



CITY of CLOVIS

AGENDA • CITY COUNCIL MEETING

Council Chamber, 1033 Fifth Street, Clovis, CA 93612 (559) 324-2060
www.cityofclovis.com

March 6, 2023

6:00 PM

Council Chamber

In compliance with the Americans with Disabilities Act, if you need special assistance to access the City Council Chamber to participate at this meeting, please contact the City Clerk or General Services Director at (559) 324-2060 (TTY – 711). Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to the Council Chamber.

The Clovis City Council meetings are open to the public at the physical address listed above. There are numerous ways to participate in the City Council meetings: you are able to attend in person; you may submit written comments as described below; you may participate by calling in by phone (see “Verbal Comments” below); and you may view the meeting which is webcast and accessed at www.cityofclovis.com/agendas.

Written Comments

- Members of the public are encouraged to submit written comments at: www.cityofclovis.com/agendas at least two (2) hours before the meeting (4:00 p.m.). You will be prompted to provide:

- Council Meeting Date
- Item Number
- Name
- Email
- Comment



- Please submit a separate form for each item you are commenting on.
- A copy of your written comment will be provided to the City Council noting the item number. If you wish to make a verbal comment, please see instructions below.
- Please be aware that any written comments received that do not specify a particular agenda item will be marked for the general public comment portion of the agenda.
- If a written comment is received after 4:00 p.m. on the day of the meeting, efforts will be made to provide the comment to the City Council during the meeting. However, staff cannot guarantee that written comments received after 4:00 p.m. will be provided to City Council during the meeting. All written comments received prior to the end of the meeting will be made part of the record of proceedings.

Verbal Comments

- If you wish to speak to the Council on an item by telephone, you should contact the City Clerk at (559) 324-2060 no later than 4:00 p.m. the day of the meeting.
- You will be asked to provide your name, phone number, and your email. You will be emailed instructions to log into Webex to participate in the meeting. Staff recommends participants log into the Webex at 5:30 p.m. the day of the meeting to perform an audio and mic check.
- All callers will be placed on mute, and at the appropriate time for your comment your microphone will be unmuted.
- In order for everyone to be heard, please limit your comments to 5 minutes or less, or 10 minutes per topic.

Webex Participation

- Reasonable efforts will be made to allow written and verbal comment from a participant communicating with the host of the virtual meeting. To do so, a participant will need to chat with the host and request to make a written or verbal comment. The host will make reasonable efforts to make written and verbal comments available to the City Council. Due to the new untested format of these meetings, the City cannot guarantee that these written and verbal comments initiated via chat will occur. Participants wanting to make a verbal comment via call will need to ensure that they accessed the WebEx meeting with audio and microphone transmission capabilities.

CALL TO ORDER

FLAG SALUTE - Councilmember Basgall

ROLL CALL

PRESENTATIONS/PROCLAMATIONS

1. Presentation of Proclamation declaring March 11, 2023, as Arbor Day.

PUBLIC COMMENTS - This is an opportunity for the members of the public to address the City Council on any matter within the City Council's jurisdiction that is not listed on the Agenda. In order for everyone to be heard, please limit your comments to 5 minutes or less, or 10 minutes per topic. Anyone wishing to be placed on the Agenda for a specific topic should contact the City Manager's office and submit correspondence at least 10 days before the desired date of appearance.

ORDINANCES AND RESOLUTIONS - With respect to the approval of resolutions and ordinances, the reading of the title shall be deemed a motion to waive a reading of the complete resolution or ordinance and unless there is a request by a Councilmember that the resolution or ordinance be read in full, further reading of the resolution or ordinance shall be deemed waived by unanimous consent of the Council.

CONSENT CALENDAR - Items considered routine in nature are to be placed upon the Consent Calendar. They will all be considered and voted upon in one vote as one item unless a

Councilmember requests individual consideration. A Councilmember's vote in favor of the Consent Calendar is considered and recorded as a separate affirmative vote in favor of each action listed. Motions in favor of adoption of the Consent Calendar are deemed to include a motion to waive the reading of any ordinance or resolution on the Consent Calendar. For adoption of ordinances, only those that have received a unanimous vote upon introduction are considered Consent items.

- [2.](#) Administration - Approval - Minutes from the February 21, 2023, Council Meeting.
- [3.](#) Administration - Approval – Waive normal purchasing process and authorize City Manager to enter into the CALNET agreement with AT&T for Telecommunications services for the amount of \$190,000 per year.
- [4.](#) Finance – Receive and File – Investment Report for the Month of October 2022.
- [5.](#) Finance – Receive and File – Treasurer's Report for the Month of October 2022.
- [6.](#) General Services – Approval – Authorize the City Manager to Execute a 10-year Extension to the Lease Agreement with Clovis Big Dry Creek Historical Society, Inc., for Property Located at 401 Pollasky Avenue, Clovis.
- [7.](#) General Services – Approval - Contract with LF Staffing Service, Inc. (DBA Labor Finders) for Temporary Labor Services.
- [8.](#) General Services – Approval – Selection of Passio Technologies, LLC. for an Intelligent Transportation System “ITS” (Computer-Aided Dispatch/Automatic Vehicle Location/Automatic Voice Annunciation [CAD/AVL/AVA] Passenger Infotainment, and Historical and Real-time Application Programming Interfaces [API's]) and Authorize City Manager to Execute the Contract for \$461,500.00.
- [9.](#) Planning and Development Services - Approval – Res. 23-____, Annexation of Miscellaneous Properties to the Landscape Maintenance District No. 1.
- [10.](#) Public Utilities - Approval – Res. 23-____, A Resolution Initiating Proceedings for the Annual Levy of Assessments for Landscape Maintenance District No. 1.
- [11.](#) Public Utilities – Approval – Award a Contract to Karbonous, Inc. for Maintenance Work Consisting of Purchasing and Replacing Granular Activated Carbon (GAC) at Well 12 and Well 27 for the amount of \$240,156.20.

PUBLIC HEARINGS - A public hearing is an open consideration within a regular or special meeting of the City Council, for which special notice has been given and may be required. When a public hearing is continued, noticing of the adjourned item is required as per Government Code 54955.1.

- [12.](#) Consider items associated with approximately 1.04 acres of land located on the north side of Alluvial Avenue, between Sunnyside and Fordham Avenues. Stallion Development and Construction – Arman Zakaryan, owner/applicant; Dan Zack, representative.
 - a. Consider Approval - Res. 23-____, A request to approve an environmental finding of a Mitigated Negative Declaration for General Plan Amendment GPA2022-001 and Rezone R2022-001.
 - b. Consider Approval - Res. 23-____, GPA2022-001, A request to amend the General Plan to re-designate the subject property from the Low Density Residential (2.1-4.0 DU/Ac) classification to the Medium High (7.1-15.0 DU/Ac) classification.

c. Consider Introduction - Ord. 23-____, R2022-001, A request to rezone the subject property from the R-1-7500 (Single-family Residential, 7,500 sf) Zone District to the R-2 (Multifamily Medium-High Density Residential) Zone District.

Staff: Lily Cha, AICP, Senior Planner

Recommendation: Approve

13. Consider Approval - Res. 23-____, Resolution of Necessity to determine that public interest and necessity require acquisition of property for public purposes; and, authorizing proceedings in eminent domain for two properties located between Locan Avenue and DeWolf Avenue. APN/Owner: 553-030-05/Zepeda and 565-042-14/Samarin. (Continued from the February 21, 2023, meeting)

Staff: Ryan C. Burnett, Engineering Program Supervisor

Recommendation: Approve

ADMINISTRATIVE ITEMS - Administrative Items are matters on the regular City Council Agenda other than Public Hearings.

14. Receive and File – Economic Development, Housing and Communications Update.

Staff: Chad McCollum, Economic Development, Housing and Communications Director

Recommendation: Receive and File

15. Consider – Various items related to the Retail Market Survey and Land Use Evaluation of the Shaw Avenue corridor.

a. Receive and File - Results of the Retail Market Survey & Land Use Evaluation of the Shaw Avenue corridor.

b. Consider Approval - For the City to enter into an agreement with Kosmont Companies to provide a Fiscal Impact and Economic Benefit Analysis for the redevelopment of existing retail space in the Shaw Avenue corridor in the amount of \$25,000.

Staff: Chad McCollum, Economic Development, Housing and Communications Director

Recommendation: Receive and File and Approve

16. Receive and File - 2023 Five-Year Financial Forecast for the City of Clovis through 2027/28 and discuss options for budget preparation for 2023/24.

Staff: Jay Schengel, Finance Director

Recommendation: Receive and File

17. Consider Approval - Res. 23-____, A request to initiate a rezoning of property within the area generally bound by Shepherd Avenue on the south, Willow Avenue on the west, the Enterprise Canal on the north and the Peach Avenue alignment on the east and authorizing staff to prepare an annexation application for the same boundary. City of Clovis, applicant.

Staff: Dave Merchen, City Planner

Recommendation: Approve

COUNCIL ITEMS

18. Consider Approval - Res. 23-____, a Resolution Opposing Initiative No. 21-0042A1, the Taxpayer Protection and Government Accountability Act sponsored by the California Business Roundtable.

Staff: John Holt, City Manager

Recommendation: Approve

19. Consider Approval – Appointments to the City of Clovis Historic Preservation Committee.

Staff: John Holt, City Manager

Recommendation: Approve

CITY MANAGER COMMENTS

COUNCIL COMMENTS

ADJOURNMENT

FUTURE MEETINGS

Regular City Council Meetings are held at 6:00 P.M. in the Council Chamber. The following are future meeting dates:

Mar. 13, 2023 (Mon.)

Mar. 20, 2023 (Mon.) (Joint Meeting with Planning Commission)

Apr. 3, 2023 (Mon.)

Apr. 10, 2023 (Mon.)

Apr. 17, 2023 (Mon.)

CITY of CLOVIS
PROCLAMATION

Declaring March 11, 2023 as Arbor Day

WHEREAS, In 1872, J. Sterling Morton proposed to the Nebraska Board of Agriculture that a special day be set aside for the planting of trees; and

WHEREAS, the Special Day, called Arbor Day, was first observed in the State of Nebraska with the planting of more than one million trees; and

WHEREAS, Arbor Day is now observed throughout our nation and the world; and

WHEREAS, Trees provide valuable resources such as reducing erosion, lowering heating and cooling costs, moderating air temperatures, cleaning our atmosphere by sequestering carbon dioxide and producing oxygen, and by providing habitat for wildlife; and

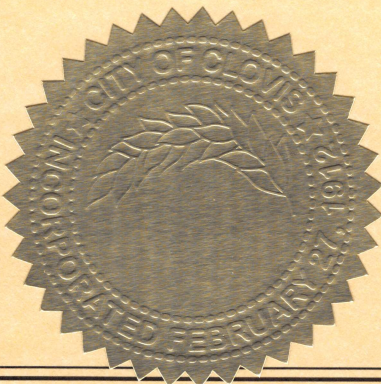
WHEREAS, Trees are a renewable resource further providing paper products, lumber, fuel for heating, and material for many other products; and


WHEREAS, Trees in our community increase property values, enhance economic activity, and beautify our City.

NOW, THEREFORE, BE IT RESOLVED, that the Clovis City Council, on behalf of the citizens of Clovis, declare March 11, 2023 as

Arbor Day

IN WITNESS THEREFORE, I hereunto set my hand and cause the official seal of the City of Clovis to be affixed the 6th day of March, 2023.





Mayor

CLOVIS CITY COUNCIL MEETING

February 21, 2023

6:05 P.M.

Council Chamber

Meeting called to order by Mayor Ashbeck
Flag Salute led by Councilmember Pearce

Roll Call: Present: Councilmembers Basgall, Bessinger, Mouanoutoua, Pearce
Mayor Ashbeck

PUBLIC COMMENTS – 6:07

CONSENT CALENDAR – 6:08

Motion by Councilmember Mouanoutoua, seconded by Councilmember Bessinger, that the items on the Consent Calendar, with the exception of Item 3, be approved. Motion carried by unanimous vote.

- 2. Administration - Approved - Minutes from the February 13, 2023, Council Meeting.
- 4. General Services – Approved – **Res. 23-06**, Authorizing the General Services Manager to Execute Documents for the Fresno County Transportation Authority (FCTA) and Fresno Council of Governments FY 2022-2023 Measure C New Technology Reserve Grant Program for Advanced Transit Projects; and Approved – **Res. 23-07**, Amending the FY 2022-2023 Transit Budget to Reflect Receipt of \$425,000 of Measure C New Technology Reserve Grant Program Funds.
- 5. Planning and Development Services – Approved – Final Acceptance for CIP 21-12, Nees Avenue Widening – Rule 20B.
- 6. Planning and Development Services – Approved – Final Acceptance for Final Map for Tract 6174, located at the southeast corner of Ashlan Avenue and Leonard Avenue (Wilson Premier Homes, Inc.)
- 7. Planning and Development Services – Approved – **Res. 23-08**, Adopting Policy and Procedure for the Application of Contract Change Orders for Public Works Contracts.

6:09 CONSENT CALENDAR - ITEM 3 - Administration - Approved – Award the Request for Proposals and approve the purchase of Cisco Network Hardware to Axelliant LLC. The total cost for the Cisco Core network equipment and shipping is \$128,395.45 plus tax.

Motion for approval by Councilmember Bessinger, seconded by Councilmember Mouanoutoua. Motion carried 5-0.

COUNCIL ITEMS – 6:12

6:12 ITEM 12 - APPROVED – TO SUBMIT A LETTER OF SUPPORT FOR SENATE BILL 14, SENATOR SHANNON GROVE, TO INCLUDE HUMAN TRAFFICKING IN THE LISTS OF CRIMES DEFINED AS SERIOUS AND VIOLENT UNDER CALIFORNIA LAW.

Motion for approval by Councilmember Mouanoutoua, seconded by Councilmember Basgall. Motion carried by unanimous vote.

PRESENTATION – 6:15

6:15 ITEM 1 - PRESENTATION OF PROCLAMATION RECOGNIZING THE AFRICAN-AMERICAN HISTORICAL & CULTURAL MUSEUM OF THE SAN JOAQUIN VALLEY IN CELEBRATION OF ITS 30TH ANNIVERSARY.

PUBLIC HEARINGS – 6:24

6:24 ITEM 8 - CONTINUED - **RES. 23-XX**, RESOLUTION OF NECESSITY TO DETERMINE THAT PUBLIC INTEREST AND NECESSITY REQUIRE ACQUISITION OF PROPERTY FOR PUBLIC PURPOSES AND; AUTHORIZING PROCEEDINGS IN EMINENT DOMAIN FOR TWO PROPERTIES LOCATED BETWEEN LOCAN AVENUE AND DEWOLF AVENUE. APN/OWNER: 553-030-05/ZEPEDA AND 565-042-14/SAMARIN.

Mark Altas, Representative for the Zepeda family, shared concerns regarding the negotiation process and lack of communication from City staff.

Motion to continue this item to the March 6, 2023, City Council meeting by Councilmember Bessinger, seconded by Councilmember Basgall. Motion carried by unanimous vote.

6:58 ITEM 9 - APPROVED – RES. 23-09, AC2022-001, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS MAKING FINDINGS AND TENTATIVELY APPROVING PETITION FOR CANCELLATION OF LAND CONSERVATION CONTRACT NO. 6273, AND AUTHORIZING THE RECORDATION OF A CERTIFICATE OF TENTATIVE CANCELATION FOR PROPERTY LOCATED NEAR THE SOUTHEAST CORNER OF SHAW AND DE WOLF AVENUES. PRECISION CIVIL ENGINEERING, INC., APPLICANT; FRANK AND GEORGIA W. SORRENTI, PROPERTY OWNERS.

Motion for approval by Councilmember Bessinger, seconded by Councilmember Pearce. Motion carried by unanimous vote.

ADMINISTRATIVE ITEMS – 7:13

7:13 ITEM 10 - RECEIVED AND FILED – PUBLIC UTILITIES DEPARTMENT UPDATE.

Rachel Ham, resident, commented on trash in the roads that border the County of Fresno.

Hiram Malcolm, resident, commented on employment opportunities with the City of Clovis.

8:00 ITEM 11 - CONSIDER – VARIOUS OPTIONS ADDRESSING THE FINDINGS AND RECOMMENDATIONS PROVIDED BY THE CLOVIS TRANSIT FLEET ELECTRIFICATION FEASIBILITY STUDY REGARDING THE REQUIRED ZERO-EMISSION CONVERSION OF THE TRANSIT FLEET.

It was the consensus of the City Council to direct staff to implement a hybrid approach by preparing a rollout plan with the Mixed Fleet option in conjunction to purchasing internal combustion engine (ICE) transit vehicles as a reserve.

CITY MANAGER COMMENTS – 9:23

9:23 ITEM 13 - UPDATE ON FOUNDERS' DAY EVENT AND ACTIVITIES.

COUNCIL COMMENTS – 9:30

CLOSED SESSION – 9:52

ITEM 14 GOVERNMENT CODE SECTION 54956.9(D)(1) CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION CASE NAME: DESIREE MARTINEZ V. CITY OF CLOVIS, ET AL., CASE NO. F082914

ITEM 15 GOVERNMENT CODE SECTION 54956.9(D)(2) CONFERENCE WITH LEGAL COUNSEL -ANTICIPATED LITIGATION SIGNIFICANT EXPOSURE TO LITIGATION THREE POTENTIAL CASES BASED ON CLAIMS RECEIVED FOR THE SUNNYSIDE AVENUE WATER MAIN BREAK AND PROPERTY FLOODING INCIDENT ON JANUARY 3, 2022.

ITEM 16 GOVERNMENT CODE SECTION 54957.6 CONFERENCE WITH LABOR NEGOTIATORS AGENCY DESIGNATED REPRESENTATIVES: JOHN HOLT AND SHONNA HALTERMAN EMPLOYEE ORGANIZATION: CLOVIS PUBLIC SAFETY EMPLOYEES ASSOCIATION

No action was taken by the City Council during the closed session.

Mayor Ashbeck adjourned the meeting of the Council to March 6, 2023.

Meeting adjourned: 10:30 p.m.

Mayor

City Clerk



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Administration

DATE: March 6, 2023

SUBJECT: Administration - Approval – Waive normal purchasing process and authorize City Manager to enter into the CALNET agreement with AT&T for Telecommunications services for the amount of \$190,000 per year.

ATTACHMENTS: None

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

For the City Council to waive normal purchasing process and authorize City Manager to enter into the CALNET agreement with AT&T for Telecommunications services.

EXECUTIVE SUMMARY

The State of California has a program for its telecommunications services called CALNET. The program offers local agencies a “piggy-back” provision for reduced rates on leased line circuits, local/long distance calling, internet connectivity and other telecommunications services. The City of Clovis has been using this CALNET agreement for over twenty years.

Staff was recently informed that the current CALNET agreement (Version 3) with AT&T is set to expire. To continue to receive current rates for telecommunications services, the City needs to transition services to the state’s new program (CALNET NextGen).

Staff recommends that Council authorize the City Manager to enter in the CALNET NextGen agreement with AT&T.

BACKGROUND

In 1999 the State of California Department of General Services and Telecommunications issued a request for proposals (RFP) of the state’s telecommunications services. This original RFP and ensuing contract were called CALNET and the program offered local agencies a “piggy-back”

provision for reduced rates on leased line circuits, internet connectivity and other telecommunications services. AT&T, our Local Exchange Carrier (LEC), was awarded the original CALNET contract and continues to renew it every time the state has reissued the RFP.

In our communications with AT&T representatives, staff was notified that the most current iteration of the program (CALNET III) was expiring and the discounted rates we receive would be going away in December 2024 unless we transitioned to the current version – CALNET NextGen.

Staff began an analysis of the current telecommunications services, evaluated usage for local calling, long distance, leased line circuits, and other services provided by AT&T. Staff also evaluated the effects of potentially transitioning these services to another provider, and found that while it is possible, introducing all new circuits and systems at this time could potentially cause conflicts such as having to issue all new phone numbers and other issues.

AT&T confirmed that the pricing would remain the same for all the City's services. Staff recommends waiving the normal purchasing policy and keeping our current services with AT&T; and also authorizing the City Manager to enter into the new CALNET NextGen agreement.

FISCAL IMPACT

The City's telecommunications annual budget is approximately \$190,000. There is no cost difference associated with moving from CALNET III to the CALNET NextGen agreement.

REASON FOR RECOMMENDATION

The CALNET agreement is competitively bid contract by the State of California Department of Technology Services (DTS). It includes a piggy-back provision for local public agencies to receive the discounted rates for technology and telecommunications services.

Also, the City has partnered with AT&T for over 20 years, and by moving to the new CALNET NextGen agreement, we can continue to receive local/long distance calling and other telecommunications services without interruption.

ACTIONS FOLLOWING APPROVAL

The CALNET NextGen agreement will be signed by both AT&T and the City; it will then be forwarded to the State of California Department of Technology Services for final approval.

Prepared by: Jesse Velez, I.T. Deputy Director

Reviewed by: City Manager *AA*



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council
 FROM: Finance Department
 DATE: March 6, 2023
 SUBJECT: Finance – Receive and File – Investment Report for the Month of October 2022.

ATTACHMENTS: 1. Distribution of Investments
 2. Monthly Investment Transactions
 3. Certificates of Deposit
 4. Municipal Securities
 5. Graph of October 31, 2022 Treasury Rates

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

EXECUTIVE SUMMARY

Attached is the Investment Report for the month of October 2022. Shown in Attachment 1 is the distribution of investments which lists all the individual securities owned by the City with the book and market values. Book value is the actual price paid for the investment. Market value is the amount that the investment is worth if sold in the open market. The market value (which fluctuates daily) that is used in the report is as of the last working day of the month. Attachment 2 reflects the monthly investment transactions for the month of October 2022. Attachment 3 lists the certificates of deposit. Attachment 4 lists the municipal securities. Attachment 5 is a graph of Treasury rates on October 31, 2022.

The investment of the City's funds is performed in accordance with the adopted Investment Policy. Funds are invested with the following objectives in mind:

1. Assets are invested in adherence with the safeguards and diversity of a prudent investor.
2. The portfolio is invested in a manner consistent with the primary emphasis on preservation of the principal, while attaining a high rate of return consistent with this guideline. Trading of securities for the sole purpose of realizing trading profits is prohibited.

3. Sufficient liquidity is maintained to provide a source for anticipated financial obligations as they become due.

4. Investments may be made, consistent with the Investment Policy Guidelines, in fixed income securities maturing in three years or less and can be extended to five years with the City Manager's approval.

The Finance Department invests the City's assets with an expectation of achieving a total rate of return at a level that exceeds the annualized rate of return on short-term government guaranteed or insured obligations (90-day Treasury bills) and to assure that the principal is preserved with minimal risk of depreciation or loss. In periods of rising interest rates, the City of Clovis portfolio return may be less than that of the annualized 90-day Treasury bill. In periods of decreasing interest rates, the City of Clovis portfolio return may be greater than the annualized 90-day Treasury bill. The current 90-day Treasury bill rate (annualized) is 1.13%. The rate of return for the City of Clovis portfolio is 1.77%. The goal for the City of Clovis investment return is 120% of the 90-day Treasury bill rate. The current rate of return is 156% of the Treasury bill rate.

In accordance with the Investment Policy, the investment period on each investment does not exceed three years and can be extended to five years with the City Manager's approval. As of October 2022, the average investment life of the City's investment portfolio is 1.55 years.

Current Investment Environment and Philosophy

During the month of October 2022, the federal funds rate remained at 3.00%-3.25%. On October 31, 2022, the Treasury yield curve increased from 3-month to 6-month notes, then decreased to 10-year notes.

Certificates of Deposit (CD's)

The City purchases both negotiable and non-negotiable Certificates of Deposit (CD's). Although negotiable CD's can be traded, it is the City's policy to buy and hold all CD's. Negotiable CD's are held by U.S. Bank, a third party custodian. Non-negotiable CD's are held in the City's safe.

Purchases and Maturities

- 0 government securities were purchased.
- 2 government securities totaling \$8,000,000 matured.
- 10 certificates of deposit totaling \$2,500,000 were purchased.
- 1 certificate of deposit totaling \$250,000 matured.
- 6 municipal securities totaling \$7,955,000 were purchased.

Market Environment

- During October the federal funds rate remained at 3.00%-3.25%.
- On October 31, the yield curve increased from 3-month to 6-month notes, then decreased to 10-year notes. See Attachment 5, Graph of Treasury Rates on October 31, 2022.

Prepared by: Jeffrey Blanks, Deputy Finance Director

Reviewed by: City Manager *AB*

**City of Clovis
Distribution of Investments
As of October 31, 2022**

AGENDA ITEM NO. 4.

	<u>COST</u>	<u>NET BOOK VALUE</u>	<u>MARKET VALUE *</u>	<u>YIELD TO MATURITY</u>	<u>STATED INTEREST RATE</u>	<u>INVEST DATE</u>	<u>MATURITY DATE</u>	<u>DAYS TO MATURITY FROM 10/31/2022</u>
<u>GOV'T SECURITIES</u>								
FHLB	8,045,600	8,014,455	6,485,700	1.875%	1.875%	12/19/19	12/09/22	39
FHLB	5,047,500	5,015,560	6,485,700	1.875%	1.875%	01/23/20	12/09/22	39
FAMCMTN	8,544,965	8,517,404	8,420,015	1.350%	1.350%	02/27/20	02/27/23	119
FHLB	5,255,000	5,106,310	4,972,503	2.125%	2.125%	03/26/20	03/10/23	130
FHLB	13,579,800	13,233,882	12,887,097	2.125%	2.125%	04/30/20	03/10/23	130
FFCB	5,000,000	5,000,000	4,701,150	0.250%	0.250%	03/01/21	03/01/24	487
FHLB	4,998,000	4,998,321	4,900,450	3.250%	3.250%	08/17/22	03/08/24	494
FHLB	1,994,000	1,995,012	1,971,560	3.625%	3.625%	09/14/22	03/08/24	494
FFCB	1,999,000	1,999,258	1,882,480	0.300%	0.300%	03/24/21	03/18/24	504
FHLB	5,000,000	5,000,000	4,650,300	0.350%	0.350%	06/07/21	06/07/24	585
FHLB	4,969,000	4,975,169	4,631,900	1.050%	1.050%	01/20/22	11/15/24	746
FHLB	3,980,000	3,983,740	3,755,080	1.750%	1.750%	02/28/22	02/28/25	851
FHLB	4,000,000	4,000,000	3,829,640	2.750%	2.750%	04/25/22	04/25/25	907
FAMCMTN	3,947,600	3,956,650	3,621,520	0.750%	0.750%	12/16/21	07/28/25	1,001
FHLB	5,000,000	5,000,000	4,885,000	3.600%	3.600%	08/30/22	08/28/25	1,032
FAMCMTN	4,948,500	4,956,740	4,484,150	0.600%	0.600%	10/14/21	09/08/25	1,043
FHLB	4,963,000	4,968,743	4,371,100	0.580%	0.580%	09/08/21	02/11/26	1,199
FHLB	3,922,000	3,933,616	3,512,800	0.750%	0.750%	12/16/21	02/24/26	1,212
FFCB	4,967,500	4,971,593	4,327,600	0.940%	0.940%	10/14/21	09/28/26	1,428
FHLB	3,649,200	3,649,200	3,505,920	1.150%	1.150%	06/29/22	10/28/26	1,458
FHLB	5,988,000	5,989,499	5,241,900	1.250%	1.250%	11/24/21	11/24/26	1,485
FHLB	5,127,757	5,113,093	4,543,400	2.125%	2.125%	01/20/22	12/11/26	1,502
FHLB	4,043,250	4,043,250	4,094,358	1.020%	1.020%	06/29/22	02/24/27	1,577
FHLB	4,550,000	4,574,856	4,094,358	1.020%	1.020%	08/17/22	02/24/27	1,577
FHLB	3,695,200	3,730,049	3,417,680	0.900%	0.900%	03/31/22	02/26/27	1,579
FHLB	4,000,000	4,000,000	3,628,480	2.375%	2.375%	03/08/22	03/08/27	1,589
SECURITIES TOTAL	<u>\$ 131,214,872</u>	<u>\$ 130,726,400</u>	<u>\$123,301,840</u>					
LAIF		<u>\$ 74,905,243</u>	<u>\$ 74,905,243</u>					
Municipal Issuance		<u>\$ 48,025,000</u>	<u>\$ 43,617,521</u>					
Sweep Account (Union Bank)		<u>\$ 29,977,956</u>	<u>\$ 29,977,956</u>					
TOTAL CD'S		<u>\$ 18,495,000</u>	<u>\$ 17,880,661</u>					
TOTAL INVESTMENTS		<u>\$ 302,129,599</u>	<u>\$ 289,683,222</u>					

* Market values for securities obtained from US Bank.

City of Clovis
Monthly Investment Transactions
As of October 31, 2022

AGENDA ITEM NO. 4.

Institution	Description	Activity	Amount	Market Value	Rate	Activity Date	Maturity Date
MT SAN ANTONIO	Mun Iss.	Purchase	405,000	405,000	2.329%	10/13/22	08/01/27
ORANGE COUNTY	Mun Iss.	Purchase	900,000	900,000	2.095%	10/13/22	08/15/25
SAN DIEGUITO	Mun Iss.	Purchase	1,000,000	1,000,000	1.661%	10/13/22	08/01/25
SAN JOSE CA	Mun Iss.	Purchase	2,355,000	2,355,000	2.450%	10/13/22	09/01/25
SAN JOSE CA	Mun Iss.	Purchase	910,000	910,000	2.600%	10/13/22	09/01/27
UNIVERSITY REVS	Mun Iss.	Purchase	2,385,000	2,385,000	1.316%	10/13/22	05/15/27
AMERICAN BANK	CD	Purchase	250,000	250,000	4.350%	10/21/22	10/21/25
BELL BANK FARGO	CD	Purchase	250,000	250,000	4.150%	10/13/22	10/14/25
FIRST CITIZENS BANK	CD	Purchase	250,000	250,000	4.700%	10/28/22	10/28/25
GREAT SOUTHERN BANK	CD	Purchase	250,000	250,000	4.500%	10/20/22	10/20/25
LCA BANK CORP	CD	Purchase	250,000	250,000	4.400%	10/28/22	10/28/25
PACIFIC ALLIANCE	CD	Purchase	250,000	250,000	4.200%	10/14/22	10/14/25
PUBLIC SERVICE CR UN	CD	Purchase	250,000	250,000	4.500%	10/25/22	10/27/25
QUEENSBOROUGH NATL BK	CD	Purchase	250,000	250,000	4.100%	10/21/22	10/21/25
SHARONVIEW FED CR UN	CD	Purchase	250,000	250,000	4.850%	10/31/22	10/31/25
1ST FINANCIAL BANK	CD	Purchase	250,000	250,000	4.150%	10/13/22	10/17/25
FFCB	Gov. Sec.	Maturity	3,000,000	2,995,775	1.375%	10/11/22	10/11/22
FFCB	Gov. Sec.	Maturity	5,000,000	5,002,455	1.600%	10/13/22	10/13/22
MORGAN STANLEY BANK	CD	Maturity	250,000	250,000	1.850%	10/17/22	10/17/22

PORTFOLIO DATA

Current Month (10/22)

	Book	Market
CD'S	\$ 18,495,000	\$ 17,880,661
Gov't Securities*	130,726,400	123,301,840
Municipal Securities	48,025,000	43,617,521
LAIF	74,905,243	74,905,243
Sweep Account (Union Bank)	29,977,956	29,977,956
TOTAL	\$ 302,129,599	\$ 289,683,221

Prior Month (09/22)

	Book	Market
CD'S	\$ 16,245,000	\$ 15,738,360
Gov't Securities*	138,724,630	131,664,480
Municipal Securities	40,070,000	36,705,918
LAIF	74,651,233	74,651,233
Sweep Account (Union Bank)	31,983,745	31,983,745
TOTAL	\$ 301,674,608	\$ 290,743,736

Three Months Previous (07/22)

	Book	Market
CD'S	\$ 13,245,000	\$ 12,948,633
Gov't Securities*	131,232,711	127,512,945
Municipal Securities	28,505,000	26,994,880
LAIF	74,651,233	74,651,233
Sweep Account (Union Bank)	51,872,996	51,872,996
TOTAL	\$ 299,506,940	\$ 293,980,687

Six Months Previous (04/22)

	Book	Market
CD'S	\$ 11,745,000	\$ 11,541,842
Gov't Securities*	135,597,608	131,674,865
Municipal Securities	18,185,000	17,212,328
LAIF	74,511,731	74,511,731
Sweep Account (Union Bank)	46,053,688	46,053,688
TOTAL	\$ 286,093,027	\$ 280,994,454

One Year Previous (10/21)

	Book	Market
CD'S	\$ 10,485,000	\$ 10,576,750
Gov't Securities*	125,551,804	125,987,047
Municipal Securities	5,900,000	5,880,960
LAIF	74,410,223	74,410,223
Sweep Account (Union Bank)	34,467,569	34,467,569
TOTAL	\$ 250,814,596	\$ 251,322,549

*Adjusted Quarterly for Premium/Discount Amortization

**City of Clovis
Certificates of Deposit
As of October 31, 2022**

AGENDA ITEM NO. 4.

Negotiable CDs	COST	MARKET PRICE	INTEREST RATE	INVEST DATE	MATURITY DATE	MATURITY FROM 10/31/22	INTEREST FREQUENCY
Lafayette Fed Cr Un	250,000	249,770.00	1.700%	11/22/19	11/22/22	22	MONTHLY
Live Oak Banking Co.	250,000	249,552.50	1.750%	12/11/19	12/12/22	42	QUARTERLY
Wells Fargo Natl Bk West	250,000	249,552.50	1.800%	12/13/19	12/13/22	43	QUARTERLY
Valley Cent Svgs Bk	250,000	248,985.00	1.700%	01/15/20	01/17/23	78	QUARTERLY
Sallie Mae Bank	250,000	248,965.00	1.900%	01/23/20	01/23/23	84	QUARTERLY
Servisfirst Bank	250,000	248,295.00	1.600%	02/21/20	02/21/23	113	MONTHLY
Celtic Bank	250,000	247,837.50	1.550%	03/13/20	03/13/23	133	MONTHLY
Axos Bank	250,000	247,550.00	1.550%	03/26/20	03/27/23	147	MONTHLY
Nicolet Natl Bank	250,000	247,045.00	0.900%	03/27/20	03/27/23	147	MONTHLY
Centerstate Bank	250,000	246,835.00	0.900%	03/30/20	03/30/23	150	MONTHLY
Bank Leumi	250,000	247,375.00	1.450%	03/31/20	03/31/23	151	MONTHLY
Discover Bank	250,000	247,317.50	1.350%	04/02/20	04/03/23	154	MONTHLY
Berkshire Bank	250,000	247,087.50	1.300%	04/08/20	04/06/23	157	MONTHLY
American Express	250,000	246,507.50	1.100%	04/21/20	04/21/23	172	MONTHLY
New York Cmnty Bank	250,000	238,692.50	0.350%	12/11/20	12/11/23	406	QUARTERLY
Transportation Alliance Bk	250,000	235,605.00	0.250%	03/12/21	03/12/24	498	QUARTERLY
Preferred Bank	250,000	235,215.00	0.250%	03/25/21	03/25/24	511	QUARTERLY
Banknited Natl Assn	245,000	231,005.60	0.450%	03/31/21	04/01/24	518	QUARTERLY
Greenstate Credit Union	250,000	233,530.00	0.450%	06/16/21	06/17/24	595	QUARTERLY
Eaglemark Savings Bank	250,000	233,087.50	0.400%	06/30/21	06/28/24	606	QUARTERLY
Texas Exchange Bk	250,000	233,100.00	0.500%	07/09/21	07/09/24	617	QUARTERLY
BMW Bk North Amer	250,000	232,837.50	0.550%	07/30/21	07/30/24	638	QUARTERLY
Toyota Finl Svgs	250,000	232,205.00	0.650%	09/09/21	09/09/24	679	QUARTERLY
State Bk India	250,000	231,982.50	0.650%	09/17/21	09/17/24	687	QUARTERLY
Ubs Bank Usa	250,000	230,640.00	0.750%	11/17/21	11/18/24	749	QUARTERLY
Webbank Salt Lake City	250,000	230,540.00	0.750%	11/29/21	11/29/24	760	QUARTERLY
Medallion Bank Salt Lake City	250,000	230,595.00	0.900%	12/20/21	12/20/24	781	QUARTERLY
Beal Bank	250,000	230,312.50	0.950%	01/19/22	01/15/25	807	QUARTERLY
Mountain Amer Fed	250,000	242,977.50	3.450%	08/31/22	02/28/25	851	QUARTERLY
Barclays Bk	250,000	233,272.50	1.700%	03/09/22	03/10/25	861	QUARTERLY
Goldman Sachs Bk	250,000	232,997.50	1.650%	03/09/22	03/10/25	861	QUARTERLY
Safra National Bk	250,000	234,700.00	2.000%	03/23/22	03/24/25	875	QUARTERLY
Pentagon Federal Cr Un	250,000	234,487.50	2.000%	03/28/22	03/28/25	879	QUARTERLY
Beal Bank	250,000	235,642.50	2.200%	04/06/22	04/02/25	884	QUARTERLY
JP Morgan Chase	250,000	237,300.00	2.500%	04/08/22	04/08/25	890	QUARTERLY
First Natl Bank	250,000	243,282.50	2.200%	04/12/22	04/11/25	893	QUARTERLY
One Community Bank	250,000	238,070.00	2.700%	04/29/22	04/29/25	911	QUARTERLY
Americu Credit Union	250,000	238,620.00	2.800%	05/02/22	05/02/25	914	QUARTERLY
Synchrony Bank Retail	250,000	240,287.50	3.100%	05/20/22	05/20/25	932	QUARTERLY
Connexus Credit Union	250,000	239,525.00	3.000%	05/26/22	05/27/25	939	QUARTERLY
Bmo Harris Bank	250,000	240,237.50	3.150%	06/17/22	06/17/25	960	QUARTERLY
Saco Biddeford	250,000	238,380.00	2.850%	06/17/22	06/17/25	960	QUARTERLY
Baxter Credit Union	250,000	250,000.00	3.400%	06/28/22	06/30/25	973	QUARTERLY
Capital One Bank	250,000	241,420.00	3.350%	06/29/22	06/30/25	973	QUARTERLY
American First Cr Un	250,000	240,585.00	3.250%	07/15/22	07/15/25	988	QUARTERLY
Trustone Financial Cr Un	250,000	240,550.00	3.250%	07/19/22	07/21/25	994	QUARTERLY
American Natl Bank	250,000	239,500.00	3.100%	07/27/22	07/28/25	1,001	QUARTERLY
TCM Bank	250,000	241,107.50	3.350%	07/28/22	07/28/25	1,001	QUARTERLY
Generations Bank	250,000	241,407.50	3.400%	08/03/22	08/04/25	1,008	QUARTERLY
Direct Fed Credit	250,000	240,930.00	3.500%	08/17/22	08/18/25	1,022	QUARTERLY
Resource One Credit	250,000	240,602.50	3.300%	08/17/22	08/18/25	1,022	QUARTERLY
Connex Credit	250,000	241,825.00	3.500%	08/31/22	08/29/25	1,033	QUARTERLY
Skyone Fed Credit	250,000	242,465.00	3.600%	08/30/22	09/02/25	1,037	QUARTERLY
Credit Union of Texas	250,000	242,430.00	3.600%	09/14/22	09/15/25	1,050	QUARTERLY
Forbright Bank	250,000	241,692.50	3.500%	09/16/22	09/16/25	1,051	QUARTERLY
Ally Bank Sandy Utah	250,000	245,382.50	4.050%	09/29/22	09/19/25	1,054	QUARTERLY
Alabama Credit Union	250,000	242,320.00	3.600%	09/20/22	09/22/25	1,057	QUARTERLY
Kemba Finl Credit Union	250,000	245,020.00	4.000%	09/21/22	09/22/25	1,057	QUARTERLY
Farmers Merchants	250,000	243,287.50	3.750%	09/28/22	09/29/25	1,064	QUARTERLY
Jefferson Finl FCU	250,000	246,005.00	4.150%	09/29/22	09/29/25	1,064	QUARTERLY
Dort Finl Credit Union	250,000	244,982.50	4.000%	09/30/22	09/30/25	1,065	QUARTERLY
First National Bank	250,000	235,412.50	3.625%	09/30/22	09/30/25	1,065	QUARTERLY
Numerica Credit Union	250,000	247,020.00	4.200%	09/30/22	09/30/25	1,065	QUARTERLY
Vystar Credit Union	250,000	247,360.00	4.350%	09/30/22	09/30/25	1,065	QUARTERLY
Bell Bank Fargo	250,000	245,945.00	4.150%	10/13/22	10/14/25	1,079	QUARTERLY
Pacific Alliance	250,000	246,290.00	4.200%	10/14/22	10/14/25	1,079	QUARTERLY
1st Financial Bank	250,000	245,945.00	4.150%	10/13/22	10/17/25	1,082	QUARTERLY
Great Southern Bank	250,000	248,375.00	4.500%	10/20/22	10/20/25	1,085	QUARTERLY
American Bank	250,000	247,322.50	4.350%	10/21/22	10/21/25	1,086	QUARTERLY
Queensborough Natl Bank	250,000	246,610.00	4.100%	10/21/22	10/21/25	1,086	QUARTERLY
Public Alliance Cr Un	250,000	248,330.00	4.500%	10/25/22	10/27/25	1,092	QUARTERLY
First Citizens Bank	250,000	249,722.50	4.700%	10/28/22	10/28/25	1,093	QUARTERLY
LCA Bank Corp	250,000	247,650.00	4.400%	10/28/22	10/28/25	1,093	QUARTERLY
Sharonview Fed Cr Un	250,000	251,362.50	4.850%	10/31/22	10/31/25	1,096	QUARTERLY
Negotiable CD TOTAL	\$ 18,495,000	\$ 17,880,661					
CD TOTAL	\$ 18,495,000	\$ 17,880,661					

**City of Clovis
Municipal Securities
As of October 31, 2022**

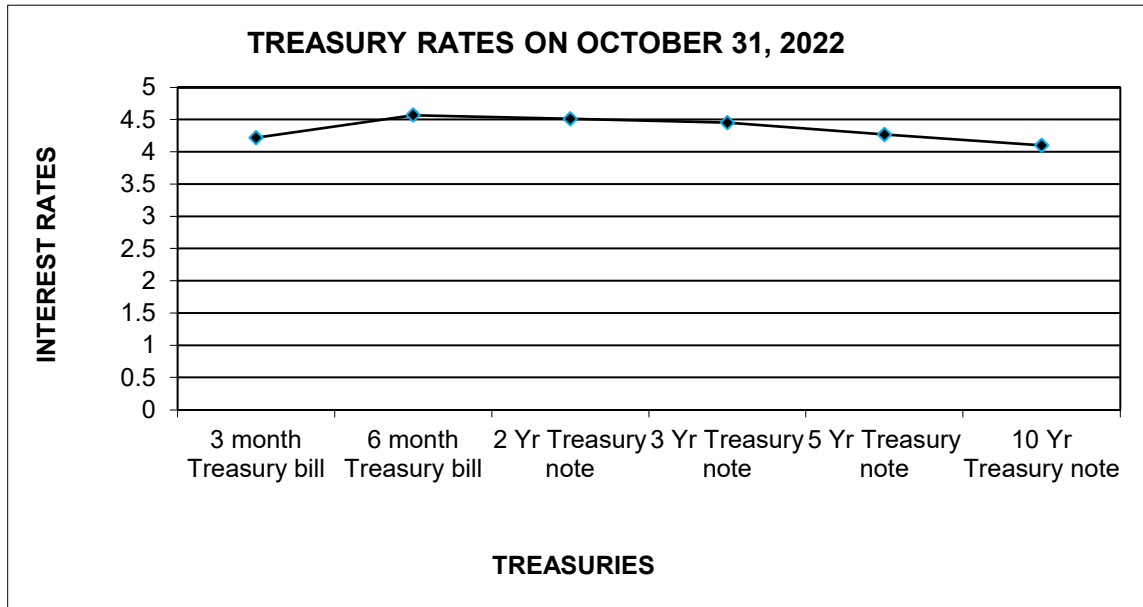
AGENDA ITEM NO. 4.

Municipal Securities	COST	MARKET PRICE	INTEREST RATE	INVEST DATE	MATURITY DATE	MATURITY FROM 10/31/22	INTEREST FREQUENCY
Huntington Beach Pension Bond	1,000,000	972,190	0.381%	04/01/21	06/15/23	227	QUARTERLY
Fresno Unified Taxable Go Ref Bond	500,000	483,870	0.462%	09/30/20	08/01/23	274	QUARTERLY
Pomona Cali Uni Sch Dist Go Bond	815,000	789,132	0.534%	10/20/20	08/01/23	274	QUARTERLY
San Jose CA USD Ref Bond	775,000	748,650	0.221%	01/20/21	08/01/23	274	QUARTERLY
Vista CA USD Ref Bond	750,000	724,613	0.221%	01/20/21	08/01/23	274	QUARTERLY
William Hart Cali HS Go Bond	1,000,000	967,750	0.366%	12/23/20	08/01/23	274	QUARTERLY
Jefferson Cali Elem Sch Dist Go Bond	710,000	683,794	0.399%	10/27/20	09/01/23	305	QUARTERLY
Santa Rosa Calif Watr Ref Bond	350,000	337,803	0.578%	12/01/20	09/01/23	305	QUARTERLY
California St Univ Ref Bond	3,455,000	3,304,638	0.475%	04/01/22	11/01/23	366	QUARTERLY
San Diego CA Convention Ref Bond	1,450,000	1,384,098	1.527%	08/18/22	04/15/24	532	QUARTERLY
Santa Ana College Ref Bond	440,000	409,332	0.644%	12/17/21	08/01/24	640	QUARTERLY
University CA Rev Bond	1,000,000	952,210	4.350%	09/15/22	05/15/25	927	QUARTERLY
Antelope Valley CA Ref Bond	750,000	692,018	1.767%	05/12/22	08/01/25	1,005	QUARTERLY
Chabot Las Positas Cmnty Clg Bond	1,490,000	1,341,194	0.880%	04/29/22	08/01/25	1,005	QUARTERLY
San Dieguito High School Ref Bond	1,000,000	918,300	1.661%	10/13/22	08/01/25	1,005	QUARTERLY
Santa Ana CCD Ref Bond	250,000	223,630	0.744%	05/12/22	08/01/25	1,005	QUARTERLY
Orange County Water Dist Ref Bond	900,000	836,712	2.095%	10/13/22	08/15/25	1,019	QUARTERLY
San Jose CA Txble Ser B	2,355,000	2,221,401	2.450%	10/13/22	09/01/25	1,036	QUARTERLY
Los Angeles CA USD Ref Bond	1,000,000	880,990	1.455%	11/15/21	07/01/26	1,339	QUARTERLY
Chabot Las Positas Cmnty Clg CA	3,505,000	3,052,224	1.080%	07/27/22	08/01/26	1,370	QUARTERLY
Chaffey CA High School Ref Bond	1,565,000	1,433,211	2.475%	06/30/22	08/01/26	1,370	QUARTERLY
Huntington Beach HS Dist Ref Bond	3,305,000	2,890,322	1.208%	04/29/22	08/01/26	1,370	QUARTERLY
Placentia Yorba USD Ref Bond	1,110,000	959,673	1.070%	05/31/22	08/01/26	1,370	QUARTERLY
San Diego CA Cmnty Ref Bond	470,000	429,134	2.299%	04/29/22	08/01/26	1,370	QUARTERLY
San Ramon Valley CA USD Ref Bond	2,125,000	1,859,991	1.147%	11/03/21	08/01/26	1,370	QUARTERLY
Sonoma Cnty Jr College Ref Bond	2,000,000	1,842,580	2.447%	06/30/22	08/01/26	1,370	QUARTERLY
San Diego CA Pub Facs Ref Bond	1,625,000	1,440,091	1.812%	08/18/22	10/15/26	1,445	QUARTERLY
El Dorado CA Irr Dist Ref Bond	1,175,000	1,023,825	1.687%	08/18/22	03/01/27	1,582	QUARTERLY
University Gen Rev Bond	2,385,000	2,016,923	1.316%	10/13/22	05/15/27	1,657	QUARTERLY
Contra Costa Ref Bond	880,000	776,811	2.163%	09/15/22	08/01/27	1,735	QUARTERLY
Fremont CA USD Ref Bond	1,140,000	989,759	2.000%	05/31/22	08/01/27	1,735	QUARTERLY
Mount San Antonio Ref Bond	405,000	362,868	2.329%	10/13/22	08/01/27	1,735	QUARTERLY
Saddleback VY Uni Ref Bond	3,000,000	2,669,490	2.400%	08/10/22	08/01/27	1,735	QUARTERLY
San Ramon Valley Ref Bond	1,435,000	1,227,743	3.415%	09/15/22	08/01/27	1,735	QUARTERLY
Santa Monica Cmnty Clg Ref Bond	1,000,000	944,410	3.050%	09/15/22	08/01/27	1,735	QUARTERLY
San Jose CA Txble Ser B	910,000	826,144	2.600%	10/13/22	09/01/27	1,766	QUARTERLY
Mun. Securities TOTAL	\$ 48,025,000	\$ 43,617,521					
Municipal Securities TOTAL	\$ 48,025,000	\$ 43,617,521					

**CITY OF CLOVIS
FINANCE DEPARTMENT
OCTOBER 31, 2022 TREASURY RATES**

Treasury Rates as of October 31, 2022

3 month Treasury bill	4.22
6 month Treasury bill	4.57
2 Yr Treasury note	4.51
3 Yr Treasury note	4.45
5 Yr Treasury note	4.27
10 Yr Treasury note	4.10



As indicated in the above graph, treasuries increase from 3-month to 6-month notes, then decrease to 10-year notes.



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Finance Department

DATE: March 6, 2023

SUBJECT: Finance – Receive and File – Treasurer’s Report for the Month of October 2022.

ATTACHMENTS: 1. Summary of Cash Balances
2. Summary of Investment Activity
3. Investments with Original Maturities Exceeding One Year

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

EXECUTIVE SUMMARY

Attached for the Council’s information is the Treasurer’s Report for the month ended October 31, 2022.

Pursuant to Section 41004 of the Government Code of the State of California, the City Treasurer is required to submit a monthly report of all receipts, disbursements, and fund balances. Attachment 1 provides a summary of the beginning balance, total receipts, total disbursements, ending balance for all funds, and a listing, by fund, of all month end fund balances. Attachment 2 summarizes the investment activity for the month and distribution, by type of investment, held by the City. Attachment 3 lists all investments with original maturities exceeding one year as of the month ended October 31, 2022.

Prepared by: Jeffrey Blanks, Deputy Finance Director

Reviewed by: City Manager *AA*

City of Clovis
Statement of Cash Balances
As of October 31, 2022

Previous Balance	\$	5,681,975.52
Deposits		27,204,630.07
Disbursements		<u>(29,763,057.84)</u>
Current Balance	\$	<u><u>3,123,547.75</u></u>

<u>FUNDS</u>	<u>BALANCE</u>
100 General Fund	\$ 10,441,634.14
201 Local Transportation	19,609,582.41
202 Parking and Business Improvements	137,681.58
203 Off Highway Use	71,829.12
204 Community Facilities District 2020-1	98,348.14
205 Senior Citizen Memorial Trust	55,791.47
207 Landscape Assessment District	5,789,149.57
208 Blackhorse III (95-1) Assessment District	97,346.48
301 Park & Recreation Acquisition	13,201,240.81
305 Refuse Equipment Reserve	2,270,678.07
310 Special Street Deposit Fund	43,930,834.03
313 Successor Agency	370,012.68
314 Housing Successor Agency	1,086,474.66
402 1976 Fire Bond Redemption	25,475.23
404 1976 Sewer Bond Redemption Fund	414,708.87
501 Community Sanitation Fund	15,821,411.50
502 Sewer Service Fund	36,877,668.23
504 Sewer Capital Projects-Users	483,190.82
506 Sewer Capital Projects-Developer	7,630,879.10
507 Water Service Fund	42,430,069.05
508 Water Capital Projects-Users	7,190,722.42
509 Water Capital Projects-Developer	14,276,799.83
515 Transit Fund	2,994,454.06
540 Planning & Development Services	15,932,884.12
601 Property & Liability Insurance	728,221.55
602 Fleet Maintenance	22,334,384.52
603 Employee Benefit Fund	5,309,611.21
604 General Government Services	24,543,166.59
605 Facilities Maintenance	3,635,706.21
606 Information Technology	6,214,577.62
701 Curb & Gutter Fund	163,892.18
703 Payroll Tax & Withholding Fund	1,399,012.12
712 Temperance/Barstow Assmt Dist (98-1)	77,336.51
713 Shepherd/Temperance Assmt Dist (2000-1)	5,813.36
715 Supp Law Enforcement Serv	(306.00)
716 Asset Forfeiture	215,635.50
720 Measure A-Public Safety Facility Tax	1,641.38
736 SA Admin Trust Fund	1,421.40
741 SA Debt Service Trust Fund	(616,972.41)
747 Housing Successor Trust Fund	1,137.98
SUBTOTALS	<u>\$ 305,253,146.11</u>
999 Invested Funds	<u>(302,129,598.36)</u>
TOTAL	<u><u>\$ 3,123,547.75</u></u>

**City of Clovis
Summary of Investment Activity
For the month of October 31, 2022**

<hr/> <hr/>		
<u>Balance of Investments Previous Month End</u>		<u>\$301,674,606.36</u>
<u>Time Certificates of Deposit Transactions</u>		
Investments	2,500,000.00	
Withdrawals	<u>(250,000.00)</u>	
Total CD Changes		2,250,000.00
<u>Other Changes</u>		
Government Securities	(7,998,230.00)	
Local Agency Investment Fund	254,010.71	
Municipal Securities	7,955,000.00	
Sweep Account	<u>(2,005,788.71)</u>	
Total Other Changes		<u>(1,795,008.00)</u>
Balance of Investments Current Month End		<u>\$ 302,129,598.36</u>

**City of Clovis
Distribution of Investments
As of October 31, 2022**

<hr/> <hr/>	
Insured CD's	18,495,000.00
Government Securities	130,726,398.85
US Treasury Notes	0.00
Local Agency Investment Fund	74,905,243.49
Municipal Securities	48,025,000.00
Sweep Account	<u>29,977,956.02</u>
Investment Total	<u>\$ 302,129,598.36</u>

City of Clovis
Original Maturities Exceeding One Year
As of October 31, 2022

Institution	Face Value	Investment Balance At Amortized Cost	Maturity	Stated Rate
FHLB	8,000,000.00	8,014,455	12/9/2022	1.875%
FHLB	5,000,000.00	5,015,560	12/9/2022	1.875%
FAMCMTN	8,500,000.00	8,517,404	2/27/2023	1.350%
FHLB	13,000,000.00	13,233,882	3/10/2023	2.125%
FHLB	5,000,000.00	5,106,310	3/10/2023	2.125%
FFCB	5,000,000.00	5,000,000	3/1/2024	0.250%
FHLB	5,000,000.00	4,998,321	3/8/2024	3.625%
FFCB	2,000,000.00	1,995,012	3/8/2024	0.300%
FHLB	2,000,000.00	1,999,258	3/18/2024	0.350%
FHLB	5,000,000.00	5,000,000	6/7/2024	1.050%
FHLB	5,000,000.00	4,975,169	11/15/2024	1.750%
FHLB	4,000,000.00	3,983,740	2/28/2025	2.750%
FAMCMTN	4,000,000.00	4,000,000	4/25/2025	0.750%
FAMCMTN	4,000,000.00	3,956,650	7/28/2025	0.600%
FHLB	5,000,000.00	5,000,000	8/28/2025	0.580%
FHLB	5,000,000.00	4,956,740	9/8/2025	0.750%
FFCB	5,000,000.00	4,968,743	2/11/2026	0.940%
FHLB	4,000,000.00	3,933,616	2/24/2026	1.150%
FHLB	5,000,000.00	4,971,593	9/28/2026	1.250%
FHLB	4,000,000.00	3,649,200	10/28/2026	2.125%
FHLB	6,000,000.00	5,989,499	11/24/2026	1.020%
FHLB	5,000,000.00	5,113,093	12/11/2026	0.900%
FHLB	4,500,000.00	4,043,250	2/24/2027	2.375%
FHLB	5,000,000.00	4,574,856	2/24/2027	1.020%
FHLB	4,000,000.00	3,730,049	2/26/2027	3.250%
FHLB	4,000,000.00	4,000,000	3/8/2027	3.600%



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: General Services

DATE: March 6, 2023

SUBJECT: General Services – Approval – Authorize the City Manager to Execute a 10-year Extension to the Lease Agreement with Clovis Big Dry Creek Historical Society, Inc., for Property Located at 401 Pollasky Avenue, Clovis.

ATTACHMENTS: 1. Current Lease Agreement
2. Lease Agreement Amendment 1

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

For City Council to authorize the City Manager to execute an amendment to the Lease Agreement with Clovis Big Dry Creek Historical Society, Inc., for Property Located at 401 Pollasky Avenue, Clovis, thereby extending the agreement through June 30, 2033.

EXECUTIVE SUMMARY

The City leases a facility located at 401 Pollasky Avenue, Clovis, to the Clovis Big Dry Creek Historical Society for use as a community museum for local history. The term of the current lease expires June 30, 2023. Staff recommends approval of an amendment to the lease agreement for the period of July 1, 2023, through June 30, 2033, at the rate of \$1.00 per year.

BACKGROUND

The City has leased the property located at 401 Pollasky Avenue, Clovis to the Big Dry Creek Historical Society for many years for use as a museum of local history. The Clovis Museum has served the city well over the years, providing a valuable historical and educational resource to the community. The current lease agreement between the City and the Big Dry Creek Historical Society was for a ten (10) year term, which followed an original 25-year lease term, the last nine (9) years of which were continued by the City when it obtained the property from the County of Fresno. The term of the current lease agreement ends June 30, 2023.

Beth Christensen, President of the Clovis Big Dry Creek Historical Society wishes to extend the terms of the existing lease agreement for another ten (10) year period. Staff is supportive of a contract amendment extending the existing lease agreement. The existing terms of the agreement would continue, including requirements that the Clovis Big Dry Creek Historical Society will maintain the facility, pay property taxes and utilities costs related to operation of the facility, and be responsible for providing the City with appropriate insurance coverages for the facility.

FISCAL IMPACT

The existing annual lease payment of one dollar (\$1.00) per year will continue with the amendment. In addition, the City will continue to provide its own property and general liability coverages for the facility.

REASON FOR RECOMMENDATION

The proposed lease amendment will continue to provide an appropriate use of the facility and will provide adequate space for the Clovis Museum. The Clovis Museum has proven to be a valuable local resource and benefit to the community.

ACTIONS FOLLOWING APPROVAL

The City Manager will execute Amendment 1 to the lease agreement with the Clovis Big Dry Creek Historical Society. The term of the Amendment will be from July 1, 2023, and will expire on June 30, 2033.

Prepared by: Shonna Halterman, General Services Director

Reviewed by: City Manager *AH*

REAL PROPERTY LEASE

**City of Clovis
and
Clovis Big Dry Creek Historical Society, Inc.**

(401 Pollasky Avenue)

REAL PROPERTY LEASE

This Lease Agreement is made and entered into _____ 2013 (“Lease Date”) between the City of Clovis, a California general law city (“City” or “Lessor”) and Clovis Big Dry Creek Historical Society, Inc., a California non-profit benefit corporation (“Society” or “Lessee”), pursuant to the following recitals, which are a substantive part of this Agreement:

RECITALS

A. City owns property at 401 Pollasky Avenue in the City of Clovis, as more particularly described and depicted in **Exhibits A and B** (“Property”). Society leases the Property from City pursuant to a 2004 lease that expired on July 31, 2013, and Society is currently a hold over tenant.

B. Society uses the Property for the purposes of operating the Clovis Big Dry Creek Historical Museum (“Museum”).

C. City and Society desire to enter into a new lease allowing Society continued use of the Property for the Museum.

NOW, THEREFORE, City and Society agree as follows:

AGREEMENT

1. Lease of Property and Term. City hereby leases to Society the Property for a term commencing on the Lease date and ending on June 30, 2023. Any hold over term shall be on a month-to-month basis.
2. Property Leased AS IS. The Property is leased to Society, and Society accepts the Property, in its existing “AS IS” condition on the Lease Date. City shall not be required to make or construct any alteration including structural changes, additions or improvements to the Property and shall have no maintenance or repair obligations with respect to the Property. Society expressly waives the provisions of sections 1941 and 1942 of the California Civil Code and all rights to make repairs at the expense of City as provided in section 1942 of the Civil Code. Society acknowledges that neither City, nor any officer, employee or agent of City has made any representation or warranty with respect to the condition of the Property, the suitability of the Property for the intended use by Society, or compliance of the Property with the Americans With Disabilities Act of 1990 (or any accessibility guidelines or other regulations promulgated thereunder). Any agreements, warranties or representations not expressly contained in this Lease shall in no way bind City, and Society expressly waive all claims for damages by reason of any statement, representation, warranty, promise or agreement, if any, not contained in this Lease.
3. Rent. As consideration for the use and occupancy of the Property, Society shall pay rent to City of one dollar (\$1.00) per year payable in advance, on or before January 1, with no refund if terminated sooner.

4. Taxes, Assessments, and Fees.

a. Possessory Interest Tax and Assessments. Society acknowledges that, pursuant to California Revenue and Taxation Code Section 107.6, Society's possessory interest in the Property created by this Lease may be subject to property taxation. Society shall be solely responsible for any property taxes arising out of Lessee's possessory interest in the Property. Society shall pay before delinquency any and all possessory interest taxes and assessments levied against it. On demand by City, Society shall furnish City with satisfactory evidence of these payments.

b. Personal Property Tax. Society shall pay before delinquency all taxes, assessments, license fees, and other charges that are levied and assessed against Society's personal property installed or located in or on the Property, and that become payable during the term of this Lease. On demand by City, Society shall furnish City with satisfactory evidence of these payments.

c. Business License Fee. Society shall pay before delinquency any and all business license fees that are levied and assessed against Society, and that become payable during the term of this Lease, pursuant to Title 3, Chapter 1, of the City Municipal Code.

5. Use of Property.

a. Purpose. The Property shall be used by Society solely and exclusively for operation of the Museum. No other uses shall be permitted on the Property except for incidental or ancillary uses.

b. No Alterations or Improvements. No alterations or improvements shall be made to the Property without the advance and express written consent of City, and upon such terms and conditions as City may require.

c. Removal of Buildings and Structures. Upon termination of this Lease, unless otherwise agreed, Society shall remove Society owned buildings, structures, and other improvements and restore the Property to substantially the same condition at the time Society took possession of the Property, regardless of whether possession occurred prior to or after execution of the Lease, ordinary wear and tear accepted. Upon the failure of Society to remove from the Property Society owned improvements, the improvements shall, at the option of City, become the sole property of City; or if City so elects, City may remove from the Property any property owned by Society and restore the Property to substantially the same condition in which they existed at the time Society took possession of the Property, all at the expense of Society.

d. Compliance with Laws. Society shall comply with all statutes, ordinances, regulations, and requirements of all governmental entities (including the City of Clovis), relating to Society's use and occupancy of the Property, whether those statutes, ordinances, regulations, and requirements are now in force or are subsequently enacted. Society shall not use the

Property or permit the Property, or any portion thereof, to be improved, developed, used or occupied in any manner that is in any way in violation of any valid law, ordinance, or regulation of any federal, state, county, or local governmental City.

e. License. If any license, permit, or other governmental authorization is required for the lawful use or occupancy of the Property, Society shall procure and maintain it throughout the term of this Lease.

f. Waste and Nuisance. Society shall not use the Property, or allow the Property to be used, in any manner that will constitute a waste, nuisance, or unreasonable annoyance to the neighborhood adjacent to the Property.

g. Maintenance. Society, at its sole cost and expense, shall at all times during the term of this Lease keep and maintain the Property and all buildings and structures thereon in good order and condition, and free from rubbish, all satisfactory to City. All maintenance and repair, both exterior and interior, including the roof, air conditioning system, heating system, plumbing, paint and windows is the responsibility of Society. The Property, including all buildings and structures thereon, shall not be used for displaying signs and notices other than those connected with the business of Society contemplated by this Lease. Such notices and signs shall be neat and properly maintained, and shall be in compliance with the City of Clovis sign ordinance. Society waives any provision of law that may require any duty of repair by City or permit Society to make repairs at the expense of City.

6. Utilities. Society shall make all arrangements for and pay for all utilities and services furnished to or used by Society including, but not limited to, gas, electricity, water, telephone, internet, trash collection and for all connection charges.

7. Indemnification. Society hereby releases and shall indemnify, hold harmless and defend City and its officials, officers, employees, agents and volunteers from and against all liability, claims, suits, damages, losses, costs and expenses, including reasonable attorneys fees, incurred in connection with or arising out of: (1) the use, occupation or control of the Property by Society, its agents, employees, invitees, lessees, sub-lessees, or volunteers; (2) any breach of Society's performance obligations under this Lease; or (3) any acts, omissions or negligence of Society or any person or entity claiming through or under Society, or Society's agents, employees, contractors, invitees or visitors.

8. Insurance Requirements. City shall procure and maintain for the duration of the Lease property insurance, at its sole cost and expense, covering the structure and land. Society may maintain personal property insurance, at its sole cost and expense, covering the personal property contents. Society shall procure and maintain for the duration of this Lease, at its sole cost and expense, liability insurance against claims for injuries to persons and for damage to property which may arise from or in connection with Society's operation and use of the Property in an amount and in the manner approved by City's Risk Management Department.

9. Liens and Claims. Society shall fully pay for all materials joined or affixed to the Property and pay in full all persons who perform labor thereupon. Society shall not suffer any mechanics' or materialmen's liens of any kind to be enforced against the Property for any work done or materials furnished at Society's request. If any such liens are filed thereon, Society shall remove the same at Society's own expense, and shall pay any judgment which may be entered thereon or thereunder. Should Society fail, neglect, or refuse so to do, City shall have the right to pay any amount required to release any such liens, or to defend any action brought thereon, and to pay any judgment entered therein; and Society shall be liable to City for all costs, damages, reasonable attorneys' fees, and any amounts expended in defending any proceedings or in the payment of any of said liens or any judgment obtained therefor. City may post and maintain upon the Property notices of nonresponsibility as provided by law.

10. Leasehold Encumbrances. Society shall not encumber by deed of trust, mortgage or other security instrument, all or a part of Society's interest under this Lease without the advance and express written consent of City, and upon such terms and conditions as City may require. Any encumbrance existing as of the Lease Date shall be subject to all covenants, conditions, or restrictions set forth in this Lease and to all rights and interests of City.

11. Successors: Assignment and Subletting. This Lease shall inure to the benefit of and be binding upon the heirs, administrators, executors, successors, and assigns of the parties hereto, but shall not be assigned or subleased by Society without the prior written consent of City, which consent may be given or withheld in City's sole and absolute discretion.

12. Bankruptcy. City shall have the right to terminate this Lease by written notice and to take exclusive possession of the Property in the event: (a) Society is adjudged a bankrupt; (b) Society becomes insolvent; (c) any action or proceeding for debtor relief of Society is commenced by Society; or (d) Society seeks general debtor relief by extrajudicial means.

Receipt of rent or other payments from any person for use of the Property shall not constitute a waiver of City's right to terminate as above set forth. If there are two or more tenants hereunder, or if Society is a partnership, City's right to terminate shall arise in the event any one of the tenants or partners is adjudged a bankrupt, becomes insolvent, seeks general debtor relief, or commences or becomes subject to any of the proceedings set forth above.

13. Reservations. City reserves for itself and those to whom it grants such right, the right to construct, maintain and operate any existing and new or additional pipes, communication (including, but not limited to, fiber optic) and power transmission facilities upon, over, and beneath the Property, so long as the exercise of such right does not unreasonably interfere with Society's rights under this Lease.

City reserves the title and exclusive right to all of the minerals and mineral ores of every kind and character now known to exist or hereafter discovered upon, within or underlying the Property, or that may be produced therefrom, including, without limiting the generality of the foregoing, all petroleum, oil, natural gas and other hydrocarbon substances and products derived

therefrom, together with the exclusive and perpetual right thereto, without, however, the right to use or penetrate the surface of, or to enter upon the Property within five hundred feet (500') of the surface thereof to extricate or remove the same.

14. Subterranean Facilities. The absence of markers, monuments or maps indicating the presence of subterranean facilities, whether belonging to City or otherwise, does not constitute a warranty or representation that none exist. Society accepts this Lease with full cognizance of the potential presence of such, acknowledging that the costs of Society's use may increase by reason thereof, and acknowledges that the owner or owners thereof may have acquired the right to continue to maintain such facilities by the passage of time.

15. Damage or Destruction of Property. If the Property is damaged or destroyed during a term of this Lease through no fault of Society, this Lease shall terminate and neither party shall be obligated to repair or restore the Property to substantially the same condition as existed immediately prior to the damage or destruction.

16. Eminent Domain. In the event of the taking or condemnation of all or any part of the Property, Society may receive compensation only for any taking of or damage to Society owned improvements. Any compensation awarded and interest thereon, including the compensation for the land value and interest thereon, shall belong to City.

17. Default.

a. Society's Default. The occurrence of any of the following shall constitute a default by Society:

- (1) Failure to pay rent, insurance premiums or taxes, or any other sums due hereunder as a result of Society's use of the Property within five (5) days of the due date;
- (2) Abandonment of the Property;
- (3) Failure to perform any other provision of this Lease if the failure to perform is not cured within ten (10) days after notice has been served upon Society.

b. Notice of Default. Notices given under this section shall specify the alleged default and the applicable lease provisions and shall demand that Society cure the default within ten (10) days, or quit the Property.

c. Termination. City may terminate this Agreement immediately upon written notice to Society if Society defaults on any obligation under this Lease and fails to cure such default within ten (10) days after written notice from City of such default. In the event of termination, City may regain possession of the Property in the manner provided by the laws of unlawful detainer of the State of California in effect at the date of such default. At City' option, if Society has breached this Lease and/or abandoned the Property, this Lease shall continue in effect for so long as City does not terminate Society's right to possession, and City may enforce

all rights and remedies under this Lease, including the right to recover the rent as it becomes due. Further, City shall be entitled to recover from Society damages and to exercise such other rights and remedies as provided to City under the laws of the State of California.

d. Right to Cure at Society's Expense. City, at any time after Society commits a default, can cure the default at Society's cost. If City, by reason of Society's default, pays any sum or does any act that requires the payment of any sum, the sum paid by City shall be due immediately from Society to City upon City's written demand for payment to Society, and if paid at a later date, shall bear interest at the rate of ten percent (10%) per annum from the date the written demand for payment is sent by City until City is reimbursed by Society. The sum, together with interest on it, shall be additional rent.

18. Waiver. No delay or omission in the exercise of any right or remedy of City on any default by Society shall impair such right or remedy or be construed as a waiver. City's consent to or approval of any act by Society requiring City's consent or approval shall not be deemed to waive or render unnecessary City's consent to or approval of any subsequent act by Society. Any waiver by City of any default must be in writing and shall not be a waiver of any other default concerning the same or any other provision of this Lease.

19. Entry and Inspection of Property. City and its authorized representatives shall have the right to enter and inspect the Property at all reasonable times to determine whether the Property is in good condition and whether Society is complying with its obligations under this Lease.

20. Relationship of Parties. City is not, nor shall it become or be deemed to be, a partner or a joint venturer with Society by reason of the provisions of this Lease nor shall this Lease be construed to authorize either party to act as the agent for the other.

21. Notice. Any notice, demand, request, consent, approval, or communication that either party desires or is required to give to the other party or any other person shall be in writing and either served personally or sent by prepaid registered mail at the address of such party as provided below, or to any such address as such party shall notify the other in writing. Notice shall be deemed communicated when received if personally served or three (3) days after mailing if mailed.

22. Effect of Termination of Lease. Termination or expiration of this Lease shall not release any party hereto from any liability or obligation hereunder, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to such termination or expiration, or thereafter in case by the terms of this Lease it is provided that anything shall or may be done after termination or expiration hereof.

23. Amendments. This Lease shall not be modified or amended in any way except in writing signed by the parties hereto.

24. Time and Specific Performance. Time and specific performance are of the essence for each provision of this Lease.

25. Interpretation. This Lease shall be construed and interpreted in accordance with the laws of the State of California.
26. Entire Agreement. This Lease contains all the agreements of the parties concerning the subject matter of it and cannot be amended or modified except by a subsequent written agreement.
27. Severability. The unenforceability, invalidity, or illegality of any provision of this Lease shall not render the other provisions unenforceable, invalid, or illegal.
28. Construction. Headings at the beginnings of sections or subsections are solely for the convenience of the parties and are not a part of nor should they be used to interpret this Lease. The singular form shall include the plural, and vice-versa. This Lease shall not be construed as if it had been prepared by one of the parties, but rather as if both parties have prepared it. Unless otherwise indicated, all references to sections are to this Lease. All exhibits referred to in this Lease are attached to it and incorporated in it by this reference.
29. Attorney's Fees. If either party commences an action against the other party arising out of or in connection with this Lease, the party prevailing in such litigation shall be entitled to have and recover from the losing party reasonable attorney's fees and costs of suit.
30. Voluntary Agreement; Authority to Execute. Society and City each represent that they have read this Agreement in full and understand and voluntarily agree to all provisions herein. The parties further declare that prior to signing this Agreement they each had the opportunity to apprise themselves of relevant information, through sources of their own selection, including consultation with counsel of their choosing if desired, in deciding whether to execute this Agreement. The signatories to this Agreement represent that they have the proper authority to execute this Agreement on behalf of the respective party.
31. Recording of Lease. Upon request of either party, the other party shall join in the execution of a memorandum or short form of this Lease for recording purposes. The memorandum or short form of Lease shall incorporate this Lease by reference and shall describe the parties hereto, the Property, and the term hereof.
32. Nondiscrimination. Society shall be bound by the following nondiscrimination and nonsegregation clause:

There shall be no discrimination against or segregation of any person, or group of persons on account of race, color, creed, religion, sex, sexual preference, marital status, ancestry national origin, or any other protected California class of persons, in the use, occupancy, or enjoyment of the Property, nor shall Society or any person claiming under or through Society, establish or permit any such practice or practices of discrimination or segregation.

IN WITNESS WHEREOF, the parties hereto have executed this Lease on the Lease Date.

CLOVIS BIG DRY CREEK HISTORICAL SOCIETY, INC.

CITY OF CLOVIS

By: Boggy M. Bos
[Name]
[Title] President

By: Robert Woolley
Robert Woolley
City Manager

APPROVED AS TO FORM:

APPROVED AS TO FORM:

By: _____
_____, Lessee Attorney

By: David J. Wolfe
David J. Wolfe, City Attorney

Send notices to:

Send notices to:

Clovis Big Dry Creek
Historical Society, Inc.
P.O. Box 25
Clovis, California 93613

City Manager
City of Clovis
1033 Fifth Street
City, California 93612

Exhibit A

Legal Description

4 2



FRESNO County Recorder
Robert C. Werner
DOC- 2003-0191123

Monday, AUG 18, 2003 12:21:52
FRE \$0.00

Ttl Pd \$0.00

Nbr-0001215239
crr/R6/1-4

When Recorded Mail To:
Real Property
Stop #44

GRANT DEED
(FEE SIMPLE)

For value received,

The COUNTY OF FRESNO, a political subdivision of the State of California,

hereby grant(s) to the City of Clovis, a municipal corporation, all that real property in the City of Clovis, County of Fresno, State of California, described as follows, to-wit:

The West 25 feet of Lots 29, 30, 31 and 32 in Block 28 of the TOWN OF CLOVIS according to the map thereof recorded in Book 1 Page 12 of Miscellaneous Maps, records of said County;

Excluding that portion developed by the City of Clovis (City) to outside public restrooms and outside storage room, the remaining property shall revert to Fresno County upon the City's cessation of use for historical, cultural or recreational purposes.

COUNTY OF FRESNO, a Political
Subdivision of the State of California

Date JUN 10 2003

Jan Arambulo
Chairman, Board of Supervisors

BERNICE E. SEIDEL, Clerk
Board of Supervisors

By Hal [Signature]
Deputy

Exhibit B
Map or Diagram showing the Property

Clovis Big Dry Creek Museum

Location Map





CITY OF CLOVIS REPORT TO THE CITY COUNCIL

APPROVED MA6516 (YES) 3-0-2
 WHELAN (YES)
 FLORES (YES)
 ARMSTRONG } ABSENT
 ASHBROOK }

TO: Mayor and City Council

FROM: General Services Department

DATE: September 9, 2013

SUBJECT: Approval – Renewal of Lease Agreement Between the City of Clovis and the Clovis Big Dry Creek Historical Society, Inc., for Property Located at 401 Pollasky Avenue, Clovis

ATTACHMENT: Lease Agreement

CONFLICT OF INTEREST

None

RECOMMENDATION

Authorize the City Manager to execute a lease agreement between the City of Clovis and the Clovis Big Dry Creek Historical Society, Inc., renewing the lease of the property, located at 401 Pollasky Avenue, Clovis, pursuant to the terms of the current lease agreement.

EXECUTIVE SUMMARY

The City leases a facility located at 401 Pollasky Avenue, Clovis, to the Clovis Big Dry Creek Historical Society for use as a community museum for local history. The term of the current lease agreement has expired. Staff recommends renewal of the terms of the lease agreement for the period of August 1, 2013 through July 31, 2023.

BACKGROUND

The city has leased the property located at 401 Pollasky Avenue, Clovis, to the Big Dry Creek Historical Society for many years for use as a museum of local history. The Clovis Museum has served the city well over the years, providing a valuable historical and educational resource to the community. The current lease agreement between the city and the Big Dry Creek Historical Society was for a nine (9) year term, which was the remainder of an original 25-year lease term which was continued by the city when it obtained the property from the County of Fresno. The term of the lease agreement

City Council Report
Lease Agreement Renewal
September 9, 2013

expired on July 31, 2013, and has continued as provided in the agreement on a month-to-month basis pending renewal of a lease agreement.

Ms. Peg Bos, President of the Clovis Big Dry Creek Historical Society wishes to extend the terms of the existing lease agreement for a ten (10) year period. Staff is supportive of extending the lease agreement under the existing terms and conditions. The terms of the proposed lease renewal provide that the Clovis Big Dry Creek Historical Society will maintain the facility; pay property taxes and utilities costs related to operation of the facility; and be responsible for providing the city with appropriate insurance coverages for the facility.

FISCAL IMPACT

The proposed terms of the lease agreement maintains the existing annual lease payment of one dollar (\$1.00) per year. In addition, the city will continue to provide its own property / general liability coverages for the facility.

REASON FOR RECOMMENDATION

The proposed lease renewal will continue to provide an appropriate use of the facility and will provide adequate space for the Clovis Museum. The Clovis Museum has proven to be a valuable local resource and benefit to the community.

ACTIONS FOLLOWING APPROVAL

The City Manager will execute a lease agreement with the Clovis Big Dry Creek Historical Society. The term of the lease renewal will be from August 1, 2013 and will expire on July 31, 2023.

Submitted by: Robert K. Ford, General Services Director _____

**FIRST AMENDMENT TO REAL PROPERT LEASE BETWEEN CITY OF CLOVIS
AND CLOVIS BIG DRY CREEK HISTORICAL SOCIETY**

401 POLLASKY AVENUE

This First Amendment (“First Amendment”) to the Real Property Lease between the City of Clovis and Clovis Big Dry Creek Historical Society (“Lease”) is made and entered into effective July 1, 2023, between the City of Clovis, a California general law city (“City” or “Lessor”) and Clovis Big Dry Creek Historical Society, Inc., a California non-profit benefit corporation (“Society” or Lessee”), pursuant to the following Recitals, which are a substantive part of this First Amendment:

RECITALS

- A. On or about September 9, 2013, City and Society entered into the Lease under which City leased a building to Society located at 401 Pollasky Avenue in the City of Clovis for operation of the Clovis Big Dry Creek Museum.
- B. The Lease expires on June 30, 2023, and the parties desire to extend the Lease for an additional 10 years.

NOW, THEREFORE, City and Society agree as follows:

AGREEMENT

1. Section 1 of the Lease is amended to read as follows:
- “1. Lease of Property and Term. City hereby leases to Society the Property for a term commencing on July 1, 2023 and ending on June 30, 2033. Any hold over term shall be on a month-to-month basis.”
2. Except as set forth in this First Amendment, all other provisions of the Lease, shall continue in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this First Amendment.

Signatures on Next Page

CLOVIS BIG DRY CREEK HISTORICAL SOCIETY, INC.

CITY OF CLOVIS

By: _____
[Name] _____
[Title] _____

By: _____
John Holt
City Manager

Dated: _____

Dated: _____

APPROVED AS TO FORM:

By: _____
Scott G. Cross, City Attorney

Send notices to:

Send notices to:

Clovis Big Dry Creek
Historical Society, Inc.
P.O. Box 25
Clovis, California 93613

City Manager
City of Clovis
1033 Fifth Street
City, California 93612



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: General Services Department

DATE: March 6, 2023

SUBJECT: General Services – Approval - Contract with LF Staffing Service, Inc. (DBA Labor Finders) for Temporary Labor Services.

ATTACHMENTS: 1. Draft Contract

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

For the City Council to approve the selection of LF Staffing Service, Inc. to provide temporary labor services to the City.

EXECUTIVE SUMMARY

Staff recently conducted a request for proposal (RFP) process for temporary labor services. Staff recommends that the City Council award the contract to LF Staffing Services Inc. based on the quality and value of their proposal.

BACKGROUND

The City has contracted for temporary labor services since 2009 to alleviate work shortages and for staffing on an as-needed basis. The services are used by the Public Utilities Department to assist with community clean up or extra help laborers. The General Service Department utilizes temporary workers to staff the skate park, wash transit vehicles, or for labor assistance on facilities projects. To comply with PERS regulations, the temporary workers are limited to work 900 hours a fiscal year.

Staff developed a Request for Proposals (RFP) for temporary labor services and posted the RFP to the City's web-based bid management system which distributed the invitation to registered vendors interested in providing temporary labor services. The RFP included specific requirements that ensure service needs of the City are met and the quality of each temporary agency worker meets the needs of the jobs that will be performed.

The City's web-based bid management system electronically distributed the RFP invitation to thirty-one (31) vendors and six (6) vendors submitted proposals to the City. Of the six (6) responders, LF Staffing Services Inc. was able to best match the staffing needs of the City.

LF Staffing Service, Inc. is a national company that has been a leader in the temporary staffing industry since 1975. LF Staffing Service Inc, locally doing business under the name of Labor Finders, has been the City's temporary labor service provider since 2009. LF Staffing currently serves many large and medium sized agencies throughout the nation and has been a reliable vendor for the Public Utilities and General Services Departments.

FISCAL IMPACT

Depending upon the amount of temporary labor needed, the estimated cost for the services over the next three (3) years is \$234,000.

REASON FOR RECOMMENDATION

The proposal submitted by LF Staffing Service, Inc. meets all the City's criteria for the provisions of providing temporary labor services. LF Staffing Service, Inc. has maintained a positive working relationship with the City and has successfully fulfilled its obligations for temporary staffing.

ACTIONS FOLLOWING APPROVAL

Staff will prepare a three-year contract that, upon mutual agreement, may be extended with two one-year extensions. The five-year contract will begin on March 15, 2023, and will expire on March 14, 2028. The contract is attached (Attachment 1).

Prepared by: Lori Shively, Personnel/Risk Manager

Reviewed by: City Manager *AK*

CITY OF CLOVIS TEMPORARY LABOR SERVICES AGREEMENT

This Temporary Labor Services Agreement ("Agreement") is entered into between the City of Clovis, a California general law city ("City") and LF Staffing Services, Inc., a Florida Corporation authorized to do business in California ("LF Staffing") with respect to the following recitals, which are a substantive part of this Agreement. This Agreement shall be effective on March 15, 2023, with LF Staffing.

RECITALS

- A. City desires to obtain services for temporary employee placement as described in **Exhibit A** attached hereto and incorporated herein, and as further set forth in the proposal from LF Staffing to City dated January 2023 and incorporated herein. If there is a conflict between the terms of the proposal and this Agreement, this Agreement shall control.
- B. LF Staffing is engaged in the business of furnishing the Services and hereby warrants and represents that it is qualified, licensed, and professionally capable of performing the Services.
- C. City desires to contract with LF Staffing for the Services on the terms and conditions as set forth in this Agreement.

NOW, THEREFORE, in consideration of the promises and mutual agreements herein, City and LF Staffing agree as follows:

AGREEMENT

1. Scope of Services. LF Staffing shall perform the Services described in Recitals.
2. Commencement of Services; Term of Agreement. LF Staffing shall commence the Services upon City's issuance of a written "Notice to Proceed" and shall continue with the Services until LF Staffing, as determined by City, has satisfactorily performed and completed the Services, or until such time as the Agreement is terminated by either party pursuant to Section 14 herein, whichever is earlier.
3. Payment for Services. City shall pay LF Staffing a sum not to exceed the amounts set forth in **Exhibit B** for the Services performed pursuant to this Agreement. LF Staffing shall submit monthly invoices to City containing detailed billing information regarding the Services provided and unless otherwise specified in **Exhibit B**, City shall tender payment to LF Staffing within thirty (30) days after receipt of invoice.
4. Independent Contractor Status. LF Staffing shall perform the Services as an independent contractor and not as an officer, employee, agent or volunteer of City. Nothing contained in this Agreement shall be deemed to create any contractual relationship between City and LF Staffing employees or subcontractors, nor shall anything contained in this Agreement be deemed to give any third party, including but not limited to any LF Staffing employee or any individual placed by LF Staffing with the City pursuant to this Agreement any claim or right of action against the City.

5. Standard of Care. LF Staffing expressly represents it is qualified in the field for which Services are being provided under this Agreement and that to the extent LF Staffing utilizes subcontractors, such subcontractors are, and will be, qualified in their respective fields. LF Staffing also expressly represents that both LF Staffing and its subcontractors, if any, are now, and will be throughout their performance of the Services under this Agreement, properly licensed or otherwise authorized to perform the Services required and contemplated by this Agreement. LF Staffing and its subcontractors, if any, shall utilize the standard of care and skill customarily exercised by members of their profession, shall use reasonable diligence and best judgment while performing the Services, and shall comply with all applicable laws and regulations.

6. Identity of Subcontractors and Sub-Consultants. LF Staffing shall, before commencing any work under this Agreement, provide to City in writing: (a) the identity of all subcontractors and sub-consultants (collectively referred to as "subcontractors"), if any, LF Staffing intends to utilize in performance of this Agreement; and (b) a detailed description of the full scope of work to be provided by such subcontractors. LF Staffing shall only employ subcontractors pre-approved by City and in no event shall LF Staffing replace an approved subcontractor without the advance written permission of City, with the understanding that City's permission will not be unreasonably withheld. Notwithstanding any other provisions in this Agreement, LF Staffing shall be liable to City for the performance of LF Staffing subcontractors.

7. Subcontractor Provisions. LF Staffing shall include in its written agreements with its subcontractors, if any, provisions which: (a) impose upon the subcontractors the obligation to provide to City the same insurance and indemnity obligations that LF Staffing owes to City; (b) make clear that City intends to rely upon the reports, opinions, conclusions and other work product prepared and performed by subcontractors for LF Staffing; and (c) entitle City to impose upon subcontractors the assignment rights found elsewhere in this Agreement.

8. Power to Act on Behalf of City. LF Staffing shall not have any right, power, or authority to create any obligation, express or implied, or make representations on behalf of City except as may be expressly authorized in advance in writing from time to time by City and then only to the extent of such authorization.

9. Record Keeping; Reports. LF Staffing shall keep complete records showing the type of Services performed. LF Staffing shall be responsible and shall require its subcontractors to keep similar records. City shall be given reasonable access to the records of LF Staffing for inspection and audit purposes. LF Staffing shall provide City with a working draft of all reports and five (5) copies of all final reports prepared by LF Staffing under this Agreement.

10. Confidentiality. LF Staffing shall not disclose or permit the disclosure of any confidential information acquired during performance of the Services, except to its agents, employees and subcontractors who need such confidential information in order to properly perform their duties relative to this Agreement.

11. Conflicts of Interest. LF Staffing warrants that neither LF Staffing nor any of its employees have an interest, present or contemplated, in the Services. LF Staffing further warrants that neither LF Staffing nor any of its employees have real property, business interests or income that will be affected by the Services. LF Staffing covenants that no person having any such interest, whether an employee or subcontractor shall perform the Services under this Agreement. During the performance of the Services, LF Staffing shall not employ or retain the services of any person who is employed by the City or a member of any City council, board or commission.

12. Non-liability of Officers and Employees. No officer or employee of City shall be personally liable to LF Staffing, or any successors in interest, in the event of a default or breach by City for any amount which may become due LF Staffing or its successor, or for any breach of any obligation under the terms of this Agreement.

13. City Right to Employ Other Temporary Labor Services. This Agreement is non-exclusive with LF Staffing. City reserves the right to employ other Temporary Labor Services in connection with the Services.

14. Termination of Agreement. This Agreement shall terminate upon completion of the Services, or earlier pursuant to the following.

a. Termination by City: Without Cause. This Agreement may be terminated by City at its discretion upon seven (7) days prior written notice to LF Staffing.

b. Termination by City or LF Staffing: For Cause. Either party may terminate this Agreement upon fourteen (14) days prior written notice to the other party of a material breach, and a failure to cure within that time period.

c. Compensation to LF Staffing Upon Termination. In the event termination is not due to fault attributable to LF Staffing and provided all other conditions for payment have been met, LF Staffing shall be paid compensation for Services performed prior to notice of termination. As to any phase partially performed but for which the applicable portion of LF Staffing compensation has not become due, LF Staffing shall be paid the reasonable value of its Services provided. However, in no event shall such payment when added to any other payment due under the applicable part of the Services exceed the total compensation of such part as specified in Section 3 herein. In the event of termination due to LF Staffing failure to perform in accordance with the terms of this Agreement through no fault of City, City may withhold an amount that would otherwise be payable as an offset to City's damages caused by such failure.

d. Effect of Termination. Upon receipt of a termination notice (or completion of this Agreement), LF Staffing shall: (i) promptly discontinue all Services affected (unless the notice directs otherwise); and (ii) deliver or otherwise make available to the City, without additional compensation, all data, documents, procedures, reports, estimates, summaries, and such other information and materials as may have been accumulated by the LF Staffing in performing this Agreement, whether completed or in process. Following the termination of this Agreement for any reason whatsoever, City shall have the right to utilize such

information and other documents, or any other works of authorship fixed in any tangible medium of expression, including but not limited to physical drawings, data magnetically or otherwise recorded on computer disks, or other writings prepared or caused to be prepared under this Agreement by LF Staffing. LF Staffing may not refuse to provide such writings or materials for any reason whatsoever.

15. Insurance. LF Staffing shall satisfy the insurance requirements set forth in **Exhibit C**.

16. Indemnity and Defense. LF Staffing hereby agrees to indemnify, defend and hold the City, its officials, officers, employees, agents, and volunteers harmless from and against all claims, demands, causes of action, actions, losses, expenses, and other liabilities, (including without limitation reasonable attorney fees and costs of litigation) of every nature arising out of or in connection with the alleged or actual acts, errors, or omissions of LF Staffing or its subcontractors relating to the performance of Services described herein. LF Staffing' duty to defend and indemnify City shall exist even if the alleged injuries sustained by the claimant are the result in part of City's active or passive negligence, but the duty to defend and indemnify City shall not extend to injuries that are the result of City's negligence or misconduct, in which case LF Staffing shall be liable on a comparative basis.

LF Staffing' duty to defend shall immediately arise when a claim is asserted and/or a lawsuit is initiated against the City arising out of or occurring in connection with the alleged or actual acts, errors, omissions or negligence of LF Staffing or its subcontractors relating to the performance of Services described herein and regardless of whether others may owe the City a duty of defense and/or indemnity. LF Staffing and City agree that said indemnity and defense obligations shall survive the expiration or termination of this Agreement for any items specified herein that arose or occurred during the term of this Agreement.

17. Assignment. Neither this Agreement nor any duties or obligations hereunder shall be assignable by LF Staffing without the prior written consent of City. In the event of an assignment to which City has consented, the assignee shall agree in writing to personally assume and perform the covenants, obligations, and agreements herein contained. In addition, LF Staffing shall not assign the payment of any monies due LF Staffing from City under the terms of this Agreement to any other individual, corporation or entity. City retains the right to pay any and all monies due LF Staffing directly to LF Staffing.

18. Form and Service of Notices. Any and all notices or other communications required or permitted by this Agreement or by law to be delivered to, served upon, or given to either party to this Agreement by the other party shall be in writing and shall be deemed properly delivered, served or given by one of the following methods:

a. Personally delivered to the party to whom it is directed. Service shall be deemed the date of delivery.

b. Delivered by e-mail to a known address of the party to whom it is directed provided the e-mail is accompanied by a written acknowledgment of receipt by the other party. Service shall be deemed the date of written acknowledgement.

c. Delivery by a reliable overnight delivery service, ex., Federal Express, receipted, addressed to the addressees set forth below the signatories to this Agreement. Service shall be deemed the date of delivery.

d. Delivery by deposit in the United States mail, first class, and postage prepaid. Service shall be deemed delivered seventy-two (72) hours after deposit.

19. Entire Agreement. This Agreement, including the exhibits attached hereto, represents the entire Agreement between City and LF Staffing and supersedes all prior negotiations, representations or agreements, either written or oral with respect to the subject matter herein. This Agreement may be amended only by written instrument signed by both City and LF Staffing.

20. Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.

21. Authority. The signatories to this Agreement warrant and represent that they have the legal right, power, and authority to execute this Agreement and bind their respective entities.

22. Severability. In the event any term or provision of this Agreement is declared to be invalid or illegal for any reason, this Agreement will remain in full force and effect and will be interpreted as though such invalid or illegal provision were not a part of this Agreement. The remaining provisions will be construed to preserve the intent and purpose of this Agreement and the parties will negotiate in good faith to modify any invalidated provisions to preserve each party's anticipated benefits.

23. Applicable Law and Interpretation and Venue. This Agreement shall be interpreted in accordance with the laws of the State of California. The language of all parts of this Agreement shall, in all cases, be construed as a whole, according to its fair meaning, and not strictly for or against either party. This Agreement is entered into by City and LF Staffing in the County of Fresno, California. LF Staffing shall perform the Services required under this Agreement in the County of Fresno, California. Thus, in the event of litigation, venue shall only lie with the appropriate state or federal court in Fresno County.

24. Amendments and Waiver. This Agreement shall not be modified or amended in any way, and no provision shall be waived, except in writing signed by the parties hereto. No waiver of any provision of this Agreement shall be deemed, or shall constitute, a waiver of any other provision, whether or not similar, nor shall any such waiver constitute a continuing or subsequent waiver of the same provision. Failure of either party to enforce any provision of this Agreement shall not constitute a waiver of the right to compel enforcement of the remaining provisions of this Agreement.

25. Third Party Beneficiaries. Nothing in this Agreement shall be construed to confer any rights upon any party not a signatory to this Agreement.

26. Execution in Counterparts. This Agreement may be executed in counterparts such that the signatures may appear on separate signature pages. A copy or an original, with all signatures appended together, shall be deemed a fully executed Agreement.

27. Alternative Dispute Resolution. If a dispute arises out of or relating to this Agreement, or the alleged breach thereof, and if said dispute cannot be settled through negotiation, the parties agree first to try in good faith to settle the dispute by non-binding mediation before resorting to litigation or some other dispute resolution procedure, unless the parties mutually agree otherwise. The mediator shall be mutually selected by the parties, but in case of disagreement, the mediator shall be selected by lot from among two nominations provided by each party. All costs and fees required by the mediator shall be split equally by the parties, otherwise each party shall bear its own costs of mediation. If mediation fails to resolve the dispute within thirty (30) days, either party may pursue litigation to resolve the dispute.

Demand for mediation shall be in writing and delivered to the other party to this Agreement. A demand for mediation shall be made within reasonable time after the claim, dispute or other matter in question has arisen. In no event shall the demand for mediation be made after the date when institution of legal or equitable proceedings based on such a claim, dispute or other matter in question would be barred by California statutes of limitations.

Now, therefore, the City and LF Staffing have executed this Agreement on the date(s) set forth below.

28. Non-Discrimination. LF Staffing shall not discriminate based on any protected class under federal or State law in the provision of the Services or with respect to any LF Staffing employees or applicants for employment. LF Staffing shall ensure that any subcontractors are bound to this provision. A protected class includes, but is not necessarily limited to race, color, national origin, ancestry, religion, age, sex, sexual orientation, marital status, and disability.

LF STAFFING SERVICES, INC.

CITY OF CLOVIS

By: _____

By: _____

John Holt, City Manager

Date: _____

Date: _____

ATTEST

Karey Cha, City Clerk

APPROVED AS TO FORM

Scott G. Cross, City Attorney

EXHIBIT A DESCRIPTION OF SERVICES

The LF Staffing shall perform certain services necessary for temporarily filling positions for various departments which services shall include the following:

- Provide temporary employees willing to report to various City sites including, but not necessarily limited to, City Hall, 1033 5th Street, 908 Villa Avenue, and 155 N. Sunnyside.
- Coordinate directly with each City department's request for temporary services, scheduling and billing for services.
- Maintain a pool of employees sufficient to meet the City's temporary staffing needs within twenty-four (24) hours.
- Provide access to a wide range of employee skills including Microsoft Word, Excel, Access, Power Point and manual labor experience.
- Allow City departments to request a specific individual, when available, to fill a temporary service need.
- Provide training and orientation as necessary for the temporary employees, in order for them to be job-ready, at no cost or additional charge to the City.
- Allow the using department to transfer temporary employee(s) within the same department (where needed) upon notification by telephone to the agency, at no additional charge to the City.
- Handle all timesheets and paychecks for temporary employees.
- Charge no fee to the City for any temporary service agency employee hired into a regular City position, or otherwise restrict the City from offering regular City employment to such individuals.
- Handle all billing for temporary services with each department, with a summary report sent to City of Clovis, Human Resources Department, at 1033 Fifth Street, Clovis, CA 93612.
- LF Staffing shall be responsible to furnish the City with a monthly summary and analysis of the placement for the period. This report shall reflect the following information sorted by City Department. Total hours worked during the month by name, classification, pay rate, and bill rate with a running total of hours worked/paid per fiscal year (July 1 – June 30). Failure to provide the monthly report may result in cancellation of contract for being non-responsive.
- Monitor hours worked and notify City within a week after a temporary employee exceeds 900 hours. Temporary employees may not exceed 900 hours worked per fiscal year from July 1st to June 30th.
- LF Staffing shall inform the City of any temporary workers who are retired annuitants from the California Public Retirement System (CalPERS) prior to their start of work in order to determine their eligibility.
- Provide a designated contact person(s) who will coordinate requests under this contract with all City departments.

- Provide a 24-hour guarantee of no charge in the event a temporary employee placed is unsatisfactory and the department requests a replacement within the first 24-hour period.
- Agree to maintain an application process, which includes skill assessment and evaluation, custom matching of employees to job requirements, and reference checking of prospective employees.
- Administer and maintain all paperwork and be responsible for all costs related to social security, state and federal withholding taxes, unemployment claims, and workers compensation claims for all temporary workers placed as a result of this contract.
- Manage all paperwork and be responsible for compliance with all State and Federal mandated benefits.
- Agree to allow the City to conduct background checks on employees who would be working in certain high security, confidential, or youth-oriented assignments and reject candidates that are not deemed suitable for placement.
- Background checks and drug screens are required by the City and must be completed prior to any temporary employee beginning work. City live scans are required for all temporary employees working in Recreation.
- LF Staffing's performance of this Services under this Agreement is subject to AUDIT by the City. The agency shall make available to the City's Accounting Division all records and information necessary for the performance of such audit. Such audit will be performed in compliance with general accepted auditing standards. Reports rendered will adhere to the confidentiality provisions (if any) of this Agreement.
- Pricing for the term of this Agreement, including all costs, is set forth in Exhibit B. Pricing for any extended term shall be mutually agreed upon by City and LF Staffing.
- There is no guarantee of any minimum or maximum number of hours or specific assignments that will be made during the life of this agreement.

EXHIBIT B

CONTRACT TERM, COST AND DUTIES PERFORMED:

The term of this Agreement will commence on March 15, 2023 for three years with two one (1) year options to extend the Agreement providing LF Staffing is performing to the City's satisfaction.

COST OF TEMPORARY SERVICES

Below are the titles of City positions that may typically require temporary staffing services. Current descriptions for identification of skills and duties required by temporary staff are attached.

Job Classification	March 2023			March 2024			March 2025		
	Hourly Rate	(%) Mark-Up	(\$) Hourly Rate including Mark Up	Hourly Rate	(%) Mark-Up	(\$) Hourly Rate including Mark Up	Hourly Rate	(%) Mark-Up	(\$) Hourly Rate including Mark Up
General Maintenance	\$16.50	60.00%	\$26.40	\$16.75	62.39%	\$27.20	\$17.00	63.50%	\$27.80
Skate Park Attendant	\$16.50	60.00%	\$26.40	\$16.75	62.39%	\$27.20	\$17.00	63.50%	\$27.80
Vehicle Washer	\$16.50	60.00%	\$26.40	\$16.75	62.39%	\$27.20	\$17.00	63.50%	\$27.80

JOB DESCRIPTIONS OF TEMPORARY SERVICES

Job Duties for General Maintenance

Under supervision delivers equipment, supplies, and mail; fills air bottles; assists in the collection of residential and commercial refuse, assists in the maintenance and repair of public parks, streets, sewers, water systems and facilities; performs a wide variety of unskilled duties; loads and unloads supplies, lifts and moves heavy objects, assists in maintenance and repair of public works facilities, digs trenches, uses air tools, performs other manual labor necessary to the completion of jobs; cleans up yards, alleys, and buildings; cleans and maintains tools used on the job; cleans and maintains grounds; may operate light equipment; assists in repairs of walks and cement structures; works as a helper, performing the more routine unskilled carpentry, painting, and minor work on buildings; assists with planting, watering, cultivating, fertilizing and caring for shrubbery, lawns and trees; mows and edges lawns; assists in spraying for pests and weed control; rakes grounds; prepares soil for planting and transplanting; cleans restrooms; clean and performs minor repairs on refuse bins; cleans lift stations; replaces broken light bulbs; keeps simple labor records; cleans, washes and polishes motor equipment; obtains equipment parts; steam cleans refuse trucks; cleans and maintains work areas, hand tools and equipment; and sweeps floors, picks up litter and keeps work area and property free of debris and performs related work as required.

Minimum Qualifications:

- Education: Equivalent to graduation from high school.
- Possession of: A valid California Driver's License and a good driving record.
- Knowledge of: Basic math, simple record keeping, personal computer operation, basic office and clerical practices, proper methods, materials, tools and equipment used in maintenance work and appropriate safety precautions and procedures.
- Ability to: Read and write at the level required for successful job performance (SOPs, SDS), use and properly maintain assigned tools and equipment, perform semi-skilled maintenance, repair and construction work, operate a vehicle observing legal and defensive driving practices, maintain simple records, sort and file accurately and locate materials in files, maintain accurate records, operate standard office equipment, read, understand and apply written materials, understand and carry out oral and written instructions and establish and maintain effective relationships with persons contacted in the course of work.
- Special Requirements: Must be willing to work flexible hours; including evenings, weekends, and holidays. Must be able to lift, carry and/or push 100 pounds with frequent lifting and/or carrying of objects weighing up to 60 pounds.

Job Duties for Skate Park Attendant

Duties: Responsible for opening and closing the skate park on a daily basis. Provide a high level of customer service. Monitor participants' behavior ensuring compliance with park rules and regulations by checking users in and periodically walking through the facility. Provide department information to facility users. Responsible for the cleanliness of the park. Assist with skate park office related functions including the completion and collection of forms, logs, and reports. Perform routine inspections of the skate park and surrounding areas to maintain cleanliness and safety. Notify supervisor regarding any problems or repairs needed to equipment or facilities. Report to supervisor of any accidents, incidents or injuries. Respond to critical incidents and act swiftly in emergency situations. Determine if medical assistance is necessary and ensure medical professionals are contacted in a timely manner. Perform other duties as assigned.

Minimum Qualifications:

- Education: Equivalent to graduation from high school.
- Must be able to work independently, often with limited/no supervision or direction; adhere to safety procedures, practices and policies of the Skate Park, Recreation Center and the City of Clovis; establish and maintain effective working relationships with staff and the general public, communicate effectively, orally and in writing.
- Experience: Previous experience in the enforcement of rules is preferred.
- Special Requirements: Must be willing to work flexible hours; including evenings, weekends, and holidays. Must be able to lift boxes and other objects weighing up to 50 pounds. All Skate Park Attendants must be live scanned.

Job Duties Vehicle Washer

Duties: Example of duties include but are not limited to cleaning, vacuuming and washing vehicles; proper use, storage and maintenance of supplies and equipment; recognize, report and correct unsafe conditions and perform related work as required. The working hours will be on weekends.

Minimum Qualifications:

- Education: Sufficient to assure the ability to read and write at the level required for successful job performance.
- Possession of: A valid California Driver's License and a good driving record.
- Knowledge of: Routine record keeping procedures.
- Experience: One year of work experience.
- Ability to: Establish and maintain cooperative and effective working relationships in the course of work, understand and carry out oral and written directions, perform routine vehicle cleaning tasks and safely operate associated equipment and machines, be flexible and receptive to change.
- Special Requirements: Must be able to frequently walk, stand, climb, bend, kneel and crawl while performing the for this job.

EXHIBIT C INSURANCE REQUIREMENTS

Prior to commencement of the Services, LF Staffing (“Consultant”) shall take out and maintain at its own expense the insurance coverage required by this **Exhibit C**. Consultant shall cause any subcontractor with whom Consultant contracts for the performance of Services pursuant to this Agreement to take out and maintain equivalent insurance coverage. Said insurance shall be maintained at all times during Consultant’s performance of Services under this Agreement, and for any additional period specified herein. All insurance shall be placed with insurance companies that are licensed and admitted to conduct business in the State of California and are rated at a minimum with an “A:VII” by A.M. Best Company, unless otherwise acceptable to the City.

a. Minimum Limits of Insurance. Consultant shall maintain the following types of insurance with limits no less than specified:

(i) Professional Liability Insurance (Errors and Omissions) in an amount not less than Two Million Dollars (\$2,000,000.00) per occurrence or claim and Two Million Dollars (\$2,000,000.00) in the aggregate. Said insurance shall be maintained for an additional period of five (5) years following the earlier of completion of Consultant’s Services under this Agreement or termination of this Agreement.

(ii) General Liability Insurance (including operations, products and completed operations coverages) in an amount not less than Two Million Dollars (\$2,000,000.00) per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.

(iii) Worker's Compensation Insurance as required by the State of California.

(iv) Automobile Liability Insurance in an amount not less than One Million Dollars (\$1,000,000.00) per accident for bodily injury and property damage.

(v) Umbrella or Excess Liability. In the event Consultant purchases an Umbrella or Excess insurance policy(ies) to meet the “Minimum Limits of Insurance,” this insurance policy(ies) shall “follow form” and afford no less coverage than the primary insurance policy(ies). In addition, such Umbrella or Excess insurance policy(ies) shall also apply on a primary and non-contributory basis for the benefit of the City, its officers, officials, employees, agents and volunteers.

If Consultant maintains higher limits than the minimums shown above, the City shall be entitled to coverage at the higher limits maintained.

b. Other Insurance Provisions. The general liability policy is to contain, or be endorsed to contain, the following provisions:

(i) The City, its officers, officials, employees, agents, and volunteers are to be covered as insured's with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the Consultant; and with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Consultant's insurance (at least as broad as ISO Form 20 10 11 85 or both CG 20 10, CG 20 26, CG 20 33 or CG 20 38; and CG 20 37 forms if later revisions used).

(ii) For any claims related to the Services performed pursuant to this Agreement, the Consultant's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, agents or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

(iii) Each insurance policy required by this section shall be endorsed to state that the City shall receive written notice at least thirty (30) days prior to the cancellation, non-renewal, or material modification of the coverages required herein.

(iv) Consultant grants to the City a waiver of any right to subrogation which any insurer of said Consultant may acquire against the City by virtue of the payment of any loss under such insurance. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

(v) Any deductibles or self-insured retentions must be declared to and approved by the City of Clovis Risk Services. The City may require the Consultant to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

c. Evidence of Coverage. Consultant shall deliver to City written evidence of the above insurance coverages, including the required endorsements prior to commencing Services under this Agreement; and the production of such written evidence shall be an express condition precedent, notwithstanding anything to the contrary in this Agreement, to Consultant's right to be paid any compensation under this Agreement. City's failure, at any time, to object to Consultant's failure to provide the specified insurance or written evidence thereof (either as to the type or amount of such insurance), shall not be deemed a waiver of City's right to insist upon such insurance later.

d. Maintenance of Insurance. If Consultant fails to furnish and maintain the insurance required by this section, City may (but is not required to) purchase such insurance on behalf of Consultant, and the Consultant shall pay the cost thereof to City upon demand, and City shall furnish Consultant with any information needed to obtain such insurance. Moreover, at its discretion, City may pay for such insurance with funds otherwise due Consultant under this Agreement.

e. Subcontractors. If the Consultant should subcontract all or any portion of the work to be performed in this Agreement, the Consultant shall cover the subcontractor, and/or require each subcontractor to adhere to all the requirements contained herein. Similarly, any cancellation, lapse, reduction or change of subcontractor's insurance shall have the same impact as described above.

f. Special Risks or Circumstances. The City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

g. Indemnity and Defense. Except as otherwise expressly provided, the insurance requirements in this section shall not in any way limit, in either scope or amount, the indemnity and defense obligations separately owed by Consultant to City under this Agreement.



CITY of CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: General Services

DATE: March 6, 2023

SUBJECT: General Services – Approval – Selection of Passio Technologies, LLC. for an Intelligent Transportation System “ITS” (Computer-Aided Dispatch/Automatic Vehicle Location/Automatic Voice Annunciation [CAD/AVL/AVA] Passenger Infotainment, and Historical and Real-time Application Programming Interfaces [API’s]) and Authorize City Manager to Execute the Contract for \$461,500.00.

ATTACHMENTS: 1. Passio Technologies, LLC. ITS Proposal
2. Contract

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

For the City Council to award a contract for an Intelligent Transportation System to Passio Technologies, LLC. (Passio) in the amount of \$461,500.00; and for the City Council to authorize the City Manager to execute the contract on behalf of the City.

EXECUTIVE SUMMARY

In September 2021, staff released a request for proposal (RFP) for various components of public transit technology. Five vendors responded to the CAD/AVL/AVA, Passenger Infotainment, and Real-time and Historical Application Programming Interfaces (API) portions of the RFP. Staff is recommending the Council award and authorize the City Manager to sign the five-year contract with Passio Technologies, LLC. (Passio) in the amount of \$461,500.00 for Computer-Aided Dispatch, Automatic Vehicle Location, Automatic Voice Annunciation (CAD/AVL/AVA), Passenger Infotainment, and Real-time and Historical APIs components of the ITS.

The CAD/AVL component will give the City the ability to view vehicle locations in real-time and gather data to determine on-time performance, schedule adherence, and event management on all routes. The data will also allow the City to improve schedules, headway frequencies, time points, bus stops, and other service-related functions in a comprehensive manner.

The AVA system will ensure compliance with ADA regulations by announcing the street location and bus stops to passengers on board the buses. The AVA system can also make annunciations in other languages such as Spanish.

The Passenger Infotainment system will enhance the passenger experience by displaying route information, service alerts, promotional information, public service information, transfer points, and more. These visual aids will simplify trip planning for passengers and keep them better informed about fixed-route services.

The Real-time and Historical APIs will provide trip planning information to passengers through third-party applications like Google Maps and other applications the City utilizes. Passengers will have the ability to plan their trips through Google Maps, track the arrival of the next bus, and view the current capacity of the buses in service. In addition, Transit staff will be able to utilize the data for route planning and service changes.

The costs for the system components and associated expenses will be paid through the Measure C New Technology Grant and State Transit Assistance (“STA”) Funds.

BACKGROUND

On September 1, 2021, Clovis Transit released an RFP for an Intelligent Transportation System with three (3) core components and three (3) optional components:

Core:

- A. Computer Aided Dispatch/Automated Vehicle Location (CAD/AVL) with Automated Voice Annunciations (AVA) and Head Sign Control
- B. Passenger Infotainment
- C. Automated Passenger Counters (APC)

Optional:

- D. Real-time and Historical APIs (Application Programming Interface)
- E. Passenger Wi-Fi
- F. Electronic Driver Vehicle Inspection Reporting (eDVIR)

Vendors were able to submit proposals and pricing on any combination of components and were not required to respond on all core components.

Five (5) proposals were submitted for components A, B, and D with the associated costs:

ETA Transit	Transloc	Passio	GMV Syncromatics	Connexionz
\$172,097.00	\$241,465.00	\$381,337.50	\$401,387.00	\$407,554.08

Staff evaluated all five (5) proposals and tentatively awarded another contractor. After a lengthy negotiation process with that contractor, it was determined that the contractor was unable to provide technology that would result in the desired system operation. After reevaluation of the remaining four (4) proposals, staff has determined that Passio's proposal was the most responsive and advantageous to the City, and that the contractor is able to provide the desired technical system.

Passio offered the most robust passenger infotainment system of all contractors, which will help keep passengers better informed of transit services and simplify trip planning. Passio will also be using the most up-to-date technology to integrate with the Automated Passenger Counter (APC) system, which will ensure the data being transferred between the systems remains accurate and compliant with the California Integrated Travel Project (CAL-ITP) General Transit Feed Specification (GTFS) Standards. This was one of the main reasons negotiations broke down with the first contractor.

The contract will be executed for three (3) years of service with two (2) one-year optional extensions and is based on the number of vehicles in the currently deployed transit fleet, and includes hardware, software, setup and installation, support and maintenance, and training. Initial contract term of three years has a cost of \$371,391.97. Due to the amount of time that passed with negotiations with the initial contractor, Staff requested updated pricing from Passio, which is reflected in the contract. Also, Passio's original bid did not include the ETA Text Back Service for \$23,869.77, integration with the APC system for \$25,800.00, or extended warranty for \$10,397.50, for a total cost of \$401,275.54. Staff is anticipating additional fixed route vehicles to be used in the next five years to meet passenger demand and service expansion with an additional estimated cost of \$60,224.46, for a total cost of the contract not to exceed \$461,500.00 for five years of service.

The City of Clovis' Information Technology Department has completed an assessment of Passio's security and software data management systems and has determined that the products meet or exceed current industry standards. Passio regularly analyzes and updates their security protocols to insure adherence to most up-to-date standards.

FISCAL IMPACT

Adequate funds through a FY22/23 Measure C New Technology Grant (\$425,000.000) and STA (\$36,500.00) are held in the City's Transit fund account for the purchase of the system for the contract amount of \$461,500.00.

REASON FOR RECOMMENDATION

The ITS components provided by Passio will enhance the services provided to Clovis Transit passengers and ensure compliance with ADA regulations. It will also provide fixed route service data that will be used for a variety of required local and state reports and will provide crucial data to be used for operational and service planning. The data generated will also be used for NTD Reporting to meet FTA funding requirements in the future.

ACTIONS FOLLOWING APPROVAL

The City Manager will execute a contract with Passio in the amount of \$461,500.00 to provide an ITS system for the public transit fleet.

Prepared by: Amy Hance, General Services Manager

Reviewed by: City Manager *AH*



October 8, 2021
RFP ISSUED 9/1/2021

TECHNICAL PROPOSAL

INTELLIGENT TRANSPORTATION SYSTEM



PREPARED FOR
City of Clovis
Nick Chin
Transit Director
155 N. Sunnyside Ave., 2nd Floor
Clovis, CA 93611
(559) 324-2762
nickc@cityofclovis.com

PREPARED BY
Passio Technologies
Mitch Skyer
President & Co-Founder
6100 Lake Forrest Dr. Ste. 410
Atlanta, GA 30328
(404) 272-9536
sales@passiotech.com



October 8, 2021
RFP ISSUED 9/1/2021

Nick Chin
Transit Director
155 N. Sunnyside Ave.,
2nd Floor
Clovis, CA 93611
(559) 324-2762
nickc@cityofclovis.com

Hello Nick,

Passio Technologies, Inc. is pleased to present our response to the City of Clovis' request for Intelligent Transportation Technology. Passio Technologies has indicated our understanding and willingness to work with each requirement as stated in the scope of work and proposed contract. That compliance and understanding are included in this proposal response. We want your riders to see how seamless public transportation can be, and our Passio ITS technology will help do just that.

Whether a family from Sierra Ridge Apartments is catching Route 50 for a day down at No Surrender Adventure Park, students headed to Fresno State on Route 10, or folks are headed to work at Wawona on Route 10, Passio will help you make their journey easier and more enjoyable. We want your riders to see how seamless public transportation can be, and our ITS solutions connect your riders with the people they want to see and places they need to go. We are excited about the upcoming transit improvements in service coming to Clovis Transit. Impactful decisions require accurate data and we want to help reshape your experience with transit technology. We have outlined an integrated solution designed specifically for the City of Clovis.

As President of Passio Technologies, Inc., I am fully authorized to represent the company in negotiations and will sign any contracts as required. Passio Technologies, LLC is a wholly-owned subsidiary of Transit Technologies, LLC, a Tennessee Limited Liability Company. We look forward to your review and are available to answer any questions or provide further clarification if needed. This proposal and associated pricing will be valid and binding for 180 days from the date October 8, 2021.

Mitch Skyer, President
Passio Technologies, Inc.

A handwritten signature in black ink that reads "Mitchel Skyer".

(678) 825-3456 ext. 106
sales@passiotech.com

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CONFLICT OF INTEREST AND CONFIDENTIALITY STATEMENT

I certify that I/We (Passio organization) have no personal or financial interests and no present employment or activity which would be incompatible with this organization's participation in any activity related to the RFP or execution of the awarded contract. For the duration of this organization's involvement in the contract, this organization agrees not to accept any gift, benefit, gratuity or consideration, or begin a personal or financial interest in a party who is bidding and/or proposing, or associated with a bidder and/or proposer on this project.

I certify that this organization will keep all contract information confidential and secure. This organization will not copy, give, or otherwise disclose such information or data to any other person unless authorized by the City of Clovis. I understand that all contract information to be kept confidential. I understand that if this organization leaves this contract before it ends, this organization must still keep all contract information confidential. We shall comply with all federal, state and local conflict of interest laws, statutes, and regulations.

I fully understand that any unauthorized disclosure made by this organization may be a basis for civil or criminal penalties and/or disciplinary action. I agree to advise the City of Clovis immediately in the event that I or another person within this organization either learn or have reason to believe that any person who has access to the contract confidential information has or intends to disclose that information in violation of this agreement.

Mitch Skyer, President
Passio Technologies

A handwritten signature in black ink that reads "Mitchel Skyer". The signature is written in a cursive style.

CITY OF CLOVIS



REQUEST FOR PROPOSAL INTELLIGENT TRANSPORTATION SYSTEM

Issue Date: September 1, 2021

Closing Date: October 1, 2021 AT 12 PM Pacific

All Questions and Responses must be electronically submitted on the Bid Page on Planet Bids:

<https://pbsystem.planetbids.com/portal/14742/portal-home>

For assistance, contact Nick Chin at Phone (559) 324-2762 or nickc@cityofclovis.com.

CONTRACTOR TO COMPLETE

Undersigned agrees to furnish the commodity or service stipulated in the attached at the prices and terms stated in this RFP.
Proposal must be signed and dated by an authorized officer or employee.

Passio Technologies

COMPANY

Mitchel Skyer

CONTACT PERSON

6100 Lake Forrest Dr Suite 410

ADDRESS

Atlanta

CITY

GA

STATE

30328

ZIP CODE

678 825 3456 ext 106

TELEPHONE NUMBER

mitch.skyer@passiotech.com

E-MAIL ADDRESS

Mitchel L Skyer

AUTHORIZED SIGNATURE

Mitchel Skyer

PRINT NAME

President

TITLE

CITY OF CLOVIS



ADDENDUM NUMBER: ONE (1)

INTELLIGENT TRANSPORTATION SYSTEM

Issue Date: September 7, 2021

Closing Date: October 1, 2021 at 12 PM Pacific

All Questions and Proposals must be electronically submitted to the Bid Page on Planet Bids:

<https://pbsystem.planetbids.com/portal/14742/portal-home>

For assistance, contact Nick Chin at (559) 324-2762 or nickc@cityofclovis.com.

NOTE THE FOLLOWING AND ATTACHED ADDITIONS, DELETIONS AND/OR CHANGES TO THE REQUIREMENTS OF REQUEST FOR PROPOSAL AND INCLUDE THEM IN YOUR RESPONSE. PLEASE SIGN AND RETURN THIS ADDENDUM WITH YOUR PROPOSAL.

- **Contractors have the option to attend the Mandatory Contractors' Conference in-person or by video conference. Contractors must email nickc@cityofclovis.com by September 14, 2021 to receive a link to the conference. Proposals submitted from Contractors that did not attend the mandatory Contractors' Conference will be rejected as non-responsive.**
- **Page 4 of RFP (attached) was updated for clarification.**

ACKNOWLEDGMENT OF ADDENDUM NUMBER ONE (1) TO RFP.

COMPANY NAME: Passio Technologies (PRINT)

SIGNATURE: *Mitchel L Skyer*

NAME & TITLE: Mitchel Skyer - President (PRINT)

CITY OF CLOVIS



ADDENDUM NUMBER: TWO (2)

INTELLIGENT TRANSPORTATION SYSTEM

Issue Date: September 22, 2021

Closing Date: October 8, 2021 at 12 PM Pacific

All Questions and Proposals must be electronically submitted to the Bid Page on Planet Bids:

<https://pbsystem.planetbids.com/portal/14742/portal-home>

For assistance, contact Nick Chin at (559) 324-2762 or nickc@cityofclovis.com.

NOTE THE FOLLOWING AND ATTACHED ADDITIONS, DELETIONS AND/OR CHANGES TO THE REQUIREMENTS OF REQUEST FOR PROPOSAL AND INCLUDE THEM IN YOUR RESPONSE. PLEASE SIGN AND RETURN THIS ADDENDUM WITH YOUR PROPOSAL.

- **Closing Date extended to October 8, 2021 at 12 PM Pacific.**
- **Questions and Answers**

ACKNOWLEDGMENT OF ADDENDUM NUMBER TWO (2) TO RFP.

COMPANY NAME: Passio Technologies (PRINT)

SIGNATURE: *Mitchel L. Skyer*

NAME & TITLE: Mitchel Skyer - President (PRINT)

TRADE SECRET ACKNOWLEDGEMENT

Each proposal submitted is a public record under the California Public Records Act (Cal. Gov. Code, secs. 6250 and following) and is therefore open to inspection by the public as required by Section 6253 of the California Government Code. This section generally states that "every person has a right to inspect any public record". The City will not exclude any proposal or portion of a proposal from treatment as a public record except information that it is properly submitted as a "trade secret" (defined below), and determined by the City to be a "trade secret" (if not otherwise subject to disclosure, as stated below). Information submitted as "proprietary", "confidential" or under any other terms that might state or suggest restricted public access will not be excluded from treatment as public record.

"Trade secrets" as defined by Section 6254.7 of the California Government Code are not treated as a public record under that section. This section defines trade secrets as:

"...Trade secrets," as used in this section, may include, but are not limited to, any formula, plan, pattern, process, tool, mechanism, compound, procedure, production data or compilation of information that is not patented, which is known only to certain individuals within a commercial concern who are using it to fabricate, produce, or compound an article of trade or a service having commercial value and which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it."

Such information must be submitted in a separate PDF file named "Trade Secret" and marked as "Confidential" in the Planet Bids system. Contractors must include a clear and concise statement that sets out the reasons for confidentiality in accordance with the foregoing definition of "trade secret." Examples of information not considered trade secrets are pricing, cover letter, promotional materials, references, and the like.

Information submitted by a Contractor as "trade secret" will be reviewed by the City, with the assistance of the City's legal counsel, to determine conformance or non-conformance to the foregoing definition.

Information that is properly identified as "trade secret" and which the City determines to conform to the definition will not become public record (if not otherwise subject to disclosure, as stated below). The City will safeguard this information in an appropriate manner, provided however, in the event of a request, demand, or legal action by any person or entity seeking access to the "trade secret" information, the City will inform the Contractor of such request, demand, or legal action, and the Contractor shall defend, indemnify, and hold harmless the City, including its officers and employees, against any and all claims, liabilities, damages, or costs or expenses, including attorney's fees and costs, relating to such request, demand or legal action, seeking access to the "trade secret" information.

Information submitted by Contractor as trade secret and determined by the City not to be in conformance with the foregoing California Government Code definition shall be excluded from the proposal and deleted by the City.

The City shall not in any way be liable or responsible for the disclosure of any proposals or portions thereof, if (1) they are not electronically submitted in a separate PDF that is marked "Trade Secret" and marked as Confidential in the Planet Bids system; or (2) disclosure thereof is required or allowed under the law or by order of court.

Contractors are advised that the City does not wish to receive trade secrets and that Contractors are not to supply trade secrets unless they are absolutely necessary.

I have read and understand, and agree to the above "Trade Secret Acknowledgement."

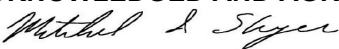
CONTRACTOR MUST CHECK ONE OF THE FOLLOWING:

Has Contractor submitted certain bid information that is a "trade secret," as defined by Section 6254.7 of the California Government Code, and in compliance with the requirements of this Trade Secrets Acknowledgement?

By marking "NO", Contractor does not claim any confidentiality of any bid information submitted to the City.

YES NO

ACKNOWLEDGED AND AGREED BY CONTRACTOR:

	10/05/2021
Signature	Date
Mitchel Skyer	President
Print Name	Title

DISCLOSURE – CRIMINAL HISTORY & CIVIL ACTIONS

In their proposal, the Contractor is required to disclose if any of the following conditions apply to them, their owners, officers, corporate managers and partners (hereinafter collectively referred to as “Contractor”):

1. Within the three-year period preceding the proposal, they have been convicted of, or had a civil judgment rendered against them for:
 - a. fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction;
 - b. violation of a federal or state antitrust statute;
 - c. embezzlement, theft, forgery, bribery, falsification, or destruction of records; or
 - d. false statements or receipt of stolen property
2. Within a three-year period preceding their proposal, they have had a public transaction or contract with any federal, state, or local government agency terminated for cause or default.

Disclosure of the above information will not automatically eliminate a Contractor from consideration. The information will be considered as part of the determination of whether to award the contract and any additional information or explanation that a Contractor elects to submit with the disclosed information will be considered. If it is later determined that the Contractor failed to disclose required information, any contract awarded to such Contractor may be immediately voided and terminated for material failure to comply with the terms and conditions of the award.

Any Contractor who is awarded a contract must sign an appropriate Certification Regarding Debarment, Suspension, and Other Responsibility Matters. Additionally, the Contractor awarded the contract must immediately advise the City in writing if, during the term of the agreement: (1) Contractor becomes suspended, debarred, excluded or ineligible for participation in federal or state funded programs or from receiving federal funds as listed in the excluded parties list system (<http://www.epls.gov>); or (2) any of the above listed conditions become applicable to Contractor. The Contractor must indemnify, defend and hold the City harmless for any loss or damage resulting from a conviction, debarment, exclusion, ineligibility or other matter listed in the signed Certification Regarding Debarment, Suspension, and Other Responsibility Matters.

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS - PRIMARY COVERED TRANSACTIONS

INSTRUCTIONS FOR CERTIFICATION

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.
4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms covered transaction, debarred, suspended, ineligible, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

CERTIFICATION

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it, its owners, officers, corporate managers and partners:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Have not within a three-year period preceding this application/proposal had one or more public transactions or contracts with any Federal, State or local government agency terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Signature: *Mitchel A Skyer*

Date: 10/05/2021

Mitchel Skyer
(Printed Name & Title)

Passio Technologies
(Name of Agency or Company)

REFERENCE LIST

VENDOR MUST COMPLETE AND RETURN WITH REQUEST FOR PROPOSAL

Firm: Passio Technologies

Provide a list of at least five (5) customers for whom you have recently provided similar services. If you have held a contract for similar services with the City of Clovis within the past seven (7) years, list the City as one of your customers. Please list the person most familiar with your contract. Be sure to include all requested information.

Reference Name: EPTA Eastern Panhandle Transit Authority Contact: Elaine Bartoldson
 Address: 446 Novak Dr
 City: Martinsburg State: WV Zip: 25405
 Phone No.: (304) 263-0876 ext. 8455 Project Date: 04/01/2018 - present
 Service Provided: NTD Reporting, Electronic passenger counting, 2 way dispatch, automated voice announcements
ParaPlan Enterprise

Reference Name: Citylink-Kootenai County Contact: Chad Ingle
 Address: 2400 W Riverstone Dr
 City: Coeur d'Alene State: ID Zip: 83814
 Phone No.: (208) 446-2102 Project Date: 10/15/2020 - present
 Service Provided: ParaPlan Pro & Notify, GPS tracking, Automated Voice Announcements, LED, Automated passenger counting

Reference Name: Ozark Regional Transit Contact: Joel Gardner
 Address: 2423 E Robinson Ave
 City: Springdale State: AR Zip: 72764
 Phone No.: (479) 361-8742 Project Date: 09/18/2019 - present
 Service Provided: Automated voice announcements, automated passenger counting, GPS tracking, ParaPlan Pro

Reference Name: Citrus Connection Contact: Debra Asbacher
 Address: 45 W. Smith St
 City: Lakeland State: FL Zip: 34787
 Phone No.: (800) 865-6302 Project Date: 09/18/2019 - Present
 Service Provided: Automated passenger counting, GPS tracking, NTD reporting, Opsview real time updates

Reference Name: Tulane University Contact: Brian Lowe
 Address: 6823 St. Charles Ave
 City: New Orleans State: LA Zip: 70118
 Phone No.: (504) 975-9019 Project Date: 01/03/2013 - present
 Service Provided: Electronic passenger counting, GPS tracking, Opsview real time updates

PARTICIPATION

The successful Vendor agrees to allow the City of Clovis and with the City's consent, other public agencies to purchase additional items at the same terms and conditions as in their submitted proposal for a period not to exceed one year from the date of award. Participating agencies may enter into a contract with the successful vendor for the purchase the services and/or equipment noted herein based on the terms, conditions, prices, and percentages offered by the successful vendor to the City. Purchase Orders issued by other public agencies referencing this agreement, shall be the sole responsibility of the agency placing the order. The City reserves the right to extend the one-year time period with mutual consent of the successful vendor.

Any agency choosing to avail itself of this opportunity, will make purchases in their own name, make payment directly to the contractor, be liable to the contractor and vice versa, per the terms of the original contract, all the while holding the City of Clovis harmless. If awarded this contract, please indicate whether you would extend the same terms and conditions to all tax supported agencies within this group as you are proposing to extend to the City of Clovis.

*** Note: This form/information is not used for evaluation purposes.**

Yes, we will extend contract terms and conditions to all qualified public agencies.

No, we will not extend contract terms to any agency other than the City of Clovis.



(Authorized Signature)

President

Title



EXCEPTIONS

As outlined in our response, Passio Technologies proposed suite of integrated solutions and associated partners will meet the requirements and options listed in the RFP.

INTELLIGENT TRANSPORTATION SYSTEM

Issue Date: September 1, 2021

Closing Date: October 8, 2021

Passio Technologies understands and accepts the following:

- A. General Conditions.
- B. General Requirements.
- C. Specific Terms and Conditions.
- D. Scope of Work and/or Scope of Work Proposal Requirements.
- E. Proposal Content Requirements.
- F. Any other part of this RFP.





CONTRACTOR COMPANY DATA

PASSIO

COMPANY OVERVIEW

The transit industry has consistently demanded reliable and actionable data to efficiently allocate resources and provide passengers with real-time information. This technology is critical to manage costs, operate within budget, and most importantly, deliver superior service.



HISTORY

In the summer of 2010, Co-Founders Mitch Skyer and Scott Reiser started Passio Technologies to fill this sizable gap within the industry. As the company developed, we identified that the passenger experience was just as important to the successful operation of the system as was understanding the resources and utilization.

ORGANIZATION

Our organizational structure is flat and customer-focused. We assign multiple project and account managers to each customer for redundancy and cross-training.

Our mission is to provide information to both the operations staff and the passengers so that everyone's experience is comfortable, informative, and effective. We move beyond simply answering support questions to find out the reason behind each question.

These answers help drive the direction of our development and innovation to ensure that the needs of our customers are being met. Passio has been in business for 10 years and has 24 full-time employees.

The majority of Passio's support and management employees are located in Atlanta, GA. Members of our senior technical support and sales teams are located in Kansas City, KS and Greenville, SC. Passio does not discriminate in any way, shape, or form for hiring, raises, and promotions. All Passio employees and clients are treated equally. Passio is growing, we've increased our staff by 40% over the past 3 years.

- Passio Technologies, LLC is registered in the State of Georgia.
- Founded on August 13, 2010.
- Federal Tax ID Number: 27-3307668
- Dun and Bradstreet ID (DUNS #): 068972279
- E-Verify Company ID: 713911. Passio actively verifies all employees to ensure they are authorized to work in the United States.
- SAM Registration CAGE Code: 7NTZ6
- SIC Codes: 7373 COMPUTER INTEGRATED SYSTEMS DESIGN
- NIGP Codes:
 - 208 Computer Software For Microcomputers, Systems, Including Cloud-based (Preprogrammed)
 - 209 Computer Software For Mainframes And Servers, Preprogrammed
 - 918 Consulting Services
 - 920 Data Processing, Computer, Programming, And Software Services
- NAICS Codes:
 - 5415 Computer Systems Design and Related Services
 - 5416 Management, Scientific, and Technical Consulting Services

FINANCIAL STANDING

Passio Technologies, LLC is a wholly-owned subsidiary of Transit Technologies, LLC, a Tennessee Limited Liability Company effective November 10, 2020. Mitch Skyer, President and Scott Reiser, CTO, are both officers of Passio. Passio currently has no debt and has been profitable since inception. All commercial banking is done through Bank of America and our accounting firm is Birnbrey, Minsk, Minsk & Perling LLC, and our senior CPA is Joseph R. Spradlin. Passio will confirm that we have the financial resources to fulfill all contractual requirements. Passio Technologies has never been subject to litigation associated with project performance and/or professional liability. If further information is needed, Passio commits to meeting those requests.

Passio Technologies maintains the following standard insurance coverage:

- Public Liability - \$1,000,000 each occurrence
- Product Liability - \$3,000,000 aggregate to include all vehicles and equipment owned or used on this contract
- Property Damage - \$1,000,000 each occurrence, \$3,000,000 aggregate
- Bodily Injury Liability - \$1,000,000 each accident, \$3,000,000 aggregate

If awarded this contract, Passio Technologies will secure all required coverages and provide a COI. Our current Certificate of Insurance (COI) will be provided.



Passio has followed a smart and steady growth path, allowing us to expand our team from 3 to 24, while maintaining the focus on our customers. We continue to offer new and innovative solutions through an aggressive research and development program, coupled with an unparalleled commitment to customer satisfaction and service support. By growing steadily and efficiently, we have not just kept pace with the transit industry's ever-changing needs, but have focused on advancing our integrations and capabilities to ensure we're always one step ahead of the curve.

We continually develop our technology, integrating with hardware and internal/external software packages while improving every step of the way. Our core methodology was built to address the needs of both the passenger and the operator, born from our decades of experience in the transit industry.

Our integrated solution provides our customers with a single platform for support, hardware integration, on-board connectivity, and reporting.

ParaPlan Software became part of the Passio family in May 2019. We joined forces to provide agencies with technology solutions for demand-response and on-demand services. ParaPlan is a great complement to our existing platform that focuses on supporting fixed route transit services. We have the entire ParaPlan team working in tandem with Passio, sharing the core belief that mobility is a universal right. We are proud to now offer the most comprehensive transit solution in the industry.



MITCH SKYER
PRESIDENT & CO-FOUNDER

mitch@passiotech.com
(678) 825-3456 ext. 106

Mitch has been President and Co-Founder of Atlanta-based Passio Technologies since 2010. He's actively been a part of the transit and parking industry since 2002. Prior to founding Passio, he was the President and Founder of Solstice Transportation Group, a transportation consulting operation.

He also worked as the National Director of Business Development for Cognisa for 7 years. He is an active member of many transportation groups and also serves on the board of several. He received his undergraduate degree from Binghamton and an MBA from University at Buffalo.



SCOTT REISER
CTO & CO-FOUNDER

scott@passiotech.com
(678) 825-3456 ext. 105

Scott has been Chief Technology Officer and Co-Founder of Atlanta-based Passio Technologies since 2010. He's actively been a part of the technology industry since 1994.

Prior to founding Passio, he was the President and Founder of Adapting Technologies, a full service IT solutions provider.

He has been involved in the Atlanta Business Alliance and the Buckhead Business Association for over nine years and he received his B.S. in International Affairs from University of Colorado-Boulder.





QUALIFICATIONS AND EXPERIENCE

PASSIO QUALIFICATIONS & EXPERIENCE





Passio is proud to share our recent successes. Passio Technologies has been named to Inc. Magazine's top 5,000 fastest growing companies for both 2018 and 2019, and was named one of Georgia's 40 fastest growing technology companies in 2018. Passio's Executive Team serves on the boards of the Georgia Parking and Transit Association, the Mid South Transportation and Parking Association, the Technology Association of Georgia Transit Technology Society, GRAC Mobility, Bike Walk Greenville, Non Emergency Medical Transportation Accreditation Commission (NEMTAC), and as a committee member of the International Parking and Mobility Institute. The company's memberships also include the American Public Transit Association (APTA), National Association of College and University Auxiliary Services (NACAS), the Community Transit Association of America (CTAA), and numerous state transit associations.

Passio develops much of their technology in-house and uses their customers' needs and input to guide future innovation. We operate on an open integrator model that allows them to seamlessly connect with other strong industry suppliers such as TranSign, Twilio, Hella, Zonar, and of course Amazon. We are adding to this list consistently by integrating, partnering, or building when the solution identified best meets our customer's needs. Passio is committed to keeping our programmable API fully documented for consumption and integration with any other system providing an API. After our acquisition of ParaPlan Software (scheduling & dispatching products for transit since 1999), we have grown our customer list to over 250 agencies utilizing our transit technology solutions!



CUSTOMER MAP



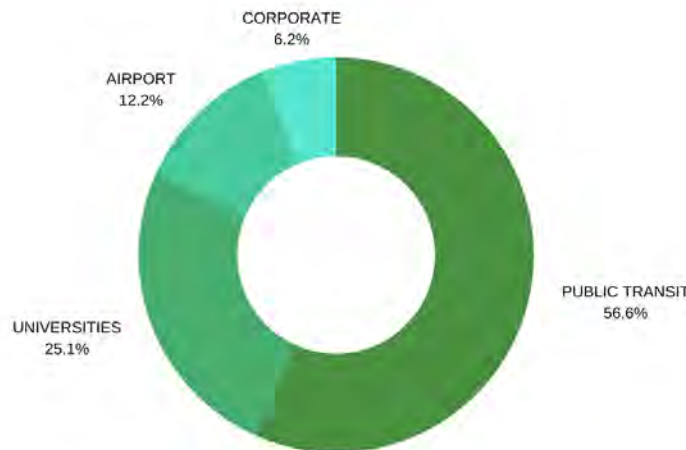
As stated, the origins of Passio Technologies came from a demonstrated need within the world of transit consulting for accurate and actionable data. The problem we identified, and then solved, was that there was no good way to capture data simply and inexpensively and put that data into an easily reviewable format. As the company developed, we identified that the passenger experience was just as important to the successful operation of the system as understanding the resources and utilization. Our top distinctions as a technology company are:

Network Simplicity

We use uncomplicated software and hardware configurations that are easy for the operators to manage, simple for maintenance to exchange and service, and quick to replace and upgrade. The system is designed to install quickly and for an operator to up and running within minutes of seeing the program for the first time

Data Usability

All complicated hardware and software is useless if the end user cannot point to the report they need, click run, and see the results. Everything presented within Passio is designed to 'make sense'. Our reporting is intuitive and user friendly, and the data is presented in the same format as it is collected. Counting is done at the stop, by a driver, on a bus, and that is how you see it in the reports.



PASSIO ITS CUSTOMER MIX





Customer Relationships

"Making every passenger count" is Passio's motto. Every customer at Passio is a reference, that is our working model, and how we conduct all of our business. Each customer has a unique approach to how they manage their passenger's experience, and how they want to provide value to their riders.

Our mission is to provide the information to both the operations staff and the passenger so that their experience is comfortable, informative, and effective. We don't begin and end with simply providing the answer to a question, but we look at the reason for the question. We always look to identify opportunities to develop newer and better reports and more effective interfaces to provide our customers with the experience they desire. By using this end user-centric approach we learn more from our customers every day, and our products and services are more valuable to our entire customer base.

Passio builds modular and scalable technology solutions for transit customers in the municipal, government, university, healthcare, aviation, corporate, residential and hospitality industries. We harness real time Passenger & Dispatch Information Systems through GPS tracking using Passio GO, Automated Voice Announcements, and on-board LED Smart Signs. These solutions are coupled with our Automated Passenger Counting and CAD/AVL systems to provide detailed visibility and comprehensive insight into any transit system.

Operations management, reporting and analytics are provided by Passio Navigator and Passio OpsView. Providing instant alerts such as speeding, off route, out of boundary, and idling, where dispatch and management can address transit issues in real time, correcting issues before they escalate. Our latest technology addition is Passio Connect, which powers our on-demand transportation software solution. This powerful new platform was built mobile first, integrating our core CAD/AVL features with our real-time routing algorithms to give agencies a new offering for their riders.





KEY PERSONNEL

Jessica has been the Senior Project Manager and Director of Operations of Atlanta-based Passio Technologies since 2010. She has a Master’s degree in Urban Transportation from University of Illinois at Chicago and worked for Solstice Transportation Group as well. She manages all project implementation and customer support and she evaluates, develops, and manages transit solutions.



JESSICA SONG
DIRECTOR OF OPERATIONS

jessica@passiotech.com
(678) 825-3456 ext. 104



Keven started as an Account Manager at Passio in 2012, and now currently serves as Customer Experience Manager. He has worked with staff at over 100 transit agencies using Passio solutions. Prior to working at Passio, he was the Area Development Manager for Concentra Healthcare. Keven majored in Public Relations with a Minor in Business from the University of Florida.

KEVEN IZEN
ACCOUNT MANAGER

keven@passiotech.com
(678) 825-3456 ext. 108

Jessica will be your designated Project Manager for the implementation and Keven will be your assigned Account Manager.



For over 20 years, Michael has worked in the transit industry managing new projects and clients. His specialty is client communications and training. Michael is a member of the Project Management Institute, has a B.A. from the State University of New York College and attended the Executive Leadership Program at Seattle University.



MICHAEL CIVITELLI
PROJECT MANAGER

michael@passiotech.com
(678) 825-3456 x124



Courtney functions as our Client Care Specialist, with almost 20 years of experience working directly with clients to create the best experience possible. She makes it a daily goal to ensure they are taken care of in a quick and positive way, making it her priority that they have the best Passio experience possible.

COURTNEY HALL
CLIENT CARE SPECIALIST

courtney@passiotech.com
678.825.3456 x 116

Other members of our proposed project team include:

- Ty Martin, Lead Customer Success Representative
- Wayne Manis, Installation Technician
- Carly Valcheff, Data Analyst





TECHNICAL APPROACH

BRINGING COMMUNITIES CLOSER TOGETHER

Our experience and passion described above will bring a unique value to your agency. Passio works hard to exceed the expectations of our customers. We achieve this through a combination of personal attention and reliability.



Running complex transit systems is challenging, especially when you're required to be efficient with limited resources while managing so many working parts. Passio simplifies every piece of this puzzle. Passio creates innovative ways to meet your goals in the areas of safety, mobility, efficiency, economic growth, environmental stewardship, security, and accessibility. We believe that everyone deserves the independence and accessibility that public transportation provides. Our solutions are specifically designed to improve the efficiency of public transportation services, improve the customer experience, scale to the size and needs of any system, and are agile to integrate and adapt to the changing landscape and advancements in technology over time. We believe that public transit is an integral part of a healthy, thriving community, and we innovate to help transit agencies operate more efficiently to bring people together. We exist to help our clients become more successful. This has always been our cornerstone.

PASSIO'S TECHNICAL APPROACH HELPS BRING COMMUNITIES CLOSER TOGETHER THROUGH SMARTER TRANSIT.

In choosing Passio, your team is hiring true partners in transit. In addition to our suite of over 20 integrated transit solutions, the Passio leadership team has over 125 years of combined experience in transit. Your knowledge in conjunction with ours yields countless possibilities. We have implemented transportation solutions with over 250 agencies with multiple modes of transit operations and varying service models, allowing us to compliment your local knowledge with new industry trends. We can help formulate best practices, targeted operational plans, and processes to improve operations. Successful reporting and management focuses on evaluating trends that can be analyzed using Passio software.

Our experience and passion described above will bring a unique value to your agency. Passio works hard to exceed the expectations of our customers. We achieve this through a combination of personal attention and reliability. As a smaller company, Passio also brings new innovations to the market faster. We build modular and customizable technology solutions for transit customers in over 40 states. Our commitment to industry standards makes interoperability easy with other platforms. Passio develops much of their technology in-house and uses their customers' needs and input to guide future innovation. We operate on an open integrator model that allows them to seamlessly connect with other strong industry suppliers such as TranSign, Twilio, Hella, Zonar, ATTI, Instamapper, Firebase, and of course Amazon. We are adding to this list consistently by integrating, partnering, or building when the solution identified best meets our customer's needs. Passio is committed to keeping our programmable API fully documented for consumption and integration with any other system providing an API. Passio develops much of their technology in-house and uses their customers' needs and input to guide future innovation. Passio supports integration with third party apps via GTFS-RT and our API. We currently integrate with The Transit App and Customer Specific Apps at approximately 20 agencies and universities.



We truly want transportation to be easily accessible to all, so we have focused on supporting blind and low vision riders through our integration with FAR. Foresight Augmented Reality (FAR) GPS tools and beacons make bus stops and common locations accessible to the blind and visually impaired. Adding the integrated FAR application with GPS for direct wayfinding is optional and may be added at any time. Foresight Augmented Reality (FAR) gives a voice, description and orientation to the sighted world for blind and low-vision users. FAR also uses Passio bus tracking information to allow riders to easily track their bus with audio cues. Passio stop announcements are also played within the FAR app to make getting around a bit easier for blind and low vision riders.

PASSIO ADDS PERSONAL ATTENTION IN EVERYTHING WE DO.

This attention begins with our onboarding process throughout the life of the contract. When onboarding a new ITS customer, Passio has a proven methodology in place to transfer project information and goals from sales to our customer success team. We use 2 project management tools (Insightly.com & Monday.com) to help facilitate this. We also use a series of online forms (Formsite.com) in collaboration with the new customer to ensure all required information is complete.

All project tasks will be implemented by a Senior Project Manager, Systems Engineer, Customer Success Supervisor, Account Manager, and a Passio Installation Technician. During the project implementation and ongoing operations, Passio leaders and project managers will coordinate on-site evaluations and strategic meetings to ensure maximum utilization of all technology solutions. These meetings will include maintenance, operations, and the agency's corporate management as required.

Passio typically provides a combination of remote and on-site training for new customers. On-site training is performed by expert Passio implementation staff. All customers are provided access to Passio's training documents, FAQs, knowledge base articles, Powerpoint presentations, and training videos for their appropriate solutions. Passio hosts webinars to provide documentation and training to our customers. Passio also provides searchable electronic media to provide documentation and training to our customers. You will be given access to our online knowledge base and multi-media training tool. This is a dynamic tool that is consistently updated as new features and functionality are added to the Passio platform. More details on our complete training program and modules can be found in our attached Training section. Yes, recorded video training is available permanently. Remote training is free and available anytime during the life of the contract.





Level one support is provided from our support phone hotline, which is 24x7x365, or via our support@passiotech.com email. Issues are evaluated when received and escalated to the senior technical support team if needed, and then to the development team if systemic issues are determined. We provide unlimited remote support. Passio will have dedicated resources available to work on “critical issues” during your contractual hours until resolved.

Another value Passio brings is our custom Agency Marketing Guide at no extra cost, which includes step-by-step guidelines to inform, engage, and excite your riders. In order to help you get the word out about your new rider tools and ensure a successful launch, we've put together a comprehensive marketing plan. This plan is modular, just like our transit solutions. Feel free to pick and choose what works best for your transit operation.

We have included generic materials that are ready to be used as is. Wording and images may be adjusted as needed, with the exception of the Passio Technologies logo. Our services and collateral offered include App Handout Cards, Flyers, and targeted Social Media Ads. We will work with your agency to craft a comprehensive launch of new services. Along with our agency marketing guide, we can provide various marketing materials designed to stand out and meet your riders where they are.

Detailed information on our proposed technical solutions are presented in our Solutions section.





QUALITY ASSURANCE

QUALITY ASSURANCE FROM THE PASSIO TEAM

Passio is dedicated to the quality of our services and solutions.



Quality Assurance & Continuous Improvement

Passio is proud to present our commitment to quality in this section. We have invested heavily in Quality Assurance (QA) with the most current releases of core products Passio Navigator, Passio Transit, Passio ParaPlan, and Passio Connect. Our dedication to high standards was based on the desire to utilize the latest managed development environments. These technologies have allowed us to enhance our code unit testing, experience testing, and implementation procedures.

Unit Testing

We are continually working to make our test cycles fast and partially automated. By breaking releases into much smaller components and testing as early in the iteration as possible, we bring updates to the market faster. Short cycles allow enhancements to reach customers much sooner, so our QA team is constantly pushed to enhance their processes to stay on-cycle with development. Unit testing, the simulation of incomplete components with service visualization, allows Passio to run simultaneous tests, rather than wait until the end of a cycle.

Functional testing

Functional testing verifies that our applications work how they are intended. It's implemented in a target environment by conducting manual user tests according to specific plans, considering the needs and requirements of our end users. Functional testing includes the following tests:

- Browser compatibility test to check app performance in various browsers.
- Regression test for every release, minor update, integration, or data migration.
- Automated functional and regression tests.
- Outcome-based user testing on all new feature sets.
- Reliability test to find app weaknesses and reduce the number of failures during deployment.
- Passio eventually uses actual user data to improve testing and user experience.

Performance Testing

By performing load tests, the Passio QA team can determine our ability to handle unsteady loads and find the maximum supported levels. From there, the team can move on to endurance testing which tests the system under continuously high load. Endurance testing is a method for detecting memory leaks and identifying at what point performance degradation occurs. It can also show how the system copes under high demand for long periods of time. We test our solutions with various loads, including ones that exceed normal operating conditions. These techniques are primarily done manually, but we are working to improve Passio Performance Testing with new automated testing tools.

Furthermore, our failure and recovery tests check the system for functional disaster recovery after simulation of various crashes both internal (software) and external (internet connection, power cuts, etc.).



Compatibility Testing

- The Passio QA team tests against the following:
- Browsers (Chrome, Firefox, Safari, Edge)
- Desktop Operating systems (Windows, macOS)
- Mobile devices (iOS, iPadOS, Android)
- Hardware versions

While these configurations are numerous, we always consult with each client to ensure our solutions work as expected on their hardware.

Maintenance Testing

Maintenance testing is performed by both our QA and Tech Support teams. They are responsible for ensuring the correct performance of applications and customer service workflows. Passio uses Freshdesk.com and Monday.com to help this team track and analyze potential problems.

Continuous Improvement

Besides these new development testing KPI's, we have implemented new Process Controls and Workflow Tools for onboarding new customers and ongoing technical support. This attention begins with our onboarding process throughout the life of the contract. When onboarding a new ITS customer, Passio has a proven methodology in place to transfer project information and goals from sales to our customer success team. We now use 2 project management tools (Insightly.com & Monday.com) to help facilitate this. We also use a series of online forms (Formsite.com) in collaboration with the new customer to ensure all required information is complete.

We are continuously adding content to our online user community/KB/FAQ on Freshdesk and updating training videos for our solutions. We are committed to comprehensive training done both remotely and on-site. Passio uses electronic media and also hosts quarterly webinars to provide documentation and training to our customers. Passio tracks support tickets internally via Freshdesk (<https://passiotech.freshdesk.com>).

All project tasks will be implemented by a Senior Project Manager, Systems Engineer, Customer Success Supervisor, Account Manager, and a Passio Installation Technician. During the project implementation and ongoing operations, Passio leaders and project managers will coordinate on site evaluations and strategic meetings to ensure maximum utilization of all technology solutions.





WORKFORCE SAFETY

INCLUDING SPECIAL RESTRICTIONS FOR COVID-19



Passio is committed to continue serving our customers despite the uncertainty of the changing environment related to COVID-19. We understand the importance of the products and services we provide and the responsibility that entails. Passio also provides healthcare and wellness for all employees who choose to opt into these benefits.

In response to the current pandemic we have implemented a business continuity plan in alignment with the recommendations from the CDC and various local health departments which includes, but is not limited to:

- We have made the decision to allow employees who can perform their jobs remotely, to work from home.
- We are providing employee time off for any need related to the pandemic.
- We are monitoring our logistics supply chains closely. While some delays are already reported, at this time we are still expecting materials to come in and devices to be shipped out.
- We have suspended all non-essential business travel.

These precautionary measures have been taken to limit the potential spread of the virus, to support our employees, and ensure we maintain our ability to serve our customers effectively, for the long term. Our senior leadership team remains vigilant and is monitoring the situation in real-time and responding rapidly as conditions evolve.

Passio Technologies will work in cooperation with your staff to achieve a safe work environment during this project. We know that providing transportation during the current situation has introduced many new challenges. Ridership patterns may have shifted significantly and available resources may be limited.

While on-site, our top priority has always been to safely implement our customer's projects, adhering to all recommended guidelines/regulations, and staying on schedule. In order for our installers to safely travel to our customers and perform work, we created the Passio COVID-19 Installation Protocol listed below.

COVID-19 Installation Protocol

Protocols and precautions utilized prior to travel...

- Passio Installer has been instructed to follow all CDC and local health regulations.
- We have provided him/her with masks, gloves, and cleaning supplies.
- If installer exhibits COVID-19 symptoms, if they test positive, or suspect they are positive they will follow CDC guidelines to remain home and isolate until:
 - 1) 3 days with no fever and
 - 2) Respiratory symptoms have improved (e.g. cough, shortness of breath) and
 - 3) 10 days since symptoms first appeared
- Depending on the healthcare provider's advice and availability of testing, the installer may get tested to see if they still have COVID-19.
- If they are tested, they will be cleared to be around others when they have no fever, respiratory symptoms have improved, and they receive two negative test results in a row, at least 24 hours apart.
<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>
- If Installer comes into contact with a person known or suspected to be positive for COVID-19 they will
 - 1) Stay home until 14 days after your last exposure.
 - 2) Check their temperature twice a day and watch for symptoms of COVID-19.
 - 3) If possible, stay away from people who are at higher risk for getting very sick from COVID-19.



Protocols and precautions utilized during travel...

- Wear a face mask whenever you are in public (i.e. gas stations, lodging, restaurants for pick up, etc.) and cannot maintain a minimum of 6' physical distance from others.
- Minimize the number of stops where possible.
- Wash hands frequently and use hand sanitizer with a minimum of 70% alcohol
- Avoid eating inside restaurants when possible. If not possible or practical, physically distance yourself from other patrons (6' minimum).

Protocols and precautions utilized at client sites...

- Physical distance (6' minimum) from others when possible
- Wear face covering when others are near the installer, or if there is a need to be onboard a vehicle at the same time.
- Wipe down high touch areas and exposed areas contacted during the installation process. Use of customer provided and approved cleaning materials is preferred when possible.
- Limit number of entrances to facilities (i.e. restrooms or need to find customer employees to answer questions)
- Exchange cell phone contact for better communication.





SCOPE OF WORK

City of Clovis Clovis, CA			
INTELLIGENT TRANSPORTATION SYSTEM			
SCOPE OF WORK - PROPOSAL REQUIREMENTS by Passio Technologies			
#	Specification	Y/N/P	Comment
CORE COMPONENTS			
A. CAD/AVL/AVA HARDWARE AND SYSTEM			
A.1	The CAD component of the system shall be seamlessly and fully integrated with the AVL component and shall have the ability for the City to view in real-time and gather data for determining On-Time Performance (i.e., by Route, Operator, Block, Trip, Day Vehicle, etc.), schedule adherence and event management for all Routes.	Y	Our proposed Passio GO™ solution complies with this requirement. Movement, change in heading/direction and speed is reported in real-time and immediately uploaded via data connection to network servers for representation on public views, website maps, and smartphone applications. Our bus motion display algorithm shows your buses 'driving' their routes. Passio provides a GPS accuracy of up to 2-5 meters in optimal environmental conditions. Vehicle direction is also prominently displayed. System managers and operators are given real time schedule adherence data by Driver Route, Route Block, and/or Stop. Drivers are also given bright visual indicators of their stop schedule and current schedule adherence. Our MDT interface within the Passio Transit app helps drivers keep up with their own schedule to see if they are behind, ahead, or perfectly on time. If the time is shown as white, the driver is on time, blue means behind schedule, and yellow would mean ahead of schedule. Furthermore, using Passio OPS View, the leadership team and operators can work quickly to improve performance in real time.
A.2	The combined data from the CAD/AVL system shall also be sufficient to allow the City to utilize the data to improve schedules, frequency (headways), time points, bus-stops, and other service-related functions in a comprehensive manner.	Y	Passio Navigator provides analytics to improve schedules using ridership data along with location data. The Passio Business Intelligence Platform includes business analytics with customizable dashboards and reports for any relative time period. Automated report scheduling and email distribution is also provided. Passio Navigator serves as your reporting dashboard with access to our library of ridership, performance, and analytics reports. Agencies use Passio Navigator to measure multiple KPIs for each route in service for any requested time period. Passio provides your dispatchers with real-time bus tracking, traffic, arrival predictions, and departure times for each stop. We provide several reports yielding crucial operational data regarding the services provided by your agency.
A.3	Initially, the Contractor will enter directly into their System the City's schedules, routes, trips, blocks and stops information for the Stageline Routes, which are the bases for on-time performance tracking and reporting.	Y	Passio Navigator™ provides customers with full access to manually configure routes, route blocks, schedules, time points, stop locations, geofences, and fleet information on a digital map. System information can be imported via GTFS data, setup manually from GPS coordinates, or performed by Passio staff. All customers have access to update any system entities, such as adding and editing Stops, Routes, and Drivers. Route blocks, scheduled time points, automated voice announcements, and LED sign controls (if available) are also configured within Passio Navigator. Customers are trained and given full access to all route, stop, vehicle, and driver management tools. There is no waiting requirement for updates, edits, or deletions to your base system structure. Dispatchers can also create detour routes on the fly, deploy test routes, and pre-set new routes for immediate cut over. All customers have access to update stops, routes, and route groups at any time. These changes can be put into effect immediately or scheduled for implementation at a later date using Passio Versioning.
A.4	The CAD/AVL system should also integrate and control the AVA component and installed head signs to provide stop information to City passengers.	Y	Passio provides innovative, modular, and customizable technology solutions for transit customers. Our proposed VLU has exceptional wireless connectivity, GPS tracking, acquisition, and accuracy sensitivity, as well as integrated fleet features to enable integration with on board systems and external transit technology applications. Our core transit technology solutions (MDT, AVA, APC, etc.) and associated equipment connect to our VLU. Operators are simultaneously logged into each system/component on their vehicle. Our AVA solution will trigger preloaded messages to announce and display when any preset geofence is entered along a specific route. This geofence trigger zone does not have to be at a predefined bus stop and can occur anywhere along the route. Headsign integration will be supported by Passio Technologies provided that each headsign has the most current updated firmware version and must be J1708/J1939 compatible.

CAD/AVL/AVA Requirements:			
A.5	Cloud-hosted with an intuitive web-based user interface	Y	Our proposed Passio ITS solution complies with this requirement. Our management tool (Passio Navigator) is 100% web-based and supports all common browsers (Chrome, Edge, Safari, and Firefox). Passio Navigator™ controls access to system features for each individual user and user group with multi-layered security features. Dispatch and Messaging for CAD/AVL is managed from a single live map screen (powered by Google Maps) located within Passio Navigator™. All communications are saved within the dispatch and messaging interface. Passio Navigator also serves as your reporting dashboard with access to our library of ridership, performance, and analytics reports.
A.6	Utilize a mobile data terminal (MDT)/tablet as the single point for operators logging onto all integrated components/systems.	Y	Our proposed VLU has exceptional wireless connectivity, GPS tracking, acquisition, and accuracy sensitivity, as well as integrated fleet features to enable integration with on board systems and external transit technology applications. Our core transit technology solutions (MDT, AVA, APC, etc.) and associated equipment connect to our VLU. Operators are simultaneously logged into each system/component on their vehicle.
A.7	MDT/Tablet should run on the Android operating system and be capable of running on future Android versions.	Y	The Passio Transit MDT provides an Android-based, rugged, touch-screen driver interface. This single-connection, modular and swappable device natively connects to other onboard devices for the control and collection of data.
A.8	Track trip schedule adherence	Y	Our proposed Passio GO™ solution complies with this requirement.
A.9	Ingestion of automatic vehicle location every 5 seconds or faster	Y	Our proposed Passio GO™ solution complies with this requirement. GPS data on board is updated in real-time, typically every second. Movement, change in heading/direction and speed is reported in real-time (2-5 seconds) and uploaded via data connection to network servers for representation on public views, website maps, and smartphone applications.
A.10	Publishing of vehicle location and run or block assignment information through an API accessible by the City and updating that API every 5 seconds or faster	Y	Passio provides an Open API to allow 3rd party software to attach to our API to pull real time transit data into their system. Passio is committed to keeping our programmable API fully documented for consumption and integration with any other system providing an API. Passio provides a real-time transit application programming interface (API), documentation, and JSON output for customers. GTFS static file imports and exports are supported and Passio can also provide a GTFS Realtime (GTFS-RT) feed to application developers. The API includes real-time location data (every 2-5 seconds) and the estimated time of arrival, as well as other system information such as real-time passenger load as an option.
A.11	System shall begin gathering AVL location data when the ignition is turned on and continue reporting until the ignition is turned off (based on a programmable time period, i.e., 30 minutes, etc.)	Y	Passio transit hardware devices are typically wired to the ignition as well as the battery of the vehicle. This means the position of the vehicle is able to be reported even if the ignition is turned off, or if the vehicle is idling. The device goes into a type of hibernation mode where draws very little power from the battery. Special configurations are available.
A.12	Mobile Data Computer (MDC)/ Vehicle Logic Unit (VLU) shall integrate with the onboard equipment on each vehicle that provides head-sign control, destination signs, next stop announcements (audible and textual), covert alarm, etc.	Y	Our proposed Passio Technologies AVA solution complies with this requirement. Our ADA compliant package can include new interior, passenger facing LED signs (if desired). Our on-board AVA systems are integrated with Passio Navigator and MDT are updated 100% over the air without any on board actions required. Announcements can include route, destination, next stop, driver names and other announcements. Our solution will trigger preloaded messages to display when a stop geofence is entered along a specific route. The Passio Transit AVA solution meets this requirement by using pre-configured GPS based geofence trigger stop locations. Passio AVA can also integrate with existing LED/LCD signs (where feasible). Our proposed in-vehicle solution supports a covert alarm to alert dispatch during emergencies. These emergency alerts can be managed by dispatch using Passio Navigator.

A.13	MDC/VLU shall store the most recent location received from the APC so that if the GPS receiver is not able to report the location, the “last known good” boardings and alightings will remain available	Y	This requirement is accepted and understood. Passio provides an IoT dashboard within the Passio Navigator interface. This dashboard includes vehicle sensor logic showing sensor status for all active vehicles, tracking of sensor failures, and a comparison of scheduled activity and actual activity. The system includes data normalization to address key outlying operational situations. Connected devices are continually monitored for an 'electronic heartbeat'. That status is available within Passio Navigator to visually represent when a vehicle is running and equipment is connected. This information is logged and tracked in real time within our Passio Navigator Reporting Module. Both the Passio APC & GPS systems have associated timestamps. If one not available then closest timestamp is appended to the record.
A.14	Annunciation of stop names with necessary configurations	Y	Operators can activate a generic canned announcement from a preset list, such as "Stop Requested". Operators can trigger preset special announcements from the MDT and repeat a stop location for ADA compliance. Agencies can even use songs, pre-recorded messages, and a number of different triggers. Quickly configure complex geofence triggers, timed announcements, doors opening sensors, and more.
A.14a	Which stops	Y	Our proposed Passio Technologies AVA solution complies with this requirement. Announcements can include route, destination, next stop, driver names and other announcements.
A.14b	What text	Y	Our proposed Passio Technologies AVA solution complies with this requirement. New stops are typically entered into Passio AVA by simply typing the text directly in Passio Navigator by selecting the route+stop combination (text-to-speech). All customers have access to add/update stops, routes, and announcements at any time. These changes can be put into effect immediately or scheduled for implementation at a later date using Passio Versioning. Announcements can be changed and updated remotely from your desk, with granular control at the route stop level. Our AVA system includes other features such as: .mp3 file uploads, and the ability to sell announcement air time on your vehicles to local business around your routes, creating an additional revenue stream for your transit.
A.14c	Where exactly to announce	Y	Our AVA solution will trigger preloaded messages to display when a stop geofence is entered along a specific route. The Passio Transit AVA solution meets this requirement by using pre-configured GPS based geofence trigger stop locations. Passio AVA can also integrate with existing LED/LCD signs (where feasible).
A.15	Web portal through which annunciation configuration can be easily customized after GTFS import or update	Y	Our proposed Passio Technologies AVA solution complies with this requirement.
A.16	Head sign control that automatically rotates pre-defined information in text	Y	Our proposed Passio solution complies with this requirement using the destination sign on-board controller.
A.16a	Integrates with CAD/AVL system or able to accept data through GTFS/other specified data upload	Y	Our proposed Passio Technologies AVA solution complies with this requirement.
A.16b	The City prefers integration with the currently installed head signs (Luminator/Twinvision and Hanover). The awarded Contractor will notify the City if they are unable to integrate with existing head signs and the City will purchase new head signs if necessary.	Y	Our AVA solution will trigger preloaded messages to announce and display when any preset geofence is entered along a specific route. This geofence trigger zone does not have to be at a predefined bus stop and can occur anywhere along the route. Headsign integration will be supported by Passio Technologies provided that each headsign has the most current updated firmware version and must be J1708/J1939 compatible.
B. PASSENGER INFOTAINMENT			
B.1	To enhance the customer experience, the City would like an infotainment solution for its Stageline vehicles. The solution would be utilized to compliment the audio announcements by displaying public information for such things as: Next Stop, Rider Alerts, promotional information, public service information, transfer points, etc.	Y	Our preferred infotainment partner, Message Point Media (http://mpmedia.tv/) will provide the equipment, content management interface, and installation services. Passio will provide project management services that include real time transit data integration with Message Point Media. Our AVA system includes other features such as: .mp3 file uploads, and the ability to sell announcement air time on your vehicles to local business around your routes, creating an additional revenue stream for your transit. For more information, please refer to our Intelligent Displays solution section.
B.2	The City would like to install one monitor in the front of each vehicle. The Contractor should recommend monitor size(s), mounting locations, and brackets.	Y	This requirement is supported and understood. For more information, please refer to our Intelligent Displays solution section outlining various configurations.

Infotainment Requirements:			
B.3	Integrate and synchronize with the AVA system	Y	Passio provides project management services that include real time transit data integration with Message Point Media.
B.4	Able to accept configuration data through GTFIS and location/assignment API provided by a CAD/AVL system, or integrated with the CAD/AVL system	Y	This specification is supported by the Passio AVA solution.
B.5	Display various types of content including audio, video, images, and accept multiple media types such as MP4, WAV, JPEG, etc.	Y	Passio will provide project management services that include real time transit data integration with Message Point Media. Our AVA system includes other features such as: .mp3 file uploads, and the ability to sell announcement air time on your vehicles to local business around your routes, creating an additional revenue stream for your transit. For more information, please refer to our Intelligent Displays solution section.
B.6	Integrate with on-board public address (PA) system	Y	This specification is supported by the Passio AVA solution.
B.7	Ability to send/push ad-hoc “real-time” information to the solution	Y	This specification is supported by the Passio AVA solution.
B.8	Ability to create location-based announcements/displays	Y	This specification is supported by the Message Point Media 'Transit Point SmartStop' solution. For more information, please refer to our Intelligent Displays solution section.
B.9	Display next stop information after departure from previous stop and/or next stop information prior to reaching the next stop giving the rider sufficient time to prepare for alighting	Y	This specification is supported by the Passio AVA solution with Message Point Media 'Transit Point SmartStop' technology. For more information, please refer to our Intelligent Displays solution section.
B.10	Web portal through which display configuration can be easily customized after GTFIS import or update	Y	The Passio Transit AVA solution feeds stop/announcement information to signs and other media. Announcement configuration is done in Passio Navigator. The Message Point Media CMS then brings this data to life in conjunction with other media files on LCD monitors and displays. For more information, please refer to our AVA and Intelligent Displays solution sections.
C. AUTOMATED PASSENGER COUNTERS (APCS)			
APC Hardware/Collection:			
C.1	The City seeks to fully understand its ridership, not only where riders board and alight, but also wheelchair lift usage. The City expects an Automatic Passenger Counting (APC) system that will be highly accurate and provide an exceedingly high level of data quality.	Y	This specification is supported by our proposed Passio APC solution. The Hella Advanced People Sensor APS-B is designed to count boarding and alighting passengers with the highest accuracy available in the market, typically better than 98%. Passio technicians work to configure and test each vehicle type to ensure optimal configuration. Passio will interface with lift sensors and designated bicycle rack sensors (if available). In addition to automatic sensor counting, the Passio MDT also supports customizable preset passenger types such as wheelchair, senior, disabled, bicycle, etc. Operators simply press to count as special riders board and exit the vehicle, if required.
C.2	Currently, the City does not receive FTA funding or report NTD data. However, the City may pursue FTA funding and NTD Certification in the future. Contractor should provide a list of transit agencies currently using the proposed APC system that have obtained FTA approval for use of APC data and NTD reporting. The City will not accept an APC system that is not accurate enough to obtain the FTA's NTD Certification approval.	Y	Passio offers customized NTD reporting that will calculate and extract the metrics required for compliance. The Passio APC solution will provide all 'Actual' data (passenger miles and stop counts) required for NTD reporting. Your account manager will work with you to set up your personalized NTD sampling schedule and Passio will support your certification process. Our integrated Hella 3D APC has been granted NTD Certification Approval. Furthermore, our NTD Certification process and maintenance plan includes procedures to calibrate APCs every year after the initial benchmark year using a modified validation plan to ensure the upkeep of the agency's certification. More information can be found in our NTD Certification section of our proposal.
APC Hardware/Collection Requirements:			
C.3	Stand-alone system that integrates with the CAD/AVL system	Y	This specification is supported by our integrated Passio APC solution. Every count will be stamped with the geolocation, stop, date, time and route information, which can be filtered in our reports. Reports include a graphical interface for display and presentation. All reports can be filtered by operational detail/grouping levels such as routes, stops, trips, drivers, and buses. Route reporting is available at three levels (block, route name, combined route). Passio also provides metrics on stop groups (inbound/outbound, north/south, etc.) which also fulfill these requirements.

C.4	Highly accurate data collection that meets or exceeds FTA requirements (95%)	Y	This specification is supported by our proposed Passio APC solution. The Hella Advanced People Sensor APS-B is designed to count boarding and alighting passengers with the highest accuracy available in the market, typically better than 98%.
C.5	Demonstrates the ability to discriminate between passengers and non- passengers, detect double backs, etc.	Y	This specification is supported by our proposed Passio APC solution. The 3 dimensional stereographic digital imaging counting system uses software analysis to actively monitor each 'gate'. The counting gate is set for each vehicle type and design and the passenger image must cross through the entire gate to be counted, thus avoiding double backs or re-crossings. The Hella system provides configurable settings to monitor and report passenger lingering within the sensor area (30 seconds is our default).
C.6	Able to separately count successive passengers that are walking close together, either one behind the other or side by side	Y	This specification is met by our proposed Passio APC solution. The Hella APC utilizes two high-definition video cameras to observe the monitoring area or AOI Area of Interest. Innovative Image-processing methods calculate a 3D position for every pixel visual object within the field of view. The AOI covers the entire door entry area including the area outside the vehicle once door is open and a set area in the vehicle's interior. Passengers are tracked while inside this AOI. Passengers are identified as three dimensional objects and continuously tracked while remaining within the AOI. The applied 3D principle ensures reliable separation of passengers versus near-to-ground objects and other environmental impacts. Objects with a third dimension are recognized and tracked. Multiple people within the AOI are continuously tracked.
C.7	Accurately differentiate between boarding and alighting and eliminate false positive counts.	Y	This requirement is accepted and understood. Passio provides an IoT dashboard within the Passio Navigator interface. This dashboard includes vehicle sensor logic showing sensor status for all active vehicles, tracking of sensor failures, and a comparison of scheduled activity and actual activity. The system includes data normalization to address key outlying operational situations. That status is available within Passio Navigator to visually represent when a vehicle is running and equipment is connected.
C.8	Automatically compile data by the APC and integrate to the MDC/VLU in real- time	Y	This specification is supported by our integrated Passio ITS solution.
C.9	Ability to store and forward data if the MDC/VLU loses communications connectivity	Y	This requirement is understood and accepted. The proposed Hella APS-B sensors come with 8GB internal memory by default for storing and forwarding when needed. Hella sensor (APS-B) data is transmitted directly to our AWS database using the pepwave router and M2M (Machine to Machine) data transmission. Passio APC record-level detail is stored within AWS for a minimum of 36 (thirty-six) months and provides count information at the base level which allows for time and individual bus and driver reporting at the stop level. After 36 (thirty-six) months data will be summarized at the route, day, and passenger type level. This data will be available in the dynamic reporting system for a minimum of 5 (five) years. All data archived after 5 (five) years will be made available electronically prior to removal from the dynamic reporting system.
C.10	Data will consist of date and time stamp, geo-coordinates, and bus stop locations	Y	The proposed Passio APC solution meets this requirement. Every count (boarding/alighting) will be stamped with the stop ID, stop name, location, date, time, route, vehicle, and door(front/rear) information; which can be filtered in our comprehensive reporting module. All data is reported in real time (for any desired time period) and may be accessed by the customer at any time. Passio also provides an IoT dashboard within the Passio Navigator interface. This dashboard includes vehicle sensor logic showing sensor status for all active vehicles, tracking of sensor failures, and a comparison of scheduled activity and actual activity. Our reporting is intuitive and user friendly, and the data is presented in the same format as it is collected. Counting is done at the stop, by a driver, on a bus, and that is how you see it in the reports.
C.11	Capability of real-time counts of passengers on board in the event of emergencies for authorities	Y	Passenger load is reported in real-time and immediately uploaded via data connection to network servers for representation in Navigator for viewing and reporting emergencies.
C.12	Count wheelchair ramp deployment	Y	Passio will interface with lift/ramp sensors and designated bicycle rack sensors (if available). In addition to automatic sensor counting, the Passio MDT also supports customizable preset passenger types such as wheelchair, senior, disabled, bicycle, etc. Operators simply press to count as special riders board and exit the vehicle, if required.

C.13	Ability to eliminate counting of Operators as passengers	Y	This specification is supported by our integrated Passio ITS solution. The AOI covers the entire door entry area including the area outside the vehicle once door is open and a set area in the vehicle's interior. Passengers are tracked while inside this AOI. Drivers will not be counted if they stay within the AOI assisting passengers etc. However, the driver can manually update counts on the MDT with one-click if required.
C.14	Approved for NTD reporting	Y	Our integrated Hella 3D APC has been granted NTD Certification Approval. Furthermore, our NTD Certification process and maintenance plan includes procedures to calibrate APCs every year after the initial benchmark year using a modified validation plan to ensure the upkeep of the agency's certification. More information can be found in our NTD Certification section of our proposal.
C.15	System will not interfere electronically with the operation of the transit vehicle or its onboard electronic equipment such as security equipment, engine controls, transmission, etc.	Y	Our proposed APC solution is cloud-based using minimal hardware. Hella sensor data is transmitted directly to our AWS database using the pepwave router and M2M (Machine to Machine) data transmission. On board cabling is done efficiently, using high quality materials and connectors designed to limit the chance to interfere with any other vehicle systems.
C.16	System equipment provided will be transferable to other transit vehicles	Y	The proposed Passio APC hardware by Hella can be transferred (or repurposed) if required. The APC system is installed and hard wired to each individual vehicle. Passio can facilitate or conduct the uninstall and reinstall between vehicles if needed. There are no requirements that would stop the system from being transferred from one vehicle to another. Typically the only new equipment required when transferring is the wiring and mounts.
APC Data Analysis, Reporting, and Support Agreement			
C.17	The APC provider will maintain a web-based reporting solution for the City that accurately imports and processes ridership data from their APC system. The reporting solution must generate accurate and user-friendly reports for two primary purposes: 1) service and operations planning, and 2) National Transit Database (NTD) reporting.	Y	This specification is supported by our Passio APC and Navigator Reporting solutions. The Passio Business Intelligence Dashboard Reports and Ridership Metrics provide this data. Please refer to our Passio Business Analytics section provided in our proposal.
C.18	The system must also provide the City with ridership reporting for service and operations planning purposes. Ridership reporting for this purpose will include, but not be limited to, ridership (totals and average) by month, by day, by route, by trip, etc.	Y	This specification is supported by our Passio APC and Navigator Reporting solutions. The Passio Business Intelligence Dashboard Reports and Ridership Metrics provide this data. Please refer to our Passio Business Analytics section provided in our proposal.
C.19	The APC System will also include a Support Agreement for APC Data Analytics, Reporting, and NTD Certification support for a minimum period of five (5) years. The objective of the Support Agreement is to maintain the APC system at a very-high level of performance.	Y	Our integrated Hella 3D APC has been granted NTD Certification Approval. Furthermore, our NTD Certification process and maintenance plan includes procedures to calibrate APCs every year after the initial benchmark year using a modified validation plan to ensure the upkeep of the agency's certification. More information can be found in our NTD Certification section of our proposal.
C.20	The Support Agreement must provide consulting, training, support, and maintenance of ridership data reported to NTD and the City.	Y	This requirement is understood and accepted. Passio record-level detail is stored for a minimum of 36 (thirty-six) months and provides count information at the base level which allows for time and individual bus and driver reporting at the stop level. After 36 (thirty-six) months data will be summarized at the route, day, and passenger type level. This data will be available in the dynamic reporting system for a minimum of 5 (five) years. All data archived after 5 (five) years will be made available electronically prior to removal from the dynamic reporting system. Your account manager will work with you to set up your personalized NTD sampling schedule and Passio will support your certification process. Our integrated Hella 3D APC has been granted NTD Certification Approval. Furthermore, our NTD Certification process and maintenance plan includes procedures to calibrate APCs every year after the initial benchmark year using a modified validation plan to ensure the upkeep of the agency's certification. More information can be found in our NTD Certification section of our proposal.
APC Analytics Requirements:			
C.21	Conducting data cleansing (data cleaning is intended to remove questionable data)	Y	This requirement is accepted and understood. The Passio system includes data normalization to address key outlying operational situations and the ability to adjust counts accordingly.

C.22	Allowing for the adjustment of data (make minor, logical alterations to raw APC data)	Y	This specification is supported by our Passio APC and Navigator Reporting solutions.
C.23	Including a means for geographic analysis of valid APC data (geographic presentation of boardings and alightings by stop)	Y	This specification is supported by our Passio APC and Navigator Reporting solutions. The Passio Business Intelligence Dashboard Reports and Ridership Metrics provide this data. Passio Business Analytics users can create a variety of ad-hoc reports (bar graph, line graph, summary table, heat map, pivot table, pie chart, etc.) for viewing, printing, and exporting. Please refer to our Passio Business Analytics section provided in our proposal.
C.24	Providing the ability to assign unknown boardings and alightings to the stop before or after	Y	This specification is supported by our Passio APC solution.
C.25	Retaining data rejected for data cleaning for a minimum of 90 days	Y	This specification is supported by our Passio APC solution.
APC Reporting Requirements:			
C.26	Web-based APC reports with an intuitive user interface	Y	This specification is supported by our Passio APC solution. For more samples and information on reporting, please refer to our Passio Business Analytics section provided in our proposal.
C.27	Secure, password-protected web access	Y	This requirement is understood and accepted. Passio Navigator™ controls access to system features for each individual user with multi-layered security features. We use a permission-based user management system that can assign Read, Write, none permissions per user based on their role. Example roles include Dispatcher, Manager, Supervisor, and Administrator, but we can be very granular with page level access. New users are easily added with permission-based security along with bank-grade encryption, SSL-256, which restricts access to authorized personnel as well as secures the data while in transit. Your users will receive comprehensive training on all Passio software products. We will provide training to all dispatchers, supervisors, administrators and maintenance technicians.
C.28	Accurate reports that have been scrubbed of all errant data	Y	This requirement is accepted and understood. The Passio system includes data normalization to address key outlying operational situations and the ability to adjust counts accordingly.
C.29	Wheelchair lift use reports	Y	This specification is supported by our Passio APC solution. For more samples and information on reporting, please refer to our Passio Business Analytics section provided in our proposal.
C.30	Customizable ridership reports for specific time periods (annually, monthly, weekly, daily, hourly) and ability to filter data	Y	This specification is supported by our Passio APC Reporting solution. Reports include a graphical interface for display and presentation. All reports can be filtered by custom or pre-set time periods. Users can group reporting data for presentation by quarter, month, week, day or by time (hour or ¼ hour) and select operational detail levels such as routes, stops, trips, drivers, and buses. Passio Navigator offers a unique dashboard view where the client can create a variety of reports (bar graph, line graph, summary table, heat map, pivot table, pie chart, etc.), or have Passio create a custom report for the agency. These customized reports can be provided if users can't create filters or "Dashboards" meeting agency specifications. Passio also provides metrics on stop groups (inbound/outbound, north/south, etc.) which also fulfill these requirements. For more samples and information on reporting, please refer to our Passio Business Analytics section provided in our proposal.
C.31	Provide up to 25 additional customized reports requested by the City at no additional cost.	Y	The Passio Business Analytics platform allows unlimited report creation with customizable dashboards for any relative time period. Automated report scheduling and email distribution is also provided. Passio Navigator serves as your reporting dashboard with access to our library of ridership, performance, and analytics reports. Agencies use Passio Navigator to measure multiple KPIs for each route in service for any requested time period. Passio provides your dispatchers with real-time bus tracking, traffic, arrival predictions, and departure times for each stop. We provide several reports yielding crucial operational data regarding the services provided by your agency. For more samples and information on reporting, please refer to our Passio Business Analytics section provided in our proposal.
C.32	Ridership reports that can be aggregated by stop, route, or trip	Y	This specification is supported by our Passio APC Reporting solution. Reports include a graphical interface for display and presentation. Users can group reporting data for presentation by quarter, month, week, day or by time (hour or ¼ hour) and select operational detail levels such as routes, stops, trips, drivers, and buses. For more samples and information on reporting, please refer to our Passio Business Analytics section provided in our proposal.

C.33	Runtime reports to compare scheduled versus actual runtimes between segments, trips, or routes as an aid to tuning schedules	Y	The Passio Business Analytics platform allows unlimited report creation with customizable dashboards for any relative time period. These dashboards can be used to directly compare datasets in line to aid schedule optimization. We provide several reports yielding crucial operational data regarding the services provided by your agency. For more samples and information on reporting, please refer to our Passio Business Analytics section provided in our proposal.
C.34	Ability to export/download reports in Excel, PDF, etc.	Y	The Passio Business Intelligence Platform data is available for export into common formats such as CSV (to XLS) and PDF. For more samples and information on reporting, please refer to our Passio Business Analytics section provided in our proposal.
C.35	Report capabilities for measures, such as: boardings, alightings, boardings per revenue mile, boardings per revenue hour, boardings per trip, revenue miles, revenue hours, passenger miles, runtime between timepoints, trip runtimes, leaving load from a stop, max trip load point, etc.	Y	These specifications are supported by our proposed Passio ITS solution. For more samples and information on reporting, please refer to our Passio Business Analytics section provided in our proposal.
C.36	Specific reports for the National Transit Database reporting of unlinked passenger trips (i.e., boardings) and passenger miles travelled for by month and fiscal year using some or all the APC data	Y	Passio works with several agencies to prepare and submit NTD data. These include Corpus Christi Regional Transportation Authority (CCRTA) in Texas; Rider Transit of Concord and Kannapolis, NC; and Eastern Panhandle Transit Authority (EPTA) in Martinsburg, WV. Idaho Citylink Transit of Kootenai County and Ozark Regional Transit are also listed as APC references. Our robust Passio NTD reporting module provides VRM (Vehicle Revenue Miles), Deadhead miles, AVM (Actual Vehicle Miles), VRH (Vehicle Revenue Hours), Deadhead hours, AVH (Actual Vehicle Hours), UPT (Unlinked Passenger Trips), PMT (Passenger Miles Travelled) by time period and by weekday/weekend etc. Passio offers customized NTD reporting that will calculate and extract the metrics required for compliance. The Passio APC solution will provide all 'Actual' data (passenger miles and stop counts) required for NTD reporting. Your account manager will work with you to set up your personalized NTD sampling schedule and Passio will support your certification process. Our integrated Hella 3D APC has been granted NTD Certification Approval. Sample reports and a complete listing of available reports is provided in our Passio Navigator & NTD Certification sections found in this proposal.

OPTIONAL COMPONENTS

D. REAL-TIME AND HISTORICAL SERVICE APIS

D.1	The purpose of the real-time and historical APIs is both to provide customer information to riders through third party applications like Google Maps and to provide any other application that the City may utilize, to access real-time and historical information about Stageline service. These APIs may be provided as a standalone component incorporating information in the CAD/AVL API.	Y	Passio provides an Open API to allow 3rd party software to attach to our API to pull real time transit data into their system. Passio is committed to keeping our programmable API fully documented for consumption and integration with any other system providing an API. Passio provides a real-time transit application programming interface (API), documentation, and JSON output for customers. GTFS static file imports and exports are supported and Passio can also provide a GTFS Realtime (GTFS-RT) feed to application developers. The API includes real-time location data (every 2-5 seconds) and the estimated time of arrival, as well as other system information such as real-time passenger load as an option.
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Real-time and Historical Service APIs Requirements:

D.2	GTFS Real-time 2.0-conforming Trip-updates and Vehicle Positions feeds provided on license terms that allow the City to download, own, and store all data	Y	Passio will work with Clovis staff to recommend/determine the best options and integrations during the project planning phase. Passio provides a real-time transit application programming interface (API), documentation, and JSON output for customers. GTFS static file imports and exports are supported and Passio can also provide a GTFS Realtime (GTFS-RT) feed to application developers. Passio automatically generates GTFS-realtime (GTFS-RT) feeds for consumption. Passio fully supports all GTFS-RT feeds for Trip Updates, Service Alerts, and Vehicle Positions.
D.3	GTFS Real-time and any other API endpoints should reference GTFS feed IDs in the GTFS data set provided by the City and update any time IDs in that data set change	Y	Passio supports all GTFS-RT feeds for Trip Updates, Service Alerts, and Vehicle Positions. Passio also provides a real-time transit application programming interface (API), documentation, and JSON output for customers. The API includes real-time location data and the estimated time of arrival, as well as other system information such as real-time passenger load.

D.4	API endpoints should update at least every 5 seconds or faster, incorporating real-time information from the CAD/AVL system	Y	The Passio API includes real-time location data (every 2-5 seconds) and the estimated time of arrival, as well as other system information such as real-time passenger load.
D.5	Well documented GeoJSON or REST API that provides useful and efficient queries regarding transit network real-time and historical status	Y	Passio provides a real-time transit application programming interface (API), documentation, and JSON output for customers.
Desired:			
D.6	All data provided on license terms that allow the City to download, store, and own all data elements, and utilize the data schema for any purpose	Y	Passio Technologies understands and accepts this requirement.
D.7	Graphical User Interface available to dispatchers for understanding real-time and historical status of the system (also may be provided through CAD/AVL system component)	Y	The specification is met by our proposed Passio Navigator solution. Passio Navigator Live Map displays the color coded routes and vehicle bus icons. Our Passio Navigator 'Replay' feature also complies with this requirement. View breadcrumbs (historical locations and speeds) of each vehicle in your fleet. Date/time range options and multiple playback speeds are available. Our new "Snapshot" mode allows dispatchers to capture a detailed historical view of their fleet locations, speed, direction, and load at any time.
D.8	Historical data available for all API endpoints for 90 days after the service date, and the archiving or deleting of data on a clear operational process transparent to the City	Y	Passio Technologies understands and accepts this requirement.
D.9	Firm capacity and intention to update GTFS Real-time endpoints as the specification evolves to provide better information to customers and better reporting data to the City	Y	Passio Technologies understands and accepts this requirement.
D.10	Provide service alerts to inform passengers of service disruptions.	Y	Passio supports all GTFS-RT feeds for Trip Updates, Service Alerts, and Vehicle Positions. Furthermore, our Passio GO system has two levels of communication within the application, Alerts and Announcements. Alerts are designed for immediate notification and highlighted viewing, whereas Announcements are displayed for general passenger information.
E. COURTESY PASSENGER WI-FI			
E.1	Today's transit riders and leisure travelers want Internet access almost as much as they want a seat and on-time arrival information. As part of its enhanced rider experience, the City wishes to add courtesy Wi-Fi services on its' Stageline vehicles. As such, the Contractor will provide an industry-proven system that works on all Stageline vehicles currently in use by the City.	Y	Passio's Mobile Wi-Fi™ solution is certified for rugged environments and transit deployments. Provide your passengers with reliable and configurable high-speed Wi-Fi. The routers are managed and configured remotely by Passio's support team. This system provides web-based management tools to monitor service and update firmware on all devices. Passio Mobile Wi-Fi™ provides web-based management tools to monitor service and update firmware on all devices. Additionally, using the Customizable Captive Portal bandwidth allowance, terms & conditions and access duration per user can be set for all devices.
Courtesy Passenger Wi-Fi Requirements:			
E.2	Interface with single sign on requirements or power on via ignition activation	Y	Passio's Mobile Wi-Fi™ solution meets this requirement.
E.3	Work through a diverse geographical area used by the City	Y	Passio's Mobile Wi-Fi™ solution meets this requirement.
E.4	Provide a consistent, high-quality connection for all users	Y	Passio's Mobile Wi-Fi™ solution meets this requirement. Passio's Mobile Wi-Fi™ solution uses the 802.11ac wireless networking standard on Verizon.
E.5	Contain components that fit on all vehicles used by the City	Y	Passio's Mobile Wi-Fi™ solution meets this requirement.
E.6	Not penetrate the outer shell of the vehicle	Y	Passio's Mobile Wi-Fi™ solution meets this requirement.
E.7	Not interfere with the operation of the transit vehicle or its onboard electronic equipment	Y	Passio's Mobile Wi-Fi™ solution meets this requirement.
E.8	Provide a Wi-Fi disclaimer and terms of use for passengers	Y	Passio's Mobile Wi-Fi™ solution meets this requirement.
E.9	Provide the ability to easily control internet content seen by the passengers	Y	Passio's Mobile Wi-Fi™ solution provides multiple security protocols. Security components of the Passio Wi-Fi solution are: stateful firewall, DoS prevention, & web blocking. A more detailed description of our Passio Wi-Fi solution may be found within our attached Solutions section.

E.10	Provide the ability to optimize bandwidth to exclude excessive bandwidth use	Y	Passio Mobile Wi-Fi™ provides web-based management tools to monitor service and update firmware on all devices. Additionally, using the Customizable Captive Portal bandwidth allowance, terms & conditions and access duration per user can be set for all devices.
E.11	Track down and fix performance issues in a timely manner	Y	Passio's Mobile Wi-Fi™ solution meets this requirement.
E.12	Be secure and separate from the Wi-Fi/Cellular connections used for the City data communications.	Y	Passio's Mobile Wi-Fi™ solution meets this requirement.
F. ELECTRONIC DRIVER VEHICLE INSPECTION REPORTING (eDVIR)			
F.1	The eDVIR component is a software system utilized by drivers and maintenance staff to automate and streamline reporting of maintenance issues. It can be part of the CAD/AVL system or separate.	Y	Passio Inspector is our Electronic Driver Vehicle Inspection Reporting (E-DVIR) module and is available as part of our Passio Manager App on our MDT. This solution will provide digital pre-trip Inspection forms, post-trip inspection forms, and hot swap/mini inspections. Drivers can clearly communicate vehicle damage location using touch point graphics and digital photos. Inspection reports and alerts are available within Passio Navigator.
eDVIR Requirements:			
F.2	Inspection components/requirements must be fully customizable	Y	This specification is supported by our Inspector solution. Please refer to our Inspector Solution documentation provided in our proposal.
F.3	Automation of driver pre- and post-trip inspections (including compliance with Federal Motor Carrier Safety Administration regulations 392.7 and 396.11)	Y	This specification is supported by our Inspector solution. Please refer to our Inspector Solution documentation provided in our proposal.
F.4	Utilize the same MDT/tablet as the CAD/AVL system	Y	This specification is supported by our Inspector solution. Please refer to our Inspector Solution documentation provided in our proposal.
Desired:			
F.5	Automation of tracking and reporting engine diagnostics	Y	Passio Inspector is our Electronic Driver Vehicle Inspection Reporting (E-DVIR) module and is available as part of our Passio Manager App on our MDT. This solution will provide digital pre-trip Inspection forms, post-trip inspection forms, and hot swap/mini inspections. Inspection reports and alerts are available within Passio Navigator.
F.6	Ability to take and attach pictures with MDT/tablet	Y	Drivers can clearly communicate vehicle damage location using touch point graphics and digital photos.
F.7	Integration with CAD/AVL and reporting components	Y	Inspection reports and alerts are available within Passio Navigator.
F.8	Integration with FASTER fleet maintenance software	Y	We already provided an integrated system with FASTER as part of our Mobility Alliance. FASTER provides complete lifecycle asset management, equipment warranty tracking, preventive maintenance reporting and alerts, asset inventory modules, comprehensive fuel management, business intelligence reporting, fleet analytics, parts inventory/processing, work order management, and labor resource management.
ADDITIONAL REQUIREMENTS			
G.1	DESIGN/IMPLEMENTATION	Y	Passio Technologies understands and accepts these requirements. More information can be found in the following sections of our proposal: Technical Approach, Implementation Plan, and Workforce Safety.
G.2	PROJECT MANAGEMENT	Y	Passio Technologies understands and accepts these requirements. More information can be found in the following sections of our proposal: Technical Approach, Implementation Plan, and Project Schedule.
G.3	TRAINING	Y	Passio Technologies understands and accepts these requirements. More information can be found in the Training section of our proposal.
G.4	TESTING	Y	Passio Technologies understands and accepts these requirements. Passio also agrees to the 30-Day Rolling Operational Testing requirements. More information can be found in the following sections of our proposal: Agency Involvement, Implementation, and Quality Assurance.
G.5	MAINTENANCE AND SUPPORT	Y	Passio Technologies understands and accepts these requirements. More information can be found in the following sections of our proposal: Warranty and Maintenance, Technical Support, and our enclosed SLA.

SOLUTIONS OVERVIEW

Passio builds modular and scalable technology solutions for transit customers in the municipal, government, university, healthcare, aviation, corporate, residential and hospitality industries. We harness real time Passenger & Dispatch Information Systems through GPS tracking using Passio GO, Automated Voice Announcements, and on-board LED Smart Signs. These solutions are coupled with our Automated Passenger Counting (APC) and CAD/AVL systems to provide detailed visibility and comprehensive insight into any transit system

BusBuzz is our unique text and mobile web application for Passenger Feedback. Passio Gateway validates passengers and limits boarding access to authorized users using Tap, Swipe, or Scan Technology. Our Active Route Management (ARM) solution solves the issue of bus-bunching and headway management, keeping buses evenly spaced out on your routes. We also provide Wi-Fi on board, vehicle inspection apps, driver time clock tools, pre-trip yard activity monitoring, and transit tools for the visually impaired.

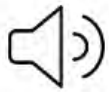
Operations management, reporting and analytics are provided by Passio Navigator and Passio OpsView. Providing instant alerts such as speeding, off route, out of boundary, and idling, where dispatch and management can address transit issues in real time, correcting issues before they escalate. Passio Inspector is our comprehensive Pre/Post trip inspection module. All of these systems are complemented by Passio ParaPlan, our comprehensive booking, scheduling, dispatching, and demand response management software for Paratransit/NEMT service. Our latest technology addition is Passio Connect, which powers our on-demand transportation software solution. This powerful new platform was built mobile first, integrating our core CAD/AVL features with our real-time routing algorithms to give agencies a new offering for their riders.

Passio's solutions are 100% ADA compliant, even going a step further to integrate with technologies that allow for not only compliance, but empowerment. For example, we integrate with FAR, a wayfinding app for the visually impaired. Our LED signage and Automatic Voice Announcements are also compliant.

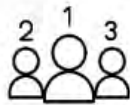
We also continue to develop our COVID-equipped transportation support by facilitating food delivery to homebound vulnerable populations, passenger load alerts for social distancing, enhanced rider communication and feedback, as well as tech-enabled contact tracing using Passio Gateway among passengers and drivers across the nation.

Furthermore, our Passio API allows us to interface with just about anything.

Passio Technologies Available Solutions



AVA
GPS (or other) triggered automated stop announcements



APC
Automatic passenger counting and reporting



PASSIO GO + REQUEST & GO
Real-time rider-focused app for vehicle tracking and information + optional app add-on for ride requests



GATEWAY & CONTACT TRACING
Tap and swipe passenger validation and demographics reporting – optional contact tracing add on



PARAPLAN
Paratransit/NEMT scheduling software for dispatchers and drivers – our on-demand software



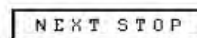
WI-FI
On-board Wi-Fi for riders



EPC
Electronic passenger counting & rider categorization



PASSIO TRANSIT
CAD/AVL Mobile Data
Terminal operator assigns routes for onboard dispatch, 2-way messaging, and operator input



SMARTSENSE LED
Integrated LED Signage displaying GPS triggered route and stop information



ACTIVE ROUTE MANAGEMENT
Bus UN-bunching solution for headway management



SCHEDULE ADHERENCE
The visual indicator on MDT of Stop schedule for operator



BUSBUZZ
Allows for instant customer feedback and direct management response



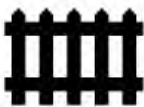
FORESIGHT AUGMENTED REALITY
Integration with the FAR wayfinding app for blind or visually impaired



INSPECTOR
Pre/Post-trip inspection module



DRIVER TIME CLOCK
Tracks drivers time operating the vehicle for payroll



YARD MANAGER
Driver based activity prior to beginning route service



PASSIO CONNECT
Mobile and web-friendly source to quickly deploy on-demand and flexible route service for your riders



PASSIO VISION
On-Board cameras and live video feeds.



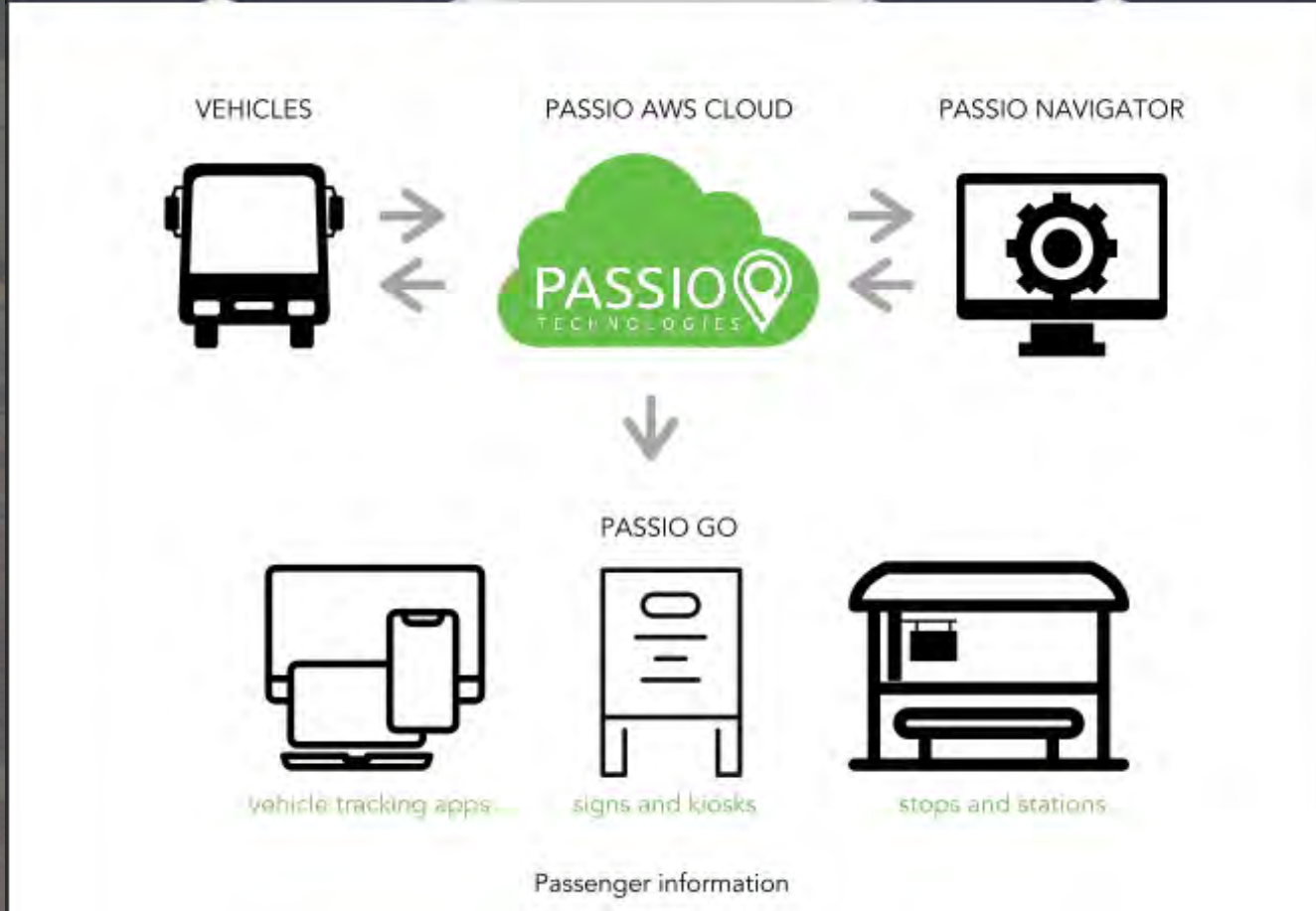
NAVIGATOR REPORTS
GPS, fleet, passenger counting, & dashboard data



CUSTOMER SERVICE
Unlimited remote support & commitment to excellence



SYSTEM DIAGRAM



Several of our ITS solutions are discussed later in more detail, but here is our complete list of Passio products and technologies for transit systems:

AGENDA ITEM NO. 8.

Automated Voice Announcements (AVA)

AVA can provide high quality announcements in multiple languages from a single system profile. Triggered by custom geofences.

Automated Passenger Counting (APC)

APC is used to track boardings and alightings by using Hella 3D stereoscopic imaging sensors mounted above your passenger doors.

Passio GO

GO is our comprehensive passenger information system with real-time GPS tracking on any device to provide maps, ETAs, alerts, favorites, and notifications to riders.

Passio Gateway

Gateway is our tap and swipe passenger identification solution to capture and validate passengers by type as they board the bus.

ParaPlan Desktop

Desktop is our comprehensive booking, scheduling, dispatching, and IVR system for demand response transportation management.

ParaPlan Mobile

Mobile gives your demand response drivers an interactive digital manifest with navigation, payments tracking, and integrated signature capture.

On Board Wi-Fi

Wifi gives your riders reliable access to high-speed internet making their journey more enjoyable.

Electronic Passenger Counting (EPC)

EPC is used to manually track boardings, alightings, and passenger types using our touchscreen MDT.

Passio Transit

Transit is our touchscreen MDT application for fixed route drivers that displays route(s), stops, alerts, and announcements.

Passio Navigator

Navigator manages and controls CAD/AVL, route and stop configuration, 2-way communication and reporting access.

SmartSense LED Signs

Signage displays automated announcements triggered by GPS location.

Passio Vision

Mobile video surveillance hardware and monitoring solution. Capture clear video events and images of the interior & exterior of your buses.



Passio Active Route Management (ARM)

ARM is our solution to the issue of bus-bunching, keeping buses evenly spaced out on for headway management.

AGENDA ITEM NO. 8.

Schedule Adherence

Schedule Adherence provides simple visual indicators for drivers of current stop schedule status.

Passio BusBuzz

BusBuzz allows passengers to provide instant feedback on driver performance, vehicles, scheduling, and service.

Passio Inspector

Inspector is our Pre/Post trip inspection module.

Driver Time Clock

Time Clock tracks driver time for payroll management.

Yard Manager

This solution monitors all driver based activity prior to and after service.

OpsView Reporting

OpsView provides full spectrum dynamic mapping, reporting, and dashboard views of your operation

FAR Integration

FAR uses beacons to make bus stops and other points of interest accessible to the blind and visually impaired.

Passio Connect

Connect is our on-demand and flexible route service for your riders, optimizes driver assignments, vehicle travel pathways, and passenger load balancing. Connect includes our Dispatch dashboard for real-time on-demand CAD/AVL. Create multiple geographic areas of service and available times. Deploy your own microtransit service or use Connect to integrate with your existing service operations..

Passio Request & GO

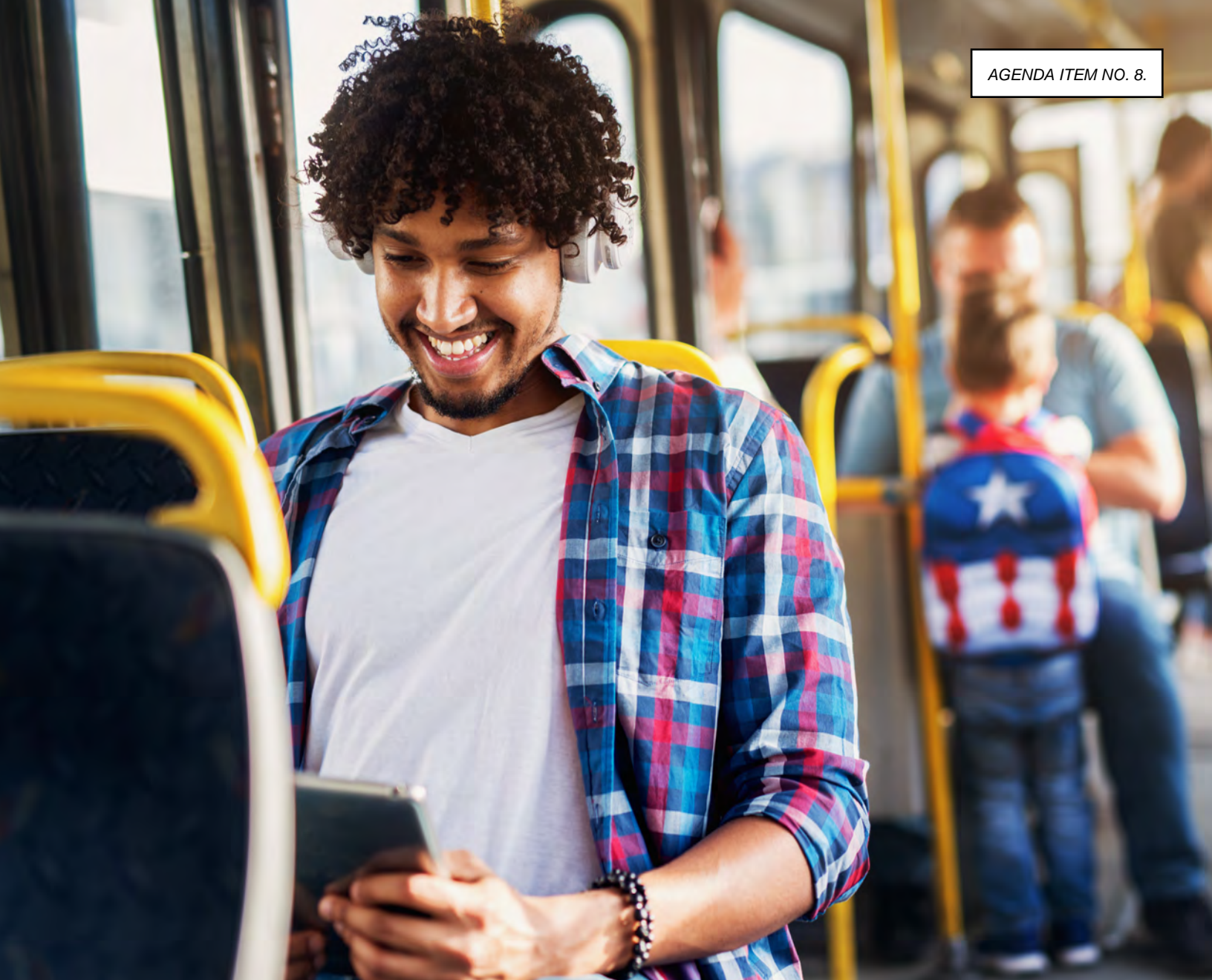
This add-on is our new fixed route ride hailing service. Passengers with the Passio GO app who are located at any bus stop or authorized location can request a pickup. Riders receive driver confirmations, ETAs, notifications, and mapping of the vehicle's progress.

Dynamic Trip Planning

Our newest development initiative is our Regional Mobility Platform for dynamic trip planning. Our Regional Mobility Platform will be built using the Passio MobilityPlatform suite: Navigator™ for fixed route management, ParaPlan™ for demand response, Connect™ for on demand and Passio GO™ with MobilityPlanner for rider-facing apps on major mobile platforms. Riders will be able to make mobility choices that will incorporate public and private transportation providers, opening access to mixed modes such as walking and bike-shares.



Detailed information on our proposed solutions are presented next.



PASSIO GO

OUR RIDER APP & PASSENGER INFORMATION SYSTEM

Passio GO is our public facing application providing real-time bus locations, stops, routes, arrival predictions, schedules, and current passenger load. The application can be downloaded for free on Google Play and the App Store.

For operators, Passio OpsView functions as its backend management tool, with robust mapping, analytics, and public communication tools



Solution: Passio GO™

Main Features

Mobile App	Rider Facing Information
<p>Our mobile app is free to use and easy to understand. Riders get a tutorial before using the intuitive app. Riders quickly plan their transit day on a map!</p>	<p>Riders can view routes, stops, driver information, # of passengers on board, and more within the app. Riders can 'favorite' their most used routes and stops.</p>
Alerts/Messages	Management
<p>Operators can push out emergency alerts to run across the top of the screen, or send messages to app users. Riders get bus ETAs for any stop they have favorited.</p>	<p>Passio GO information such as stops and route maps can be edited by management through Passio Navigator, our cloud based reporting system.</p>

Other Viewing Options

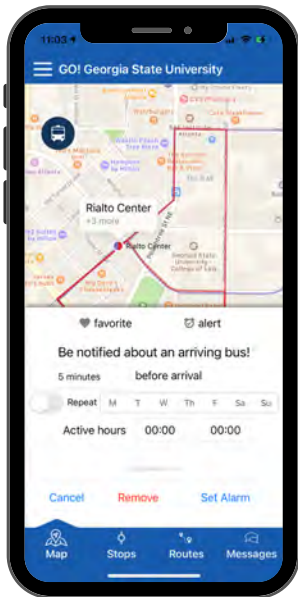
Passio GO is available as a native app, Public Viewer (live website), or LiveDisplay.TV to be displayed in public places like a library or dispatch office.



Real-Time Data on Arrival and Departure of Transit Vehicles

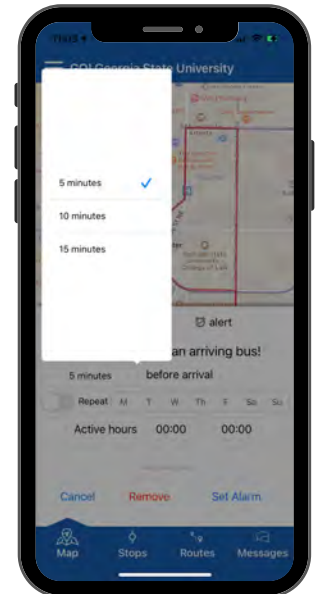
Our app, Passio GO, can provide real-time data app alerts when vehicles arrive or depart a stop.

App users must set up their alerts within the Passio GO App.



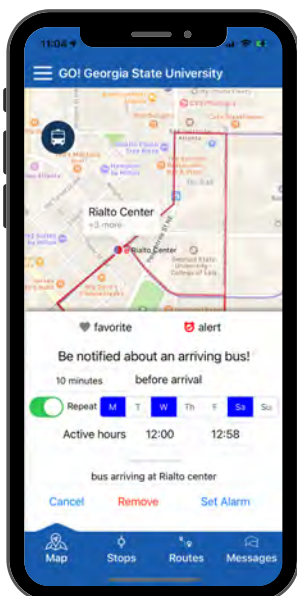
Start in the Live Map

App users start in the Passio GO live map. They can choose a stop then press the "Alert" setting to begin configuring the alert. They can also "Favorite" the stop.



Set Time Based Alerts

Riders are able to choose if they want an alert 5, 10, or 15 minutes before the vehicle arrives at their stop.



Turning Your Alert On

Next, riders choose dates they need alerts, and a time frame they would like alerts. They can even nick-name the alert or add comments.

Optional: Passio can also provide a direct SMS service to your passengers to get bus ETAs. This is useful for passengers who wouldn't like to download the app, or who do not have a smartphone.



Passio GO™

Our App represents the next generation of real time vehicle location tools for passengers and CAD/AVL management and reporting tools for system operators. Fully integrating the best visual tools, public viewers, and smartphone applications into the Passio Transit platform provides our customers with unparalleled access to real time updates for routes and stops, while instantaneously evaluating the system’s performance from any computer, tablet, or cellphone. Hundreds of hours of testing and consistent customer feedback have produced a tool that is intuitive for passengers, invaluable for daily operators, and indispensable for management and leadership teams.

Passio GO™ Mobile App

The Passio GO mobile application is designed to be intuitive and user friendly. No specific training is required for the end users. Once the application is downloaded to their smartphone, the application leads them to naturally understand how to use the key features such as viewing specific routes, tracking buses in real time, and identifying where they need to go simply by tapping on the home screen.

For users wishing to take advantage of enhanced features such as ‘follow my bus’ or destination planning, the application has straightforward embedded hints and guidance tools that make the app easy for everyone to use. GPS data is updated in real time, typically every second or less, on board the vehicle. Movement, change in heading/direction and speed is reported in real time and immediately uploaded via data connection to network servers for representation on public views, website maps, and smartphone applications.

Smartphone applications are available, at no cost, for both Apple (iOS) and Android (Google Play) users. In addition to smartphone applications, an interactive mobile web view is available for use on personal computers, tablets, and is optimized for mobile viewing on any cell phone or mobile device.



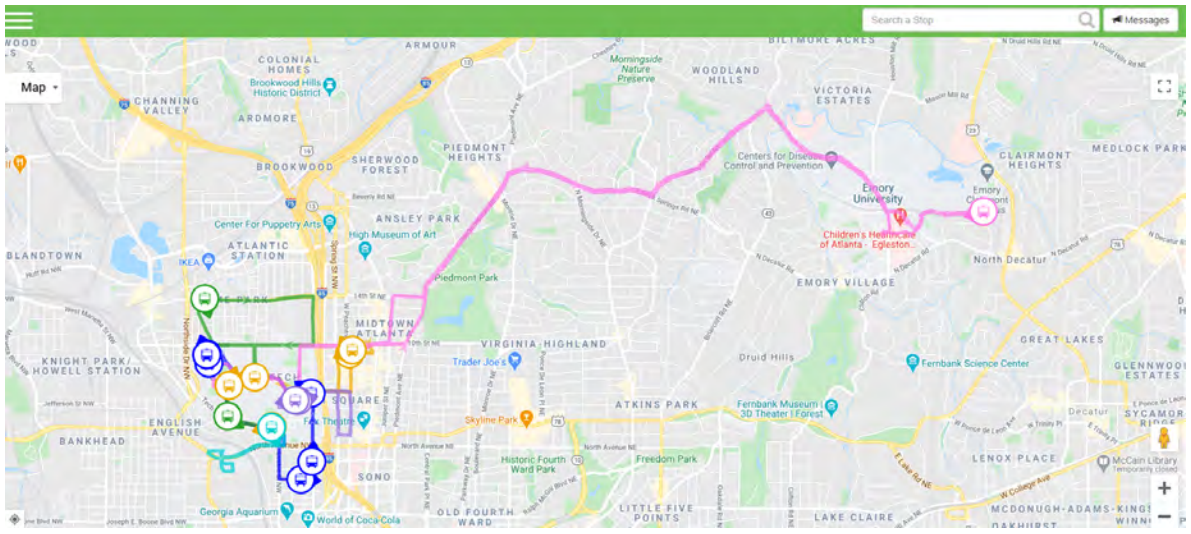
Real Time Passenger Load

Passio Transit customers using either Automated Passenger Counting or Electronic Passenger Counting (touch screen counting on the MDT) have the option to view real time passenger load data on both the Passio Navigator Operational Live Map for management as well as the publicly available web viewer, kiosk, and smartphone apps.

Maps and Customized Layers

All public views utilize externally validated map applications for accurate representation of locations, buildings, and streets. Additional layers may be added for tailored information such as alternate building names, key points of interest, and external information.





Passio GO Smartphone Applications™

Free downloads for iPhone (iOS App Store) and Android (Google Play) users are always available for Passio GO. All updates are provided free of charge to both the institutional customer and the end user.



Mobile App Features:

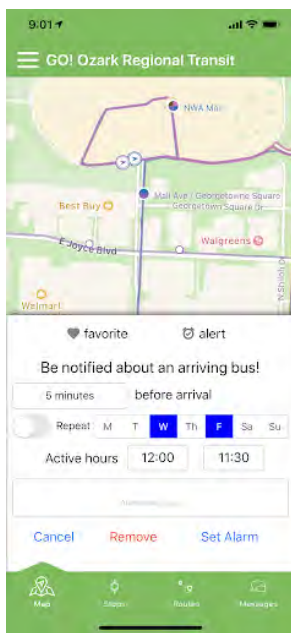
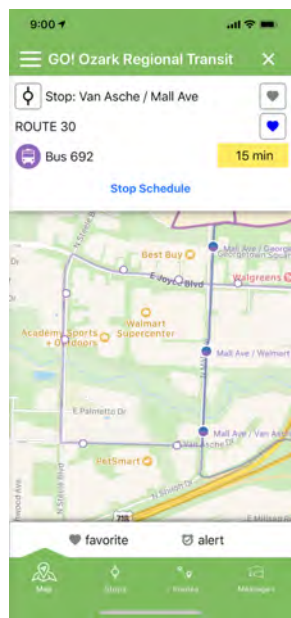
- Geo-location button on the home screen allows GPS enabled smartphones to orient the user's location to map view.
- Users have the option to select all, some, or one route. Only active routes are enabled within the application.
- Select individual stops directly from the home screen.
- Application algorithm processes real time vehicle location information for smooth and steady graphical representation.
- Customizable bus icons and easy access to view saved routes and stops.



Passenger Notifications:

(Alerts and Announcements)

The system has two levels of communication within the application: "Alerts" for immediate notification and highlighted viewing and "Announcements" for general information. Alerts scroll above the map and do not require any action by the user to view them. Announcements are indicated by the red message button on the bottom right of the home screen. Users tap on the indicator to view the more detailed announcement information.



Automatic Scheduled Stop Alerts

Smartphone app users have the ability to set an Arrival alert or 'Favorite' for any stop within the system.

The user taps on the desired stop to view the Bus and Estimated Time of Arrival (ETA) information. Users can set the stop as a favorite and set alerts for when the bus is 5 minutes away etc.

The Passio GO Interactive Public Viewer

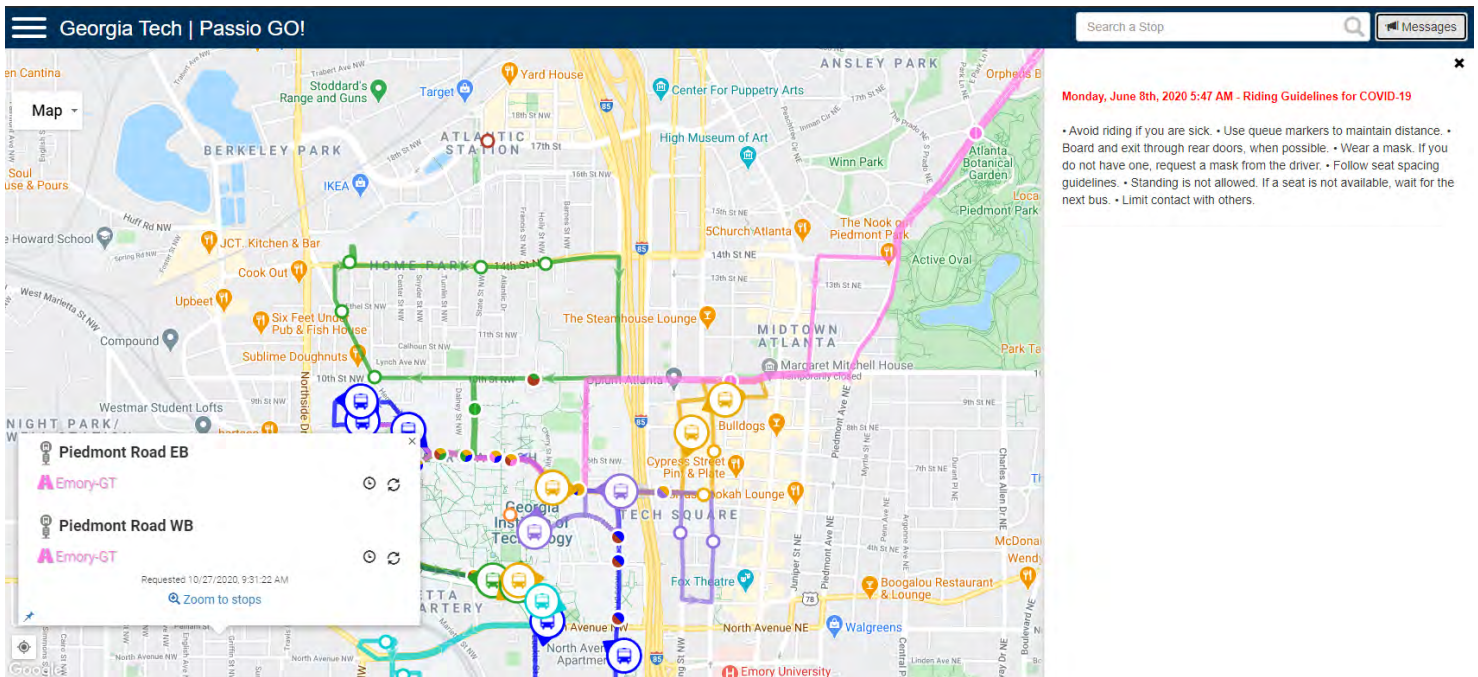
This is our rider-facing application providing real-time location of vehicles, stops, and routes on a public website.

Many customers require the functionality of the smartphone application accessible from any internet-connected PC, tablet, or mobile device. The Interactive Public Viewer includes Optimized Mobile Web View (Public Website) for using the tool on smaller mobile devices such as tablets and smartphones. This ensures that all display features are proportioned correctly for display on smaller screens.



The Passio GO Interactive Public Viewer

This is our rider-facing application providing the real-time location of vehicles, stops, and routes on a public website. Many customers require the functionality of the smartphone application accessible from any internet-connected PC, tablet, or mobile device.



The Interactive Public Viewer includes Optimized Mobile Web View (Public Website) for using the tool on smaller mobile devices such as tablets and smartphones. This ensures that all display features are proportioned correctly for display on smaller screens.

Interactive Public Viewer is accessible via a customer-specific web link.

- There is no additional software to download and the solution is a pure HTML implementation that displays vehicles on a 2-dimensional map.
- The Public Viewer can be customized and branded with colors and logos, as well as advertising and marketing information.
- Vehicle location, passenger load information, and estimated time of arrival (ETA) information is updated automatically without any interaction required from the user.

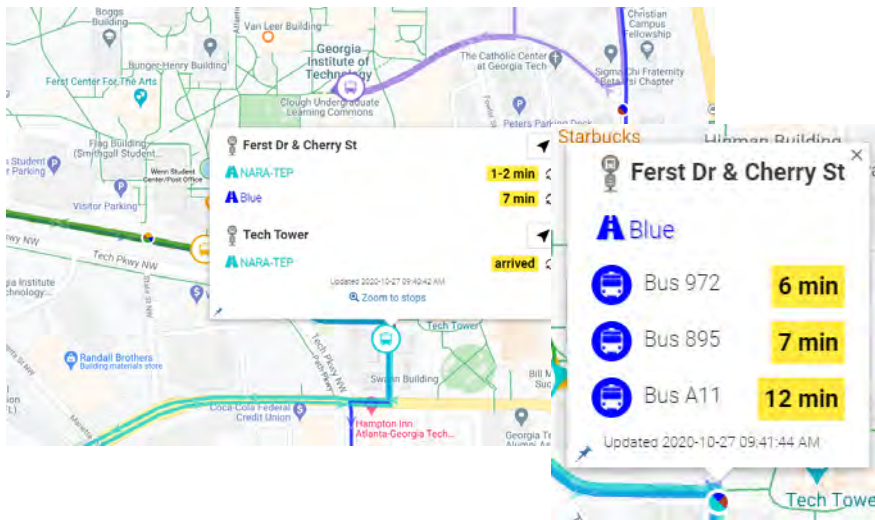


Vehicle direction is indicated on each bus icon and routes are all drawn in different colors. Bus stops that are shared by multiple routes are clearly indicated through stop design features.

Clicking on the bus icon will show the current location, route, and next stop information for the vehicle.

Users have access to settings from the primary viewing screen. Tapping on the Select Routes option shows all active routes available.

Users can select one or more of the routes, view the distance from their current location and tag the routes as favorites. On-screen help is available for assisting users with key system components.



Choosing any stop on any route will provide the user with the ETA (Estimated Time of Arrival) information about the next buses scheduled to service that stop.

Passio GO Kiosk Mode – LiveDisplay.TV

With the introduction of Passio GO Kiosk Mode™ using LiveDisplay.TV™, Passio GO customers have access to configure and customize public views of their vehicle route activity at an unprecedented level. Any internet-connected screen from a tablet embedded in a kiosk to a large display monitor at a key transit center or public location can be used to show vehicle and route locations.

The unique configuration design provides options for granular access to the display features. A simple web link is created for each combination of views and options. Once the link is set it can be displayed using standard internet browsers. All vehicle and route information automatically updates and refreshes – no user interaction is required to view data in real time.



Passio GO Text ETA Service (optional)

No smartphone? No problem! Get the word out anyway and offer your riders Passio’s Text-ETA Service where they can simply text the stop code to (555) 555-5555 to get real-time ETA information for any stop. Once the rider submits the stop number via text, they will immediately receive an automated text reply containing the ETA of the next bus (or buses) in your system and the routes they are on.



Bus stops in your transit system are each identified by a unique stop code. It is configured by the agency and will be printed on a physical bus stop sign for your riders to see and use. Set up your stop codes easily using Passio Navigator.

Passio Text-ETA response format options include:

ETA for Washington & 5th (Stop 212)
 Blue: 5 (10:15 AM) & 65 (11:15 AM) min
 Red: 22 (10:32 AM) & 47 (10:57 AM) min

ETA for Washington & 5th (Stop 212)
 5 min (10:15 AM) short route: long name...
 Red: 22 min (10:32 AM) [SN] Long Name...
 Red: 47 min (10:57 AM)
 Blue: 65 min (11:15 AM)

ETA for Washington & 5th (Stop 212)
 Blue: 5 min (10:15 AM)
 Red: 22 min (10:32 AM)
 Red: 47 min (10:57 AM)
 Blue: 65 min (11:15 AM)





PASSIO TRANSIT MDT

OUR MOBILE DATA TERMINAL TECHNOLOGY

Passio Transit includes software for our Edge MDT (Mobile Data Terminal) which supports route assignments, electronic passenger counting, upcoming stops, navigation, alerts, and driver clock. Transit connects to automatic voice announcements and LED signage if desired. The MDT also sends data to Passio Navigator, our cloud-based reporting and AVL system.



Solution: Passio Transit MDT

Main Features

Integrations

Our MDT can integrate with APC & AVA systems, LED signage, and Passio GO, building a full customer journey with minimal operator involvement.

Driver Login

Drivers log in to the MDT when beginning their routes, making it easy for managers to see what vehicles and drivers are currently on route.

Training

Vehicle operators are provided with a simple 20 minute training session on the MDT, which uses an intuitive design making it easy to operate while on the road.

Navigator

The MDT works with Passio Navigator to report information back to our cloud-based reporting system. Customers can monitor data in real-time and build custom reports using dashboards and filters.

Connectivity

Passio MDTs use 4G LTE connections and are directly connected to vehicle power. The MDT can function in extreme weather conditions while providing vehicle location, system status, and reporting metrics to Navigator.





Rugged Design

- Power Management
- Handles Extreme Heat, Cold, and Vibration
- Single Wiring Connection -
- Just Minutes to Swap Devices
- Responsive Touch Screen

4G LTE Connectivity

- Direct Hardware to Power & Ignition
- Extremely Accurate SIRV IV GPS
- Signal Acquisition in Seconds
- Dead Reckoning
- Multi Hardware Connections

Driver Interface

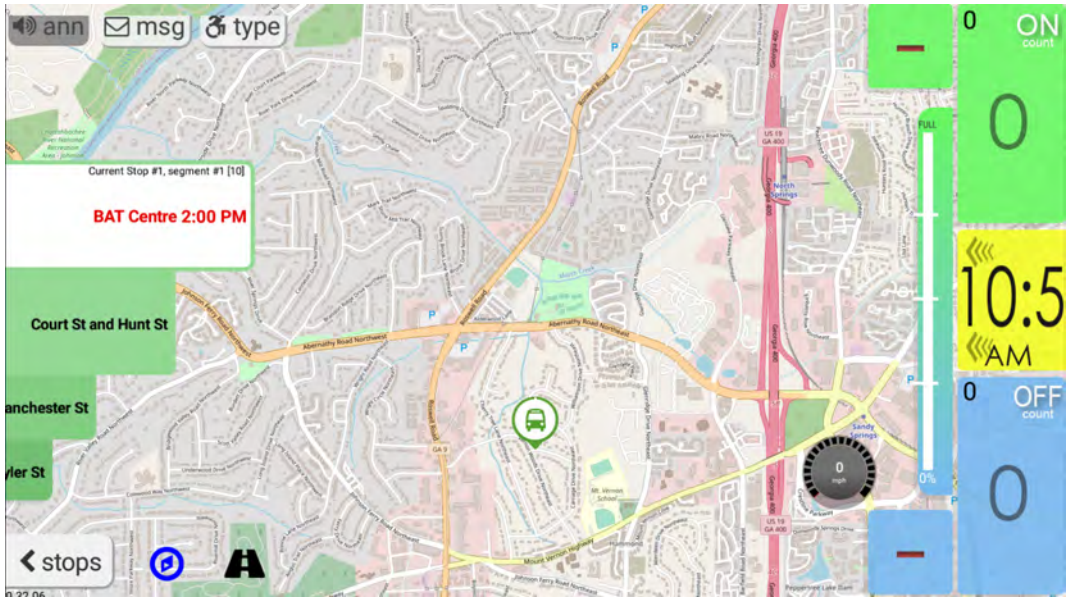
- Intuitive Design
- 10 Minute Full Operator Training
- In-App Training Mode
- Clearly Viewable Status Indicators
- All Routes, Stops, Announcements, Available on Any Bus at Any Time

Passio Transit MDT

At the heart of the on-vehicle CAD/AVL system is the Passio Transit software and our Edge MDT, an android-based, rugged, touch-screen driver interface. This single-connection, modular and swappable device natively connects to other onboard devices for the control and collection of data. All configuration information, collected data, and communication is handled through our secured web portal with individual logins at central dispatch.

When we think about the edge of something, we often conjure images of cliffs and mountains with endless possibilities and opportunities. In much the same way, the “Edge” in transit technology represents the most current advancements - and even introduces new innovations that may have been previously unheard of. It represents the “Edge” of your technology platform. Transit tech is unique – it does not simply operate with an app and a smartphone. It requires creating serious hardware connections in a very challenging environment. Next to heavy construction and manufacturing and mining, moving vehicles with a variety of power, instruments, and wiring diagrams is one of the toughest environments for hardware and electronics. It is crucial that the ITS solution you choose for your system provides the on-board hardware components that are rugged enough to withstand this environment. The Passio Edge MDT™ showcases the design, connectivity, and interface to elevate your transit system to new heights.

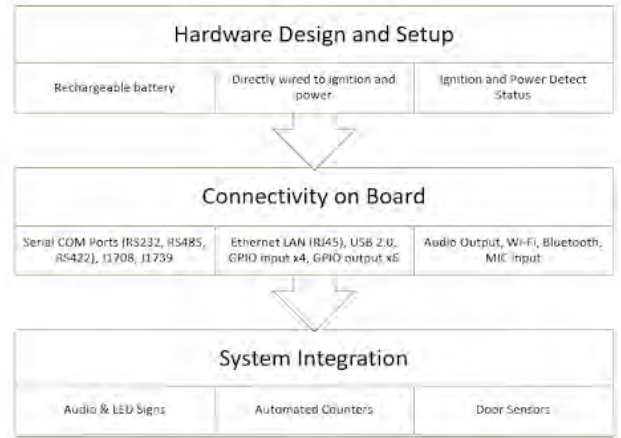




Passio Transit App - MDT Live Maps

Hardware Specifications

The Passio Edge™ Mobile Data Terminal is constructed to meet the requirements unique to transit operations of different sizes and configurations. It is installed to be managed safely and used effectively by operators and is referred to as the intelligent “brain” of the Passio ITS system. It provides location, announcements, and real-time information to passengers, direct and immediate performance metrics to operators, and enables management and agency leaders to gather the data necessary to plan for the future needs of the system.



- Working Temperature: -10° to 65° C
- Storage Temperature: -25° to 80° C
- Comply with IP64 Standard: Protected against splashing water and dust
- 7" LED Backlit embedded Android industrial panel pc
- High Brightness: 450CD/m2
- 800 x 480 resolution
- Capacitive touchscreen panel
- Strong vibration resistance
- External SiRF IV GPS
- Power input: DC 9-36V, 9W power consumption
- Power consumption: 8W
- Size (LWD): 220 x 152 x 36.5 mm
- Weight: 740g



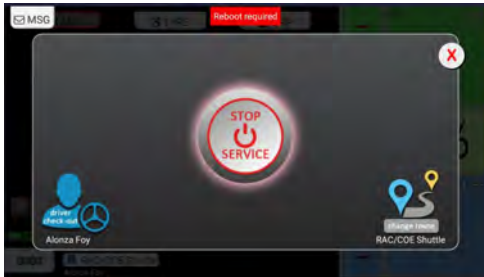
Passio Transit Software

Drivers simply login to Passio Transit and choose their assigned route. The software displays their stops in sequence and they are ready to go.



Schedule Adherence - While in service, drivers can keep up with their own schedule to determine if they are behind, ahead, or perfectly on schedule. A clock time in blue indicates the driver is behind schedule, and a yellow clock denotes ahead of schedule. Additionally, passenger counts from the APC unit are displayed to the driver instantly. The top buttons allow the driver to make custom announcements, edit passenger types, and create boarding groups if needed.

In/Out of Service Status - This feature measures revenue hours for billing, route schedule validation, and NTD reporting. Drivers have the following options when going out of service: training, fueling, maintenance, charter, and others.



Going back into service is easy, simply tap the service screen, and choose "Start Service".

Driver Check In/Out - This optional add on enables driver status reporting, operations management, and time tracking for data that can be matched to payroll. From the shuttle icon on the bottom left of the MDT screen, operators have the option to start service, check in/out, or change route. Several route status updates can be made by the operator within the MDT.

2-way Dispatch Messaging - 2-way dispatch messaging makes it easy to communicate directly with on board operators through custom messages and receipt confirmation.

EPC Interface - Our electronic passenger counting interface allows operators to manually count as riders board and exit the vehicle, if required. The "ON" green button at the top right adds a boarding to the vehicle. Pressing the blue "OFF" denotes a passenger alighting. The yellow counter shows the running total of passengers currently on board. Multiple boardings and alightings are easily created by pressing the GRP button. Passenger and fare types can also be entered from a list of customizable pre-set options.



Passio Transit App - Request & GO add-on

Passio Transit App - Passenger & Fare Types





PASSIO NAVIGATOR

Passio Navigator is our cloud based reporting system. Managers can set up user accounts with permissions, protecting sensitive information. Navigator is easy to use and requires almost no training. Generate reports based on set filters, or create your own dashboard reporting.



Solution: Passio Navigator

Main Features

CAD/AVL Management

Utilize reporting, live maps, driver schedules, geo-fence locations, and playback histories. Managers can add/edit/remove routes, stops, and drivers. Users can also pull passenger boarding/alighting reports to monitor route daily use.

Reporting Filters

Filter all reports by bus, driver, route, stop, passenger types, and more to create custom dashboard reports.

OpsView

View the live map of all routes in real time. Customers can locate their entire fleet, see if drivers are off route, view schedules, and see current passenger load.

Control and Changes

Management has the ability to control and change all service information via Passio Navigator without assistance. Changes are updated in real time and reflected across Navigator and on the Passio GO app.

On-Time Performance

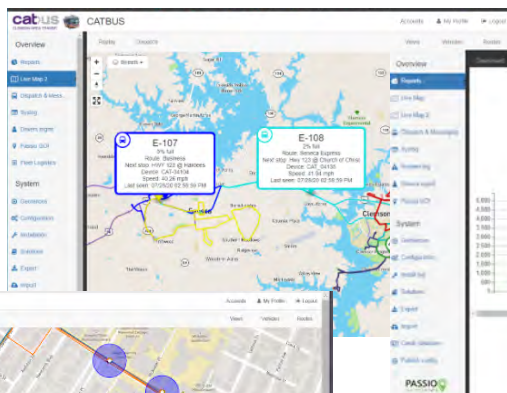
Use our preset on-time performance report to see which routes are performing well, and which may need to be changed. Reports can be pulled by hour or day to see if vehicles were early, on time, or late to specific stops.



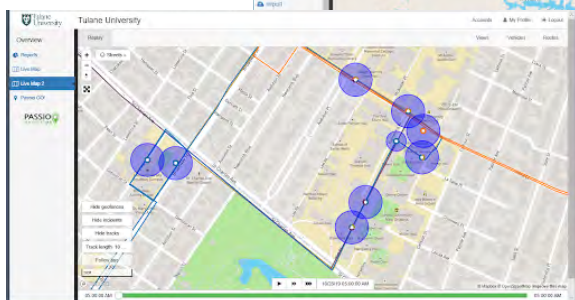
Cloud-Based CAD/AVL Management Solution

Passio Navigator™ is the man behind the curtain, our web application controlling access to system features for each individual user with multi-layered security features. Navigator™ provides customers with full access to configure their system and fleet information. All Passio customers are connected to Passio Navigator™. Each user’s view is limited to their products and services. This ensures that the system is easy to learn, training requirements are minimized, and interactions are efficient for all of our users.

Passio Navigator
Web App -
OpsView™ Live
Map



Passio Navigator -
Reporting Module



Passio Navigator - Stop/AVA
Geofence Map

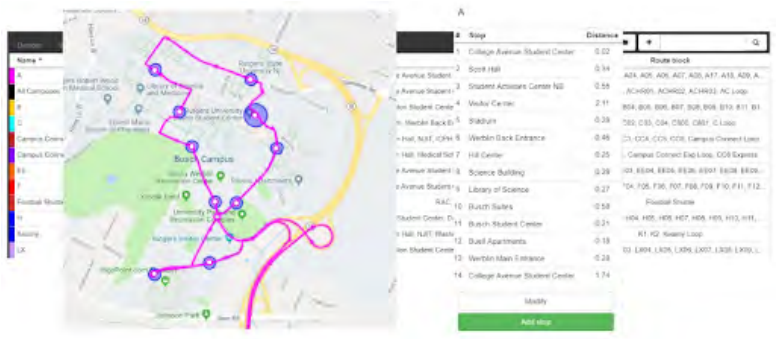
Access

Visibility to all settings and the ability to make updates in real-time is incredibly valuable for customers. Passio’s outstanding account management team is always available to answer questions or make the updates at our customer’s requests. This industry leading tool for management and reporting provides customers with unparalleled access to information, while ensuring simple and straightforward access to reports and analytics. Passio has developed an integrated, web-based, user guide for training and system use. It is available to all active customers and is consistently updated by our support team. Users are granted access based on their need to review, update, or evaluate aspects of their system.

Control

Update configuration details through Passio Navigator™. Add and edit stops, edit drivers, request route edits, and more. If you are unable to make an edit, contact our outstanding account management team for assistance on making changes or to answer any questions you may have.

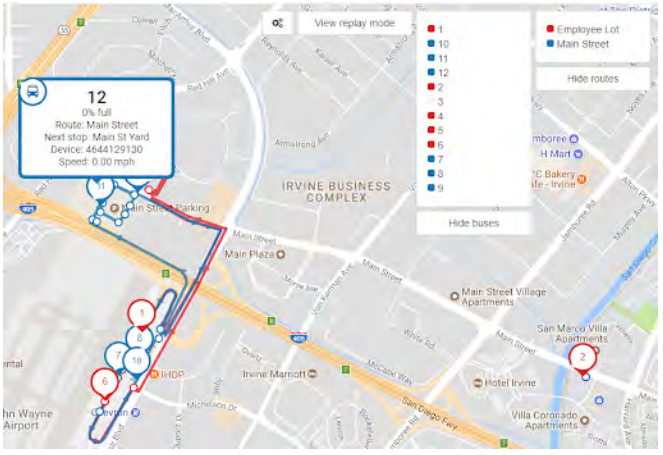




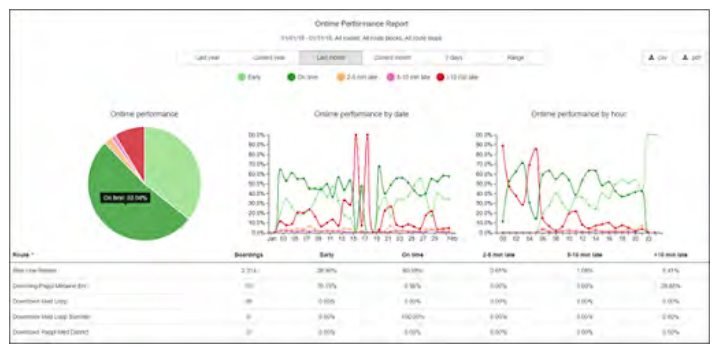
Passio Navigator - Route/Stop Configuration

Operational Live Map

View real time vehicle locations, determine whether vehicles are on or off route, and filter the view by route, or vehicle number.



Passio Navigator - Operational Live Map



Passio Navigator - Dynamic Reporting Module

Passio Navigator™ Reporting Tools

The Passio reporting system is managed through Passio Navigator™. This enables our customers to have a single login with access to all reporting, configuration, and management functions within the Passio Transit Platform. The reporting system is divided between dynamic reporting and dashboard reports. The dynamic reporting tools are designed to allow the end user to build reports using combinations of filters for both specific and general areas of analysis. The full spectrum of components and fields within the database are available for the user to build the view they need with a few simple mouse clicks...

Primary Report Views

- Filter by custom or pre-set time periods
- Group reporting data for by quarter, month, week, day or by time (hour or ¼ hour)
- Select operational detail levels such as routes, stops, drivers, and buses.
- Custom passenger types can be filtered, segmented, and reported
- Switch between passenger boarding and alighting counts for all filter views

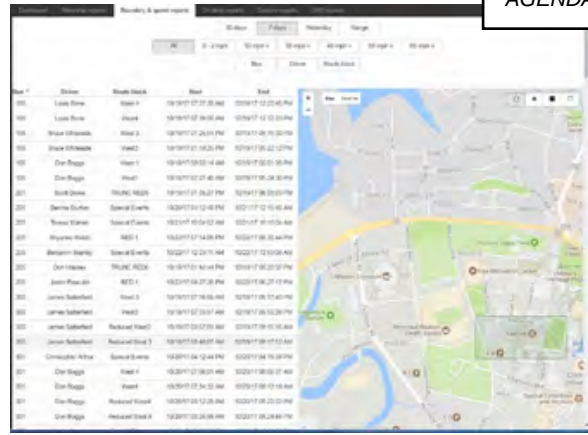
Trend Analysis

- Switch between passenger boarding and alighting counts for all filter views
- Compare ridership trends by month, week, day, quarter/semester, weekday, hour, ¼ hour
- Capture NTD related data such as Passenger Miles Traveled
- Route reporting at three levels (block, route name, combined route)
- Capable of grouping stops in alternate combinations outside of route groupings



Speed Fence Activity

Users have the capability to highlight a specific area on the system map to select all speeding incidents that exceed the threshold set in the report configuration.



Ad-Hoc Reporting

- Data filtered using the dynamic reporting system can be downloaded to CSV/Excel format at summarized level
- Detailed core level data can be downloaded into CSV/Excel format at any time for user analytics using data tools
- As an additional upgradeable feature, the system has the capability to transfer data via programmed API to 3rd party data visualization tool. This system allows for unlimited reports, pivot tables, graphs, charts to be created, saved, and automatically emailed. Additionally, the system has the capability to allow users to write custom SQL queries and create custom reference tables for customer specific reporting needs.

Dashboard Reports

Dashboard reports enable users to design and save reports to their unique specifications. Users tailor reports based on presentation type, data analyzed, filters used, and comparison analytics.

- Fixed Date or Relative Date – set a report period that is fixed from a specific date to a specific date, or create relative date reports (I.e. the last 3 months or previous 14 days)
- Scheduled Auto Email – email individual reports or an entire dashboard to a single email recipient or a group of recipients. Emails can be scheduled at any interval desired.
- Multiple Dashboards – users have the option to create multiple dashboards to group report types by category or target audience.

Reports include a graphical interface for display and presentation. The interface allows users to dynamically create bar, line, pivot tables, and pie charts without downloading to third party software. The data is available for export into common formats such as CSV (to XLS) and PDF. The user may create multiple dashboard pages specific to the KPIs that they want to see as well as the ability to email or print individual reports or entire dashboards ad-hoc or create scheduled group emails.

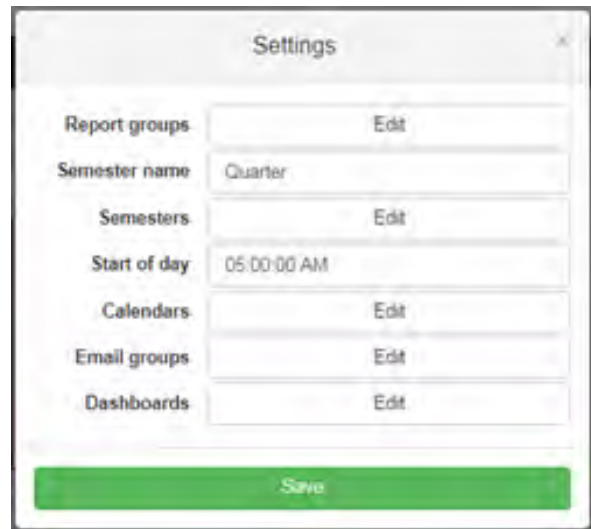


Passio Navigator - Bus Utilization Reporting



Report Time Period Settings

The Passio Navigator module has the capability to group data for reports at both the 'system day' and 'calendar day' level. For example, routes may end after midnight, but should be reported with the previous day's activity. System should allow users to configure reports to begin a day at a particular time and end at a particular time the next day. The 'Start of Day' field is configurable within Passio Navigator to set the start of the 24 hour reporting period.

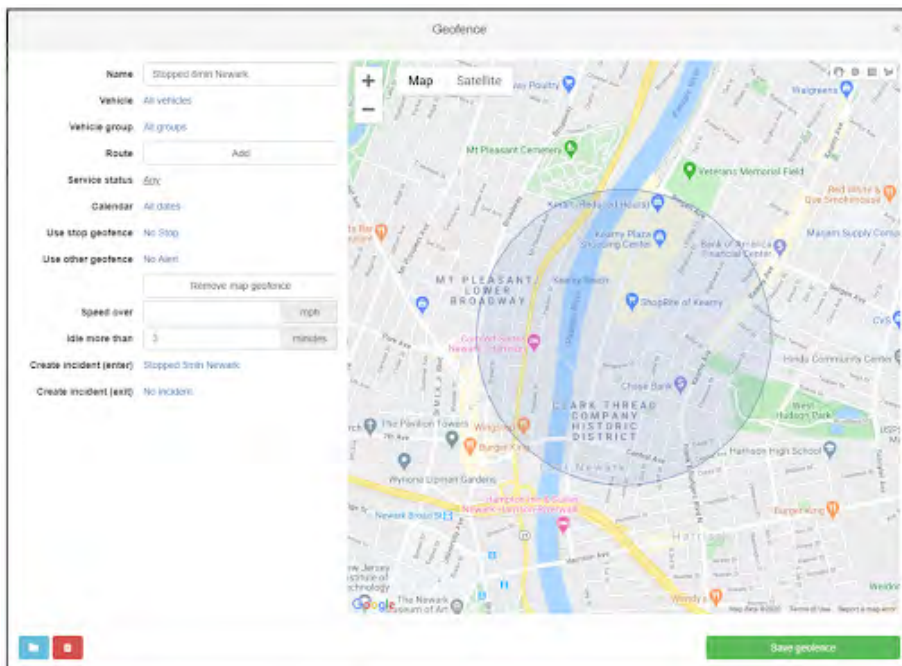


Read/Write Access

Access is controlled at the individual action level, and is customizable for each user. Passio does not limit the number of users who may have access to either Read or Write actions within Passio Navigator™.

Incident and Alerts Reporting

The Passio Transit platform logs and provides reporting on all tracked incidents. These incidents include In and Out of Service status, system alerts such as speeding, off route, and idling, and customer defined alerts. The defined alerts can be tailored for each system and may include customer specific incidents, emergencies, accidents, and/or passenger incidents. Each incident is tagged with the time, date, latitude, longitude, latitude, route, driver, vehicle number, device number, passenger load, and incident type. If enabled, both audio and photo recordings can be attached to any operator-initiated incident.



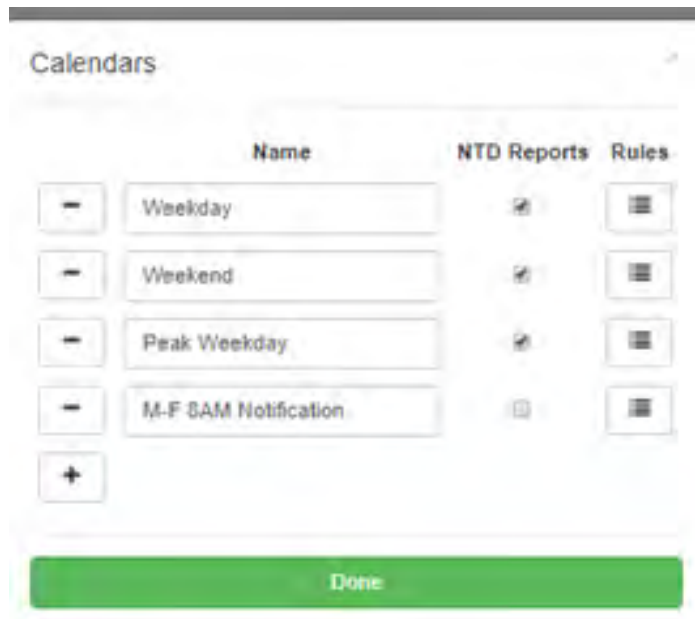
Passio
Navigator -
Alert
Geofence



Alerts

Passio Navigator users may configure alerts to be sent to as many as twenty-five email or text recipients at one time. Alerts are configured so that the times and days of the week can be set to make an alert 'active' which will enable the alert to be sent to a specific group.

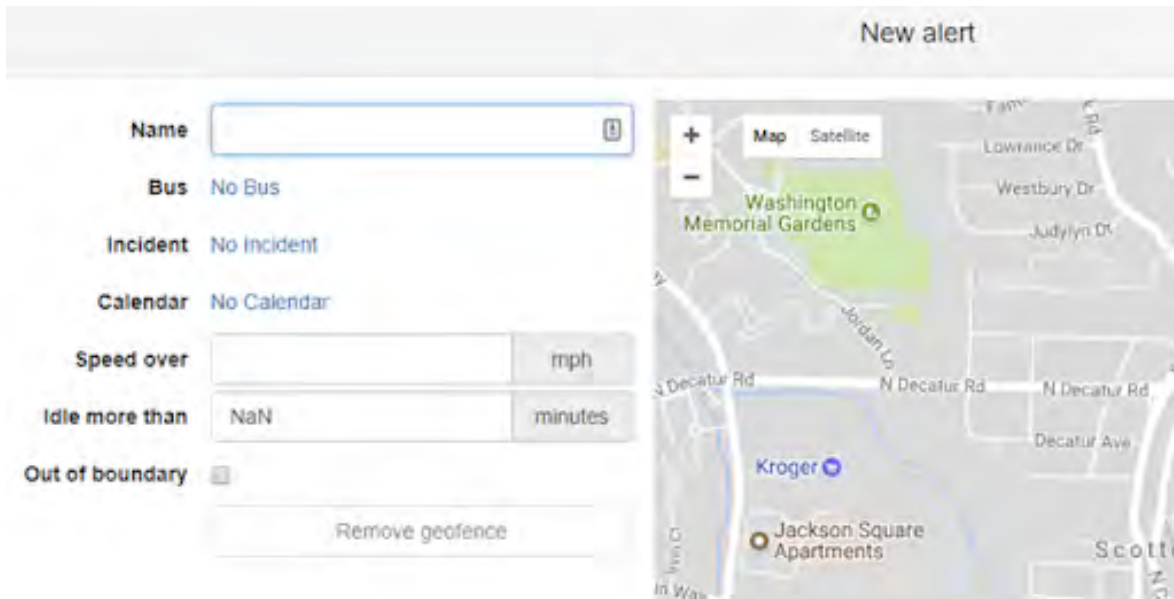
Alerts are scheduled using the calendar function found in Passio Navigator. Multiple calendar options are set using pre-defined business rules and then can be selected for application to each alert individually. Available alerts include speed infraction, vehicle idling, off route, and location.



Alerts		
Name	Bus	Incident
Speeding over 60mph		Speeding over 65
Employee Shuttle Yard - Exit		Employee Yard - Outbound
Employee Shuttle Yard - Enter		Employee Yard - Inbound
Main St Yard - Enter		Main St Yard - Inbound
Main St Yard - Exit		Main St Yard - Outbound
GTC - Enter		GTC - Inbound
GTC - Exit		GTC - Outbound
Furling		Furling
JWA - Enter		JWA - Inbound
JWA - Exit		JWA - Outbound
Main St Lot - Enter		Main St Lot - Inbound
Main St Lot - Exit		Main St Lot - Outbound
Terminal Zone - Enter		Terminal Zone - Inbound
Terminal Zone - Exit		Terminal Zone - Outbound
Employee Lot - Enter		Employee Lot - Inbound
Employee Lot - Exit		Employee Lot - Outbound
JWA Employee - Exit		JWA Employee - Outbound



Setting up new alerts can easily be done by entering a few basic points of information.



Passio Navigator - Alert Configuration

Buses Drivers Stops Routes Stop groups Route groups		
Name ^	Name ^	Name ^
6th @ Goddard	C-1/R-5 East	Central PO / U.V.
6th @ Oak	C-1/R-5 West	Central Rd Apt.
7-11	C-2 Parking	Cherry @ Ft Rutledge
Amtrak @ Sonic	C-2/Nu Street	Cherry Rd @ Bryan Cir
Ann Hope UMC	C.C.C.	Cherry Rd @ Edgewood
Ave of Chamblin East	C.F.M. @ Hwy 93	Cherry Rd @ Bryan Cir

Passio Navigator - Route & Stops Configuration

Access to stop, route, and driver information is a single click from the topline configuration menu bar. Updates are straightforward and intuitive, but also provide a significant amount of control and flexibility for managing the system.

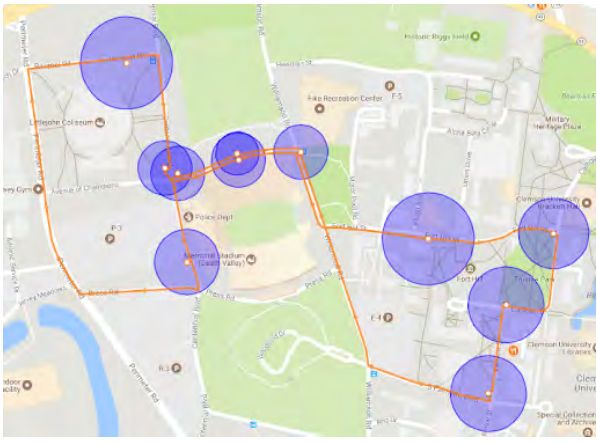


Stop Railroad Park Edit stop
Position 1
Estimated distance 0 miles
Travel time 0 seconds
Dwell time seconds

Passio AVA System

Stop name ann.
Additional ann. (en)
Next stop ann.
Route ann.
Next on exit ann.
Ann. on door open (en)
Ann. on door open int. speaker
Ann. on door open ext. speaker
Preceding ann. radius

Route blocks, scheduled time points, automated voice announcements, and LED sign controls are all configured within Passio Navigator.



Route

Seneca Business Loop

#	Stop	Distance	Seneca_2 :20				Seneca_1 :50			
1	Railroad Park	0.00	06:20 AM	07:20 AM	08:20 AM	09:20 AM	06:50 AM	07:50 AM	08:50 AM	09:50 AM
2	Thrift Store/Pawn Shop	0.96	06:21 AM	07:21 AM	08:21 AM	09:21 AM	06:51 AM	07:51 AM	08:51 AM	09:51 AM
3	CMC	1.63	06:26 AM	07:26 AM	08:26 AM	09:26 AM	06:56 AM	07:56 AM	08:56 AM	09:56 AM
4	Magnolia Plaza	0.56	06:27 AM	07:27 AM	08:27 AM	09:27 AM	06:57 AM	07:57 AM	08:57 AM	09:57 AM
5	Wal-Mart - Hwy. 123	0.46	06:30 AM	07:30 AM	08:30 AM	09:30 AM	07:00 AM	08:00 AM	09:00 AM	10:00 AM
6	Dogwood Plaza	0.32	06:32 AM	07:32 AM	08:32 AM	09:32 AM	07:02 AM	08:02 AM	09:02 AM	10:02 AM
7	Morningside	0.45	06:32 AM	07:32 AM	08:32 AM	09:32 AM	07:02 AM	08:02 AM	09:02 AM	10:02 AM
8	Railo Station Rd/DMV	0.22	06:33 AM	07:33 AM	08:33 AM	09:33 AM	07:03 AM	08:03 AM	09:03 AM	10:03 AM

Passio Navigator - Route Timepoint Configuration

Stop

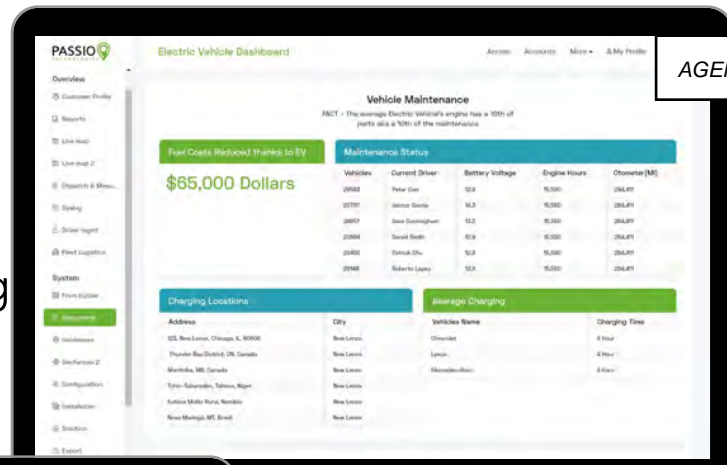
Name CATTUS HQ
Reporting name Chatham Area Transit Headquarters
Stop Code
Description
Latitude 34.552558350266
Longitude -82.822828602879
Radius 50
Yield 0
Route 804 Route
Passio AVA System
Ann. audio
Ann. name (en)
Ann. only stop
LED ann.
LED only

A map view of a stop configuration in Passio Navigator. The stop is marked with a blue circle on a street map. The map shows surrounding streets and landmarks.

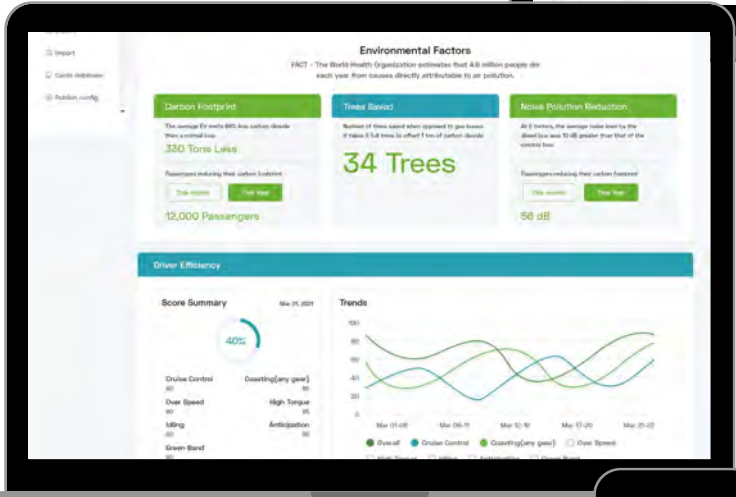
Passio Navigator - Stop Configuration



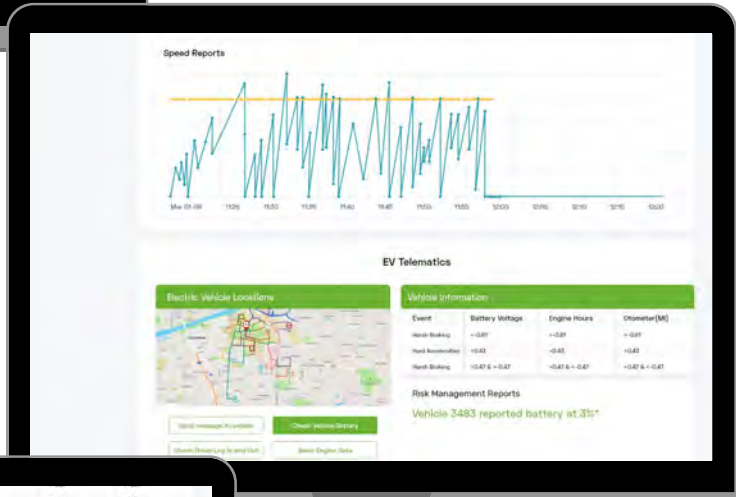
Vehicle (EV) Maintenance:
Includes EV maintenance status, money saved, charging locations, charging times, and more.



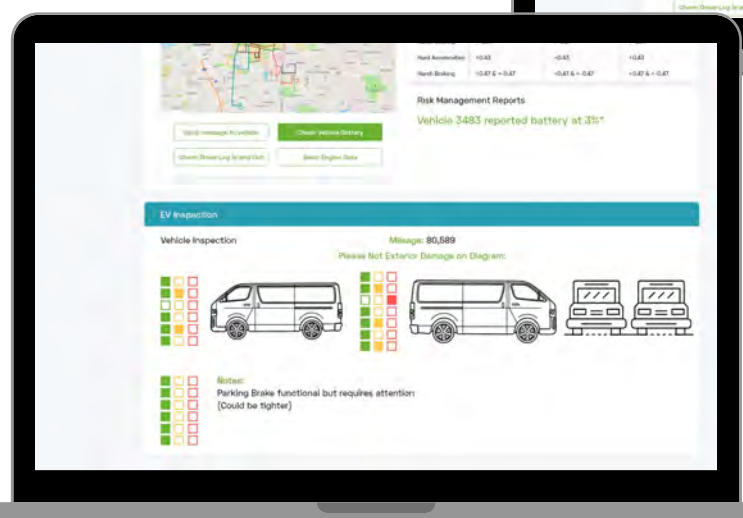
Environmental Factors:
Dashboard information including carbon footprint, trees saved, noise pollution, and driver efficiency.



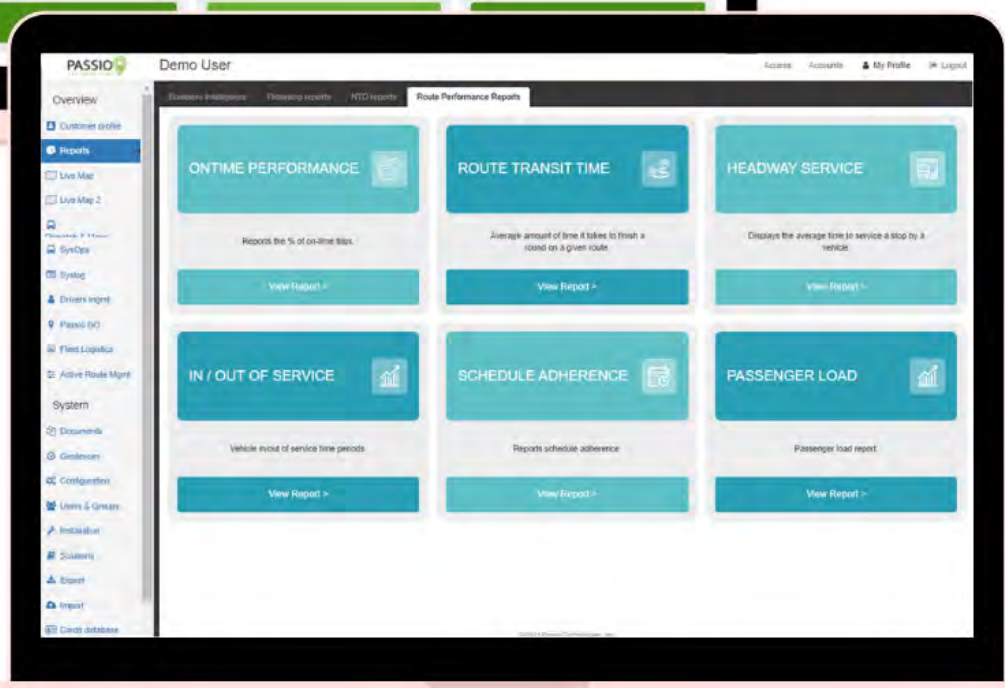
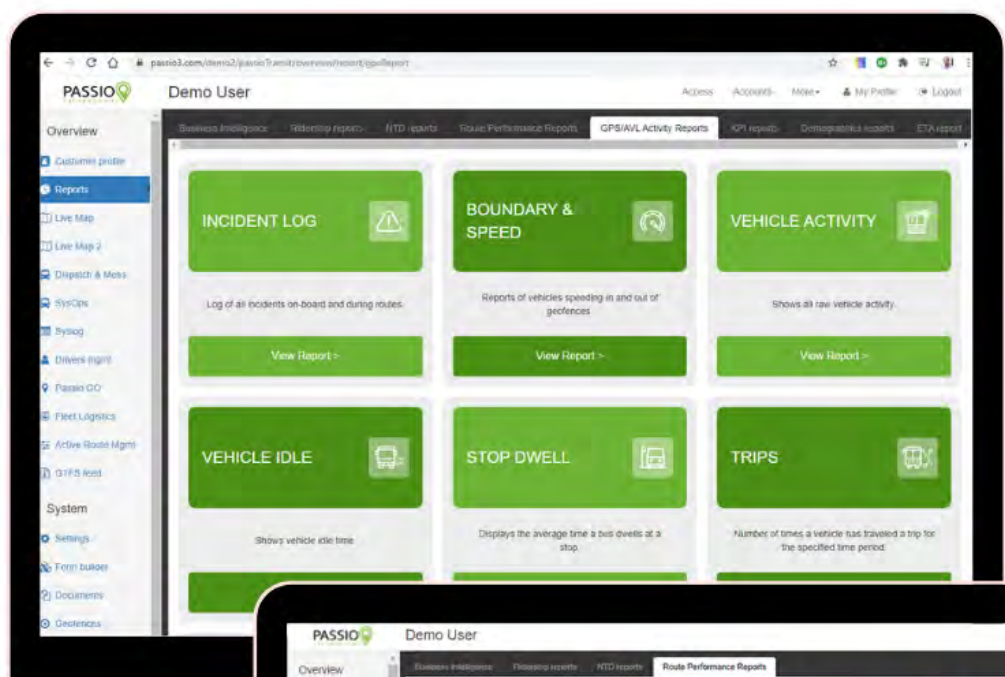
Driver Behavior & Telematics:
Monitor speeding, hard braking, idling, acceleration, impact detection, etc.



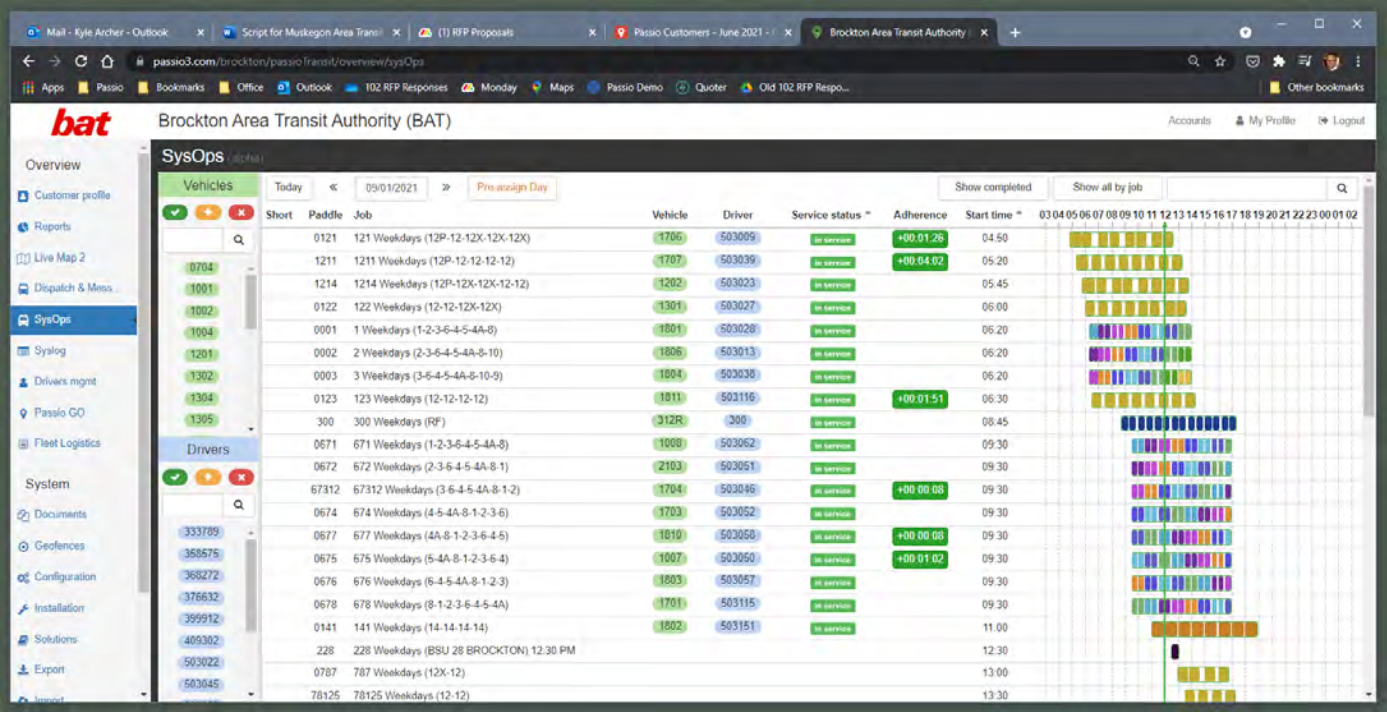
Electronic Driver Vehicle Inspections (eDVIR): Create custom inspection reports of your EVs to monitor their incidents, battery performance, and maintenance.



Passio Navigator - Reports Pages



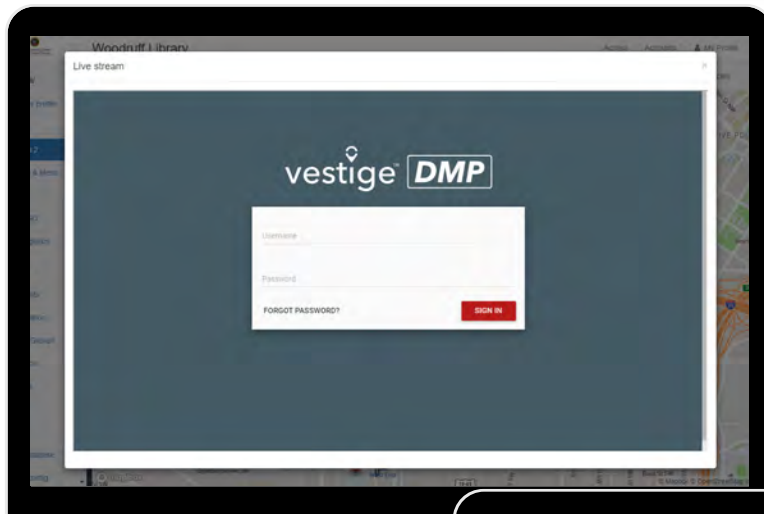
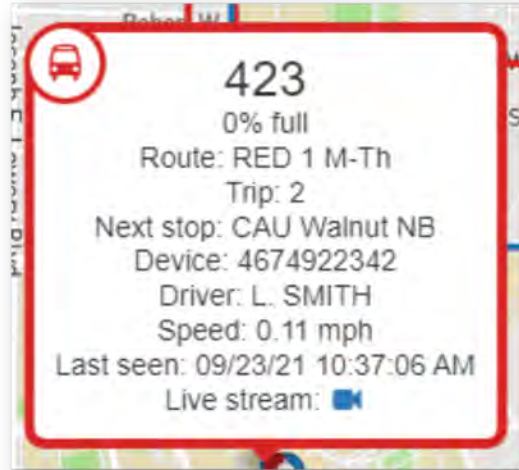
Passio Navigator - SysOps



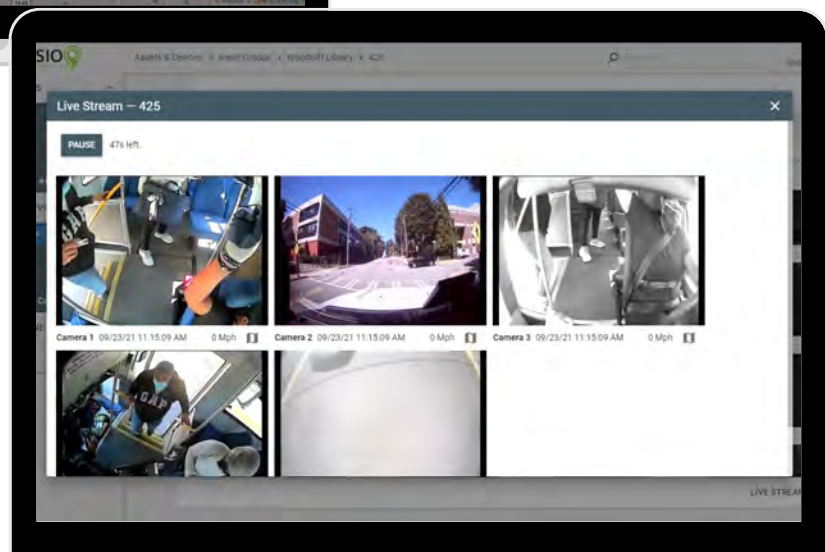
Mobile Video Integration (as an option)

Passio Vision Live Stream

From Passio Navigator Live Map, simply click on a vehicle to view additional information. Then at the bottom of the vehicle info bubble, click on the video/camera icon to begin streaming live. Check in on your drivers and riders any time!



Passio Vision is restricted to those with access. Limit this option to specific agency employees.



Passio Vision Live Stream displays each camera view in real time. Multiple camera layouts and configurations are available to best meet your requirements.





AUTOMATIC VOICE ANNOUNCEMENTS

EASY AUTOMATIC VOICE ANNOUNCEMENTS

Automatic Voice Announcements inform riders of the current route, stop, and other programmable information. No action from the operator is required, as AVA can be set up to begin when entering any custom geofence. Specific announcements can be made on exact dates, or scheduled times, like every game day.



Solution: Automatic Voice Announcements

Main Features

Announcement Abilities

Announcements can be in up to 3 languages at each stop, chosen from 130 different options. Customers can use songs, pre-recorded messages, and a number of different triggers. Use geofence triggers, timed announcements, doors opening sensors, and more.

Geo-Fences

Setting up geofences is easy. Simply edit the geofences using Passio Navigator on the live digital map.

Navigator

Our cloud based solution, Passio Navigator, can be used to manage all AVA announcements. Upload pre-recorded information, or reprogram announcements completely with text-to-speech.

Audio Interrupt

We can also allow for audio to be interrupted on vehicles if there is already existing sound playing, such as a radio.

Hardware Setup

Hardware setup is simple and handled by the Passio Install team. Customers also have the option to add external announcement speakers.



We experience the world through our five senses and the two that we most heavily rely upon are vision and hearing. Passio's AVA solution provides passengers with all necessary information to make their ride as smooth as possible. It is simple to set-up, robust in functionality, and easy for operators to use in the field. AVA announcements are set, maintained, and changed by using the stop profile within Passio Navigator™. There are several customizable options including: announcing current stop, next stop, and next stop on exit of a geo-fence. Our system will also allow customers to include both a route announcement and an additional custom announcement. A good example would be if there is a football game, the system could announce the stop name as well as a shout-out to their team.

Our system meets two specifications for all transit systems: complying with ADA (American's with Disabilities Act) requirements, and providing passengers with an amazing "journey experience." We recognize that passengers need different information depending on purpose and ridership. Therefore, our AVA system has eleven (11) settings which can be customized at each stop on each route. Our standard solution contains this level of custom configuration:

- Ability to announce in over 130 languages
- Announcements in up to three different languages at each stop
- Announcing stop and route name
- Announcing next stop upon entering geofence
- Announcing next stop on existing geofence
- Announcing upon door open on interior speaker
- Announcing upon door open on exterior speaker
- Announcing upon door open in three different languages
- Announcing at a specified radius point
- Playing pre-recorded messages or music at any stop

Customers have full access to make all updates and adjustments to routes, stops, and announcements, but if it's preferred, Passio will manage all edits, updates and adds for our customers at no additional charge. There is no limit to how many stops, routes, or messages can be added, stored, or played using the Passio AVA system and each device has 4GB of data storage on board the bus.



AVA Configuration & Set-up

The entire AVA system is fully managed within Passio Navigator™. Customers have access to stops, trigger points, routes, and vehicles. The interface is flexible and straightforward, and is designed to grow with system needs. Training is simple and support for updates and remote assistance is unlimited and can be requested well in advance for testing and confirmation. The number of stops and announcements that the system can support is unlimited. All stop announcements are triggered by GPS location, route, and time criteria. Trigger points (not at specific stops) may be added to include key connection points and business centers, as well as public service announcements. They can be triggered by route, direction, and GPS location.

Features and Functionality

Variable Stop Radius – each stop radius can be set by the map or simply typing in the radius field. This feature allows the user to control entrance and exit triggers for each stop.

Exact Pronunciation – the on-board voice synthesizer provides the highest level of sound quality and volume control. The system allows for phonetic spelling of any word to ensure correct pronunciation.

Announcement Event Control – announcement behavior can be controlled for each route stop and/or each trigger stop on each route independently of all others. This allows the user to control the information announced to ensure that enough information is provided, while avoiding passenger annoyance and confusion by creating noise overload. Any authorized user can change the stop announcement simply by entering it in Passio Navigator.™

- Announce Current Stop Name (Yes/No)
- Announce Next Stop Name (Yes/No)
- Announce Route Name (Yes/No)
- Announce Next Stop Name on Route Exit (Yes/No)
- Delay Voice Announcement (# Seconds)
- Trigger Stop Only (Yes/No)



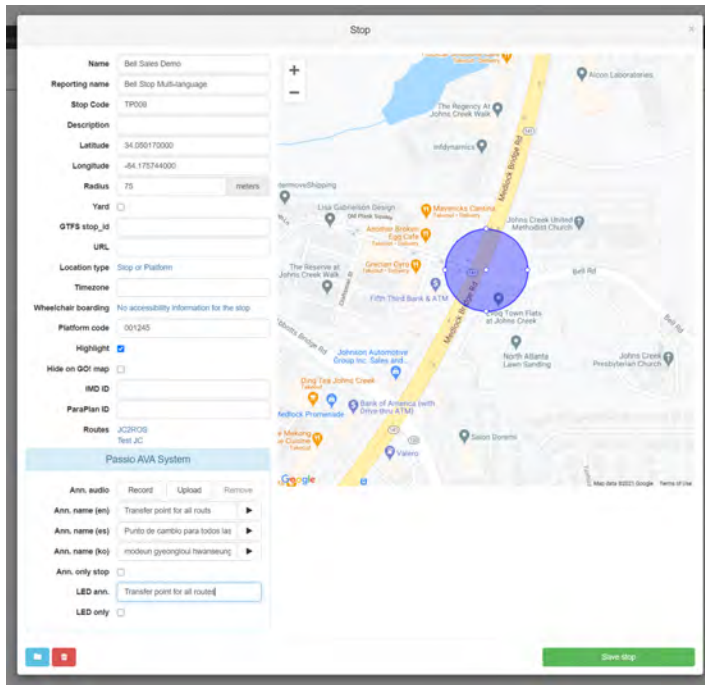
Announcement Scheduling

Each announcement can be scheduled to play on a specific date, day of the week, or during a date and/or time interval. Scheduling control can be applied to a specific stop on a specific route.

Audio Hardware Integration Options

The Passio AVA solution has the capability to integrate and provide audio hardware that enhances the capabilities of your system. For customers requiring these enhanced deliverables, our solution has the following integrated features:

External Speaker Announcements – the system has the capability to detect if a stop is noted as an external announcement stop. It will electronically detect the door open status and send an electronic relay signal to the correct speakers to make an announcement as internal only, external only, or both internal and external.



Audio Interrupt

The Passio AVA system is typically configured to be the primary audio source on the vehicle. The system can be configured to enable an additional audio source such as a radio head unit (AM/FM/CD/DVD player) to be the primary audio source and for the automated voice announcement system to interrupt when making an announcement. This option often requires a replacement of both the existing on-board head unit and the addition of audio control equipment.

Multi-Language Support

Announcements may be made in any available second language using the on-device voice synthesizer.

Sound Files

The Passio AVA system supports the ability for users to upload a sound file to play at a particular route stop or trigger stop. The sound file can be played independently or in addition to the generated stop announcement. Authorized users have the option to record files directly within Passio Navigator™ or to upload independently created files.

Stop Level Settings - are configurable for each route

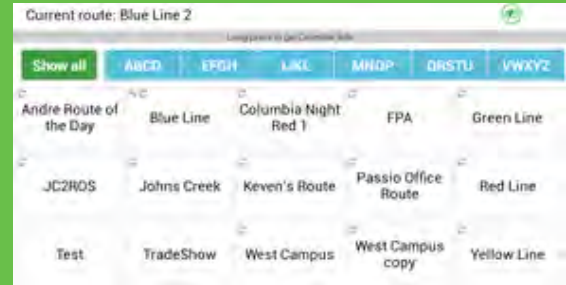
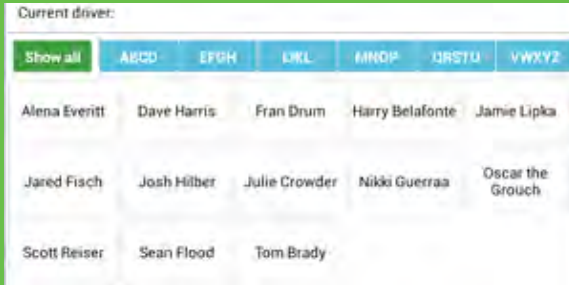


On-Board Operation

All announcements are automatically triggered by the GPS location of the bus and require no interaction from the operator. Logic is built into the configuration profile to prevent overlapping stop announcements by using stop order/directional algorithms.

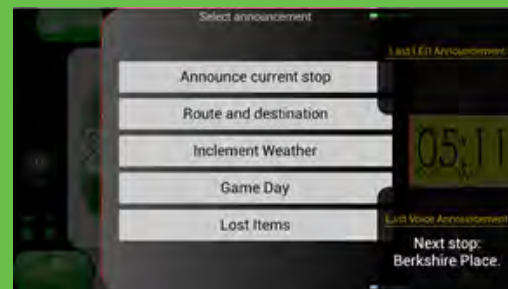
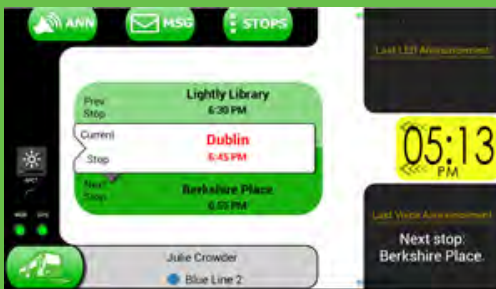
Getting Started: Operator selects their name, no complicated codes or mysterious procedures.

Routes are preset and automatically updated on the device. A simple tap on the screen starts the AVA.



Standard operations screen provides the operator with all of the information required to fully use the AVA system.

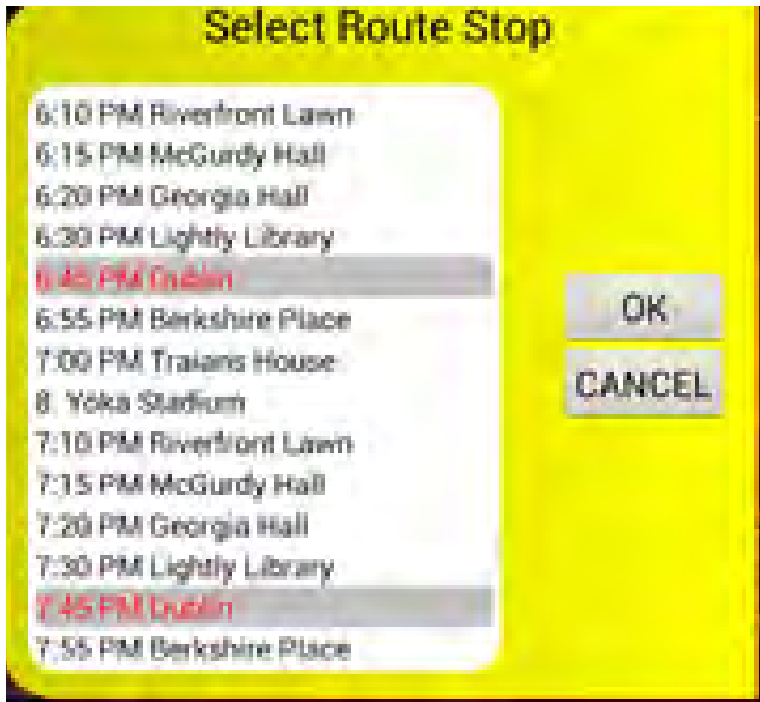
Operators can trigger preset special announcements from the MDT and repeat a stop location for ADA compliance.



Driver Managed Stop Jumps

Situations occur where a driver must skip a stop for reasons such as construction, congestion, or blocked routes while on route. Dispatch can adjust routes using the Detour function within Passio Navigator when this information is known. If the driver must make the correction on route, Passio's AVA system offers operators a simple and intuitive method to move around the skipped stops without confusing announcements when driving past skipped stops.

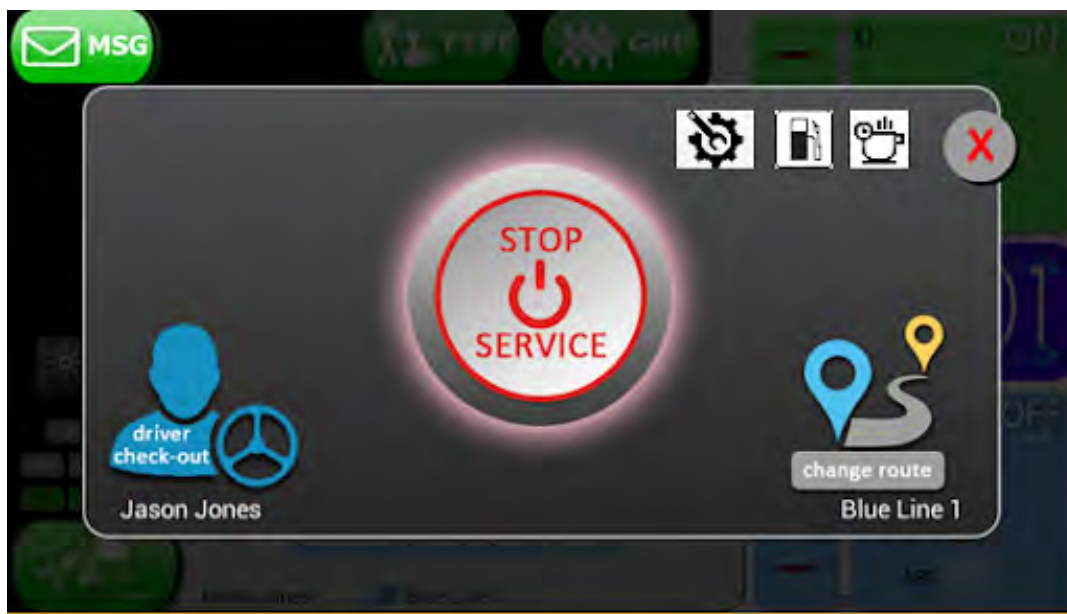




The Passio system provides the mobile data terminal, software, logic, and connectivity to on-board existing audio equipment. Each Mobile Data Terminal (MDT) is outfitted with a cellular data connection that automatically checks for configuration profile updates (or they can be manually downloaded by the operator). These profile updates provide all of the information to trigger automated voice announcement messages.

Out of Service

When the vehicle operator or dispatch places a vehicle out of service, all voice announcement functionality immediately ceases. The action is recorded in the Passio Navigatore Incident log, where time, date, latitude, longitude, driver, route, and vehicle number are tagged to the log. For integrated systems, LED signs will change messages to 'Not In Service' and the vehicle will no longer be viewable on Smartphone applications and public viewers.





LED SIGNAGE

Passio can integrate LED signage with Automatic Voice Announcements, using the Mobile Data Terminals. The combination of signage and announcements enhances the journey and overall experience for all riders. LED signage is triggered by the MDT, which uses geofences, thus eliminating any operator involvement.

Solution: LED Signage

Main Features

Message Triggers

LED sign integrations can be set up to constantly rotate, or be set off when entering and exiting a geofence. Both settings can also overlap one another.

Field Capabilities

Use fixed and/or dynamic field options to populate information about routes, stops, and points of interest, etc.

Calendar/Schedule

LED Messages can be set according to a calendar schedule. For example, weekend and weekday routes can be completely different.

Programing and Set Up

Customers have full access to edit and customize LED messaging through Passio Navigator.




 A rectangular LED sign with a black background and orange-red characters. The text "LED DESTINATOR" is displayed in a bold, sans-serif font.

As important as audio is, visual cues are just as crucial to riders. LED signage may be integrated with Passio AVA via serial connection protocols, sending unique command line instructions to each sign within the vehicle's network when using TranSign signs. Other manufacturer signage that accepts J1708/J1939 commands may be triggered by the Passio MDT as well. All commands are generated by the Mobile Data Terminal. The instructions are entered in the customer configuration profile using web-based Passio Navigator™. The information is published and then automatically downloaded via wireless data connection to each MDT on-board the vehicle.



 A rectangular LED sign with a black background and orange-red characters. The text "246 WEST LOT TO AIRPORT" is displayed in a bold, sans-serif font.

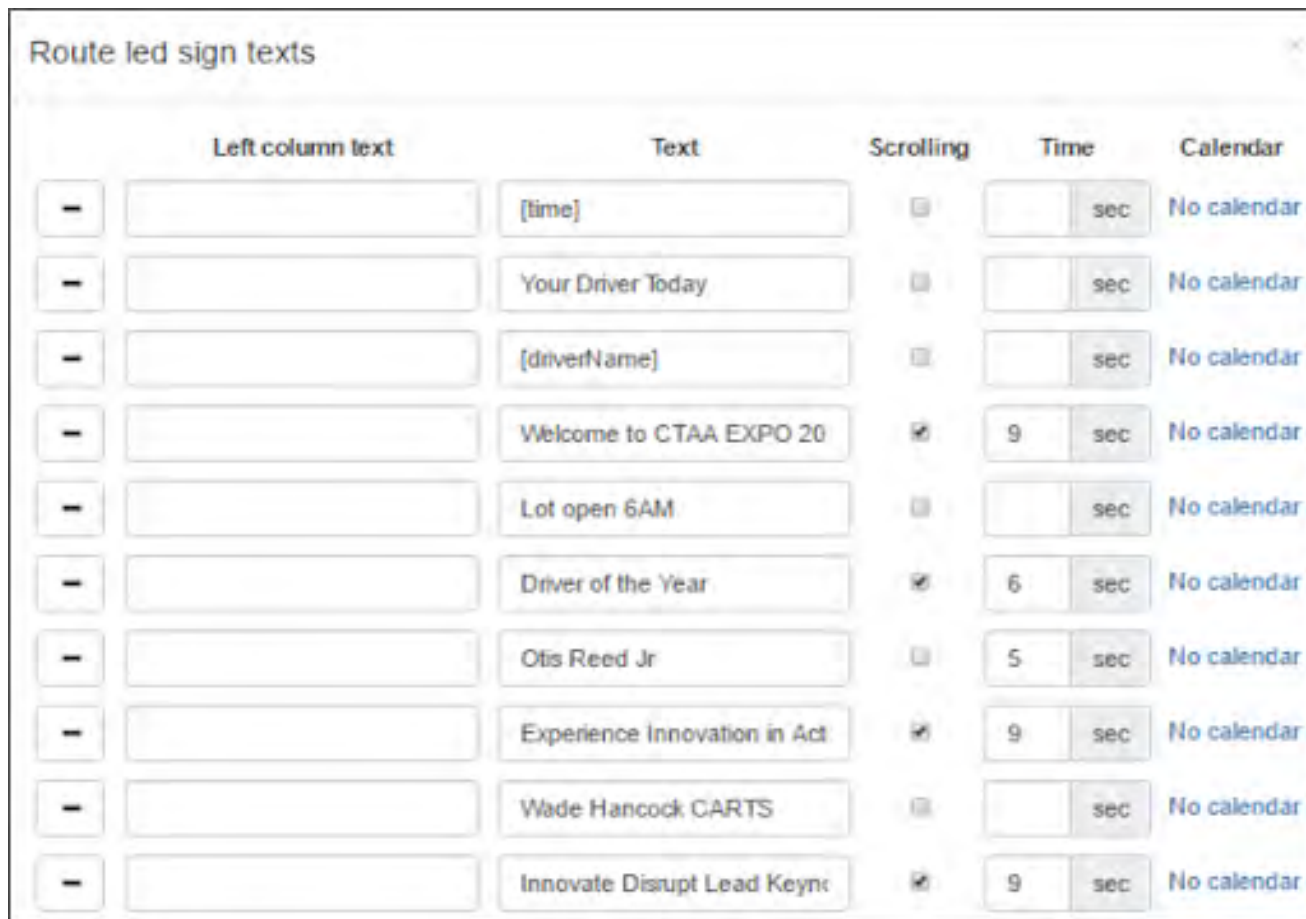
The GPS-based message progression helps to eliminate driver distraction and to encourage safer driving habits. Communication with your riders is integral to your rider experience and when your destination information is clear, accurate, and timely, you are fulfilling your promise to deliver excellence to your passengers. Our system is easy to use and simple to set-up, so even those who are not tech-savvy can schedule announcements in a few clicks.



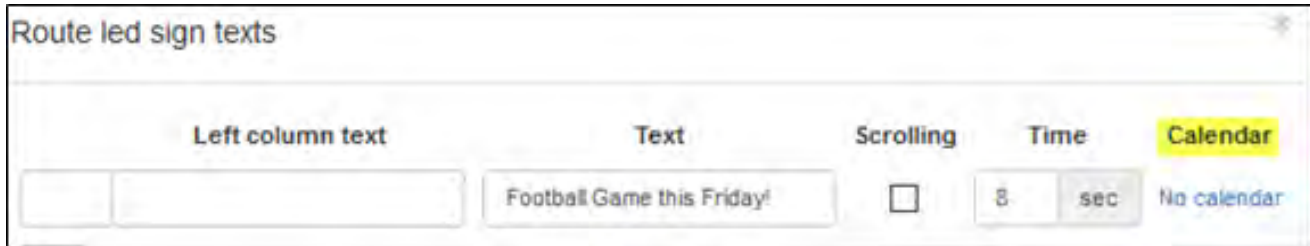


Multiple LED signs may be configured and controlled within the configuration profile. The screen shot above illustrates how physical signs are added and accessed by the Passio platform and the Mobile Data Terminal.

The sign messaging details are programmed within the 'Text' field in the profile. Data from the Mobile Data Terminal can be passed to the LED sign, as can custom messaging. The message can be fixed or scrolled, and the time the message displays can be set as well. The calendar function allows the system user to schedule specific dates and times for the message to display.



The customer has full access to enter public service announcements and advertisements into the configuration profile for both the LED signs and the AVA system. These messages can be programmed in advance or in near real-time. The LED announcements can also be scheduled using the calendar function within the LED announcement screen.



A visual message is triggered in Passio’s integrated solution in one of two ways:

Vehicle enters the geo-fence. The stop name is displayed, along with a fully customizable preceding message, i.e. “Now Approaching” or “Next Stop Is”.

Constantly rotating messages. These messages are set at the route level and rotate as long as the vehicle is assigned to the route via the MDT.

Rotating messages can be configured to either interrupt or not to interrupt geo-fence triggered stop announcements.

Any fixed message can be displayed and the amount of time it will be displayed can be set by the message. Whether or not the message scrolls can be independently set.

Have all of the same capabilities as fixed fields, but can dynamically populate the following information: driver name, time, date, next stop, current stop, route, bus number, and the last stop on the route.

Can be calendar controlled as well, meaning they can be scheduled by day, date, or time as to when they will display.



Rear LED Destination Signs (optional)





AUTOMATIC PASSENGER COUNTING

Automated Passenger Counting allows customers to easily record all boardings, without any involvement from the vehicle operator. We partnered with Hella to allow for fully automated counting connected to our MDT which can also be used to track passenger types.



Solution: Automatic Passenger Counting (APC)

Main Features

MDT Involvement

The APC system directly links to our Mobile Data Terminal (if required) to allow operators to view the number of passengers on board, record passenger type, and view route and stop information.

Hella Sensors

Using Hella devices, we are able to take advantage of 3D sensors with 98% accuracy to count passengers as they board and alight vehicles, even in low light or extreme transit conditions.

Alternatives & Integrations

We also provide mixing and matching passenger counting options. While customers may want APC on some vehicles, Electronic Passenger Counting (EPC) is readily available for others. Passio can also use card readers to count and identify individual passengers and passenger type.

Navigator

Our cloud based solution, Passio Navigator, automatically uploads APC information for data analysis. Navigator also has the ability to create advanced ridership reports and dashboards.

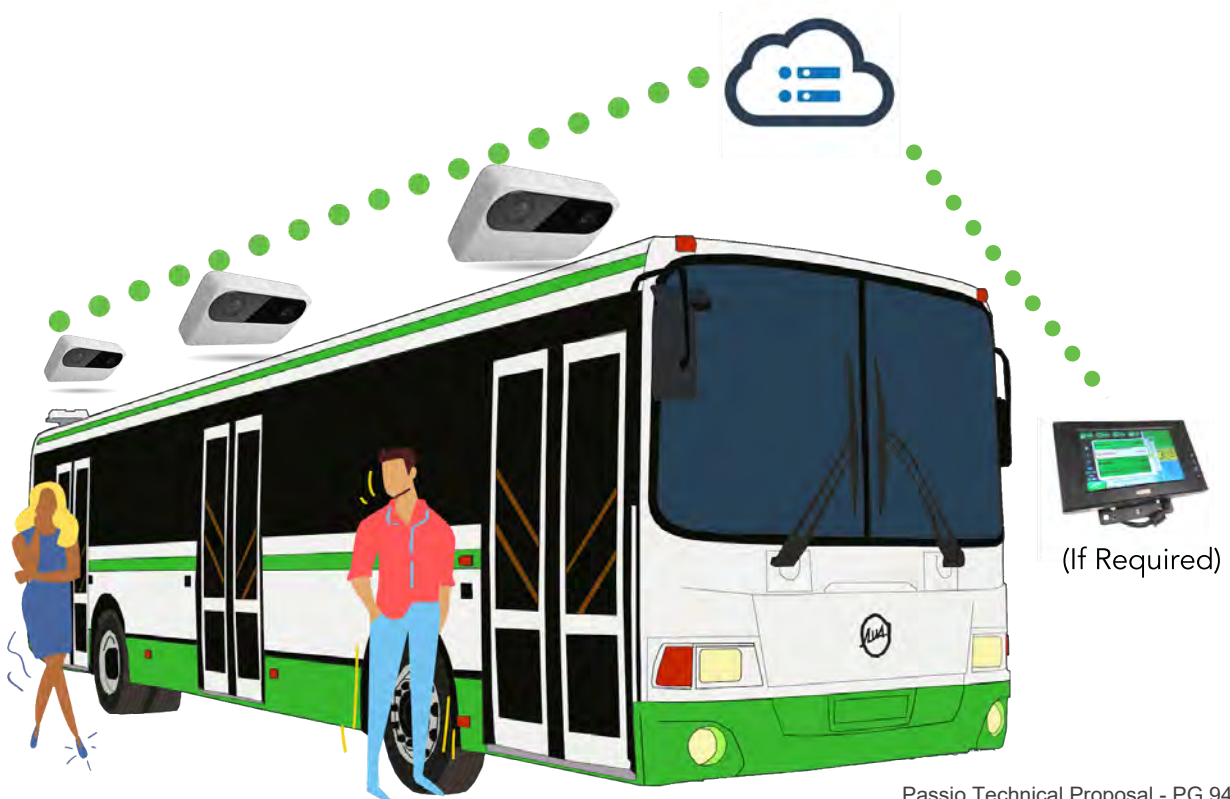


Customers have the option to integrate APC (Automated Passenger Counting) into their solution. Passio Technologies has adopted the innovative approach of modular technology solutions for our customers. Passio offers three options for entering passenger count data, automatically using APC sensors, Electronically using the Mobile Data Terminal touch screen, or through the Gateway Tap & Swipe system. For example, if you wanted APC's on 30 transit buses, driver managed electronic passenger counting units on 15 buses, and card swipe validation on four special-use vehicles, we can provide the solution. All the data will be reported centrally, and then we are able to deliver high quality passenger data and analytics for the entire system.

APC counting is fully automated, conducted without any operator interaction. Additional features and capabilities include an interactive, touch screen program that enables operators to track special passenger types, track field incidents, and receive communications from supervisors and dispatch. The tracking tools record in-service start and end times, deadhead time and miles, and, if added, the ability to track driver hours.

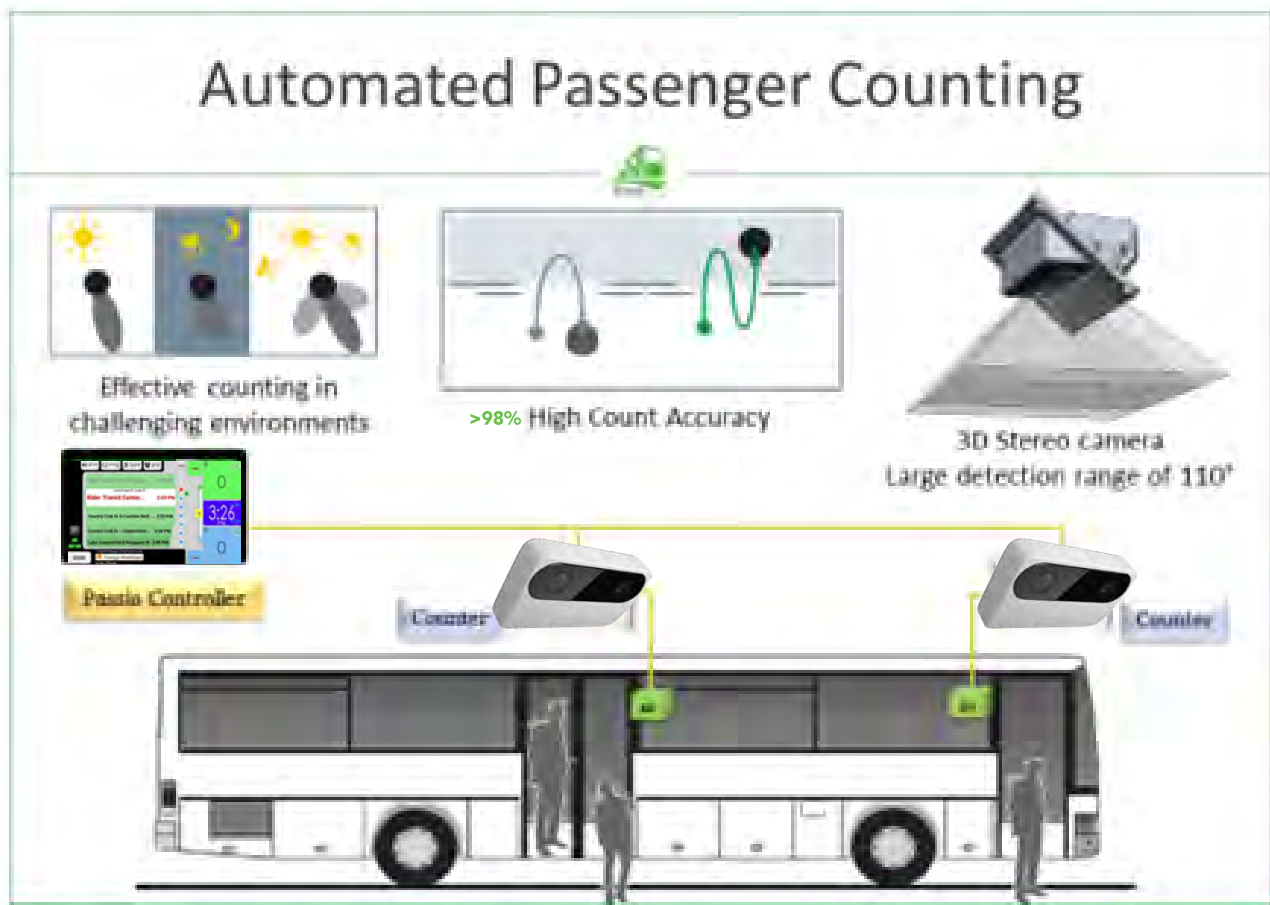
Passio has partnered with Hella to integrate their three-dimensional bi-directional electronic imaging people counting system. With more than 25,000 employees in 30 countries, Hella has been developing and manufacturing automobile technology, chiefly in the areas of lighting and electronics, for more than 100 years. The unit has been designed to work in challenging environments such as variable or low light, multi-level counting fields of vision, and where a large detection range (up to 110°) is needed. The unit is designed to operate from -25° C (-13° F) to +70°C (+158° F) and only draws about 4W of power. The software is specially designed to compensate for passenger movement up and down stairways or on ramps in low floor buses.

The Passio Transit hardware senses passengers from an overhead sensor.



Additional sensors are available to trigger passenger counts when door status (open/closed) is transmitted. The system proposed will cover all entry and exit points of the vehicle. The APC system will create passenger counts without administrator or driver input. The startup will happen with vehicle ignition and does not require any manual input to begin. The system will accurately count passengers as they board and alight and register stops, routes, and runs. The APC system has the capability to distinguish passengers and non-passenger objects and can detect double backs and re-crossings.

The system utilizes 3D camera technology manufactured in Germany by HELLA, which will reliably distinguish passengers and non-passenger objects and can detect double backs and re-crossings.



It will detect how many people enter or leave a vehicle, typically achieving a system counting accuracy of >98%, even under unfavorable conditions such as variable lighting or shadows.

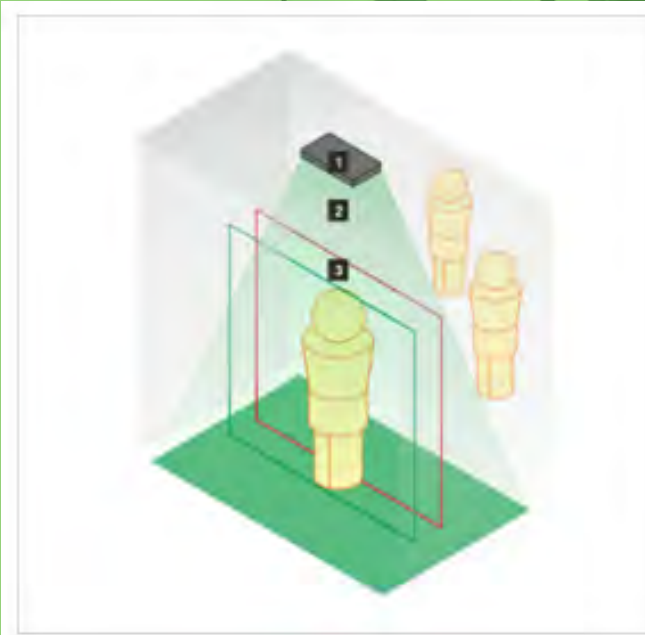


Fig. 4: People counting (schematic illustration)

- 1 Automatic People Counter (APC)
- 2 Calibrated visual range
- 3 Counting gate

The APC continually acquires stereoscopic video images in its visual range.

The integrated software evaluates the stereoscopic images. Persons within the monitored area are recognized automatically and their movements are tracked across the subsequent images.

The APC, therefore, can count the number of persons that enter or leave a vehicle.

The software provides the following functions:

- Bidirectional counting on a defined line
- Tracking persons within a given area
- Video streaming and video recording (optional)

The counting data are transferred via interfaces to the external processing system.

The counting gates represent the thresholds in the visual range which must be crossed by a person in order to trigger an entry or exit count event.

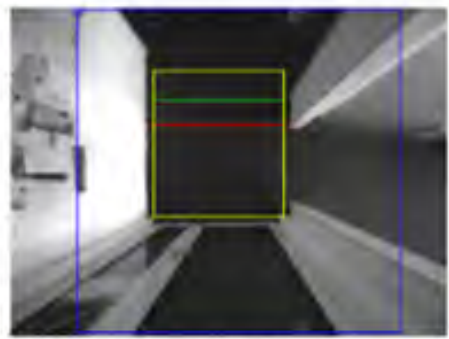


Fig. 5: Straight counting lines/counting gates (example)

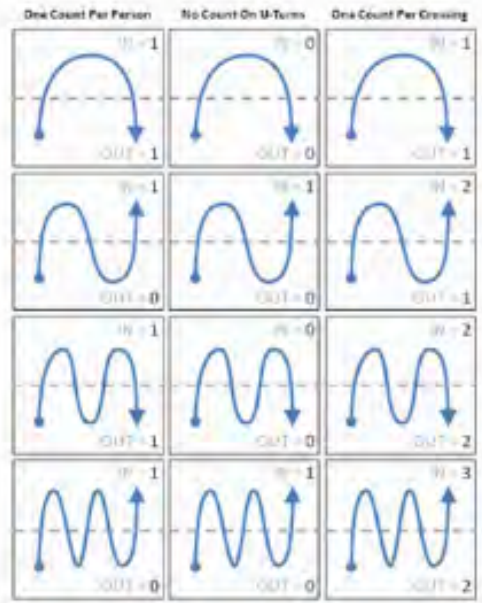
Simple, straight counting lines/counting gates, (Fig. 5) are provided for the simple and fast installation at doors and passageways.


Fig. 10: Three modes for counting those who turn around

There are three modes (Fig. 10) for counting people who turn around in the monitored area:


- one count for persons who turn around ('one count per person')
- no count for persons who turn around ('no count on U-turns')
- counting every time counting lines are crossed ('one count per crossing')

Only the counting mode 'one count per crossing' counts immediately by crossing counting lines. Other modes provide the counting data at the time of leaving of the detection area.







COUNTING ACCURACY:
Over 98% - even under difficult conditions




POLYGONAL COUNTING LINES:
The position of the counting lines is variable and can be adopted on-site to meet requirements.




LEVEL HANDLINGS:
Height differences > 20 cm are compensated in the detection range. It is possible to count people on stairways.



RETURNING PEOPLE:
Movement of people in the door area (e.g. at stops) is compensated with no repeated counting. Returners are detected again.



OPTICAL SELF-DIAGNOSIS:
Monitoring the optical path. Disturbances by masking or spraying the optics are detected and communicated to the system.



TURNAROUND TIME:
The systems detects how long people stay at a place and gives information e.g. about the efficiency of advertising campaigns.



OCCUPANCY:
The current number of people in the detection range is always transparent and allows situational access limitations



BALANCE OF FLOORS:
Distinguishes between a floor's entrance, a floor's exit and people moving on using the escalator.

DATA TRANSFER:
Real-time operations over interfaces. Storage in CSV files in the event of an IBIS communication loss.

OPERATION:
Storage in CSV files for individual transfer.

APC record-level detail is stored for a minimum of 36 (thirty-six) months and provides count information at the base level which allows for time and individual bus and driver reporting at the stop level. After 36 (thirty-six) months data will be summarized at the route, day, and passenger type level. This data will be available in the dynamic reporting system for a minimum of 5 (five) years. All data archived after 5 (five) years will be made available electronically prior to removal from the dynamic reporting system.





PASSIO BUSINESS ANALYTICS



Passio Navigator™ Reporting Tools

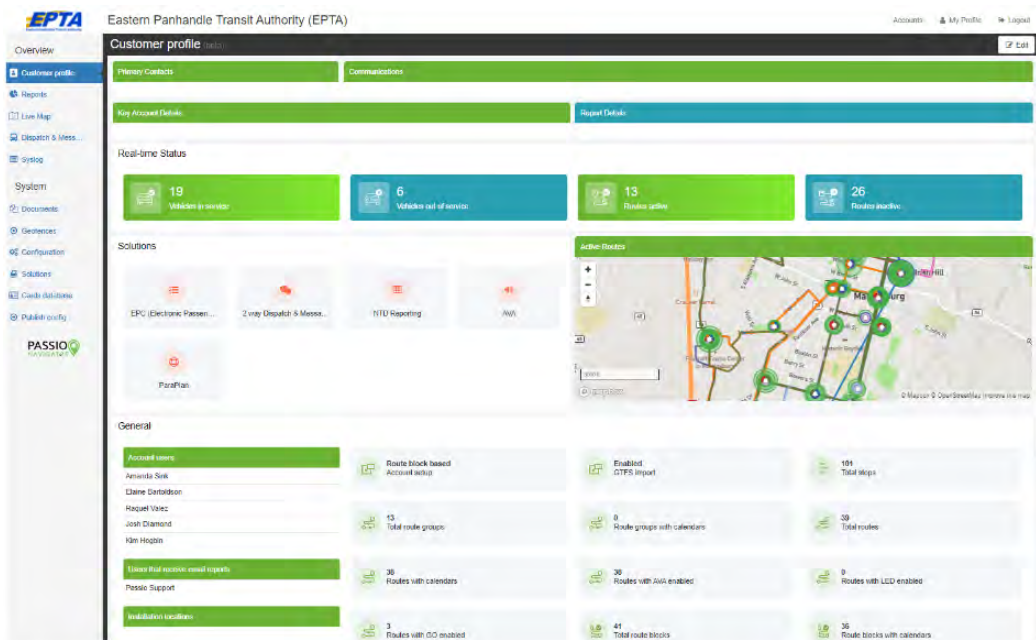
The Passio Business Analytics system is managed through Passio Navigator™. This enables our customers to have a single login with access to all reporting, configuration, and management functions within the Passio Transit Platform. The reporting system is divided between dynamic reporting and dashboard reports. The dynamic reporting tools are designed to allow the end user to build reports using combinations of filters for both specific and general areas of analysis. The full spectrum of components and fields within the database are available for the user to build the view they need with a few simple mouse clicks...

Primary Report Views

- Filter by custom or pre-set time periods
- Group reporting data for by quarter, month, week, day or by time (hour or ¼ hour)
- Select operational detail levels such as routes, stops, drivers, and buses.
- Custom passenger types can be filtered, segmented, and reported
- Switch between passenger boarding and alighting counts for all filter views

Trend Analysis

- Switch between passenger boarding and alighting counts for all filter views
- Compare ridership trends by month, week, day, quarter/semester, weekday, hour, ¼ hour
- Capture NTD related data such as Passenger Miles Traveled
- Route reporting at three levels (block, route name, combined route)
- Capable of grouping stops in alternate combinations outside of route groupings

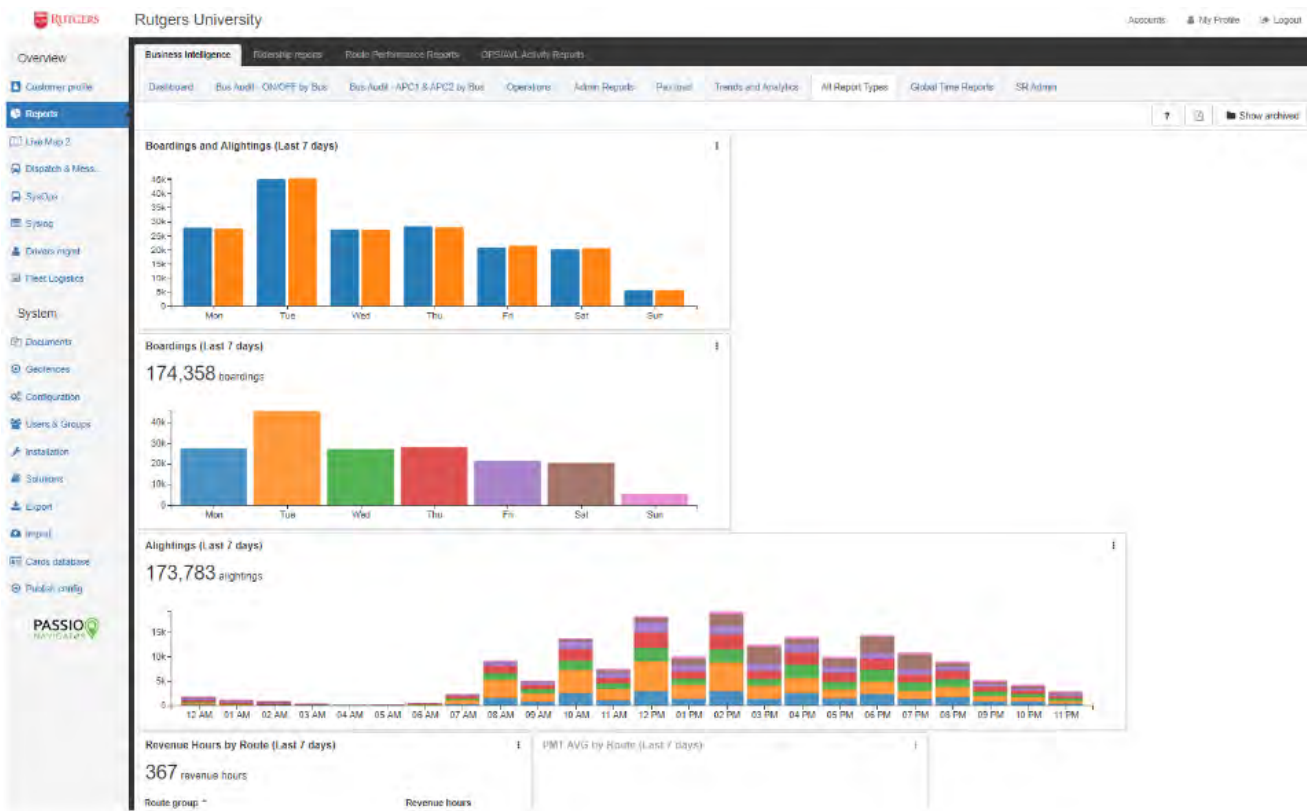


Passio Agency Profile Dashboard



Passio Analytics is segmented into 5 groups:

- Business Intelligence – Provides customizable charts and graphs to provide insight and to help better understand your service trends.
- Ridership Metrics – This collection provides a comprehensive ridership analysis.
- Route Performance – This quite of tool allows users to analyze on-time performance trends and schedule adherence details.
- GPS/AVL Activity – This collection provides custom boundary incident reporting, speed reports, and other vehicle activities.
- NTD Reporting – One-click NTD S-10 reporting with sampling, benchmarking, and certification support from Passio



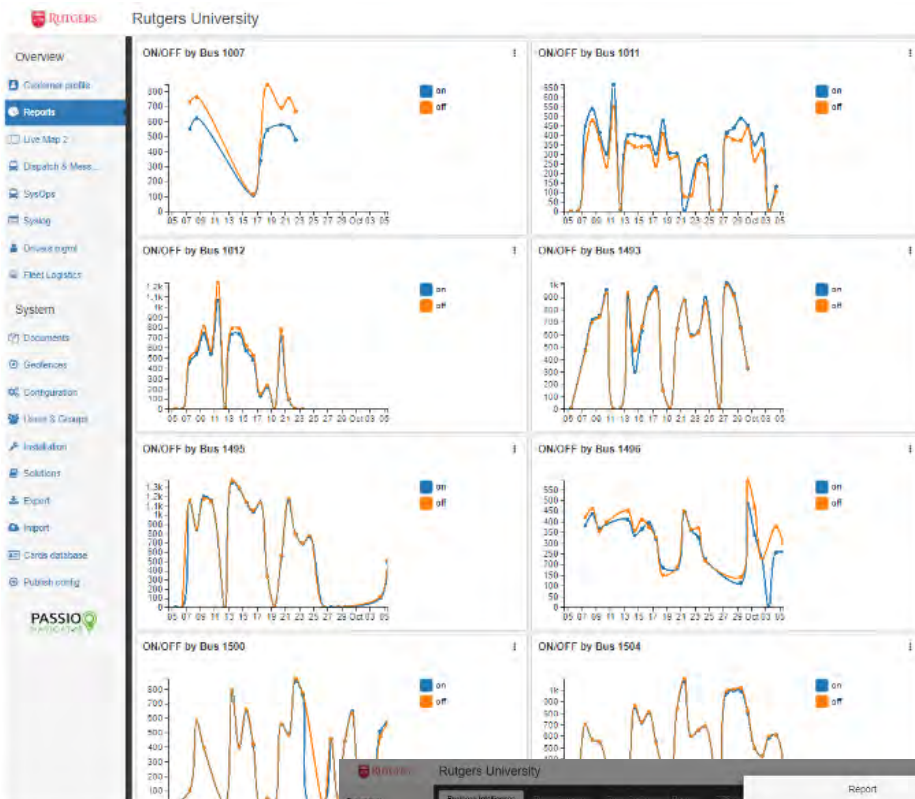
Passio Dashboard Reporting – Boardings & Alightings



Business Intelligence

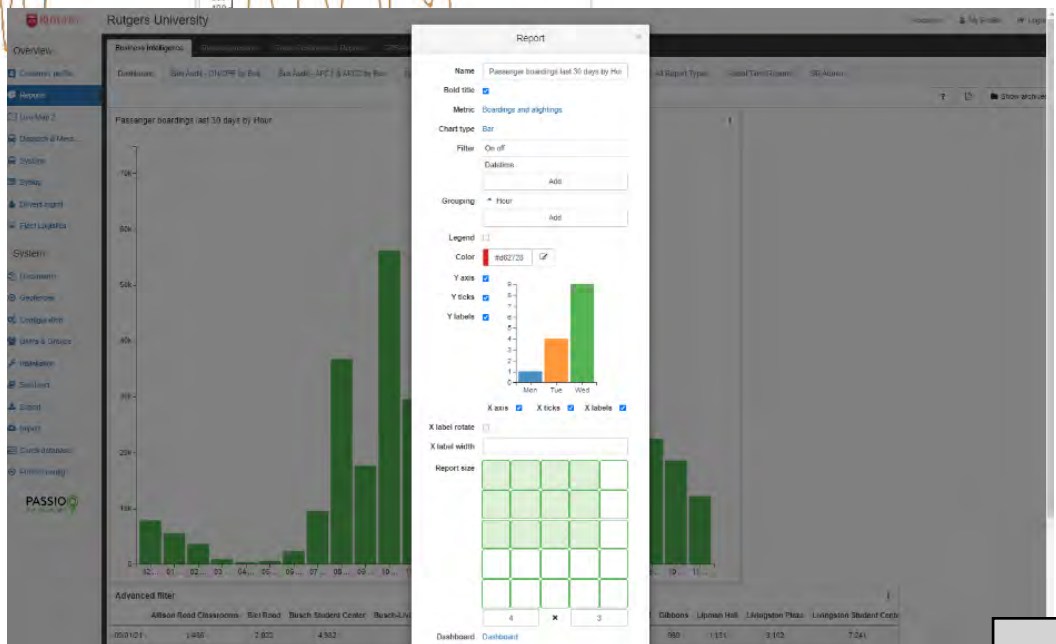
Provides customizable charts and graphs to provide insight and to help better understand your service trends.

- Bus Audit (ON/OFF)
- Bus Audit (APC)
- Operations
- Passenger Load
- Trends and Analytics
- Global Time Reports
- Admin Reports



Passio Dashboard Reporting – Audit

Passio Dashboard Customization – Ad Hoc Reporting



Dashboard reports enable users to design and save reports to their unique specifications. Users tailor reports based on presentation type, data analyzed, filters used, and comparison analytics.

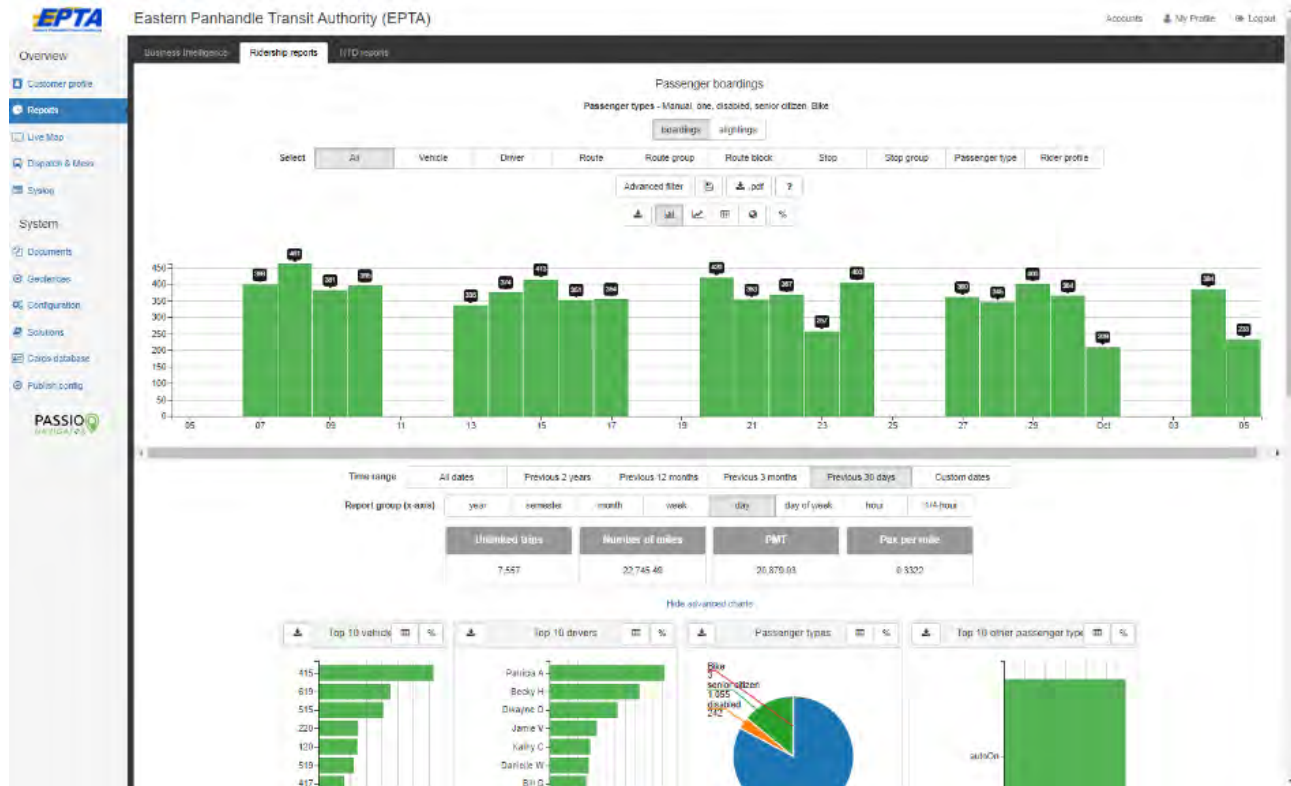
- Fixed Date or Relative Date – set a reporting period that is fixed from a specific date to a specific date, or create relative date reports (I.e. the last 3 months or previous 14 days)
- Scheduled Auto Email – email individual reports or an entire dashboard to a single email recipient or a group of recipients. Emails can be scheduled at any interval desired.
- Multiple Dashboards – users have the option to create multiple dashboards to group report types by category or target audience.

Reports include a graphical interface for display and presentation. The interface allows users to dynamically create bar, line, pivot tables, and pie charts without downloading to third party software. The data is available for export into common formats such as CSV (to XLS) and PDF. The user may create multiple dashboard pages specific to the KPIs that they want to see as well as the ability to email or print individual reports or entire dashboards ad-hoc or create scheduled group emails.

Ridership Metrics

This collection provides a comprehensive ridership analysis.

- Boardings & Alightings by Date/Time/Span for...
 - Vehicle, Driver, Route, Route Group, and Route Block
 - Stop, Stop Group, Passenger Type, and Rider Profile



Passio Ridership Metrics



Route Performance

This collection of tools/reports allows users to analyze on-time performance trends and schedule adherence details.

- On-time Performance (OTP)
- Route Transit
- Headway
- In/Out of Service
- Schedule Adherence

Passio Route Performance Module

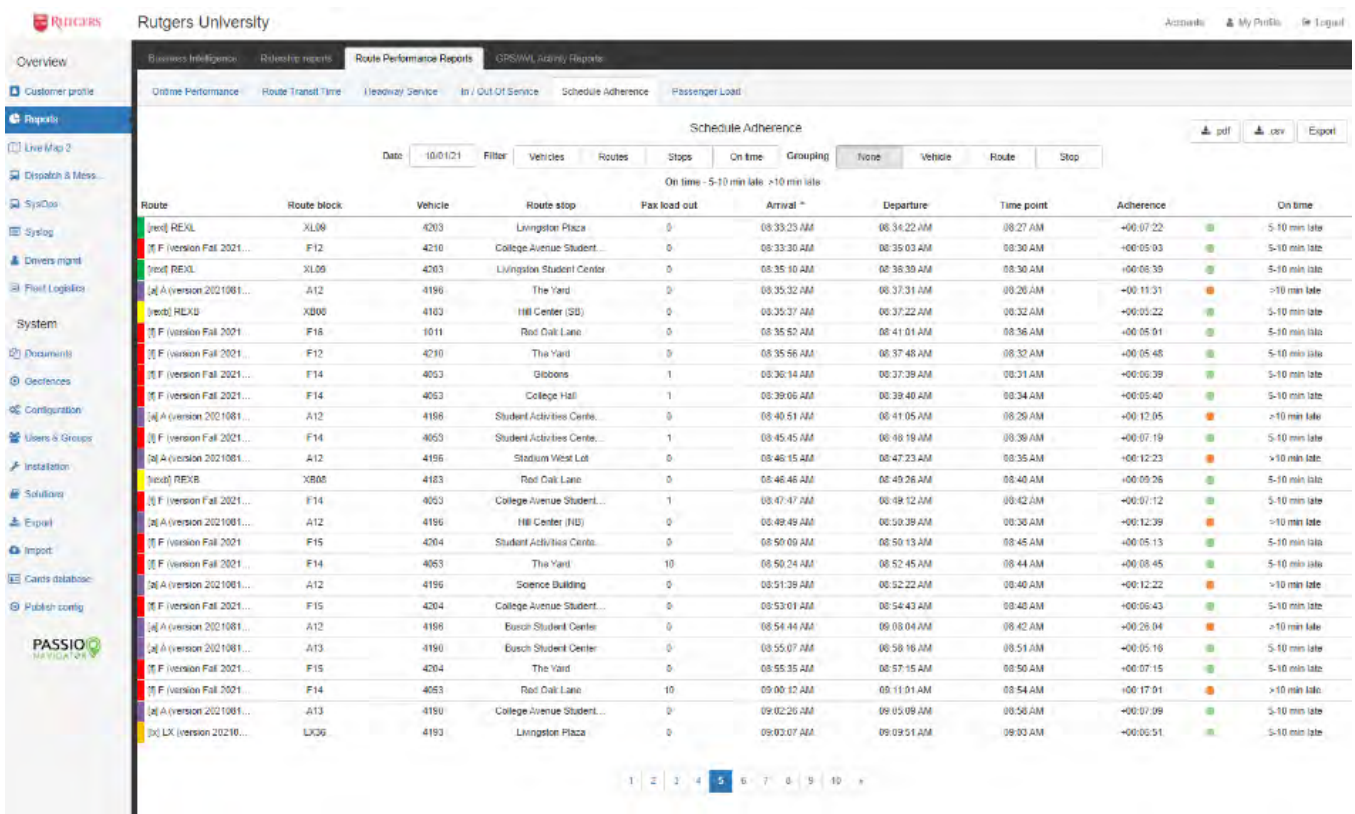
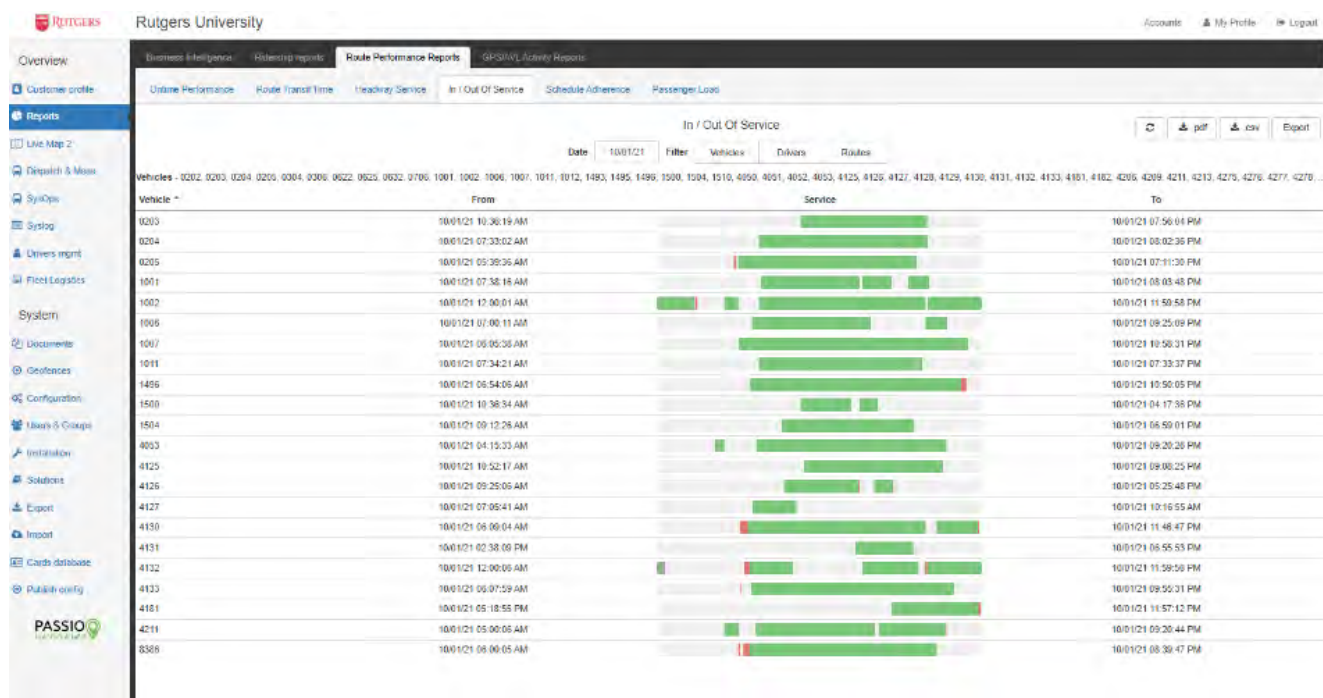
On-Time Performance Report Data:

Route	Boardings	Miles travelled	Early	On time	5-10 min late	>10 min late
[green] Penn Station Local	5,012	2,750.07	0.65%	97.75%	1.42%	0.00%
Route block	Boardings	Miles travelled	Early	On time	5-10 min late	>10 min late
PSL5	890	460.45	0.00%	100.00%	0.00%	0.00%
PSL4	1,513	1,104.38	0.81%	97.72%	1.48%	0.00%
PSL1	1,529	1,103.23	1.10%	96.89%	1.92%	0.00%

Passio Route Performance Module – On Time Performance



Passio Route Performance Module - Service



Passio Route Performance Module – Schedule Adherence

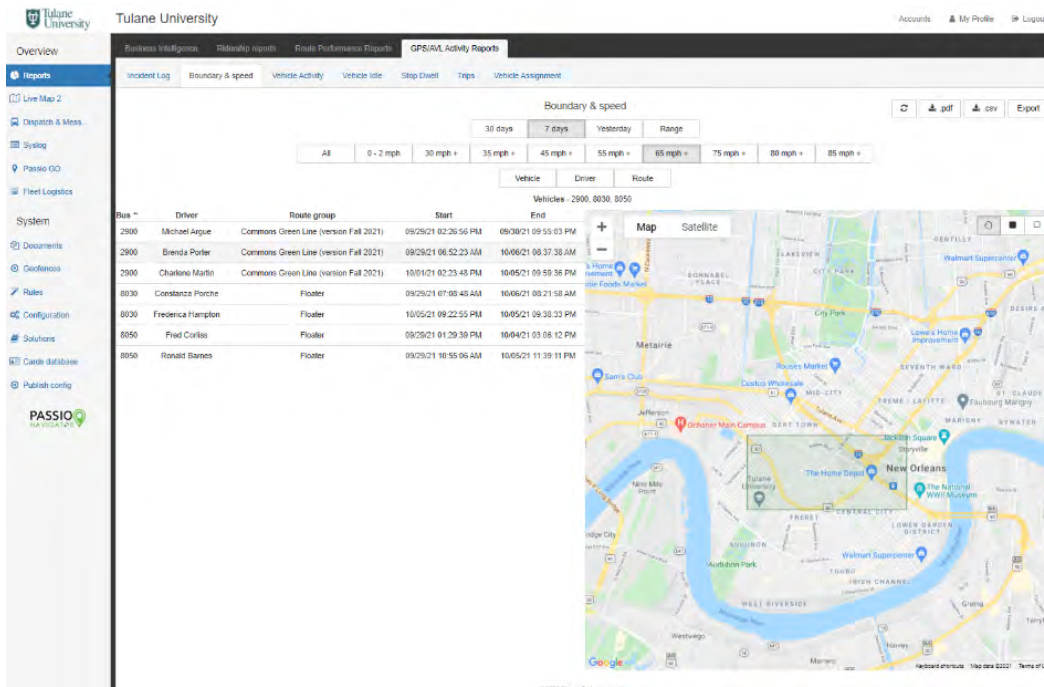


GPS/AVL Activity

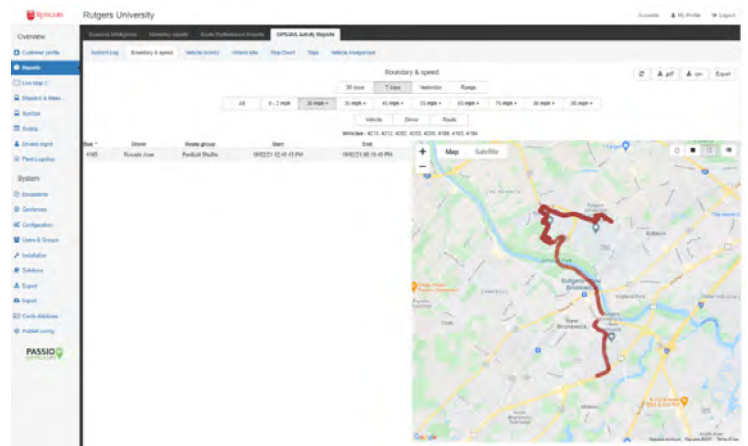
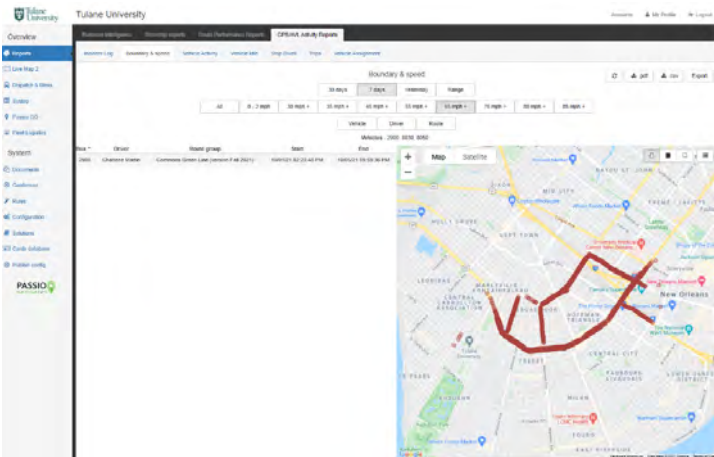
This collection provides custom boundary incident reporting, speed reports, and other vehicle activities.

- Incident Logs, Trips, Vehicle Assignment
- Vehicle Activity, Vehicle Idle, Stop Dwell, Boundary & Speed

Passio GPS/AVL Reporting – Boundary Reporting



Speed Fence Activity - Users have the capability to highlight a specific area on the system map to select all speeding incidents that exceed the threshold set in the report configuration.



Passio GPS/AVL Reporting – Speed Reporting & Tracking

Passio GPS/AVL Reporting – Incident Logs

Vehicle ID	Time	Location	Incident Type	Status
1495	08:03:18 AM	Livingston Plaza	stop	Completed
1495	09:04:06 AM	Livingston Student Center	stop	Completed
1495	09:07:51 AM	Busch Livingston Health Center	stop	Completed
1495	09:13:09 AM	Hill Center (NB)	stop	Completed
1495	09:14:16 AM	Science Building	stop	Completed
1495	09:16:25 AM	Busch Student Center	stop	Completed
1495	09:22:06 AM	Busch Livingston Health Center	stop	Completed
1495	09:23:01 AM	Livingston Plaza	stop	Completed
1495	09:24:07 AM	Livingston Student Center	stop	Completed
1495	09:27:25 AM	Busch Livingston Health Center	stop	Completed
1495	09:32:04 AM	Hill Center (NB)	stop	Completed
1495	09:33:18 AM	Science Building	stop	Completed
1495	09:35:22 AM	Busch Student Center	stop	Completed
1495	09:43:00 AM	Busch Livingston Health Center	stop	Completed
1495	09:43:52 AM	Livingston Plaza	stop	Completed
1495	09:44:55 AM	Livingston Student Center	stop	Completed
1495	09:50:20 AM	Busch Livingston Health Center	stop	Completed
1495	09:55:22 AM	Hill Center (NB)	stop	Completed
1495	09:56:38 AM	Science Building	stop	Completed
1495	09:58:43 AM	Busch Student Center	stop	Completed
1495	07:05:59 AM	Busch Livingston Health Center	stop	Completed
1495	07:07:45 AM	Livingston Plaza	stop	Completed
1495	07:08:52 AM	Livingston Student Center	stop	Completed
4192	07:11:24 AM	Red Oak Lane	stop	Completed
4192	07:13:28 AM	Lipman Hill	stop	Completed

Passio GPS/AVL Reporting – Vehicle Activity

Vehicle	Start time	Activity type	Name	Route	Duration	Idle time	Mov. time	Max speed	Geo miles	Trip miles	Trip time
1495	08:03:18 AM	stop	Livingston Plaza	B-Ho Route	00:04	00:00	00:04	21.30	0.02	0.03	00:03
1495	09:04:06 AM	stop	Livingston Student Center	B-Ho Route	00:27	00:10	00:17	7.14	0.03	0.20	00:51
1495	09:07:51 AM	stop	Busch Livingston Health Center	B-Ho Route	00:22	00:10	00:12	16.51	0.04	1.25	04:36
1495	09:13:09 AM	stop	Hill Center (NB)	B-Ho Route	00:21	00:00	00:21	12.24	0.04	3.52	09:54
1495	09:14:16 AM	stop	Science Building	B-Ho Route	00:21	00:00	00:21	16.22	0.04	3.00	11:03
1495	09:16:25 AM	stop	Busch Student Center	B-Ho Route	02:46	01:20	01:17	20.07	0.17	4.21	13:10
1495	09:22:06 AM	stop	Busch Livingston Health Center	B-Ho Route	00:04	00:00	00:04	27.76	0.03	5.28	18:45
1495	09:23:01 AM	stop	Livingston Plaza	B-Ho Route	00:20	00:10	00:10	16.40	0.02	5.61	19:46
1495	09:24:07 AM	stop	Livingston Student Center	B-Ho Route	00:25	00:10	00:15	12.59	0.03	5.79	20:52
1495	09:27:25 AM	stop	Busch Livingston Health Center	B-Ho Route	00:23	00:09	00:14	14.47	0.03	6.64	24:10
1495	09:32:04 AM	stop	Hill Center (NB)	B-Ho Route	00:28	00:07	00:21	16.50	0.04	9.12	28:49
1495	09:33:18 AM	stop	Science Building	B-Ho Route	00:22	00:00	00:22	15.52	0.04	9.39	30:03
1495	09:35:22 AM	stop	Busch Student Center	B-Ho Route	05:21	04:20	01:01	18.45	0.17	9.61	32:07
1495	09:43:00 AM	stop	Busch Livingston Health Center	B-Ho Route	00:04	00:00	00:04	28.95	0.03	10.69	39:45
1495	09:43:52 AM	stop	Livingston Plaza	B-Ho Route	00:21	00:10	00:11	17.76	0.04	11.20	40:37
1495	09:44:55 AM	stop	Livingston Student Center	B-Ho Route	02:35	02:20	00:15	11.54	0.03	11.40	41:40
1495	09:50:20 AM	stop	Busch Livingston Health Center	B-Ho Route	00:24	00:10	00:14	15.90	0.03	12.45	47:05
1495	09:55:22 AM	stop	Hill Center (NB)	B-Ho Route	00:29	00:15	00:14	18.14	0.04	14.72	52:07
1495	09:56:38 AM	stop	Science Building	B-Ho Route	00:26	00:09	00:17	12.30	0.03	14.99	53:23
1495	09:58:43 AM	stop	Busch Student Center	B-Ho Route	05:33	04:28	01:04	20.56	0.15	15.40	55:28
1495	07:05:59 AM	stop	Busch Livingston Health Center	B-Ho Route	00:00	00:00	00:00	32.23	0.09	16.51	01:03:44
1495	07:07:45 AM	stop	Livingston Plaza	B-Ho Route	00:21	00:14	00:07	17.27	0.03	16.00	01:04:30
1495	07:08:52 AM	stop	Livingston Student Center	B-Ho Route	03:57	03:20	00:17	12.03	0.04	17.00	01:05:37
4192	07:11:24 AM	stop	Red Oak Lane	(jestr) REXEB	01:20	00:50	00:30	12.24	0.04	0.61	01:08:09
4192	07:13:28 AM	stop	Lipman Hill	(jestr) REXEB	00:11	00:00	00:11	15.68	0.03	0.63	01:10:13

NTD Reporting

One-click NTD S-10 reporting with sampling, benchmarking, and certification support from Passio. Our robust Passio NTD reporting module provides VRM (Vehicle Revenue Miles), Deadhead miles, AVM (Actual Vehicle Miles), VRH (Vehicle Revenue Hours), Deadhead hours, AVH (Actual Vehicle Hours), UPT (Unlinked Passenger Trips), PMT (Passenger Miles Travelled) by time period and by weekday/weekend, etc. Passio offers customized NTD reporting that will calculate and extract the metrics required for compliance. The Passio APC solution will provide all 'Actual' data (passenger miles and stop counts) required for NTD reporting. Your account manager will work with you to set up your personalized NTD sampling schedule and Passio will support your certification process. Our integrated Hella 3D APC has been granted NTD Certification Approval.



Passio NTD Reporting Samples

Our robust Passio NTD reporting module provides VRM (Vehicle Revenue Miles), Deadhead miles, AVM (Actual Vehicle Miles), VRH (Vehicle Revenue Hours), Deadhead hours, AVH (Actual Vehicle Hours), UPT (Unlinked Passenger Trips), PMT (Passenger Miles Travelled) by time period and by weekday/weekend, etc. Passio offers customized NTD reporting that will calculate and extract the metrics required for compliance. The Passio APC solution will provide all 'Actual' data (passenger miles and stop counts) required for NTD reporting. Your account manager will work with you to set up your personalized NTD sampling schedule and Passio will support your certification process. Our integrated Hella 3D APC has been granted NTD Certification Approval.

Passio NTD Summary Report:



Our NTD Summary Report provides all required NTD summary metrics (both Revenue and Actual summaries are included). These results can be filtered by date range and route(s).



Passio NTD Weekday Route Filter Report:

	Revenue	Actual
VRM (Vehicle Revenue Miles)	6,165.12	miles
Deadhead miles	467.40	miles
AVM (Actual Vehicle Miles)	6,632.52	miles
VRH (Vehicle Revenue Hours)	306	hours
Deadhead hours	32	hours
AVH (Actual Vehicle Hours)	338	hours
UPT (Unlinked Passenger Trips)	807	passengers
PMT (Passenger Miles Travelled)	6,566.11	passenger miles

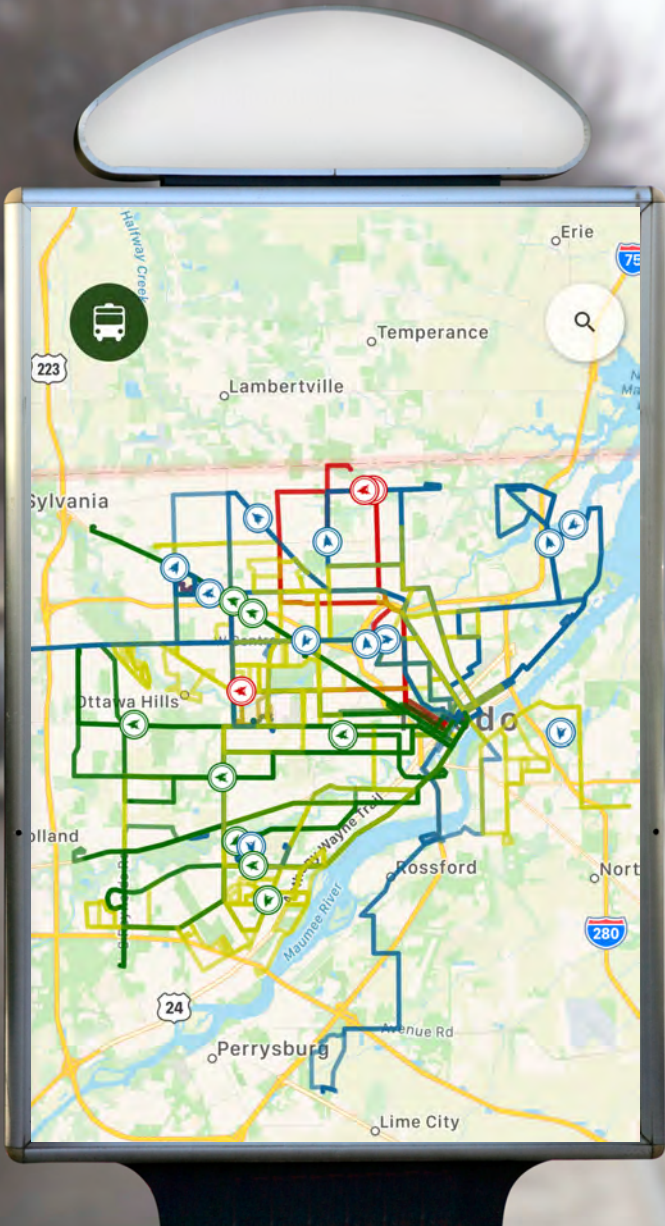
Our NTD Filter Report provides all required NTD summary metrics by date range, day(s) of the week, and selected route(s).

Passio NTD Detail Report:

	Average			Total
	Weekday	Saturday	Sunday	
Total actual miles	909.33	0.28	0.00	20,008.31
NTD calendar miles	747.54	0.00	0.00	16,445.88
In service miles	882.31	0.28	0.00	16,412.00
Out of service miles	27.01	0.00	0.00	594.31
Total actual hours	66	3	0	1,461
NTD calendar hours	53	0	0	1,157
Revenue hours	63	3	0	1,398
Deadhead hours	3	0	0	63
Unlinked passenger trips	234.05	0.00	0.00	5,149
Passenger miles travelled	929.42	0.00	0.00	20,447.34
Passenger trip length	3.97	0.00	0.00	3.97
		Total		
	Weekday	Saturday	Sunday	Total
Days schedule operated	22	4	5	31

The following NTD details (totals and averages) are provided by date range and selected route(s). Metrics include: Total actual miles, NTD calendar miles, In service miles, Out of service miles, Total actual hours, NTD calendar hours, Revenue hours, Deadhead hours, Unlinked passenger trips, Passenger miles travelled, Passenger trip length, and Days schedule operated.



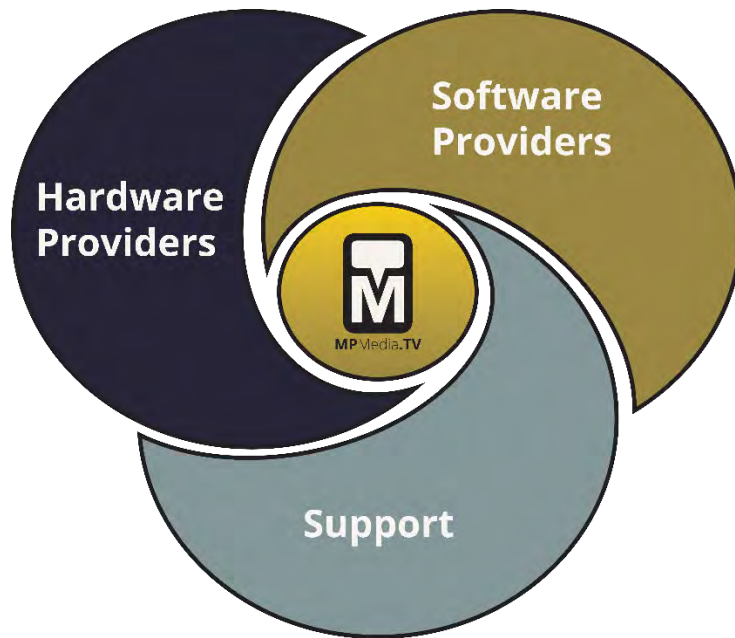


INTELLIGENT DISPLAYS

On-Board displays powered by MessagePoint Media







MessagePoint Media designs digital signage solutions with a 21st century model of mass-customization combined with a managed services model that incorporates hardware and content management platform support to meet any requirement. They make custom designed solutions, tailored, and scaled to the customer's needs at a disruptive price-point when compared with competitors. MessagePoint makes this possible by leveraging Commercially Available, Off-The-Shelf modular technology, sub-components, software, and integrating them within an open development

framework. MessagePoint Media applies the hacker/maker ethos to the concept of digital signage to create a highly extensible and customizable fully managed IT service.

This solution is built upon 3 pillars, Modular and Expandable Purpose Designed Hardware, a Cutting-Edge Content Management Software, and most importantly, a Managed Services & Support Model that gives customers access to extended support uncommon in the industry. The MessagePoint Media model stems from the philosophy that the solution to most problems are found in the spaces between disciplines.

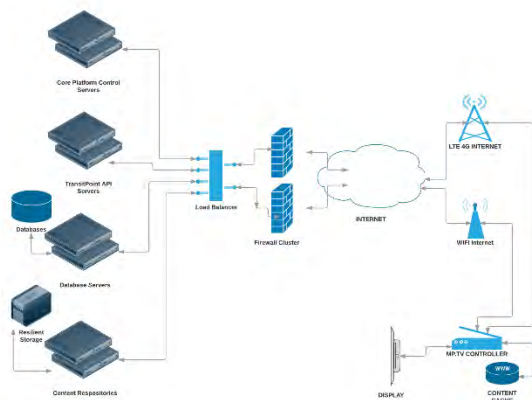
The MessagePoint.TV (MP.TV) platform is the heart of their service. MP.TV is built on top of a powerful next generation HTML5 based general purpose cloud based digital signage platform that drives thousands of screens all over the world. The MessagePoint.TV platform is entirely cloud based and requires zero server infrastructure or maintenance from the agency. The platform is hosted in multiple tier 1 datacenters and boasts a greater than 99.9% uptime. The administrative interface is web based, fully responsive, and can be accessed from a desktop, laptop, tablet, or mobile phone anywhere in the world with an Internet Connection. All communications take place over encrypted HTTPS connections and require no special firewall or network configuration to function properly.

One CMS, Universal Compatibility

This solution is designed from the ground up for cross-compatibility. The solution runs on any screen, any size, any manufacturer. This solution works with LCD, LED, oLED, and E-ink, all from the same content management user interface. The content platform works with any operating system including Windows, Android, Linux, MacOS, or Google Chrome.

Access from Any Device, Anywhere

There is no functionality or capability of the MP.TV platform that requires anything more than a web browser to access. Administration, Management, Content Creation, and Scheduling are all fully enabled in a modern HTML5 Web Based Console that is accessible from anywhere. Not only that, but the platform is also built fully responsive with nearly identical functionality regardless of the size or type of device from Smartphones to tablets to desktops. No matter where you are, and what device you have with you; you can fully operate and manage the platform.



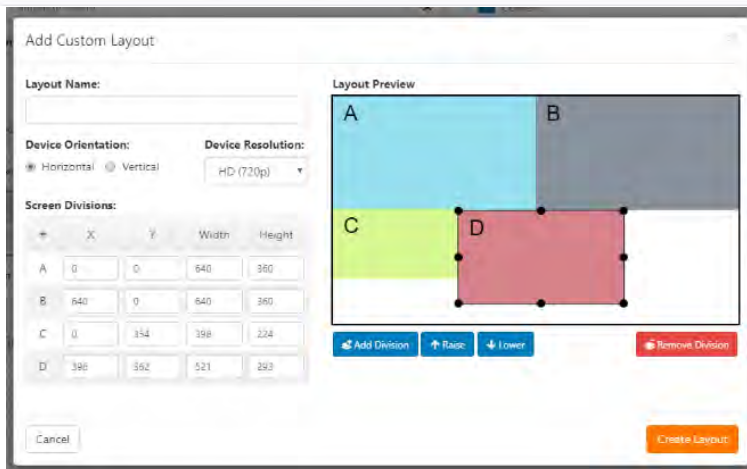
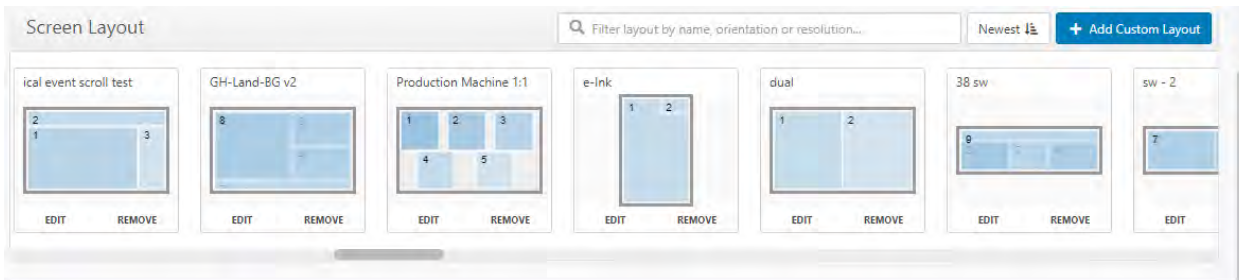
Service Architecture

MP.TV is a cloud-based service that leverages the power of the MP.TV controller’s local content cache to provide resilient operation even during extended periods of lack of internet connectivity. This also allows MessagePoint Media to be extremely efficient with bandwidth since all content items are downloaded to the local content cache in the background and only have to be sent once.

The MessagePoint.TV architecture and it is supporting Visual Apps are implemented using an “Offline First” design paradigm wherever possible. In its simplest form this means that any request for data is first served by locally cached data wherever possible. If the data is dynamic the application will opportunistically attempt to update the data in cache in the background and then trigger the foreground app to update its display based on the new data after it is received.

CONTENT PUBLISHING AND CAMPAIGNS

Customizable Layouts

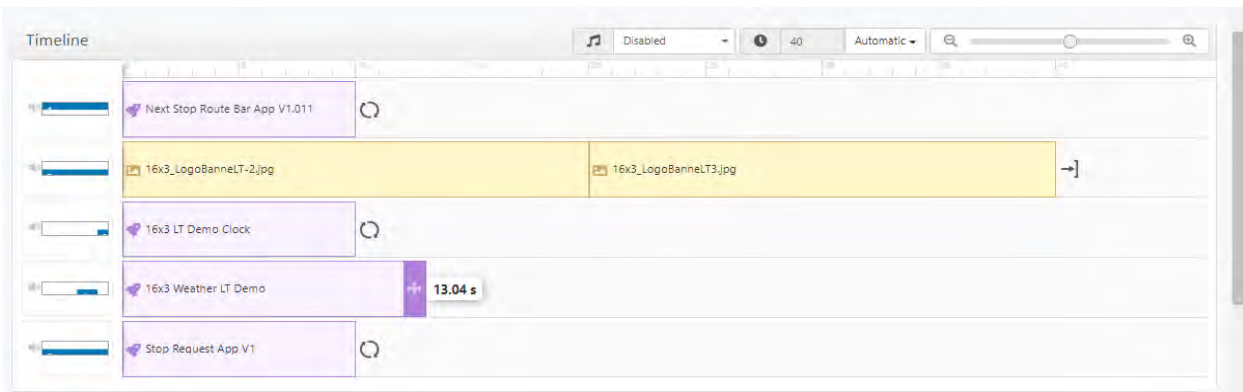


Most digital signage solutions offer very little functionality when it comes to screens. For an expensive software licensing fee, you get very little in return. In contrast, this platform provides the ability to create custom screen layouts with up to 11 content zones per screen. Each content zone is 100% compatible with any content, visual application, or interactive touch ability currently supported by the CMS. Even if Vail decides to pursue non-standard screen sizes in future designs, the

platform is flexible enough to dynamically integrate with any display resolution or aspect ratio natively, without the need for additional development. New content layouts are created via the intuitive, easy to use drag and drop tool. This functionality is in-built because the CMS is not a proprietary solution for a proprietary screen, but a custom developed solution built on top of a powerful existing platform that powers tens of thousands of screens worldwide.

Simplified, Dynamic Campaigns

Once a user has finalized a content layout, they can begin populating each of the content zones with a host of media options (images, videos, HTML, Social Media, RSS Feeds and much more) from the platform's embedded file management interface. Simply drag & drop cloud stored media assets (or upload new files) directly onto the campaign timeline. The timeline module provides an at-a-glance view of content in the campaign rotation, divided by each content zone.



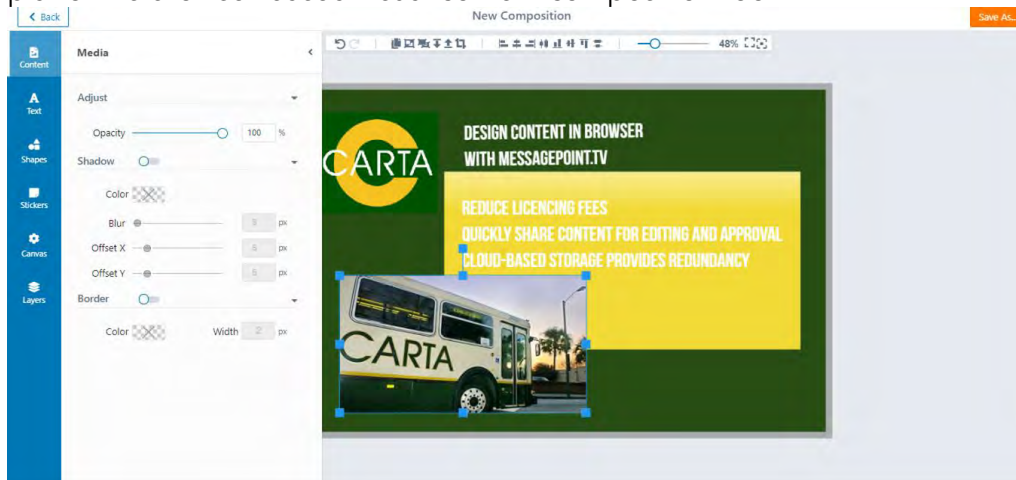
Each artifact in the content feed is intuitively adjustable via a sliding bar. By default, content will automatically loop when it reaches the end of its timeline but can be configured for single rotations. This feature is useful for dynamically triggering content real time content such as announcing next-stop, arrivals/departure alerts, and other time-limited-service alerting.

Content Scheduling and Publishing

MessagePoint’s solution provides content scheduling capacity which fulfills the basic requirement for time and date. Campaigns also have the capacity for auto-expiration at setup to ensure seasonal or timely information does not persist after the relevant time-period. In addition, the solution features advanced content scheduling according to dynamic conditions, such as weather, the outcome of a local sporting event, or localized triggers. This dynamic content scheduling is especially useful if an agency intends to use any screen space for advertising, as your advertisers can create campaigns that respond to real-time information. All content campaigns are published remotely from the web interface to the screens in near-real time. Simply click publish and the integrated controller of your screen will incorporate the new content.

Cloud-Based Content Design Tools

Every modern CMS should support the upload, hosting, and a display of a large variety of customer created files. However, one unique feature that sets MessagePoint.TV apart is the platform’s browser-based visual content composition tool.



Using this tool, Vail can leverage the power of the platform to quickly collaborate and design content for campaigns without ever leaving the content management ecosystem. The interface is easy enough for even the most design-averse office professional, with the ability to drag/drop existing content, adjust backgrounds/canvas size, incorporate text, group artifacts, and create layered compositions. While the tool may lack the power of an industry leading graphic design software, it provides a stable, easy to use interface that is robust enough to support branded service announcements and other typical use-cases for transit agencies. The composition tool provides Vail with the ability to reclaim the costs associated with licensing commercial design software.

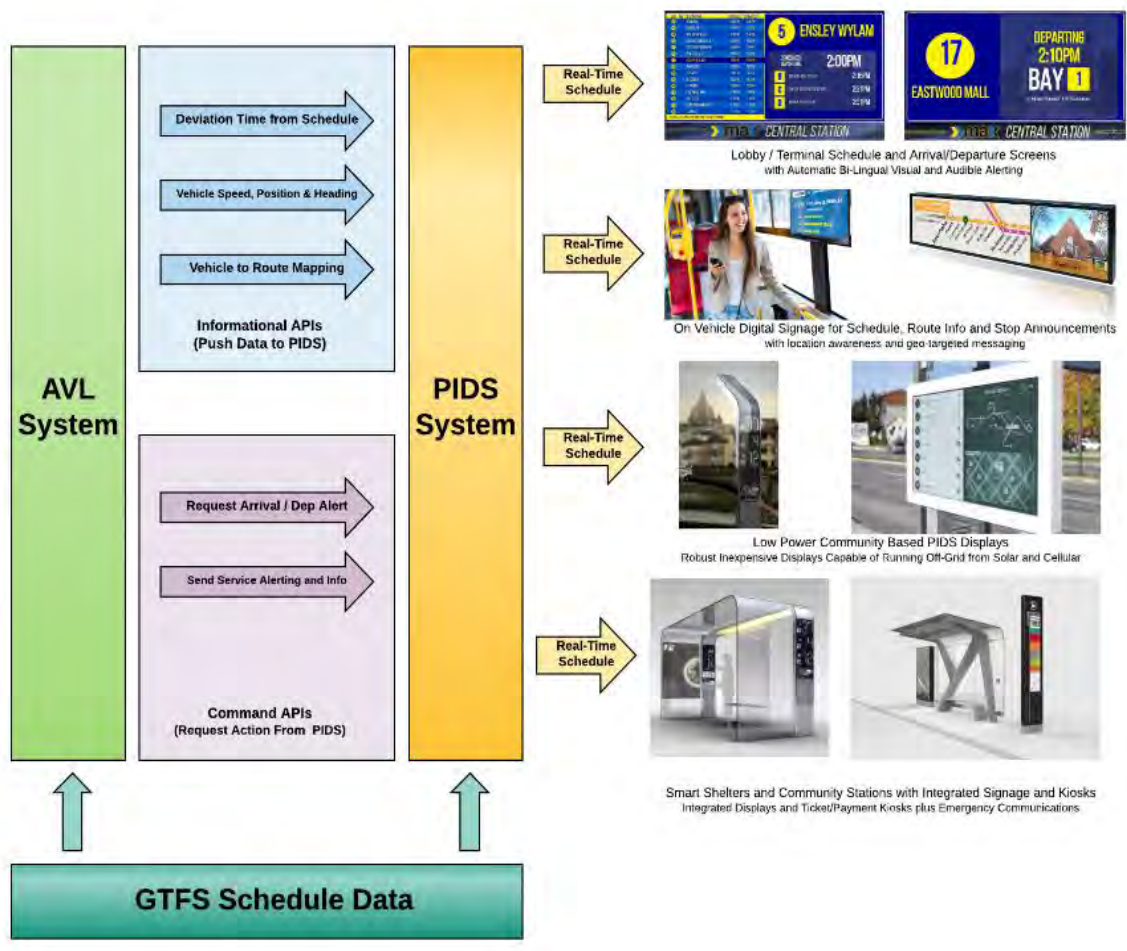
Industry Leading Visual Applications

The Content Management System comes with a continuously growing selection of powerful visual applications. These applications are fully customizable, with the ability to integrate and display information from internal data feeds, 3rd party data, and IoT sensor information using REST APIs. MessagePoint does not hide TransitPoint applications behind a paywall, every TransitPoint application is included with the service. MP.TV's integrated set of visual display apps is one of the most robust in the industry offering a broad set of built-in applications including:

- | | | |
|--|---|--|
| <ul style="list-style-type: none"> • Weather • Stocks • Trivia • Multiple Calendars • Multiple RSS Feed Viewers • Content Rotators • URL Display • Streaming Video • Webcams | <ul style="list-style-type: none"> • Countdowns • Detail and Banner Event Calendars • Social Media Displays • Airport Flight Info • Bike Share Availability (Supported Services) • Image of the Day / Week / Month / Hour | <ul style="list-style-type: none"> • Local (USB) Camera Display • Wi-Fi Info Display App with QR Auto-Configure • Animated Slideshow Apps • Emergency Alerting System • Welcome Visitors App |
|--|---|--|

Real Time Information Integration

The Content Management System uses powerful visual applications to embed any type of Real-time content that is required, including transit specific and more general real-time information driven applications. It also comes with dozens of existing visual applications going far beyond the normal clocks, RSS feeds, and weather apps, along with the ability to coordinate with Town of Vail for the creation of Custom Visual Apps that can be embedded into the platform using simple familiar HTML5 tools. In addition to support for GTFS/GTFS-RT, MessagePoint Media's signage solution supports the Passio Native APIs.



3rd party Data Integration

The CMS platform has the ability to dynamically ingest information from the web. If it has a publicly listed URL, RSS feed or an accessible API, MPTV is able to display it. In addition, these data sources can be used to dynamically trigger content based on environmental conditions. This capability allows the broadest flexibility in triggering public service announcements and tailor them to your agency, including interfacing with other public services and even other private organizations in Vail.

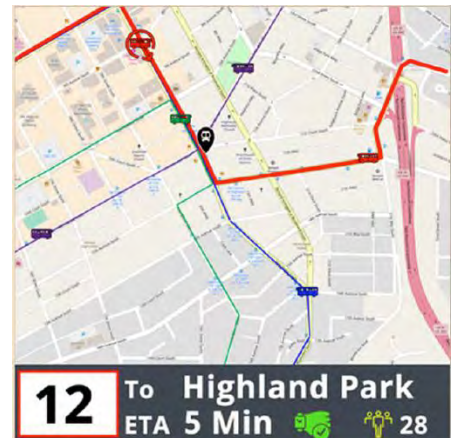
Emergency Alerting



Emergency Alerting is implemented through a dedicated Mobile Web App that supports 4 unique alert campaigns or can be integrated with any external alerting system that can use Webhooks. The alerting system supports custom emergency text entered on the mobile app at the time the alert is triggered. These alerts can immediately preempt content, both globally and in a pre-defined subset of the screens in the network. In addition, the Emergency Alerting app provides an Open API to integrate with other Alerting systems such as CAP.

GTFS Route Map

The visual app catalog includes a robust live map feature which can incorporate information for any CAD/AVL provider or use public information. For this offering, MessagePoint will deliver this solution using Passio's API to deliver highly accurate, granular route information and incorporate their arrival time predictions. This app is also capable of integrating information from APC data and vehicle API feeds to provide information for passengers about available passenger capacity or vehicle specific amenities such as bike racks or Wi-Fi for a given departure.



Accessibility

When it comes to ADA requirements, MessagePoint believes that compliance should not be synonymous with complacency. While the solution offers standard compliance features such as ADA call-buttons with speech to text, MessagePoint Media feels compelled to build additional accessibility into the design. They also include high contrast, large font configurations of standard announcements that can be dynamically triggered. The text to speech engine can also be configured to provide accessible information for up to 27 languages, a necessity for an international destination for tourism

Web/Social Feeds

The platform integrates with data feeds and social media accounts. This data can be incorporated into the signage solution via a CMS with existing or custom visual Apps. In addition, the platform can monitor relevant hashtags for community engagement with an integrated default white-list or default black-list content moderation feature.



Advertising Plus Add-On

With the Advertising Plus Add-On (<http://mpm.to/adplus>), MessagePoint Media is providing a complete sub-system designed to support a robust advertising and sponsorship model. They don't stop with supporting advertising content, or even geo-fencing advertising. They provide a robust model that will let agencies successfully compete for advertising dollars and/or attract the best ad sales partners. Some of the features include:

- **Proof of Play**
- **Split-Placement**
- **Flash-Ads**
- **Automatic Scheduled Content Rotation**
- **Dynamic Triggers**
- **Location Based Ads**
- **Dynamic Response System**
- **Co-Managed Support Level for Advertising Content**

The granular permissions and access control inherent in the web platform allows Vail the ability to give limited access to its advertising partners to individual content zones within campaigns, which will allow third party advertisers to update their content while leaving your passenger information undisturbed.

Software Based Remote Monitoring

As stated in section 1.1, remote monitoring requires multiple redundancies to avoid “silent failures,” and the Content Management System plays a key role in that endeavor. MessagePoint’s content management platform and their onboard hardware both provide several remote monitoring capabilities for internet connectivity, remote screen viewing, and hardware monitoring. In the event a screen experiences a service outage, a service email is immediately generated for both the customer and MessagePoint’s internal support team. The content management system provides the health and connectivity information of your network at a glance in browser and allows the user to remotely control the on-board controller unit for troubleshooting.



Controllers (Players) establish an outgoing HTTPS tunnel to the Management Server at startup. This is referred to as the “Fast Channel”. The Controller sends regular heartbeat updates, playback log information, and performance metrics to the server via this channel on a regular basis that can be adjusted, on a per player basis, on the player settings screen. If the player fails to check in on schedule the console will mark the player as offline, and an email message will be sent to the defined admin users after the configured offline time threshold value on the player settings is reached. In addition, the player will report errors playing content to the management UI which will generate immediate email notifications. Error logging, online/offline status, and performance metrics can all be accessed via the MP.TV Management Web UI.

ON-BOARD

MP.TV Mobile Intelligent Displays

MP.TV Mobile Intelligent (MPTV-M Series) displays are designed from the ground up to provide outstanding performance in a compact, reliable, self-contained package. Instead of building on top of a complex design based on a central Intel PC Architecture computer, a general-purpose operating system, and a network of dumb monitors, the MP.TV mobile display is built on top of the same proven solid-state RISC (Reduced instruction set computer) based technology that powers today's most advanced tablets and smartphones. This allows for more flexible installation options and easier service.

The MPTV-M displays are easily installed on any bus, only requiring access to 8V-36V DC power and onboard Ethernet or Wi-Fi from the Cellular Gateway. For vehicles without a cellular gateway, the M series display can be outfitted with its own LTE Modem internally.

Advertising with Infotainment Displays

Vail has stated that they intend to pursue advertising as part of their Mobile Infotainment solution. Any on-screen solution has the potential to support this endeavor, but MessagePoint's CMS allows Vail to enhance revenue while avoiding the pitfalls that create a system that riders tune out, or worse begin to resent. MessagePoint's platform allows agencies to adhere to the following best practices:

- 1) **NEVER remove the transit-related information** from the screen. The CMS allows screen allocations to be compartmentalized and prioritized in infinite combinations.
- 2) **Geo-Fencing content** is a revenue maximizer. Advertisers will gladly pay less to be displayed only at relevant times along a route. While each individual advertiser may pay less, the volume can be expanded, increasing overall revenue. A solution without geo-fencing is leaving money on the table.
- 3) **Dynamically Trigger Content** based on external conditions. If its cold outside, the local coffee shop might like a spot, if its hot, the ice cream parlor.

MPTV-M24 24-Inch Intelligent Mobile Display

The low-cost option for onboard infotainment is the level 21.5-inch (Diagonal) display is a full HD display packed with over 2 Million pixels and 700 NITS of high-brightness display. This translates into a razor-sharp display that makes even complex animations and data crystal clear, even on the brightest days. A mirror port allows the master display to drive an additional mirrored display at full HD resolution. The integrated controller sports a Quad Core CPU and a Quad Core GPU, supported by 8Gb of onboard storage, expandable to 256Gb for caching display content and data. This means MessagePoint can download content once and play it whenever it is needed, even if Internet is unavailable. This little powerhouse is also packed with connectivity with built in support for Gigabit Ethernet, 802.11n Wi-Fi, Bluetooth 4.0 and Low Energy, as well as optional 4G LTE, GPS, and IoT interfaces. It even supports being mounted in a portrait / Digital Poster orientation for narrow spaces.



MPTV-M27v 27-Inch Intelligent Mobile Portrait Display

When it comes to Stanchion mounting, it is hard to beat this 27-inch vertical display. This display provides native 4k 16:9 resolution at 700 NITS of brightness with the utmost clarity. The Portrait form factor functionally allows you to have around 2.5 FHD monitors worth of content, giving you plenty of space to display route ladders, service announcements, infotainment, and advertising.

MPTV-M37w 37 Inch Super Wide Intelligent Mobile/Indoor Signage Display

The 37" (Diagonal) display is an HD marvel that packs a 35 Inch Wide display into a package only 12 inches in height, less than the M22. With 700 NITS of brightness and a 4000:1 contrast ratio, this screen is typically mounted in the center aisle, typically replacing the standard LED destination sign. This display is a real problem solver, as it provides a wider form factor that allows for convenient and versatile content layouts. Its thin form factor means it can be mounted in locations where a normal display just won't fit.



SUPPORT OVERVIEW

Providing Managed Customer Service, Not Just Product Support

Support offerings are at the core of MessagePoint's service, and what sets them apart from every other provider of digital signage type service in the market. MessagePoint brings the proven Managed Services model from the Information Technology space to your digital signage network. At whatever level your agency requires, they are available to act as an extension of your team over the life of the network. Their developers are continuously improving and extending the platform with enhancements that are available to all clients. Depending on your Support plan, MessagePoint provides day-to-day content management and creation support as well.

Proactive Update Support and Monitoring

This includes enhancements and reactive support for the MP.TV visual apps, the MP.TV platform, and hardware. MPM provides proactive monitoring and management of your system including the MP.TV visual apps, and the MP.TV platform itself. MessagePoint will watch the availability of your controllers and act when controllers fail to check in. They also perform updating and patching of the MP.TV Client. MessagePoint will review the underlying O/S for vulnerability patches. It gives you access to the MP.TV content and development teams on a preferred basis for on-demand services. In addition, they provide first level support from a US and Global team that allows them to provide 24x7x365 support coverage. They also provide full support and maintenance on the MP.TV controllers for the life of the contract, including replacement and upgrade protection, as needed.

Content Management

This is where MP.TV really begins to stand apart from other offerings and is one of the key benefits that clients enjoy. With only some basic restrictions to prevent abuse, you have unlimited ability to submit content. As part of your subscription the MessagePoint Help Desk will perform unlimited Adds, Moves, and Changes of Agency content for your signage channels. This means that rather than having to train dozens of staff on updating content, you can simply let them email the updated content to the MessagePoint support team and include instructions, like where to put it, when to show it, and when to remove it.

MessagePoint takes it from there and fulfill the requirements of adding, scheduling,

managing, and removing the content. In other words, you create the content, and they do the rest. Of course, if you want to be trained and do your own updates, MessagePoint is happy to do that, but with this service you never have to do so.

Content Creation

As part of the co-managed support subscription, MessagePoint will build instances of the standard and MP.TV produced display apps for you, as needed for an application. They can build and publish channels for you. They even include a set of content credits with each screen on their fully managed support level. You can use these to have their team do content production, including images, video, and animation, from their library of content templates. That way, you can just send a general concept and let designers take it from there. This is truly hassle free hands-off Digital Signage. You can simply concentrate on your messaging and let MessagePoint do the rest.

SUPPORT TIERS

Self-Managed (Base) Support

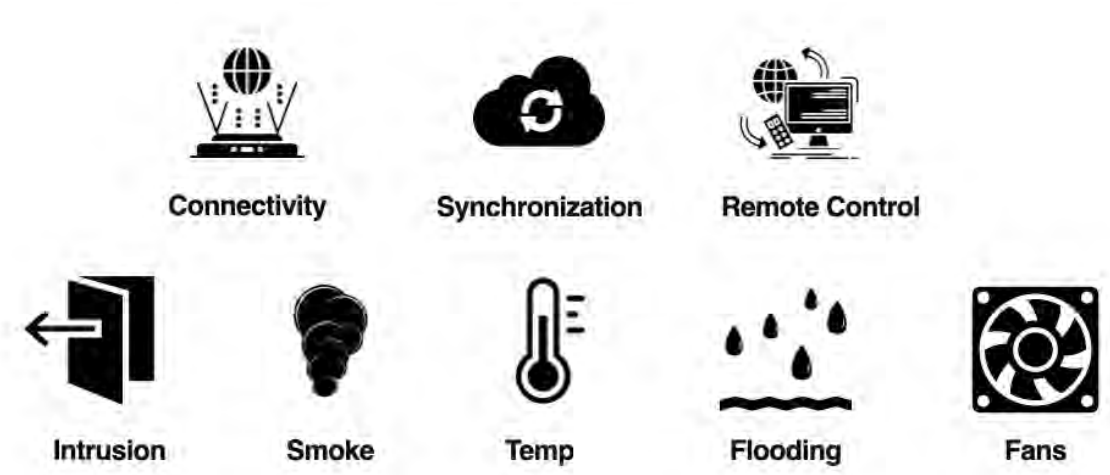
At this level, once you are trained on the system, the MessagePoint team steps back into a support role. You still can leverage their support team for both functionality and usability support questions. They provide regular webinars for your staff and a once a year no-cost design and usability review meeting with your staff to make sure you are getting the most out of the system. Finally, because MessagePoint knows life happens, they provide Two Weeks per year of their Co-Managed level support on-demand. If your operations staff is out sick, on vacation, or turns over, your network won't suffer. They can step in and temporarily manage the network for you, so you will not miss a beat. At this support level Message Point delivers the following elements of the signage operations stack.

Co-Managed Support

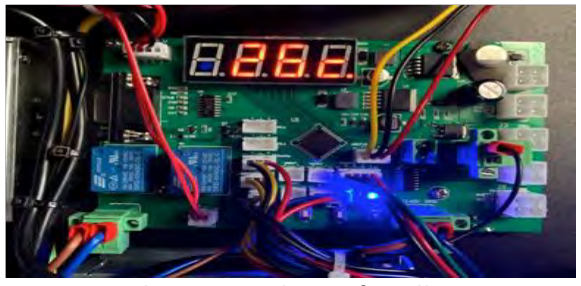
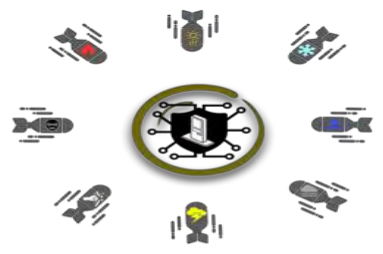
This level is for organizations who have a good creative team to create content or don't anticipate needing a lot of content creation, but don't want to have to dedicate the time and I.T. resources to manage their signage network. Co-Managed customers can simply submit content via e-mail to the MessagePoint help desk and they take care of the rest, handling all the programming, scheduling, and content management. They also take responsibility for monitoring, updating, and managing all the controllers and interfaces to ensure that your network stays up and running. At this level MPM takes on responsibility for these additional elements.

Fully Managed Support

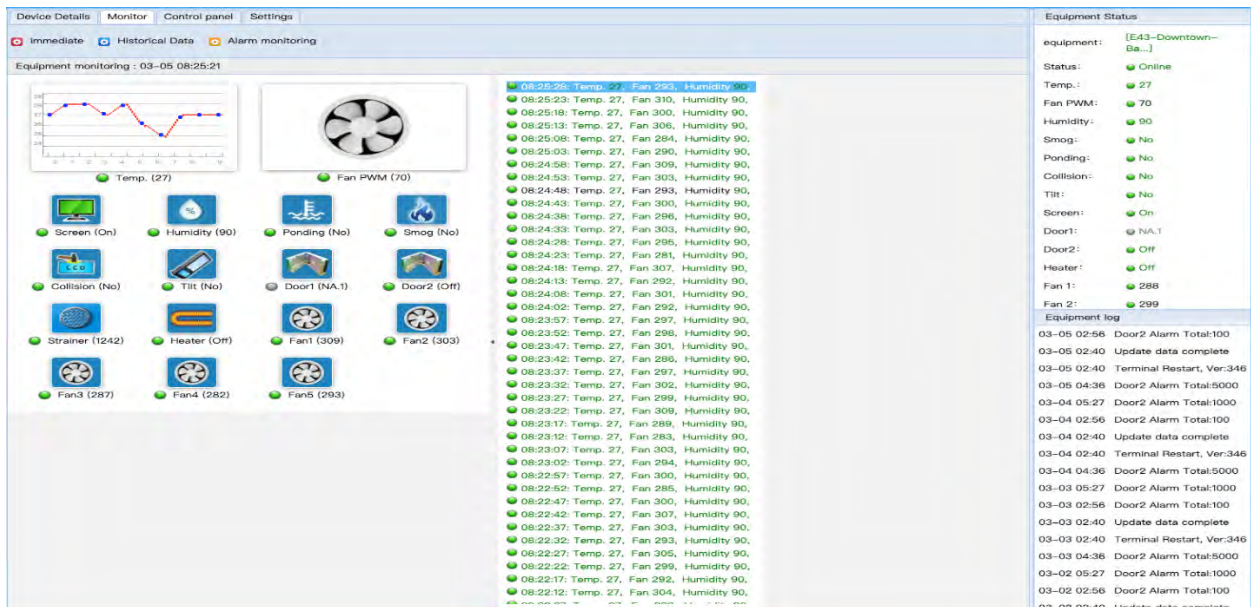
Fully Managed Support is truly hassle-free concierge digital signage service. Not only does MessagePoint provide all the support outlined, but they provide a monthly budget for content production that can be used to create images, animations, or video to run on your network from their design team. You can even use the same content on your website or social media as well. At this level MPM adds these additional elements to their support.



The OMC (Outdoor Management Console) environmental monitoring and management sub-system is a full-spectrum platform for maximizing resilience and up-time for Outdoor LCD displays in harsh environments. The system consists of three main elements. The first is a dedicated OMC (Onboard Management Controller) board installed inside each display. This board provides a dedicated sensor management and measurement platform with connections for all the onboard sensors and inputs in the display enclosure. The OMC connects to the hardware controller via USB and interfaces to a dedicated supplemental background application called the ODM (Outdoor Display Manager). This application receives all the inputs from the OMC and can take proactive action to protect the display. This can include things as simple as activating the heater module based on the ambient temperature to switching off the LCD panel to prevent damage if the temperature inside the enclosure exceeds the max safe operating temperature. It is also able to take more complex multi-step actions such as the Active Anti-Vandalism Service Component. The third component of the system is the OMC Cloud Management Console. This system operates in a bi-directional mode with the ODM application (and by association the OMC Controllers on each display).



This system can provide aggregated health data on a sensor-by-sensor basis for all your displays in the system from a single interface. It can send e-mail alerts to Vail personnel if alert conditions are met. However, the system also can remotely control the displays via the ODM and OMC. It can turn off the LCD Panel to save power outside of operating hours. It can take screenshots or pictures with the camera. It can perform remote reboots, and much more.



The OMC Console is a Web Based application hosted in Message Point’s Server infrastructure. It aggregates an intuitive bird’s eye dashboard of information from all OMC enabled EX displays and provides alerting, remote monitoring, and remote management functionality across the entire deployed network of displays.

Active Anti-Vandalism

Many of the MessagePoint displays feature a unique Active Anti-Vandalism System (AAVS) which discourages vandalism. Integrated vibration and tilt sensors detect dangerous thresholds that indicate possible vandalism. This triggers a configurable Text to Speech auditory warning to the individual and then uses the integrated onboard cameras to upload an alert, complete with photos of the environment, to the OMC Cloud Management console. The system also includes an integrated camera for displaying real-time video to potential vandals to let them know the area is under surveillance without requiring any other external systems.

Lifecycle Management

MessagePoint will provide procurement and maintenance services for the duration of the contract lifecycle, including delivering design requirements to their network of contract manufacturers, providing integrated logistics support, and providing field service for routine and emergency maintenance. MessagePoint will retain all procurement documentation including invoices, shipping, and warranty information and provide to the city upon request.

Hardware Updates

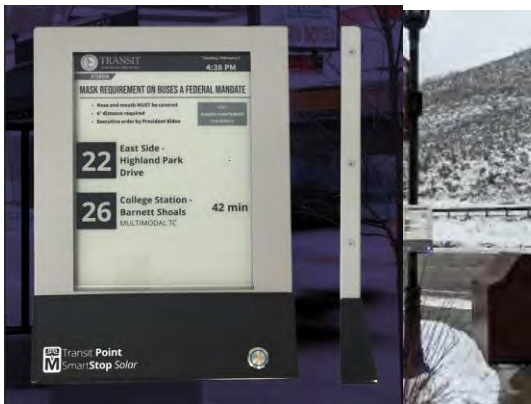
MessagePoint’s team frequently innovates new functionalities for their customers. Their service model and signage platform provide an avenue for all customers to share in the benefit of these solutions often without additional software or subscription purchases. This can be new services to leverage existing sensors and equipment or new styles and functions for existing applications. Because MessagePoint employs the design principles of mass customization and modularity in their hardware, the Town of Vail can quickly and affordably roll out new functionality even in use cases that may require new elements/sensors.

MPTV-EX37sw & EX28sw Superwide HD Intelligent Outdoor Signage Display

The EX37sw is a superwide 37" Extreme Outdoor Ruggedized Intelligent Display. This model provides a 2000NIT sunlight-readable display. The model is equipped with a powerful integrated MP.TV controller that provides a wealth of connectivity and content triggering options. Connectivity to the cloud is provided via High Sensitivity 802.11n Dual Band Wi-Fi or Gigabit Ethernet and can be equipped with an integrated multi-band LTE 4G module.



Its little brother, the EX28sw provides the same features and functionality in a smaller footprint and lower cost, making it a great option for budget conscious agencies or for environments that have architectural constraints.



MPTV-E13lp Low Power E-Ink Display

The MPTV-E13lp is built around a 13.3" Flag design E-ink screen with an extremely high resolution, 207 dot per inch pixel pitch, 2200x1650 resolution. The display also uses a plastic substrate versus a glass substrate which provides some level of flexibility, which helps improve the reliability and resistance to breakage. The display is then covered with a six-millimeter anti-reflective tempered safety glass cover for reliability.



MPTV-E43 Intelligent Outdoor Signage Displays

These vertically mounted 43" Intelligent Displays provide a 2000NIT sunlight-readable display. The model is equipped with a powerful integrated MP.TV controller that provides a wealth of connectivity and content triggering options. Connectivity to the cloud is provided via High Sensitivity 802.11n Dual Band Wi-Fi or Gigabit Ethernet and can be equipped with an integrated multi-band LTE 4G module.

MPTV-EX39swkv Dual 39inch Vertical Outdoor Interactive Kiosk

For more crowded platforms, MessagePoint recommends a different approach. The triangular shaped dual screen vertical kiosk provides a vertical form factor that can provide information for two separate bays simultaneously. In addition, this unit can substitute any combination of LED panels and LCD, including 4k, giving a wide range of options for the displays. This kiosk's dynamic triangle shape and height allows users to gain information from a distance, while its angle provides a 300-degree field of view. LCD screens can also be converted to touchscreen to allow interactive wayfinding for riders.





Wi-Fi

Passio offers Wi-Fi installation on any vehicle. Improve the passenger's journey by providing free high-speed Wi-Fi. Usage reports can be pulled from Passio Navigator at any time. Customer terms and conditions, permissions, access points, and time limits can be managed.



Wi-Fi

Main Features

Reporting

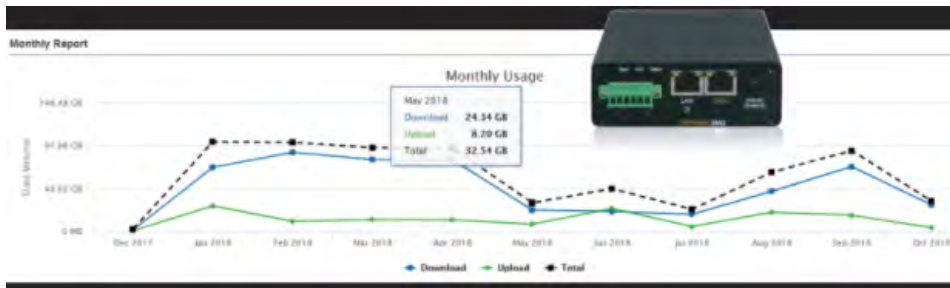
Wi-Fi usage is automatically reported to Passio Navigator and can be viewed in a chart format. Data usage can be viewed by the month, displaying download, and upload data.

Hardware

We use Pepwave devices to allow for Wi-Fi use on vehicles. The Pepwave contains built-in GPS tracking while linking to our cloud-based management system, Passio Navigator. Your agency or Passio can remotely manage the Wi-Fi system.



Passio's Mobile Wi-Fi solution is certified for rugged environments and transit deployments. Provide your passengers with reliable high-speed Wi-Fi using the 802.11ac wireless networking standard.



Passio OnBoard Wi-Fi Reporting

Passio's Wi-Fi solution is certified for rugged environments and transit deployments. Provide your passengers with reliable high-speed Wi-Fi using the 802.11ac wireless networking standard. The routers are managed and configured remotely by Passio's support team. Using the Customizable Captive Portal bandwidth allowance, terms & conditions and access duration per user can be set for all devices.



Highlights

- Cloud-based device management & monitoring
- VPN configuration for remote management and bandwidth monitoring
- Firmware management
- Enterprise-ready
- Configurable backups
- Comprehensive reporting interface
- Intelligent notifications

Security

- Stateful firewall
- DoS prevention
- Web blocking



The Pepwave MAX is equipped with a terminal block for secure power installation in vehicles and other locations. Built-in GPS fleet tracking and cloud-based management enable Passio to use the device for AVL redundancy and to manage the mobile network. Redundant SIMs can be used for additional data or multiple carriers if needed.

Passio's Mobile Public Wi-Fi solution incorporates reliability, full data controls and reporting, and remote hardware management.

- 1 – 60 Simultaneously Connected Users
- Router Throughput up to 65Mbps when using LTE
- 802.11ac standard
- 4.1 x 4.3 x 1.2 inches, weighs just .54 lbs
- 2 x SMA/Female Cellular Antenna Connectors
- 1 x SMA/Female GPS Antenna Connector (GPS antenna included)
- 1 x RP-SMA/Female Wi-Fi Connector
- DC Power 12V – 28V or Passive PoE Input, 12W Max Consumption
- Environmental Operating Parameters:
 - -40° - 149°F (-40° - 65°C), Humidity: 15 to 95% (non-condensing)
- Certifications: FCC, CE, RoHS EN 61000: Electromagnetic Compatibility





INSPECTOR

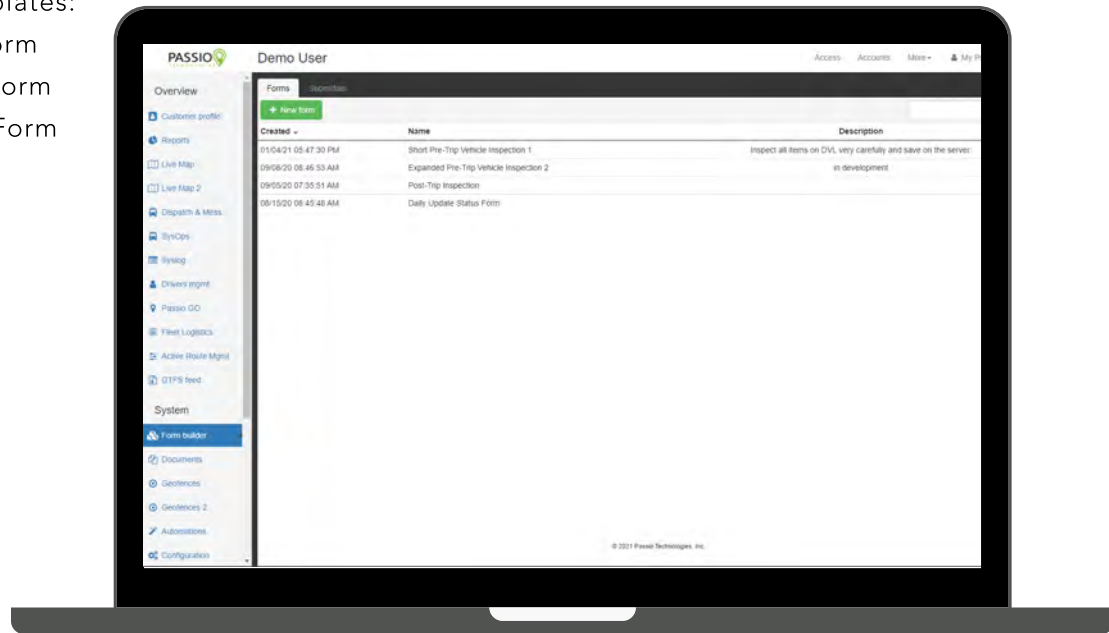
PASSIO INSPECTOR: MAINTAIN AIRTIGHT COMPLIANCE WITH E-DVIR (ELECTRONIC DRIVER VEHICLE INSPECTION REPORTING) AND THE PASSIO INSPECTION MANAGEMENT SYSTEM.



Passio Inspector is available within Passio Navigator:

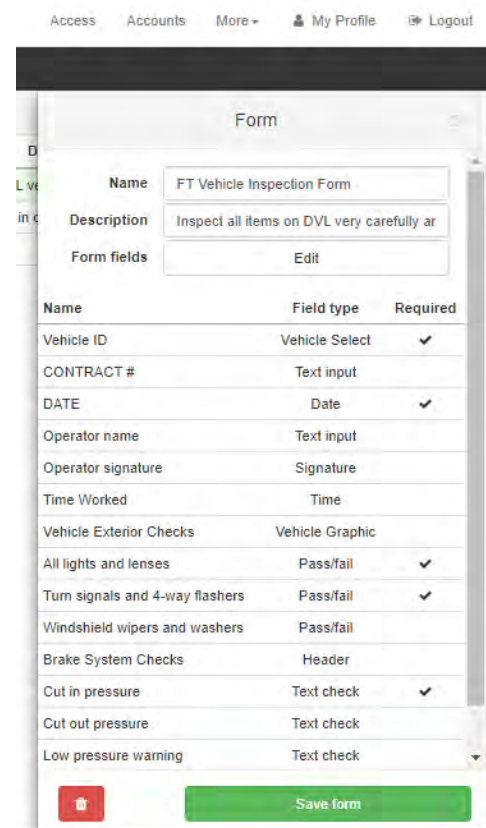
Tailored Forms & Checklists. Create custom inspection forms for use by your operators. Including any custom variations of the following Passio templates:

- Pre-Trip Inspection Form
- Post-Trip Inspection Form
- Hot Swap Inspection Form
- Mini Inspection Form



Managers can view submitted items, dates, and results of each inspection:

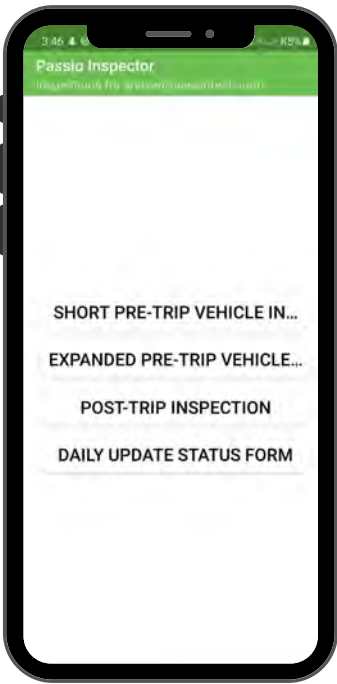
Customize your inspection forms to meet the exact needs of your operation. Designate the type of inspection item and which items are "required/mandatory" by the operator.



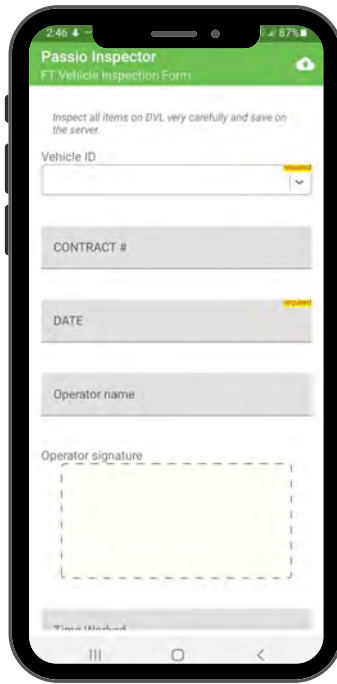
BASIC INSPECTOR WORK FLOW

- Operator performs inspection using Passio Inspector App
- Inspection Submitted for review
- Alerts & Reports Populated in Passio Navigator
- Inspection Detail Archived
- Maintenance performs repairs if required
- Vehicle Cleared Status Updated on next inspection

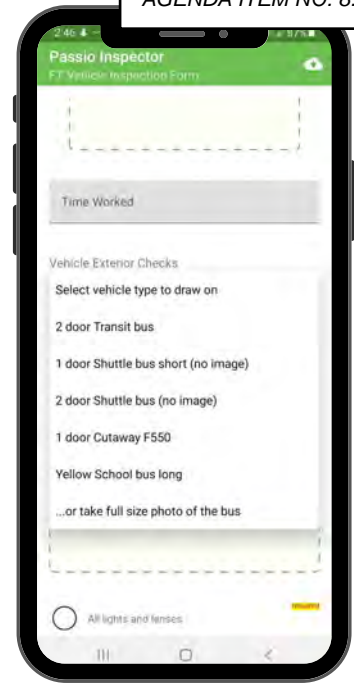
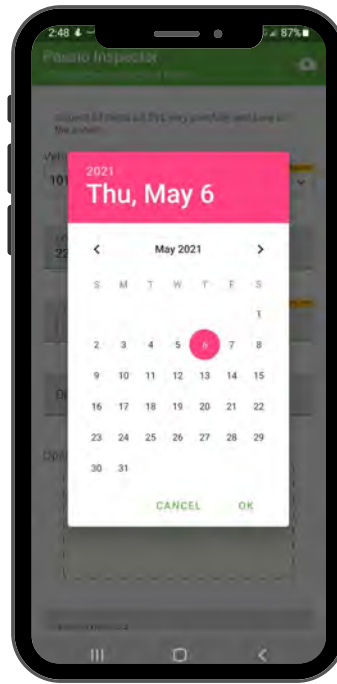




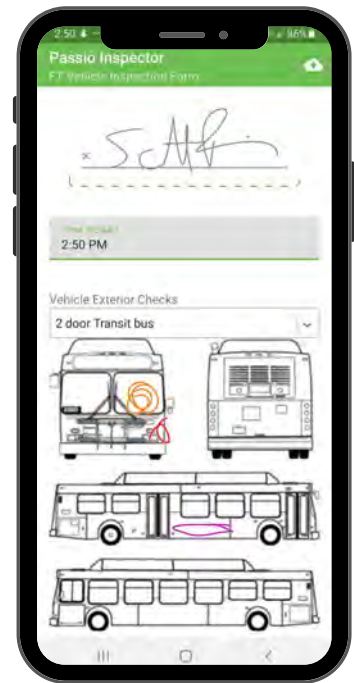
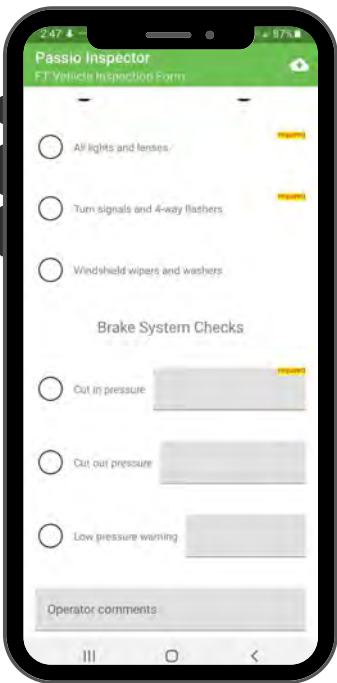
Operator selects inspection type to perform



Operator inputs initial requirements



Operator selects vehicle type to trigger additional requirements



Intuitive design for easy training and reliability
Tap and click indicators for each inspection item
Clearly communicate vehicle damage location using touch point graphics

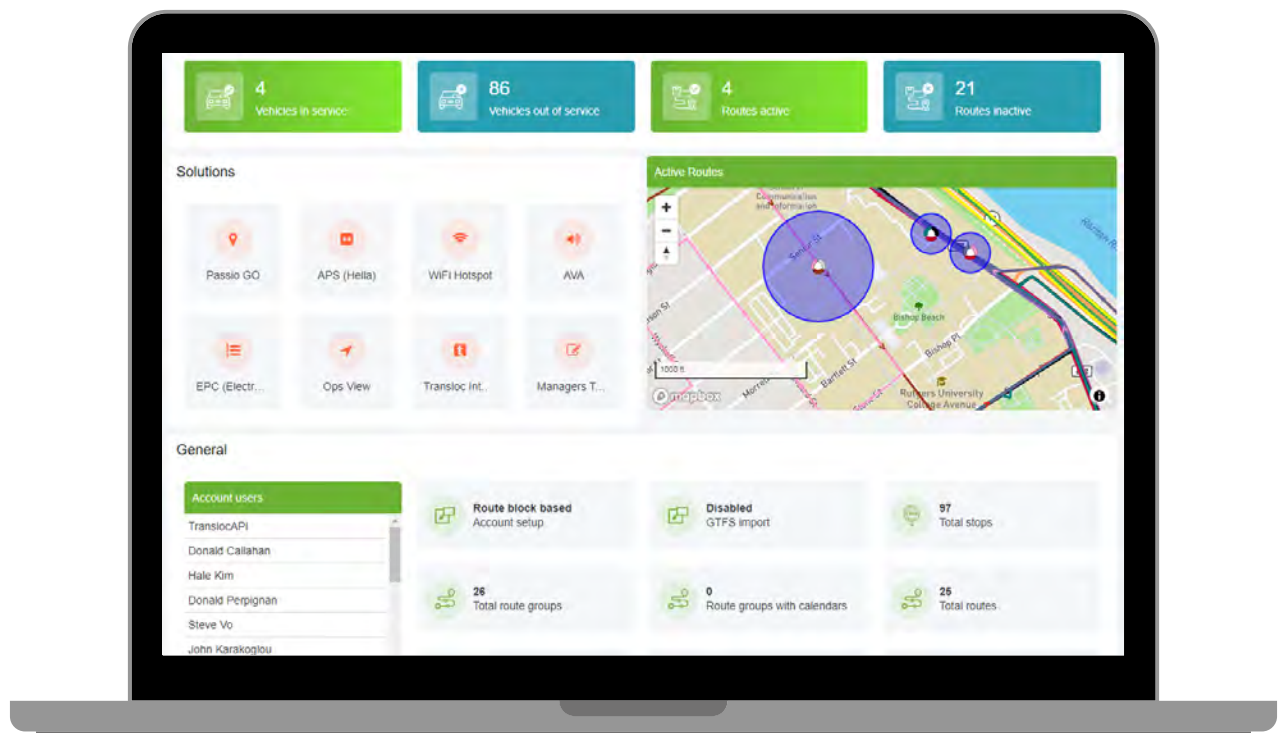


The Passio Inspector Reporting Dashboard within Passio Navigator.

Passio Inspector is an intuitive cloud-based solution to help you manage and track the inspection process end-to-end. Create custom inspection forms and manage reported defects electronically, helping you prove safety and compliance on the road.

Powerful Fleet Insight

Increase visibility into fleet operations. With inspection stats such as most failed inspection items and vehicles, you'll get a better picture of overall vehicle health and performance trends.



Real-time Dashboard within Passio Navigator



INTEGRATIONS

WE INTEGRATE WITH NUMEROUS HARDWARE DEVICES, APPS, AND EVEN OTHER SOFTWARE SYSTEMS TO MAKE BUSINESS EASY FOR OUR CLIENTS.



This section provides information concerning the available integration and customization services provided by Passio Technologies. Passio develops much of their technology in-house and uses their customers' needs and input to guide future innovation. We operate on a modular and open integrator model that allows us to seamlessly connect with other strong industry suppliers.

GENERAL INTEGRATIONS



FORESIGHT AUGMENTED REALITY

We integrate Passio GO, our passenger app, with FAR - wayfinding for the blind or visually impaired. FAR allows riders to have a full understanding of all of our app information, including routes, stops, ETAs, and more using Beacons (Advanced GPS devices)



GENERAL TRANSIT FEED SPECIFICATION (+ REAL-TIME)

GTFS and GTFS Real-Time (RT) are integrated with Passio systems. GTFS can be downloaded or uploaded in our system at any time to allow for full access to data and easy compliance



APPS

Passio integrates with Transit.app seamlessly, making it easier than ever to use our transit technology to communicate information to riders in multiple formats We also work with InsightSmartTRAXX, a rider communication system that also allows for real-time edits and options for an open API.



GOOGLE SINGLE SIGN ON

Passio integrates with Google SSO for easy seamless log-ins to all Passio solutions. Just another way we make managing your transit system even easier.



REI AUDIO AND CAMERA

We integrate with REI Audio and Camera systems for full monitoring on-board vehicles



LED SIGN INTEGRATIONS



TRANSIGN

These signs are able to be programmed to match Automatic Voice Announcements on board. No need to take signs down when a route or stop changes. LED signs are updated automatically in near real-time when information in Passio Navigator is updated.



LUMINATOR & TWINVISION

Passio integrates with a number of different LED sign hardware options. This option also allows for programing with AVA and updates over the air in real-time using Passio Navigator, instead of needing to do an update in person.



HANOVER

We integrate with multiple LED sign options to allow for an easy implementation of Passio's solutions. LED signs can be updated virtually which means no need to walk to a bus or plug everything in. This includes new routes or stops or AVA.

AUTOMATIC PASSENGER COUNTING INTEGRATIONS



HELLA

Passio uses multiple different Automatic Passenger Counting devices. All APC devices synch with our reporting dashboard Passio Navigator automatically with no need to upload or download information. APC counters also sync with onboard Mobile Data Terminals and our app.



IRIS

To make our systems and solutions easy to use, we integrate with Iris APC devices! All information can be updated over the air in real-time. New information is communicated to our MDT and other systems like app and LED signs.





TWILIO

We integrate with Twilio, a communication platform that allows for phone calls and text messages, as well as other communication options using the web.



ZONAR

Passio integrates with Zonar for easy to use GPS tracking systems.

OTHER INTEGRATIONS



AMAZON WEB SERVICE

All Paratransit & NEMT data is hosted using Amazon Web Service.



GITHUB

Passio integrates with Github, a software development platform to make any necessary edits while customizing solutions for our clients.

Major Medicaid brokers Passio is compatible with:

- LogistiCare
- Access2Care
- MTM
- National MedTrans (NMN)
- SoutheasTrans
- Veyo

Other trip brokerage services supported by Passio:

- SMS – Special Mobility Services
- Coordinated Transportation Solutions (CTS)
- MAS – Medical Answering Services
- Magellan Complete Care (MCC)
- MCCI
- PACE
- Provide-A-Ride
- Secure Transport
- TotalTransit
- Zoll
- QRyde
- Ride-Health

Passio is focused on creating the perfect combinations of solutions and technology for every transit system we work with. We integrate with other software providers to align with our mission of "Making Passengers Count". Please contact us to determine the exact software providers we are able to integrate with.

CUSTOMIZATION

We are adding to this list consistently by integrating, partnering, or building when the solution identified best meets our customer's needs. Passio is committed to keeping our programmable API fully documented for consumption and integration with any other system providing an API. Passio provides a real-time transit application programming interface (API), documentation, and JSON output for customers. The API includes real-time location data and the estimated time of arrival, as well as other system information such as passenger load. Passio API access is provided over HTTPS, and accessed from our secure site. Data is sent and received as JSON unless stated otherwise. Each Passio customer will own and have full access to system data throughout the life of each contract. In addition to data access via our API, Passio data is always available for export into common formats such as CSV (to XLSX) and PDF from Passio Navigator. If required by any agency, we could import Keyhole Markup Language (KML) data for any 3rd party GIS system. All customers are provided access to Passio's training documents, API documentation (JSON), FAQs, knowledge base articles, Powerpoint presentations, and training videos for their appropriate solutions. Passio uses electronic media and hosted webinars to provide documentation and training to our customers.

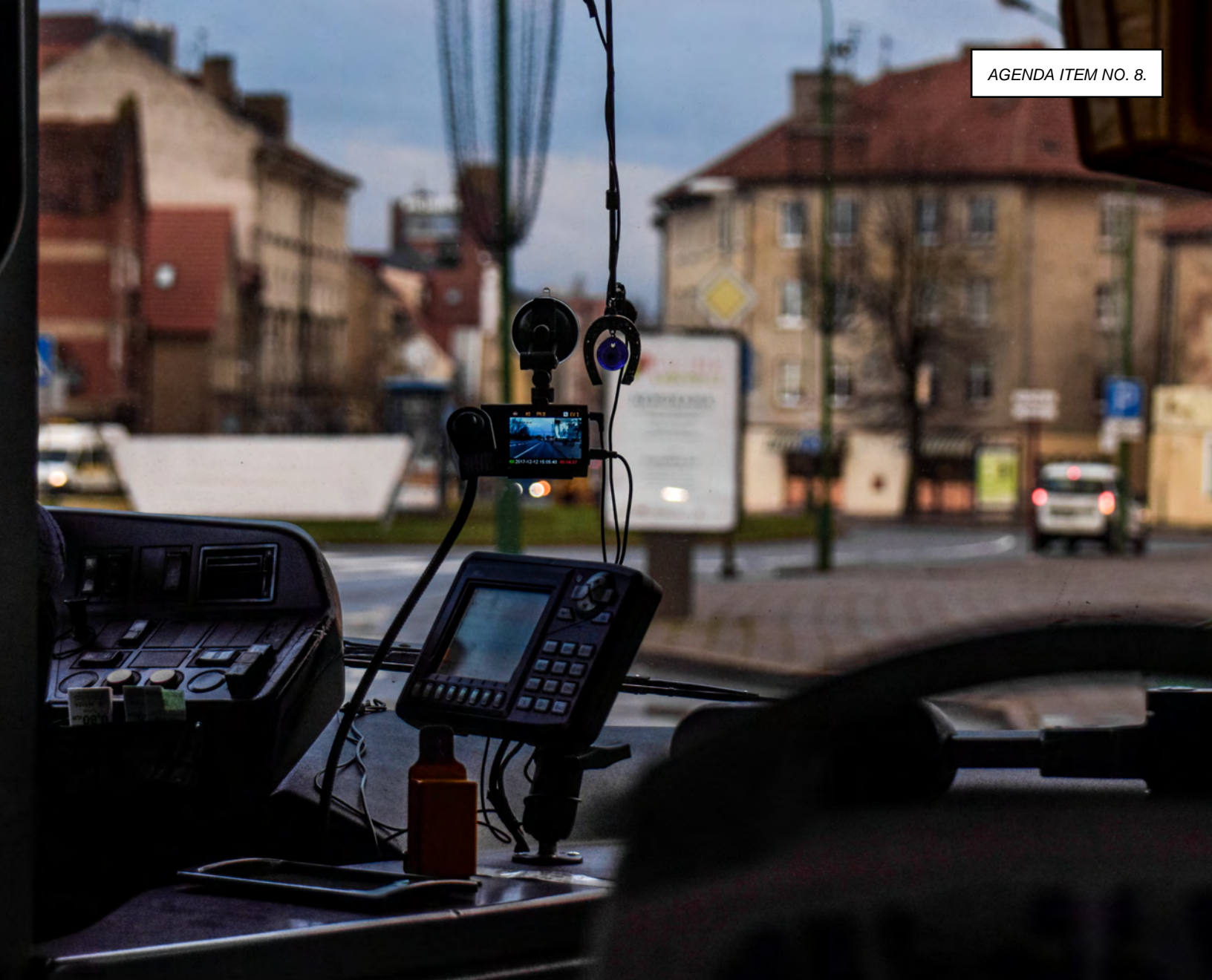
Our Passio GTFS Realtime is a feed specification that allows public transportation agencies to provide real-time updates about their fleet to application developers. It is an extension to GTFS (General Transit Feed Specification), an open data format for public transportation schedules and associated geographic information. GTFS Realtime was designed around ease of implementation, good GTFS interoperability, and a focus on passenger information. The Passio GTFS Realtime feed conforms to Version 2.0 of the GTFS-RT Specification.

Configuration and/or customization changes will not be affected by subsequent software releases. Passio's internal Quality Assurance protocols include comprehensive backend unit testing and interface user testing for all existing & new functions/features/customizations. Our skilled team of production and quality assurance professionals ensures all software releases meet and conform to these stringent requirements.

All software updates and customizations are immediately included in the existing software maintenance agreement.

Integration and/or customization services are charged by project and/or hourly. Estimated timeline and scope for such services will be outlined and agreed upon before notice to proceed on any customization services.





HARDWARE FOR ITS



Summary of all Passio equipment available for service implementation. The data collected using this proposed hardware is provided within our attached solution documents (when applicable). Listing of all hardware components available from Passio (or our partners) for ITS deployments:

- Mobile Data Terminals (MDT)
- Vehicle Logic Units (VLU)
- Automatic Passenger Counters (APC)
- Routers (Wi-Fi)
- LED Signs (Interior)
- Front Destination Signs (Exterior Facing)
- Side Destination Signs (Exterior Facing)
- Public Address Systems (PA)
- Video Surveillance Camera Systems
- Wheelchair Lift Deployment Sensors
- Bike Rack Deployment Sensors

We will provide complete tech specifications for each component if requested. The proposed hardware for this project is listed in our itemized Cost Proposal.



Transit MDT



Portable Transit MDT



Pepwave Router



Hella APS-B



CalAmp VLU



Technical Requirements

Our proposed software solutions are 100% web-based and optimized for Chrome and Firefox. Passio Navigator™ is accessible on any device supporting the listed browsers. Recommended Internet Speed should be five (5) Mbps or greater. The technical requirements for any selected options can also be made available prior to installation.

Passio Navigator Minimum Requirements (Workstation)

- Processor: Intel Core i3 or greater, AMD Ryzen 5 or greater, or Apple M1 Processor (CPU). 2.2 GHz or greater.
- OS Windows: Microsoft Windows 10 Home, Pro, Enterprise or Education version (x86 or x64)
- OS Apple: macOS 10.15.X "Catalina" or 11.X "Big Sur."
- Memory/RAM: 8 GB or higher.
- Video/Graphics: Integrated or Discrete graphics processor of 1440 X 900 resolution, or better.
- Monitor: 13" – 17" notebook display, 19" – 27" desktop widescreen flat-panel display.
- Network Adapter: 802.11ac 2.4/5 GHz wireless adapter.
- Internet Speed: 5 Mbps or greater
- Supported browsers: Chrome, Firefox, Microsoft Edge, & Safari

Passio GO Minimum Requirements (mobile)

- Operating System (OS): iOS 14.4 or newer, Android 5.0 or newer
- Hardware (iPhone): iPhone 7 or newer
- Hardware (Android): Any device running Android 5.0, or greater.
- Data Plan: 1 GB per month per device or greater
- Storage: 32GB or greater





SECURITY

SECURITY FROM THE PASSIO TEAM

We care about the security of your data within the Passio platform. We strive to make our data use durable, reliable, and secure.



Data Security

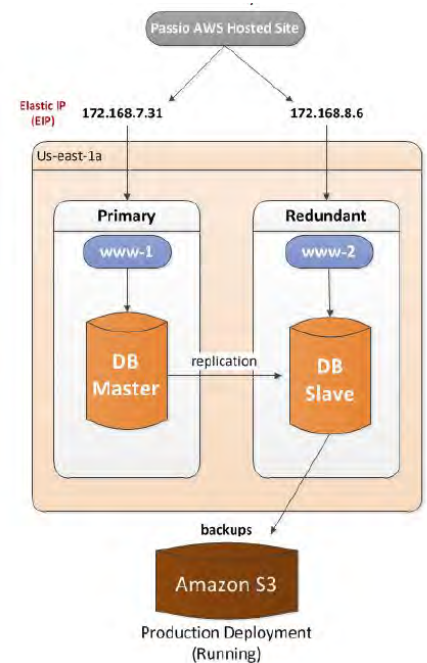
Passio Technologies offers a hosted solution on the Amazon AWS platform for our SaaS model and data storage needs. AWS provides redundancy of the business environment through shared, distributed hardware resources. We also maintain an active backup of the data and SaaS environment both locally and remotely.

Amazon S3

Amazon S3 (Simple Storage Service) provides a fully redundant data storage infrastructure for storing and retrieving any amount of data, at any time, from anywhere on the Web. Access to the customer accounts are user-specific with individual actions logged for transparency. Data transmitted is encrypted between the on-board devices and the server.

Data Durability and Reliability

Amazon S3 provides a highly durable storage infrastructure designed for mission-critical and primary data storage. Amazon S3 redundantly stores data in multiple facilities and on multiple devices within each facility. To increase durability, Amazon S3 synchronously stores your data across multiple facilities before confirming that the data has been successfully stored. In addition, Amazon S3 calculates checksums on all network traffic to detect corruption of data packets when storing or retrieving data. Unlike traditional systems, which can require laborious data verification and manual repair, Amazon S3 performs regular, systematic data integrity checks and is built to be automatically self-healing.



Amazon S3's standard storage is:

- Backed with the Amazon S3 Service Level Agreement for availability.
- Designed for 99.999999999% durability and 99.99% availability of objects over a given year. Designed to sustain the concurrent loss of data in two facilities.

Amazon Cloud

Watch Instant Status Monitoring With instance status monitoring, Passio can quickly determine whether Amazon EC2 has detected any problems that might prevent your instances from running applications. Amazon EC2 performs automated checks on every running EC2 instance to identify hardware and software issues.

- Status Check Every 2 Minutes
- CPU Utilization – Alert if utilization exceeds threshold for more than 15 min
- Disk Volume QueueLength (the number of read and write operation requests waiting to be completed) ≥ 5 for 5 minutes – Alert.



Results of status checks to identify specific and detectable problems are viewable within the dashboard. This data augments the information that Amazon EC2 already provides about the intended state of each instance (such as pending, running, stopping) as well as the utilization metrics that Amazon CloudWatch monitors (CPU utilization, network traffic, and disk activity).

Status checks are performed every minute and each returns a pass or a fail status. If all checks pass, the overall status of the instance is OK. If one or more checks fail, the overall status is impaired. Status checks are built into Amazon EC2, so they cannot be disabled or deleted.

Disaster Recovery Backup & Restore

Passio Technologies' cloud-computing platform is hosted on top of Amazon's AWS EC2 Service.

In order to protect our customer's data against disaster, we have implemented the following plan. Our primary servers' data is replicated across to redundant storage in the same Availability Zone. Backup snapshots are done every 10 minutes and stored in Amazon S3.

Amazon EBS Snapshots are used to save point-in-time snapshots of Passio volumes to Amazon S3. Snapshots provide immediate access to Amazon EBS volumes. Passio utilizes High-Performance Volumes to ensure performance standards are met for the most demanding applications. Amazon EBS volume data is replicated across multiple servers in an Availability Zone to prevent the loss of data from the failure of any single component.

Amazon EBS volumes are designed for an annual failure rate (AFR) of between 0.1% - 0.2%, where failure refers to a complete or partial loss of the volume, depending on the size and performance of the volume. This makes EBS volumes 20 times more reliable than typical commodity disk drives.

AWS will use commercially reasonable efforts to make Amazon EC2 and Amazon EBS each available with a Monthly Uptime Percentage (defined below) of at least 99.95%, in each case during any monthly billing cycle (the "Service Commitment").

Passio utilizes Amazon Elastic Block Store (Amazon EBS) to provide persistent block storage volumes for use with Amazon EC2 instances in the AWS Cloud. Each Amazon EBS volume is automatically replicated within its Availability Zone to protect from component failure to provide high availability and durability. Amazon EBS volumes provide consistent and low-latency performance needed to run large workloads that can scale usage up within minutes.



Data Retention Storage and Retrieval Standards

All data is available 24/7/365 via the web portal accessible via assigned username and password.

GPS/AVL Tracking Data

- Individual GPS Activity Reporting Level stored for 90 (ninety) days. This data provides 'breadcrumb' or detailed historical reporting
- GPS Activity Detail Data stored in the dynamic reporting system for a minimum of 3 (three) years. This data provides GPS based reporting by route and stop, to include on time reports, headways reports, dwell time reports, etc. It also includes GPS based alert reports such as out of boundary, speeding, idling, movement, etc.
- All archived data is available for customers to electronically download at any time prior to removal from the dynamic reporting system.

Passenger Count Data (if applicable)

Record level detail is always stored for a minimum of 36 (thirty-six) months. This archive provides count information at the base level which allows for time and individual bus and driver reporting at the stop level. After 36 (thirty-six) months this data will be summarized at the route, day, and passenger type level. Data will be available in the dynamic reporting system for a minimum of 5 (five) years. All data archived after 5 (five) years will be made available electronically prior to removal from the dynamic reporting system.

Access Levels

Passio Navigator™ controls access to system features for each individual user and user group with multi-layered security features. We use a permission-based user management system that can assign Read, Write, none permissions per user based on their role. Example roles include Dispatcher, Manager, Supervisor, and Admin but we can be very granular with page level access. The AWS infrastructure puts strong safeguards in place to help protect customer privacy. New users are easily added with permission-based security along with bank-grade encryption, SSL-256, which restricts access to authorized personnel as well as secures the data while in transit. Passio also uses UTF-8 encoding everywhere, so we can store and display in any language. We currently support non-English data where all text fields can use non-English characters, such as bus names, route names, etc.

Passio OpenAPI

The Passio OpenAPI utilizes a single secure gateway to authenticate our users. The Passio OpenAPI is consists of 2 types: 1) REST-based, using JSON as the data-interchange format, All API requests require the Authorization Token (auto-expiring), API access is over SSL, and are accessed from <https://passio3.com>, and 2) Real-time location WebSocket (WS) API allows users to listen to Passio real-time location broadcast (instead of querying the Passio database). Data is sent and received as JSON. The API endpoint is <https://passio3.com>. In the Location chapter of this document, you can find a sample Node-Js code of how to connect to our WS API. Passio API endpoints follow modern best-practices security procedures.



HIPAA Security Rule

Passio is dedicated to the protection of your data AND your sensitive patient information. ParaPlan Software by Passio Technologies complies with the Administrative, Physical, and Technical safeguards of the HIPAA Security Rule, which outlines specific regulations that must be applied in order to prevent breaches in the process of the creation, sharing, storage, and disposal of ePHI. All ParaPlan data is encrypted to NIST standards at rest and in transit. Our software also complies with all major components of the HITECH/HIPAA Omnibus Rule of 2013. We are also compliant with the Family Educational Rights and Privacy Act (FERPA) that protects the privacy of student education records. Passio is dedicated to the protection of your data and your sensitive rider information.

- We use Microsoft SQL Server with a non-standard port
- For our API, we use SSL and auto-expiring authentication tokens
- We utilize a single secure gateway to authenticate our users
- We support TLS 1.2 on our web apps and web APIs
- We redirect http calls to https on our web apps and web APIs
- We force SSL connections on traffic to SQL Server
- We force SSL connections on logins to SQL Server
- We encrypt all data in transit (via forcing SSL-256) and at rest (in the database)
- We provide HIPAA level auditing, creating 22 audit action groups to track user access
- Our web security is also managed by Amazon Web Services. All data flowing across the AWS global network that interconnects AWS datacenters and regions is automatically encrypted at the physical layer before it leaves AWS secured facilities.



We ensure your data will not be used for any purpose other than use with Passio Technologies. Passio will destroy any sensitive data once it is no longer needed, nor disclose any information to others without the prior written consent of the user, as stated in our Terms of Service. We follow the “AWS Best Practices” to ensure compliance with the HIPAA Security Rule (national standards for the security of electronic protected health information) and the confidentiality provisions of the Patient Safety Rule (which protects identifiable information being used to analyze patient safety events and safety). We perform nightly backups of all databases using Amazon S3. We have the ability to move between servers to prevent downtime in the case of server failures. Furthermore, we do not use OpenSSL, making our servers and related infrastructure immune to related vulnerabilities.

How is sensitive client data protected from breach?

We use Microsoft SQL Server with a non-standard port. For our API, we use SSL and auto-expiring authentication tokens. With the introduction of our Cloud and iOS products, we needed a single secure gateway to authenticate users, so we moved to an email-based username system. When it (a hashed username & password combination) authenticates, we hand back a single session token and a key. This 'secure token' is a GUID that is active only for that user's session and can be revoked server-side. When the user makes data requests, we use that token and key to determine the local database that user's requests will be run against. ParaPlan limits access via scalable processes administered by web-based tools.

Furthermore, our REST server looks up the database credentials and constructs the data request to the SQL server, then returns the results in encrypted JSON format. Our data requests are made over HTTPS so we do not have to make special firewall rules. Since the request is submitted securely over SSL (the same standard used by financial websites), we know the connection between the client and server is safe.

Passio shall promptly (or in any case within 48 hours) notify customers if we have reason to believe there has been any misuse, compromise, loss, or unauthorized disclosure or acquisition of, or access to, Confidential Data ("Information Security Breach"). Upon any discovery of an Information Security Breach, Passio will investigate, remediate, and mitigate the effects of the Information Security Breach, and provide customers with assurances reasonably satisfactory to customers that such Information Security Breach will not recur.





IMPLEMENTATION PLAN

Implementation Plan

Passio's overall project approach engages in a policy of consistent feedback and continual updates on progress. At each major milestone of the project timetable, we will schedule a confirming conference call, review any open items, and develop a strategic plan to address and correct issues. Our customers will have the opportunity to review those corrections and confirm that they are complete. Client satisfaction is met by the combination of focusing on the planned implementation schedule and constant and open communication. Passio's Implementation Plan consists of the following 5 components:



Initiating

Determine all key stakeholders, contact information, and roles. Define communications process. Gather location data for installation and identify vehicle availability

Planning

Create schedule updates and milestone confirmations process. Define critical dates and identify potential barriers to success. Gather and confirm configuration data from customer

Executing

Determine initial installation schedule and pre-install fleet evaluation, schedule installers. Order equipment and document expected delivery timeline. Software setup and initial program testing

Monitoring & Controlling

Test software deployment with customer configuration. Track, review, and regulate the progress and performance of the project; identify any areas in which changes to the plan are required; and initiate the corresponding changes. Conduct field testing, make adjustments from feedback, confirm updates

Closing

Conduct final testing with customer representatives. Confirm installation documentation and update Conduct training and review of operational items



Agency Requirements and Tasks

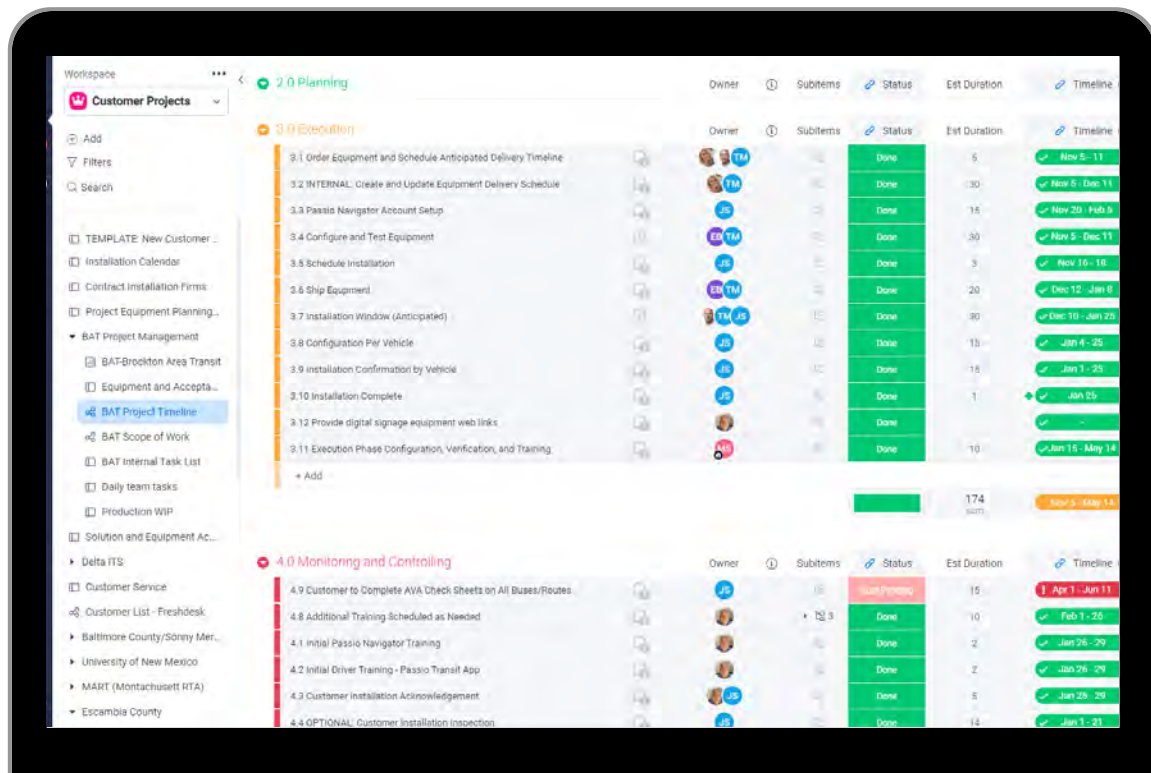
- Coordination of vehicle availability and interaction with the installation team.
- Coordination of training schedule and identifying key staff members requiring access to the system.
- Identifying a minimum of two contacts who are trained to be system coordinators. These individuals will coordinate troubleshooting efforts and implement support items when remote support is initiated.
- Providing feedback and suggestions to enhance the utilization of the system.

Passio Promise

- Our Passio ITS solution provides a state-of-the-art approach that sets us apart from our competitors. The value of our platform continues well after the date of deployment and is easily expandable by taking future demands into consideration.
- All software and version updates, including new standard features and capabilities, are made available to our customers at no additional cost.
- We provide free marketing materials including designs for cut-out cards, posters, banners, and social media posts to help promote your new system to your riders.
- Passio's platform is completely modular and is capable of working with a variety of hardware.
- Passio provides an integrated, web-based user guide for training and system use.
- By choosing Passio as your transit technology provider, you will receive 24/7/365 access to all of your data, superior customer service, and the most innovative cloud-based technology on the market.



COLLABORATIVE (SHARED) CLIENT PROJECT MANAGEMENT EXAMPLE:



Your dedicated Passio Project Manager will keep you updated on each step of planning, installation, implementation, and training using our collaborative online project management website. Each Passio customer will have a dedicated project board where they can see progress, make comments, and participate in the plan with our project team





PROJECT SCHEDULE



Typical implementation schedule for a new Passio agency: Our anticipated Implementation Timeline is approximately 12-18 weeks from Agreement/PO to testing and deployment. Timelines will be adjusted based on customer requests, vehicle availability, equipment delivery, and setup requirements. Installations will be completed as soon as possible. Detailed project tasks are outlined below.

1.0 Initiation (Prep - Week 1)
1.01 Notice Of Intent To Award
1.02 Project Setup And Review
1.03 Review Contract Documents
1.04 Update Acceptance & Warranty Documentation
1.05 Execute Contract
1.06 Notice To Proceed And Po Issued
1.07 Schedule Kickoff Call
2.0 Planning (Week 1 - Week 5)
2.01 Kickoff Call
2.02 Coordinate Equipment Lead Time And Notify Suppliers
2.03 Passio To Send Customer Configuration Forms And Instructions
2.04 Update & Customize Project Schedule
2.05 Customer To Provide Account Setup And Solution Information
2.06 Vehicle & Solution Specific Installation Discussions
2.08 Send Equipment List And Specifications To Customer
2.09 Passio To Send Wiring Diagrams To Customer
2.10 Customer To Send Installation Instructions To Passio
2.11 Develop Installation Plan
2.12 Configuration Corrections Provided By Customer



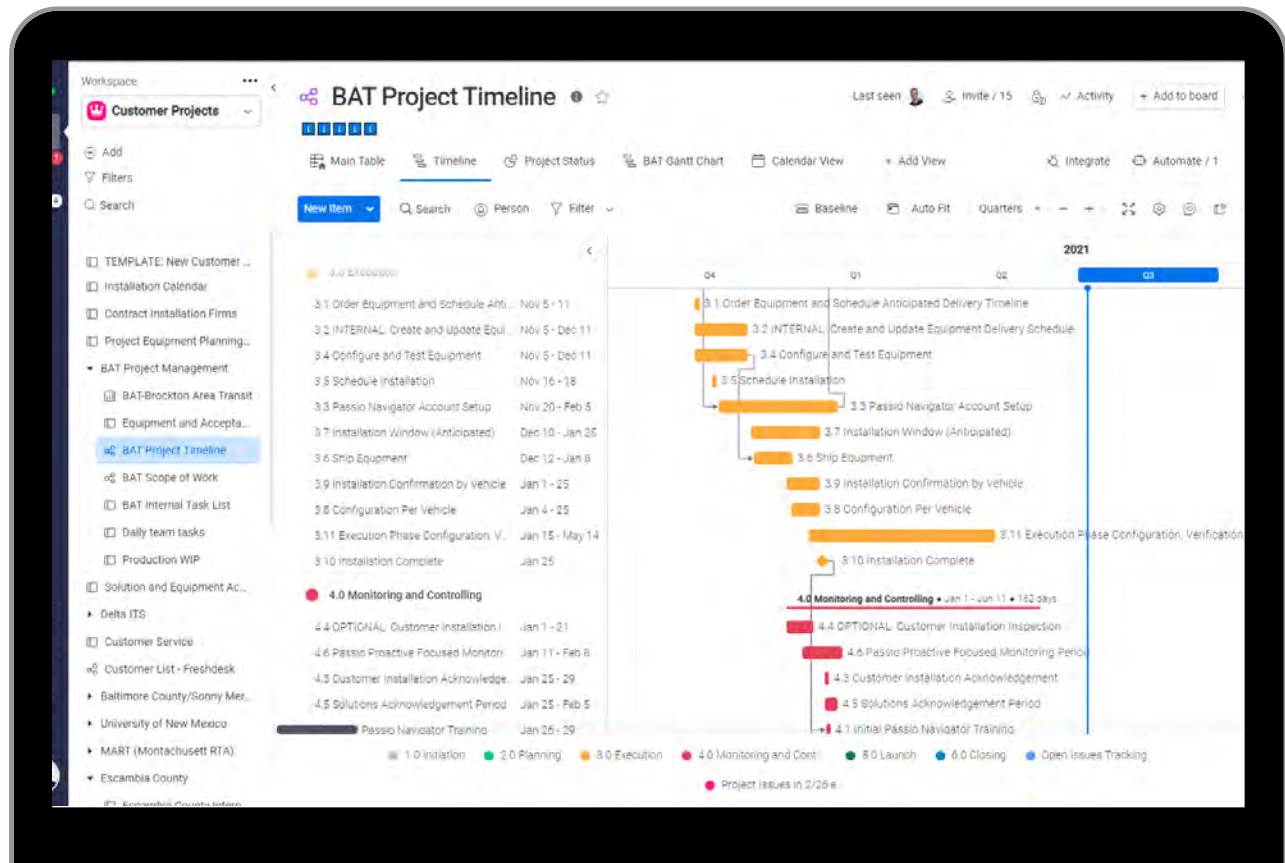
3.0 Execution (Week 2 - Week 12)
3.01 Order Equipment And Schedule Anticipated Delivery Timeline
3.03 Passio Navigator Account Setup
3.04 Configure And Test Equipment
3.05 Schedule Installation
3.06 Ship Equipment
3.07 Installation Window (Anticipated)
3.08 Configuration Per Vehicle
3.09 Installation Confirmation By Vehicle
3.10 Installation Complete
3.11 Execution Phase Configuration, Verification, And Training
4.0 Monitoring And Controlling (Week 11 - Week 15)
4.01 Initial Passio Navigator Training
4.02 Initial Driver Training - Passio Transit App
4.03 Customer Installation Acknowledgement
4.04 Customer Installation Inspection
4.05 Solutions Acknowledgement Period
4.06 Passio Proactive Focused Monitoring Period
4.07 Marketing, Communications And Social Media Information Shared
4.08 Additional Training Scheduled As Needed
4.09 Customer To Complete AVA Check Sheets On All Buses/Routes
4.10 Test APC Count Accuracy (If Required)
5.0 Launch (Week 15 - Week 17)
5.01 Pre Launch Full Deployment
5.02 Official Go Live Date
5.03 Two Day Deep Monitor
5.04 Reports Review
6.0 Closing (Week 18 - Week 22)
6.01 Customer Configuration Training - Customer Request
6.02 Customer Success Team Interaction - Post Launch

These project tasks will be implemented by a Senior Project Manager, Systems Engineer, Customer Success Supervisor, Account Manager, and a Passio Installation Technician.

PASSIO TECHNOLOGIES USER ACCEPTANCE TESTING. PASSIO WILL ALSO FOLLOW OUR USER ACCEPTANCE TESTING PROTOCOL. INITIAL EQUIPMENT AND DEPLOYMENT TESTS FOR POWER, CONNECTIVITY, AND REPORTING CONNECTION. ONCE THE SYSTEM IS OPERATIONAL, PASSIO WILL ACTIVELY MONITOR ALL REPORTING ACTIVITY FOR A 60-90 DAY WINDOW AND IMPLEMENT ACCURACY TESTING AND CONFIGURATION ADJUSTMENTS DURING THAT PERIOD AS REQUIRED.



COLLABORATIVE (SHARED) CLIENT PROJECT MANAGEMENT EXAMPLE:



Your dedicated Passio Project Manager will keep you updated on each step of planning, installation, implementation, and training using our collaborative online project management website. Each Passio customer will have a dedicated project board where they can see progress, make comments, and participate in the plan with our project team





ITS TRAINING

The following training is included for all customers with purchased products and services.

The following training is included for all customers with purchased products and services. Note that some of these modules will not be required based on solutions selected by the agency.

- Remote training delivered remotely via webinar conference software is unlimited and provided at no additional charge.
- On-site training is available at additional cost plus travel expenses.
- Custom or non-standard remote training may incur additional hourly fees.

All customers are provided access to Passio's training documents, FAQs, knowledge base articles, Powerpoint presentations, and training videos for their appropriate solutions. Passio uses electronic media and hosted webinars to provide documentation and training to our customers.

Training Modules

T-101 Operator Training (45-90 Minutes per Session)

- Driver/Operator
 - Mobile Data Terminal Operation
 - Operator Sign-On Procedures
 - Route Status – In/Out of Service
 - Driver Status – Check In/Check Out
 - System Explanation – general overview of system operations and important actions
 - Safety Overview – reinforce interaction with MDT only when it can be done safely
 - Passenger Counting Procedures (training tailored to specific system requirements)
- Electronic Passenger Counting
- Automatic Passenger Counting
- Gateway™ Card Tap & Swipe (if required)
 - Advanced MDT Features (training tailored to specific system requirements)
- Passenger Types
- Group Counts
- Passenger Load Management
- Operator Initiated Voice/LED Announcements
- On Time Indicators/Schedule Management Tools
 - Incident Reporting and Messaging (training tailored to specific system requirements)Record an Incident
- Send an incident
- Retrieve Messages
- Respond to Messages
 - System Monitoring (training tailored to specific system requirements)
- GPS, WEB
- APC
- LED SIGNS



- Messaging Module Only (Automated Voice Announcements and GPS Enable LED Signs)
- MDT Operation in Controller Mode
- Changing Stops without Triggering Announcements
- Operator Initiated Announcements
 - Troubleshooting
- Confirm passenger count uploads, GPS activity, and connected peripherals
- Resetting Mobile Data Terminal
 - On Site Training (Provided in addition to the above components)
- Observation and correction of operators using each section in training mode
- Review of training components on board vehicle

T102 Supervisor Training (1.5-2 Hours)

- T-101 Operator Training
- Performing Software Updates
- Procedures for Updating Configuration Settings on Mobile Data Terminal
- Backup Procedures for Data Upload
- Troubleshooting and System Management Indicators
- Managing feedback from Operators
- Communication Processes to Passio for Reporting Support Items
- Passio Navigator™ Integrated Functions (If Required)

T102 Supervisor Training (1.5-2 Hours)

- T-101 Operator Training
- Review and Testing Techniques for Operator Training

T202 Dispatcher Training (1.5 Hours)

- Passio Navigator™ Reports Module
- Dynamic Ridership Reports to review activity in real time
- Boundary & Speed Reports – vehicle activity reporting
 - On Time Reports – schedule performance reports
 - Passio Navigator™ Live Map – live vehicle activity
 - Passio Navigator™ Dispatch & Messaging – originate messages and track responses
 - Passio Navigator™ Incident Log – incident activity types, reasons, and reporting options
 - Passio Navigator™ System Alerts – set and update alerts
 - Passio Navigator™ System Configuration
- Add drivers
- Update LED and AVA Messaging Assign/Unassign Vehicles to Routes



T201 System Administrator & Reporting Training (1.5-2 Hours)

Appropriate for supervisors, managers, and staff support. A follow up refresher course is recommended 30-60 days after the system is in operation. Passio provides additional training for major software upgrade releases or system operations changes.

- Passenger Counting Reports
- Dynamic Ridership Reports - creation and downloading of raw data for internal analysis
- Dashboard Reports – create, save, and share tailored reports
 - National Transit Database Reporting
 - GPS/AVL: Operational Reporting
- Boundary and Speed Reports
- On Time Reports
 - GPS/AVL Live Map
- View/Show Stops, Routes, and System Information
- Using Replay Mode
 - Dispatch & Messaging
 - Incident Log Management and Downloading
 - Driver Timesheet Module
 - Alerts Configuration Profile Management
- Adding and Editing Routes, Stops, Drivers, Vehicles
 - Automated Voice Announcements (AVA) Configuration & Management
 - LED Sign SmartSense™ Display Configuration & Management
 - Passio Gateway™ Card Management and Demographics Reporting
 - TransLoc AVL Training (Additional 60 Minutes if Required)
- Documentation and support available for end users (user guide)
- Passio Navigator™ Integrated Functions for TransLoc (if required)

T501 Hardware Maintenance and Installation Training (2 Hours)

- Passio support process
- Wiring and installation overview
- Hardware testing and management
- Cleaning and general maintenance procedures
- Alignment and calibration procedures
- Accessing on board data

Passio Advice & Recommendations

The Passio executive project team has over 125 years of combined experience implementing transportation solutions by partnering with over 250 agencies. Our extensive experience with multiple modes of transit operations and varying methods of service, allows us to serve as subject matter experts if desired. We can help formulate best practices, targeted operational plans, and processes to improve operations. Successful reporting and management focuses on evaluating trends that can be analyzed using Passio software.



Passio Training Staff



For over 20 years, Michael has worked in the transit industry managing new projects and clients. His specialty is client communications and training. Michael is a member of the Project Management Institute, has a B.A. from the State University of New York and graduated from the Executive Leadership Program at Seattle University.

MICHAEL CIVITELLI
PROJECT MANAGER

michael@passiotech.com
(678) 825-3456 x124



Keven started as an Account Manager at Passio in 2012, and now currently serves as Customer Experience Manager. He has worked with staff at over 100 transit agencies using Passio solutions. Prior to working at Passio, he was the Area Development Manager for Concentra Healthcare. Keven majored in Public Relations with a Minor in Business from the University of Florida.

KEVEN IZEN
ACCOUNT MANAGER

keven@passiotech.com
(678) 825-3456 ext. 108



Wayne has been installing for Passio Technologies since 2019. He has been in working with GPS device installation and providing hands-on technical support since 2005.

WAYNE MANIS
HARDWARE MAINTENANCE AND
INSTALLATION TRAINING

wayne@passiotech.com
(678) 825-3456



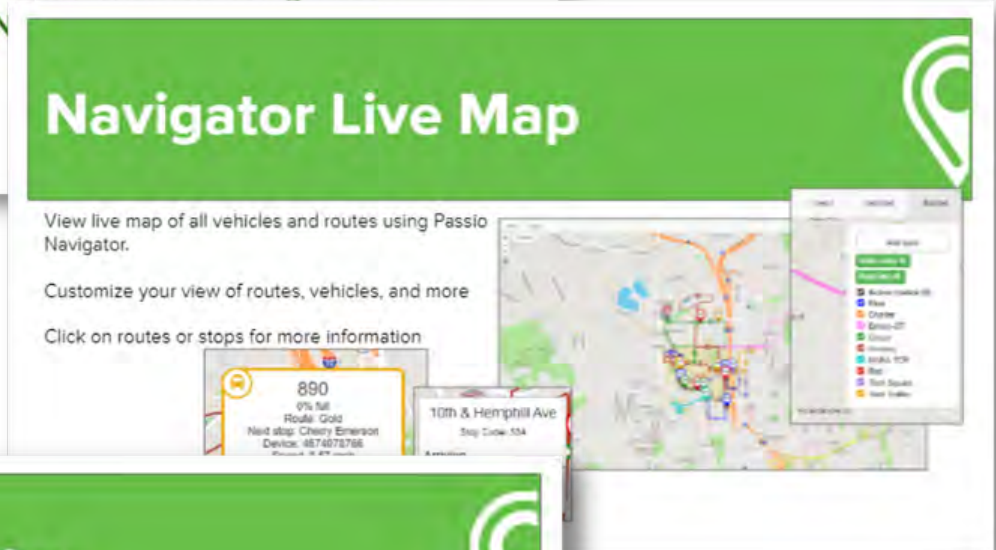
Training Material Examples



PASSIO TECHNOLOGIES

Passio GO General Training

Learn how to update Passio GO information using Passio

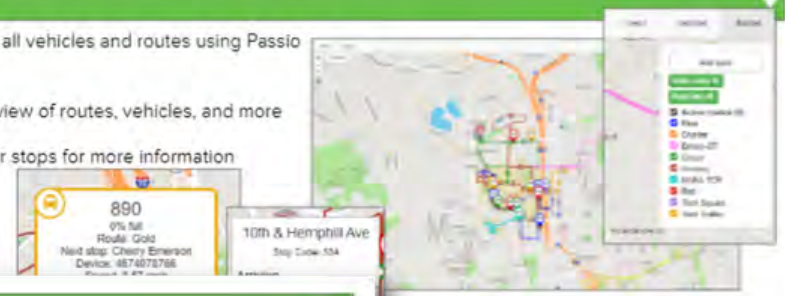


Navigator Live Map

View live map of all vehicles and routes using Passio Navigator.

Customize your view of routes, vehicles, and more

Click on routes or stops for more information




Passio GO Basics

The Passio GO app is available on the AppStore and the Google play store for free to all riders.

The app offers vehicle tracking, real time information, route & stop details, messaging, and more.

The agency page is branded specifically to our client.



Available on the **App Store**

GET IT ON **Google Play**



Passio GO Messages

New messages show a "new" red box

Messages will always be on the right bottom of the screen






PASSIO TECHNOLOGIES

Navigator Reports

Understanding how to filter and download specific ridership reports within Passio Navigator

Route Configuration

Control Automated Voice Announcements and LED signs

Schedules and Route Distance

View Routes and Stop Locations

Dashboard Reports



Ridership Reports - BAT

Select 'boardings' or 'alightings' (dis-boardings) to change data view

Select filter options for all data identified by these categories

Change graph view (line chart, heat map, etc)

Select 'show advanced charts' for more options

Select time range to view data from the desired time period



The MDT Basics

The MDT allows information to be entered easily while simultaneously reporting all data back to Passio Navigator, our cloud based reporting system accessed by your supervisor.

Below shows the MDT device and what it controls.

This item will be installed on all vehicles and is the heart of the Passio system.

The MDT controls:

- Going in and out of service
- Driver and Route Assignment
- Passenger Counting
- Automated Voice Announcements
- LED sign information
- Messaging

Note: your agency may not have each of these features



PASSIO TECHNOLOGIES



Driver Training

Full driver training to prepare drivers completely before they begin using Passio systems.

If you have questions, please contact Passio Technologies Customer service

MDT Basics

Vehicle Start

1. The MDT will automatically turn on with the ignition
2. Select Driver Name
3. Select Route
4. Select Route Block (if there is one)



In Service

1. Tap **GREEN START SERVICE BUTTON** when you arrive at the first stop



Out of Service

1. Tap the **BIG GREEN BUS** (bottom corner)
2. Tap **RED STOP SERVICE BUTTON**
3. No counts will happen and bus disappears from GPS until back in service

Note: You may see a list of options when going out of service, please select the appropriate option. Contact your supervisor for additional details.



Change Driver

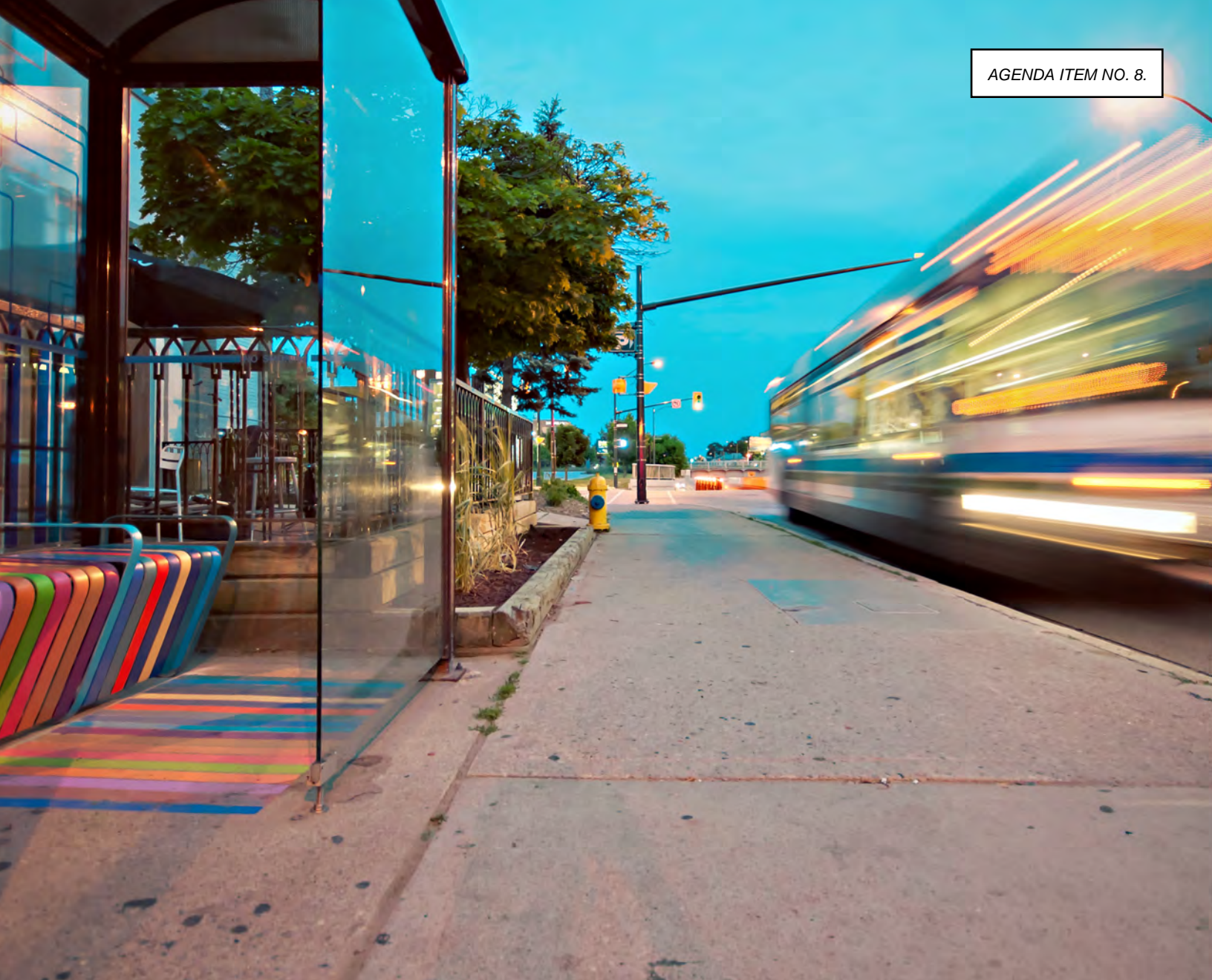
1. Tap the **BIG GREEN BUS** (bottom corner)
2. Select **DRIVER CHECK OUT**
3. Select new driver when ready



Change Route

1. Tap the **BIG GREEN BUS** (bottom corner)
2. Select **CHANGE ROUTE**
3. Select new route (and route block if there is one)





AGENCY INVOLVEMENT



Agency Requirements and Tasks

- Coordination of vehicle availability and interaction with the installation team.
- Coordination of training schedule and identifying key staff members requiring access to the system.
- Identifying a minimum of two contacts who are trained to be system coordinators. These individuals will coordinate troubleshooting efforts and implement support items when remote support is initiated.
- Providing feedback and suggestions to enhance the utilization of the system.



Initiating
Determine all key stakeholders, contact information, and roles. Define communications process. Gather location data for installation and identify vehicle availability

Planning
Create schedule updates and milestone confirmations process. Define critical dates and identify potential barriers to success. Gather and confirm configuration data from customer

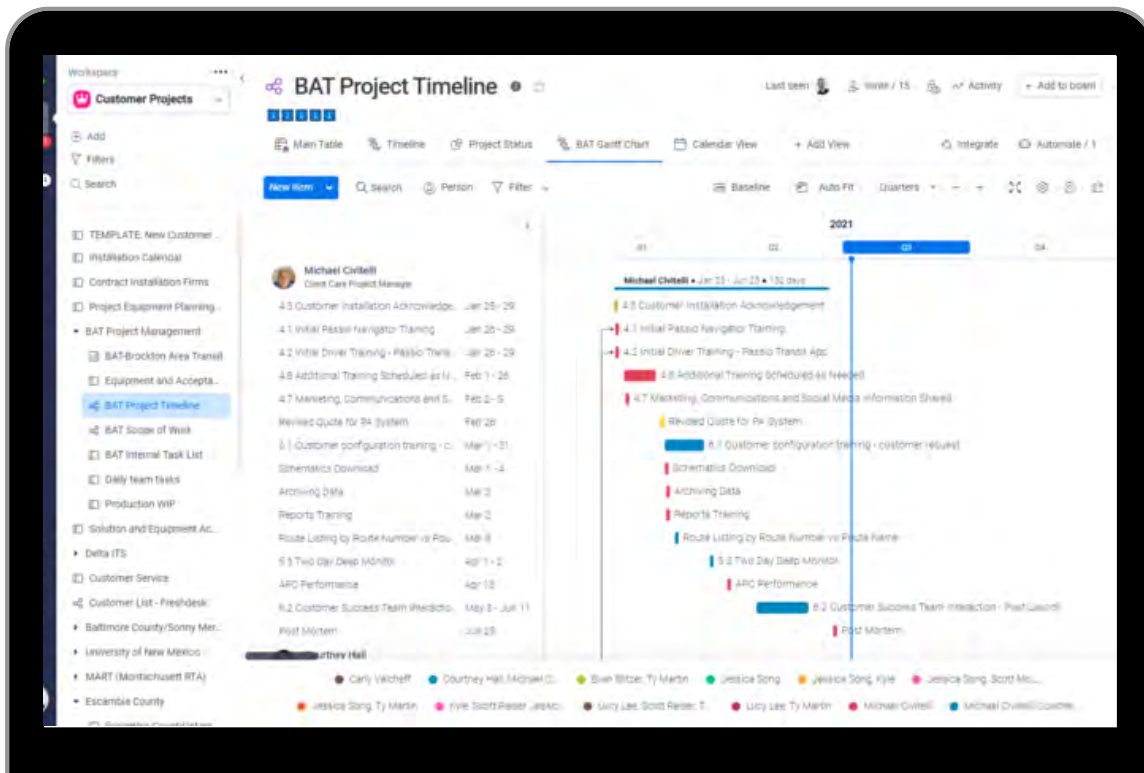
Executing
Determine initial installation schedule and pre-install fleet evaluation, schedule installers. Order equipment and document expected delivery timeline. Software setup and initial program testing

Monitoring & Controlling
Test software deployment with customer configuration. Track, review, and regulate the progress and performance of the project; identify any areas in which changes to the plan are required; and initiate the corresponding changes. Conduct field testing, make adjustments from feedback, confirm updates

Closing
Conduct final testing with customer representatives. Confirm installation documentation and update Conduct training and review of operational items



COLLABORATIVE (SHARED) CLIENT PROJECT MANAGEMENT EXAMPLE:



Your dedicated Passio Project Manager will keep you updated on each step of planning, installation, implementation, and training using our collaborative online project management website. Each Passio customer will have a dedicated project board where they can see progress, make comments, and participate in the plan with our project team





TECHNICAL SUPPORT

SUPPORT FROM THE PASSIO TEAM

Learn what Passio does on a daily basis to support our clients.



Level one support is provided from our support phone/chat/email/social, which Passio provides immediate tech support (acknowledgment within 30 minutes for any critical issue) during our office hours of 7 AM - 6 PM Eastern Time, Monday through Friday. Issues are evaluated when received and escalated to the senior technical support team if needed, and then to the development team if critical systemic issues are determined. All issues submitted can be tracked and referenced using our Freshdesk Ticketing CRM portal. Most common issues are resolved on the same day. The typical resolution time for 90% of issues not resolved within one working day is three (3) working days. Technical support is always included for the life of any Passio agreement.

Customer calls or emails are reviewed and acknowledged within one working day or less of receipt. Most common issues are resolved within that time period. The typical resolution time for 90% of issues not resolved within one working day is three working days.

Passio's systems can be updated via the administrator portal for some key configuration settings. Additionally, web conference software is used to share screen information. Implementing major upgrades or patches are typically done over weekends and in the early AM hours. Testing of upgrades is also done during this period. All major upgrades and patches are included in the standard service agreement and do not incur additional charges.

Server-side upgrades do not require any customer staff involvement. Passio has developed the capability to upgrade software versions via remote server trigger command. If an update does require a configuration that is not possible to conduct 'over the air' the customer will be provided with complete instructions and pre-scheduled remote support to upgrade on board devices.

Passio Tech Support:

Phone 1-800-520-0277 x102

Email support@passiotech.com

Web <https://passiotech.freshdesk.com>

Chat <https://passiotech.com/#>



Passio Online Training & User Guide

Passio ITS Platform Overview

Passio Technologies training resources are available for customers only. This site has information on how to use passenger counting systems and reporting tools.

Please contact:
support@passiotech.com or 800-520-0277 x102
 if you have any questions regarding your system or platform setup.

TOOL TIPS!

Passio NAVIGATOR

IncroMAXX Transit Platform: Passio Navigator

Subpages (2): [BusBuzz - customer service](#) [Using the Passio system](#)

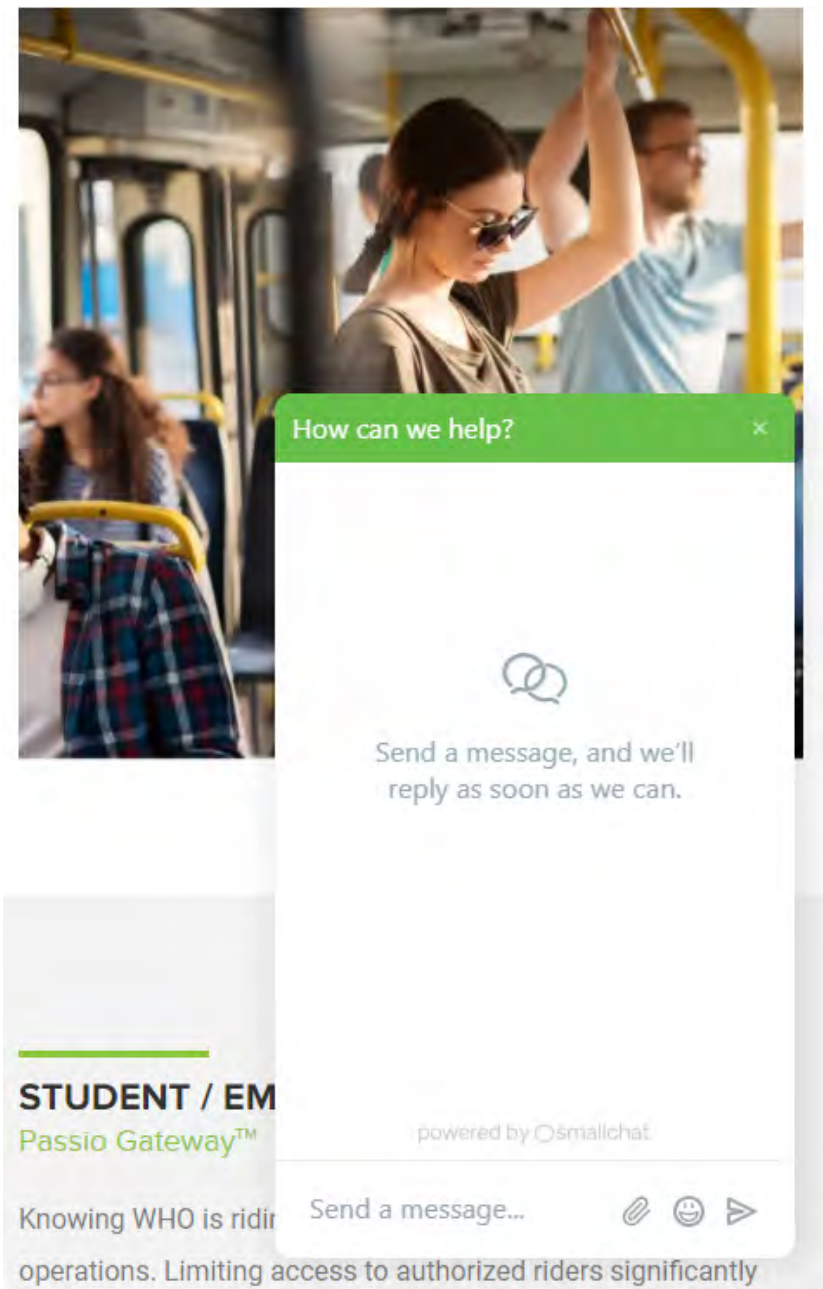
[Add files](#)

Passio maintains an online user management and training tool for all active customers.



PASSIO OFFERS QUICK AND EASY WEB CHAT FOR QUESTIONS, COMMENTS, AND CONCERNS DIRECTLY THROUGH OUR WEBSITE PASSIOTECH.COM

We make it easy for riders, clients, and any other interested parties to ask us questions using a live chatbox on our website. Chats are answered in real-time, answering any questions we receive about our solutions, app, and more!





WARRANTY & MAINTENANCE

All Passio software can be updated in the field over the air. Additionally, the ITS Hardware itself may be re-calibrated in the field. Each configuration is extensively monitored and tested during the initial rollout period, and account managers periodically confirm the configuration and make updates through the life of the contract. Software updates will be provided at no additional charge for the life of the agreement.

Passio's approach to the equipment warranty and ongoing maintenance has been realigned to change the way the industry approaches this challenge. Our goal is to maximize our customer's independence, eliminate downtime, and avoid extra costs that are not necessary when equipment and service are designed with the end-user in mind.

The Passio solution is designed to be self-managed. Our design reduces scheduling time delays and empowers our customers to resolve modest issues quickly, efficiently, and at a lower cost to the transit agency while enjoying full remote support. When situations arise that demand a hands-on approach, company-trained technicians can be dispatched to handle repair or replacement on an hourly or daily basis.

All on-site service will incur additional charges, and be subject to minimum service call amounts. At our customer's requests, Passio will coordinate and schedule post-install on-site service. Customers will be charged with applicable trip charges and hourly fees for services on-site. Service calls are typically charged a three-hour minimum but may be higher based on location. Passio will remotely support customers who use internal employees to conduct on-site repairs for no additional fees.

FIRST 30 DAYS - All new equipment, wiring, and system setup **MUST** be working as promised. All Passio customers can expect us to ensure equipment is installed properly, is tested, and the software/systems are functioning as outlined in our agreement.

WARRANTY PERIOD - All customers, whether they have a standard one-year warranty or have purchased the extended warranty agreements, can expect immediate attention and equipment exchanges or repairs processed as quickly as possible from the initial request, avoiding delays.

ON-SITE/ON-BOARD REPAIRS - Our equipment is designed to be diagnosed in minutes, software updates can be done with minimal disruption to operations, and replacements are fast and simple. We provide unlimited remote support for the life of our client's contracts with us. In the limited instances where an on-site tech is needed, in addition to our staff installation team, we have a nationwide network of installers chosen for their knowledge, professionalism, and value-based pricing.



EQUIPMENT WARRANTY

1. All equipment is sold with a standard one-year manufacturer’s warranty.
2. Equipment Warranty covers all equipment failure due to normal wear and tear or manufacturer's defect. Equipment warranty does not cover theft, damages sustained from an accident or vehicle malfunction, vandalism, or damage due to neglect by a driver, passenger, or other individuals.
3. Extended warranties may be purchased in 12 (twelve) month increments up to a maximum of 48 (forty-eight) additional months, for a total of 60 (sixty) months. Warranty fees must be received with initial order payment, or no later than 30 (thirty) days after initial equipment is delivered to the customer.

WARRANTY PRICING

Warranty Costs - Per Vehicle		Warranty Coverage Period (Months)				
Item	Manufacturer	12 Months	24 Months	36 Months	48 Months	60 Months
MDT	Passio	Included	\$185	\$275	\$455	\$515
APC	Hella	Included	\$45	\$95	\$190	\$330
VLU	CalAmp	Included	\$25	\$45	\$75	\$99
LED Sign	TranSign	Included	Included	Included	Included	Included
WiFi Modem/Router	Pepwave	Included	\$85	\$150	\$215	\$290
AVA Connect System	Ducking System	Included	\$45	\$60	\$110	\$135

1. SPARES - Passio recommends a minimum spare ratio of 5% for all equipment.
2. Warranty payment made at time of purchase, covers parts only, no labor included. Customer is responsible for shipping costs.
3. Component Loaner Program for extended warranty repair items.
4. Out of warranty equipment will either be repaired or replaced with the same or compatible upgraded model, whichever is more cost effective for the customer.

On Site Service Fees

1. On site service fee - \$350 for up to 2 hours. Additional hours - \$150.00 per hour. Rate is subject to change.
2. Additional trip charges, travel expenses, and mileage fees are site specific and may apply.

Service and Maintenance Plans

Passio does not typically provide service and maintenance plans, remote support will normally resolve the majority of issues. In some cases quarterly, semi-annual, or annual inspection plans may be valuable to the customer. The costs for these plans vary based on the number of vehicles, availability of vehicles for inspection, and the amount of equipment onboard vehicles. The costs for these plans are currently based on \$1,200 per day plus trip charges and travel expenses.

NON WARRANTY REPAIRS:

- All costs for repair or replacement of units not covered by warranty will be billed at cost for equipment and time. Shipping fees are billed as incurred.
- On-site and/or internal service is billed hourly, current rate is \$150.00 per hour, plus travel costs (if required). Rate is subject to change.



ON-SITE SERVICE AND REPAIR

The Passio solution is designed to be self-managed to a great extent. This reduces scheduling time delays and empowers our customers to resolve modest issues quickly, efficiently, and at lower costs to the agency, while enjoying full remote support. When situations arise that demand a 'hands-on' approach, company trained technicians can be dispatched to handle repair or replacement on an hourly or daily basis.

- All on-site service will incur additional charges, and be subject to minimums.
- Passio does not automatically provide on-site personnel post-installation but will coordinate and schedule on-site service requested by customers.
- Customers will be charged with applicable trip charges and hourly fees for on-site service. On-site service calls are typically charged a three (3) hour minimum but may be higher based on location.
- Passio will remotely support customers who use internal (customer) employees to conduct on-site repairs for no additional fees.

CUSTOMER SYSTEM MANAGEMENT

- The Customer understands and accepts that the technology solutions offered by Passio are dynamic and require designated on-site contact(s) to update software, confirm connectivity, and troubleshoot hardware and system issues.
- The Customer has the option to provide configuration updates such as routes, drivers, and stops to Passio for updates, typically within 2 (two) working days for standard updates. The Customer may, at their option, self-update configuration information.
- Passio will provide remote support for connectivity, configuration, and hardware troubleshooting. The Customer shall not rent, sell, assign, lease, or sublicense the Services. The Customer shall not use the Services in a service bureau, outsourcing, or another arrangement to process or administer data on behalf of any third party.
- Customer shall not knowingly access, store, or transmit via the Services any material that (i) is unlawful, harmful, threatening, defamatory, obscene, infringing, harassing or offensive; (ii) facilitates illegal activity; (iii) is discriminatory; or (iv) causes damage or injury to any person or property.
- Customer shall not violate or attempt to violate the security of Passio's networks, including (i) accessing data not intended for Customer; (ii) accessing a server or account that Customer is not authorized to access; (iii) attempting to scan or test the vulnerability of a system or network or to breach security or authentication measures; or (iv) attempting to interfere with the availability or functionality of the Services, including by means of submitting a virus, overloading, flooding, spamming, mail bombing or crashing.

Customer acknowledges and agrees...

- that the Services are an information tool only and is not a substitute for competent management and oversight of Customer's Vehicle Fleet, transportation system, and personnel;
- that the Services depend upon data being transmitted over the internet, Customer's network, GPS satellites, and third-party carrier networks, and that, Passio has no control over the functioning of the internet, Customer's network, GPS satellites, or the network of a carrier; and
- that Customer alone is responsible for acquiring and maintaining Customer's Vehicle Fleet, Customer's network, Customer's internet access, and the rest of Customer's physical and technological infrastructure.





PASSIO SLA

Passio Technologies – Service Levels Agreement

- 1. Support.** Passio will provide remote support for connectivity, configuration, and hardware troubleshooting. Passio will provide or arrange for on-site support services following installation of the Equipment for additional fees, which may include trip charges and/or travel expenses, hourly fees, and minimum charges as incurred. Passio's support personnel will, under most circumstances, log and confirm support items within one working day. Passio shall use commercially reasonable efforts to resolve critical support items are within two working days or less.
- 2. Schedule Maintenance.** Passio shall use commercially reasonable efforts to provide Customer with prior notice of maintenance times, which Passio typically conducts during off-peak periods.
- 3. Availability.** Subject to the terms and conditions of this Agreement, Passio will use commercially reasonable efforts to make the Hosted Services Available (as defined below) at least ninety-nine point five percent (99.5%) of the time as measured over the course of each calendar month during the Term (each such calendar month, a "Service Period"), excluding unavailability as a result of any of the Exceptions described below in this Section 1 (the "Availability Requirement"). "Service Level Failure" means a material failure of the Hosted Services to meet the Availability Requirement. "Available" and "**Availability**" mean the Hosted Services are available for access and use by Customer. For purposes of calculating the Availability Requirement, the following are "Exceptions" to the Availability Requirement, and neither will the Hosted Services be considered un-Available nor any Service Level Failure be deemed to occur in connection with any failure to meet the Availability Requirement or impaired ability of Customer to access or use the Hosted Services that is due, in whole or in part, to any: (a) access to or use of the Hosted Services by Customer or any of its users, or using Customer's or an users' access credentials, that does not strictly comply with this Agreement or the Documentation; (b) Customer's delay in performing, or failure to perform, any of its obligations under this Agreement; (c) Customer's or its users' Internet connectivity; (d) force majeure event; (e) failure, interruption, outage or other problem with any software, hardware, system, network, facility or other matter not supplied by Passio pursuant to this Agreement; (f) scheduled downtime for routine maintenance of which Passio has provided Customer at least 24 hours' prior notice via email or through the Hosted Services; or (g) disabling, suspending, or terminating the Services pursuant to the Agreement.

4. Service Level Failures and Remedies. In the event of a Service Level Failure, Passio will issue a credit to Customer in the amount set forth in the table below, measured as a percentage of the monthly fees (or pro rata equivalent thereof) for the applicable Hosted Services paid or payable for the Service Period the Service Level Failure occurred (each a “Service Credit”).

Availability	Service Credit (as percentage of monthly fees (or pro rata equivalent thereof))
99.5% - 100%	0.0 %
95.0% - 99.49%	2.5 %
90.0% - 94.9%	5.0 %
< 90.0%	20.0 %

Notwithstanding the foregoing, Passio has no obligation to issue any Service Credit unless Customer: (i) reports the Service Failure to Passio immediately upon becoming aware of it, and (ii) requests such Service Credit in writing within 10 days of the Service Level Failure. Additionally, in no event will a Service Credit for any Service Period exceed [twenty percent (20%)] of the total monthly fees (or pro rata equivalent thereof) that would be payable for that Service Period if no Service Level Failure had occurred. For the avoidance of doubt, if a flat fee is agreed upon in the applicable Order, and as a result there is not a monthly fee, the Service Credit for any Service Period will not exceed twenty percent (20%) of the total flat fee divided by the total number of months that constitute the Term. Subject to the foregoing, any Service Credit payable to Customer under this Agreement will be issued to Customer in the calendar month following the Service Period in which the Service Level Failure occurred. This Section 4 sets forth Passio’s sole obligation and liability and Customer’s sole remedy for any Service Level Failure, and Passio and Customer agree that such credits are a reasonable estimation of the damages and are not a penalty.

5. Hardware Replacement. Passio will typically order and/or ship replacement hardware within two working days of receiving completed Return Merchandise Authorization from Customer. Replacement items not in stock will be processed using the available supplier with the fastest replacement schedule available at the time. Equipment replaced under Passio Warranty Program (either standard one year manufacturer’s warranty or if extended warranty is purchased) covers equipment only and does not include labor or installation. Customer is responsible for shipping costs and warranty processing fees.

6. Equipment Installation. If equipment and installation services are contracted, customer shall provide direction, in writing, to Passio Technologies, a minimum of 10 days prior to installation date. Information to be provided shall include power source for all equipment, location of equipment installation, and any other installation parameters. Vehicle installation shall be deemed complete and accepted by customer after successful communications test by installer. Customer has two working days to alert Passio Technologies, in writing to any installation exception. Installations are warranted for 30 days.

7. System Deployment and Testing. Initial system deployment testing to start a minimum of fourteen (14) working days prior to live deployment and typically continues for 30-90 days post live start. All equipment shall be fully installed to initiate deployment testing, any equipment not installed will extend testing period. Items to be reviewed and adjusted (but not limited to) will include equipment installation and communications, system configuration, schedule activity, and reporting and analytics. Customers will work directly with the deployment team to review, update and provide feedback for edits and adjustments. Accuracy of reports and system data is directly related to the thoroughness of the deployment testing, and any limitations placed on the testing process may impact the amount of time needed to address reporting or configuration issues.

8. Customer Agreement. Customer agrees to the above terms and conditions upon acceptance of equipment and/or software licenses.

THANK YOU

Thank you for taking the time to review our response to your request. Passio Technologies will provide the right team and technology to meet and exceed your expectations. Our advanced transit solutions will impress your riders now and into the future.

If you have any questions, please contact us.

Primary Contact -

MITCH SKYER

President

678-825-3456 x106

mitch@passiotech.com

Secondary Contacts -

SCOTT MCLAREN

Senior Business Development Manager

404-218-4254

scottmclaren@passiotech.com

KYLE ARCHER

Director of Business Development

678-825-3456 x114

kylearcher@passiotech.com





PRICING PROPOSAL

YOUR DETAILED PRICING INFORMATION



COST PROPOSAL

Contractors are to complete the tables for the components they are bidding on. For any other costs not listed, please input them in the blank sections.

The Contractor must submit a line-item breakdown, detailing the overall cost for each category they are bidding on. (e.g. Hardware – Sensors, GPS Unit, Router, etc.) Please indicate if there are any savings/discounts if multiple components are awarded.

A. <u>CAD/AVL/AVA</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
CAD/AVL Hardware	\$5,250.00				
AVA Hardware	\$5,390.00				
Head Sign Control Hardware	\$2,870.00				
MDTs/Tablets	\$9,737.00				
Setup/Installation	\$15,427.50				
License	\$20,267.45				
Service/Support/Maintenance	\$19,236.00	\$19,236.00	\$19,236.00	\$19,236.00	\$19,236.00
Training	Unlimited Remote training included				
Spare Parts (2 MDTs, 2VLUs)	\$2,141.00				
Advanced Analytics	\$8,400.00				
Total CAD/AVL/AVA:	\$88,718.95	\$19,236.00	\$19,236.00	\$19,236.00	\$19,236.00

B. <u>Passenger Infotainment</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Infotainment Hardware	\$77,545.58				
Setup/Installation	\$30,539.74				
License	In Setup/Install				
Service/Support/Maintenance	\$ 2,786.00**	\$2,786.00 **	\$2,786.00 **	\$2,786.00 **	\$2,786.00 **
Training	In Setup/Install				
Passenger Infotainment Total:	\$110,871.32	\$2,786.00 **	\$2,786.00 **	\$2,786.00 **	\$2,786.00 **

**** Service/Support/Maintenance on Infotainment: Pricing includes standard support. For fully managed add \$9,100.00 to this line item. Recommend fully managed in the beginning to help with setup, design and other aspects.**

C. <u>APC's</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
APC Hardware	\$26,586.00				
Setup/Installation	\$19,141.25				
License	\$10,347.75				
Service/Support/Maintenance	\$9,408.00	\$9,408.00	\$9,408.00	\$9,408.00	\$9,408.00
Training	Unlimited Remote Training Included				
Spare Parts – APS Units (2 total)	\$2,420.00				

APCs Total:	\$67,903.00	\$9,408.00	\$9,408.00	\$9,408.00	\$9,408.00

D. <u>Real-Time and Historical API's</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Setup/Installation	\$1,795.00				
License					
Service/Support/Maintenance					
APIs Total:	\$1,795.00				

E. <u>Courtesy Passenger Wi-Fi</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Wi-Fi Hardware	Included in APC				
Setup/Installation	\$995.00				
License	\$3,767.00				
Service/Support/Maintenance	\$2,268.00	\$2,268.00	\$2,268.00	\$2,268.00	\$2,268.00
1GB of Pooled Data on 14 Vehciles	\$5,913.00	\$5,913.00	\$5,913.00	\$5,913.00	\$5,913.00
** Can increase GB on each vehicle as we monitor if needed					
5GB or 10GB pooled options available					

Wi-Fi Total:	\$12,943.00	\$8,181.00	\$8,181.00	\$8,181.00	\$8,181.00

F. eDVIR	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
eDVIR Hardware	MDT in CAD/AVL				
Setup/Installation	\$295.00				
License	\$365.40				
Service/Support/Maintenance	\$1,663.20	\$1,663.20	\$1,663.20	\$1,663.20	\$1,663.20
Training	Unlimited Remote Training Included				
Spare Parts	N/A				
Wi-Fi Total:	\$2,323.60	\$1,663.20	\$1,663.20	\$1,663.20	\$1,663.20

<u>Proposal Totals</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
A. CAD/AVL/AVA	\$88,718.95	\$19,236.00	\$19,236.00	\$19,236.00	\$19,236.00
B. Infotainment	\$110,871.32	\$2,786.00	\$2,786.00	\$2,786.00	\$2,786.00
C. APC's	\$67,903.00	\$9,408.00	\$9,408.00	\$9,408.00	\$9,408.00
D. API's	\$1,795.00				

E. Passenger Wi-Fi	\$12,943.00	\$8,181.00	\$8,181.00	\$8,181.00	\$8,181.00
F. eDVIR	\$2,323.60	\$1,663.20	\$1,663.20	\$1,663.20	\$1,663.20
Proposal Total:	\$284,554.87	\$41,274.20	\$41,274.20	\$41,274.20	\$41,274.20

CHECK LIST

This Checklist is provided to assist vendors in the preparation of their RFP response. Included are important requirements the Contractor is responsible to submit with the RFP package in order to make the RFP compliant.

Check off each of the following (*if applicable*):

1. Signed cover page of Request for Proposal (RFP).
2. Check <https://pbsystem.planetbids.com/portal/14742/portal-home> for any addenda.
3. Signed cover page of each Addendum.
4. Provide a Conflict of Interest Statement.
5. Signed *Trade Secret Form* as provided with this RFP (Trade Secret Information, if provided, must be electronically submitted in a separate PDF file and marked as Confidential).
6. Signed *Debarment Certification Form* as provided with this RFP.
7. Provide a Criminal History and Civil Actions Disclosure Statement, *if applicable*, as instructed in this RFP.
8. Signed *Participation Form* as provided with this RFP.
9. The completed *Reference List* as provided with this RFP.
10. Indicate all of Contractor exceptions to the City's requirements, conditions and specifications as stated within this RFP.
11. Contractor's proposal, in PDF format, electronically submitted to the Bid Page on Planet Bids.

Return Checklist with your RFP response

PASSIO TECHNOLOGIES

YOUR CUSTOM SOLUTION QUOTE

City of Clovis - CA

Nick Chin

NICKC@CITYOFCLOVIS.COM

Clovis

Quote #: 510 v4

PLEASE REACH OUT TO
PASSIO SALES WITH ANY
QUESTIONS
SALES@PASSIOTECH.COM

PASSIO 
TECHNOLOGIES

Passio Technologies
6100 Lake Forrest Dr
Atlanta, GA 30328
United States

Quote #	510 v4
Date	Oct 17, 2022
Expires	Nov 30, 2022
Contact	Scott McLaren

Prepared for City of Clovis - CA
Nick Chin
Clovis, CA
United States

T: 559-324-2762
E: NICKC@CITYOFCLOVIS.COM

ACCEPT QUOTE

Passio Technologies Quote - City of Clovis - GO/AVA/LEDx/DVIR/GTFS-RT

Passio GO with MDT

One-Time Fees

Category	Item	Qty	Price	Total
Setup	Passio GO CAD/AVL GPS Setup	1	\$1,995.00	\$1,995.00
	Setup Passio GO solution for customer account. One fee per system.			\$1,496.25[†]
	25% Item Discount (\$498.75)			
	Code: GOga			
	Base Price		\$1,995.00	\$1,995.00
License	Passio GO GPS CAD/AVL Software License	14	\$134.10	\$1,877.40
	Per unit one time software license. Includes lifetime updates. For Installed, Portable, and API Configuration.			\$1,408.05
	25% Item Discount (\$469.35)			
	Code: GOgpsavl			
	Base Price		\$134.10	\$1,877.40
Hardware	VLU	14	\$422.00	\$5,908.00
	Vehicle Logic Unit for GPS Tracking.			
	Code: VLU			
Hardware	MDT Portable	14	\$966.00	\$13,524.00
	Rugged Android MDT with Cradle Mount			
	Code: MDTport			

One-Time Subtotal \$23,304.40
Discount (\$968.10)

Annual Fees

Category	Item	Qty	Price	Total
Recurring	Passio GO GPS/AVL Recurring Annual Per unit annual recurring fee. Configuration updates, reporting, and data storage. Code: 40RX21PGO	14	\$799.00	\$11,186.00[†]

** Recurring fees billed annually with 0 upfront payment(s).*

Annual Subtotal **\$11,186.00**

Headsign Integration - LEDx - J1708 Connection

One-Time Fees

Category	Item	Qty	Price	Total
Setup	LED Connect (LEDx) Destination Sign Software License Integration with J1708/J1939 exterior destination sign. Includes connection hardware. Code: 1212020LEDX	14	\$449.10	\$6,287.40[†]
Hardware	LED Hardware Wiring harness, mounts, hardware Code: LEDhard2	14	\$205.00	\$2,870.00

One-Time Subtotal **\$9,157.40**

Annual Fees

Category	Item	Qty	Price	Total
Recurring	LED Connect (LEDx) Software Recurring Annual Per unit annual recurring fee for J1708/J1939 Destination LED sign integration and software management. Code: 2210029LEDX	14	\$107.00	\$1,498.00[†]

** Recurring fees billed annually with 0 upfront payment(s).*

Annual Subtotal **\$1,498.00**

GTFS-RT (Real Time)

One-Time Fees

Category	Item	Qty	Price	Total
Setup	Real Time GTFS Feed Setup Setup General Transit Feed for real time access. Code: GTFSfeed	1	\$1,795.00	\$1,795.00[†]
			One-Time Subtotal	\$1,795.00

Annual Fees

Category	Item	Qty	Price	Total
Recurring	Real Time GTFS Feed Recurring Annually Per unit annual recurring fee. Configuration updates, reporting, and data storage. 100% Item Discount (\$308.00) Code: GTFSa	14	\$22.00	\$308.00 \$0.00[†]

* Recurring fees billed annually with 0 upfront payment(s).

Annual Subtotal	\$308.00
Discount	(\$308.00)

Automated Voice Announcement - AVA

One-Time Fees

Category	Item	Qty	Price	Total
Hardware	AVA: Audio Interrupt System Includes audio interrupt hardware, ancillary equipment, and wiring for connection to existing PA or Head Unit system with installed speakers. If additional audio equipment is required, Passio can provide this option as an upgrade to the customer. Code: 1219045AVA	14	\$385.00	\$5,390.00
Setup	AVA: Automated Voice Announcement Software License Per unit one time software license. Includes lifetime updates. Code: AVAlicense	14	\$898.00	\$12,572.00[†]
Setup	AVA: Automated Voice Announcement Standard Setup Automated Voice Announcement solution setup 25% Item Discount (\$1,248.75) Code: 1213009AVA	1	\$4,995.00	\$4,995.00 \$3,746.25[†]
Hardware / Component	AVA: Inline Noise Filter Inline Noise Filter	14	\$35.00	\$490.00[†]

Category	Item	Qty	Price	Total
	Code: 1210019AVA			

One-Time Subtotal \$23,447.00

Discount (\$1,248.75)

Annual Fees

Category	Item	Qty	Price	Total
Recurring	AVA: Automated Voice Announcement Recurring Annually Per unit annual recurring fee. Configuration updates, reporting, and data storage. Code: AVAannual	14	\$468.00	\$6,552.00 [†]

* Recurring fees billed annually with 0 upfront payment(s).

Annual Subtotal \$6,552.00

ETA Text Back

One-Time Fees

Category	Item	Qty	Price	Total
Setup/License	ETA Text Back Account Setup ETA to text request initial setup for a customer account. Includes setting up text codes, testing text back feature, training, and database coordination. This is a one time fee per account. 15% Item Discount (\$281.43) Passio (Code: TXTBSET)	1	\$1,876.20	\$1,876.20 \$1,594.77

One-Time Subtotal \$1,876.20

Discount (\$281.43)

Annual Fees

Category	Item	Qty	Price	Total
Recurring	ETA Text Back Annual Service ETA text back stop codes and messaging. Annual fee per account. Up to 10,000 text messages per month. Additional text packages available in message increments. Code: TXTBANN	1	\$4,455.00	\$4,455.00 [†]
	Base Price		\$2,655.00	\$2,655.00
	<u>ETA Text Back Message Packages:</u> ETA Text Back Messaging - 10K/Month Total (TXTBANN10K)		\$1,800.00	\$1,800.00

* Recurring fees billed annually with 0 upfront payment(s).

Annual Subtotal \$4,455.00

UTA Integration with APC Solution

One-Time Fees

Category	Item	Qty	Price	Total
Setup	<p>API Integration - UTA</p> <p>API Integration with UTA</p> <p>Customers who utilize UTA as their source for APC data and choose to integrate with one or more Passio Solutions will require this integration.</p> <p>Code: APIGTAB</p> <p>API Setup: API Integration Core Setup (APISET)</p>	1	\$7,800.00	\$7,800.00
One-Time Subtotal				\$7,800.00

Annual Fees

Category	Item	Qty	Price	Total
Recurring	<p>API Integration Express Recurring Annual</p> <p>Annual fee for API Integration. Includes software updates and real time location data integration, as well as updates to the integration protocols for any changes.</p> <p>Passio (Code: APIINTRECUR)</p>	1	\$3,600.00	\$3,600.00 [†]
Annual Subtotal				\$3,600.00

* Recurring fees billed annually with 0 upfront payment(s).

Infotainment - Advertising Capabilities on Screens

One-Time Fees

Category	Item	Qty	Price	Total
Setup	<p>Setup/Installation</p> <p>Project Management for solution implementation. One time fee for management, deployment, and coordination.</p> <p>Code: PM-SETUP</p>	1	\$30,539.74	\$30,539.74 [†]

Category	Item	Qty	Price	Total
Hardware	Infotainment Hardware	1	\$77,545.58	\$77,545.58[†]
	Included in the Hardware:			
	<ul style="list-style-type: none"> MPTV-M27v - 26.9" 1080p Intelligent Display - 700 NIT Brightness (13 Total Screens) MP-BRK-M27v-SH LD - Clean Back Bracket / Shield for M27 Screens MP-BRK-M-Kit-Front Stanchion - Mounting kit for front stanchions, includes pipe & clamps. MP-180M - Quad Core HD Standalone Controller for Mobile Infotainment Deployments. Capable of driving up to 4 secondary displays. 5 Year Warranty 			
	Code: PM-SETUP			

One-Time Subtotal \$108,085.32

Annual Fees

Category	Item	Qty	Price	Total
Recurring	Project Support and Maintenance Annual	14	\$848.00	\$11,872.00[†]
	Annual ongoing support, maintenance:			
	Co-managed with AD+ module support for advertising			
	** Previously recommended the basic support and feel you may need more guidance to start in the beginning. This will make sure your screens are set and coordinated until someone on staff is able to learn the process. Or you can keep the support at this setting the entire time.			
	Code: PM-MAINT-ANN			

* Recurring fees billed annually with 0 upfront payment(s).

Annual Subtotal \$11,872.00

Installation

One-Time Fees

Category	Item	Qty	Price	Total
Hardware	Installation	14	\$1,380.00	\$19,320.00
	Hardware installation and connectivity testing. On site charges, travel, and initial costs.			
	Passio (Code: Install)			
	<u>Component Install:</u>			
	MDT (Mobile Data Terminal) (MDTINST)			

Category	Item	Qty	Price	Total
	VLU (Vehicle Logic Unit) (VLUINST)			
	AVA Interrupt (AVAINST)			
	LEDX Installation (LEDXINST)			
	Cellular Router (ROUSTRINST)			
			One-Time Subtotal	\$19,320.00

Spare Devices - 2 MDTs / 2 VLUs

One-Time Fees

Category	Item	Qty	Price	Total
Hardware	MDT Portable	2	\$966.00	\$1,932.00
	Rugged Android MDT with Cradle Mount			
	Code: MDTport			
Hardware	VLU	2	\$422.00	\$844.00
	Vehicle Logic Unit for GPS Tracking.			
	Code: VLU			
			One-Time Subtotal	\$2,776.00

Summary

[†] Non-taxable item

Please contact us if you have any questions.

One-Time Subtotal	\$197,561.32
Discount	(\$2,498.28)
Clovis, CA (8.35%)	\$5,059.33
Total One-Time	\$200,122.38 USD
Annual Subtotal	\$39,471.00
Discount	(\$308.00)
Total Annually	\$39,163.00 USD

ACCEPT QUOTE

Cost Breakdown

Category	One-Time Fees	Annual Fees
Setup	\$65,984.14	—
License	\$1,877.40	—
Hardware	\$127,333.58	—
Recurring	—	\$39,471.00
Hardware / Component	\$490.00	—
Setup/License	\$1,876.20	—
Discount	(\$2,498.28)	(\$308.00)
Clovis, CA	\$5,059.33	—
Total	\$200,122.38 USD	\$39,163.00 USD

Standard Terms and Conditions

- Installation
 - All installation quotes are estimates based on customer provided vehicle information. Limited vehicle availability or undocumented vehicle configuration information may result in increased installation costs and/or trip charges.
- Sales & Use Tax
 - Customer to provide tax exempt certificate if applicable. Customers are required to calculate calculate and pay all applicable USE taxes unless alternate arrangements made at time of order.
- Term of Agreement
 - Standard term is 36 months for optimal pricing. Customers have the option to select 60 month term to lock in pricing for an extended period. Lesser term periods are subject to higher recurring fees.
- Deposit
 - New customers are required to pay a deposit equal to 50% of the one time costs prior to shipment of any equipment or account setup.

PASSIO TECHNOLOGIES

YOUR CUSTOM SOLUTION QUOTE

City of Clovis - CA

Nick Chin

nickc@ci.clovis.ca.us

Clovis

Quote #: 955 v2

PLEASE REACH OUT TO
PASSIO SALES WITH ANY
QUESTIONS
SALES@PASSIOTECH.COM

PASSIO 
TECHNOLOGIES

Passio Technologies
6100 Lake Forrest Dr
Atlanta, GA 30328
United States

Quote #	955 v2
Date	Oct 13, 2022
Expires	Nov 30, 2022
Contact	Scott McLaren

Prepared for City of Clovis - CA
Nick Chin
Clovis, CA
United States

T: 559-324-2762
E: nickc@ci.clovis.ca.us

ACCEPT QUOTE

Passio Technologies Quote with City of Clovis - 5 Year Ext Warranty

One-Time Fees

Category	Item	Qty	Price	Total
Hardware / Warranty	MDT Warranty Mobile Data Terminal Warranty - covers all manufacturers defects and device failures not related to damage, vandalism, misuse, accident, or other non normal wear and tear event. All devices include a 12 month standard warranty. Warranties may be extended to add to the initial 12 month period. Lilliput (Code: MDTwar) <u>Extended Warranty:</u> MDT 60 Month Warranty Per Device (MDTWTY60)	14	\$487.50	\$6,825.00[†]
Hardware / Warranty	VLU Warranty Vehicle Logic Unit Warranty - covers all manufacturers defects and device failures not related to damage, vandalism, misuse, accident, or other non normal wear and tear event. All devices include a 12 month standard warranty. Warranties may be extended to add to the initial 12 month period. CalAmp (Code: VLUwar) <u>Extended Warranty:</u> VLU 60 Month Warranty Per Device (VLUWTY60)	14	\$168.75	\$2,362.50[†]
Hardware / Warranty	AVA Connect System Warranty AVA Connect Warranty - covers all manufacturers defects and device failures not related to damage, vandalism, misuse, accident, or other non normal wear and tear event. All devices include a 12 month standard warranty. Warranties may be extended to add to the initial 12 month period. CalAmp (Code: AVAwar) <u>Extended Warranty:</u> AVA 60 Month Warranty Per Device (VLUWTY60)	14	\$125.00	\$1,750.00[†]

[†] Non-taxable item

Total One-Time **\$10,937.50 USD**

260

Please contact us if you have any questions.

ACCEPT QUOTE

Cost Breakdown

Category	One-Time Fees
Hardware / Warranty	\$10,937.50
Total	\$10,937.50 USD

Standard Terms and Conditions

- Installation
 - All installation quotes are estimates based on customer provided vehicle information. Limited vehicle availability or undocumented vehicle configuration information may result in increased installation costs and/or trip charges.
- Sales & Use Tax
 - Customer to provide tax exempt certificate if applicable. Customers are required to calculate and pay all applicable USE taxes unless alternate arrangements made at time of order.
- Term of Agreement
 - Standard term is 36 months for optimal pricing. Customers have the option to select 60 month term to lock in pricing for an extended period. Lesser term periods are subject to higher recurring fees.
- Deposit
 - New customers are required to pay a deposit equal to 50% of the one time costs prior to shipment of any equipment or account setup.

**CITY OF CLOVIS
CONTRACT SERVICES AGREEMENT**

This Contract Services Agreement ("Agreement") is entered into between the City of Clovis, a California general law city ("City") and Passio Technologies, LLC, a Georgia corporation ("Contractor") with respect to the following recitals, which are a substantive part of this Agreement. This Agreement shall be effective on [REDACTED] ("Effective Date").

RECITALS

City desires to obtain and implement a computer aided mobile intelligent transportation system and related services to aid in providing public transit services") as more fully described in **Exhibit A** and incorporated herein by reference.

Contractor has developed an Intelligent Transportation System and is experienced in implementing the system for public transit systems ("Project") and has submitted a proposal to provide Project implementation and the related services (Project implementation and related services are hereinafter collectively referred to as "Services") to City as more fully described in the **Exhibit B** attached hereto and incorporated herein by reference.

City desires to retain Contractor, and Contractor desires to provide City with the Services, on the terms and conditions as set forth in this Agreement.

NOW, THEREFORE, in consideration of the promises and mutual agreements herein, City and Contractor agree as follows:

AGREEMENT

1. Scope of Services. Contractor shall perform the Services described in the Recitals and detailed in **Exhibits A & B**. Changes in the scope of Services, including the work performed and/or deliverables produced, shall be made in writing and particularly describe the changes in Services, including payment/costs and schedule/term, as applicable.
2. Priority and Conflicts; Exclusions. If the terms and requirements of this Agreement and/or **Exhibit A** conflict with **Exhibit B**, this Agreement and **Exhibit A** shall control. No contractual terms and/or conditions found in **Exhibit B** shall purport to waive, disclaim, or limit Contractor's liability, indemnification obligations, warranties, damages for breach or delay, or any security, bonding, or insurance requirements, and any such provisions shall have no force or effect with respect to this Agreement and the Services performed by Contractor.
3. Term of Agreement; Commencement of Services; Schedule. The term of this Agreement shall be three (3) years commencing on [REDACTED], and Contractor shall begin performing the Services on that date unless otherwise notified in writing by City. This Agreement shall terminate on _____ (**initial term**), unless City extends the term for up to an additional two (2) years by sending written notice of extension (extended term) to Contractor at least sixty (60) days prior to the end of the initial term. This Agreement may be terminated prior to the end of the initial term or extended term pursuant to Sections 26 and 27 herein.

Contractor shall perform the Services according to the schedule set forth in **Exhibit A**. The schedule shall be subject to modification based on the City's operational needs. City will notify Contractor in advance of any modification to the schedule.

4. Payment for Services. During the initial term and any extended term of this Agreement, City shall pay Contractor for the Services performed pursuant to this Agreement according to the rate(s) schedule stated in **Exhibit A**. Contractor shall submit periodic invoices corresponding to the Milestone Schedule included in **Exhibit A** as the Services are delivered. The total amount paid by City to Contractor for Services performed during the initial term shall not exceed the compensation described in **Exhibit A** during the initial term (Three Hundred and Twenty-Two Thousand Nine Hundred and Forty-Nine Dollars and Fifty-Four Cents (\$322,949.54)), plus a contingency of fifteen percent (15%). If City extends the term in accordance with Section 3, the total amount paid by City to Contractor for Services performed during the extended term shall not exceed the compensation described in **Exhibit A** during the applicable extended term, plus a contingency of fifteen percent (15%).

The foregoing is inclusive of all labor, equipment, materials, costs and expenses, taxes, and overhead. City shall pay Contractor for Services satisfactorily performed pursuant to this Agreement. Contractor shall submit periodic invoices to City containing detailed billing information and milestone deliverables regarding the Services provided and unless otherwise specified in **Exhibit A**, City shall tender payment to Contractor within thirty (30) days after receipt of invoice.

5. Independent Contractor Status. Contractor and its subcontractors shall perform the Services as independent contractors and not as officers, employees, agents, or volunteers of City. Contractor is engaged in an independently established trade, occupation, or business to perform the Services required by this Agreement and is hereby retained to perform work that is outside the usual course of City's business. Contractor is free from the control and direction of City in connection with the manner of performance of the Services. Nothing contained in this Agreement shall be deemed to create any contractual relationship between City and Contractor's employees or subcontractors, nor shall anything contained in this Agreement be deemed to give any third party, including but not limited to Contractor's employees or subcontractors, any claim or right of action against City.

6. Acknowledgement. Contractor acknowledges, warrants, and represents that it and its principals have thoroughly investigated the scope of Services to be provided by the Contractor and has examined all of the Exhibits attached hereto, and any referenced reports, and has examined the Project installation site for equipment and/or materials which Contractor has agreed to supply herein and is familiar with the local conditions which may affect the manufacture and delivery of said equipment, and that except as provided for herein, Contractor will make no claims for additional compensation over and above that set forth in Section 4 herein and Exhibit A hereto.

7. Qualifications. Contractor represents that Contractor has the qualifications and skills necessary to perform the Services under this Agreement in a competent, professional manner, without the advice or direction of City. This means Contractor is able to fulfill the requirements of this Agreement. Failure to perform all the Services required under this Agreement constitutes a material breach of the Agreement. Contractor has complete and sole discretion for the matter in which the Services under this Agreement will be performed.

8. Key Personnel. Contractor agrees and designates the following individuals as "Key Personnel" for providing the Services:

- President: Mitch Skyer
- Chief Technology Officer: Scott Reiser
- Director of Operations: Jessica Song
- Sales Director: Scott McLaren
- Account Manager: Keven Izen
- Project Manager: Michael Civitelli
- Client Care Specialist: Courtney Hall
- Lead Customers Success Representative: Lucy Lee
- Installation Technician: Wayne Manis
- Data Analyst: Carly Valcheff

Contractor agrees that said Key Personnel will be able to dedicate up to one hundred percent (100%) of their time to the Services, as needed, for the successful and timely completion of the Project and Services. Contractor reserves the right to substitute Key Personnel, provided that Contractor notifies City in writing at least ten (10) days in advance of such change.

9. Contractor Representations; Standard of Care; Compliance with Law. Contractor represents that Contractor and any subcontractors utilized by Contractor are and will be qualified in the field for which Services are being provided under this Agreement and Contractor and any subcontractors are now, and will be throughout their performance of the Services under this Agreement, properly licensed, certified, secured/bonded, trained, and/or otherwise qualified and authorized to perform the Services required and contemplated by this Agreement, as may be required by law. Contractor and its subcontractors shall utilize the standard of care and skill customarily exercised by members of their profession, shall use reasonable diligence and best judgment while performing the Services, and shall comply with all applicable laws, regulations, and industry standards. Contractor shall comply with all Labor Code requirements for public works projects if applicable to Contractor's work under this Agreement.

10. Identity of Subcontractors. Contractor shall, before commencing any Services under this Agreement, provide to City in writing: (a) the identity of all subcontractors, if any, Contractor intends to utilize in Contractor's performance of this Agreement; and (b) a detailed description of the full scope of work to be provided by such subcontractors. Contractor shall only employ subcontractors pre-approved by City and in no event shall Contractor replace an approved subcontractor without the advance written permission of City, with the understanding that City's permission will not be unreasonably withheld. Notwithstanding any other provisions in this Agreement, Contractor shall be liable to City for the performance of Contractor's subcontractors.

11. Subcontractor Provisions. Contractor shall include in its written agreements with its subcontractors, if any, provisions which: (a) impose upon the subcontractors the obligation to provide to City the same insurance and indemnity obligations that Contractor owes to City; (b) make clear that City intends to rely upon the reports, opinions, conclusions and other work product prepared and performed by subcontractors for Contractor; and (c) entitle City to impose upon subcontractors the assignment rights found elsewhere in this Agreement.

12. Drug Free Workplace. Contractor acknowledges that City has adopted a policy of maintaining a drug free workplace and Contractor agrees to abide by the provisions of City's substance abuse policy provide to Contractor under separate cover. Violation of this provision may result in immediate termination of this Agreement.

13. Power to Act on Behalf of City. Contractor is not acting as an agent of City and shall not have any right, power, or authority to create any obligation, express or implied, or make representations on behalf of City except as may be expressly authorized in advance in writing from time to time by City and then only to

the extent of such authorization.

14. Record Keeping; Reports. Contractor shall keep complete records showing the type of Services performed. Contractor shall be responsible and shall require its subcontractors to keep similar records. City shall be given reasonable access to the records of Contractor and its subcontractors for inspection and audit purposes. Contractor shall provide City with a working draft of all reports upon reasonable request by City and of all final reports prepared by Contractor under this Agreement.

15. Ownership and Inspection of Documents. All data (routes, latitudes/longitudes, stop locations, bus schedules, operator bids, etc.), tests, reports, analyses, documents, records, conclusions, opinions, recommendations, and other work product generated by or produced for Contractor or its subcontractors in connection with the Services, regardless of the medium, including physical drawings and materials recorded on computer discs or other electronic devices ("Work Product"), shall be and remain the property of City. City shall have the right to use, copy, modify, and reuse the Work Product as it sees fit. Upon City's request, Contractor shall make available for inspection and copying all such Work Product and all Work Product shall be turned over to City promptly at City's request or upon termination of this Agreement, whichever occurs first. Contractor shall not release any Work Product to third parties without prior written approval of City. This obligation shall survive termination of this Agreement and shall survive for four (4) years from the date of expiration or termination of this Agreement.

16. Confidentiality. All Work Product prepared and performed by and on behalf of Contractor in connection with the Services performed pursuant to this Agreement shall be kept confidential and shall be disclosed only to City, unless otherwise provided by law or expressly authorized by City. Contractor shall not disclose or permit the disclosure of any confidential information acquired during performance of the Services, except to its agents, employees and subcontractors who need such confidential information in order to properly perform their duties relative to this Agreement. Contractor shall also require its subcontractors to be bound to these confidentiality provisions.

17. Professional Responsibility. Notwithstanding any other provision in this Agreement, the review and/or approval by City, or any of its directors, officers, employees, or agents, of any technical specifications, design documents, and all other work products or project communications prepared by the Contractor or any of its subcontractors, or of any acts or failures to act by Contractor or any of its subcontractors, shall not relieve the Contractor or any of its subcontractors of any professional responsibility for the services performed.

18. Implementation and Integration Services. Contractor will coordinate all activities, including but not limited to implantation and integration services, inspection, field testing of equipment, monitoring, and reporting Contractor's progress with and to City. Contractor will cooperate with and advise City of Contractor's progress and timing schedules for the Project and shall provide City access to Contractor's equipment and facilities for City's inspections of this Project. City shall have the authority to cause Contractor's work to be stopped if such work is not in accordance with **Exhibits A and B**. City shall designate a representative ("City Representative") who shall have the authority to take all actions on behalf of City. Contractor shall direct all notices and other correspondence to the City Representative. Any notices or approvals from City that are not sent by the City Representative shall be subsequently confirmed by the City Representative.

19. Labor and Materials. Contractor shall provide and furnish all the labor, materials, necessary tools, expendable equipment, and all utility related to construction, implementation, and integration services, and transportation services required to complete the Project.

20. Extra Work. In the event Contractor requests a Change Order for extra work required as a result of conditions which are significantly different from those reasonably anticipated when this Agreement was executed, such request shall be submitted to City in writing and shall be accompanied by the following declaration, signed by the Contractor:

I, Mitchel Skyer (name of Contractor’s authorized representative) being the President (title of Contractor’s authorized representative) of Passio Technologies, LLC (Contractor’s name) (“Contractor”) declare under penalty of perjury under the laws of the State of California, and do personally certify and attest that: I have thoroughly reviewed the attached claim for additional compensation and/or extension of time, know its contents, and know said claim is made in good faith; the supporting data is truthful and accurate; and the amount requested accurately reflects the Agreement adjustment for which Contractor believes the City is liable. I am familiar with California Penal Code Section 72 and California Government Code Sections 12560 et seq., pertaining to false claims, and I know and understand that submission or certification of a false claim may lead to fines, imprisonment, and/or other severe legal consequences.

Mitchel Skyer
Signature

President 11-21-2022
Title Date

Submission of a claim, properly certified, with all required supporting documentation, and written rejection or denial of all or part of the claim by the City, is a condition precedent to any action, proceeding, litigation, suit, or demand for arbitration by Contractor.

Contractor’s disagreement over the amount to be paid for extra work shall not relieve Contractor of the obligation to continue to perform all the Services as required in **Exhibits A and B**.

21. System Acceptance. On-site system acceptance testing shall include Contractor and City staff, and will occur per the testing plan timetable as specified by the Contractor in its System Acceptance Testing. System acceptance tests will exercise all system components according to an acceptance test plan developed by the Contractor and approved by City.

Tests conducted by the Contractor may not prevent the ongoing operation of City unless previously approved by City. The Contractor shall maintain and submit complete records of all test results.

22. Final Acceptance of Full System Deployment. Final Acceptance for the Full System Deployment (“Final Acceptance”) will be granted after thirty (30) calendar days of continuous achievement of the acceptance metrics and error-free production operation of the System from the System Go-Live date.

23. City Name and Logo. Contractor shall not use City's name or insignia, photographs relating to the City projects or work for which Contractor’s services are rendered, or any publicity pertaining to the Contractor’s Services under this Agreement in any magazine, trade paper, newspaper, television or radio production, internet website, social media, or other similar medium without the prior written consent of City.

24. Conflicts of Interest. Contractor warrants that neither Contractor nor any of its employees have an improper interest, present or contemplated, in the Services which would affect Contractor’s or its employees’ performance of the Services and the Work Product produced. Contractor further warrants that neither Contractor nor any of its employees have real property, business interests or income that will be affected by the Services. Contractor covenants that no person having any such interest, whether an employee or

subcontractor shall perform the Services under this Agreement. During the performance of the Services, Contractor shall not employ or retain the services of any person who is employed by the City or a member of any City board or commission.

25. Non-liability of Officers and Employees. No officer or employee of City shall be personally liable to Contractor, or any successors in interest, in the event of a default or breach by City for any amount which may become due Contractor or its successor, or for any breach of any obligation under the terms of this Agreement.

26. Termination of Agreement. This Agreement shall terminate as provided in Section 3, unless terminated earlier pursuant to the following:

- a. Termination by City: For Convenience. City may at its discretion terminate this Agreement for convenience and without cause upon thirty (30) days prior written notice to Contractor. Upon receipt of a termination notice pursuant to this subsection, Contractor shall promptly discontinue all Services affected, unless the notice directs otherwise.
- b. Termination by City or Contractor: For Cause. Either party may terminate this Agreement upon thirty (30) days prior written notice to the other party of a material breach, and a failure within that time period to cure or commence reasonable steps to cure the breach.
- c. Compensation to Contractor Upon Termination. Contractor shall be paid compensation for Services satisfactorily performed up to and including the date of termination. As to any phase partially performed but for which the applicable portion of Contractor's compensation has not become due, Contractor shall be paid the reasonable value of its Services provided. However, in no event shall such payment when added to any other payment due under the applicable part of the work exceed the total compensation of such part as specified Section 4. In the event of termination due to Contractor's failure to perform in accordance with the terms of this Agreement through no fault of City, City may withhold an amount that would otherwise be payable as an offset to City's damages caused by such failure.
- d. Effect of Termination. Upon notice of termination of this Agreement, Contractor shall: (i) promptly discontinue all Services affected, unless the notice of termination directs otherwise; and (ii) deliver or otherwise make available to the City, without additional compensation, all Work Product and/or deliverables accumulated by the Contractor in performing this Agreement, whether completed or in process. Contractor may not refuse to provide such Work Product for any reason whatsoever.

27. Default/Material Breach. If either party defaults in the performance of this Agreement or materially breaches any of its provisions, the non-breaching party may terminate this Agreement by giving written notification to the breaching party. Termination will take effect immediately on receipt of notice by the breaching party or five (5) days after mailing of notice, whichever occurs first. For purposes of this paragraph, material breach of this Agreement includes, but is not limited to, the following:

- a. City's failure to pay Contractor any undisputed compensation due within thirty (30) days after written demand for payment;
- b. Contractor's failure to complete the Project;
- c. Contractor's material breach of any representation or agreement contained herein, and failure to commence actions to correct such breach within thirty (30) days of written notice by City;

or

- d. City's material breach of any representation or agreement contained in this Agreement, and failure to commence actions to correct such breach within thirty (30) days of written notice by the Contractor.

28. Insurance. Contractor shall satisfy the insurance requirements set forth in **Exhibit C**.

29. Indemnity and Defense. Contractor hereby agrees to indemnify, defend, and hold the City, its officials, officers, employees, agents, and volunteers harmless from and against all claims, demands, causes of action, actions, damages, losses, expenses, and other liabilities, (including without limitation reasonable attorney fees and costs of litigation) of every nature arising out of or in connection with the alleged or actual acts, errors, omissions or negligence of Contractor or its subcontractors relating to the performance of Services described herein to the fullest extent permitted by law, except to the extent any injuries or damages are the result of City's negligence or willful misconduct, subject to any limitations imposed by law. Contractor and City agree that said indemnity and defense obligations shall survive the expiration or termination of this Agreement for any items specified herein that arose or occurred during the term of this Agreement.

30. Risk of Loss. Contractor shall bear the risk of loss or injury or damage to their work until such time as City has, by written formal acceptance, accepted said work. For the purposes of this section, the work does not include any existing property of City, unless said existing property is modified by the Project or Services. City's acceptance shall occur when the Project has successfully tested and complies with the requirements contained in **Exhibits A and B**. During the time period which Contractor must bear the risk of loss, Contractor shall rebuild, repair, restore, and replace and make good all injuries or damage to such work, and shall bear the expenses thereof, except for such injuries or damages as are occasioned by acts of federal government or public entity, and only to the extent of five percent (5%) of the Agreement amount where such injuries or damages are proximately caused by an act of God within the meaning of California Public Contract Code Section 7105.

31. Taxes. Contractor agrees to pay all taxes, licenses, and fees levied or assessed by any governmental agency on Contractor incident to the performance of Services under this Agreement, and unemployment and workers' compensation insurance, social security, or any other taxes upon the wages of Contractor, its employees, agents, and representatives. Contractor agrees to obtain and renew an annual business tax certificate from City and pay the applicable annual business registration tax to City during the term of this Agreement.

32. Assignment. Neither this Agreement nor any duties or obligations hereunder shall be assignable by Contractor without the prior written consent of City. In the event of an assignment to which City has consented, the assignee shall agree in writing to personally assume and perform the covenants, obligations, and agreements herein contained. In addition, Contractor shall not assign the payment of any monies due Contractor from City under the terms of this Agreement to any other individual, corporation, or entity. City retains the right to pay any and all monies due Contractor directly to Contractor.

33. Form and Service of Notices. Any and all notices or other communications required or permitted by this Agreement or by law to be delivered to, served upon, or given to either party to this Agreement by the other party shall be in writing and shall be deemed properly delivered, served or given by one of the following methods:

- a. Personally delivered to the party to whom it is directed. Service shall be deemed the date of delivery.

- b. Delivered by email to a known address of the party to whom it is directed provided the email is accompanied by an acknowledgment of receipt by the other party. Service shall be deemed the date of acknowledgement.
- c. Delivery by a reliable overnight delivery service (ex.: Federal Express), receipted, and addressed to the addressees set forth below the signatories to this Agreement. Service shall be deemed the date of delivery.
- d. Delivery by deposit in the United States mail, first class, and postage prepaid. Service shall be deemed delivered ninety-six (96) hours after deposit.

34. Entire Agreement. This Agreement, including the Exhibits and any other attachments, represents the entire Agreement between City and Contractor, and supersedes all prior negotiations, representations or agreements, either written or oral with respect to the subject matter herein. This Agreement may be amended only by written instrument signed by both City and Contractor.

35. Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.

36. Authority. The signatories to this Agreement warrant and represent that they have the legal right, power, and authority to execute this Agreement and bind their respective entities. Evidence of Contractor's authority is attached as **Exhibit D**.

37. Severability. In the event any term or provision of this Agreement is declared to be invalid or illegal for any reason, this Agreement will remain in full force and effect and will be interpreted as though such invalid or illegal provision were not a part of this Agreement. The remaining provisions will be construed to preserve the intent and purpose of this Agreement and the parties will negotiate in good faith to modify any invalidated provisions to preserve each party's anticipated benefits.

38. Applicable Law and Interpretation and Venue. This Agreement shall be interpreted in accordance with the laws of the State of California. The language of all parts of this Agreement shall, in all cases, be construed as a whole, according to its fair meaning, and not strictly for or against either party. This Agreement is entered into by City and Contractor in the County of Fresno, California. Contractor shall perform the Services required under this Agreement in the County of Fresno, California. Thus, in the event of litigation, venue shall only lie with the appropriate state or federal court in Fresno County.

39. Amendments and Waiver. This Agreement shall not be modified or amended in any way, and no provision shall be waived, except in writing signed by the parties hereto. No waiver of any provision of this Agreement shall be deemed, or shall constitute, a waiver of any other provision, whether or not similar, nor shall any such waiver constitute a continuing or subsequent waiver of the same provision. Failure of either party to enforce any provision of this Agreement shall not constitute a waiver of the right to compel enforcement of the remaining provisions of this Agreement.

40. Third Party Beneficiaries. Nothing in this Agreement shall be construed to confer any rights upon any party not a signatory to this Agreement.

41. Execution in Counterparts. This Agreement may be executed in counterparts such that the signatures may appear on separate signature pages. A copy or an original, with all signatures appended together, shall be deemed a fully executed Agreement.

42. Alternative Dispute Resolution. If a dispute arises out of, or relating to, this Agreement, or the alleged breach thereof, and if said dispute cannot be settled through negotiation, the parties agree first to try in good faith to settle the dispute by non-binding mediation before resorting to litigation. The mediator shall be mutually selected by the parties, but in case of disagreement, the mediator shall be selected by lot from among two (2) nominations provided by each party. All costs and fees required by the mediator shall be split equally by the parties, otherwise each party shall bear its own costs of mediation. If mediation fails to resolve the dispute within thirty (30) days, either party may pursue litigation to resolve the dispute.

Demand for mediation shall be in writing and delivered to the other party to this Agreement.

A demand for mediation shall be made within reasonable time after the claim, dispute, or other matter in question has arisen. In no event shall the demand for mediation be made after the date when institution of legal or equitable proceedings based on such a claim, dispute, or other matter in question would be barred by California statutes of limitations.

43. Non-Discrimination. Contractor shall not discriminate on the basis of any protected class under federal or State law in the provision of the Services or with respect to any Contractor employees or applicants for employment. Contractor shall ensure that any subcontractors are bound to this provision. A protected class, includes, but is not necessarily limited to, race, color, national origin, ancestry, religion, age, sex, sexual orientation, marital status, and disability.

44. Performance Requirements. Notwithstanding, and in addition to the provisions of Sections 26 and 27 of this Agreement, if the Services performed hereunder are not in conformity with the requirements of this Agreement and other pertinent documents, City shall have the right to require Contractor to correct the work in conformity with the requirements of this Agreement at no additional increase in the payment to Contractor. Contractor shall promptly correct the work rejected by City for failing to conform to the requirements of the Agreement. Remedy for non-compliance or non-performance shall commence within twenty-four (24) hours of notice. City shall also have the right to require Contractor to take all necessary steps to ensure future performance of the Services in conformity with the requirements of this Agreement. In the event Contractor fails to correct the work or fails to take necessary steps to ensure future performance of the Services in conformity with the requirements of this Agreement, City shall have the right to immediately terminate this Agreement for default.

Now, therefore, the City and Contractor have executed this Agreement on the date(s) set forth below.

CONTRACTOR

CITY OF CLOVIS

By: Mitchel Skyer

By: _____
John Holt, City Manager

Date: 21 NOV 2022

Date: _____

Party Identification and Contact Information:

Contractor

Passio Technologies, LLC
Attn: Mitch Skyer
President
6100 Lake Forest Dr., Ste 410
Atlanta, GA 30328
sales@passiotech.com
(404) 272-9536

City of Clovis

General Services - Transit
Attn: Bethany Berube
Transit Supervisor
1033 Fifth Street
Clovis, CA 93612
bethanyb@cityofclovis.com
(559) 324-2771

ATTEST

Karey Cha, City Clerk

APPROVED AS TO FORM

Scott G. Cross, City Attorney

EXHIBIT A

DESCRIPTION OF SERVICES

SCOPE OF SERVICES

CAD/AVL/AVA HARDWARE AND SYSTEM

The Computer-Aided Dispatch (“CAD”) component of the system shall be seamlessly and fully integrated with the Automatic Vehicle Location (“AVL”) component and shall have the ability for the City to view in real-time and gather data for determining On-Time Performance (i.e., by Route, Operator, Block, Trip, Day Vehicle, etc.), schedule adherence and event management for all Routes.

The combined data from the CAD/AVL system shall also be sufficient to allow the City to utilize the data to improve schedules, frequency (headways), time points, bus-stops, and other service-related functions in a comprehensive manner.

Initially, the Contractor will enter directly into their System the City’s schedules, routes, trips, blocks and stops information for the Stageline Routes, which are the bases for on-time performance tracking and reporting.

The CAD/AVL system should also integrate and control the Automated Vehicle Annunciation System (“AVA”) component and installed head signs to provide stop information to City passengers.

CAD/AVL/AVA Requirements:

- Cloud-hosted with an intuitive web-based user interface.
- Utilize a Mobile Data Terminal (“MDT”)/Tablet as the single point for operators logging onto all integrated components/systems.
- MDT/Tablet should run on the Contractor-recommended Android operating system as a best practice, but be capable of running on future Android versions.
- Track trip schedule adherence.
- Ingestion of automatic vehicle location every five (5) seconds or faster.
- Publishing of vehicle location and run or block assignment information through an Application Programming Interface (“API”) accessible by the City and updating that API every five (5) seconds or faster.
- System shall begin gathering AVL location data when the ignition is turned on and continue reporting until the ignition is turned off (based on a programmable time period, i.e., thirty (30) minutes, etc.).
- Mobile Data Computer (“MDC”)/Vehicle Logic Unit (“VLU”) shall integrate with the onboard equipment on each vehicle that provides head-sign control, destination signs, next stop announcements (audible and textual), covert alarm, etc.
- MDC/VLU shall store the most recent location received from the Automatic Passenger

Counting system (“APC”) so that if the Global Positioning System (“GPS”) receiver is not able to report the location, the “last known good” boardings and alightings will remain available.

- Annunciation of stop names with necessary configurations:
 - Which stops.
 - What text.
 - Where exactly to announce.
- Web portal through which annunciation configuration can be easily customized after General Transit Feed Specification (“GTFS”) import or update.
- Head sign control that automatically rotates pre-defined information in text:
 - Integrates with CAD/AVL system or able to accept data through GTFS/other specified data upload.
 - The City prefers integration with the currently installed head signs (Luminator/Twinvision and Hanover). The awarded Contractor will notify the City if they are unable to integrate with existing head signs and the City will purchase new head signs if necessary.

PASSENGER INFOTAINMENT

To enhance the customer experience, the City would like an infotainment solution for its Stageline vehicles. The solution would be utilized to compliment the audio announcements by displaying public information for such things as: Next Stop, Rider Alerts, promotional information, public service information, transfer points, etc.

City would like to install one monitor in the front of each vehicle. Contractor should recommend monitor size(s), mounting locations, and brackets

Infotainment Requirements:

- Integrate and synchronize with the AVAS.
- Able to accept configuration data through GTFS and location/assignment API provided by a CAD/AVL system, or integrated with the CAD/AVL system.
- Display various types of content including audio, video, images, and accept multiple media types such as MP4, WAV, JPEG, etc.
- Integrate with on-board Public Address (“PA”) system.
- Ability to send/push ad-hoc “real-time” information to the solution.
- Ability to create route-based announcements/displays.

- Display next stop information after departure from previous stop and/or next stop information prior to reaching the next stop giving the rider sufficient time to prepare for alighting.
- Web portal through which display configuration can be easily customized after GTFS import or update.

REAL-TIME AND HISTORICAL SERVICE APIs

The purpose of the real-time and historical APIs is both to provide customer information to riders through third party applications, such as Google Maps, and to provide any other application that the City may utilize, to access real-time and historical information about Stageline service. These APIs may be provided as a standalone component incorporating information in the CAD/AVL or API.

Real-time and Historical Service APIs Requirements:

- GTFS Real-time 2.0-conforming Trip-updates and Vehicle Positions feeds provided on license terms that allow the City to download, own, and store all data.
- GTFS Real-time and any other API endpoints should reference GTFS feed IDs in the GTFS data set provided by the City and update any time IDs in that data set change.
- API endpoints should update at least every five (5) seconds or faster, incorporating real-time information from the CAD/AVL system.
- Well documented GeoJSON or REST API that provides useful and efficient queries regarding transit network real-time and historical status.

Desired:

- All data provided on license terms that allow the City to download, store, and own all data elements, and utilize the data schema for any purpose.
- Graphical User Interface available to dispatchers for understanding real-time and historical status of the system (also may be provided through CAD/AVL system component).
- Historical data available for all API endpoints for ninety (90) days after the service date, and the archiving or deleting of data on a clear operational process transparent to the City.
- Firm capacity and intention to update GTFS real-time endpoints as the specification evolves to provide better information to customers and better reporting data to the City.

Provide service alerts to inform passengers of service disruptions.

30-DAY ROLLING OPERATIONAL TEST

Upon completion of all vehicle and System installations, and to further demonstrate stability, integrity, and reliability prior to Project Signoff, the City and the Contractor will conduct a 30-Day Rolling Operational Test. This test is intended to ensure that the System, as installed in the field, works properly as a fully integrated System. Prior to the start of the 30-day Test, all outstanding

variances must be corrected, and all training completed. During testing, no adjustments, modifications, or substitutions shall be made to the System by the Contractor, except with the approval of the City.

Functionality tests shall verify that the Contractors' features and functions of the System have been professionally designed and implemented. The following items, as a minimum, shall be included in the Function Tests:

- Testing of the proper functioning of all hardware, both individually and collectively.
- Testing of the proper functioning of all software and firmware features and functions.
- Testing of all on-board functions.
- Testing of all user interface functions.
- Verification that System response time requirements have been met.
- Verification that System stability and availability is free of problems.

The City expects no “down time” to be experienced during the 30-day Rolling Operational Test period, either on any vehicles or as a System. If there is a failure of the System during this time, or if 10% of the vehicles experience the same issue, the Contractors will identify and correct the problem. The City, at its sole discretion, will determine if the problem necessitates a resetting of the 30-Day Rolling Operational Test.

GTFS (STATIC AND REAL-TIME) REQUIREMENTS

- Ensure compliance with the California Minimum GTFS Guidelines on an agreed upon schedule with the City.
- Ensure compliance with Mobility Data Interoperability Principles on an agreed upon schedule with the City.
- Integrate with Urban Transportation Associates onboard APC system via API. Import Real-Time Passenger Load data with GTFS feed and make the same data available in Dispatch software tools.
- Export the GTFS (Both static and real-time) feed and make it available for consuming applications, such as Google Maps, within two (2) business days.

SCHEDULE

1.0 Initiation (Prep – Week 1)
1.01 Notice of Intent to Award
1.02 Project Setup and Review
1.03 Review Contract Documents
1.04 Update Acceptance & Warranty Documentation
1.05 Execute Contract
1.06 Notice to Proceed and PO Issued
1.07 Schedule Kickoff Call
2.0 Planning (Week 1 – Week 5)
2.01 Kickoff Call
2.02 Coordinate Equipment Lead Time and Notify Suppliers
2.03 Passio to Send Customer Configuration Forms and Instructions
2.04 Update & Customize Project Schedule
2.05 Customer to Provide Account Setup and Solution Information
2.06 Vehicle & Solution Specific Installation Discussions
2.07 Send Equipment List and Specifications to Customer
2.08 Passio to Send Wiring Diagrams to Customer
2.09 Customer to Send Installation Instructions to Passio
2.10 Develop Installation Plan
2.11 Configuration Corrections Provided by Customer
3.0 Execution (Week 2 – Week 12)
3.01 Order Equipment and Schedule Anticipated Delivery Timeline
3.02 Passio Navigator Account Setup
3.03 Configure and Test Equipment
3.04 Schedule Installation
3.05 Ship Equipment
3.06 Installation Window (Anticipated)
3.07 Configuration per Vehicle
3.08 Installation Confirmation by Vehicle
3.09 Installation Complete
3.10 Execution Phase Configuration, Verification, and Training
4.0 Monitoring and Controlling (Week 11 – Week 15)
4.01 Initial Passio Navigator Training
4.02 Initial Driver Training – Passio Transit App
4.03 Customer Installation Acknowledgement
4.04 Customer Installation Inspection
4.05 Solutions Acknowledgement Period
4.06 Passio Proactive Focused Monitoring Period
4.07 Marketing, Communications, and Social Media Information Shared
4.08 Additional Training Scheduled as Needed
4.09 Customer to Complete AVA Check Sheets on All Buses/Routes
4.10 Test APC Count Accuracy (If Required)
5.0 Launch (Week 15 – Week 17)
5.01 Pre-Launch Full Deployment
5.02 Official Go Live Date
5.03 Two-Day Deep Monitor
5.04 Reports Review

6.0 Closing (Week 18 – Week 22)
6.01 Customer Configuration Training – Customer Request
6.02 Customer Success Tram Interaction – Post Launch

Passio Technologies User Acceptance Testing

Passio will also follow our user acceptance testing protocol. Initial equipment and deployment tests for power, connectivity, and reporting connection. Once the system is operational, Passio will actively monitor all reporting activity for a 60-90 window and implement accuracy testing and configuration adjustments during that period as required.

Your dedicated Passio Project Manager will keep you updated on each step of planning, installation, implementation, and training using our collaborative online project management website. Each Passio customer will have a dedicated project board where they can see progress, make comments, and participate in the plan with our project team

COMPENSATION AND RATES

Contractor shall be compensated according to the following rates/fees:

<u>CAD/AVL/AVA</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Total</u>
CAD/AVL Hardware	\$19,432.00					\$19,432.00
CAD/AVL Setup	\$1,496.25					\$1,496.25
CAD/AVL License	\$1,408.05					\$1,408.05
CAD/AVL Annual	\$11,186.00	\$11,186.00	\$11,186.00	\$11,186.00	\$11,186.00	\$55,930.00
AVA Hardware	\$5,880.00					\$5,880.00
AVA Setup	\$3,746.25					\$3,746.25
AVA License	\$12,572.00					\$12,572.00
AVA Annual	\$6,552.00	\$6,552.00	\$6,552.00	\$6,552.00	\$6,552.00	\$32,760.00
Headsign Hardware	\$2,870.00					\$2,870.00
Headsign License	\$6,287.40					\$6,287.40
Headsign Annual	\$1,498.00	\$1,498.00	\$1,498.00	\$1,498.00	\$1,498.00	\$7,490.00
Text Service Setup	\$1,594.77					\$1,594.77
Text Service Annual	\$4,455.00	\$4,455.00	\$4,455.00	\$4,455.00	\$4,455.00	\$22,275.00
Training	\$0					\$0.00
Spare Parts	\$2,776					\$2,776.00
Total CAD/AVL/AVA:	\$81,753.72	\$23,691.00	\$23,691.00	\$23,691.00	\$23,691.00	\$176,517.72

<u>Passenger Infotainment</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Total</u>
Infotainment Hardware	\$77,545.58					\$77,545.58
Setup	\$30,539.74					\$30,539.74
Infotainment Annual	\$11,872.00	\$11,872.00	\$11,872.00	\$11,872.00	\$11,872.00	\$59,360.00
Training	\$0					\$0
Infotainment Total:	\$119,957.32	\$11,872.00	\$11,872.00	\$11,872.00	\$11,872.00	\$167,445.32

<u>APC Integration</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Total</u>
Setup	\$7,800.00					\$7,800.00
Annual	\$3,600.00	\$3,600.00	\$3,600.00	\$3,600.00	\$3,600.00	\$18,00.00
Training	\$0					\$0
APC Integration Total:	\$11,400.00	\$3,600.00	\$3,600.00	\$3,600.00	\$3,600.00	\$25,800.00

<u>Real-Time & Historical API's</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Total</u>
GTFS Setup	\$1,795.00					\$1,795.00
GTFS Annual	\$0					\$0.00
APIs Total:	\$1,795.00	\$0	\$0	\$0	\$0	\$1,795.00

<u>Installation</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Total</u>
Component Install	\$19,320.00					\$19,320.00
Install Total:	\$19,320.00	\$0	\$0	\$0	\$0	\$19,320.00

<u>Extended Warranty</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Total</u>
MDT Warranty	\$6,825.00					\$6,825.00
VLU Warranty	\$2,362.50					\$2,362.50
AVA Warranty	\$1,750.00					\$1,750.00
Extended Warranty Total:	\$10,397.50	\$0	\$0	\$0	\$0	\$10,397.50

These rates/fees represent the total cost for all Services provided under this Agreement, including labor, equipment, materials, costs and expenses, taxes, and overhead, to be paid for Services satisfactorily performed.

Total compensation, including expense reimbursement for the initial term, shall not exceed:

INITIAL CONTRACT TERM TOTAL: \$371,391.97

Passio Technologies - Service Levels Agreement

- 1. Support:** Passio will provide remote support for connectivity, configuration, and hardware troubleshooting. Passio will provide or arrange for on-site support services following installation of the Equipment for additional fees, which may include trip charges and/or travel expenses, hourly fees, and minimum charges as incurred. Passio's support personnel will, under most circumstances, log and confirm support items within one working day. Passio shall use commercially reasonable efforts to resolve critical support items are within two working days or less.
- 2. Schedule Maintenance.** Passio shall use commercially reasonable efforts to provide City with prior notice of maintenance times, which Passio typically conducts during off-peak periods.
- 3. Availability.** Subject to the terms and conditions of this Agreement, Passio will use commercially reasonable efforts to make the Hosted Services Available (as defined below) at least ninety-nine point five percent (99.5%) of the time as measured over the course of each calendar month during the Term (each such calendar month, a "Service Period"), excluding unavailability as a result of any of the Exceptions described below in this Section 1 (the "Availability Requirement"). "Service Level Failure"

means a material failure of the Hosted Services to meet the Availability Requirement. "Available" and "Availability" mean the Hosted Services are available for access and use by City. For purposes of calculating the Availability Requirement, the following are "Exceptions" to the Availability Requirement, and neither will the Hosted Services be considered un-Available nor any Service Level Failure be deemed to occur in connection with any failure to meet the Availability Requirement or impaired ability of City to access or use the Hosted Services that is due, in whole or in part, to any: (a) access to or use of the Hosted Services by City or any of its users, or using City's or an users' access credentials, that does not strictly comply with this Agreement or the Documentation; (b) City's delay in performing, or failure to perform, any of its obligations under this Agreement; (c) City's or its users' Internet connectivity; (d) force majeure event; (e) failure, interruption, outage or other problem with any software, hardware, system, network, facility or other matter not supplied by Passio pursuant to this Agreement; (f) scheduled downtime for routine maintenance of which Passio has provided City at least 24 hours' prior notice via email or through the Hosted Services; or (g) disabling, suspending, or terminating the Services pursuant to the Agreement.

4. Service Level Failures and Remedies. In the event of a Service Level Failure, Passio will issue a credit to City in the amount set forth in the table below, measured as a percentage of the monthly fees (or pro rata equivalent thereof) for the applicable Hosted Services paid or payable for the Service Period the Service Level Failure occurred (each a "Service Credit").

Availability	Service Credit (as a percentage of monthly fees (or pro rata equivalent thereof))
99.5% - 100%	0.0 %
95.0% - 99.49%	2.5 %
90.0% - 94.9%	5.0 %
< 90.0%	20.0 %

Notwithstanding the foregoing, Passio has no obligation to issue any Service Credit unless City: (i) reports the Service Failure to Passio immediately upon becoming aware of it, and (ii) requests such Service Credit in writing within 10 days of the Service Level Failure. Additionally, in no event will a Service Credit for any Service Period exceed [twenty percent (20%)] of the total monthly fees (or pro rata equivalent thereof) that would be payable for that Service Period if no Service Level Failure had occurred. For the avoidance of doubt, if a flat fee is agreed upon in the applicable Order, and as a result there is not a monthly fee, the Service Credit for any Service Period will not exceed twenty percent (20%) of the total flat fee divided by the total number of months that constitute the Term. Subject to the foregoing, any Service Credit payable to City under this Agreement will be issued to City in the calendar month following the Service Period in which the Service Level Failure occurred. This Section 4 sets forth Passio's sole obligation and liability and City's sole remedy for any Service Level Failure, and Passio and City agree that such credits are a reasonable estimation of the damages and are not a penalty.

5. Hardware Replacement Passio will typically order and/or ship replacement hardware within two working days of receiving completed Return Merchandise Authorization from City. Replacement items not in stock will be processed using the available supplier with the fastest replacement schedule available at the time. Equipment replaced under Passio Warranty Program (either standard one year manufacturer's warranty or if extended warranty is purchased) covers equipment only and does not include labor or installation. City is responsible for shipping costs and warranty processing fees.

6. Equipment Installation. If equipment and installation services are contracted, City shall provide direction, in writing, to Passio Technologies, a minimum of 10 days prior to installation date. Information to be provided shall include power source for all equipment, location of equipment installation, and any other installation parameters. Vehicle installation shall be deemed complete and accepted by City after successful communications test by installer. City has two working days to alert Passio Technologies, in writing to any installation exception. Installations are warranted for 30 days.

7. System Deployment and Testing. Initial system deployment testing to start a minimum of fourteen (14) working days prior to live deployment and typically continues for 30-90 days post live start. All equipment shall be fully installed to initiate deployment testing, any equipment not installed will extend testing period. Items to be reviewed and adjusted (but not limited to) will include equipment installation and communications, system configuration, schedule activity, and reporting and analytics. City will work directly with the deployment team to review, update and provide feedback for edits and adjustments. Accuracy of reports and system data is directly related to the thoroughness of the deployment testing, and any limitations placed on the testing process may impact the amount of time needed to address reporting or configuration issues.

8. Customer Agreement. City agrees to the above terms and conditions upon acceptance of equipment and/or software licenses.

EXHIBIT B CONTRACTOR'S PROPOSAL

EXHIBIT C INSURANCE REQUIREMENTS

Prior to commencement of the Services, Contractor shall take out and maintain at its own expense the insurance coverage required by this **Exhibit C**. Contractor shall cause any subcontractor with whom Contractor contracts for the performance of Services pursuant to this Agreement to take out and maintain equivalent insurance coverage. Said insurance shall be maintained at all times during Contractor's performance of Services under this Agreement, and for any additional period specified herein. All insurance shall be placed with insurance companies that are licensed and admitted to conduct business in the State of California and are rated at a minimum with an "A:VII" by A.M. Best Company, unless otherwise acceptable to the City.

a. Minimum Limits of Insurance. Contractor shall maintain the following types of insurance with limits no less than specified:

(i) General Liability Insurance (including operations, products and completed operations coverages) in an amount not less than two million dollars (\$2,000,000.00) per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.

(ii) Worker's Compensation Insurance as required by the State of California.

(iii) Automobile Liability Insurance in an amount not less than one million dollars (\$1,000,000.00) per accident for bodily injury and property damage.

(iv) Umbrella or Excess Liability. In the event Contractor purchases an Umbrella or Excess insurance policy(ies) to meet the "Minimum Limits of Insurance," this insurance policy(ies) shall "follow form" and afford no less coverage than the primary insurance policy(ies). In addition, such Umbrella or Excess insurance policy(ies) shall also apply on a primary and non-contributory basis for the benefit of the City, its officers, officials, employees, agents, and volunteers.

If Contractor maintains higher limits than the minimums shown above, the City shall be entitled to coverage at the higher limits maintained.

b. Other Insurance Provisions. The general liability policy is to contain, or be endorsed to contain, the following provisions:

(i) The City, its officers, officials, employees, agents, and volunteers are to be covered as insureds with respect to liability arising out of automobiles owned, leased, hired, or borrowed by or on behalf of the Contractor; and with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form 20 10 11 85 or both CG 20 10, CG 20 26, CG 20 33 or CG 20 38; and CG 20 37 forms if later revisions used).

(ii) For any claims related to the Services performed pursuant to this Agreement, the Contractor's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the City, its officers,

officials, employees, agents, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.

(iii) Each insurance policy required by this section shall be endorsed to state that the City shall receive written notice at least thirty (30) days prior to the cancellation, non-renewal, or material modification of the coverages required herein.

(iv) Contractor grants to the City a waiver of any right to subrogation which any insurer of said Contractor may acquire against the City by virtue of the payment of any loss under such insurance. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

(v) Any deductibles or self-insured retentions must be declared to and approved by the City of Clovis Risk Services. The City may require the Contractor to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

c. Evidence of Coverage. Contractor shall deliver to City written evidence of the above insurance coverages, including the required endorsements prior to commencing Services under this Agreement; and the production of such written evidence shall be an express condition precedent, notwithstanding anything to the contrary in this Agreement, to Contractor's right to be paid any compensation under this Agreement. City's failure, at any time, to object to Contractor's failure to provide the specified insurance or written evidence thereof (either as to the type or amount of such insurance), shall not be deemed a waiver of City's right to insist upon such insurance later.

d. Maintenance of Insurance. If Contractor fails to furnish and maintain the insurance required by this section, City may (but is not required to) purchase such insurance on behalf of Contractor, and the Contractor shall pay the cost thereof to City upon demand, and City shall furnish Contractor with any information needed to obtain such insurance. Moreover, at its discretion, City may pay for such insurance with funds otherwise due Contractor under this Agreement.

e. Subcontractors. If the Contractor should subcontract all or any portion of the work to be performed in this Agreement, the Contractor shall cover the subcontractor, and/or require each subcontractor to adhere to all the requirements contained herein. Similarly, any cancellation, lapse, reduction or change of subcontractor's insurance shall have the same impact as described above.

f. Special Risks or Circumstances. The City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

g. Indemnity and Defense. Except as otherwise expressly provided, the insurance requirements in this section shall not in any way limit, in either scope or amount, the indemnity and defense obligations separately owed by Contractor to City under this Agreement.

EXHIBIT D SIGNING AUTHORITY



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Planning and Development Services Department

DATE: March 6, 2023

SUBJECT: Planning and Development Services - Approval – Res. 23-____, Annexation of Miscellaneous Properties to the Landscape Maintenance District No. 1.

ATTACHMENTS: 1. Res. 23-____

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

For the City Council to approve Resolution 23-____, approving annexation of miscellaneous properties into City of Clovis Landscape Maintenance District (LMD) No. 1.

EXECUTIVE SUMMARY

The developers / property owners of the properties listed in Attachment A of the proposed resolution have submitted executed landscape maintenance covenants, copies of which are on file with the City Clerk, indicating consent to annexation of the subject property into the City of Clovis Landscape Maintenance District No. 1. This action will annex each of these properties into the Landscape Maintenance District so that they can be assessed for maintenance costs within their respective areas.

BACKGROUND

Council formed the original district on July 15, 1985, for the purpose of funding the maintenance of landscaped areas and parks. These properties are being brought to Council for annexation to the district as a group rather than separately in an effort to conserve staff resources and Council's time. Under the provisions of the Landscaping and Lighting Act of 1972, if all of the owners of property proposed for annexation provide written consent to annexation, then noticing, hearing, and filing of an Engineer's Report is not required.

Under the provisions of the Landscaping and Lighting Act of 1972, and in accordance with Article XIII C and Article XIII D of Proposition 218, all the owners of property proposed for annexation have provided a written request and consent to annexation, and have executed a covenant (petition) indicating acceptance of the annual assessment.

FISCAL IMPACT

This project will add any landscaped areas and will incrementally increase maintenance revenue through annual assessments from the annexed properties. Current year to date status of landscape maintenance district facilities is as follows:

	<u>Various LMD's Under Consideration</u>	<u>Year to Date</u>
LMD Landscaping added:	0.000 acres	11.535 acres
Resource needs added:	0.000 person	1.154 person

The resource needs estimate is based on 1 person per 10 acres of landscaped area.

REASON FOR RECOMMENDATION

The property owners for the miscellaneous properties have requested or consented to annexation into the City of Clovis LMD No. 1.

ACTIONS FOLLOWING APPROVAL

The miscellaneous properties shall become a part of the City of Clovis LMD No. 1 and will be assessed next year for maintenance costs.

Prepared by: Ruben Amavizca, Engineer II

Reviewed by: City Manager *AA*

RESOLUTION 23-__

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS
APPROVING ANNEXATION TO LANDSCAPING MAINTENANCE DISTRICT NO. 1 OF
THE CITY OF CLOVIS**

WHEREAS, City of Clovis Landscape Maintenance District No. 1 ("District") was formed by Resolution No. 85-78, adopted July 15, 1985, pursuant to Part 2 of Division 15 of the Streets and Highways Code (Landscape and Lighting Act of 1972), herein the "Act"; and

WHEREAS, all of the owners of property proposed to be annexed to the District consisting of proposed developments as described in Attachment A attached hereto and incorporated herein by reference, have consented to said annexation and such annexation may be ordered without notice and hearing or filing of engineer's report, or both.

NOW, THEREFORE, BE IT RESOLVED, that the City of Clovis:

1. That the public interest and convenience require that certain property described in Attachment A attached hereto and by reference incorporated herein be annexed into Landscape Maintenance District No. 1 of the City of Clovis for the maintenance and servicing of landscaping facilities.
2. The City Clerk shall receive and file the maps showing the boundaries of the areas annexed as set forth in Attachment A which boundaries shall be used for assessment proceedings until and unless a change of organization is approved pursuant to the Act.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on March 6, 2023, by the following vote, to wit.

AYES:
NOES:
ABSENT:
ABSTAIN:

DATED:

Mayor

City Clerk

Attachment A

Miscellaneous properties to be added to the Landscape Maintenance District No. 1 of the City of Clovis:

Project Number	Address	Developer/Owner
Building Permit No. 10-1781	2124 Sample Ave	Rafael Crespo and Laudelina Crespo
Building Permit No. 585-2011	591 W. Minarets Ave	Richard E. Sexton, Jr. and Ann E. Sexton
Building Permit No. 10-2058	2413 Menlo Ave	Jackie Wilkins
Building Permit No. 08-1367	949 Fremont Ave	Khosrou Vahdat Afshar and Maryam Ghodosian Afshar
Building Permit No. 08-1105	978 Burlingame Ave	Debbie L. Cheselske and Dennis P. Cheselske
Building Permit NO 4914-2019	95 W. Sierra Ave	Stephen M. Garcia and Grace V. Garcia
Building Permit No. 22-02583	1701 Locan Ave	Mark Marinko
Building Permit No. 4780-2020	1198 Los Altos Ave	Sean S. Skiles and Julie A. Skiles
Building Permit No. 6212-2019	635 W. Paul Ave	Ana Maria Alcaraz and Noel Alcaraz
Building Permit No. 22-04422	1743 Bullard Ave	Salvador Casillas and Martha Casillas
Building Permit No. 4734-2014	1549 Fifth Street	Diana Guadalupe Chavez
Building Permit No. 4743-2014	641 Oxford Ave	John A. Lovejoy
Building Permit No. 1132-2011	455 Gateway Ave	Susan E. Mckee and John S. Henderson
Building Permit No. 4731-2020	559 W. Mesa Ave	Leland R. Burgan and Jane Best
Building Permit No. 1901-2020	588 Purdue Ave	Corey H. Hanemoto
Building Permit No. 22-04420	1729 Bullard Ave	Salvador Casillas and Martha Casillas
Building Permit No. 22-03995	29 Dewitt Ave	William J. Johnson and Terrill D. Johnson
SPR 2018-004A	2500 Alluvial Ave	Neema Assemi
SPR 207A	270 Shaw Ave	Manreet S. Ladhar
Building Permit No. 5491-2020	640 W. Rialto Ave	Javier Montalvo Prieto and Maria Irene Delgado Deprieto
Building Permit No. 973-2020	485 W. Sierra Ave	Larry Lew Louie and Lai-Feng Vivian Louie

Building Permit No. 21-00180	216 Keats Ave	James F. Mobley and Laurel A. Mobley
Building Permit No. 2403-2020	1712 Stanford Ave	Marvin Dale Wooten, III
Bulding Permit No. 2184-2020	348 De Witt Ave	Sheila T. Amato
Building Permit No. 5928-2015	1621 Fifth Ave	MRO Investment
Building Permit No. 7081-2019	1362 Bernadine Dr.	Rodney Hayes
Building Permit No. 2185-2020	282 Oxford Ave	John M. Sobaje and Kristen Sobaje
Building Permit No. 3131-2019	281 Peach Ave	Trenton G. Stokes and Brenna K. Stokes
SPR 2020-002	561 De Witt Ave	Keith Korth
SPR 20-007	541 De Witt Ave	Gary R. Horton and Carrie M. Horton
Building Permit No. 1222-2019	3171 Buckingham Ave	Ali Alitaiyeb
Building Permit No. 187-2019	1537 Bullard Ave	Shelly Orene Crawford
Building Permit No. 4515-2019	1018 Woodworth Ave	Samuel Gonzales and Jennie Gonzales
Building Permit No. 6976-2019	385 Purdue Ave	2M Development Corporation, a California Corporation
Building Permit No. 6974-2019	395 Purdue Ave	2M Development Corporation, a California Corporation



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Public Utilities Department

DATE: March 6, 2023

SUBJECT: Public Utilities - Approval – Res. 23-____, A Resolution Initiating Proceedings for the Annual Levy of Assessments for Landscape Maintenance District No. 1.

ATTACHMENTS: 1. Resolution of Initiation

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

For the City Council to approve Resolution No. 23-____, which will initiate proceedings for the annual levy of assessments for Landscape Maintenance District No. 1.

EXECUTIVE SUMMARY

This resolution is to initiate proceedings for the annual levy of assessments for the Landscape Maintenance District (LMD) No. 1 as required by the Landscaping and Lighting Act of 1972. The assessments are necessary to fund the operations and maintenance of the benefit areas within the LMD. The Engineer's Report detailing the assessments will be compiled and prepared by the City's consultant, Francisco and Associates, Inc. Upon City Council approval of the Engineer's Report on May 15, 2023, the assessments will be sent to Fresno County to be included in the property tax rolls.

BACKGROUND

The Landscaping and Lighting Act of 1972, a provision of the Streets and Highways Code of California, allows a legislative body to levy and collect assessments for specific areas that receive a special benefit. Within the City of Clovis, these specific areas are collectively known as Landscape Maintenance District (LMD) No.1. On July 15, 1985, Council adopted Resolution No. 85-78, forming the City of Clovis Landscape Maintenance District No. 1, which funds the operation and maintenance of landscaped areas and interior parks of development throughout the City.

Pursuant to the Landscape and Lighting Act of 1972 (the "Act"), City Council must annually approve an Engineer's Report for the City's LMD No. 1 to authorize the levy of assessments for the ensuing fiscal year. To initiate the Fiscal Year 2023-24 LMD No. 1 approval process, the Act requires City Council to adopt a resolution ordering the preparation and filing of the Engineer's Report, which is the purpose for this agenda item. Following adoption of the attached resolution, the LMD No. 1 Engineer's Report and proposed assessments for Fiscal Year 2023-24 will be brought to Council for preliminary approval at the April 17, 2023, City Council meeting. At that time, City staff will also recommend that Council adopt a resolution declaring its intent to levy and collect assessments and set a public hearing date related to the proposed LMD No. 1 assessments for Fiscal Year 2023-24, as required by the Act.

The yearly assessments established for all properties within the LMD provide funding for the City's costs for operation, maintenance, related services, and incidental expenses. The required operation and maintenance includes mowing, edging, fertilizing, weed control, irrigation system, pruning, plant replacement, lighting, and a depreciation fund to periodically replace landscape and park structures and associated equipment. The Act requires that a resolution be adopted that generally describes new improvements or substantial changes to existing improvements, and orders that a report be prepared and filed regarding the assessment district. A listing of new improvements or substantial changes to the existing improvements is attached to the resolution as Exhibit 1. Adoption of this resolution satisfies the requirement.

The final step in the process is to notify the Fresno County Auditor-Controller of the approved assessments so that they may be included on the property tax rolls. The tentative schedule for notification to the County is June 29, 2023.

FISCAL IMPACT

None.

REASON FOR RECOMMENDATION

This resolution is required by the Landscaping and Lighting Act of 1972 to levy assessments to fund the cost of operations and maintenance for benefit areas within LMD No. 1.

ACTIONS FOLLOWING APPROVAL

1. The Engineer's Report will be prepared; and
2. Staff will present the final assessment costs for consideration by the City Council at the public hearing.

Prepared by: Eric Aller, Parks Manager

Reviewed by: City Manager *AA*

RESOLUTION 23-____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS INITIATING PROCEEDINGS FOR THE ANNUAL LEVY OF ASSESSMENTS FOR LANDSCAPE MAINTENANCE DISTRICT NO. 1 OF THE CITY OF CLOVIS

WHEREAS, the Council has approved seventy-six (76) annexations with new improvements to the Landscape Maintenance District No. 1 of the City of Clovis (herein "LMD No. 1") since the Engineer's Report dated June 6, 2022; and

WHEREAS, proceedings for the annual assessments for LMD No. 1 for the fiscal year 2023-24 need to be initiated.

NOW, THEREFORE, BE IT RESOLVED, that the City of Clovis is hereby found, determined, and ordered as follows:

- 1. The Council proposes to undertake proceedings for the levy of the annual assessments for LMD No. 1 under part 2 of Division 15 of the Streets and Highways Code of the State of California (Section 22500 et seq.), generally known as the Landscaping and Lighting Act of 1972 (herein the "Act").
2. The new improvements being added by the above referred annexations to the existing maintained improvements are set forth in Attachment A.
3. The Public Utilities Director shall have a report prepared and filed in accordance with Article 4 (commencing with Section 22565) of the Act.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on March 6, 2023, by the following vote, to wit.

AYES:
NOES:
ABSENT:
ABSTAIN:

DATED:

Mayor

City Clerk

THE NEW IMPROVEMENTS FOR THE LANDSCAPE MAINTENANCE
DISTRICT NO. 1 ARE DESCRIBED AS FOLLOWS:

The proposed landscaping, irrigation, and lighting systems as described in the covenants appropriate to each of the following properties and other tracts to be annexed to the LMD prior to June 30, 2023.

Tract 6277	BPN 22-02886
Tract 6339	SPR 2021-004
Tract 6377	BPN 07-2070
Tract 6404	BPN 08-1670
Tract 6166	BPN 09-2165
Tract 6389	BPN 07-03615
Building Permit No. 22-00045	BPN 08-2789
Building Permit No. 21-00626	BPN 08-1730
Building Permit No. 5245-2020	BPN 09-0954
Building Permit No. 5242-2020	BPN 08-2774
Building Permit No. 21-03364	BPN 08-1586
Building Permit No. 21-04956	PM 2022-002
Building Permit No. 21-01344	BPN 07-2937
Building Permit No. 21-03590	BPN 08-1430
Building Permit No. 187-2019	BPN 10-0193
Building Permit No. 4515-2019	BPN 11-0352
Building Permit No. 08-1430	BPN 11-0211
Building Permit No. 07- 3601	BPN 985-2011
Building Permit No. 10- 1730	BPN 09-02419
Building Permit No. 08- 1361	BPN 09-2323
Building Permit No. 08- 1774	BPN 10-0153
Building Permit No. 08- 1130	BPN 09-1360
Building Permit No. 2120-2012	BPN 10-2358
Building Permit No. 05- 3006	BPN 09-2418
Building Permit No. 08- 0088	BPN 09-0539
Building Permit No. 10- 0874	BPN 08-3022
SPR 2020-008	BPN 10-2238
SPR 1988-090A	BPN 10-1554
SPR 2019-005	BPN 10-0828
SPR 2020-001	BPN 10-0834
SPR 1990-003A	BPN 10-2035
RHNA 2019-001	BPN 08-1652
SPR 2018-011A2	BPN 08-0980
SPR 1994-031A	BPN 07-3017
Tract 6367	BPN 11-0274
Tract 6292	BPN 08-02336
Tract 6342	BPN 08-1817
Tract 6344	Tract 6208



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Public Utilities Department

DATE: March 6, 2023

SUBJECT: Public Utilities – Approval – Award a Contract to Karbonous, Inc. for Maintenance Work Consisting of Purchasing and Replacing Granular Activated Carbon (GAC) at Well 12 and Well 27 for the amount of \$240,156.20.

ATTACHMENTS: 1. Vicinity Map

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

For the City Council to authorize the City Manager to enter into an agreement with Karbonous, Inc. in the amount of \$240,156.20 to provide maintenance consisting of removing and replacing granular activated carbon (GAC) at City Well 12, located at 900 Gettysburg Avenue, and Well 27, located at 611 Peach Avenue.

EXECUTIVE SUMMARY

Included in the 2022-2023 Water Enterprise budget are funds to remove and install GAC at various well sites in the City. Three carbon suppliers were contacted through a competitive quote process and three separate quotes were received for each well site. Karbonous, Inc. provided the lowest responsible quotes for Well 12 and Well 27 in the amounts of \$119,504.18 and \$120,652.02, respectively (including tax). The work includes routine maintenance as defined in section 2.9.02(c) of the Clovis Municipal Code, consisting of removing the existing carbon vessel contents, transporting the contents to a reactivation/destruction facility, and then installing virgin coal-based carbon in the vessels at each well site.

BACKGROUND

Granular Activated Carbon (GAC) is currently utilized at 5 separate City well sites to absorb contaminants in the drinking water. Over time, the carbon loses its adsorptive capacity and no longer captures contaminants, at which point they begin to pass through into the drinking water

system. Once the carbon has reached its capacity, it must be removed and either replaced or regenerated. This will typically occur between one and three years, depending on the contaminant and production of the well.

Both wells have GAC treatment to remove contaminants from drinking water in order to stay below the maximum contaminant level (MCL) set by the State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW). Well 12 has GAC treatment to remove 1,2,3-Trichloropropane (TCP) from drinking water, while Well 27 has GAC treatment to remove 1,2 Dibromo-3-Chloropropane (DBCP) from drinking water. Treatment was originally installed at Well 12 in 1992 and the carbon was most recently replaced on May 25, 2021. Treatment at Well 27 was installed in 1998 and the carbon was most recently replaced on November 12, 2019.

FISCAL IMPACT

Sufficient funds were included in the Water Enterprise budget for the 2022-2023 fiscal year. The City received a remediation settlement for DBCP in 1997 and for TCP in 2017. Funds from these settlements are budgeted each year to maintain compliance of the well sites requiring treatment.

REASON FOR RECOMMENDATION

Karbonous, Inc. provided the lowest responsible quote for both well sites and has extensive experience in this type of work. There are sufficient funds available in this fiscal year's budget for the cost of this project. Additionally, in order to continue to run the wells as permitted by DDW, replacement of the carbon is required to meet SWRCB drinking water standards.

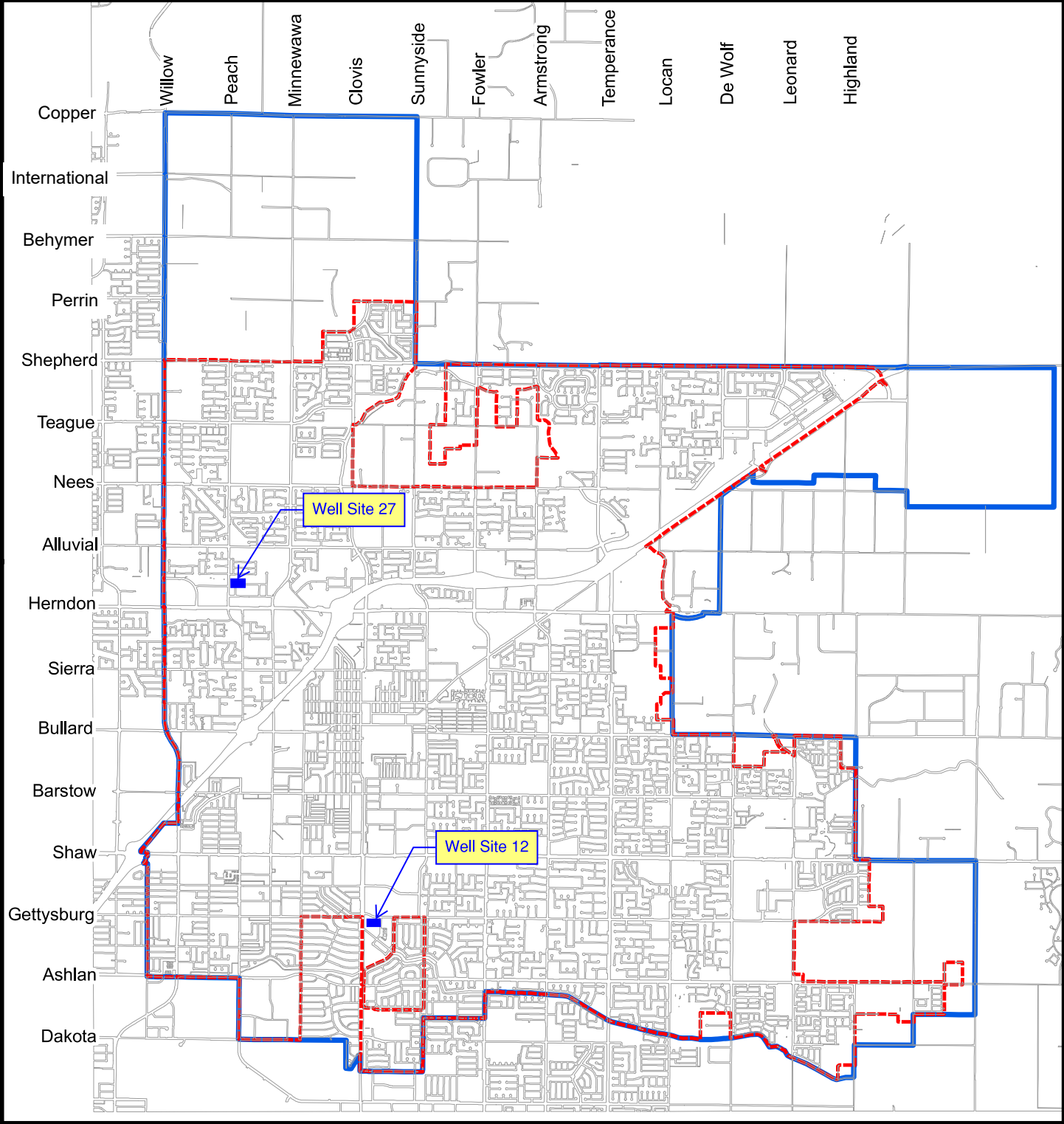
ACTIONS FOLLOWING APPROVAL

A contract will be prepared and executed by the City Manager, subject to the Contractor providing performance security that is satisfactory to the City.

Prepared by: Paul Armendariz, Assistant Public Utilities Director

Reviewed by: City Manager *AA*

VICINITY MAP



ATTACHMENT 1



 CITY LIMITS  SPHERE OF INFLUENCE



CITY of CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Planning and Development Services

DATE: March 6, 2023

SUBJECT: Consider items associated with approximately 1.04 acres of land located on the north side of Alluvial Avenue, between Sunnyside and Fordham Avenues. Stallion Development and Construction – Arman Zakaryan, owner/applicant; Dan Zack, representative.

a. Consider Approval - Res. 23-____, A request to approve an environmental finding of a Mitigated Negative Declaration for General Plan Amendment GPA2022-001 and Rezone R2022-001.

b. Consider Approval - Res. 23-____, GPA2022-001, A request to amend the General Plan to re-designate the subject property from the Low Density Residential (2.1-4.0 DU/Ac) classification to the Medium High (7.1-15.0 DU/Ac) classification.

c. Consider Introduction - Ord. 23-____, R2022-001, A request to rezone the subject property from the R-1-7500 (Single-family Residential, 7,500 sf) Zone District to the R-2 (Multifamily Medium-High Density Residential) Zone District.

Staff: Lily Cha, AICP, Senior Planner

Recommendation: Approve

ATTACHMENTS:

1. Draft Resolution, ISMND
2. Draft Resolution, GPA2022-001
3. Draft Ordinance, R2022-001
4. Development Exhibits
5. Applicant's Justification Letter
6. Letters of Objection
7. Correspondence from Agencies and Departments
8. Initial Study/ Mitigated Negative Declaration

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

Staff and the Planning Commission recommend that the City Council approve the following:

- An environmental finding of a mitigated negative declaration for general plan amendment GPA2022-001 and rezone R2022-001; and
- General Plan Amendment GPA2022-001; and
- Rezone R2022-001.

EXECUTIVE SUMMARY

The applicant is proposing the development of a 12-unit multifamily development on approximately 1.04 acres of land located north of Alluvial Avenue, between Sunnyside and Fordham Avenues. The project requires the re-designation of the property’s land use from Low Density Residential (2.1-4.0 DU/Ac) to Medium High Density Residential (7.1-15.0 DU/Ac) classification. Coupled with the change in land use designation is a request to rezone the property from the existing R-1-7500 (Single-family Residential, 7,500 sf) Zone District to the R-2 (Multifamily Medium-High Density Residential) Zone District. Approval of these land use entitlements will allow the developer to proceed with the site plan review process where site specific details of the development are reviewed by staff.

BACKGROUND

- General Plan Designation: Low Density Residential (2.1-4.0 DU/Ac)
- Specific Plan Designation: Herndon Shepherd
- Existing Zoning: R-1-7500 (Single-family Residential, 7,500 sf)
- Lot Size: ±1.04 acres
- Current Land Use: Vacant
- Adjacent Land Uses:
 - North: Single-family subdivision
 - South: Single-family subdivision
 - East: Single-family subdivision
 - West: Church
- Previous Entitlements: R92-18

PROPOSAL AND ANALYSIS

The applicant requests approval of GPA2022-001 and R2022-001 to allow the development of a 12-unit multifamily residential project on a ±1.04-acre parcel that is located on the north side of Alluvial Avenue, between Sunnyside and Fordham Avenues (see **Figure 1**). The project site is vacant and previously housed a single-family residence with an accessory building. The house and accessory building were demolished due to dilapidation from fire damage and abandonment. The project is considered an infill development that is primarily surrounded by single-family residences to the north, east, and across Alluvial Avenue to the south. A church site abuts the project site directly to the west.

FIGURE 1
Project Location



 = Project Site (1.04)

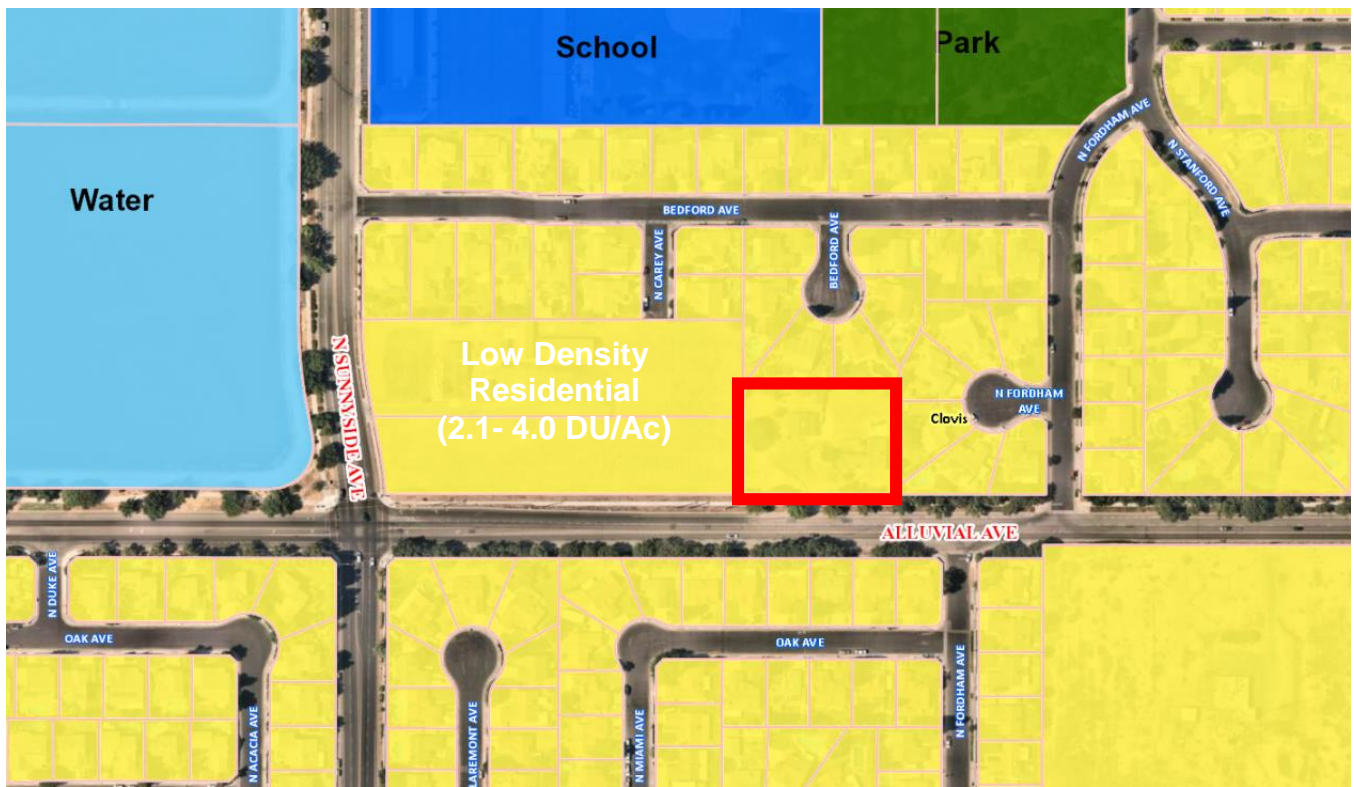
Proposed Multifamily Development

The development project is a 12-unit multifamily apartment complex proposed for market rate rent. Of the 12-units proposed, a total of ten are 2-bedroom units and the remaining two are 3-bedroom units. The main building housing the residential units is proposed at 2-stories (25 foot tall to the parapet) and approximately 16,160 square feet in size. Garage parking will be provided via a single-story (12 foot tall), 3,160 square foot accessory building. Additional parking stalls are provided along the main building perimeter. Also, incorporated into the project is approximately 5,400 square feet of open space. The open space area is provided for the benefit of the residences and incorporates a lawn area and a covered seating area with outdoor barbeques. The project will also provide associated site improvements such as landscaping and site utilities. The proposed site plan, building elevations, and floor plan are provided in **Attachment 4** of this report.

General Plan Amendment

The applicant is requesting to amend the General Plan Land Use Diagram to modify the land use designation of the subject property from the current Low Density Residential (2.1-4.0 Dwelling Unit Per Acre) to the Medium High Density Residential (7.1-15.0 Dwelling Unit Per Acre) designation. Under the existing General Plan land use designation (Low Density Residential), the project site could support the development up to a maximum of 4 residential units. With the proposed land use designation (Medium High Density Residential), the site could accommodate development of up to 15 residential units. However, applicant is proposing 12 residential units with this project.

FIGURE 2
General Plan Land Use Diagram



 = Project Site (Proposed Medium Density)

The General Plan provides policies and actions to guide the orderly development of the city. A range of allowed density and intensity for each land use designation is provided within the Land Use Element of the General Plan. A general plan amendment is a change in City policy and therefore requires a compelling reason for change. For that reason, a justification letter has been provided by the applicant as part of the application to amend the General Plan (see **Attachment 5**). According to the applicant, the change will have positive impacts by advancing several important goals of the General Plan, providing additional revenue for the City as a result of the multifamily development, and providing more housing within the City.

Consistency with General Plan Goals and Policies

The proposed project would change the land use designation from Low Density Residential to Medium High Density Residential. The change in land use designation would not conflict with the goals and policies of the General Plan land use element. The following goals and policies reflect Clovis' desire to maintain tradition of responsible planning and well-managed growth to preserve the quality of life in existing neighborhoods and ensure the development of new neighborhoods with an equal quality of life.

Policy 3.6 Mix of housing types and sizes. Development is encouraged to provide a mix of housing types, unit sizes, and densities at the block level. To accomplish this, individual projects five acres or larger may be developed at densities equivalent to one designation higher or lower than the assigned designation, provided that the density across an individual project remains consistent with the General Plan.

Goal 5: A city with housing, employment, and lifestyle opportunities for all ages and incomes of residents.

Policy 5.1 Housing variety in developments. The Clovis General Plan has been planned to provide a variety of housing product types suitable to each stage of a person's life. Each development should contribute to a diversity of housing sizes and types within the standards appropriate to the land use designation. This policy does not apply to projects smaller than five acres.

Policy 5.2 Ownership and rental. Encourage a mixture of both ownership and rental options to meet varied preferences and income affordability needs.

Goal 6: A city that grows and develops in a manner that implements its vision, sustains the integrity of its guiding principles, and requires few and infrequent amendments to the General Plan.

Policy 6.1 Amendment criteria. The City Council may approve amendments to the General Plan when the City Council is satisfied that the following conditions are met:

- The proposed change is and will be fiscally neutral or positive.
- The proposed change can be adequately served by public facilities and would not negatively impact service on existing development or the ability to service future development.

Policy 6.2 Smart growth. The city is committed to the following smart growth goals.

- Create a range of housing opportunities and choices.
- Create walkable neighborhoods.
- Foster distinctive, attractive communities with a strong sense of place.
- Mix land uses.
- Strengthen and direct development toward existing communities.
- Take advantage of compact building design.

Findings for General Plan Amendments

The findings to consider when deciding on a general plan amendment application and staff's response to each of those findings are listed below.

1. The proposed amendment is internally consistent with the goals, policies, and actions of the General Plan.

Although the request will modify the land use diagram of the General Plan, as described in the above section, the proposed amendment is consistent with several goals and policies of the General Plan. Therefore, the amendment is internally consistent with the General Plan.

2. The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.

The project was determined not to be detrimental to the public interest, health, safety, and convenience, or general welfare of the city. Agencies and City departments reviewed the project to ensure consistency with City codes and regulations.

3. If applicable, the parcel is physically suitable (including absence of physical constraints, access, compatibility with adjoining land uses, and provision of utilities) for the requested/anticipated project.

The project site is physically suitable for the type and intensity of the proposed project. The project site is a ±1.04 acre infill site that is surrounded by existing single-family residential development to the north, east, and across Alluvial Avenue to the south. A church ±3.9 acre church site is located directly to the west of the project site. The proposed 12-unit multifamily project would serve as an appropriate transitional use between the single-family residences and the non-residential church site.

Sewer and water studies indicate adequate provisions for the proposed increase in density from this project. Additionally, the project was reviewed by agencies and City departments to ensure that facilities are adequate to accommodate the proposed project.

4. There is a compelling reason for the amendment.

*The project is infill development and is consistent with the goals and policies of the General Plan. If approved, the project would develop an otherwise unused property, provide an alternative housing type in the area, and contribute to the City's housing stock. The applicant's reasoning for the general plan amendment is provided in **Attachment 5**. The decision-making body has the discretion to determine if reasons for amending the general plan are compelling.*

Rezone

The proposed change in land use designation also requires a change in the property's assigned zone district. The applicant is requesting to rezone the subject property from the current R-1-7500 (Single-Family Residential 7,500 sq. ft.) Zone District to the R-2 (Multifamily Residential) Zone District. The R-2 Zone District is associated with moderately dense residential uses, including multifamily apartments, duplexes, townhouses, and small parcel, attached, and detached single-family uses. With this project, the applicant is proposing the development of multifamily apartments. The proposed zone district is consistent with the Medium High Density Residential land use designation with allowable density range of 7.1 to 15.0 dwelling units per acre. The 12-unit multifamily project has a density of 11.5 dwelling units per acre.

Objective Standards for Multifamily Development

In accordance with the State of California Senate Bill (SB) 330, the city adopted a set of objective standards for multifamily development on December 16, 2019. Adoption of objective standards provides a more efficacious process for residential development that contributes towards the state's goal of addressing the housing shortage. Objective standards are development standards that can be objectively defined and measured when reviewing applications for new housing developments. Standards include quantifiable and measurable features of building and property such as building height, required setbacks from property lines, building articulation, lighting, etc.

If approved, the project will be reviewed in compliance with the City's Multifamily Residential Design Review process and subjected to the City's adopted objective standards for multifamily residential development.

Findings for Rezones

The findings to consider when deciding on a rezone application and staff's response to each of those findings are listed below.

1. The proposed amendment is consistent with the goals, policies, and actions of the General Plan.

Although the request will modify the land use diagram of the General Plan, as described in the above section, the proposed amendment is consistent with several goals and policies of the General Plan. Therefore, the amendment is internally consistent with the General Plan. The proposed rezone to the R-2 Zone District is consistent with the proposed Medium High Density Residential Designation.

2. The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.

The project was determined not to be detrimental to the public interest, health, safety, and convenience, or general welfare of the city. Agencies and City departments reviewed the project to ensure consistency with City codes and regulations.

3. The proposed amendment is internally consistent with other applicable provisions of the Development Code.

If approved, the proposed project would be subject to review under the City's multifamily residential design review process. Site specific details will be evaluated to ensure that applicable development requirements of the municipal code and objective multifamily standards are met.

4. The parcel is physically suitable (including absence of physical constraints, access, compatibility with adjoining land uses, and provision of utilities) for the requested zoning designations and anticipated land uses/projects. (§ 2, Ord. 14-13, eff. October 8, 2014).

See number 3 under Findings for General Plan Amendment section.

Planning Commission

The Planning Commission considered GPA2022-001 and R2022-001 at its regular meeting on January 26, 2023. Commissioners expressed support for the project and agreed that the project was thoughtfully designed to minimize impacts on the existing neighborhood. Commissioners Bedsted and Hatcher encouraged the developer to increase the perimeter wall adjacent to the single-family residences to the north and east of the site for additional privacy. The developer's representative committed to discussing the request with the developer who couldn't be present at the meeting this evening.

There were several neighbors in attendance that spoke against the project. Their concerns relate to the project causing a change to the neighborhood's characteristics and its impact on their quality of life. These impacts generally include the increase in traffic, parking overflow into their neighborhood, invasion of privacy, intrusion of lighting and noise, an increase in crime, and the decrease in the values of the surrounding homes.

The Planning Commission approved GPA2022-001 and R2022-001 with a 5-0 vote.

Public Outreach and Comments

Neighborhood Meetings

Per City policy, the applicant is required to hold two neighborhood meetings. The first meeting must be held prior to the Planning Commission hearing and the second must be held after the Planning Commission hearing but prior to the City Council hearing.

The applicant held the first required neighborhood meeting for this project on April 27, 2022 at 6:00 pm. The meeting was held at the Heritage Crossing Hospice and Palliative Care Center located near the Alluvial and Willow Avenues. In attendance were the project team, City staff, and several neighbors. Neighbors expressed concerns including:

- Expectations that the parcel will be single-family residential, and neighbors do not want a change to multifamily residential.
- The project will add 2 additional driveways onto Alluvial Avenues that could be dangerous for students walking to school.
- Noise nuisance from higher density housing.
- The 2-story building will invade the privacy of the surrounding single-family residences.
- Higher density will bring too many people and water use.
- Increase in traffic to the area would cause congestion.

- Additional lighting from the development could be a nuisance.

As a result of this meeting, the applicant made some modifications to the project to mitigate privacy concerns. The changes include eliminating windows on the entire east elevation of the main building and providing additional site perimeter trees for screening. The applicant is proposing the planting of Japanese Blueberry trees along the site perimeter. This tree is of an evergreen variety (does not shed), is fast growing, and can mature to a height of between 30 to 40 feet.

The applicant held a second required neighborhood meeting on February 22, 2023, at 6:00 pm. The meeting was held at the office of the project's architect which is located near the intersections of Herndon and Fowler. Five neighbors were in attendance of the meeting. Comments from the Planning Commission meeting were reiterated by the neighbors. The applicant presented several additional potential modifications to the project that may further mitigate some of the concerns of the neighbors. Modifications presented include the increase of the garage building height to accommodate overhead storage so residents could still park in their garages and provide better screening from balconies, addition of storage bins, and denser tree planting along the north property line for greater screening.

Public Comments

Staff received two letters in opposition to the proposed project from residents near the project site (see **Attachment 6**). These letters were received after the neighborhood meeting held by the applicant. A public notice of the upcoming Planning Commission public hearing of this project was sent to area residents within 800 feet of the property boundaries. Staff received a third letter of opposition after notices were mailed.

The first letter was received on April 5, 2022 from a resident who lives directly adjacent to the back of the subject property. The resident is opposed to the change of land use from single-family residential to allow for multiple family residential development. It is the residents understanding when they purchased their property that surrounding development would be of single-family residences.

A second letter opposing the project was received on April 14, 2022 from residents living directly behind the project. The residents also purchased their property with the understanding that the adjacent developments would be of single-family residential development. They are against the development of the multi-family residential complex and believe that the development will depreciate the value of their home and quality of life. Their concerns include additional noise, invasion of privacy from second story balconies looking into their property, and additional traffic that would result from the development.

Staff received a third letter in opposition of the project on January 17, 2023. The resident outlined several existing issues that this project would contribute towards, if approved. These issues include the existing noise, rising crime rate, and traffic due to the Walmart Shopping Center, Highway 168, and Century Elementary School. In addition to these concerns, the resident indicates that the 2-story project will alter the privacy of the existing single-family homes.

Review and Comments from Agencies

The Project was distributed to all City Divisions as well as outside agencies, including Cal Trans, Clovis Unified School District, Fresno Irrigation District, Fresno Metropolitan Flood Control District, AT&T, PG&E, San Joaquin Valley Air Pollution Control District, State Department of Fish and Wildlife, County of Fresno, and the Fresno Local Agency Formation Commission (LAFCo).

Comments received are attached (**Attachment 7**) only if the agency has provided concerns, conditions, or mitigation measures. Routine responses and comment letters are placed in the administrative record and provided to the applicant for their records.

California Environmental Quality Act (CEQA)

The City of Clovis has completed an Initial Study assessing the project's impact on natural and manmade environments, as required by the State of California. The City Planner has recommended approval of a mitigated negative declaration. A mitigated negative declaration is a written statement announcing that this project will not have a significant effect on the environment. The complete Initial Study/ Mitigated Negative Declaration is included as **Attachment 8**. In summary, environmental impacts were determined to be found to be less than significant with implementation of mitigation measures for biological resources, cultural resources, geological resources, and tribal cultural resources.

The City published a notice of this public hearing in *The Business Journal* on Friday, February 17, 2023.

FISCAL IMPACT

None.

REASON FOR RECOMMENDATION

The proposed infill development will provide additional housing, housing type, and quality residential environment for this area as envisioned by the General Plan. The project does not substantially impact City sewer and water infrastructure, and other public services. As indicated in the above section, the project is consistent with the goals and policies of the General Plan and Development Code. Therefore, staff and the Planning Commission recommends that the City Council approve an environmental finding of a mitigated negative declaration for general plan amendment GPA2022-001 rezone R2022-001, and approve GPA2022-001 and R2022-001.

ACTIONS FOLLOWING APPROVAL

The developer will proceed with the multifamily residential design review where site specific details of the development are reviewed by staff.

Prepared by: Lily Cha, AICP, Senior Planner

Reviewed by: City Manager *[Signature]*

RESOLUTION 23-___

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS
 APPROVING AN ENVIRONMENTAL FINDING OF A MITIGATED NEGATIVE
 DECLARATION FOR GENERAL PLAN AMENDMENT GPA2022-001 AND REZONE R2022-
 001, PURSUANT TO CEQA GUIDELINES**

WHEREAS, the project proponent, Stallion Development and Construction, 811 Barstow, Clovis, CA, 93612, has submitted Rezone R2020-001 for 1.04 acres of property located north of Alluvial Avenue, between Sunnyside and Fordham Avenues, in the County of Fresno; and

WHEREAS, the City of Clovis (“City”) caused to be prepared an initial study (hereinafter incorporated by reference) in June 2020, for the Project to evaluate potential environmental impacts, and on the basis of that study, it was determined that no significant environmental impacts would result from this Project with mitigation measures included; and

WHEREAS, on the basis of this initial study, a mitigated negative declaration has been prepared, circulated, and made available for public comment pursuant to the California Environmental Quality Act (“CEQA”), Public Resources Code, section 21000, et seq., and Guidelines for implementation of CEQA, 14 California Code of Regulations, sections 15000, et seq.; and

WHEREAS, the City Council has independently reviewed, evaluated, and considered the CEQA analysis outlined in the staff report, initial study, mitigated negative declaration and all comments, written and oral, received from persons who reviewed the mitigated negative declaration, or otherwise commented on the Project (“Administrative Record”).

**NOW, THEREFORE, BASED UPON THE ENTIRE RECORD OF THE PROCEEDINGS,
 THE CITY COUNCIL RESOLVES AND FINDS AS FOLLOWS:**

1. The foregoing recitals as true and correct.
2. The initial study and mitigated negative declaration for the Project are adequate, reflect the City’s independent judgment and analysis, and have been completed in compliance with CEQA and the CEQA Guidelines.
3. The initial study and mitigated negative declaration were presented to the City Council and the City Council has independently reviewed, evaluated, and considered the initial study, mitigated negative declaration and all comments, written and oral, received from persons who reviewed the initial study and mitigated negative declaration, or otherwise commented on the Project (“in the Administrative Record”) prior to approving the Project.
4. On the basis of the whole record, that there is no substantial evidence that the Project will have a significant effect on the environment.

- 5. The mitigated negative declaration is adopted and the mitigation monitoring program set forth in **Attachment A**, including the mitigation measures identified therein and as described in the mitigated negative declaration is adopted.
- 6. Directs that the record of these proceedings shall be contained in the Department of Planning and Development Services located at 1033 Fifth Street, Clovis, California 93612, and the custodian of the record shall be the City Planner or other person designated by the Planning and Development Services Director.
- 7. The Planning and Development Services Director, or his/her designee, is authorized to file a notice of determination for the Project in accordance with CEQA and to pay any fees required for such filing.
- 8. The basis for the findings is detailed in the March 6, 2023 staff report, which is hereby incorporated by reference, the entire Administrative Record, as well as evidence and comments presented in connection with the mitigated negative declaration.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on March 6, 2023, by the following vote, to wit.

- AYES:
- NOES:
- ABSENT:
- ABSTAIN:

DATED: March 6, 2023

Mayor

City Clerk

**ATTACHMENT A:
Mitigation Monitoring Program
GPA2022-001 & R202-001**

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
Biological Resources				
BIO-1	<p>Pre-Activity Surveys for Birds (raptors, migratory birds, and other protected bird species). Site disturbance shall be initiated outside of the nesting period of migratory birds and nesting raptors (generally between February 1 and August 31). If avoidance is not possible, a pre-construction survey shall be prepared by a qualified biologist to determine the presence of birds such as the burrowing owl and other protected bird species. If the biologist determines the presence of such birds, the developer shall establish a buffer zone(s) of adequate size, as determined by the biologist, to prevent disturbance of the nest until the young have fledged.</p>	City of Clovis Planning	<i>Prior to Permits and During Construction</i>	
BIO-2	<p>Avoidance and Minimization Measures for Construction Near the Dog Creek. Site development shall be designed to minimize impacts and disturbance to Dog Creek whenever possible. This shall include worker training, covering excavations near the Dog Creek to prevent the trapping of wildlife, and/or the establishment of exclusion fencing to prevent equipment</p>			

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	from being used outside of the designated work zone.			
Cultural Resources				
CULT-1	<p>If prehistoric or historic-era cultural or archaeological materials are encountered during construction activities, all work in the immediate vicinity of the find shall halt until a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, can evaluate the significance of the find and make recommendations. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants.</p> <p>If the qualified professional archaeologist determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation. These additional studies may include avoidance, testing, and evaluation or data recovery excavation.</p> <p>If a potentially-eligible resource is encountered, then the qualified professional archaeologist, the Lead Agency, and the project proponent shall arrange for</p>	City of Clovis Planning	<i>Prior to Permits and During Construction</i>	

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	<p>either 1) total avoidance of the resource or 2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the Lead Agency as verification that the provisions for managing unanticipated discoveries have been met.</p>			
<p>CULT-2</p>	<p>If human remains are discovered during construction or operational activities, further excavation or disturbance shall be prohibited pursuant to Section 7050.5 of the California Health and Safety Code. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the Public Resources Code (Chapter 1492, Statutes of 1982, Senate Bill 297), and Senate Bill 447 (Chapter 44, Statutes of 1987), shall be followed. Section 7050.5(c) shall guide the potential Native American involvement, in the event of discovery of human remains, at the direction of the County coroner. All reports, correspondence, and determinations regarding the discovery of human remains on the project site shall be submitted to the Lead Agency.</p>	<p>City of Clovis Planning</p>	<p><i>Prior to Permits and During Construction</i></p>	
<p>Geological Resources</p>				

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
GEO-1	<p>If prehistoric or historic-era cultural materials are encountered during construction activities, all work in the immediate vicinity of the find shall halt until a qualified professional archaeologist and/or paleontologist, meeting the Secretary of the Interior’s Professional Qualification Standards for prehistoric and historic archaeologist, can evaluate the significance of the find and make recommendations. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants.</p> <p>If the qualified professional determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation. These additional studies may include avoidance, testing, and evaluation or data recovery excavation.</p> <p>If a potentially-eligible resource is encountered, then the qualified professional archaeologist and/or paleontologist, the Lead Agency, and the project proponent shall arrange for either 1) total avoidance of the resource or 2) test excavations to evaluate eligibility and, if</p>	City of Clovis Planning	<i>Prior to Permits and During Construction</i>	

Proposed Mitigation	Summary of Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	eligible, total data recovery. The determination shall be formally documented in writing and submitted to the Lead Agency as verification that the provisions for managing unanticipated discoveries have been met.			

RESOLUTION 23-____

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS
 APPROVING GENERAL PLAN AMENDMENT 2022-001 TO AMEND THE 2014 CLOVIS
 GENERAL PLAN LAND USE ELEMENT FOR APPROXIMATELY 1.04 ACRES LOCATED
 NORTH OF ALLUVIAL AVENUE BETWEEN SUNNYSIDE AND FORDHAM AVENUES**

WHEREAS, the project proponent, Stallion Development and Construction, 811 Barstow, Clovis, CA 93612, has submitted a General Plan Amendment GPA2020-001 for 1.04 acres of property located north of Alluvial Avenue, between Sunnyside and Fordham Avenues, in the County of Fresno; and

WHEREAS, GPA2022-001 proposes to amend the 2014 Clovis General Plan Land Use Element for the Property from the Low Density Residential designation to the Medium High Density designation; and

WHEREAS, the Planning Commission considered GPA2022-001 at a duly noticed public hearing on January 26, 2023, at which time the Planning Commission adopted a resolution recommending approval of the Project; and

WHEREAS, the City published notice of the public hearing in the Fresno Business Journal on February 17, 2023, mailed public notices to property owners within 800 feet of the Property ten (10) days prior to the City Council hearing, and otherwise posted notice of the public hearing according to applicable law; and

WHEREAS, a duly noticed public hearing was held on May 16, 2022; and

WHEREAS, the City Council has had an opportunity to review and consider the entire Administrative Record relating to the Project, which is on file with the Department, and reviewed and considered those portions of the Administrative Record determined to be necessary to make an informed decision, including, but not necessarily limited to, the staff report, the written materials submitted with the request, and the verbal and written testimony and other evidence presented during the public hearing.

**NOW, THEREFORE, BASED UPON THE ENTIRE RECORD OF THE PROCEEDINGS,
 THE CITY COUNCIL RESOLVES AND FINDS AS FOLLOWS:**

1. The Project satisfies the required findings for approval of a general plan amendment, as follows:
 - a. The GPA2022-001 is internally consistent with the goals, policies, and actions of the General Plan.
 - b. The GPA2022-001 would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.

- c. The Property is physically suitable (including absence of physical constraints, access, compatibility with adjoining land uses, and provision of utilities) for the development of the Project.
 - d. There is a compelling reason for the amendment, namely, to correct the mapping error and oversight previously made by the City relative to establishing the land use designation on the property.
2. The City Council finds that there is no possibility the project could have a significant effect on the environment, exempting the project pursuant to CEQA Guidelines section 15061(b)(3).
 3. The basis for the findings is detailed in the March 6, 2023 staff report, which is hereby incorporated by reference, the entire Administrative Record, as well as the evidence and comments presented during the public hearing.
 4. GPA 2022-001 is hereby approved.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on March 6, 2023, by the following vote, to wit.

- AYES:
- NOES:
- ABSENT:
- ABSTAIN:

DATED: March 6, 2023

Mayor

City Clerk

ORDINANCE 23-____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CLOVIS AMENDING AND CHANGING THE OFFICIAL ZONE MAP OF THE CITY OF CLOVIS IN ACCORDANCE WITH SECTION 9.080.020 OF THE CLOVIS MUNICIPAL CODE TO REZONE APPROXIMATELY 1.04 ACRES FROM THE R-1-7,500 (SINGLE-FAMILY RESIDENTIAL 7,500 SQ. FT.) ZONE DISTRICT TO THE R-2 (MULTIPLE FAMILY RESIDENTIAL) ZONE DISTRICT FOR PROPERTY LOCATED NORTH OF ALLUVIAL, BETWEEN SUNNYSIDE AND FORDHAM AVENUES

WHEREAS, Stallion Development and Construction, 811 Barstow Avenue, Clovis, CA 93612, submitted an application for Rezone R2022-001 in connection with the proposed development of a 12-unit multifamily apartment complex (“Project”) on approximately 1.04 acres of property located north of Alluvial Avenue, between Sunnyside and Fordham Avenues (“Property”); and

WHEREAS, Rezone Application R2022-001 proposes to rezone the property from the R-1-7,500 (Single-family residential 7,500 sq. ft.) Zone District to the R-2 (Multifamily residential) Zone District; and

WHEREAS, the Planning Commission held a duly noticed public hearing on January 26, 2023, to consider the Project approval, at which time interested persons were given opportunity to comment on the Project; and

WHEREAS, the Planning Commission voted and recommended that the City Council approve Rezone R2022-001; and

WHEREAS, the Planning Commission’s recommendations were forwarded to the City Council for consideration; and

WHEREAS, the City published notice of the public hearing in the Fresno Business Journal on February 17, 2023, mailed public notices to property owners within 800 feet of the Property ten (17) days prior to the City Council hearing, and otherwise posted notice of the public hearing according to applicable law; and

WHEREAS, the City Council held a duly noticed public hearing on March 6, 2023, to consider approval of Rezone R2022-001; and

WHEREAS, based on this initial study, a mitigated negative declaration has been prepared, circulated, and made available for public comment pursuant to the California Environmental Quality Act (“CEQA”), Public Resources Code, section 21000, et seq., and Guidelines for implementation of CEQA, 14 California Code of Regulations, sections 15000, et seq.; and

WHEREAS, the City Council has had an opportunity to review and consider the entire Administrative Record relating to the Project, which is on file with the Department, and reviewed and considered those portions of the Administrative Record determined to be necessary to make an informed decision, including, but not necessarily limited to, the staff report and staff presentation, the written materials submitted with the request, and the verbal and written testimony and other evidence presented during the public hearing.

NOW, THEREFORE, BASED UPON THE ENTIRE RECORD OF THE PROCEEDINGS, THE CITY COUNCIL FINDS AS FOLLOWS:

1. The proposed rezone is consistent with the goals, policies, and actions of the adopted General Plan.
2. The proposed rezone would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.
3. The Property is physically suitable (including absence of physical constraints, access, compatibility with adjoining land uses, and provision of utilities) for the requested zoning designation and development of the Project.
4. The City Council finds that the Project is categorically exempt from CEQA pursuant to CEQA Guidelines section 15332 (Class 32 – Infill Development), and will not have a significant effect on the environment pursuant to CEQA Guidelines section 15061(b)(3).
5. The basis and evidence for the findings are detailed in the October 18, 2021, staff report and staff presentation addressing the Project during the October 18, 2021, public hearing, both of which are hereby incorporated by reference, the entire Administrative Record, as well as the evidence and comments presented during the public hearing.

The City Council of the City of Clovis does ordain as follows:

Section 1 The official map of the city is amended in accordance with Section 9.08.020 and Chapter 9.86 of the Clovis Municipal Code by rezoning certain land in the City of Clovis, County of Fresno, State of California, to wit:

LEGAL DESCRIPTION:

See the attached **Attachment A**.

From the R-1 (Single-family Residential) Zone District to the R-2 (Multifamily Medium-High Density) Zone District.

Section 2 This Ordinance shall go into effect and be in full force from and after thirty (30) days after its final passage and adoption.

APPROVED: Date the Ordinance was introduced

Mayor

City Clerk

* * * * *

The foregoing Ordinance was introduced and read at a regular meeting of the City Council held on March 6, 2023, and was adopted at a regular meeting of said Council held on Date Adopted, by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

DATED: Date Adopted

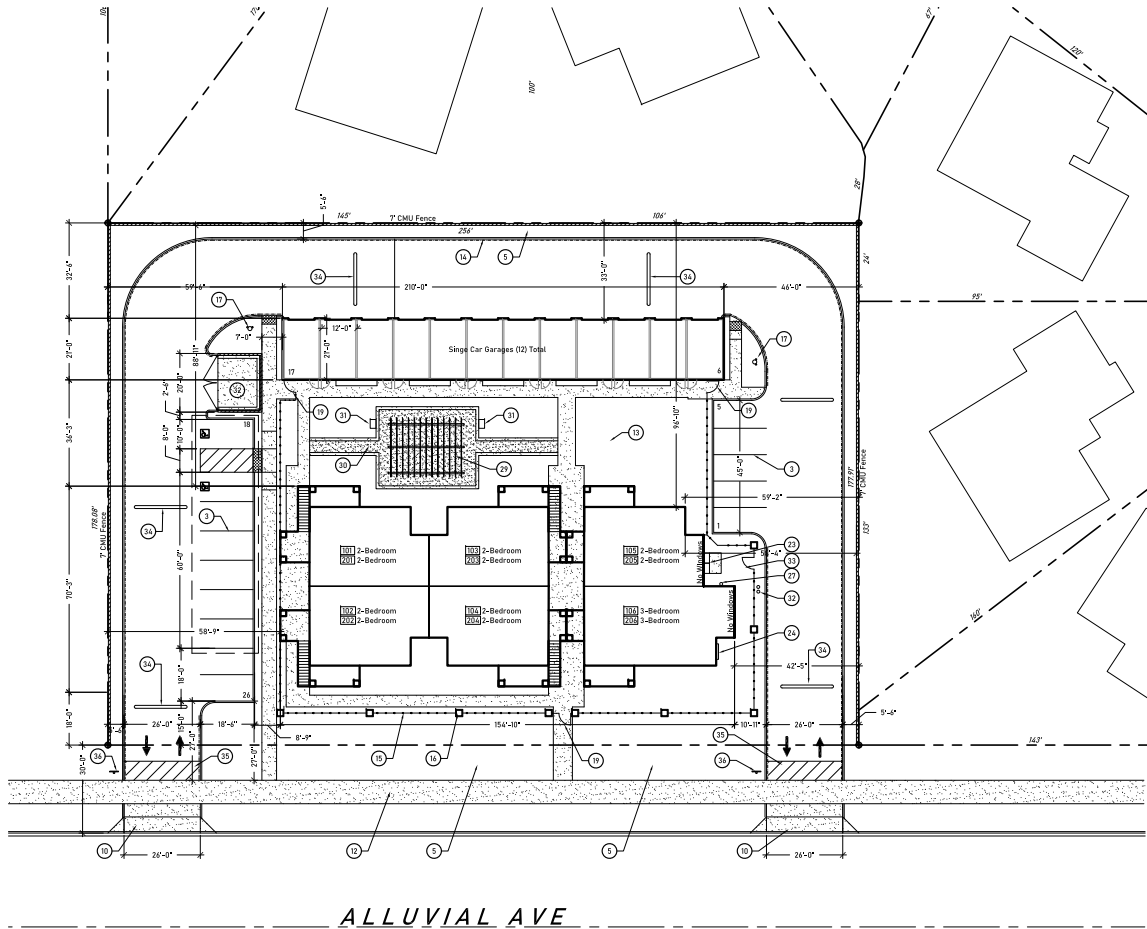
City Clerk

**ATTACHMENT A
LEGAL DESCRIPTION**

Legal Description:

LOT 30 OF TRACT NO. 4546 MONTE VISTA NO. 38, IN THE CITY OF CLOVIS, COUNTY OF FRESNO, STATE OF CALIFORNIA, AS PER MAP THEROF RECORDED AUGUST 5, 1993 IN BOOK 56, PAGES 4, AND 5 OF PLATS, FRESNO COUNTY RECORDS.

MORE COMMONLY KNOWN AS: 1491 ALLUVIAL AVENUE, CLOVIS, CA 93611-7328



Conceptual Site Plan
1" = 20'-0"

Site Legend		Keynotes	
Symbol	Description	Sym	Description
	Existing Curb/Outer	(1)	(N) Concrete trash enclosure per city standards.
	Street Centerline	(2)	(N) Concrete landing.
	Property Line	(3)	(N) Parking stall striping.
	Proposed Concrete Pavement	(4)	(N) A/C Pavement. Refer to Civil Engineering drawings for additional information.
	Proposed Hardscape Surface	(5)	(N) Landscape planter area. Refer to Landscape drawings for additional information.
	Building Footprint	(6)	(N) Van accessible parking stall sign.
	CMU Wall	(7)	(N) Accessible parking stall sign.
	SETBACK	(8)	(N) Accessible curb ramp. Refer to Civil Engineering drawings for additional information.
	Curb/Outer	(9)	(N) Concrete drive approach per City Standards.
	Path of Travel	(10)	(E) Electrical Transformer
	Marked Fire Lane	(11)	(E) Sidewalk
		(12)	(N) Grass lawn area.
		(13)	(N) 4" concrete curb. Refer to Civil Engineering drawings for additional information.
		(14)	(N) 6" tall steel picket fence.
		(15)	(N) Decorative fence plaster.
		(16)	(N) Private fire hydrant
		(17)	(E) Street Light.
		(18)	(N) 48" Wide accessible gate. Provide fire department bypass lockbox. Provide egress hardware.
		(19)	(N) Accessible Tow-Away sign.
		(20)	(N) Landscape Irrigation Valves.
		(21)	(N) Sanitary Sewer point of connection. Contractor to confirm location and depth of existing lateral.
		(22)	(N) Electrical Main Location
		(23)	(N) Gas Meter Location.
		(24)	-
		(25)	-
		(26)	(N) Fire Sprinkler Riser.
		(27)	(N) 4" Fire Sprinkler Water Service and Detector Check Valve.
		(28)	(N) Trellis structure
		(29)	(N) Decomposed Granite walking surface
		(30)	(N) BBO station.
		(31)	(N) FDC/PPV location.
		(32)	(N) 48" Service gate. Provide fire department bypass lockbox.
		(33)	(N) Speed bump.
		(34)	(N) Pedestrian Warning Signage.
		(35)	(N) Right turn only sign.

Project Data

Project Description: New Multi-Family Residential project with 12 dwelling units. Demolish existing site, rezone property.

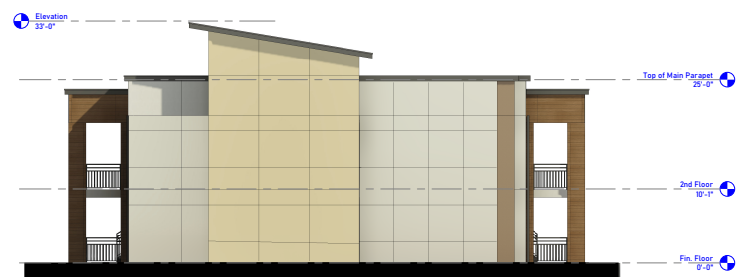
Site Data:	
Site Address:	1491 Alluvial Ave Clovis, CA 93611
APN:	563-342-35
Zoning:	Existing: R-1 Proposed: R-2
General Plan Use:	Existing: none Proposed: Med-High Density Residential (11 - 15 DU/AC)
Site Area:	45,302 SF
Site Building Coverage:	23%
Parking Data:	Garage Spaces: 12 Covered Carport Spaces: 7 Uncovered Spaces: 7 Total Parking: 26 Total Parking Required: 24
Open space:	Open space provided: 5,810 sf Open space required: 3,130 sf
Building Data:	
Apartment Building Date:	Construction Type: VB Sprinkler System: NFPA-100 No. of Stories: 2 Occupancy: R-3 Use: Multi-Family (12 DUs)
Dwelling Units:	Type 2b (2-bedroom): 10 Type 3b (3-bedroom): 2
Type 2b Unit Areas:	Living area: 1100 SF Patio area: 100 SF Porch area: 100 SF
Type 3b Unit Areas:	Living area: 1350 SF Patio area: 100 SF Porch area: 100 SF
Apartment Building Area (SF):	2b Living Areas: 1100 x 10 = 11,000 2b Living Areas: 1350 x 2 = 2,700 Total Living Area: +/- 13,700 2b Patio Area: 100 x 10 = 1,000 2b Porch Area: 100 x 10 = 1,000 2b Path Area: 100 x 1 = 100 2b Perch Area: 100 x 2 = 200 Total non-Living Area: 2,400
Garage Building Data:	Gross Building Area: +/- 16,160 Construction Type: VB Sprinkler System: none No. of Stories: 1 Occupancy: U Use: Individual Private Garages
Garage Building Area (SF):	Total Garage Area: +/- 3,160 SF



Front Elevation (South)
1/8" = 1'-0"



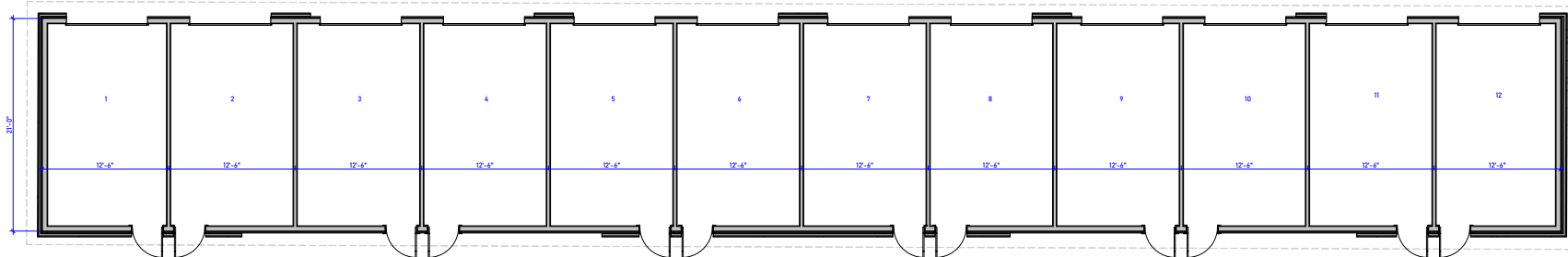
Left Elevation (West)
1/8" = 1'-0"



Right Elevation (East)
1/8" = 1'-0"



Rear Elevation
1/8" = 1'-0"



Garage Floor Plan
3/16" = 1'-0"







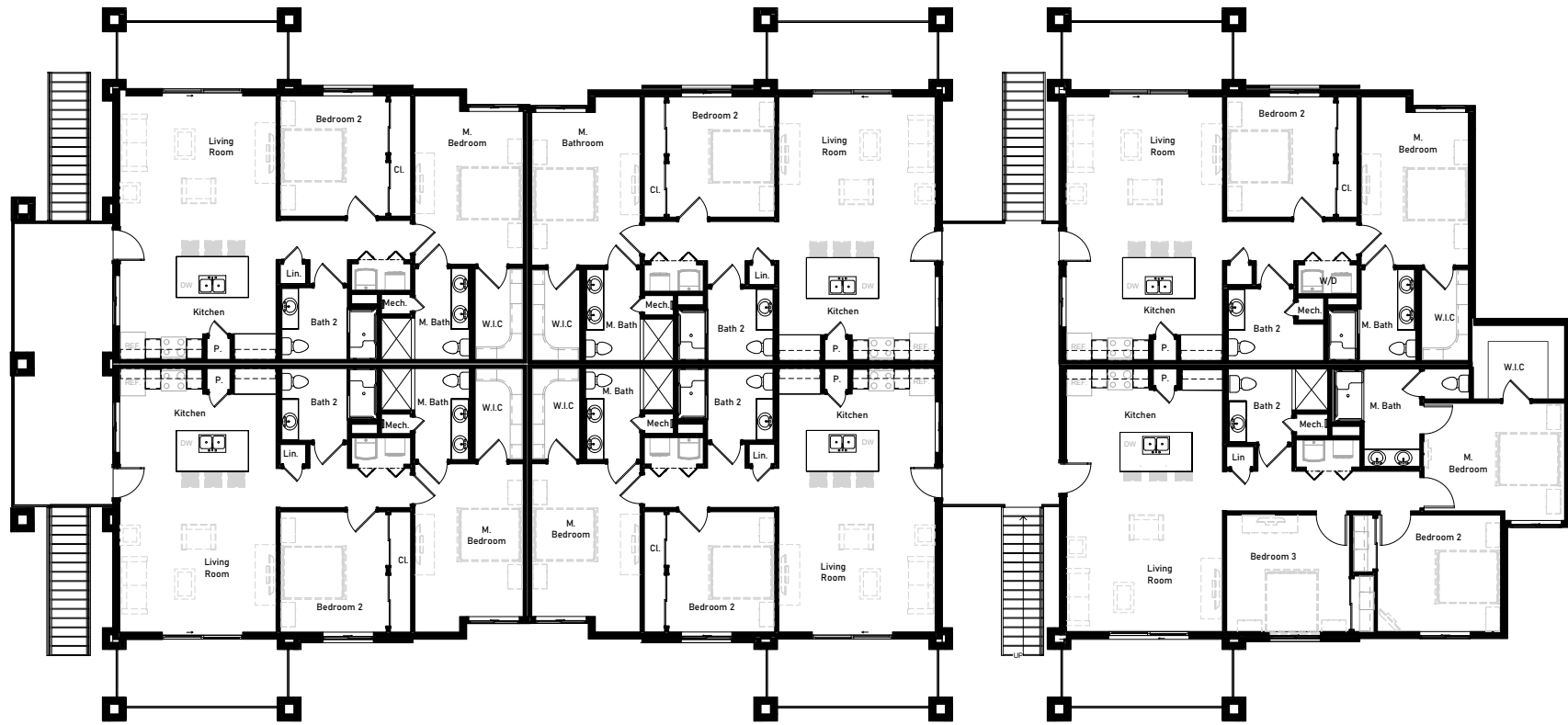
Garage Elevation (North)
1/8" = 1'-0"



Garage Elevation (South)
1/8" = 1'-0"

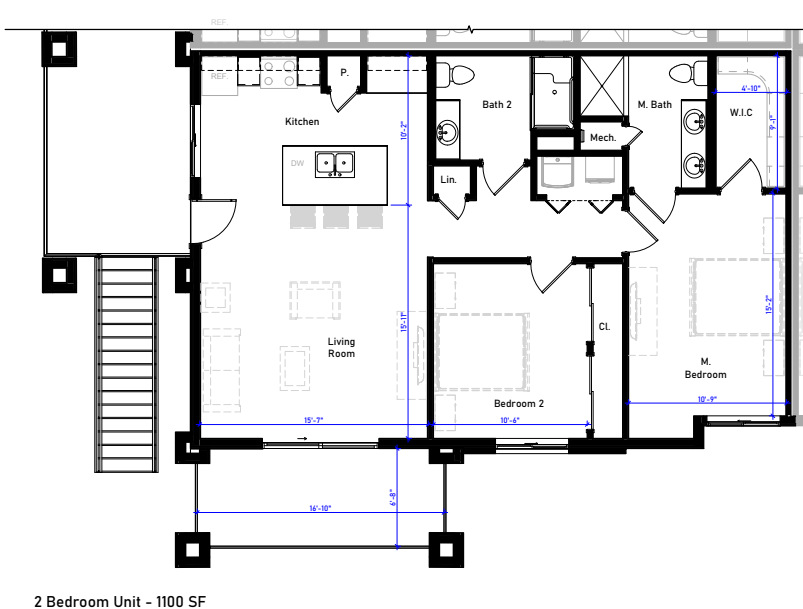
Material Legend

-  Fiberon Composite Cladding
1x8 Open Joint Profile
Color: Tupelo
-  Omega Stucco Finish Coat
Colortek - Smooth - 432 Milky Quartz
-  Omega Stucco Finish Coat
Color tek-232 Sonoma
-  Omega Stucco Finish Coat
Colortek - Smooth - 221 Harvest Gold



Floor Plan (1st and 2nd Floor Similar)
3/16" = 1'-0"

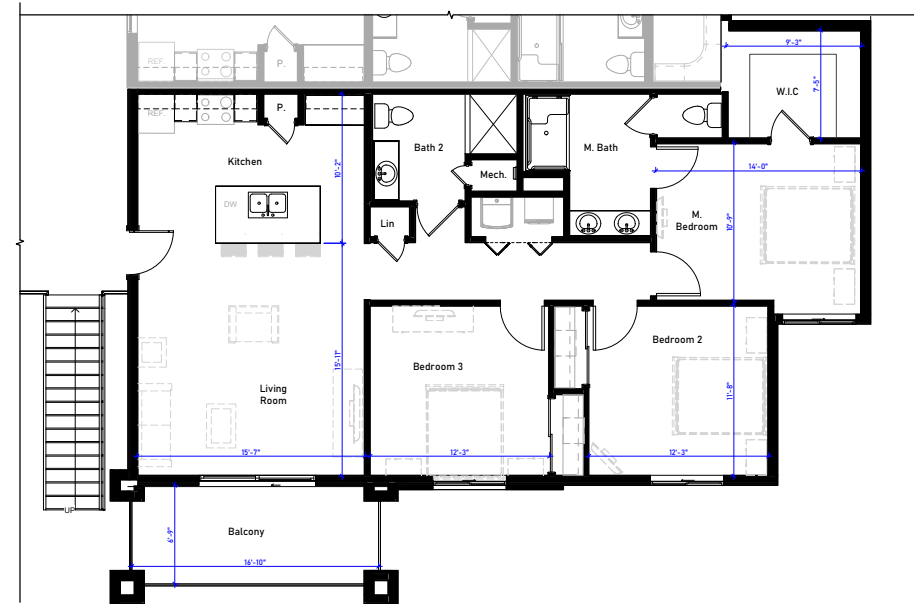




2 Bedroom Unit - 1100 SF
1/4" = 1'-0"



Typical Living Room Layout



3 Bedroom Unit - 1350 SF
1/4" = 1'-0"



August 17, 2022

Renee Mathis, Director of Planning and Development
City of Clovis
1033 Fifth Street
Clovis, CA 93612

Subject: Letter of Justification for Proposed General Plan Amendment.

Dear Ms. Mathis:

Arman Zakaryan of Stallion Development and Construction proposes to construct *The Palms*, a 12-unit multifamily residential project that would be located at 1491 Alluvial Avenue (APN 563-142-35). The proposed project covers approximately 1.04 acres located at the northeastern quadrant of Sunnyside and Alluvial avenues. The project would include demolition of an existing fire-damaged and vacant single-family residence on the project site. The use and density being proposed would require a General Plan Amendment (GPA) to change the planned land use designation from *L—Low Density Residential* (2.1-4 du/ac) to *MH—Medium High Density Residential* (7.1 to 15 du/ac) and a Rezone from *R-1-7500* to *R-2*.

The City of Clovis rightfully seeks to minimize amendments to its General Plan, which was comprehensively updated in 2014. Goal 6 of the General Plan is for "A city that grows and develops in a manner that implements its vision, sustains the integrity of its guiding principles, and requires *few and infrequent amendments* to the General Plan." Why should we make plans if we are going to immediately change them?

Nevertheless, circumstances change, and new ideas emerge that are worthy of consideration, which is why the amendment process exists. We believe that *The Palms* is a project that justifies a General Plan Amendment for the following reasons:

1. The proposed amendment is internally consistent with the goals, policies, and actions of the General Plan.

Goal 5 of the General Plan seeks for Clovis to be a city with housing, employment, and lifestyle opportunities for all ages and incomes of residents, and Policy 5.2 further specifies that a mixture of both ownership and rental housing options should be encouraged to meet varied preferences and income affordability needs. Clovis has a high need for multifamily housing generally, and in particular the neighborhoods north of Herndon Ave feature very little existing or planned multifamily housing. Approving the proposed GPA would promote housing variety where it is needed.

In Goal 6, the General Plan states that Clovis should be a city that grows and develops in a manner that implements its vision, sustains the integrity of its guiding principles, and requires few and infrequent amendments to the General Plan. To that end, Policy 6.1 states that proposed GPAs should be fiscally neutral or positive. This GPA, and the apartment community that we be developed as a result, will be fiscally positive for the City of Clovis. Based on the current assessed value of the property and the anticipated value of the fully developed apartment community, we anticipate that the City of Clovis' share of property taxes collected for the site will increase between 300% to 400% or more.

Figure 1
Projected Property Tax Revenue Increase

		Annual Property Tax <i>(Estimated at 1% of value)</i>	City Share of Property Tax <i>(Estimated at 20% of total)</i>	% Increase
Current Value <i>(purchase price)</i>	\$575,000	\$5,750	\$1,150	-
Future Value, Low <i>(after stabilization)</i>	\$2,500,000	\$25,000	\$5,000	335%
Future Value, High <i>(after stabilization)</i>	\$3,000,000	\$30,000	\$6,000	422%

Policy 6.1 also states that proposed changes must be adequately served by public facilities and should not negatively impact service on existing development or the ability to service future development. The traffic, water, and sewer studies provided with this application demonstrate convincingly that The Palms project can be served by existing infrastructure and should not negatively impact the City's ability to service future development.

In Policy 6.2 of the General Plan, the City of Clovis also commits itself to *Smart Growth* planning and development practices. This project will advance several Smart Growth principles, particularly the following:

A. Create a range of housing opportunities and choices.

Housing in Clovis is overwhelmingly built out in the form of single-family houses. While this is an ideal choice for many people, there are many other housing needs and desires that aren't being met as abundantly. Well-designed and well-managed for-rent apartment homes are in high demand in our region and that demand is growing as high interest rates dampen the ability and desire to purchase a single-family house. The Palms will add to the diversity of the housing supply in Clovis and help fill an important gap in the market.

B. Create walkable neighborhoods.

This project promotes walkability in several ways. Its location is on a major street offers direct walking connections (without being diverted by cul-de-sacs) to a bus stop 0.7 miles to the west and numerous shopping opportunities 0.5 miles to the

south. Furthermore, the site plan promotes walkability by bringing the building near the street, placing parking beside and behind the building, using wrought iron fencing to allow visibility into the site from the public sidewalk, and by placing a pedestrian gate at the sidewalk for easy resident access to the public sidewalk network. Finally, the architectural design of the building presents windows and balconies toward the public sidewalk, creating an inviting and interesting streetscape for passing pedestrians and promoting public safety by placing "eyes on the street."

- G. *Preserve open space, farmland, natural beauty, and critical environmental areas.*
- I. *Strengthen and direct development toward existing communities.*

The Central Valley is equally famous for its highly productive farmland and for the rapidity with which cities in the region have allowed that farmland to be replaced with suburban development. By placing this project within the existing city instead of at the rural fringe of the metropolitan area, and by building at a density that is higher than a conventional suburban subdivision, this project preserves farmland and open space and strengthens the existing community.

2. The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.

Nothing is proposed on the site that would be detrimental to the public interest, health, safety, convenience, or general welfare of the City. In fact, by providing housing in a region experiencing a severe housing shortage, The Palms project would be beneficial to the public interest, health, safety, convenience, and general welfare.

3. The parcel is physically suitable for the proposed project.

This site is physically suitable for the proposed multifamily residential project. It can be adequately serviced by existing infrastructure and can easily comply with the goals and vision of the MH—Medium High Density Residential land use designation and the property development standards of the proposed R-2 zoning designation. The site lacks physical constraints and has excellent access, the project design promotes compatibility with adjoining land uses, and provision of utilities exceeds standards.

4. There is a compelling reason for the amendment.

There are several compelling reasons for this General Plan Amendment. First, while this represents a small change to a specific aspect of the General Plan, as discussed above The Palms project is faithful to the overall vision of the document and it will advance several important goals of the General Plan while increasing revenue for the City. Other justifications for the amendment are as follows:

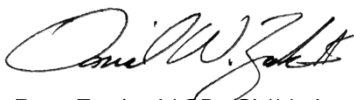
- Addressing the Housing Crisis.** This project will make an important contribution toward addressing the housing crisis that plagues our region. The 12 apartment homes of The Palms, if approved, will make far better use of this prime location than the current ranch house does, and the additional of a dozen high-quality housing units will provide homes for deserving families without encroaching into farmland or wildlife habitat. Furthermore, these homes will be located in a “Highest Resource” Opportunity Area as defined by the State Department of Housing and Community Development. This will not only be beneficial to the future residents of the project but will also assist the City of Clovis’ diligent efforts to comply with the State’s Housing Element regulations.
- Physical Constraints to Single-Family Development.** Due to its shallow depth and its only frontage being located on a Collector road, the site is arguably more suitable for a multifamily project than for the single-family use for which it is currently zoned. A single-family project on this site would likely result one of two layouts, neither of which would be ideal: either four individual driveway encroachments onto Alluvial Avenue would be required, which would cause traffic impediments and would degrade the pedestrian environment; or the houses would have to be oriented around an awkwardly shallow cul-de-sac presenting passing motorists and pedestrians with opaque and inhospitable backyard fences, as opposed to the more attractive frontage that would be presented by the highly articulated and fenestrated facade and non-opaque wrought iron fence of The Palms project. Due to these challenges, it is probably not a coincidence that this site has not yet been redeveloped as single-family housing despite its extremely desirable location.
- A Minor Increase in the Allowable Density.** On paper, the proposed General Plan Amendment would increase the allowable density of the site from 4 units per acre to 15 units per acre. In a practical sense, however, the proposed project doesn’t add many more units than are currently permitted on the site. While only four lots and a total of four homes are allowed on this site by the current R-1-7500 zoning, recent pro-housing State legislation such as AB 68 and SB 9 could allow two units per lot (either configured as a duplex or as a house with an accessory dwelling unit [ADU]) resulting in a total of 8 units. If junior ADUs are included, it may be possible to develop 3 units per lot for a total of 12 units under the current zoning. Such a configuration could be successful, but the layout of the 12 units proposed by The Palms project is much more efficient and provides more generous open space amenities than would be possible with State-sanctioned duplexes or ADUs.
- High Quality Design.** Another compelling reason to support the General Plan Amendment is the fact that The Palms features a high-quality design which meets or exceeds all R-2 development standards.
- Privacy.** One commonly expressed concern when developing new multifamily housing adjacent to existing single-family housing is that the multifamily residents will be able to see inside of the homes or yards of the single-family housing. This possibility has been addressed by thoughtful site planning, and it is very unlikely that

there will be any views into the single-family properties from the new apartments for the following reasons:

- The grade of The Palms site is 2 ½ feet lower than the grade of the adjacent single-family housing, which reduces the degree to which future residents can look down into adjacent properties;
 - The apartments are located at the front of the site, toward Alluvial Avenue and away from the single-family housing, further reducing the views into adjacent properties;
 - The garages for The Palms are located between the apartments and the single-family houses, obstructing the views between the two types of housing; and
 - The perimeter landscaping, particularly the trees, will provide a visual buffer between the existing housing and The Palms.
- **Neighborhood Feedback.** Two neighborhood meetings were held to discuss the project. The first meeting was held on April 5, 2022. Approximately 9 people representing 5 households were in attendance, in addition to the development team and City staff. As a courtesy, a second meeting was held on April 27 to address the comments from the first meeting. The same residents were in attendance.
 - **Reduction of Blight.** The existing structure recently suffered an attic fire and is considered a total loss. Such structures are not only visually unappealing but they can act as an attractive nuisance, leading to other problems. The sooner that this vacant, damaged, and boarded up structure can be replaced by a vibrant new community, the better.

We look forward to working with City staff, the community, the Planning Commission, and the City Council on this exciting project. Please let me know if I can provide any additional information to assist with your review.

Sincerely,



Dan Zack, AICP, CNU-A
President and Principal Planner

Lily Cha

From: Linda Alvord [REDACTED]
Sent: Tuesday, April 5, 2022 3:42 PM
To: Lily Cha
Subject: Re: [External] 1491 Alluvial Ave., proposed development

Follow Up Flag: Follow up
Flag Status: Completed

Ms. Cha,

This is our comment for the Record.

We are opposed to the rezoning of the 1491 Alluvial property to MultiFamily dwellings. We bought our home and property thinking that the area around our house would be single family dwelling zoning, which it currently is. We did not buy our house and property, which is directly adjacent to the back of the 1491 property, thinking that a 2 story apartment complex would be built next to our backyard. Please keep us notified of any requests to rezone the property.

Yours,

Darin and Linda Alvord

On 4/1/2022 8:00 AM, Lily Cha wrote:

You're very welcome. Have a wonderful weekend.

Sincerely,



Lily Cha, MPA | Associate Planner

City of Clovis | Planning Division
 1033 Fifth Street, Clovis, CA 93612
 p. 559.324.2335 | f. 559.324.2844
lilyc@cityofclovis.com

From: Linda Alvord [REDACTED]
Sent: Thursday, March 31, 2022 9:45 AM
To: Lily Cha <lilyc@ci.clovis.ca.us>
Subject: Re: [External] 1491 Alluvial Ave., proposed development

Thank you for the information.

On Thu, Mar 31, 2022, 9:22 AM Lily Cha <lilyc@ci.clovis.ca.us> wrote:

Hi Linda,

Thank you for your inquiry.

ngs. With this project, the

Attachment 6

Lily Cha

From: Andrea DeShayes [REDACTED]
Sent: Thursday, April 14, 2022 2:07 PM
To: Lily Cha
Cc: [REDACTED]
Subject: Re: [External] 1491 Alluvial Ave Project

Follow Up Flag: Follow up
Flag Status: Completed

Lily,
 My husband, Mark, and I attended the neighborhood meeting for the proposed 1491 Alluvial Ave. Project. Since the project will be located directly behind our residence, we have concerns.

We purchased our Clovis home in 1994. One of the things that we were happy about was that we were in a single family residential neighborhood. We chose this neighborhood since we no longer wanted to live in or near an apartment (or luxury condo) complex. We like having only single family residences around our house and having the ability to talk about any issues or concerns with other owners who occupy their homes. While we understood that the lot behind us could be divided into 2 or even 4 single family homes, we never anticipated that there would be 12 non-owner families living on that property. This depreciates the value of our home and the quality of our life. We enjoy having our windows open and listening to birds or sitting in our backyard and hearing some neighbors, but not 12 additional families.

We are not happy that there will be a driveway directly behind our back fence that ultimately every driver at the complex may use multiple times day and night, which will add additional noise. I understand the developer said they are planting some type of tree between the driveway and the fence, but no tree grows overnight!

The three balconies that look directly into our backyard are also a problem. We realize single family homes can also be 2 story, we knew there would be a 2 story house next door to our home, but the only window that looks into our property is a bathroom window. Most single family residences in our neighborhood do not have upper balconies.

The traffic situation is also problematic. It is difficult turning east on Alluvial from Fordham now, I can't imagine what will happen when you add 24 or more cars (a minimum of 2 per family). You will have 4 entrances onto Alluvial within a short distance which will be a problem. There are times when it is difficult to safely get across Alluvial or Sunnyside from either Fordham or Bedford.

We are disappointed that Clovis would think about a project with this density in a residential neighborhood. We recognize what is allowed, but we should be thinking about what is good for the neighborhood and the future.

Thank you,

Andrea DeShayes

On Tue, Apr 5, 2022 at 4:24 PM Lily Cha <lilyc@ci.clovis.ca.us> wrote:

Hi Andrea,

Lily Cha

From: [REDACTED]
Sent: Tuesday, January 17, 2023 12:28 PM
To: Lily Cha
Subject: [External] The Palms at Alluvial 2 - Planning Reference: GPA2022-001 and R2022-001

Follow Up Flag: Follow up
Flag Status: Completed

Dear Ms. Cha-Haydostian,

I am writing to oppose the proposed development by Arman Zakaryan/Stallion Development for the property at 1491 Alluvial. The land is currently zoned for 3 single-family homes which is congruent with the surrounding area. Our neighborhood is already overcome with noise, a raising crime rate, and traffic due to the Walmart Shopping Center, Highway 168, and Century Elementary School. Allowing a two-story 12-unit apartment complex will alter the privacy of the existing homes as well as escalate the current issues as stated above in our area. I ask you for the current residents and families in this area **do not allow** Stallion Development to use this land to build a 12-unit apartment complex for the sole purpose of monetary gain for Arman Zakaryan.

Thank you.

Rena', Mike & Kaylee Gunn

[REDACTED]



January 12, 2022

LU0021565
2604

Kelsey George, Assistant Planner
City of Clovis
Planning and Development Services Department
1033 Fifth Street
Clovis, CA 93612

Dear Ms. George:

PROJECT NUMBER: **DRC2021-056**

DRC2021-056, Proposed rezone from R-1 to R-2. Develop a 12-plex apartment complex with detached garages.

APN: 563-142-35

ZONING: R-1 to R-2

ADDRESS: 1491 Alluvial Avenue

Recommended Conditions of Approval for Residential Uses:

- Construction permits for the proposed development should be subject to assurance of sewer capacity of the Regional Wastewater Treatment Facility. Concurrence should be obtained from the California Regional Water Quality Control Board (RWQCB). For more information, contact staff at (559) 445-5116.
- Construction permits for the proposed development should be subject to assurance that the City of Clovis community water system has the capacity and quality to serve this project. Concurrence should be obtained from the State Water Resources Control Board, Division of Drinking Water-Southern Branch. For more information call (559) 447-3300.
- If the applicant proposes to use and/or store hazardous materials and/or hazardous wastes, they shall meet the requirements set forth in the California Health and Safety Code (HSC), Division 20, Chapter 6.95, and the California Code of Regulations (CCR), Title 22, Division 4.5. Any business that handles a hazardous material or hazardous waste may be required to submit a Hazardous Materials Business Plan pursuant to the California Health and Safety Code (HSC), Division 20, Chapter 6.95, Section 25507 (<http://cers.calepa.ca.gov/>). Contact the Fresno County Hazmat Compliance Program at (559) 600-3271 for more information.
- The proposed construction/demolition project has the potential to expose nearby residents to elevated noise levels. Consideration should be given to your City's municipal code.
- As a measure to protect ground water, all water wells and/or septic systems that exist or have been abandoned within the project area should be properly destroyed by an appropriately licensed contractor.

Promo.

alth

- Should any underground storage tank(s) be found during the project, the applicant shall apply for and secure an Underground Storage Tank Removal Permit from the Fresno County Department of Public Health, Environmental Health Division. Contact the Fresno County Hazmat Compliance Program at (559) 600-3271 for more information.

The following comments pertain to the demolition of existing structures:

- Should the structures have an active rodent or insect infestation, the infestation should be abated prior to demolition of the structures in order to prevent the spread of vectors to adjacent properties.
- In the process of demolishing the existing structures, the contractor may encounter asbestos containing construction materials and materials coated with lead-based paints.
- If asbestos containing materials are encountered, contact the San Joaquin Valley Air Pollution Control District at (559) 230-6000 for more information.
- If the structures were constructed prior to 1979 or if lead-based paint is suspected to have been used in these structures, then prior to demolition and/or remodel work the contractor should contact the following agencies for current regulations and requirements:
 - California Department of Public Health, Childhood Lead Poisoning Prevention Branch, at (510) 620-5600.
 - United States Environmental Protection Agency, Region 9, at (415) 947-8000.
 - State of California, Industrial Relations Department, Division of Occupational Safety and Health, Consultation Service (CAL-OSHA) at (559) 454-5302.

REVIEWED BY:

Kevin Tsuda

Kevin Tsuda, R.E.H.S.
Environmental Health Specialist II

(559) 600-33271

cc: Deep Sidhu- Environmental Health Division (CT. 59.07)



2907 S. Maple Avenue
Fresno, California 93725-2208
Telephone: (559) 233-7161
Fax: (559) 233-8227

CONVEYANCE. COMMITMENT. CUSTOMER SERVICE.

September 22, 2022

Lily Cha-Haydostian
Department of Planning and Development Services
City of Clovis
1033 Fifth Street
Clovis, CA 93612

RE: General Plan Amendment 2022-001
N/E Alluvial and Sunnyside avenues
FID's Dawson No. 114

Dear Ms. Cha-Haydostian:

The Fresno Irrigation District (FID) has reviewed the General Plan Amendment 2022-001 for which the applicant requests to amend the General Plan for a parcel from Low Density Residential to Medium High Density Residential, APN: 563-142-35. This request is being processed concurrently with R2022-001. FID has the following comment:

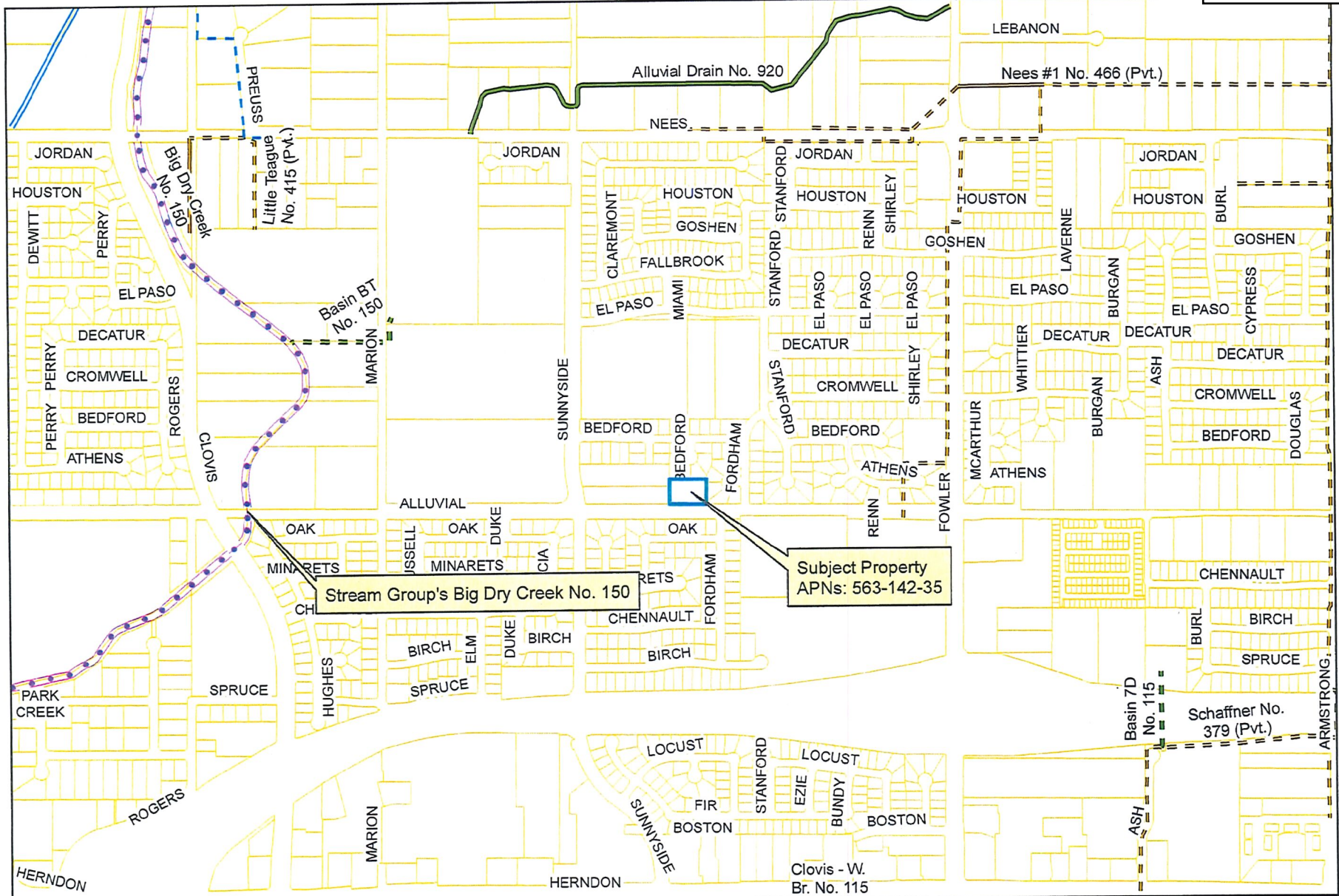
1. This site was previously reviewed and commented on by FID on January 12, 2022 as Development Review Committee Application No. 2021-056. These comments still apply and a copy has been attached for you reference.

Thank you for submitting this for our review. We appreciate the opportunity to review and comment on the subject documents for the proposed project. If you have any questions, please feel free to contact Jeremy Landrith at (559) 233-7161 extension 7407 or jlandrith@fresnoirrigation.com.

Sincerely,

Laurence Kimura, P.E.
Chief Engineer

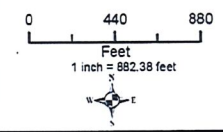
Attachments

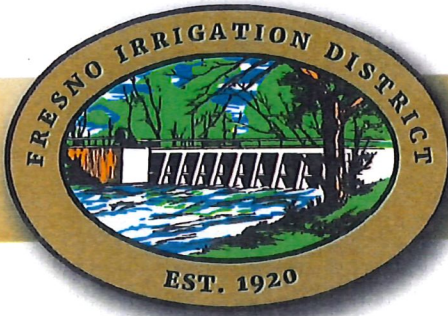


Legend	
FID Canal	FID Pipeline
Private Canal	Private Pipeline
Abandoned Canal	Abandoned Pipeline
Stream Group	Other-Creek/River
Other-Pipeline	FID Boundary
Railroad	Streets & Hwys
FMFCD Acquired Basins	FMFCD Proposed Basins
Parcel	

This map was produced by the Fresno Irrigation District and is provided for reference and informational purposes only and is not intended to show map scale accuracy or all inclusive map features, nor for legal purposes. FID makes no statements regarding the accuracy of this map as the features shown are in their approximate location. Please contact the FID Engineering Dept. at (559) 233-7161 for further information on FID facilities.

Path: G:\Fidgis\2022\013 FID Master.mxd
 Spatial Reference
 Name: NAD 1983 StatePlane California IV FIPS 0404





2907 S. Maple Avenue
 Fresno, California 93725-2208
 Telephone: (559) 233-7161
 Fax: (559) 233-8227

CONVEYANCE. COMMITMENT. CUSTOMER SERVICE.

January 12, 2022

Kelsey George
 City of Clovis
 Planning Division
 1033 Fifth Street
 Clovis, CA 93612

RE: Development Review Committee Application No. 2021-056
 N/E Alluvial and Sunnyside avenues

Dear Ms. George:

The Fresno Irrigation District (FID) has reviewed the Development Review Committee Application No. 2021-056 for which the applicant proposes to rezone the subject property for development of a 12-plex apartment complex with detached garage, APN: 563-142-35. FID has the following comments:

1. FID does not own, operate, or maintain any facilities located on the subject property, as shown on the attached FID exhibit map.
2. For informational purposes, Stream Group's Big Dry Creek No. 150 runs southerly crossing Alluvia Avenue and Clovis Avenue approximately 2,900 feet west of the subject property, as shown on the attached FID exhibit map. Big Dry Creek is operated and maintain by FID. Should this project include any street and/or utility improvements along Alluvial Avenue, Clovis Avenue, or in the vicinity of this facility, FID requires it review and approve all plans.

Thank you for submitting this for our review. We appreciate the opportunity to review and comment on the subject documents for the proposed project. If you have any questions, please feel free to contact Chris Lundeen at (559) 233-7161 extension 7410 or clundeen@fresnoirrigation.com.

Sincerely,

Laurence Kimura, P.E.
 Chief Engineer

Attachment

G:\Agencies\Clovis\DRC Meetings\DRC2021-056\DRC2021-056 FID Comment.doc

December 29, 2022

Lily Cha
City of Clovis
Planning and Development Services
1033 Fifth St.
Clovis, CA 93612

Project: The Palms at Alluvial 2 Initial Study and Mitigated Negative Declaration

District CEQA Reference No: 20221648

Dear Ms. Cha:

The San Joaquin Valley Air Pollution Control District (District) has reviewed the Initial Study (IS) and Mitigated Negative Declaration (MND) from the City of Clovis (City) for The Palms at Alluvial 2 residential development. Per the IS/MND, the project consists of 12 apartment units that are all designated for market rate rent, as well as a ± 3,160 square foot building for garages, associated landscaping, utility and pedestrian infrastructure, and sports fields (Project). The Project is located on the north side of Alluvial Avenue between Sunnyside and N. Fordham Avenues in Clovis, CA.

The District offers the following comments regarding the Project:

1) Project Related Emissions

Based on information provided to the District, Project specific annual criteria pollutant emissions from construction and operation are not expected to exceed any of the significance thresholds as identified in the District's Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI):

<https://www.valleyair.org/transportation/GAMAQI.pdf>.

1a) Construction Emissions

The District recommends, to reduce impacts from construction-related diesel exhaust emissions, the Project should utilize the cleanest available off-road construction equipment, including the latest tier equipment.

Samir Sheikh
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061
www.valleyair.org www.healthyairliving.com

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: (661) 392-5500 FAX: (661) 392-5585

2) Vegetative Barriers and Urban Greening

There are residential units located north and east of the Project. The District suggests the City consider the feasibility of incorporating vegetative barriers and urban greening as a measure to further reduce air pollution exposure on sensitive receptors (e.g., residential units).

While various emission control techniques and programs exist to reduce air quality emissions from mobile and stationary sources, vegetative barriers have been shown to be an additional measure to potentially reduce a population's exposure to air pollution through the interception of airborne particles and the uptake of gaseous pollutants. Examples of vegetative barriers include, but are not limited to the following: trees, bushes, shrubs, or a mix of these. Generally, a higher and thicker vegetative barrier with full coverage will result in greater reductions in downwind pollutant concentrations. In the same manner, urban greening is also a way to help improve air quality and public health in addition to enhancing the overall beautification of a community with drought tolerant, low-maintenance greenery.

3) Clean Lawn and Garden Equipment in the Community

Since the Project consists of residential development, gas-powered lawn and garden equipment have the potential to result in an increase of NOx and PM2.5 emissions. Utilizing electric lawn care equipment can provide residents with immediate economic, environmental, and health benefits. The District recommends the Project proponent consider the District's Clean Green Yard Machines (CGYM) program which provides incentive funding for replacement of existing gas powered lawn and garden equipment. More information on the District CGYM program and funding can be found at: <http://www.valleyair.org/grants/cgym.htm> and <http://valleyair.org/grants/cgym-commercial.htm>.

4) On-Site Solar Deployment

It is the policy of the State of California that renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045. While various emission control techniques and programs exist to reduce air quality emissions from mobile and stationary sources, the production of solar energy is contributing to improving air quality and public health. The District suggests that the City consider incorporating solar power systems as an emission reduction strategy for the Project.

5) Electric Vehicle Chargers

To support and accelerate the installation of electric vehicle charging equipment and development of required infrastructure, the District offers incentives to public agencies, businesses, and property owners of multi-unit dwellings to install electric

charging infrastructure (Level 2 and 3 chargers). The purpose of the District's Charge Up! Incentive program is to promote clean air alternative-fuel technologies and the use of low or zero-emission vehicles. The District recommends that the City and project proponents install electric vehicle chargers at project sites, and at strategic locations.

Please visit www.valleyair.org/grants/chargeup.htm for more information.

6) District Rules and Regulations

The District issues permits for many types of air pollution sources, and regulates some activities that do not require permits. A project subject to District rules and regulations would reduce its impacts on air quality through compliance with the District's regulatory framework. In general, a regulation is a collection of individual rules, each of which deals with a specific topic. As an example, Regulation II (Permits) includes District Rule 2010 (Permits Required), Rule 2201 (New and Modified Stationary Source Review), Rule 2520 (Federally Mandated Operating Permits), and several other rules pertaining to District permitting requirements and processes.

The list of rules below is neither exhaustive nor exclusive. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm. To identify other District rules or regulations that apply to future projects, or to obtain information about District permit requirements, the project proponents are strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (559) 230-5888.

6a) District Rules 2010 and 2201 - Air Quality Permitting for Stationary Sources

Stationary Source emissions include any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. District Rule 2010 (Permits Required) requires operators of emission sources to obtain an Authority to Construct (ATC) and Permit to Operate (PTO) from the District. District Rule 2201 (New and Modified Stationary Source Review) requires that new and modified stationary sources of emissions mitigate their emissions using Best Available Control Technology (BACT).

This Project may be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and may require District permits. Prior to construction, the Project proponent should submit to the District an application for an ATC. For further information or assistance, the project proponent may contact the District's SBA Office at (559) 230-5888.

6b) District Rule 9510 - Indirect Source Review (ISR)

The District has reviewed the information provided and has determined the project size is below the District Rule 9510, section 2.1 applicability threshold of 50 dwelling units for a residential development. Therefore, District Rule 9510 requirements and related fees do not apply to the project.

6c) District Rule 4002 (National Emissions Standards for Hazardous Air Pollutants)

The Project will be subject to District Rule 4002 since the Project will include demolition, renovation, and removal of existing structures. To protect the public from uncontrolled emissions of asbestos, this rule requires a thorough inspection for asbestos to be conducted before any regulated facility is demolished or renovated. Any asbestos present must be handled in accordance with established work practice standards and disposal requirements.

Information on how to comply with District Rule 4002 can be found online at: <http://www.valleyair.org/busind/comply/asbestosbultn.htm>.

6d) District Rule 4601 (Architectural Coatings)

The Project will be subject to District Rule 4601 since it is expected to utilize architectural coatings. Architectural coatings are paints, varnishes, sealers, or stains that are applied to structures, portable buildings, pavements or curbs. The purpose of this rule is to limit VOC emissions from architectural coatings. In addition, this rule specifies architectural coatings storage, cleanup and labeling requirements. Additional information on how to comply with District Rule 4601 requirements can be found online at: <http://www.valleyair.org/rules/currnrules/r4601.pdf>

6e) District Regulation VIII (Fugitive PM10 Prohibitions)

The project proponent may be required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to commencing any earthmoving activities as described in Regulation VIII, specifically Rule 8021 – *Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities*.

Should the project result in at least 1-acre in size, the project proponent shall provide written notification to the District at least 48 hours prior to the project proponents intent to commence any earthmoving activities pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). Also, should the project result in the disturbance of 5-

acres or more, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials, the project proponent shall submit to the District a Dust Control Plan pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). For additional information regarding the written notification or Dust Control Plan requirements, please contact District Compliance staff at (559) 230-5950. The application for both the Construction Notification and Dust Control Plan can be found online at:

<https://www.valleyair.org/busind/comply/PM10/forms/DCP-Form.docx>

Information about District Regulation VIII can be found online at:

http://www.valleyair.org/busind/comply/pm10/compliance_pm10.htm

6f) District Rule 4901 - Wood Burning Fireplaces and Heaters

The purpose of this rule is to limit emissions of carbon monoxide and particulate matter from wood burning fireplaces, wood burning heaters, and outdoor wood burning devices. This rule establishes limitations on the installation of new wood burning fireplaces and wood burning heaters. Specifically, at elevations below 3,000 feet in areas with natural gas service, no person shall install a wood burning fireplace, low mass fireplace, masonry heater, or wood burning heater.

Information about District Rule 4901 can be found online at:

<http://valleyair.org/rule4901/>

6g) Other District Rules and Regulations

The Project may also be subject to the following District rules: Rule 4102 (Nuisance) and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

7) District Comment Letter

The District recommends that a copy of the District's comments be provided to the Project proponent.

If you have any questions or require further information, please contact Jacob Torrez by e-mail at Jacob.torrez@valleyair.org or by phone at (559) 230-6558.

Sincerely,

Brian Clements
Director of Permit Services

A handwritten signature in blue ink, appearing to read "Mark Montelongo".

For: Mark Montelongo
Program Manager

The Palms at Alluvial 2

GPA2022-001 & R2022-001

Initial Study and Mitigated Negative Declaration

December 2022

PREPARED BY:

Lily Cha
Senior Planner
Planning & Development Services
(559) 324-2335
Lilyc@cityofclovis.com



INITIAL STUDY

This Initial Study was prepared pursuant to the California Environmental Quality Act (CEQA) Public Resources Code Sections 21000 *et seq.*, CEQA Guidelines Title 14, Section 15000 *et seq.* of the California Code of Regulations.

PROJECT TITLE: The Palms at Alluvial 2

LEAD AGENCY NAME AND ADDRESS: City of Clovis
Planning & Development Services
1033 Fifth Street
Clovis, CA 93612

CONTACT PERSON AND PHONE NUMBER: Lily Cha, Senior Planner
(559) 324-2335
lilyc@cityofclovis.com

PROJECT LOCATION: 1491 Alluvial Avnue
Clovis, CA 93611
APN: 561-142-35

PROJECT SPONSOR'S NAME AND ADDRESS: Stallion Development and Construction
Arman Zakaryan
811 Barstow Avenue
Clovis CA 93612

LAND USE DESIGNATION: Low Density

ZONING DESIGNATION: See page 6 of this Initial Study

PROJECT DESCRIPTION See page 7 of this Initial Study

SURROUNDING LAND USES AND SETTING: See page 6 of this Initial Study

REQUIRED APPROVALS: See page 8 of this Initial Study

HAVE CALIFORNIA NATIVE AMERICAN TRIBES REQUESTED CONSULTATION? IF SO, HAS CONSULTATION BEGUN? Yes

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A. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, as indicated by the checklist and corresponding discussion in this Initial Study.

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology & Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology & Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities & Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

Determination

On the basis of this initial evaluation:

- I find that the proposed Project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.
- I find that, although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponents. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed Project MAY have a significant effect on the environmental, and an ENVIRONMENTAL IMPACT REPORT (EIR) will be prepared.
- I find that the proposed Project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environmental, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately analyzed in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Prepared By:



 Lily Cha, Senior Planner
 City of Clovis Planning & Development Services

11-14-2022

 Date

Approved By:

 Renee Mathis, Director
 City of Clovis Planning & Development Services

11-15-2022

 Date

B. PROJECT OVERVIEW

Arman Zakaryan, Stallion Development and Construction (applicant), proposes the construction of a multifamily residential complex totaling ±19,320 square feet along with associated site improvements (i.e. landscape, parking, sidewalks, and utilities infrastructure) on a ±1.04 acre site located north of Alluvial Avenue and east of Sunnyside Avenue in the City of Clovis, California, herein referred to throughout the document as “proposed Project” and/or “Project.” Details regarding the Project and operations are described more fully below beginning under Section E of this Initial Study.

C. PROJECT LOCATION

As shown in Figure 1 below, the Project is located on the north side of Alluvial Avenue, between Sunnyside and N. Fordham Avenues and is approximately 1.04 acres in area. The Project will occupy the entire parcel with Accessor’s Parcel Number (APN) 563-142-35.

D. EXISTING SETTING

This section describes the existing conditions, surrounding conditions, as well as the General Plan land use and zoning designations.

1. EXISTING CONDITIONS

As shown in Figure 1 below, the existing a dilapidated residence with a detached garage and accessory structure. A portion of the residence has been damaged by fire and had not been repaired. Both accessory buildings also appear to be in disrepair. The rest of the site is unimproved but shows signs of disturbance with routine maintenance for fire and weed abatement. The property is unoccupied.

2. SURROUNDING CONDITIONS

As referenced below in Table 1, and shown on Figure 1, the Project site is surrounded by existing residential development to the north, east, and south. To the west is a residential property that was converted into a church. As mentioned above, some food processing activities would continue to occur at the northern portion of the site.

Table 1: Surrounding Land Uses

	Land Use Designation	Existing Zoning*	Existing Land Use
North	Low Density Residential	R-1-7500	Single-Family Residential
East	Low Density Residential	R-1-7500	Single-Family Residential
South	Low Density Residential	R-1-7500	Single-Family Residential
West	Church	R-1-7500	Church

*R-1-7500 (Single-Family Residential – 7,500 square feet)

3. LAND USE DESIGNATION

As shown on Figure 2, the Project site has an existing General Plan Land Use designations of Low Density and Residential. The Low Density Residential designation allows for single-family residential development at a density of 2.1 to 4.0 dwelling units per acre. The applicant proposes to amend the General Plan Land Use to the Medium High Density that allows for residential development with a density of 7.1 to 15.0 dwelling units per acre. The amendment is being processed with General Plan Amendment GPA 2022-001.

4. ZONING DESIGNATION

As shown on Figure 3, the Project site is currently zoned R-1-7500 (Single-Family Residential– 7,500 square feet), however, proposes a rezone to the R-2 Zone District (Multifamily Medium-High Density). The R-2 Zone District is consistent with the proposed Medium High Density land use designation.

E. PROJECT DESCRIPTION

The subject parcel is a ± 1.04 acre urban in-fill property designated for Low Density Single-Family development in the City of Clovis General Plan. The applicant is proposing to redesignate and rezone the project site to allow for the development of a multifamily complex. The Project proposes 12 apartment units that are all designated for market rate rent. The Project consists of a ± 16,160 square foot building to accommodate the 12 units, as well as a ± 3,160 square foot building for garages, associated landscaping, utility and pedestrian infrastructure, and sports fields.

This section describes the components of the proposed Project in more detail, including site preparations, proposed structures, and on- and off- site improvements.

1. PROJECT ENTITLEMENTS

The Project would include several planning entitlements, including a general plan amendment, rezone, and multiple family design review. The general plan amendment is to redesignate the property from the Low Density Residential designation to the Medium High Density designation, the rezone is to bring the zoning into consistency with the proposed general plan land use designation, and the multiple family design review is required to memorialize the design and layout of the buildings.

2. PROJECT CONSTRUCTION AND PHASING

The Project is anticipated to begin construction spring of 2023 with full buildout by Fall of 2023.

3. SITE PREPARATION

Site preparation would include the demolition of the existing structures and typical grading activities to ensure an adequately graded site for drainage purposes. Part of the preparation would include the removal of any vegetation, crops, and trees necessary to accommodate the Project. Other site preparation activities would include minor excavation for the installation of utility infrastructure, for conveyance of water, sewer, stormwater, and irrigation.

4. PROJECT COMPONENTS

This section describes the overall components of the Project, such as the proposed buildings, landscape, vehicle and pedestrian circulation, and utilities.

DEMOLITION

The existing residence and accessory buildings will be demolished with this site plan.

CONCEPTUAL SITE LAYOUT AND ELEVATIONS

While this section discusses the general site layout and elevations, it is important to note that the actual site will be reviewed more fully during the City's multiple family design review process. As shown in Figure 4, the Project proposes construction of a ± 16,160 square foot building to accommodate the 12 apartment units. Of the 12 units, ten (10) are two-bedroom units and two (2) are 3-bedroom units. There will also be a ± 3,160 square foot building designated for individual garages. The apartment building is situated towards the street frontage of the site, while the garage building is towards the rear of the site. Additional parking stalls are provided along the west and east sides of the apartment building.

Conceptual elevations for the apartment building is shown in Figure 5 respectively. As shown, the apartment building is 2 stories with a maximum height of 33 feet at its peak. Although conceptual at this time, the exterior has a modern look and feel with its shape and material using a mixture stucco, composite cladding and metal. The garage building is single-story with a maximum height of 12 feet. The material will be the same as the main building. Development of the project will be in accordance with the City of Clovis' Multifamily Objective Standards and the R-2 Zone District standards.

SITE CIRCULATION AND PARKING

The Project would be accessed via two (2) points of ingress/egress from Alluvial Avenue. On-site parking would be provided per the CMC standards for parking spaces for multi-family development. Although ±26 vehicle spaces are proposed, the final parking calculation will be reviewed during the City's Multi-Family Design Review process. Installation of pedestrian paths of travel would be required as part of the Project from the Alluvial Avenue frontage. Although the details have not yet been provided, these features would be per City of Clovis Development Code standards and/or in compliance with Americans with Disabilities Act (ADA) requirements.

LANDSCAPE

The Project would include landscape throughout the site. Landscaped areas would generally be located along the frontage of each structure where a variety of ornamental shrubs, plants, and trees would be planted, as well as landscape in areas throughout the parking lots, consistent with the CMC. Landscape plans are typically provided during the City's Multi-Family Design Review process at which time the proposed landscape would be reviewed for compliance with the City's water efficient landscape regulations and guidelines.

UTILITIES

Utilities for the site would consist of water, sewer, electric, cable, gas, and stormwater infrastructure. Minor trenching and digging activities would be required for the installation of necessary pipelines typical of commercial development. All utility plans would be required to be reviewed and approved by the appropriate agency, and/or department to ensure that installation occurs to pertinent codes and regulations. Other infrastructure would include new fire hydrants as required by the City of Clovis Fire Department.

Utilities are provided by and managed from a combination of agencies, including FID which provides the City's water supply which is then supplied to customers by the City of Clovis, Fresno Metropolitan Flood Control District (FMFCD) which has responsibility for storm water management, and the City's public utilities department which provides for solid waste collection, and sewer collection services. Pacific Gas & Electric (PG&E) provides electricity and natural gas within the City of Clovis.

F. REQUIRED PROJECT APPROVALS

The City of Clovis requires the following review, permits, and/or approvals for the proposed Project; however, other approvals not listed below may be required as identified throughout the entitlement process:

- General Plan Amendment
- Rezone
- Multi-Family Design Review
- Grading Permit
- Building Permit
- Sign Permit
- San Joaquin Unified Air Pollution Control District
- Fresno Metropolitan Flood Control District

G. TECHNICAL STUDIES

The analysis of the Project throughout this Initial Study relied in part on the technical studies listed below prepared for the Project, as well as other sources, including, but not limited to, the 2014 Clovis General Plan Environmental Impact Report (EIR), departmental staff, California Department of Conservation, and the California Department of Toxic Control Substances.

- **Appendix A:** Air Quality and Greenhouse Gas Technical Memorandum
- **Appendix B:** Biological Resource Assessment

- **Appendix C:** Archaeological Resources Survey
- **Appendix D:** Historical Evaluation
- **Appendix E:** Traffic Generation Analysis
- **Appendix F:** Water
- **Appendix G:** Sewer

Figure 1: Project Location and Existing Conditions



 Project Location (1.04 acres)



Figure 2: General Plan Land Use Designation




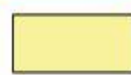
-  Project Location (1.04 acres)
-  Low Density Residential (2.1-4.0 DU/Ac)



Figure 3: Zoning



Figure 5: Conceptual Elevations "Main Building"



The Palms at Alluvial 2

1491 Alluvial Ave, Clovis, CA 93611

April 27, 2022

Figure 6: Conceptual Elevation "Garage Building"



The Palms at Alluvial 2

1491 Alluvial Ave, Clovis, CA 93611

April 27, 2022

H. ENVIRONMENTAL CHECKLIST

This section provides an evaluation of the potential environmental impacts of the proposed project and are based on CEQA Guidelines Appendix G. For each issue area, one of four conclusions is made:

- **No Impact:** No project-related impact to the environment would occur with project development.
- **Less Than Significant Impact:** The proposed project would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.
- **Less Than Significant with Mitigation Incorporated:** The proposed project would result in an environmental impact or effect that is potentially significant, but the incorporation of mitigation measure(s) would reduce the project-related impact to a less than significant level.
- **Potentially Significant Impact:** The proposed project would result in an environmental impact or effect that is potentially significant, and no mitigation can be identified that would reduce the impact to a less than significant level.

1. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial effect on a scenic vista?			X	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c. Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?		X		

ENVIRONMENTAL SETTING

The City of Clovis is located within the San Joaquin Valley. Thus, much of the City and its surrounding areas are predominately flat. As a result, on clear days, the Sierra Nevada Mountains are visible to the east depending on your location. Aside from Sierra Nevada, there are no officially designated focal points or viewsheds within the City. However, Policy 2.3, Visual Resources, of the Open Space Element of the 2014 Clovis General Plan, requires maintaining public views of open spaces, parks, and natural features and to preserve Clovis' viewshed of the surrounding foothills.

As mentioned above in the Project Description, the site is located north of Alluvial and east of Sunnyside. In general, the Project site is within an urbanized area of the City surrounded by existing residential to the north, east, and south, as well as a church west of the site. As a result, the area is characterized by a mix of development types and uses, as well as typical infrastructure, such as roadways, streetlights, parking lot lights, and ambient light sources typical of residential development.

DISCUSSION

- a) *Would the project have a substantial effect on a scenic vista?*

Less-Than-Significant Impact. As mentioned above, there are no officially designated scenic vistas or focal points in the City of Clovis. While the Sierra Nevada Mountains can be viewed on clear days, the Project would be consistent with the proposed R-2 zone district standards which allows structures to be constructed at a maximum height of 35 feet. Although the maximum height limit is 35 feet/2-1/2 stories for R-2 zone district, the Project proposes a maximum height of approximately 33 feet, which is below what is allowed under the development standards. Lastly, General Plan Policy 2.3 requires that public views of open spaces, parks, and natural features be maintained; however, the Project site is not within the immediate vicinity of these features. Therefore, because the Project would be constructed at a maximum height consistent with the proposed R-2 Zone District and surrounding R-1-7500 Zone District development standards, a **less-than-significant impact** would occur with regards to the Project having a substantial effect on a scenic vista. As a result, no mitigation measures are required.

- b) *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?*

No Impact. As stated in the 2014 Clovis General Plan Environmental Impact Report EIR, there are no Caltrans-designated scenic highways within the City of Clovis.¹ Further, there are no existing historical structures or rock outcroppings located on or within the immediate vicinity of the site, Therefore, the Project would result in **no impact** with regards to substantially damaging scenic resources within a State scenic highway, and no mitigation measures are required.

- c) *Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Less-Than-Significant Impact. As mentioned previously, the existing site is within an urbanized area surrounded by primarily residential and church land uses. Thus, the area is generally characterized by different types of structures at varying heights, design, and character. The Project proposes to construct a ±16,160 square foot building to accommodate the 12 units, as well as a ±3,160 square foot building for garages. The main building will be 33 feet tall and situated near the front of the parcel. The garage building is 12 feet tall and situated behind the main building. Such uses would not substantially degrade from the existing visual character or quality of public views of the site and its surroundings. Further, as mentioned above, there are no officially designated scenic areas in the City, and none specifically at or surrounding the site itself.

In addition, the Project proposes that the structures would be at a height below the maximum height limit permitted under the proposed R-2 Zone District and surrounding R-1-7500 Zone District. Thus, the Project is within the scale and character of the area and would not substantially degrade the existing visual character. Lastly, the Project would undergo Site Plan Review (SPR) which would ensure that the overall design and

¹ 2014 Clovis General Plan EIR, June 2014, Page 5.1-1.

character is consistent and/or complements the surrounding areas. The SPR process will ensure the Project complies with relevant design policies, such as General Plan, Multifamily Objective Standards, and the Clovis Development Code. During the review, the height, color and materials are reviewed for consistency with these plans and guidelines. Consequently, a **less-than-significant** impact would occur with regards to substantially degrading the existing visual character of the site and its surroundings, and no mitigation measures are required.

- d) *Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

Less-Than-Significant Impact With Mitigation. The Project consists of a multifamily residential complex. The proposed Project would introduce new sources of light and glare, although there are current uses on the site that already produce light and glare. Light and glare from the Project would be typical of a multifamily residential type development, which may include sources such as exterior lighting for safety, and light and glare from vehicles reflecting from surfaces such as windshields. Other sources of light would be the interior lighting of the buildings at night. These sources of light and glare are not typically associated with causing significant effects on the environment. Further, the site is already surrounded by existing uses, such as residential and church, which as a result has established existing sources of light and glare. These sources of existing light and glare are comprised of streetlights, exterior and interior light and glare from existing homes, and from vehicles going to and from the neighborhood. Other sources of existing light and glare derive from vehicles travelling along Sunnyside and Alluvial Avenues.

Although the Project would introduce new sources of light and glare, the SPR process would ensure that the design and placement of lighting is appropriate to minimize potential light and glare impacts to surrounding properties. In addition, compliance with Mitigation Measure AES-1 would ensure that light and glare impacts be **less than significant with mitigation**.

Mitigation Measure AES-1: The Project shall comply with Section 9.22.050, Exterior Light and Glare, of the Clovis Municipal Code (CMC or Development Code), which requires light sources to be shielded and that lighting does not spillover to adjacent properties.

2. AGRICULTURE AND FORESTRY RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.				X
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code				X

section 12220 (g)) or timberland (as defined in Public Resources Code section 4526)?				
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				X

ENVIRONMENTAL SETTING

The Project site is located in the northeast area of Alluvial and Sunnyside Avenues and considered an in-fill property. The site is within an urbanized area of the City and is surrounded a mix of existing developments types.

DISCUSSION

- a) *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

No Impact. The project site is not Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). The project site was previously used as a single-family residence. The Project proposes to redevelop the site to a multifamily residential complex.

- b) *Would the project conflict with existing zoning for agricultural use, or a Williamson Act Contract?*

No Impact. As shown on Figure 5.2-2 of the Agricultural Resources Chapter of the 2014 Clovis General Plan EIR, the Project site is not under a Williamson Act Contract. Further, the site is not currently zoned or designated for agricultural use. As a result, the Project would have **no impact** with regards to conflicting with existing zoning for agricultural use or a Williamson Act Contract. No mitigation measures are required.

- c) *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220 (g)) or timberland (as defined in Public Resources Code section 4526)?*

No Impact. The Project site does not contain forest land. Further, the site is not zoned for forestry or other forestry related uses. As a result, **no impact** would occur with regards to conflicts with existing zoning for, or cause rezoning of, forest land. No mitigation measures are required.

- d) *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

No Impact. See discussion under Section 2c.

e) *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

No Impact. See discussion under Section 2a.

3. AIR QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?			X	
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c. Expose sensitive receptors to substantial pollutant concentrations?			X	
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

ENVIRONMENTAL SETTING

An Air Quality and Greenhouse Gas Analysis Report (AQ/GHG Report) was prepared by Johnson Johnson and Miller Air Quality Consulting on June 29, 2022 (see Appendix A). Information in this AQ/GHG Report is used for the analysis included in both the Air Quality and Greenhouse Gas Emissions section of this Initial Study.

San Joaquin Valley Air Basin

The City of Clovis (City) is in the central portion of the San Joaquin Valley Air Basin (SJVAB). SJVAB consists of eight counties: Fresno, Kern (western and central), Kings, Tulare, Madera, Merced, San Joaquin, and Stanislaus. Air pollution from significant activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources. These sources, coupled with geographical and meteorological conditions unique to the area, stimulate the formation of unhealthy air.

The SJVAB is approximately 250 miles long and an average of 35 miles wide. It is bordered by the Sierra Nevada in the east, the Coast Ranges in the west, and the Tehachapi mountains in the south. There is a slight downward elevation gradient from Bakersfield in the southeast end (elevation 408 feet) to sea level at the northwest end where the valley opens to the San Francisco Bay at the Carquinez Straits. At its northern end is the Sacramento Valley, which comprises the northern half of California’s Central Valley. The bowl-shaped topography inhibits movement of pollutants out of the valley (SJVAPCD 2012a).

Topography

The topography of a region is important for air quality because mountains can block airflow that would help disperse pollutants and can channel air from upwind areas that transports pollutants to downwind areas. The San Joaquin Valley Air Pollution Control District (SJVAPCD) covers the entirety of the SJVAB. The SJVAB is generally shaped like a bowl. It is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada mountains are along the eastern boundary (8,000 to 14,000 feet in elevation), the Coast Ranges are along the western boundary (3,000 feet in elevation), and the Tehachapi Mountains are along the southern boundary (6,000 to 8,000 feet in elevation).

Climate

The SJVAB is in a Mediterranean climate zone and is influenced by a subtropical high-pressure cell most of the year. Mediterranean climates are characterized by sparse rainfall, which occurs mainly in winter. Summers are hot and dry. Summertime maximum temperatures often exceed 100°F in the valley.

The subtropical high-pressure cell is strongest during spring, summer, and fall and produces subsiding air, which can result in temperature inversions in the valley. A temperature inversion can act like a lid, inhibiting vertical mixing of the air mass at the surface.

Any emissions of pollutants can be trapped below the inversion. Most of the surrounding mountains are above the normal height of summer inversions (1,500–3,000 feet).

Winter-time high pressure events can often last many weeks, with surface temperatures often lowering into the 30°F. During these events, fog can be present and inversions are extremely strong. These wintertime inversions can inhibit vertical mixing of pollutants to a few hundred feet (SJVAPCD 2012a).

Ambient Air Quality Standards

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

These National and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect “sensitive receptors,” those most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health based AAQS for seven air pollutants. As shown in Table 3, Ambient Air Quality Standards for Criteria Pollutants, these pollutants are ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

In addition to the criteria pollutants, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated based on risk rather than specification of safe levels of contamination.

Table 3: Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour	--	0.09 ppm
	8-Hour	0.07 ppm	0.07 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.03 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	Annual	0.03 ppm	--
	24-Hour	0.14 ppm	0.04 ppm
	3-Hour	0.5 ppm	
	1-Hour	0.075 ppm	0.25 ppm
PM ₁₀	Annual	--	20 ug/m ³
	24-Hour	150 ug/m ³	50 ug/m ³
PM _{2.5}	Annual	12 ug/m ³	12 ug/m ³
	24-Hour	35 ug/m ³	--
Lead	30-Day Avg.	--	1.5 ug/m ³
	3-Month Avg.	1.5 ug/m ³	--

Notes: ppm = parts per million; ug/m³ = micrograms per cubic meter.
Source: California Air Resources Board, 2008. Ambient Air Quality Standards (4/01/08), <http://www.arb.ca.gov/aqs/aaqs2.pdf>.

Attainment Status

The air quality management plans prepared by SJVAPCD provide the framework for SJVAB to achieve attainment of the state and federal AAQS through the SIP. Areas are classified as attainment or nonattainment areas for pollutants, depending on whether they meet the ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

At the federal level, the SJVAPCD is designated as extreme nonattainment for the 8-hour ozone standard, attainment for PM₁₀ and CO, and nonattainment for PM_{2.5}. At the state level, the SJVAB is designated nonattainment for the 8-hour ozone, PM₁₀, and PM_{2.5} standards. The SJVAB has not attained the federal 1-hour ozone, although this standard was revoked in 2005.

DISCUSSION

- a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Less-Than-Significant Impact. Although the CEQA Guidelines indicate that a significant impact would occur if the Project were to conflict with or obstruct implementation of the applicable air quality plan, the SJVAPCDs 2015 Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) does not provide specific guidance on analyzing conformity with the plan. Thus, for purposes of analyzing this potential impact, the AQ/GHG Report considered impacts based on: (1) whether the Project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality

standards; and (2) whether the Project will comply with applicable control measures in the air quality plan, primarily compliance with Regulation VIII – Fugitive PM₁₀ Prohibitions and Rule 9510 – Indirect Source Review.

In general, regional air quality impacts and attainment of standards are the result of the cumulative impacts of all emission sources within the air basin. Thus, individual projects are generally not large enough to contribute measurably to an existing violation or air quality standards alone. Therefore, in order to analyze this threshold, and because of the region’s existing nonattainment status for several pollutants, the Project would be considered to cause significant impacts if it were to generate emissions that would exceed the SJVAPCD’s significance thresholds. The District’s annual emission significance thresholds are as follows:

- 100 tons per year CO
- 27 tons per year So_x
- 10 tons per year NO_x
- 15 tons per year PM₁₀
- 10 tons per year ROG
- 15 tons per year PM_{2.5}

Based on the AQ/GHG Report, the Project would not exceed these thresholds from construction and operation of the Project (As Shown in Table 4).² Further, any impacts related to the construction activities of the Project, such as dust control, would be regulated through the SJVAPCD, which require measures such as frequent watering of the site during construction to minimize dust.

Table 4: CO, NO_x, ROG, PM₁₀, PM_{2.5} Thresholds, Maximum

Emission Source (Tons Per Year)	CO	NO _x	ROG	PM ₁₀	PM _{2.5}
Highest Construction Emissions in Any Year (Unmitigated)	1.51	1.42	0.24	0.009	0.07
Operational Emissions at Buildout	0.43	0.07	0.11	0.10	0.03
Total Emissions	1.95	1.49	0.35	0.109	0.10
Significance Threshold	100	10	10	15	15
Exceed threshold – significant impact?	No	No	No	No	No
Notes: ROG = reactive organic gases NO _x = nitrogen oxides PM ₁₀ and PM _{2.5} = particulate matter					

Lastly, the SJVAPCD typically provides a comment letter indicating that the Project would be subject to compliance with the SJVAPCD Rule 9510 (Indirect Source Review), which is intended to mitigate a project’s impact on air quality through project design elements or by payment of in-lieu fees and Regulation VII (Fugitive PM₁₀ Prohibitions), which requires a Construction Notification Form or approval of a Dust Control Plan prior to construction.

Consequently, compliance with SJVAPCD regulations would ensure that the Project result in a **less-than-significant** impact and no mitigation measures are required.

- b) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

Less-Than-Significant Impact. See discussion under Section 3a above.

- c) *Would the project expose sensitive receptors to substantial pollutant concentrations?*

² Air Quality and Greenhouse Gas Analysis Report, Johnson Johnson and Miller Air Quality, starting on page 23, June 29, 2022.

Less-Than-Significant Impact. Sensitive receptors are generally considered to include children, the elderly, and persons with pre-existing respiratory and cardiovascular illness. The SJVAPCD considers a sensitive receptor a location that houses or attracts children, the elderly, or people with illnesses. Examples of these receptors are hospitals, residences, schools and school facilities, and convalescent facilities. The nearest sensitive receptors to the Project site would be the existing residences adjacent to the site to the north, south, and east, in addition to the church to the west. Based the AQ/GHG Report, the Project would not exceed emission thresholds that would result in a significant impact³ based on compliance with SJVAPCD regulations and standards for construction and operation of this type of development. Therefore, a **less-than-significant** impact would occur.

d) *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Less-Than-Significant Impact. Generally, sources considered to emit odors are associated with wastewater treatment facilities, sanitary landfills, petroleum refineries, chemical manufacturing, and other industrial/manufacturing related uses. The Project would include a multifamily residential complex thus, is unlikely to produce odors that would be considered to adversely affect a substantial number of people. Further, there are no major odor-generating sources within screening distance of the site. Although some odors would be emitted through the construction of the Project, such as diesel fuel and exhaust from construction equipment, these odors would be temporary in nature and last only during construction activities. Further, the types of uses allowed in the R-2 zone district such as a multifamily development are not generally considered to be odor-causing uses that would adversely affect a substantial number of people. Overall, a **less-than-significant** impact would occur.

4. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		

³ Air Quality and Greenhouse Gas Analysis Report, Johnson Johnson and Miller Air Quality Consulting, starting on page 29, June 29, 2022.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

ENVIRONMENTAL SETTING

A biological resources assessment (Biological Resources Assessment) was prepared by LSA. dated May 25, 2022 (see Appendix B). This Biological Resources Assessment included a literature review and records search to identify the existence and potential for occurrence of sensitive or special-status plant and animal species in the project vicinity. The site has been utilized as a single-family residence.

DISCUSSION

- a) *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Less-Than-Significant Impact With Mitigation. As described in the Biological Resources Assessment, the site was developed and is surrounded by substantial development. The site comprises of an existing single-family residence and no natural plant communities occur in the area of the Project site.⁴ No special-status wildlife species or diagnostic signs of special-status wildlife species were present on the Project site, and, according to the Biological Resources Assessment, the disturbed condition of the site would tend to preclude those species from occurring. Although no impacts to special-status species are expected, the Biological Resources Assessment concludes that there is a potential for the project to impact migratory birds. In efforts to ensure protection of such species and waters, implementation of mitigation measure BIO-1 would ensure that a **less-than-significant impact with mitigation** occurs.

Mitigation Measure BIO-1: Nesting Bird Surveys and Active Nest Avoidance. Initial ground disturbance and vegetation removal should take place outside of the active nesting bird season (i.e., February 15-September 30), when feasible. Should project construction activities commence during this period, a qualified biologist should conduct a nesting bird survey prior to the onset of the work activities to ensure that birds are not engaged in active nesting within or immediately adjacent to the project site. If nesting birds are discovered during preconstruction surveys, the biologist should identify an appropriate buffer (i.e., up to 500 feet depending on the circumstances and specific bird species) where no clearing, grading, or construction activities with potential to have direct or indirect impacts on the nesting birds are allowed to take place until after the birds have fledged from the nest, or the qualified biologist has determined that the nest is no longer active.

- b) *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*

Less-Than-Significant Impact. As mentioned previously, the Project site is characterized by agricultural and ornamental plants with some ruderal plant species scattered throughout. There are no riparian habitats or sensitive natural communities identified at the site, nor are there any identified in local or regional plans. Therefore, the Project would not result in a substantial adverse effect with respect to this threshold, and a **less-than-significant** impact would occur. No mitigation measures are required.

- c) *Would the project have a substantial adverse effect on state or federally protected wetlands as (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

No Impact. Based on the Biological Resources Evaluation prepared for the Project, no wetland features are known to exist at the Project site.

- d) *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

No Impact. The Biological Resources Evaluation did not identify the site as a regional or local wildlife movement corridors.⁵ Further, wildlife corridors typically serve as areas that wildlife traverse in order to migrate from one habitat to another and because the site is infill and surrounded by urban development, the site is unlikely to serve as any sort of wildlife corridor. Thus, **no impact** would occur, and no mitigation measures are required.

⁴ Biological Resources Evaluation prepared by LSA May 25, 2022, page 3.

⁵ Biological Resources Evaluation prepared by LSA, May 25, 2022, page 5.

e) *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Less-Than-Significant Impact. The Project site does not indicate the presence of any sensitive habitat or wildlife features that would be significantly impacted. Although Policy 2.6 of the Open Space and Conservation Element of the 2014 General Plan calls for the protection of biological resources, the Biological Resources Evaluation did not identify any such resources at the site due to its location and being surrounded by urban development. Further, the Clovis Development Code does include tree protection standards for any trees that may need to be removed during construction. Compliance with the tree protection standards of the Clovis Municipal Code would require the replacement of trees and/or payment of in-lieu fees. Consequently, due to the lack of any identified sensitive species, and because the Project would be required to comply with the tree protection ordinance, the impact would be **less-than-significant**, and no mitigation measures would be required.

f) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

No Impact. The Project site is not located within an adopted or approved Habitat Conservation Plan (HCP) or other conservation plan. However, the site is within the PG&E San Joaquin Valley Operation and Maintenance HCP, although the PG&E HCP applies only to PG&E construction and maintenance activities and does not apply to the site. Overall, **no impact** would occur, and no mitigation measures are required.

5. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?		X		
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		
c. Disturb any human remains, including those interred outside of formal cemeteries?		X		

ENVIRONMENTAL SETTING

The Project site is located on a disturbed and developed site. The site has an existing single-family residence and is surrounded by existing residential development as well as a church. A Cultural Resources Survey was prepared by LSA dated July 13, 2022 (See Appendix C). The Cultural Resources Survey was based on information obtained at the Southern San Joaquin Valley Information Center, CSU Bakersfield, as well as review of other surveys conducted in the area. Based on the Cultural Resources Survey, no cultural resources have been identified within one-half mile of the Project Site.

DISCUSSION

- a) *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

Less-Than-Significant Impact With Mitigation. As previously mentioned, the Project site is developed with an existing residence. A cultural resource records search was conducted within one-half mile of the Project. The search indicated that the subject property had never been surveyed for resources and it is not known if any exist on it. However, the Cultural Resources Survey concluded that based on the results of the records search findings and lack of archeological resources previously identified within a one-half mile radius of the Project, the potential to encounter subsurface cultural resources is minimal.⁶ Further, compliance with Policy 2.9 of the General Plan, which calls for the preservation of historical sites and buildings of state or national significance, would ensure that if there were historical resources present, they would be protected. Because there is the slight possibility for the accidental or inadvertent uncovering of archaeological resources during construction, Mitigation Measure CULT-1 would serve to reduce those potential impacts by requiring the stopping of any work until any found artifacts can be properly removed and inventoried by a qualified archaeologist. Therefore, regarding the Project causing a substantial adverse change in the significance of a historical resource the Project would result in a **less-than-significant impact with mitigation**.

Mitigation Measure CULT-1: If prehistoric or historic-era cultural or archaeological materials are encountered during construction activities, all work in the immediate vicinity of the find shall halt until a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, can evaluate the significance of the find and make recommendations. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants.

If the qualified professional archaeologist determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation. These additional studies may include avoidance, testing, and evaluation or data recovery excavation.

If a potentially eligible resource is encountered, then the qualified professional archaeologist, the Lead Agency, and the project proponent shall arrange for either 1) total avoidance of the resource or 2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the Lead Agency as verification that the provisions for managing unanticipated discoveries have been met.

- b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

Less-Than-Significant Impact With Mitigation. The site is developed with an existing residence and is surrounded by existing urban development. The site's ground has been previously disturbed as a result of the agriculture, and residential uses and other ground disturbing activities throughout the years. Nevertheless, the potential remains that archeological resources could be inadvertently or accidentally uncovered during ground-disturbing activities such as trenching, digging, and the installation of utilities and other infrastructure.

⁶ Cultural Resources Technical Memorandum by LSA, July 13, 2022, page 2.

Because there is the slight possibility for the accidental or inadvertent uncovering of archaeological resources during construction, Mitigation Measure CULT-1 would serve to reduce those potential impacts by requiring the stopping of any work until any found artifacts can be properly removed and inventoried by a qualified archaeologist. Therefore, the Project would result in a **less-than-significant impact with mitigation**.

c) *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Less-Than-Significant Impact With Mitigation. The site is developed with an existing residence and is surrounded by existing urban developed. The site's ground has been previously disturbed as a result of the agriculture, and residential uses and other ground disturbing activities throughout the years. Nevertheless, the potential remains that human remains could be inadvertently or accidentally uncovered during ground-disturbing activities such as trenching, digging, and the installation of utilities and other infrastructure.

Because there is the slight possibility for the accidental or inadvertent uncovering of human remains during construction, Mitigation Measure CULT-2 would serve to reduce those potential impacts by requiring the stopping of any work until any found human remains can be properly removed by the County coroner and/or tribes. Therefore, the Project would result in a **less-than-significant impact with mitigation**.

Mitigation Measure CULT-2: If human remains are discovered during construction or operational activities, further excavation or disturbance shall be prohibited pursuant to Section 7050.5 of the California Health and Safety Code. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the Public Resources Code (Chapter 1492, Statutes of 1982, Senate Bill 297), and Senate Bill 447 (Chapter 44, Statutes of 1987), shall be followed. Section 7050.5(c) shall guide the potential Native American involvement, in the event of discovery of human remains, at the direction of the County coroner. All reports, correspondence, and determinations regarding the discovery of human remains on the project site shall be submitted to the Lead Agency.

6. ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

ENVIRONMENTAL SETTING

The Project is located on an infill site surrounded by existing urban uses, primarily residential and educational.

DISCUSSION

- a) *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Less-Than-Significant Impact. The Project proposes the construction of a multifamily residential complex. Construction of such structures would require site preparation, grading, paving, architectural coating, and trenching. Construction would consist of typical activities for construction projects and therefore would not require use of new resources. While such activities would consume petroleum-based fuels, such consumption would be temporary and conclude upon completion of construction. The proposed Project in operation would be served by Pacific Gas & Electric (PG&E) and would not require extensions of energy infrastructure or new energy supplies. As previously mentioned, the Project is located on an infill site surrounded by existing urban uses. Sources of operational energy consumption would include natural gas and/or electricity for space and water heating and transportation fuels (i.e., gasoline and diesel) for vehicle trips. Further, the multifamily use would be subject to compliance with the latest energy efficiency standards in effect at the time of development and operation. This would include compliance with Title 24 Green Building Standards for energy efficiency, as well as be required to comply with the latest water efficient landscape policy regulations. Further, the Project would be required to comply with Clovis General Plan Policy 3.4, and 3.7 of the Open Space and Conservation, which call for the use of water conserving and drought tolerant landscape, as well as energy efficient buildings. Conformance to these standards would be reviewed during the City’s site plan review process and during review of building plans.

Consequently, compliance with these measures would ensure that the Project does not result in a significant impact due to the unnecessary consumption of energy and **less-than-significant** impact would occur.

- b) *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Less-Than-Significant Impact. See discussion under Section 6a above.

7. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	

iv) Landslides?			X	
b. Result in substantial soil erosion or the loss of topsoil?			X	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems where sewers are not available for the disposal of wastewater?				X
f. Directly or indirectly destroy a unique paleontological resource or unique geologic feature?		X		

ENVIRONMENTAL SETTING

The 2014 Clovis General Plan EIR identified no geologic hazards or unstable soil conditions known to exist on the Project site. Although Figure 5.6-2 of the Geology and Soils Chapter of the General Plan EIR does show a fault, the fault is located several miles east of the Project site.

DISCUSSION

- a) *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?; ii) Strong seismic ground shaking?; iii) Seismic-related ground failure, including liquefaction?; iv) Landslides?*

Less-Than-Significant Impact. Although the Project site does not have any known faults on the site, the potential remains that seismic ground-shaking could occur from the fault located east of the Project. However, adherence to the most current California Building Codes would ensure that the structures are constructed safely and in compliance with the appropriate Building Codes. With regards to liquefaction, the 2014 General Plan EIR states that the soil types in the area are not considered conducive to liquefaction due to their high clay content or from being to coarse.⁷ Further, the site is generally flat and therefore landslides would not occur at the Project site. Overall, due to the location away from a known fault, adherence to the most recent California Building

⁷ 2014 Clovis General Plan EIR, Chapter 5: Geology and Soils, page 5.6-3.

Codes, and the flat topography, a **less-than-significant impact** would occur with regards to potential impacts from seismic activity.

- b) *Would the project result in substantial soil erosion or the loss of topsoil?*

Less-Than-Significant Impact. The topography of the Project site is relatively flat with little to no slope. Development of the site would require grading and construction activities to ensure a flat and graded surface prior to construction. Such activities may result in the soil erosion and loss of topsoil. Such impacts would be addressed by applicable regulations set forth by the Regional Water Quality Control Board (RWQCB) including preparation of a Stormwater Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer per the General Construction Permit requirements of the National Pollutant Discharge Elimination System (NPDES). The SWPPP incorporates Best Management Practices for erosion and sediment controls and soil stabilization. Further, as part of the Project, grading plans are required to be submitted and approved by the City Engineer Division to ensure appropriate grading of the site. Thus, these review and approval processes would ensure that a **less-than-significant** impact occur, and no mitigation measures are required.

- c) *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Less-Than-Significant Impact. See discussion under Section 7a.

- d) *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect substantial risks to life or property?*

No Impact. According to the 2014 Clovis General Plan EIR, expansive soils are mostly present in areas along the northern edge of the non-Sphere of Influence (SOI) and the easternmost part of the Clovis non-SOI plan area. Because the Project is not within the vicinity of these areas, there would be no potential for creating direct or indirect substantial risks to life or property with regards to expansive soils. As a result, **no impact** would occur, and no mitigation measures are required.

- e) *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems where sewers are not available for the disposal of wastewater?*

No Impact. The Project does not propose the use of septic tanks; therefore, **no impact** would occur.

- f) *Would the project directly or indirectly destroy a unique paleontological resource or unique geologic feature?*

Less-Than-Significant Impact With Mitigation. The Project site has been previously disturbed, as well as the immediately surrounding areas with no known occurrences of the discovery of paleontological resources. In addition, the Cultural Resources Survey concluded that the potential for uncovering of archaeological or subsurface historical deposits (i.e. paleontological resources) is unlikely. Nevertheless, the possibility remains that the inadvertent or accidental discovery could occur during ground disturbing construction activities. However, Mitigation Measure GEO-1, below, would serve to protect the accidental discovery of paleontological resources. As such, a **less-than-significant with mitigation** impact would occur.

Mitigation Measure GEO-1: If prehistoric or historic-era cultural materials are encountered during construction activities, all work in the immediate vicinity of the find shall halt until a qualified professional archaeologist and/or paleontologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, can evaluate the significance of the find and make

recommendations. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants.

If the qualified professional determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation. These additional studies may include avoidance, testing, and evaluation or data recovery excavation.

If a potentially-eligible resource is encountered, then the qualified professional archaeologist and/or paleontologist, the Lead Agency, and the project proponent shall arrange for either 1) total avoidance of the resource or 2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the Lead Agency as verification that the provisions for managing unanticipated discoveries have been met.

8. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?			X	

ENVIRONMENTAL SETTING

Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHGs) because they capture heat radiated from the sun as it is reflected into the atmosphere, much like a greenhouse does. The accumulation of GHG's has been implicated as a driving force for global climate change. Definitions of climate change vary between and across regulatory authorities and the scientific community, but in general can be described as the changing of the earth's climate caused by natural fluctuations and anthropogenic activities which alter the composition of the global atmosphere.

Individual projects contribute to the cumulative effects of climate change by emitting GHGs during construction and operational phases. The principal GHGs are carbon dioxide, methane, nitrous oxide, ozone, and water vapor. While the presence of the primary GHGs in the atmosphere are naturally occurring, carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) are largely emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Carbon dioxide is the "reference gas" for climate change, meaning that emissions of GHGs are typically reported in "carbon dioxide-equivalent" measures. Emissions of carbon dioxide are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices and landfills. Other GHGs, with much greater heat-absorption

potential than carbon dioxide, include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes.

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming, although there is uncertainty concerning the magnitude and rate of the warming. Potential global warming impacts in California may include, but are not limited to, loss in snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which sets forth a series of target dates by which statewide emission of greenhouse gases (GHG) would be progressively reduced, as follows: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels. In 2006, California passed the California Global Warming Solutions Act of 2006 (AB 32), which requires the California Air Resources Board (CARB) to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions).

In April 2009, the California Office of Planning and Research published proposed revisions to the California Environmental Quality Act to address GHG emissions. The amendments to CEQA indicate the following:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation."
- OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
- Environmental impact reports (EIRs) must specifically consider a project's energy use and energy efficiency potential.

On December 30, 2009, the Natural Resources Agency adopted the proposed amendments to the CEQA Guidelines in the California Code of Regulations.

In December 2009, the San Joaquin Valley Air Pollution Control District (SJVAPCD) adopted guidance for addressing GHG impacts in its *Guidance for Valley Land Use Agencies in Addressing GHG Impacts for New Projects Under CEQA*. The guidance relies on performance-based standards, otherwise known as Best Performance Standards (BPS), to assess significance of project-specific GHG emissions on global climate change during the environmental review process.

Projects can reduce their GHG emission impacts to a less than significant level by implementing BPS. Projects can also demonstrate compliance with the requirements of AB 32 by demonstrating that their emissions achieve a 29% reduction below “business as usual” (BAU) levels. BAU is a projected GHG emissions inventory assuming no change in existing business practices and without considering implementation of any GHG emission reduction measures.

Significance Criteria

The SJVAPCDs *Guidance for Valley Land Use Agencies in Addressing GHG Impacts for New Projects Under CEQA* provides initial screening criteria for climate change analyses, as well as draft guidance for the determination of significance.

The effects of project specific GHG emissions are cumulative, and therefore climate change impacts are addressed as a cumulative, rather than a direct, impact. The guidance for determining significance of impacts has been developed from the requirements of AB 32. The guideline addresses the potential cumulative impacts that a project’s GHG emissions could have on climate change.

Since climate change is a global phenomenon, no direct impact would be identified for an individual land development project. The following criteria are used to evaluate whether a project would result in a significant impact for climate change impacts:

- Does the project comply with an adopted statewide, regional, or local plan for reduction or mitigation of GHG emissions? If no, then
- Does the project achieve 29% GHG reductions by using approved Best Performance Standards? If no, then
- Does the project achieve AB 32 targeted 29% GHG emission reductions compared with BAU?

Projects that meet one of these guidelines would have less than significant impact on the global climate.

Because BPS have not yet been adopted and identified for specific development projects, and because neither the ARB nor the City of Clovis has not yet adopted a plan for reduction of GHG with which the Project can demonstrate compliance, the goal of 29% below BAU for emissions of GHG has been used as a threshold of significance for this analysis.

DISCUSSION

- a) *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Less-Than-Significant Impact. The Project would include the construction of a multifamily residential complex. As such, GHG emissions would be produced through the construction and operational phases of the Project. However, the SJVAPCD includes regulations to reduce GHG emissions such as standards for medium and

heavy-duty engines and vehicles (i.e. tractors and construction equipment) that would apply to buildout of the Project. Further, compliance with Title 24 energy efficient building codes would apply, which also help to reduce GHG emissions during operation of the Project, by requiring minimum standards for insulation, energy efficiency, and window glazing, etc., which serve to maximize efficiency of new construction. Further, the Project would comply with the latest water efficient landscape standards which help to reduce energy usage. Overall, the AQ/GHG Report concluded that the Project, with implementation of required energy efficient standards, would sufficiently reduce emissions versus business as usual scenarios and would exceed the minimum percentage reduction of emissions required by the State, SJVAPCD, and the Clovis General Plan EIR. In particular, the AQ/GHG Report found that the Project would achieve a reduction of 32.4% from BAU by 2024 and 41.1% by 2030 with regulations and design features incorporated. Therefore, a **less-than-significant** impact would occur.

- b) *Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?*

Less-Than-Significant Impact. Based on the AQ/GHG Report,⁸ the Project would include several features that would minimize GHG emissions, which are consistent with project-level strategies identified by the Air Resources Board Scoping Plan and the Clovis General Plan. Further, although the SJVAPCD has adopted a Climate Action Plan, it does not contain measures that are applicable to development projects. Since there are no other local or regional climate action plans, the Project was assessed for consistency with the Air Resources Board (ARBs) adopted scoping plans.

As indicated in the discussion above under Section 8a, the Project would result in GHG reductions that meet or exceed minimum targets by complying with the latest energy efficient standards, and water conservation. Consequently, the AQ/GHG Report found this potential impact to be **less than significant**.

9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within			X	

⁸ Air Quality and Greenhouse Gas Analysis Report, Johnson Johnson and Millar Aire Quality Consulting, page 48, June 29, 2022

one-quarter mile of an existing or proposed school?				
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

ENVIRONMENTAL SETTING

For purposes of this chapter, the term “hazardous materials” refers to both hazardous substances and hazardous wastes. A “hazardous material” is defined in the Code of Federal Regulations (CFR) as “substance or material that is capable of posing an unreasonable risk to health, safety, and property when transported in commerce” (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

“Hazardous material” means any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. “Hazardous materials” include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. “Hazardous wastes” are defined in California Health and Safety Code Section 25141(b) as wastes that:

...because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause or significantly contribute to an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

The nearest school to the Project site is Century Elementary School, located approximately 800 feet north of the Project site.

DISCUSSION

- a) *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less-Than-Significant Impact. The Project consists of the construction of an multifamily residential complex under the proposed R-2 zone district. The type of hazardous materials that would be associated with the Project are those typical of multifamily residential uses, such as the use of cleaners, landscape maintenance products, soaps, and potential pesticides (for pest control). It is not expected that the Project would routinely transport, use, or dispose of hazardous materials other than those typical of those associated with residential uses. However, if transported, handled, and disposes of in accordance with regulations, these materials are not generally considered of the type or quantity that would pose a significant hazard to the public when used as directed. During construction, typical equipment and materials would be used that are associated with residential/commercial construction; however, any chemicals or materials would be handled, stored, disposed of, and/or transported according to applicable laws. Consequently, because the Project is not of the type of use that would routinely transport, use, or dispose of hazardous materials a **less-than-significant** impact would occur.

- b) *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Less-Than-Significant Impact. See discussion above under Section 9a.

- c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Less-Than-Significant Impact. As previously discussed, the Project site is near Century Elementary School. However, the Project is not of the type of use typically associated with emitting hazardous emissions or handling the type or quantity of hazardous materials such that it would pose a risk or threat to the school, or surrounding area. Therefore, a **less-than-significant** impact would occur.

- d) *Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

No Impact. According the California Department of Toxic Substance Control EnviroStor Database, the Project site is not located on or within the immediate vicinity of a hazardous materials site.⁹ Therefore, **no impact** would occur.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

⁹ California Department of Toxic Substance Control, EnviroStor Database, https://www.envirostor.dtsc.ca.gov/public/map/?global_id=71003467, accessed on February 22, 2021.

No Impact. The Project is located approximately five (5) miles northeast of the Fresno Yosemite International Airport and is not within the Airport Influence Area, safety zones, noise, or airspace and overflight areas. Therefore, **no impact** would occur.

- f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Less-Than-Significant Impact. The Project is located at a site that is surrounded by existing development. Further, the road network is already in place from previous development. Although the Project could result in temporary traffic detouring or closures during buildout, these delays would be temporary and would be coordinated with the City engineering department and other departments to ensure safe access to and from the area is maintained. Further, the site itself would be reviewed by City departments to ensure adequate site access and circulation is provided in the event of an emergency. Overall, a **less-than-significant** impact would occur.

- g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Less-Than-Significant Impact. The site is an infill site surrounded by urban uses. Therefore, it is not in a location typically associated with wildfires. Although urban fires could occur, the Project would be constructed to the latest fire code standards, which would include fire sprinklers in each unit, as well as the installation of several fire hydrants throughout the site as required by the Clovis Fire Department. Further, other life safety features would be required such as smoke detectors, which would be reviewed and checked by the Fire Department to ensure proper operation prior to occupancy. Ultimately, a **less-than-significant** impact would occur.

10. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in			X	

flooding on- or offsite; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows?				
i) Result in substantial erosion or siltation on- or off-site?			X	
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?			X	
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
iv) Impede or redirect flood flows?			X	
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

ENVIRONMENTAL SETTING

The Plan Area is within the drainages of three streams: Dry Creek, Dog Creek, and Redbank Slough. On the north, Dry Creek discharges into the Herndon Canal in the City of Fresno west of Clovis. South of Dry Creek, Dog Creek is a tributary of Redbank Slough, which discharges into Mill Ditch south of Clovis (USGS 2012). A network of storm drains in the City and the Plan Area discharges into 31 retention basins, most of which provide drainage for a one- to two-square-mile area. Most of the Plan Area east and northeast of the City is not in drainage areas served by retention basins. Those areas drain to streams that discharge into reservoirs, including Big Dry Creek Reservoir in the north-central part of the Plan Area and Redbank Creek Dam and Reservoir in the southeast part of the Plan Area. Fancher Creek Dam and Reservoir are near the east Plan Area boundary.

The Project is located within the Fresno Metropolitan Flood Control District (FMFCD) boundary, and subject to its standards and regulations. Detention and retention basins in the FMFCD’s flood control system are sized to accommodate stormwater from each basin’s drainage area in built out condition. The current capacity standard for FMFCD basins is to contain runoff from six inches of rainfall during a ten-day period and to infiltrate about 75 to 80 percent of annual rainfall into the groundwater basin (Rourke 2014). Basins are highly effective at reducing average concentrations of a broad range of contaminants, including several polyaromatic hydrocarbons, total suspended solids, and most metals (FMFCD 2013). Pollutants are removed by filtration

through soil, and thus don't reach the groundwater aquifer (FMFCD 2014). Basins are built to design criteria exceeding statewide Standard Urban Stormwater Mitigation Plan (SUSMP) standards (FMFCD 2013). The urban flood control system provides treatment for all types of development—not just the specific categories of development defined in a SUSMP—thus providing greater water quality protection for surface water and groundwater than does a SUSMP.

In addition to their flood control and water quality functions, many FMFCD basins are used for groundwater recharge with imported surface water during the dry season through contracts with the Fresno Irrigation District (FID) and the cities of Fresno and Clovis; such recharge totaled 29,575 acre feet during calendar year 2012 (FMFCD 2013).

The pipeline collection system in the urban flood control system is designed to convey the peak flow rate from a two-year storm.

Most drainage areas in the urban flood control system do not discharge to other water bodies and drain mostly through infiltration into groundwater. When necessary, FMFCD can move water from a basin in one such drainage area to a second such basin by pumping water into a street and letting water flow in curb and gutter to a storm drain inlet in an adjoining drainage area (Rourke 2014). Two FMFCD drainage areas discharge directly to the San Joaquin River, and three to an irrigation canal, without storage in a basin. Six drainage areas containing basins discharge to the San Joaquin River, and another 39 basins discharge to canals (FMFCD 2013).

A proposed development that would construct more impervious area on its project site than the affected detention/retention basin is sized to accommodate is required to infiltrate some stormwater onsite, such as through an onsite detention basin or drainage swales (Rourke 2014).

The Big Dry Creek Reservoir has a total storage capacity of about 30 thousand acre-feet (taf) and controls up to 230-year flood flows. Fancher Creek Dam and Reservoir hold up to 9.7 taf and controls up to 200-year flood flows. Redbank Creek Dam and Reservoir hold up to 1 taf and controls up to 200-year flood flows.

Groundwater

In 2014, the Sustainable Groundwater Management Act (SGMA) was signed into law which created the framework for groundwater management within California. As a result, SGMA requires governments and water agencies of high and medium priority basins to halt groundwater overdraft and bring the groundwater basins back to a balance.

The City of Clovis is within the greater Kings Groundwater Sub basin, which is managed by the North Kings Groundwater Sustainability Agency for the area which the City is located and is considered critically over drafted. The Kings Basin is a sub basin to the southern part of the San Joaquin Valley Basin and covers 1,530 square miles. Groundwater within the basin is monitored by the City, Fresno Irrigation District (FID), and the Kings River Conservation District.

The City of Clovis provides water through a combination of surface and groundwater sources, including averaging over 20,000 acre-feet per year from the Kings River, as well as several City-managed wells. In 2015, the City delivered approximately 20,030 acre-feet of water to its residents.

Lastly, a Water Infrastructure Investigation was completed by Provost and Pritchard on June 27, 2022. The investigation was into the water system infrastructure required to serve the proposed development. Information from this investigation is used for the analysis in the Hydrology and Water Quality and Utilities and Service Systems sections of this Initial Study.

DISCUSSION

- a) *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Less-Than-Significant Impact. The Project is located on a site that was previously anticipated for suburban development that the Project proposes. As with any development, existing policies and standards are required to be complied with, which are assessed during review of the entitlements. As such, the engineering department, as well as outside agencies such as the Fresno Metropolitan Flood Control District (FMFCD) review all plans to ensure that none of the water quality standards are violated and that waste discharge requirements are adhered to during construction and operation of the Project. Consequently, this process of Project review and approval would ensure that a **less-than-significant** impact occur.

- b) *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

Less-Than-Significant Impact. The Project would not deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level due to the Project. The General Plan EIR identified a net decrease in ground water aquifer throughout the region, however, because the City’s domestic water system is primarily served through surface water via existing water entitlements, the loss of aquifer is less than significant.

The City has developed a surface water treatment plant (opened in June 2004) that reduces the need for pumped groundwater and has also expanded the municipal groundwater recharge facility. In addition, all landscaping shall be subject to MWELo requirements, which mandate drought tolerant and low water use landscaping. Further, the Water Infrastructure Investigation for the Project determined that the existing and planned water distribution system and recommended connections should be adequate to convey water supply to the Project to support anticipated demands from the Project. For these reasons, the Project’s impacts to groundwater are **less than significant**.

- c) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows?*

Less-Than-Significant Impact. The Project site is located on an infill site that is generally flat and surrounded by existing urban uses. There are no streams or rivers on the site that would be altered as a result of the Project.. The infrastructure surrounding the site, such as storm drains are already in place from existing development. The drainage pattern would be constructed per existing policies and regulations through review of the plans by the City engineering department and the FMFCD to ensure the site is properly and adequately drained such that the storm drain system is maintained and so that no flooding occurs. FMCD has reviewed the Project and there are existing facilities to serve the site subject to compliance with conditions of approval that would be required as part of the Project entitlements. Consequently, this review and approval by City engineers and FMFCD would mean that the Project result in a **less-than-significant** impact.

- d) *Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

Less-Than-Significant Impact. The Project site is located on an infill site substantially surrounded by existing urban uses. Due to the Central Valley’s location away from the ocean, an impact from a tsunami is unlikely. However, the Project site is designated as a Federal Emergency Management Agency (FEMA) Flood Zone “X” which is considered by FEMA as a non-special flood hazard area and that the risk of a flood is low risk. A Flood Zone X has a 0.2 percent-annual-chance of flood (or a 500-year flood). Consequently, this is a low-risk area and as a result a **less-than-significant** impact would occur.

- e) *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Less-Than-Significant Impact. The City of Clovis is within the North Kings County Groundwater Sustainability Agency (GSA). Pursuant to the Sustainable Groundwater Management Act of 2014 (SGMA), certain regions in California are required to develop and implement a groundwater management plan that sustainably manages groundwater resources. The North Kings County GSA adopted a groundwater management plan in 2019. Although the groundwater sub basin which Clovis lies within is considered over drafted, the Project would derive its water from surface water sources and does not propose or include plans for groundwater use. With regards to water quality control, the Project would be required to adhere to appropriate storm drain conveyance and the protection of water resources which would include the installation of backflow preventers.

Further, the Water Infrastructure Investigation for the Project determined that the existing and planned water distribution system and recommended connections should be adequate to convey water supply to the Project to support anticipated demands from the Project. Consequently, the Project would result in a **less-than-significant** impact.

11. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an existing community?			X	
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

ENVIRONMENTAL SETTING

As described above in the Project Description, the Project site is considered an in-fill site in that the surrounding areas are urbanized. There are existing single-family residential uses to the north, east, and south, as well as a church to the west.

DISCUSSION

a) *Would the project physically divide an existing community?*

Less-Than-Significant Impact. The site is developed and is within a general area that is urbanized with a mix of existing uses and land use types. Typically, physically dividing existing communities is associated with the construction of a new road intersecting an established area or introducing uses that are not necessarily in line with the existing uses and planned land uses of the area. The Project site is adjacent to Alluvial Avenue and between a church site and existing single-family residences. As a residential use, the Project is inline with the surrounding area. Therefore, a **less-than-significant** impact would occur, and no mitigation measures are required.

b) *Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

Less-Than-Significant Impact. The proposed use requires the amendment to the City’s General Plan Land Use Diagram from the existing Low Density Residential designation to Medium High Density Residential. The proposed rezone request to the R-2 zone district is consistent with the proposed Medium High Density Residential designation. Further, through the entitlement process, the Project is reviewed for compliance with applicable regulations, including those intended for avoiding or mitigating an environmental effect. For example, the Project would be required to comply applicable lighting, landscape, and noise standards, which are regulated through the Clovis Municipal Code to ensure minimal impacts to the environment as well as with neighboring properties. Overall, with the review process ensuring General Plan and other applicable policies will be adhered to, the Project would result in a **less-than-significant** impact with regards to conflicting with a land use plan.

12. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

ENVIRONMENTAL SETTING

The City of Clovis 2014 General Plan EIR defines minerals as any naturally occurring chemical elements or compounds formed from inorganic processes and organic substances.¹⁰ The 2014 General Plan EIR indicates that there are no active mines or inactive mines within the Plan Area of the City of Clovis.

¹⁰ 2014 Clovis General Plan EIR, Chapter 5: Mineral Resources, page 5.11-1.

DISCUSSION

Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. As stated above, the City of Clovis does not have any active mines or inactive mines. Further, the Project site is an infill site within the City and is not zoned, designated, or otherwise mapped for mineral resource extraction, or for having mineral resources of value to the region present on or below the surface of the site. Therefore, **no impact** would occur, and no mitigation measures are required.

c) *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

No Impact. Please refer to the discussion under Section 12.a.

13. NOISE

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b. Generation of excessive groundborne vibration or groundborne noise levels?			X	
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

ENVIRONMENTAL SETTING

As mentioned above in the Project Description, the site is located on the north side of Alluvial Avenue and east of Sunnyside Avenue. In general, the Project site is within an urbanized area of the City surrounded by existing residential to the north, east, and south, as well as a church to the west of the site. As such, existing ambient noise levels are typical of noises from these types of developments (i.e., schools, roadway networks, and residential).

DISCUSSION

- a) *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Less-Than Significant Impact. The Project would include the redevelopment of a site within Clovis. The Project would result in a temporary and permanent increase in ambient noise levels as a result. However, as mentioned above, the Project site is infill and is already surrounded by existing residential development and church uses. Therefore, while the Project would introduce new ambient noise from the construction of the multifamily complex, it is likely that the Project would still meet City noise standards.

Further, the City of Clovis Municipal Code Section 9.22.080, Noise, sets forth noise standards for development which would need to be complied with. For example, construction would only be permitted between the hours of 7:00 a.m. and 7:00 p.m. on weekdays, and between 9 a.m. and 5:00 p.m. on weekends. However, between June 1 and September 15, construction may begin at 6 a.m. on weekdays.

Consequently, because the Project site is considered infill, already surrounded by similar uses, and because construction noise would be temporary in nature, the potential for a substantial increase in ambient or temporary noise increases is considered **less-than-significant** and no mitigation measures are required.

- b) *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Less-Than Significant Impact. The Project would include the redevelopment of a site within Clovis. Construction equipment typical of the development of multifamily residential buildings would be utilized temporarily. This equipment could include the use of heavy tractors, trucks, and other equipment; however, this type of equipment isn't typically associated with excessive groundborne vibration given the distance of residential homes to the site. If any vibration were to occur, it's likely that it would be temporary in nature and not at levels that would significantly impact the surrounding area.

Further, the Project would be required to comply with the provisions of Section 9.22.090 of the Clovis Municipal Code which requires that vibration not be perceptible along property lines and that it shall not interfere with operations or facilities on adjoining parcels. It's important to note that temporary construction vibration and noise is exempt from these provisions since construction is temporary. Overall, because the type of equipment likely to be used in the development of the Project is not considered to be of the type and intensity to result in substantial vibration or groundborne noise, the impact would be **less than significant** and no mitigation measures are required.

- c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

No Impact. The Project is not located within the vicinity of Fresno Yosemite International Airport, which is approximately five (5) miles southwest of the site. As such, it is located outside of the noise contour map of the airport.¹¹ Therefore, people working at the church would not be exposed to excessive noise levels and **no impact** would occur.

¹¹ Fresno Council of Governments, Airport Land Use Compatibility Plan, December 2018, Fresno Yosemite International Airport, Exhibit D2, Noise Contours.

14. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example through extension of roads or other infrastructure)?			X	
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			X	

ENVIRONMENTAL SETTING

The Project is located on an in-fill site that has previously been planned for residential use in the 2014 Clovis General Plan. As previously mentioned, a general plan amendment and rezone has been filed to redesignate the site to Medium High Density and rezone the site to R-2 to allow for the proposed multifamily project.

DISCUSSION

- a) *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example through extension of roads or other infrastructure)?*

Less-Than-Significant Impact. As mentioned, the Project would include the development of a multifamily complex including 12 units. The proposed density change from the Low Density designation to the Medium High designation will increase the capacity of housing units and thus will increase the number of people in the area. The existing designation will allow for 4 houses while the proposed project will provide 12 units (Ten 2-bedroom units and two 3-bedroom units). While the Project includes increasing the density for residential use, the overall area was planned for development and is considered an infill site. Further, unplanned population growth is typically associated with providing new services in remote areas of the City or other infrastructure that was not previously identified in the General Plan. The Project site itself is an in-fill site, thus, the primary infrastructure (i.e. road network, utilities, etc.) is already in place and would be able to serve the site. Thus, a **less-than-significant** impact would occur, and no mitigation measures are required.

- b) *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

Less-Than-Significant Impact. The Project site is developed. While there is an existing home on the site, nobody currently lives at this location. The residence was damaged from a fire and had sat vacant for several years. Therefore, the Project would not result in the substantial displacement of existing people or housing. Therefore, displacement of existing people or housing would not occur, and a **less-than-significant** impact would occur.

15. PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</i>				
a. Fire protection?			X	
b. Police protection?			X	
c. Schools?			X	
d. Parks?			X	
e. Other public facilities?			X	

ENVIRONMENTAL SETTING

The Project is located on an in-fill site within the City, surrounded by existing residential and church uses. The Project would be served by the Clovis Fire Department, Clovis Police Department, with mutual aid from the City of Fresno or County of Fresno, when needed. The Project site would also be within the Clovis Unified School District.

The nearest fire station is Fresno County Fire Station 85, located approximately half a mile north of the site and Fire Station #3, located approximately one (1) mile southwest of the site. The Clovis Police department is located approximately one and a half (1.5) miles south of the site.

DISCUSSION

- a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services?*

Less-Than-Significant Impact. Although the Project would result additional residential units to the area, the site is in an urbanized area of the City already able to be served by the Clovis Fire Department. Also, the site itself is near Fire Station’s #3, which would mean that response times should be able to be maintained during calls for service. As part of the entitlement process for the Project, the Clovis Fire Department reviewed the design and site layout to ensure adequate fire safety measures and site circulation are achieved. This review includes placement of new fire hydrants in certain locations throughout the site, adequate drive widths for fire truck and emergency vehicle access, and the appropriate application of fire codes, such as installation of sprinkler systems, fire alarms, and smoke detectors. The initial review by Fire Department determined that adequate fire services can be provided to the site subject to standard conditions of approval, including providing minimum clear paths of travel for fire access. Overall, construction that would meet the latest fire code standards, and review by the Clovis Fire Department, impacts related to effects on the performance of the Fire Department would be **less-than-significant** and no mitigation measures are required.

- b) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services?*

Less-Than-Significant Impact. Although the Project would result in additional residential units to the area, the site is in an urbanized area of the City already able to be served by the Clovis Police Department. The Clovis Police Department headquarters are located at 1233 Fifth Street, which is approximately one and a half (1.5) miles from the site. As part of the entitlement process for the Project, the Clovis Police Department will review the design and site layout to ensure adequate safety measures are achieved. Lastly, the site is in an already urbanized area serviced by the Clovis Police Department, and thus access to and from the site would be similar to existing conditions when responding to calls for services. Consequently, a **less-than-significant** impact would occur, and no mitigation measures are required.

- c) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?*

Less-Than Significant Impact. The Project includes construction of a multifamily residential complex which would generate students for schools. The Project request was distributed to the Clovis Unified School District for review and the school district did not express any concerns accommodating additional students that may result from the development of this project.

- d) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?*

Less-Than-Significant Impact. See discussion under Section 16, Recreation for the analysis related to parks.

- e) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?*

Less-Than-Significant Impact. Although the Project would result in an increase in residential density, the increase can be considered less than significant. The project site is an infill development surrounded by existing residential and church uses. Further, through the entitlement process, the Project would undergo review by several departments and agencies for compliance with appropriate regulations and policies. This could result in various impact fees that are intended to maintain and enhance public facilities as appropriate. As such, payment of the typical development fees, as well as project review by the different department and agencies, would result in the Project having a **less-than-significant** impact to public facilities. No mitigation measures are required.

16. RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?			X	

ENVIRONMENTAL SETTING

The Project is located on an in-fill site surrounded by existing residential and church uses. The nearest park to the site is Dry Creek Park, located approximately half a mile west of the project site, and the nearest recreational trail is the Dry Creek Trail, which is also located half a mile west of the Project site.

DISCUSSION

- a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

Less-Than-Significant Impact. As mentioned in the Population and Housing section of this Initial Study, the Project proposes the construction of a multifamily residential complex which will generate new residents to the site that may increase utilization of the nearby park. However, the additional 12 units is not likely to substantially increase the usage of the park. Further, the Project itself would include landscaped common areas and play areas within its site for its residents. Overall, the type and use of Project would not likely increase the use of existing parks such that physical deterioration would occur. Therefore, the impact would be **less-than-significant**, and no mitigation measures are required.

- b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?*

Less-Than-Significant Impact. The Project site itself would construct on site landscaping in compliance with City standards for residential development. However, it is not likely that the Project itself would require the construction or expansion of new recreational facilities that would have an adverse physical effect on the environment. The Project would also be required to contribute a proportionate share towards the acquisition and development of future parks in order for the City to maintain its adopted ratio of providing four (4) acres of parkland per 1,000 residents, as stated in Policy 1.1 in the Open Space and Conservation Element of the 2014 General Plan, and Section 3.4.03 of the Clovis Municipal Code. As such, a **less-than-significant** impact would occur, and no mitigation measures are required.

17. TRANSPORTATION

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			X	
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d. Result in inadequate emergency access?			X	

ENVIRONMENTAL SETTING

The Project is an infill site surrounded by existing residential subdivisions and a church. The site is bounded by Alluvial Avenue to the north and is located east of Sunnyside Avenue. According to the 2014 Clovis General Plan Circulation Diagram in the Circulation Element (Figure C-1 of the Circulation Element), Alluvial and Sunnyside Avenues are designated as collector streets. Collector streets are low-to-moderate capacity streets which serves to move traffic from local streets to arterial roads. A Trip Generation Analysis (TGA) was prepared by JLB Traffic Engineering on May 26, 2022 (included as Appendix D of this Initial Study). The information and analysis in the following section is based on the results of the TGA.

DISCUSSION

- a) *Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*

Less-Than-Significant Impact. As mentioned above, the site is within an urbanized area that was previously planned for residential development by the 2014 Clovis General Plan. The Project proposes a density of approximately 11.5 DU/Ac which is within the allowable density range of the Medium High Density land use designation. Although the existing land use designation is Low Density Residential, the applicant requests an increase to the Medium High Density land use designation.

As a result of the proposed increase, preparation of a TGA was required by the City Engineer to evaluate the potential difference in traffic generation of the proposed Project and that which could otherwise be developed consistent with the Clovis General Plan. The TGA focus on comparing the anticipated driveway trip generation during weekday, the AM peak hour and the PM peak hour of the project against that which could otherwise be developed consistent with the City of Clovis General Plan land use designation. Accordingly, the Project is

estimated to generate more traffic by 43 daily trips, 2 AM peak hour trips and 2 PM peak hour trips. Based on this analysis, the City Engineer determined that there are less than significant impacts to program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

b) *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

Less-Than-Significant Impact. Under Senate Bill 743 (SB743), traffic impacts are related to Vehicle Miles Traveled (VMT). The VMT metric became mandatory on July 1, 2020. The City Guidelines provide guidance relative to analyzing VMT for purposes of determining transportation impacts in accordance with CEQA. The City Guidelines also state that Projects that generate or attract fewer than 500 vehicle trips per day are presumed to cause a less-than-significant transportation impact. These Projects are identified as small project. The Project is considered a small project and therefore will cause a less-than-significant impact.

c) *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Less-Than-Significant Impact. The Project would result in a significant impact if it would include features that would create a hazard such as a sharp curve in a new roadway or create a blind corner or result in sight distance issues from entryways. Through the entitlement process, the Project would undergo review by multiple City departments, such as planning and engineering, to ensure that the site layout conforms to existing regulations, such as the City Development Code, and other applicable codes, such as the fire code and building code. During this review, the Project would need to make the necessary corrections to ensure that no hazardous design features would result from the Project. Therefore, because the Project would undergo site plan and design review to ensure consistency and adherence to applicable design and site layout guidelines, a **less-than-significant** impact would occur.

d) *Would the project result in inadequate emergency access?*

Less-Than-Significant Impact. The Project would include two ingress/egress access points along Alluvial Avenue. As part of the Project review, the Clovis Fire Department would review all plans to ensure adequate emergency access is provided. This review includes review for adequate roadway widths, turning radii, as well as adequate access to units and accessibility to water. Consequently, because the Project plans would be required by the Clovis Municipal Code to be reviewed and approved by Clovis Fire Department and Police Department prior to construction, this impact would be **less than significant**, and no mitigation measures are required.

18. TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?				X

<p>b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American Tribe?</p>		X		
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ENVIRONMENTAL SETTING

On September 25, 2014, Governor Jerry Brown signed Assembly Bill AB52, which intends to protect a new class of recourse under CEQA. This new class is Tribal Cultural Resources and provides an avenue to identify Tribal Cultural resources through a consultation process, similar to SB18. However, unlike SB18, where consultation is required for all General Plan and Specific Plan Amendments, AB52, applies to all projects where a Notice of Determination is filed. Furthermore, the consultation process is required to be complete prior to filing a Notice of Intent.

On May 17, 2022, consistent with SB18 and AB52, invitations to consult on the Project were mailed to 12 tribes within the area. Tribes have up to thirty (30) days to request consultation in accordance with AB52, while tribes have up to (90) days to request consultation in accordance with SB18. No requests for consultation were requested during these times. An Archaeological Resources Survey was prepared by LSA dated July 13, 2022 (See Appendix C). The Archeological Resources Memo was based on information obtained at the Southern San Joaquin Valley Information Center, CSU Bakersfield, as well as review of other surveys conducted in the area. Based on the Archeological Resources Survey, no cultural resources have been identified within a half mile of the Project site.

DISCUSSION

- a) *Would the project cause a substantial adverse change to a listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*

No Impact. As mentioned in the Project Description, the Project site is currently developed. There are no existing structures or features on the site that are listed or eligible in the California Register of Historical Resources, or in a local register. As such, the Project would have **no impact** and no mitigation measures are required.

- b) *Would the project cause a substantial adverse change to a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American Tribe?*

Less-Than-Significant Impact With Mitigation. As mentioned above, the City invited 12 Native American tribes to consult on the Project under AB52 and SB18, and no tribes requested consultation within the 30-day

or 90-day period. The Project site is developed but would require trenching and ground-disturbing activities during construction for the installation of utility infrastructure needed to serve the Project. Although no cultural resources were identified at the site, the potential remains that cultural resources could be inadvertently discovered during ground-disturbing activities. However, implementation of Mitigation Measures TCR-1 and TCR-2 below would reduce potential significant impacts and ensure protection in the event of accidental discovery of any cultural resources. With Mitigation Measure TCR-1 and TCR-2, impacts would be **less-than-significant with mitigation**.

Mitigation Measure TCR-1: If cultural or archaeological materials are encountered during construction activities, all work in the immediate vicinity of the find shall halt until a qualified professional archaeologist, meeting the Secretary of the Interior’s Professional Qualification Standards for prehistoric and historic archaeologist, can evaluate the significance of the find and make recommendations. Cultural resource materials may include prehistoric resources such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock as well as historic resources such as glass, metal, wood, brick, or structural remnants. If the qualified professional archaeologist determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from project implementation. These additional studies may include avoidance, testing, and evaluation or data recovery excavation. If a potentially eligible resource is encountered, then the qualified professional archaeologist, the Lead Agency, and the project proponent shall arrange for either 1) total avoidance of the resource or 2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the Lead Agency as verification that the provisions for managing unanticipated discoveries have been met.

Mitigation Measure TCR-2: If human remains are discovered during construction or operational activities, further excavation or disturbance shall be prohibited pursuant to Section 7050.5 of the California Health and Safety Code. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the Public Resources Code (Chapter 1492, Statutes of 1982, Senate Bill 297), and Senate Bill 447 (Chapter 44, Statutes of 1987), shall be followed. Section 7050.5(c) shall guide the potential Native American involvement, in the event of discovery of human remains, at the direction of the County coroner. All reports, correspondence, and determinations regarding the discovery of human remains on the project site shall be submitted to the Lead Agency.

19. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b. Have sufficient water supplies available to serve the project and reasonably			X	

foreseeable future development during normal, dry and multiple dry years?				
c. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e. Comply with federal, state, and local management reduction statutes and regulations related to solid waste?			X	

ENVIRONMENTAL SETTING

Pacific Gas & Electric (PG&E) provides electricity and natural gas services in the City of Clovis. AT&T/SBC provides telephone service to the City.

The City's water supply sources include groundwater drawn from the Kings Sub-basin of the San Joaquin Valley Groundwater Basin and treated surface water from the Fresno Irrigation District (MID). Surface water is treated at the City of Clovis Surface Water Treatment Facility.

The City of Clovis provides sewer collection service to its residents and businesses. Treatment of wastewater occurs at the Fresno-Clovis Regional Wastewater Treatment Plant (RWTP). The Fresno-Clovis RWTP is operated and maintained by the City of Fresno and operates under a waste discharge requirement issued by the Central Valley Regional Water Quality Control Board. Additionally, the City of Clovis has completed a 2.8 mgd wastewater treatment/water reuse facility, which will service the City's new growth areas.

The Fresno Metropolitan Flood Control District (FMFCD) has the responsibility for storm water management within the Fresno-Clovis metropolitan area of the Project site. Stormwater runoff that is generated by land development is controlled through a system of pipelines and storm drainage detention basins.

DISCUSSION

- a) *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

Less-Than-Significant Impact. The Project includes construction of a multifamily infill development. A Water Infrastructure Investigation for the Project was conducted by Provost and Pritchard Consulting Group ("P&P") and a Wastewater Service Study for the Project was conducted by Blair, Church & Flynn Consulting Engineers. In the technical memorandum dated June 27, 2022, P&P confirmed that the City's existing and planned water distribution system and recommended connections should be adequate to convey water supply to the Project to support the anticipated demands from the Project. The Wastewater Service Study dated July 8, 2022 also

indicates that the existing and planned wastewater collection system facilities can accommodate the proposed change from Low Density Residential to Medium High Density Residential land use for the subject site. Further, as part of the review process for the Project, the wastewater impacts will be evaluated by the City Engineer to ensure compliance with the City's Waste Water Master Plan, as well as FMFCD, so that the Project would not exceed wastewater treatment requirements such that a new facility would be required nor would the existing treatment facility need to be expanded. FMCD has reviewed the Project and there are existing facilities to serve the site subject to mitigation. Further, while the Project would introduce new uses at this site, the type of development is consistent with the land use designation previously planned for. Upon review and approval by the City Engineer, the Project would result in a **less-than-significant** impact.

- b) *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

Less-Than-Significant Impact. The Project is entirely within the FID service area. Lands within the service area are entitled to an average annual allotment of approximately 2.24 acre-feet per acre. According to the Water Infrastructure Investigation conducted by P&P, the Project would increase the Annual Average (AFY) from 2.6 to 3.4. The additional supply required (AFY) is 1.1 for the Project. In accordance with City Ordinance, the Project will need to pay additional fees so that the City can acquire additional water supply to serve the development. Water from the Kings River is available to offset the anticipated annual demand of 3.4 acre-feet. Therefore, the Project will cause a **less-than-significant impact** on water supply.

- c) *Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Less-Than-Significant Impact. The Wastewater Service Study was conducted by Blair, Church, and Flynn on July 8, 2022, which determined that the existing and planned wastewater collection system facilities can accommodate the type of use proposed. For that reason, the impact would be **less than significant**.

- d) *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

Less-Than-Significant Impact. The Project would introduce new solid waste throughout construction and operation of the Project. However, the Project would be required to comply with Chapter 6.3.1, Recycling and Diversion of Construction and Demolition Debris, of the Clovis Municipal Code during construction. This section of the Clovis Municipal Code requires that a minimum of fifty percent (50%) of waste tonnage from a project be diverted from disposal, and that all new residential (and commercial) construction within the City shall submit and obtain approval for a waste management plan prior to construction activities. Compliance with these measures would ensure that the Project does not result in a significant impact during the construction phase of the Project. Further, compliance with policies in the General Plan for the reduction and recycling of solid waste would serve to reduce impacts of solid waste by promoting and encouraging the recycling of materials. Lastly, according to the California Department of Resources Recycling and Recovery (CalRecycle), the City of Clovis has exceeded their target per employee disposal rate of 15.5 pounds per day per employee, meaning that Clovis residents are actually producing less solid waste than the target set by the State.¹² Consequently, a **less-than-significant** impact would occur.

- e) *Would the project comply with federal, state, and local management reduction statutes and regulations related to solid waste?*

Less-Than-Significant. See discussion 19d above.

¹² Calrecycle, City of Clovis, <https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006>, accessed October 2022.

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

ENVIRONMENTAL SETTING

The Project site is located on an infill site surrounded by existing urban uses. The site’s topography is relatively flat with level terrain and is characterized primarily by the existing peach orchard.

DISCUSSION

- a) *Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

Less-Than-Significant Impact. The Project is located at a site that is relatively flat with level terrain and is surrounded by existing development. Further, the road network is already in place from previous development. Although the Project could result in temporary traffic detouring or closures during buildout, these delays would be temporary and would be coordinated with the City engineering department and other departments to ensure safe access to and from the area is maintained. Further, the site itself would be reviewed by City departments to ensure adequate site access and circulation is provided in the event of an emergency. Overall, a **less-than-significant** impact would occur.

- b) *Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

Less-Than-Significant Impact. The Project site is relatively flat with level terrain, is partially developed, and is located on an infill site surrounded by existing urban uses. The general vicinity of the site is flat, therefore, is not of the type of topography nor in a location likely to exacerbate wildfire risks. Further, the Project would be required to comply with the latest fire codes and would be required to include sprinklers on the interior of the structures and require installation of several hydrants throughout the site. Lastly, the site plans would undergo review by the Clovis Fire Department to ensure that all fire safety regulations are met. Therefore, a **less-than-significant** impact would occur.

- c) *Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

Less-Than-Significant Impact. The site is located in an area previously developed with urban uses. As a new development, installation of a private roadway network, water lines, and power lines would be required; however, these utilities and infrastructure are typical of development and would be constructed to standards of the respective agencies and departments which oversee them, as well as be required to comply all necessary plan review and permitting requirements of such departments and agencies. As such, a **less-than-significant** impact would occur.

- d) *Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

No Impact. The City of Clovis is generally flat topography, and the site itself is in an area that is not in close proximity to hillsides such that it would expose people or structures to significant risks associates with downstream flooding or landslides as a result of runoff or post-fire slope instability. As such, **no impact** would occur.

21. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?			X	

<p>b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p>			X	
<p>c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?</p>			X	

ENVIRONMENTAL SETTING

The Project is located on an infill site within the City of Clovis, substantially surrounded by existing development consisting of residential and educational uses.

DISCUSSION

- a) *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?*

Less-Than-Significant Impact. As discussed above throughout the Initial Study, the Project would not result in any significant impacts with implementation of mitigation measures prescribed above. Therefore, the Project would have a **less-than-significant** impact as it would not substantially degrade the quality of the environment.

- b) *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Less-Than-Significant Impact. The Project includes mitigation measures in certain topic areas identified throughout this Initial Study which would reduce potential impacts to a less-than-significant level. None of these impacts would be cumulatively considerable since most are either temporary impacts from construction or site specific. While air quality that is generally considered to be cumulatively measured, the Project was found to have a less-than-significant impact through compliance with existing regulations from the SJVPACD. As such, future Projects in Clovis would be required to comply with those same regulations, ensuring adequate mitigation as development occurs. Thus, a **less-than-significant** impact would occur.

- c) *Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?*

Less-Than-Significant Impact. As discussed throughout the document, the Project would not result in a significant impact that could not be mitigated to a less-than-significant level. Therefore, a **less-than-significant** impact would occur.

I. Report Preparation

LEAD AGENCY

Lily Cha

Senior Planner
City of Clovis
Planning & Development Services

TECHNICAL STUDIES

Air Quality, Health Risk Analysis, and Greenhouse Gas Technical Memorandum

1491 Alluvial Residential Development Project
Richard Miller, Air Quality and Climate Change Specialist
Johnson Johnson and Miller Air Quality Consulting Services

Biological Resources Assessment

1491 Alluvila Avenue Project
Kelly McDonald, Biologist
LSA Associates, Inc.

Archaeological Resources Survey Assessment

1491 Alluvial Avenue Project
Kerrie Collison, M.A, RPA 28731436, Associate/ Senior Cultural Resources Manager
LSA Associates, Inc.

Historical Evaluation

1491 Alluvial Avenue Project
Casey Tibbet, M.A., Associate/ Cultural Resources Manager
LSA Associates, Inc.

Traffic Generation Analysis

Alluvial Avenue Project
Carlos Ayala-Magana, Engineer I/II
JLB Traffic Engineering, Inc.

Wastewater Service Study

Proposed 12-unit Multi-Family Residential Development
Brad Kerner, PE
Blair, Church & Flynn Consulting Engineers

Water Infrastructure Investigation

Alluvial Avenue Project
Nicolas Jacobson, PE
Provost and Pritchard Consulting Group

APPENDIX A

Air Quality and Greenhouse Gas Technical Memorandum

To: Crawford Architecture & Planning
Attn: Nicholas Crawford, AIA
1755 Herndon Avenue
Clovis, CA 93611
nicholas@crawfordap.com

From: Johnson Johnson and Miller Air Quality Consulting Services
Richard Miller, Air Quality and Climate Change Specialist
rmiller.jjm.environmental@gmail.com
Kimber Johnson, Air Quality and Climate Change Specialist
kjohnson.jjm.environmental@gmail.com

Proposed 1491 Alluvial Residential Development Project in Clovis, CA

Date: June 29, 2022

Subject: Air Quality, Health Risk Analysis, and Greenhouse Gas Technical Memorandum

This Air Quality, Health Risk Analysis, and Greenhouse Gas Emissions Technical Memorandum was prepared to evaluate whether the estimated criteria air pollutant, ozone precursor, toxic air contaminant (TAC), and/or greenhouse gas (GHG) emissions generated from construction and/or operation of the proposed 1491 Alluvial Residential Development Project in Clovis, CA (proposed project or project) would cause significant impacts to air resources in the project area. The respective analyses were conducted within the context of the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] § 21000, et seq.). The methodology follows the Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) prepared by the San Joaquin Valley Air Pollution Control District (SJVAPCD) for the quantification of emissions and evaluation of potential impacts to air resources¹ and the SJVAPCD's Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under the California Environmental Quality Act.²

Project Location and Description

The proposed project consists of the construction of a residential development project in the City of Clovis, Fresno County, California. The proposed project covers approximately 1.04 acres generally located northwest of the intersection of North Fordham Avenue and Alluvial Avenue in Clovis, California. The Assessor's Parcel Number (APN) associated with the project is 563-142-35. The project would include demolition of an existing single-family residence on the project site. The use and density being proposed would require an amendment to the general plan land designation from L (Low Density Residential; 2.1-4 du.ac) to MH (Medium High Density Residential; 7.1 to 15 du/ac) and a rezone from R-1-7500 to R-2.

¹ San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: <https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF>. Accessed June 22, 2022.

² San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009. Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. December 17. Website: <https://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf>. Accessed June 22, 2022.

Proposed 1491 Alluvial Residential Development Project—Clovis, CA
Air Quality, Health Risk Analysis, and Greenhouse Gas Technical Memorandum
June 29, 2022

An aerial view of the project site is shown in Figure 1. The project site plan is included as part of Attachment C (Additional Supporting Information).

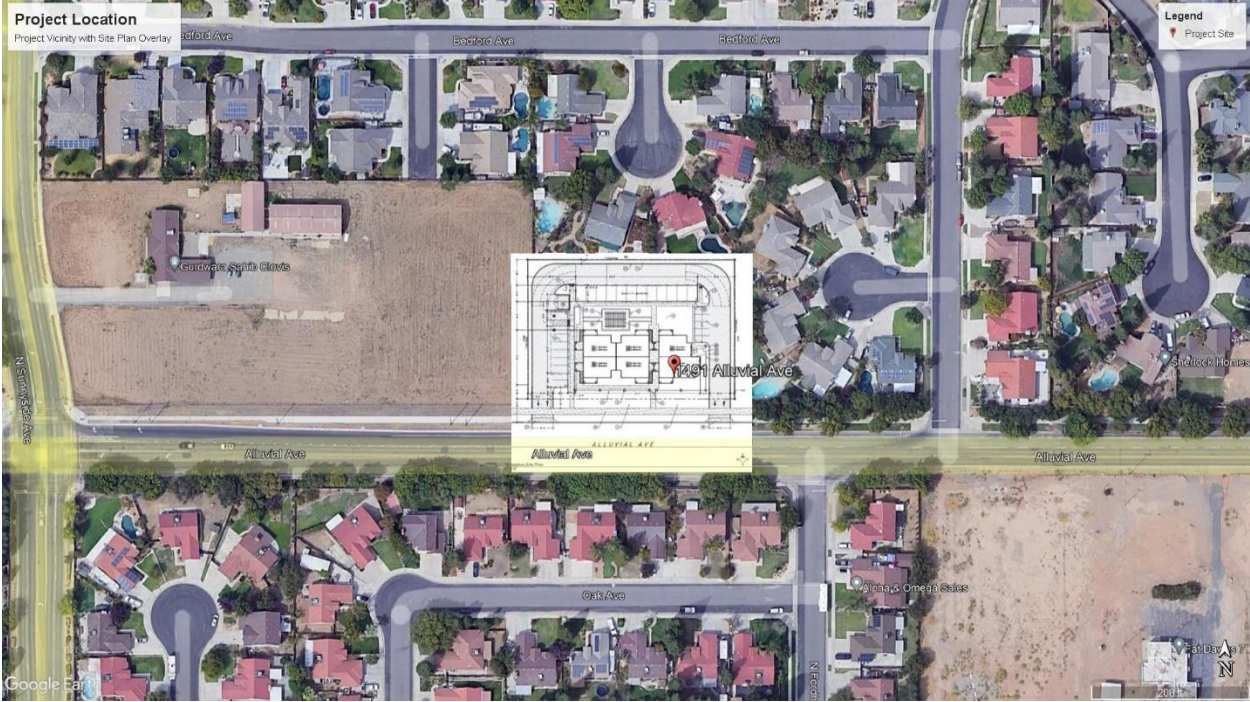


Figure 1 – Project Site—Aerial Vicinity

Modeling Parameters and Assumptions

The following modeling parameters and assumptions were used to generate criteria air pollutant (including precursors), Toxic Air Contaminants (TACs), and greenhouse gas (GHG) emissions for the proposed project.

Air Pollutants and GHGs Assessed

Criteria Pollutants Assessed

The following criteria air pollutants were assessed in this analysis: reactive organic gases (ROG), oxides of nitrogen (NO_x), carbon monoxide (CO), sulfur oxides (SO_x), particulate matter less than 10 microns in diameter (PM₁₀), and particulate matter less than 2.5 microns in diameter (PM_{2.5}).

Note that the proposed project would emit ozone precursors ROG and NO_x. However, the proposed project would not directly emit ozone since it is formed in the atmosphere during the photochemical reaction of ozone precursors.

The project does not contain sources that would produce substantial quantities of SO_x emissions during construction or operation. Modeling conducted for the project is provided in Attachment A and includes SO₂ emission estimates. No further analysis of SO₂ is required.

GHGs Assessed

This analysis was restricted to GHGs identified by AB 32, which include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃). The proposed project would generate a variety of GHGs, including several defined by AB 32 such as CO₂, CH₄, and N₂O.

Certain GHGs defined by AB 32 would not be emitted by the project. HFCs, PFCs, SF₆, and NF₃ are typically used in industrial applications, none of which would be used for typical residential operations. Therefore, it is not anticipated that the proposed project would emit those GHGs.

GHG emissions associated with the proposed project construction, as well as future operations were estimated using CO₂ equivalent (CO₂e) emissions as a proxy for all GHG emissions. Construction GHG emissions were amortized over the lifetime of the proposed project. In order to obtain the CO₂e, an individual GHG is multiplied by its Global Warming Potential (GWP). The GWP designates on a pound for pound basis the potency of the GHG compared to CO₂.

Toxic Air Contaminants Assessed

Diesel particulate matter (DPM)

Studies indicate that diesel particulate matter (DPM) poses the greatest health risk among airborne TACs. The California Air Resources Board (CARB) conducted a 10-year research program that demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic long-term health risk.

DPM is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases: gas and particle. The gas phase is composed of many of the urban hazardous air pollutants, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particle phase also has many different types of particles that can be classified by size or composition. The size of diesel particulates that are of greatest health concern are those that are in the categories of fine and ultra-fine particles. The composition of these fine and ultra-fine particles may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals, and other trace elements. Diesel exhaust is emitted from a broad range of diesel engines, such as the on-road diesel engines of trucks, buses, and cars, and off-road diesel engines that include locomotives, marine vessels, and heavy-duty equipment.³

For purposes of this analysis, DPM exhaust emissions are represented as particulate matter that is 10 micrometers in diameter and smaller (PM₁₀).

Asbestos

Asbestos is a fibrous mineral that both naturally occurs in ultramafic rock (a rock type commonly found in California) and is used as a processed component of building materials. Because asbestos has been proven to cause a number of disabling and fatal diseases, such as asbestosis and lung cancer, it is strictly regulated either based on its natural widespread occurrence or in its use as a building material. In the initial Asbestos National Emission Standards for Hazardous Air Pollutants rule promulgated in 1973, a distinction was made between building materials that would readily release asbestos fibers when damaged or disturbed (friable) and those materials that were unlikely to result in significant fiber release (non-friable). The U.S. Environmental Protection Agency (EPA) has since determined that, when severely damaged, otherwise non-friable materials can release significant amounts of asbestos fibers. Asbestos has been banned from many building materials under the Toxic Substances Control Act, the Clean Air Act, and the Consumer Product Safety Act. Naturally occurring asbestos (NOA) is known to occur in many parts of California and is commonly associated with ultramafic or serpentinite rock.

Model Selection

Criteria Pollutants and GHG Emissions—Model Selection

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. CalEEMod quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water

³ California Air Resources Board (CARB). 2019. Overview: Diesel Exhaust and Health. Website: <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>. Accessed June 22, 2022.

use. Furthermore, CalEEMod identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user.

CalEEMod was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California Air Districts. Default data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California Air Districts to account for local requirements and conditions.

CalEEMod is a comprehensive tool for quantifying air quality impacts from land use projects located throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as preparing CEQA or National Environmental Policy Act documents, conducting pre-project planning, and, verifying compliance with local air quality rules and regulations, etc.

CalEEMod version 2020.4.0 was used to estimate project-generated emissions from construction and operations of the proposed project.

Construction DPM emissions (represented as PM₁₀ exhaust) were estimated using CalEEMod version 2020.4.0. Emissions were estimated for the unmitigated scenario.

Toxic Air Containments—Model Selection and Parameters

An air dispersion model is a mathematical formulation used to estimate the air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. The air dispersion model applied in this assessment was the U.S. EPA AERMOD (version 21112) air dispersion model. Specifically, the AERMOD model was used to estimate levels of air emissions at sensitive receptor locations from potential sources of project-generated TACs during the construction period. The use of the AERMOD model provides a refined methodology for estimating construction impacts by utilizing long-term, measured representative meteorological data for the project site and a representative construction schedule.

The modeling analysis also considered the spatial distribution and elevation of each emitting source in relation to the sensitive receptors. Direction-dependent calculations were obtained by identifying the Universal Transverse Mercator (UTM) coordinates for each source location. Terrain elevations were obtained for the project site using the AERMAP model, the AERMOD terrain data pre-processor. Specifically, terrain data from the U.S. Geological Survey (USGS) National Elevation Database (NED) for the project area was used. The air dispersion model assessment used meteorological data from the Fresno metrological station, located approximately 3.6 miles southwest of the project area. The meteorological data used was preprocessed for use with AERMOD by SJVAPCD and included data for the years 2013-2017; all years were used in the assessment. To evaluate the proposed project's localized impacts at the point of maximum impact, all receptors were placed within the breathing zone at 1.2 meters above ground level. Furthermore, the closest sensitive receptors were existing residences directly adjacent to the project site. The health risk calculations were completed using residential factors for all receptors.

For the construction period, construction emissions were assumed to be distributed over the project site with a working schedule of eight hours per day and five days per week. Emissions were adjusted by a factor of 4.2 to convert for use with a 24-hour-per-day, 365 day-per-year averaging period. This adjustment was completed in AERMOD by applying a variable hour work period. Detailed parameters and complete calculations are contained in Attachment B.

Assumptions

Construction Modeling Assumptions

Schedule

The proposed project would require various tasks including site preparation, grading, building construction, paving, and architectural coating (painting). The exact start and end times for various project phases are currently unknown. Table 1 shows the anticipated construction schedule. Construction of the project is expected to begin on 08/01/2023 and last for 4-6 months. The earliest anticipated operational start date for the project is 10/01/2023. The construction schedule utilized in the analysis represents a “worst-case” analysis scenario since emission factors for construction equipment decrease as the analysis year increases, due to improvements in technology and more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years or is phased over multiple years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required per CEQA guidelines. The site-specific construction fleet may vary due to specific project needs at the time of construction.

Table 1: Project Construction Schedule

Construction Task	Start Date	End Date	Number of Days per Week	Number of Workdays per Phase
Demolition	8/1/2023	8/28/2023	5	20
Site Preparation	8/29/2023	8/30/2023	5	2
Grading	8/31/2023	9/5/2023	5	4
Paving	9/6/2023	9/19/2023	5	10
Building Construction	9/20/2023	1/18/2024	5	87
Architectural Coating	1/19/2024	2/1/2024	5	10

Source: CalEEMod Output (Attachment A); also shown in Additional Supporting Information (Attachment C).

Equipment

The off-road equipment fleet for construction were generated using default values from CalEEMod. CalEEMod generates construction fleets for construction activities based on the size of the construction areas. Construction equipment for each construction activity is shown in Table 2.

Table 2: Project Construction Equipment

Construction Task	Equipment Type	Pieces of Equipment	Usage (hours/day)	Horsepower	Load Factor	Fuel Type
Demolition	Concrete/Industrial Saws	1	8	81	0.73	Diesel
	Rubber Tired Dozers	1	8	247	0.40	Diesel
	Tractors/Loaders/Backhoes	3	8	97	0.37	Diesel
Site Preparation	Graders	1	8	187	0.41	Diesel
	Rubber Tired Dozers	1	7	247	0.40	Diesel
	Tractors/Loaders/Backhoes	1	8	97	0.37	Diesel
Grading	Graders	1	8	187	0.41	Diesel
	Rubber Tired Dozers	1	8	247	0.40	Diesel
	Tractors/Loaders/Backhoes	2	7	97	0.37	Diesel
Paving	Cement and Mortar Mixers	1	6	9	0.56	Diesel
	Pavers	1	6	130	0.42	Diesel
	Paving Equipment	1	8	132	0.36	Diesel
	Rollers	1	7	80	0.38	Diesel
	Tractors/Loaders/Backhoes	1	8	97	0.37	Diesel
Building Construction	Cranes	2	6.9	231	0.29	Diesel
	Forklifts	2	6.9	89	0.20	Diesel
	Generator Sets	2	9.2	84	0.74	Diesel
	Tractors/Loaders/Backhoes	2	6.9	97	0.37	Diesel
	Welders	6	9.2	46	0.45	Diesel
Architectural Coating	Air Compressors	1	6	78	0.48	Diesel

Source: CalEEMod Output (Attachment A); also shown in Additional Supporting Information (Attachment C).

Vehicle Trips

Table 3 provides a summary of the construction-related vehicle trips. CalEEMod default values were used to estimate the number of construction-related vehicle trips and were supplemented with additional purpose-based trips to avoid underestimating emissions from on-road vehicles anticipated during the construction period.

The default values for hauling trips are based on the assumption that a truck can haul 20 tons (or 16 cubic yards) of material per load. If one load of material is delivered, CalEEMod assumes that one haul truck importing material will also have a return trip with an empty truck (e.g., 2 one-way trips). Hauling trips were generated in the demolition phase based on the assumption that 1,111 tons of debris would be generated from the demolition of existing buildings (an existing residence and related outbuildings) and demolition/removal of existing hardscape currently occupying the project site (see Attachment A for calculations used to estimate the amount of debris to be generated). Based on applicant-provided information, cut and fill is

expected to mostly balance on-site. For the purposes of estimating emissions, it was assumed that up to 1,000 cubic yards of material could be imported and 1,000 cubic yards of material could be exported during the grading phase.

The fleet mix for worker trips is light-duty passenger vehicles to light-duty trucks. The vendor trips fleet mix is composed of a mixture of medium and heavy-duty diesel trucks. The hauling trips were assumed to be 100 percent heavy-duty diesel truck trips. CalEEMod default trip lengths for a project in Fresno County and an urban setting were used for construction trips.

Table 3: Construction Vehicle Trips

Construction Task	Worker Trips per Day	Vendor Trips per Day	Total Haul Truck Trips
Demolition	13	0	120
Site Preparation	8	0	6
Grading	10	0	258
Paving	13	4	10
Building Construction	21	6	28
Architectural Coating	4	0	2

Source: CalEEMod Output (Attachment A); also shown in Additional Supporting Information (Attachment C)

Operational Modeling Assumptions

Operational emissions are those emissions that occur during operation of the proposed project. The sources are summarized below.

Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the automobiles that would travel to and from the proposed project site. Assumptions were based on the CalEEMod default values for the low-rise multifamily residential land use. The default rates are based on information from the Institute of Transportation Engineers (ITE) Trip Generation Handbook, 10th Edition. Trip rates for the same land use were obtained from the ITE Trip Generation Handbook 11th Edition. As the CalEEMod default rates were higher than rates in the 11th Edition of ITE Trip Generation Handbook, default rates were retained to present a more conservative estimate of emissions.

The trip generation rates for each phase of the project are shown in Table 4.

Table 4: Project Daily Trip used to Estimate Emissions

Land Use Type	Amount	Units	Weekday Trip Generation Rate per Dwelling Unit	Saturday Trip Generation Rate per Dwelling Unit	Sunday Trip Generation Rate per Dwelling Unit
Trip Rates					
12-unit Multifamily Development	12	Dwelling Units	7.32	8.14	6.28
Daily Trips					
12-unit Multifamily Development (Trips per Day)			87.84	97.68	75.36

Source of Trip Rates: Institute of Transportation Engineers (ITE), Trip Generation Manual 10th Edition, consistent with CalEEMod default values.

Pass-by trips are assumed to already be on the local roads; however, unlike internal capture, vehicles making pass-by trips are not necessarily making a single trip to visit multiple land uses within the project site. For the purposes of estimating air pollutant emissions, it is appropriate to account for the project-generated trips that would travel to and from the project site. CalEEMod default trip types were applied in the analysis. Please see Attachment A for detailed assumptions.

Trip Lengths

The CalEEMod default round trip lengths for an urban setting in Fresno County were used in this analysis. Trip lengths are for primary trips. Trip purposes are primary, diverted, and pass-by trips. Diverted trips take a slightly different path than a primary trip. The CalEEMod default rates for percentages of primary, diverted, and pass-by trips were used.

Vehicle Fleet Mix

The vehicle fleet mix is defined as the mix of motor vehicle classes active during the operation of the proposed project. Emission factors are assigned to the expected vehicle mix as a function of vehicle class, speed, and fuel use (gasoline- and diesel-powered vehicles). To estimate emissions associated with the proposed project, the vehicle fleet mixes were revised to reflect the residential fleet mix approved by the SJVAPCD for each year analyzed.

Area Sources

Consumer Products

Consumer products are various solvents used in non-industrial applications, which emit VOCs during their product use. “Consumer Product” means a chemically formulated product used by household and institutional consumers, including but not limited to: detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. It does not include other paint products, furniture coatings, or architectural coatings. CalEEMod includes default consumer product use rates based on building square footage. The default emission factors developed for CalEEMod were used for consumer products were used.

Architectural Coatings (Painting)

Paints release VOC emissions. The residential building(s) included as part of the proposed project would be repainted on occasion. The project is required to comply with the SJVAPCD Rule 4601—Architectural Coatings. Effective January 1, 2022, nonflat gloss and semi-gloss paints will also be required to meet the 50 g/l standard, providing lower VOC emissions for buildings constructed after that date.

Landscaping Emissions

CalEEMod estimates a total of 180 days for which landscaping equipment would be used to estimate potential emissions for the proposed project.

Indirect Emissions

For GHG emissions, CalEEMod contains calculations to estimate indirect GHG emissions. Indirect emissions are emissions where the location of consumption or activity is different from where actual emissions are generated. For example, electricity would be consumed at the proposed project site; however, emissions associated with producing that electricity are generated off-site at a power plant. Since the electricity can vary greatly based on locations, the user should override these values if they have more specific information regarding their specific water supply and treatment.

Energy Use

The emissions associated with the building electricity and natural gas usage (non-hearth) were estimated based on the land use type and size. Values for a project served by Pacific Gas and Electric (PG&E) were used in the analysis.

The Renewables Portfolio Standard (RPS) is not accounted for in CalEEMod 2020.4.0. The Renewable Electricity Standards took effect in 2020. The Renewable Electricity Standard requires that electricity providers include a minimum of 33 percent renewable energy in their portfolios by the year 2020. CalEEMod 2020.4.0 includes PG&E emission factors based on actual rates reported by the utility. The latest information available in PG&E's 2020 Sustainability Report were used to adjust the project's CO₂ intensity factor for the 2030 scenario.

Other Indirect Emissions (Water Use, Wastewater Use, and Solid Waste)

CalEEMod includes calculations for indirect GHG emissions for electricity consumption, water consumption, and solid waste disposal. For water consumption, CalEEMod calculates embedded energy (e.g., treatment, conveyance, distribution) associated with providing each gallon of potable water to the project. For solid waste disposal, GHG emissions are associated with the disposal of solid waste generated by the proposed project into landfills. CalEEMod default data was used for inputs associated with solid waste.

AIR QUALITY

Environmental Setting

Air quality impacts are both local and regional. Regional and local air quality is impacted by topography, dominant airflows, atmospheric inversions, location, and season. The project is located in Clovis, within Fresno County. The project site and all of Fresno County are in the San Joaquin Valley Air Basin (Air Basin or SJV Air Basin), which experiences some of the most challenging environmental conditions for air quality in the nation. The following section describes these conditions as they pertain to the Air Basin. The information in this section is primarily from the SJVAPCD's GAMAQI.⁴

Topography

The topography of a region is important for air quality because mountains can block airflow that would help disperse pollutants and can channel air from upwind areas that transports pollutants to downwind areas. The SJVAPCD covers the entirety of the SJV Air Basin. The Air Basin is generally shaped like a bowl. It is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada mountains are along the eastern boundary (8,000 to 14,000 feet in elevation), the Coast Ranges are along the western boundary (3,000 feet in elevation), and the Tehachapi Mountains are along the southern boundary (6,000 to 8,000 feet in elevation).

Climate

The climate is important for air quality because of differences in the atmosphere's ability to trap pollutants close to the ground, which creates adverse air quality; inversely, the atmosphere's ability to rapidly disperse pollutants over a wide area prevents high concentrations from accumulating under different climatic conditions. The SJV Air Basin has an "inland Mediterranean" climate and is characterized by long, hot, dry summers and short, foggy winters. Sunlight can be a catalyst in the formation of some air pollutants (such as ozone); the SJV Air Basin averages over 260 sunny days per year.

Inversion layers are significant in determining pollutant concentrations. Concentration levels can be related to the amount of mixing space below the inversion. Temperature inversions that occur on the summer days are usually encountered 2,000 to 2,500 feet above the valley floor. In winter months, overnight inversions occur 500 to 1,500 feet above the valley floor.

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the SJV Air Basin form natural horizontal barriers to the dispersion of air contaminants. The wind generally flows south-southeast through the valley, through the Tehachapi Pass and into the Mojave Desert Air Basin portion of Kern County. As the wind moves through the SJV Air Basin, it mixes with the air pollution generated locally, generally transporting air pollutants from the north to the south in the summer and in a reverse flow in the winter.

⁴ San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: <https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF>. Accessed May 20, 2022.

The winds and unstable air conditions experienced during the passage of winter storms result in periods of low pollutant concentrations and excellent visibility. Between winter storms, high pressure and light winds allow cold moist air to pool on the San Joaquin Valley floor. This creates strong, low-level temperature inversions and very stable air conditions, which can lead to Tule fog. Wintertime conditions favorable to fog formation are also conditions favorable to high concentrations of PM_{2.5} and PM₁₀.

Criteria Air Pollutants

The Federal Clean Air Act (FCAA) establishes the framework for modern air pollution control. The FCAA, enacted in 1970 and amended in 1990, directs the U.S. EPA to establish ambient air quality standards. These standards are divided into primary and secondary standards. The primary standards are set to protect human health, and the secondary standards are set to protect environmental values, such as plant and animal life. The FCAA requires the EPA to set National Ambient Air Quality Standards for the six criteria air pollutants. These pollutants include particulate matter (PM), ground-level ozone, carbon monoxide (CO), sulfur oxides, nitrogen oxides, and lead.

Toxic Air Contaminants

A toxic air contaminant (TAC) is an air pollutant not included in the California Ambient Air Quality Standards, but TACs are considered hazardous to human health. Toxic air contaminants are defined by the California Air Resources Board (CARB) as those pollutants that, “may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health.”

The health effects associated with TACs are generally assessed locally rather than regionally. Toxic air contaminants can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage; TACs can also cause short-term acute effects such as eye watering, respiratory irritation, running nose, throat pain, and headaches. For evaluation purposes, TACs are separated into carcinogens and noncarcinogens. Carcinogens are assumed to have no safe threshold below which health impacts would not occur, and the cancer risk is expressed as excess cancer cases per one million exposed individuals (typically over a lifetime of exposure).

TACs of concern assessed in this analysis include asbestos and DPM.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics.

Air Quality Standards

The Clean Air Act requires states to develop a general plan to attain and maintain the standards in all areas of the country and a specific plan to attain the standards for each area designated nonattainment. These plans, known as State Implementation Plans or SIPs, are developed by state and local air quality management agencies and submitted to EPA for approval.

The SIP for the State of California is administered by the CARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California’s SIP incorporates individual federal attainment plans for each regional air district. SIPs are prepared by the regional air district and sent to CARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

The CARB also administers the California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the California Clean Air Act. The 10 state air pollutants include the six federal criteria pollutant standards listed above as well as visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The federal and state ambient air quality standards are summarized in Table 5.

Table 5: California and National Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	National Standards	
		Concentration	Primary	Secondary
Ozone	1 Hour	0.09 ppm (180 µg/m³)	—	Same as Primary Standard
	8 Hour	0.070 ppm (137 µg/m³)	0.070ppm (137 µg/m³)	
Respirable Particulate Matter	24 Hour	50 µg/m³	150 µg/m3	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m³	—	
Fine Particulate Matter	24 Hour	—	35 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m³	12 µg/m³	
Carbon Monoxide	1 Hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	—
	8 Hour	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	—
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)	—	—
Nitrogen Dioxide	1 Hour	0.18 ppm (339 µg/m³)	100 ppb (188 µg/m³)	—
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	Same as Primary Standard
Sulfur Dioxide	1 Hour	0.25 ppm (655 µg/m³)	75 ppb (196 µg/m³)	—
	3 Hour	—	—	0.5 ppm (1300 µg/m³)

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Pollutant	Averaging Time	California Standards	National Standards	
		Concentration	Primary	Secondary
	24 Hour	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas)	—
	Annual Arithmetic Mean	—	0.030 ppm (for certain areas)	—
	30-Day Average	1.5 µg/m ³	—	—
Lead	Calendar Quarter	—	1.5 µg/m ³	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 µg/m ³	
Visibility-Reducing Particles	8 Hour	See Footnote 1	No National Standards	
Sulfates	24 Hour	25 µg/m ³		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)		

Notes:

1 - In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

µg/m³ = micrograms per cubic meter

CARB = California Air Resources Board

mg/m³ = milligrams per cubic meter

ppm = parts per million

Source: California Air Resources Board (CARB). 2017. Air Quality Standards. Website: <https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status>. Accessed March 23, 2022.

The local air quality can be evaluated by reviewing relevant air pollution concentrations near the project area. Table 6 summarizes 2018 through 2020 published monitoring data, which is the most recent 3-year period available. The table displays data from the Clovis-N Villa Avenue station (located approximately 2.22 miles southwest of the project site). The data shows that during the past few years, the project area has exceeded the standards for ozone (state and national, PM₁₀ (state and national), and PM_{2.5} (state and national). The data in the table reflects the concentration of the pollutants in the air, measured using air monitoring equipment. This differs from emissions, which are calculations of a pollutant being emitted over a certain period. No recent monitoring data for Fresno County or the San Joaquin Valley Air Basin was available for CO or SO₂. Generally, no monitoring is conducted for pollutants that are no longer likely to exceed ambient air quality standards.

Table 6: Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2018	2019	2020
Ozone ¹	1 Hour	Max 1 Hour (ppm)	0.121	0.103	0.142
		Days > State Standard (0.09 ppm)	13	6	12
	8 Hour	Max 8 Hour (ppm)	0.095	0.080	0.108
		Days > State Standard (0.07 ppm)	43	27	36
		Days > National Standard (0.075 ppm)	23	10	23
Carbon monoxide (CO)	8 Hour	Max 8 Hour (ppm)	ND	ND	ND
		Days > State Standard (9.0 ppm)	ND	ND	ND
		Days > National Standard (9 ppm)	ND	ND	ND
Nitrogen dioxide (NO ₂) ²	Annual	Annual Average (ppm)	0.009	0.008	0.009
	1 Hour	Max 1 Hour (ppm)	0.0645	0.0572	0.0543
		Days > State Standard (0.18 ppm)	0	0	0
Sulfur dioxide (SO ₂)	Annual	Annual Average (ppm)	ND	ND	ND
	24 Hour	Max 24 Hour (ppm)	ND	ND	ND
		Days > State Standard (0.04 ppm)	ND	ND	ND
Inhalable coarse particles (PM ₁₀) ¹	Annual	Annual Average (µg/m ³)	39.6	32.6	50.8
	24 Hour	24 Hour (µg/m ³)	118.6	155.7	296.0
		Days > State Standard (50 µg/m ³)	90.4	65.9	117.5
		Days > National Standard (150 µg/m ³)	0.0	0.0	5.8
Fine particulate matter (PM _{2.5}) ¹	Annual	Annual Average (µg/m ³)	15.6	10.2	ID
		State Standard (12 µg/m ³) Exceeded?	Yes	No	ID
	24 Hour	24 Hour (µg/m ³)	82.3	39.1	193.7
		Days > National Standard (35 µg/m ³)	26.0	ID	40.0
Notes:					
> = exceed ppm = parts per million µg/m ³ = micrograms per cubic meter ID = insufficient data ND = no data max = maximum Bold = exceedance State Standard = California Ambient Air Quality Standard National Standard = National Ambient Air Quality Standard ¹ Clovis-N Villa Avenue Source: California Air Resources Board (CARB). 2022. Trends Summary. Website: https://www.arb.ca.gov/adam/trends/trends1.php . Accessed June 20, 2022. ² Clovis-N Villa Avenue Source: California Air Resources Board (CARB). 2022. Top 4 Summary: Select Pollutant, Years, & Area. Website: https://www.arb.ca.gov/adam/topfour/topfour1.php . Accessed June 29, 2022.					

The health impacts of the various air pollutants of concern can be presented in a number of ways. One method is to compare concentrations in an area with the applicable state and federal ozone standards. If concentrations are below the standard, it is reasonable to conclude that no significant health impacts would occur. When concentrations exceed the standard, impacts will vary based on the amount by which the standard is exceeded. The EPA developed the Air

Quality Index (AQI) as an easy-to-understand measure of health impacts compared with concentrations in the air. Table 7 provides a description of the health impacts of ozone at different concentrations.

Table 7: Air Quality Index and Health Effects from Ozone

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
AQI 51–100—Moderate	Sensitive Groups: Children and people with asthma are the groups most at risk.
Concentration 55–70 ppb	Health Effects Statements: Unusually sensitive individuals may experience respiratory symptoms.
	Cautionary Statements: Unusually sensitive people should consider limiting prolonged outdoor exertion.
AQI 101–150—Unhealthy for Sensitive Groups	Sensitive Groups: Children and people with asthma are the groups most at risk.
Concentration 71–85 ppb	Health Effects Statements: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults and people with respiratory disease, such as asthma.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
AQI 151–200—Unhealthy	Sensitive Groups: Children and people with asthma are the groups most at risk.
Concentration 86–105 ppb	Health Effects Statements: Greater likelihood of respiratory symptoms and breathing difficulty in active children and adults and people with respiratory disease, such as asthma; possible respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.
AQI 201–300—Very Unhealthy	Sensitive Groups: Children and people with asthma are the groups most at risk.
Concentration 106–200 ppb	Health Effects Statements: Increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.
Sources: Air Now. 2022. AQI Calculator: AQI to Concentration. Website: https://www.airnow.gov/aqi/aqi-calculator/ . Accessed May 31, 2022.	

U.S. Environment Protection Agency (EPA). 2018. Technical Assistance Document for the Reporting of Daily Air Quality – the Air Quality Index (AQI). September. Accessed June 27, 2022.

The AQI for the 8-hour ozone standard is based on the current NAAQS of 70 parts per billion (ppb). Based on the AQI scale for the 8-hour ozone standard, the project area experienced 106 days in the last three years that would have violated the 70-ppb standard. The highest reading was 108 ppb in 2020 (AQI 203—Very Unhealthy).

Another pollutant of concern due to associated health impacts is PM_{2.5}. An AQI of 100 or lower is considered moderate and would be triggered by a 24-hour average concentration of 12.1 to 35.4 µg/m³. An AQI of 101 to 105 or 35.5-55.4 µg/m³ is considered unhealthful for sensitive groups. When concentrations reach this amount, it is considered an exceedance of the federal PM_{2.5} standard. The monitoring station nearest the project (Clovis-N Villa Avenue) exceeded the standard on at least 66 days in the three-year period spanning from 2018 to 2020. The highest number of exceedances was recorded in 2020 with 40.0 days over the national 24-hour standard. People with respiratory or heart disease, the elderly, and children are the groups most at risk. Unusually sensitive people should consider reducing prolonged or heavy exertion. The AQI of 151 to 200 is classified as unhealthy for everyone. This AQI classification is triggered when PM_{2.5} concentration ranges from 55.4 to 150.4 µg/m³. At this concentration, there is increasing likelihood of respiratory symptoms in sensitive individuals, aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease, and in the elderly. People with respiratory or heart disease, the elderly, and children should limit prolonged exertion. Everyone else should reduce prolonged or heavy exertion. The highest 24-hour concentration recorded at the Clovis-N Villa Avenue monitoring station in the most recent 3-year period available was 193.7 µg/m³ (AQI 244—Very Unhealthy) in 2020. At this concentration, there is increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population. Sensitive groups and active individuals should avoid all physical activity outdoors, move activities indoors, or reschedule to a time when air quality is better. Everyone else should avoid prolonged or heavy exertion, consider moving activities indoors, or reschedule to a time when air quality is better. The relationship of the AQI to health effects is shown in Table 8.

Table 8: Air Quality Index and Health Effects of Particle Pollution

Air Quality Index/ PM _{2.5} Concentration	Health Effects Description
AQI 51–100—Moderate	Sensitive Groups: Some people who may be unusually sensitive to particle.
Concentration 12.1–35.4 µg/m ³	Health Effects Statements: Unusually sensitive people should consider reducing prolonged or heavy exertion.
	Cautionary Statements: Unusually sensitive people: Consider reducing prolonged or heavy exertion. Watch for symptoms such as coughing or shortness of breath. These are signs to take it easier.
AQI 101–150—Unhealthy for Sensitive Groups	Sensitive Groups: Sensitive groups include people with heart or lung disease, older adults, children, and teenagers.
Concentration 35.5–55.4 µg/m ²	Health Effects Statements: Increasing likelihood of respiratory symptoms in sensitive individuals, aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease, and the elderly.
	If you have heart disease: Symptoms such as palpitations, shortness of breath, or unusual fatigue may indicate a serious problem. If you have any of these, contact your health care provider.
AQI 151–200—Unhealthy	Sensitive Groups: Everyone
Concentration 55.5–150.4 µg/m ³	Health Effects Statements: Increased aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; increased respiratory effects in general population.
	Cautionary Statements: Sensitive groups: Avoid prolonged or heavy exertion. Consider moving activities indoors or rescheduling. Everyone else: Reduce prolonged or heavy exertion. Take more breaks during outdoor activities.
AQI 201–300—Very Unhealthy	Sensitive Groups: Everyone
Concentration 150.5–250.4 µg/m ³	Health Effects Statements: Significant aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; significant increase in respiratory effects in general population.
	Cautionary Statements: Sensitive groups: Avoid all physical activity outdoors. Move activities indoors or reschedule to a time when air quality is better. Everyone else: Avoid prolonged or heavy exertion. Consider moving activities indoors or rescheduling to a time when air quality is better.
Source: Air Now. 2016. AQI Calculator: AQI to Concentration. Website: https://www.airnow.gov/aqi/aqi-calculator/ . Accessed March 23, 2022 and June 20, 2022.	

Federal and state air quality laws require identification of areas not meeting the ambient air quality standards. These areas must develop regional air quality plans to eventually attain the standards. The SJV Air Basin is designated nonattainment for ozone, PM₁₀, and PM_{2.5}.⁵

Thresholds of Significance

Project-level Thresholds

The CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial, adverse change in the environment.” To determine if a project would have a significant impact on air quality, the type, level, and impact of emissions generated by the proposed project must be evaluated.

This analysis uses the air quality significance thresholds contained in Appendix G of the CEQA Guidelines, effective December 28, 2018. A significant impact would occur if the proposed project would:

- a) Conflict with or obstruct implementation of the applicable air quality plan.
- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard.
- c) Expose sensitive receptors to substantial pollutant concentrations.
- d) Create objectionable odors affecting a substantial number of people.

The City of Clovis has not established specific CEQA significance thresholds. Where available guidance provided by the applicable air district can be used to make significance determinations for the CEQA questions listed above. While the final determination of whether a project is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, the SJVAPCD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions in accordance with the Appendix G requirements. If a Lead Agency finds that a project has the potential to exceed these air pollution thresholds, according to the SJVAPCD, the project should be considered to have significant air quality impacts.

Air pollutant emissions have regional effects and localized effects. This analysis assesses the regional effects of the project’s criteria pollutant emissions in comparison to SJVAPCD thresholds of significance for short-term construction activities and long-term operation of the project. Localized emissions from project construction and operation are also assessed using concentration-based thresholds that determine if the project would result in a localized exceedance of any ambient air quality standards or would make a cumulatively considerable contribution to an existing exceedance.

⁵ San Joaquin Valley Air Pollution Control District (SJVAPCD). 2017. Ambient Air Quality Standards & Valley Attainment Status. Website: <https://www.valleyair.org/aqinfo/attainment.htm>. Accessed May 20, 2022.

The primary pollutants of concern during project construction and operation are ROG, NO_x, PM₁₀, and PM_{2.5}. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for ROG and NO_x; SO_x, CO, PM₁₀, and PM_{2.5}.

Ozone is a secondary pollutant that can be formed miles away from the source of emissions through reactions of ROG and NO_x emissions in the presence of sunlight. Therefore, ROG and NO_x are termed ozone precursors. The SJVAB often exceeds the state and national ozone standards. Therefore, if the project emits a substantial quantity of ozone precursors, the project may contribute to an exceedance of the ozone standard. The SJVAB also exceeds air quality standards for PM₁₀, and PM_{2.5}; therefore, substantial project emissions may contribute to an exceedance for these pollutants.

The SJVAPCD has adopted significance thresholds for construction-related and operational emissions. These thresholds will be identified and addressed in the appropriate section of this document.

Project construction would involve the use of diesel-fueled vehicles and equipment that emit DPM, which is considered a TAC. Once operational, a limited number of diesel-fueled vehicles would access the project site. The following project-specific health risk significance thresholds are applied in this analysis:

- Maximum Incremental Cancer Risk: ≥ 20 in 1 million.
- Hazard Index (project increment) ≥ 1.0 .

Fugitive Dust

Construction

Fugitive dust would be generated from site grading and other earth-moving activities. Most of this fugitive dust would remain localized and would be deposited near the project site. However, the potential for impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from the project site. Therefore, adherence to Regulation VIII would be required during construction of the proposed project. Regulation VIII would require fugitive dust control measures that are consistent with best management practices (BMPs) established by the SJVAPCD to reduce the proposed project's construction-generated fugitive dust impacts to a less than significant level.

The SJVAPCD (SJVAPCD or District) adopted Regulation VIII in 1993 and its most recent amendments became effective on October 1, 2004. This is a basic summary of the regulation's requirements as they apply to construction sites. These regulations affect all workers at a regulated construction site, including everyone from the landowner to the subcontractors. Violations of Regulation VIII are subject to enforcement action including fines.⁶

Visible Dust Emissions may not exceed 20 percent opacity during periods when soil is being disturbed by equipment or by wind at any time. Visible Dust Emissions opacity of 20 percent

⁶ San Joaquin Valley Air Pollution Control District (SJVAPCD). 2007. Compliance Assistance Bulletin. Website: <http://www.valleyair.org/busind/comply/pm10/forms/RegVIIIICAB.pdf>. Accessed May 29, 2021.

means dust that would obstruct an observer's view of an object by 20 percent. District inspectors are state certified to evaluate visible emissions. Dust control may be achieved by applying water before/during earthwork and onto unpaved traffic areas, phasing work to limit dust, and setting up wind fences to limit windblown dust.

Soil Stabilization is required at regulated construction sites after normal working hours and on weekends and holidays. This requirement also applies to inactive construction areas such as phased projects where disturbed land is left unattended. Applying water to form a visible crust on the soil and restricting vehicle access are often effective for short-term stabilization of disturbed surface areas. Long-term methods including applying dust suppressants and establishing vegetative cover.

Carryout and Trackout occur when materials from emptied or loaded vehicles falls onto a paved surface or shoulder of a public road or when materials adhere to vehicle tires and are deposited onto a paved surface or shoulder of a public road. Should either occur, the material must be cleaned up at least daily, and immediately if it extends more than 50 feet from the exit point onto a paved road. The appropriate clean-up methods require the complete removal and cleanup of mud and dirt from the paved surface and shoulder. Using a blower device or dry sweeping with any mechanical device other than a PM10-efficient street sweeper is a violation. Larger construction sites, or sites with a high amount of traffic on one or more days, must prevent carryout and trackout from occurring by installing gravel pads, grizzlies, wheel washers, paved interior roads, or a combination thereof at each exit point from the site. In many cases, cleaning up trackout with water is also prohibited as it may lead to plugged storm drains. Prevention is the best method.

Unpaved Access and Haul Roads, as well as unpaved vehicle and equipment traffic areas at construction sites must have dust control. Speed limit signs limiting vehicle speed to 15 mph or less at construction sites must be posted every 500 feet on uncontrolled and unpaved roads.

Storage Piles and Bulk Materials have handling, storage, and transportation requirements that include applying water when handling materials, wetting or covering stored materials, and installing wind barriers to limit visible dust emissions. Also, limiting vehicle speeds, loading haul trucks with a freeboard of six inches or greater along with applying water to the top of the load, and covering the cargo compartments are effective measures for reducing visible dust emissions and carryout from vehicles transporting bulk materials.

Dust Control Plans identify the dust sources and describe the dust control measures that will be implemented before, during, and after any dust generating activity for the duration of the project. Owners or operators are required to submit plans to the SJVAPCD at least 30 days prior to commencing the work for the following:

- Residential developments of ten or more acres of disturbed surface area.
- Non-residential developments of five or more acres of disturbed surface area.
- The relocation of more than 2,500 cubic yards per day of materials on at least three days.

Operations may not commence until the SJAVPCD has approved the Dust Control Plan. A copy of the plan must be on site and available to workers and District employees. All work on the site is subject to the requirements of the approved dust control plan. A failure to abide by the plan by anyone on site may be subject to enforcement action.

Record Keeping is required to document compliance with the rules and must be kept for each day any dust control measure is used. The SJVAPCD has developed record forms for water application, street sweeping, and “permanent” controls such as applying long term dust palliatives, vegetation, ground cover materials, paving, or other durable materials. Records must be kept for one year after the end of dust generating activities (Title V sources must keep records for five years).

Exemptions exist for several activities. Those occurring above 3,000 feet in elevation are exempt from all Regulation VIII requirements. Further, Rule 8021 – Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities exempts the following construction and earthmoving activities:

- Blasting activities permitted by California Division of Industrial Safety.
- Maintenance or remodeling of existing buildings provided the addition is less than 50% of the size of the existing building or less than 10,000 square feet (due to asbestos concerns, contact the SJVAPCD at least two weeks ahead of time).
- Additions to single family dwellings.
- The disking of weeds and vegetation for fire prevention on sites smaller than ½ acre.
- Spreading of daily landfill cover to preserve public health and safety and to comply with California Integrated Waste Management Board requirements.

Nuisances are prohibited at all times because District Rule 4102 – Nuisance applies to all construction sources of fugitive dust, whether or not they are exempt from Regulation VIII. It is important to monitor dust-generating activities and implement appropriate dust control measures to limit the public’s exposure to fugitive dust.

Environmental Impact Analysis

This section discusses potential impacts related to air quality associated with the proposed project and provides mitigation measures where necessary.

Impact AIR-1 Conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis

The CEQA Guidelines indicate that a significant impact would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI indicates that projects that do not exceed SJVAPCD regional criteria pollutant emissions quantitative thresholds would not conflict with or obstruct the applicable air quality plan (AQP). An additional criterion regarding the project's implementation of control measures was assessed to provide further evidence of the project's consistency with current AQPs. This document proposes the following criteria for determining project consistency with the current AQPs:

1. Will the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs? This measure is determined by comparison to the regional and localized thresholds identified by the District for Regional and Local Air Pollutants.
2. Will the project comply with applicable control measures in the AQPs?

Contribution to Air Quality Violations

A measure for determining if the project is consistent with the air quality plans is if the project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plans. Regional air quality impacts and attainment of standards are the result of the cumulative impacts of all emission sources within the air basin. Individual projects are generally not large enough to contribute measurably to an existing violation of air quality standards. Therefore, the cumulative impact of the project is based on its cumulative contribution. Because of the region's nonattainment status for ozone, PM_{2.5}, and PM₁₀—if project-generated emissions of either of the ozone precursor pollutants (ROG and NO_x), PM₁₀, or PM_{2.5} would exceed the SJVAPCD's significance thresholds—then the project would be considered to contribute to violations of the applicable standards and conflict with the attainment plans.

As shown in Table 9 and Table 10 under Impact AIR-2 below, the project's construction and operational regional emissions would not exceed SJVAPCD's regional criteria pollutant emissions quantitative thresholds. Therefore, the proposed project would not be considered in conflict with or obstruct implementation of the applicable air quality plan based on this criterion.

Compliance with Applicable Control Measures

SJVAPCD's AQPs contain a number of control measures, which are enforceable requirements through the adoption of rules and regulations. A description of rules and regulations that apply to this project is provided below.

Other control measures that apply to the project are Rule 4641—Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operation that requires reductions in VOC emissions during paving and Rule 4601—Architectural Coatings that limits the VOC content of all types of paints and coatings sold in the San Joaquin Valley. These measures apply at the point of sale of the asphalt and the coatings, so project compliance is ensured without additional mitigation measures. Other control measures that may apply include:

SJVAPCD Rule 9510—Indirect Source Review (ISR) is a control measure in the 2006 PM₁₀ Plan that requires NO_x and PM₁₀ emission reductions from development projects in the San Joaquin Valley. The NO_x emission reductions help reduce the secondary formation of PM₁₀ in the atmosphere (primarily ammonium nitrate and ammonium sulfate) and also reduce the formation of ozone. Reductions in directly emitted PM₁₀ reduce particles such as dust, soot, and aerosols. Rule 9510 is also a control measure in the 2016 Plan for the 2008 8-Hour Ozone Standard. Developers of projects subject to Rule 9510 must reduce emissions occurring during construction and operational phases through on-site measures, or pay off-site mitigation fees. The proposed project would not be subject to Rule 9510 based on the project's size (12 dwelling units) unless the project is subject due to being a portion of a larger project.

Regulation VIII—Fugitive PM₁₀ Prohibitions is a control measure that is one main strategies from the 2006 PM₁₀ for reducing the PM₁₀ emissions that are part of fugitive dust. Residential projects over 10 acres and non-residential projects over 5 acres are required to file a Dust Control Plan (DCP) containing dust control practices sufficient to comply with Regulation VIII. In addition, projects that would move, deposit, or relation more than 2,500 cubic yards per day of bilk material on at least three days of the project would also be required to file a DCP. Projects not requiring a DCP will be required to submit a Construction Notification to the SJVAPCD.

The project would comply with all applicable SJVAPCD rules and regulations. Therefore, the proposed project would not conflict with or obstruct implementation of the applicable air quality attainment plan under this criterion.

Conclusion

As described above, the proposed project's construction and operational regional emissions would not exceed SJVAPCD's regional criteria pollutant emissions quantitative thresholds. Furthermore, the proposed project would comply with all applicable SJVAPCD rules and regulations. Accordingly, the proposed project would not conflict with or obstruct implementation of the applicable air quality plans, and, therefore, this impact would be less than significant.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation measures are necessary.

Impact AIR-2 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?

Impact Analysis

To result in a less than significant impact, the following criteria must be true:

1. Regional analysis: emissions of nonattainment pollutants must be below the SJVAPCD's regional significance thresholds. This is an approach recommended by the District in its GAMAQI.
2. Summary of projections: the project must be consistent with current air quality attainment plans including control measures and regulations. This is an approach consistent with Section 15130(b) of the CEQA Guidelines.
3. Cumulative health impacts: the project must result in less than significant cumulative health effects from the nonattainment pollutants. This approach correlates the significance of the regional analysis with health effects, consistent with the court decision, *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1219-20.

Regional Emissions

Air pollutant emissions have both regional and localized effects. This analysis assesses the regional effects of the project's criteria pollutant emissions in comparison to SJVAPCD thresholds of significance for short-term construction activities and long-term operation of the project. Localized emissions from project construction and operation are assessed under Impact AIR-3—Sensitive Receptors using concentration-based thresholds that determine if the project would result in a localized exceedance of any ambient air quality standards or would make a cumulatively considerable contribution to an existing exceedance.

The primary pollutants of concern during project construction and operation are ROG, NO_x, PM₁₀, and PM_{2.5}. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for CO, NO_x, ROG, SO_x, PM₁₀, and PM_{2.5}.

Ozone is a secondary pollutant that can be formed miles from the source of emissions, through reactions of ROG and NO_x emissions in the presence of sunlight. Therefore, ROG and NO_x are termed ozone precursors. The Air Basin often exceeds the state and national ozone standards. Therefore, if the project emits a substantial quantity of ozone precursors, the project may contribute to an exceedance of the ozone standard. The Air Basin also exceeds air quality standards for PM₁₀, and PM_{2.5}; therefore, substantial project emissions may contribute to an exceedance for these pollutants. The SJVAPCD's annual emission significance thresholds used

for the project define the substantial contribution for both operational and construction emissions as follows:

- 100 tons per year CO
- 10 tons per year NO_x
- 10 tons per year ROG
- 27 tons per year SO_x
- 15 tons per year PM₁₀
- 15 tons per year PM_{2.5}

The project does not contain sources that would produce substantial quantities of SO₂ emissions during construction and operation. Modeling conducted for the project show that SO₂ emissions are well below the SJVAPCD GAMAQI thresholds, as shown in the modeling results contained in Attachment A. No further discussion of SO₂ is required.

Construction Emissions

Construction activities associated with development of the proposed project would include site preparation, grading, building construction, paving, and architectural coatings. Emissions from construction-related activities are generally short-term in duration but may still cause adverse air quality impacts. During construction, fugitive dust would be generated from earth-moving activities. Exhaust emissions would also be generated from off-road construction equipment and construction-related vehicle trips. Emissions associated with construction of the proposed project are discussed below.

Table 9 provides the construction emissions estimate for the proposed project. Please refer to the Modeling Parameters and Assumptions section of this technical memorandum for details regarding assumptions used to estimate construction emissions. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required pursuant to CEQA guidelines.

Table 9: Construction Annual Emissions (Unmitigated)

Parameter	Air Pollutants				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
2023					
Demolition	0.015	0.151	0.139	0.014	0.008
Site Preparation	0.001	0.013	0.007	0.003	0.002
Grading	0.003	0.045	0.021	0.010	0.005
Paving	0.004	0.033	0.046	0.002	0.002
Building Construction	0.131	0.996	1.080	0.051	0.044
<i>2023 Subtotal</i>	<i>0.154</i>	<i>1.238</i>	<i>1.293</i>	<i>0.081</i>	<i>0.060</i>
2024					
Building Construction	0.023	0.180	0.205	0.009	0.007
Architectural Coating	0.059	0.006	0.010	0.000	0.000
<i>2024 Subtotal</i>	<i>0.082</i>	<i>0.186</i>	<i>0.215</i>	<i>0.009</i>	<i>0.008</i>
Total Emissions from All Construction Activities (2023-2024)					
Total Project Construction Emissions (tons/year)	0.24	1.42	1.51	0.09	0.07
Significance Threshold (tons/year)	10	10	100	15	15
Exceeds Significance Threshold?	No	No	No	No	No
Notes: Calculations (including totals) use unrounded results; totals in the summary table may not appear to sum exactly due to rounding. PM ₁₀ and PM _{2.5} emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive PM ₁₀ Prohibitions. NO _x = oxides of nitrogen PM ₁₀ = particulate matter 10 microns in diameter PM _{2.5} = particulate matter 2.5 microns in diameter ROG = reactive organic gases Source: CalEEMod Output (Attachment A).					

As shown in Table 9, estimated emissions from construction of project are below the SJVAPCD significance thresholds. Therefore, the regional construction emissions would be less than significant on a project basis.

Operational Emissions

As previously discussed, the pollutants of concern include ROG, NO_x, CO, PM₁₀, and PM_{2.5}. Emissions were assessed for full buildout operations in the 2023 operational year. The 2023 operational year was chosen as it would be the best representation of the project as it is year earliest year the project could become operational. Emissions were estimated assuming full

buildout in the earliest year of operations, thus generating the full amount of expected operational activity. The SJVAPCD Criteria Air Pollutant Significance thresholds were used to determine impacts. Operational annual emissions are shown in Table 10 below.

Table 10: Operational Annual Emissions for Full Buildout (Unmitigated)

Emissions Source	Tons per Year					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area	0.077	0.006	0.091	< 0.001	0.001	0.001
Energy Consumption	0.001	0.008	0.003	< 0.001	0.001	0.001
Mobile (On-road Vehicles)	0.029	0.053	0.336	0.001	0.096	0.026
Total Project Annual Emissions	0.11	0.07	0.43	< 0.01	0.10	0.03
Thresholds of Significance	10	10	100	27	15	15
Exceeds Significance Threshold?	No	No	No	No	No	No
Notes: Totals in the summary table may not appear to sum exactly due to rounding. NO _x = oxides of nitrogen PM _{2.5} = particulate matter 2.5 microns or less in diameter PM ₁₀ = particulate matter 10 microns or less in diameter ROG = reactive organic gases Source: CalEEMod Output (Attachment A).						

As shown in Table 10, the proposed project would not result in net operational-related air pollutants or precursors that would exceed the applicable thresholds of significance. Therefore, project operations would not be considered to have the potential to generate a significant quantity of air pollutants; long-term operational impacts associated with the project’s criteria pollutant emissions would be less than significant.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation measures are necessary.

Impact AIR-3 Expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis

Emissions occurring at or near the project have the potential to create a localized impact that could expose sensitive receptors to substantial pollutant concentrations. Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution than others due to their exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. The SJVAPCD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools.

The closest existing sensitive receptors (to the project site) are residences located directly adjacent to the project site. Any residential uses currently occupying the project site would not be exposed to emissions from the proposed project, as the existing buildings occupying the project site would be demolished to make way for the proposed development.

Localized Impacts

Emissions occurring at or near the project have the potential to create a localized impact also referred to as an air pollutant hotspot. Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level (SIL) that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard. The pollutants of concern for localized impact in the SJVAB are NO₂, SO_x, and CO.

The SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard.

Construction: Localized Concentrations of PM₁₀, PM_{2.5}, CO, and NO_x

Local construction impacts would be short-term in nature lasting only during the duration of construction (anticipated to last 4-6 months for the proposed project). As shown in Table 11 below, on-site construction emissions would be less than 100 pounds per day for each of the criteria pollutants. To present a conservative estimate, on-site emissions for on-road construction vehicles were included in the localized analysis. Based on the SJVAPCD's guidance, the construction emissions would not cause an ambient air quality standard violation.

Table 11: Localized Concentrations of PM₁₀, PM_{2.5}, CO, and NO_x for Construction

Source	On-site Emissions (pounds per day)				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Entire Project Construction Duration (2023-2024)					
Maximum Daily Construction (2023)	3.55	27.04	29.22	3.85	2.11
Maximum Daily Construction (2024)	11.79	25.55	29.00	1.05	1.00
Maximum Daily On-site Emissions	11.79	27.04	29.22	3.85	2.11
Significance Thresholds	—	100	100	100	100
Exceed Significance Thresholds?	—	No	No	No	No
Note: Overlap of construction activities is based on the construction schedule shown in Table 1 and Attachment A. Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A). Maximum daily emissions of NO _x , CO, PM ₁₀ , and PM _{2.5} were highest in the Winter scenario, while maximum daily emissions of ROG were highest in the Summer scenario. Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF . Accessed May 20, 2022.					

Operation: Localized Concentrations of PM₁₀, PM_{2.5}, CO, and NO_x

Localized impacts could occur in areas with a single large source of emissions, such as a power plant, or at locations with multiple sources concentrated in a small area, such as a distribution center. Although residential developments are typically less likely to cause a localized air quality impact compared to land uses with large sources of emissions or multiple concentrated sources of emissions, the proposed project would emit air pollutants that have the potential to create a localized impact. The maximum daily operational emissions would occur at project buildout, which was assumed to occur in 2023 to provide a conservative estimate of emissions.

Operational emissions include those generated on-site by area sources such as consumer products, and landscape maintenance, energy use from natural gas combustion, and motor vehicles operation at the project site. To assess localized air impacts, motor vehicle emissions were estimated for on-site operations using trip lengths for on-site travel. The trip lengths used to analyze on-site emissions was selected by measuring possible on-site paths using Google Earth; the length for the longest measured route for the appropriate vehicle type was selected to present a conservative estimate of on-site emissions. To account for localized emissions around the roadways adjacent to the project site, the trip length also included an additional 0.25 mile to account for localized off-site emissions.

As shown in Table 12 below, operational modeling of on-site emissions for the project indicate that the project would not exceed 100 pounds per day for each of the criteria pollutants. Therefore, based on the SJVAPCD’s guidance, the operational emissions would not cause an ambient air quality standard violation. As such, impacts would be less than significant.

Table 12: Localized Concentrations of PM₁₀, PM_{2.5}, CO, and NO_x for Operations

Source	On-site Emissions (pounds per day)				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Area	0.45	0.12	1.03	0.01	0.01
Energy	0.00	0.04	0.02	0.00	0.00
Mobile (On-road Vehicles)	0.19	0.11	0.72	0.03	0.01
Project Total	0.64	0.27	1.77	0.05	0.03
Significance Thresholds	—	100	100	100	100
Exceed Significance Thresholds?	—	No	No	No	No
Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A). Maximum daily emissions of ROG were highest in the Summer scenario, while maximum daily emissions of NO _x , CO, PM ₁₀ , and PM _{2.5} were highest in the Winter scenario. Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF . Accessed May 20, 2022.					

Toxic Air Contaminants

Construction

Project construction would involve the use of diesel-fueled vehicles and equipment that emit DPM, which is considered a TAC. The SJVAPCD’s current threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed individual of 20 in a million (formerly 10 in a million).

A project-level assessment was conducted of the potential community health risk and health hazard impacts on surrounding sensitive receptors resulting from the emissions of TACs during construction. A summary of the assessment is provided below, while the detailed assessment is provided in Attachment B.

Construction activity using diesel-powered equipment emits DPM, a known carcinogen. Diesel particulate matter includes exhaust PM₁₀ and exhaust PM_{2.5}. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk.⁷ Health risks from TACs are a function of both concentration and duration of exposure. Construction diesel emissions are temporary, affecting an area for a period of weeks or months. Additionally, construction-related sources are mobile and transient in nature.

⁷ California Air Resources Board (CARB). 2015. The Report on Diesel Exhaust. Website: <https://ww2.arb.ca.gov/sites/default/files/classic/toxics/dieseltac/de-fnds.htm>. Accessed October 8, 2021.

The health risk assessment evaluated DPM (represented as exhaust PM₁₀) emissions generated during construction of the proposed project and the related health risk impacts for sensitive receptors located within 1,000 feet of the project boundary.

The project site is located within 1,000 feet of existing sensitive receptors that could be exposed to diesel emission exhaust during the construction period. To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including DPM), a dispersion model was used to translate an emission rate from the source location to concentrations at the receptor locations of interest (i.e., receptors at nearby residences). A maximally exposed receptor (MER) was determined for construction of the project for off-site receptors and future residential receptors through the use of the dispersion modeling. Risks from all phases of construction were calculated for the MER location identified in each scenario.

Table 13 presents a summary of the proposed project’s construction cancer risk and chronic non-cancer hazard impacts at the MER from project construction prior to the application of any equipment mitigation. It should be noted that the assumptions that were used to estimate the potential risk of harm to public health are based on methods consistent with published OEHHA guidance and err on the side of health protection to avoid underestimation of risk.

Table 13: Unmitigated Health Risks from Project Construction to Off-Site Receptors

Scenario	Health Impact Metric	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index ²
Risks and Hazards from Project Construction to the Off-site MER¹			
Total project construction	Risks and Hazards at the MER: Infants	19.76	0.113
	Risks and Hazards at the MER: Child	7.13	0.113
	Risks and Hazards at the MER: Adult	0.68	0.113
Highest From Any Scenario			
Total project construction	Risks and Hazards at the MER (Infant Scenario)	19.76	0.113
Applicable Threshold of Significance		20	1
Exceeds Individual Source Threshold?		No	No
Notes: MER = Maximally Exposed Receptor ¹ UTM for Off-site MER: 260169.13, 4081070.1 ² Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as PM ₁₀ exhaust) by the REL of 5 µg/m ³ . Source: Attachment B.			

As shown in Table 13, estimated health risks from elevated DPM concentrations during construction of the proposed project would not exceed the cancer risk significance threshold or non-cancer hazard index significance threshold at the MER. Therefore, the proposed project would not result in a significant impact on nearby sensitive receptors from TACs during construction.

Operations

The proposed project would develop a multifamily residential apartment complex consisting of 12 dwelling units and would not generate substantial on-site TAC emissions during operation. Residential uses and on-site operational activities are not typically associated with the generation of TAC emissions; however a screening analysis was performed to assess potential impacts.

Operational DPM

The proposed project would primarily generate trips associated with residents and visitors traveling to and from the project site. The daily travel trips to and from the project site would primarily be generated by passenger vehicles. Because nearly all passenger vehicles are gasoline-combusted, the proposed project would not generate significant amount of DPM emissions during operation. Therefore, the proposed project would not result in significant health impacts to nearby sensitive receptors from emissions project-generated trips during operation.

Unlike warehouses or distribution centers, the daily vehicle trips generated by the proposed 12-unit residential project would be primarily generated by passenger vehicles. Passenger vehicles typically use gasoline engines rather than the diesel engines that are found in heavy-duty trucks. Gasoline-powered vehicles do emit TACs in the form of toxic organic gases, some of which are carcinogenic. Compared to the combustion of diesel, the combustion of gasoline has relatively low emissions of TACs. Thus, residential projects produce limited amounts of TAC emissions during operation.

Diesel truck trips could be generated by the project, such as in the form of delivery vehicles, trash pickups, tree trimming services, owner-operator tractors. For the purpose of estimating emissions for project buildout operations, the analysis used the SJVAPCD’s approved residential fleet mix for the 2023 year. This fleet mix assumes a lower amount of heavy-heavy-duty truck trips compared to the default value for Fresno County. Operational DPM emissions from diesel trucks were estimated using EMFAC 2017 emission factors and estimated truck travel and idling at the project site. The emissions were entered into the SJVAPCD Prioritization Screening Tool to determine the risk scores, with complete calculations and assumptions included as part of Attachment C. The results of the screening analysis are provided in Table 14.

Table 14: Prioritization Tool Health Risk Screening Results (Operational DPM Emissions)

Impact Source	Cancer Risk Score	Chronic Risk Score	Acute Risk Score
On-site Diesel Trucks during Project Operations	0.085	0.004	0.000
Total Risk from Project Operations	0.085	0.004	0.000
Screening Risk Score Threshold	10	1	1

Screening Thresholds Exceeded?	No	No	No
Source: Attachment C – Operational Health Risk Screening and Additional Supporting Information			

As shown in Table 14, the project would not exceed the applicable screening levels. The primary source of the emissions responsible for chronic risk are from diesel trucks. DPM does not have an acute risk factor. Since the project does not exceed the applicable SJVAPCD screening risk thresholds for cancer risk, acute risk, or chronic risk, the impact related to the project’s potential to expose sensitive receptors to substantial pollutant concentrations from project operations would be less than significant.

Operations—The Project’s Potential to Locate Sensitive Receptor Near Existing Sources of TACs

The proposed project would develop approximately 1.04 acres with multi-family residential uses. As the proposed project includes the development of residential uses, the project would locate new sensitive receptors that could be subject to existing sources of TACs at the project site. However, the California Supreme Court concluded in *California Building Industry Association v. BAAQMD* that agencies subject to CEQA are not required to analyze the impact of existing environmental conditions on a project’s future users or residents. This impact will not be further addressed in this document.

Valley Fever

Valley fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, *Coccidioides immitis* (*C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities.

The San Joaquin Valley is considered an endemic area for Valley fever. The San Joaquin Valley is considered an endemic area for Valley fever. During 2000–2018, a total of 65,438 coccidioidomycosis cases were reported in California; median statewide annual incidence was 7.9 per 100,000 population and varied by region from 1.1 in Northern and Eastern California to 90.6 in the Southern San Joaquin Valley, with the largest increase (15-fold) occurring in the Northern San Joaquin Valley. Incidence has been consistently high in six counties in the Southern San Joaquin Valley (Fresno, Kern, Kings, Madera, Tulare, and Merced counties) and Central Coast (San Luis Obispo County) regions.⁸ California experienced 7,392 new probable or confirmed cases of Valley fever in 2020. A total of 448 confirmed or probable Valley fever cases were reported in Fresno County in 2020.⁹

⁸ Centers for Disease Control and Prevention (CDC). 2020. Regional Analysis of Coccidioidomycosis Incidence—California, 2000–2018. Website: https://www.cdc.gov/mmwr/volumes/69/wr/mm6948a4.htm?s_cid=mm6948a4_e. Accessed May 20, 2022.

⁹ California Department of Public Health (CDPH). 2021. Coccidioidomycosis in California Provisional Monthly Report January 2021. Website: <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciinCAProvisionalMonthlyReport.pdf>. Accessed May 20, 2022.

The distribution of *C. immitis* within endemic areas is not uniform and growth sites are commonly small (a few tens of meters) and widely scattered. Known sites appear to have some ecological factors in common suggesting that certain physical, chemical, and biological conditions are more favorable for *C. immitis* growth. Avoidance, when possible, of sites favorable for the occurrence of *C. immitis* is a prudent risk management strategy. Listed below are ecologic factors and sites favorable for the occurrence of *C. immitis*:

- 1) Rodent burrows (often a favorable site for *C. immitis*, perhaps because temperatures are more moderate and humidity higher than on the ground surface)
- 2) Old (prehistoric) Indian campsites near fire pits
- 3) Areas with sparse vegetation and alkaline soils
- 4) Areas with high salinity soils
- 5) Areas adjacent to arroyos (where residual moisture may be available)
- 6) Packrat middens
- 7) Upper 30 centimeters of the soil horizon, especially in virgin undisturbed soils
- 8) Sandy, well-aerated soil with relatively high water-holding capacities

Sites within endemic areas less favorable for the occurrence of *C. immitis* include:

- 1) Cultivated fields
- 2) Heavily vegetated areas (e.g., grassy lawns)
- 3) Higher elevations (above 7,000 feet)
- 4) Areas where commercial fertilizers (e.g., ammonium sulfate) have been applied
- 5) Areas that are continually wet
- 6) Paved (asphalt or concrete) or oiled areas
- 7) Soils containing abundant microorganisms
- 8) Heavily urbanized areas where there is little undisturbed virgin soil.¹⁰

The project is situated on a site previously disturbed that does not provide a suitable habitat for spores. Specifically, the project site is currently occupied with an existing residence and associated paving, landscaping, and outbuildings. Therefore, implementation of the proposed project would have a low probability of the site having *C. immitis* growth sites and exposure to the spores from disturbed soil.

Although conditions are not favorable, construction activities could generate fugitive dust that contain *C. immitis* spores. The project will minimize the generation of fugitive dust during

¹⁰ United States Geological Survey (USGS). 2000. Operational Guidelines (Version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever), 2000, Open-File Report 2000-348. Website: <https://pubs.usgs.gov/of/2000/0348/pdf/of00-348.pdf>. Accessed May 20, 2022.

construction activities by complying with SJVAPCD’s Regulation VIII. Therefore, this regulation, combined with the relatively low probability of the presence of *C. immitis* spores would reduce Valley fever impacts to less than significant.

During operations, dust emissions are anticipated to be relatively small because most of the project area where operational activities would occur would be occupied by the proposed apartment complex and pavement associated with the proposed residential development. This condition would lessen the possibility of the project from providing habitat suitable for *C. immitis* spores and for generating fugitive dust that may contribute to Valley fever exposure. Impacts would be less than significant.

Naturally Occurring Asbestos

Review of the map of areas where naturally occurring asbestos in California are likely to occur found no such areas in the project area. Therefore, development of the project is not anticipated to expose receptors to naturally occurring asbestos.¹¹ Impacts would be less than significant.

Impact Analysis Summary

In summary, the project would not exceed SJVAPCD localized emission daily screening levels for any criteria pollutant. The project is not a significant source of TAC emissions during short-term construction or long-term operations. The project is not in an area with suitable habitat for Valley fever spores and is not in area known to have naturally occurring asbestos. Therefore, the project would not result in significant impacts to sensitive receptors after incorporation of mitigation.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation measures are necessary.

¹¹ U.S. Geological Survey. 2011. Van Gosen, B.S., and Clinkenbeard, J.P. California Geological Survey Map Sheet 59. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California. Open-File Report 2011-1188 Website: <https://pubs.usgs.gov/of/2011/1188/>. Accessed May 20, 2022.

Impact AIR-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis

Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. According to the *CBIA v. BAAQMD* ruling, impacts of existing sources of odors on the project are not subject to CEQA review. Therefore, the analysis to determine if the project would locate new sensitive receptors near an existing source of odor is not used to determine significance for this impact.

Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

Although the project is less than one mile from the nearest sensitive receptor, the project is not expected to be a significant source of odors. The screening levels for these land use types are shown in Table 15.

Table 15: Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Wastewater Treatment Facilities	2 miles

Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: <https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF>. Accessed May 20, 2022.

Project Construction and Project Operation

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local

governments and regulatory agencies. Project operations would not be anticipated to produce odorous emissions, as the project would not be considered an odor generator based on the land uses shown in Table 15. Construction activities associated with the proposed project could result in short-term odorous emissions from diesel exhaust associated with construction equipment. However, these emissions would be intermittent and would dissipate rapidly from the source. In addition, this diesel-powered equipment would only be present onsite temporarily during construction activities. The temporary and intermittent nature of construction activities would decrease the likelihood of the odors concentrating in a single area or lingering for any notable period of time. As such, these odors would likely not be noticeable for extended periods of time beyond the project's site boundaries. Therefore, construction would not create objectionable odors affecting a substantial number of people from use of diesel-powered equipment. As there would not be conditions under which the project would have the potential to expose a substantial number of people to odors emitted from construction or operations of the project, and the impact would be less than significant.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation measures are necessary.

GREENHOUSE GASES

Environmental Setting

Greenhouse Gases

Greenhouse gases and climate change are cumulative global issues. The CARB and EPA regulate GHG emissions within the State of California and the U.S., respectively. Meanwhile, the CARB has the primary regulatory responsibility within California for GHG emissions. Local agencies can also adopt policies for GHG emission reduction.

Many chemical compounds in the Earth's atmosphere act as GHGs as they absorb and emit radiation within the thermal infrared range. When radiation from the sun reaches the Earth's surface, some of it is reflected into the atmosphere as infrared radiation (heat). Greenhouse gases absorb this infrared radiation and trap the heat in the atmosphere. Over time, the amount of energy from the sun to the Earth's surface should be approximately equal to the amount of energy radiated back into space, leaving the temperature of the earth's surface roughly constant. Many gases exhibit these "greenhouse" properties. Some of them occur in nature (water vapor, carbon dioxide [CO₂], methane [CH₄], and nitrous oxide [N₂O]), while others are exclusively human made (like gases used for aerosols).

The principal climate change gases resulting from human activity that enter and accumulate in the atmosphere are listed below.

Carbon Dioxide

Carbon dioxide enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and chemical reactions (e.g., the manufacture of cement). Carbon dioxide is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.

Methane

Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and agricultural practices and the decay of organic waste in municipal solid waste landfills.

Nitrous Oxide

Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.

Fluorinated Gases

Hydrofluorocarbons, perfluorinated chemicals, and sulfur hexafluoride are synthetic, powerful climate-change gases that are emitted from a variety of industrial processes. Fluorinated gases are often used as substitutes for ozone-depleting substances (i.e., chlorofluorocarbons, hydrochlorofluorocarbons, and halons). These gases are typically emitted in smaller quantities, but because they are potent climate-change gases, they are sometimes referred to as high global warming potential gases.

Emissions Inventories and Trends

According to the CARB's recent GHG inventory for the State, released 2021, California produced 418.2 million metric tons of carbon dioxide equivalent (MMT CO_2e) in 2019. The major source of GHGs in California is transportation, contributing approximately 39.7 percent of the state's total GHG emissions in 2019.¹² This puts total emissions at 12.8 MMT CO_2e below the 2020 target of 431 million metric tons. California statewide GHG emissions dropped below the 2020 GHG limit in 2016 and have remained below the 2020 GHG limit since then.

Potential Environmental Impacts

For California, climate change in the form of warming has the potential to incur and exacerbate environmental impacts, including but not limited to changes to precipitation and runoff patterns, increased agricultural demand for water, inundation of low-lying coastal areas by sea-level rise, and increased incidents and severity of wildfire events.¹³ Cooling of the climate may have the opposite effects. Although certain environmental effects are widely accepted to be a potential hazard to certain locations, such as rising sea level for low-lying coastal areas, it is currently infeasible to predict all environmental effects of climate change on any one location.

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial and manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact.

Regulatory Requirements

California has adopted statewide legislation addressing various aspects of climate change and GHG emissions mitigation. Much of this legislation establishes a broad framework for the state's long-term GHG reduction and climate change adaptation program. The governor has also issued several executive orders (EOs) related to the state's evolving climate change policy. Of particular importance are AB 32 and SB 32, which outline the state's GHG reduction goals of achieving 1990 emissions levels by 2020 and a 40 percent reduction below 1990 emissions levels by 2030.

In the absence of federal regulations, control of GHGs is generally regulated at the state level and is typically approached by setting emission reduction targets for existing sources of GHGs, setting policies to promote renewable energy and increase energy efficiency, and developing statewide action plans.

¹² California Air Resources Board (CARB). 2021. California Greenhouse Gas Emissions for 2000 to 2019. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf. Accessed. March 1, 2022.

¹³ Moser et al. 2009. Moser, Susie, Guido Franco, Sarah Pittiglio, Wendy Chou, Dan Cayan. 2009. The Future Is Now: An Update on Climate Change Science Impacts and Response Options for California. Website: http://www.susannemoser.com/documents/CEC-500-2008-071_Moseret_al_FutureisNow.pdf. Accessed March 1, 2022.

CEQA Guidelines

The CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial, adverse change in the environment.” To determine if a project would have a significant impact on GHGs, the type, level, and impact of emissions generated by the project must be evaluated.

The following GHG significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97. A significant impact would occur if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

Thresholds of Significance

San Joaquin Valley Air Pollution Control District

The SJVAPCD’s Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA presents a tiered approach to analyzing project significance with respect to GHG emissions. Project GHG emissions are considered less than significant if they can meet any of the following conditions, evaluated in the order presented:

- Project is exempt from CEQA requirements;
- Project complies with an approved GHG emission reduction plan or GHG mitigation program;
- Project implements Best Performance Standards (BPS); or
- Project demonstrates that specific GHG emissions would be reduced or mitigated by at least 29 percent compared to Business-as-Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period.

Project-level Thresholds

Section 15064.4(b) of the CEQA Guidelines’ amendments for GHG emissions states that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

- Consideration #1: The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Consideration #2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- Consideration #3: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such regulations or requirements must be adopted by

the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an Environmental Impact Report (EIR) must be prepared for the project.

Newhall Ranch

In the California Supreme Court decision in the *Center for Biological Diversity et al. vs. California Department of Fish and Wildlife, the Newhall Land and Farming Company* (62 Cal.4th 204 [2015], and known as the Newhall Ranch decision), the Supreme Court was concerned that new development may need to reduce GHG emissions more than existing development to demonstrate it is meeting its fair share of reductions. New development does do more than its fair share through compliance with enhanced regulations, particularly with respect to motor vehicles, energy efficiency, and electricity generation. If no additional reductions are required from an individual project beyond that achieved by regulations, then the amount needed to reach the 2020 target is the amount of GHG emissions a project must reduce to comply with AB 32 Statewide goals.

The State's regulatory program implementing the 2008 Scoping Plan is now fully mature. All regulations envisioned in the Scoping Plan have been adopted by the responsible agencies and the effectiveness of those regulations have been estimated by the agencies during the adoption process and then are tracked to verify their effectiveness after implementation. Governor Brown, in the introduction to Executive Order B-30-15, states "California is on track to meet or exceed the current target of reducing greenhouse gas emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32)." The progress was evident in emission inventories prepared by CARB, which showed that the State inventory dropped below 1990 levels for the first time in 2016.¹⁴ The 2017 Scoping Plan Update includes projections indicating that the State will meet or exceed the 2020 target with adopted regulations.¹⁵ The State now projects that it will meet the 2020 target and achieve continued progress towards meeting the 2017 Scoping Plan target for 2030.

GHG Threshold Applied in the Analysis

The City of Clovis has not adopted a GHG reduction plan. In addition, the City has not completed the GHG inventory, benchmarking, or goal-setting process required to identify a reduction target and take advantage of the streamlining provisions contained in the CEQA Guidelines amendments adopted for SB 97 and clarifications provided in the CEQA Guidelines amendments adopted on December 28, 2018. In the absence of an adopted numeric GHG emissions threshold consistent with the State's 2030 target, the project's GHG emissions impact determination is based on the extent to which the project complies with regulations or

¹⁴ California Air Resources Board (CARB). 2018. Climate Pollutants Fall Below 1990 Levels for the First Time. Website: <https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levelsfirst-time>. Accessed March 1, 2022.

¹⁵ California Air Resources Board (CARB). 2017. The 2017 Climate Change Scoping Plan Update, the Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. January 17, 2017. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed March 1, 2022.

requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. The project’s GHG emissions are provided for informational purposes only.

Environmental Impact Analysis

This section discusses potential impacts related to GHGs associated with the proposed project and provides mitigation measures where necessary.

Impact GHG-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact Analysis

The proposed project may contribute to climate change impacts through its contribution of GHGs. The proposed project would generate a variety of GHGs during construction and operations, including several defined by AB 32, such as CO₂, CH₄, and N₂O from the exhaust of equipment during construction and on-road vehicle trips during construction and operations.

In the absence of an adopted numeric GHG emissions threshold consistent with the State’s 2030 target, the project’s GHG emissions impact determination is based on the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. The project’s GHG emissions are provided for informational purposes only.

Quantification of Greenhouse Gas Emissions for Informational Purposes

Construction Emissions

Construction emissions would be generated from the exhaust of construction equipment, material delivery trips, haul truck trips, and worker commuter trips. Detailed construction assumptions are provided in Modeling Parameters and Assumptions section of this technical memorandum. Construction-generated GHGs were quantified and are disclosed in Attachment A. MTCO₂e emissions during construction of the project are summarized below in Table 16.

Table 16: Construction Greenhouse Gas Emissions

Project Construction (2023-2024)	MTCO₂e
Demolition	26
Site Preparation	2
Grading	11
Paving	7
Building Construction	194
Architectural Coating	1
Total Construction MTCO₂e	241
Emissions Amortized Over 30 Years¹	8

Notes:
 MTCO₂e = metric tons of carbon dioxide equivalent

Project Construction (2023-2024)	MTCO ₂ e
¹ Construction GHG emissions are amortized over the 30-year lifetime of the project. Source: CalEEMod Output (Attachment A).	

During the construction of the proposed project, approximately 241 MTCO₂e would be emitted. Neither the City of Clovis nor the SJVAPCD have an adopted threshold of significance for construction related GHG emissions. Because impacts from construction activities occur over a relatively short-term period (4-6 months for the proposed project), they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, GHG emission reduction measures for construction equipment are relatively limited. Therefore, a standard practice is to amortize construction emissions over the anticipated lifetime of a project so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies. However, emissions were quantified for informational purposes only. The total emissions generated during construction were amortized based on the life of the development (30 years for residential development) and added to the operational emissions to determine the total emissions from the project, as shown below.

Operational Emissions

Operational or long-term emissions occur over the life of the project. Sources of emissions may include motor vehicles and trucks, energy usage, water usage, waste generation, and area sources, such as landscaping activities and residential woodburning. Operational GHG emissions associated with the proposed project were estimated using CalEEMod 2020.4.0.

Business-as-Usual Operational Emissions

Operational emissions under the business-as-usual scenario were modeled using CalEEMod 2020.4.0. Modeling assumptions for the year 2005 were used to represent 2020 business as usual conditions (without the benefit of regulations adopted to reduce GHG emissions). The CARB and SJVAPCD guidance recommend using regulatory conditions in 2002-2004 in the baseline scenario to represent conditions as if regulations had not been adopted to allow the effect of projected growth on achieving reduction targets to be clearly defined. CalEEMod defaults were used for project energy usage, water usage, waste generation, and area sources (architectural coating, consumer products, and landscaping). The vehicle fleet mixes were revised to reflect the project fleet mix identified for the buildout year.

Buildout Year Operational Emissions

Operational emissions for the year 2023 were modeled using CalEEMod. CalEEMod assumes compliance with some, but not all, applicable rules and regulations regarding energy efficiency, vehicle fuel efficiency, renewable energy usage, and other GHG reduction policies, as described in the CalEEMod User’s Guide.¹⁶

The reductions obtained from each regulation and the source of the reduction amount used in the analysis are described below.

¹⁶ California Air Pollution Control Officers Association (CAPCOA). 2021. California Emission Estimator Model (CalEEMod) Version 2020.4.0 User’s Guide. Website: https://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01_user-39-s-guide2020-4-0.pdf?sfvrsn=6. Accessed October 20, 2021.

The following regulations are incorporated into the CalEEMod emission factors:

- Pavley I and Pavley II (LEV III) motor vehicle emission standards
- CARB Medium and Heavy-Duty Vehicle Regulation
- 2005, 2008, 2013, 2016, and 2019 Title 24 Energy Efficiency Standards

The following regulations have not been incorporated into the CalEEMod emission factors and require alternative methods to account for emission reductions provided by the regulations:

- Renewables Portfolio Standard (RPS) requirements for year 2030
- Green Building Code Standards (indoor water use)
- California Model Water Efficient Landscape Ordinance (outdoor water)
- CalRecycle 75 Percent Initiative (solid waste)

Title 24 reductions for 2013 and 2016 updates were added to CalEEMod 2016.3.2 and were carried into CalEEMod 2020.4.0. Title 24 reductions for 2019 were added to CalEEMod 2020.4.0.

RPS is not accounted for in CalEEMod 2020.4.0. Reductions from RPS for operational years 2030 and beyond are addressed by revising the electricity emission intensity factor in CalEEMod to account for the utility RPS rate forecast for 2030. The utilities will be required by SB 100 to increase the use of renewable energy sources to 60 percent by 2030. The latest power content label for PG&E was used to estimate a revised CO₂ intensity factor for use in the modeling.

Reductions in emissions from solid waste are based on the County achieving the CalRecycle 75 Percent Initiative by 2020 compared with a 50 percent baseline for 2005.¹⁷ Reductions are taken using the CalEEMod mitigation component.

Energy savings from water conservation resulting from the Green Building Code Standards for indoor water use and California Model Water Efficient Landscape Ordinance for outdoor water use are not included in CalEEMod. The Water Conservation Act of 2009 mandates a 20 percent reduction in urban water use that is implemented with these regulations.¹⁸ Benefits of the water conservation regulations are applied in the CalEEMod mitigation component.

GHG reductions from some design features and compliance with regulations that are not otherwise accounted for can be quantified in CalEEMod. Note that CalEEMod nominally treats these design elements and conditions as “mitigation measures,” despite their inclusion in the

¹⁷ California Department of Resources Recycling and Recovery (CalRecycle). 2016b. California's 75 Percent Initiative: Defining the Future. Website: <https://www.calrecycle.ca.gov/75percent#:~:text=The%20Legislature%20and%20Governor%20Brown,decreasing%20California's%20reliance%20on%20landfills>. Accessed November 2, 2021.

¹⁸ California Department of Water Resources (CDWR). 2013. California Water Plan Update 2013, Chapter 3 Urban Water Use Efficiency.

project description. Therefore, reported operational emissions are considered to represent unmitigated project conditions.

Operational GHG emissions by source are shown in Table 17. Full buildout of the project is anticipated to occur as early as 2023.

Table 17: Unmitigated Project Operational GHG Emissions (Buildout Year Scenario)

Emission Source	Emissions (MT CO ₂ e per year)	
	2023 Business as Usual Total Emissions (MT CO ₂ e per year)	Buildout Year Total Emissions with Regulations and Design Features (MT CO ₂ e per year)
Area	5	5
Energy	36	16
Mobile (On-road Vehicles)	121	87
Waste	3	2
Water	3	1
Amortized Construction Emissions	8	8
Total	176	119
Reduction from BAU		57
Percent Reduction		32.4%
Significance Threshold		29%
Exceeds Significance Threshold? (Shown For Informational Purposes)		No
MT CO ₂ e = metric tons of carbon dioxide equivalent. Totals may not appear to sum exactly due to rounding. Source of Significance Threshold: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Final Draft Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF . Accessed May 20, 2022. Source of Business-as-Usual Emissions: CalEEMod output for the 2023 BAU Scenario (see Attachment A). Source of Buildout Year Emissions: CalEEMod output for the year 2023 (Attachment A).		

As shown in Table 17, the proposed project’s total GHG annual emissions would not exceed applicable thresholds of significance in either scenario analyzed.

Emissions were assessed for full buildout operations in years 2024 and 2030. The 2030 scenario summarized in Table 17 was prepared to assess the project’s consistency with the SB 32 2030 target.

Table 18: Unmitigated Project Operational GHG Emissions (Year 2030 Scenario)

Emission Source	Emissions (MT CO ₂ e per year)	
	2030 Business as Usual Total Emissions (MT CO ₂ e per year)	2030 Year Total Emissions with Regulations and Design Features (MT CO ₂ e per year)
Area	5	5
Energy	36	16
Mobile (On-road Vehicles)	120	71
Waste	3	2
Water	3	1
Amortized Construction Emissions	8	8
Total	175	103
Reduction from BAU		72
Percent Reduction		41.1%
Significance Threshold		29%
Exceeds Significance Threshold? (Shown For Informational Purposes)		No
MT CO ₂ e = metric tons of carbon dioxide equivalent. Totals may not appear to sum exactly due to rounding. ¹ Adjusted threshold to account for 2017 Scoping Plan Update 40 percent reduction goal by 2030. Source of Business-as-Usual Emissions: CalEEMod output for the 2030 BAU Scenario (see Attachment A). Source of 2030 Emissions: CalEEMod output for the year 2030 (Attachment A).		

As shown in Table 17 and Table 18, the project would achieve a 32.4 percent reduction from BAU at project buildout (2023) and 41.1 percent reduction from BAU by the year 2030 with adopted regulations and design features incorporated. These values are above the 29 percent reduction required by the SJVAPCD threshold and are above the required 21.7 percent average reduction from all GHG emission sources to meet the AB 32 targets. The CARB originally identified a reduction of 29 percent from business as usual as needed to achieve AB 32 targets. The 2008 recession and slower growth in the years since 2008 have reduced the growth forecasted for 2020 and the amount needed to be reduced to achieve 1990 levels as required by AB 32; the target was revised to 21.7 percent.

The 32.4 percent reduction from BAU is 10.7 percent beyond the average reduction required by the State from all sources to achieve the AB 32 2020 target. This surplus addresses the Supreme Court’s concern in the Newhall case that new development must do more than average to meet its fair share of emission reductions.

By 2030, the proposed project would achieve a 41.1 percent reduction from BAU or 19.4 percent above the 21.7 percent reduction necessary to meet the 2020 target.

The project’s occupancy is anticipated to be fully built out in 2023 at the earliest, thus an additional analysis is provided to show consistency with post-2020 State legislative GHG goals.

The SB 32 goal of 40 percent below 1990 emission levels by 2030 is the target established by the 2017 Scoping Plan Update.

The 2017 Scoping Plan includes new strategies that are not incorporated in the analysis above. Many measures that are likely to proceed include zero net energy buildings in future updates to Title 24 and enhanced motor vehicle fuel efficiency standards beyond 2025. The 2017 Scoping Plan identified an emission limit of 260 million metric tons of carbon dioxide equivalents (MMT CO_2e). The 2030 BAU Inventory is estimated to be 392 MMT CO_2e . The 2017 Scoping Plan identified that the bulk of its reductions would come from the Electric Power, Industrial fuel combustion, and Transportation. The continuance of the Cap and Trade would provide additional reductions. Although the 2017 Scoping Plan largely relies on state actions to achieve the GHG emissions limit, the CARB considers local governments partners in achieving the State's goals for reducing GHG emissions. The 2017 Scoping Plan suggests that all new land use development implement feasible measures to reduce GHG emissions, however, it does not define feasible measures nor assign a required reduction amount to new development. A fair share quantitative threshold based on the 2017 Scoping Plan is not presently feasible as the nexus between a project's contribution and its fair share mitigation is not well defined.

Based on the 32.4 percent reduction from BAU for the buildout year scenario (2023), the proposed project would not have a significant impact on GHG emissions as it would meet the SJVAPCD's threshold of 29 percent and exceed the CARB's 21.7 percent reduction necessary from all sources to meet the AB 32 emissions limit.

For the year 2030, the project achieves a 41.1 percent reduction from BAU, which demonstrates substantial progress towards achieving the 2030 target.

Regarding the years 2045 and 2050, there have been Executive Orders issued to address carbon neutrality and GHG reduction targets, respectively for those years, however, there are no existing GHG reduction plans that specifically address those Orders. Historically, the State would take the lead in developing regulatory and market measures to achieve the required reductions. The proposed project would participate in the reductions through adherence with regulations and continued improvements to the motor vehicle efficiencies accessing the project site. Studies have shown that in order to meet the 2050 targets, aggressive pursuit of technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. Because of the technological shifts required and the unknown parameters of the regulatory framework in 2050, quantitatively analyzing the proposed project's impacts further relative to the 2050 goals is speculative for purposes of CEQA.

Impact Analysis (Project's Compliance with Consideration No. 3 Regarding Consistency with Adopted Plans to Reduce GHG Emissions)

The following analysis assesses the project's compliance with Consideration No. 3 regarding consistency with adopted plans to reduce GHG emissions. As discussed above, the City of Clovis has not adopted a GHG reduction plan. In addition, the City has not completed the GHG inventory, benchmarking, or goal-setting process required to identify a reduction target and take advantage of the streamlining provisions contained in the CEQA Guidelines amendments adopted for SB 97 and clarifications provided in the CEQA Guidelines amendments adopted on

December 28, 2018. The SJVAPCD has adopted a Climate Action Plan, but it does not contain measures that are applicable to the project. Therefore, the SJVAPCD Climate Action Plan cannot be applied to the project. Since no other local or regional Climate Action Plan is in place, the project is assessed for its consistency with CARB's adopted 2008 and 2017 Scoping Plans. This would be achieved with an assessment of the proposed project's compliance with Scoping Plan measures contained in the 2017 Scoping Plan Update.

Greenhouse Gas Emissions Estimation Summary and Greenhouse Gas Impact Analysis

Greenhouse Gas Impact Analysis

The following analysis assesses the proposed project's compliance with Consideration No. 3 regarding consistency with adopted plans to reduce GHG emissions. The proposed project is assessed for its consistency with CARB's adopted Scoping Plans. This would be achieved with an assessment of the proposed project's compliance with Scoping Plan measures contained in the 2017 Scoping Plan Update.

Consistency with SB 32

The 2017 Climate Change Scoping Plan Update (2017 Scoping Plan) includes the strategy that the State intends to pursue to achieve the 2030 targets of Executive Order S-3-05 and SB 32. The 2017 Scoping Plan includes the following summary of its overall strategy for reaching the 2030 target:

- SB 350
 - Achieve 50 percent Renewables Portfolio Standard (RPS) by 2030.
 - Doubling of energy efficiency savings by 2030.
- Low Carbon Fuel Standard (LCFS)
 - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
- Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
 - Maintaining existing GHG standards for light- and heavy-duty vehicles.
 - Put 4.2 million zero-emission vehicles (ZEVs) on the roads.
 - Increase ZEV buses, delivery and other trucks.
- Sustainable Freight Action Plan
 - Improve freight system efficiency.
 - Maximize use of near-zero emission vehicles and equipment powered by renewable energy.
 - Deploy over 100,000 zero-emission trucks and equipment by 2030.
- Short-Lived Climate Pollutant (SLCP) Reduction Strategy

- Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
- Reduce emissions of black carbon 50 percent below 2013 levels by 2030.
- SB 375 Sustainable Communities Strategies
 - Increased stringency of 2035 targets.
- Post-2020 Cap-and-Trade Program
 - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
 - CARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements. In Fall 2016, CARB staff described potential future amendments including reducing the offset usage limit, redesigning the allocation strategy to reduce free allocation to support increased technology and energy investment at covered entities and reducing allocation if the covered entity increases criteria or toxics emissions over some baseline.
- By 2018, develop Integrated Natural and Working Lands Action Plan to secure California’s land base as a net carbon sink.

Table 19 provides an analysis of the project’s consistency with the 2017 Scoping Plan Update measures.

Table 19: Consistency with SB 32 2017 Scoping Plan Update

Scoping Plan Measure	Project Consistency
<p>SB 350 50% Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33% in 2020 to 50% in 2030.</p>	<p>Consistent: The project will purchase electricity from a utility subject to the SB 350 Renewable Mandate SB 100 Renewable Mandate. SB 100 revised the Renewable Portfolio Standard goals to achieve the 50 percent renewable resources target by December 31, 2026, and to achieve a 60 percent target by December 31, 2030. The specific provider for the City of Clovis and the proposed project is Pacific Gas and Electric (PG&E).</p>
<p>SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels.</p>	<p>Not Applicable. This measure applies to existing buildings. Renovations to existing buildings are not proposed as part of the proposed project, which includes the development of new multifamily residential uses (12 dwelling units). New structures are required to comply with Title 24 Energy Efficiency Standards that are expected to increase in stringency until residential housing achieves zero net energy.</p>
<p>Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.</p>	<p>Consistent. Vehicles accessing the project site will use fuel containing lower carbon content as the fuel standard is implemented.</p>
<p>Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by</p>	<p>Consistent. The project consists of residential development and would not engage in vehicle manufacturing; however, vehicles would access the</p>

Scoping Plan Measure	Project Consistency
<p>the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.</p>	<p>project site during project operations. Future project residents and visitors can be expected to purchase increasing numbers of more fuel efficient and zero emission cars and trucks each year. Home deliveries will be made by increasing numbers of ZEV delivery trucks.</p>
<p>Sustainable Freight Action Plan. The plan’s target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030.</p>	<p>Not Applicable. The measure applies to owners and operators of trucks and freight operations. However, deliveries that would be made to the future residences are expected to be made by increasing number of ZEV delivery trucks.</p>
<p>Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.</p>	<p>Consistent. Sources of black carbon are already regulated by the CARB and air district criteria pollutant and toxic regulations that control fine particulate emissions from diesel engines and other combustion source. The proposed apartments would not include hearths or would include only electric or natural gas hearths; natural gas hearths produce very little black carbon compared to woodburning fireplaces and heaters.</p>
<p>SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita vehicle miles traveled.</p>	<p>Not Applicable. The project does not consist of a proposed regional transportation plan; therefore, this measure is not applicable to the proposed project.</p>
<p>Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.</p>	<p>Consistent. The post-2020 Cap-and-Trade Program indirectly affects people who use the products and services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects’ electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the program’s first compliance period.</p>
<p>Natural and Working Lands Action Plan. The CARB is working in coordination with several other agencies at the federal, state, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the governor’s Executive Order B-30-15 to</p>	<p>Not Applicable. The project consists of multifamily residential development and will not be considered natural or working lands.</p>

Scoping Plan Measure	Project Consistency
reduce GHG emissions and to cultivate net carbon sequestration potential for California’s natural and working land.	
Source: California Air Resources Board (CARB). 2017. The 2017 Climate Change Scoping Plan Update. January 20. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf . Accessed May 20, 2022.	

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures with any level of certainty, as they have not yet been developed; nevertheless, it can be anticipated that operation of the project would comply with whatever measures are enacted that state lawmakers decide would lead to an 80 percent reduction below 1990 levels by 2050. In its 2008 Scoping Plan, CARB acknowledged that the “measures needed to meet the 2050 are too far in the future to define in detail.” In the First Scoping Plan Update; however, CARB generally described the type of activities required to achieve the 2050 target: “energy demand reduction through efficiency and activity changes; large scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately.” The 2017 Scoping Plan provides an intermediate target that is intended to achieve reasonable progress toward the 2050 target.

Accordingly, taking into account the proposed project’s design features and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the project would be consistent with State GHG Plans and would further the State’s goals of reducing GHG emissions to 1990 levels by 2020, 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050, and does not obstruct their attainment. Impacts would be less than significant.

Conclusion

Taking into account the proposed project’s design features and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the proposed project would be consistent with State and local GHG Plans would not obstruct their attainment. The proposed project’s GHG impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation measures are necessary.

Impact GHG-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis

The analysis contained above under Impact GHG-1 evaluates whether the project would not conflict with any applicable plan, policy, or regulation of an agency adopted to reduce the emissions of GHGs. As discussed under Impact GHG-1 above, the proposed project would not conflict with any applicable plan, policy, or regulation of agency to reduce. As such, project impacts in this regard would be less than significant.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation measures are necessary.

Attachments:

Attachment A – CalEEMod Output

Attachment B – Construction Health Risk Assessment

Attachment C – Operational Health Risk Screening and Additional Supporting Information

ATTACHMENT A
CalEEMod Output

CalEEMod Output

Table of Contents

CalEEMod Output Files

- **Unmitigated Project Construction and Operations (Regional)—Annual**
- **Unmitigated Project Construction and Operations (On-site and Localized)—Annual**
- **Unmitigated Project Construction and Operations (On-site and Localized)—Summer**
- **Unmitigated Project Construction and Operations (On-site and Localized)—Winter**
- **Business-as-Usual Scenario (2023)—Annual**
- **Business-as-Usual Scenario (2030)—Annual**
- **Project Operations 2030 Operational Year Scenario**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**Alluvial Development - Unmitigated Construction and 2023 Operations
Fresno County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	3.16	1000sqft	0.07	3,160.00	0
Parking Lot	16.93	1000sqft	0.39	16,932.00	0
Unenclosed Parking Structure	7.00	Space	0.06	2,800.00	0
City Park	0.12	Acre	0.12	5,400.00	0
Apartments Low Rise	12.00	Dwelling Unit	0.75	17,010.00	34

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Alluvial Residential Development Project

Project operations the earliest operational year (2023)

Land Use - Land use development (see site coverage summary for how project components are represented in CalEEMod)

Construction Phase - Anticipated construction duration per applicant: 4-6 months

Construction start date: 08/01/2023

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction HP hours.

Trips and VMT - Additional truck trips were added to each phase for mobilization/demobilization of on-site equipment (two trips per piece of equipment).

Additional vendor trips added to the paving phase to account for delivery of materials.

Demolition - Existing site to be demolished (1,111 tons of debris from buildings + hardscape)

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Grading - Cut fill anticipated to mostly balance on-site (minimal or no export/import anticipated).
 1,000 cy import + 1,000 cy export (separate trips) assumed to provide a conservative estimate of emissions.

Architectural Coating - Rule 4601 Architectural Coatings

Vehicle Trips - Trip generation for apartment units - other land uses are used to represent on-site amenities that would serve project residents and would not generate additional external trips

Woodstoves - SJVAPCD Rule 4901 Woodburning

Consumer Products -

Area Coating - Rule 4601 Architectural Coating

Construction Off-road Equipment Mitigation - Compliance with SJVAPCD Regulation VIII

Area Mitigation - Rule 4601 Architectural Coatings, building code standards (outside outlets), and no woodburning fireplaces (only natural gas hearth)

Water Mitigation - Compliance with Green Building Code Standards and California Model Water Efficient Landscape Ordinance

Waste Mitigation - CalRecycle 75 Percent Initiative (25% reduction)

Fleet Mix - SJVAPCD-approved Residential Fleet Mix for the 2023 operational year

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Residential_Exterior	150	50
tblAreaCoating	Area_EF_Residential_Interior	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	200.00	87.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.51	0.53
tblFleetMix	LDT1	0.05	0.21
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.03	1.1000e-003
tblFleetMix	LHD2	7.0060e-003	9.0000e-004

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tblFleetMix	MCY	0.02	2.5000e-003
tblFleetMix	MDV	0.16	0.06
tblFleetMix	MH	3.0900e-003	1.9000e-003
tblFleetMix	MHD	0.01	8.5000e-003
tblFleetMix	OBUS	7.1700e-004	0.00
tblFleetMix	SBUS	1.5290e-003	4.0000e-004
tblFleetMix	UBUS	2.9100e-004	4.3000e-003
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialImported	0.00	1,000.00
tblLandUse	LandUseSquareFeet	16,930.00	16,932.00
tblLandUse	LandUseSquareFeet	5,227.20	5,400.00
tblLandUse	LandUseSquareFeet	12,000.00	17,010.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	UsageHours	6.00	6.90
tblOffRoadEquipment	UsageHours	6.00	6.90
tblOffRoadEquipment	UsageHours	8.00	9.20
tblOffRoadEquipment	UsageHours	6.00	6.90
tblOffRoadEquipment	UsageHours	8.00	9.20
tblTripsAndVMT	HaulingTripNumber	110.00	120.00
tblTripsAndVMT	HaulingTripNumber	0.00	6.00
tblTripsAndVMT	HaulingTripNumber	250.00	258.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	HaulingTripNumber	0.00	28.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

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tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1539	1.2374	1.2933	2.4600e-003	0.0455	0.0536	0.0991	0.0152	0.0514	0.0666	0.0000	207.2007	207.2007	0.0351	2.7300e-003	208.8912
2024	0.0823	0.1868	0.2148	3.9000e-004	1.6700e-003	7.5800e-003	9.2500e-003	4.5000e-004	7.3300e-003	7.7800e-003	0.0000	32.5063	32.5063	4.9800e-003	1.8000e-004	32.6832
Maximum	0.1539	1.2374	1.2933	2.4600e-003	0.0455	0.0536	0.0991	0.0152	0.0514	0.0666	0.0000	207.2007	207.2007	0.0351	2.7300e-003	208.8912

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1539	1.2374	1.2933	2.4600e-003	0.0277	0.0536	0.0812	8.7900e-003	0.0514	0.0602	0.0000	207.2005	207.2005	0.0351	2.7300e-003	208.8910
2024	0.0823	0.1868	0.2148	3.9000e-004	1.6700e-003	7.5800e-003	9.2500e-003	4.5000e-004	7.3300e-003	7.7800e-003	0.0000	32.5063	32.5063	4.9800e-003	1.8000e-004	32.6832
Maximum	0.1539	1.2374	1.2933	2.4600e-003	0.0277	0.0536	0.0812	8.7900e-003	0.0514	0.0602	0.0000	207.2005	207.2005	0.0351	2.7300e-003	208.8910

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	37.82	0.00	16.47	41.00	0.00	8.63	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2023	10-31-2023	0.7264	0.7264
2	11-1-2023	1-31-2024	0.9203	0.9203
3	2-1-2024	4-30-2024	0.0047	0.0047
		Highest	0.9203	0.9203

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0770	5.5200e-003	0.0913	3.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	5.3445	5.3445	2.4000e-004	1.0000e-004	5.3789
Energy	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	15.8624	15.8624	1.3200e-003	3.0000e-004	15.9847
Mobile	0.0287	0.0533	0.3363	9.2000e-004	0.0955	6.7000e-004	0.0962	0.0255	6.3000e-004	0.0261	0.0000	85.7371	85.7371	6.5100e-003	4.3100e-003	87.1850
Waste						0.0000	0.0000		0.0000	0.0000	1.1225	0.0000	1.1225	0.0663	0.0000	2.7811
Water						0.0000	0.0000		0.0000	0.0000	0.2480	0.5974	0.8454	0.0256	6.1000e-004	1.6675
Total	0.1066	0.0664	0.4308	1.0000e-003	0.0955	2.1400e-003	0.0977	0.0255	2.1000e-003	0.0276	1.3706	107.5413	108.9119	0.1000	5.3200e-003	112.9972

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0770	5.5100e-003	0.0906	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	5.3432	5.3432	2.4000e-004	1.0000e-004	5.3776
Energy	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	15.8624	15.8624	1.3200e-003	3.0000e-004	15.9847
Mobile	0.0287	0.0533	0.3363	9.2000e-004	0.0955	6.7000e-004	0.0962	0.0255	6.3000e-004	0.0261	0.0000	85.7371	85.7371	6.5100e-003	4.3100e-003	87.1850
Waste						0.0000	0.0000		0.0000	0.0000	0.8419	0.0000	0.8419	0.0498	0.0000	2.0858
Water						0.0000	0.0000		0.0000	0.0000	0.1984	0.4779	0.6763	0.0205	4.9000e-004	1.3340
Total	0.1066	0.0664	0.4302	1.0000e-003	0.0955	2.1300e-003	0.0976	0.0255	2.0900e-003	0.0276	1.0404	107.4205	108.4608	0.0783	5.2000e-003	111.9670

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.04	0.02	0.15	0.00	0.00	0.47	0.01	0.00	0.48	0.04	24.09	0.11	0.41	21.69	2.26	0.91

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2023	8/28/2023	5	20	Default duration
2	Site Preparation	Site Preparation	8/29/2023	8/30/2023	5	2	Default duration
3	Grading	Grading	8/31/2023	9/5/2023	5	4	Default duration

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4	Paving	Paving	9/6/2023	9/19/2023	5	10	Default duration
5	Building Construction	Building Construction	9/20/2023	1/18/2024	5	87	Reduced from 200 days to 87 to match anticipated schedule
6	Architectural Coating	Architectural Coating	1/19/2024	2/1/2024	5	10	Default duration

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.52

Residential Indoor: 34,445; Residential Outdoor: 11,482; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 1,374 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	2	6.90	231	0.29
Building Construction	Forklifts	2	6.90	89	0.20
Building Construction	Generator Sets	2	9.20	84	0.74

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Building Construction	Tractors/Loaders/Backhoes	2	6.90	97	0.37
Building Construction	Welders	6	9.20	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	120.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	6.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	258.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	4.00	10.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	14	21.00	6.00	28.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0119	0.0000	0.0119	1.8000e-003	0.0000	1.8000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1432	0.1346	2.4000e-004		6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003	0.0000	21.0866	21.0866	5.3500e-003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e-004	0.0119	6.7700e-003	0.0187	1.8000e-003	6.3300e-003	8.1300e-003	0.0000	21.0866	21.0866	5.3500e-003	0.0000	21.2202

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	7.5100e-003	1.5800e-003	4.0000e-005	1.0300e-003	7.0000e-005	1.1000e-003	2.8000e-004	7.0000e-005	3.5000e-004	0.0000	3.3990	3.3990	2.0000e-005	5.3000e-004	3.5589
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.6000e-004	3.0700e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0400e-003	2.8000e-004	0.0000	2.8000e-004	0.0000	0.8173	0.8173	2.0000e-005	2.0000e-005	0.8250
Total	5.3000e-004	7.7700e-003	4.6500e-003	5.0000e-005	2.0700e-003	8.0000e-005	2.1400e-003	5.6000e-004	7.0000e-005	6.3000e-004	0.0000	4.2163	4.2163	4.0000e-005	5.5000e-004	4.3839

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3500e-003	0.0000	5.3500e-003	8.1000e-004	0.0000	8.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1432	0.1346	2.4000e-004		6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003	0.0000	21.0865	21.0865	5.3500e-003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e-004	5.3500e-003	6.7700e-003	0.0121	8.1000e-004	6.3300e-003	7.1400e-003	0.0000	21.0865	21.0865	5.3500e-003	0.0000	21.2202

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	7.5100e-003	1.5800e-003	4.0000e-005	1.0300e-003	7.0000e-005	1.1000e-003	2.8000e-004	7.0000e-005	3.5000e-004	0.0000	3.3990	3.3990	2.0000e-005	5.3000e-004	3.5589
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.6000e-004	3.0700e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0400e-003	2.8000e-004	0.0000	2.8000e-004	0.0000	0.8173	0.8173	2.0000e-005	2.0000e-005	0.8250
Total	5.3000e-004	7.7700e-003	4.6500e-003	5.0000e-005	2.0700e-003	8.0000e-005	2.1400e-003	5.6000e-004	7.0000e-005	6.3000e-004	0.0000	4.2163	4.2163	4.0000e-005	5.5000e-004	4.3839

Alluvial Development - Unmitigated Construction and 2023 Operations - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1300e-003	0.0124	6.6400e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	1.1300e-003	0.0124	6.6400e-003	2.0000e-005	6.2700e-003	5.1000e-004	6.7800e-003	3.0000e-003	4.7000e-004	3.4700e-003	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	3.8000e-004	8.0000e-005	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.1700	0.1700	0.0000	3.0000e-005	0.1779
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0503	0.0503	0.0000	0.0000	0.0508
Total	3.0000e-005	4.0000e-004	2.7000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.2203	0.2203	0.0000	3.0000e-005	0.2287

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.8200e-003	0.0000	2.8200e-003	1.3500e-003	0.0000	1.3500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1300e-003	0.0124	6.6400e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	1.1300e-003	0.0124	6.6400e-003	2.0000e-005	2.8200e-003	5.1000e-004	3.3300e-003	1.3500e-003	4.7000e-004	1.8200e-003	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	3.8000e-004	8.0000e-005	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.1700	0.1700	0.0000	3.0000e-005	0.1779
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0503	0.0503	0.0000	0.0000	0.0508
Total	3.0000e-005	4.0000e-004	2.7000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.2203	0.2203	0.0000	3.0000e-005	0.2287

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0143	0.0000	0.0143	6.8700e-003	0.0000	6.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6700e-003	0.0289	0.0174	4.0000e-005		1.2100e-003	1.2100e-003		1.1100e-003	1.1100e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501
Total	2.6700e-003	0.0289	0.0174	4.0000e-005	0.0143	1.2100e-003	0.0155	6.8700e-003	1.1100e-003	7.9800e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	0.0161	3.4000e-003	8.0000e-005	2.2100e-003	1.5000e-004	2.3600e-003	6.1000e-004	1.5000e-004	7.5000e-004	0.0000	7.3079	7.3079	5.0000e-005	1.1500e-003	7.6516
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.7000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1257	0.1257	0.0000	0.0000	0.1269
Total	3.4000e-004	0.0162	3.8700e-003	8.0000e-005	2.3700e-003	1.5000e-004	2.5200e-003	6.5000e-004	1.5000e-004	7.9000e-004	0.0000	7.4336	7.4336	5.0000e-005	1.1500e-003	7.7785

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.4300e-003	0.0000	6.4300e-003	3.0900e-003	0.0000	3.0900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6700e-003	0.0289	0.0174	4.0000e-005		1.2100e-003	1.2100e-003		1.1100e-003	1.1100e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501
Total	2.6700e-003	0.0289	0.0174	4.0000e-005	6.4300e-003	1.2100e-003	7.6400e-003	3.0900e-003	1.1100e-003	4.2000e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	0.0161	3.4000e-003	8.0000e-005	2.2100e-003	1.5000e-004	2.3600e-003	6.1000e-004	1.5000e-004	7.5000e-004	0.0000	7.3079	7.3079	5.0000e-005	1.1500e-003	7.6516
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.7000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1257	0.1257	0.0000	0.0000	0.1269
Total	3.4000e-004	0.0162	3.8700e-003	8.0000e-005	2.3700e-003	1.5000e-004	2.5200e-003	6.5000e-004	1.5000e-004	7.9000e-004	0.0000	7.4336	7.4336	5.0000e-005	1.1500e-003	7.7785

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.7300e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	6.3000e-004	1.3000e-004	0.0000	9.0000e-005	1.0000e-005	9.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.2833	0.2833	0.0000	4.0000e-005	0.2966
Vendor	2.0000e-005	8.8000e-004	2.6000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3847	0.3847	0.0000	6.0000e-005	0.4020
Worker	2.0000e-004	1.3000e-004	1.5300e-003	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4087	0.4087	1.0000e-005	1.0000e-005	0.4125
Total	2.3000e-004	1.6400e-003	1.9200e-003	0.0000	7.4000e-004	2.0000e-005	7.5000e-004	2.0000e-004	2.0000e-005	2.1000e-004	0.0000	1.0766	1.0766	1.0000e-005	1.1000e-004	1.1110

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.7300e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	6.3000e-004	1.3000e-004	0.0000	9.0000e-005	1.0000e-005	9.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.2833	0.2833	0.0000	4.0000e-005	0.2966
Vendor	2.0000e-005	8.8000e-004	2.6000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3847	0.3847	0.0000	6.0000e-005	0.4020
Worker	2.0000e-004	1.3000e-004	1.5300e-003	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4087	0.4087	1.0000e-005	1.0000e-005	0.4125
Total	2.3000e-004	1.6400e-003	1.9200e-003	0.0000	7.4000e-004	2.0000e-005	7.5000e-004	2.0000e-004	2.0000e-005	2.1000e-004	0.0000	1.0766	1.0766	1.0000e-005	1.1000e-004	1.1110

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1279	0.9831	1.0587	1.8500e-003		0.0432	0.0432		0.0417	0.0417	0.0000	152.4525	152.4525	0.0259	0.0000	153.0997
Total	0.1279	0.9831	1.0587	1.8500e-003		0.0432	0.0432		0.0417	0.0417	0.0000	152.4525	152.4525	0.0259	0.0000	153.0997

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.4700e-003	3.1000e-004	1.0000e-005	2.0000e-004	1.0000e-005	2.1000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.6655	0.6655	0.0000	1.0000e-004	0.6968
Vendor	2.4000e-004	9.6200e-003	2.8800e-003	4.0000e-005	1.4500e-003	6.0000e-005	1.5100e-003	4.2000e-004	6.0000e-005	4.8000e-004	0.0000	4.2119	4.2119	2.0000e-005	6.3000e-004	4.4014
Worker	2.3700e-003	1.5400e-003	0.0181	5.0000e-005	6.1300e-003	3.0000e-005	6.1600e-003	1.6300e-003	3.0000e-005	1.6600e-003	0.0000	4.8191	4.8191	1.5000e-004	1.4000e-004	4.8644
Total	2.6400e-003	0.0126	0.0213	1.0000e-004	7.7800e-003	1.0000e-004	7.8800e-003	2.1100e-003	1.0000e-004	2.2100e-003	0.0000	9.6965	9.6965	1.7000e-004	8.7000e-004	9.9626

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1279	0.9831	1.0587	1.8500e-003		0.0432	0.0432		0.0417	0.0417	0.0000	152.4523	152.4523	0.0259	0.0000	153.0995
Total	0.1279	0.9831	1.0587	1.8500e-003		0.0432	0.0432		0.0417	0.0417	0.0000	152.4523	152.4523	0.0259	0.0000	153.0995

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.4700e-003	3.1000e-004	1.0000e-005	2.0000e-004	1.0000e-005	2.1000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.6655	0.6655	0.0000	1.0000e-004	0.6968
Vendor	2.4000e-004	9.6200e-003	2.8800e-003	4.0000e-005	1.4500e-003	6.0000e-005	1.5100e-003	4.2000e-004	6.0000e-005	4.8000e-004	0.0000	4.2119	4.2119	2.0000e-005	6.3000e-004	4.4014
Worker	2.3700e-003	1.5400e-003	0.0181	5.0000e-005	6.1300e-003	3.0000e-005	6.1600e-003	1.6300e-003	3.0000e-005	1.6600e-003	0.0000	4.8191	4.8191	1.5000e-004	1.4000e-004	4.8644
Total	2.6400e-003	0.0126	0.0213	1.0000e-004	7.7800e-003	1.0000e-004	7.8800e-003	2.1100e-003	1.0000e-004	2.2100e-003	0.0000	9.6965	9.6965	1.7000e-004	8.7000e-004	9.9626

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3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0229	0.1781	0.2015	3.6000e-004		7.2500e-003	7.2500e-003		7.0000e-003	7.0000e-003	0.0000	29.2394	29.2394	4.8700e-003	0.0000	29.3612
Total	0.0229	0.1781	0.2015	3.6000e-004		7.2500e-003	7.2500e-003		7.0000e-003	7.0000e-003	0.0000	29.2394	29.2394	4.8700e-003	0.0000	29.3612

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.8000e-004	6.0000e-005	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1253	0.1253	0.0000	2.0000e-005	0.1312
Vendor	4.0000e-005	1.8500e-003	5.4000e-004	1.0000e-005	2.8000e-004	1.0000e-005	2.9000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7940	0.7940	0.0000	1.2000e-004	0.8297
Worker	4.2000e-004	2.6000e-004	3.2000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1800e-003	3.1000e-004	0.0000	3.2000e-004	0.0000	0.8938	0.8938	3.0000e-005	2.0000e-005	0.9018
Total	4.6000e-004	2.3900e-003	3.8000e-003	2.0000e-005	1.5000e-003	2.0000e-005	1.5100e-003	4.0000e-004	1.0000e-005	4.2000e-004	0.0000	1.8131	1.8131	3.0000e-005	1.6000e-004	1.8627

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3.6 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0229	0.1781	0.2015	3.6000e-004		7.2500e-003	7.2500e-003		7.0000e-003	7.0000e-003	0.0000	29.2394	29.2394	4.8700e-003	0.0000	29.3611
Total	0.0229	0.1781	0.2015	3.6000e-004		7.2500e-003	7.2500e-003		7.0000e-003	7.0000e-003	0.0000	29.2394	29.2394	4.8700e-003	0.0000	29.3611

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.8000e-004	6.0000e-005	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1253	0.1253	0.0000	2.0000e-005	0.1312
Vendor	4.0000e-005	1.8500e-003	5.4000e-004	1.0000e-005	2.8000e-004	1.0000e-005	2.9000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7940	0.7940	0.0000	1.2000e-004	0.8297
Worker	4.2000e-004	2.6000e-004	3.2000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1800e-003	3.1000e-004	0.0000	3.2000e-004	0.0000	0.8938	0.8938	3.0000e-005	2.0000e-005	0.9018
Total	4.6000e-004	2.3900e-003	3.8000e-003	2.0000e-005	1.5000e-003	2.0000e-005	1.5100e-003	4.0000e-004	1.0000e-005	4.2000e-004	0.0000	1.8131	1.8131	3.0000e-005	1.6000e-004	1.8627

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0580					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	0.0589	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.2000e-004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0556	0.0556	0.0000	1.0000e-005	0.0582
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.3000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1216	0.1216	0.0000	0.0000	0.1227
Total	6.0000e-005	1.6000e-004	4.6000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.1772	0.1772	0.0000	1.0000e-005	0.1809

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3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0580					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	0.0589	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.2000e-004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0556	0.0556	0.0000	1.0000e-005	0.0582
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.3000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1216	0.1216	0.0000	0.0000	0.1227
Total	6.0000e-005	1.6000e-004	4.6000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.1772	0.1772	0.0000	1.0000e-005	0.1809

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0287	0.0533	0.3363	9.2000e-004	0.0955	6.7000e-004	0.0962	0.0255	6.3000e-004	0.0261	0.0000	85.7371	85.7371	6.5100e-003	4.3100e-003	87.1850
Unmitigated	0.0287	0.0533	0.3363	9.2000e-004	0.0955	6.7000e-004	0.0962	0.0255	6.3000e-004	0.0261	0.0000	85.7371	85.7371	6.5100e-003	4.3100e-003	87.1850

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	87.84	97.68	75.36	256,237	256,237
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	87.84	97.68	75.36	256,237	256,237

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	48.40	15.90	35.70	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.530500	0.205800	0.167300	0.055000	0.001100	0.000900	0.008500	0.021800	0.000000	0.004300	0.002500	0.000400	0.001900
City Park	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Enclosed Parking Structure	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Parking Lot	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Unenclosed Parking Structure	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.1233	7.1233	1.1500e-003	1.4000e-004	7.1937
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.1233	7.1233	1.1500e-003	1.4000e-004	7.1937
Natural Gas Mitigated	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910
Natural Gas Unmitigated	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910

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5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	163764	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	163764	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910

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5.3 Energy by Land Use - Electricity

Unmitigated

Land Use	Electricity Use kWh/yr	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
Apartments Low Rise	49572.4	4.5866	7.4000e-004	9.0000e-005	4.6320
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	16590	1.5350	2.5000e-004	3.0000e-005	1.5502
Parking Lot	5926.2	0.5483	9.0000e-005	1.0000e-005	0.5537
Unenclosed Parking Structure	4900	0.4534	7.0000e-005	1.0000e-005	0.4579
Total		7.1233	1.1500e-003	1.4000e-004	7.1937

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

Land Use	Electricity Use kWh/yr	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
Apartments Low Rise	49572.4	4.5866	7.4000e-004	9.0000e-005	4.6320
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	16590	1.5350	2.5000e-004	3.0000e-005	1.5502
Parking Lot	5926.2	0.5483	9.0000e-005	1.0000e-005	0.5537
Unenclosed Parking Structure	4900	0.4534	7.0000e-005	1.0000e-005	0.4579
Total		7.1233	1.1500e-003	1.4000e-004	7.1937

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0770	5.5100e-003	0.0906	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	5.3432	5.3432	2.4000e-004	1.0000e-004	5.3776
Unmitigated	0.0770	5.5200e-003	0.0913	3.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	5.3445	5.3445	2.4000e-004	1.0000e-004	5.3789

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0680					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.3000e-004	4.4900e-003	1.9100e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1985	5.1985	1.0000e-004	1.0000e-004	5.2294
Landscaping	2.7100e-003	1.0300e-003	0.0894	0.0000		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	0.1460	0.1460	1.4000e-004	0.0000	0.1496
Total	0.0770	5.5200e-003	0.0913	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	5.3445	5.3445	2.4000e-004	1.0000e-004	5.3789

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0680					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.3000e-004	4.4900e-003	1.9100e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1985	5.1985	1.0000e-004	1.0000e-004	5.2294
Landscaping	2.6700e-003	1.0200e-003	0.0887	0.0000		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	0.1447	0.1447	1.4000e-004	0.0000	0.1482
Total	0.0770	5.5100e-003	0.0906	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	5.3432	5.3432	2.4000e-004	1.0000e-004	5.3776

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.6763	0.0205	4.9000e-004	1.3340
Unmitigated	0.8454	0.0256	6.1000e-004	1.6675

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.781848 / 0.492904	0.7991	0.0256	6.1000e-004	1.6207
City Park	0 / 0.142978	0.0463	1.0000e-005	0.0000	0.0468
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.8454	0.0256	6.1000e-004	1.6675

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.625479 / 0.394323	0.6393	0.0205	4.9000e-004	1.2966
City Park	0 / 0.114382	0.0370	1.0000e-005	0.0000	0.0374
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.6763	0.0205	4.9000e-004	1.3340

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.8419	0.0498	0.0000	2.0858
Unmitigated	1.1225	0.0663	0.0000	2.7811

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	5.52	1.1205	0.0662	0.0000	2.7760
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		1.1225	0.0663	0.0000	2.7811

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	4.14	0.8404	0.0497	0.0000	2.0820
City Park	0.0075	1.5200e-003	9.0000e-005	0.0000	3.7700e-003
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		0.8419	0.0498	0.0000	2.0858

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Alluvial Development - On-site Emissions - Fresno County, Annual

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**Alluvial Development - On-site Emissions
Fresno County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	3.16	1000sqft	0.07	3,160.00	0
Parking Lot	16.93	1000sqft	0.39	16,932.00	0
Unenclosed Parking Structure	7.00	Space	0.06	2,800.00	0
City Park	0.12	Acre	0.12	5,400.00	0
Apartments Low Rise	12.00	Dwelling Unit	0.75	17,010.00	34

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Alluvial Residential Development Project - Localized Screening Analysis - On-site Emissions
 Project operations the earliest operational year (2023)

Land Use - Land use development (see site coverage summary for how project components are represented in CalEEMod)

Construction Phase - Anticipated construction duration per applicant: 4-6 months
 Construction start date: 08/01/2023

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction HP hours.

Trips and VMT - Construction trip lengths updated to 0.39 mile (0.14 + 0.25) to account for on-site and localized emissions from on-road vehicles traveling to and from the project site.

Demolition - Existing site to be demolished (1,111 tons of debris from buildings + hardscape)

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Grading - Cut fill anticipated to mostly balance on-site (minimal or no export/import anticipated).
 1,000 cy import + 1,000 cy export (separate trips) assumed to provide a conservative estimate of emissions.

Architectural Coating - Rule 4601 Architectural Coatings

Vehicle Trips - Trip lengths updated to 0.39 mile to account for on-site and localized emissions from mobile sources.

Woodstoves - SJVAPCD Rule 4901 Woodburning

Consumer Products -

Area Coating - Rule 4601 Architectural Coating

Construction Off-road Equipment Mitigation - Compliance with SJVAPCD Regulation VIII

Area Mitigation - Rule 4601 Architectural Coatings, building code standards (outside outlets), and no woodburning fireplaces (only natural gas hearth)

Water Mitigation - Compliance with Green Building Code Standards and California Model Water Efficient Landscape Ordinance

Waste Mitigation - CalRecycle 75 Percent Initiative (25% reduction)

Fleet Mix - SJVAPCD-approved Residential Fleet Mix for the 2023 operational year

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Residential_Exterior	150	50
tblAreaCoating	Area_EF_Residential_Interior	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	200.00	87.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.51	0.53
tblFleetMix	LDT1	0.05	0.21
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.03	1.1000e-003
tblFleetMix	LHD2	7.0060e-003	9.0000e-004

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tblFleetMix	MCY	0.02	2.5000e-003
tblFleetMix	MDV	0.16	0.06
tblFleetMix	MH	3.0900e-003	1.9000e-003
tblFleetMix	MHD	0.01	8.5000e-003
tblFleetMix	OBUS	7.1700e-004	0.00
tblFleetMix	SBUS	1.5290e-003	4.0000e-004
tblFleetMix	UBUS	2.9100e-004	4.3000e-003
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialImported	0.00	1,000.00
tblLandUse	LandUseSquareFeet	16,930.00	16,932.00
tblLandUse	LandUseSquareFeet	5,227.20	5,400.00
tblLandUse	LandUseSquareFeet	12,000.00	17,010.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	UsageHours	6.00	6.90
tblOffRoadEquipment	UsageHours	6.00	6.90
tblOffRoadEquipment	UsageHours	8.00	9.20
tblOffRoadEquipment	UsageHours	6.00	6.90
tblOffRoadEquipment	UsageHours	8.00	9.20
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripNumber	110.00	120.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tbITripsAndVMT	HaulingTripNumber	0.00	6.00
tbITripsAndVMT	HaulingTripNumber	250.00	258.00
tbITripsAndVMT	HaulingTripNumber	0.00	10.00
tbITripsAndVMT	HaulingTripNumber	0.00	28.00
tbITripsAndVMT	HaulingTripNumber	0.00	2.00
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripNumber	0.00	4.00
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbIVehicleTrips	DV_TP	11.00	0.00
tbIVehicleTrips	HO_TL	7.50	0.39
tbIVehicleTrips	HS_TL	7.30	0.39
tbIVehicleTrips	HW_TL	10.80	0.39
tbIVehicleTrips	PB_TP	3.00	0.00
tbIVehicleTrips	PR_TP	86.00	100.00
tbIVehicleTrips	ST_TR	1.96	0.00
tbIVehicleTrips	SU_TR	2.19	0.00
tbIVehicleTrips	WD_TR	0.78	0.00
tbIWoodstoves	WoodstoveWoodMass	3,019.20	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1520	1.2071	1.2731	2.2400e-003	0.0329	0.0532	0.0861	0.0118	0.0511	0.0629	0.0000	186.3329	186.3329	0.0349	2.8000e-004	187.2881
2024	0.0820	0.1850	0.2120	3.7000e-004	7.0000e-005	7.5600e-003	7.6300e-003	2.0000e-005	7.3100e-003	7.3200e-003	0.0000	30.6949	30.6949	4.9600e-003	3.0000e-005	30.8271
Maximum	0.1520	1.2071	1.2731	2.2400e-003	0.0329	0.0532	0.0861	0.0118	0.0511	0.0629	0.0000	186.3329	186.3329	0.0349	2.8000e-004	187.2881

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1520	1.2071	1.2731	2.2400e-003	0.0151	0.0532	0.0683	5.3800e-003	0.0511	0.0564	0.0000	186.3327	186.3327	0.0349	2.8000e-004	187.2879
2024	0.0820	0.1850	0.2120	3.7000e-004	7.0000e-005	7.5600e-003	7.6300e-003	2.0000e-005	7.3100e-003	7.3200e-003	0.0000	30.6948	30.6948	4.9600e-003	3.0000e-005	30.8271
Maximum	0.1520	1.2071	1.2731	2.2400e-003	0.0151	0.0532	0.0683	5.3800e-003	0.0511	0.0564	0.0000	186.3327	186.3327	0.0349	2.8000e-004	187.2879

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.13	0.00	19.03	54.31	0.00	9.15	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2023	10-31-2023	0.7003	0.7003
2	11-1-2023	1-31-2024	0.9120	0.9120
3	2-1-2024	4-30-2024	0.0046	0.0046
		Highest	0.9120	0.9120

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0770	5.5200e-003	0.0913	3.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	5.3445	5.3445	2.4000e-004	1.0000e-004	5.3789
Energy	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	15.8624	15.8624	1.3200e-003	3.0000e-004	15.9847
Mobile	0.0237	0.0169	0.0990	7.0000e-005	4.6300e-003	1.0000e-004	4.7300e-003	1.2300e-003	9.0000e-005	1.3200e-003	0.0000	6.7352	6.7352	2.1200e-003	1.1600e-003	7.1331
Waste						0.0000	0.0000		0.0000	0.0000	1.1225	0.0000	1.1225	0.0663	0.0000	2.7811
Water						0.0000	0.0000		0.0000	0.0000	0.2480	0.5974	0.8454	0.0256	6.1000e-004	1.6675
Total	0.1016	0.0300	0.1935	1.5000e-004	4.6300e-003	1.5700e-003	6.2000e-003	1.2300e-003	1.5600e-003	2.7900e-003	1.3706	28.5394	29.9100	0.0956	2.1700e-003	32.9453

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0770	5.5100e-003	0.0906	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	5.3432	5.3432	2.4000e-004	1.0000e-004	5.3776
Energy	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	15.8624	15.8624	1.3200e-003	3.0000e-004	15.9847
Mobile	0.0237	0.0169	0.0990	7.0000e-005	4.6300e-003	1.0000e-004	4.7300e-003	1.2300e-003	9.0000e-005	1.3200e-003	0.0000	6.7352	6.7352	2.1200e-003	1.1600e-003	7.1331
Waste						0.0000	0.0000		0.0000	0.0000	0.8419	0.0000	0.8419	0.0498	0.0000	2.0858
Water						0.0000	0.0000		0.0000	0.0000	0.1984	0.4779	0.6763	0.0205	4.9000e-004	1.3340
Total	0.1015	0.0300	0.1929	1.5000e-004	4.6300e-003	1.5600e-003	6.1900e-003	1.2300e-003	1.5500e-003	2.7800e-003	1.0404	28.4186	29.4590	0.0739	2.0500e-003	31.9152

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.04	0.03	0.33	0.00	0.00	0.64	0.16	0.00	0.64	0.36	24.09	0.42	1.51	22.69	5.53	3.13

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2023	8/28/2023	5	20	Default duration
2	Site Preparation	Site Preparation	8/29/2023	8/30/2023	5	2	Default duration
3	Grading	Grading	8/31/2023	9/5/2023	5	4	Default duration

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Paving	Paving	9/6/2023	9/19/2023	5	10	Default duration
5	Building Construction	Building Construction	9/20/2023	1/18/2024	5	87	Reduced from 200 days to 87 to match anticipated schedule
6	Architectural Coating	Architectural Coating	1/19/2024	2/1/2024	5	10	Default duration

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.52

Residential Indoor: 34,445; Residential Outdoor: 11,482; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 1,374 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	2	6.90	231	0.29
Building Construction	Forklifts	2	6.90	89	0.20
Building Construction	Generator Sets	2	9.20	84	0.74

Alluvial Development - On-site Emissions - Fresno County, Annual

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Building Construction	Tractors/Loaders/Backhoes	2	6.90	97	0.37
Building Construction	Welders	6	9.20	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	120.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	6.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	258.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	4.00	10.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Building Construction	14	21.00	6.00	28.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	2.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0119	0.0000	0.0119	1.8000e-003	0.0000	1.8000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1432	0.1346	2.4000e-004		6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003	0.0000	21.0866	21.0866	5.3500e-003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e-004	0.0119	6.7700e-003	0.0187	1.8000e-003	6.3300e-003	8.1300e-003	0.0000	21.0866	21.0866	5.3500e-003	0.0000	21.2202

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	1.2700e-003	1.0000e-003	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.2263	0.2263	0.0000	4.0000e-005	0.2370
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	8.0000e-005	7.8000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0516	0.0516	2.0000e-005	1.0000e-005	0.0544
Total	2.6000e-004	1.3500e-003	1.7800e-003	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2779	0.2779	2.0000e-005	5.0000e-005	0.2914

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3500e-003	0.0000	5.3500e-003	8.1000e-004	0.0000	8.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1432	0.1346	2.4000e-004		6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003	0.0000	21.0865	21.0865	5.3500e-003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e-004	5.3500e-003	6.7700e-003	0.0121	8.1000e-004	6.3300e-003	7.1400e-003	0.0000	21.0865	21.0865	5.3500e-003	0.0000	21.2202

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	1.2700e-003	1.0000e-003	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.2263	0.2263	0.0000	4.0000e-005	0.2370
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	8.0000e-005	7.8000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0516	0.0516	2.0000e-005	1.0000e-005	0.0544
Total	2.6000e-004	1.3500e-003	1.7800e-003	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2779	0.2779	2.0000e-005	5.0000e-005	0.2914

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1300e-003	0.0124	6.6400e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	1.1300e-003	0.0124	6.6400e-003	2.0000e-005	6.2700e-003	5.1000e-004	6.7800e-003	3.0000e-003	4.7000e-004	3.4700e-003	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	6.0000e-005	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0113	0.0113	0.0000	0.0000	0.0119
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.1700e-003	3.1700e-003	0.0000	0.0000	3.3400e-003
Total	1.0000e-005	6.0000e-005	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0145	0.0145	0.0000	0.0000	0.0152

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.8200e-003	0.0000	2.8200e-003	1.3500e-003	0.0000	1.3500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1300e-003	0.0124	6.6400e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	1.1300e-003	0.0124	6.6400e-003	2.0000e-005	2.8200e-003	5.1000e-004	3.3300e-003	1.3500e-003	4.7000e-004	1.8200e-003	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	6.0000e-005	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0113	0.0113	0.0000	0.0000	0.0119
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.1700e-003	3.1700e-003	0.0000	0.0000	3.3400e-003
Total	1.0000e-005	6.0000e-005	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0145	0.0145	0.0000	0.0000	0.0152

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0143	0.0000	0.0143	6.8700e-003	0.0000	6.8700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6700e-003	0.0289	0.0174	4.0000e-005		1.2100e-003	1.2100e-003		1.1100e-003	1.1100e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501
Total	2.6700e-003	0.0289	0.0174	4.0000e-005	0.0143	1.2100e-003	0.0155	6.8700e-003	1.1100e-003	7.9800e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-004	2.7300e-003	2.1500e-003	1.0000e-005	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.4866	0.4866	1.0000e-005	8.0000e-005	0.5096
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	1.0000e-005	1.2000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	7.9300e-003	7.9300e-003	0.0000	0.0000	8.3600e-003
Total	1.8000e-004	2.7400e-003	2.2700e-003	1.0000e-005	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.4945	0.4945	1.0000e-005	8.0000e-005	0.5179

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.4300e-003	0.0000	6.4300e-003	3.0900e-003	0.0000	3.0900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6700e-003	0.0289	0.0174	4.0000e-005		1.2100e-003	1.2100e-003		1.1100e-003	1.1100e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501
Total	2.6700e-003	0.0289	0.0174	4.0000e-005	6.4300e-003	1.2100e-003	7.6400e-003	3.0900e-003	1.1100e-003	4.2000e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-004	2.7300e-003	2.1500e-003	1.0000e-005	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.4866	0.4866	1.0000e-005	8.0000e-005	0.5096
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	1.0000e-005	1.2000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	7.9300e-003	7.9300e-003	0.0000	0.0000	8.3600e-003
Total	1.8000e-004	2.7400e-003	2.2700e-003	1.0000e-005	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.4945	0.4945	1.0000e-005	8.0000e-005	0.5179

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.7300e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	1.1000e-004	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0189	0.0189	0.0000	0.0000	0.0198
Vendor	1.0000e-005	2.8000e-004	1.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0499	0.0499	0.0000	1.0000e-005	0.0522
Worker	9.0000e-005	4.0000e-005	3.9000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0258	0.0258	1.0000e-005	0.0000	0.0272
Total	1.1000e-004	4.3000e-004	6.6000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0945	0.0945	1.0000e-005	1.0000e-005	0.0991

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.7300e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	1.1000e-004	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0189	0.0189	0.0000	0.0000	0.0198
Vendor	1.0000e-005	2.8000e-004	1.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0499	0.0499	0.0000	1.0000e-005	0.0522
Worker	9.0000e-005	4.0000e-005	3.9000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0258	0.0258	1.0000e-005	0.0000	0.0272
Total	1.1000e-004	4.3000e-004	6.6000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0945	0.0945	1.0000e-005	1.0000e-005	0.0991

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1279	0.9831	1.0587	1.8500e-003		0.0432	0.0432		0.0417	0.0417	0.0000	152.4525	152.4525	0.0259	0.0000	153.0997
Total	0.1279	0.9831	1.0587	1.8500e-003		0.0432	0.0432		0.0417	0.0417	0.0000	152.4525	152.4525	0.0259	0.0000	153.0997

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.5000e-004	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0443	0.0443	0.0000	1.0000e-005	0.0464
Vendor	1.5000e-004	3.0500e-003	2.1300e-003	1.0000e-005	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.5458	0.5458	1.0000e-005	8.0000e-005	0.5712
Worker	1.1100e-003	4.5000e-004	4.6200e-003	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.3039	0.3039	1.0000e-004	5.0000e-005	0.3205
Total	1.2700e-003	3.7500e-003	6.9500e-003	1.0000e-005	3.1000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	1.0000e-004	0.0000	0.8941	0.8941	1.1000e-004	1.4000e-004	0.9381

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1279	0.9831	1.0587	1.8500e-003		0.0432	0.0432		0.0417	0.0417	0.0000	152.4523	152.4523	0.0259	0.0000	153.0995
Total	0.1279	0.9831	1.0587	1.8500e-003		0.0432	0.0432		0.0417	0.0417	0.0000	152.4523	152.4523	0.0259	0.0000	153.0995

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.5000e-004	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0443	0.0443	0.0000	1.0000e-005	0.0464
Vendor	1.5000e-004	3.0500e-003	2.1300e-003	1.0000e-005	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.5458	0.5458	1.0000e-005	8.0000e-005	0.5712
Worker	1.1100e-003	4.5000e-004	4.6200e-003	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.3039	0.3039	1.0000e-004	5.0000e-005	0.3205
Total	1.2700e-003	3.7500e-003	6.9500e-003	1.0000e-005	3.1000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	1.0000e-004	0.0000	0.8941	0.8941	1.1000e-004	1.4000e-004	0.9381

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0229	0.1781	0.2015	3.6000e-004		7.2500e-003	7.2500e-003		7.0000e-003	7.0000e-003	0.0000	29.2394	29.2394	4.8700e-003	0.0000	29.3612
Total	0.0229	0.1781	0.2015	3.6000e-004		7.2500e-003	7.2500e-003		7.0000e-003	7.0000e-003	0.0000	29.2394	29.2394	4.8700e-003	0.0000	29.3612

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	5.0000e-005	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	8.3300e-003	8.3300e-003	0.0000	0.0000	8.7300e-003
Vendor	3.0000e-005	5.8000e-004	4.0000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.1027	0.1027	0.0000	2.0000e-005	0.1075
Worker	2.0000e-004	8.0000e-005	8.5000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0564	0.0564	2.0000e-005	1.0000e-005	0.0594
Total	2.3000e-004	7.1000e-004	1.2900e-003	0.0000	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.1674	0.1674	2.0000e-005	3.0000e-005	0.1756

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0229	0.1781	0.2015	3.6000e-004		7.2500e-003	7.2500e-003		7.0000e-003	7.0000e-003	0.0000	29.2394	29.2394	4.8700e-003	0.0000	29.3611
Total	0.0229	0.1781	0.2015	3.6000e-004		7.2500e-003	7.2500e-003		7.0000e-003	7.0000e-003	0.0000	29.2394	29.2394	4.8700e-003	0.0000	29.3611

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	5.0000e-005	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	8.3300e-003	8.3300e-003	0.0000	0.0000	8.7300e-003
Vendor	3.0000e-005	5.8000e-004	4.0000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.1027	0.1027	0.0000	2.0000e-005	0.1075
Worker	2.0000e-004	8.0000e-005	8.5000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0564	0.0564	2.0000e-005	1.0000e-005	0.0594
Total	2.3000e-004	7.1000e-004	1.2900e-003	0.0000	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.1674	0.1674	2.0000e-005	3.0000e-005	0.1756

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0580					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	0.0589	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.7000e-003	3.7000e-003	0.0000	0.0000	3.8700e-003
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	1.0000e-005	1.2000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	7.6700e-003	7.6700e-003	0.0000	0.0000	8.0800e-003
Total	3.0000e-005	3.0000e-005	1.4000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0114	0.0114	0.0000	0.0000	0.0120

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0580					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	0.0589	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.7000e-003	3.7000e-003	0.0000	0.0000	3.8700e-003
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	1.0000e-005	1.2000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	7.6700e-003	7.6700e-003	0.0000	0.0000	8.0800e-003
Total	3.0000e-005	3.0000e-005	1.4000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0114	0.0114	0.0000	0.0000	0.0120

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0237	0.0169	0.0990	7.0000e-005	4.6300e-003	1.0000e-004	4.7300e-003	1.2300e-003	9.0000e-005	1.3200e-003	0.0000	6.7352	6.7352	2.1200e-003	1.1600e-003	7.1331
Unmitigated	0.0237	0.0169	0.0990	7.0000e-005	4.6300e-003	1.0000e-004	4.7300e-003	1.2300e-003	9.0000e-005	1.3200e-003	0.0000	6.7352	6.7352	2.1200e-003	1.1600e-003	7.1331

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	87.84	97.68	75.36	12,416	12,416
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	87.84	97.68	75.36	12,416	12,416

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	0.39	0.39	0.39	48.40	15.90	35.70	100	0	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.530500	0.205800	0.167300	0.055000	0.001100	0.000900	0.008500	0.021800	0.000000	0.004300	0.002500	0.000400	0.001900
City Park	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Enclosed Parking Structure	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Parking Lot	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Unenclosed Parking Structure	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.1233	7.1233	1.1500e-003	1.4000e-004	7.1937
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.1233	7.1233	1.1500e-003	1.4000e-004	7.1937
Natural Gas Mitigated	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910
Natural Gas Unmitigated	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	163764	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	163764	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

Land Use	Electricity Use kWh/yr	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
Apartments Low Rise	49572.4	4.5866	7.4000e-004	9.0000e-005	4.6320
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	16590	1.5350	2.5000e-004	3.0000e-005	1.5502
Parking Lot	5926.2	0.5483	9.0000e-005	1.0000e-005	0.5537
Unenclosed Parking Structure	4900	0.4534	7.0000e-005	1.0000e-005	0.4579
Total		7.1233	1.1500e-003	1.4000e-004	7.1937

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	49572.4	4.5866	7.4000e-004	9.0000e-005	4.6320
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	16590	1.5350	2.5000e-004	3.0000e-005	1.5502
Parking Lot	5926.2	0.5483	9.0000e-005	1.0000e-005	0.5537
Unenclosed Parking Structure	4900	0.4534	7.0000e-005	1.0000e-005	0.4579
Total		7.1233	1.1500e-003	1.4000e-004	7.1937

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0770	5.5100e-003	0.0906	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	5.3432	5.3432	2.4000e-004	1.0000e-004	5.3776
Unmitigated	0.0770	5.5200e-003	0.0913	3.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	5.3445	5.3445	2.4000e-004	1.0000e-004	5.3789

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0680					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.3000e-004	4.4900e-003	1.9100e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1985	5.1985	1.0000e-004	1.0000e-004	5.2294
Landscaping	2.7100e-003	1.0300e-003	0.0894	0.0000		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	0.1460	0.1460	1.4000e-004	0.0000	0.1496
Total	0.0770	5.5200e-003	0.0913	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	5.3445	5.3445	2.4000e-004	1.0000e-004	5.3789

Alluvial Development - On-site Emissions - Fresno County, Annual

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0680					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.3000e-004	4.4900e-003	1.9100e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1985	5.1985	1.0000e-004	1.0000e-004	5.2294
Landscaping	2.6700e-003	1.0200e-003	0.0887	0.0000		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	0.1447	0.1447	1.4000e-004	0.0000	0.1482
Total	0.0770	5.5100e-003	0.0906	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	5.3432	5.3432	2.4000e-004	1.0000e-004	5.3776

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Alluvial Development - On-site Emissions - Fresno County, Annual

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.6763	0.0205	4.9000e-004	1.3340
Unmitigated	0.8454	0.0256	6.1000e-004	1.6675

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.781848 / 0.492904	0.7991	0.0256	6.1000e-004	1.6207
City Park	0 / 0.142978	0.0463	1.0000e-005	0.0000	0.0468
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.8454	0.0256	6.1000e-004	1.6675

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.625479 / 0.394323	0.6393	0.0205	4.9000e-004	1.2966
City Park	0 / 0.114382	0.0370	1.0000e-005	0.0000	0.0374
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.6763	0.0205	4.9000e-004	1.3340

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.8419	0.0498	0.0000	2.0858
Unmitigated	1.1225	0.0663	0.0000	2.7811

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	5.52	1.1205	0.0662	0.0000	2.7760
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		1.1225	0.0663	0.0000	2.7811

Alluvial Development - On-site Emissions - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	4.14	0.8404	0.0497	0.0000	2.0820
City Park	0.0075	1.5200e-003	9.0000e-005	0.0000	3.7700e-003
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		0.8419	0.0498	0.0000	2.0858

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**Alluvial Development - On-site Emissions
Fresno County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	3.16	1000sqft	0.07	3,160.00	0
Parking Lot	16.93	1000sqft	0.39	16,932.00	0
Unenclosed Parking Structure	7.00	Space	0.06	2,800.00	0
City Park	0.12	Acre	0.12	5,400.00	0
Apartments Low Rise	12.00	Dwelling Unit	0.75	17,010.00	34

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Alluvial Residential Development Project - Localized Screening Analysis - On-site Emissions
Project operations the earliest operational year (2023)

Land Use - Land use development (see site coverage summary for how project components are represented in CalEEMod)

Construction Phase - Anticipated construction duration per applicant: 4-6 months
Construction start date: 08/01/2023

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction HP hours.

Trips and VMT - Construction trip lengths updated to 0.39 mile (0.14 + 0.25) to account for on-site and localized emissions from on-road vehicles traveling to and from the project site.

Demolition - Existing site to be demolished (1,111 tons of debris from buildings + hardscape)

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading - Cut fill anticipated to mostly balance on-site (minimal or no export/import anticipated).
 1,000 cy import + 1,000 cy export (separate trips) assumed to provide a conservative estimate of emissions.

Architectural Coating - Rule 4601 Architectural Coatings

Vehicle Trips - Trip lengths updated to 0.39 mile to account for on-site and localized emissions from mobile sources.

Woodstoves - SJVAPCD Rule 4901 Woodburning

Consumer Products -

Area Coating - Rule 4601 Architectural Coating

Construction Off-road Equipment Mitigation - Compliance with SJVAPCD Regulation VIII

Area Mitigation - Rule 4601 Architectural Coatings, building code standards (outside outlets), and no woodburning fireplaces (only natural gas hearth)

Water Mitigation - Compliance with Green Building Code Standards and California Model Water Efficient Landscape Ordinance

Waste Mitigation - CalRecycle 75 Percent Initiative (25% reduction)

Fleet Mix - SJVAPCD-approved Residential Fleet Mix for the 2023 operational year

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Residential_Exterior	150	50
tblAreaCoating	Area_EF_Residential_Interior	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	200.00	87.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.51	0.53
tblFleetMix	LDT1	0.05	0.21
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.03	1.1000e-003
tblFleetMix	LHD2	7.0060e-003	9.0000e-004

Alluvial Development - On-site Emissions - Fresno County, Summer

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	MCY	0.02	2.5000e-003
tblFleetMix	MDV	0.16	0.06
tblFleetMix	MH	3.0900e-003	1.9000e-003
tblFleetMix	MHD	0.01	8.5000e-003
tblFleetMix	OBUS	7.1700e-004	0.00
tblFleetMix	SBUS	1.5290e-003	4.0000e-004
tblFleetMix	UBUS	2.9100e-004	4.3000e-003
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialImported	0.00	1,000.00
tblLandUse	LandUseSquareFeet	16,930.00	16,932.00
tblLandUse	LandUseSquareFeet	5,227.20	5,400.00
tblLandUse	LandUseSquareFeet	12,000.00	17,010.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	UsageHours	6.00	6.90
tblOffRoadEquipment	UsageHours	6.00	6.90
tblOffRoadEquipment	UsageHours	8.00	9.20
tblOffRoadEquipment	UsageHours	6.00	6.90
tblOffRoadEquipment	UsageHours	8.00	9.20
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripNumber	110.00	120.00

Alluvial Development - On-site Emissions - Fresno County, Summer

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tbITripsAndVMT	HaulingTripNumber	0.00	6.00
tbITripsAndVMT	HaulingTripNumber	250.00	258.00
tbITripsAndVMT	HaulingTripNumber	0.00	10.00
tbITripsAndVMT	HaulingTripNumber	0.00	28.00
tbITripsAndVMT	HaulingTripNumber	0.00	2.00
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripNumber	0.00	4.00
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbIVehicleTrips	DV_TP	11.00	0.00
tbIVehicleTrips	HO_TL	7.50	0.39
tbIVehicleTrips	HS_TL	7.30	0.39
tbIVehicleTrips	HW_TL	10.80	0.39
tbIVehicleTrips	PB_TP	3.00	0.00
tbIVehicleTrips	PR_TP	86.00	100.00
tbIVehicleTrips	ST_TR	1.96	0.00
tbIVehicleTrips	SU_TR	2.19	0.00
tbIVehicleTrips	WD_TR	0.78	0.00
tbIWoodstoves	WoodstoveWoodMass	3,019.20	0.00

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	3.5485	27.0327	29.1807	0.0510	7.1656	1.1836	7.7722	3.4407	1.1429	3.9988	0.0000	4,631.5370	4,631.5370	0.7846	0.0425	4,652.3774
2024	11.7890	25.5444	28.9588	0.0510	8.8700e-003	1.0366	1.0455	2.4400e-003	1.0002	1.0027	0.0000	4,631.1939	4,631.1939	0.7693	3.9900e-003	4,651.6178
Maximum	11.7890	27.0327	29.1807	0.0510	7.1656	1.1836	7.7722	3.4407	1.1429	3.9988	0.0000	4,631.5370	4,631.5370	0.7846	0.0425	4,652.3774

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	3.5485	27.0327	29.1807	0.0510	3.2391	1.1836	3.8456	1.5523	1.1429	2.1105	0.0000	4,631.5370	4,631.5370	0.7846	0.0425	4,652.3774
2024	11.7890	25.5444	28.9588	0.0510	8.8700e-003	1.0366	1.0455	2.4400e-003	1.0002	1.0027	0.0000	4,631.1939	4,631.1939	0.7693	3.9900e-003	4,651.6178
Maximum	11.7890	27.0327	29.1807	0.0510	3.2391	1.1836	3.8456	1.5523	1.1429	2.1105	0.0000	4,631.5370	4,631.5370	0.7846	0.0425	4,652.3774

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.73	0.00	44.53	54.84	0.00	37.76	0.00	0.00	0.00	0.00	0.00	0.00

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4471	0.1209	1.0396	7.5000e-004		0.0143	0.0143		0.0143	0.0143	0.0000	141.5533	141.5533	4.4100e-003	2.5600e-003	142.4271
Energy	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983
Mobile	0.1900	0.0990	0.5414	4.6000e-004	0.0292	6.0000e-004	0.0298	7.7600e-003	5.6000e-004	8.3200e-003		47.4167	47.4167	0.0124	7.5600e-003	49.9792
Total	0.6420	0.2612	1.5986	1.4700e-003	0.0292	0.0183	0.0475	7.7600e-003	0.0182	0.0260	0.0000	241.7546	241.7546	0.0178	0.0111	245.5046

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4467	0.1209	1.0324	7.5000e-004		0.0143	0.0143		0.0143	0.0143	0.0000	141.5372	141.5372	4.3800e-003	2.5600e-003	142.4103
Energy	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983
Mobile	0.1900	0.0990	0.5414	4.6000e-004	0.0292	6.0000e-004	0.0298	7.7600e-003	5.6000e-004	8.3200e-003		47.4167	47.4167	0.0124	7.5600e-003	49.9792
Total	0.6416	0.2612	1.5914	1.4700e-003	0.0292	0.0182	0.0474	7.7600e-003	0.0182	0.0260	0.0000	241.7385	241.7385	0.0178	0.0111	245.4878

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.07	0.03	0.45	0.00	0.00	0.22	0.08	0.00	0.22	0.15	0.00	0.01	0.01	0.17	0.00	0.01

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2023	8/28/2023	5	20	Default duration
2	Site Preparation	Site Preparation	8/29/2023	8/30/2023	5	2	Default duration
3	Grading	Grading	8/31/2023	9/5/2023	5	4	Default duration
4	Paving	Paving	9/6/2023	9/19/2023	5	10	Default duration
5	Building Construction	Building Construction	9/20/2023	1/18/2024	5	87	Reduced from 200 days to 87 to match anticipated schedule
6	Architectural Coating	Architectural Coating	1/19/2024	2/1/2024	5	10	Default duration

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.52

Residential Indoor: 34,445; Residential Outdoor: 11,482; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 1,374 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	2	6.90	231	0.29
Building Construction	Forklifts	2	6.90	89	0.20
Building Construction	Generator Sets	2	9.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	6.90	97	0.37
Building Construction	Welders	6	9.20	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	120.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	6.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	258.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	4.00	10.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Building Construction	14	21.00	6.00	28.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	2.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1887	0.0000	1.1887	0.1800	0.0000	0.1800			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241	1.1887	0.6766	1.8654	0.1800	0.6328	0.8128		2,324.3959	2,324.3959	0.5893		2,339.1278

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.2500e-003	0.1223	0.0989	2.3000e-004	2.1800e-003	2.0000e-004	2.3800e-003	6.1000e-004	1.9000e-004	8.0000e-004		24.7456	24.7456	3.9000e-004	3.8900e-003	25.9150
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0250	7.0900e-003	0.0699	6.0000e-005	3.9800e-003	8.0000e-005	4.0600e-003	1.0700e-003	7.0000e-005	1.1400e-003		6.0151	6.0151	1.5300e-003	8.5000e-004	6.3058
Total	0.0323	0.1294	0.1688	2.9000e-004	6.1600e-003	2.8000e-004	6.4400e-003	1.6800e-003	2.6000e-004	1.9400e-003		30.7607	30.7607	1.9200e-003	4.7400e-003	32.2208

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5349	0.0000	0.5349	0.0810	0.0000	0.0810			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241	0.5349	0.6766	1.2116	0.0810	0.6328	0.7138	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.2500e-003	0.1223	0.0989	2.3000e-004	2.1800e-003	2.0000e-004	2.3800e-003	6.1000e-004	1.9000e-004	8.0000e-004		24.7456	24.7456	3.9000e-004	3.8900e-003	25.9150
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0250	7.0900e-003	0.0699	6.0000e-005	3.9800e-003	8.0000e-005	4.0600e-003	1.0700e-003	7.0000e-005	1.1400e-003		6.0151	6.0151	1.5300e-003	8.5000e-004	6.3058
Total	0.0323	0.1294	0.1688	2.9000e-004	6.1600e-003	2.8000e-004	6.4400e-003	1.6800e-003	2.6000e-004	1.9400e-003		30.7607	30.7607	1.9200e-003	4.7400e-003	32.2208

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	1.1339	12.4250	6.6420	0.0172	6.2662	0.5074	6.7736	3.0041	0.4668	3.4709		1,666.0573	1,666.0573	0.5388		1,679.5282

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.6300e-003	0.0612	0.0494	1.2000e-004	1.0900e-003	1.0000e-004	1.1900e-003	3.0000e-004	1.0000e-004	4.0000e-004		12.3728	12.3728	1.9000e-004	1.9500e-003	12.9575
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0154	4.3700e-003	0.0430	4.0000e-005	2.4500e-003	5.0000e-005	2.5000e-003	6.6000e-004	4.0000e-005	7.0000e-004		3.7016	3.7016	9.4000e-004	5.2000e-004	3.8805
Total	0.0190	0.0655	0.0925	1.6000e-004	3.5400e-003	1.5000e-004	3.6900e-003	9.6000e-004	1.4000e-004	1.1000e-003		16.0744	16.0744	1.1300e-003	2.4700e-003	16.8380

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8198	0.0000	2.8198	1.3518	0.0000	1.3518			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282
Total	1.1339	12.4250	6.6420	0.0172	2.8198	0.5074	3.3272	1.3518	0.4668	1.8186	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.6300e-003	0.0612	0.0494	1.2000e-004	1.0900e-003	1.0000e-004	1.1900e-003	3.0000e-004	1.0000e-004	4.0000e-004		12.3728	12.3728	1.9000e-004	1.9500e-003	12.9575
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0154	4.3700e-003	0.0430	4.0000e-005	2.4500e-003	5.0000e-005	2.5000e-003	6.6000e-004	4.0000e-005	7.0000e-004		3.7016	3.7016	9.4000e-004	5.2000e-004	3.8805
Total	0.0190	0.0655	0.0925	1.6000e-004	3.5400e-003	1.5000e-004	3.6900e-003	9.6000e-004	1.4000e-004	1.1000e-003		16.0744	16.0744	1.1300e-003	2.4700e-003	16.8380

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1391	0.0000	7.1391	3.4333	0.0000	3.4333			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	7.1391	0.6044	7.7435	3.4333	0.5560	3.9893		1,995.6147	1,995.6147	0.6454		2,011.7503

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0780	1.3150	1.0631	2.5100e-003	0.0234	2.1700e-003	0.0256	6.5400e-003	2.0700e-003	8.6100e-003		266.0154	266.0154	4.1900e-003	0.0418	278.5861
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0193	5.4600e-003	0.0538	5.0000e-005	3.0600e-003	6.0000e-005	3.1200e-003	8.2000e-004	5.0000e-005	8.8000e-004		4.6270	4.6270	1.1800e-003	6.5000e-004	4.8506
Total	0.0972	1.3204	1.1168	2.5600e-003	0.0265	2.2300e-003	0.0287	7.3600e-003	2.1200e-003	9.4900e-003		270.6424	270.6424	5.3700e-003	0.0425	283.4368

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.2126	0.0000	3.2126	1.5450	0.0000	1.5450			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	3.2126	0.6044	3.8170	1.5450	0.5560	2.1010	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0780	1.3150	1.0631	2.5100e-003	0.0234	2.1700e-003	0.0256	6.5400e-003	2.0700e-003	8.6100e-003		266.0154	266.0154	4.1900e-003	0.0418	278.5861
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0193	5.4600e-003	0.0538	5.0000e-005	3.0600e-003	6.0000e-005	3.1200e-003	8.2000e-004	5.0000e-005	8.8000e-004		4.6270	4.6270	1.1800e-003	6.5000e-004	4.8506
Total	0.0972	1.3204	1.1168	2.5600e-003	0.0265	2.2300e-003	0.0287	7.3600e-003	2.1200e-003	9.4900e-003		270.6424	270.6424	5.3700e-003	0.0425	283.4368

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7468	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2100e-003	0.0204	0.0165	4.0000e-005	3.6000e-004	3.0000e-005	4.0000e-004	1.0000e-004	3.0000e-005	1.3000e-004		4.1243	4.1243	6.0000e-005	6.5000e-004	4.3192
Vendor	2.8000e-003	0.0539	0.0380	1.0000e-004	1.5500e-003	9.0000e-005	1.6300e-003	4.6000e-004	8.0000e-005	5.4000e-004		10.9208	10.9208	1.7000e-004	1.6900e-003	11.4292
Worker	0.0250	7.0900e-003	0.0699	6.0000e-005	3.9800e-003	8.0000e-005	4.0600e-003	1.0700e-003	7.0000e-005	1.1400e-003		6.0151	6.0151	1.5300e-003	8.5000e-004	6.3058
Total	0.0291	0.0814	0.1244	2.0000e-004	5.8900e-003	2.0000e-004	6.0900e-003	1.6300e-003	1.8000e-004	1.8100e-003		21.0602	21.0602	1.7600e-003	3.1900e-003	22.0542

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7468	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2100e-003	0.0204	0.0165	4.0000e-005	3.6000e-004	3.0000e-005	4.0000e-004	1.0000e-004	3.0000e-005	1.3000e-004		4.1243	4.1243	6.0000e-005	6.5000e-004	4.3192
Vendor	2.8000e-003	0.0539	0.0380	1.0000e-004	1.5500e-003	9.0000e-005	1.6300e-003	4.6000e-004	8.0000e-005	5.4000e-004		10.9208	10.9208	1.7000e-004	1.6900e-003	11.4292
Worker	0.0250	7.0900e-003	0.0699	6.0000e-005	3.9800e-003	8.0000e-005	4.0600e-003	1.0700e-003	7.0000e-005	1.1400e-003		6.0151	6.0151	1.5300e-003	8.5000e-004	6.3058
Total	0.0291	0.0814	0.1244	2.0000e-004	5.8900e-003	2.0000e-004	6.0900e-003	1.6300e-003	1.8000e-004	1.8100e-003		21.0602	21.0602	1.7600e-003	3.1900e-003	22.0542

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5035	26.9339	29.0055	0.0507		1.1833	1.1833		1.1427	1.1427		4,604.1117	4,604.1117	0.7818		4,623.6572
Total	3.5035	26.9339	29.0055	0.0507		1.1833	1.1833		1.1427	1.1427		4,604.1117	4,604.1117	0.7818		4,623.6572

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.9000e-004	6.5600e-003	5.3000e-003	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005		1.3274	1.3274	2.0000e-005	2.1000e-004	1.3901
Vendor	4.2000e-003	0.0808	0.0570	1.5000e-004	2.3200e-003	1.3000e-004	2.4500e-003	6.8000e-004	1.2000e-004	8.1000e-004		16.3812	16.3812	2.6000e-004	2.5400e-003	17.1438
Worker	0.0404	0.0115	0.1129	1.0000e-004	6.4300e-003	1.3000e-004	6.5500e-003	1.7300e-003	1.2000e-004	1.8500e-003		9.7167	9.7167	2.4700e-003	1.3700e-003	10.1863
Total	0.0450	0.0989	0.1752	2.6000e-004	8.8700e-003	2.7000e-004	9.1300e-003	2.4400e-003	2.5000e-004	2.7000e-003		27.4253	27.4253	2.7500e-003	4.1200e-003	28.7202

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5035	26.9339	29.0055	0.0507		1.1833	1.1833		1.1427	1.1427	0.0000	4,604.1117	4,604.1117	0.7818		4,623.6572
Total	3.5035	26.9339	29.0055	0.0507		1.1833	1.1833		1.1427	1.1427	0.0000	4,604.1117	4,604.1117	0.7818		4,623.6572

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.9000e-004	6.5600e-003	5.3000e-003	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005		1.3274	1.3274	2.0000e-005	2.1000e-004	1.3901
Vendor	4.2000e-003	0.0808	0.0570	1.5000e-004	2.3200e-003	1.3000e-004	2.4500e-003	6.8000e-004	1.2000e-004	8.1000e-004		16.3812	16.3812	2.6000e-004	2.5400e-003	17.1438
Worker	0.0404	0.0115	0.1129	1.0000e-004	6.4300e-003	1.3000e-004	6.5500e-003	1.7300e-003	1.2000e-004	1.8500e-003		9.7167	9.7167	2.4700e-003	1.3700e-003	10.1863
Total	0.0450	0.0989	0.1752	2.6000e-004	8.8700e-003	2.7000e-004	9.1300e-003	2.4400e-003	2.5000e-004	2.7000e-003		27.4253	27.4253	2.7500e-003	4.1200e-003	28.7202

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2660	25.4469	28.7895	0.0507		1.0363	1.0363		1.0000	1.0000		4,604.4193	4,604.4193	0.7668		4,623.5894
Total	3.2660	25.4469	28.7895	0.0507		1.0363	1.0363		1.0000	1.0000		4,604.4193	4,604.4193	0.7668		4,623.5894

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.9000e-004	6.5200e-003	5.2700e-003	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005		1.3016	1.3016	2.0000e-005	2.0000e-004	1.3631
Vendor	4.1300e-003	0.0805	0.0562	1.5000e-004	2.3200e-003	1.3000e-004	2.4500e-003	6.8000e-004	1.2000e-004	8.1000e-004		16.0758	16.0758	2.5000e-004	2.4900e-003	16.8242
Worker	0.0371	0.0105	0.1078	9.0000e-005	6.4300e-003	1.2000e-004	6.5500e-003	1.7300e-003	1.1000e-004	1.8400e-003		9.3972	9.3972	2.2700e-003	1.3000e-003	9.8412
Total	0.0417	0.0975	0.1693	2.5000e-004	8.8700e-003	2.6000e-004	9.1300e-003	2.4400e-003	2.4000e-004	2.6900e-003		26.7746	26.7746	2.5400e-003	3.9900e-003	28.0285

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2660	25.4469	28.7895	0.0507		1.0363	1.0363		1.0000	1.0000	0.0000	4,604.4193	4,604.4193	0.7668		4,623.5894
Total	3.2660	25.4469	28.7895	0.0507		1.0363	1.0363		1.0000	1.0000	0.0000	4,604.4193	4,604.4193	0.7668		4,623.5894

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.9000e-004	6.5200e-003	5.2700e-003	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005		1.3016	1.3016	2.0000e-005	2.0000e-004	1.3631
Vendor	4.1300e-003	0.0805	0.0562	1.5000e-004	2.3200e-003	1.3000e-004	2.4500e-003	6.8000e-004	1.2000e-004	8.1000e-004		16.0758	16.0758	2.5000e-004	2.4900e-003	16.8242
Worker	0.0371	0.0105	0.1078	9.0000e-005	6.4300e-003	1.2000e-004	6.5500e-003	1.7300e-003	1.1000e-004	1.8400e-003		9.3972	9.3972	2.2700e-003	1.3000e-003	9.8412
Total	0.0417	0.0975	0.1693	2.5000e-004	8.8700e-003	2.6000e-004	9.1300e-003	2.4400e-003	2.4000e-004	2.6900e-003		26.7746	26.7746	2.5400e-003	3.9900e-003	28.0285

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.6009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	11.7817	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4000e-004	4.0500e-003	3.2800e-003	1.0000e-005	7.0000e-005	1.0000e-005	8.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005		0.8089	0.8089	1.0000e-005	1.3000e-004	0.8471
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0800e-003	2.0000e-003	0.0205	2.0000e-005	1.2200e-003	2.0000e-005	1.2500e-003	3.3000e-004	2.0000e-005	3.5000e-004		1.7899	1.7899	4.3000e-004	2.5000e-004	1.8745
Total	7.3200e-003	6.0500e-003	0.0238	3.0000e-005	1.2900e-003	3.0000e-005	1.3300e-003	3.5000e-004	3.0000e-005	3.8000e-004		2.5988	2.5988	4.4000e-004	3.8000e-004	2.7216

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.6009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	11.7817	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4000e-004	4.0500e-003	3.2800e-003	1.0000e-005	7.0000e-005	1.0000e-005	8.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005		0.8089	0.8089	1.0000e-005	1.3000e-004	0.8471
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0800e-003	2.0000e-003	0.0205	2.0000e-005	1.2200e-003	2.0000e-005	1.2500e-003	3.3000e-004	2.0000e-005	3.5000e-004		1.7899	1.7899	4.3000e-004	2.5000e-004	1.8745
Total	7.3200e-003	6.0500e-003	0.0238	3.0000e-005	1.2900e-003	3.0000e-005	1.3300e-003	3.5000e-004	3.0000e-005	3.8000e-004		2.5988	2.5988	4.4000e-004	3.8000e-004	2.7216

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1900	0.0990	0.5414	4.6000e-004	0.0292	6.0000e-004	0.0298	7.7600e-003	5.6000e-004	8.3200e-003		47.4167	47.4167	0.0124	7.5600e-003	49.9792
Unmitigated	0.1900	0.0990	0.5414	4.6000e-004	0.0292	6.0000e-004	0.0298	7.7600e-003	5.6000e-004	8.3200e-003		47.4167	47.4167	0.0124	7.5600e-003	49.9792

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	87.84	97.68	75.36	12,416	12,416
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	87.84	97.68	75.36	12,416	12,416

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	0.39	0.39	0.39	48.40	15.90	35.70	100	0	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.530500	0.205800	0.167300	0.055000	0.001100	0.000900	0.008500	0.021800	0.000000	0.004300	0.002500	0.000400	0.001900
City Park	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Enclosed Parking Structure	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Parking Lot	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Unenclosed Parking Structure	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983
NaturalGas Unmitigated	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	448.669	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.448669	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4467	0.1209	1.0324	7.5000e-004		0.0143	0.0143		0.0143	0.0143	0.0000	141.5372	141.5372	4.3800e-003	2.5600e-003	142.4103
Unmitigated	0.4471	0.1209	1.0396	7.5000e-004		0.0143	0.0143		0.0143	0.0143	0.0000	141.5533	141.5533	4.4100e-003	2.5600e-003	142.4271

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3724					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0128	0.1095	0.0466	7.0000e-004		8.8500e-003	8.8500e-003		8.8500e-003	8.8500e-003	0.0000	139.7647	139.7647	2.6800e-003	2.5600e-003	140.5953
Landscaping	0.0301	0.0114	0.9930	5.0000e-005		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003		1.7886	1.7886	1.7300e-003		1.8318
Total	0.4471	0.1209	1.0396	7.5000e-004		0.0143	0.0143		0.0143	0.0143	0.0000	141.5533	141.5533	4.4100e-003	2.5600e-003	142.4271

Alluvial Development - On-site Emissions - Fresno County, Summer

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3724					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0128	0.1095	0.0466	7.0000e-004		8.8500e-003	8.8500e-003		8.8500e-003	8.8500e-003	0.0000	139.7647	139.7647	2.6800e-003	2.5600e-003	140.5953
Landscaping	0.0297	0.0114	0.9859	5.0000e-005		5.4500e-003	5.4500e-003		5.4500e-003	5.4500e-003		1.7724	1.7724	1.7100e-003		1.8151
Total	0.4467	0.1209	1.0324	7.5000e-004		0.0143	0.0143		0.0143	0.0143	0.0000	141.5372	141.5372	4.3900e-003	2.5600e-003	142.4103

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Alluvial Development - On-site Emissions

Fresno County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	3.16	1000sqft	0.07	3,160.00	0
Parking Lot	16.93	1000sqft	0.39	16,932.00	0
Unenclosed Parking Structure	7.00	Space	0.06	2,800.00	0
City Park	0.12	Acre	0.12	5,400.00	0
Apartments Low Rise	12.00	Dwelling Unit	0.75	17,010.00	34

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Alluvial Residential Development Project - Localized Screening Analysis - On-site Emissions

Project operations the earliest operational year (2023)

Land Use - Land use development (see site coverage summary for how project components are represented in CalEEMod)

Construction Phase - Anticipated construction duration per applicant: 4-6 months

Construction start date: 08/01/2023

Off-road Equipment - Adjusted construction equipment usage to match CalEEMod default total building construction HP hours.

Trips and VMT - Construction trip lengths updated to 0.39 mile (0.14 + 0.25) to account for on-site and localized emissions from on-road vehicles traveling to and from the project site.

Demolition - Existing site to be demolished (1,111 tons of debris from buildings + hardscape)

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading - Cut fill anticipated to mostly balance on-site (minimal or no export/import anticipated).
 1,000 cy import + 1,000 cy export (separate trips) assumed to provide a conservative estimate of emissions.

Architectural Coating - Rule 4601 Architectural Coatings

Vehicle Trips - Trip lengths updated to 0.39 mile to account for on-site and localized emissions from mobile sources.

Woodstoves - SJVAPCD Rule 4901 Woodburning

Consumer Products -

Area Coating - Rule 4601 Architectural Coating

Construction Off-road Equipment Mitigation - Compliance with SJVAPCD Regulation VIII

Area Mitigation - Rule 4601 Architectural Coatings, building code standards (outside outlets), and no woodburning fireplaces (only natural gas hearth)

Water Mitigation - Compliance with Green Building Code Standards and California Model Water Efficient Landscape Ordinance

Waste Mitigation - CalRecycle 75 Percent Initiative (25% reduction)

Fleet Mix - SJVAPCD-approved Residential Fleet Mix for the 2023 operational year

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Residential_Exterior	150	50
tblAreaCoating	Area_EF_Residential_Interior	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	200.00	87.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.51	0.53
tblFleetMix	LDT1	0.05	0.21
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.03	1.1000e-003
tblFleetMix	LHD2	7.0060e-003	9.0000e-004

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	MCY	0.02	2.5000e-003
tblFleetMix	MDV	0.16	0.06
tblFleetMix	MH	3.0900e-003	1.9000e-003
tblFleetMix	MHD	0.01	8.5000e-003
tblFleetMix	OBUS	7.1700e-004	0.00
tblFleetMix	SBUS	1.5290e-003	4.0000e-004
tblFleetMix	UBUS	2.9100e-004	4.3000e-003
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialImported	0.00	1,000.00
tblLandUse	LandUseSquareFeet	16,930.00	16,932.00
tblLandUse	LandUseSquareFeet	5,227.20	5,400.00
tblLandUse	LandUseSquareFeet	12,000.00	17,010.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	UsageHours	6.00	6.90
tblOffRoadEquipment	UsageHours	6.00	6.90
tblOffRoadEquipment	UsageHours	8.00	9.20
tblOffRoadEquipment	UsageHours	6.00	6.90
tblOffRoadEquipment	UsageHours	8.00	9.20
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripLength	20.00	0.39
tblTripsAndVMT	HaulingTripNumber	110.00	120.00

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tbITripsAndVMT	HaulingTripNumber	0.00	6.00
tbITripsAndVMT	HaulingTripNumber	250.00	258.00
tbITripsAndVMT	HaulingTripNumber	0.00	10.00
tbITripsAndVMT	HaulingTripNumber	0.00	28.00
tbITripsAndVMT	HaulingTripNumber	0.00	2.00
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripLength	7.30	0.39
tbITripsAndVMT	VendorTripNumber	0.00	4.00
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbITripsAndVMT	WorkerTripLength	10.80	0.39
tbIVehicleTrips	DV_TP	11.00	0.00
tbIVehicleTrips	HO_TL	7.50	0.39
tbIVehicleTrips	HS_TL	7.30	0.39
tbIVehicleTrips	HW_TL	10.80	0.39
tbIVehicleTrips	PB_TP	3.00	0.00
tbIVehicleTrips	PR_TP	86.00	100.00
tbIVehicleTrips	ST_TR	1.96	0.00
tbIVehicleTrips	SU_TR	2.19	0.00
tbIVehicleTrips	WD_TR	0.78	0.00
tbIWoodstoves	WoodstoveWoodMass	3,019.20	0.00

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	3.5348	27.0409	29.2207	0.0510	7.1656	1.1836	7.7723	3.4407	1.1430	3.9989	0.0000	4,631.0865	4,631.0865	0.7854	0.0434	4,652.0122
2024	11.7867	25.5524	28.9974	0.0510	8.8700e-003	1.0366	1.0455	2.4400e-003	1.0003	1.0027	0.0000	4,630.7652	4,630.7652	0.7701	4.2000e-003	4,651.2697
Maximum	11.7867	27.0409	29.2207	0.0510	7.1656	1.1836	7.7723	3.4407	1.1430	3.9989	0.0000	4,631.0865	4,631.0865	0.7854	0.0434	4,652.0122

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	3.5348	27.0409	29.2207	0.0510	3.2391	1.1836	3.8457	1.5523	1.1430	2.1106	0.0000	4,631.0865	4,631.0865	0.7854	0.0434	4,652.0122
2024	11.7867	25.5524	28.9974	0.0510	8.8700e-003	1.0366	1.0455	2.4400e-003	1.0003	1.0027	0.0000	4,630.7652	4,630.7652	0.7701	4.2000e-003	4,651.2697
Maximum	11.7867	27.0409	29.2207	0.0510	3.2391	1.1836	3.8457	1.5523	1.1430	2.1106	0.0000	4,631.0865	4,631.0865	0.7854	0.0434	4,652.0122

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.73	0.00	44.53	54.84	0.00	37.75	0.00	0.00	0.00	0.00	0.00	0.00

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4471	0.1209	1.0396	7.5000e-004		0.0143	0.0143		0.0143	0.0143	0.0000	141.5533	141.5533	4.4100e-003	2.5600e-003	142.4271
Energy	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983
Mobile	0.1314	0.1116	0.7158	4.4000e-004	0.0292	6.1000e-004	0.0298	7.7600e-003	5.6000e-004	8.3200e-003		45.1070	45.1070	0.0164	8.3200e-003	47.9961
Total	0.5834	0.2739	1.7730	1.4500e-003	0.0292	0.0183	0.0475	7.7600e-003	0.0182	0.0260	0.0000	239.4449	239.4449	0.0218	0.0119	243.5215

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.4467	0.1209	1.0324	7.5000e-004		0.0143	0.0143		0.0143	0.0143	0.0000	141.5372	141.5372	4.3800e-003	2.5600e-003	142.4103
Energy	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983
Mobile	0.1314	0.1116	0.7158	4.4000e-004	0.0292	6.1000e-004	0.0298	7.7600e-003	5.6000e-004	8.3200e-003		45.1070	45.1070	0.0164	8.3200e-003	47.9961
Total	0.5830	0.2738	1.7658	1.4500e-003	0.0292	0.0183	0.0474	7.7600e-003	0.0182	0.0260	0.0000	239.4287	239.4287	0.0218	0.0119	243.5047

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.07	0.03	0.40	0.00	0.00	0.22	0.08	0.00	0.22	0.15	0.00	0.01	0.01	0.14	0.00	0.01

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2023	8/28/2023	5	20	Default duration
2	Site Preparation	Site Preparation	8/29/2023	8/30/2023	5	2	Default duration
3	Grading	Grading	8/31/2023	9/5/2023	5	4	Default duration
4	Paving	Paving	9/6/2023	9/19/2023	5	10	Default duration
5	Building Construction	Building Construction	9/20/2023	1/18/2024	5	87	Reduced from 200 days to 87 to match anticipated schedule
6	Architectural Coating	Architectural Coating	1/19/2024	2/1/2024	5	10	Default duration

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.52

Residential Indoor: 34,445; Residential Outdoor: 11,482; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 1,374 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	2	6.90	231	0.29
Building Construction	Forklifts	2	6.90	89	0.20
Building Construction	Generator Sets	2	9.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	6.90	97	0.37
Building Construction	Welders	6	9.20	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	120.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	6.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	258.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	4.00	10.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Building Construction	14	21.00	6.00	28.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	2.00	0.39	0.39	0.39	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1887	0.0000	1.1887	0.1800	0.0000	0.1800			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241	1.1887	0.6766	1.8654	0.1800	0.6328	0.8128		2,324.3959	2,324.3959	0.5893		2,339.1278

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.3100e-003	0.1325	0.1021	2.4000e-004	2.1800e-003	2.1000e-004	2.3900e-003	6.1000e-004	2.0000e-004	8.1000e-004		25.2272	25.2272	3.5000e-004	3.9700e-003	26.4180
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0169	8.3500e-003	0.0927	6.0000e-005	3.9800e-003	8.0000e-005	4.0600e-003	1.0700e-003	7.0000e-005	1.1400e-003		5.5691	5.5691	2.0800e-003	9.5000e-004	5.9044
Total	0.0232	0.1409	0.1947	3.0000e-004	6.1600e-003	2.9000e-004	6.4500e-003	1.6800e-003	2.7000e-004	1.9500e-003		30.7963	30.7963	2.4300e-003	4.9200e-003	32.3224

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5349	0.0000	0.5349	0.0810	0.0000	0.0810			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241	0.5349	0.6766	1.2116	0.0810	0.6328	0.7138	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.3100e-003	0.1325	0.1021	2.4000e-004	2.1800e-003	2.1000e-004	2.3900e-003	6.1000e-004	2.0000e-004	8.1000e-004		25.2272	25.2272	3.5000e-004	3.9700e-003	26.4180
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0169	8.3500e-003	0.0927	6.0000e-005	3.9800e-003	8.0000e-005	4.0600e-003	1.0700e-003	7.0000e-005	1.1400e-003		5.5691	5.5691	2.0800e-003	9.5000e-004	5.9044
Total	0.0232	0.1409	0.1947	3.0000e-004	6.1600e-003	2.9000e-004	6.4500e-003	1.6800e-003	2.7000e-004	1.9500e-003		30.7963	30.7963	2.4300e-003	4.9200e-003	32.3224

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	1.1339	12.4250	6.6420	0.0172	6.2662	0.5074	6.7736	3.0041	0.4668	3.4709		1,666.0573	1,666.0573	0.5388		1,679.5282

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.1500e-003	0.0663	0.0510	1.2000e-004	1.0900e-003	1.1000e-004	1.1900e-003	3.0000e-004	1.0000e-004	4.0000e-004		12.6136	12.6136	1.7000e-004	1.9800e-003	13.2090
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0104	5.1400e-003	0.0570	3.0000e-005	2.4500e-003	5.0000e-005	2.5000e-003	6.6000e-004	4.0000e-005	7.0000e-004		3.4272	3.4272	1.2800e-003	5.8000e-004	3.6335
Total	0.0135	0.0714	0.1081	1.5000e-004	3.5400e-003	1.6000e-004	3.6900e-003	9.6000e-004	1.4000e-004	1.1000e-003		16.0407	16.0407	1.4500e-003	2.5600e-003	16.8425

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8198	0.0000	2.8198	1.3518	0.0000	1.3518			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282
Total	1.1339	12.4250	6.6420	0.0172	2.8198	0.5074	3.3272	1.3518	0.4668	1.8186	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.1500e-003	0.0663	0.0510	1.2000e-004	1.0900e-003	1.1000e-004	1.1900e-003	3.0000e-004	1.0000e-004	4.0000e-004		12.6136	12.6136	1.7000e-004	1.9800e-003	13.2090
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0104	5.1400e-003	0.0570	3.0000e-005	2.4500e-003	5.0000e-005	2.5000e-003	6.6000e-004	4.0000e-005	7.0000e-004		3.4272	3.4272	1.2800e-003	5.8000e-004	3.6335
Total	0.0135	0.0714	0.1081	1.5000e-004	3.5400e-003	1.6000e-004	3.6900e-003	9.6000e-004	1.4000e-004	1.1000e-003		16.0407	16.0407	1.4500e-003	2.5600e-003	16.8425

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1391	0.0000	7.1391	3.4333	0.0000	3.4333			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	7.1391	0.6044	7.7435	3.4333	0.5560	3.9893		1,995.6147	1,995.6147	0.6454		2,011.7503

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0678	1.4246	1.0970	2.5600e-003	0.0234	2.2700e-003	0.0257	6.5400e-003	2.1700e-003	8.7100e-003		271.1919	271.1919	3.7200e-003	0.0427	283.9934
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0130	6.4200e-003	0.0713	4.0000e-005	3.0600e-003	6.0000e-005	3.1200e-003	8.2000e-004	5.0000e-005	8.8000e-004		4.2840	4.2840	1.6000e-003	7.3000e-004	4.5418
Total	0.0808	1.4310	1.1683	2.6000e-003	0.0265	2.3300e-003	0.0288	7.3600e-003	2.2200e-003	9.5900e-003		275.4759	275.4759	5.3200e-003	0.0434	288.5352

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.2126	0.0000	3.2126	1.5450	0.0000	1.5450			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	3.2126	0.6044	3.8170	1.5450	0.5560	2.1010	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0678	1.4246	1.0970	2.5600e-003	0.0234	2.2700e-003	0.0257	6.5400e-003	2.1700e-003	8.7100e-003		271.1919	271.1919	3.7200e-003	0.0427	283.9934
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0130	6.4200e-003	0.0713	4.0000e-005	3.0600e-003	6.0000e-005	3.1200e-003	8.2000e-004	5.0000e-005	8.8000e-004		4.2840	4.2840	1.6000e-003	7.3000e-004	4.5418
Total	0.0808	1.4310	1.1683	2.6000e-003	0.0265	2.3300e-003	0.0288	7.3600e-003	2.2200e-003	9.5900e-003		275.4759	275.4759	5.3200e-003	0.0434	288.5352

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7468	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0500e-003	0.0221	0.0170	4.0000e-005	3.6000e-004	4.0000e-005	4.0000e-004	1.0000e-004	3.0000e-005	1.3000e-004		4.2045	4.2045	6.0000e-005	6.6000e-004	4.4030
Vendor	2.4800e-003	0.0576	0.0400	1.0000e-004	1.5500e-003	9.0000e-005	1.6400e-003	4.6000e-004	9.0000e-005	5.4000e-004		11.0836	11.0836	1.6000e-004	1.7200e-003	11.6001
Worker	0.0169	8.3500e-003	0.0927	6.0000e-005	3.9800e-003	8.0000e-005	4.0600e-003	1.0700e-003	7.0000e-005	1.1400e-003		5.5691	5.5691	2.0800e-003	9.5000e-004	5.9044
Total	0.0204	0.0881	0.1497	2.0000e-004	5.8900e-003	2.1000e-004	6.1000e-003	1.6300e-003	1.9000e-004	1.8100e-003		20.8573	20.8573	2.3000e-003	3.3300e-003	21.9074

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7468	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0500e-003	0.0221	0.0170	4.0000e-005	3.6000e-004	4.0000e-005	4.0000e-004	1.0000e-004	3.0000e-005	1.3000e-004		4.2045	4.2045	6.0000e-005	6.6000e-004	4.4030
Vendor	2.4800e-003	0.0576	0.0400	1.0000e-004	1.5500e-003	9.0000e-005	1.6400e-003	4.6000e-004	9.0000e-005	5.4000e-004		11.0836	11.0836	1.6000e-004	1.7200e-003	11.6001
Worker	0.0169	8.3500e-003	0.0927	6.0000e-005	3.9800e-003	8.0000e-005	4.0600e-003	1.0700e-003	7.0000e-005	1.1400e-003		5.5691	5.5691	2.0800e-003	9.5000e-004	5.9044
Total	0.0204	0.0881	0.1497	2.0000e-004	5.8900e-003	2.1000e-004	6.1000e-003	1.6300e-003	1.9000e-004	1.8100e-003		20.8573	20.8573	2.3000e-003	3.3300e-003	21.9074

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5035	26.9339	29.0055	0.0507		1.1833	1.1833		1.1427	1.1427		4,604.1117	4,604.1117	0.7818		4,623.6572
Total	3.5035	26.9339	29.0055	0.0507		1.1833	1.1833		1.1427	1.1427		4,604.1117	4,604.1117	0.7818		4,623.6572

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.4000e-004	7.1100e-003	5.4700e-003	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005		1.3532	1.3532	2.0000e-005	2.1000e-004	1.4171
Vendor	3.7300e-003	0.0865	0.0600	1.6000e-004	2.3200e-003	1.3000e-004	2.4600e-003	6.8000e-004	1.3000e-004	8.1000e-004		16.6254	16.6254	2.4000e-004	2.5800e-003	17.4001
Worker	0.0273	0.0135	0.1497	9.0000e-005	6.4300e-003	1.3000e-004	6.5500e-003	1.7300e-003	1.2000e-004	1.8500e-003		8.9963	8.9963	3.3600e-003	1.5400e-003	9.5378
Total	0.0314	0.1071	0.2152	2.6000e-004	8.8700e-003	2.7000e-004	9.1400e-003	2.4400e-003	2.6000e-004	2.7000e-003		26.9749	26.9749	3.6200e-003	4.3300e-003	28.3550

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5035	26.9339	29.0055	0.0507		1.1833	1.1833		1.1427	1.1427	0.0000	4,604.1117	4,604.1117	0.7818		4,623.6572
Total	3.5035	26.9339	29.0055	0.0507		1.1833	1.1833		1.1427	1.1427	0.0000	4,604.1117	4,604.1117	0.7818		4,623.6572

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.4000e-004	7.1100e-003	5.4700e-003	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005		1.3532	1.3532	2.0000e-005	2.1000e-004	1.4171
Vendor	3.7300e-003	0.0865	0.0600	1.6000e-004	2.3200e-003	1.3000e-004	2.4600e-003	6.8000e-004	1.3000e-004	8.1000e-004		16.6254	16.6254	2.4000e-004	2.5800e-003	17.4001
Worker	0.0273	0.0135	0.1497	9.0000e-005	6.4300e-003	1.3000e-004	6.5500e-003	1.7300e-003	1.2000e-004	1.8500e-003		8.9963	8.9963	3.3600e-003	1.5400e-003	9.5378
Total	0.0314	0.1071	0.2152	2.6000e-004	8.8700e-003	2.7000e-004	9.1400e-003	2.4400e-003	2.6000e-004	2.7000e-003		26.9749	26.9749	3.6200e-003	4.3300e-003	28.3550

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2660	25.4469	28.7895	0.0507		1.0363	1.0363		1.0000	1.0000		4,604.4193	4,604.4193	0.7668		4,623.5894
Total	3.2660	25.4469	28.7895	0.0507		1.0363	1.0363		1.0000	1.0000		4,604.4193	4,604.4193	0.7668		4,623.5894

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.4000e-004	7.0700e-003	5.4400e-003	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005		1.3271	1.3271	2.0000e-005	2.1000e-004	1.3897
Vendor	3.6600e-003	0.0861	0.0591	1.5000e-004	2.3200e-003	1.3000e-004	2.4600e-003	6.8000e-004	1.3000e-004	8.1000e-004		16.3175	16.3175	2.4000e-004	2.5300e-003	17.0778
Worker	0.0250	0.0124	0.1434	9.0000e-005	6.4300e-003	1.2000e-004	6.5500e-003	1.7300e-003	1.1000e-004	1.8400e-003		8.7014	8.7014	3.0800e-003	1.4600e-003	9.2129
Total	0.0290	0.1056	0.2079	2.5000e-004	8.8700e-003	2.6000e-004	9.1400e-003	2.4400e-003	2.5000e-004	2.6900e-003		26.3459	26.3459	3.3400e-003	4.2000e-003	27.6804

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2660	25.4469	28.7895	0.0507		1.0363	1.0363		1.0000	1.0000	0.0000	4,604.4193	4,604.4193	0.7668		4,623.5894
Total	3.2660	25.4469	28.7895	0.0507		1.0363	1.0363		1.0000	1.0000	0.0000	4,604.4193	4,604.4193	0.7668		4,623.5894

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.4000e-004	7.0700e-003	5.4400e-003	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005		1.3271	1.3271	2.0000e-005	2.1000e-004	1.3897
Vendor	3.6600e-003	0.0861	0.0591	1.5000e-004	2.3200e-003	1.3000e-004	2.4600e-003	6.8000e-004	1.3000e-004	8.1000e-004		16.3175	16.3175	2.4000e-004	2.5300e-003	17.0778
Worker	0.0250	0.0124	0.1434	9.0000e-005	6.4300e-003	1.2000e-004	6.5500e-003	1.7300e-003	1.1000e-004	1.8400e-003		8.7014	8.7014	3.0800e-003	1.4600e-003	9.2129
Total	0.0290	0.1056	0.2079	2.5000e-004	8.8700e-003	2.6000e-004	9.1400e-003	2.4400e-003	2.5000e-004	2.6900e-003		26.3459	26.3459	3.3400e-003	4.2000e-003	27.6804

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.6009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	11.7817	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1000e-004	4.3900e-003	3.3800e-003	1.0000e-005	7.0000e-005	1.0000e-005	8.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005		0.8247	0.8247	1.0000e-005	1.3000e-004	0.8636
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7500e-003	2.3600e-003	0.0273	2.0000e-005	1.2200e-003	2.0000e-005	1.2500e-003	3.3000e-004	2.0000e-005	3.5000e-004		1.6574	1.6574	5.9000e-004	2.8000e-004	1.7548
Total	4.9600e-003	6.7500e-003	0.0307	3.0000e-005	1.2900e-003	3.0000e-005	1.3300e-003	3.5000e-004	3.0000e-005	3.8000e-004		2.4821	2.4821	6.0000e-004	4.1000e-004	2.6184

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.6009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	11.7817	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1000e-004	4.3900e-003	3.3800e-003	1.0000e-005	7.0000e-005	1.0000e-005	8.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005		0.8247	0.8247	1.0000e-005	1.3000e-004	0.8636
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7500e-003	2.3600e-003	0.0273	2.0000e-005	1.2200e-003	2.0000e-005	1.2500e-003	3.3000e-004	2.0000e-005	3.5000e-004		1.6574	1.6574	5.9000e-004	2.8000e-004	1.7548
Total	4.9600e-003	6.7500e-003	0.0307	3.0000e-005	1.2900e-003	3.0000e-005	1.3300e-003	3.5000e-004	3.0000e-005	3.8000e-004		2.4821	2.4821	6.0000e-004	4.1000e-004	2.6184

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1314	0.1116	0.7158	4.4000e-004	0.0292	6.1000e-004	0.0298	7.7600e-003	5.6000e-004	8.3200e-003		45.1070	45.1070	0.0164	8.3200e-003	47.9961
Unmitigated	0.1314	0.1116	0.7158	4.4000e-004	0.0292	6.1000e-004	0.0298	7.7600e-003	5.6000e-004	8.3200e-003		45.1070	45.1070	0.0164	8.3200e-003	47.9961

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	87.84	97.68	75.36	12,416	12,416
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	87.84	97.68	75.36	12,416	12,416

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	0.39	0.39	0.39	48.40	15.90	35.70	100	0	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.530500	0.205800	0.167300	0.055000	0.001100	0.000900	0.008500	0.021800	0.000000	0.004300	0.002500	0.000400	0.001900
City Park	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Enclosed Parking Structure	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Parking Lot	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090
Unenclosed Parking Structure	0.510058	0.053037	0.175964	0.161396	0.026773	0.007006	0.013819	0.022114	0.000717	0.000291	0.024206	0.001529	0.003090

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983
NaturalGas Unmitigated	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	448.669	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.448669	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003		52.7846	52.7846	1.0100e-003	9.7000e-004	53.0983

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4467	0.1209	1.0324	7.5000e-004		0.0143	0.0143		0.0143	0.0143	0.0000	141.5372	141.5372	4.3800e-003	2.5600e-003	142.4103
Unmitigated	0.4471	0.1209	1.0396	7.5000e-004		0.0143	0.0143		0.0143	0.0143	0.0000	141.5533	141.5533	4.4100e-003	2.5600e-003	142.4271

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3724					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0128	0.1095	0.0466	7.0000e-004		8.8500e-003	8.8500e-003		8.8500e-003	8.8500e-003	0.0000	139.7647	139.7647	2.6800e-003	2.5600e-003	140.5953
Landscaping	0.0301	0.0114	0.9930	5.0000e-005		5.4900e-003	5.4900e-003		5.4900e-003	5.4900e-003		1.7886	1.7886	1.7300e-003		1.8318
Total	0.4471	0.1209	1.0396	7.5000e-004		0.0143	0.0143		0.0143	0.0143	0.0000	141.5533	141.5533	4.4100e-003	2.5600e-003	142.4271

Alluvial Development - On-site Emissions - Fresno County, Winter

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3724					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0128	0.1095	0.0466	7.0000e-004		8.8500e-003	8.8500e-003		8.8500e-003	8.8500e-003	0.0000	139.7647	139.7647	2.6800e-003	2.5600e-003	140.5953
Landscaping	0.0297	0.0114	0.9859	5.0000e-005		5.4500e-003	5.4500e-003		5.4500e-003	5.4500e-003		1.7724	1.7724	1.7100e-003		1.8151
Total	0.4467	0.1209	1.0324	7.5000e-004		0.0143	0.0143		0.0143	0.0143	0.0000	141.5372	141.5372	4.3900e-003	2.5600e-003	142.4103

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**Alluvial Development - Buildout Operations BAU Scenario
Fresno County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	3.16	1000sqft	0.07	3,160.00	0
Parking Lot	16.93	1000sqft	0.39	16,932.00	0
Unenclosed Parking Structure	7.00	Space	0.06	2,800.00	0
City Park	0.12	Acre	0.12	5,400.00	0
Apartments Low Rise	12.00	Dwelling Unit	0.75	17,010.00	34

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2005
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Buildout Operations (2023 - Earliest Year of Operations) - Business as Usual (BAU) Scenario
PG&E CO2 Intensity Factors for 2005

Land Use - Land use development (see site coverage summary for how project components are represented in CalEEMod)

Construction Phase - Operational run only (zeroed out construction parameters)

Off-road Equipment - Operational run only (zeroed out construction parameters)

Off-road Equipment -

Trips and VMT - Operational run only (zeroed out construction parameters)

Demolition -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading -

Architectural Coating - Operational run only

Vehicle Trips - Trip generation for apartment units - other land uses are used to represent on-site amenities that would serve project residents and would not generate additional external trips

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - SJVAPCD Rule 4901 Woodburning

Consumer Products -

Area Coating -

Construction Off-road Equipment Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix - SJVAPCD-approved Residential Fleet Mix for the 2023 operational year
2023 fleet mix used for the buildout BAU scenario

Energy Use -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblConstructionPhase	NumDays	10.00	1.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.48	0.53
tblFleetMix	LDT1	0.08	0.21
tblFleetMix	LDT2	0.16	0.17
tblFleetMix	LHD1	0.04	1.1000e-003
tblFleetMix	LHD2	6.7150e-003	9.0000e-004
tblFleetMix	MCY	0.02	2.5000e-003

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tblFleetMix	MDV	0.17	0.06
tblFleetMix	MH	7.9820e-003	1.9000e-003
tblFleetMix	MHD	0.02	8.5000e-003
tblFleetMix	OBUS	8.9300e-004	0.00
tblFleetMix	SBUS	9.6600e-004	4.0000e-004
tblFleetMix	UBUS	3.0700e-004	4.3000e-003
tblLandUse	LandUseSquareFeet	16,930.00	16,932.00
tblLandUse	LandUseSquareFeet	5,227.20	5,400.00
tblLandUse	LandUseSquareFeet	12,000.00	17,010.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	203.98	641.35
tblTripsAndVMT	WorkerTripNumber	4.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

		Highest		
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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	5.3445	5.3445	3.3000e-004	1.0000e-004	5.3813
Energy											0.0000	36.2630	36.2630	1.5400e-003	3.5000e-004	36.4051
Mobile											0.0000	116.3275	116.3275	0.0178	0.0143	121.0209
Waste											1.1225	0.0000	1.1225	0.0663	0.0000	2.7811
Water											0.2480	1.8782	2.1262	0.0256	6.1000e-004	2.9483
Total											1.3706	159.8131	161.1837	0.1115	0.0153	168.5366

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	5.3445	5.3445	3.3000e-004	1.0000e-004	5.3813
Energy											0.0000	36.2630	36.2630	1.5400e-003	3.5000e-004	36.4051
Mobile											0.0000	116.3275	116.3275	0.0178	0.0143	121.0209
Waste											1.1225	0.0000	1.1225	0.0663	0.0000	2.7811
Water											0.2480	1.8782	2.1262	0.0256	6.1000e-004	2.9483
Total											1.3706	159.8131	161.1837	0.1115	0.0153	168.5366

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	8/1/2023	8/1/2023	5	1	

Acres of Grading (Site Preparation Phase): 0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.52

Residential Indoor: 34,445; Residential Outdoor: 11,482; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 1,374 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	116.3275	116.3275	0.0178	0.0143	121.0209
Unmitigated											0.0000	116.3275	116.3275	0.0178	0.0143	121.0209

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	87.84	97.68	75.36	256,237	256,237
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	87.84	97.68	75.36	256,237	256,237

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	48.40	15.90	35.70	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.530500	0.205800	0.167300	0.055000	0.001100	0.000900	0.008500	0.021800	0.000000	0.004300	0.002500	0.000400	0.001900
City Park	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982
Enclosed Parking Structure	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982
Parking Lot	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982
Unenclosed Parking Structure	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	26.2311	26.2311	1.3500e-003	1.6000e-004	26.3136
Electricity Unmitigated											0.0000	26.2311	26.2311	1.3500e-003	1.6000e-004	26.3136
NaturalGas Mitigated											0.0000	10.0319	10.0319	1.9000e-004	1.8000e-004	10.0915
NaturalGas Unmitigated											0.0000	10.0319	10.0319	1.9000e-004	1.8000e-004	10.0915

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	187990											0.0000	10.0319	10.0319	1.9000e-004	1.8000e-004	10.0915
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												0.0000	10.0319	10.0319	1.9000e-004	1.8000e-004	10.0915

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	187990											0.0000	10.0319	10.0319	1.9000e-004	1.8000e-004	10.0915
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												0.0000	10.0319	10.0319	1.9000e-004	1.8000e-004	10.0915

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

Land Use	Electricity Use kWh/yr	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
Apartments Low Rise	47283.1	13.7552	7.1000e-004	9.0000e-005	13.7984
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	20694.8	6.0203	3.1000e-004	4.0000e-005	6.0393
Parking Lot	14832.4	4.3149	2.2000e-004	3.0000e-005	4.3285
Unenclosed Parking Structure	7358.4	2.1406	1.1000e-004	1.0000e-005	2.1474
Total		26.2311	1.3500e-003	1.7000e-004	26.3136

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	47283.1	13.7552	7.1000e-004	9.0000e-005	13.7984
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	20694.8	6.0203	3.1000e-004	4.0000e-005	6.0393
Parking Lot	14832.4	4.3149	2.2000e-004	3.0000e-005	4.3285
Unenclosed Parking Structure	7358.4	2.1406	1.1000e-004	1.0000e-005	2.1474
Total		26.2311	1.3500e-003	1.7000e-004	26.3136

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	5.3445	5.3445	3.3000e-004	1.0000e-004	5.3813
Unmitigated											0.0000	5.3445	5.3445	3.3000e-004	1.0000e-004	5.3813

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	5.1985	5.1985	1.0000e-004	1.0000e-004	5.2294
Landscaping											0.0000	0.1460	0.1460	2.4000e-004	0.0000	0.1519
Total											0.0000	5.3445	5.3445	3.4000e-004	1.0000e-004	5.3813

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	5.1985	5.1985	1.0000e-004	1.0000e-004	5.2294
Landscaping											0.0000	0.1460	0.1460	2.4000e-004	0.0000	0.1519
Total											0.0000	5.3445	5.3445	3.4000e-004	1.0000e-004	5.3813

7.0 Water Detail

7.1 Mitigation Measures Water

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.1262	0.0256	6.1000e-004	2.9483
Unmitigated	2.1262	0.0256	6.1000e-004	2.9483

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.781848 / 0.492904	1.9806	0.0256	6.1000e-004	2.8023
City Park	0 / 0.142978	0.1456	1.0000e-005	0.0000	0.1460
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.1262	0.0256	6.1000e-004	2.9483

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.781848 / 0.492904	1.9806	0.0256	6.1000e-004	2.8023
City Park	0 / 0.142978	0.1456	1.0000e-005	0.0000	0.1460
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.1262	0.0256	6.1000e-004	2.9483

8.0 Waste Detail

8.1 Mitigation Measures Waste

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.1225	0.0663	0.0000	2.7811
Unmitigated	1.1225	0.0663	0.0000	2.7811

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	5.52	1.1205	0.0662	0.0000	2.7760
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		1.1225	0.0663	0.0000	2.7811

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	5.52	1.1205	0.0662	0.0000	2.7760
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		1.1225	0.0663	0.0000	2.7811

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**Alluvial Development - 2030 BAU Scenario
Fresno County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	3.16	1000sqft	0.07	3,160.00	0
Parking Lot	16.93	1000sqft	0.39	16,932.00	0
Unenclosed Parking Structure	7.00	Space	0.06	2,800.00	0
City Park	0.12	Acre	0.12	5,400.00	0
Apartments Low Rise	12.00	Dwelling Unit	0.75	17,010.00	34

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2005
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2030 Operations Business as Usual (BAU) Scenario
PG&E CO2 Intensity Factors for 2005

Land Use - Land use development (see site coverage summary for how project components are represented in CalEEMod)

Construction Phase - Operational run only (zeroed out construction parameters)

Off-road Equipment - Operational run only (zeroed out construction parameters)

Off-road Equipment -

Trips and VMT - Operational run only (zeroed out construction parameters)

Demolition -

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading -

Architectural Coating - Operational run only

Vehicle Trips - Trip generation for apartment units - other land uses are used to represent on-site amenities that would serve project residents and would not generate additional external trips

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - SJVAPCD Rule 4901 Woodburning

Consumer Products -

Area Coating -

Energy Use -

Construction Off-road Equipment Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix - SJVAPCD-approved Residential Fleet Mix for the 2030 operational year
2030 fleet mix used for the 2030 BAU scenario

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblConstructionPhase	NumDays	10.00	1.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.48	0.51
tblFleetMix	LDT1	0.08	0.22
tblFleetMix	LDT2	0.16	0.17
tblFleetMix	LHD1	0.04	8.0000e-004
tblFleetMix	LHD2	6.7150e-003	1.0000e-003
tblFleetMix	MCY	0.02	2.5000e-003

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tblFleetMix	MDV	0.17	0.06
tblFleetMix	MH	7.9820e-003	3.0000e-003
tblFleetMix	MHD	0.02	7.4000e-003
tblFleetMix	OBUS	8.9300e-004	0.00
tblFleetMix	SBUS	9.6600e-004	1.2000e-003
tblFleetMix	UBUS	3.0700e-004	4.4000e-003
tblLandUse	LandUseSquareFeet	16,930.00	16,932.00
tblLandUse	LandUseSquareFeet	5,227.20	5,400.00
tblLandUse	LandUseSquareFeet	12,000.00	17,010.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	203.98	641.35
tblTripsAndVMT	WorkerTripNumber	4.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

		Highest		
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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	5.3445	5.3445	3.3000e-004	1.0000e-004	5.3813
Energy											0.0000	36.2852	36.2852	1.5400e-003	3.5000e-004	36.4274
Mobile											0.0000	115.3508	115.3508	0.0179	0.0141	119.9988
Waste											1.1225	0.0000	1.1225	0.0663	0.0000	2.7811
Water											0.2480	1.8782	2.1262	0.0256	6.1000e-004	2.9483
Total											1.3706	158.8587	160.2293	0.1117	0.0152	167.5369

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	5.3445	5.3445	3.3000e-004	1.0000e-004	5.3813
Energy											0.0000	36.2852	36.2852	1.5400e-003	3.5000e-004	36.4274
Mobile											0.0000	115.3508	115.3508	0.0179	0.0141	119.9988
Waste											1.1225	0.0000	1.1225	0.0663	0.0000	2.7811
Water											0.2480	1.8782	2.1262	0.0256	6.1000e-004	2.9483
Total											1.3706	158.8587	160.2293	0.1117	0.0152	167.5369

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	8/1/2023	8/1/2023	5	1	

Acres of Grading (Site Preparation Phase): 0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.52

Residential Indoor: 34,445; Residential Outdoor: 11,482; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 1,374 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	115.3508	115.3508	0.0179	0.0141	119.9988
Unmitigated											0.0000	115.3508	115.3508	0.0179	0.0141	119.9988

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	87.84	97.68	75.36	256,237	256,237
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	87.84	97.68	75.36	256,237	256,237

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	48.40	15.90	35.70	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000
City Park	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982
Enclosed Parking Structure	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982
Parking Lot	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982
Unenclosed Parking Structure	0.477591	0.081668	0.164575	0.168109	0.036290	0.006715	0.016687	0.017024	0.000893	0.000307	0.021194	0.000966	0.007982

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated											0.0000	26.2534	26.2534	1.3500e-003	1.6000e-004	26.3359
Electricity Unmitigated											0.0000	26.2534	26.2534	1.3500e-003	1.6000e-004	26.3359
NaturalGas Mitigated											0.0000	10.0319	10.0319	1.9000e-004	1.8000e-004	10.0915
NaturalGas Unmitigated											0.0000	10.0319	10.0319	1.9000e-004	1.8000e-004	10.0915

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	187990											0.0000	10.0319	10.0319	1.9000e-004	1.8000e-004	10.0915
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												0.0000	10.0319	10.0319	1.9000e-004	1.8000e-004	10.0915

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	187990											0.0000	10.0319	10.0319	1.9000e-004	1.8000e-004	10.0915
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												0.0000	10.0319	10.0319	1.9000e-004	1.8000e-004	10.0915

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	47283	13.7552	7.1000e-004	9.0000e-005	13.7984
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	20698	6.0213	3.1000e-004	4.0000e-005	6.0402
Parking Lot	14900.2	4.3346	2.2000e-004	3.0000e-005	4.3483
Unenclosed Parking Structure	7364	2.1423	1.1000e-004	1.0000e-005	2.1490
Total		26.2534	1.3500e-003	1.7000e-004	26.3359

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

Land Use	Electricity Use kWh/yr	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
Apartments Low Rise	47283	13.7552	7.1000e-004	9.0000e-005	13.7984
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	20698	6.0213	3.1000e-004	4.0000e-005	6.0402
Parking Lot	14900.2	4.3346	2.2000e-004	3.0000e-005	4.3483
Unenclosed Parking Structure	7364	2.1423	1.1000e-004	1.0000e-005	2.1490
Total		26.2534	1.3500e-003	1.7000e-004	26.3359

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	5.3445	5.3445	3.3000e-004	1.0000e-004	5.3813
Unmitigated											0.0000	5.3445	5.3445	3.3000e-004	1.0000e-004	5.3813

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	5.1985	5.1985	1.0000e-004	1.0000e-004	5.2294
Landscaping											0.0000	0.1460	0.1460	2.4000e-004	0.0000	0.1519
Total											0.0000	5.3445	5.3445	3.4000e-004	1.0000e-004	5.3813

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	5.1985	5.1985	1.0000e-004	1.0000e-004	5.2294
Landscaping											0.0000	0.1460	0.1460	2.4000e-004	0.0000	0.1519
Total											0.0000	5.3445	5.3445	3.4000e-004	1.0000e-004	5.3813

7.0 Water Detail

7.1 Mitigation Measures Water

Alluvial Development - 2030 BAU Scenario - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.1262	0.0256	6.1000e-004	2.9483
Unmitigated	2.1262	0.0256	6.1000e-004	2.9483

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.781848 / 0.492904	1.9806	0.0256	6.1000e-004	2.8023
City Park	0 / 0.142978	0.1456	1.0000e-005	0.0000	0.1460
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.1262	0.0256	6.1000e-004	2.9483

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.781848 / 0.492904	1.9806	0.0256	6.1000e-004	2.8023
City Park	0 / 0.142978	0.1456	1.0000e-005	0.0000	0.1460
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.1262	0.0256	6.1000e-004	2.9483

8.0 Waste Detail

8.1 Mitigation Measures Waste

Alluvial Development - 2030 BAU Scenario - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.1225	0.0663	0.0000	2.7811
Unmitigated	1.1225	0.0663	0.0000	2.7811

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	5.52	1.1205	0.0662	0.0000	2.7760
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		1.1225	0.0663	0.0000	2.7811

Alluvial Development - 2030 BAU Scenario - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	5.52	1.1205	0.0662	0.0000	2.7760
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		1.1225	0.0663	0.0000	2.7811

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**Alluvial Development - 2030 Operations
Fresno County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	3.16	1000sqft	0.07	3,160.00	0
Parking Lot	16.93	1000sqft	0.39	16,932.00	0
Unenclosed Parking Structure	7.00	Space	0.06	2,800.00	0
City Park	0.12	Acre	0.12	5,400.00	0
Apartments Low Rise	12.00	Dwelling Unit	0.75	17,010.00	34

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2030
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	191	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Alluvial Residential Development Project 2030 Operational Year Scenario

Land Use - Land use development (see site coverage summary for how project components are represented in CalEEMod)

Construction Phase - Operational run only (zeroed out construction parameters)

Off-road Equipment - Operational run only (zeroed out construction parameters)

Off-road Equipment -

Trips and VMT - Operational run only (zeroed out construction parameters)

Demolition -

Grading -

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Architectural Coating - Operational run only

Vehicle Trips - Trip generation for apartment units - other land uses are used to represent on-site amenities that would serve project residents and would not generate additional external trips

Woodstoves - SJVAPCD Rule 4901 Woodburning

Consumer Products -

Area Coating - Rule 4601 Architectural Coating

Construction Off-road Equipment Mitigation -

Area Mitigation - Rule 4601 Architectural Coatings, building code standards (outside outlets), and no woodburning fireplaces (only natural gas hearth)

Water Mitigation - Compliance with Green Building Code Standards and California Model Water Efficient Landscape Ordinance

Waste Mitigation - CalRecycle 75 Percent Initiative (25% reduction)

Fleet Mix - SJVAPCD-approved Residential Fleet Mix for the 2023 operational year

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Residential_Exterior	150	50
tblAreaCoating	Area_EF_Residential_Interior	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	150	50
tblConstructionPhase	NumDays	10.00	1.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.54	0.51
tblFleetMix	LDT1	0.05	0.22
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.02	8.0000e-004

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	LHD2	5.9260e-003	1.0000e-003
tblFleetMix	MCY	0.02	2.5000e-003
tblFleetMix	MDV	0.13	0.06
tblFleetMix	MH	2.4420e-003	3.0000e-003
tblFleetMix	MHD	0.02	7.4000e-003
tblFleetMix	OBUS	6.7900e-004	0.00
tblFleetMix	SBUS	1.3250e-003	1.2000e-003
tblFleetMix	UBUS	2.7800e-004	4.4000e-003
tblLandUse	LandUseSquareFeet	16,930.00	16,932.00
tblLandUse	LandUseSquareFeet	5,227.20	5,400.00
tblLandUse	LandUseSquareFeet	12,000.00	17,010.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	203.98	191
tblTripsAndVMT	WorkerTripNumber	4.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0580	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0580	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0580	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0580	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2023	9-30-2023	0.0414	0.0414
		Highest	0.0414	0.0414

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0770	5.5200e-003	0.0910	3.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	5.3445	5.3445	2.4000e-004	1.0000e-004	5.3789
Energy	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	15.4091	15.4091	1.3200e-003	3.0000e-004	15.5314
Mobile	0.0177	0.0367	0.2406	7.5000e-004	0.0956	4.9000e-004	0.0961	0.0255	4.6000e-004	0.0260	0.0000	70.1953	70.1953	5.0700e-003	3.1600e-003	71.2627
Waste						0.0000	0.0000		0.0000	0.0000	1.1225	0.0000	1.1225	0.0663	0.0000	2.7811
Water						0.0000	0.0000		0.0000	0.0000	0.2480	0.5593	0.8074	0.0256	6.1000e-004	1.6295
Total	0.0956	0.0498	0.3348	8.3000e-004	0.0956	1.9600e-003	0.0976	0.0255	1.9300e-003	0.0274	1.3706	91.5082	92.8788	0.0985	4.1700e-003	96.5836

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0769	5.5100e-003	0.0904	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	5.3432	5.3432	2.4000e-004	1.0000e-004	5.3775
Energy	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	15.4091	15.4091	1.3200e-003	3.0000e-004	15.5314
Mobile	0.0177	0.0367	0.2406	7.5000e-004	0.0956	4.9000e-004	0.0961	0.0255	4.6000e-004	0.0260	0.0000	70.1953	70.1953	5.0700e-003	3.1600e-003	71.2627
Waste						0.0000	0.0000		0.0000	0.0000	0.8419	0.0000	0.8419	0.0498	0.0000	2.0858
Water						0.0000	0.0000		0.0000	0.0000	0.1984	0.4475	0.6459	0.0205	4.9000e-004	1.3036
Total	0.0955	0.0498	0.3342	8.3000e-004	0.0956	1.9500e-003	0.0976	0.0255	1.9200e-003	0.0274	1.0404	91.3950	92.4354	0.0769	4.0500e-003	95.5611

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.03	0.02	0.19	0.00	0.00	0.51	0.01	0.00	0.52	0.04	24.09	0.12	0.48	22.01	2.88	1.06

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	8/1/2023	8/1/2023	5	1	

Acres of Grading (Site Preparation Phase): 0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.52

Residential Indoor: 34,445; Residential Outdoor: 11,482; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 1,374 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0580					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0580	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0580					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0580	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0177	0.0367	0.2406	7.5000e-004	0.0956	4.9000e-004	0.0961	0.0255	4.6000e-004	0.0260	0.0000	70.1953	70.1953	5.0700e-003	3.1600e-003	71.2627
Unmitigated	0.0177	0.0367	0.2406	7.5000e-004	0.0956	4.9000e-004	0.0961	0.0255	4.6000e-004	0.0260	0.0000	70.1953	70.1953	5.0700e-003	3.1600e-003	71.2627

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	87.84	97.68	75.36	256,237	256,237
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	87.84	97.68	75.36	256,237	256,237

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	48.40	15.90	35.70	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.511000	0.223100	0.169000	0.059300	0.000800	0.001000	0.007400	0.017300	0.000000	0.004400	0.002500	0.001200	0.003000
City Park	0.542478	0.054482	0.176258	0.134700	0.021641	0.005926	0.015139	0.022678	0.000679	0.000278	0.021974	0.001325	0.002442
Enclosed Parking Structure	0.542478	0.054482	0.176258	0.134700	0.021641	0.005926	0.015139	0.022678	0.000679	0.000278	0.021974	0.001325	0.002442
Parking Lot	0.542478	0.054482	0.176258	0.134700	0.021641	0.005926	0.015139	0.022678	0.000679	0.000278	0.021974	0.001325	0.002442
Unenclosed Parking Structure	0.542478	0.054482	0.176258	0.134700	0.021641	0.005926	0.015139	0.022678	0.000679	0.000278	0.021974	0.001325	0.002442

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6.6700	6.6700	1.1500e-003	1.4000e-004	6.7404
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6.6700	6.6700	1.1500e-003	1.4000e-004	6.7404
NaturalGas Mitigated	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910
NaturalGas Unmitigated	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910

Alluvial Development - 2030 Operations - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	163764	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	163764	8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.8000e-004	7.5500e-003	3.2100e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7391	8.7391	1.7000e-004	1.6000e-004	8.7910

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

Land Use	Electricity Use kWh/yr	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
Apartments Low Rise	49572.4	4.2948	7.4000e-004	9.0000e-005	4.3401
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	16590	1.4373	2.5000e-004	3.0000e-005	1.4525
Parking Lot	5926.2	0.5134	9.0000e-005	1.0000e-005	0.5188
Unenclosed Parking Structure	4900	0.4245	7.0000e-005	1.0000e-005	0.4290
Total		6.6700	1.1500e-003	1.4000e-004	6.7404

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

Land Use	Electricity Use kWh/yr	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
Apartments Low Rise	49572.4	4.2948	7.4000e-004	9.0000e-005	4.3401
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	16590	1.4373	2.5000e-004	3.0000e-005	1.4525
Parking Lot	5926.2	0.5134	9.0000e-005	1.0000e-005	0.5188
Unenclosed Parking Structure	4900	0.4245	7.0000e-005	1.0000e-005	0.4290
Total		6.6700	1.1500e-003	1.4000e-004	6.7404

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use only Natural Gas Hearths

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0769	5.5100e-003	0.0904	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	5.3432	5.3432	2.4000e-004	1.0000e-004	5.3775
Unmitigated	0.0770	5.5200e-003	0.0910	3.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	5.3445	5.3445	2.4000e-004	1.0000e-004	5.3789

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0680					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.3000e-004	4.4900e-003	1.9100e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1985	5.1985	1.0000e-004	1.0000e-004	5.2294
Landscaping	2.6800e-003	1.0300e-003	0.0891	0.0000		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	0.1460	0.1460	1.4000e-004	0.0000	0.1495
Total	0.0770	5.5200e-003	0.0910	3.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	5.3445	5.3445	2.4000e-004	1.0000e-004	5.3789

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0680					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.3000e-004	4.4900e-003	1.9100e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1985	5.1985	1.0000e-004	1.0000e-004	5.2294
Landscaping	2.6400e-003	1.0200e-003	0.0885	0.0000		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	0.1447	0.1447	1.4000e-004	0.0000	0.1482
Total	0.0769	5.5100e-003	0.0904	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	5.3432	5.3432	2.4000e-004	1.0000e-004	5.3775

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.6459	0.0205	4.9000e-004	1.3036
Unmitigated	0.8074	0.0256	6.1000e-004	1.6295

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.781848 / 0.492904	0.7640	0.0256	6.1000e-004	1.5857
City Park	0 / 0.142978	0.0434	1.0000e-005	0.0000	0.0438
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.8074	0.0256	6.1000e-004	1.6295

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0.625479 / 0.394323	0.6112	0.0205	4.9000e-004	1.2685
City Park	0 / 0.114382	0.0347	1.0000e-005	0.0000	0.0351
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.6459	0.0205	4.9000e-004	1.3036

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Alluvial Development - 2030 Operations - Fresno County, Annual

AGENDA ITEM NO. 12.

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.8419	0.0498	0.0000	2.0858
Unmitigated	1.1225	0.0663	0.0000	2.7811

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	5.52	1.1205	0.0662	0.0000	2.7760
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		1.1225	0.0663	0.0000	2.7811

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	4.14	0.8404	0.0497	0.0000	2.0820
City Park	0.0075	1.5200e-003	9.0000e-005	0.0000	3.7700e-003
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		0.8419	0.0498	0.0000	2.0858

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

ATTACHMENT B
Construction Health Risk Assessment

Construction Health Risk Assessment

Table of Contents

- **General Parameters**
- **Construction Health Risk Calculations—Unmitigated Scenario**

Construction Health Risk Assessment

Construction Health Risk Assessment General Parameters

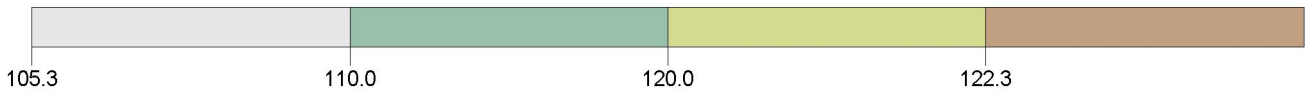
PROJECT TITLE:

Graphical Representation of AERMOD Inputs



Terrain Contours

meters



COMMENTS:

SOURCES:

2

RECEPTORS:

752

SCALE:

1:11,935

0



0.4 km

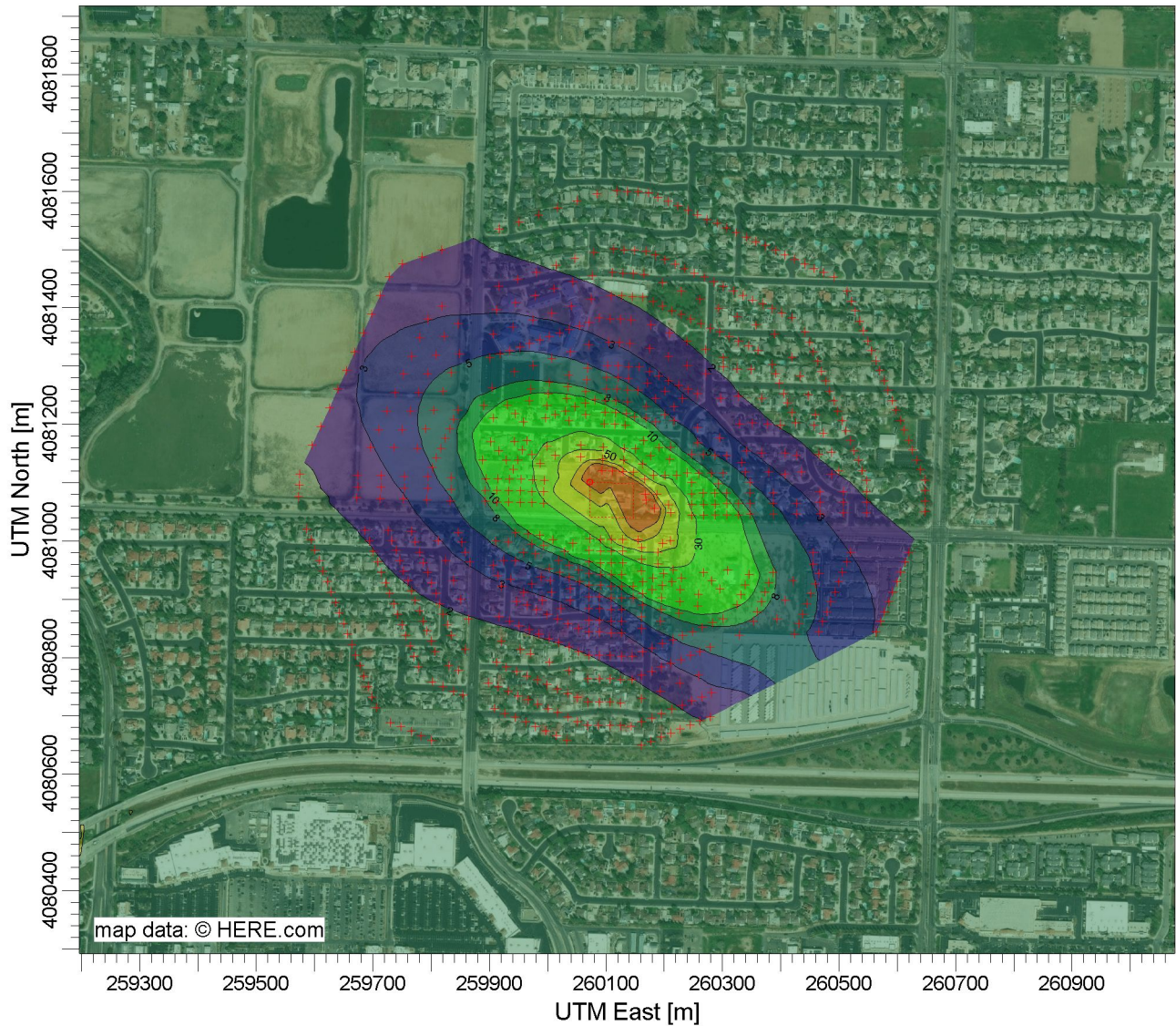
DATE:

6/29/2022

PROJECT NO.:

PROJECT TITLE:

Air Dispersion Trend (Unit Emissions)



PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUP: AREA

ug/m³

Max: 163 [ug/m³] at (260169.13, 4081070.10)



COMMENTS:

SOURCES:

2

RECEPTORS:

752

OUTPUT TYPE:

Concentration

SCALE:

1:11,828



MAX:

163 ug/m³

DATE:

6/29/2022

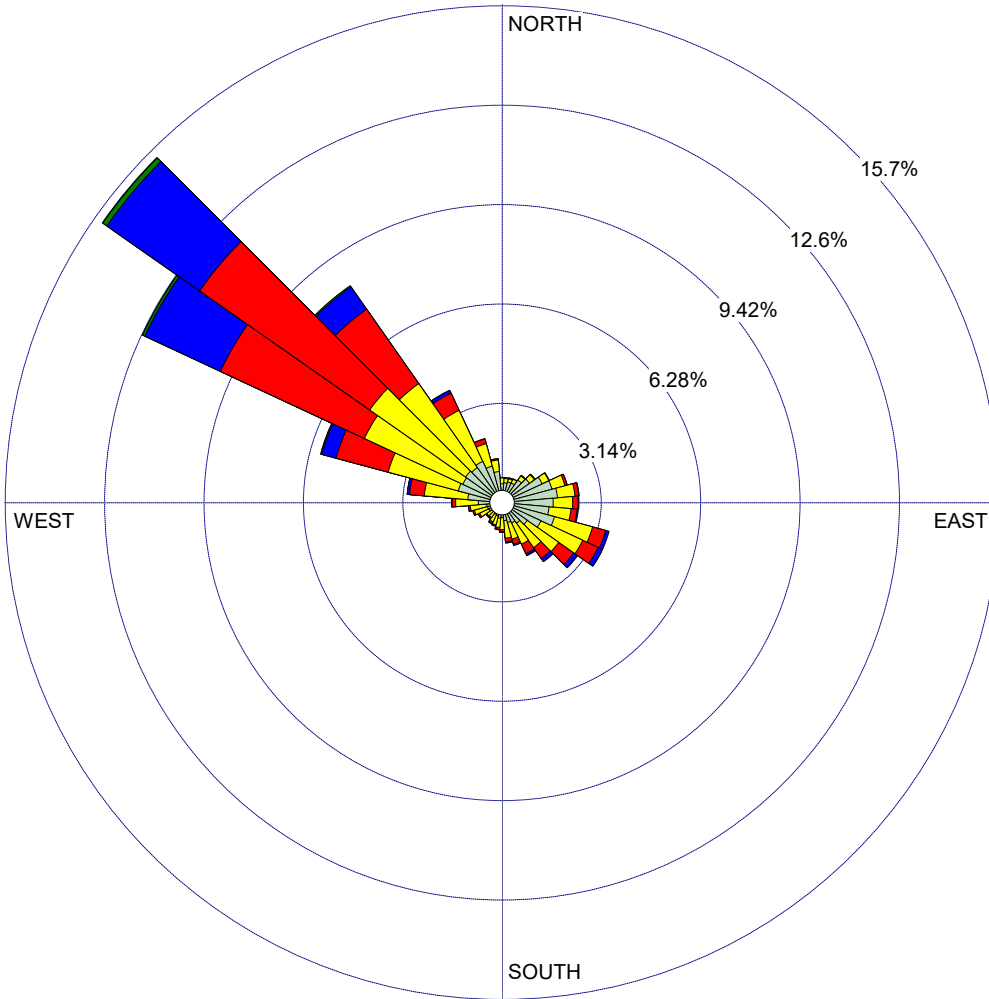
PROJECT NO.:

WIND ROSE PLOT:

Wind Rose - Station #93193 (Flow Vector - Blowing From)

DISPLAY:

**Wind Speed
Direction (blowing from)**



WIND SPEED
(m/s)

- >= 11.10
- 8.80 - 11.10
- 5.70 - 8.80
- 3.60 - 5.70
- 2.10 - 3.60
- 0.50 - 2.10

Calms: 4.31%

COMMENTS:

DATA PERIOD:

**Start Date: 1/1/2013 - 00:00
End Date: 12/31/2017 - 23:59**

CALM WINDS:

4.31%

AVG. WIND SPEED:

2.95 m/s

TOTAL COUNT:

43534 hrs.

DATE:

6/29/2022

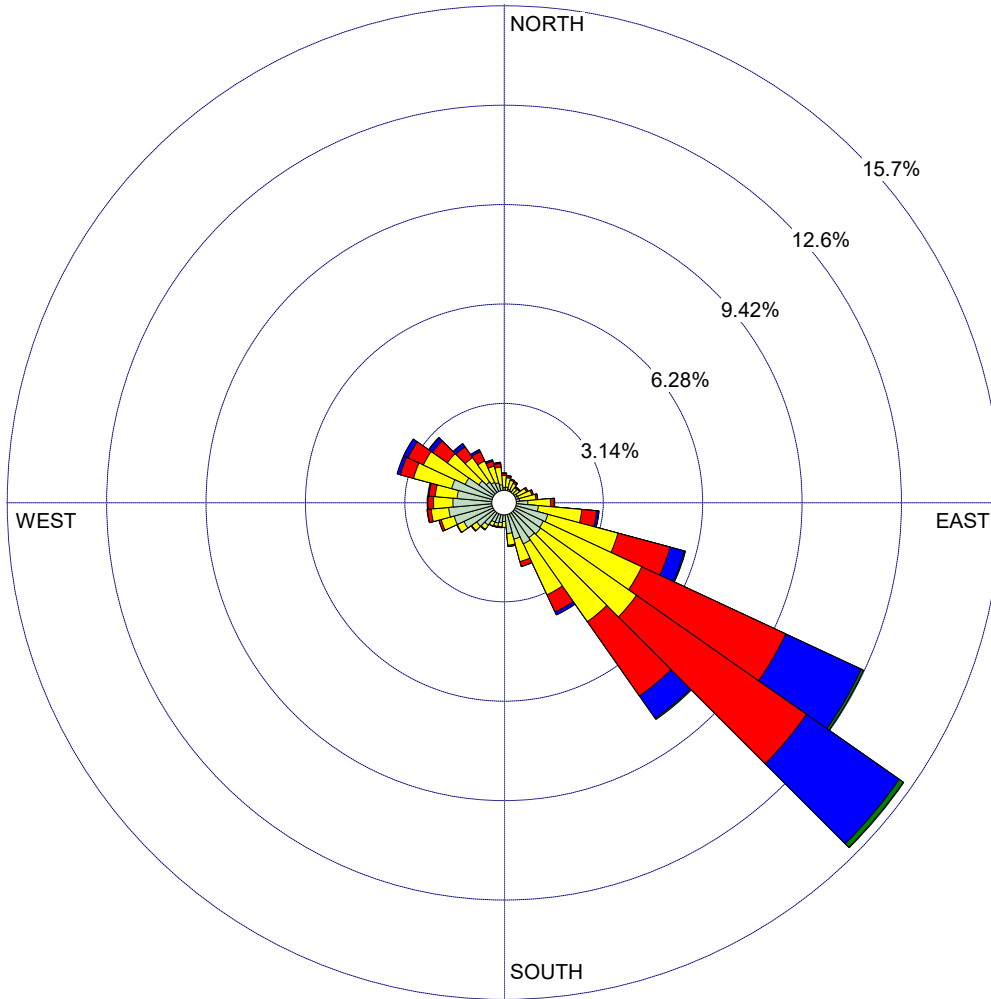
PROJECT NO.:

WIND ROSE PLOT:

Wind Rose - Station #93193 (Flow Vector - Blowing To)

DISPLAY:

**Wind Speed
Flow Vector (blowing to)**



WIND SPEED (m/s)

- >= 11.10
- 8.80 - 11.10
- 5.70 - 8.80
- 3.60 - 5.70
- 2.10 - 3.60
- 0.50 - 2.10

Calms: 4.31%

COMMENTS:

DATA PERIOD:

**Start Date: 1/1/2013 - 00:00
End Date: 12/31/2017 - 23:59**

CALM WINDS:

4.31%

AVG. WIND SPEED:

2.95 m/s

TOTAL COUNT:

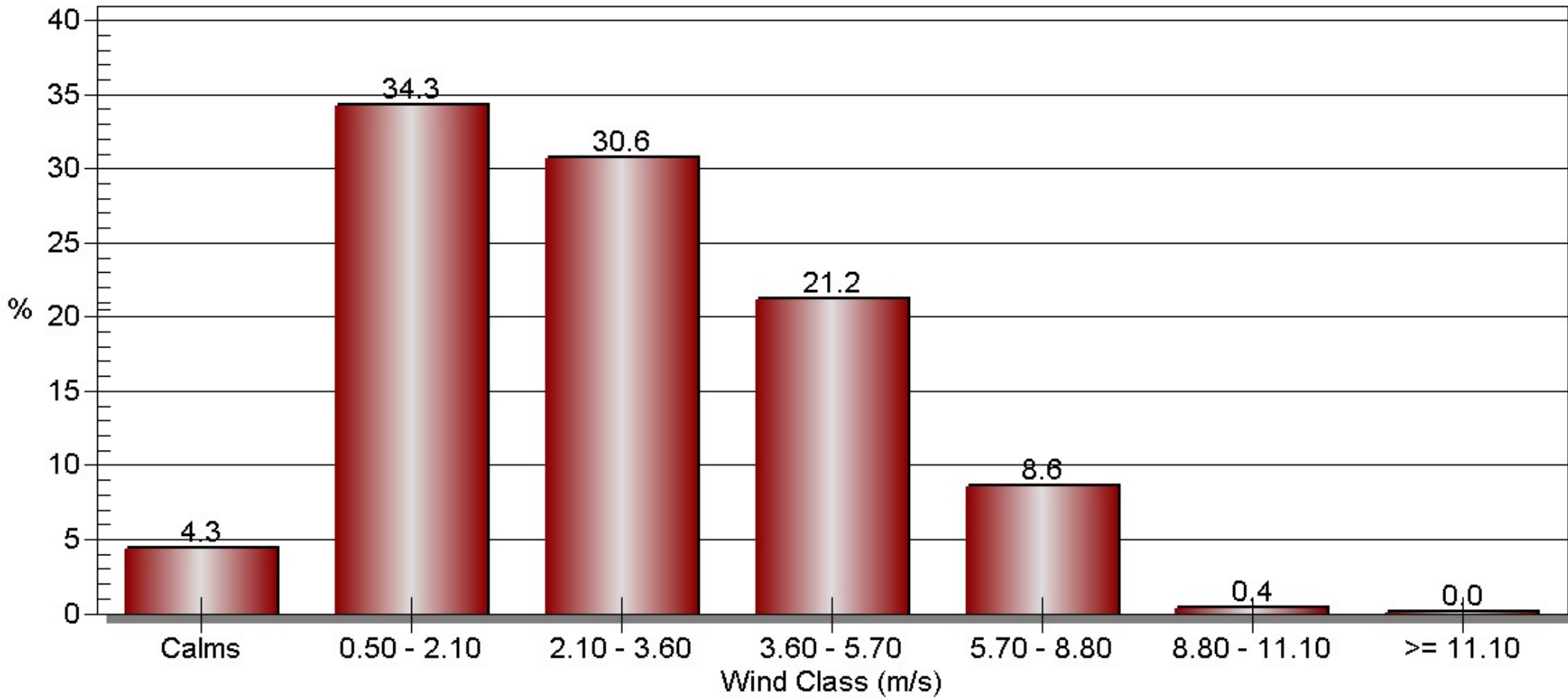
43534 hrs.

DATE:

6/29/2022

PROJECT NO.:

Wind Class Frequency Distribution



Construction Health Risk Assessment

Construction Health Risk Calculations Unmitigated Scenario

Alluvial Development Project

Estimation of Annual Onsite Construction Emissions

Start of Construction	8/1/2023	
End of Construction	2/1/2024	Total
Number of Days	184	184
Number of Hours	4,416	4,416

Size of the construction area source: **4,424.3** **sq-meters**

Year	On-site Construction Activity	Unmitigated On-site DPM (tons)
2023	On-site Site Demolition	0.00677
2023	On-site Site Preparation	0.00051
2023	On-site Grading	0.00121
2023	On-site Paving	0.00154
2023	On-site Building Construction	0.04320
2024	On-site Building Construction	0.00725
2024	On-site Architectural Coating	0.00030

Total Unmitigated DPM (On-site) 6.078E-02 tons

Average Emission 5.519E+04 grams
3.471E-03 grams/sec
7.846E-07 grams/m2-sec

Alluvial Development Project

Estimation of Annual Offsite Construction DPM Emissions (Unmitigated)

Start of Construction	8/1/2023							
End of Construction	2/1/2024							Total
Number of Days	184							184
Number of Hours	4,416							4,416

	2023	2023	2023	2023	2023	2024	2024
Construction Trip Type	Demolition	Site Preparation	Grading	Paving	Building Construction	Building Construction	Architectural Coating
Haul Truck	0.00007	0.00000	0.00015	0.00001	0.00001	0.00000	0.00000
Vendor Truck	0.00000	0.00000	0.00000	0.00001	0.00006	0.00001	0.00000
Worker	0.00001	0.00000	0.00000	0.00000	0.00003	0.00001	0.00000
Total	0.00008	0.00000	0.00015	0.00002	0.00010	0.00002	0.00000

	Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total DPM	2.400E-04	8.000E-05	5.000E-05	3.700E-04

Average Emissions

Grams	2.179E+02	7.264E+01	4.540E+01
Grams/sec	1.371E-05	4.569E-06	2.856E-06

Default Distance 20 7.3 10.8 Default Distance in CalEEMod Run (Alluvial Development)

Vehicle Travel Distance in the Construction HRA (miles)

Road Segment 1 (mi) 0.39 0.39 0.39 On-site + Localized distance in miles, as this is slightly higher than the value used in AERMOD (0.31 mi)

Trip Distribution (percent)

Road Segment 1 100.0% 100.0% 100.0%

Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)

				Total
Road Segment 1	2.673E-07	2.441E-07	1.031E-07	6.145E-07

OEHHA Cancer Risk Methodology

Cancer Risk = DPM x CPF x ASF x DBR x ED x EF x TAH x AF/ AT

Cancer Risk = probability of an individual contracting cancer out of a population of 1 million people

DPM = long-term average concentration of diesel PM as predicted by the air dispersion model (ug/m³)

CPF = cancer potency factor for DPM (mg.ke-day)

ASF = age sensitivity factors that are dependent on the age of the exposed individual (unitless)

DBR = daily breathing rates that are dependent on the age of the exposed individual (liters/kg-day)

ED = exposure duration (years)

EF = exposure frequency (days/year)

TAH = time at home factors that are dependent on the age of the exposed individual (%)

AT = averaging time over the lifetime of an individual (days)

AF = adjustment factor for workers and students (unitless)

Cancer Risk Equation Values as recommended by the California Office of Environmental Health Hazards Assessment

**Cancer Risk Calculations Using OEHHA Cancer Risk Assumptions
Alluvial Development Project**

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant (Starting in 3rd Trimester)

UTM: 260169.13 4081070.1

Cancer Potency Factor: 1.1 (mg/kg-day)⁻¹
 Exposure Frequency 260 days/year
 Averaging Period 25550 days

Construction Annual DPM Emissions (as PM10 Exhaust) Unmitigated

Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.56545	10	361	0.85	0.250	4.86
0-<1	0.56545	10	1090	0.85	0.254	14.90
					Total	19.76

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Child

UTM: 260169.13 4081070.1

Cancer Potency Factor: 1.1 (mg/kg-day)⁻¹
 Exposure Frequency 260 days/year
 Averaging Period 25550 days

Construction Annual DPM Emissions (as PM10 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor (ug/m3) ⁻¹
Entire Duration	0.56545	3	745	1	0.504	7.13
					Total	7.13

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Adult

UTM: 260169.13 4081070.1

Cancer Potency Factor: 1.1 (mg/kg-day)⁻¹
 Exposure Frequency 260 days/year
 Averaging Period 25550 days

Construction Annual DPM Emissions (as PM10 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor (ug/m3) ⁻¹
Entire Duration	0.56545	1	290	0.73	0.504	0.68
					Total	0.68

Alluvial Development Project

UTM: 260169.13 4081070.1

Estimates of Chronic Non-Cancer Hazard Index (CNCHI)

Unmitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL		Average	Max DPM	CNCHI
X	Y	DPM	(ug/m3)	
(m)	(m)	(ug/m3)		
260169.13	4081070.1	0.5655	0.5655	0.113

Alluvial Development Project

Construction Annual DPM Emissions (PM10 Exhaust)—Unmitigated Concentrations

Annual Average Onsite Total DPM Emission Rate (grams/m2/sec)*: 3.47E-03
Annual Average Offsite Total DPM Emission Rate (grams/sec): 6.15E-07

Maximum DPM (ug/m3) X Y
 5.6545E-01 260169.13 4081070.10

*grams/sec used, as the unit emissions already account for the area in m2

Receptors		Unit Emissions VALUES AVERAGED	Unit Emissions VALUES AVERAGED	Onsite Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 1 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Total DPM (ug/m3)
X	Y	SITE AREA	Offsite			
260166.86	4081106.44	57.39756	19.58237	1.99E-01	1.20E-05	1.9927E-01
260167.12	4081080.22	139.75663	31.90304	4.85E-01	1.96E-05	4.8518E-01
260169.13	4081070.10	162.87729	40.57458	5.65E-01	2.49E-05	5.6545E-01
260181.27	4081112.68	35.08227	17.85503	1.22E-01	1.10E-05	1.2180E-01
260162.34	4081132.37	30.51855	13.55199	1.06E-01	8.33E-06	1.0595E-01
260187.12	4081080.50	75.53631	31.62638	2.62E-01	1.94E-05	2.6224E-01
260183.57	4081055.72	125.02604	61.20402	4.34E-01	3.76E-05	4.3406E-01
260201.27	4081112.96	24.13427	17.80617	8.38E-02	1.09E-05	8.3793E-02
260176.75	4081146.24	17.78682	11.53862	6.17E-02	7.09E-06	6.1754E-02
260207.37	4081062.19	61.10461	49.3126	2.12E-01	3.03E-05	2.1215E-01
260211.14	4081049.14	63.97869	74.93338	2.22E-01	4.60E-05	2.2215E-01
260221.27	4081113.24	17.45189	17.69832	6.06E-02	1.09E-05	6.0595E-02
260210.11	4081140.41	12.37642	12.40695	4.30E-02	7.62E-06	4.2972E-02
260191.17	4081160.10	11.55058	9.94263	4.01E-02	6.11E-06	4.0104E-02
260164.46	4081172.32	13.59636	8.71077	4.72E-02	5.35E-06	4.7205E-02
260239.87	4081116.92	12.6279	16.71756	4.38E-02	1.03E-05	4.3848E-02
260210.24	4081160.95	9.07003	9.86458	3.15E-02	6.06E-06	3.1493E-02
260246.85	4081099.94	15.2605	21.57925	5.30E-02	1.33E-05	5.2990E-02
260247.11	4081081.34	20.48531	30.32185	7.11E-02	1.86E-05	7.1133E-02
260247.37	4081062.74	26.42136	47.04853	9.17E-02	2.89E-05	9.1750E-02
260247.63	4081044.15	31.76896	86.49274	1.10E-01	5.32E-05	1.1034E-01
260260.15	4081116.52	9.91585	16.69192	3.44E-02	1.03E-05	3.4433E-02
260246.75	4081149.12	7.21182	11.14651	2.50E-02	6.85E-06	2.5043E-02
260185.28	4081203.71	7.01451	6.56126	2.44E-02	4.03E-06	2.4355E-02
260267.11	4081081.62	15.07097	29.79577	5.23E-02	1.83E-05	5.2337E-02
260267.37	4081063.02	18.99187	45.89848	6.59E-02	2.82E-05	6.5958E-02
260267.63	4081044.43	22.74434	83.29249	7.90E-02	5.12E-05	7.9008E-02
260280.33	4081116.34	7.95045	16.57525	2.76E-02	1.02E-05	2.7610E-02
260267.31	4081148.04	6.00198	11.19133	2.08E-02	6.88E-06	2.0843E-02
260257.72	4081169.42	5.1041	8.92918	1.77E-02	5.49E-06	1.7724E-02
260216.51	4081206.63	5.05524	6.38316	1.75E-02	3.92E-06	1.7553E-02
260201.03	4081216.96	5.24955	5.86195	1.82E-02	3.60E-06	1.8227E-02
260169.87	4081231.22	5.93911	5.22251	2.06E-02	3.21E-06	2.0621E-02
260287.11	4081081.90	11.51061	29.23964	4.00E-02	1.80E-05	3.9977E-02
260287.37	4081063.30	14.2203	44.73151	4.94E-02	2.75E-05	4.9393E-02
260287.63	4081044.71	16.9186	80.23629	5.87E-02	4.93E-05	5.8782E-02
260300.46	4081116.30	6.49088	16.38963	2.25E-02	1.01E-05	2.2543E-02
260287.71	4081147.35	5.04887	11.15443	1.75E-02	6.85E-06	1.7534E-02
260257.06	4081194.56	3.99465	7.00167	1.39E-02	4.30E-06	1.3872E-02
260216.40	4081230.39	4.06673	5.23357	1.41E-02	3.22E-06	1.4121E-02
260185.88	4081244.35	4.56313	4.72107	1.58E-02	2.90E-06	1.5844E-02
260307.10	4081082.18	9.0523	28.65801	3.14E-02	1.76E-05	3.1443E-02
260307.36	4081063.58	10.99927	43.58037	3.82E-02	2.68E-05	3.8211E-02
260307.62	4081044.99	12.98462	77.30117	4.51E-02	4.75E-05	4.5123E-02
260308.00	4081146.90	4.29019	11.05328	1.49E-02	6.79E-06	1.4900E-02
260295.44	4081177.46	3.47736	8.03947	1.21E-02	4.94E-06	1.2077E-02
260296.30	4081244.82	2.06167	4.40708	7.16E-03	2.71E-06	7.1598E-03
260231.53	4081243.92	3.23788	4.67294	1.12E-02	2.87E-06	1.1243E-02
260201.48	4081257.67	3.60588	4.25971	1.25E-02	2.62E-06	1.2520E-02
260171.44	4081271.41	3.93164	3.87958	1.36E-02	2.38E-06	1.3651E-02
260327.36	4081063.86	8.73032	42.44304	3.03E-02	2.61E-05	3.0333E-02
260327.62	4081045.27	10.22446	74.51244	3.55E-02	4.58E-05	3.5540E-02
260339.86	4081118.32	4.46842	15.4568	1.55E-02	9.50E-06	1.5522E-02
260332.89	4081135.29	3.97767	12.44158	1.38E-02	7.65E-06	1.3816E-02
260340.40	4081154.25	3.13265	9.86058	1.09E-02	6.06E-06	1.0881E-02
260257.63	4081252.44	2.52868	4.30185	8.78E-03	2.64E-06	8.7809E-03
260240.94	4081260.08	2.68673	4.10736	9.33E-03	2.52E-06	9.3295E-03
260224.25	4081267.71	2.84594	3.9203	9.88E-03	2.41E-06	9.8820E-03
260207.55	4081275.35	2.99878	3.73988	1.04E-02	2.30E-06	1.0413E-02
260190.86	4081282.99	3.13947	3.56623	1.09E-02	2.19E-06	1.0901E-02
260174.17	4081290.62	3.26513	3.39959	1.13E-02	2.09E-06	1.1337E-02
260346.84	4081101.34	4.99625	19.78262	1.73E-02	1.22E-05	1.7357E-02
260347.10	4081082.74	5.97741	27.41982	2.08E-02	1.69E-05	2.0767E-02
260347.36	4081064.14	7.07563	41.29758	2.46E-02	2.54E-05	2.4588E-02

260347.62	4081045.55	8.22341	71.80347	2.85E-02	4.41E-05	2.8592E-02
260380.14	4081118.20	3.28234	14.83914	1.14E-02	9.12E-06	1.1404E-02
260366.74	4081150.80	2.7037	9.93943	9.39E-03	6.11E-06	9.3920E-03
260352.31	4081202.31	1.9573	5.92519	6.79E-03	3.64E-06	6.7984E-03
260329.63	4081201.21	2.26159	6.17484	7.85E-03	3.79E-06	7.8549E-03
260326.55	4081248.60	1.67824	4.11896	5.83E-03	2.53E-06	5.8285E-03
260301.76	4081299.39	1.46219	2.92062	5.08E-03	1.79E-06	5.0778E-03
260271.77	4081286.89	1.85896	3.29497	6.45E-03	2.02E-06	6.4554E-03
260239.72	4081301.55	2.051	3.06133	7.12E-03	1.88E-06	7.1219E-03
260207.67	4081316.21	2.2232	2.83849	7.72E-03	1.74E-06	7.7195E-03
260175.62	4081330.87	2.3614	2.62631	8.20E-03	1.61E-06	8.1992E-03
260387.10	4081083.30	4.21055	26.06576	1.46E-02	1.60E-05	1.4633E-02
260387.36	4081064.70	4.88627	39.00122	1.70E-02	2.40E-05	1.6987E-02
260387.62	4081046.11	5.60041	66.68825	1.94E-02	4.10E-05	1.9483E-02
260407.25	4081114.86	2.79684	15.01141	9.71E-03	9.23E-06	9.7184E-03
260407.30	4081150.00	2.11382	9.41128	7.34E-03	5.78E-06	7.3439E-03
260399.77	4081198.88	1.54445	5.63171	5.36E-03	3.46E-06	5.3650E-03
260377.46	4081199.97	1.72655	5.81465	5.99E-03	3.57E-06	5.9973E-03
260368.22	4081245.08	1.36434	3.96792	4.74E-03	2.44E-06	4.7387E-03
260349.01	4081294.31	1.16754	2.82675	4.05E-03	1.74E-06	4.0548E-03
260324.51	4081294.93	1.32209	2.92201	4.59E-03	1.80E-06	4.5914E-03
260301.94	4081314.00	1.35648	2.64584	4.71E-03	1.63E-06	4.7106E-03
260270.78	4081328.26	1.48382	2.49947	5.15E-03	1.54E-06	5.1526E-03
260239.62	4081342.51	1.60191	2.35452	5.56E-03	1.45E-06	5.5624E-03
260208.46	4081356.76	1.69974	2.21262	5.90E-03	1.36E-06	5.9020E-03
260177.30	4081371.02	1.77686	2.0749	6.17E-03	1.28E-06	6.1696E-03
260435.69	4081118.94	2.25891	13.46318	7.84E-03	8.27E-06	7.8500E-03
260427.35	4081065.26	3.55154	36.60395	1.23E-02	2.25E-05	1.2352E-02
260427.61	4081046.66	4.02264	61.83412	1.40E-02	3.80E-05	1.4003E-02
260425.61	4081203.32	1.31803	5.09182	4.58E-03	3.13E-06	4.5786E-03
260418.74	4081220.04	1.22954	4.43069	4.27E-03	2.72E-06	4.2710E-03
260411.87	4081236.76	1.15336	3.892	4.00E-03	2.39E-06	4.0063E-03
260405.00	4081253.47	1.08809	3.44634	3.78E-03	2.12E-06	3.7794E-03
260398.13	4081270.19	1.03248	3.07342	3.58E-03	1.89E-06	3.5861E-03
260391.26	4081286.91	0.98473	2.7576	3.42E-03	1.69E-06	3.4202E-03
260384.39	4081303.63	0.94343	2.48792	3.28E-03	1.53E-06	3.2766E-03
260361.08	4081327.87	0.94879	2.21375	3.29E-03	1.36E-06	3.2951E-03
260344.64	4081335.38	0.99335	2.16941	3.45E-03	1.33E-06	3.4497E-03
260328.21	4081342.90	1.04015	2.12328	3.61E-03	1.30E-06	3.6122E-03
260311.77	4081350.42	1.08808	2.07549	3.78E-03	1.28E-06	3.7785E-03
260295.33	4081357.94	1.13584	2.02654	3.94E-03	1.25E-06	3.9443E-03
260278.90	4081365.46	1.18199	1.9769	4.10E-03	1.21E-06	4.1045E-03
260262.46	4081372.98	1.22509	1.92669	4.25E-03	1.18E-06	4.2541E-03
260246.02	4081380.50	1.26422	1.87633	4.39E-03	1.15E-06	4.3899E-03
260229.59	4081388.01	1.29855	1.82564	4.51E-03	1.12E-06	4.5090E-03
260213.15	4081395.53	1.3286	1.77506	4.61E-03	1.09E-06	4.6133E-03
260196.71	4081403.05	1.35504	1.7249	4.70E-03	1.06E-06	4.7051E-03
260180.28	4081410.57	1.37906	1.67562	4.79E-03	1.03E-06	4.7884E-03
260487.12	4081114.02	1.73802	12.75742	6.03E-03	7.84E-06	6.0413E-03
260467.09	4081084.42	2.3782	22.6497	8.26E-03	1.39E-05	8.2698E-03
260467.35	4081065.82	2.6839	33.95494	9.32E-03	2.09E-05	9.3380E-03
260467.61	4081047.22	3.00906	57.02573	1.04E-02	3.50E-05	1.0481E-02
260500.13	4081119.87	1.56192	11.12898	5.42E-03	6.84E-06	5.4290E-03
260486.73	4081152.47	1.35704	7.42493	4.71E-03	4.56E-06	4.7155E-03
260473.33	4081185.07	1.17921	5.35017	4.09E-03	3.29E-06	4.0969E-03
260459.94	4081217.67	1.0335	4.05982	3.59E-03	2.49E-06	3.5903E-03
260446.54	4081250.27	0.91979	3.19599	3.19E-03	1.96E-06	3.1950E-03
260433.14	4081282.87	0.83382	2.58555	2.89E-03	1.59E-06	2.8962E-03
260419.74	4081315.47	0.76897	2.13608	2.67E-03	1.31E-06	2.6708E-03
260390.32	4081355.40	0.74833	1.77386	2.60E-03	1.09E-06	2.5989E-03
260358.27	4081370.06	0.81336	1.72513	2.82E-03	1.06E-06	2.8246E-03
260326.22	4081384.73	0.88229	1.66901	3.06E-03	1.03E-06	3.0639E-03
260294.17	4081399.39	0.9489	1.60766	3.29E-03	9.88E-07	3.2951E-03
260262.12	4081414.05	1.00627	1.54256	3.49E-03	9.48E-07	3.4942E-03
260230.07	4081428.71	1.05071	1.47485	3.65E-03	9.06E-07	3.6484E-03
260198.01	4081443.37	1.08537	1.4071	3.77E-03	8.65E-07	3.7687E-03
260507.08	4081084.98	1.87243	20.20415	6.50E-03	1.24E-05	6.5125E-03
260507.34	4081066.38	2.09187	30.72321	7.26E-03	1.89E-05	7.2808E-03
260507.60	4081047.78	2.32506	51.89785	8.07E-03	3.19E-05	8.1033E-03
260539.84	4081121.11	1.27384	9.13325	4.42E-03	5.61E-06	4.4277E-03
260532.87	4081138.09	1.19124	7.39024	4.14E-03	4.54E-06	4.1399E-03
260525.89	4081155.07	1.11311	6.13581	3.86E-03	3.77E-06	3.8679E-03
260518.91	4081172.05	1.04001	5.1948	3.61E-03	3.19E-06	3.6136E-03
260511.93	4081189.03	0.97264	4.46758	3.38E-03	2.75E-06	3.3792E-03
260504.96	4081206.01	0.91149	3.89181	3.16E-03	2.39E-06	3.1666E-03
260497.98	4081222.99	0.85656	3.42618	2.97E-03	2.11E-06	2.9756E-03
260491.00	4081239.97	0.80767	3.04257	2.80E-03	1.87E-06	2.8057E-03

260484.02	4081256.94	0.76466	2.72254	2.65E-03	1.67E-06	2.6562E-03
260477.04	4081273.92	0.72711	2.45213	2.52E-03	1.51E-06	2.5257E-03
260470.07	4081290.90	0.69436	2.22077	2.41E-03	1.36E-06	2.4118E-03
260463.09	4081307.88	0.66591	2.02137	2.31E-03	1.24E-06	2.3129E-03
260456.11	4081324.86	0.64113	1.84812	2.23E-03	1.14E-06	2.2268E-03
260449.13	4081341.84	0.61939	1.69652	2.15E-03	1.04E-06	2.1512E-03
260442.16	4081358.82	0.6001	1.56301	2.08E-03	9.61E-07	2.0842E-03
260418.49	4081383.43	0.60625	1.43476	2.10E-03	8.82E-07	2.1055E-03
260401.79	4081391.07	0.63122	1.42255	2.19E-03	8.74E-07	2.1921E-03
260385.10	4081398.71	0.65747	1.40849	2.28E-03	8.66E-07	2.2833E-03
260368.41	4081406.34	0.68462	1.39269	2.38E-03	8.56E-07	2.3775E-03
260351.71	4081413.98	0.71211	1.37517	2.47E-03	8.45E-07	2.4729E-03
260335.02	4081421.62	0.73925	1.35614	2.57E-03	8.33E-07	2.5671E-03
260318.33	4081429.25	0.76546	1.33596	2.66E-03	8.21E-07	2.6581E-03
260301.63	4081436.89	0.78994	1.31455	2.74E-03	8.08E-07	2.7431E-03
260284.94	4081444.52	0.81205	1.29207	2.82E-03	7.94E-07	2.8198E-03
260268.25	4081452.16	0.83129	1.2684	2.89E-03	7.79E-07	2.8866E-03
260251.55	4081459.80	0.84797	1.24421	2.94E-03	7.65E-07	2.9445E-03
260234.86	4081467.43	0.8623	1.21961	2.99E-03	7.49E-07	2.9942E-03
260218.17	4081475.07	0.87497	1.19492	3.04E-03	7.34E-07	3.0382E-03
260201.47	4081482.70	0.88657	1.17019	3.08E-03	7.19E-07	3.0784E-03
260184.78	4081490.34	0.89735	1.14522	3.12E-03	7.04E-07	3.1158E-03
260546.82	4081104.13	1.35911	11.66626	4.72E-03	7.17E-06	4.7253E-03
260547.08	4081085.54	1.5091	16.80775	5.24E-03	1.03E-05	5.2491E-03
260547.34	4081066.94	1.67133	26.16165	5.80E-03	1.61E-05	5.8181E-03
260547.60	4081048.34	1.84372	45.37004	6.40E-03	2.79E-05	6.4283E-03
260639.83	4081122.51	0.82625	4.29518	2.87E-03	2.64E-06	2.8710E-03
260632.86	4081139.49	0.78108	3.79443	2.71E-03	2.33E-06	2.7138E-03
260625.88	4081156.47	0.73787	3.37764	2.56E-03	2.08E-06	2.5636E-03
260618.90	4081173.45	0.69693	3.02697	2.42E-03	1.86E-06	2.4212E-03
260611.92	4081190.43	0.65846	2.72878	2.29E-03	1.68E-06	2.2875E-03
260604.95	4081207.40	0.62281	2.47383	2.16E-03	1.52E-06	2.1636E-03
260597.97	4081224.38	0.59001	2.25353	2.05E-03	1.38E-06	2.0496E-03
260590.99	4081241.36	0.56012	2.0618	1.94E-03	1.27E-06	1.9457E-03
260584.01	4081258.34	0.53309	1.89379	1.85E-03	1.16E-06	1.8518E-03
260577.03	4081275.32	0.50882	1.74565	1.77E-03	1.07E-06	1.7674E-03
260570.06	4081292.30	0.48715	1.61423	1.69E-03	9.92E-07	1.6921E-03
260563.08	4081309.28	0.46791	1.49716	1.62E-03	9.20E-07	1.6253E-03
260556.10	4081326.26	0.45083	1.3924	1.57E-03	8.56E-07	1.5659E-03
260549.12	4081343.24	0.4357	1.29811	1.51E-03	7.98E-07	1.5133E-03
260542.15	4081360.22	0.4223	1.21315	1.47E-03	7.46E-07	1.4668E-03
260535.17	4081377.20	0.41042	1.13626	1.42E-03	6.98E-07	1.4255E-03
260528.19	4081394.18	0.39978	1.06642	1.39E-03	6.55E-07	1.3885E-03
260521.21	4081411.15	0.39025	1.00284	1.35E-03	6.16E-07	1.3554E-03
260514.24	4081428.13	0.38159	0.94468	1.32E-03	5.81E-07	1.3253E-03
260490.57	4081452.75	0.38654	0.89287	1.34E-03	5.49E-07	1.3424E-03
260473.87	4081460.39	0.40019	0.89306	1.39E-03	5.49E-07	1.3898E-03
260457.18	4081468.02	0.41448	0.89196	1.44E-03	5.48E-07	1.4394E-03
260440.49	4081475.66	0.4293	0.88966	1.49E-03	5.47E-07	1.4909E-03
260423.79	4081483.29	0.44463	0.88656	1.54E-03	5.45E-07	1.5441E-03
260407.10	4081490.93	0.45997	0.8822	1.60E-03	5.42E-07	1.5973E-03
260390.41	4081498.57	0.47518	0.87692	1.65E-03	5.39E-07	1.6501E-03
260373.71	4081506.20	0.49	0.87091	1.70E-03	5.35E-07	1.7016E-03
260357.02	4081513.84	0.50401	0.86399	1.75E-03	5.31E-07	1.7502E-03
260340.32	4081521.47	0.51698	0.85641	1.79E-03	5.26E-07	1.7952E-03
260323.63	4081529.11	0.52863	0.84811	1.84E-03	5.21E-07	1.8357E-03
260306.94	4081536.75	0.53887	0.83929	1.87E-03	5.16E-07	1.8712E-03
260290.24	4081544.38	0.54764	0.82991	1.90E-03	5.10E-07	1.9016E-03
260273.55	4081552.02	0.555	0.82002	1.93E-03	5.04E-07	1.9272E-03
260256.86	4081559.65	0.56124	0.80977	1.95E-03	4.98E-07	1.9488E-03
260240.16	4081567.29	0.56665	0.7992	1.97E-03	4.91E-07	1.9676E-03
260223.47	4081574.93	0.5716	0.78839	1.98E-03	4.84E-07	1.9848E-03
260206.78	4081582.56	0.57641	0.77736	2.00E-03	4.78E-07	2.0015E-03
260190.08	4081590.20	0.58124	0.76611	2.02E-03	4.71E-07	2.0182E-03
260646.81	4081105.53	0.87261	4.89877	3.03E-03	3.01E-06	3.0323E-03
260647.07	4081086.93	0.95229	6.21741	3.31E-03	3.82E-06	3.3097E-03
260647.33	4081068.34	1.03743	8.26259	3.60E-03	5.08E-06	3.6065E-03
260647.59	4081049.74	1.12765	11.76011	3.91E-03	7.23E-06	3.9218E-03
260155.89	4081001.97	86.47109	69.21026	3.00E-01	4.25E-05	3.0023E-01
260128.44	4081002.94	70.10923	64.70581	2.43E-01	3.98E-05	2.4342E-01
260109.65	4081003.14	50.45032	57.14611	1.75E-01	3.51E-05	1.7517E-01
260090.86	4081003.33	32.27896	43.60062	1.12E-01	2.68E-05	1.1208E-01
260072.07	4081003.52	22.43458	28.11743	7.79E-02	1.73E-05	7.7899E-02
260161.40	4080988.64	60.00616	43.93217	2.08E-01	2.70E-05	2.0834E-01
260197.40	4080996.24	63.27396	62.09367	2.20E-01	3.82E-05	2.1969E-01
260128.24	4080982.95	35.88526	30.6731	1.25E-01	1.88E-05	1.2459E-01
260109.45	4080983.14	25.80211	25.58866	8.96E-02	1.57E-05	8.9587E-02

260090.66	4080983.33	18.18439	19.71906	6.31E-02	1.21E-05	6.3139E-02
260071.87	4080983.52	13.95791	14.87441	4.85E-02	9.14E-06	4.8464E-02
260161.19	4080968.64	35.28113	24.87127	1.22E-01	1.53E-05	1.2249E-01
260189.94	4080980.40	49.71026	37.53501	1.73E-01	2.31E-05	1.7259E-01
260210.14	4081000.68	58.15002	74.71346	2.02E-01	4.59E-05	2.0191E-01
260128.03	4080962.95	20.46159	17.19638	7.10E-02	1.06E-05	7.1043E-02
260109.24	4080963.14	15.2528	14.33085	5.29E-02	8.81E-06	5.2959E-02
260090.45	4080963.33	11.60451	11.66686	4.03E-02	7.17E-06	4.0292E-02
260071.66	4080963.52	9.46183	9.54456	3.28E-02	5.87E-06	3.2852E-02
260160.99	4080948.64	21.81891	15.61629	7.57E-02	9.60E-06	7.5754E-02
260189.74	4080960.41	33.19808	22.96616	1.15E-01	1.41E-05	1.1526E-01
260127.83	4080942.95	12.85366	10.9444	4.46E-02	6.73E-06	4.4628E-02
260109.04	4080943.14	10.00913	9.34055	3.47E-02	5.74E-06	3.4752E-02
260090.25	4080943.33	8.04893	7.95166	2.79E-02	4.89E-06	2.7947E-02
260071.46	4080943.53	6.82656	6.81045	2.37E-02	4.19E-06	2.3702E-02
260163.66	4080929.82	14.99209	10.98107	5.20E-02	6.75E-06	5.2052E-02
260180.91	4080936.88	19.87929	13.71872	6.90E-02	8.43E-06	6.9019E-02
260198.15	4080943.94	24.55613	16.85666	8.52E-02	1.04E-05	8.5257E-02
260215.40	4080951.00	27.80496	20.41104	9.65E-02	1.25E-05	9.6537E-02
260146.41	4080922.76	10.85039	8.69443	3.77E-02	5.34E-06	3.7672E-02
260127.62	4080922.95	8.72352	7.6478	3.03E-02	4.70E-06	3.0288E-02
260108.83	4080923.14	7.06428	6.69585	2.45E-02	4.11E-06	2.4528E-02
260090.04	4080923.33	5.91104	5.8781	2.05E-02	3.61E-06	2.0524E-02
260071.25	4080923.53	5.15638	5.18595	1.79E-02	3.19E-06	1.7903E-02
260162.97	4080909.62	10.16706	7.80972	3.53E-02	4.80E-06	3.5300E-02
260179.74	4080916.48	13.3511	9.55396	4.63E-02	5.87E-06	4.6354E-02
260196.51	4080923.35	16.8043	11.58548	5.83E-02	7.12E-06	5.8343E-02
260213.28	4080930.21	19.90646	13.87224	6.91E-02	8.52E-06	6.9113E-02
260230.05	4080937.08	22.01433	16.41966	7.64E-02	1.01E-05	7.6432E-02
260146.21	4080902.76	7.61775	6.38406	2.64E-02	3.92E-06	2.6449E-02
260127.42	4080902.95	6.27721	5.70309	2.18E-02	3.50E-06	2.1795E-02
260108.63	4080903.14	5.25038	5.09882	1.82E-02	3.13E-06	1.8230E-02
260089.84	4080903.33	4.52663	4.57639	1.57E-02	2.81E-06	1.5717E-02
260071.05	4080903.53	4.03061	4.11887	1.40E-02	2.53E-06	1.3995E-02
260162.43	4080889.48	7.2339	5.84487	2.51E-02	3.59E-06	2.5116E-02
260195.28	4080902.93	11.75083	8.35358	4.08E-02	5.13E-06	4.0798E-02
260228.13	4080916.38	16.37724	11.64175	5.69E-02	7.15E-06	5.6860E-02
260267.65	4080946.28	20.69171	20.8606	7.18E-02	1.28E-05	7.1844E-02
260127.21	4080882.95	4.72469	4.45298	1.64E-02	2.74E-06	1.6404E-02
260108.42	4080883.14	4.05786	4.04781	1.41E-02	2.49E-06	1.4089E-02
260089.63	4080883.34	3.57874	3.69173	1.24E-02	2.27E-06	1.2426E-02
260070.84	4080883.53	3.23711	3.37119	1.12E-02	2.07E-06	1.1240E-02
260161.97	4080869.38	5.35976	4.5516	1.86E-02	2.80E-06	1.8609E-02
260194.31	4080882.62	8.45279	6.26886	2.93E-02	3.85E-06	2.9348E-02
260226.65	4080895.85	12.12788	8.57719	4.21E-02	5.27E-06	4.2107E-02
260258.99	4080909.09	14.70297	11.3927	5.10E-02	7.00E-06	5.1048E-02
260281.71	4080931.90	16.92931	16.76927	5.88E-02	1.03E-05	5.8780E-02
260127.01	4080862.95	3.68338	3.59452	1.28E-02	2.21E-06	1.2789E-02
260108.22	4080863.14	3.23126	3.30909	1.12E-02	2.03E-06	1.1219E-02
260089.43	4080863.34	2.90042	3.05462	1.01E-02	1.88E-06	1.0071E-02
260070.64	4080863.53	2.65715	2.8214	9.22E-03	1.73E-06	9.2260E-03
260161.56	4080849.30	4.10837	3.65589	1.43E-02	2.25E-06	1.4264E-02
260193.50	4080862.37	6.25873	4.86455	2.17E-02	2.99E-06	2.1730E-02
260225.44	4080875.45	9.05181	6.5171	3.14E-02	4.00E-06	3.1427E-02
260257.38	4080888.52	11.54869	8.57271	4.01E-02	5.27E-06	4.0096E-02
260295.80	4080917.59	14.08711	13.83557	4.89E-02	8.50E-06	4.8912E-02
260308.76	4080949.58	15.55304	23.39697	5.40E-02	1.44E-05	5.4006E-02
260126.80	4080842.95	2.95155	2.97341	1.02E-02	1.83E-06	1.0248E-02
260108.01	4080843.15	2.63505	2.76556	9.15E-03	1.70E-06	9.1492E-03
260089.22	4080843.34	2.39867	2.57693	8.33E-03	1.58E-06	8.3285E-03
260070.43	4080843.53	2.22063	2.40224	7.71E-03	1.48E-06	7.7104E-03
260162.43	4080809.82	2.66397	2.55477	9.25E-03	1.57E-06	9.2495E-03
260179.68	4080816.88	3.22246	2.88847	1.12E-02	1.78E-06	1.1188E-02
260196.93	4080823.94	3.92663	3.29022	1.36E-02	2.02E-06	1.3633E-02
260214.17	4080831.00	4.77032	3.76831	1.66E-02	2.32E-06	1.6562E-02
260231.42	4080838.06	5.71584	4.32448	1.98E-02	2.66E-06	1.9845E-02
260248.67	4080845.12	6.69896	4.95971	2.33E-02	3.05E-06	2.3258E-02
260265.92	4080852.18	7.627	5.66681	2.65E-02	3.48E-06	2.6480E-02
260283.17	4080859.24	8.40528	6.44062	2.92E-02	3.96E-06	2.9183E-02
260300.41	4080866.30	8.9517	7.27363	3.11E-02	4.47E-06	3.1080E-02
260324.66	4080890.64	10.24145	10.13788	3.56E-02	6.23E-06	3.5559E-02
260331.65	4080907.91	11.0092	12.74244	3.82E-02	7.83E-06	3.8226E-02
260338.65	4080925.18	11.40952	16.30732	3.96E-02	1.00E-05	3.9618E-02
260345.64	4080942.46	11.37886	21.4756	3.95E-02	1.32E-05	3.9515E-02
260145.18	4080802.76	2.23535	2.27694	7.76E-03	1.40E-06	7.7614E-03
260126.39	4080802.96	2.01924	2.14621	7.01E-03	1.32E-06	7.0111E-03
260107.60	4080803.15	1.85023	2.02588	6.42E-03	1.24E-06	6.4243E-03

260088.81	4080803.34	1.72001	1.91411	5.97E-03	1.18E-06	5.9722E-03
260070.02	4080803.53	1.61766	1.80816	5.62E-03	1.11E-06	5.6168E-03
260161.54	4080769.63	1.83208	1.87562	6.36E-03	1.15E-06	6.3612E-03
260178.31	4080776.49	2.13629	2.06997	7.42E-03	1.27E-06	7.4174E-03
260195.08	4080783.36	2.5177	2.29845	8.74E-03	1.41E-06	8.7416E-03
260211.85	4080790.22	2.98064	2.56597	1.03E-02	1.58E-06	1.0349E-02
260228.62	4080797.08	3.52227	2.87778	1.22E-02	1.77E-06	1.2229E-02
260245.39	4080803.95	4.12821	3.23787	1.43E-02	1.99E-06	1.4333E-02
260262.15	4080810.81	4.76641	3.64458	1.65E-02	2.24E-06	1.6549E-02
260278.92	4080817.68	5.39995	4.09909	1.87E-02	2.52E-06	1.8748E-02
260329.23	4080838.27	6.8053	5.70504	2.36E-02	3.51E-06	2.3628E-02
260352.80	4080861.92	7.68936	7.60089	2.67E-02	4.67E-06	2.6698E-02
260359.60	4080878.72	8.25519	9.2264	2.87E-02	5.67E-06	2.8663E-02
260366.40	4080895.51	8.62722	11.31184	2.99E-02	6.95E-06	2.9956E-02
260373.20	4080912.31	8.76198	14.07482	3.04E-02	8.65E-06	3.0426E-02
260380.00	4080929.10	8.64114	17.89202	3.00E-02	1.10E-05	3.0009E-02
260386.81	4080945.90	8.27931	23.51763	2.87E-02	1.45E-05	2.8756E-02
260144.77	4080762.76	1.59365	1.70926	5.53E-03	1.05E-06	5.5334E-03
260125.98	4080762.96	1.46995	1.62872	5.10E-03	1.00E-06	5.1039E-03
260107.19	4080763.15	1.37176	1.5532	4.76E-03	9.54E-07	4.7630E-03
260088.40	4080763.34	1.29407	1.48182	4.49E-03	9.11E-07	4.4933E-03
260069.61	4080763.53	1.23116	1.41303	4.27E-03	8.68E-07	4.2748E-03
260160.79	4080729.49	1.3392	1.4416	4.65E-03	8.86E-07	4.6499E-03
260193.64	4080742.94	1.74005	1.70466	6.04E-03	1.05E-06	6.0416E-03
260226.50	4080756.39	2.32769	2.05324	8.08E-03	1.26E-06	8.0818E-03
260259.35	4080769.83	3.10118	2.51132	1.08E-02	1.54E-06	1.0767E-02
260394.32	4080866.25	6.70465	8.34121	2.33E-02	5.13E-06	2.3280E-02
260407.65	4080899.16	6.89807	12.19652	2.39E-02	7.50E-06	2.3954E-02
260420.97	4080932.06	6.47768	19.15379	2.25E-02	1.18E-05	2.2499E-02
260125.57	4080722.96	1.11982	1.28125	3.89E-03	7.87E-07	3.8882E-03
260106.78	4080723.15	1.05891	1.23092	3.68E-03	7.56E-07	3.6767E-03
260087.99	4080723.34	1.00965	1.18263	3.50E-03	7.27E-07	3.5057E-03
260069.20	4080723.54	0.96926	1.13595	3.36E-03	6.98E-07	3.3655E-03
260161.20	4080689.83	1.03102	1.15139	3.58E-03	7.08E-07	3.5799E-03
260178.45	4080696.89	1.1535	1.23981	4.00E-03	7.62E-07	4.0051E-03
260195.70	4080703.95	1.30437	1.34021	4.53E-03	8.24E-07	4.5289E-03
260212.94	4080711.01	1.48815	1.45525	5.17E-03	8.94E-07	5.1670E-03
260230.19	4080718.07	1.70695	1.58667	5.93E-03	9.75E-07	5.9266E-03
260247.44	4080725.13	1.96209	1.73746	6.81E-03	1.07E-06	6.8124E-03
260264.69	4080732.19	2.25051	1.90923	7.81E-03	1.17E-06	7.8138E-03
260281.94	4080739.25	2.56669	2.10418	8.91E-03	1.29E-06	8.9115E-03
260423.66	4080840.49	5.37685	6.61024	1.87E-02	4.06E-06	1.8670E-02
260430.66	4080857.76	5.53572	7.85191	1.92E-02	4.83E-06	1.9222E-02
260437.65	4080875.04	5.58118	9.41279	1.94E-02	5.78E-06	1.9381E-02
260444.65	4080892.31	5.50868	11.43049	1.91E-02	7.02E-06	1.9130E-02
260451.64	4080909.59	5.32507	14.1362	1.85E-02	8.69E-06	1.8495E-02
260458.64	4080926.86	5.0458	17.94691	1.75E-02	1.10E-05	1.7527E-02
260465.63	4080944.14	4.69419	23.69964	1.63E-02	1.46E-05	1.6310E-02
260455.49	4080960.93	4.84361	32.62251	1.68E-02	2.00E-05	1.6835E-02
260456.30	4080980.11	4.53753	52.60247	1.58E-02	3.23E-05	1.5784E-02
260143.95	4080682.77	0.93197	1.07281	3.24E-03	6.59E-07	3.2360E-03
260125.16	4080682.96	0.88294	1.03609	3.07E-03	6.37E-07	3.0657E-03
260106.37	4080683.15	0.84304	1.00086	2.93E-03	6.15E-07	2.9272E-03
260087.58	4080683.35	0.81052	0.96689	2.81E-03	5.94E-07	2.8143E-03
260068.79	4080683.54	0.78334	0.93365	2.72E-03	5.74E-07	2.7199E-03
260160.45	4080649.69	0.81458	0.93872	2.83E-03	5.77E-07	2.8284E-03
260177.36	4080656.61	0.89493	1.00031	3.11E-03	6.15E-07	3.1073E-03
260194.27	4080663.54	0.99215	1.06894	3.44E-03	6.57E-07	3.4449E-03
260211.18	4080670.46	1.10902	1.146	3.85E-03	7.04E-07	3.8506E-03
260228.09	4080677.38	1.24765	1.23273	4.33E-03	7.58E-07	4.3320E-03
260245.00	4080684.30	1.40976	1.33091	4.89E-03	8.18E-07	4.8948E-03
260261.91	4080691.22	1.59551	1.44191	5.54E-03	8.86E-07	5.5397E-03
260278.82	4080698.14	1.80336	1.56691	6.26E-03	9.63E-07	6.2613E-03
260465.30	4080845.11	4.59023	7.06515	1.59E-02	4.34E-06	1.5939E-02
260472.16	4080862.05	4.58807	8.32746	1.59E-02	5.12E-06	1.5933E-02
260479.02	4080878.99	4.50743	9.91971	1.56E-02	6.10E-06	1.5654E-02
260485.88	4080895.92	4.35462	11.99224	1.51E-02	7.37E-06	1.5124E-02
260492.73	4080912.86	4.14016	14.79929	1.44E-02	9.09E-06	1.4382E-02
260499.59	4080929.79	3.87777	18.80582	1.35E-02	1.16E-05	1.3473E-02
260506.45	4080946.73	3.58331	24.96254	1.24E-02	1.53E-05	1.2455E-02
260513.31	4080963.66	3.27156	35.40256	1.14E-02	2.18E-05	1.1379E-02
260520.17	4080980.60	2.95651	55.98059	1.03E-02	3.44E-05	1.0298E-02
260564.31	4080844.09	2.9256	6.92607	1.02E-02	4.26E-06	1.0160E-02
260571.25	4080861.23	2.82576	8.04239	9.81E-03	4.94E-06	9.8145E-03
260578.19	4080878.37	2.69914	9.44539	9.37E-03	5.80E-06	9.3758E-03
260585.13	4080895.50	2.5515	11.2644	8.86E-03	6.92E-06	8.8644E-03
260592.07	4080912.64	2.38909	13.72551	8.29E-03	8.43E-06	8.3021E-03

260599.01	4080929.78	2.21778	17.23585	7.70E-03	1.06E-05	7.7096E-03
260605.95	4080946.92	2.04296	22.62511	7.09E-03	1.39E-05	7.1060E-03
260612.89	4080964.05	1.86962	31.81564	6.49E-03	1.96E-05	6.5099E-03
260619.83	4080981.19	1.70149	50.07581	5.91E-03	3.08E-05	5.9375E-03
260043.48	4080995.76	13.82718	12.1818	4.80E-02	7.49E-06	4.8008E-02
260009.29	4081002.40	11.82444	7.52989	4.10E-02	4.63E-06	4.1053E-02
260029.08	4080981.88	9.51287	7.69555	3.30E-02	4.73E-06	3.3028E-02
259993.02	4081065.25	27.57452	9.73712	9.57E-02	5.98E-06	9.5730E-02
259993.54	4081084.88	34.97185	9.91335	1.21E-01	6.09E-06	1.2141E-01
259994.06	4081104.51	40.06296	9.2993	1.39E-01	5.71E-06	1.3908E-01
259986.50	4081010.13	10.95492	5.90119	3.80E-02	3.63E-06	3.8033E-02
259993.50	4080992.12	8.828	5.49701	3.06E-02	3.38E-06	3.0650E-02
260018.23	4080966.47	6.94673	5.56959	2.41E-02	3.42E-06	2.4119E-02
260035.97	4080958.82	6.83244	6.09496	2.37E-02	3.75E-06	2.3722E-02
260053.71	4080951.17	6.76963	6.51999	2.35E-02	4.01E-06	2.3505E-02
259973.03	4081065.78	19.92449	7.23513	6.92E-02	4.45E-06	6.9172E-02
259973.55	4081085.41	24.58063	7.63318	8.53E-02	4.69E-06	8.5336E-02
259974.06	4081105.04	28.2994	7.53498	9.82E-02	4.63E-06	9.8246E-02
259965.95	4081012.10	9.32503	4.68358	3.24E-02	2.88E-06	3.2375E-02
259972.66	4080994.81	7.87988	4.45623	2.74E-02	2.74E-06	2.7358E-02
259979.38	4080977.52	6.54862	4.18487	2.27E-02	2.57E-06	2.2736E-02
260003.12	4080952.89	5.3261	4.20357	1.85E-02	2.58E-06	1.8492E-02
260020.15	4080945.55	5.23319	4.52261	1.82E-02	2.78E-06	1.8170E-02
260037.19	4080938.21	5.15943	4.80593	1.79E-02	2.95E-06	1.7914E-02
260054.22	4080930.87	5.12534	5.02934	1.78E-02	3.09E-06	1.7796E-02
259953.04	4081066.31	15.06951	5.62785	5.23E-02	3.46E-06	5.2317E-02
259953.55	4081085.94	18.17408	6.03628	6.31E-02	3.71E-06	6.3095E-02
259954.07	4081105.57	20.88569	6.15491	7.25E-02	3.78E-06	7.2508E-02
259945.58	4081013.59	7.92498	3.83183	2.75E-02	2.35E-06	2.7514E-02
259958.64	4080979.97	5.96797	3.52578	2.07E-02	2.17E-06	2.0720E-02
259988.25	4080939.21	4.22198	3.32895	1.47E-02	2.05E-06	1.4659E-02
260004.81	4080932.08	4.14783	3.53788	1.44E-02	2.17E-06	1.4401E-02
260037.93	4080917.80	4.03585	3.89641	1.40E-02	2.39E-06	1.4013E-02
259933.05	4081066.83	11.7986	4.53158	4.10E-02	2.78E-06	4.0961E-02
259933.56	4081086.46	13.96605	4.89427	4.85E-02	3.01E-06	4.8486E-02
259934.08	4081106.09	15.97158	5.09014	5.54E-02	3.13E-06	5.5448E-02
259931.72	4080998.33	6.07941	3.11371	2.11E-02	1.91E-06	2.1106E-02
259944.51	4080965.40	4.69024	2.88368	1.63E-02	1.77E-06	1.6284E-02
259973.51	4080925.48	3.43592	2.72708	1.19E-02	1.68E-06	1.1929E-02
260005.96	4080911.49	3.32074	3.0073	1.15E-02	1.85E-06	1.1530E-02
260038.40	4080897.51	3.24598	3.23367	1.13E-02	1.99E-06	1.1270E-02
259913.05	4081067.36	9.48812	3.74624	3.29E-02	2.30E-06	3.2940E-02
259913.57	4081086.99	11.06144	4.05504	3.84E-02	2.49E-06	3.8402E-02
259914.09	4081106.62	12.57403	4.26725	4.37E-02	2.62E-06	4.3653E-02
259911.42	4080999.63	5.3288	2.67167	1.85E-02	1.64E-06	1.8500E-02
259924.01	4080967.21	4.29799	2.51551	1.49E-02	1.55E-06	1.4922E-02
259936.60	4080934.80	3.3209	2.30519	1.15E-02	1.42E-06	1.1530E-02
259958.86	4080911.71	2.85527	2.29004	9.91E-03	1.41E-06	9.9134E-03
259990.80	4080897.94	2.75934	2.49248	9.58E-03	1.53E-06	9.5805E-03
260022.73	4080884.18	2.69061	2.66517	9.34E-03	1.64E-06	9.3420E-03
259893.06	4081067.89	7.80172	3.16326	2.71E-02	1.94E-06	2.7085E-02
259893.58	4081087.52	8.97747	3.4222	3.12E-02	2.10E-06	3.1167E-02
259894.09	4081107.15	10.13641	3.62483	3.52E-02	2.23E-06	3.5191E-02
259907.52	4080958.74	3.66784	2.1722	1.27E-02	1.33E-06	1.2734E-02
259914.51	4080940.73	3.22772	2.08667	1.12E-02	1.28E-06	1.1206E-02
259921.50	4080922.72	2.81748	1.98763	9.78E-03	1.22E-06	9.7821E-03
259946.24	4080897.06	2.40766	1.96878	8.36E-03	1.21E-06	8.3594E-03
259963.98	4080889.41	2.36089	2.05476	8.20E-03	1.26E-06	8.1971E-03
259981.72	4080881.77	2.31947	2.13671	8.05E-03	1.31E-06	8.0533E-03
259999.46	4080874.12	2.28548	2.21262	7.93E-03	1.36E-06	7.9354E-03
260017.21	4080866.47	2.25782	2.2788	7.84E-03	1.40E-06	7.8394E-03
260034.95	4080858.82	2.23608	2.3326	7.76E-03	1.43E-06	7.7639E-03
260052.69	4080851.18	2.22245	2.37359	7.72E-03	1.46E-06	7.7167E-03
259845.99	4081015.26	3.83367	1.84595	1.33E-02	1.13E-06	1.3310E-02
259852.70	4080997.97	3.60841	1.80879	1.25E-02	1.11E-06	1.2528E-02
259859.42	4080980.68	3.36862	1.77424	1.17E-02	1.09E-06	1.1695E-02
259866.13	4080963.39	3.1111	1.73796	1.08E-02	1.07E-06	1.0801E-02
259916.73	4080869.60	1.79113	1.49955	6.22E-03	9.22E-07	6.2188E-03
259933.76	4080862.26	1.75797	1.54945	6.10E-03	9.52E-07	6.1037E-03
259950.80	4080854.92	1.72792	1.59757	6.00E-03	9.82E-07	5.9994E-03
259967.83	4080847.58	1.70215	1.64306	5.91E-03	1.01E-06	5.9100E-03
259984.86	4080840.24	1.68094	1.68547	5.84E-03	1.04E-06	5.8364E-03
260001.89	4080832.90	1.66253	1.72265	5.77E-03	1.06E-06	5.7725E-03
260018.93	4080825.56	1.64664	1.75412	5.72E-03	1.08E-06	5.7174E-03
260035.96	4080818.22	1.63303	1.7788	5.67E-03	1.09E-06	5.6701E-03
260052.99	4080810.87	1.62264	1.79658	5.63E-03	1.10E-06	5.6341E-03
259833.08	4081069.46	4.77282	2.08197	1.66E-02	1.28E-06	1.6570E-02

259833.60	4081089.09	5.33422	2.23652	1.85E-02	1.37E-06	1.8519E-02
259834.11	4081108.72	5.91389	2.38141	2.05E-02	1.46E-06	2.0531E-02
259812.16	4081000.46	2.90362	1.46679	1.01E-02	9.01E-07	1.0081E-02
259825.21	4080966.84	2.60873	1.42288	9.06E-03	8.74E-07	9.0570E-03
259838.27	4080933.23	2.26655	1.37252	7.87E-03	8.43E-07	7.8691E-03
259851.32	4080899.61	1.90198	1.30072	6.60E-03	7.99E-07	6.6035E-03
259864.38	4080865.99	1.56261	1.20869	5.42E-03	7.43E-07	5.4253E-03
259920.58	4080827.77	1.34163	1.25154	4.66E-03	7.69E-07	4.6582E-03
259953.70	4080813.50	1.30491	1.30755	4.53E-03	8.04E-07	4.5308E-03
259970.26	4080806.36	1.29061	1.33267	4.48E-03	8.19E-07	4.4811E-03
260003.38	4080792.08	1.26645	1.37426	4.40E-03	8.45E-07	4.3973E-03
260036.49	4080777.81	1.24553	1.40108	4.32E-03	8.61E-07	4.3247E-03
259793.09	4081070.52	3.64436	1.65989	1.27E-02	1.02E-06	1.2652E-02
259793.61	4081090.15	4.01755	1.77318	1.39E-02	1.09E-06	1.3948E-02
259794.13	4081109.78	4.41	1.88524	1.53E-02	1.16E-06	1.5310E-02
259766.36	4081016.47	2.44777	1.23532	8.50E-03	7.59E-07	8.4981E-03
259773.25	4080998.74	2.35442	1.21605	8.17E-03	7.47E-07	8.1741E-03
259780.13	4080981.01	2.25715	1.19947	7.84E-03	7.37E-07	7.8364E-03
259787.02	4080963.28	2.1521	1.18434	7.47E-03	7.28E-07	7.4717E-03
259793.91	4080945.55	2.03667	1.16865	7.07E-03	7.18E-07	7.0710E-03
259800.79	4080927.81	1.91063	1.15025	6.63E-03	7.07E-07	6.6334E-03
259807.68	4080910.08	1.77655	1.12779	6.17E-03	6.93E-07	6.1680E-03
259814.56	4080892.35	1.63816	1.1004	5.69E-03	6.76E-07	5.6875E-03
259821.45	4080874.62	1.50051	1.06832	5.21E-03	6.57E-07	5.2097E-03
259828.34	4080856.88	1.36787	1.03224	4.75E-03	6.34E-07	4.7492E-03
259835.22	4080839.15	1.24409	0.99333	4.32E-03	6.10E-07	4.3194E-03
259859.58	4080813.89	1.11084	0.97544	3.86E-03	5.99E-07	3.8569E-03
259911.98	4080791.30	1.05521	1.03805	3.66E-03	6.38E-07	3.6638E-03
259929.45	4080783.77	1.0412	1.05703	3.61E-03	6.50E-07	3.6152E-03
259946.92	4080776.24	1.0296	1.07487	3.57E-03	6.61E-07	3.5749E-03
259964.39	4080768.71	1.01953	1.09101	3.54E-03	6.70E-07	3.5400E-03
259981.86	4080761.18	1.01017	1.10492	3.51E-03	6.79E-07	3.5075E-03
259999.33	4080753.65	1.00125	1.11646	3.48E-03	6.86E-07	3.4765E-03
260016.80	4080746.13	0.99236	1.12528	3.44E-03	6.92E-07	3.4457E-03
260034.26	4080738.60	0.98367	1.13139	3.41E-03	6.95E-07	3.4155E-03
260051.73	4080731.07	0.97573	1.13488	3.39E-03	6.97E-07	3.3879E-03
259753.11	4081071.57	2.87581	1.36286	9.98E-03	8.38E-07	9.9842E-03
259753.62	4081091.20	3.13765	1.44821	1.09E-02	8.90E-07	1.0893E-02
259754.14	4081110.83	3.41513	1.53529	1.19E-02	9.43E-07	1.1857E-02
259726.03	4081018.41	2.02607	1.0475	7.03E-03	6.44E-07	7.0341E-03
259732.75	4081001.13	1.96333	1.03288	6.82E-03	6.35E-07	6.8163E-03
259739.46	4080983.84	1.89969	1.02048	6.59E-03	6.27E-07	6.5954E-03
259746.17	4080966.55	1.83233	1.00972	6.36E-03	6.21E-07	6.3615E-03
259752.89	4080949.26	1.75879	0.99957	6.11E-03	6.14E-07	6.1062E-03
259759.60	4080931.97	1.67752	0.98862	5.82E-03	6.08E-07	5.8241E-03
259766.31	4080914.68	1.58851	0.9756	5.51E-03	6.00E-07	5.5151E-03
259773.03	4080897.39	1.49325	0.9596	5.18E-03	5.90E-07	5.1844E-03
259779.74	4080880.10	1.39385	0.94006	4.84E-03	5.78E-07	4.8393E-03
259786.46	4080862.81	1.29314	0.91707	4.49E-03	5.64E-07	4.4897E-03
259793.17	4080845.52	1.19397	0.89092	4.14E-03	5.48E-07	4.1454E-03
259799.88	4080828.23	1.09903	0.86231	3.82E-03	5.30E-07	3.8158E-03
259806.60	4080810.95	1.01014	0.83197	3.51E-03	5.11E-07	3.5072E-03
259830.34	4080786.32	0.9125	0.8158	3.17E-03	5.01E-07	3.1682E-03
259847.38	4080778.97	0.89645	0.83026	3.11E-03	5.10E-07	3.1125E-03
259898.47	4080756.95	0.85655	0.87043	2.97E-03	5.35E-07	2.9740E-03
259915.50	4080749.61	0.84676	0.88261	2.94E-03	5.42E-07	2.9401E-03
259932.54	4080742.27	0.83855	0.89409	2.91E-03	5.49E-07	2.9116E-03
259949.57	4080734.93	0.83131	0.90442	2.89E-03	5.56E-07	2.8864E-03
259966.60	4080727.59	0.8245	0.91344	2.86E-03	5.61E-07	2.8628E-03
259983.63	4080720.24	0.81775	0.92091	2.84E-03	5.66E-07	2.8394E-03
260000.66	4080712.90	0.81088	0.92679	2.81E-03	5.70E-07	2.8155E-03
260017.70	4080705.56	0.80368	0.93098	2.79E-03	5.72E-07	2.7905E-03
260034.73	4080698.22	0.79642	0.93338	2.76E-03	5.74E-07	2.7653E-03
260051.76	4080690.88	0.78947	0.93425	2.74E-03	5.74E-07	2.7412E-03
259713.12	4081072.62	2.33109	1.14486	8.09E-03	7.04E-07	8.0930E-03
259713.64	4081092.25	2.52134	1.21078	8.75E-03	7.44E-07	8.7535E-03
259714.15	4081111.88	2.72396	1.27924	9.46E-03	7.86E-07	9.4570E-03
259686.61	4081018.03	1.69994	0.90172	5.90E-03	5.54E-07	5.9019E-03
259693.60	4081000.02	1.65274	0.88974	5.74E-03	5.47E-07	5.7380E-03
259700.59	4080982.01	1.60588	0.87977	5.57E-03	5.41E-07	5.5753E-03
259707.59	4080964.00	1.55704	0.87142	5.41E-03	5.36E-07	5.4058E-03
259714.58	4080945.99	1.50366	0.86382	5.22E-03	5.31E-07	5.2205E-03
259721.57	4080927.98	1.44425	0.85599	5.01E-03	5.26E-07	5.0142E-03
259728.57	4080909.97	1.37813	0.84684	4.78E-03	5.20E-07	4.7847E-03
259735.56	4080891.96	1.3059	0.83543	4.53E-03	5.13E-07	4.5339E-03
259742.55	4080873.95	1.2288	0.82117	4.27E-03	5.05E-07	4.2663E-03
259749.55	4080855.94	1.14893	0.80391	3.99E-03	4.94E-07	3.9890E-03

259756.54	4080837.93	1.06845	0.78378	3.71E-03	4.82E-07	3.7096E-03
259763.53	4080819.92	0.98948	0.76118	3.43E-03	4.68E-07	3.4354E-03
259770.53	4080801.91	0.91388	0.73667	3.17E-03	4.53E-07	3.1730E-03
259777.52	4080783.90	0.84304	0.71082	2.93E-03	4.37E-07	2.9270E-03
259802.26	4080758.25	0.76424	0.69536	2.65E-03	4.27E-07	2.6535E-03
259820.00	4080750.60	0.75061	0.70584	2.61E-03	4.34E-07	2.6062E-03
259837.74	4080742.95	0.7378	0.71587	2.56E-03	4.40E-07	2.5617E-03
259855.48	4080735.31	0.72632	0.72553	2.52E-03	4.46E-07	2.5219E-03
259908.71	4080712.36	0.70094	0.75208	2.43E-03	4.62E-07	2.4338E-03
259926.45	4080704.72	0.69492	0.75976	2.41E-03	4.67E-07	2.4129E-03
259944.19	4080697.07	0.68943	0.76659	2.39E-03	4.71E-07	2.3938E-03
259961.93	4080689.42	0.68404	0.77235	2.37E-03	4.75E-07	2.3751E-03
259979.67	4080681.78	0.6785	0.77699	2.36E-03	4.77E-07	2.3559E-03
259997.42	4080674.13	0.67256	0.7804	2.33E-03	4.80E-07	2.3353E-03
260015.16	4080666.48	0.66613	0.78254	2.31E-03	4.81E-07	2.3129E-03
260032.90	4080658.84	0.65947	0.78343	2.29E-03	4.81E-07	2.2898E-03
259673.14	4081073.67	1.93157	0.9796	6.71E-03	6.02E-07	6.7060E-03
259673.65	4081093.30	2.074	1.0315	7.20E-03	6.34E-07	7.2005E-03
259674.17	4081112.93	2.22646	1.08617	7.73E-03	6.67E-07	7.7298E-03
259586.64	4081020.66	1.17366	0.65789	4.07E-03	4.04E-07	4.0747E-03
259593.63	4081002.65	1.14938	0.65037	3.99E-03	4.00E-07	3.9905E-03
259600.63	4080984.64	1.12653	0.6441	3.91E-03	3.96E-07	3.9111E-03
259607.62	4080966.63	1.10409	0.63897	3.83E-03	3.93E-07	3.8332E-03
259614.61	4080948.62	1.08098	0.63476	3.75E-03	3.90E-07	3.7530E-03
259621.61	4080930.61	1.05593	0.63115	3.67E-03	3.88E-07	3.6660E-03
259628.60	4080912.60	1.02792	0.6276	3.57E-03	3.86E-07	3.5688E-03
259635.59	4080894.59	0.99621	0.62357	3.46E-03	3.83E-07	3.4587E-03
259642.59	4080876.58	0.96072	0.61859	3.34E-03	3.80E-07	3.3355E-03
259649.58	4080858.57	0.92157	0.61219	3.20E-03	3.76E-07	3.1996E-03
259656.58	4080840.56	0.87938	0.60413	3.05E-03	3.71E-07	3.0531E-03
259663.57	4080822.55	0.83492	0.59426	2.90E-03	3.65E-07	2.8988E-03
259670.56	4080804.54	0.78916	0.58264	2.74E-03	3.58E-07	2.7399E-03
259677.56	4080786.53	0.74317	0.56945	2.58E-03	3.50E-07	2.5803E-03
259684.55	4080768.53	0.69774	0.5549	2.42E-03	3.41E-07	2.4225E-03
259691.54	4080750.52	0.65364	0.53924	2.27E-03	3.31E-07	2.2694E-03
259698.54	4080732.51	0.61156	0.52279	2.12E-03	3.21E-07	2.1233E-03
259705.53	4080714.50	0.57204	0.50585	1.99E-03	3.11E-07	1.9861E-03
259730.27	4080688.84	0.52651	0.49355	1.83E-03	3.03E-07	1.8281E-03
259748.01	4080681.19	0.51772	0.49805	1.80E-03	3.06E-07	1.7976E-03
259765.75	4080673.55	0.50928	0.50232	1.77E-03	3.09E-07	1.7683E-03
259783.49	4080665.90	0.5014	0.5064	1.74E-03	3.11E-07	1.7409E-03
259801.23	4080658.25	0.49429	0.51035	1.72E-03	3.14E-07	1.7162E-03
259573.17	4081076.31	1.29924	0.70478	4.51E-03	4.33E-07	4.5107E-03
259573.69	4081095.94	1.37632	0.73564	4.78E-03	4.52E-07	4.7783E-03
259574.20	4081115.57	1.45889	0.7686	5.06E-03	4.72E-07	5.0650E-03
260093.30	4081121.41	136.07376	14.3945	4.72E-01	8.85E-06	4.7239E-01
260111.51	4081120.45	120.19475	15.11497	4.17E-01	9.29E-06	4.1726E-01
260129.71	4081119.48	90.99054	15.70371	3.16E-01	9.65E-06	3.1588E-01
260147.92	4081118.51	61.05198	16.17855	2.12E-01	9.94E-06	2.1195E-01
260056.48	4081144.35	68.40286	9.81303	2.37E-01	6.03E-06	2.3747E-01
260094.36	4081141.39	70.88167	11.22722	2.46E-01	6.90E-06	2.4607E-01
260130.78	4081139.45	46.89105	12.12686	1.63E-01	7.45E-06	1.6279E-01
260057.54	4081164.33	42.87619	8.10413	1.49E-01	4.98E-06	1.4885E-01
260095.42	4081161.36	40.01396	9.0741	1.39E-01	5.58E-06	1.3891E-01
260131.84	4081159.42	27.589	9.71183	9.58E-02	5.97E-06	9.5781E-02
260150.04	4081158.46	21.41668	9.95506	7.43E-02	6.12E-06	7.4354E-02
260013.33	4081147.01	44.67765	7.95493	1.55E-01	4.89E-06	1.5510E-01
259999.76	4081161.71	32.68463	6.67187	1.13E-01	4.10E-06	1.1347E-01
259986.91	4081133.37	35.12892	7.44673	1.22E-01	4.58E-06	1.2195E-01
260097.54	4081201.30	16.75048	6.34267	5.81E-02	3.90E-06	5.8153E-02
260115.75	4081200.33	14.73803	6.52295	5.12E-02	4.01E-06	5.1167E-02
260133.96	4081199.37	12.61313	6.67657	4.38E-02	4.10E-06	4.3790E-02
260065.77	4081216.96	15.18051	5.36501	5.27E-02	3.30E-06	5.2702E-02
260036.50	4081206.40	19.3003	5.47323	6.70E-02	3.36E-06	6.7004E-02
259973.34	4081148.07	27.54299	6.27343	9.56E-02	3.86E-06	9.5619E-02
260098.61	4081221.27	11.93438	5.42292	4.14E-02	3.33E-06	4.1433E-02
260116.81	4081220.31	10.63585	5.55401	3.69E-02	3.41E-06	3.6926E-02
260135.02	4081219.34	9.29162	5.66699	3.23E-02	3.48E-06	3.2259E-02
260148.76	4081213.56	8.8798	5.97932	3.08E-02	3.67E-06	3.0830E-02
260064.39	4081236.05	11.3725	4.67226	3.95E-02	2.87E-06	3.9482E-02
260047.32	4081229.89	13.1455	4.74705	4.56E-02	2.92E-06	4.5637E-02
260030.25	4081223.73	14.82836	4.79035	5.15E-02	2.94E-06	5.1479E-02
260013.18	4081217.57	16.21244	4.79794	5.63E-02	2.95E-06	5.6284E-02
259996.11	4081211.42	17.08133	4.76324	5.93E-02	2.93E-06	5.9300E-02
259964.05	4081172.20	21.52274	5.26448	7.47E-02	3.24E-06	7.4719E-02
259956.56	4081155.67	22.00934	5.46033	7.64E-02	3.36E-06	7.6408E-02
259949.07	4081139.15	21.01734	5.52604	7.30E-02	3.40E-06	7.2965E-02

259941.57	4081122.62	18.80377	5.40867	6.53E-02	3.32E-06	6.5280E-02
260081.46	4081242.21	9.67317	4.5717	3.36E-02	2.81E-06	3.3583E-02
260099.67	4081241.25	8.88309	4.68402	3.08E-02	2.88E-06	3.0840E-02
260117.87	4081240.28	8.00917	4.78134	2.78E-02	2.94E-06	2.7807E-02
260136.08	4081239.31	7.10667	4.86275	2.47E-02	2.99E-06	2.4674E-02
260065.80	4081256.15	8.58708	4.08919	2.98E-02	2.51E-06	2.9812E-02
260032.36	4081244.08	11.09806	4.21408	3.85E-02	2.59E-06	3.8529E-02
259998.91	4081232.02	13.19312	4.23842	4.58E-02	2.60E-06	4.5802E-02
259958.13	4081203.76	15.82646	4.37591	5.49E-02	2.69E-06	5.4944E-02
259943.45	4081171.38	17.99077	4.75079	6.25E-02	2.92E-06	6.2458E-02
259928.77	4081139.00	16.54851	4.7771	5.74E-02	2.94E-06	5.7451E-02
260100.73	4081261.22	6.84263	4.07969	2.38E-02	2.51E-06	2.3757E-02
260118.94	4081260.25	6.2276	4.15112	2.16E-02	2.55E-06	2.1622E-02
260137.14	4081259.28	5.59619	4.20932	1.94E-02	2.59E-06	1.9430E-02
260155.35	4081258.31	4.9848	4.25526	1.73E-02	2.62E-06	1.7307E-02
260067.12	4081276.22	6.67629	3.60165	2.32E-02	2.21E-06	2.3179E-02
260034.20	4081264.34	8.51745	3.72792	2.96E-02	2.29E-06	2.9570E-02
260001.28	4081252.46	10.26243	3.78122	3.56E-02	2.32E-06	3.5628E-02
259968.36	4081240.58	11.34231	3.74155	3.94E-02	2.30E-06	3.9377E-02
259944.68	4081218.70	12.92589	3.87766	4.49E-02	2.38E-06	4.4874E-02
259915.77	4081154.96	14.41076	4.24892	5.00E-02	2.61E-06	5.0029E-02
260101.79	4081281.19	5.41663	3.57794	1.88E-02	2.20E-06	1.8806E-02
260120.00	4081280.22	4.96736	3.62921	1.72E-02	2.23E-06	1.7246E-02
260138.20	4081279.25	4.51048	3.67035	1.57E-02	2.26E-06	1.5660E-02
260068.39	4081296.26	5.31987	3.18995	1.85E-02	1.96E-06	1.8470E-02
260035.87	4081284.53	6.6887	3.31358	2.32E-02	2.04E-06	2.3222E-02
260003.36	4081272.80	8.08737	3.3835	2.81E-02	2.08E-06	2.8077E-02
259970.85	4081261.07	9.1688	3.38487	3.18E-02	2.08E-06	3.1831E-02
259931.20	4081233.59	10.74006	3.46697	3.73E-02	2.13E-06	3.7286E-02
259906.84	4081211.07	11.0901	3.46216	3.85E-02	2.13E-06	3.8501E-02
259902.65	4081170.63	12.50783	3.8066	4.34E-02	2.34E-06	4.3423E-02
259888.37	4081139.15	10.81124	3.59819	3.75E-02	2.21E-06	3.7533E-02
260102.85	4081301.16	4.38248	3.15584	1.52E-02	1.94E-06	1.5216E-02
260121.06	4081300.19	4.04565	3.1922	1.40E-02	1.96E-06	1.4046E-02
260139.27	4081299.23	3.70418	3.22003	1.29E-02	1.98E-06	1.2861E-02
260157.47	4081298.26	3.37337	3.23982	1.17E-02	1.99E-06	1.1713E-02
260070.80	4081336.31	3.57713	2.53611	1.24E-02	1.56E-06	1.2420E-02
260038.88	4081324.79	4.3767	2.6501	1.52E-02	1.63E-06	1.5195E-02
260006.96	4081313.27	5.24984	2.73266	1.82E-02	1.68E-06	1.8226E-02
259975.04	4081301.76	6.08516	2.7764	2.11E-02	1.71E-06	2.1126E-02
259943.12	4081290.24	6.70745	2.7722	2.33E-02	1.70E-06	2.3286E-02
259904.19	4081263.26	7.7255	2.83117	2.68E-02	1.74E-06	2.6821E-02
259890.17	4081232.36	8.96738	3.02496	3.11E-02	1.86E-06	3.1132E-02
260104.97	4081341.10	3.02245	2.4924	1.05E-02	1.53E-06	1.0494E-02
260123.18	4081340.14	2.81946	2.50903	9.79E-03	1.54E-06	9.7892E-03
260141.39	4081339.17	2.61543	2.51984	9.08E-03	1.55E-06	9.0810E-03
260071.82	4081375.86	2.57157	2.05308	8.93E-03	1.26E-06	8.9284E-03
260054.75	4081369.70	2.83575	2.10912	9.84E-03	1.30E-06	9.8456E-03
260037.68	4081363.54	3.1174	2.16045	1.08E-02	1.33E-06	1.0823E-02
260020.61	4081357.38	3.41632	2.20647	1.19E-02	1.36E-06	1.1861E-02
260003.54	4081351.22	3.72688	2.24569	1.29E-02	1.38E-06	1.2939E-02
259986.47	4081345.06	4.04296	2.27803	1.40E-02	1.40E-06	1.4036E-02
259969.40	4081338.90	4.35094	2.30238	1.51E-02	1.41E-06	1.5106E-02
259952.33	4081332.74	4.63565	2.31791	1.61E-02	1.42E-06	1.6094E-02
259935.26	4081326.58	4.88175	2.32348	1.69E-02	1.43E-06	1.6948E-02
259918.19	4081320.42	5.07934	2.31843	1.76E-02	1.42E-06	1.7634E-02
259901.12	4081314.26	5.22157	2.30208	1.81E-02	1.41E-06	1.8128E-02
259846.58	4081225.47	7.31199	2.61124	2.54E-02	1.60E-06	2.5385E-02
259839.09	4081208.94	7.28517	2.60406	2.53E-02	1.60E-06	2.5292E-02
259831.60	4081192.41	7.06276	2.55919	2.45E-02	1.57E-06	2.4520E-02
259824.10	4081175.89	6.67054	2.4756	2.32E-02	1.52E-06	2.3158E-02
259816.61	4081159.36	6.15673	2.35734	2.14E-02	1.45E-06	2.1374E-02
259809.11	4081142.83	5.57527	2.2122	1.94E-02	1.36E-06	1.9356E-02
259801.62	4081126.30	4.97972	2.05116	1.73E-02	1.26E-06	1.7288E-02
260088.89	4081382.02	2.3247	1.99287	8.07E-03	1.22E-06	8.0714E-03
260107.10	4081381.05	2.19746	2.00272	7.63E-03	1.23E-06	7.6297E-03
260125.30	4081380.08	2.06657	2.00867	7.17E-03	1.23E-06	7.1753E-03
260143.51	4081379.11	1.93578	2.01046	6.72E-03	1.24E-06	6.7213E-03
260074.29	4081415.93	1.91438	1.68168	6.65E-03	1.03E-06	6.6468E-03
260040.85	4081403.86	2.2712	1.77389	7.88E-03	1.09E-06	7.8855E-03
260007.40	4081391.79	2.66865	1.85312	9.26E-03	1.14E-06	9.2653E-03
259973.96	4081379.72	3.09829	1.91566	1.08E-02	1.18E-06	1.0757E-02
259940.52	4081367.66	3.51822	1.95723	1.22E-02	1.20E-06	1.2215E-02
259907.08	4081355.59	3.86383	1.97267	1.34E-02	1.21E-06	1.3414E-02
259849.57	4081321.30	4.53642	2.01528	1.57E-02	1.24E-06	1.5749E-02
259834.89	4081288.92	5.25959	2.14608	1.83E-02	1.32E-06	1.8260E-02
259820.21	4081256.54	5.75203	2.22447	2.00E-02	1.37E-06	1.9969E-02

259805.53	4081224.16	5.81176	2.21941	2.02E-02	1.36E-06	2.0177E-02
259790.85	4081191.78	5.39084	2.11023	1.87E-02	1.30E-06	1.8716E-02
259776.16	4081159.40	4.64371	1.90913	1.61E-02	1.17E-06	1.6122E-02
260109.22	4081420.99	1.66428	1.63537	5.78E-03	1.00E-06	5.7785E-03
260127.43	4081420.02	1.57479	1.63541	5.47E-03	1.01E-06	5.4679E-03
260145.63	4081419.06	1.48622	1.63257	5.16E-03	1.00E-06	5.1604E-03
260163.84	4081418.09	1.40085	1.62706	4.86E-03	1.00E-06	4.8640E-03
260076.67	4081455.96	1.47687	1.39632	5.13E-03	8.58E-07	5.1278E-03
260043.75	4081444.08	1.72172	1.4739	5.98E-03	9.06E-07	5.9778E-03
260010.83	4081432.21	1.99183	1.54424	6.91E-03	9.49E-07	6.9156E-03
259977.91	4081420.33	2.28856	1.60484	7.94E-03	9.86E-07	7.9457E-03
259944.99	4081408.45	2.60022	1.65301	9.03E-03	1.02E-06	9.0276E-03
259912.07	4081396.57	2.89244	1.68506	1.00E-02	1.04E-06	1.0042E-02
259846.24	4081372.81	3.28804	1.68777	1.14E-02	1.04E-06	1.1415E-02
259822.55	4081350.93	3.61816	1.73712	1.26E-02	1.07E-06	1.2561E-02
259808.10	4081319.06	4.16629	1.84624	1.45E-02	1.13E-06	1.4464E-02
259793.64	4081287.19	4.59993	1.92033	1.60E-02	1.18E-06	1.5970E-02
259779.19	4081255.31	4.78245	1.93873	1.66E-02	1.19E-06	1.6603E-02
259764.74	4081223.44	4.63645	1.88406	1.61E-02	1.16E-06	1.6097E-02
259750.29	4081191.57	4.20416	1.75574	1.46E-02	1.08E-06	1.4596E-02
259735.83	4081159.69	3.61344	1.57502	1.25E-02	9.68E-07	1.2545E-02
260111.34	4081460.94	1.30098	1.35478	4.52E-03	8.33E-07	4.5172E-03
260129.55	4081459.97	1.23751	1.35198	4.30E-03	8.31E-07	4.2968E-03
260147.76	4081459.00	1.17491	1.34703	4.08E-03	8.28E-07	4.0795E-03
260165.96	4081458.03	1.11479	1.34011	3.87E-03	8.24E-07	3.8708E-03
260079.00	4081495.98	1.17205	1.17403	4.07E-03	7.21E-07	4.0695E-03
260046.49	4081484.25	1.34717	1.23893	4.68E-03	7.61E-07	4.6774E-03
260013.97	4081472.52	1.53842	1.29991	5.34E-03	7.99E-07	5.3414E-03
259981.46	4081460.78	1.74778	1.35519	6.07E-03	8.33E-07	6.0682E-03
259948.95	4081449.05	1.97446	1.403	6.85E-03	8.62E-07	6.8552E-03
259916.43	4081437.32	2.20512	1.44116	7.66E-03	8.86E-07	7.6559E-03
259818.89	4081402.12	2.70088	1.47222	9.38E-03	9.05E-07	9.3770E-03
259795.50	4081380.52	2.95133	1.51525	1.02E-02	9.31E-07	1.0246E-02
259781.23	4081349.04	3.37401	1.60804	1.17E-02	9.88E-07	1.1714E-02
259766.95	4081317.56	3.74032	1.67664	1.30E-02	1.03E-06	1.2985E-02
259752.68	4081286.08	3.96016	1.70673	1.37E-02	1.05E-06	1.3749E-02
259738.40	4081254.60	3.96131	1.68462	1.38E-02	1.04E-06	1.3753E-02
259724.13	4081223.12	3.73852	1.60534	1.30E-02	9.87E-07	1.2979E-02
259709.85	4081191.63	3.34992	1.47756	1.16E-02	9.08E-07	1.1630E-02
259695.58	4081160.15	2.88736	1.32189	1.00E-02	8.12E-07	1.0024E-02
260113.46	4081500.88	1.04431	1.1379	3.63E-03	6.99E-07	3.6260E-03
260131.67	4081499.91	0.99742	1.13353	3.46E-03	6.97E-07	3.4632E-03
260149.88	4081498.94	0.95168	1.1277	3.30E-03	6.93E-07	3.3044E-03
260168.09	4081497.98	0.90772	1.12025	3.15E-03	6.88E-07	3.1518E-03
260083.94	4081595.71	0.72388	0.79983	2.51E-03	4.92E-07	2.5134E-03
260050.68	4081583.71	0.81485	0.84387	2.83E-03	5.19E-07	2.8293E-03
260017.43	4081571.71	0.91244	0.88674	3.17E-03	5.45E-07	3.1681E-03
259984.18	4081559.71	1.01725	0.92802	3.53E-03	5.70E-07	3.5319E-03
259950.93	4081547.71	1.13155	0.96702	3.93E-03	5.94E-07	3.9288E-03
259917.67	4081535.71	1.25637	1.00295	4.36E-03	6.16E-07	4.3621E-03
259817.92	4081499.71	1.62261	1.07897	5.63E-03	6.63E-07	5.6335E-03
259784.67	4081487.72	1.71071	1.08891	5.94E-03	6.69E-07	5.9394E-03
259751.41	4081475.72	1.77753	1.09006	6.17E-03	6.70E-07	6.1713E-03
259727.49	4081453.62	1.92271	1.12395	6.67E-03	6.91E-07	6.6753E-03
259712.89	4081421.42	2.17	1.19185	7.53E-03	7.32E-07	7.5338E-03
259698.29	4081389.23	2.40877	1.24789	8.36E-03	7.67E-07	8.3628E-03
259683.69	4081357.03	2.60154	1.2845	9.03E-03	7.89E-07	9.0320E-03
259669.09	4081324.84	2.70515	1.29348	9.39E-03	7.95E-07	9.3917E-03
259654.50	4081292.64	2.69454	1.26915	9.35E-03	7.80E-07	9.3548E-03
259639.90	4081260.45	2.5695	1.21099	8.92E-03	7.44E-07	8.9207E-03
259625.30	4081228.25	2.35604	1.12513	8.18E-03	6.91E-07	8.1796E-03
259610.70	4081196.05	2.0939	1.02252	7.27E-03	6.28E-07	7.2696E-03
259596.10	4081163.86	1.82284	0.91559	6.33E-03	5.63E-07	6.3285E-03
260118.77	4081600.74	0.65668	0.77305	2.28E-03	4.75E-07	2.2801E-03
260136.98	4081599.77	0.63239	0.76777	2.20E-03	4.72E-07	2.1958E-03
260155.18	4081598.80	0.60878	0.76163	2.11E-03	4.68E-07	2.1138E-03
260173.39	4081597.84	0.5862	0.75463	2.03E-03	4.64E-07	2.0354E-03
260168.20	4081210.94	7.6185	6.15106	2.64E-02	3.78E-06	2.6451E-02
260292.49	4081097.74	8.86264	21.8512	3.08E-02	1.34E-05	3.0780E-02
260456.53	4081197.81	1.17864	4.94793	4.09E-03	3.04E-06	4.0947E-03
260426.96	4081147.26	1.92581	9.359	6.69E-03	5.75E-06	6.6912E-03
260465.47	4081148.98	1.54466	8.30972	5.36E-03	5.11E-06	5.3674E-03

CONCUNIT ug/m³
DEPUNIT g/m²

Construction Concentrations (Unit Emissions)

* AERMOD (21112)	J: G:\0028.000	1)\Construction\	Construct	ion.isc	6/29/2022	* AERMOD (21112)	J: G:\0028.000	1)\Construction\	Construct	ion.isc	6/29/2022	
* AERMET (1808)	1):				7:37:02	* AERMET (1808)	1):				7:37:02	
* MODELING OPTI	ONS USED: Reg	DEFAULT CONC E	LEV FLGP	OL URBAN	ADJU*	* MODELING OPTI	ONS USED: Reg	DEFAULT CONC E	LEV FLGP	OL URBAN	ADJU*	
* PLOT	FILE OF ANNUAL	VALUES AVERAGED	ACROSS	5 YEARS	FOR SOUR	* PLOT	FILE OF ANNUAL	VALUES AVERAGED	ACROSS	5 YEARS	FOR SOUR	
* FOR A	TOTAL OF 752	RECEPTORS.	A6,2X,48,	2X,18,8.2,	X,48)	* FOR A	TOTAL OF 752	RECEPTORS.	A6,2X,48,	2X,18,8.2,	X,48)	
* FORM A	T: (3)(X,F3.15)	3,(1X,F8.2),2X,	ZLEV	ZHILL	ZFLAG	* FORM A	T: (3)(X,F3.15)	3,(1X,F8.2),2X,	ZLEV	ZHILL	ZFLAG	
* X	Y	AVERAGE CONC	AVE	GRP	NUM YRS	* X	Y	AVERAGE CONC	AVE	GRP	NUM YRS	
					NET ID						NET ID	
260166.86	4081106.44	37.39756	114.49	114.49	1.2	ANNUAL	AREA	5				
260167.12	4081080.22	139.75663	114.45	114.45	1.2	ANNUAL	AREA	5				
260169.13	4081070.1	162.87729	114.44	114.44	1.2	ANNUAL	AREA	5				
260181.27	4081112.68	35.08227	114.53	114.53	1.2	ANNUAL	AREA	5				
260162.34	4081132.37	30.51855	114.5	114.5	1.2	ANNUAL	AREA	5				
260187.12	4081080.5	75.53631	114.51	114.51	1.2	ANNUAL	AREA	5				
260183.57	4081055.72	125.02604	114.47	114.47	1.2	ANNUAL	AREA	5				
260201.27	4081112.96	24.13427	114.58	114.58	1.2	ANNUAL	AREA	5				
260176.75	4081146.24	17.78682	114.55	114.55	1.2	ANNUAL	AREA	5				
260207.37	4081062.19	61.10461	114.53	114.53	1.2	ANNUAL	AREA	5				
260211.14	4081049.14	63.97869	114.53	114.53	1.2	ANNUAL	AREA	5				
260221.27	4081113.24	17.45189	114.62	114.62	1.2	ANNUAL	AREA	5				
260210.11	4081140.41	12.37642	114.62	114.62	1.2	ANNUAL	AREA	5				
260191.17	4081160.1	11.55058	114.6	114.6	1.2	ANNUAL	AREA	5				
260164.96	4081160.52	12.59636	114.55	114.55	1.2	ANNUAL	AREA	5				
260239.87	4081116.92	12.72279	114.66	114.66	1.2	ANNUAL	AREA	5				
260210.24	4081160.95	9.07003	114.64	114.64	1.2	ANNUAL	AREA	5				
260246.85	4081099.94	15.2605	114.66	114.66	1.2	ANNUAL	AREA	5				
260247.11	4081081.34	20.48531	114.65	114.65	1.2	ANNUAL	AREA	5				
260247.37	4081062.74	26.42136	114.63	114.63	1.2	ANNUAL	AREA	5				
260247.63	4081044.15	31.76896	114.61	114.61	1.2	ANNUAL	AREA	5				
260260.15	4081116.52	9.91585	114.7	114.7	1.2	ANNUAL	AREA	5				
260246.75	4081149.12	7.21182	114.7	114.7	1.2	ANNUAL	AREA	5				
260185.28	4081203.71	7.01451	114.62	114.62	1.2	ANNUAL	AREA	5				
260267.11	4081081.62	15.07097	114.69	114.69	1.2	ANNUAL	AREA	5				
260267.37	4081063.02	18.99187	114.67	114.67	1.2	ANNUAL	AREA	5				
260267.63	4081044.43	22.74434	114.66	114.66	1.2	ANNUAL	AREA	5				
260280.33	4081116.34	7.95045	114.74	114.74	1.2	ANNUAL	AREA	5				
260267.31	4081148.04	6.00198	114.74	114.74	1.2	ANNUAL	AREA	5				
260257.72	4081169.42	5.1041	114.75	114.75	1.2	ANNUAL	AREA	5				
260216.51	4081206.63	5.05524	114.7	114.7	1.2	ANNUAL	AREA	5				
260201.03	4081230.96	12.24055	114.67	114.67	1.2	ANNUAL	AREA	5				
260169.87	4081231.22	5.93911	114.62	114.62	1.2	ANNUAL	AREA	5				
260287.11	4081081.9	11.51061	114.73	114.73	1.2	ANNUAL	AREA	5				
260287.37	4081063.3	14.2203	114.72	114.72	1.2	ANNUAL	AREA	5				
260287.63	4081044.71	16.9186	114.7	114.7	1.2	ANNUAL	AREA	5				
260300.46	4081116.3	6.49088	114.78	114.78	1.2	ANNUAL	AREA	5				
260287.71	4081147.35	5.04887	114.78	114.78	1.2	ANNUAL	AREA	5				
260257.06	4081194.56	3.99465	114.77	114.77	1.2	ANNUAL	AREA	5				
260216.4	4081230.39	4.06673	114.73	114.73	1.2	ANNUAL	AREA	5				
260185.88	4081244.35	4.56313	114.67	114.67	1.2	ANNUAL	AREA	5				
260307.1	4081082.18	9.0523	114.77	114.77	1.2	ANNUAL	AREA	5				
260307.36	4081063.58	10.99927	114.76	114.76	1.2	ANNUAL	AREA	5				
260307.62	4081044.99	12.98462	114.74	114.74	1.2	ANNUAL	AREA	5				
260308	4081146.9	4.29019	114.83	114.83	1.2	ANNUAL	AREA	5				
260295.44	4081177.46	3.47736	114.84	114.84	1.2	ANNUAL	AREA	5				
260296.3	4081244.82	2.06167	114.9	114.9	1.2	ANNUAL	AREA	5				
260231.53	4081243.92	3.23788	114.77	114.77	1.2	ANNUAL	AREA	5				
260201.84	4081267.67	3.46588	114.72	114.72	1.2	ANNUAL	AREA	5				
260171.44	4081271.41	3.93164	114.66	114.66	1.2	ANNUAL	AREA	5				
260327.36	4081063.86	8.73032	114.79	114.79	1.2	ANNUAL	AREA	5				
260327.62	4081045.27	10.22446	114.77	114.77	1.2	ANNUAL	AREA	5				
260339.86	4081118.32	4.46842	114.87	114.87	1.2	ANNUAL	AREA	5				
260332.89	4081135.29	3.97767	114.87	114.87	1.2	ANNUAL	AREA	5				
260340.4	4081154.25	3.13265	114.91	114.91	1.2	ANNUAL	AREA	5				
260257.63	4081252.44	2.52868	114.84	114.84	1.2	ANNUAL	AREA	5				
260240.94	4081260.08	3.58873	114.81	114.81	1.2	ANNUAL	AREA	5				
260224.25	4081267.71	2.84594	114.78	114.78	1.2	ANNUAL	AREA	5				
260207.55	4081275.35	2.99878	114.75	114.75	1.2	ANNUAL	AREA	5				
260190.86	4081282.99	3.13947	114.72	114.72	1.2	ANNUAL	AREA	5				
260174.17	4081290.62	3.26513	114.69	114.69	1.2	ANNUAL	AREA	5				
260346.84	4081101.34	4.99625	114.87	114.87	1.2	ANNUAL	AREA	5				
260347.1	4081082.74	5.97741	114.85	114.85	1.2	ANNUAL	AREA	5				
260347.36	4081064.14	7.07563	114.83	114.83	1.2	ANNUAL	AREA	5				
260347.62	4081045.55	8.22141	114.81	114.81	1.2	ANNUAL	AREA	5				
260380.14	4081118.2	3.28234	114.95	114.95	1.2	ANNUAL	AREA	5				
260366.74	4081150.8	2.7037	114.95	114.95	1.2	ANNUAL	AREA	5				
260352.31	4081202.31	1.9573	114.97	114.97	1.2	ANNUAL	AREA	5				
260329.63	4081201.21	2.26159	114.92	114.92	1.2	ANNUAL	AREA	5				
260326.55	4081248.6	1.67824	114.97	114.97	1.2	ANNUAL	AREA	5				
260301.76	4081299.39	1.46219	114.98	114.98	1.2	ANNUAL	AREA	5				
260271.77	4081286.89	1.85996	114.9	114.9	1.2	ANNUAL	AREA	5				
260239.72	4081301.55	2.051	114.86	114.86	1.2	ANNUAL	AREA	5				
260207.67	4081311.21	2.22232	114.79	114.79	1.2	ANNUAL	AREA	5				
260175.62	4081330.67	2.3614	114.74	114.74	1.2	ANNUAL	AREA	5				
260387.1	4081083.3	4.21055	114.92	114.92	1.2	ANNUAL	AREA	5				
260387.36	4081064.7	4.88627	114.9	114.9	1.2	ANNUAL	AREA	5				
260387.62	4081046.11	5.60041	114.88	114.88	1.2	ANNUAL	AREA	5				
260407.25	4081114.86	2.79684	114.99	114.99	1.2	ANNUAL	AREA	5				
260407.3	4081150	2.11382	115.03	115.03	1.2	ANNUAL	AREA	5				
260399.77	4081198.88	1.54445	115.07	115.07	1.2	ANNUAL	AREA	5				
260377.46	4081199.97	1.72655	115.03	115.03	1.2	ANNUAL	AREA	5				
260368.22	4081245.08	1.36434	115.05	115.05	1.2	ANNUAL	AREA	5				
260349.01	4081294.31	1.16754	115.08	115.08	1.2	ANNUAL	AREA	5				
260324.51	4081294.93	1.32209	115.03	115.03	1.2	ANNUAL	AREA	5				
260301.94	4081314	1.35648	115	115	1.2	ANNUAL	AREA	5				
260270.78	4081328.26	1.48382	114.96	114.96	1.2	ANNUAL	AREA	5				
260239.62	4081342.51	1.60191	114.91	114.91	1.2	ANNUAL	AREA	5				
260208.46	4081356.76	1.69974	114.85	114.85	1.2	ANNUAL	AREA	5				
260177.3	4081371.02	1.77686	114.8	114.8	1.2	ANNUAL	AREA	5				
260435.69	4081118.94	2.25891	115.04	115.04	1.2	ANNUAL	AREA	5				
260427.35	4081065.26	3.55154	114.98	114.98	1.2	ANNUAL	AREA	5				
260427.61	4081046.66	4.02264	114.96	114.96	1.2	ANNUAL	AREA	5				
260425.61	4081203.32	3.1803	115.13	115.13	1.2	ANNUAL	AREA	5				
260418.74	4081220.04	1.22954	115.14	115.14	1.2	ANNUAL	AREA	5				
260411.87	4081236.76	1.15336	115.14	115.14	1.2	ANNUAL	AREA	5				
260405	4081253.47	1.08909	115.15	115.15	1.2	ANNUAL	AREA	5				
260398.13	4081270.19	3.03248	115.15	115.15	1.2	ANNUAL	AREA	5				
260391.26	4081286.91	1.98473	115.16	115.16	1.2	ANNUAL	AREA	5				
260384.39	4081303.63	0.94343	115.17	115.17	1.2	ANNUAL	AREA	5				
260361.08	4081327.87	0.94879	115.15	115.15	1.2	ANNUAL	AREA	5				
260344.64	4081335.38	0.993										

260473.33	4081185.07	1.17921	115.21	115.21	1.2	ANNUAL	AREA	5	260473.33	4081185.07	5.35017	115.21	115.21	1.2	ANNUAL	LINE	5
260459.94	4081217.67	1.0335	115.22	115.22	1.2	ANNUAL	AREA	5	260459.94	4081217.67	4.05982	115.22	115.22	1.2	ANNUAL	LINE	5
260446.54	4081250.27	0.91979	115.23	115.23	1.2	ANNUAL	AREA	5	260446.54	4081250.27	3.19599	115.23	115.23	1.2	ANNUAL	LINE	5
260433.14	4081282.87	0.83382	115.24	115.24	1.2	ANNUAL	AREA	5	260433.14	4081282.87	2.58555	115.24	115.24	1.2	ANNUAL	LINE	5
260419.74	4081315.47	0.76897	115.26	115.26	1.2	ANNUAL	AREA	5	260419.74	4081315.47	2.13608	115.26	115.26	1.2	ANNUAL	LINE	5
260390.32	4081348.07	0.70483	115.26	115.26	1.2	ANNUAL	AREA	5	260390.32	4081348.07	1.72385	115.26	115.26	1.2	ANNUAL	LINE	5
260358.27	4081370.06	0.81336	115.21	115.21	1.2	ANNUAL	AREA	5	260358.27	4081370.06	1.72513	115.21	115.21	1.2	ANNUAL	LINE	5
260326.22	4081384.73	0.88229	115.16	115.16	1.2	ANNUAL	AREA	5	260326.22	4081384.73	1.66901	115.16	115.16	1.2	ANNUAL	LINE	5
260294.17	4081399.39	0.9489	115.1	115.1	1.2	ANNUAL	AREA	5	260294.17	4081399.39	1.60766	115.1	115.1	1.2	ANNUAL	LINE	5
260262.12	4081414.05	1.00627	115.04	115.04	1.2	ANNUAL	AREA	5	260262.12	4081414.05	1.54256	115.04	115.04	1.2	ANNUAL	LINE	5
260230.07	4081428.71	1.05071	115.02	115.02	1.2	ANNUAL	AREA	5	260230.07	4081428.71	1.47485	115.02	115.02	1.2	ANNUAL	LINE	5
260198.01	4081443.37	1.08537	114.96	114.96	1.2	ANNUAL	AREA	5	260198.01	4081443.37	1.4071	114.96	114.96	1.2	ANNUAL	LINE	5
260507.08	4081084.98	1.87243	115.16	115.16	1.2	ANNUAL	AREA	5	260507.08	4081084.98	20.20445	115.16	115.16	1.2	ANNUAL	LINE	5
260507.34	4081066.38	2.09187	115.13	115.13	1.2	ANNUAL	AREA	5	260507.34	4081066.38	30.72321	115.13	115.13	1.2	ANNUAL	LINE	5
260507.66	4081047.78	2.32506	115.11	115.11	1.2	ANNUAL	AREA	5	260507.66	4081047.78	51.89785	115.11	115.11	1.2	ANNUAL	LINE	5
260539.84	4081121.11	1.27384	115.26	115.26	1.2	ANNUAL	AREA	5	260539.84	4081121.11	9.13325	115.26	115.26	1.2	ANNUAL	LINE	5
260532.87	4081138.09	1.19124	115.28	115.28	1.2	ANNUAL	AREA	5	260532.87	4081138.09	7.39024	115.28	115.28	1.2	ANNUAL	LINE	5
260525.89	4081155.07	1.13131	115.28	115.28	1.2	ANNUAL	AREA	5	260525.89	4081155.07	6.13581	115.28	115.28	1.2	ANNUAL	LINE	5
260518.91	4081172.05	1.04001	115.29	115.29	1.2	ANNUAL	AREA	5	260518.91	4081172.05	5.1948	115.29	115.29	1.2	ANNUAL	LINE	5
260511.93	4081189.03	0.97264	115.3	115.3	1.2	ANNUAL	AREA	5	260511.93	4081189.03	4.66758	115.3	115.3	1.2	ANNUAL	LINE	5
260504.96	4081206.01	0.93149	115.3	115.3	1.2	ANNUAL	AREA	5	260504.96	4081206.01	3.89181	115.3	115.3	1.2	ANNUAL	LINE	5
260497.98	4081222.99	0.85656	115.3	115.3	1.2	ANNUAL	AREA	5	260497.98	4081222.99	3.02618	115.3	115.3	1.2	ANNUAL	LINE	5
260491.98	4081239.97	0.80767	115.31	115.31	1.2	ANNUAL	AREA	5	260491.98	4081239.97	3.04257	115.31	115.31	1.2	ANNUAL	LINE	5
260484.02	4081256.94	0.76466	115.32	115.32	1.2	ANNUAL	AREA	5	260484.02	4081256.94	2.72254	115.32	115.32	1.2	ANNUAL	LINE	5
260477.04	4081273.92	0.72711	115.32	115.32	1.2	ANNUAL	AREA	5	260477.04	4081273.92	2.45213	115.32	115.32	1.2	ANNUAL	LINE	5
260470.07	4081290.9	0.69436	115.33	115.33	1.2	ANNUAL	AREA	5	260470.07	4081290.9	2.22077	115.33	115.33	1.2	ANNUAL	LINE	5
260463.09	4081307.88	0.66591	115.34	115.34	1.2	ANNUAL	AREA	5	260463.09	4081307.88	2.02137	115.34	115.34	1.2	ANNUAL	LINE	5
260456.11	4081324.86	0.64113	115.35	115.35	1.2	ANNUAL	AREA	5	260456.11	4081324.86	1.84812	115.35	115.35	1.2	ANNUAL	LINE	5
260449.13	4081341.84	0.61939	115.36	115.36	1.2	ANNUAL	AREA	5	260449.13	4081341.84	1.69652	115.36	115.36	1.2	ANNUAL	LINE	5
260442.16	4081358.82	0.6001	115.37	115.37	1.2	ANNUAL	AREA	5	260442.16	4081358.82	1.56301	115.37	115.37	1.2	ANNUAL	LINE	5
260435.19	4081375.8	0.58205	115.38	115.38	1.2	ANNUAL	AREA	5	260435.19	4081375.8	1.43476	115.38	115.38	1.2	ANNUAL	LINE	5
260428.22	4081392.78	0.56512	115.34	115.34	1.2	ANNUAL	AREA	5	260428.22	4081392.78	1.31455	115.34	115.34	1.2	ANNUAL	LINE	5
260421.25	4081409.76	0.54927	115.31	115.31	1.2	ANNUAL	AREA	5	260421.25	4081409.76	1.20297	115.31	115.31	1.2	ANNUAL	LINE	5
260414.28	4081426.74	0.53452	115.28	115.28	1.2	ANNUAL	AREA	5	260414.28	4081426.74	1.09275	115.28	115.28	1.2	ANNUAL	LINE	5
260407.31	4081443.72	0.52087	115.25	115.25	1.2	ANNUAL	AREA	5	260407.31	4081443.72	1.00028	115.25	115.25	1.2	ANNUAL	LINE	5
260400.34	4081460.7	0.50822	115.22	115.22	1.2	ANNUAL	AREA	5	260400.34	4081460.7	0.91881	115.22	115.22	1.2	ANNUAL	LINE	5
260393.37	4081477.68	0.49657	115.18	115.18	1.2	ANNUAL	AREA	5	260393.37	4081477.68	0.83834	115.18	115.18	1.2	ANNUAL	LINE	5
260386.4	4081494.66	0.48502	115.15	115.15	1.2	ANNUAL	AREA	5	260386.4	4081494.66	0.76887	115.15	115.15	1.2	ANNUAL	LINE	5
260379.43	4081511.64	0.47347	115.12	115.12	1.2	ANNUAL	AREA	5	260379.43	4081511.64	0.7094	115.12	115.12	1.2	ANNUAL	LINE	5
260372.46	4081528.62	0.46192	115.09	115.09	1.2	ANNUAL	AREA	5	260372.46	4081528.62	0.65993	115.09	115.09	1.2	ANNUAL	LINE	5
260365.49	4081545.6	0.45037	115.06	115.06	1.2	ANNUAL	AREA	5	260365.49	4081545.6	0.61994	115.06	115.06	1.2	ANNUAL	LINE	5
260358.52	4081562.58	0.43882	115.03	115.03	1.2	ANNUAL	AREA	5	260358.52	4081562.58	0.58995	115.03	115.03	1.2	ANNUAL	LINE	5
260351.55	4081579.56	0.42727	115.0	115.0	1.2	ANNUAL	AREA	5	260351.55	4081579.56	0.56996	115.0	115.0	1.2	ANNUAL	LINE	5
260344.58	4081596.54	0.41572	114.97	114.97	1.2	ANNUAL	AREA	5	260344.58	4081596.54	0.55097	114.97	114.97	1.2	ANNUAL	LINE	5
260337.61	4081613.52	0.40417	114.94	114.94	1.2	ANNUAL	AREA	5	260337.61	4081613.52	0.53098	114.94	114.94	1.2	ANNUAL	LINE	5
260330.64	4081630.5	0.39262	114.91	114.91	1.2	ANNUAL	AREA	5	260330.64	4081630.5	0.51099	114.91	114.91	1.2	ANNUAL	LINE	5
260323.67	4081647.48	0.38107	114.88	114.88	1.2	ANNUAL	AREA	5	260323.67	4081647.48	0.49100	114.88	114.88	1.2	ANNUAL	LINE	5
260316.7	4081664.46	0.36952	114.85	114.85	1.2	ANNUAL	AREA	5	260316.7	4081664.46	0.47101	114.85	114.85	1.2	ANNUAL	LINE	5
260309.73	4081681.44	0.35797	114.82	114.82	1.2	ANNUAL	AREA	5	260309.73	4081681.44	0.45102	114.82	114.82	1.2	ANNUAL	LINE	5
260302.76	4081698.42	0.34642	114.79	114.79	1.2	ANNUAL	AREA	5	260302.76	4081698.42	0.43103	114.79	114.79	1.2	ANNUAL	LINE	5
260295.79	4081715.4	0.33487	114.76	114.76	1.2	ANNUAL	AREA	5	260295.79	4081715.4	0.41104	114.76	114.76	1.2	ANNUAL	LINE	5
260288.82	4081732.38	0.32332	114.73	114.73	1.2	ANNUAL	AREA	5	260288.82	4081732.38	0.39105	114.73	114.73	1.2	ANNUAL	LINE	5
260281.85	4081749.36	0.31177	114.7	114.7	1.2	ANNUAL	AREA	5	260281.85	4081749.36	0.37106	114.7	114.7	1.2	ANNUAL	LINE	5
260274.88	4081766.34	0.30052	114.67	114.67	1.2	ANNUAL	AREA	5	260274.88	4081766.34	0.35107	114.67	114.67	1.2	ANNUAL	LINE	5
260267.91	4081783.32	0.28927	114.64	114.64	1.2	ANNUAL	AREA	5	260267.91	4081783.32	0.33108	114.64	114.64	1.2	ANNUAL	LINE	5
260260.94	4081800.3	0.27802	114.61	114.61	1.2	ANNUAL	AREA	5	260260.94	4081800.3	0.31109	114.61	114.61	1.2	ANNUAL	LINE	5
260253.97	4081817.28	0.26677	114.58	114.58	1.2	ANNUAL	AREA	5	260253.97	4081817.28	0.29110	114.58	114.58	1.2	ANNUAL	LINE	5
260247.0	4081834.26	0.25552	114.55	114.55	1.2	ANNUAL	AREA	5	260247.0	4081834.26	0.27111	114.55	114.55	1.2	ANNUAL	LINE	5
260240.03	4081851.24	0.24427	114.52	114.52	1.2	ANNUAL	AREA	5	260240.03	4081851.24	0.25112	114.52	114.52	1.2	ANNUAL	LINE	5
260233.06	4081868.22	0.23302	114.49	114.49	1.2	ANNUAL	AREA	5	260233.06	4081868.22	0.23113	114.49	114.49	1.2	ANNUAL	LINE	5
260226.09	4081885.2	0.22177	114.46	114.46	1.2	ANNUAL	AREA	5	260226.09	4081885.2	0.21114	114.46	114.46	1.2	ANNUAL	LINE	5
260219.12	4081902.18	0.21052	114.43	114.43	1.2	ANNUAL	AREA	5	260219.12	4081902.18	0.19115	114.43	114.43	1.2	ANNUAL	LINE	5
260212.15	4081919.16	0.19927	114.4	114.4	1.2	ANNUAL	AREA	5	260212.15	4081919.16	0.17116	114.4	114.4	1.2	ANNUAL	LINE	5
260205.18	4081936.14	0.18802	114.37	114.37	1.2	ANNUAL	AREA	5	260205.18	4081936.14	0.15117	114.37	114.37	1.2	ANNUAL	LINE	5
260198.21	4081953.12	0.17677	114.34	114.34	1.2	ANNUAL	AREA	5	260198.21	4081953.12	0.13118	114.34	114.34	1.2	ANNUAL	LINE	5
260191.24	4081970.1	0.16552	114.31	114.31	1.2	ANNUAL	AREA	5	260191.24	4081970.1	0.11119	114.31	114.31	1.2	ANNUAL	LINE	5
260184.27																	

260146.21	4080902.76	7.61775	114.23	114.23	1.2	ANNUAL	AREA	5	260146.21	4080902.76	6.38406	114.23	114.23	1.2	ANNUAL	LINE	5
260127.42	4080902.95	6.27271	114.19	114.19	1.2	ANNUAL	AREA	5	260127.42	4080902.95	5.70309	114.19	114.19	1.2	ANNUAL	LINE	5
260108.63	4080903.14	5.25038	114.15	114.15	1.2	ANNUAL	AREA	5	260108.63	4080903.14	5.09882	114.15	114.15	1.2	ANNUAL	LINE	5
260089.84	4080903.33	4.52663	114.11	114.11	1.2	ANNUAL	AREA	5	260089.84	4080903.33	4.57639	114.11	114.11	1.2	ANNUAL	LINE	5
260071.05	4080903.53	4.03961	114.07	114.07	1.2	ANNUAL	AREA	5	260071.05	4080903.53	4.11887	114.07	114.07	1.2	ANNUAL	LINE	5
260162.48	4080903.72	7.21329	114.25	114.25	1.2	ANNUAL	AREA	5	260162.48	4080903.72	5.84487	114.25	114.25	1.2	ANNUAL	LINE	5
260195.28	4080902.93	11.75083	114.35	114.35	1.2	ANNUAL	AREA	5	260195.28	4080902.93	8.35358	114.35	114.35	1.2	ANNUAL	LINE	5
260228.13	4080916.38	16.37724	114.44	114.44	1.2	ANNUAL	AREA	5	260228.13	4080916.38	11.64175	114.44	114.44	1.2	ANNUAL	LINE	5
260267.65	4080946.28	20.69171	114.55	114.55	1.2	ANNUAL	AREA	5	260267.65	4080946.28	20.8606	114.55	114.55	1.2	ANNUAL	LINE	5
260127.21	4080882.95	4.72469	114.17	114.17	1.2	ANNUAL	AREA	5	260127.21	4080882.95	4.45298	114.17	114.17	1.2	ANNUAL	LINE	5
260108.42	4080883.14	4.05786	114.13	114.13	1.2	ANNUAL	AREA	5	260108.42	4080883.14	4.04781	114.13	114.13	1.2	ANNUAL	LINE	5
260089.63	4080883.34	3.57874	114.09	114.09	1.2	ANNUAL	AREA	5	260089.63	4080883.34	3.69173	114.09	114.09	1.2	ANNUAL	LINE	5
260070.84	4080883.53	3.23711	114.06	114.06	1.2	ANNUAL	AREA	5	260070.84	4080883.53	3.37119	114.06	114.06	1.2	ANNUAL	LINE	5
260161.97	4080869.38	5.35976	114.23	114.23	1.2	ANNUAL	AREA	5	260161.97	4080869.38	4.55116	114.23	114.23	1.2	ANNUAL	LINE	5
260226.65	4080895.85	12.12788	114.41	114.41	1.2	ANNUAL	AREA	5	260226.65	4080895.85	8.57719	114.41	114.41	1.2	ANNUAL	LINE	5
260258.99	4080909.09	14.70297	114.49	114.49	1.2	ANNUAL	AREA	5	260258.99	4080909.09	11.3927	114.49	114.49	1.2	ANNUAL	LINE	5
260281.71	4080931.9	16.92931	114.57	114.57	1.2	ANNUAL	AREA	5	260281.71	4080931.9	16.76927	114.57	114.57	1.2	ANNUAL	LINE	5
260127.01	4080862.95	3.68338	114.15	114.15	1.2	ANNUAL	AREA	5	260127.01	4080862.95	3.59452	114.15	114.15	1.2	ANNUAL	LINE	5
260108.22	4080863.14	3.23126	114.12	114.12	1.2	ANNUAL	AREA	5	260108.22	4080863.14	3.30909	114.12	114.12	1.2	ANNUAL	LINE	5
260089.43	4080863.34	2.90042	114.08	114.08	1.2	ANNUAL	AREA	5	260089.43	4080863.34	3.05462	114.08	114.08	1.2	ANNUAL	LINE	5
260070.64	4080863.53	2.65715	114.05	114.05	1.2	ANNUAL	AREA	5	260070.64	4080863.53	2.8214	114.05	114.05	1.2	ANNUAL	LINE	5
260161.56	4080849.3	1.10837	114.22	114.22	1.2	ANNUAL	AREA	5	260161.56	4080849.3	3.65589	114.22	114.22	1.2	ANNUAL	LINE	5
260193.5	4080862.37	6.25873	114.29	114.29	1.2	ANNUAL	AREA	5	260193.5	4080862.37	4.86455	114.29	114.29	1.2	ANNUAL	LINE	5
260225.44	4080875.45	9.05181	114.38	114.38	1.2	ANNUAL	AREA	5	260225.44	4080875.45	6.5171	114.38	114.38	1.2	ANNUAL	LINE	5
260257.38	4080888.52	11.54869	114.46	114.46	1.2	ANNUAL	AREA	5	260257.38	4080888.52	8.57271	114.46	114.46	1.2	ANNUAL	LINE	5
260295.8	4080917.59	14.08711	114.58	114.58	1.2	ANNUAL	AREA	5	260295.8	4080917.59	13.83557	114.58	114.58	1.2	ANNUAL	LINE	5
260308.76	4080949.58	15.55304	114.64	114.64	1.2	ANNUAL	AREA	5	260308.76	4080949.58	23.39697	114.64	114.64	1.2	ANNUAL	LINE	5
260126.8	4080842.95	2.95155	114.14	114.14	1.2	ANNUAL	AREA	5	260126.8	4080842.95	2.97341	114.14	114.14	1.2	ANNUAL	LINE	5
260108.01	4080843.15	2.63505	114.11	114.11	1.2	ANNUAL	AREA	5	260108.01	4080843.15	2.76556	114.11	114.11	1.2	ANNUAL	LINE	5
260089.22	4080843.34	2.39867	114.07	114.07	1.2	ANNUAL	AREA	5	260089.22	4080843.34	2.57693	114.07	114.07	1.2	ANNUAL	LINE	5
260070.43	4080843.53	2.22063	114.03	114.03	1.2	ANNUAL	AREA	5	260070.43	4080843.53	2.40224	114.03	114.03	1.2	ANNUAL	LINE	5
260162.43	4080809.82	2.66397	114.18	114.18	1.2	ANNUAL	AREA	5	260162.43	4080809.82	2.55477	114.18	114.18	1.2	ANNUAL	LINE	5
260179.68	4080816.88	3.22246	114.23	114.23	1.2	ANNUAL	AREA	5	260179.68	4080816.88	2.88847	114.23	114.23	1.2	ANNUAL	LINE	5
260196.93	4080823.94	3.92663	114.27	114.27	1.2	ANNUAL	AREA	5	260196.93	4080823.94	3.29022	114.27	114.27	1.2	ANNUAL	LINE	5
260214.17	4080831	4.77032	114.3	114.3	1.2	ANNUAL	AREA	5	260214.17	4080831	3.76831	114.3	114.3	1.2	ANNUAL	LINE	5
260231.42	4080838.06	5.71584	114.35	114.35	1.2	ANNUAL	AREA	5	260231.42	4080838.06	4.32448	114.35	114.35	1.2	ANNUAL	LINE	5
260248.67	4080845.12	6.69896	114.39	114.39	1.2	ANNUAL	AREA	5	260248.67	4080845.12	4.95971	114.39	114.39	1.2	ANNUAL	LINE	5
260265.92	4080852.18	7.627	114.44	114.44	1.2	ANNUAL	AREA	5	260265.92	4080852.18	5.66825	114.44	114.44	1.2	ANNUAL	LINE	5
260283.17	4080859.24	8.40528	114.48	114.48	1.2	ANNUAL	AREA	5	260283.17	4080859.24	6.44062	114.48	114.48	1.2	ANNUAL	LINE	5
260300.41	4080866.3	8.9517	114.52	114.52	1.2	ANNUAL	AREA	5	260300.41	4080866.3	7.27363	114.52	114.52	1.2	ANNUAL	LINE	5
260324.66	4080890.64	10.24145	114.59	114.59	1.2	ANNUAL	AREA	5	260324.66	4080890.64	10.13788	114.59	114.59	1.2	ANNUAL	LINE	5
260331.65	4080907.91	11.0092	114.62	114.62	1.2	ANNUAL	AREA	5	260331.65	4080907.91	12.74244	114.62	114.62	1.2	ANNUAL	LINE	5
260338.65	4080925.18	11.40952	114.66	114.66	1.2	ANNUAL	AREA	5	260338.65	4080925.18	16.30732	114.66	114.66	1.2	ANNUAL	LINE	5
260345.64	4080942.46	11.37886	114.7	114.7	1.2	ANNUAL	AREA	5	260345.64	4080942.46	21.47556	114.7	114.7	1.2	ANNUAL	LINE	5
260145.18	4080802.76	2.23535	114.15	114.15	1.2	ANNUAL	AREA	5	260145.18	4080802.76	2.27694	114.15	114.15	1.2	ANNUAL	LINE	5
260126.39	4080802.96	2.01924	114.12	114.12	1.2	ANNUAL	AREA	5	260126.39	4080802.96	2.14621	114.12	114.12	1.2	ANNUAL	LINE	5
260107.6	4080803.15	1.85023	114.09	114.09	1.2	ANNUAL	AREA	5	260107.6	4080803.15	2.02588	114.09	114.09	1.2	ANNUAL	LINE	5
260088.81	4080803.34	1.72001	114.05	114.05	1.2	ANNUAL	AREA	5	260088.81	4080803.34	1.91411	114.05	114.05	1.2	ANNUAL	LINE	5
260070.02	4080803.53	1.61766	114.02	114.02	1.2	ANNUAL	AREA	5	260070.02	4080803.53	1.80816	114.02	114.02	1.2	ANNUAL	LINE	5
260161.54	4080769.63	1.83208	114.16	114.16	1.2	ANNUAL	AREA	5	260161.54	4080769.63	1.87562	114.16	114.16	1.2	ANNUAL	LINE	5
260178.31	4080776.49	2.13629	114.19	114.19	1.2	ANNUAL	AREA	5	260178.31	4080776.49	2.06997	114.19	114.19	1.2	ANNUAL	LINE	5
260195.08	4080783.36	2.5177	114.22	114.22	1.2	ANNUAL	AREA	5	260195.08	4080783.36	2.29845	114.22	114.22	1.2	ANNUAL	LINE	5
260211.85	4080790.22	2.98064	114.26	114.26	1.2	ANNUAL	AREA	5	260211.85	4080790.22	2.56597	114.26	114.26	1.2	ANNUAL	LINE	5
260228.62	4080797.08	3.52227	114.3	114.3	1.2	ANNUAL	AREA	5	260228.62	4080797.08	2.87778	114.3	114.3	1.2	ANNUAL	LINE	5
260245.39	4080803.95	4.12821	114.33	114.33	1.2	ANNUAL	AREA	5	260245.39	4080803.95	3.2387	114.33	114.33	1.2	ANNUAL	LINE	5
260262.15	4080810.81	4.76641	114.38	114.38	1.2	ANNUAL	AREA	5	260262.15	4080810.81	3.64458	114.38	114.38	1.2	ANNUAL	LINE	5
260278.92	4080817.68	5.39995	114.42	114.42	1.2	ANNUAL	AREA	5	260278.92	4080817.68	4.09909	114.42	114.42	1.2	ANNUAL	LINE	5
260329.23	4080838.27	6.8053	114.54	114.54	1.2	ANNUAL	AREA	5	260329.23	4080838.27	5.70504	114.54	114.54	1.2	ANNUAL	LINE	5
260352.8	4080861.92	7.68936	114.61	114.61	1.2	ANNUAL	AREA	5	260352.8	4080861.92	7.60089	114.61	114.61	1.2	ANNUAL	LINE	5
260359.6	4080878.72	8.25519	114.64	114.64	1.2	ANNUAL	AREA	5	260359.6	4080878.72	9.2264	114.64	114.64	1.2	ANNUAL	LINE	5
260366.4	4080895.51	8.62722	114.67	114.67	1.2	ANNUAL	AREA	5	260366.4	4080895.51	11.31184	114.67	114.67	1.2	ANNUAL	LINE	5
260373.2	4080912.31	8.76198	114.7	114.7	1.2	ANNUAL	AREA	5	260373.2	4080912.31	10.47482	114.7	114.7	1.2	ANNUAL	LINE	5
260380.81	4080925.18	11.64114	114.74	114.74	1.2	ANNUAL	AREA	5	260380.81	4080925.18	17.89202	114.74	114.74	1.2	ANNUAL	LINE	5
260386.81	4080949.58	8.27931	114.77	114.77	1.2	ANNUAL	AREA	5	260386.81	4080949.58	23.51763	114.77	114.77	1.2	ANNUAL	LINE	5
260144.77	4080762.76	1.59365	114.13	114.13	1.2	ANNUAL	AREA	5	260144.77	4080762.76	1.70926	114.13	114.13	1.2	ANNUAL	LINE	5
260125.98	4080762.96	1.46995	114.1	114.1	1.2	ANNUAL	AREA	5	260125.98	4080762.96	1.62872	114.1	114.1	1.2	ANNUAL	LINE	5
260107.19	4080763.15	1.37176	114.07	114.07													

AGENDA ITEM NO. 12.

260043.48	4080995.76	13.82718	114.08	114.08	1.2	ANNUAL	AREA	5	260043.48	4080995.76	12.1818	114.08	114.08	1.2	ANNUAL	LINE	5
260009.29	4081002.4	11.82444	114	114	1.2	ANNUAL	AREA	5	260009.29	4081002.4	7.52989	114	114	1.2	ANNUAL	LINE	5
260029.08	4080981.88	9.51287	114.04	114.04	1.2	ANNUAL	AREA	5	260029.08	4080981.88	7.69555	114.04	114.04	1.2	ANNUAL	LINE	5
259993.02	4081065.25	27.57452	114.01	114.01	1.2	ANNUAL	AREA	5	259993.02	4081065.25	9.73712	114.01	114.01	1.2	ANNUAL	LINE	5
259993.54	4081065.88	34.97185	114.03	114.03	1.2	ANNUAL	AREA	5	259993.54	4081065.88	9.94335	114.03	114.03	1.2	ANNUAL	LINE	5
259994.66	4081104.51	40.06296	114.04	114.04	1.2	ANNUAL	AREA	5	259994.66	4081104.51	9.29295	114.04	114.04	1.2	ANNUAL	LINE	5
259986.5	4081010.13	10.95492	113.95	113.95	1.2	ANNUAL	AREA	5	259986.5	4081010.13	5.90119	113.95	113.95	1.2	ANNUAL	LINE	5
259993.5	4080992.12	8.828	113.96	113.96	1.2	ANNUAL	AREA	5	259993.5	4080992.12	5.49701	113.96	113.96	1.2	ANNUAL	LINE	5
260018.23	4080966.47	6.94673	114	114	1.2	ANNUAL	AREA	5	260018.23	4080966.47	5.56959	114	114	1.2	ANNUAL	LINE	5
260035.97	4080958.82	6.83244	114.04	114.04	1.2	ANNUAL	AREA	5	260035.97	4080958.82	6.09496	114.04	114.04	1.2	ANNUAL	LINE	5
260053.71	4080951.17	6.76963	114.08	114.08	1.2	ANNUAL	AREA	5	260053.71	4080951.17	6.51999	114.08	114.08	1.2	ANNUAL	LINE	5
259973.03	4081065.78	19.92449	113.95	113.95	1.2	ANNUAL	AREA	5	259973.03	4081065.78	7.23513	113.95	113.95	1.2	ANNUAL	LINE	5
259973.55	4081085.41	24.58063	113.98	113.98	1.2	ANNUAL	AREA	5	259973.55	4081085.41	7.63318	113.98	113.98	1.2	ANNUAL	LINE	5
259974.05	4081105.04	28.2994	113.99	113.99	1.2	ANNUAL	AREA	5	259974.05	4081105.04	7.53498	113.99	113.99	1.2	ANNUAL	LINE	5
259965.95	4081012.1	9.32503	113.9	113.9	1.2	ANNUAL	AREA	5	259965.95	4081012.1	4.68358	113.9	113.9	1.2	ANNUAL	LINE	5
259972.66	4080994.81	7.87988	113.91	113.91	1.2	ANNUAL	AREA	5	259972.66	4080994.81	4.45623	113.91	113.91	1.2	ANNUAL	LINE	5
259979.38	4080977.52	6.54862	113.92	113.92	1.2	ANNUAL	AREA	5	259979.38	4080977.52	4.18487	113.92	113.92	1.2	ANNUAL	LINE	5
260003.12	4080952.89	5.3261	113.95	113.95	1.2	ANNUAL	AREA	5	260003.12	4080952.89	4.20357	113.95	113.95	1.2	ANNUAL	LINE	5
260020.15	4080945.55	5.23319	113.98	113.98	1.2	ANNUAL	AREA	5	260020.15	4080945.55	4.52261	113.98	113.98	1.2	ANNUAL	LINE	5
260037.19	4080938.21	5.15943	114.02	114.02	1.2	ANNUAL	AREA	5	260037.19	4080938.21	4.80593	114.02	114.02	1.2	ANNUAL	LINE	5
260054.22	4080930.87	5.12534	114.05	114.05	1.2	ANNUAL	AREA	5	260054.22	4080930.87	5.02934	114.05	114.05	1.2	ANNUAL	LINE	5
259953.04	4081066.31	15.06951	113.9	113.9	1.2	ANNUAL	AREA	5	259953.04	4081066.31	5.82785	113.9	113.9	1.2	ANNUAL	LINE	5
259953.55	4081085.94	18.17408	113.92	113.92	1.2	ANNUAL	AREA	5	259953.55	4081085.94	6.03628	113.92	113.92	1.2	ANNUAL	LINE	5
259954.07	4081105.57	20.88569	113.94	113.94	1.2	ANNUAL	AREA	5	259954.07	4081105.57	6.15491	113.94	113.94	1.2	ANNUAL	LINE	5
259945.58	4081013.59	7.92498	113.86	113.86	1.2	ANNUAL	AREA	5	259945.58	4081013.59	3.83183	113.86	113.86	1.2	ANNUAL	LINE	5
259958.64	4080979.97	5.96797	113.87	113.87	1.2	ANNUAL	AREA	5	259958.64	4080979.97	3.52578	113.87	113.87	1.2	ANNUAL	LINE	5
259988.25	4080939.21	4.22198	113.92	113.92	1.2	ANNUAL	AREA	5	259988.25	4080939.21	3.32895	113.92	113.92	1.2	ANNUAL	LINE	5
260004.81	4080932.08	4.14783	113.94	113.94	1.2	ANNUAL	AREA	5	260004.81	4080932.08	3.53788	113.94	113.94	1.2	ANNUAL	LINE	5
260037.93	4080917.8	4.03585	114.01	114.01	1.2	ANNUAL	AREA	5	260037.93	4080917.8	3.89641	114.01	114.01	1.2	ANNUAL	LINE	5
259933.05	4081066.83	11.7986	113.85	113.85	1.2	ANNUAL	AREA	5	259933.05	4081066.83	4.53158	113.85	113.85	1.2	ANNUAL	LINE	5
259933.56	4081065.46	13.96605	113.87	113.87	1.2	ANNUAL	AREA	5	259933.56	4081065.46	4.89427	113.87	113.87	1.2	ANNUAL	LINE	5
259934.08	4081106.09	15.97158	113.89	113.89	1.2	ANNUAL	AREA	5	259934.08	4081106.09	5.09014	113.89	113.89	1.2	ANNUAL	LINE	5
259931.72	4080998.33	6.07941	113.82	113.82	1.2	ANNUAL	AREA	5	259931.72	4080998.33	3.11371	113.82	113.82	1.2	ANNUAL	LINE	5
259944.51	4080965.4	4.69024	113.83	113.83	1.2	ANNUAL	AREA	5	259944.51	4080965.4	2.88368	113.83	113.83	1.2	ANNUAL	LINE	5
259973.51	4080925.48	3.43592	113.88	113.88	1.2	ANNUAL	AREA	5	259973.51	4080925.48	2.72708	113.88	113.88	1.2	ANNUAL	LINE	5
260005.96	4080911.49	3.2074	113.93	113.93	1.2	ANNUAL	AREA	5	260005.96	4080911.49	3.0073	113.93	113.93	1.2	ANNUAL	LINE	5
260038.4	4080897.51	3.24598	113.99	113.99	1.2	ANNUAL	AREA	5	260038.4	4080897.51	3.23367	113.99	113.99	1.2	ANNUAL	LINE	5
259913.57	4081067.36	9.48812	113.82	113.82	1.2	ANNUAL	AREA	5	259913.57	4081067.36	3.74624	113.82	113.82	1.2	ANNUAL	LINE	5
259913.57	4081066.99	11.06144	113.83	113.83	1.2	ANNUAL	AREA	5	259913.57	4081066.99	4.05591	113.83	113.83	1.2	ANNUAL	LINE	5
259914.09	4081106.62	12.57403	113.84	113.84	1.2	ANNUAL	AREA	5	259914.09	4081106.62	4.26725	113.84	113.84	1.2	ANNUAL	LINE	5
259911.42	4080999.63	5.3288	113.77	113.77	1.2	ANNUAL	AREA	5	259911.42	4080999.63	2.67167	113.77	113.77	1.2	ANNUAL	LINE	5
259924.01	4080967.21	4.29799	113.78	113.78	1.2	ANNUAL	AREA	5	259924.01	4080967.21	2.51551	113.78	113.78	1.2	ANNUAL	LINE	5
259936.6	4080934.8	3.3209	113.8	113.8	1.2	ANNUAL	AREA	5	259936.6	4080934.8	2.30519	113.8	113.8	1.2	ANNUAL	LINE	5
259958.86	4080911.71	2.85527	113.83	113.83	1.2	ANNUAL	AREA	5	259958.86	4080911.71	2.29004	113.83	113.83	1.2	ANNUAL	LINE	5
259990.8	4080897.94	2.75934	113.89	113.89	1.2	ANNUAL	AREA	5	259990.8	4080897.94	2.49248	113.89	113.89	1.2	ANNUAL	LINE	5
260022.73	4080884.18	2.69961	113.96	113.96	1.2	ANNUAL	AREA	5	260022.73	4080884.18	2.66517	113.96	113.96	1.2	ANNUAL	LINE	5
259903.63	4081067.89	7.80172	113.77	113.77	1.2	ANNUAL	AREA	5	259903.63	4081067.89	3.16327	113.77	113.77	1.2	ANNUAL	LINE	5
259893.58	4081087.52	8.97747	113.78	113.78	1.2	ANNUAL	AREA	5	259893.58	4081087.52	3.4222	113.78	113.78	1.2	ANNUAL	LINE	5
259894.09	4081107.15	10.13641	113.8	113.8	1.2	ANNUAL	AREA	5	259894.09	4081107.15	3.62483	113.8	113.8	1.2	ANNUAL	LINE	5
259907.52	4080958.74	3.66784	113.74	113.74	1.2	ANNUAL	AREA	5	259907.52	4080958.74	2.1722	113.74	113.74	1.2	ANNUAL	LINE	5
259914.51	4080940.73	3.22772	113.75	113.75	1.2	ANNUAL	AREA	5	259914.51	4080940.73	2.08667	113.75	113.75	1.2	ANNUAL	LINE	5
259921.5	4080922.72	2.81748	113.76	113.76	1.2	ANNUAL	AREA	5	259921.5	4080922.72	1.98763	113.76	113.76	1.2	ANNUAL	LINE	5
259946.24	4080897.06	2.40766	113.8	113.8	1.2	ANNUAL	AREA	5	259946.24	4080897.06	1.96878	113.8	113.8	1.2	ANNUAL	LINE	5
259963.98	4080889.41	2.36089	113.83	113.83	1.2	ANNUAL	AREA	5	259963.98	4080889.41	2.05476	113.83	113.83	1.2	ANNUAL	LINE	5
259981.72	4080881.77	2.31947	113.87	113.87	1.2	ANNUAL	AREA	5	259981.72	4080881.77	2.13671	113.87	113.87	1.2	ANNUAL	LINE	5
259999.46	4080874.12	2.28548	113.9	113.9	1.2	ANNUAL	AREA	5	259999.46	4080874.12	2.21262	113.9	113.9	1.2	ANNUAL	LINE	5
260017.21	4080866.47	2.25782	113.94	113.94	1.2	ANNUAL	AREA	5	260017.21	4080866.47	2.2788	113.94	113.94	1.2	ANNUAL	LINE	5
260034.95	4080858.82	2.23608	113.98	113.98	1.2	ANNUAL	AREA	5	260034.95	4080858.82	2.3326	113.98	113.98	1.2	ANNUAL	LINE	5
260052.69	4080851.18	2.22245	114.01	114.01	1.2	ANNUAL	AREA	5	260052.69	4080851.18	2.37359	114.01	114.01	1.2	ANNUAL	LINE	5
259845.99	4081015.26	3.83367	113.61	113.61	1.2	ANNUAL	AREA	5	259845.99	4081015.26	1.84595	113.61					

259932.54	4080742.27	0.83855	113.8	113.8	1.2	ANNUAL	AREA	5	259932.54	4080742.27	0.89409	113.8	113.8	1.2	ANNUAL	LINE	5
259949.57	4080734.93	0.83131	113.82	113.82	1.2	ANNUAL	AREA	5	259949.57	4080734.93	0.90442	113.82	113.82	1.2	ANNUAL	LINE	5
259966.6	4080727.59	0.8245	113.84	113.84	1.2	ANNUAL	AREA	5	259966.6	4080727.59	0.91344	113.84	113.84	1.2	ANNUAL	LINE	5
259983.63	4080720.24	0.81775	113.86	113.86	1.2	ANNUAL	AREA	5	259983.63	4080720.24	0.92091	113.86	113.86	1.2	ANNUAL	LINE	5
260000.66	4080712.9	0.81088	113.88	113.88	1.2	ANNUAL	AREA	5	260000.66	4080712.9	0.92679	113.88	113.88	1.2	ANNUAL	LINE	5
260017.7	4080705.66	0.80368	113.9	113.9	1.2	ANNUAL	AREA	5	260017.7	4080705.66	0.93056	113.9	113.9	1.2	ANNUAL	LINE	5
260034.73	4080698.22	0.79642	113.93	113.93	1.2	ANNUAL	AREA	5	260034.73	4080698.22	0.93338	113.93	113.93	1.2	ANNUAL	LINE	5
260051.76	4080690.88	0.78947	113.95	113.95	1.2	ANNUAL	AREA	5	260051.76	4080690.88	0.93425	113.95	113.95	1.2	ANNUAL	LINE	5
259713.12	4081072.62	2.33109	113.45	113.45	1.2	ANNUAL	AREA	5	259713.12	4081072.62	1.14486	113.45	113.45	1.2	ANNUAL	LINE	5
259713.64	4081092.25	2.52134	113.46	113.46	1.2	ANNUAL	AREA	5	259713.64	4081092.25	1.21078	113.46	113.46	1.2	ANNUAL	LINE	5
259714.15	4081111.88	2.72396	113.47	113.47	1.2	ANNUAL	AREA	5	259714.15	4081111.88	1.27924	113.47	113.47	1.2	ANNUAL	LINE	5
259686.61	4081018.03	1.69994	113.39	113.39	1.2	ANNUAL	AREA	5	259686.61	4081018.03	0.90172	113.39	113.39	1.2	ANNUAL	LINE	5
259693.6	4081000.02	1.65274	113.38	113.38	1.2	ANNUAL	AREA	5	259693.6	4081000.02	0.88974	113.38	113.38	1.2	ANNUAL	LINE	5
259700.59	4080982.01	1.60589	113.4	113.4	1.2	ANNUAL	AREA	5	259700.59	4080982.01	0.87977	113.4	113.4	1.2	ANNUAL	LINE	5
259707.59	4080964	1.55704	113.41	113.41	1.2	ANNUAL	AREA	5	259707.59	4080964	0.87142	113.41	113.41	1.2	ANNUAL	LINE	5
259714.58	4080945.99	1.50366	113.42	113.42	1.2	ANNUAL	AREA	5	259714.58	4080945.99	0.86382	113.42	113.42	1.2	ANNUAL	LINE	5
259721.57	4080927.98	1.44425	113.43	113.43	1.2	ANNUAL	AREA	5	259721.57	4080927.98	0.85599	113.43	113.43	1.2	ANNUAL	LINE	5
259728.57	4080909.97	1.37813	113.45	113.45	1.2	ANNUAL	AREA	5	259728.57	4080909.97	0.84684	113.45	113.45	1.2	ANNUAL	LINE	5
259735.56	4080891.96	1.3059	113.48	113.48	1.2	ANNUAL	AREA	5	259735.56	4080891.96	0.83543	113.48	113.48	1.2	ANNUAL	LINE	5
259742.55	4080873.95	1.2288	113.51	113.51	1.2	ANNUAL	AREA	5	259742.55	4080873.95	0.82117	113.51	113.51	1.2	ANNUAL	LINE	5
259749.55	4080855.94	1.14893	113.53	113.53	1.2	ANNUAL	AREA	5	259749.55	4080855.94	0.80391	113.53	113.53	1.2	ANNUAL	LINE	5
259756.54	4080837.93	1.06845	113.4	113.4	1.2	ANNUAL	AREA	5	259756.54	4080837.93	0.78378	113.4	113.4	1.2	ANNUAL	LINE	5
259763.53	4080819.92	0.98948	113.55	113.55	1.2	ANNUAL	AREA	5	259763.53	4080819.92	0.76118	113.55	113.55	1.2	ANNUAL	LINE	5
259770.53	4080801.91	0.91388	113.57	113.57	1.2	ANNUAL	AREA	5	259770.53	4080801.91	0.73667	113.57	113.57	1.2	ANNUAL	LINE	5
259777.52	4080783.9	0.84304	113.59	113.59	1.2	ANNUAL	AREA	5	259777.52	4080783.9	0.71082	113.59	113.59	1.2	ANNUAL	LINE	5
259802.26	4080758.25	0.76424	113.65	113.65	1.2	ANNUAL	AREA	5	259802.26	4080758.25	0.69536	113.65	113.65	1.2	ANNUAL	LINE	5
259820	4080750.6	0.75061	113.68	113.68	1.2	ANNUAL	AREA	5	259820	4080750.6	0.70584	113.68	113.68	1.2	ANNUAL	LINE	5
259837.74	4080742.95	0.7378	113.7	113.7	1.2	ANNUAL	AREA	5	259837.74	4080742.95	0.71587	113.7	113.7	1.2	ANNUAL	LINE	5
259855.48	4080735.31	0.72632	113.72	113.72	1.2	ANNUAL	AREA	5	259855.48	4080735.31	0.72553	113.72	113.72	1.2	ANNUAL	LINE	5
259906.71	4080712.36	0.70906	113.77	113.77	1.2	ANNUAL	AREA	5	259906.71	4080712.36	0.75208	113.77	113.77	1.2	ANNUAL	LINE	5
259926.45	4080704.72	0.69492	113.79	113.79	1.2	ANNUAL	AREA	5	259926.45	4080704.72	0.75976	113.79	113.79	1.2	ANNUAL	LINE	5
259944.19	4080697.07	0.68943	113.8	113.8	1.2	ANNUAL	AREA	5	259944.19	4080697.07	0.76659	113.8	113.8	1.2	ANNUAL	LINE	5
259961.93	4080689.42	0.68404	113.82	113.82	1.2	ANNUAL	AREA	5	259961.93	4080689.42	0.77235	113.82	113.82	1.2	ANNUAL	LINE	5
259979.67	4080681.78	0.6785	113.84	113.84	1.2	ANNUAL	AREA	5	259979.67	4080681.78	0.77699	113.84	113.84	1.2	ANNUAL	LINE	5
259997.42	4080674.13	0.67256	113.86	113.86	1.2	ANNUAL	AREA	5	259997.42	4080674.13	0.7804	113.86	113.86	1.2	ANNUAL	LINE	5
260015.16	4080666.48	0.66613	113.88	113.88	1.2	ANNUAL	AREA	5	260015.16	4080666.48	0.78254	113.88	113.88	1.2	ANNUAL	LINE	5
260032.9	4080658.84	0.65947	113.91	113.91	1.2	ANNUAL	AREA	5	260032.9	4080658.84	0.78343	113.91	113.91	1.2	ANNUAL	LINE	5
259673.44	4081073.67	1.93157	113.4	113.4	1.2	ANNUAL	AREA	5	259673.44	4081073.67	0.9796	113.4	113.4	1.2	ANNUAL	LINE	5
259673.65	4081093.3	2.074	113.4	113.4	1.2	ANNUAL	AREA	5	259673.65	4081093.3	1.0315	113.4	113.4	1.2	ANNUAL	LINE	5
259674.17	4081112.93	2.22646	113.4	113.4	1.2	ANNUAL	AREA	5	259674.17	4081112.93	1.08517	113.4	113.4	1.2	ANNUAL	LINE	5
259586.64	4081020.66	1.17366	113.26	113.26	1.2	ANNUAL	AREA	5	259586.64	4081020.66	0.65789	113.26	113.26	1.2	ANNUAL	LINE	5
259593.63	4081002.65	1.14938	113.26	113.26	1.2	ANNUAL	AREA	5	259593.63	4081002.65	0.65037	113.26	113.26	1.2	ANNUAL	LINE	5
259600.63	4080984.64	1.12653	113.27	113.27	1.2	ANNUAL	AREA	5	259600.63	4080984.64	0.6441	113.27	113.27	1.2	ANNUAL	LINE	5
259607.62	4080966.63	1.10409	113.29	113.29	1.2	ANNUAL	AREA	5	259607.62	4080966.63	0.63897	113.29	113.29	1.2	ANNUAL	LINE	5
259614.61	4080948.62	1.08998	113.3	113.3	1.2	ANNUAL	AREA	5	259614.61	4080948.62	0.63476	113.3	113.3	1.2	ANNUAL	LINE	5
259621.61	4080930.61	1.05939	113.33	113.33	1.2	ANNUAL	AREA	5	259621.61	4080930.61	0.63115	113.33	113.33	1.2	ANNUAL	LINE	5
259628.6	4080912.3	1.02792	113.35	113.35	1.2	ANNUAL	AREA	5	259628.6	4080912.3	0.6271	113.35	113.35	1.2	ANNUAL	LINE	5
259635.59	4080894.59	0.99621	113.37	113.37	1.2	ANNUAL	AREA	5	259635.59	4080894.59	0.62357	113.37	113.37	1.2	ANNUAL	LINE	5
259642.59	4080876.58	0.96072	113.41	113.41	1.2	ANNUAL	AREA	5	259642.59	4080876.58	0.61859	113.41	113.41	1.2	ANNUAL	LINE	5
259649.58	4080858.57	0.92157	113.43	113.43	1.2	ANNUAL	AREA	5	259649.58	4080858.57	0.61219	113.43	113.43	1.2	ANNUAL	LINE	5
259656.58	4080840.56	0.87938	113.47	113.47	1.2	ANNUAL	AREA	5	259656.58	4080840.56	0.60413	113.47	113.47	1.2	ANNUAL	LINE	5
259663.57	4080822.55	0.83492	113.51	113.51	1.2	ANNUAL	AREA	5	259663.57	4080822.55	0.59426	113.51	113.51	1.2	ANNUAL	LINE	5
259670.56	4080804.54	0.78916	113.54	113.54	1.2	ANNUAL	AREA	5	259670.56	4080804.54	0.58264	113.54	113.54	1.2	ANNUAL	LINE	5
259677.56	4080786.53	0.74317	113.54	113.54	1.2	ANNUAL	AREA	5	259677.56	4080786.53	0.56945	113.54	113.54	1.2	ANNUAL	LINE	5
259684.55	4080768.53	0.69774	113.55	113.55	1.2	ANNUAL	AREA	5	259684.55	4080768.53	0.5549	113.55	113.55	1.2	ANNUAL	LINE	5
259691.54	4080750.52	0.65364	113.58	113.58	1.2	ANNUAL	AREA	5	259691.54	4080750.52	0.53924	113.58	113.58	1.2	ANNUAL	LINE	5
259698.54	4080732.51	0.61156	113.62	113.62	1.2	ANNUAL	AREA	5	259698.54	4080732.51	0.52279	113.62	113.62	1.2	ANNUAL	LINE	5
259705.53	4080714.5	0.57204	113.64	113.64	1.2	ANNUAL	AREA	5	259705.53	4080714.5	0.50585	113.64	113.64	1.2	ANNUAL	LINE	5
259730.27	4080688.84	0.52651	113.63	113.63	1.2	ANNUAL	AREA	5	259730.27	4080688.84	0.49355	113.63	113.63	1.2	ANNUAL	LINE	5
259748.01	4080681.19	0.51772	113.62	113.62	1.2	ANNUAL	AREA	5	259748.01	4080681.19	0.49805	113.62	113.62	1.2	ANNUAL	LINE	5
259765.75	4080673.55	0.50928	113.61	113.61	1.2	ANNUAL	AREA	5	259765.75	4080673.55	0.50232	113.61	113.61	1.2	ANNUAL	LINE	5
259783.49	4080665.9	0.5014	113.61	113.61	1.2	ANNUAL	AREA	5	259783.49	4080665.9	0.5064	113.61	113.61	1.2	ANNUAL	LINE	5
259801.23	4080658.25	0.49429	113.61	113.61	1.2	ANNUAL	AREA	5	259801.23	4080658.25	0.51035	113.61	113.61	1.2	ANNUAL	LINE	5
259819.17	4080640.26	1.39924	113.25	113.25	1.2	ANNUAL	AREA	5	259819.17	4080640.26	0.74671	113.25	113.25	1.2	ANNUAL	LINE	5
259837.69	4080625.94	1.37632	113.26	113.26	1.2	ANNUAL	AREA	5	259837.69	4080625.94	0.73564	113.26	113.26	1.2	ANNUAL	LINE	5
259574.2	4081115.57	1.45889	113.28	113.28	1.2	ANNUAL	AREA	5	259574.2	4081115.57	0.7686	113.28	113.28	1.2	ANNUAL	LINE	5
260093.3	4081121.41	1.3607376	114.31														

AGENDA ITEM NO. 12.

259888.37	4081139.15	10.81124	113.81	113.81	1.2	ANNUAL	AREA	5	259888.37	4081139.15	3.59819	113.81	113.81	1.2	ANNUAL	LINE	5
260102.85	4081301.16	4.38248	114.53	114.53	1.2	ANNUAL	AREA	5	260102.85	4081301.16	3.15584	114.53	114.53	1.2	ANNUAL	LINE	5
260121.06	4081300.19	4.04565	114.57	114.57	1.2	ANNUAL	AREA	5	260121.06	4081300.19	3.1922	114.57	114.57	1.2	ANNUAL	LINE	5
260139.27	4081299.23	3.70418	114.61	114.61	1.2	ANNUAL	AREA	5	260139.27	4081299.23	3.22003	114.61	114.61	1.2	ANNUAL	LINE	5
260157.47	4081298.26	3.37337	114.65	114.65	1.2	ANNUAL	AREA	5	260157.47	4081298.26	3.23962	114.65	114.65	1.2	ANNUAL	LINE	5
260070.8	4081336.31	3.57713	114.48	114.48	1.2	ANNUAL	AREA	5	260070.8	4081336.31	2.53611	114.48	114.48	1.2	ANNUAL	LINE	5
260038.88	4081324.79	4.3767	114.37	114.37	1.2	ANNUAL	AREA	5	260038.88	4081324.79	2.6501	114.37	114.37	1.2	ANNUAL	LINE	5
260006.96	4081313.27	5.24984	114.26	114.26	1.2	ANNUAL	AREA	5	260006.96	4081313.27	2.73266	114.26	114.26	1.2	ANNUAL	LINE	5
259975.04	4081301.76	6.08516	114.15	114.15	1.2	ANNUAL	AREA	5	259975.04	4081301.76	2.7764	114.15	114.15	1.2	ANNUAL	LINE	5
259943.12	4081290.24	6.70745	114.07	114.07	1.2	ANNUAL	AREA	5	259943.12	4081290.24	2.7722	114.07	114.07	1.2	ANNUAL	LINE	5
259904.19	4081263.26	7.7255	113.95	113.95	1.2	ANNUAL	AREA	5	259904.19	4081263.26	2.83117	113.95	113.95	1.2	ANNUAL	LINE	5
259890.17	4081232.36	8.96738	113.87	113.87	1.2	ANNUAL	AREA	5	259890.17	4081232.36	3.02496	113.87	113.87	1.2	ANNUAL	LINE	5
260104.97	4081341.1	3.02245	114.57	114.57	1.2	ANNUAL	AREA	5	260104.97	4081341.1	2.4924	114.57	114.57	1.2	ANNUAL	LINE	5
260123.18	4081340.14	2.81946	114.61	114.61	1.2	ANNUAL	AREA	5	260123.18	4081340.14	2.59903	114.61	114.61	1.2	ANNUAL	LINE	5
260141.39	4081339.17	2.61543	114.66	114.66	1.2	ANNUAL	AREA	5	260141.39	4081339.17	2.51984	114.66	114.66	1.2	ANNUAL	LINE	5
260071.82	4081375.86	2.57157	114.52	114.52	1.2	ANNUAL	AREA	5	260071.82	4081375.86	2.05308	114.52	114.52	1.2	ANNUAL	LINE	5
260054.75	4081369.7	2.83575	114.47	114.47	1.2	ANNUAL	AREA	5	260054.75	4081369.7	2.10912	114.47	114.47	1.2	ANNUAL	LINE	5
260037.68	4081363.54	3.1174	114.41	114.41	1.2	ANNUAL	AREA	5	260037.68	4081363.54	2.16045	114.41	114.41	1.2	ANNUAL	LINE	5
260020.61	4081357.38	3.41632	114.33	114.33	1.2	ANNUAL	AREA	5	260020.61	4081357.38	2.20647	114.33	114.33	1.2	ANNUAL	LINE	5
260003.54	4081351.22	3.72688	114.28	114.28	1.2	ANNUAL	AREA	5	260003.54	4081351.22	2.24569	114.28	114.28	1.2	ANNUAL	LINE	5
259986.47	4081345.06	4.04296	114.22	114.22	1.2	ANNUAL	AREA	5	259986.47	4081345.06	2.27803	114.22	114.22	1.2	ANNUAL	LINE	5
259969.4	4081339.9	4.35094	114.17	114.17	1.2	ANNUAL	AREA	5	259969.4	4081339.9	2.30238	114.17	114.17	1.2	ANNUAL	LINE	5
259952.33	4081332.74	4.63665	114.12	114.12	1.2	ANNUAL	AREA	5	259952.33	4081332.74	2.31791	114.12	114.12	1.2	ANNUAL	LINE	5
259935.26	4081326.58	4.88175	114.08	114.08	1.2	ANNUAL	AREA	5	259935.26	4081326.58	2.32348	114.08	114.08	1.2	ANNUAL	LINE	5
259918.19	4081320.42	5.07934	114.03	114.03	1.2	ANNUAL	AREA	5	259918.19	4081320.42	2.31843	114.03	114.03	1.2	ANNUAL	LINE	5
259901.12	4081314.26	5.22157	113.98	113.98	1.2	ANNUAL	AREA	5	259901.12	4081314.26	2.30208	113.98	113.98	1.2	ANNUAL	LINE	5
259886.58	4081225.47	7.31199	113.73	113.73	1.2	ANNUAL	AREA	5	259886.58	4081225.47	2.61124	113.73	113.73	1.2	ANNUAL	LINE	5
259839.09	4081208.94	7.28517	113.7	113.7	1.2	ANNUAL	AREA	5	259839.09	4081208.94	2.60406	113.7	113.7	1.2	ANNUAL	LINE	5
259831.6	4081192.41	7.06276	113.68	113.68	1.2	ANNUAL	AREA	5	259831.6	4081192.41	2.55919	113.68	113.68	1.2	ANNUAL	LINE	5
259821.1	4081175.89	6.67054	113.67	113.67	1.2	ANNUAL	AREA	5	259821.1	4081175.89	2.4756	113.67	113.67	1.2	ANNUAL	LINE	5
259816.61	4081159.36	6.15673	113.66	113.66	1.2	ANNUAL	AREA	5	259816.61	4081159.36	2.35734	113.66	113.66	1.2	ANNUAL	LINE	5
259809.11	4081142.83	5.57527	113.65	113.65	1.2	ANNUAL	AREA	5	259809.11	4081142.83	2.2122	113.65	113.65	1.2	ANNUAL	LINE	5
259801.62	4081126.3	4.97972	113.63	113.63	1.2	ANNUAL	AREA	5	259801.62	4081126.3	2.05116	113.63	113.63	1.2	ANNUAL	LINE	5
260088.89	4081382.02	2.3247	114.58	114.58	1.2	ANNUAL	AREA	5	260088.89	4081382.02	1.99287	114.58	114.58	1.2	ANNUAL	LINE	5
260107.1	4081381.05	2.19746	114.63	114.63	1.2	ANNUAL	AREA	5	260107.1	4081381.05	2.00272	114.63	114.63	1.2	ANNUAL	LINE	5
260125.3	4081380.08	2.06657	114.67	114.67	1.2	ANNUAL	AREA	5	260125.3	4081380.08	2.00867	114.67	114.67	1.2	ANNUAL	LINE	5
260143.51	4081379.11	1.93578	114.72	114.72	1.2	ANNUAL	AREA	5	260143.51	4081379.11	2.01046	114.72	114.72	1.2	ANNUAL	LINE	5
260074.29	4081415.93	1.91438	114.58	114.58	1.2	ANNUAL	AREA	5	260074.29	4081415.93	1.68188	114.58	114.58	1.2	ANNUAL	LINE	5
260040.86	4081404.85	2.2712	114.45	114.45	1.2	ANNUAL	AREA	5	260040.86	4081404.85	1.77389	114.45	114.45	1.2	ANNUAL	LINE	5
260007.4	4081391.79	2.66865	114.33	114.33	1.2	ANNUAL	AREA	5	260007.4	4081391.79	1.85312	114.33	114.33	1.2	ANNUAL	LINE	5
259973.96	4081379.72	3.09829	114.22	114.22	1.2	ANNUAL	AREA	5	259973.96	4081379.72	1.91566	114.22	114.22	1.2	ANNUAL	LINE	5
259940.52	4081367.66	3.51822	114.12	114.12	1.2	ANNUAL	AREA	5	259940.52	4081367.66	1.95723	114.12	114.12	1.2	ANNUAL	LINE	5
259907.08	4081355.59	3.86383	114.03	114.03	1.2	ANNUAL	AREA	5	259907.08	4081355.59	1.97267	114.03	114.03	1.2	ANNUAL	LINE	5
259849.57	4081321.3	4.53642	113.85	113.85	1.2	ANNUAL	AREA	5	259849.57	4081321.3	2.01528	113.85	113.85	1.2	ANNUAL	LINE	5
259834.89	4081288.92	5.25959	113.75	113.75	1.2	ANNUAL	AREA	5	259834.89	4081288.92	2.14608	113.75	113.75	1.2	ANNUAL	LINE	5
259820.21	4081256.54	5.75203	113.67	113.67	1.2	ANNUAL	AREA	5	259820.21	4081256.54	2.22447	113.67	113.67	1.2	ANNUAL	LINE	5
259805.63	4081234.16	5.81176	113.6	113.6	1.2	ANNUAL	AREA	5	259805.63	4081234.16	2.22961	113.6	113.6	1.2	ANNUAL	LINE	5
259790.85	4081191.78	5.39084	113.58	113.58	1.2	ANNUAL	AREA	5	259790.85	4081191.78	2.11023	113.58	113.58	1.2	ANNUAL	LINE	5
259776.16	4081159.4	4.64371	113.57	113.57	1.2	ANNUAL	AREA	5	259776.16	4081159.4	1.90913	113.57	113.57	1.2	ANNUAL	LINE	5
260109.22	4081420.99	1.66428	114.67	114.67	1.2	ANNUAL	AREA	5	260109.22	4081420.99	1.63537	114.67	114.67	1.2	ANNUAL	LINE	5
260127.43	4081420.02	1.57479	114.72	114.72	1.2	ANNUAL	AREA	5	260127.43	4081420.02	1.63541	114.72	114.72	1.2	ANNUAL	LINE	5
260145.63	4081419.06	1.48622	114.77	114.77	1.2	ANNUAL	AREA	5	260145.63	4081419.06	1.63257	114.77	114.77	1.2	ANNUAL	LINE	5
260163.84	4081418.09	1.40085	114.82	114.82	1.2	ANNUAL	AREA	5	260163.84	4081418.09	1.62706	114.82	114.82	1.2	ANNUAL	LINE	5
260076.67	4081455.96	1.47687	114.63	114.63	1.2	ANNUAL	AREA	5	260076.67	4081455.96	1.39632	114.63	114.63	1.2	ANNUAL	LINE	5
260043.75	4081444.08	1.72172	114.51	114.51	1.2	ANNUAL	AREA	5	260043.75	4081444.08	1.4739	114.51	114.51	1.2	ANNUAL	LINE	5
260010.83	4081432.21	1.99183	114.38	114.38	1.2	ANNUAL	AREA	5	260010.83	4081432.21	1.54424	114.38	114.38	1.2	ANNUAL	LINE	5
259977.91	4081420.33	2.28856	114.26	114.26	1.2	ANNUAL	AREA	5	259977.91	4081420.33	1.60484	114.26	114.26	1.2	ANNUAL	LINE	5
259944.99	4081408.45	2.60022	114.15	114.15	1.2	ANNUAL	AREA	5	259944.99	4081408.45	1.65301	114.15	114.15	1.2	ANNUAL	LINE	5
259912.07	4081396.57	2.89244	114.08	114.08	1.2	ANNUAL	AREA	5	259912.07	4081396.57	1.68506	114.08	114.08	1.2	ANNUAL	LINE	5
259846.24	4081372.81	3.28804	113.93	113.93	1.2	ANNUAL	AREA	5	259846.24	4081372.81	1.68777	113.93	113.93	1.2	ANNUAL	LINE	5
259822.55	4081350.93	3.61816	113.83	113.83	1.2	ANNUAL	AREA	5	259822.55	4081350.93	1.73712	113.83	113.83	1.2	ANNUAL	LINE	5
259808.1	4081319.06	4.16629	113.73	113.73	1.2	ANNUAL	AREA	5	259808.1	4081319.06	1.84624	113.73	113.73	1.2	ANNUAL	LINE	5
259793.64	4081287.19	4.59993	113.63	113.63	1.2	ANNUAL	AREA	5	259793.64	4081287.19	1.92033	113.63	113.63	1.2	ANNUAL	LINE	5
259779.19	4081255.31	5.18245	113.55	113.55	1.2	ANNUAL	AREA	5	259779.19	4081255.31	1.9387	113.55	113.55	1.2	ANNUAL	LINE	5
259764.74	4081233.44	4.63645	113.51	113.51	1.2	ANNUAL	AREA	5	259764.74	4081233.44	1.88406	113.51	113.51	1.2	ANNUAL	LINE	5
259750.29	4081191.57	4.20416	113.51	113.51	1.2	ANNUAL	AREA	5	259750.29	4081191.57	1.75574	113.51	113.51	1.2	ANNUAL	LINE	5
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ATTACHMENT C
Operational Health Risk Screening and Additional Supporting Information

Operational Health Risk Screening and Additional Supporting Information

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Health Risk Screening for Project Operations

- **Screening Calculations Workbook and Prioritization Sheet**

Additional Modeling Assumptions and Other Supporting Information

- **Land Use Assumptions Summary**
- **Project Site Plan**
- **Alluvial Residential Development Project Construction Assumptions**
- **Alluvial Residential Development Project Screening Assumptions Summary (Operations)**

Alluvial Residential Development Project—Health Risk Screening Analysis for Project Operations

Proposed 1491 Alluvial Residential Development Project—Clovis, CA

Diesel Truck Trips

**Trucks Onsite
Daily**

Heavy Truck Trips

1.41

Truck Assumptions

Trucks Onsite per Day	1.41
Trucks Onsite per Year	515.6
Idling Events per Truck per day	2
Idling Time per Event (min.)	15
Idling Minutes/Year	15,467
Idling Hours/Year	258

	Truck Entering	Trucks Exiting	Total
Average Travel Distance Onsite (ft) Measured with Google Earth Path Tool	740	740	1,480

	Miles/Trip	Truck Trips/Year	Miles/Year
Offsite Miles Estimate	0.25	1,031.1	257.8

	Distance Onsite (ft) in and out	Distance to Receptor Meters	Direction to Receptor	Idling Emissions (lbs/year)	Running Emissions (lbs/yr)	Total Truck Emissions (lbs/year)	Grand Total (lbs/yr)	Average Lbs/Day	Max Lbs/Day*	Max lbs/Hr
Emissions	1,480	<100 M	All	0.03	0.01	0.04	0.04	0.00010	0.00030	0.00003

*Max daily assumed to be 3 times the daily average. Max hr based on 12 hrs/day

Running Emission Calculations

EMFAC 2017 Rates

Idling Emission Rate for Diesel g/day	0.03119
g/lb conversion factor	0.00220
HDT Onsite Running Emissions 5 mph g/mile	0.01697
HDT Running Emissions Onroad 5-25 mph	0.01099

EMFAC 2017 PM10 running emissions Aggregated Fleet Age in 2023

EMFAC 2017 Average Running Emissions

	PM10_RUNEX	PM10 RUNEX
	5-25 MPH	5 MPH
Weighted Averages (Based on Project Fleet)	0.0110	0.01697

	Distance (Feet)	Distance (Miles)	Miles/Year/ Truck	Trucks/Day	Emission (g/mi)	Emissions g/year	Emission lbs/year	Emissions lbs/hour
Onsite Running Emissions	1,480.00	0.28	102.3	1.412525143	0.01697	2.45	0.01	1.23418E-06

	Distance (Feet)	Miles/ Round Trip	Miles/Year/ Truck	Trucks/Day	Emissions Rate (g/mi)	Emissions g/year	Emission lbs/year	Emissions lbs/hour
Offsite Running Emissions	2,640.00	0.50	182.50	1.4	0.01099	2.83	0.01	1.42561E-06

Total Running 1.16499E-02 2.65979E-06

Total Emissions	Lbs/Year
Onsite Running Emissions	0.00541
Offsite Running Emissions	0.00624
Idling Emissions	0.02510
Total	0.03675

Health Risk Prioritization Results (Receptor 0-100 M)

	Cancer Score	Chronic Score	Acute Score
Prioritization Score Truck Run and Idle	0.085	0.004	0.000

On-site Truck Running and Idling Emissions for the Health Risk Screening Analysis—Alluvial Residential Development Project

EMFAC2017 (v1.0.2) Emission Rates

Region Type: County

Region: FRESNO

Calendar Year: 2023

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW. Note 'day' in the unit is operation day.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT	NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
FRESNO	2023	HHDT	Aggregated	5	DSL	37131.58519	13.08445167	0.014823507	0.01549376	3468.021017	0.006759906	0.545124609	0.145538919	0.16568498	2.058443973	0.032764143
FRESNO	2023	HHDT	Aggregated	10	DSL	53398.05085	10.18371081	0.012014152	0.012557378	2877.489823	0.004184916	0.452301329	0.090100085	0.102572088	1.275404796	0.027185097
FRESNO	2023	HHDT	Aggregated	15	DSL	43626.73593	7.273210423	0.008716785	0.009110919	2276.289004	0.002221426	0.357800932	0.047826693	0.054447049	0.693519357	0.02150525
FRESNO	2023	HHDT	Aggregated	20	DSL	69342.35083	5.39232653	0.006260738	0.006543821	1908.678681	0.001366411	0.300017709	0.029418459	0.033490677	0.447668061	0.01803225
FRESNO	2023	HHDT	Aggregated	25	DSL	55207.15826	4.510089354	0.006657893	0.006958933	1679.236753	0.001142964	0.263952633	0.024607701	0.028013995	0.353648605	0.015864596
						Total	40.44378878	0.048473074	0.050664811	12209.71528	0.015675623	1.919197211	0.337491857	0.384208789	4.828684792	0.115351336
FRESNO	2023	LHDT1	Aggregated	5	DSL	6199.181844	2.037385805	0.073505272	0.076828855	1229.7033	0.036309545	0.193292234	0.781723133	0.889939814	3.344059139	0.011625118
FRESNO	2023	LHDT1	Aggregated	10	DSL	20615.10507	2.063303599	0.05460114	0.057069962	1033.757494	0.026469237	0.162492282	0.569867098	0.648755804	2.455046599	0.009772726
FRESNO	2023	LHDT1	Aggregated	15	DSL	44646.41182	2.056246579	0.041676271	0.043560687	675.1301498	0.015193654	0.106121058	0.327110424	0.37239347	1.431059279	0.006382408
FRESNO	2023	LHDT1	Aggregated	20	DSL	48946.88807	2.078246816	0.032821104	0.034305128	575.4465035	0.008477683	0.090452177	0.182519516	0.207786335	0.823284629	0.005440039
FRESNO	2023	LHDT1	Aggregated	25	DSL	52386.22844	2.146129687	0.026768549	0.027978904	510.3662442	0.006124734	0.080222466	0.131861918	0.150116027	0.615025011	0.004824796
						Total	10.38131249	0.229372336	0.239743535	4024.403692	0.092574853	0.632580217	1.993082089	2.26899145	8.668474658	0.038045088
FRESNO	2023	LHDT2	Aggregated	5	DSL	2188.558898	1.763058599	0.066305075	0.069303096	1292.234948	0.03597013	0.203121338	0.774415729	0.88162082	3.330980185	0.012216267
FRESNO	2023	LHDT2	Aggregated	10	DSL	7277.955828	1.764958998	0.050451887	0.052733097	1148.449572	0.026350188	0.18052028	0.567304039	0.645837931	2.454518109	0.010856979
FRESNO	2023	LHDT2	Aggregated	15	DSL	15761.96735	1.728329377	0.039131716	0.040901078	764.4883454	0.01470506	0.120166922	0.316591287	0.360418132	1.386247324	0.007227164
FRESNO	2023	LHDT2	Aggregated	20	DSL	17280.20731	1.724651482	0.031145727	0.032553998	652.0523175	0.007800074	0.102493544	0.167931007	0.191178287	0.754670636	0.006164239
FRESNO	2023	LHDT2	Aggregated	25	DSL	18494.43189	1.769775461	0.025579631	0.026736228	581.0806367	0.00552148	0.091337784	0.118874209	0.135330383	0.550662741	0.005493302
						Total	8.750773916	0.212614036	0.222227499	4438.305819	0.090346933	0.697639868	1.94511627	2.214385554	8.477078996	0.041957951
FRESNO	2023	MHDT	Aggregated	5	DSL	26857.75475	6.732713845	0.007133996	0.007456564	2367.151421	0.002993835	0.372083239	0.06445645	0.073378762	0.792451862	0.022363673
FRESNO	2023	MHDT	Aggregated	10	DSL	31658.85234	5.116527556	0.006040571	0.006313698	1950.069328	0.001929961	0.306523742	0.04155154	0.047303265	0.488899288	0.018423288
FRESNO	2023	MHDT	Aggregated	15	DSL	25544.27351	3.583542562	0.004108544	0.004294314	1527.157644	0.000994994	0.021421945	0.024387254	0.264734044	0.014427828	
FRESNO	2023	MHDT	Aggregated	20	DSL	31724.96823	2.829984849	0.003056676	0.003194885	1301.882533	0.000617081	0.204637804	0.01328559	0.015124633	0.176068211	0.012299541
FRESNO	2023	MHDT	Aggregated	25	DSL	43409.12548	2.225060885	0.002868911	0.002998663	1137.316744	0.000482352	0.178770354	0.010384896	0.011822413	0.134857234	0.010748805
						Total	20.4878297	0.023208697	0.024258091	8283.577669	0.007018223	1.302063054	0.151100422	0.172016328	1.857010639	0.078259134
Running Emissions 5-25 MPH Averaged							NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
						HHDT	8.0888	0.0097	0.0101	2441.9431	0.0031	0.3838	0.0675	0.0768	0.9657	0.0231
						LHDT1	2.0763	0.0459	0.0479	804.8807	0.0185	0.1265	0.3986	0.4538	1.7337	0.0076
						LHDT2	1.7502	0.0425	0.0444	887.6612	0.0181	0.1395	0.3890	0.4429	1.6954	0.0084
						MHDT	4.0976	0.0046	0.0049	1656.7155	0.0014	0.2604	0.0302	0.0344	0.3714	0.0157
						HHDT										
						Miles per Trip	0.39			Miles per Trip	0.39					
						Daily Trucks	0.95			Daily Trucks	0.37					
						Daily Trips	1.91			Daily Trips	0.74					
Onsite Truck																
						Max Daily Emissions	ROG	NOx	CO	SO2	PM10	PM2.5				
						HHDT (g/day)	0.0502	6.0149	0.7181	0.0172	0.0075	0.0072				
						LHDT1 (g/day)	0.0150	0.0779	0.0651	0.0003	0.0018	0.0017				
						LHDT2 (g/day)	0.0119	0.0537	0.0520	0.0003	0.0014	0.0013				
						MHDT (g/day)	0.0088	1.1880	0.1077	0.0045	0.0014	0.0013				
						Total Trucks (g/day)	0.0859	7.3346	0.9429	0.0222	0.0121	0.0116				
						Running Emissions lbs/day	0.0002	0.0162	0.0021	0.0000	0.0000	0.0000				
						Idling Emissions Lbs/Day	0.012	0.152	0.183	0.000	0.000	0.000				
						Total Emissions/Day	0.013	0.168	0.185	0.0003	0.000	0.000				
						g/lb conversion factor		0.00220								

Onsite Truck						
Max Daily Emissions	ROG	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
HHDT (g/day)	0.0502	6.0149	0.7181	0.0172	0.0075	0.0072
LHDT1 (g/day)	0.0150	0.0779	0.0651	0.0003	0.0018	0.0017
LHDT2 (g/day)	0.0119	0.0537	0.0520	0.0003	0.0014	0.0013
MHDT (g/day)	0.0088	1.1880	0.1077	0.0045	0.0014	0.0013
Total Trucks (g/day)	0.0859	7.3346	0.9429	0.0222	0.0121	0.0116
Running Emissions lbs/day	0.0002	0.0162	0.0021	0.0000	0.0000	0.0000
Idling Emissions Lbs/Day	0.012	0.152	0.183	0.000	0.000	0.000
Total Emissions/Day	0.013	0.168	0.185	0.0003	0.000	0.000
g/lb conversion factor		0.00220				
Idling Minutes/Day Per Truck	15					
Total Trucks per Day	1.41					
Number Idling Trucks per Day	1.41					
Total Trucks per Day—HHDT	0.95					
Total Trucks per Day—LHDT1	0.05					
Total Trucks per Day—LHDT2	0.04					
Total Trucks per Day—MHDT	0.37					

Idling Emissions	Calendar Year	Season	Region	Vehicle Category	Fuel	Pollutant	g/vehicle/day	g/day	Max lbs/day
IDLEX	2023	Annual	FRESNO	HHDT	DSL	ROG	5.8518	5.58	0.012299
IDLEX	2023	Annual	FRESNO	LHDT1	DSL	ROG	0.1098	0.01	0.000012
IDLEX	2023	Annual	FRESNO	LHDT2	DSL	ROG	0.1098	0.00	0.000010
IDLEX	2023	Annual	FRESNO	MHDT	DSL	ROG	0.0656	0.02	0.000054
IDLEX	2023	Annual	FRESNO	HHDT	DSL	NO _x	70.4062	67.12	0.147977
IDLEX	2023	Annual	FRESNO	LHDT1	DSL	NO _x	2.2570	0.11	0.000239
IDLEX	2023	Annual	FRESNO	LHDT2	DSL	NO _x	2.2218	0.09	0.000193
IDLEX	2023	Annual	FRESNO	MHDT	DSL	NO _x	4.7589	1.77	0.003900
IDLEX	2023	Annual	FRESNO	HHDT	DSL	CO	86.1079	82.09	0.180979
IDLEX	2023	Annual	FRESNO	LHDT1	DSL	CO	0.9097	0.04	0.000096
IDLEX	2023	Annual	FRESNO	LHDT2	DSL	CO	0.9097	0.04	0.000079
IDLEX	2023	Annual	FRESNO	MHDT	DSL	CO	2.3434	0.87	0.001920
IDLEX	2023	Annual	FRESNO	HHDT	DSL	SO ₂	0.1335	0.13	0.000281
IDLEX	2023	Annual	FRESNO	LHDT1	DSL	SO ₂	0.0013	0.00	0.000000
IDLEX	2023	Annual	FRESNO	LHDT2	DSL	SO ₂	0.0021	0.00	0.000000
IDLEX	2023	Annual	FRESNO	MHDT	DSL	SO ₂	0.0072	0.00	0.000006
IDLEX	2023	Annual	FRESNO	HHDT	DSL	PM ₁₀	0.0285	0.03	0.000060
IDLEX	2023	Annual	FRESNO	LHDT1	DSL	PM ₁₀	0.0277	0.00	0.000003
IDLEX	2023	Annual	FRESNO	LHDT2	DSL	PM ₁₀	0.0278	0.00	0.000002
IDLEX	2023	Annual	FRESNO	MHDT	DSL	PM ₁₀	0.0043	0.00	0.000003
IDLEX	2023	Annual	FRESNO	HHDT	DSL	PM _{2.5}	0.0273	0.03	0.000057
IDLEX	2023	Annual	FRESNO	LHDT1	DSL	PM _{2.5}	0.0265	0.00	0.000003
IDLEX	2023	Annual	FRESNO	LHDT2	DSL	PM _{2.5}	0.0266	0.00	0.000002
IDLEX	2023	Annual	FRESNO	MHDT	DSL	PM _{2.5}	0.0041	0.00	0.000003

For Weighted Average for Project (5-25 MPH)

	NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
Weighted Average Using Project Truck Fleet Percentages										
HHDT	8.088757757	0.009694615	0.010132962	2441.943056	0.003135125	0.383839442	0.067498371	0.076841758	0.965736958	0.023070267
LHDT1	2.076262497	0.045874467	0.047948707	804.8807383	0.018514971	0.126516043	0.398616418	0.45379829	1.733694932	0.007609018
LHDT2	1.750154783	0.042522807	0.0444455	887.6611637	0.018069387	0.139527974	0.389023254	0.442877111	1.695415799	0.00839159
MHDT	4.097565939	0.004641739	0.004851618	1656.715534	0.001403645	0.260412611	0.030220084	0.034403266	0.371402128	0.015651827
HHDT	7.711377919	0.009242314	0.00966021	2328.014551	0.002988856	0.365931468	0.064349245	0.073256717	0.920680639	0.021993927
LHDT1	0.099877718	0.002206772	0.002306552	38.71844297	0.000890655	0.006086	0.019175272	0.021829772	0.083398652	0.000366029
LHDT2	0.068883092	0.001673625	0.001749299	34.9368217	0.00071118	0.005491582	0.015311288	0.017430884	0.066728659	0.000330279
MHDT	1.523135504	0.001725414	0.00180343	615.8295648	0.000521759	0.096799832	0.011233323	0.012788284	0.138056538	0.005818052
Total	9.403274232	0.014848124	0.015519491	3017.499381	0.005112449	0.474308881	0.110069128	0.125305656	1.208864488	0.028508287
Weighted Average	6.6570668	0.010511759	0.010987055	2136.244722	0.003619369	0.335787921	0.07792366	0.08871039	0.855818032	0.020182499
Total Trucks per Day—HHDT	0.953345143									
Total Trucks per Day—LHDT1	0.048104571									
Total Trucks per Day—LHDT2	0.039358286									
Total Trucks per Day—MHDT	0.371717143									
Total	1.412525143									

For Weighted Average for Project (5 MPH)

	NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
Weighted Average Using Project Truck Fleet Percentages										
HHDT	13.08445167	0.014823507	0.01549376	3468.021017	0.006759906	0.545124609	0.145538919	0.16568498	2.058443973	0.032764143
LHDT1	2.037385805	0.073505272	0.076828855	1229.7033	0.036309545	0.193292234	0.781723133	0.889939814	3.344059139	0.011625118
LHDT2	1.763058599	0.066305075	0.069303096	1292.234948	0.03597013	0.203121338	0.774415729	0.88162082	3.330980185	0.012216267
MHDT	6.732713845	0.007133996	0.007456564	2367.151421	0.002993835	0.372083239	0.06445645	0.073378762	0.792451862	0.022363673
HHDT	12.47399845	0.014131918	0.014770901	3306.220992	0.006444523	0.519691898	0.138748821	0.157954971	1.962407563	0.031235537
LHDT1	0.098007571	0.00353594	0.003695819	59.15435025	0.001746655	0.00929824	0.037604456	0.042810173	0.160864532	0.000559221
LHDT2	0.069390964	0.002609654	0.002727651	50.86015228	0.001415723	0.007994508	0.030479676	0.034699084	0.13110167	0.000480811
MHDT	2.502665154	0.002651829	0.002771733	879.9107627	0.00111286	0.138309718	0.023959568	0.027276144	0.294567942	0.008312961
Total	15.14406214	0.02292934	0.023966103	4296.146258	0.010719761	0.675294364	0.230792521	0.262740373	2.548941707	0.04058853
Weighted Average	10.72126908	0.016232872	0.016966851	3041.465336	0.007589076	0.478075996	0.163390027	0.186007572	1.804528379	0.028734731
Total Trucks per Day—HHDT	0.953345143									
Total Trucks per Day—LHDT1	0.048104571									
Total Trucks per Day—LHDT2	0.039358286									
Total Trucks per Day—MHDT	0.371717143									
Total	1.412525143									

For Weighted Average for Project (Idle)

	PM10_IDLEX
Weighted Average Using Project Truck Fleet Percentages	
HHDT	0.028509555
LHDT1	0.027738176
LHDT2	0.027771248
MHDT	0.004255894
HHDT	0.027179446
LHDT1	0.001334333
LHDT2	0.001093029
MHDT	0.001581989
Total	0.031188796
Weighted Average	0.022080171
Total Trucks per Day—HHDT	0.953345143
Total Trucks per Day—LHDT1	0.048104571
Total Trucks per Day—LHDT2	0.039358286
Total Trucks per Day—MHDT	0.371717143
Total	1.412525143

Diesel PM Screening Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in grey areas.		
Author (Prioritization Calculator)	Matthew Cegielski	Last Update	October 13, 2016
Date Updated with Project Emissions	June 24, 2022		
Facility:	Alluvial Residential Development Project(Diesel PM Screening Analysis for Project Operations)		
ID#:	—		
Project #:	Truck Run and Idle Emissions (Project Operations)		
Unit and Process#	Mobile Source Diesel		

Operating Hours hr/yr	258.00	(operating hours assumed based on idle hours)				
Receptor Proximity and Proximity Factors	Cancer Score	Chronic Score	Acute Score	Max Score	Receptor proximity is in meters. Prioritization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.	
	0 < R < 100	1.000	8.49E-02	4.27E-03		0.00E+00
100 ≤ R < 250	0.250	2.12E-02	1.07E-03	0.00E+00		2.12E-02
250 ≤ R < 500	0.040	3.40E-03	1.71E-04	0.00E+00		3.40E-03
500 ≤ R < 1000	0.011	9.34E-04	4.70E-05	0.00E+00		9.34E-04
1000 ≤ R < 1500	0.003	2.55E-04	1.28E-05	0.00E+00		2.55E-04
1500 ≤ R < 2000	0.002	1.70E-04	8.55E-06	0.00E+00		1.70E-04
2000 < R	0.001	8.49E-05	4.27E-06	0.00E+00		8.49E-05

Enter the unit's CAS# of the substances emitted and their amounts. Prioritization score for each substance generated below. Totals on last row.

Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	9901	3.68E-02	1.42E-04	1.42E-04	8.49E-02	4.27E-03	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
				0.00E+00	0.00E+00	0.00E+00	0.00E+00
Totals					8.49E-02	4.27E-03	0.00E+00

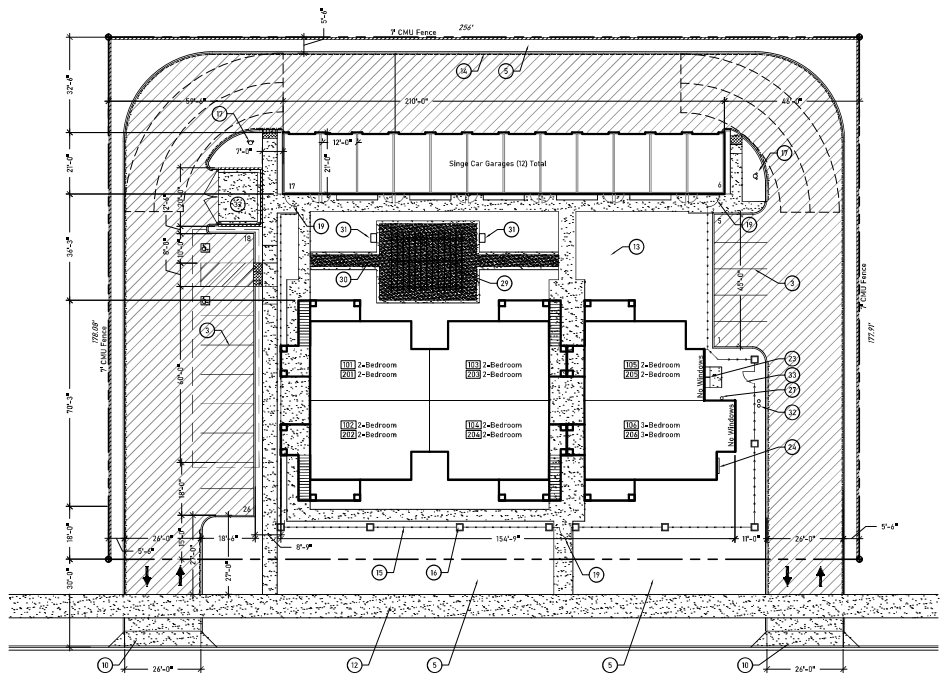
Proposed 1491 Alluvial Residential Development Project—Clovis, CA

Lat, Long 36°50'42.57"N, 119°41'25.35"W
 City Clovis
 County Fresno
 UTM 11 S
 260111.51 m E
 4081074.24 m N
 Utility PG&E

Apartment Building

Multi-Family (12 DU's)	Number	Area
Dwelling Units 2b	10	
	Living Area	1,040
	Patio Area	120
	Porch Area	80
	<i>2b Unit Total</i>	<i>1,240</i>
<i>Total for All 2b Units (10 Units)</i>		<i>12,400</i>
3b	2	
	Living Area	1,330
	Patio Area	120
	Porch Area	80
	<i>3b Unit Total</i>	<i>1,530</i>
<i>Total for All 3b Units (2 Units)</i>		<i>3,060</i>
	Gros Building Area	15,460 sq ft
~10% to Add as a Potential Maximum Building Area		1,550 sq ft
Total Buildings Area Assessed in the Analysis		17,010 sq ft
Garage Building Area (12 spaces)		3,160 sq ft
Open Space Provided		5,400 sq ft

Site Coverage		CalEEMod Representation
Apartment Complex	17,010	Apartments Low Rise
Garage (12 Spaces)	3,160	Enclosed Parking Structure
Covered Spaces (7 Covered)	2,800	Unenclosed Parking Structure
Open Space	5,400	Park
Remaining Represented as Parking Lot	16,932	
	Site Area 45,302 sq ft	
	Checking Site Area 45,302	



ALLUVIAL AVE

Conceptual Site Plan
1" = 20'-0"



Site Legend	
Symbol	Description
	Existing Curb/Gutter
	Street Centerline
	Property Line
	Proposed Concrete Pavement
	(E) Area to be demolished
	Proposed Asphalt Concrete
	Building Footprint
	CMU Wall
	SETBACK
	Curb/Gutter
	Path of Travel
	Demo
	Marked Fire Lane
	Existing Street Tree Gleba Billow (Maidenhair Tree)
	New Tree Phoenix Dactylaria (Date Palm)

Project Data	
Project Description: New Multi-Family Residential project with 12 dwelling units. Demolish existing site, rezone property.	
Site Data	
Site Address:	1417 Alluvial Ave Clovis, CA 93311
APN:	563-142-95
Zoning:	Existing: R-1 Proposed: R-2
General Plan Use:	Existing: none Proposed: Medium Density Residential (12 - 15 DU/AC)
Site Area:	45,302 SF
Site Building Coverage:	25%
Parking Data:	Garage Spaces: 12 Covered Carport Spaces: 7 Uncovered Spaces: 7 Total Parking: 26 Total Parking Required: 26
Open space:	Open space provided: 5,400 sf Open space required: 3,100 sf

Building Data:	
Apartment Building Date:	Construction Type: 1B Sprinkler System: NFPA-100 No. of Stories: 2 Occupancy: R-2 Use: Multi-Family (12 DU/As)
Dwelling Units:	Type 2b (2-bedroom): 10 Type 2b (1-bedroom): 2
Type 2b Unit Areas:	Living Area: 1,040 SF Patio Area: 120 SF Porch Area: 80 SF
Type 2b Unit Areas:	Living Area: 1,330 SF Patio Area: 120 SF Porch Area: 80 SF
Apartment Building Area (SF):	2b Living Area: 1,040 x 10 = 10,400 2b Living Area: 1,330 x 2 = 2,660 Total Living Area: 13,060
	2b Patio Area: 120 x 10 = 1,200 2b Porch Area: 80 x 10 = 800 2b Patio Area: 120 x 2 = 240 2b Porch Area: 80 x 2 = 160 Total non-Living Area: 2,400
	Gross Building Area: 15,460
Garage Building Date:	Construction Type: 1B Sprinkler System: none No. of Stories: 1 Occupancy: U Use: Individual Private Garages
Garage Building Area (SF):	Total Garage Area: 3,160 SF

Keynotes	
Sym	Description
(1)	(N) Concrete trash enclosure per city standards.
(2)	(N) Concrete landing.
(3)	(N) Parking stall striping.
(4)	(N) A/C Pavement, Refer to Civil Engineering drawings for additional information.
(5)	(N) Landscape planter area, Refer to Landscape drawings for additional information.
(6)	(N) Van accessible parking stall sign.
(7)	(N) Accessible parking stall sign.
(8)	(N) Accessible parking stalls and access aisle.
(9)	(N) Accessible curb ramp, Refer to Civil Engineering drawings for additional information.
(10)	(N) Concrete drive approach per City Standards.
(11)	(E) Electrical Transformer
(12)	(E) Sidewalk
(13)	(N) Grass lawn area.
(14)	(N) 4" concrete curb, Refer to Civil Engineering drawings for additional information.
(15)	(N) 6" tall steel picket fence.
(16)	(N) Decorative fence pilaster.
(17)	(N) Private fire hydrant
(18)	(E) Street Light.
(19)	(N) 48" wide accessible gate, Provide fire department bypass lockbox. Provide egress hardware.
(20)	(N) Accessible Tow-Away sign.
(21)	(N) Landscape Irrigation Valves.
(22)	(N) Sanitary Sewer point of connection, Contractor to confirm location and depth of existing laterals.
(23)	(N) Electrical Main Location
(24)	(N) Gas Meter Location.
(25)	--
(26)	--
(27)	(N) Fire Sprinkler Riser.
(28)	(N) Fire Sprinkler Water Service and Detector Check Valve.
(29)	(N) Trellis structure
(30)	(N) Decomposed Granite walking surface
(31)	(N) B80 station.
(32)	(N) FDC/PPV location.
(33)	(N) 48" Service gate. Provide fire department bypass lockbox.

Crawford
Architecture
& Planning

PROJECT
Alluvial &
Sunnyside
Apts.
1417 Alluvial Ave
Clovis, CA 93311

NOTES:

DATE: March 01, 2022
PROJECT NO.: 2761
REVISION: DATE

Architectural
Site Plan

SCALE: 1" = 20'

A0.1

705

Alluvial Development Project Construction Assumptions
Proposed 1491 Alluvial Residential Development Project—Clovis, CA

Construction Phase				Num Days		
Phase Name	Start Date	End Date	Week	Num Days	Notes	
Demolition	8/1/2023	8/28/2023	5	20	Default duration	
Site Preparation	8/29/2023	8/30/2023	5	2	Default duration	
Grading	8/31/2023	9/5/2023	5	4	Default duration	
Paving	9/6/2023	9/19/2023	5	10	Default duration	
Building Construction	9/20/2023	1/18/2024	5	87	Reduced from	
Architectural Coating	1/19/2024	2/1/2024	5	10	Default duration	

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8	81	0.73
Demolition	Rubber Tired Dozers	1	8	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8	97	0.37
Site Preparation	Graders	1	8	187	0.41
Site Preparation	Rubber Tired Dozers	1	7	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8	97	0.37
Grading	Graders	1	8	187	0.41
Grading	Rubber Tired Dozers	1	8	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7	97	0.37
Paving	Cement and Mortar Mixers	1	6	9	0.56
Paving	Pavers	1	6	130	0.42
Paving	Paving Equipment	1	8	132	0.36
Paving	Rollers	1	7	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8	97	0.37
Building Construction	Cranes	2	6.9	231	0.29
Building Construction	Forklifts	2	6.9	89	0.20
Building Construction	Generator Sets	2	9.2	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	6.9	97	0.37
Building Construction	Welders	6	9.2	46	0.45
Architectural Coating	Air Compressors	1	6	78	0.48

Trips and VMT	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip
Phase Name	Number	Number	Number	Length	Length	Length
Demolition	13	0	120	10.8	7.3	20
Site Preparation	8	0	6	10.8	7.3	20
Grading	10	0	258	10.8	7.3	20
Paving	13	4	10	10.8	7.3	20
Building Construction	21	6	28	10.8	7.3	20
Architectural Coating	4	0	2	10.8	7.3	20

Proposed 1491 Alluvial Residential Development Project—Clovis, CA

Estimation of Demolition Debris

Buildings

Debris Generation for Buildings (cy)

Approximate Size	Area (sq ft)	~H (ft)	Stories	Cubic Feet	/27	*0.33	Cubic Yards
Building	5,810	15	1.5	130725	4841.667	1597.7500	1,598
Total Building	5,810						1,598 cy

Removal of Hardscape

Approximate Size	15,000	sq-feet
Thickness	5	inches
Volume	6,250	cu-ft
Volume	231	cy

Conversion Weight of Impervious: 2,700 lbs/cy

Weight of Impervious: 312.50 tons of debris

Conversion of Tons of Debris to Cubic Yards

Conversion Factor	1 cy = 0.5 tons
Impervious	625.00 cy

Total

Removal of surfaces	625	cy
Total Building	1,598	cy
Total	2,223	cy

Removal of surfaces	313 tons of debris
Total Building	799 tons of debris
Total	1,111 tons of debris

Notes: cy = cubic yards; ft= feet; ~ = approximate; lbs = pounds; sq-foot = square feet; cu-ft = cubic feet

Source of conversion factors:

Federal Emergency Management Agency (FEMA). 2010. Debris Estimating Field Guide. September. Website: https://www.fema.gov/pdf/government/grant/pa/fema_329_debris_estimating.pdf.

DownEaster. 2015. Material Weight – Pounds per Cubic Yard. June 9. Website: https://downeastermfg.com/wp-content/uploads/2015/.../Cubic_Yardage_Chart-D.pdf.

Alluvial Residential Development Project - Daily Truck Trip Calculations

	Weekday	Saturday	Sunday											
Project Total (Trips per Day)	87.84	97.68	75.36											
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	Total
2023 Residential Fleet Mix	0.5305	0.2058	0.1673	0.055	0.0011	0.0009	0.0085	0.0218	0	0.0043	0.0025	0.0004	0.0019	1
Project Daily Trips (Weekday)	46.59912	18.07747	14.69563	4.8312	0.096624	0.079056	0.74664	1.914912	0	0.377712	0.2196	0.035136	0.166896	87.84
Project Daily Trips (Saturday)	51.81924	20.10254	16.34186	5.3724	0.107448	0.087912	0.83028	2.129424	0	0.420024	0.2442	0.039072	0.185592	97.68
Project Daily Trips (Sunday)	39.97848	15.50909	12.60773	4.1448	0.082896	0.067824	0.64056	1.642848	0	0.324048	0.1884	0.030144	0.143184	75.36
Trucks	LHD1	LHD2	MHD	HHD	Total									
Project Daily Trips (Weekday)	0.096624	0.079056	0.74664	1.914912	2.837232									
Project Daily Trips (Saturday)	0.107448	0.087912	0.83028	2.129424	3.155064									
Project Daily Trips (Sunday)	0.082896	0.067824	0.64056	1.642848	2.434128									
Total Weekly	0.673464	0.551016	5.20404	13.34683	19.77535									
Weighted Average (Daily Truck Trips)	0.096209	0.078717	0.743434	1.90669	2.82505									

APPENDIX B

Biological Resource Assessment

May 25, 2022

Nicholas Crawford, AIA
Crawford Architecture & Planning
1755 Herndon Avenue, Suite 103
Clovis, CA 93611

Subject: Biological Resources Assessment for the Proposed 1491 Alluvial Avenue Project located at 1491 Alluvial Avenue, Clovis, California

Dear Mr. Crawford:

The purpose of this Biological Resources Technical Memorandum is to describe and document potential impacts to biological resources associated with the proposed multi-family apartment units (project) on one legal parcel (Assessor’s Parcel Number 563-142-35) in Clovis, Fresno County, California. This technical information is provided for project review under the 2022 State California Environmental Quality Act (CEQA) Guidelines and other relevant federal, State, and local regulations. This document provides a biological resources impact analysis that reflects the current environmental setting, project design, and regulatory context.

PROJECT DESCRIPTION

The 1.0-acre project site is located at 1491 Alluvial Avenue in the City of Clovis (City) on one legal parcel (Assessor’s Parcel Number 563-142-35). The “project site” discussed in this memorandum refers to all areas within the 1.0-acre property where temporary and permanent ground disturbance would occur.

The proposed project would develop 12 multi-family apartment units and would require a General Plan Amendment and rezone from single-family residential to multi-family residential.

PROJECT SETTING

The subject property is located in Section 33 of Township 12 South and Range 21 East on the 7.5-minute series United States Geological Survey (USGS) *Clovis, California* quadrangle (refer to Attachment A: Figure 1, Regional Location). The project site is relatively flat with almost no topographic variation and is at approximately 374 feet (114 meters) above mean sea level in elevation. Existing residential developments, a church, and a paved road surround the parcel. The project site is strictly upland in nature; no drainage features, riparian areas, or wetlands are present within the project parcel or in the immediate vicinity.

The project site is currently developed with a single-family residential home. According to historic aerial imagery, the project site has remained in its current condition for more than 20 years. Recent developments along the margins of the City of Clovis and expansion into ranch land settlements have brought increased urban development throughout lands previously used for agriculture. Some lands in the vicinity of the project site are fallow or active agricultural lands; however, most of the

lands are a mixture of residential, commercial, and industrial uses (refer to Figure 2, Project Site and Surrounding Land Uses). There are no undisturbed open spaces in the vicinity of the project site.

METHODS

Literature Review and Records Search

LSA Biologist Kelly McDonald conducted a literature review and records search on May 10, 2022, to identify the existence and potential for occurrence of sensitive or special-status plant and animal species¹ in the project vicinity. Federal and State lists of sensitive species were also examined. Current electronic database records reviewed included the following:

- **California Natural Diversity Data Base information (CNDDDB – RareFind 5)**, which is administered by the California Department of Fish and Wildlife (CDFW), formerly known as the California Department of Fish and Game. This database covers sensitive plant and animal species, as well as sensitive natural communities that occur in California. Records from nine USGS quadrangles surrounding the project area (*Malaga, Sanger, Clovis, Round Mountain, Friant, Academy, Fresno South, Lanes Bridge, and Fresno North*), along with a query of records within a 5-mile radius of the project parcel.
- **California Native Plant Society’s (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants**, which uses four specific categories or “lists” of sensitive plant species to assist with the conservation of rare or endangered botanical resources. Records from the nine USGS quadrangles surrounding the project area were obtained from this database.
- **United States Fish and Wildlife Service’s (USFWS) Information for Planning and Conservation (IPaC) Online System**, which lists all proposed, candidate, threatened, and endangered species managed by the Endangered Species Program of the USFWS that have the potential to occur on or near a particular site. This database also lists all designated critical habitats, national wildlife refuges, and migratory birds that could potentially be impacted by activities from a proposed project. An IPaC Trust Resource Report (USFWS 2022a) was generated for the project site.
- **Designated and Proposed USFWS Critical Habitat Polygons** were reviewed to determine whether critical habitat has been designated or proposed within or in the vicinity of the project site (USFWS 2022b).
- **The USFWS National Wetlands Inventory** was reviewed to determine whether any wetlands or surface waters of the United States have been previously-identified in the project area (USFWS 2022c).

¹ For the purposes of this memorandum, the term “special-status species” refers to those species that are listed or proposed for listing under the CESA and/or FESA, California Fully Protected Species, California Species of Special Concern, and California Special Animals. It should be noted that “Species of Special Concern” and “California Special Animal” are administrative designations made by the CDFW and carry no formal legal protection status. However, Section 15380 of the CEQA Guidelines indicates that these species should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

- **eBird:** eBird is a real-time, online checklist program launched in 2002 by the Cornell Lab of Ornithology and National Audubon Society. It provides rich data sources for basic information on bird abundance and distribution at a variety of spatial and temporal scales. eBird occurrence records within the project site and a 5-mile radius around the project site were reviewed in March 2022 (eBird 2022).

In addition to the databases listed above, historic and current aerial imagery, existing environmental reports for developments in the project vicinity, and local land use policies related to biological resources were reviewed.

RESULTS

This section summarizes the environmental setting and provides further analysis of the literature and records search. Discussions regarding the potentially occurring special-status biological resources, and habitat connectivity are presented below.

Based on the analysis of aerial imagery and photographs (Google Earth 2022), the project site consists of a flat, upland area supporting ornamental landscaping and one single-family residential home. Examples of the ornamental landscaping include trees of heaven (*Ailanthus altissima*), pines (*Pinus sp.*), Mexican fan palm (*Washingtonia robusta*), trailing lantana (*Lantana montevidensis*), and red gum eucalyptus (*Eucalyptus camaldulensis*), among others.

Habitat within the project site is considered low quality with respect to most native wildlife species and the project site is not expected to support any special-status species. Attachment B contains the compiled results of the CNPS, CNDDDB, and IPaC records search from a nine-quad radius of the project site. A nine USGS quadrangle search covers a large, variable geographic and topographic area containing numerous habitat types not found within or around the project site. There is no designated or proposed critical habitat for any federally-listed species within the project site.

Special-Status Natural Communities

The CNDDDB search identified occurrences of four special-status natural (i.e., plant) communities within the nine-quad search area: Great Valley Mixed Riparian Forest, Northern Claypan Vernal Pool, Northern Hardpan Vernal Pool, and Sycamore Alluvial Woodland. No special-status natural communities or conservation areas exist within the project site or in adjacent parcels. The project site is completely isolated and distant from all special-status natural communities that occur in the region.

Special-Status Plants

The literature review identified 16 special-status plant species that are known to occur within a nine-quad radius of the project site (refer to Attachment B). The majority of the rare plant species that were identified in the databases have specialized habitat requirements (i.e., they occur in vernal pools, woodland, riparian, or wetland habitats, etc.) that do not occur within the project site. Historic anthropogenic disturbances have greatly altered the natural hydrologic regimes and have either eliminated or greatly impacted the pre-settlement habitats needed to support the special-

status plant species identified in the CNDDDB and CNPS queries. Therefore, no special-status plant species are expected to occur or be impacted by the proposed project.

Special-Status Animals

The literature review identified 35 special-status animal species within the nine-quad radius of the project site (refer to Attachment B). There are no records of special-status animal species occurring within the project site. The special-status animal species identified in the literature review are not anticipated to occur on the project site due to historic and ongoing anthropogenic disturbances and lack of suitable habitat.

The project site does support suitable nesting habitat for a variety of bird species, which are protected while nesting under the federal Migratory Bird Treaty Act and California Fish and Game Code.

Wetlands and Potential Jurisdictional Drainages

There are no records of wetlands or potential jurisdictional drainage features existing within the project parcel. No potentially jurisdictional drainage features, wetlands, or riparian areas are present on the project site.

Regional Habitat Conservation Plans and Local Policies

The City of Clovis and Fresno County currently do not have a regional Natural Community Conservation Plan (NCCP) or Habitat Conservation Plan (HPC).

The 2014 General Plan for the City of Clovis outlines local relevant policies related to biological resources. Below is the list of applicable polices from the City of Clovis General Plan:

- Policy 2.6: Biological resources. Support the protection of biological resources through the conservation of high-quality habitat area.
- Policy 2.7: Native plants. Encourage the use of native and climate-appropriate plant species and prohibit the use of plant species known to be invasive.

The City of Clovis Municipal Code *Chapter 9.30 Tree Protection Standards* outlines tree removal process. Several trees are present within the project site, however based on the *Chapter 9.30.050 Exemptions*, any tree located on developed single-family residential property is exempt from the tree removal approval process. There are protected trees that are not exempt from the tree removal process which include heritage trees, twelve inches or greater in diameter (single-family residential property exempted), multi-trunk trees (single-family residential property exempted), parkway trees, and trees required by a site plan review. Based on the current design, the project would not be required to apply for a tree removal permit due to the zoning classification exemption.

The project does not conflict with any applicable biological resources or policies outlined in the 2000 Fresno County General Plan.

IMPACT FINDINGS

The following subsections provide impact conclusions with respect to the 2022 CEQA Appendix G Checklist Form questions.

Special-Status Species

No special-status plant or animal species are likely to occur on site due to lack of suitable habitat and historical anthropogenic uses. Attachment B the compiled results of the CNPS, CNDDDB, and IPaC records search from a 5-mile radius around the project site. No species-status plants or animals are expected to occur within the proposed construction footprint. No special-status species are anticipated to be adversely impacted by the project, and no mitigation is required.

Nesting Birds

The project site and immediate vicinity contain vegetation and other features that provide suitable nesting habitat for a variety of native and migratory bird species, which are protected while nesting. To ensure compliance with the Federal Migratory Bird Treaty Act and California Fish and Game Code Sections 3500–3516, pre-construction nesting bird surveys are recommended to occur prior to any vegetation clearing or construction activities planned to occur during the nesting bird season (February 15 through September 30). With successful implementation of the recommended impact avoidance measures (see below), impacts to nesting birds would be avoided.

Special-Status Natural Communities

The project would not impact riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or USFWS. No mitigation is required.

Wetlands

The project would not directly or indirectly impact any jurisdictional wetlands or drainage features. No mitigation is required.

Wildlife Movement

The project is surrounded by existing residential homes and paved roads. The wildlife species that occur in the project vicinity are adapted to the urban-wildland interface. The noise, vibration, light, dust, or human disturbance within construction areas would only temporarily deter wildlife from using areas in the immediate vicinity of construction activities. These indirect effects could temporarily alter migration behaviors, territories, or foraging habitats in select areas. However, because these are temporary effects, it is likely that wildlife already living and moving in close proximity to urban development would alter their normal functions for the duration of the project construction and then re-establish these functions once all temporary construction effects have been removed. The proposed project would not place any permanent barriers within any known wildlife movement corridors or interfere with habitat connectivity. No adverse effects on wildlife movement are anticipated, and no mitigation is required.

Regional Habitat Conservation Plans and Local Policies

The proposed project would not conflict with any regional habitat conservation plan or local policies related to the protection and conservation of biological resources. No mitigation is required.

RECOMMENDED AVOIDANCE MEASURE

The following regulatory compliance measure is recommended to be implemented to avoid impacts on migratory and nesting birds.

- BIO-1 Nesting Bird Surveys and Active Nest Avoidance.** Initial ground disturbance and vegetation removal should take place outside of the active nesting bird season (i.e., February 15- September 30), when feasible. Should project construction activities commence during this period, a qualified biologist should conduct a nesting bird survey prior to the onset of the work activities to ensure that birds are not engaged in active nesting within or immediately adjacent to the project site. If nesting birds are discovered during preconstruction surveys, the biologist should identify an appropriate buffer (i.e., up to 500 feet depending on the circumstances and specific bird species) where no clearing, grading, or construction activities with potential to have direct or indirect impacts on the nesting birds are allowed to take place until after the birds have fledged from the nest, or the qualified biologist has determined that the nest is no longer active.

CONCLUSION

The project would not result in any impacts to sensitive habitat areas, and project implementation is not likely to adversely affect any special-status species. With implementation of the recommended regulatory compliance measure for the avoidance of impacts to nesting birds, no adverse effects to protected biological resources are anticipated.

Sincerely,

LSA Associates, Inc.

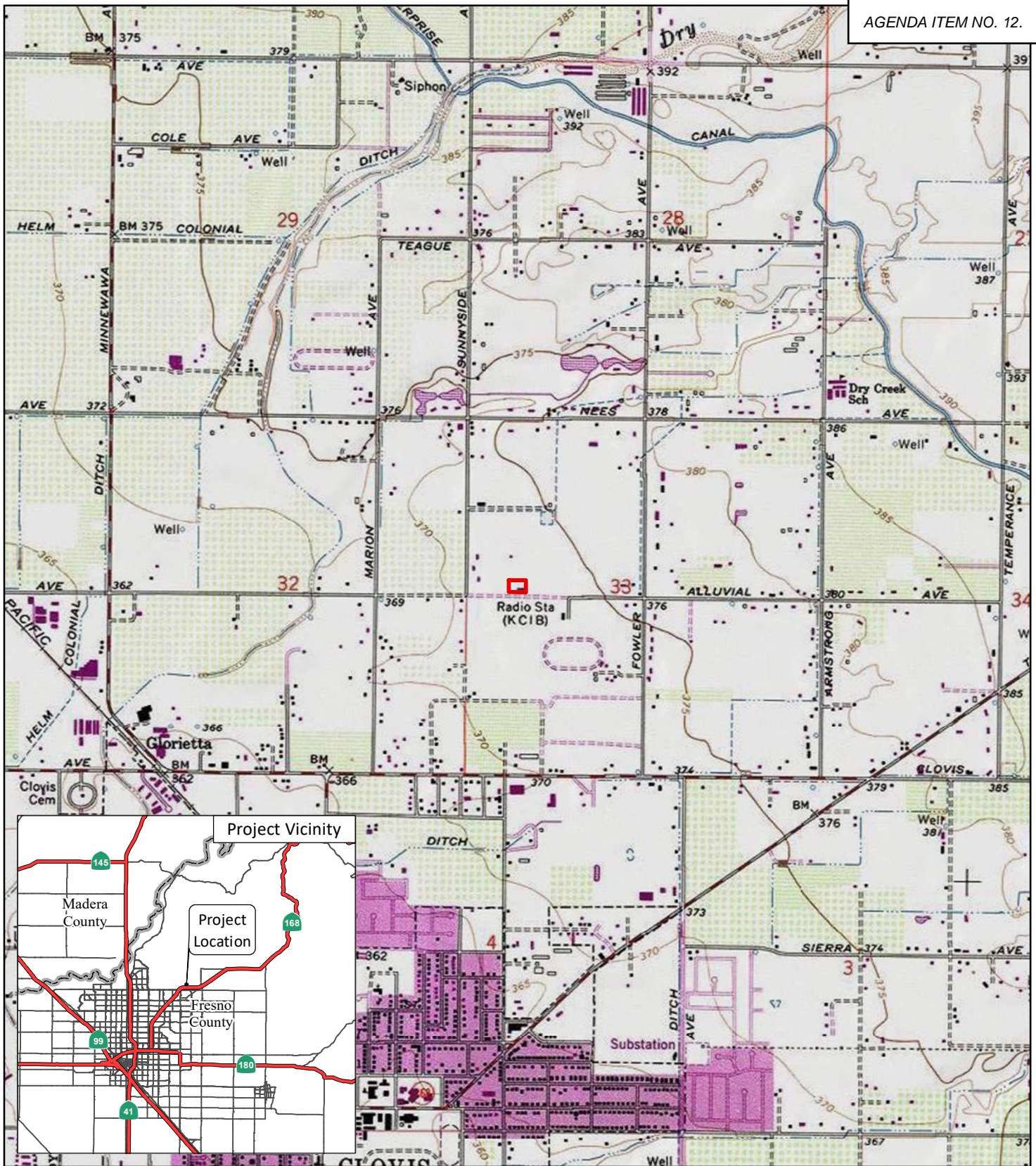


Kelly McDonald
Biologist

Attachments: A: Figures
B: Literature Review Species Lists

ATTACHMENT A

FIGURES

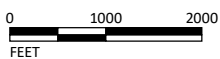


LSA

LEGEND

Project Site

FIGURE 1



SOURCE: USGS 7.5' Quad.- Clovis, CA (1981)

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1491 Alluvial Avenue Project
Project Location and Vicinity

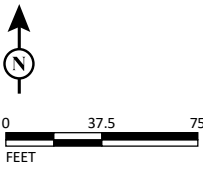


ALLUVIAL AVENUE

LSA

LEGEND
 Project Site

FIGURE 2



SOURCE: Google Maps, 2022
 R:\SLM2201\GIS\MXD\Project Site.mxd (5/9/2022)



ATTACHMENT B

LITERATURE REIVIEW SPECIES LISTS



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database

AGENDA ITEM NO. 12.



Query Criteria: Quad (Malaga (3611966) OR Sanger (3611965) OR Clovis (3611976) OR Round Mountain (3611975) OR Friant (3611986) OR Academy (3611985) OR Fresno South (3611967) OR Fresno North (3611977) OR Lanes Bridge (3611987))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
<i>Ambystoma californiense</i> pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
<i>Anniella pulchra</i> Northern California legless lizard	ARACC01020	None	None	G3	S3	SSC
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G4	S3	SSC
<i>Ardea alba</i> great egret	ABNGA04040	None	None	G5	S4	
<i>Arizona elegans occidentalis</i> California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	None	G2	S1S2	
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<i>Branchinecta mesovallensis</i> midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Calycadenia hooveri</i> Hoover's calycadenia	PDAST1P040	None	None	G2	S2	1B.3
<i>Carex comosa</i> bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
<i>Castilleja campestris</i> var. <i>succulenta</i> succulent owl's-clover	PDSCR0D3Z1	Threatened	Endangered	G4?T2T3	S2S3	1B.2
<i>Caulanthus californicus</i> California jewelflower	PDBRA31010	Endangered	Endangered	G1	S1	1B.1
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2T3	S3	
<i>Dipodomys nitratoides exilis</i> Fresno kangaroo rat	AMAFD03151	Endangered	Endangered	G3TH	SH	
<i>Downingia pusilla</i> dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database

AGENDA ITEM NO. 12.



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Efferia antiochi</i> Antioch efferian robberfly	IIDIP07010	None	None	G1G2	S1S2	
<i>Egretta thula</i> snowy egret	ABNGA06030	None	None	G5	S4	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eremophila alpestris actia</i> California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
<i>Eryngium spinosepalum</i> spiny-sepaled button-celery	PDAP10Z0Y0	None	None	G2	S2	1B.2
<i>Euderma maculatum</i> spotted bat	AMACC07010	None	None	G4	S3	SSC
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
<i>Gonidea angulata</i> western ridged mussel	IMBIV19010	None	None	G3	S1S2	
Great Valley Mixed Riparian Forest Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	S2.2	
<i>Imperata brevifolia</i> California satintail	PMPOA3D020	None	None	G4	S3	2B.1
<i>Lagophylla dichotoma</i> forked hare-leaf	PDAST5J070	None	None	G2	S2	1B.1
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G3G4	S4	
<i>Leptosiphon serrulatus</i> Madera leptosiphon	PDPLM09130	None	None	G3	S3	1B.2
<i>Linderiella occidentalis</i> California linderiella	ICBRA06010	None	None	G2G3	S2S3	
<i>Lytta moesta</i> moestan blister beetle	IICOL4C020	None	None	G2	S2	
<i>Lytta molesta</i> molestan blister beetle	IICOL4C030	None	None	G2	S2	
<i>Metapogon hurdi</i> Hurd's metapogon robberfly	IIDIP08010	None	None	G1G2	S1S2	
<i>Mylopharodon conocephalus</i> hardhead	AFCJB25010	None	None	G3	S3	SSC
<i>Nannopterum auritum</i> double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
<i>Navarretia myersii ssp. myersii</i> pincushion navarretia	PDPLM0C0X1	None	None	G2T2	S2	1B.1
Northern Claypan Vernal Pool Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	
Orcuttia inaequalis San Joaquin Valley Orcutt grass	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
Orcuttia pilosa hairy Orcutt grass	PMPOA4G040	Endangered	Endangered	G1	S1	1B.1
Perognathus inornatus San Joaquin pocket mouse	AMAFD01060	None	None	G2G3	S2S3	
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Pseudobahia bahiifolia Hartweg's golden sunburst	PDAST7P010	Endangered	Endangered	G1	S1	1B.1
Pseudobahia peirsonii San Joaquin adobe sunburst	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Spea hammondii western spadefoot	AAABF02020	None	None	G2G3	S3	SSC
Sycamore Alluvial Woodland Sycamore Alluvial Woodland	CTT62100CA	None	None	G1	S1.1	
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Tuctoria greenei Greene's tuctoria	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Vulpes macrotis mutica San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S2	

Record Count: 55

CNPS Rare Plant Inventory

CALIFORNIA
NATIVE PLANT SOCIETY



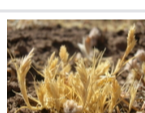
Search Results

16 matches found. Click on scientific name for details

Search Criteria: CRPR is one of [1A:1B:2A:2B:3] , 9-Quad include

[3611966:3611965:3611976:3611975:3611986:3611985:3611967:3611987:3611977]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
<u><i>Calycadenia hooveri</i></u>	Hoover's calycadenia	Asteraceae	annual herb	Jul-Sep	None	None	G2	S2	1B.3	No Photo Available
<u><i>Carex comosa</i></u>	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	None	None	G5	S2	2B.1	 Dean Wm. Taylor 1997
<u><i>Castilleja campestris</i></u> var. <u><i>succulenta</i></u>	succulent owl's-clover	Orobanchaceae	annual herb (hemiparasitic)	(Mar)Apr-May	FT	CE	G4? T2T3	S2S3	1B.2	No Photo Available
<u><i>Caulanthus californicus</i></u>	California jewelflower	Brassicaceae	annual herb	Feb-May	FE	CE	G1	S1	1B.1	No Photo Available
<u><i>Downingia pusilla</i></u>	dwarf downingia	Campanulaceae	annual herb	Mar-May	None	None	GU	S2	2B.2	No Photo Available
<u><i>Eryngium spinosepalum</i></u>	spiny-sepaled button-celery	Apiaceae	annual/perennial herb	Apr-Jun	None	None	G2	S2	1B.2	No Photo Available
<u><i>Imperata brevifolia</i></u>	California satintail	Poaceae	perennial rhizomatous herb	Sep-May	None	None	G4	S3	2B.1	 © 2020 Matt C. Berger
<u><i>Lagophylla dichotoma</i></u>	forked hare-leaf	Asteraceae	annual herb	Apr-May	None	None	G2	S2	1B.1	 © 2010 Chris Winchell
<u><i>Leptosiphon serrulatus</i></u>	Madera leptosiphon	Polemoniaceae	annual herb	Apr-May	None	None	G3	S3	1B.2	 © 2008 Chris Winchell
<u><i>Navarretia myersii</i></u> ssp. <u><i>myersii</i></u>	pincushion navarretia	Polemoniaceae	annual herb	Apr-May	None	None	G2T2	S2	1B.1	 © 2020

<u><i>Orcuttia inaequalis</i></u>	San Joaquin Valley Orcutt grass	Poaceae	annual herb	Apr-Sep	FT	CE	G1	S1	1B.1	No Photo Available
<u><i>Orcuttia pilosa</i></u>	hairy Orcutt grass	Poaceae	annual herb	May-Sep	FE	CE	G1	S1	1B.1	 © 2003 George W. Hartwell
<u><i>Pseudobahia bahiifolia</i></u>	Hartweg's golden sunburst	Asteraceae	annual herb	Mar-Apr	FE	CE	G1	S1	1B.1	No Photo Available
<u><i>Pseudobahia peirsonii</i></u>	San Joaquin adobe sunburst	Asteraceae	annual herb	Feb-Apr	FT	CE	G1	S1	1B.1	No Photo Available
<u><i>Sagittaria sanfordii</i></u>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	 ©2013 Debra L. Cook
<u><i>Tuctoria greenei</i></u>	Greene's tuctoria	Poaceae	annual herb	May-Jul(Sep)	FE	CR	G1	S1	1B.1	 ©2008 F. Gauna

Showing 1 to 16 of 16 entries

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CONTACT US

Send questions and comments to rareplants@cnps.org.

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CONTRIBUTORS

[The Calflora Database](#)
[The California Lichen Society](#)
[California Natural Diversity Database](#)
[The Jepson Flora Project](#)
[The Consortium of California Herbaria](#)
[CalPhotos](#)



Developed by
Rincon Consultants, Inc.

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Fresno County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

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NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
<p>Fresno Kangaroo Rat <i>Dipodomys nitratoides exilis</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/5150</p>	Endangered
<p>San Joaquin Kit Fox <i>Vulpes macrotis mutica</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2873</p>	Endangered

Birds

NAME	STATUS
<p>Yellow-billed Cuckoo <i>Coccyzus americanus</i> There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3911</p>	Threatened

Reptiles

NAME	STATUS
<p>Blunt-nosed Leopard Lizard <i>Gambelia silus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/625</p>	Endangered
<p>Giant Garter Snake <i>Thamnophis gigas</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482</p>	Threatened

Amphibians

NAME	STATUS
<p>California Tiger Salamander <i>Ambystoma californiense</i></p> <p>There is final critical habitat for this species. The location of the critical habitat is not available.</p> <p>https://ecos.fws.gov/ecp/species/2076</p>	Threatened

Fishes

NAME	STATUS
<p>Delta Smelt <i>Hypomesus transpacificus</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. The location of the critical habitat is not available.</p> <p>https://ecos.fws.gov/ecp/species/321</p>	Threatened

Insects

NAME	STATUS
<p>Monarch Butterfly <i>Danaus plexippus</i></p> <p>Wherever found</p> <p>No critical habitat has been designated for this species.</p> <p>https://ecos.fws.gov/ecp/species/9743</p>	Candidate

Crustaceans

NAME	STATUS
<p>Conservancy Fairy Shrimp <i>Branchinecta conservatio</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. The location of the critical habitat is not available.</p> <p>https://ecos.fws.gov/ecp/species/8246</p>	Endangered
<p>Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. The location of the critical habitat is not available.</p> <p>https://ecos.fws.gov/ecp/species/498</p>	Threatened

Flowering Plants

NAME	STATUS
------	--------

Greene's Tuctoria *Tuctoria greenei*

Endangered

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/1573>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around

your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, determine range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Common Yellowthroat *Geothlypis trichas sinuosa*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/2084>

Breeds May 20 to Jul 31

Golden Eagle *Aquila chrysaetos*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Breeds Jan 1 to Aug 31

Nuttall's Woodpecker *Picoides nuttallii*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9410>

Breeds Apr 1 to Jul 20

Tricolored Blackbird *Agelaius tricolor*

Breeds Mar 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3910>

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Nuttall's
Woodpecker
BCC - BCR (This
is a Bird of
Conservation
Concern (BCC)
only in
particular Bird
Conservation
Regions (BCRs)
in the
continental
USA)



Tricolored
Blackbird
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds occurring in my specified location?

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The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Coastal Barrier Resources System

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

THERE ARE NO KNOWN COASTAL BARRIERS AT THIS LOCATION.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which on the [official CBRS maps](#). The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

APPENDIX C

Archaeological Resource Survey

July 13, 2022

Nicholas Crawford, AIA
 Crawford Architecture & Planning
 1755 Herndon Avenue, Suite 103
 Clovis, CA 93611

Subject: Archaeological Resources Survey Assessment for the 1491 Alluvial Avenue Project in Clovis, Fresno County, California (LSA Project SLM2201)

Dear Mr. Crawford:

LSA conducted an archaeological resources survey assessment (study) for the proposed 1491 Alluvial Avenue Project (project) in Clovis, Fresno County, California. The project site is currently developed with a single-family residential home, and the proposed project would involve demolition of the existing home and development of 12 multifamily apartment units. Study work was completed per the requirements of the California Environmental Quality Act of 1970 (CEQA).

This study has the following purposes: (1) identify archaeological deposits that may meet the CEQA definition of a historical resource (California Public Resources Code [PRC] Section 21084.1) or a unique archaeological resource (PRC Section 21083.2) and that may be impacted by the proposed project; (2) assess the potential for human remains; and (3) recommend procedures for avoiding or mitigating impacts to such deposits, if warranted. The study consisted of background research and a field survey and was conducted by LSA Associate/Senior Cultural Resources Manager Kerrie Collison, M.A., Registered Professional Archaeologist (RPA) 28731436.

PROJECT SITE LOCATION AND CHARACTERISTICS

The approximately 1-acre project site, which is also the study site, is depicted on the United States Geological Survey (USGS) *Clovis, California* 7.5-minute topographic quadrangle map in Section 33 of Township 12 South, Range 21 East, Mount Diablo Baseline and Meridian (USGS 1981; Figure 1 [all figures provided in Attachment B]). It is located within Assessor’s Parcel Number 563-142-35, on the north side of Alluvial Avenue between North Sunnyside Avenue and North Fordham Avenue (Figure 2).

The project site is flat and is at an elevation of approximately 375 feet. The nearest year-round freshwater source is Dry Creek, which is 0.6 mile west of the project site. Soil surveys (USDA n.d.) indicate that the project site consists of San Joaquin sandy loam sediments, which are terraces and fan remnants derived from granite that typically consist of sandy loam, sandy clay loam, and clay 19 to 25 inches below the surface, with duripan (a cemented hardpan) below. Surficial sediments of the project site overlay geologic deposits, specifically alluvium, lake, playa, and terrace deposits that date to the Pleistocene (2.58 million to 11,700 years ago) and Holocene (11,700 years ago to present) (CGS 2015).

BACKGROUND RESEARCH

Southern San Joaquin Valley Information Center

A record search of the project site and a 0.5-mile search radius was conducted on May 23, 2022, by Jeremy E. David, Assistant Coordinator at the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System at California State University, Bakersfield (SSJVIC Records Search File No. 22-203). The SSJVIC, an affiliate of the California Office of Historic Preservation, is the official repository of cultural resources records and reports for Fresno County. The record search results (Attachment C) indicate that no previous cultural resources studies have included a portion of the project site. Eight previous cultural resources studies have included a portion of the 0.5-mile radius of the project site; all of these studies have been field surveys. As a result of previous cultural resources studies, no cultural resources have been recorded within the project site or the 0.5-mile radius.

Native American Heritage Commission

On May 10, 2022, LSA submitted a request to the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File (SLF) for the presence of Native American cultural resources that might be impacted by the proposed project. The NAHC maintains the SLF database and is the official State repository of Native American sacred-site location records in California.

NAHC Cultural Resources Analyst Cameron Vela responded on July 6, 2022, stating that the results of the SLF search were negative (Attachment D). The NAHC also provided a suggested list of Native American individuals to contact for information regarding the project site.

Aerial Photographs and Maps

Aerial photographs and historic maps that include the project site were also reviewed (USGS n.d.; NETR n.d.). The results of the review are presented in Table A.

Table A: Aerial Photograph and Historic Map Review

Map/Photograph	Results
1923 <i>Clovis, California</i> map (Scale 1:31,680)	No buildings or developments are depicted on the project site. Roads are delineated in the vicinity of the project site.
1946 <i>Clovis, California</i> map (Scale 1:62,500)	No changes from the 1923 map.
1962 aerial photograph	The project site is an agricultural field.
1964 <i>Clovis, California</i> map (Scale 1:24,000)	No changes in the project site from the 1923 map.
1972 aerial photograph	No visible change from the 1962 aerial photograph.
1984 aerial photograph	A house is depicted on the project site, along with a detached garage, a swimming pool, and a small, detached building north of the garage and pool. The surrounding land is still used for agricultural purposes.
1998 aerial photograph	No changes in the project site from the 1984 aerial photograph.

Source: USGS (n.d.) and National Environmental Title Research (n.d.).

FIELD SURVEY

On May 25, 2022, LSA archaeologist Kerrie Collison conducted a pedestrian field survey of the entire project site. The majority of the project site is developed as a residential building and associated structures (such as a detached garage), but the swimming pool depicted in aerial photographs is no longer extant. Unpaved and undeveloped areas of the project site were intensively surveyed to examine the project site for any indications of archaeological deposits and/or human remains. The south side of the house was covered in ankle-high vegetation, while the area on the north side of the house was void of vegetation and compacted (see Photo 1, below).



Photo 1: Northwest corner of house. Note various ground conditions. View southeast.

The field survey did not identify any archaeological cultural resources in the project site. Observed sediments were uniform throughout the project site and were a light-brown, fine-grained material.

SUMMARY AND RECOMMENDATIONS

This study, consisting of background research and a field survey, did not identify archaeological deposits or human remains in the project site. Prior to its development for residential purposes, the project site was used for agricultural purposes. Agricultural use of the project site would have disturbed surficial and near-surficial sediments that may have contained prehistoric archaeological resources, and later grading for residential development of the project site would have disturbed the same sediments. While Dry Creek (which would have been a reliable water source for prehistoric

and historic-period populations) is 0.6 mile from the project site and the mapped geologic deposits that underlay the surficial sediments of the project site date to a time that includes human occupation of the region, the project site has undergone a large amount of ground disturbance, and there is a low likelihood that subsurface archaeological deposits exist within the project site.

Given the above factors, the potential for the project to impact cultural resources is low, and no further cultural studies are recommended for this project. LSA recommends that, in the event that archaeological resources are identified during project activities, work should be halted immediately within 50 feet of the find until a qualified professional archaeologist is contacted to assess the nature and significance of the find and determine if any additional study or treatment of the find is warranted. The archaeologist should develop proper mitigation measures required for the discovery per California Code of Regulations [CCR], Title 14, Chapter 3, Section 15064.5(f). Additional studies could include, but would not be limited to, collection and documentation of artifacts, documentation of the cultural resources on State of California Department of Parks and Recreation Series 523 forms, or subsurface testing. If determined appropriate by the qualified archaeologist, archaeological monitoring should commence and continue until grading and excavation are complete or until the monitoring archaeologist determines, based on field observations and in consultation with the qualified archaeologist, that there is little likelihood of encountering additional archaeological cultural resources. Archaeological monitoring may be reduced from full-time to part-time or spot-checking if determined appropriate by the qualified archaeologist based on monitoring results. Upon completion of any monitoring activities, the archaeologist should prepare a report to document the methods and results of monitoring activities. The final version of this report should be submitted to the SSJVIC.

In the event that human remains are encountered at any time during project work, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Fresno County Coroner has made a determination of origin and disposition pursuant to State PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner would notify the NAHC within 24 hours, which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD's recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

Please contact me at kerrie.collison@lsa.net if you have any questions regarding this study. Thank you for using the services of LSA.

Sincerely,

LSA Associates, Inc.



Kerrie Collison, M.A., RPA 28731436
Associate/Senior Cultural Resources Manager

Attachments: A—References
B—Project Figures
C—Records Search Results Summary Letter
D—Native American Heritage Commission Response

ATTACHMENT A

REFERENCES

California Geological Survey (CGS)

- 2015 Geologic Map of California. Website: <https://maps.conservation.ca.gov/cgs/gmc/> (accessed July 5, 2022).

National Environmental Title Research (NETR)

- n.d. Historic Aerials. Website: <http://www.historicaerials.com> (accessed July 5, 2022).

United States Department of Agriculture Natural Resources Conservation Service (USDA)

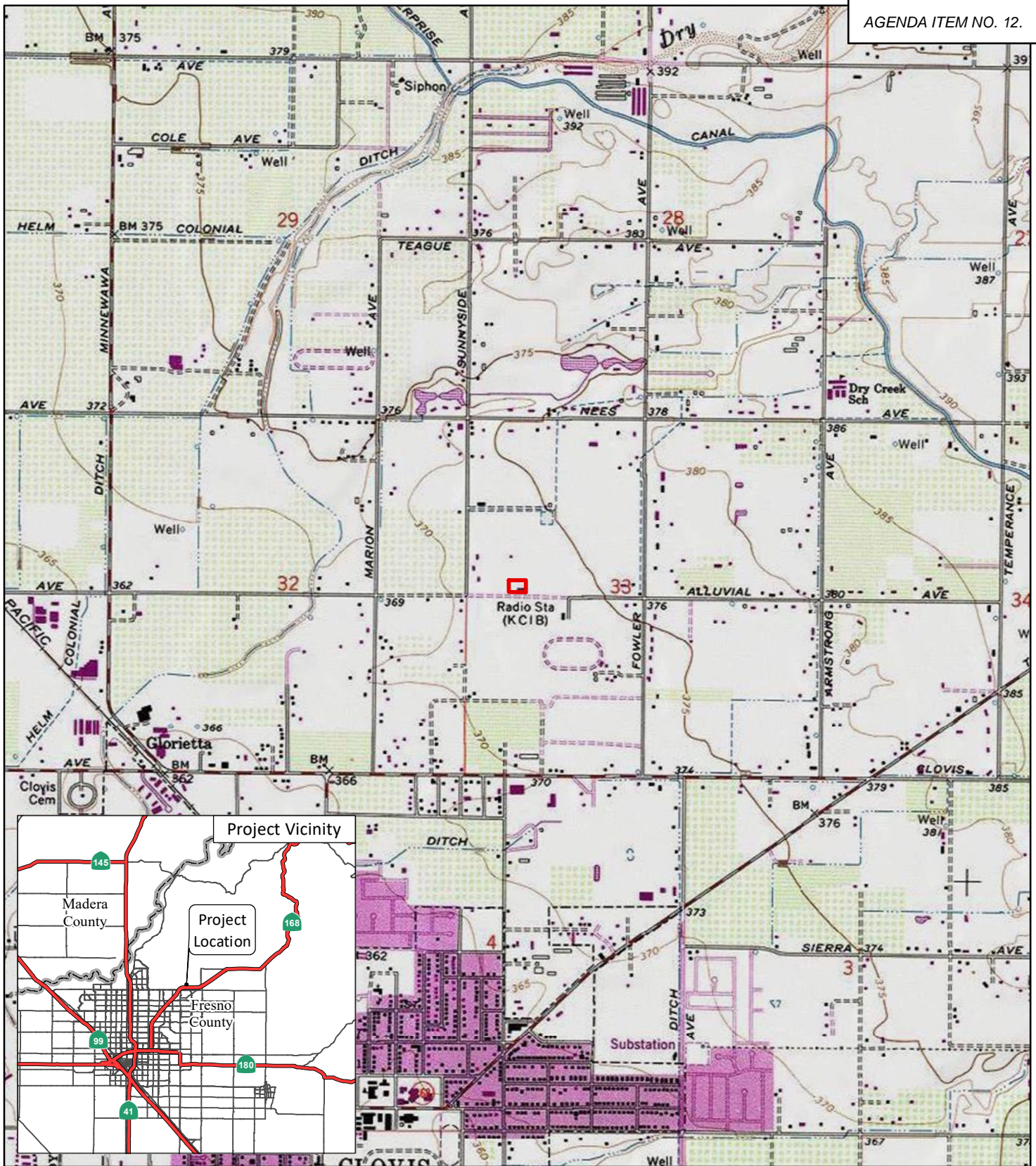
- n.d. Web Soil Survey. Website: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> (accessed July 1, 2022).

United States Geological Survey (USGS)

- 1981 *Clovis, California* 7.5-minute topographic quadrangle. Published 1964. Photorevised 1981. USGS, Denver, Colorado.
- n.d. USGS topoView. Website: <https://ngmdb.usgs.gov/topoview/viewer/#4/39.98/-100.02> (accessed July 5, 2022).

ATTACHMENT B

PROJECT FIGURES

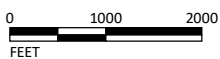


LSA

LEGEND

Project Site

FIGURE 1



SOURCE: USGS 7.5' Quad.- Clovis, CA (1981)

R:\SLM2201\GIS\MXD\Projloc and Vic.mxd (5/9/2022)

1491 Alluvial Avenue Project
Project Location and Vicinity



ALLUVIAL AVENUE

LSA

LEGEND
 Project Site

FIGURE 2



0 37.5 75
 FEET

SOURCE: Google Maps, 2022
 R:\SLM2201\GIS\MXD\Project Site.mxd (5/9/2022)

1491 Alluvial Avenue Project
 Project Site



ATTACHMENT C

RECORDS SEARCH RESULTS SUMMARY LETTER



5/23/2022

Kerrie Collison
LSA
285 South Street, Suite P
San Luis Obispo, CA 93401

Re: 1491 Alluvial Avenue (SLM2201)
Records Search File No.: 22-203

The Southern San Joaquin Valley Information Center received your record search request for the project area referenced above, located on the Clovis USGS 7.5' quads. The following reflects the results of the records search for the project area and the 0.5 mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format: custom GIS maps GIS data

Resources within project area:	None
Resources within 0.5 mile radius:	None
Reports within project area:	None
Reports within 0.5 mile radius:	FR-00270, 00272, 00281, 01130, 02180, 02234, 02308, 02783

Resource Database Printout (list): enclosed not requested nothing listed

Resource Database Printout (details): enclosed not requested nothing listed

Resource Digital Database Records: enclosed not requested nothing listed

Report Database Printout (list): enclosed not requested nothing listed

Report Database Printout (details): enclosed not requested nothing listed

Report Digital Database Records: enclosed not requested nothing listed

Resource Record Copies: enclosed not requested nothing listed

Report Copies: enclosed not requested nothing listed

OHP Built Environment Resources Directory: enclosed not requested nothing listed

Archaeological Determinations of Eligibility: enclosed not requested nothing listed

CA Inventory of Historic Resources (1976): enclosed not requested nothing listed

Caltrans Bridge Survey: Not available at SSJVIC; please see
<https://dot.ca.gov/programs/environmental-analysis/cultural-studies/california-historical-bridges-tunnels>

Ethnographic Information: Not available at SSJVIC

Historical Literature: Not available at SSJVIC

Historical Maps: Not available at SSJVIC; please see
<http://historicalmaps.arcgis.com/usgs/>

Local Inventories: Not available at SSJVIC

GLO and/or Rancho Plat Maps: Not available at SSJVIC; please see
<http://www.glorerecords.blm.gov/search/default.aspx#searchTabIndex=0&searchByTypeIndex=1> and/or
<http://www.oac.cdlib.org/view?docId=hb8489p15p;developer=local;style=oac4;doc.view=items>

Shipwreck Inventory: Not available at SSJVIC; please see
<https://www.slc.ca.gov/shipwrecks/>

Soil Survey Maps: Not available at SSJVIC; please see
<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.


The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,


 Jeremy E David
 Assistant Coordinator

ATTACHMENT D

NATIVE AMERICAN HERITAGE COMMISSION RESPONSE

NATIVE AMERICAN HERITAGE COMMISSION

July 6, 2022

Kerrie Collison
LSA

Via Email to: Kerrie.Collison@lsa.net

Re: 1491 Alluvial Avenue Project, Fresno County

Dear Ms. Collison:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cameron.Vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

Attachment



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

PARLIAMENTARIAN
Russell Attebery
Karuk

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
William Mungary
Paiute/White Mountain
Apache

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki,
Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710

**Native American Heritage Commission
Native American Contact List
Fresno County
7/6/2022**

AGENDA ITEM NO. 12.

Big Sandy Rancheria of Western Mono Indians
Elizabeth Kipp, Chairperson
P.O. Box 337
Auberry, CA, 93602
Phone: (559) 374 - 0066
Fax: (559) 374-0055
lkipp@bsrnation.com

Western Mono

North Fork Rancheria of Mono Indians
Elaine Fink, Chairperson
P.O. Box 929
North Fork, CA, 93643
Phone: (559) 877 - 2461
Fax: (559) 877-2467
efink@nfr-nsn.gov

Mono

Cold Springs Rancheria of Mono Indians
Jared Aldern,
P. O. Box 209
Tollhouse, CA, 93667
Phone: (559) 855 - 5043
Fax: (559) 855-4445
csrepa@netptc.net

Mono

North Valley Yokuts Tribe
Timothy Perez,
P.O. Box 717
Linden, CA, 95236
Phone: (209) 662 - 2788
huskanam@gmail.com

Costanoan
Northern Valley
Yokut

Cold Springs Rancheria of Mono Indians
Carol Bill, Chairperson
P.O. Box 209
Tollhouse, CA, 93667
Phone: (559) 855 - 5043
Fax: (559) 855-4445
coldsprgstribe@netptc.net

Mono

North Valley Yokuts Tribe
Katherine Perez, Chairperson
P.O. Box 717
Linden, CA, 95236
Phone: (209) 887 - 3415
canutes@verizon.net

Costanoan
Northern Valley
Yokut

Dumna Wo-Wah Tribal Government
Robert Ledger, Chairperson
2191 West Pico Ave.
Fresno, CA, 93705
Phone: (559) 540 - 6346
ledgerrobert@ymail.com

Foothill Yokut
Mono

Picayune Rancheria of Chukchansi Indians
Claudia Gonzales, Chairwoman
P.O. Box 2226
Oakhurst, CA, 93644
Phone: (559) 412 - 5590
cgonzales@chukchansitribe.net

Foothill Yokut

Kings River Choinumni Farm Tribe
Stan Alec,
3515 East Fedora Avenue
Fresno, CA, 93726
Phone: (559) 647 - 3227

Foothill Yokut

Picayune Rancheria of Chukchansi Indians
Heather Airey, Tribal Historic Preservation Officer
P.O. Box 2226
Oakhurst, CA, 93644
Phone: (559) 795 - 5986
hairey@chukchansi-nsn.gov

Foothill Yokut

North Fork Mono Tribe
Ron Goode, Chairperson
13396 Tollhouse Road
Clovis, CA, 93619
Phone: (559) 299 - 3729
rwgoode911@hotmail.com

Mono

Table Mountain Rancheria
Brenda Lavell, Chairperson
P.O. Box 410
Friant, CA, 93626
Phone: (559) 822 - 2587
Fax: (559) 822-2693
rpennell@tmr.org

Yokut

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 1491 Alluvial Avenue Project, Fresno County.

Native American Heritage Commission
Native American Contact List
Fresno County
7/6/2022

AGENDA ITEM NO. 12.

Table Mountain Rancheria

Bob Pennell, Cultural Resource
Director
P.O. Box 410 Yokut
Friant, CA, 93626
Phone: (559) 325 - 0351
Fax: (559) 325-0394
rpennell@tmr.org

Traditional Choinumni Tribe

David Alvarez, Chairperson
2415 E. Houston Avenue Foothill Yokut
Fresno, CA, 93720
Phone: (559) 217 - 0396
Fax: (559) 292-5057
davealvarez@sbcglobal.net

Tule River Indian Tribe

Neil Peyron, Chairperson
P.O. Box 589 Yokut
Porterville, CA, 93258
Phone: (559) 781 - 4271
Fax: (559) 781-4610
neil.peyron@tulerivertribe-nsn.gov

Tule River Indian Tribe

Joey Garfield, Tribal Archaeologist
P. O. Box 589 Yokut
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
joey.garfield@tulerivertribe-nsn.gov

Tule River Indian Tribe

Kerri Vera, Environmental
Department
P. O. Box 589 Yokut
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
kerri.vera@tulerivertribe-nsn.gov

**Wuksache Indian Tribe/Eshom
Valley Band**

Kenneth Woodrow, Chairperson
1179 Rock Haven Ct. Foothill Yokut
Salinas, CA, 93906 Mono
Phone: (831) 443 - 9702
kwood8934@aol.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 1491 Alluvial Avenue Project, Fresno County.

APPENDIX D

Historical Evaluation

July 13, 2022

Nicholas Crawford, AIA
Crawford Architecture & Planning
1755 Herndon Avenue, Suite 103
Clovis, CA 93611

Subject: 1491 Alluvial Avenue, City of Clovis, California (LSA Project Number SLM2201)

Dear Mr. Crawford:

LSA completed a historical evaluation of the property at 1491 Alluvial Avenue (Assessor's Parcel Number 563-142-35) in Clovis, California. The evaluation was documented on Department of Parks and Recreation (DPR) 523A (Primary Record) and 523B (Building, Structure, and Object Record) forms, and the property was identified on a DPR Location Map.

As a result of that evaluation, which included archival research and an intensive-level field survey, it was determined that the 1972 Shed-style residence does not appear to be eligible for listing in the California Register of Historical Resources under any criteria.

In summary, the residence was built at the very end of the post-World War II residential boom (1945–1973), but it was not part of a residential subdivision. Therefore, it is not representative of that important development pattern. No evidence was found that it is associated with a historically important person or the work of a master architect. Despite some alterations, the residence embodies several characteristics of the Shed style of architecture, but it is a pedestrian example of the style and does not epitomize the design principles of the style more fully than others of its type.

For these reasons, the residence at 1491 Alluvial Avenue does not qualify as a "historical resource" as defined by the California Environmental Quality Act (CEQA). For the purposes of this project, the City of Clovis may make a finding of "no impact" with regard to historical resources.

If you have any questions, please contact me at Casey.Tibbet@lsa.net or by telephone at (951) 781-9310.

Sincerely,

LSA Associates, Inc.



Casey Tibbet, M.A.
Associate/Cultural Resources Manager
Historian/Architectural Historian

Attachment: Department of Parks and Recreation forms

State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
 HRI # _____
 Trinomial _____
 NRHP Status Code 6Z

Other Listings _____
 Review Code _____ Reviewer _____ Date _____

Page 1 of 6 Resource Name or #: 1491 Alluvial Avenue

P1. Other Identifier: _____
***P2. Location:** Not for Publication Unrestricted *a. County: Fresno and (P2b and P2c or P2d. Attach a Location Map as necessary.)
 b. USGS 7.5' Quad: Clovis, CA Date: 1981 T 12S; R 21E; Section: 33; M.D.B.M.
 c. Address: 1491 Alluvial Avenue City: Clovis Zip: 93611
 d. UTM: Zone: 11; _____mE/ _____mN (G.P.S.)
 e. Other Locational Data: (e.g., parcel #): Assessor Parcel Number (APN) 563-142-035

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
 This one-story Shed-style residence is located on an approximately 1-acre parcel on the north side of Alluvial Avenue between North Sunnyside Avenue and North Fordham Avenue. The residence is irregular in plan and rests on a concrete slab foundation. It is surmounted by a moderately pitched, cross-shed roof sheathed with composition shingles and has a brick chimney, narrow eaves, and exposed rafter tails. The exterior wall cladding consists of stucco and staggered brick veneer. The asymmetrical, south-facing façade has a recessed, central gable-roofed bay flanked by shed-roofed wings. Façade fenestration consists of three vinyl-framed sliding windows, one of which has decorative shutters. The entry is deeply recessed and includes a single wooden door with a three-over-seven geometric pattern of rectangles. The door is flanked by multi-paned, arched sidelights and wall-mounted sconces. The east elevation includes two windows, a door, and a tall pair of windows. The west elevation has two doors, one of which may be for a water heater or similar equipment. The property also includes: a detached garage with a multi-level shed roof, stucco walls, two garage doors, a covered but partially open-sided storage area, and a small enclosed room, as well as a detached building that has been partially demolished. The property is in poor condition, but the residence appears to be in fair to good condition. The integrity of materials has been somewhat compromised by the installation of modern vinyl windows.

***P3b. Resource Attributes:** (List attributes and codes) HP2-Single-family residence

***P4. Resources Present:** Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



See Continuation Sheet

P5b. Description of Photo: (View, date, accession #) Façade, view to the north (Google 2021)

***P6. Date Constructed/Age and Sources:** Historic Prehistoric Both
 1972 (Redfin 2022)

***P7. Owner and Address:**
 Unknown

***P8. Recorded by:** (Name, affiliation, and address)
 Casey Tibbet, M.A.
 LSA Associates, Inc.
 1500 Iowa Avenue, Suite 200
 Riverside, CA 92507

***P9. Date Recorded:**
 May 25, 2022

***P10. Survey Type:** (Describe)
 Intensive-level CEQA compliance

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") None

***Attachments:** NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

B1. Historic Name: _____

B2. Common Name: _____

B3. Original Use: Single-family residence **B4. Present Use:** Single-family residence

***B5. Architectural Style:** Shed

***B6. Construction History:** (Construction date, alterations, and date of alterations) Except where noted, the following information is based on building permits or aerial photographs (City of Clovis var.; California State University, Fresno 2022).

1970 Based on an aerial photograph, in 1970 the property was undeveloped except perhaps as farmland.

1972 According to various real estate websites, the house was built in 1972 (Redfin 2022).

1973 An aerial photograph shows the house, a detached building, and a swimming pool on the property. The detached building looks like it was oriented east-west instead of north-south. At that time, the surrounding acreage was farmland.

1977 An aerial photograph shows the property developed as it is today with the residence, detached garage (oriented north-south), a swimming pool, and a small detached building north of the garage and pool. The surrounding acreage was still farmland.

1992 An aerial photograph from October 1992 shows the beginnings of residential development on the acreage to the south, east, and north.

1993 Permits issued to owner E.J. Leatherman to abandon well and to "stub house gas supply to location of new service." Permit issued to owner Monte Vista Homes to abandon septic system.

***B7. Moved?** No Yes Unknown **Date:** _____ **Original Location:** _____

***B8. Related Features:**

B9a. Architect: None found **b. Builder:** None found

***B10. Significance: Theme:** Post-World War II Residential Development; Residential Architecture **Area:** City of Clovis

Period of Significance: 1972 **Property Type:** Residential **Applicable Criteria:** N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This 1972 Shed-style residence does not meet the criteria for listing in the California Register of Historical Resources (California Register), and no local criteria were found. It is not a historical resource as defined by the California Environmental Quality Act (CEQA). See *Continuation Sheet*.

B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

California Department of Transportation

2011 *Tract Housing in California, 1945–1973. A Context for National Register Evaluation.* Caltrans Division of Environmental Analysis, Sacramento.

City of Clovis

2014 General Plan and Development Code Draft PEIR, Section 5.5, Cultural Resources. Accessed online in May 2022 at: <https://cityofclovis.com/wp-content/uploads/2018/10/Chapter-05-05-Cultural-Resources.pdf>.

Var. Building permits provided for 1491 Alluvial Avenue by the City of Clovis in May 2022.

California State University, Fresno

Var. Aerial photographs accessed via the Map and Aerial Location Tool in May and June 2022 at: <http://malt.library.fresnostate.edu/MALT/>.

McAlester, Virginia Savage

2013 *A Field Guide to American Houses.* Alfred A. Knopf, New York.

Redfin

2022 1491 Alluvial Avenue. Accessed in May 2022 at: <https://www.redfin.com/CA/Clovis/1491-Alluvial-Ave-93611/home/72702518>.

The Fresno Bee

1975 News In Brief. March 5, page 37.

B13. Remarks:

***B14. Evaluator:** Casey Tippet, M.A., LSA Associates, Inc., 1500 Iowa Avenue, Suite 200, Riverside, CA 92507

***Date of Evaluation:** June 2022

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

Refer to Location Map

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial _____

Page 3 of 6 *Resource Name or #: (Assigned by recorder) 1491 Alluvial Avenue
*Recorded by LSA Associates, Inc. *Date: June 2022 Continuation Update

P5a. Photo (continued from page 1)



West elevation (partial) and façade, view to the northeast (5/25/22).



Façade and east elevation, view to the northwest (5/25/22).



Front entry (5/25/22).



Garage, view north (5/25/22)

See Continuation Sheet

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____

HRI # _____

Trinomial _____

Page 4 of 6 *Resource Name or #: (Assigned by recorder) 1491 Alluvial Avenue
*Recorded by LSA Associates, Inc. *Date: June 2022 Continuation Update

B10. Significance (continued from page 2)

Historic Context. The following was excerpted from the City of Clovis General Plan and Development Code Draft Program Environmental Impact Report (PEIR) (City of Clovis 2014:5.5-7):

“Clovis was founded following the construction of a freight stop along the recently completed San Joaquin Valley Railroad in 1891. As the agricultural potential of Fresno County began to be realized in the late nineteenth century, a number of individuals rapidly developed the railway to transport the region’s grain, cattle, and timber longer distances. In close proximity to agriculture and the nearby Sierras, the new stop had an ideal location and was named after local farmer Clovis M. Cole, who sold a large portion of his wheat ranch in support of the railway.

Another contributor to the growth of Clovis was the Fresno Flume and Irrigation Company. The company constructed the Shaver Log Flume that started at the Shaver Dam and traveled 42 miles into the valley to the present-day intersection of Fifth Street and Clovis Avenue. Here, the company constructed a 40-acre mill and finishing plant, which served as an impetus for the further development of Clovis as workers arrived to work at the plant.

A number of businesses, churches, and schools soon developed in response to the increasing population and, by 1895, the community had its first post office. Italian immigrants brought grape production to Clovis with the first vineyards in the region. Clovis incorporated in 1912 and grew modestly into the 20th century, with its economy continuing to rely primarily on agriculture. An unprecedented demand for canned food occurred with the onset of World War I, stimulating the local economy and growth in the City. As evidence of the City’s changing status, Clovis High School was relocated to an ornate, Spanish-designed building in 1920.

Increased agricultural production required additional water, and the Central Valley Project (CVP) was undertaken in the early 1930s to provide irrigation and water management to the San Joaquin Valley. The CVP began as a New Deal project but was not completed until the early 1950s due to labor shortages caused by World War II. An original component of the project is the Friant-Kern Canal, which flows immediately northeast of Clovis. The City experienced a modest building boom in the years following World War II as a number of housing developments expanded away from the city center. Although residential growth has continued since that time, the City continues to maintain its small-town character.”

People Associated with This Residence. No information was found for the architect, builder, or original owner of the residence. The only owner found for the residence was E.J. Leatherman in 1993 (City of Clovis var.). Research revealed that Dr. Elwyn J. Leatherman, a chiropractor, did not live at 1491 Alluvial Avenue until sometime after 1975; he was listed at 1068 West Browning Avenue in 1975 (*The Fresno Bee* 1975).

Architectural Context. The Shed style was popularized by the Sea Ranch development north of San Francisco, which was inspired by and utilized vernacular forms of unpainted wood and structures found on old farms and western mines (McAlester 2013). According to McAlester, characteristics of the Shed style (circa 1965–1990) include “shed roof forms, generally multi-directional and occasionally coupled with a gable roof; wood wall cladding (vertical, diagonal, horizontal, or shingles), occasionally with brick veneer; smooth roof-wall junction commonly with little or no overhang; asymmetry” (McAlester 2013:649). The overall effect is bold diagonals and multiple massing with very little exterior detail. T1-11 plywood siding and brick veneer are common.

Significance Evaluation. This property is being evaluated for historical significance under the California Register criteria in compliance with CEQA. No local criteria were found.

- **Criterion 1: Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.** The residence was built at the end of the post-WWII residential boom (1945–1973) that made a significant contribution to the broad patterns of local, regional, and even national history. “More than 40 million housing units were built in the United States during the 30 year period following the end of World War II, and at least 30 million of these were single-family houses” (California Department of Transportation 2011:2). These homes were typically modest in size and style and constructed in a short time as part of large tracts marketed to the working class. “The fundamental unit for postwar housing is not the individual house, but the tract, or a single construction phase within a larger tract or new community,” and typically, a single home would not be individually significant in this context (California Department of Transportation 2011:121). Research revealed that this home was not built as part of a large residential development and therefore is not representative of that context.

See Continuation Sheet

State of California - The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____

HRI # _____

Trinomial _____

Page 5 of 6 *Resource Name or #: (Assigned by recorder) 1491 Alluvial Avenue
 *Recorded by LSA Associates, Inc. *Date: June 2022 Continuation Update

B10. Significance (continued from page 4)

- **Criterion 2: Associated with the lives of persons important to local, California or national history.** Based on the research discussed above, no evidence was found that the residence was associated with any historically significant persons during the historic period (pre-1973).
- **Criterion 3: Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.** This residence embodies characteristics of the Shed style, including shed roof forms coupled with a gable roof, asymmetry, multiple massing, brick veneer, and little exterior detailing. Although it currently has modern stucco as the primary wall cladding and modern vinyl-framed windows, the overall Shed style has not been significantly compromised. However, it is a relatively pedestrian example of the style and does not rise to a level above the ordinary. No evidence was found that it is the work of a master, and it does not epitomize the design principles of the style more fully than others of its type.
- **Criterion 4: Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.** This residence was built in 1972 using common materials and construction practices. It does not have the potential to yield information important to the history or prehistory of the local area, California, or the nation.

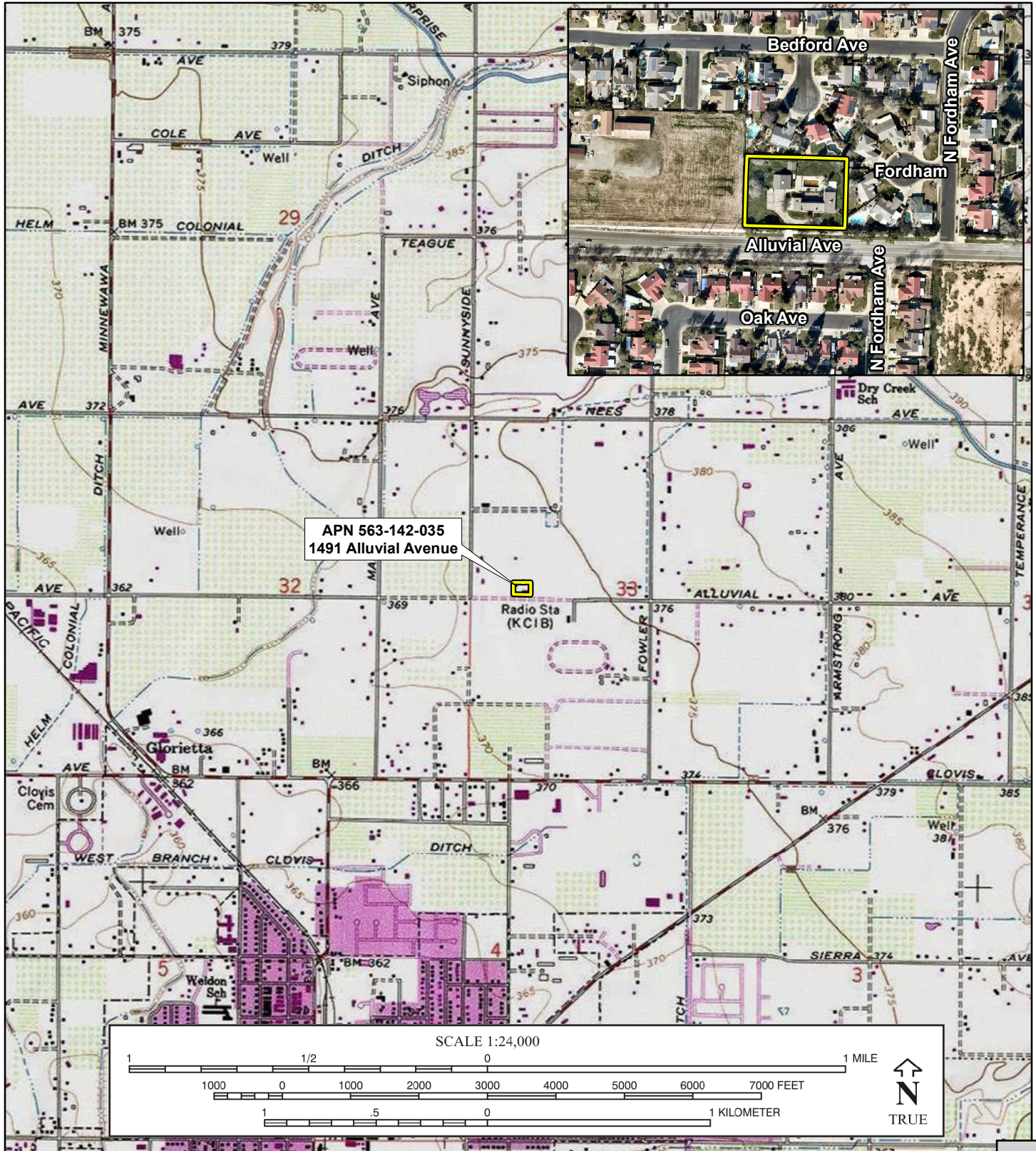
State of California - Resource Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # _____
HRI # _____
Trinomial _____

*Resource Name or 1491 Alluvial Avenue

*Map Name: USGS 7.5' Quad, Clovis; Nearmap

*Scale: 1:24000 *Date of Map: 1981; 2022



APPENDIX E

Traffic Generation Analysis

May 26, 2022

Mr. Arman Zakaryan
 Stallion Development & Construction
 6311 N Fresno St, Ste. 102
 Fresno CA 93710

Subject: Alluvial Avenue Project Trip Generation Analysis (JLB Project 006-044)

Dear Mr. Zakaryan,

JLB Traffic Engineering, Inc. (JLB) has completed a **Trip Generation Analysis (TGA)** for the **Alluvial Avenue** (Project) located in the City of Clovis. The Project proposes to develop a two-story multifamily housing project with up to 12 dueling units. The project is located at the northeast quadrant of Sunnyside Avenue and Alluvial Avenue in the City of Clovis. Per information provided to JLB, the Project will undergo a General Plan Amendment to modify the land use from R-1 Low Density Residential to R-2 Medium High Density Residential.

The purpose of this TGA is to evaluate the potential difference in traffic generation of the proposed Project and that which could otherwise be developed consistent with the Clovis General Plan. The TGA will focus primarily on comparing the anticipated driveway trip generation during a weekday, the AM peak hour and the PM peak hour of the project against that which could otherwise be developed consistent with the City of Clovis General Plan land use designation. The TGA will also determine if the Project can be screened out of having to prepare a Vehicle Miles Traveled (VMT) Analysis.

Project Description

The Project proposes to develop approximately 12 dueling units with a two-story multifamily housing. Per information provided to JLB the Project will undergo a General Plan Amendment to modify the land use from R-1 Low Density Residential to R-2 Medium High Density Residential. An aerial of the Project Vicinity and Project Site Plan are shown in Exhibits A and B, respectively.

Proposed Project Trip Generation

The trip generation rates for the proposed Project were obtained from the 11th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE). Table I presents the trip generation for the proposed Project with trip generation rates for 12 multi-family residential units. At buildout, the proposed Project is estimated to generate approximately 81 daily trips, 5 AM peak hour trips and 6 PM peak hour trips.

Table I: Proposed Project Trip Generation

Land Use (ITE Code)	Size	Unit	Daily		AM (7-9) Peak Hour						PM (4-6) Peak Hour					
			Rate	Total	Trip Rate	In	Out	In	Out	Total	Trip Rate	In	Out	In	Out	Total
						%						%				
Multifamily Housing (Low-Rise) (220)	12	d.u.	6.74	81	0.40	24	76	1	4	5	0.51	63	37	4	2	6
Total Project Trips				81				1	4	5				4	2	6

Note: d.u. = dwelling units



www.JLBtraffic.com
info@JLBtraffic.com

516 W Shaw Ave., Ste. 103
 Fresno, CA 93704
 (559) 570-8991

General Plan Land Designation Trip Generation

The General Plan proposes that the Project site be developed with Single-Family Detached Housing units under Low Density Residential land use (2.1 to 4.0 dwelling units per acre). For purposes of this comparison, it is assumed that the Project site is developed according to the maximum single-family range allowable under the Low Density Residential of 4.0 dwelling units per acre. Therefore, this site could be developed with a maximum of 4 Single-Family Detached Housing units (maximum of 4 dwelling units per acre * 1.04 net acres = 4.16 units). Table II presents the trip generation of that which could otherwise be developed consistent with the General Plan With trip generation rates for 4 Single Family Detached Housing units. Consistent with the General Plan, the project site is estimated to generate approximately 38 daily trips, 3 AM peak hour trips and 4 PM peak hour trips.

Table II: General Plan Land Use Designation Trip Generation

Land Use (ITE Code)	Size	Unit	Daily		AM (7-9) Peak Hour						PM (4-6) Peak Hour					
			Rate	Total	Trip Rate	In	Out	In	Out	Total	Trip Rate	In	Out	In	Out	Total
						%						%				
Single-Family Detached Housing (210)	4	d.u.	9.43	38	0.70	26	74	1	2	3	0.94	63	37	3	1	4
Total Project Trips				38				1	2	3				3	1	4

Note: d.u. = dwelling units

Difference in Project Trip Generation

The difference in trip generation between the proposed Project and General Plan Land Use Designation site land uses is summarized in Table III. Compared to that which could be developed consistent with the General Plan, the proposed Project is estimated to generate an increase of 43 daily trips, 2 AM peak hour trips and 2 PM peak hour trips.

Table III: Difference in Trip Generation

	Daily	AM (7-9) Peak Hour			PM (4-6) Peak Hour		
	Total	In	Out	Total	In	Out	Total
Proposed Project	81	1	4	5	4	2	6
General Plan Land Use Designation	38	1	2	3	3	1	4
Difference in Trip Generation	43	0	2	2	1	1	2

City of Clovis VMT Guidelines

The City of Clovis *Interim Transportation Impact Analysis Guidelines*, dated July 14, 2020, provides guidance on the requirements to evaluate transportation impacts for projects in the city for the purpose of determining impacts under the California Environmental Quality Act (CEQA). The thresholds described therein are referred to herein as the City of Clovis VMT Thresholds. The City of Clovis VMT Thresholds document specifically address the requirements of California Senate Bill 743 (SB 743) which mandates specific types of CEQA analysis of transportation projects, effective July 1, 2020. The December 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) published by the Governor’s Office of Planning and Research (OPR), was utilized as a reference and guidance document in the preparation of the Clovis VMT Thresholds.



The City of Clovis VMT Thresholds adopted a screening standard and criteria that can be used to screen out qualified projects that meet the adopted criteria from needing to prepare a detailed VMT analysis. These criteria may be size, location, proximity to transit or trip making potential. In general development projects that that meet one or more of the following criteria can be screened out from a quantitative VMT analysis.

1. Project is Small (Less than 500 average daily trips)
2. Project has a High Level of Affordable Housing Units
3. Project is Local-serving Retail of less than 100,000 square feet gross floor area
4. Project is an institutional/Government and Public Service Uses
5. Project Located in a Transit Priority Area/High Quality Transit Corridor (within 0.5 miles of a transit stop).
6. Project is located in a Low VMT Zone

Although this Project will undergo a General Plan Amendment, its land use is currently residential and will remain as residential. The proposed land use will allow a greater density, which has been observed to reduce VMT. The Project is expected to generate significantly less than the 500 daily trip threshold (a maximum of 81 daily trips), classifying the Project as a small project. Therefore, JLB recommends the project be screened out from having to prepare a VMT analysis.

Conclusions and Recommendations

Conclusions and recommendations regarding the proposed Project are provided below:

- The proposed Project will undergo a General Plan Amendment to modify the land use from R-1 Low Density Residential (2.1 to 4 dwelling units per acre) to R-2 Medium High Density Residential.
- At buildout, the proposed Project is estimated to generate approximately 81 daily trips, 5 AM peak hour trips and 6 PM peak hour trips.
- Consistent with the General Plan, the Project site could be developed with up to 4 single family residential units and produce approximately 38 daily trips, 3 AM peak hour trips and 4 PM peak hour trips.
- Compared to that which could otherwise be developed at the Project Site consistent with the City of Clovis General Plan, the proposed Project is estimated to generate more traffic by 43 daily trips, 2 AM peak hour trips and 2 PM peak hour trips.
- The Project is expected to generate less than 500 daily trips, therefore, JLB recommends the Project be screened out of a VMT Analysis as a small project per City of Clovis VMT Guidelines.

If you have any questions or require additional information, please contact me at (559) 869-4514, or via email at cayala@JLBtraffic.com.

Sincerely,



Carlos Ayala-Magana
Engineer I/II

Z:\01 Projects\006 Clovis\006-044 Alluvial Ave TGA\05 Letter\L05262022 Alluvial Ave TGA.docx



www.JLBtraffic.com

info@JLBtraffic.com

516 W Shaw Ave., Ste. 103
Fresno, CA 93704
(559) 570-8991

Page | 3

Exhibit A: Vicinity Map

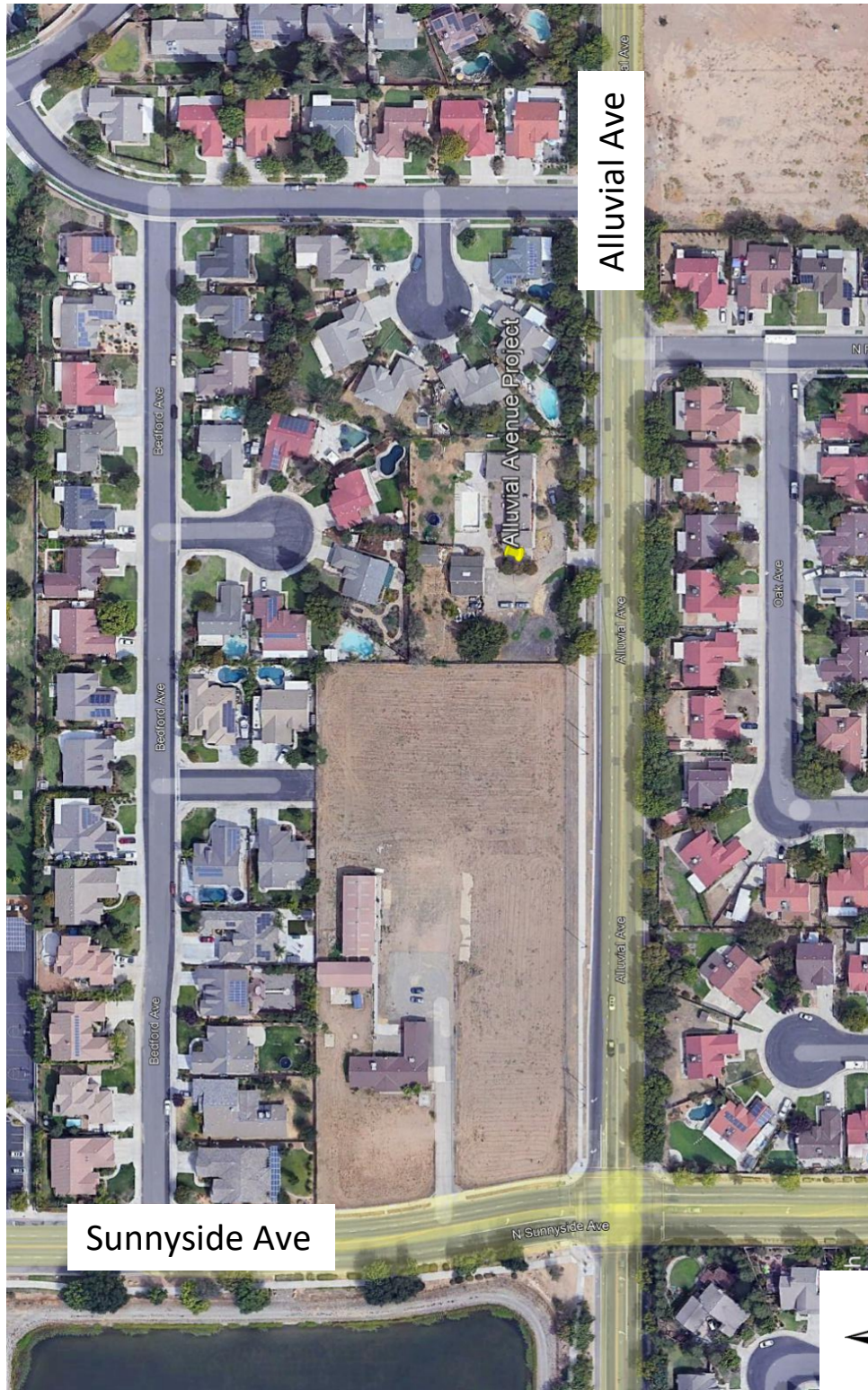
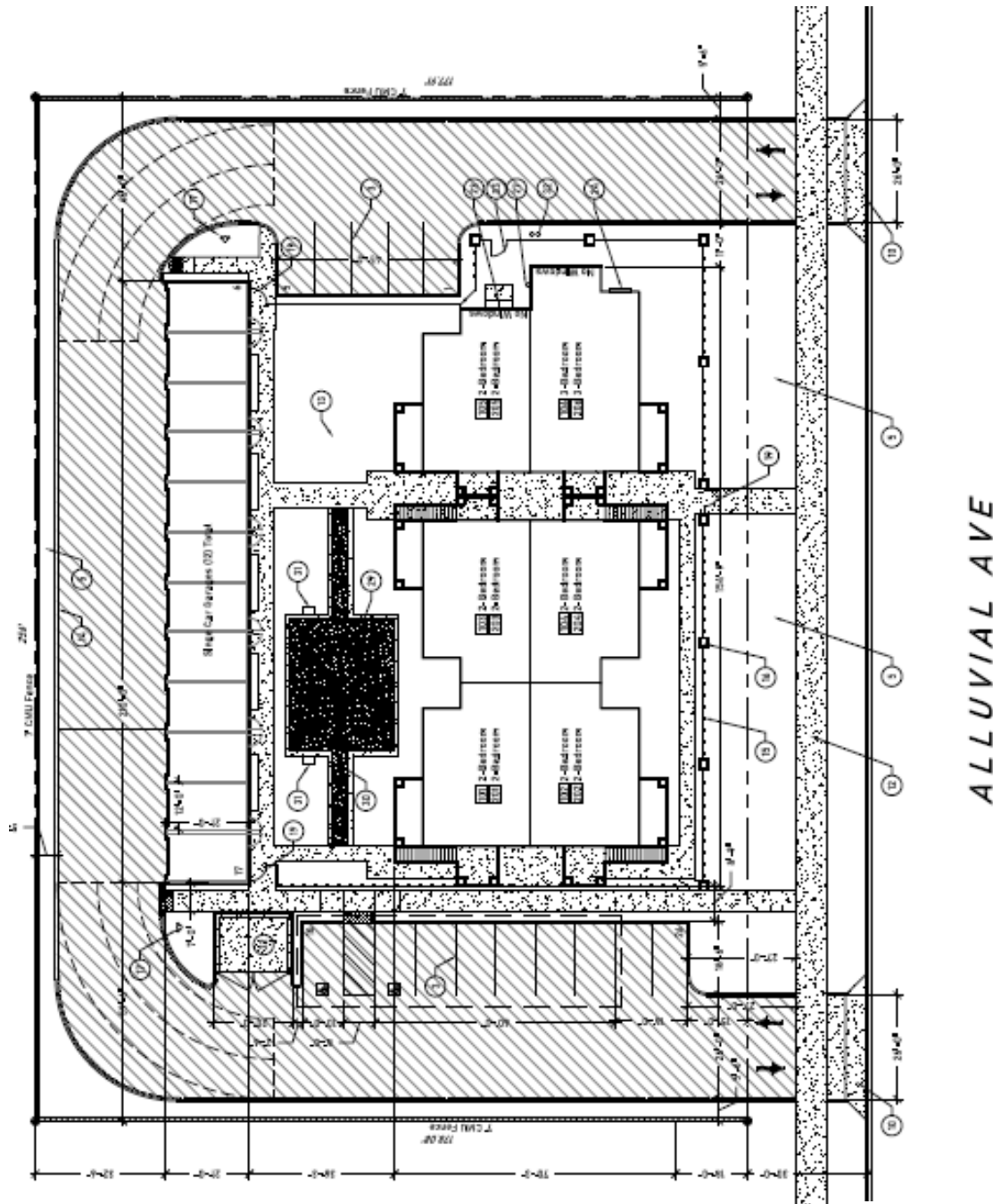


Exhibit B: Project Site Plan



APPENDIX F
Water Study

Technical Memorandum

To: Gene Abella, PE

From: Nicholas Jacobson, PE

Subject: Water Infrastructure Investigation for 1491 Alluvial Avenue, East of North Sunnyside Avenue (APN 563-1421-35)

Date: June 27, 2022

Provost and Pritchard Consulting Group (“P&P”) has prepared this technical memorandum summarizing the findings of our investigation into the water system infrastructure required to serve a proposed development located at 1491 Alluvial Avenue (APN 563-1421-35)

Project Information

It is our understanding that the proposed development (Project) will have a land use designation of medium-high density residential (7.1 - 15.0 dwelling units per acre [du/ac]) which differs from the original designation of low density residential (2.1 - 4.0 du/ac), originally considered for this area in the City of Clovis Water Master Plan (WMP) Update – Phase III (Provost & Pritchard, 2018). The Project will need to comply with the City’s two points of connection requirement.

An existing 12-inch distribution main fronts the Project in Alluvial Avenue. The existing 12-inch main in Alluvial Avenue connects to additional 12-inch mains to the east at Fowler Avenue, to the west in Sunnyside Avenue, and to 8-inch mains in Fordham Avenue. Collectively, these facilities convey water from local wells and a surface water treatment plant located about four (4) miles to the southeast. This portion of the City’s potable water system is within the pressure zone called “Zone 2.” Attachment A shows the existing and planned infrastructure in the area.

The entire Project is within the Kings River service area for FID, which means the Project has access to water from the Kings River as its source of supply. The existing project site consists of a residential dwelling and two detached structures.

Assumptions:

The following assumptions apply to this investigation:

- The City requires a minimum of two points of connection to the existing water system.
- Master planned facilities near the Project are existing.
- Developer is responsible for sizing all water mains and other water related infrastructure internal to the Project.
- The Clovis Fire Department (CFD) requires a minimum fire flow of 1,800 gallons per minute (gpm) and a minimum residual pressure of 35 psi, per CFD Standard #2.3.

- Existing and proposed water system demands will be based on unit demands from the WMP.
- Existing infrastructure sizes based on GIS data from City (see Attachment A).
- Recycled water will not be applied to public landscaping surrounding the Project.
- Hydraulic model analysis was not completed as part of this investigation.

Water Demand

Potable water demands for the Project were estimated using land-use-based unit water demand factors from the WMP. Table LU-2 in the Land Use Element of the City General Plan (GP) states that medium-high density residential has an allowable density ranging from 7.1 – 15.0 du/ac. The proposed use will consist of a 12-unit multi-family homes on 1.04 acres, which equates to 11.54 du/ac, consistent with a designation of medium-high density residential land use. **Table 1** summarizes unit demand factors used to estimate demand for typical planning conditions such as annual average, maximum day, and peak hour.

Table 1. Summary of Unit Water Demands by Land Use

Land Use	Annual Average (AFY/ac)	Maximum Day (gpm/ac)	Peak Hour (gpm/ac)
<i>Existing</i>			
Low Density Residential	2.50	2.63	4.65
<i>Proposed</i>			
Medium-High Density Residential	3.30	3.48	6.14

Notes:

1. Source for unit water demand values was Table 5-3.1 in WMP.
2. Abbreviations: AFY = Acre-feet per year, gpm = gallons per minute

Water usage for each demand category was estimated by multiplying gross acreage of land use type by its respective unit demand. Refer to **Table 2** for a summary of anticipated water demands for existing and proposed conditions.

Infrastructure

An existing 12-inch distribution main fronts the Project in Alluvial Avenue. The existing 12-inch main in Alluvial Avenue connects to additional 12-inch mains to the east at Fowler Avenue, to the west in Sunnyside Avenue, and to 8-inch mains in Fordham Avenue.

Connection to the existing water system should be provided in two locations as required by City standards. The information provided by the City for the Project does not provide locations for proposed connections to City distribution infrastructure. The Project is bounded on the western, northern, and eastern sides by existing development making two points of connection difficult. One way to accomplish the required two points of connection would be to connect to the 12-inch main in Alluvial and then through an easement on private property which is not recommended. Another option would be to have on-site mains connect at two locations in Alluvial Avenue and

construct an isolation valve between the two points of connection. The developer will have to provide additional information to the City on how it will satisfy the requirement for two points of connection.

Table 2. Summary of Total Water Demands by Land Use

Land Use	Area (ac)	Annual Average (AFY)	Maximum Day (gpm)	Peak Hour (gpm)
<i>Existing</i>				
Low Density Residential	1.04	2.6	2.7	4.8
<i>Proposed</i>				
Medium-High Density Residential	1.04	3.4	3.6	6.4

Water Supply

Urbanization within Clovis occurs both inside and outside the Kings River service area for Fresno Irrigation District (FID), therefore not all lands have access to this water source. Lands generally located south and west of the Enterprise Canal are within the Kings River service area and as such are entitled to an average annual allotment of approximately 2.24 acre-feet per acre (AF/ac). Some land uses within the City have unit demands greater than the 2.24 AF/ac supply available. The City adopted an ordinance requiring new development with demands exceeding the allotment to pay fees, so the City can acquire additional water supply to serve the development. Since the entirety of the Project is within the FID service area, water from the Kings River is available to offset the anticipated annual demand of 3.4 acre-feet. See **Table 3** for summary of reconciliation of supply and demand for existing and proposed land use conditions.

Table 3. Reconciliation of Supply and Demand

Land Use Category	Annual Average (AFY)	FID Entitlement (AFY)	Additional Supply Required (AFY)
<i>Existing</i>			
Low Density Residential	2.6	2.3	(0.3)
<i>Proposed</i>			
Medium-High Density Residential	3.4	2.3	(1.1)

Summary

Based on information collected during this investigation and the City's adherence to recommendations from prior water supply planning efforts, the existing and planned water distribution system and recommended connections should be adequate to convey water supply to the Project to support anticipated demands from the Project. As the Project falls within the

To: Gene Abella
1491 Alluvial Avenue, East of North Sunnyside Avenue (APN 563-1421-35)
Water Infrastructure Investigation

FID boundary, there is surface water entitlement available for its water supply, however the Project will need to pay fees to the City to make up a supply shortfall of about 1.1 AFY.

Serving this Project should not negatively impact the City's ability to provide a supply and delivery of water to reasonably foreseeable users within the City assuming adherence to recommendations from prior water resources planning efforts. However, to understand the cumulative impacts to supplies and other major water infrastructure, the City should be tracking changes in demand as part of the development process in order to determine when projects with greater demand are offset by projects with demands lower than originally planned.

Respectfully,

Nicholas Jacobson, PE

Enclosures: 1

Attachment A – Water Facilities Exhibit

c: Mike Harrison



DATE SIGNED 6/27/2022



- Legend**
- Project_Site
 - Pressure Zone Boundary
- Existing Water Mains**
Size (in inches)
- 6"
 - 8"
 - 12"

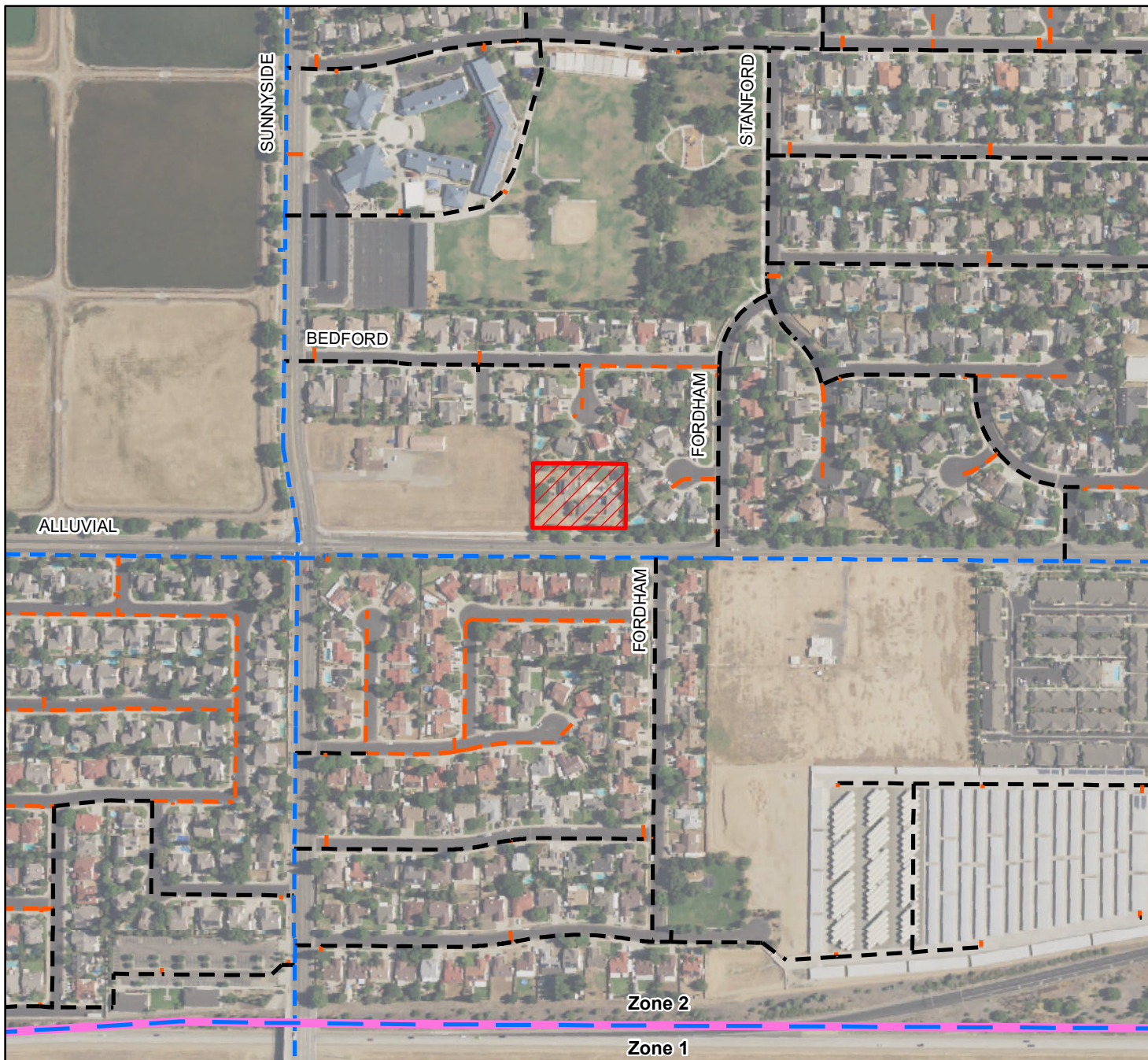
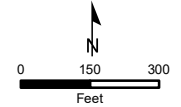


Exhibit Water Facilities

Water System Evaluation



APPENDIX G
Sewer Study

Gene G. Abella
City of Clovis
Planning and Development Services
1033 Fifth Street
Clovis, CA 93612

July 8, 2022
File No. 219-0204 (16)

Subject: Wastewater Service Study for Proposed 12-Unit Multi-Family Residential Development at 1491 Alluvial Avenue.

Dear Gene,

This letter provides the results and findings of our wastewater service study for a proposed multi-family residential development near the corner of Sunnyside Avenue and Alluvial Avenue, pursuant to your May 1st, 2022 email message.

A developer proposes to construct a 12-unit multi-family residential development (MFRD) on a 1.04 acre parcel of land situated near the northeast corner of Sunnyside Avenue and Alluvial Avenue, namely Assessor's Parcel Numbers (APN) 563-142-35. The City of Clovis Wastewater Collection System Master Plan (Master Plan) is based on a hydraulic model of the wastewater system. Included in the hydraulic model are various land use designations together with the appropriate wastewater flow generation rates for each land use. The Master Plan currently shows the area where the MFRD is proposed as a Low Density Residential land use, which has a lower wastewater flow generation rate than the proposed Medium High Density Residential land use of MFRD. The higher wastewater flow generation rate for the proposed MFRD was evaluated using the hydraulic model to determine the potential effect of the proposed development on the City's wastewater system. For the purposes of this letter report, "Master Plan Model" refers to the hydraulic model corresponding to the Master Plan, and "MFRD Evaluation Model" refers to the same hydraulic model as slightly modified to reflect the proposed change from Low Density Residential to Medium High Density Residential land use for the subject site.

Figure 1 provides a "screen shot" exhibit showing the Master Plan Model output for buildout conditions. The sewers that are planned to convey wastewater flow for the subject site provide more than sufficient capacity to accommodate the planned wastewater flows, as illustrated by the maximum relative depths or depth-to-diameter (d/D) ratios shown for each sewer reach under peak wastewater flow conditions. The Wastewater Master Plan prescribes a maximum allowable d/D ratio of 0.82 for the analysis of existing sewers, and 0.65 for the sizing design of planned sewers.

Manhole 55.43 is the Master Plan Model node that would receive wastewater flow from the sewer service sub-area that includes the subject site. The Master Plan Model calculates an average daily wastewater flow for buildout conditions at Manhole 55.43 of 0.037499 million gallons per day (MGD). The planned wastewater flow generation rate for Low Density Residential land use areas is 0.000567 MGD per acre. The proposed MFRD is on a 1.04 acre parcel, but since sewer subareas include roads, the subject site affects 1.41 acres according to criteria of the Master Plan. Currently this area accounts for 0.000799 MGD of the total flow calculated at Manhole 55.43 in the Master Plan Model. For the buildout condition of the model, already developed areas within the Herndon II service area are subject to calibration (see Section 4.9.1 of the 2017 Wastewater Collection System Master Plan Report). Manhole 55.43 has a calibration factor of 0.666258. Applying this factor to the calculated 0.000799 MGD to the Master Plan flow rate at Manhole 55.43 produces a 0.000533 flow rate for the buildout condition of the subject area.

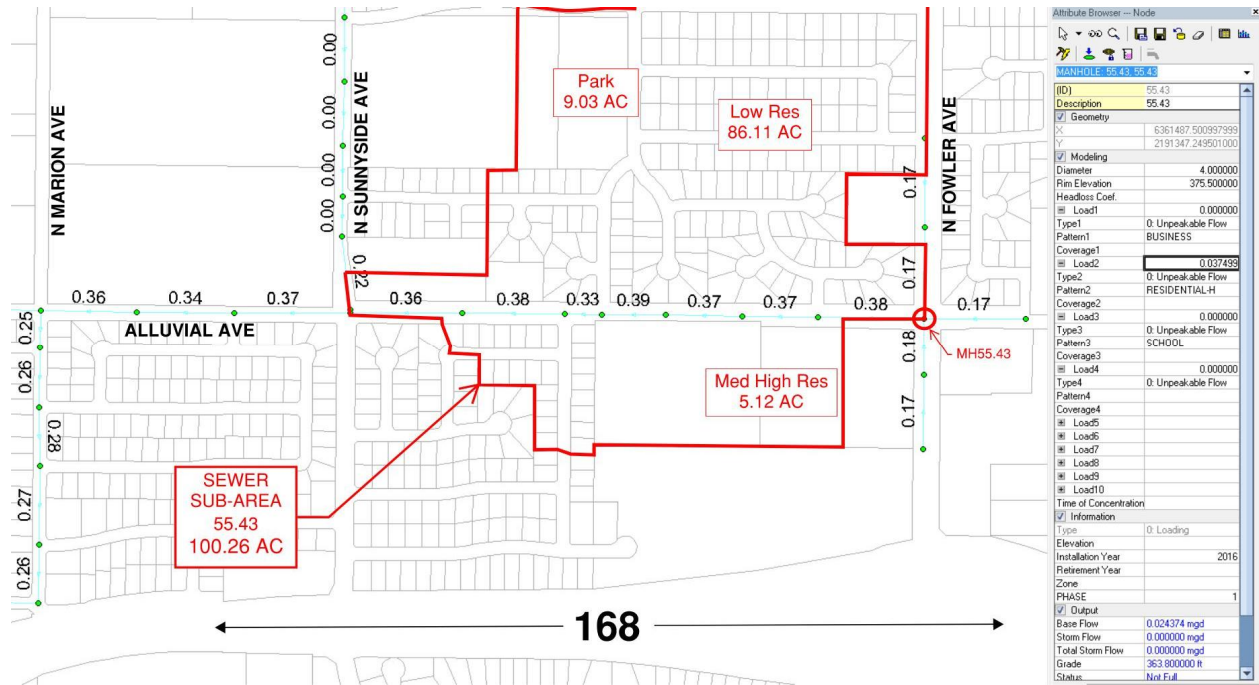


Figure 1: Master Plan Model for Buildout Conditions

The Master Plan provides criteria for selecting the wastewater flow generation rates for various land uses for future developments. For some residential land uses, a dwelling-unit-per-acre (du/acre) method is used. The Medium High Density Residential classification is used for developments between 7.10 and 15.00 du/acre. The proposed MFRD is 12 units situated on 1.41 acres. This results in an approximate value of 8.5 du/acre. Medium High Density Residential land uses are assigned a wastewater flow generation rate of 0.001459 MGD per acre.

The MFRD Evaluation Model reflects the elimination of 1.41 acres of Low Density Residential land use, and the addition of the same area of Medium High Residential land use, for the sewer service sub-area tributary to Manhole 55.43. This results in a net increase in planned tributary flow for Manhole 55.43 of 0.001525 MGD, which is an increase of approximately 4.1 percent compared to the buildout condition of the Master Plan Model. The resulting total average wastewater flow calculated for the MFRD Evaluation Model is 0.039023 MGD at Manhole 55.43.

Figure 2 provides a “screen shot” exhibit showing the MFRD Evaluation Model output for the buildout condition. The sewers that would convey wastewater flow for the proposed MFRD provide more than sufficient capacity to accommodate the calculated wastewater flows, as illustrated by the maximum d/D ratios shown for each sewer reach. The MFRD Evaluation Model calculates higher d/D ratios than the Master Plan Model, but even those higher d/D ratios are well below the maximum relative depth criteria prescribed by the Master Plan, for both existing and planned sewers.

The 10-inch sewer along Alluvial Avenue eventually leads to Clovis' connection to the regional Fresno-Clovis wastewater collection system at Herndon Avenue and Willow Avenue. At that connection, the Master Plan Model estimates that the average wastewater flow discharged to the regional Herndon Trunk Sewer will be 2.2498 MGD, and that the peak wastewater flow will be 3.3961 MGD. Similarly, the MFRD Model estimates an average wastewater flow of 2.2513 MGD and a peak wastewater flow of 3.3988 MGD. As indicated in the Master Plan, the City currently owns an average daily flow capacity of 2.800 MGD in the regional Herndon Trunk Sewer. The following Table 1 summarizes the impact at the Fresno-Clovis Herndon Connection.

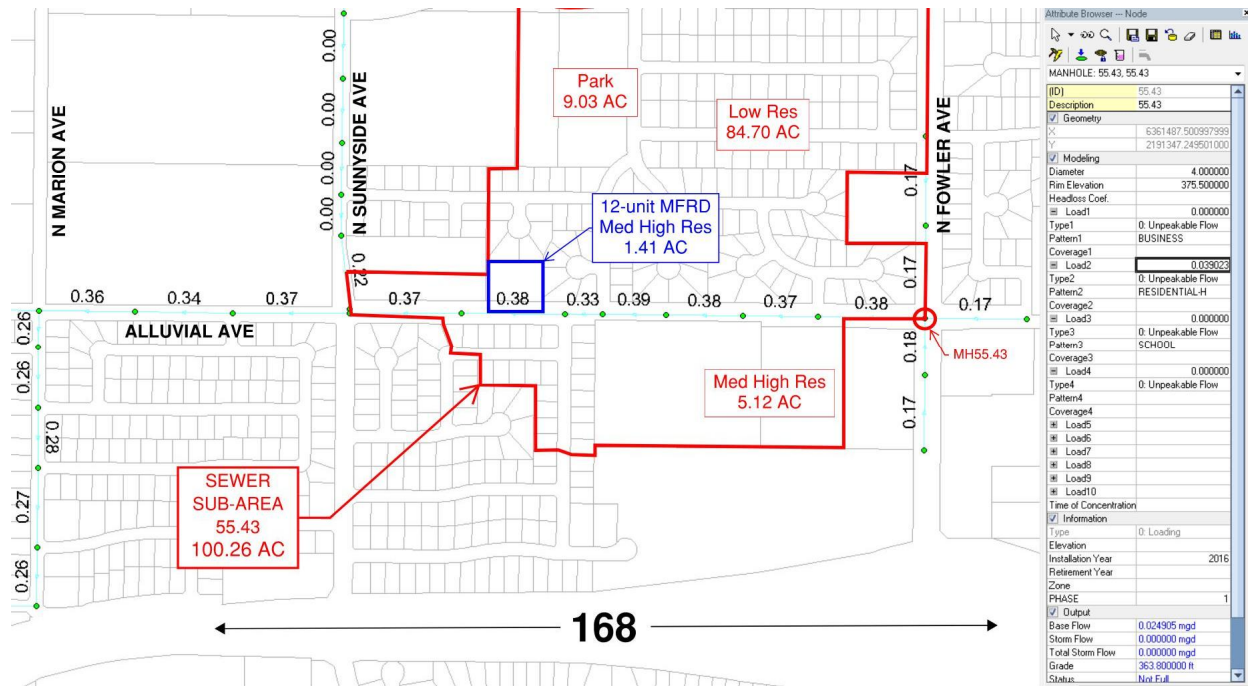


Figure 2: MFRD Model for Buildout Conditions

Scenario		Herndon Connection		
		Master Plan Config.	Master Plan Config. with 12-unit MFRD (@MH 55.43)	Difference (increase)
Buildout	Avg Flow (MGD)	2.2498	2.2513	0.001525
	Peak Flow (MGD)	3.3961	3.3988	0.002719

Table 1: Impact on Fresno-Clovis Wastewater Connection at Herndon and Willow

In summary, our evaluation indicates that the existing and planned wastewater collection system facilities can accommodate the proposed change from Low Density Residential to Medium High Residential land use for the subject site. However, it should be noted that there may be competing interests for available wastewater flow capacity in the regional Herndon Trunk Sewer. This analysis only evaluates the potential wastewater service implications of the proposed development in the context of the current Master Plan. It does not consider the effect of other potential allocations of available wastewater flow capacity, whether temporary or permanent, as may be allowed by the City for other proposed developments or other purposes.

If you have questions or comments, or if you require additional information, you are invited to contact me or Nathan Fastenau any time, as always. Many thanks, and...

Best Regards,

BLAIR, CHURCH & FLYNN CONSULTING ENGINEERS



Brad Kerner, PE
Project Manager



Date Signed: 8 July 2022

c:Nathan Fastenau, BCF (Email)
Sean Smith, City of Clovis (Email)



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Planning and Development Services

DATE: March 6, 2023

SUBJECT: Consider Approval - Res. 23-____, Resolution of Necessity to determine that public interest and necessity require acquisition of property for public purposes; and, authorizing proceedings in eminent domain for two properties located between Locan Avenue and DeWolf Avenue. APN/Owner: 553-030-05/Zepeda and 565-042-14/Samarin. (Continued from the February 21, 2023, meeting)

Staff: Ryan C. Burnett, Engineering Program Supervisor

Recommendation: Approve

ATTACHMENTS:

1. Res. 23-____ Resolution of Necessity – APNs 553-030-05 and 565-042-14
2. Locations Map
3. Notice of Hearing

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

For the City Council to hold a public hearing and approve the attached Resolution of Necessity (Attachment 1), approving the eminent domain process to acquire property for public street purposes at the northeast corner of Herndon and DeWolf Avenues and the southeast corner of Herndon and Locan Avenues (Attachment 2).

EXECUTIVE SUMMARY

This is a request to approve a Resolution of Necessity approving the eminent domain process to acquire right-of-way for the widening of Herndon Avenue in the vicinity from Temperance to DeWolf Avenues. Staff has not been able to come to an agreement with the property owners to purchase the needed right-of-way. This action is to avoid further delays in the construction of improvements to Herndon Avenue from Temperance to DeWolf Avenues. This item was

continued from the February 21, 2023, meeting based on questions that were raised during public comment.

California Code of Civil Procedure Section 1245.240 requires the Resolution of Necessity be approved by a vote of two-thirds of all the members of the City Council.

BACKGROUND

City staff is currently in discussion with Jose and Carmen Zepeda - property owners of APN 553-030-05, and William, Cheryl, and Timothy Samarin - property owners of APN 565-042-14 respectively. The acquisitions consist of 2,655 square feet of new street right-of-way across APN 553-030-05 and 16,520 square feet of new street right-of-way across APN 565-042-14. Attachment 2 shows the areas needing to be acquired.

This right-of-way is needed for the widening of Herndon Avenue from Temperance Avenue to DeWolf Avenue. Improvements to Herndon Avenue includes construction to finish lanes, curb, gutter, drive approaches, curb ramps, landscaping, irrigation, and paving and overlay, as necessary to match the existing pavement.

City staff have been working with the property owners since September 2021 to come to an agreement for the acquisitions. Staff has worked with the property owners to try to address issues and questions they have related to the acquisition and the future development of their properties. Due to lack of agreement on the terms of the acquisition and timing of the Herndon Avenue street improvements, staff is moving forward with this request for the City Council to approve the Resolution of Necessity and authorize staff to begin the eminent domain process, if necessary. The Resolution of Necessity is the first step in the eminent domain process.

Staff will continue to work with these property owners with the goal of coming to an agreement on the terms of the right-of-way acquisition; however, the start of construction related activities on Herndon Avenue will be delayed if right-of-way is not acquired in a timely manner.

The property owners have been notified of the public hearing date and their right to appear and be heard on the Resolution of Necessity. Council is advised that the only issues under consideration at the public hearing are considering necessity to invoke eminent domain, and whether there exist relevant findings required for adopting a Resolution of Necessity. The fair market value of the property is not a proper topic for consideration or discussion at the Resolution of Necessity hearing.

The findings for the Resolution of Necessity are:

1. Public interest and necessity require the proposed project;
2. The proposed project is planned and located in the manner that will be most compatible with the greatest public good and the least private injury;
3. The property described in the Resolution is necessary for the proposed project;
4. An offer to acquire the real property, pursuant to section 7267.2 of the Government Code, was made to the owners of record as provided by law;

5. The City has complied with all conditions and statutory requirements necessary to exercise the power of eminent domain ("the right to take") to acquire the portion of the property described herein; and
6. The City has fully complied with all provisions of the California Environmental Quality Act for the Project.

FISCAL IMPACT

The project and related right-of-way acquisitions are budgeted and funded by Measure "C" with a local match. There are no fiscal impacts to the City of Clovis.

REASON FOR RECOMMENDATION

The eminent domain action is necessary to acquire the necessary right-of-way and allow the improvements to Herndon Avenue between Temperance and DeWolf Avenue to proceed.

ACTIONS FOLLOWING APPROVAL

Staff will pursue the eminent domain action in the manner required by law.

Prepared by: Jomar Rushdan, Management Analyst

Reviewed by: City Manager *JH*

RESOLUTION 23-____**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS DETERMINING THAT THE PUBLIC INTEREST AND NECESSITY REQUIRE ACQUISITION OF PROPERTY FOR PUBLIC PURPOSES AND AUTHORIZING PROCEEDINGS IN EMINENT DOMAIN**

WHEREAS, it appears necessary and desirable that the City of Clovis (hereinafter "City"), acquire public street easements on and over portions of two parcels of real property commonly known as APN 553-030-05 and APN 565-042-14, which are more particularly described as set forth in **Attachment A**, and as depicted in **Attachment B** attached hereto (the easement interests are hereinafter referred to as the "Property"); and

WHEREAS, the underlying project for which the Property is needed is the widening and related improvements to Herndon Avenue from Temperance Avenue to DeWolf Avenue, CIP No. 16-09 ("Project"), and this resolution is necessary to acquire the Property, consisting of public street easements over approximately 2,655 square feet from APN 553-030-05 and 16,520 square feet from APN 565-042-14, for the Project; and

WHEREAS, a Notice of Hearing on the Intent of the City Council of the City of Clovis (hereinafter "Council") to Adopt the Resolution of Necessity was mailed to the record owners of the Property in accordance with California Code of Civil Procedure section 1245.235(a) and (b). The Notice of Hearing advised the property owners of their right to be heard on the matters referred to therein on the date and at the time and place stated therein; and

WHEREAS, the hearing set out in the Notice of Hearing was duly held on February 21, 2023 at the time and place stated therein, and all interested parties were given an opportunity to be heard. The hearing was then closed and the matter considered by the Council, all in accordance with applicable law; and

WHEREAS, this Council has received and considered all relevant facts and evidence, including, but not limited to, the Planning and Development Services staff report and matters referenced therein; facts which are otherwise commonly known and matters of public record; and all other relevant and proper evidence offered at the hearing by staff, affected property owners who made timely requests for hearing, and others who appeared and were heard.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Clovis by a vote of not less than 2/3 of its members, declares, finds, and resolves as follows:

1. The foregoing recitals are true and correct and, by this reference, incorporated herein as if set forth in full. The staff report for this Resolution of Necessity and all Attachments thereto and all Exhibits attached to this Resolution are incorporated by reference.
2. The City is authorized to acquire the Property for the Project by eminent domain proceedings pursuant to Section 37350.5 and 40404 of the California Government Code.
3. The Property to be acquired is generally located on Herndon Avenue between Locan Avenue and DeWolf Avenue, in the City of Clovis, County of Fresno, State of California. The interests in the Property to be taken consists of those certain easements hereinafter described in the legal description attached as **Attachment A**, and depicted in the diagram attached as **Attachment B**.
4. Based on all evidence presented in this matter, the Council specifically finds and determines that:
 - a. The public interest and necessity require the proposed Project.
 - b. The proposed Project is planned or located in the manner that will be most compatible with the greatest public good and the least private injury.
 - c. The Property as described is necessary for the proposed Project.
 - d. The offers required by Section 7267 .2 of the Government Code have been made to the identified and known owners of record of the Property.
 - e. The City has complied with all conditions and statutory requirements necessary to exercise the power of eminent domain ("the right to take") to acquire the portion of the Property described herein.
5. The easement interests in the Property which are authorized to be acquired by this resolution are as delineated on the attached exhibits, being real property completely situated within the territorial boundaries of the City.
6. The City plans that the date of use of the Property for the Project will be within seven years from the date the complaint for eminent domain proceedings is filed.

7. The City Attorney of the City of Clovis is authorized and directed to institute and conduct to conclusion in the name of the City, proceedings in eminent domain. The proceedings are to be in accordance with the provisions of the California Constitution and the Code of Civil Procedure in order to acquire in the name of the City easements in and to a portion of the Property herein described and such other interests as may be necessary for construction and operation of the Project. This Council finds and determines the public interest, necessity, and welfare require prejudgment possession of the Property as soon as the same may be lawfully obtained. The City Attorney is authorized and directed to obtain such possession.

8. The Director of Finance of the City is authorized to pay, out of funds authorized or received, for the acquisition of the Property, for prejudgment possession of the Property, and for all other costs and expenses of acquisition, including, but not limited to, final compensation for the take and all fees and costs charged for City services in connection with this litigation.

9. The City Manager and City Attorney are hereby authorized, without further action of this Council, to enter into any settlement regarding acquisition of the Property by way of agreement and/or stipulation so long as the settlement is based upon approved evidence and appraisal opinion.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on March 6, 2023, by the following vote, to wit.

- AYES:
- NOES:
- ABSENT:
- ABSTAIN:

DATED: March 6, 2023

Mayor

City Clerk

LEGAL DESCRIPTION

APN: A Portion of 553-030-05
Herndon Avenue Right-of-Way Dedication

That portion of Lot 1 of Tract No. 2134, Sierra View Estates, according to the map thereof recorded in Volume 23 of Plats, at Page 57, Fresno County Records, lying in the Northeast Quarter of Section 2, Township 13 South, Range 21 East, Mount Diablo Base and Meridian, according to the Official Plat thereof, in the State of California, County of Fresno, more particularly described as follows:

COMMENCING at the North Quarter corner of said Section 2; thence South 0°06'55" West, along the West line of said Northeast Quarter, a distance of 115.66 feet; thence South 89°53'05" East, a distance of 30.00 feet to the East line of Locan Avenue, as shown on said Tract Map and the **POINT OF BEGINNING**;

thence South 72°30'44" East, along the South line of Herndon Avenue, as shown on said Tract Map, a distance of 10.48 feet to a point of intersection thereof with a line which is parallel with and 40.00 feet East of said West line;

thence South 0°06'55" West, along said parallel line, a distance of 238.97 feet;

thence South 11°25'31" West, a distance of 50.99 feet to the East line of said Locan Avenue and a point of intersection thereof with a line which is parallel with and 30.00 feet East of said West line;

thence North 0°06'55" East, along last said parallel line, a distance of 292.10 feet to the **POINT OF BEGINNING**.

Containing an area of 2,655 square feet or 0.06 acres, more or less.

The above described Right-of-Way Dedication is graphically depicted on the attached Exhibit "B" and made a part of this description by reference thereto.

END DESCRIPTION

This legal description was prepared by me, or under my direction, in accordance with the Professional Land Surveyors' Act.



Analisa Raquel Gonzales, PLS 9496
Blair, Church & Flynn

April 2, 2021
Date



LEGAL DESCRIPTION

APN: A Portion of 565-042-14
Herndon Avenue Right-of-Way Dedication

A portion of that parcel of land granted by that Gift Deed, recorded December 30, 1993, as Document No. 93204334, of Official Records of Fresno County, lying in the Southeast Quarter of Section 35, Township 12 South, Range 21 East, Mount Diablo Base and Meridian, according to the Official Plat thereof, in the State of California, County of Fresno, more particularly described as follows:

COMMENCING at the Southwest corner of said Southeast Quarter; thence North 00°46'17" East, along the West line said Southeast Quarter, a distance of 50.17 feet; thence South 89°13'43" East, a distance of 30.00 feet to a point of intersection thereof with a line which is parallel with and 30.00 feet East of said West line and the **POINT OF BEGINNING**;

thence North 00°46'17" East, along said parallel line, a distance of 3.47 feet; thence leaving said parallel line, South 45°08'00" East, a distance of 28.15 feet; thence North 89°33'40" East, a distance of 600.38 feet to a point of intersection thereof with a line which is parallel with and 43.00 feet North of the South line of said Southeast Quarter; thence South 89°33'27" East, along last said parallel line, a distance of 455.38 feet; thence leaving last said parallel line, South 88°40'34" East, a distance of 845.10 feet to a point of intersection thereof with a line which is parallel with and 30.00 feet North of said South line; thence North 89°33'27" West, along last said parallel line, a distance of 1,900.93 feet to the northeasterly line of that certain parcel of land as described in the Grant Deed to the County of Fresno, recorded February 23, 1995 as Document No. 95023556, Official Records of said County; thence North 44°23'34" West, leaving last said parallel line and along said northeasterly line, a distance of 28.20 feet to the **POINT OF BEGINNING**.

Containing an area of 16,520 square feet or 0.38 acres, more or less.

END DESCRIPTION

This legal description was prepared by me, or under my direction, in accordance with the Professional Land Surveyors' Act.

Type text here

Analisa Raquel Gonzalez, PLS 9496
Blair, Church & Flynn

April 2, 2021
Date



Exhibit B-1

POINT OF COMMENCEMENT
N. 1/4 CORNER SEC. 2, T.13S.,
R.21E., M.D.B. & M.

HERNDON AVENUE

WEST LINE OF THE N.E.
1/4 OF SEC. 2, T.13S.,
R.21E., M.D.B. & M.

LINE TABLE		
LINE #	LENGTH	BEARING
L1	30.00	S89°53'05"E
L2	10.48	S72°30'44"E

POINT OF BEGINNING

SOUTH LINE OF
HERNDON AVENUE

APN: 553-020-68

LOCAN AVENUE

APN: 553-030-05

GRANT DEED
DOCUMENT NO. 2007-0141666
OFFICIAL RECORDS,
FRESNO COUNTY

LOT 1
TRACT 2134
BOOK 23, PAGE 57 OF PLATS
FRESNO COUNTY RECORDS

APN: 553-030-06

EAST LINE OF
LOCAN AVENUE

S11°25'31"W
50.99'



LEGEND





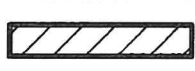
- PROPERTY LINE
- PROPOSED RIGHT-OF-WAY DEDICATION
- EXTENSION LINE
- SECTION LINE
- EXISTING RIGHT OF WAY LINE
- ▨▨▨▨▨ AREA OFFERED FOR RIGHT-OF-WAY DEDICATION
TOTAL AREA: 2,655 SQFT/0.06 AC.



<p>Blair, Church & Flynn CONSULTING ENGINEERS</p>	<p>CONSULTANT Blair, Church & Flynn Consulting Engineers 484 Clovis Avenue, Suite 200 Clovis, California 93612 Tel (569) 326-1400 Fax (569) 326-1500</p>	<p>HERNDON AVENUE WIDENING</p> <p>EXHIBIT "B"</p> <p>RIGHT-OF-WAY DEDICATION</p> <p>APN: 553-030-05</p>		<p>DR. BY ARG CH. BY RSW DATE 4/2/21 SCALE: AS NOTED</p>	<p>SHEET NO. 1 OF 1 SHEETS</p>
	<p>Drawing: P:\218-0369\Site\Exhibits\553-030-05\218369_APN-553-030-05_Herndon_EX-B.dwg; Layout1 - RCF.ctb Plot by: pgonzalez Apr 02, 2021 - 2:03pm</p>				

Exhibit B

LEGEND

-  PROPERTY LINE
 -  PROPOSED RIGHT-OF-WAY DEDICATION
 -  SECTION LINE
 -  EXISTING RIGHT OF WAY LINE
 -  AREA OFFERED FOR RIGHT-OF-WAY DEDICATION
- TOTAL AREA: 16,520 SQFT/0.38 AC.

APN: 565-042-14
 GIFT DEED
 DOCUMENT NO. 93204334
 OFFICIAL RECORDS, FRESNO COUNTY

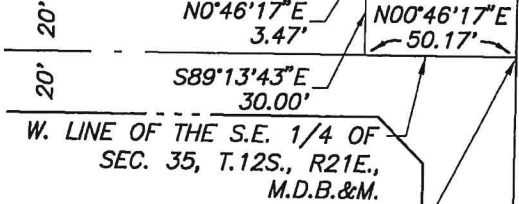
APN: 565-042-14
 GIFT DEED
 DOCUMENT NO. 93204334
 OFFICIAL RECORDS,
 FRESNO COUNTY

APN: 553
 -120-03

APN: 553-120-01

S. LINE OF THE S.E. 1/4
 OF SEC. 35, T.12S., R21E.,
 M.D.B.&M.

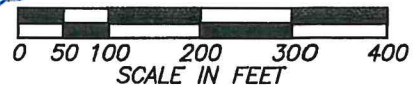
DE WOLF AVENUE



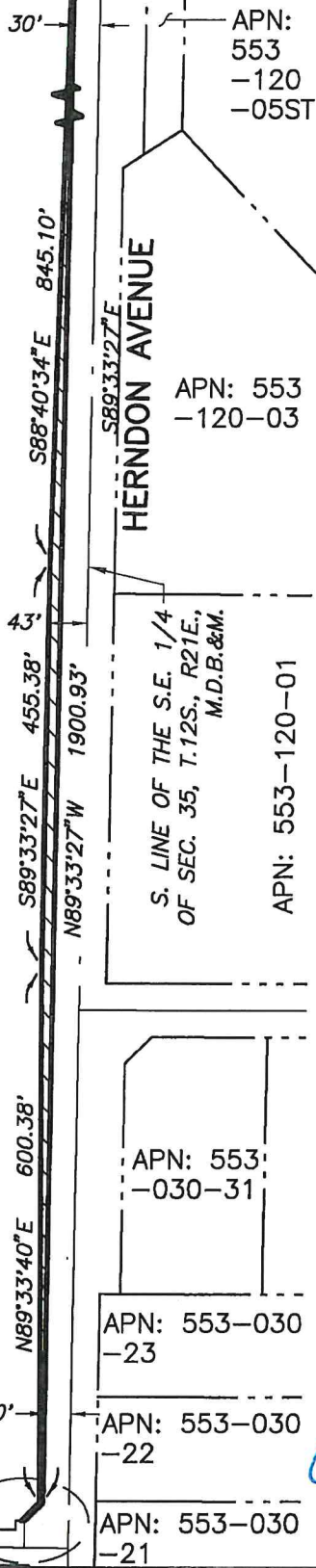
POINT OF COMMENCEMENT
 S.W. CORNER OF THE S.E. 1/4
 OF SEC. 35, T.12S., R21E.,
 M.D.B.&M.


NORTHEASTERLY LINE OF
 RIGHT-OF-WAY EASEMENT
 AS GRANTED TO THE COUNTY
 OF FRESNO IN DOC. NO.
 95023556, O.R.F.C.

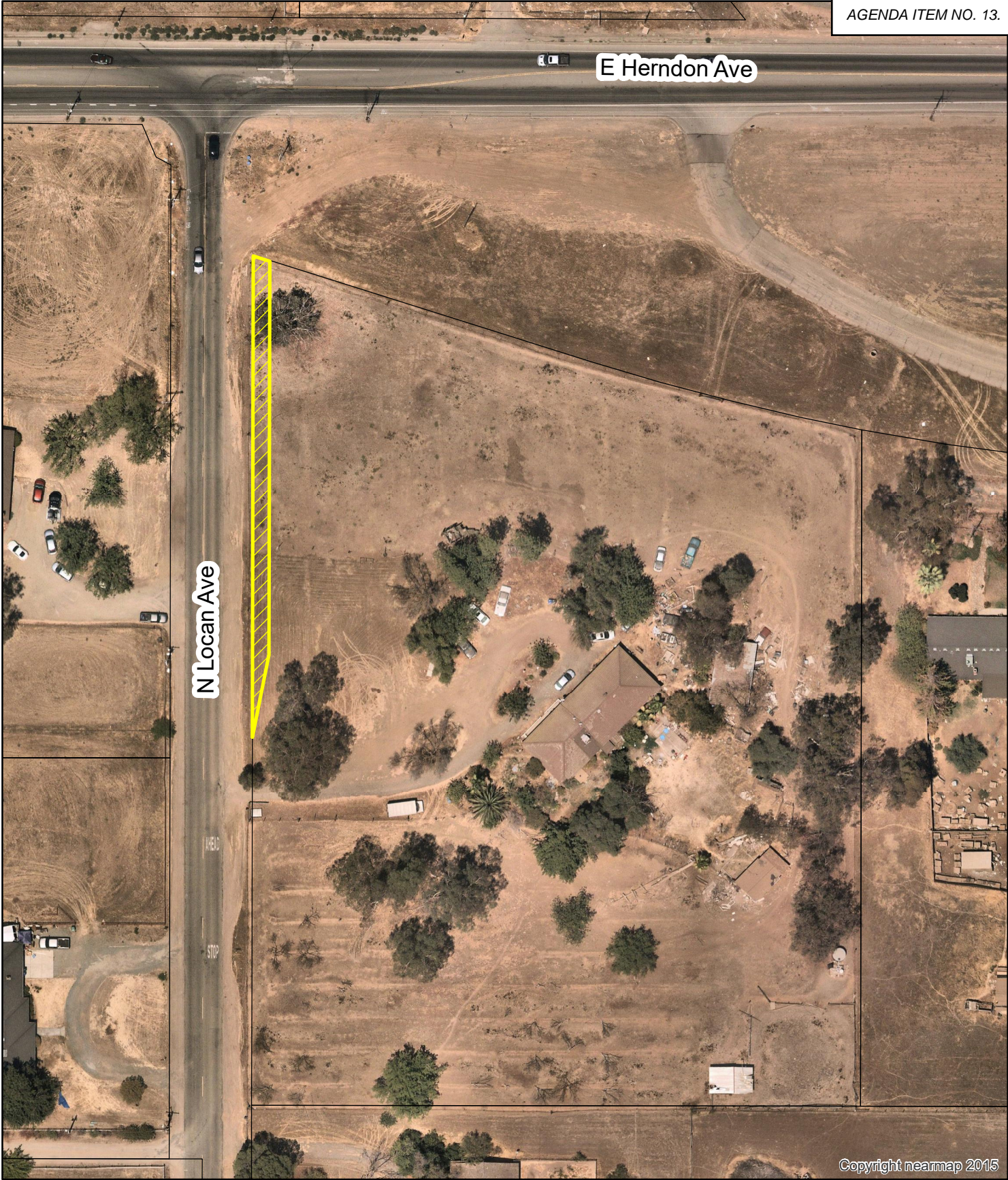
DETAIL
 SCALE: 1"=60'



SEE DETAIL
 DE WOLF AVENUE



 <p>CONSULTANT Blair, Church & Flynn Consulting Engineers 451. Clovis Avenue, Suite 200 Clovis, California 93612 Tel (559) 326-1400 Fax (559) 326-1500</p>	<p>HERNDON AVENUE WIDENING</p> <p>EXHIBIT "B"</p> <p>RIGHT-OF-WAY DEDICATION</p> <p>APN: 565-042-14</p>		<p>DR. BY HKE CH. BY ARG DATE 4/2/21 SCALE: AS NOTED</p>	<p>SHEET NO. 1 OF 1 SHEETS</p>
	<p>Blair, Church & Flynn Consulting Engineers logo</p>			



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553-030-05

Zepeda Jose Luis & Carmen

Existing Property Lines
 ROW to be Acquired

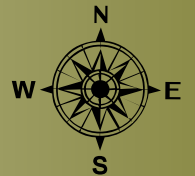
Attachment 2

791



4/26/2021

CIP 16-09
 APN: 565-042-14
 ROW2020-14



Existing Property Line ROW to be Acquisition

Feet0 25 792



CITY OF CLOVIS
Department of Planning and Development Services
 CITY HALL • 1033 FIFTH STREET • CLOVIS, CA 93612

NOTICE OF HEARING ON RESOLUTION OF NECESSITY
 (Code Civ. Proc., § 1245.234)

January 11th, 2023

Jose and Carmen Zepeda
 6900 Locan Avenue
 Clovis, CA 93619

Re: Notice of Proposed Adoption of Resolution of Necessity; APN 553-030-05 (Portion)

Dear Mr. and Mrs. Zepeda:

The City of Clovis (“City”) has previously informed you of its interest in purchasing a portion of your property identified as APN: 553-030-05 and located at 6900 N. Locan Avenue (“Property”) in Clovis, California for The Herndon Widening Project on Herndon Avenue (“Project”). The City has offered to pay you the full amount of the City’s appraised value of the Property. The City remains interested in purchasing your Property on a voluntary basis, and negotiating to that end. However, because the City must move forward with the Project, the City has no choice but to initiate the process for acquiring your Property involuntarily, by means of eminent domain, if necessary.

Accordingly, notice is hereby given that on Monday, February 21st, 2023, at 6:00 p.m. or as soon thereafter as the matter may be heard, at the Clovis City Council chambers, located at 1033 5th Street, Clovis, California, the Clovis City Council will consider for adoption a proposed Resolution of Necessity authorizing condemnation of the Property. The public project is the acquisition of property for a right of way and other easements and/or fee interests for the City’s street improvement project along Herndon Avenue.

As the record owner of the Property, you have the right to appear before the City Council and be heard on the matters referred to in California Code of Civil Procedure section 1240.030, which are:

1. Whether the public interest and necessity require the project;

2. Whether the project is planned or located in the manner that will be most compatible with the greatest public good and the least private injury; and
3. Whether the real property sought to be acquired is necessary for the project.

If you wish to appear and be heard on **February 21st, 2023** on the above matters, please mail or deliver the written request to appear enclosed with this letter. The written request must be received by the City no later than 5 p.m. on **February 14th, 2023**. If no request is received, you will waive your right to appear and be heard on the above matters.

Failure to make a written request to appear before the City Council meeting on **February 21st, 2023**, does not mean that you agree with the City's offer previously made to you. The proposed adoption of the resolution of necessity addresses only the issues set forth above. **The resolution of necessity hearing will not address the fair market value of the Property. Any fair market value issues will be addressed in the eminent domain proceedings if the resolution of necessity is adopted.**

I enclose for your reference, or your attorney's reference, sections 1240.030 and 1245.235 of the Code of Civil Procedure, which describes the resolution of necessity process.

PLEASE BE ADVISED, YOUR FAILURE TO FILE A WRITTEN REQUEST WITH THE CITY REQUESTING TO APPEAR AND BE HEARD AT THE ABOVE REFERENCED ADDRESS FEBRUARY 14TH, 2023 WILL RESULT IN A WAIVER OF YOUR RIGHT TO APPEAR AND BE HEARD ON THE PROPOSED ADOPTION OF THE RESOLUTION OF NECESSITY REFERENCED ABOVE.

Again, please be assured that the City still desires to enter into a voluntary purchase agreement with you for the acquisition of your Property, and the giving of this Notice is not meant to preclude that possibility. However, the City's need to proceed with the Project requires that it move forward immediately to resolve this matter. Please contact me at 324-2336 if you would like to discuss any aspect of this matter.

Sincerely,

RYAN C. BURNETT, AICP
ENGINEERING PROGRAM SUPERVISOR

Jomar Rushdan
Management Analyst
City of Clovis Engineering Division

Enclosures

cc: Scott G. Cross, Esq., Lozano Smith

WRITTEN REQUEST TO APPEAR AND
BE HEARD ON RESOLUTION OF NECESSITY

TO: Jomar Rushdan
Management Analyst
City of Clovis
1033 5th Street
Clovis, CA 93612

FROM: Jose and Carmen Zepeda

Please consider this our written request to be heard on the Resolution of Necessity item scheduled for **Monday, February 21st, 2023** at 6:00 p.m. before the Clovis City Council at 1033 5th Street, Clovis, California. We understand you must receive this request no later than **5:00** p.m. on **February 14th, 2023** at the above address.

We understand that the matters to be heard are:

- a. That the public interest and necessity require the project;
- b. The project is planned or located in the manner that will be most compatible with the greatest public good and the least private injury;
- c. The real property ("property") sought to be acquired is necessary for the project; and

We further understand that the hearing will **not** address the issue of what is the fair market value of the property.

DATED: _____, 2023 _____
Property Owner (or Authorized Agent)

DATED: _____, 2023 _____
Property Owner (or Authorized Agent)

[You may mail by first class mail, or certified mail, or you may hand deliver this notice to the City Offices.]

California Code of Civil Procedure

1240.030.

The power of eminent domain may be exercised to acquire property for a proposed project only if all of the following are established:

- (a) The public interest and necessity require the project.
- (b) The project is planned or located in the manner that will be most compatible with the greatest public good and the least private injury.
- (c) The property sought to be acquired is necessary for the project.

1245.235.

(a) The governing body of the public entity may adopt a resolution of necessity only after the governing body has given each person whose property is to be acquired by eminent domain and whose name and address appears on the last equalized county assessment roll notice and a reasonable opportunity to appear and be heard on the matters referred to in Section 1240.030.

(b) The notice required by subdivision (a) shall be sent by first-class mail to each person described in subdivision (a) and shall state all of the following:

- (1) The intent of the governing body to adopt the resolution.
- (2) The right of such person to appear and be heard on the matters referred to in Section 1240.030.
- (3) Failure to file a written request to appear and be heard within 15 days after the notice was mailed will result in waiver of the right to appear and be heard.

(c) The governing body, or a committee of not less than 11 members thereof designated by the governing body if the governing body has more than 40 members, shall hold a hearing at which all persons described in subdivision (a) who filed a written request within the time specified in the notice may appear and be heard on the matters referred to in Section 1240.030. Such a committee shall be reasonably representative of the various geographical areas within the public entity's jurisdiction. The governing body need not give an opportunity to appear and be heard to any person who fails to so file a written request within the time specified in the notice. If a committee is designated by the governing body pursuant to this subdivision to hold the hearing, the committee, subsequent to the hearing, shall provide the governing body and any person described in subdivision (a) who has appeared before the committee with a written summary of the hearing and a written recommendation as to whether to adopt the resolution of necessity. Any person described in subdivision (a) who has appeared before the committee shall also be given an opportunity to appear and be heard before the governing body on the matters referred to in Section 1240.030.

(d) Notwithstanding subdivision (b), the governing body may satisfy the requirements of this section through any other procedure that has given each person described in subdivision (a) reasonable written personal notice and a reasonable opportunity to appear and be heard on the matters referred to in Section 1240.030.



CITY OF CLOVIS
Department of Planning and Development Services
 CITY HALL • 1033 FIFTH STREET • CLOVIS, CA 93612

NOTICE OF HEARING ON RESOLUTION OF NECESSITY
 (Code Civ. Proc., § 1245.234)

January 11th, 2023

William Samarin, Cheryl Samarin and Timothy Samarin
 1809 N. Shasta
 Kerman, CA 93630

Re: Notice of Proposed Adoption of Resolution of Necessity; APN 565-042-14 (Portion)

Dear Mr. and Ms. Samarin:

The City of Clovis (“City”) has previously informed you of its interest in purchasing a portion of your property identified as APN: 565-042-14 and located at North/East Corner of Herndon & De Wolf Avenues (“Property”) in Clovis, California for The Herndon Widening Project on Herndon Avenue (“Project”). The City has offered to pay you the full amount of the City’s appraised value of the Property. The City remains interested in purchasing your Property on a voluntary basis, and negotiating to that end. However, because the City must move forward with the Project, the City has no choice but to initiate the process for acquiring your Property involuntarily, by means of eminent domain, if necessary.

Accordingly, notice is hereby given that on Monday, February 21st, 2023, at 6:00 p.m. or as soon thereafter as the matter may be heard, at the Clovis City Council chambers, located at 1033 5th Street, Clovis, California, the Clovis City Council will consider for adoption a proposed Resolution of Necessity authorizing condemnation of the Property. The public project is the acquisition of property for a right of way and other easements and/or fee interests for the City’s street improvement project along Herndon Avenue.

As the record owner of the Property, you have the right to appear before the City Council and be heard on the matters referred to in California Code of Civil Procedure section 1240.030, which are:

1. Whether the public interest and necessity require the project;

2. Whether the project is planned or located in the manner that will be most compatible with the greatest public good and the least private injury; and
3. Whether the real property sought to be acquired is necessary for the project.

If you wish to appear and be heard on **February 21st, 2023** on the above matters, please mail or deliver the written request to appear enclosed with this letter. The written request must be received by the City no later than 5 p.m. on **February 14th, 2023**. If no request is received, you will waive your right to appear and be heard on the above matters.

Failure to make a written request to appear before the City Council meeting on **February 21st, 2023**, does not mean that you agree with the City's offer previously made to you. The proposed adoption of the resolution of necessity addresses only the issues set forth above. **The resolution of necessity hearing will not address the fair market value of the Property. Any fair market value issues will be addressed in the eminent domain proceedings if the resolution of necessity is adopted.**

I enclose for your reference, or your attorney's reference, sections 1240.030 and 1245.235 of the Code of Civil Procedure, which describes the resolution of necessity process.

PLEASE BE ADVISED, YOUR FAILURE TO FILE A WRITTEN REQUEST WITH THE CITY REQUESTING TO APPEAR AND BE HEARD AT THE ABOVE REFERENCED ADDRESS FEBRUARY 14TH, 2023 WILL RESULT IN A WAIVER OF YOUR RIGHT TO APPEAR AND BE HEARD ON THE PROPOSED ADOPTION OF THE RESOLUTION OF NECESSITY REFERENCED ABOVE.

Again, please be assured that the City still desires to enter into a voluntary purchase agreement with you for the acquisition of your Property, and the giving of this Notice is not meant to preclude that possibility. However, the City's need to proceed with the Project requires that it move forward immediately to resolve this matter. Please contact me at 324-2336 if you would like to discuss any aspect of this matter.

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RYAN C. BURNETT, AICP
ENGINEERING PROGRAM SUPERVISOR

Jomar Rushdan
Management Analyst
City of Clovis Engineering Division

Enclosures

cc: Scott G. Cross, Esq., Lozano Smith

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BE HEARD ON RESOLUTION OF NECESSITY

TO: Jomar Rushdan
Management Analyst
City of Clovis
1033 5th Street
Clovis, CA 93612

FROM: William, Cheryl and Timothy Samarin

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referred to in Section 1240.030. Such a committee shall be reasonably representative of the various geographical areas within the public entity's jurisdiction. The governing body need not give an opportunity to appear and be heard to any person who fails to so

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(d) Notwithstanding subdivision (b), the governing body may satisfy the requirements of this section through any other procedure that has given each person described in subdivision (a) reasonable written personal notice and a reasonable opportunity to appear and be heard on the matters referred to in Section 1240.030.



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Administration Department

DATE: March 6, 2023

SUBJECT: Receive and File – Economic Development, Housing and Communications Update.

Staff: Chad McCollum, Economic Development, Housing and Communications Director

Recommendation: Receive and File

ATTACHMENTS: 1. None.

Economic Development, Housing and Communications Director Chad McCollum will provide a verbal presentation on this item.

Please direct questions to the City Manager's office at 559-324-2060.



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council
 FROM: Administration
 DATE: March 6, 2023
 SUBJECT: Consider – Various items related to the Retail Market Survey and Land Use Evaluation of the Shaw Avenue corridor.

a. Receive and File - Results of the Retail Market Survey & Land Use Evaluation of the Shaw Avenue corridor.

b. Consider Approval - For the City to enter into an agreement with Kosmont Companies to provide a Fiscal Impact and Economic Benefit Analysis for the redevelopment of existing retail space in the Shaw Avenue corridor in the amount of \$25,000.

Staff: Chad McCollum, Economic Development, Housing and Communications Director

Recommendation: Receive and File and Approve

ATTACHMENTS: 1. Retail Market Survey & Land Use Survey by Kosmont Companies
 2. Draft Agreement of Work Plan for Real Estate Advisory / Implementation Services

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

For the City Council to receive and file a Retail Market Survey and Land Use Evaluation and authorize the City Manager to enter into an agreement with Kosmont Companies to initiate a Phase 2 economic development study pertaining to Shaw Avenue Corridor.

EXECUTIVE SUMMARY

In May 2021, the City of Clovis retained Kosmont Companies to produce a Retail Market Survey & Land Use Evaluation (Attachment 1) to analyze the existing retail market conditions in Clovis

as well as examining land uses which could potentially replace underperforming retail locations and identify economic development tools to attract and optimize future development.

The study focused on changing retail trends, changing work trends such as work from home, and how an increase in e-commerce will impact our real estate landscape.

Following the completion of these services, Staff has determined that additional analysis of targeted development projects in the City, with a focus on the Sierra Vista Mall, would be beneficial and is seeking approval from City Council (Attachment 2) to move forward. Findings from the phase 2 study would provide input into the General Plan update currently underway.

BACKGROUND

The City of Clovis Economic Development Team has worked closely with business owners and developers to find uses for underutilized properties along the Shaw Avenue Corridor. This past decade has seen a growth in hotel development, as well as national brand retail stores and restaurants. The Shaw Avenue Corridor has outperformed other older commercial corridors but has the potential to continue to function as an even greater economic engine for the City of Clovis. Some property is underutilized or is vacant including several major commercial centers such as Sierra Vista Mall and Village Square shopping centers. The retail market has shifted significantly in the past decade and requires the City to analyze the mix of uses the market is demanding to ensure continued vibrancy of the corridor.

Kosmont Companies completed an analysis of the retail market as well as other land uses indicating there are opportunities to accommodate other land uses along the Shaw Avenue corridor that would improve the marketability and value of properties currently struggling to find users.

It is proposed to continue working with Kosmont Companies, in a Phase 2 of their already comprehensive work in the Phase 1 Retail Market Survey & Land Use Evaluation. While Phase 1 was a macro economic study of our city and region, Phase 2 will use changing retail market trends and focus in on a potential redevelopment project of the Sierra Vista Mall, identifying possible future uses which could maximize the location's economic benefit to the City of Clovis. The study is not meant to only look at the Mall, but the findings will be provided in such a way as to be able to be applied to additional real estate throughout the Corridor and City. These findings could be considered as part of the General Plan Update process that is in process. Implementing land use changes along the corridors is one of the most significant tools the City has to encourage redevelopment and economic growth along the corridor.

Kosmont Companies is a real estate and economic consulting firm, specializing in working with public agencies to maximize their economic growth potential by, among other things, identifying possible uses for underutilized real estate.

FISCAL IMPACT

Costs to cover this agreement are available in the Economic Development budget for the fiscal year 2022 – 2023. One time cost associated with this agreement is \$25,000.

REASON FOR RECOMMENDATION

Staff is interested in additional data and analysis on the Shaw Avenue Corridor, in particular, building upon the research and work already undertaken by Kosmont Companies during the first phase of their study.

ACTIONS FOLLOWING APPROVAL

After approval by the Council, the City Manager will execute the agreement with Kosmont, after which City Staff will begin work with Kosmont on beginning Phase 2 of their Shaw Avenue Corridor study.

Prepared by: Chad McCollum, Economic Development Director

Reviewed by: City Manager *JH*



CITY of CLOVIS

CITY OF CLOVIS

RETAIL MARKET SURVEY & LAND USE EVALUATION

SEPTEMBER 2021, UPDATED FEBRUARY 2023



2301 Rosecrans Ave. Suite 4140
El Segundo, CA 90245
TEL: 424-297-1070 | URL: www.kosmont.com

INTRODUCTION

Kosmont Companies ("Kosmont"), a real estate & economics advisory firm serving hundreds of cities and local governments for over 36 years, has been retained by the City of Clovis ("City") to 1) develop a retail market survey ("Survey") and 2) examine other land uses that could replace or rejuvenate ailing retail locations and identify economic development tools to attract and optimize future development ("Land Use Evaluation").

- **Kosmont's expertise covers a full range of economics & real estate advisory services including:**
 - Market and Feasibility Analyses
 - Fiscal Impact & Economic Benefit Studies
 - Economic Development Strategies & Implementation
 - Business/Retailer & Developer Recruitment
 - Identification of Funding Sources & Financing Strategies
 - Public-Private Transaction Structuring & Negotiation
- **Winning track record of initiating and implementing projects for municipalities**
 - In-house team includes economists, registered municipal advisors, financial analysts, lawyers, real estate professionals, former city managers & economic development department heads
 - Extensive network of brokers, investors and market data for real-time information, and industry leadership

Disclaimer: The analyses, projections, assumptions, and any examples presented herein are for illustrative purposes and are not a guarantee of actual and/or future results. Actual results are difficult to predict as a function of market conditions, natural disasters, pandemics, legislation and administrative actions.

Note: If needed, Financial Advisory and Real Estate Brokerage services can be provided by Kosmont Financial Services, Inc. (SEC / MSRB Registered Municipal Advisor) and Kosmont Real Estate Services, Inc. (Licensed Real Estate Brokerage Firm), respectively.

RETAIL MARKET SURVEY & LAND USE EVALUATION

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EXECUTIVE SUMMARY – RETAIL MARKET SURVEY

Demographic / Economic Profile

- Large population within City (~124,100) and significant population capture (~844,900) within a 30-minute drive time from Sierra Vista Mall (“Mall”). A 30-minute drive time was observed based on the true trade area of the Mall
- Approximately 70% of all visitors to the Mall were not only coming from Clovis and Fresno, but from as far southeast as Fowler, Parlier, Reedley, Sanger, and Selma
- Slightly older population in City (median age of 37 is higher than Fresno County; similar to State). Younger populations are captured within 30-minutes of Sierra Vista Mall (median age of 33)
- Average household size of 2.84 is less than Fresno County and similar to State; Average household income for the City is 28% higher than County, but 10% less than the State
- 37% of Clovis residents have bachelor’s degrees or higher (50% higher than County; slightly less than State)
- Clovis residents spend approximately \$1.3 billion on key retail goods and services. Major expenditure categories include: groceries (23% of spending), vehicle payments/gasoline (21%), restaurants (16%), apparel (9%), and household supplies and furnishings (9%)
- Unemployment in the City increased by over 100% from 3.8% in 2019 to 8.1% in 2020 due to the COVID-19 pandemic; Unemployment has since decreased and has reached below pre-pandemic levels
- Clovis’ jobs / housing ratio is lower than County and State, indicating a possible need for more jobs in the City. Most workers who live in the City travel to Fresno, Visalia, Madera, Los Angeles, and Sanger to go to work
- Historically, 39% of Clovis’ tax revenues come from sales and use taxes and TOT compared to 30% across all California Cities.
- In the five-year period from 2016-2021, Clovis saw a 45% increase in sales tax revenue, while County Pool revenues have grown significantly by 81% due to the rise in e-commerce sales
- Although the COVID-19 pandemic did cause a decline in sales tax revenues due to lockdowns (28% decrease in Q1 2020), the City recovered quickly and experienced a 29% increase in Q2 2020. Clovis’ sales tax revenues in 2021 exceeded pre-COVID-19 pandemic revenues by over \$5.5 million

EXECUTIVE SUMMARY – RETAIL MARKET SURVEY (CONT'D)

Retail Market Existing Conditions

- Retail:
 - Clovis has a large retail market (7.25 million SF) and 56% of the retail space in the City can be found along the Shaw Ave. Corridor (“Corridor”). Additionally, 78% of all retail vacancy in the City is also along the Corridor
 - Over the last 15 years, retail vacancy along the Corridor fluctuated from 5.4% in 2007 to 12.9% in 2011. Vacancy doubled during the Great Recession and ~31,000 SF of retail was constructed along the Corridor in the 11-year period between 2007 and 2018
 - Retail vacancy decreased by 30% from year-end 2019 to year-end 2022 as more vacant space became absorbed. However, the pandemic did limit construction of retail space along the Corridor with 3,600 SF added to the market
 - According to CoStar, there are is no retail space currently planned, proposed, or under construction in the Corridor
 - The Great Recession did cause a slowdown in retail construction in the City with just ~36,000 SF built between 2008 and 2011
 - The two largest changes in retail inventory occurred in 2013 with the opening of Clovis Crossing shopping center in the northern end of the City, including the 190,000 SF Walmart anchor, and in 2019 with the 150,000 SF Costco along the Shaw Ave. Corridor
 - Although restaurant and entertainment uses each comprise less than 6% of retail space in the Shaw Ave. Corridor and the City, 20% of key retail expenditures by households are in dining and entertainment
 - Experiential uses (dining and entertainment) are key drivers of foot traffic and could help shape the reimagination of retail space
 - ~1M SF of retail space along the Corridor plus 400,000 SF outside the Corridor is over 40 years old, there may be opportunities for renovated / reimagined space as part of blended-use development (including commercial and multi-family residential)

EXECUTIVE SUMMARY – RETAIL MARKET SURVEY (CONT'D)

Competitive Retail

- Placer.ai is a mobility data provider that tracks movements of over 30 million people in the U.S. via anonymized mobile app data. This information can reveal visitation trends to / from retailers, store visit performance. Visitor data was culled from Jan. 2019 to Jun. 2021 for the Sierra Vista Mall (“Mall”) and competitive centers within a 15-mile radius
- The Mall ranks 7th in visitor traffic, down from 4th in 2019, with ~429,400 monthly visits between 1/1/19 and 6/23/21 (~534,100 average monthly visits pre-COVID, ~355,509 post-COVID)
- The malls located in Clovis draw visitors from a more local area with 66-68% of visitors living less than 7 miles from the centers, while some Fresno malls, including Fashion Fair and River Park, draw over 40% of their visitors from over 10 miles away
- Fashion Fair and River Park capture additional visitors from northern and western areas, such as Firebaugh, Kerman, Madera, and Mendota, in addition to capturing visitors within Sierra Vista Mall’s true trade area (85% of Mall’s true trade area* is covered by these centers)
- In addition to observing regional competition, Kosmont examined visitation trends across the eight largest retail centers in Clovis (by gross leasable area [“GLA”])
- The Sierra Vista Mall (“Mall”) received the most visitors of among the largest centers located in Clovis pre-COVID. Post-COVID the Mall has lagged behind in visitors to Clovis Commons and Clovis Crossing
- Visitors to Sierra Vista Mall have average HH incomes (\$76,100). Visitors to centers in the northern end of the City (such as those along Herndon Ave. – Clovis Commons and Clovis Crossing) have higher average household incomes (\$85,500 to \$89,900). Comparatively, visitors to centers located on the southern end of the City have lower average incomes ranging from \$60,000 to \$80,800)
- The retail centers in Clovis compete with each other and primarily draw local visitors. 66% to 77% of visitor traffic comes from within 7 miles. 72% to 87% of these centers’ true trade area overlaps with the true trade area of the Sierra Vista Mall

EXECUTIVE SUMMARY – LAND USE EVALUATION

Land Use Trends

- *Retail:* Retail store closures, bankruptcies, and e-commerce has changed economics of retail centers; Retail centers are being reimaged into mixed/blended use developments; Retail is driven by trip-generators like entertainment, experience, and essential
- *Office:* Leasing activity has declined as remote work becomes new normal; shift to suburban offices and integrating office amenities in blended use environments
- *Industrial:* E-commerce is accelerating growth of industrial; Significant demand for fulfillment, last-mile, flex / R&D, and warehouse facilities
- *Residential:* Home have become live, play, and **work** environments; Home offices are the new home amenity as single and multifamily housing projects are designed to accommodate work space
- *Hospitality:* The hospitality sector (including conventions and tourism) was hurt significantly by the COVID-19 pandemic; Leisure travel is showing signs of rebounding

Evaluation of Potential Land Uses

- After evaluating the demand for retail, Kosmont observed the market demand for office, industrial (including flex space), residential (multifamily) and hospitality (hotel) uses in the City
- Existing supply conditions from the most recent available quarter (Q4 2022) were observed in the City, the Clovis/Fresno Market Area (“Market Area”)*, and Fresno County (“County”)
- Office:
 - Clovis has a small (8% of office space in Market Area), but growing office market (~2.2M SF) with 40% of the space in the market being constructed in the last 15 years
 - 72,000 SF of office space is currently under construction and 137,300 SF is proposed; Current office vacancy is 5.7%, office gross rents are \$23.40 PSF/Year, both lower than Market Area and County
 - Approximately 156,500 SF of the office space over 40 years old could be replaced / reimaged

EXECUTIVE SUMMARY – LAND USE EVALUATION (CONT'D)

Evaluation of Potential Land Uses (cont'd)

■ Industrial / Flex:

- Clovis has a small (5% of Market Area) and very strong industrial market (3.2M SF) with 0.1% vacancy and \$9.00 rents (lower vacancy and higher rents compared to Market Area and County)
- Market is relatively new (18% of space is over 40 years old), but 315,200 SF built in the last 15 years; 13,600 SF under construction and 13,600 proposed in City
- Approximately 288,100 SF of the office space over 40 years old could be replaced / reimagined

■ Multifamily Residential:

- The multifamily residential market in Clovis is strong – current vacancy of 3.0%, current asking rents at \$1,477 per month, lower vacancy and higher rents compared to Market Area and County); 8,946 existing multifamily housing units in the City
- Significant construction in last 3 years – 1,012 multifamily units; Housing can be the emphasis to meet RHNA requirements

■ Hotel:

- The hotel market in Clovis contains 12 existing and operational hotels totaling 1,018 rooms; Neighboring Fresno has 70 hotels totaling 6,007 rooms
- In addition to a 111-room Residence Inn under construction in Clovis, there is one hotel proposed (158 rooms) and five hotels in final planning (537 rooms)
- If planned and proposed hotels are built, the supply of hotel rooms will meet / exceed the estimated demand for hotel rooms in the next 15 years; Oversaturation could negatively impact existing older hotels

Economic Development Tools

- City could consider using economic development “currencies” such as STAR*®, D.O.R.®, and EIFD, along with grant programs, to help finance infrastructure and blended use development that will attract, finance, and optimize development opportunities to replace or enhance retail locations
- ~1.14M SF of commercial space older than 40 years could be reimagined as blended use



RETAIL MARKET SURVEY

City of Clovis – Retail Market Survey & Land Use Evaluation

DEMOGRAPHIC/ECONOMIC PROFILE

RETAIL MARKET SURVEY

SUMMARY

DEMOGRAPHIC/ECONOMIC PROFILE

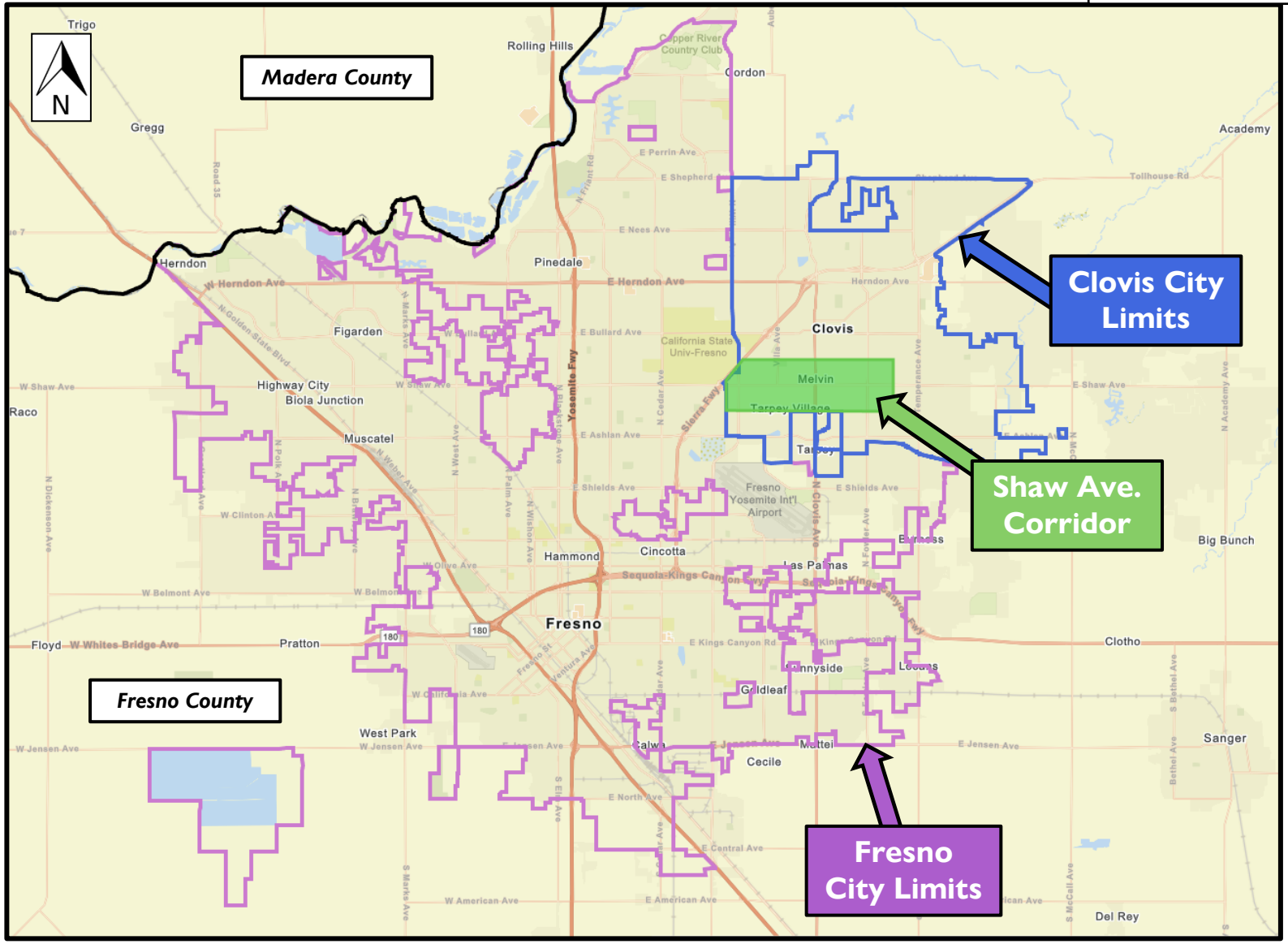
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- 37% of Clovis residents have bachelor’s degrees or higher (50% higher than County; slightly less than State)
- Clovis residents spend approximately \$1.3 billion on key retail goods and services. Major expenditure categories include: groceries (23% of spending), vehicle payments/gasoline (21%), restaurants (16%), apparel (9%), and household supplies and furnishings (9%). Similar findings were seen among households within a 30-minute drive time of Sierra Vista Mall
- Unemployment in the City increased by over 100% from 3.8% in 2019 to 8.1% in 2020 due to the COVID-19 pandemic; Unemployment has since decreased and has gone below pre-pandemic levels
- Clovis’ jobs / housing ratio is lower than County and State, indicating a possible need for more jobs in the City. Most workers who live in the City travel to Fresno, Visalia, Madera, Los Angeles, and Sanger to go to work

SUMMARY

DEMOGRAPHIC/ECONOMIC PROFILE (CONT'D)

- Historically, 39% of Clovis' tax revenues come from sales and use taxes and TOT compared to 30% across all California Cities. Although this would have made the City more susceptible to the negative impacts of the COVID-19 pandemic, the City saw an increase in sales tax revenue. This is likely because many residents living southeast of Clovis rely on the retail centers for essential items and travel was restricted during the State's COVID-19 lockdowns
- In the five-year period from 2016-2021, Clovis saw a 45% increase in sales tax revenue, while County Pool revenues have grown significantly by 81% due to the rise in e-commerce sales
- Although the COVID-19 pandemic did cause a decline in sales tax revenues due to lockdowns (28% decrease in Q1 2020), the City recovered quickly and experienced a 29% increase in Q2 2020. Clovis' sales tax revenues in 2021 exceeded pre-COVID-19 pandemic revenues by over \$5.5 million

CITY LIMITS AND SHAW AVE. CORRIDOR



Source: ESRI Business Analyst Online (Accessed February 2023); **Note:** The City of Clovis has a key concentration of retail along the Shaw Ave. Corridor. For this analysis, the boundaries for this corridor are from Winery Ave. and CA-168 on the west, Barstow Ave. to the north, Gettysburg Ave. to the south, and Armstrong Ave. to the east.

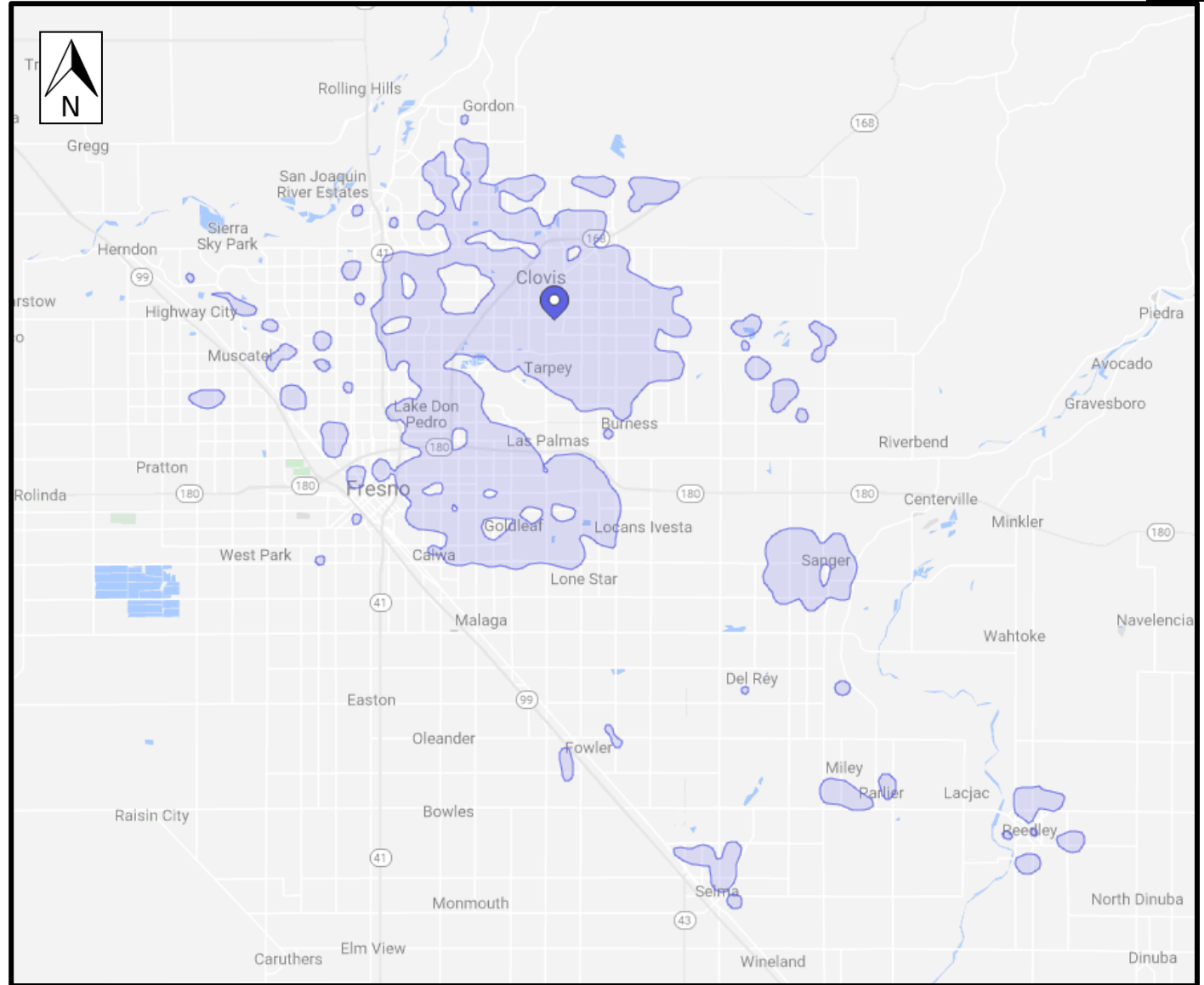


POPULATION & INCOME

CITY, COUNTIES, AND STATE

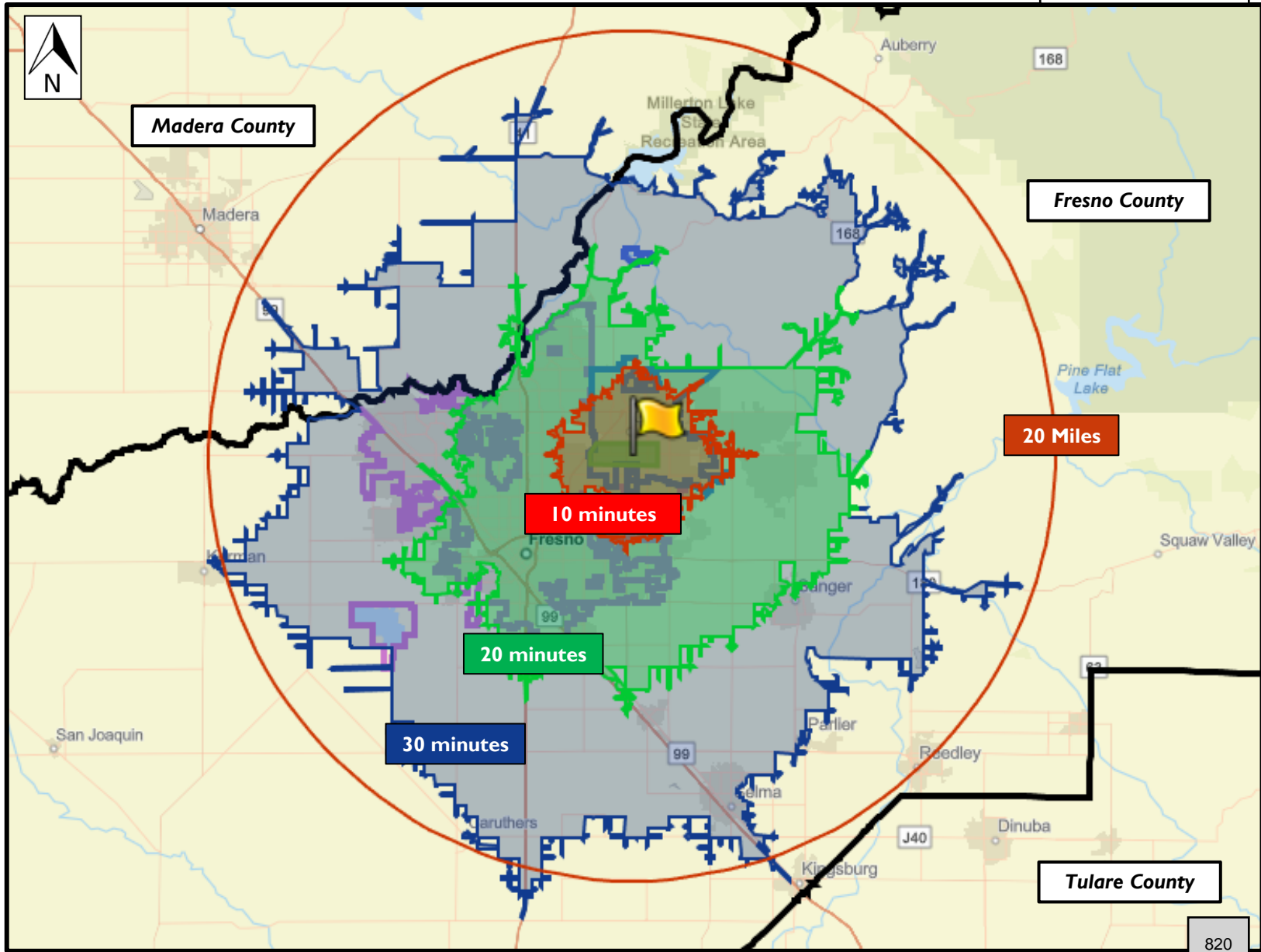
2022	Clovis City	Fresno County	California State
Population	124,096	1,019,104	39,770,476
Households	43,590	323,286	13,570,050
Average HH Size	2.84	3.10	2.86
Median Age	36.6	32.7	36.7
% Bachelor's Degree or Higher	37.0%	24.7%	37.8%
% Hispanic Origin	30.7%	53.7%	39.4%
Per Capita Income	\$40,711	\$28,652	\$44,265
Median HH Income	\$88,775	\$63,121	\$88,930
Average HH Income	\$115,792	\$90,193	\$129,367

TRUE TRADE AREA FOR SIERRA VISTA MALL (BASED ON VISITATION FROM 1/1/19 – 6/23/21)



Source: Placer.ai (Accessed June 2021); **Note:** The true trade area represents 70% of visitors to the Sierra Vista Mall within the selected timeframe. As shown above, many visitors come from as far southeast as Fowler, Parlier, Reedley, Sanger, and Selma.

RADIUS AND DRIVE TIMES (10-20-30 MINUTES FROM SIERRA VISTA MALL – 1050 SHAW AVE.)



Source: ESRI Business Analyst Online (Accessed June 2021; Updated February 2023)

POPULATION & INCOME

RADIUS AND DRIVE TIMES

2022	10 Minutes	20 Minutes	30 Minutes		20 Miles
Population	158,923	625,822	844,851		891,668
Households	54,812	207,316	275,028		288,856
Average HH Size	2.86	2.97	3.03		3.05
Median Age	34.4	33.2	33.2		33.2
% Bachelor's Degree or Higher	31.5%	28.4%	26.9%		26.4%
% Hispanic Origin	35.8%	46.7%	49.2%		50.2%
Per Capita Income	\$33,984	\$30,633	\$30,132		\$29,946
Median HH Income	\$75,643	\$64,473	\$65,133		\$65,035
Average HH Income	\$98,476	\$92,331	\$92,399		\$92,294

Source: ESRI Business Analyst Online (Accessed June 2021; Updated February 2023)

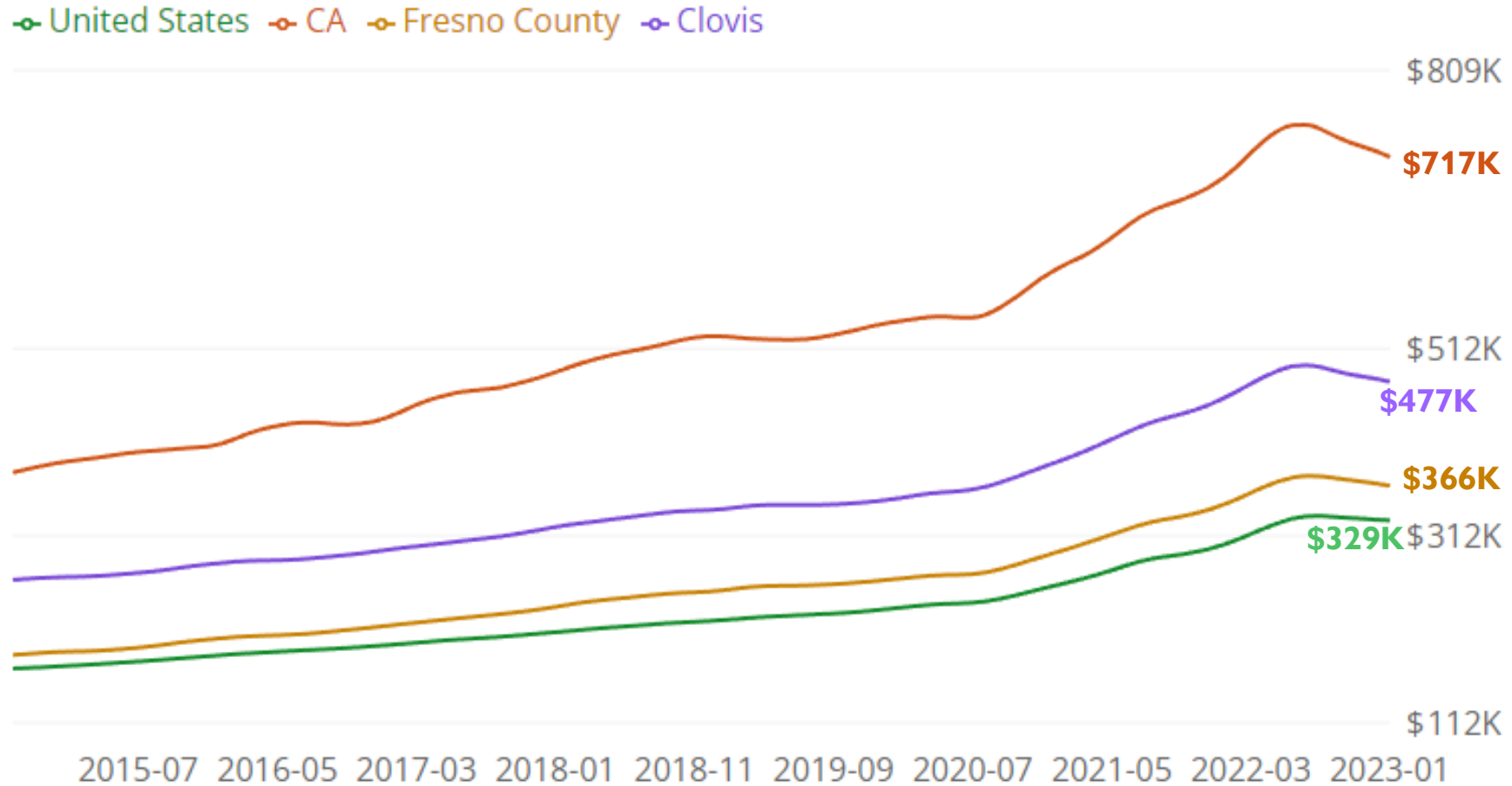
TAPESTRY SEGMENT PROFILES

CITY OF CLOVIS

“Tapestries” in City	Percent	Sample Characteristics
Boomburbs	24.3%	<ul style="list-style-type: none"> - New growth market with young professionals with families that have opted to move to new housing in the suburbs - Affluent market with high education (55% college graduates) and 84% homeownership, though there is a higher proportion of mortgages - Low unemployment with most households containing more than two workers - Style matters to this segment from personal appearance to their homes and physical fitness is a priority - This is a top market for technology and are well connected
Exurbanites	10.4%	<ul style="list-style-type: none"> - Well-educated, older residents who are close to retirement; Less labor participation (60%) - Many residents are empty-nesters or married with no children (avg. HH size = 2.50) - Residents are active in their communities and are seasoned travelers. They take advantage of being near large metro regions, but prefer a more expansive home style in less crowded neighborhoods; Many work from home and/or are self-employed - High education and incomes; High levels of home ownership (85%) - Purchases reflect quality over cost-consciousness; Preference towards luxury cars, natural/organic products, and home improvement goods - Gardening and home improvement are priorities, but residents also use many services such as home care and maintenance to personal care - Residents are well-connected and use the internet to do shopping and manage finances

HOME VALUE HISTORY

2013 - 2022



RETAIL GOODS AND SERVICES EXPENDITURES

The ~43,600 households within Clovis spend approximately \$1.3 billion annually on key retail goods and services.

The ~275,000 households within a 30-minute drive time of Sierra Vista Mall spend approximately \$6.6 billion across these select retail expenditure categories.

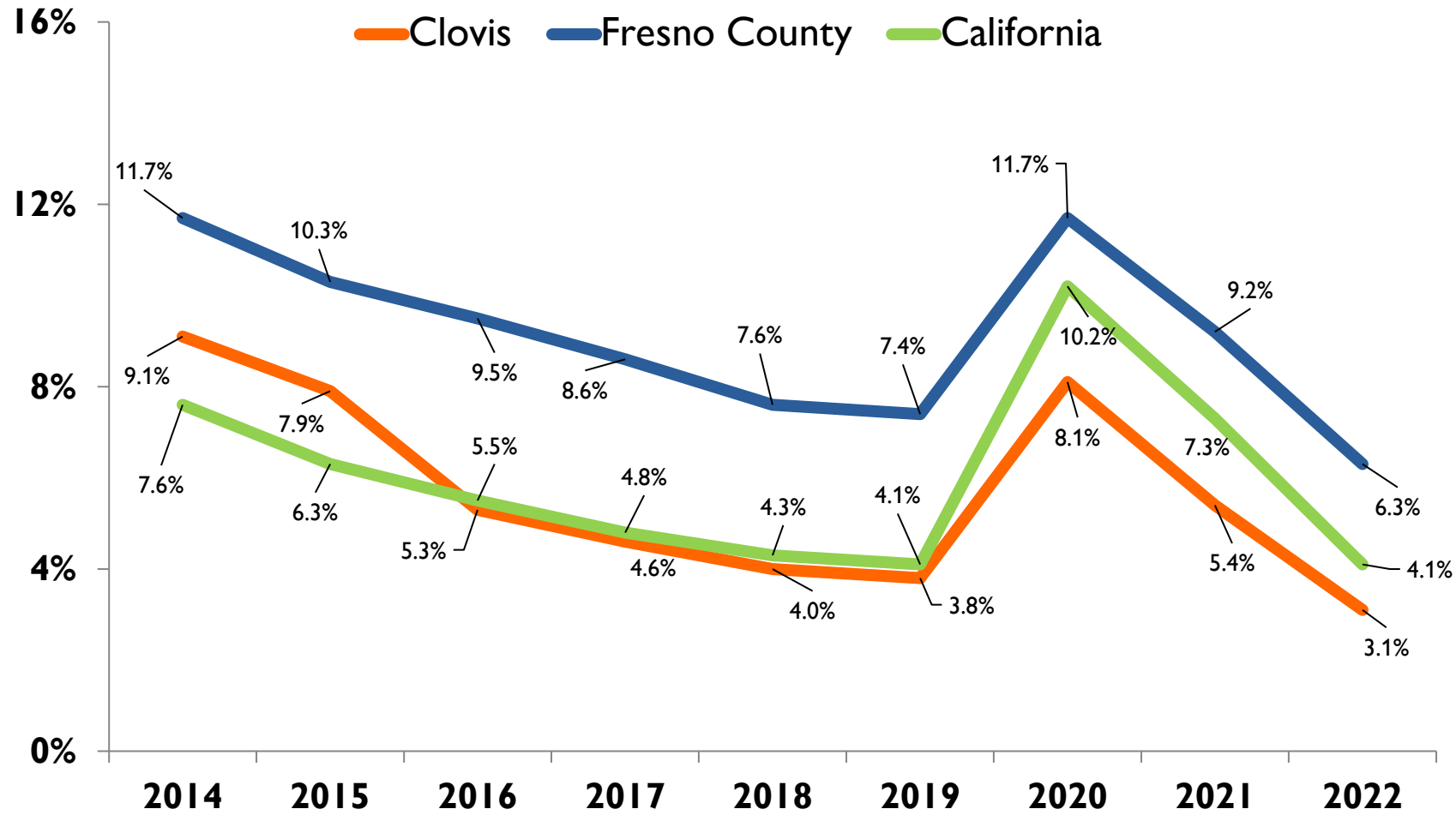
Current Residents	City of Clovis	% Share Per HH	Residents in 30-minute drive-time of Sierra Vista Mall	% Share Per HH
Households:	43,590	-	275,028	-
Average HH Income	\$115,792	-	\$92,399	-
Avg. HH Expenditures for Select Categories				
Food at Home	\$6,634	22.6%	\$5,472	22.9%
Food Away From Home	\$4,738	16.1%	\$3,904	16.3%
Alcohol	\$773	2.6%	\$618	2.6%
Housekeeping Supplies	\$953	3.2%	\$771	3.2%
Household Furnishings / Equipment	\$1,766	6.0%	\$1,402	5.9%
Apparel	\$2,637	9.0%	\$2,159	9.0%
Vehicle Payments (excl. leases)	\$3,278	11.2%	\$2,606	10.9%
Gasoline / Motor Fuel	\$2,945	10.0%	\$2,463	10.3%
Health (OTC/Prescription Drugs, Eyewear)	\$687	2.3%	\$541	2.3%
Fees / Admission	\$969	3.3%	\$750	3.1%
TV / Video / Audio Equipment	\$1,417	4.8%	\$1,152	4.8%
Pets	\$862	2.9%	\$675	2.8%
Toys / Games / Hobby	\$146	0.5%	\$117	0.5%
Personal Care Products	\$618	2.1%	\$505	2.1%
Reading	\$126	0.4%	\$101	0.4%
Education (School Books and Supplies)	\$165	0.6%	\$136	0.6%
Tobacco Products	\$418	1.4%	\$358	1.5%
Sports / Recreation / Exercise Equipment	\$230	0.8%	\$181	0.8%
Total Per Household	\$29,362	100.0%	\$23,911	100.0%
Total Annual Spending Potential	\$1,279,886,200	-	\$6,576,230,000	-

Source: ESRI Business Analyst Online (Accessed June 2021; Updated February 2023);

Note: The Fees/Admission category primarily reflects spending on entertainment, including tickets to the theatre, movies, parks/museums, and sporting events.

UNEMPLOYMENT HISTORY

CITY, COUNTY, AND STATE



Unemployment Rate (Dec 2022)	
Clovis	2.8%
Fresno County	6.2%
California	3.7%

Source: California Employment Development Department (Accessed August 2022);
 Notes: Numbers are not seasonally adjusted. Annual averages are observed for years 2014 to 2022.

EMPLOYMENT BY INDUSTRY

CITY OF CLOVIS

Resident Employed Population (Age 16+)	
Sector	Share
Health Care and Social Assistance	19.7%
Educational Services	14.6%
Retail Trade	8.8%
Accommodation and Food Services	8.5%
Public Administration	7.4%
Construction	5.3%
Administration & Support, Waste Management and Remediation	5.1%
Manufacturing	4.9%
Professional, Scientific, and Technical Services	4.1%
Wholesale Trade	3.5%
Agriculture, Forestry, Fishing and Hunting	3.2%
Transportation and Warehousing	3.2%
Other Services (excluding Public Administration)	3.0%
Finance and Insurance	2.6%
Arts, Entertainment, and Recreation	1.7%
Real Estate and Rental and Leasing	1.4%
Information	1.3%
Utilities	0.9%
Management of Companies and Enterprises	0.8%
Mining, Quarrying, and Oil and Gas Extraction	0.1%

“Industries in which City residents work”

Workers Employed in City (Age 16+)	
Sector	Share
Health Care and Social Assistance	18.4%
Educational Services	18.4%
Retail Trade	16.4%
Accommodation and Food Services	13.1%
Construction	6.2%
Administration & Support, Waste Management and Remediation	4.7%
Professional, Scientific, and Technical Services	4.1%
Manufacturing	4.0%
Public Administration	2.9%
Other Services (excluding Public Administration)	2.9%
Arts, Entertainment, and Recreation	1.7%
Agriculture, Forestry, Fishing and Hunting	1.6%
Finance and Insurance	1.4%
Transportation and Warehousing	1.3%
Wholesale Trade	1.1%
Information	0.9%
Real Estate and Rental and Leasing	0.9%
Management of Companies and Enterprises	0.1%
Mining, Quarrying, and Oil and Gas Extraction	0.0%
Utilities	0.0%

“Jobs in the City”

Source: U.S. Census Bureau Center for Economic Studies (2019, Accessed February 2023);

Notes: Categorized by North American Industry Classification System (NAICS) Industry Sectors

WORKER DESTINATIONS & ORIGINS CITY OF CLOVIS

Outflow: Where Residents Commute To For Work		
City	Count	Percentage
Fresno city, CA	24,420	49.2%
Clovis city, CA	8,442	17.0%
Visalia city, CA	770	1.6%
Madera city, CA	607	1.2%
Los Angeles city, CA	507	1.0%
Sanger city, CA	446	0.9%
San Jose city, CA	307	0.6%
Hanford city, CA	301	0.6%
San Francisco city, CA	284	0.6%
Reedley city, CA	264	0.5%
Sacramento city, CA	251	0.5%
Bakersfield city, CA	245	0.5%
Selma city, CA	230	0.5%
Tulare city, CA	218	0.4%
Chowchilla city, CA	182	0.4%
Modesto city, CA	172	0.3%
Stockton city, CA	169	0.3%
Porterville city, CA	162	0.3%
Kerman city, CA	156	0.3%
San Diego city, CA	149	0.3%
Kingsburg city, CA	141	0.3%
Oakland city, CA	114	0.2%
Lemoore city, CA	100	0.2%
Merced city, CA	100	0.2%
Old Fig Garden CDP, CA	100	0.2%
All Other Locations	10,758	21.7%

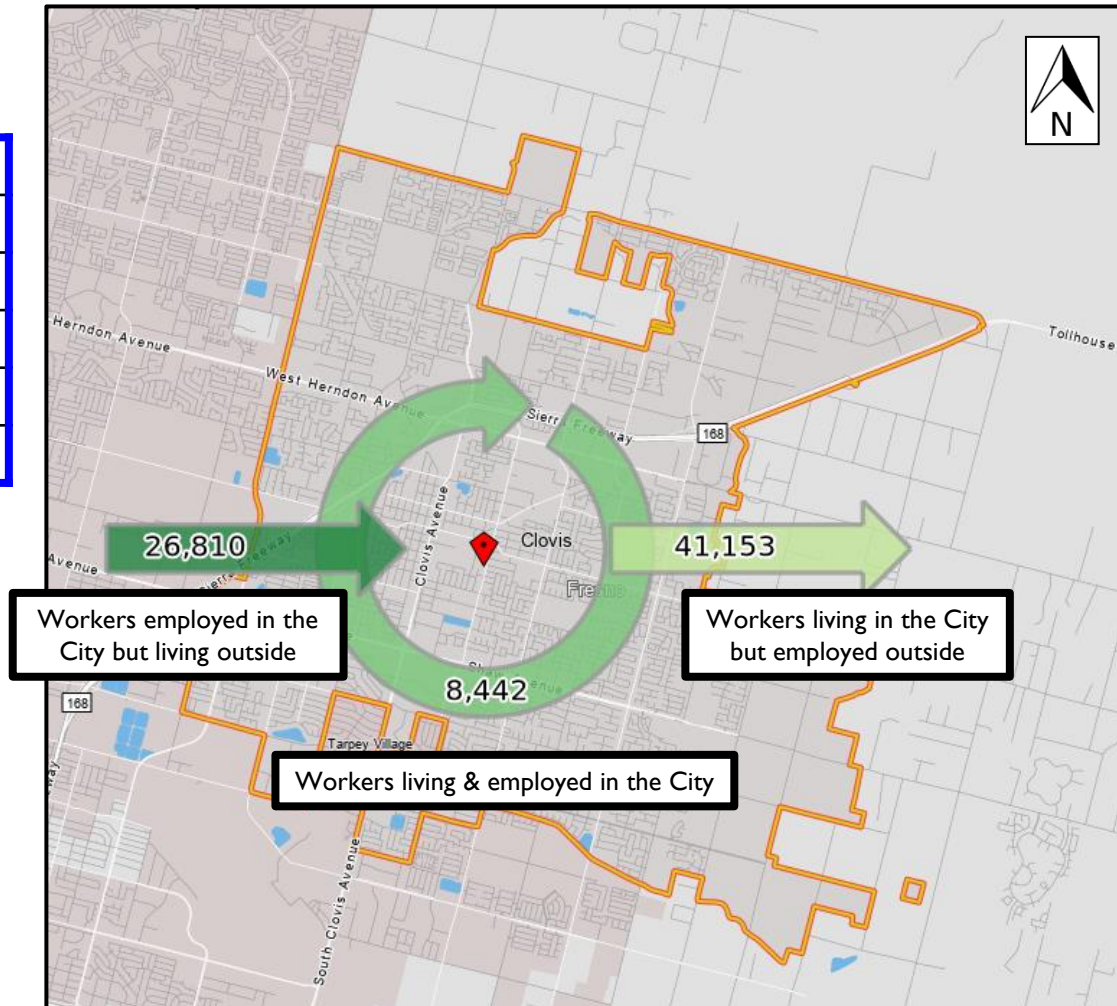
Inflow: Where Workers Come From		
City	Count	Percentage
Fresno city, CA	13,896	39.4%
Clovis city, CA	8,442	23.9%
Sanger city, CA	499	1.4%
Visalia city, CA	347	1.0%
Madera city, CA	325	0.9%
Selma city, CA	318	0.9%
Tarpey Village CDP, CA	273	0.8%
Reedley city, CA	230	0.7%
San Jose city, CA	197	0.6%
Bonadelle-Madera Ranchos CDP, CA	168	0.5%
Dinuba city, CA	153	0.4%
Bakersfield city, CA	143	0.4%
Sunnyside CDP, CA	141	0.4%
Hanford city, CA	137	0.4%
Kerman city, CA	134	0.4%
Old Fig Garden CDP, CA	134	0.4%
Tulare city, CA	131	0.4%
Kingsburg city, CA	130	0.4%
Modesto city, CA	130	0.4%
Porterville city, CA	129	0.4%
Merced city, CA	114	0.3%
Mayfair CDP, CA	110	0.3%
Los Angeles city, CA	104	0.3%
Parlier city, CA	104	0.3%
Fowler city, CA	93	0.3%
All Other Locations	8,670	24.6%

WORKER INFLOW / OUTFLOW

Reference: City of Clovis	
Workers Living and Working	8,442
Workers Coming (Inflow)	26,810
Workers Going (Outflow)	41,153
Net Inflow/Outflow	(14,343)
Employment Ratio*	0.71

***Employment Ratio** = People employed within City (living and working in City + those who come into the City for work) / Employed population of City (living and working in City + workers who live in the City, but work outside of the City)

Source: U.S. Census Bureau Center for Economic Studies (2019); City of Clovis ACFR FY 2021-2022 (Accessed June 2021; Updated February 2023)



- Major industry sectors in the City of Clovis include: health care and social assistance, educational services, retail trade, accommodation and food services, and construction
- Employees who work in the City come from the following areas: Fresno, Sanger, Visalia, Madera, and Selma
- Most residents who work outside of the City go to the following areas: Fresno, Visalia, Madera, Los Angeles, and Sanger
- Top 5 Employers in Clovis include:
 - Clovis Unified School District (5,196 employees)
 - Clovis Community Hospital (3,074 employees)
 - County of Fresno (1,402 employees)
 - Wal-Mart (750 employees)
 - City of Clovis (702 employees)

JOBS / HOUSING BALANCE

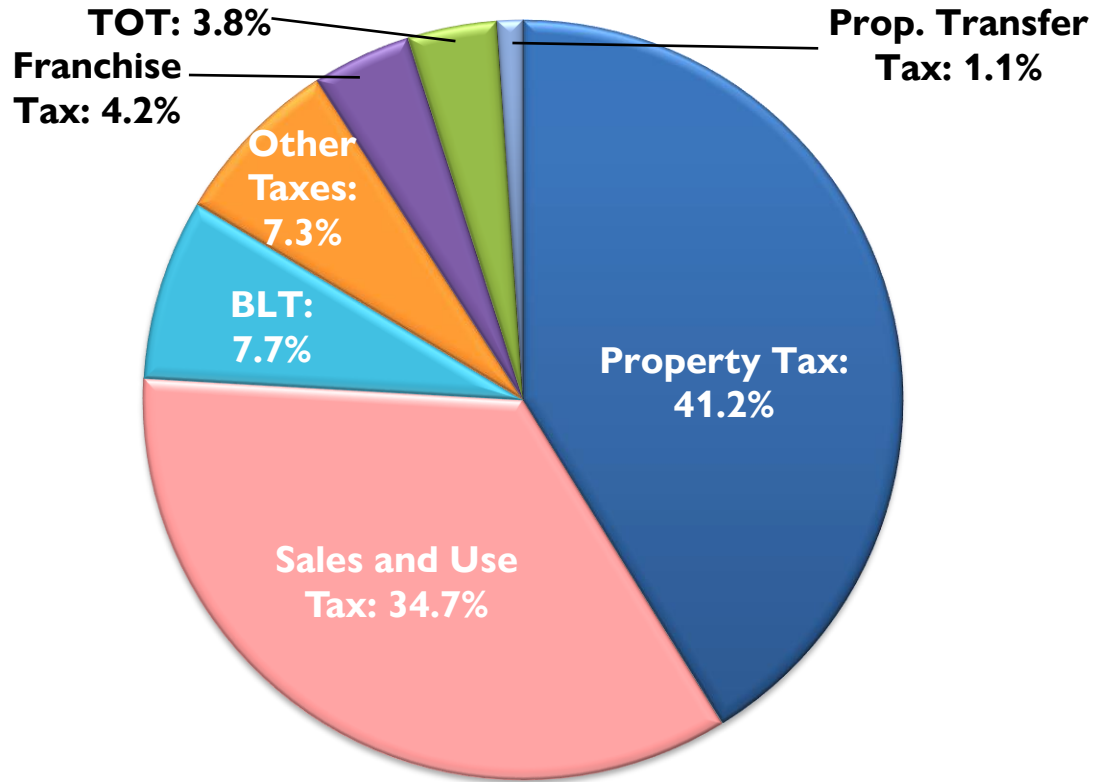
2022	Clovis City	Fresno County	California State
Employment	31,221	347,069	16,426,737
Households	43,590	323,286	13,570,050
Jobs / Housing Ratio	0.72	1.07	1.21

Source: ESRI Business Analyst Online (Accessed June 2021; Updated February 2023)

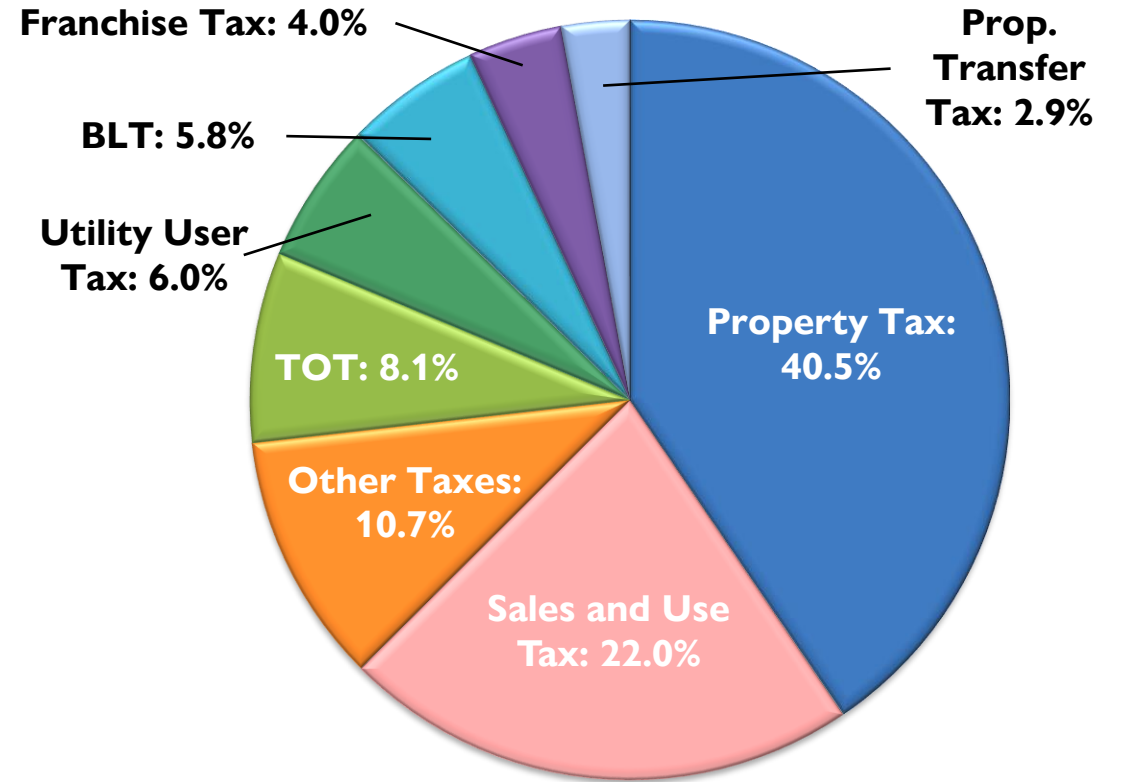
TAX REVENUES (HISTORIC CONTEXT)

CITY OF CLOVIS VS. CALIFORNIA CITIES

City of Clovis



California Cities' Tax Revenues

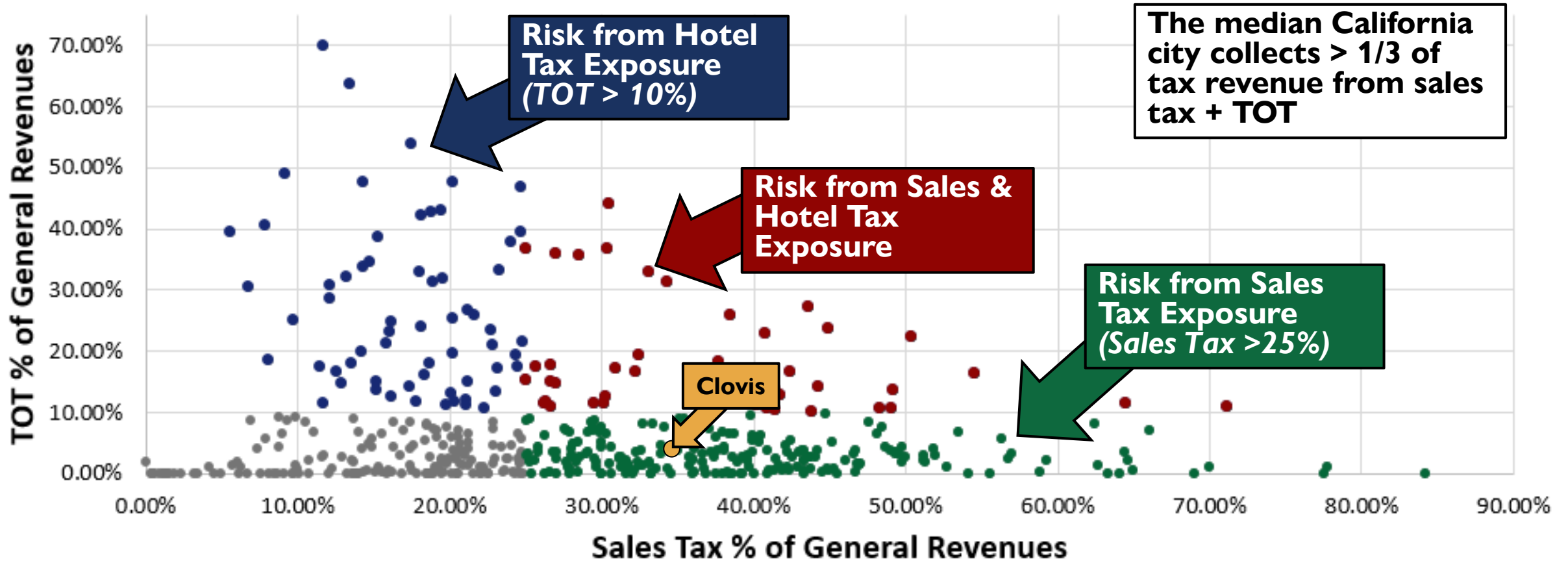


Source: California State Controller's Office, City Revenues FY 2017-2018 (Accessed June 2021)

Notes: Includes both functional and general tax revenues. Property Taxes includes: in-lieu of MVLF, secured, unsecured, and other property tax revenue categories. Other Taxes includes: interest, penalties, delinquent taxes, transportation taxes (transit and non-transit), employer payroll tax, construction development taxes, parking taxes, admission taxes, and all other taxes. Transportation taxes comprise most of the revenue labeled "Other Taxes". In Clovis, no revenues were collected from Utility User Taxes.

TAX REVENUES

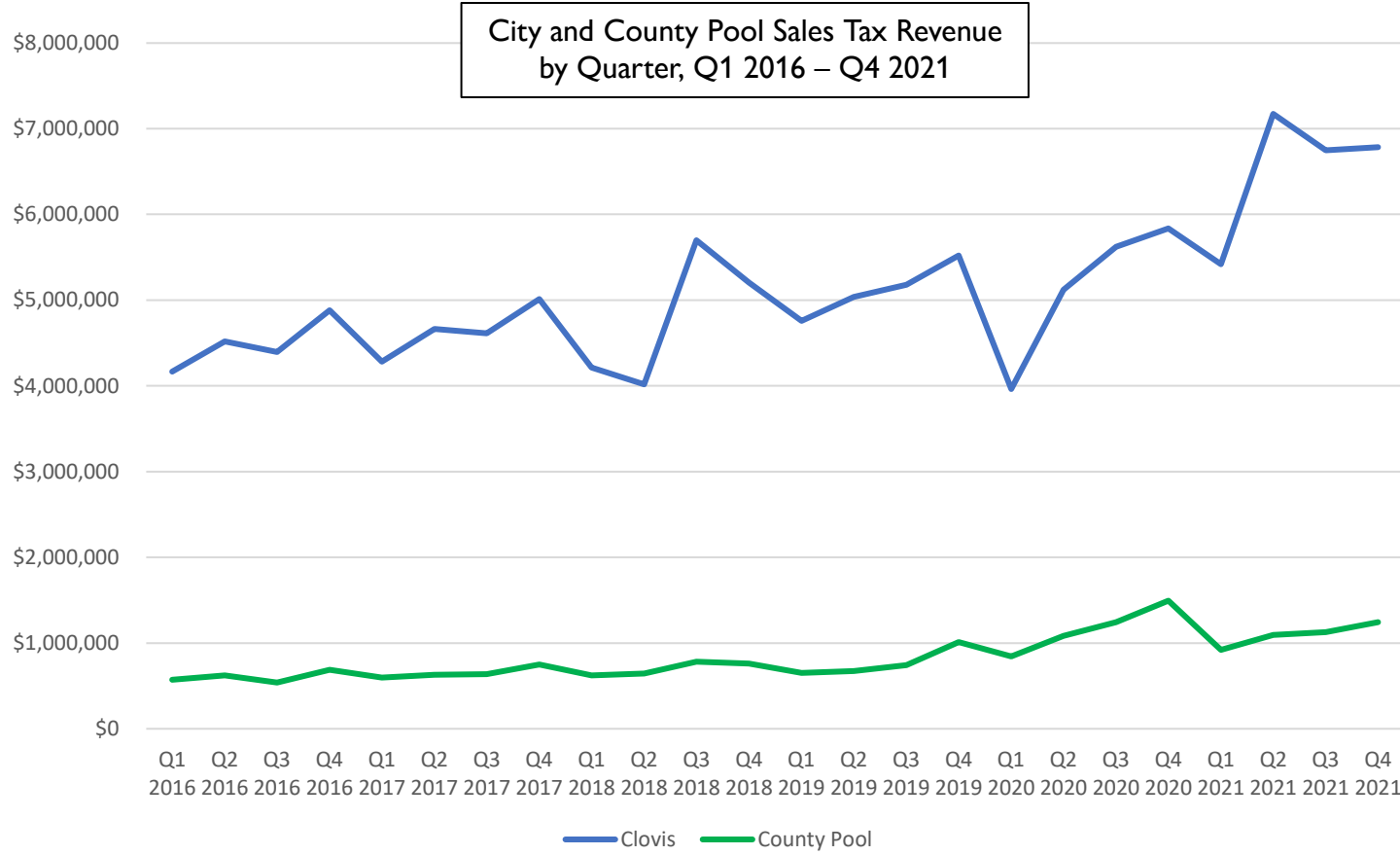
SALES TAX & TOT EXPOSURE



Source: California State Controller's Office, City Revenues FY 2017-2018 (Accessed June 2021)

SALES TAX HISTORY

CITY SAW NO DECLINE IN SALES TAX REVENUE DUE TO COVID-19, EXCEPT FOR Q1 2020



Year	Clovis	County Pool	Pool Share
2016	\$17,964,000	\$2,423,000	13.5%
2017	\$18,572,000	\$2,616,000	14.1%
2018	\$19,133,000	\$2,813,000	14.7%
2019	\$20,494,000	\$3,087,000	15.1%
2020	\$20,546,000	\$4,669,000	22.7%
2021	\$26,123,000	\$4,392,000	16.8%
2022*	\$30,000,000	N/A	N/A
5-Year Growth (2016-2021)*	45.4%	81.3%	24.6%
COVID-19 Effect (2019-2020)	0.3%	51.2%	50.9%
CAGR	7.8%	12.6%	4.5%

Source: CA DOF (Accessed February 2023)

Note: 5-Year Growth from 2016-2021 was measured given no information for County Pool was provided in 2022.



RETAIL MARKET EXISTING CONDITIONS

RETAIL MARKET SURVEY

RETAIL MARKET EXISTING CONDITIONS SUMMARY

- The City contains ~38 SF of shopping center space per capita (65% more than California and the United States). This is higher in comparison to the shopping center space per capita of the cities of Clovis and Fresno combined (~33 SF). The COVID-19 pandemic has accelerated e-commerce trends and ~25% of U.S. malls could close in the next 3-5 years unless retail space gets reimagined
- We observed the existing market conditions for retail within the Shaw Ave. Corridor (“Corridor”), the City, and the County. The Corridor is a critical piece of Clovis’ retail market given the area contains 56% of all the retail square footage within the City. Additionally, 78% of all retail vacancy in the City falls along the Corridor
- Retail vacancy in the Corridor is **higher** than the City and the Fresno County market. However, retail lease rates remain slightly **higher** in the Corridor and the City compared to Fresno County
- Over the last 15 years, retail vacancy along the Corridor fluctuated from 5.4% in 2007 to 12.9% in 2011. Vacancy doubled during the Great Recession and just ~31,000 SF of retail was constructed along the Corridor in the 11-year period between 2007 and 2018. The largest increase in retail inventory and decrease in retail vacancy along the Corridor came in 2019 with the opening of the 150,000 SF Costco located just south of the shopping center on the SWC of Shaw and Clovis Aves.
- It is important to note that retail vacancy levels along the Corridor during the COVID-19 pandemic have remained lower than those during the Great Recession. Retail vacancy decreased by 30% from year-end 2019 to year-end 2022 as more vacant space became absorbed. However, the pandemic did limit construction of retail space along the Corridor with 3,600 SF added to the market

RETAIL MARKET EXISTING CONDITIONS SUMMARY (CONT'D)

- In observing the retail market history in the City, 2011 saw the highest levels of vacancy at 11.0%. Since 2013, retail vacancy in the City has remained between 4.7% and 9.0%
- The Great Recession did cause a slowdown in retail construction in the City with just ~36,000 SF built between 2008 and 2011
- The two largest changes in retail inventory occurred in 2013 with the opening of Clovis Crossing shopping center in the northern end of the City (NWC Sunnyside and Herndon Aves.), including the 190,000 SF Walmart anchor, and in 2019 with the 150,000 SF Costco along the Shaw Ave. Corridor (south of center on SWC of Shaw and Clovis Aves.)
- Experiential uses (dining and entertainment) are key drivers of foot traffic and could help shape the reimagination of retail space. Although restaurant and entertainment uses each comprise less than 6% of retail space in the Shaw Ave. Corridor and the City, 20% of key retail expenditures by households are in dining and entertainment. We examined concentrations of restaurants (full service and fast food) and entertainment uses (including bars/nightclubs, bowling alleys, and movie theaters) within Clovis and Fresno to better understand the locations of these uses and observe competition
 - There are three movie theater buildings in Clovis, but only two operate as theaters (Regal/United Artists Theaters at Village Square and Sierra Vista Cinemas at Sierra Vista Mall). There are five other theaters in Fresno – a Maya Cinemas (near CSU Fresno), Regal Cinemas at the Manchester Center (NEC Blackstone and Shields Aves.), Regal/UA at Broadway Faire (SEC Valentine and Shaw Aves.), and Regal Edwards Fresno at Shops at River Park (SEC Nees and Blackstone Aves.), and Regal Cinemas at Marketplace at El Paso (opened 2021, SWC Riverside Dr. and W. Herndon Ave.)
 - Restaurants are primarily concentrated on large arterial streets including Shaw and Clovis Aves. in Clovis and Shaw, Blackstone, and Cedar Aves. in Fresno. Additionally, smaller concentrations of restaurants can be found in centers located along Herndon, Nees, West, and Willow Aves.

RETAIL CENTERS NOT COMING BACK AS PURE RETAIL

- The City contains approximately 38 SF of shopping center retail space per capita (**65% more per capita shopping center space** compared to California and the U.S.)
- As a regional reference, the cities of Clovis and Fresno shopping center GLA per capita is 33 SF
- An **estimated 25% of U.S. malls could close over the next 3-5 years**, with the COVID-19 pandemic accelerating e-commerce trends
- These trends are affecting properties in Clovis, particularly the Sierra Vista Mall (e.g. Sears closure in April 2021)
- Large vacant retail space will need to be reimagined into alternative uses (blended use)

	Clovis, CA	Fresno, CA & Clovis, CA	California*	United States*
Shopping Center GLA	4.7 million SF	22.2 million SF	908.1 million SF	7.6 billion SF
Population	124,100	671,600	39.5 million	328.2 million
Shopping Center GLA SF Per Cap.	38 SF	33 SF	23 SF	23 SF

Global Context: Shopping Center SF Per Capita

USA	23.5	CANADA	16.8	AUSTRALIA	11.2
UK	4.6	JAPAN	4.4	FRANCE	3.8
SPAIN	3.4	CHINA	2.8	ITALY	2.9

Source: ICSC; Cowen & Company; Cushman & Wakefield; Coresight Research; CoStar (Accessed June 2021; Updated February 2023); **Note:** *CA and US data represents 2019 estimates. This data reflects all shopping center space according to CoStar and does not include stand alone retail space. Population of Fresno, CA in 2022 was 547,500.

RETAIL MARKET OVERVIEW

	Q4 2022		
	Shaw Ave. Corridor	City of Clovis	Fresno County
Availability			
NNN Rent \$PSF/Yr.	\$15.77	\$15.35	\$14.53
Vacancy Rate	6.7%	4.7%	4.2%
Vacant SF	268,009	342,964	2,061,661
Net Absorption	12,759	25,445	67,778
Inventory			
Existing SF	4,024,621	7,245,494	48,954,091

- Much of the available retail space in Clovis can be found in the Shaw Ave. Corridor including:
 - 116,641 SF former Sears available at Sierra Vista Mall (1140 Shaw Ave.)
 - 90,157 SF available at Sierra Vista Mall (1050 Shaw Ave.)
 - 61,484 SF available (including former Bally's Total Fitness) at Western Village Shopping Center (711-781 W. Shaw Ave.)
 - 36,200 SF retail space available, including former Big Lots, at Shaw Village (424-460 W. Shaw Ave.)
- According to CoStar, there is no retail space planned, proposed, or under construction in Shaw Ave. Corridor, however 161,200 SF proposed and 35,000 SF (including 29,000 SF Loma Vista Marketplace) under construction city-wide
- 1 million SF of retail space along the Shaw Ave. Corridor plus an additional 400K SF in other parts of the City are over 40 years old. We estimate that half of that retail space (700K SF) could be reimaged / re-envisioned for a blended use project



Source: CoStar (Accessed February 2023)

Note: Costar defines Triple Net (NNN) as “a lease where the tenant is responsible for all expenses associated with their proportional share of occupancy of the building, except long-lived structural components and management charges.” The Shaw Ave. Corridor extends from Winery Ave. and CA-168 on the west, Barstow Ave. to the north, Gettysburg Ave. to the south, and Armstrong Ave. to the east. The City of Clovis falls within its own submarket for retail and thus was compared to the Shaw Ave. Corridor and Fresno County. Vacant space refers to all space that is not occupied by a tenant regardless of availability or lease obligation. Available space is the amount of space currently being marketed as available for lease or sale in a given time period. It includes any space that is vacant, occupied, or available at a future date.

Top: Former Sears at Sierra Vista Mall
Middle: Western Village Shopping Center
Above: Former Big Lots at Shaw Village

RETAIL MARKET HISTORY

2007 – 2022

SHAW AVE. CORRIDOR

Year	Inventory SF	Vacant SF Total	Vacant % Total	Net Absorp. SF Total	NNN Rent Overall
2022	4,024,621	268,009	6.7%	38,494	\$15.77
2021	4,021,008	302,890	7.5%	23,852	\$14.59
2020	4,021,008	326,742	8.1%	22,352	\$16.05
2019	4,021,008	349,094	8.7%	261,754	\$15.33
2018	3,865,208	455,048	11.8%	8,329	\$15.56
2017	3,865,208	463,377	12.0%	(57,640)	\$16.34
2016	3,865,208	405,737	10.5%	8,074	\$14.70
2015	3,850,632	399,235	10.4%	(67,764)	\$14.47
2014	3,850,632	331,471	8.6%	78,022	\$14.68
2013	3,850,632	409,493	10.6%	77,250	\$13.38
2012	3,850,632	486,743	12.6%	17,135	\$11.70
2011	3,840,832	494,078	12.9%	(55,178)	\$13.68
2010	3,836,253	434,321	11.3%	30,430	\$13.89
2009	3,836,253	464,751	12.1%	(232,091)	\$15.12
2008	3,836,253	232,660	6.1%	(23,582)	\$15.26
2007	3,833,603	206,428	5.4%	54,987	\$15.05

CITY OF CLOVIS

Year	Inventory SF	Vacant SF Total	Vacant % Total	Net Absorp. SF Total	NNN Rent Overall
2022	7,245,494	342,964	4.7%	65,353	\$15.35
2021	7,226,481	389,304	5.4%	(16,640)	\$14.71
2020	7,223,631	369,814	5.1%	45,687	\$15.87
2019	7,200,986	392,856	5.5%	344,183	\$16.01
2018	7,039,186	575,239	8.2%	37,399	\$16.07
2017	7,019,391	592,843	8.4%	26,499	\$16.74
2016	6,950,723	550,674	7.9%	98,229	\$15.76
2015	6,923,479	621,659	9.0%	(77,637)	\$15.37
2014	6,908,064	528,607	7.7%	182,038	\$14.93
2013	6,817,571	620,152	9.1%	381,178	\$13.59
2012	6,498,153	681,912	10.5%	92,048	\$12.71
2011	6,431,535	707,342	11.0%	(61,123)	\$14.63
2010	6,419,279	633,963	9.9%	30,326	\$15.29
2009	6,415,733	660,743	10.3%	(209,705)	\$16.10
2008	6,395,725	431,030	6.7%	(64,545)	\$16.18
2007	6,328,238	298,998	4.7%	112,469	\$15.78

FRESNO COUNTY

Year	Inventory SF	Vacant SF Total	Vacant % Total	Net Absorp. SF Total	NNN Rent Overall
2022	48,954,091	2,061,661	4.2%	378,200	\$14.53
2021	48,825,543	2,311,313	4.7%	292,042	\$14.63
2020	48,566,408	2,344,220	4.8%	112,144	\$14.18
2019	48,398,114	2,288,070	4.7%	488,516	\$14.53
2018	48,165,564	2,544,036	5.3%	773,173	\$14.00
2017	48,056,315	3,207,960	6.7%	12,127	\$13.67
2016	47,700,554	2,864,326	6.0%	771,941	\$13.42
2015	47,420,013	3,355,726	7.1%	490,654	\$13.09
2014	47,145,150	3,571,517	7.6%	802,312	\$12.90
2013	46,622,407	3,851,086	8.3%	570,959	\$12.47
2012	46,082,696	3,903,232	8.5%	551,335	\$12.27
2011	45,842,717	4,214,588	9.2%	(529,932)	\$12.31
2010	45,782,028	3,623,967	7.9%	251,536	\$12.72
2009	45,619,955	3,713,430	8.1%	(958,418)	\$16.63
2008	45,134,856	2,268,696	5.0%	(62,895)	\$15.50
2007	44,703,771	1,774,716	4.0%	450,507	\$16.06

Source: CoStar (Accessed February 2023);

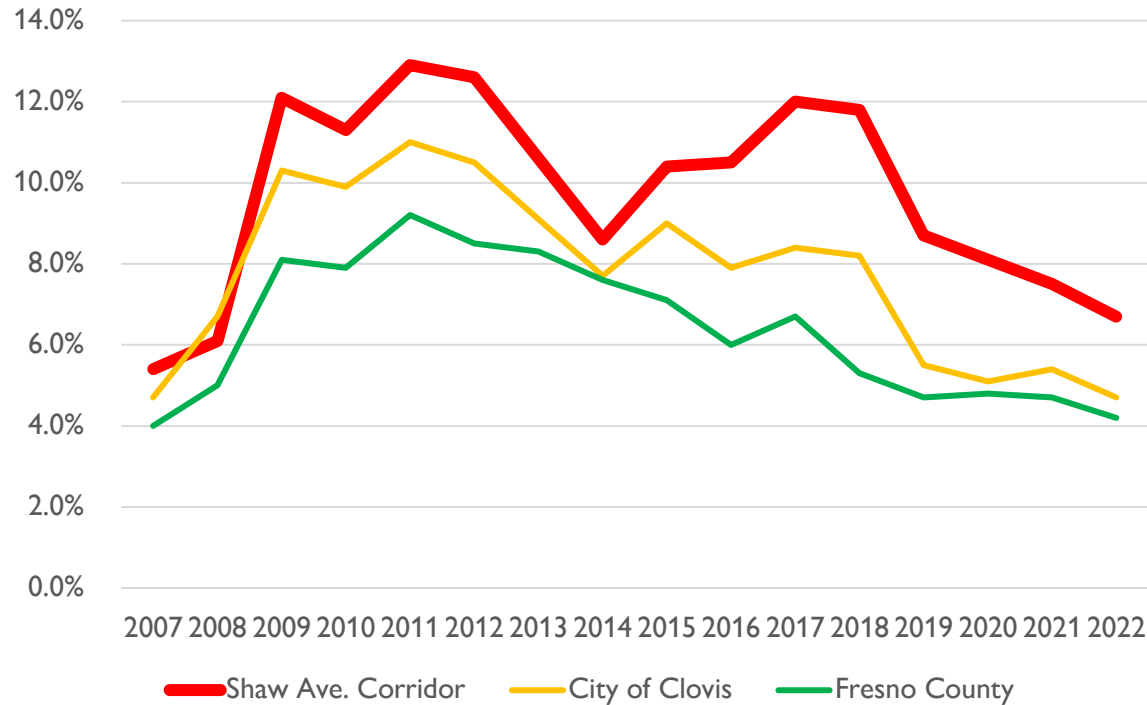
Note: Numbers in parentheses and in red indicate a negative number.



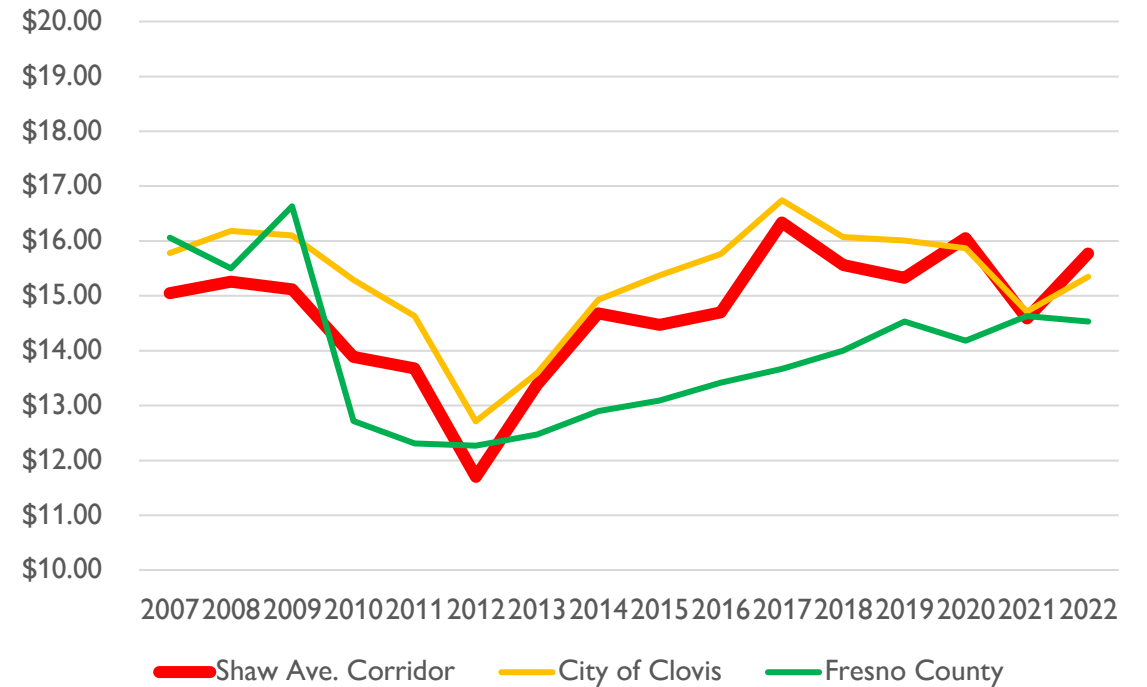
RETAIL MARKET HISTORY

2007 – 2022

Vacancy Rates



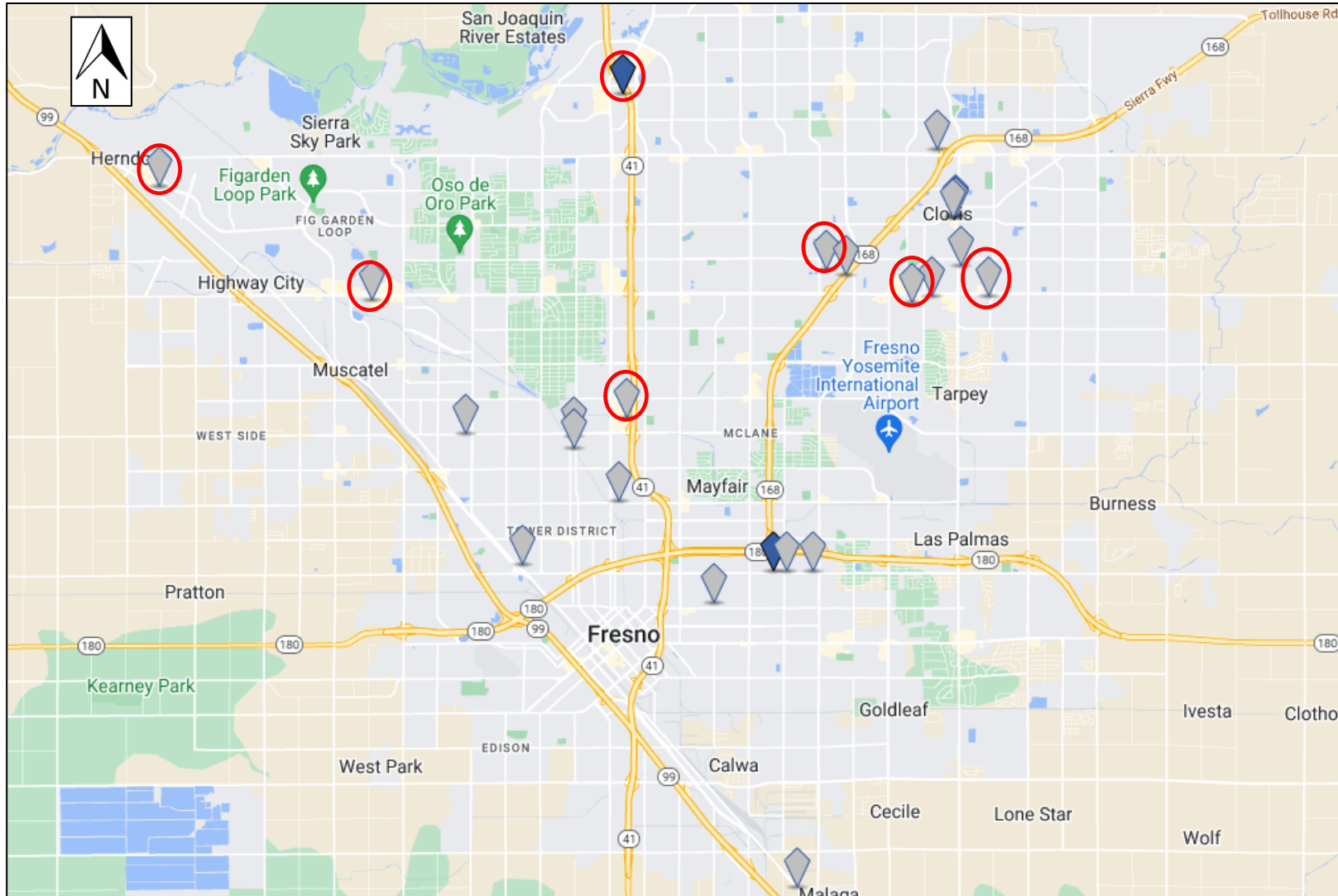
NNN Rent \$PSF/Yr.



Source: CoStar (Accessed February 2023)

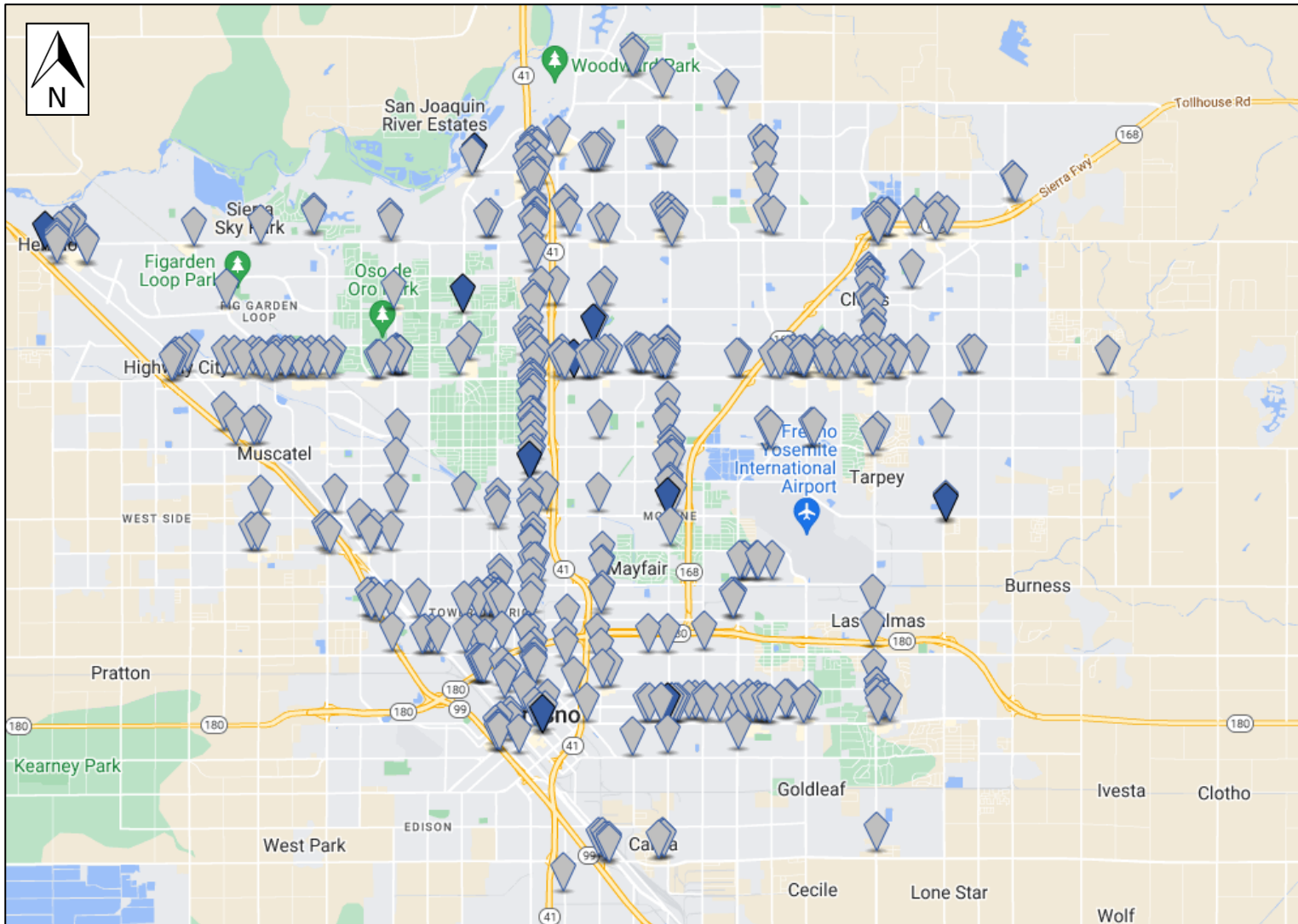


ENTERTAINMENT CONCENTRATION MAP



Source: CoStar (Accessed February 2023);
Notes: In this analysis, entertainment space refers to bars/nightclubs, bowling alleys, and movie theaters. CoStar typically does not account for other experiences (e.g. adventure rooms, laser tag, raceways) that can be seen in the Sierra Vista Mall, however we have included the race track and laser tag at Sierra Vista Mall in our analysis. Movie theaters are circled in red.

RESTAURANT CONCENTRATION MAP



Source: CoStar (Accessed February 2023);
Notes: Restaurants include full-service restaurants and fast food.

COMPETITIVE RETAIL

RETAIL MARKET SURVEY

COMPETITIVE RETAIL SUMMARY

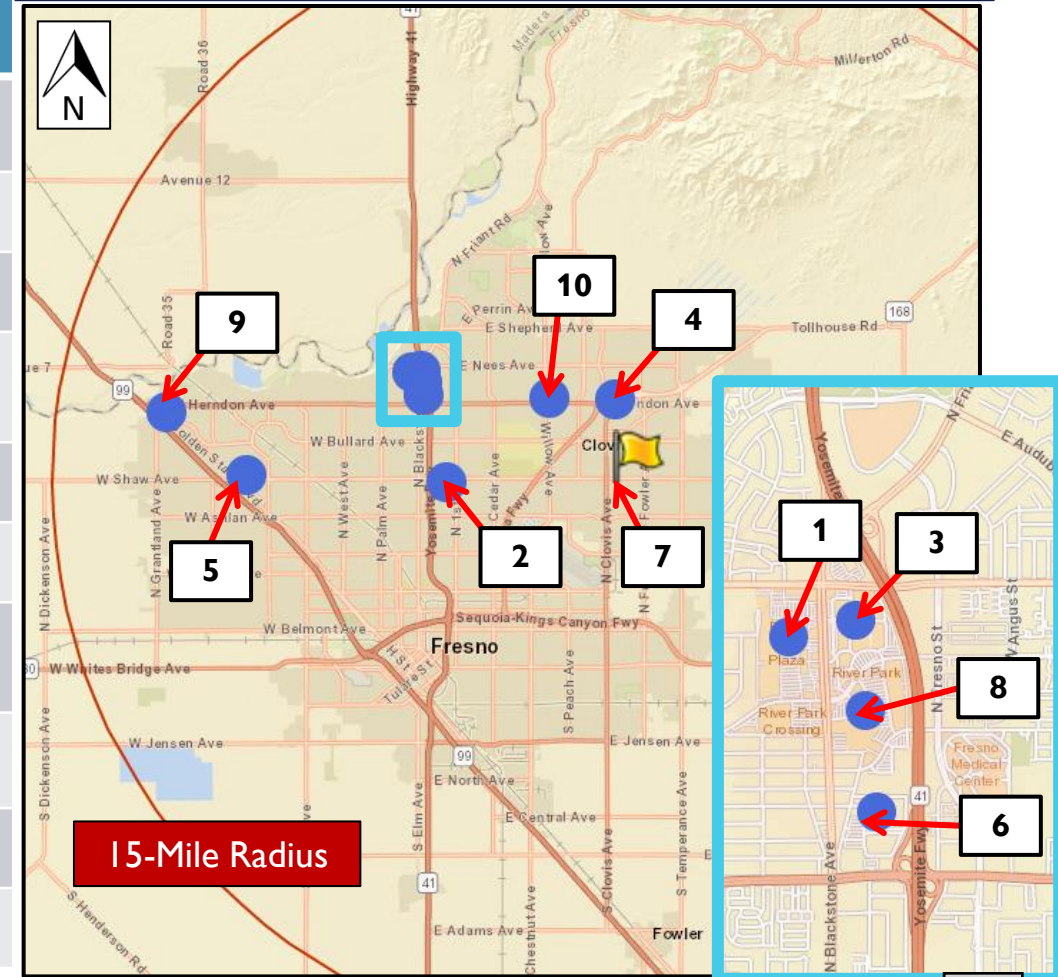
- Placer.ai is a mobility data provider that tracks movement of over 30 million people in the U.S. via anonymized mobile app data. This information can reveal visitation trends to/from retailers, providing insight into store visit performance and characteristics of consumers. Visitor data was culled from January 2019 through June 2021 for the Sierra Vista Mall (“Mall”) and competitive centers within a 15-mile radius
- This data shows that the Mall has seen lower customer traffic compared to nearby regional retail centers
 - The Mall ranks 7th in visitor traffic among the competitive set, down from 4th in 2019, with ~429,400 monthly visits between 1/1/19 and 6/23/21 (~534,100 average monthly visits pre-COVID, ~355,509 post-COVID)
 - Sierra Vista Mall ranks 2nd among this competitive set in terms of GLA and 2nd in total visits among retail centers in Clovis
 - Sierra Vista Mall visitors have average HH incomes (\$76,100) that are substantially below other centers in Clovis – Clovis Crossing (\$85,500) and Clovis Commons (\$88,800)
 - The malls located in Clovis offers draw visitors more locally with 66-68% of visitors living less than 7 miles, as compared to 48-50% of River Park visitors and 51% of Fashion Fair visitors
 - Fashion Fair and River Park capture additional visitors from northern and western areas, such as Firebaugh, Kerman, Madera, and Mendota, in addition to capturing visitors within Sierra Vista Mall’s true trade area (85% of Mall’s true trade area is covered by these centers)

COMPETITIVE RETAIL SUMMARY (CONT'D)

- In addition to observing regional competition, visitation trends were examined across the eight largest centers (by GLA) in the City
- Four of these centers are located along the Shaw Ave. Corridor and three are located along Herndon Ave. The last center included in the analysis is The Center Clovis on SEC of Ashlan and Peach Aves.
- The data shows the following:
 - The Sierra Vista Mall (“Mall”) received the most visitors of among the largest centers located in Clovis pre-COVID. Post-COVID the Mall has lagged behind in visitors to Clovis Commons and Clovis Crossing. Only in recent months (May/June 2021) has the Mall received more visitors than its counterparts in the north of the City, despite the recent closure of Sears in April 2021. Pre-COVID, The Center Clovis also experienced a major drop in visitation in mid-2019 after Costco moved from its location at the center to a more northeast location close to the SWC of Shaw and Clovis Aves.
 - The majority of these centers compete with each other and draw local visitors. 66% to 77% of visitor traffic to these eight centers comes from within 7 miles. Consequently, 72% to 87% of these centers’ true trade areas overlap with the true trade area of the Mall
 - Visitors to the northern centers along Herndon Ave. have significantly higher average HH incomes (\$85,500 to \$89,900) and less variation compared to centers located in the southern end of the City (avg. HH incomes of \$60,000 to \$80,800). These centers capture slightly more visitors from the north compared to the Mall

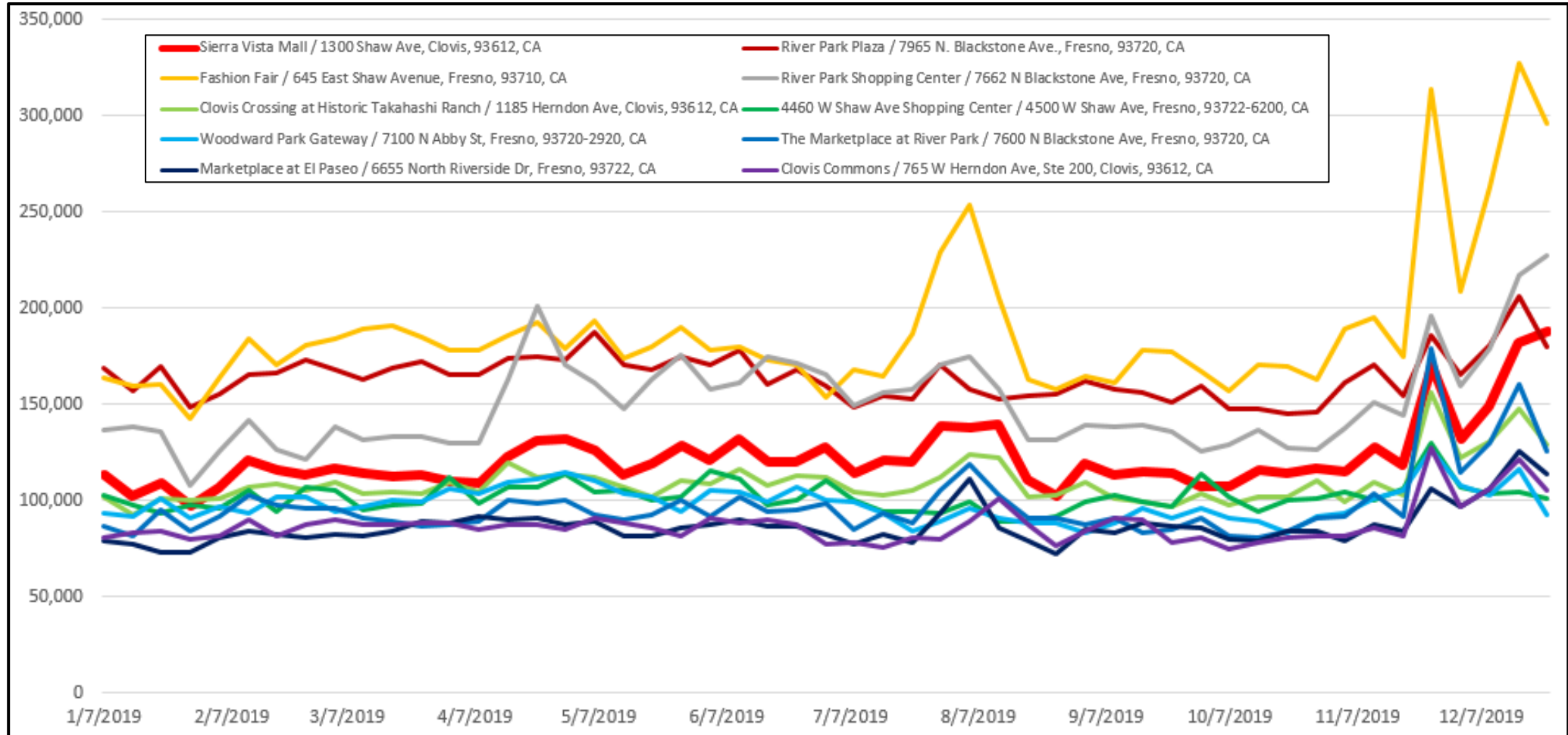
HIGHEST VISITED RETAIL CENTERS WITHIN 15 MILES OF SIERRA VISTA MALL

#	Retail Center	Dist. From Sierra Vista Mall	GLA (SF)	% Vacant / % Avail.	Anchor Tenants	Est. Visits (1/1/19 – 6/23/21)
1	River Park Plaza (Fresno, CA)	6.1 mi NW	583,810	3.4% / 3.4%	Sam's Club, Lowe's, Total Wine, Nordstrom Rack	19.57 M
2	Fashion Fair (Fresno, CA)	4.5 mi W	1,029,233	0.0% / 0.0%	Macy's, JCPenney, Forever 21, H&M, Ulta, Apple	19.34 M
3	River Park Shopping Ctr. (Fresno, CA)	5.9 mi NW	483,386	3.3% / 4.3%	Regal Cinemas, Macy's, REI, Cost Plus	15.08 M
4	Clovis Crossing (Clovis, CA)	2.2 mi N	450,574	7.2% / 7.2%	Walmart Supercenter, Dick's, Home Goods, Jo-Ann, Famous Footwear	13.15 M
5	4460 W. Shaw Ave. (Fresno, CA)	9.8 mi W	300,748	1.9% / 1.9%	Costco, WinCo Foods, Harbor Freight	13.13 M
6	Woodward Park Gateway (Fresno, CA)	5.6 mi NW	260,867	1.8% / 2.5%	Costco, Home Depot	12.90 M
7	Sierra Vista Mall (Clovis, CA)	-	728,895	13.7% / 35.8%	Target, Kohl's, Sierra Vista Cinemas, MB2 Raceway	12.83 M
8	Marketplace at River Park (Fresno, CA)	5.7 mi NW	529,090	2.6% / 2.6%	Target, Best Buy, Michaels, Marshalls, Dick's, PetSmart	11.87 M
9	Marketplace at El Paseo (Fresno, CA)	12.1 mi NW	530,500	6.9% / 7.7%	Target, Burlington, Ross, Marshalls, Petco	10.49 M
10	Clovis Commons (Clovis, CA)	2.9 mi NW	321,126	1.0% / 1.0%	Target, PetSmart, Best Buy, TJ Maxx	10.34 M



ESTIMATED WEEKLY VISITS – 2019

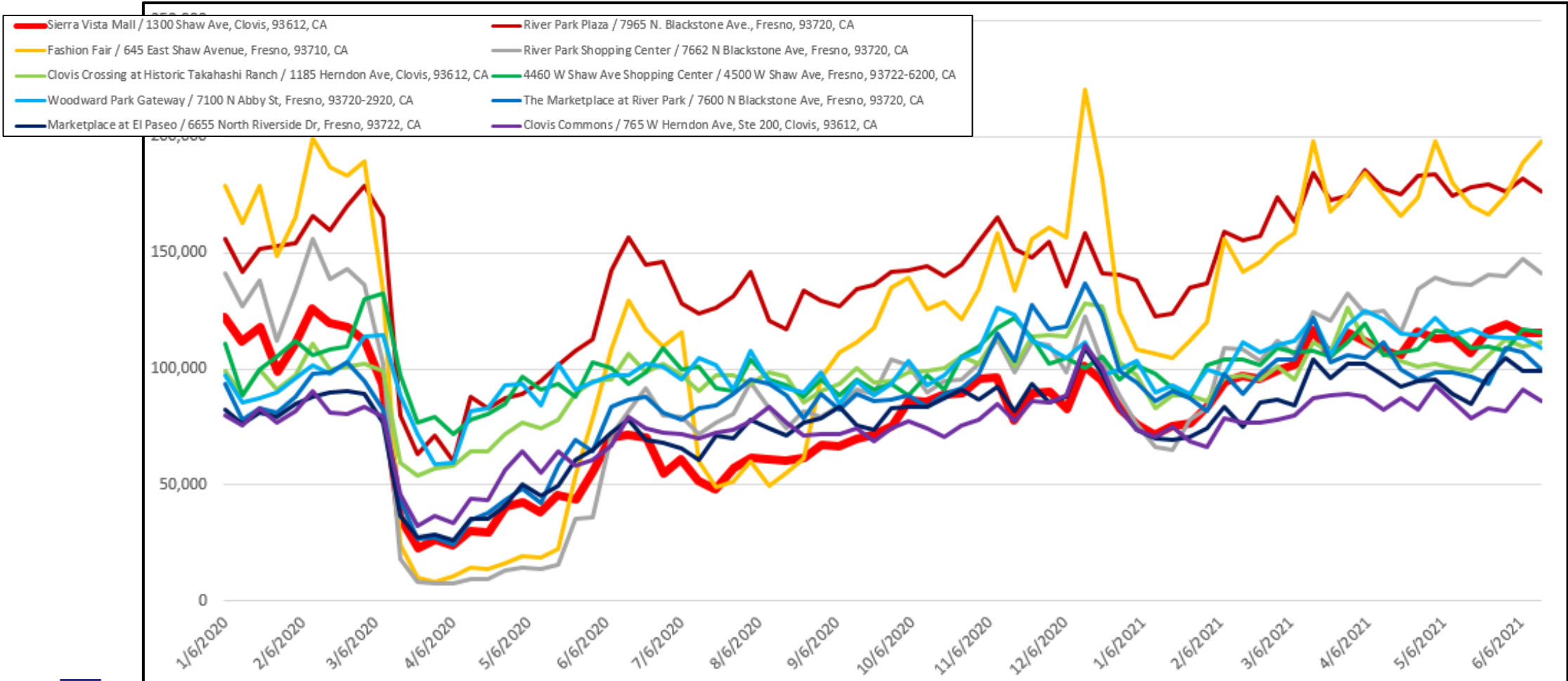
SIERRA VISTA MALL & MAJOR CENTERS WITHIN 15 MILES



Source: Placer.ai (Accessed June 2021).



ESTIMATED WEEKLY VISITS – 2020 & 2021 SIERRA VISTA MALL & MAJOR CENTERS WITHIN 15 MILES



Source: Placer.ai (Accessed June 2021).



VISIT SUMMARY: 1/1/19 – 6/23/21

SIERRA VISTA MALL & MAJOR CENTERS WITHIN 15 MILES

Mall Visitation Data: 1/1/19 – 6/23/21

	Estimated Unique Customers	Estimated Total Visits	Average Visits Per Customer	Average Length of Stay	Median Weekly Visits	Median Daily Visits
River Park Plaza	1.72 M	19.57 M	11.41	61 min	155,957	20,465
Fashion Fair	2.17 M	19.34 M	8.91	76 min	164,319	20,077
River Park Shopping Ctr.	1.77 M	15.08 M	8.54	89 min	126,348	15,121
Clovis Crossing	966.2 K	13.15 M	13.61	49 min	101,862	14,101
4460 W. Shaw Ave.	907.9 K	13.13 M	14.46	48 min	101,317	14,074
Woodward Park Gtwy.	1.23 M	12.90 M	10.46	45 min	99,150	13,992
Sierra Vista Mall	1.24 M	12.83 M	10.36	78 min	108,226	12,966
Marketplace - River Park	1.44 M	11.87 M	8.26	55 min	91,556	12,306
Marketplace - El Paseo	972.0 K	10.49 M	10.79	61 min	83,588	11,216
Clovis Commons	974.1 K	10.34 M	10.62	49 min	81,118	11,322



Source: Placer.ai (Accessed June 2021).

TYPICAL VISITOR PERSONA: 1/1/19 – 6/23/21

SIERRA VISTA MALL & MAJOR CENTERS WITHIN 15 MILES

Visitor Home Location Demographics: 1/1/19 – 6/23/21

	Avg. HH Income	Most Common Ethnicities	Customer Favorite Grocery Chain	Customer Favorite Leisure Venue
River Park Plaza	\$81,800	White (48%), Hispanic (39%), Asian (9%)	Save Mart	Regal Cinemas
Fashion Fair	\$66,800	Hispanic (44%), White (42%), Asian (10%)	Save Mart	Regal Cinemas
River Park Shopping Ctr.	\$83,400	White (48%), Hispanic (38%), Asian (10%)	Save Mart	Regal Cinemas
Clovis Crossing	\$85,500	White (49%), Hispanic (36%), Asian (11%)	Save Mart	Regal Cinemas
4460 W. Shaw Ave.	\$68,500	Hispanic (48%), White (36%), Asian (10%)	Save Mart	Regal Cinemas
Woodward Park Gtwy.	\$80,600	White (46%), Hispanic (40%), Asian (10%)	Save Mart	Regal Cinemas
Sierra Vista Mall	\$76,100	White (46%), Hispanic (39%), Asian (11%)	Save Mart	Regal Cinemas
Marketplace - River Park	\$76,800	White (45%), Hispanic (41%), Asian (10%)	Save Mart	Regal Cinemas
Marketplace - El Paseo	\$75,900	Hispanic (45%), White (41%), Asian (10%)	Save Mart	Regal Cinemas
Clovis Commons	\$88,800	White (50%), Hispanic (36%), Asian (11%)	Save Mart	Regal Cinemas

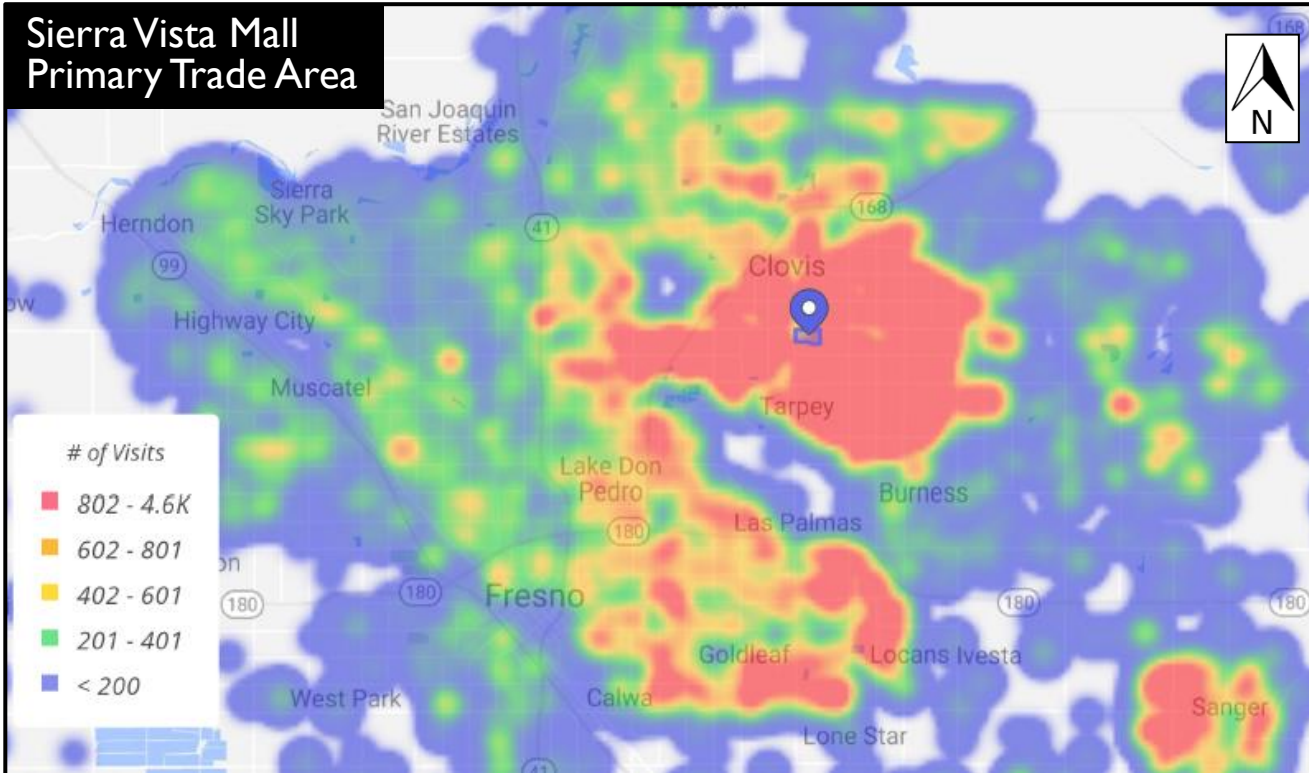


Source: Placer.ai (Accessed June 2021). **Notes:** To be considered the favorite grocer or leisure or entertainment venue of a customer, this customer would have had to visit the chain at a minimum 4 times during the selected timeframe to indicate loyalty.

TRADE AREA COVERAGE: 1/1/19 – 6/23/21

SIERRA VISTA MALL & MAJOR CENTERS WITHIN 15 MILES

Sierra Vista Mall
Primary Trade Area



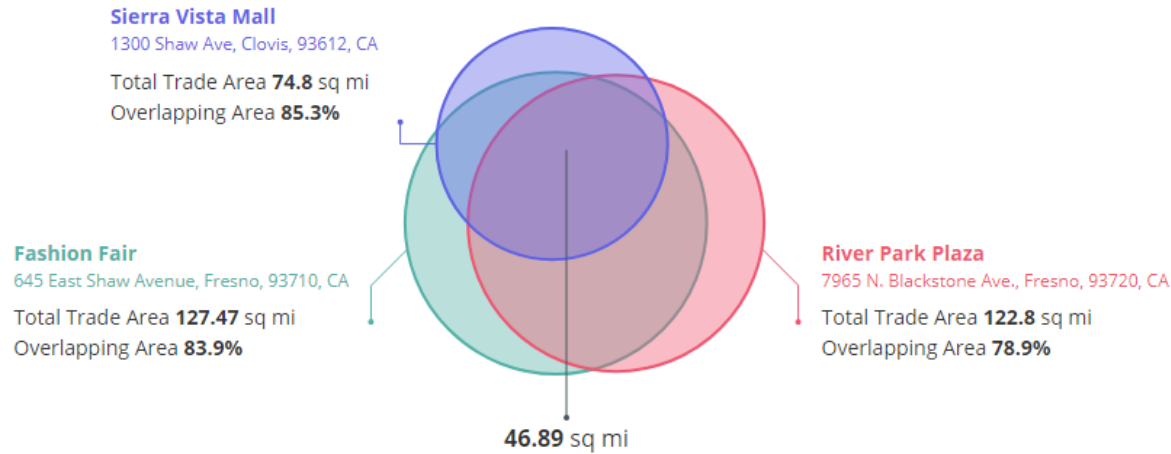
Mall Visitation Data: 1/1/19 – 6/23/21
Distance from Visitor Home Area

	0-3 Miles	3-7 Miles	7-10 Miles	10+ Miles
River Park Plaza	19%	31%	11%	39%
Fashion Fair	17%	34%	5%	44%
River Park Shopping Ctr.	18%	30%	12%	40%
Clovis Crossing	37%	30%	10%	23%
4460 W. Shaw Ave.	44%	17%	6%	33%
Woodward Park Gtwy.	25%	29%	9%	37%
Sierra Vista Mall	34%	32%	9%	25%
Marketplace - River Park	20%	28%	11%	40%
Marketplace - El Paseo	31%	17%	8%	44%
Clovis Commons	41%	27%	9%	23%

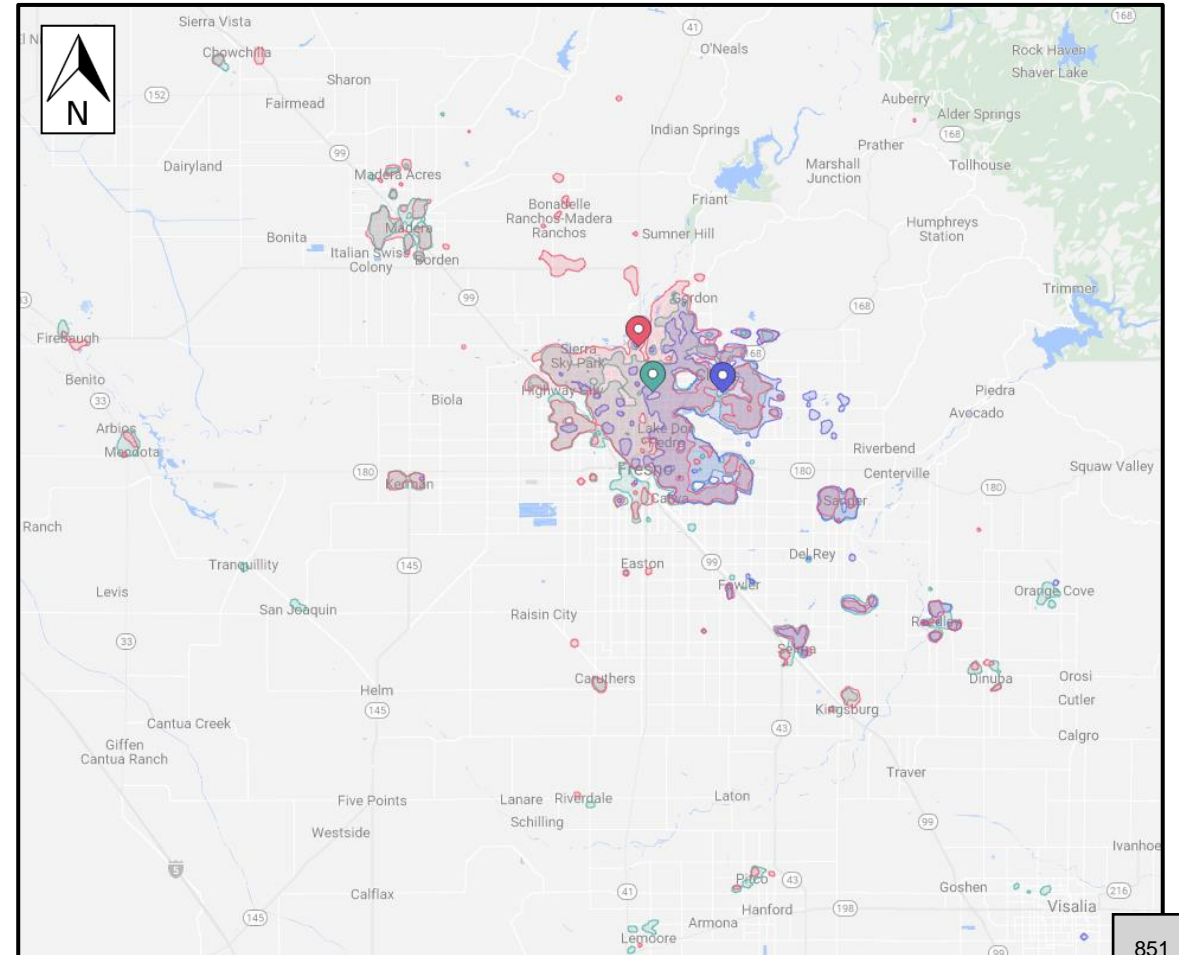
Source: PlacerAI (Accessed June 2021)

TRUE TRADE AREAS: 1/1/19 – 6/23/21

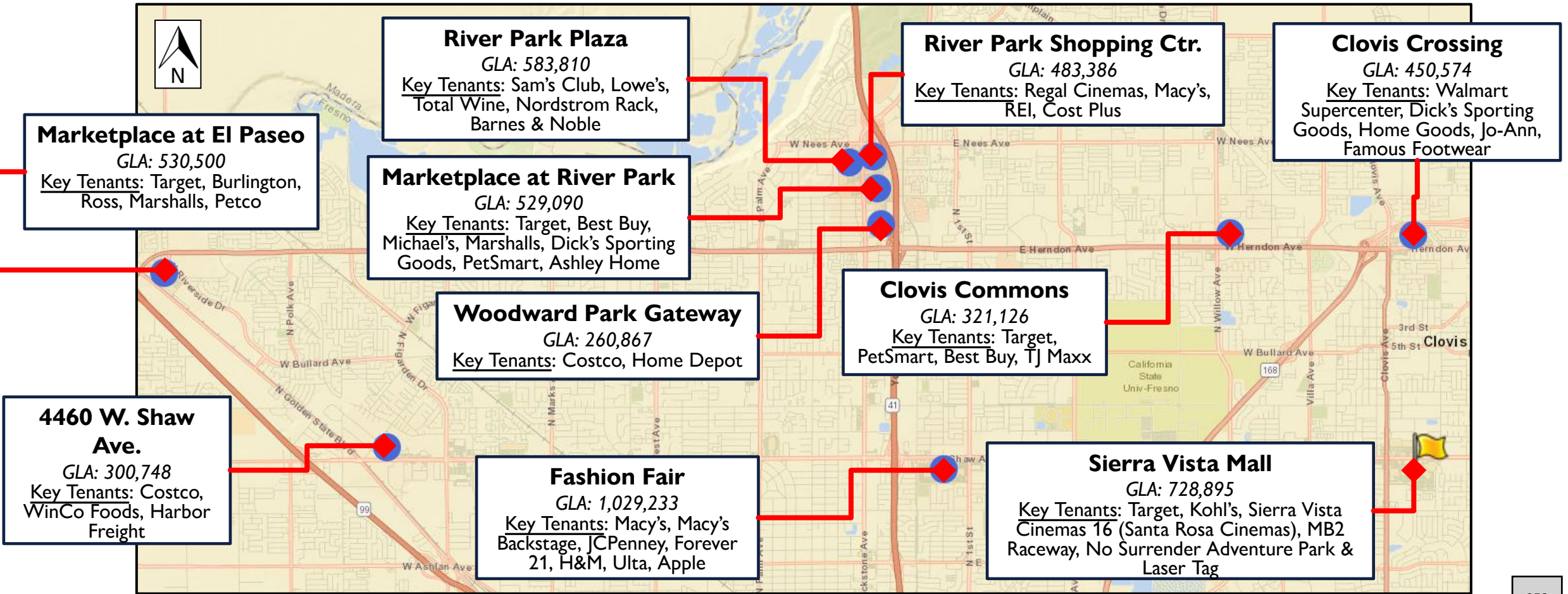
SIERRA VISTA MALL VS RIVER PARK PLAZA AND FASHION FAIR



- The Sierra Vista Mall’s true trade area extends to locations as far southeast as Fowler, Parlier, Reedley, Sanger, and Selma
- It is important to note, however, that River Park Plaza and Fashion Fair also capture from these areas (85% of Sierra Vista Mall’s true trade area is covered by those two centers)
- Fashion Fair and River Park Plaza capture additional visitors from northern and western areas such as Firebaugh, Kerman, Madera, and Mendota



ANCHOR TENANTS SIERRA VISTA MALL & MAJOR CENTERS WITHIN 15 MILES

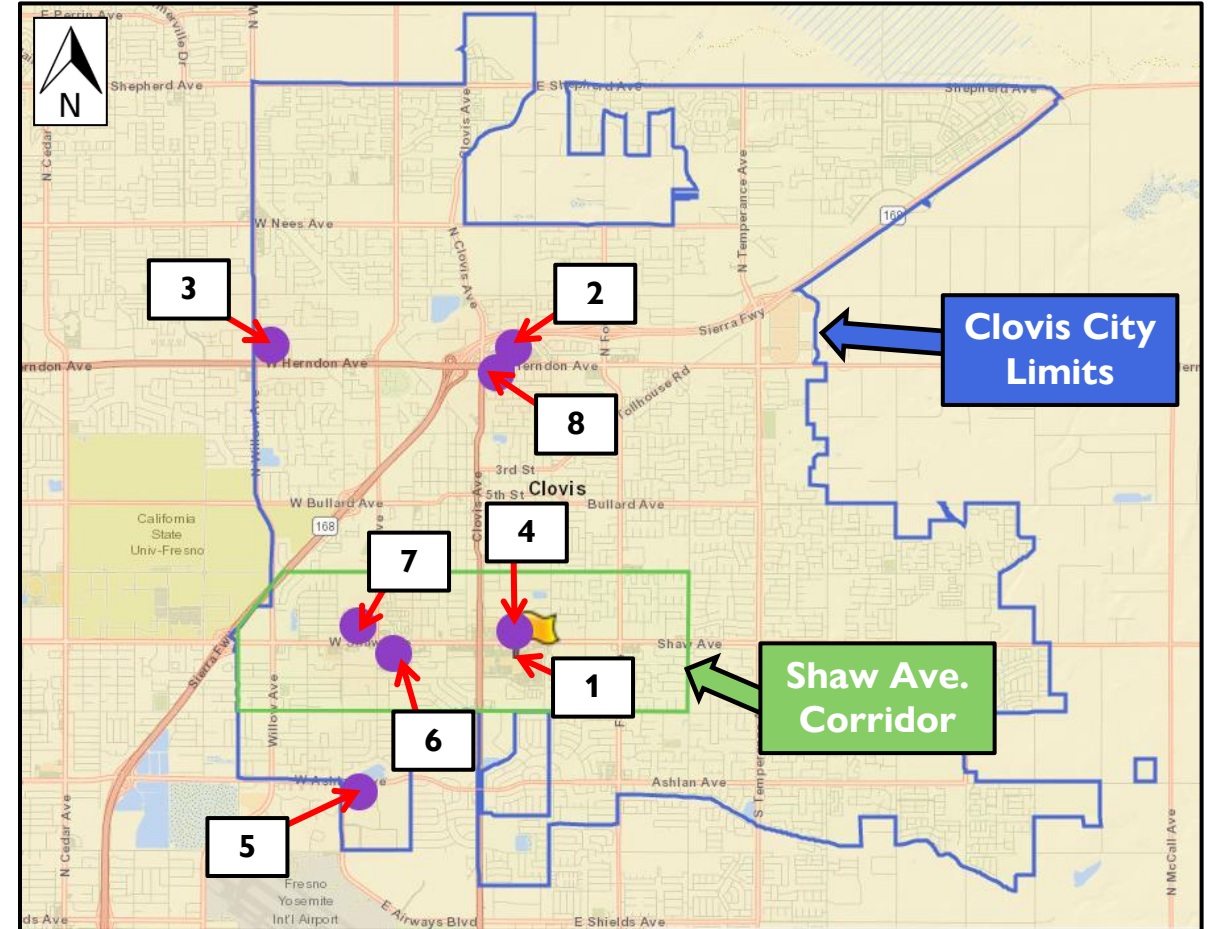


Source: PlacerAI (Accessed June 2021)

LARGEST RETAIL CENTERS BY GLA

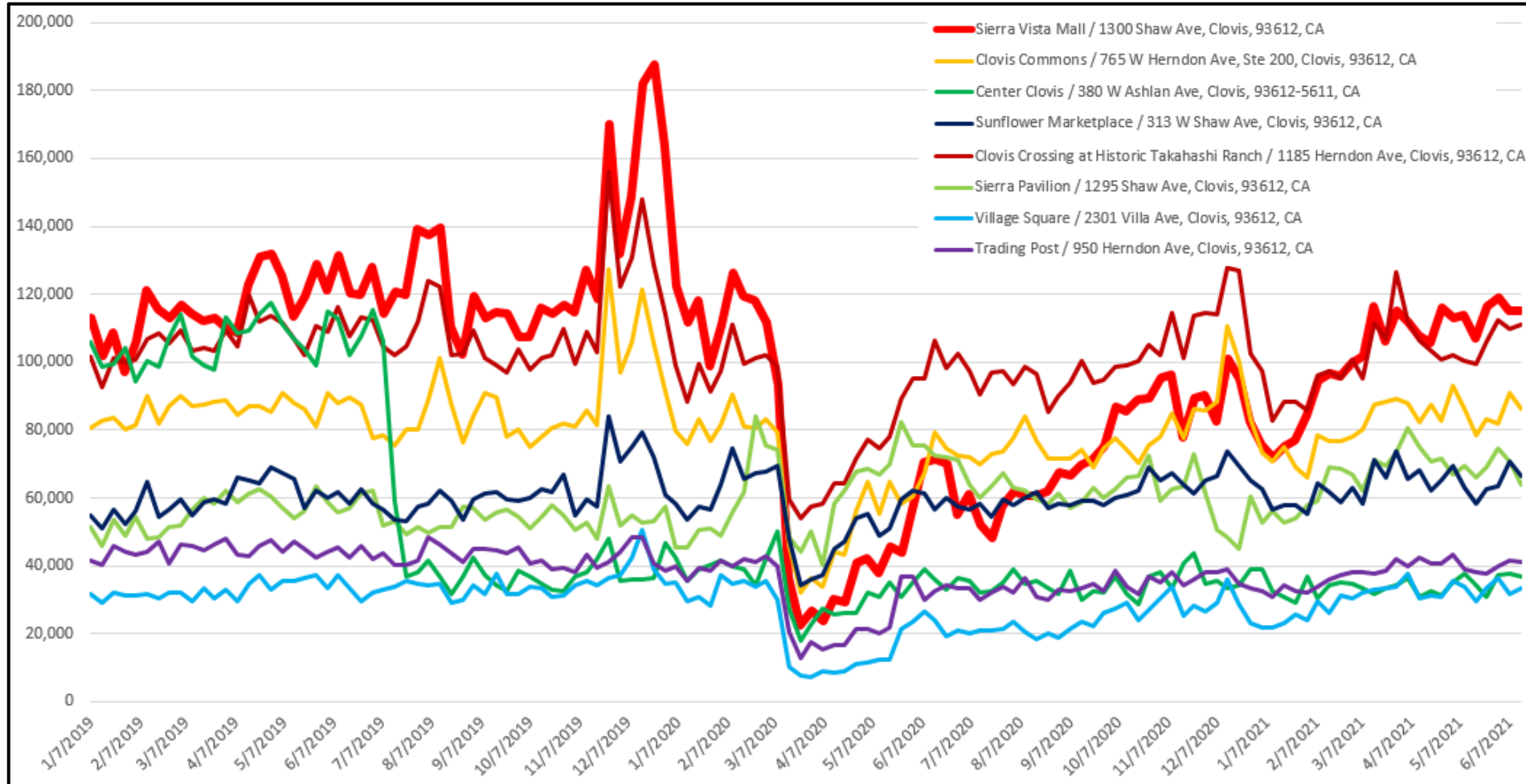
CITY OF CLOVIS

#	Retail Center	Dist. From Sierra Vista Mall	GLA (SF)	% Vacant / % Avail.	Anchor Tenants
1	Sierra Vista Mall	-	728,895	13.7% / 35.8%	Target, Kohl's, Santa Rosa Cinemas, MB2 Raceway, No Surrender Adv. Park
2	Clovis Crossing	2.2 mi N	450,574	7.2% / 7.2%	Walmart Supercenter, Dick's, Home Goods, Jo-Ann, Famous Footwear
3	Clovis Commons	2.9 mi NW	321,126	1.0% / 1.0%	Target, PetSmart, Best Buy, TJ Maxx
4	Sierra Pavilion	0.2 mi N	287,451	0.0% / 0.0%	FoodMaxx, At Home, Big Lots, Party City, Pet Supplies Plus
5	The Center Clovis	1.5 mi SW	261,526	1.2% / 9.0%	WinCo Foods
6	Village Square	0.9 mi W	260,329	23.5% / 26.1%	Ross, Burlington, Dollar Tree
7	Sunflower Marketplace	1.2 mi NW	246,105	2.2% / 2.2%	Walmart, Michaels
8	Trading Post	2.0 mi N	136,782	1.7% / 1.7%	Sprouts, Tuesday Morning, Dollar Tree



Sources: Kosmont Companies; Placer.ai; ESRI Business Analyst Online; CoStar (Accessed June 2021); **Notes:** According to CoStar, vacant space refers to all space that is not occupied by a tenant regardless of availability or lease obligation. Available space is the amount of space currently being marketed as available for lease or sale in a given time period. It includes any space that is vacant, occupied, or available at a future date. For this analysis, the boundaries for this corridor are from Winery Ave. and CA-168 on the west, Barstow Ave. to the north, Gettysburg Ave. to the south, and Armstrong Ave. to the east.

ESTIMATED WEEKLY VISITS – 1/1/19 – 6/23/21 SIERRA VISTA MALL & MAJOR CENTERS WITHIN CLOVIS



Source: Placer.ai (Accessed June 2021).



VISIT SUMMARY: 1/1/19 – 6/23/21

SIERRA VISTA MALL & MAJOR CENTERS WITHIN CLOVIS

Mall Visitation Data: 1/1/19 – 6/23/21

	Estimated Unique Customers	Estimated Total Visits	Average Visits Per Customer	Average Length of Stay	Median Weekly Visits	Median Daily Visits
Sierra Vista Mall	1.24 M	12.83 M	10.36	78 min	108,226	12,966
Clovis Crossing	966.2 K	13.15 M	13.61	49 min	101,862	14,101
Clovis Commons	974.1 K	10.34 M	10.62	49 min	81,118	11,322
Sierra Pavilion	824.3 K	7.72 M	9.37	51 min	58,879	8,131
The Center Clovis	581.2 K	6.54 M	11.25	48 min	36,713	5,232
Village Square	600.5 K	3.74 M	6.23	68 min	31,044	4,058
Sunflower Marketplace	800.8 K	7.83 M	9.78	50 min	59,889	8,515
Trading Post	615.5 K	4.91 M	7.97	54 min	39,580	5,504

TYPICAL VISITOR PERSONA: 1/1/19 – 6/23/21

SIERRA VISTA MALL & MAJOR CENTERS WITHIN CLOVIS

Visitor Home Location Demographics: 1/1/19 – 6/23/21

	Avg. HH Income	Most Common Ethnicities	Customer Favorite Grocery Chain	Customer Favorite Leisure Venue
Sierra Vista Mall	\$76,100	White (46%), Hispanic (39%), Asian (11%)	Save Mart	Regal Cinemas
Clovis Crossing	\$85,500	White (49%), Hispanic (36%), Asian (11%)	Save Mart	Regal Cinemas
Clovis Commons	\$88,800	White (50%), Hispanic (36%), Asian (11%)	Save Mart	Regal Cinemas
Sierra Pavilion	\$80,800	White (48%), Hispanic (37%), Asian (11%)	Save Mart	Regal Cinemas
The Center Clovis	\$65,100	White (42%), Hispanic (41%), Asian (12%)	Save Mart	Regal Cinemas
Village Square	\$66,800	Hispanic (43%), White (42%), Asian (11%)	WinCo Foods	Regal Cinemas
Sunflower Marketplace	\$60,000	White (43%), Hispanic (41%), Asian (11%)	WinCo Foods	Regal Cinemas
Trading Post	\$89,900	White (52%), Hispanic (33%), Asian (11%)	Save Mart	Regal Cinemas



Source: Placer.ai (Accessed June 2021). **Notes:** To be considered the favorite grocer or leisure or entertainment venue of a customer, this customer would have had to visit the chain at a minimum 4 times during the selected timeframe to indicate loyalty.

FINDINGS

RETAIL MARKET SURVEY

- “Brick and Mortar” retail has been undergoing massive changes in the past five years and the financial failure of the vast majority of department store chains, the non-stop growth of e-commerce, along with the expansion of the super box stores such as Costco, Walmart, and Target has devastated regional malls across the U.S.
- COVID-19 related bankruptcies by dozens of national soft good chains that used to be mall mainstays is the last straw. Over 25% of all malls built prior to 2000 are expected to be torn down in the next 3-5 years
- Clovis contains a significant amount of retail (~38 SF shopping center space per capita) compared to the combined cities of Clovis and Fresno (~33 SF) regionally and CA and U.S. (~23 SF). The retail centers along Shaw and Herndon Aves. service a large number of visitors particularly from the local area (within 7 miles) and from areas as far south as Parlier, Sanger, and Selma
- Although Clovis has not lost sales tax revenue post-COVID, retail centers in the City do experience competition from other major retail centers in Fresno. For example, River Park and Fashion Fair not only draw visitors from Sierra Vista Mall’s true trade area, but also capture visitors from areas to the north and west of Fresno. Furthermore, retail centers in Clovis appear to be experiencing more vacancy and availability compared to their Fresno counterparts
- Given these trends, Clovis could consider reimagining vacant or available retail space – in particular by creating experiential, entertainment, and dining destinations or potentially blending other uses with retail – to create a more attractive and diversified development that can best serve the community and the region



LAND USE EVALUATION

City of Clovis – Retail Market Survey & Land Use Evaluation

LAND USE TRENDS

LAND USE EVALUATION

ECONOMIC AND LAND USE TRENDS

➤ Retail

- Retail store closures, bankruptcies, and e-commerce has changed economics of retail centers. Many are being reimagined (e.g., blended use)
- Retail is driven by trip-generators such as entertainment, experience, and essentials

➤ Office

- Office building vacancy rising as remote work becomes new normal; Social distancing leads to offices resizing/reconfiguring
- Corporations see possible shift to suburban offices - Integrating office in blended use environments

➤ Industrial

- E-commerce growth has exploded
- Retail and industrial are merging, with space being used for Buy Online Pick Up in Store (BOPIS), fulfillment, last mile and warehousing

➤ Residential

- Homes are live, play, **and work** environments
- Strength in suburban markets; Home office is the new amenity; Apartment developments are being designed to facilitate work
- New residential sites in shopping centers

➤ Hospitality

- Hospitality sector hurt the most by COVID-19, but leisure travel is rebounding



Housing is Not a Loss Leader, it's a Growth Driver

Retail is Not Just Retail Anymore

Telework is Reconfiguring Office

Industrial / Distribution is Critical for Your Economy

Housing Creation as Economic Development

Retail Reimagination as Economic Development

Office Conversions as Economic Development

Industrial & Fulfillment as Economic Development

- New housing can generate significant new tax revenues and support local jobs
- Housing is not necessarily a net negative fiscal impact, especially at current property values

- U.S. retail over-built and needs “right sizing;” COVID-19 accelerated trends; today its about essentials, experience & e-commerce
- Blended/mixed use projects integrate multiple uses (housing, retail, open space, creative office, hotel)

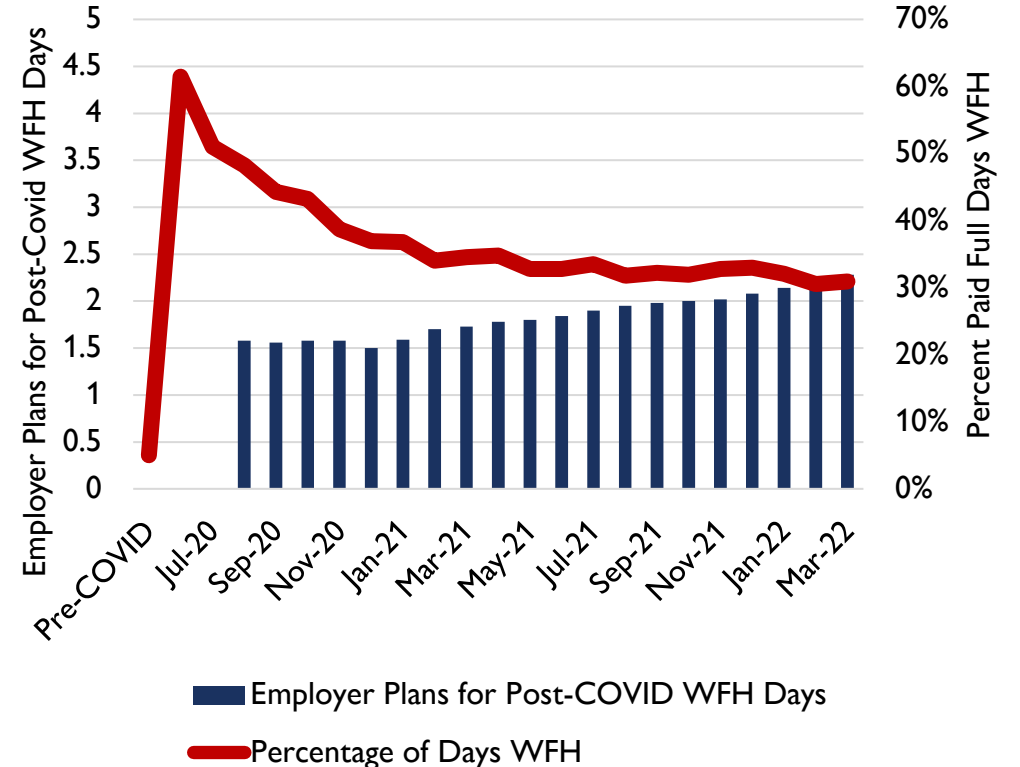
- Telework and work from home options are reshaping the needs for office space and business districts
- Job redistribution tied to housing
- Vacancies can lead to fiscal impact pressure

- Modern industrial is not “your father’s industrial” – not smokestacks
- Retail can’t thrive without distribution
- Booming demand for distribution, e-commerce, and data centers, blending for fulfillment/delivery, job creators

WORK-FROM-HOME GROWTH

- Work-from-home is changing where people choose to live, and increases popularity of “15-minute communities” that offer amenities and quality of life.
- Census Bureau estimated that ~44% of workers are in jobs where working from home is currently feasible, with only a quarter of those in feasible telework jobs actually utilizing this capability.
- Research shows the ability to telework likely varies by educational attainment and income-level; many of the telework occupations are Management / Business / Financial / Professional occupations. Opportunity for Clovis new residential units.
- Other research shows that work-from-home represent ~30% of days, significantly above pre-pandemic estimates of 5%.
- Employers are expecting an average of 2.3 work-from-home days per week, suggesting that hybrid home/office model is likely to be well-utilized post-COVID.

Work-from-Home: Current Utilization and Employer Plans for post-COVID

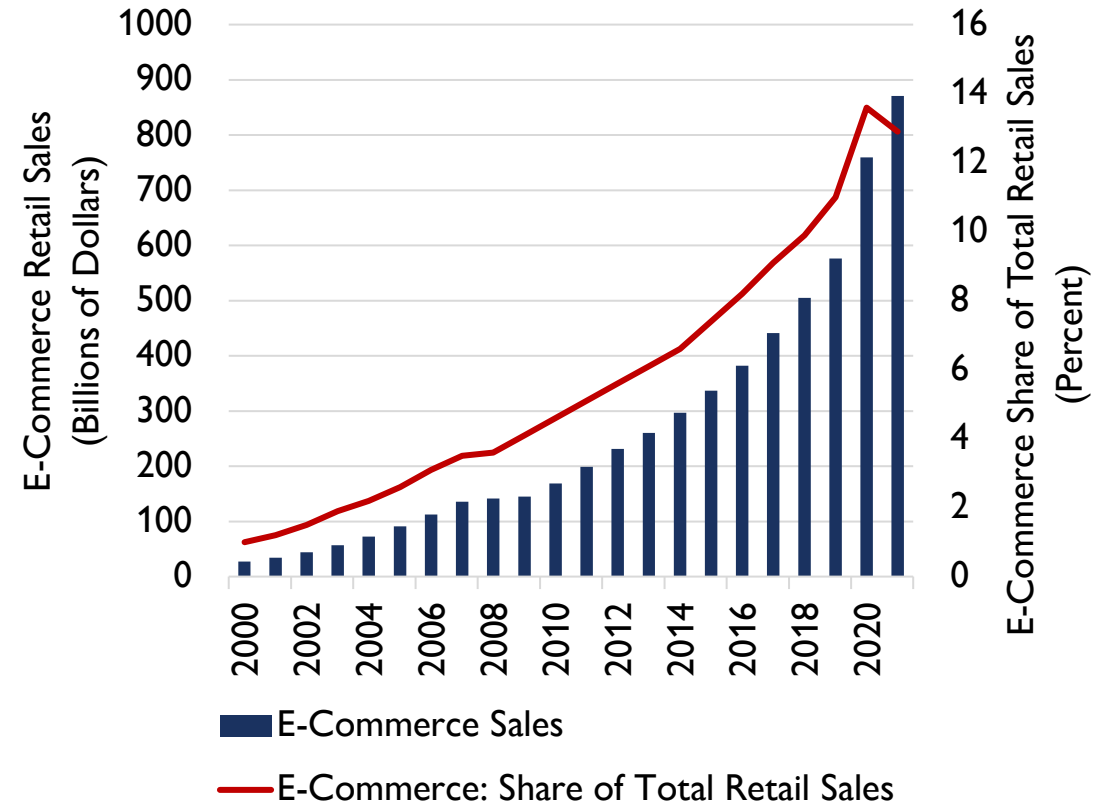


Source: U.S. Census Bureau; St. Louis Federal Reserve; Survey of Working Arrangements (Accessed February 2023)

E-COMMERCE GROWTH

- E-commerce sales in the U.S. have increased steadily, jumping by 30% to \$800 billion annually by Q2 2020 due to increased utilization during the COVID-19 pandemic. This put additional pressure on local brick-and-mortar retailers. Post pandemic retail mall shopping has recovered somewhat.
- According to UBS, e-commerce’s share of overall U.S. retail sales will continue to increase over the next 5 years, resulting in a loss of brick-and-mortar sales, primarily in clothing, office supply and sporting goods.
- Consumer online shopping behavior has further solidified during the COVID-19 pandemic, and is not likely to revert to old patterns, thanks to free 1-day delivery services, etc.

E-Commerce Retail Sales



Source: U.S. Census Bureau; St. Louis Federal Reserve; UBS (Accessed February 2023)

RETAIL TRENDS

- Shopping centers across the U.S. are faced with dramatic decline in retail sales as the digital economy converts the lifestyles and social patterns of every generation. Today's consumers use online websites for purchasing many hard and soft good commodities.
- Several hundred regional malls have closed in past 5-10 years. By 2025, experts expect only Class-A malls in high income communities are most likely to survive.
- The impacts from e-commerce will have major impacts on large shopping centers in the region, particularly power centers. Community retail centers with the strongest opportunity for future growth are those focused on essentials and experiences.
- Shopping districts that are centered around experiences, entertainment, and essentials are best poised for economic resiliency and future success.
- The future for retail centers in Clovis lies in fostering experiential, entertainment uses and restaurants. Blended use projects that bring additional uses to retail sites (such as hospitality, last-mile logistics, and multifamily residential) can bring more customers to the stores and thus be a more sustainable and diversified development that serves the community.

It's About Convenience



It's About Experience



It's About Blended Use



WHAT DRIVES AN ENGAGING RETAIL EXPERIENCE?

Thoughtful Design	Programmed Outdoor Space	Communal Elements	Unique Amenities	Unique Food Offerings	Curated Retail Tenants
<ul style="list-style-type: none"> • Feels like an exciting destination • Celebrates local character • Fosters a specific vibe/feeling • Feels fresh and innovative 	<ul style="list-style-type: none"> • Fun and welcoming environment to gather and hang • Fresh air elevates dining and shopping experience • Mood lighting and aesthetics lifts the ambiance 	<ul style="list-style-type: none"> • Shared community experiences • Encourage conversation and connection • Examples: breweries, distilleries, coffee / tea 	<ul style="list-style-type: none"> • Unexpected entertainment attracts and retains customers • Memorable and engaging • Examples – arcade games, photo booths, lawn games, art installations 	<ul style="list-style-type: none"> • Interesting and culturally rich food options • Reflects local flavor, authentic, interesting fusion • Exciting to try, drives additional visits 	<ul style="list-style-type: none"> • Tenants and pop-ups create a reason to come • Digital brands with brick-and-mortar spaces • Curated products that create a desirable shopping experience • Local / exclusive products



Stone Brewing Beer Garden Communal Outdoor Spaces

ENGAGING RETAIL EXAMPLES



Upscale Design Elements



Rodeo39 Curated Retail & Food



Outdoor Amenities



Steelcraft Curated Food

EXPERIENTIAL ENTERTAINMENT RETAIL CONCEPTS

Experiential retail / entertainment concepts have been merging food, drinks, and entertainment into engaging experiences. This includes:

- Movie Theater concepts such as Alamo Drafthouse that deliver an improved theater experience with better seating / design and elevated food / beverage.
- Bowling concepts such as Bowlmor and Lucky Strike, which provide a more upscale experience in a lounge setting
- Smaller format sports / activities concepts such as Puttshack, Spin Ping Pong, rock climbing gyms, ax throwing, escape rooms, laser tag, and trampoline parks.
- Larger format sporting / activities, including Topgolf and SFC sports facilities
- Personalized retail services, such as clothing and accessories stores that offer in-store services and customization
- Interactive exhibits, including art galleries, installations, and other cultural offerings
- Gaming concepts such as arcade bars, pinball, virtual reality gaming, and e-sports



CASE STUDY

VILLAGE CENTER / RODEO 39

Village Center / Rodeo 39 is an example of an experiential retail / housing blended use project that serves as an entertaining destination and hub for the community. It also demonstrates how adding residential can generate demand for retail on the site and add value to a project.

The Village Center shopping plaza in Stanton was a blighted 24-acre shopping site that had significant vacancy issues. The site's retail component was rightsized down to 10-acres of the site, with a "town square" environment anchored by the Rodeo 39 curated public market. A new multifamily housing project was built on the remainder of the site.

Food and entertainment – particularly curated local offerings – was the foundation of the public market, a new 41,000 SF retail and dining space. Rodeo 39 has been a great success, with the local community embracing the eclectic destination.

The project also added a variety of entertaining and experiential offerings that encourage people to spend more time – a wide variety of cultural dining, small stage for live music performances, retro arcade / games, boutique tattoo artists, pop-up shops, and a variety of indoor and outdoor seating and gathering areas.



AERIAL PHOTO VILLAGE CENTER / RODEO 39

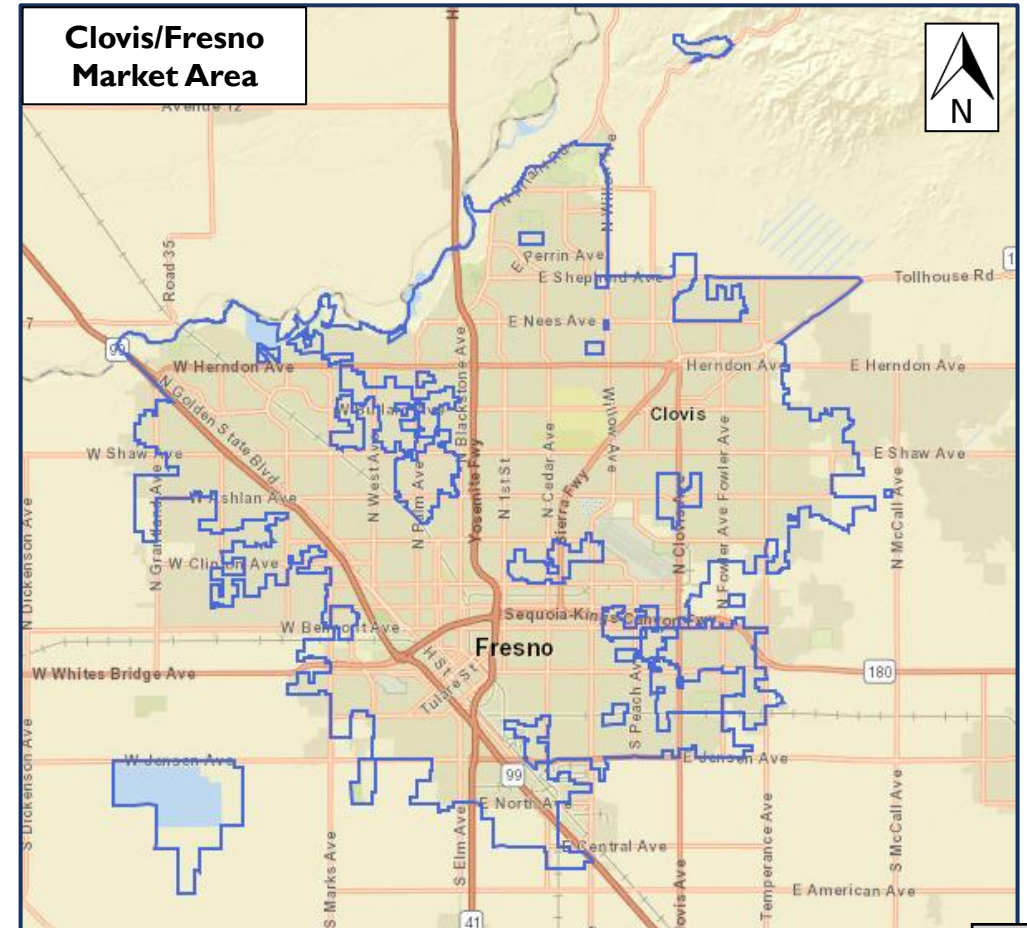


EVALUATION OF POTENTIAL LAND USES

LAND USE EVALUATION

LAND USE EVALUATION OVERVIEW

- This Land Use Evaluation section observed the market demand for office, industrial, residential (multifamily), and hospitality (hotel) uses in the City
- Existing supply conditions from the most recent available quarter (Q4 2022) for these uses were observed in the City, a regional area (Clovis/Fresno Market Area “Market Area”*), and Fresno County
- Historic market data, from 2007 to 2022, was used to quantify growth achieved over time and observe changes between the City and the Market Area
- Demand for hospitality uses was examined by observing hotel construction trends in both Clovis and Fresno, along with observing the occupancy, average daily rates, and supply/demand of room nights of hotels in the City
- A high-level SWOT analysis was prepared to highlight the strengths, weaknesses, opportunities, and threats of the examined land uses



Notes: *The City of Clovis falls within its own submarket for office and multifamily uses. The City also falls within two submarkets for industrial uses – Northeast Fresno and Outlying Fresno County, the latter of which draws from an area west of Fresno. Given this information, it was decided to observe the combined areas of the Cities of Clovis and Fresno as a regional reference instead of drawing comparisons with the CoStar submarkets.

SUMMARY

OFFICE MARKET

- The Clovis/Fresno Market Area comprises 95% of all existing office space in Fresno County. The office market in Clovis is small - 8% of the total office market within the Market Area.
- The office market in the City is a small, but growing market. Approximately 40% of the City's office space was built in the last 15 years and there is 72,000 SF currently under construction and another 137,300 SF proposed
- Office vacancy in Clovis is **lower** and rents are slightly **lower** than the Market Area and Fresno County. However, the market demand for office is moderately strong given that vacancy remains below 10% in the City, Market Area, and County. Office vacancy in the City has remained below pre-Great Recession levels and office rents have increased year-over-year since year-end 2017
- The Shaw Ave. Corridor contains 16% of the office space in Clovis and features slightly **lower** vacancy (5.5%) and **similar** rents (\$23.40 PSF) compared to the overall office market in the City
- Over the last 15 years, office vacancies in the City have fluctuated from 5.7% in 2022 to as high as 16.6% in 2008. The Great Recession led to a significant increase in vacancy and a slowdown in office development with just 69,000 SF of office space delivered between 2008 and 2012
- Although office vacancy levels have increased from 2019 to 2020 due to the COVID-19 pandemic, vacancy never approached the levels experienced during the Great Recession
- The largest increase in office inventory occurred in 2008 (160K SF delivered), in 2013 (146K SF), in 2016 (104K SF, including 782 Medical Center Dr. East [69,000 SF]), and in 2022 (153K SF, including 139K SF Fresno County Social Services Building – 380 W. Ashlan Ave. [former Costco]); Since 2007, office construction has steadily increased year over year in the Clovis/Fresno Market Area
- In the Market Area, the Great Recession did have an impact on office vacancy – reaching as high as 13.4% in 2011. Although the pandemic did lead to an increase in office vacancy, vacancy has since declined by year-end 2022; Office vacancy in the Market Area has also remained below 10% since 2017, indicating a strong office market
- Office rents in the Market Area have remained relatively stable since 2008 (between \$16-19 PSF/Yr.) and have steadily increased since 2016. 2020 saw a 17% increase in office rents
- 14% of the office space in the City is over 40 years old. We estimate that half of this space (156,500 SF) could be reimagined or re-envisioned for a blending of uses

OFFICE MARKET OVERVIEW

	Q4 2022		
	City of Clovis	Clovis/Fresno Market Area	Fresno County
Availability			
Gross Rent \$PSF/Yr.	\$23.40	\$23.66	\$23.66
Vacancy Rate	5.7%	8.8%	8.5%
Vacant SF	127,695	2,393,871	2,413,010
Net Absorption	(27,201)	(9,719)	(9,719)
Inventory			
Existing SF	2,238,514	27,112,474	28,490,285

Source: CoStar (Accessed February 2023); **Note:** CoStar defines Full Service / Gross Rent as “a rental rate that includes normal building standard services which are provided and paid by the landlord.” Vacant space refers to all space that is not occupied by a tenant regardless of availability or lease obligation. Available space is the amount of space currently being marketed as available for lease or sale in a given time period. It includes any space that is vacant, occupied, or available at a future date.



- Major office space available in the City of Clovis:
 - 49,818 SF of medical office space available at Clovis Community Medical Center (782 Medical Center Dr. East)
 - 40,498 SF available at 90 W. Ashlan Ave.
- Major office space under construction:
 - 43,000 SF Loma Vista Office Building (Class B, opening Aug. 2023) at 2356 Leonard Ave.
 - 29,000 SF under construction and 15,400 SF proposed at Shaw Mission Business Park (2036-2196 Shaw Ave.)
- Additionally, there is 23,600 SF of Class A office space proposed at 370 W. Spruce Ave. (Herndon Peach Business Center) and 98,300 SF of Class A and B office space proposed at 918-968 N. Temperance Ave. (Greyhawk Business Center)
- 40% of the City’s office market (896,300 SF) was constructed in the last 15 years
- 14% of office space in the City is over 40 years old. We estimate that half of this office space (156,500 SF) could be reimagined into a blend of uses



Top: Clovis Community Medical Center
Middle: 90 W. Ashlan Ave.
Above: Rendering of Loma Vista Office Bldg.

OFFICE MARKET HISTORY

2007 – 2022

CITY OF CLOVIS

CLOVIS/FRESNO MARKET AREA

FRESNO COUNTY

Year	Inventory SF	Vacant SF Total	Vacant % Total	Net Absorp. SF Total	Gross Rent Overall
2022	2,238,514	127,695	5.7%	156,857	\$23.40
2021	2,085,726	131,764	6.3%	78,795	\$21.66
2020	2,027,598	152,431	7.5%	2,546	\$21.48
2019	1,996,768	124,147	6.2%	30,646	\$19.10
2018	1,983,680	141,705	7.1%	94,732	\$17.93
2017	1,929,068	181,825	9.4%	83,335	\$16.67
2016	1,867,980	204,072	10.9%	56,005	\$17.64
2015	1,763,257	155,354	8.8%	56,425	\$17.68
2014	1,717,699	166,221	9.7%	22,718	\$17.21
2013	1,717,699	188,939	11.0%	179,031	\$17.83
2012	1,571,142	221,413	14.1%	(14,293)	\$17.92
2011	1,561,027	197,005	12.6%	15,216	\$17.71
2010	1,561,027	212,221	13.6%	37,009	\$17.92
2009	1,556,086	244,289	15.7%	58,087	\$18.18
2008	1,502,613	248,903	16.6%	40,597	\$18.21
2007	1,342,186	129,073	9.6%	(11,041)	\$19.56

Year	Inventory SF	Vacant SF Total	Vacant % Total	Net Absorp. SF Total	Gross Rent Overall
2022	27,112,474	2,393,871	8.8%	270,506	\$23.66
2021	26,876,302	2,428,205	9.0%	(272,932)	\$23.60
2020	26,796,047	2,075,018	7.7%	92,409	\$22.14
2019	26,519,028	1,890,408	7.1%	325,388	\$18.89
2018	26,396,990	2,093,758	7.9%	461,077	\$17.48
2017	26,318,258	2,476,103	9.4%	638,688	\$16.56
2016	25,981,445	2,777,978	10.7%	262,700	\$16.47
2015	25,806,043	2,865,276	11.1%	180,949	\$17.07
2014	25,729,968	2,970,150	11.5%	295,372	\$16.79
2013	25,663,115	3,198,669	12.5%	369,815	\$17.06
2012	25,419,558	3,324,927	13.1%	93,563	\$17.53
2011	25,390,854	3,389,786	13.4%	(21,659)	\$17.74
2010	25,352,600	3,329,633	13.1%	(244,331)	\$17.82
2009	25,218,695	2,951,397	11.7%	39,011	\$17.84
2008	24,763,327	2,535,040	10.2%	304,337	\$18.35
2007	24,120,138	2,196,188	9.1%	(310,878)	\$15.76

Year	Inventory SF	Vacant SF Total	Vacant % Total	Net Absorp. SF Total	Gross Rent Overall
2022	28,490,285	2,413,010	8.5%	259,556	\$23.66
2021	28,254,113	2,436,394	8.6%	(246,146)	\$23.60
2020	28,168,849	2,104,984	7.5%	78,721	\$22.14
2019	27,891,830	1,906,686	6.8%	334,066	\$18.86
2018	27,766,092	2,115,014	7.6%	512,228	\$17.44
2017	27,641,360	2,502,510	9.1%	645,839	\$16.50
2016	27,304,547	2,811,536	10.3%	286,909	\$16.43
2015	27,116,653	2,910,551	10.7%	171,917	\$17.01
2014	27,040,578	3,006,393	11.1%	305,522	\$16.73
2013	26,973,725	3,245,062	12.0%	385,608	\$17.01
2012	26,730,168	3,387,113	12.7%	82,092	\$17.49
2011	26,701,464	3,440,501	12.9%	(16,665)	\$17.66
2010	26,658,210	3,380,342	12.7%	(223,776)	\$17.73
2009	26,509,279	3,007,635	11.3%	61,499	\$17.73
2008	26,031,226	2,591,081	10.0%	288,196	\$18.29
2007	25,388,037	2,236,088	8.8%	(332,800)	\$15.71

Source: CoStar (Accessed February 2023);

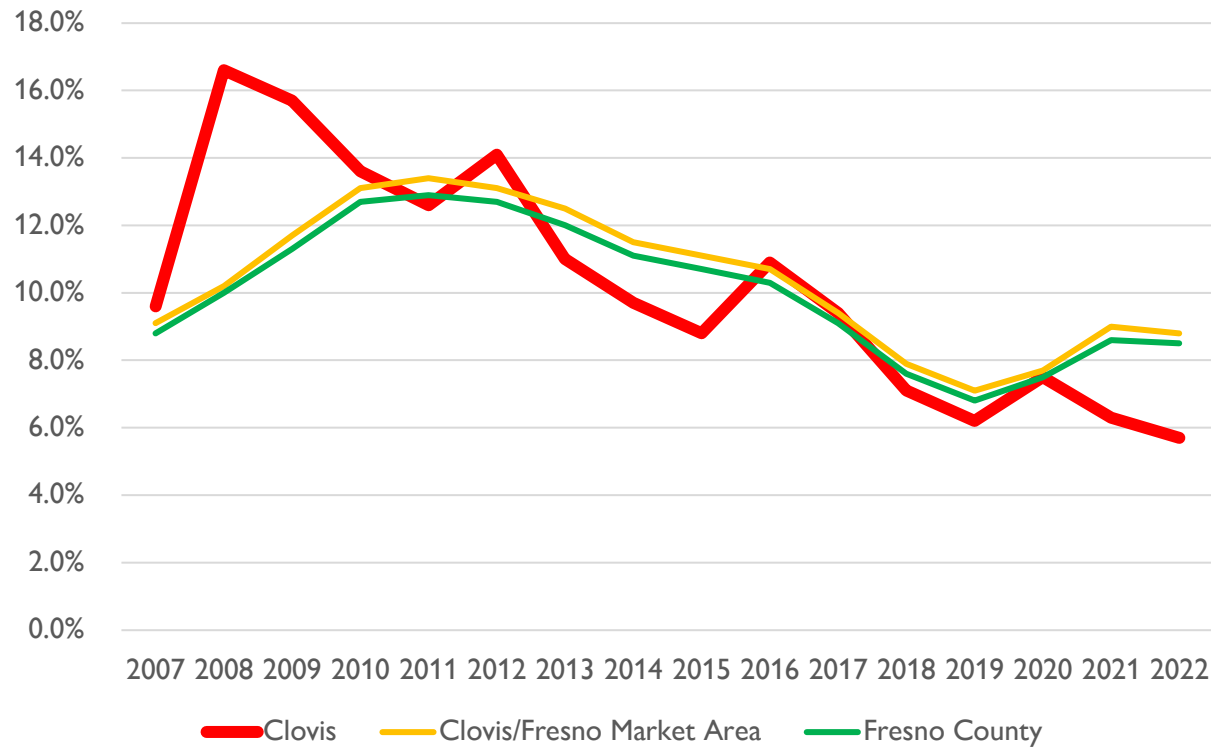
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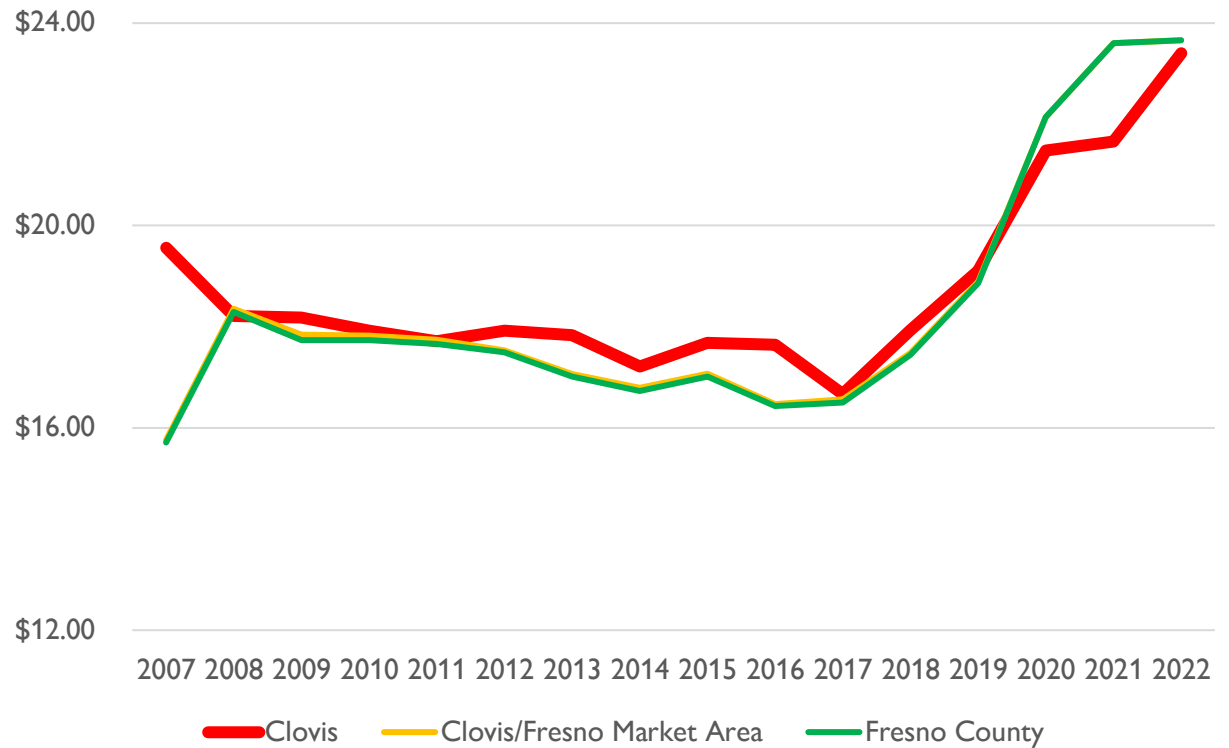
OFFICE MARKET HISTORY

2007 – 2022

Vacancy Rates



Gross Rent \$PSF/Yr.



SUMMARY

INDUSTRIAL / FLEX MARKET

- 80% of the total industrial market in Fresno County falls within the Clovis/Fresno Market Area. 5% of the industrial space in the Market Area falls within the City
- The Clovis industrial market features **higher** rents and **lower** vacancy compared to the Market Area and the County. The industrial market in Clovis is very strong with 0.1% vacancy
- The Shaw Ave. Corridor contains 15% of the industrial space in Clovis. Industrial space in the Corridor is primarily concentrated along Clovis and Barstow Aves. and features **no vacancy** and **higher** rents (\$9.00 PSF) compared to the Market Area
- There is approximately 13,600 SF of industrial currently under construction in Clovis and an additional 13,600 SF proposed at the Clovis 168 and Dry Creek Business Parks
- Much of the industrial space in Clovis was built prior to 2007, however just 18% of the of the space is over 40 years old. There are seven industrial/flex buildings that comprise almost 1/3 of the total industrial/flex market in the City (1,039,700 SF)
- Over the last 15 years, 315,200 SF of industrial space was built in the City. Most of this came in 2020 with the opening of an 80,000 SF manufacturing facility at 53 W. Herndon Ave.
- Historically, the industrial market in Clovis has been very strong and vacancies have not been above 5.4% in the last 15 years. In the last five years, vacancies have remained **below 1%**. The pandemic accelerated the demand for industrial given the rise in e-commerce activity and the need for smaller last-mile, flex industrial, and sorting facilities
- The Great Recession caused a drop in industrial rents by 61% from 2008 to 2010, however, rents have climbed back to pre-Recession levels by 2017
- In the Clovis/Fresno Market Area, the Great Recession did have an impact on vacancy – reaching as high as 9.0% in 2011. However, construction of industrial space steadily increased year over year. The largest increase in the industrial market came in 2018 with the addition of an 855,000 SF Amazon fulfillment center and a 671,000 SF Ulta Beauty distribution center in Fresno
- Industrial rents in the Market Area have remained relatively stable since 2007 and have steadily increased since 2017. Despite the pandemic, industrial vacancy remains lower than pre-Great Recession levels and has remained below 4.0% since 2016, indicating strong demand for industrial
- 18% of the office space in the City is over 40 years old. We estimate that half of this space (288,100 SF) could be reimaged as blended use, while the other half could be enhanced to meet e-commerce demand

INDUSTRIAL / FLEX MARKET OVERVIEW

	Q4 2022		
	City of Clovis	Clovis/Fresno Market Area	Fresno County
Availability			
NNN Rent \$PSF/Yr.	\$9.00	\$7.39	\$6.92
Vacancy Rate	0.1%	2.6%	2.4%
Vacant SF	1,648	1,794,819	2,096,868
Net Absorption	15,117	152,220	162,545
Inventory			
Existing SF	3,232,847	69,105,792	85,944,462

- Limited availability of industrial / flex space in the City (4,100 SF across two buildings)
- Two industrial buildings in the City currently under construction – 12 W. Palo Alto Ave. (3,600 SF, Class B warehouse at Clovis 168 Industrial Park, completion: April 2023) and 520 Park Creek Dr. (10,000 SF, Class B space, completion: April 2023)
- 13,600 SF warehouse proposed at Dry Creek Business Park (603 Pollasky Ave.)
- Minimal industrial / flex space built in the last 15 years (315,200 SF), most notably the 80,000 SF, Class B manufacturing facility at 53 W. Herndon Ave.
- 18% of industrial and flex space in the City is over 40 years old. We estimate that half of the space (288,100 SF) could be reimaged as potential blended use project, while the other half could be upgraded / enhanced to meet e-commerce demand



Top: Clovis 168 Industrial Park
Middle: 520 Park Creek Dr.
Above: Rendering of Dry Creek Business Park

Source: CoStar (Accessed February 2023); **Note:** CoStar defines Triple Net (NNN) as “a lease where the tenant is responsible for all expenses associated with their proportional share of occupancy of the building, except long-lived structural components and management charges.” Vacant space refers to all space that is not occupied by a tenant regardless of availability or lease obligation. Available space is the amount of space currently being marketed as available for lease or sale in a given time period. It includes any space that is vacant, occupied, or available at a future date.

INDUSTRIAL / FLEX MARKET HISTORY

2007 – 2022

CITY OF CLOVIS

CLOVIS/FRESNO MARKET AREA

FRESNO COUNTY

Year	Inventory SF	Vacant SF Total	Vacant % Total	Net Absorp. SF Total	NNN Rent Overall
2022	3,232,847	1,648	0.1%	36,129	\$9.00
2021	3,203,238	8,168	0.3%	44,678	\$10.18
2020	3,168,337	17,945	0.6%	91,497	\$11.25
2019	3,068,772	9,877	0.3%	34,350	\$12.32
2018	3,044,912	20,367	0.7%	49,757	\$11.58
2017	3,021,092	46,304	1.5%	(34,491)	\$12.00
2016	3,021,092	11,813	0.4%	41,228	\$6.24
2015	2,982,587	14,536	0.5%	29,176	\$6.24
2014	2,977,127	38,252	1.3%	53,187	-
2013	2,977,127	91,439	3.1%	40,103	\$4.68
2012	2,977,127	131,542	4.4%	29,633	\$4.68
2011	2,977,127	161,175	5.4%	(2,322)	\$4.93
2010	2,966,577	148,303	5.0%	17,234	\$5.87
2009	2,952,525	151,485	5.1%	(12,344)	\$10.21
2008	2,947,065	133,681	4.5%	31,626	\$15.00
2007	2,917,689	135,931	4.7%	(59,235)	\$11.40

Year	Inventory SF	Vacant SF Total	Vacant % Total	Net Absorp. SF Total	NNN Rent Overall
2022	69,105,792	1,794,819	2.6%	652,423	\$7.39
2021	68,282,853	1,624,303	2.4%	851,636	\$6.53
2020	67,837,016	2,030,102	3.0%	875,732	\$5.77
2019	67,614,167	2,682,985	4.0%	(238,983)	\$5.40
2018	67,491,123	2,320,958	3.4%	2,484,862	\$5.62
2017	64,923,815	2,238,512	3.4%	404,584	\$4.72
2016	64,770,335	2,489,616	3.8%	831,023	\$5.11
2015	64,414,943	2,965,247	4.6%	1,784,021	\$4.44
2014	63,337,884	3,672,209	5.8%	865,183	\$4.03
2013	63,316,599	4,516,107	7.1%	1,057,780	\$4.21
2012	62,998,079	5,255,367	8.3%	564,642	\$4.15
2011	62,855,671	5,677,601	9.0%	(266,855)	\$4.01
2010	62,834,772	5,389,847	8.6%	(499,873)	\$3.97
2009	62,804,848	4,860,050	7.7%	(968,410)	\$4.13
2008	62,600,123	3,686,915	5.9%	599,603	\$5.11
2007	62,081,354	3,767,749	6.1%	(433,623)	\$4.72

Year	Inventory SF	Vacant SF Total	Vacant % Total	Net Absorp. SF Total	NNN Rent Overall
2022	85,944,462	2,096,868	2.4%	878,847	\$6.92
2021	84,916,523	1,947,776	2.3%	1,145,223	\$6.11
2020	84,443,490	2,619,966	3.1%	1,036,775	\$5.39
2019	84,039,113	3,252,364	3.9%	(299,828)	\$5.27
2018	83,850,152	2,763,575	3.3%	2,598,319	\$5.97
2017	81,272,844	2,784,586	3.4%	527,476	\$4.63
2016	81,119,364	3,158,582	3.9%	839,678	\$5.01
2015	80,763,972	3,642,868	4.5%	1,786,211	\$4.43
2014	79,686,913	4,352,020	5.5%	1,187,020	\$4.02
2013	79,665,628	5,517,755	6.9%	1,154,450	\$4.17
2012	79,347,108	6,353,685	8.0%	345,028	\$4.09
2011	79,204,700	6,556,305	8.3%	(476,948)	\$3.95
2010	79,180,856	6,055,513	7.6%	(624,353)	\$3.95
2009	79,150,932	5,401,236	6.8%	(604,680)	\$4.07
2008	78,868,962	4,514,586	5.7%	201,907	\$5.12
2007	78,317,593	4,165,124	5.3%	(579,798)	4.72

Source: CoStar (Accessed February 2023);

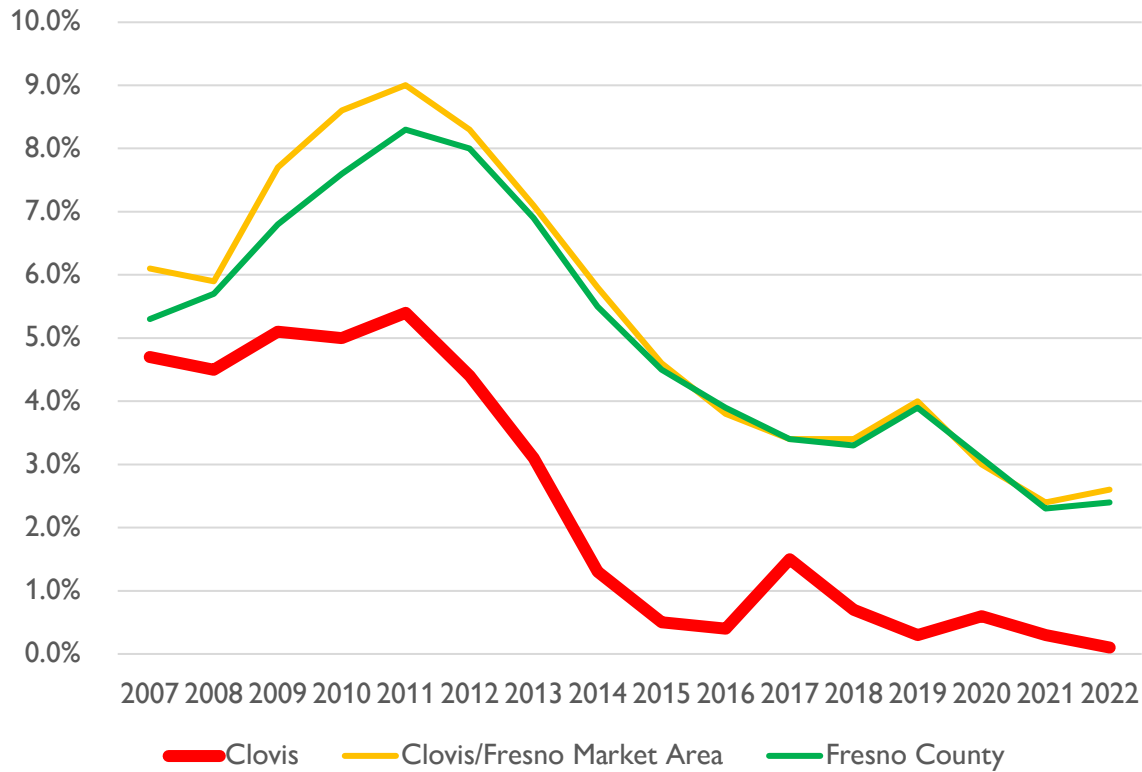
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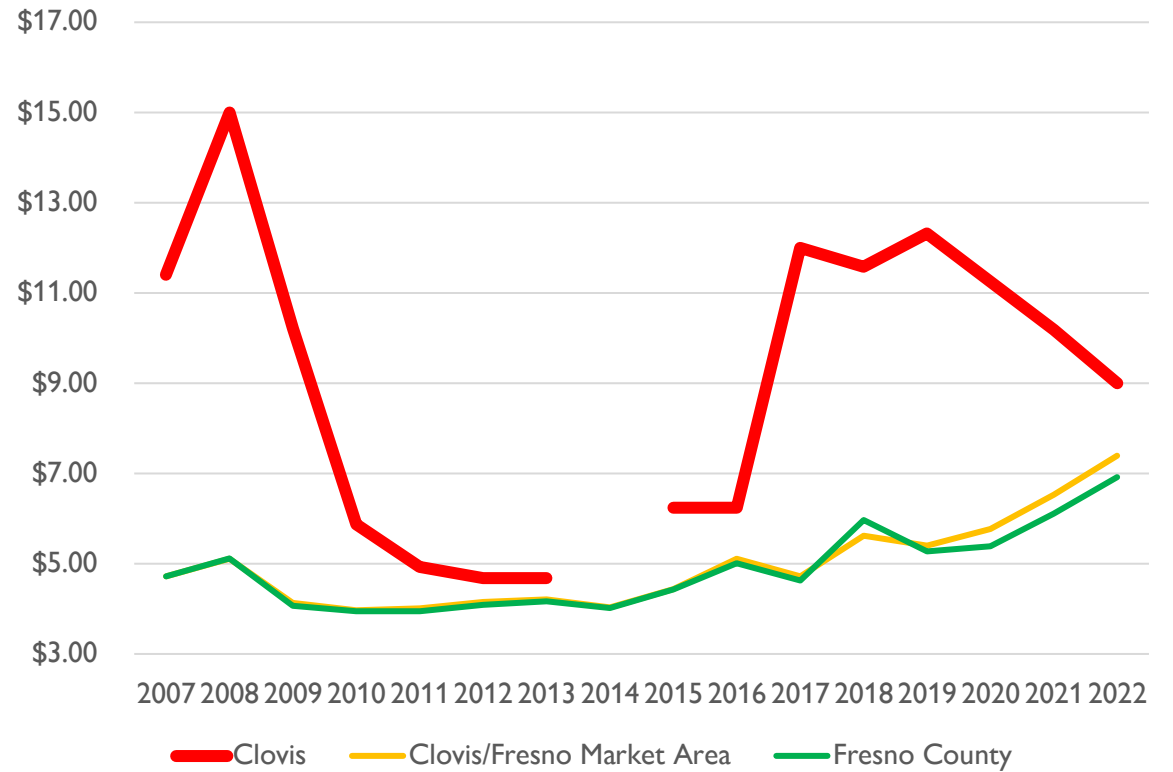
INDUSTRIAL / FLEX MARKET HISTORY

2007 – 2022

Vacancy Rates



NNN Rent \$PSF/Yr.*



SUMMARY

MULTIFAMILY RESIDENTIAL MARKET

- 86% of the total multifamily market in Fresno County falls within the Clovis/Fresno Market Area. The City contains 14% of the multifamily units in the Market Area
- The Clovis multifamily market features **higher** rents and **lower** vacancy compared to the Market Area and Fresno County
- 33% of the multifamily units in Clovis fall along the Shaw Ave. Corridor and are concentrated along Barstow, Minnewawa, and Willow Aves., as well as behind various retail centers on Shaw Ave. For example, The Emerson, a recently completed 216-unit complex, is located directly south of the Sierra Vista Mall
- Asking rents among multifamily units in the Corridor are **lower** than the City, but **higher** than the Market Area and vacancy is **higher** than the three observed geographies
- Multifamily vacancy in the City is currently at 3.0% and has been below 3.1% since 2016, indicating a very strong multifamily market
- During the Great Recession, multifamily vacancy peaked at 6.3% in 2009. There was a complete halt in construction from 2008 to 2013 and from 2007 to 2018, approximately 170 units were built
- Despite the limited construction in earlier years, Clovis is experiencing a significant period of growth in multifamily units since year-end 2018 – 1,156 units (including market-rate and affordable) have been built in the last four years, the majority during the pandemic and post-pandemic years
- Further evidence of strong multifamily demand can be observed as 643 units were absorbed in 2020 and 2021, combined. Furthermore, multifamily vacancy is lower than pre-Great Recession levels. Additionally, the average asking rent per unit has steadily increased since 2009, indicating a strengthening multifamily market
- In the Clovis/Fresno Market Area, neither the Great Recession nor the COVID-19 pandemic, had much impact on multifamily construction. Construction has increased year-over-year and 3,128 units have been built in the last three years (Clovis accounts for 32% of these new units)
- Although, multifamily vacancy in the Market Area peaked in 2009 at 6.8%, vacancy has remained below 3.7% since 2016. Additionally, multifamily rents have steadily increased since 2009
- The City may consider allocating greater density for future projects to meet the demand for housing and achieve Regional Housing Needs Assessment (“RHNA”) numbers. Clovis is tasked with adding ~9,000 new units 66% of which are considered “affordable”

MULTIFAMILY MARKET OVERVIEW

	Q4 2022		
	City of Clovis	Clovis/Fresno Market Area	Fresno County
Availability			
Asking Rent Unit/Mo.	\$1,447	\$1,302	\$1,254
Vacancy Rate	3.0%	3.4%	3.2%
Total # of Vacant Units	265	2,240	2,433
Net Absorption	31	(83)	(106)
Inventory			
Total # of Units	8,946	65,168	75,864

- Since year-end 2019, there have been seven new projects built in Clovis (5 market-rate buildings totaling 877 units; 2 affordable buildings totaling 135 units; 1,012 units in total). Such examples include:
 - The Emerson (1170 Santa Ana Ave.), 216 Class A, market-rate units, completed 2020 [18 units/acre]
 - Dolce Vita Luxury Apartments (382 N. McKelvy Ave.), 158 units, completed 2021 [24 units/acre]
 - Solivita Commons (725 W. Alluvial Ave.), 60 Class B, affordable units, completed 2021 [14 units/acre]
- One building listed as under construction (Veneto Park at 567 N. Chapel Hill Ave., 185 Class B, market-rate units, projected Apr. '23)
- No other buildings currently planned or proposed in the City, per CoStar
- To meet growing demand for housing and meet RHNA requirements, City could consider higher density projects



Top: The Emerson
Middle: Dolce Vita Luxury Apts
Above: Solivita Commons

Source: CoStar; Fresno Council of Governments “Sixth Cycle RHNA Plan” (Accessed July 2021; Updated February 2023);

Note: Data represents the average asking rents across all unit types (Studios, 1BR, 2BR, etc.). Inventory includes condominium and co-op units but does not include dormitory or mobile home units. Per Fresno COG’s Sixth Cycle RHNA Plan, Clovis must add 8,977 new housing units (2,926 very low [<50% AMI]; 1,549 low [50-80% AMI]; 1,448 moderate [80-120% AMI], and 3,054 above moderate [>120% AMI] housing).

MULTIFAMILY MARKET HISTORY

2007 – 2022

CITY OF CLOVIS

Year	Inventory Units	Vacant Units	% Vacant	Net Absorp. Units	Asking Rent	Asking Rent (PSF)
2022	8,946	265	3.1%	-	\$1,447	\$1.58
2021	8,536	189	2.2%	143	\$1,391	\$1.55
2020	8,318	115	1.4%	500	\$1,234	\$1.38
2019	7,934	230	2.9%	93	\$1,166	\$1.33
2018	7,790	179	2.3%	19	\$1,122	\$1.29
2017	7,790	198	2.6%	28	\$1,076	\$1.24
2016	7,790	228	2.9%	119	\$1,024	\$1.18
2015	7,742	299	3.9%	67	\$979	\$1.13
2014	7,742	365	4.7%	55	\$942	\$1.09
2013	7,655	333	4.4%	82	\$920	\$1.06
2012	7,655	414	5.4%	(3)	\$906	\$1.05
2011	7,655	410	5.4%	-	\$896	\$1.04
2010	7,655	410	5.4%	70	\$892	\$1.03
2009	7,655	481	6.3%	(75)	\$885	\$1.02
2008	7,655	405	5.3%	8	\$935	\$1.08
2007	7,620	379	5.0%	135	\$927	\$1.07

CLOVIS/FRESNO MARKET AREA

Year	Inventory Units	Vacant Units	% Vacant	Net Absorp. Units	Asking Rent	Asking Rent (PSF)
2022	65,168	2,240	3.4%	404	\$1,302	\$1.47
2021	63,476	1,287	2.0%	397	\$1,243	\$1.41
2020	62,873	1,081	1.7%	1,312	\$1,122	\$1.28
2019	62,040	1,559	2.5%	875	\$1,066	\$1.22
2018	61,430	1,823	3.0%	370	\$1,020	\$1.17
2017	61,407	2,169	3.5%	683	\$974	\$1.11
2016	60,814	2,255	3.7%	453	\$931	\$1.07
2015	60,649	2,542	4.2%	986	\$889	\$1.02
2014	60,253	3,131	5.2%	229	\$856	\$0.98
2013	60,088	3,196	5.3%	609	\$841	\$0.97
2012	59,910	3,626	6.1%	185	\$828	\$0.95
2011	59,700	3,597	6.0%	133	\$820	\$0.94
2010	59,436	3,466	5.8%	1,083	\$815	\$0.94
2009	58,886	3,999	6.8%	(64)	\$811	\$0.94
2008	58,347	3,395	5.8%	(102)	\$855	\$0.99
2007	58,029	2,975	5.1%	395	\$848	\$0.98

FRESNO COUNTY

Year	Inventory Units	Vacant Units	% Vacant	Net Absorp. Units	Asking Rent	Asking Rent (PSF)
2022	75,864	2,433	3.2%	377	\$1,254	\$1.41
2021	74,127	1,409	1.9%	436	\$1,197	\$1.36
2020	73,521	1,239	1.7%	1,370	\$1,086	\$1.23
2019	72,688	1,774	2.4%	891	\$1,034	\$1.18
2018	72,078	2,053	2.8%	421	\$991	\$1.13
2017	72,055	2,451	3.4%	805	\$949	\$1.08
2016	71,432	2,629	3.7%	614	\$909	\$1.04
2015	71,220	3,030	4.3%	1,073	\$868	\$1.00
2014	70,754	3,637	5.1%	287	\$841	\$0.96
2013	70,541	3,710	5.3%	684	\$827	\$0.95
2012	70,363	4,216	6.0%	196	\$815	\$0.94
2011	70,087	4,132	5.9%	206	\$807	\$0.93
2010	69,742	3,993	5.7%	1,289	\$803	\$0.92
2009	69,111	4,650	6.7%	(107)	\$798	\$0.92
2008	68,439	3,872	5.7%	22	\$842	\$0.97
2007	67,978	3,433	5.1%	674	\$834	\$0.96

Source: CoStar (Accessed February 2023);

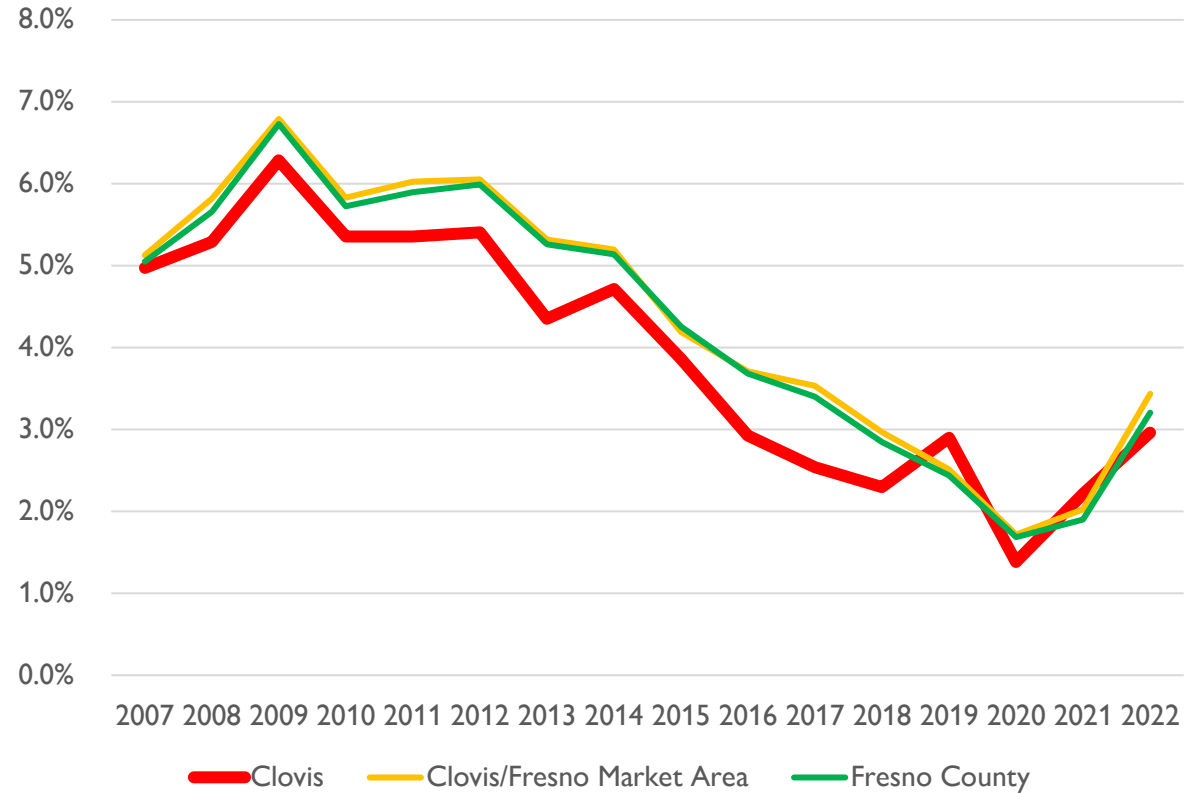
Note: Numbers in parentheses and in red indicate a negative number.



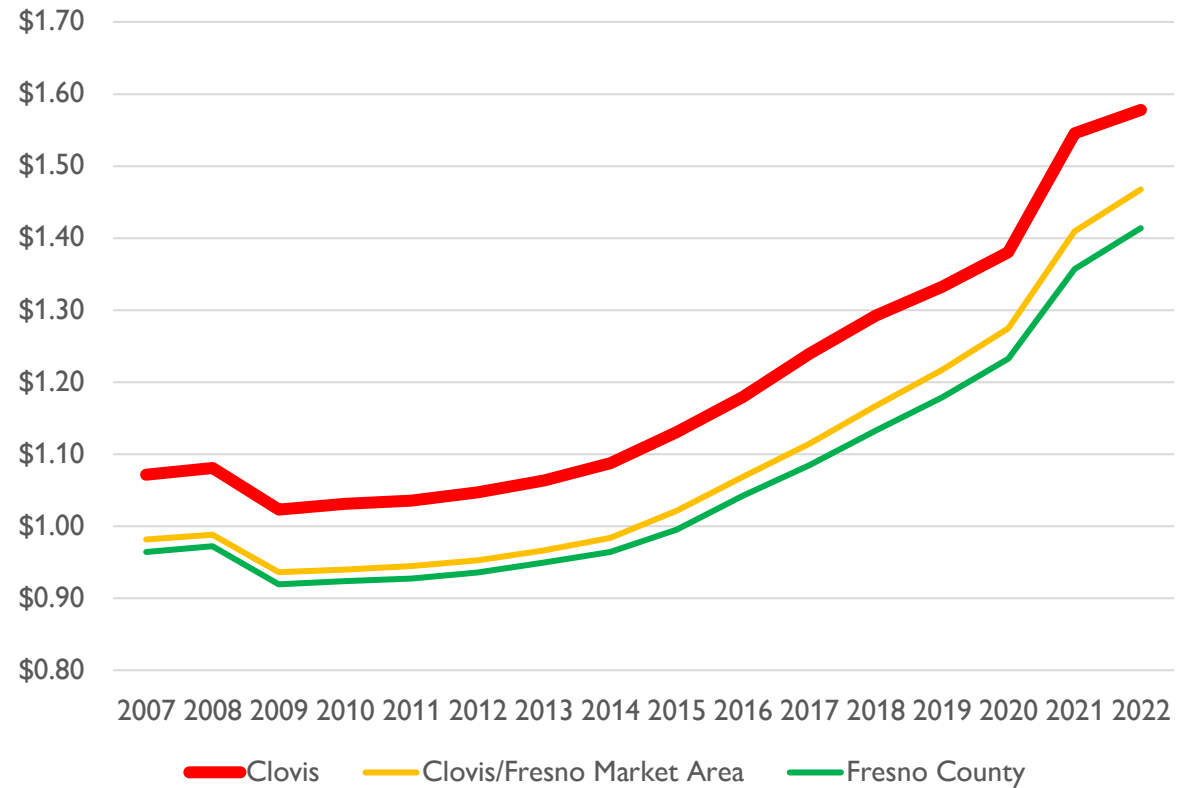
MULTIFAMILY MARKET HISTORY

2007 – 2022

Vacancy Rates



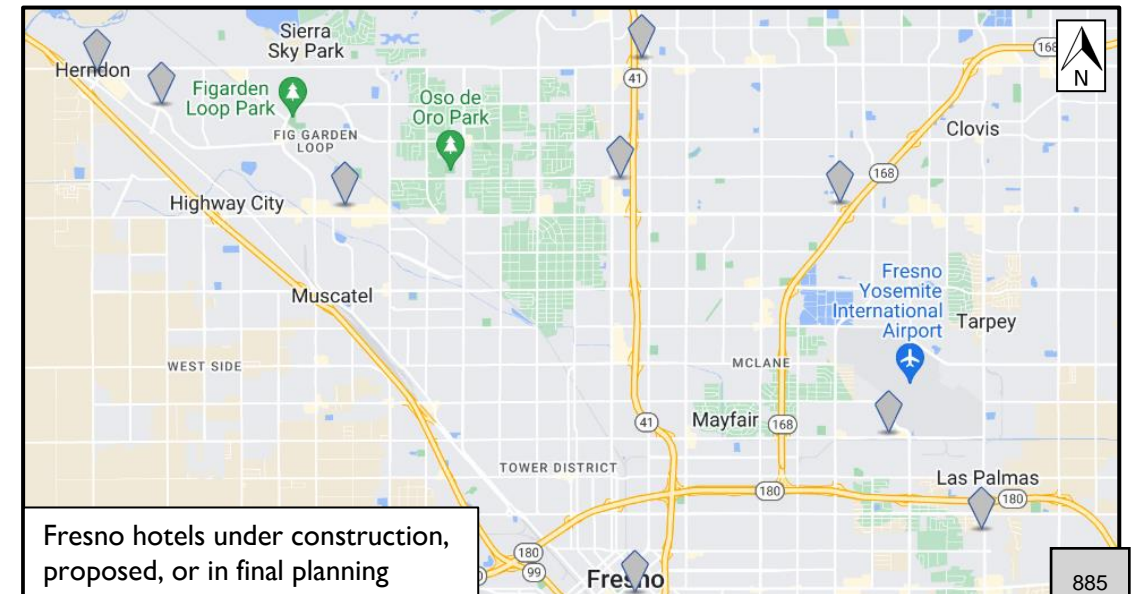
Asking Rent \$PSF/Mo.



SUMMARY HOTEL MARKET

- Major concentrations of hotels in Clovis are along Clovis Ave. and W. Shaw Ave. (see maps on following pages)
- Nine of the twelve existing hotels in Clovis fall along the Shaw Ave. Corridor; There are eight other hotels in the City that are either proposed, under construction, or in final planning, four of which are located directly along the Corridor (including a 111-room Residence Inn that is currently under construction)
- Neighboring Fresno currently has 70 existing and operational hotels totaling 6,007 rooms. In addition to the existing set, there are 11 hotels that are either proposed, under construction, or in final planning (totaling 1,118 rooms; two are located along Shaw Ave. and three are along CA-41., shown in the map to the right)
- Using the existing set of hotels, demand for hotel rooms was estimated using 71% occupancy as a benchmark and increasing demand for hotel rooms by 2% annually
- The results show support for 132 additional hotel rooms in Clovis within 10 years and 252 rooms within 15 years

- In addition to the new Residence Inn, the seven hotels that are proposed or in final planning will bring an additional 695 rooms to Clovis – resulting in 806 new hotel rooms in the next three years
- If the proposed and planned hotels in the City remain on schedule, the supply of hotel rooms will likely meet/exceed the estimated demand for hotel rooms in the next 15 years. The oversaturation of newer hotels in the City could have a negative impact on older or more obsolete hotels in the Clovis/Fresno Market Area



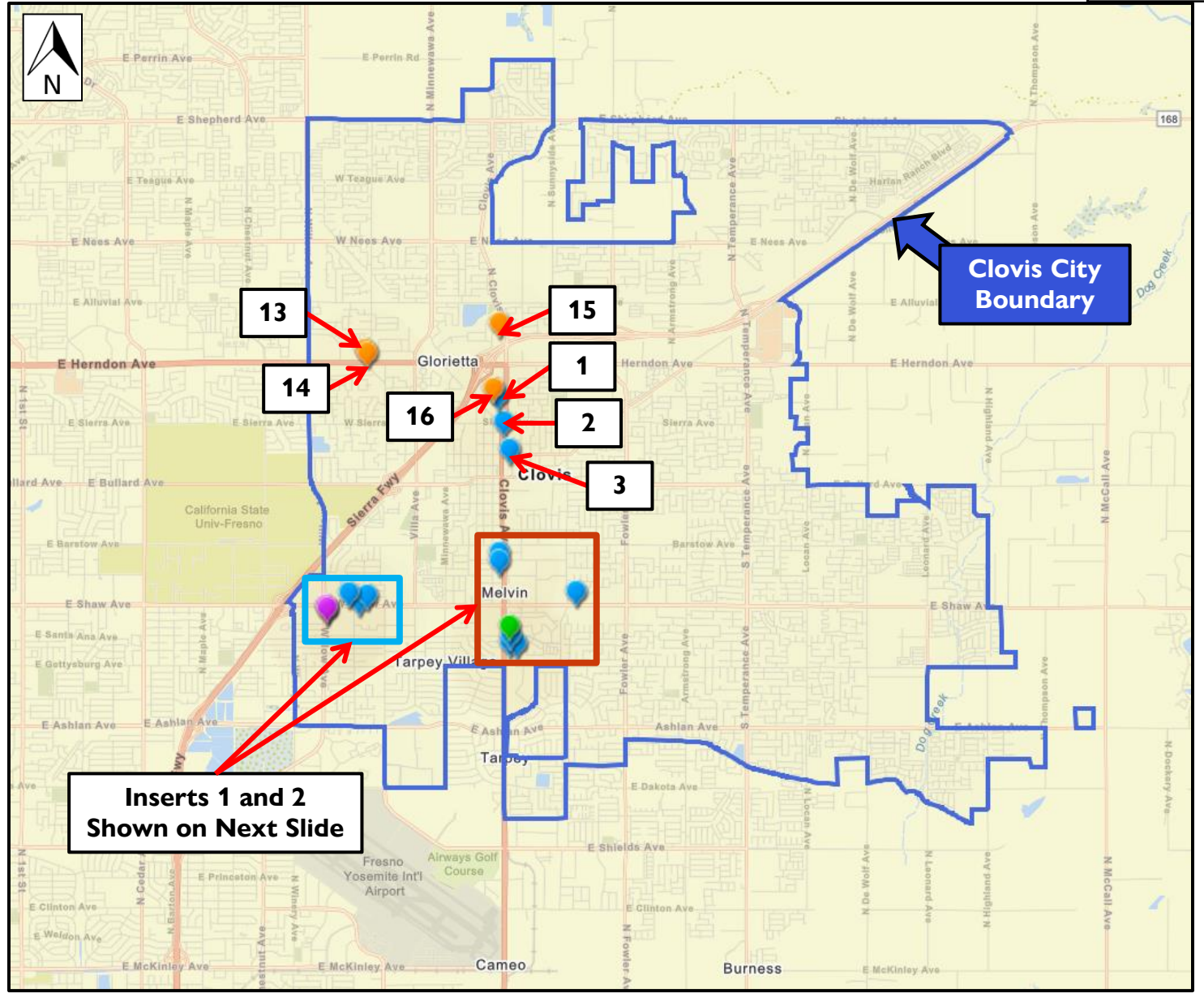
Sources: CoStar; Smith Travel Research (Accessed July 2021; Updated February 2023);

Note: There are seven hotels proposed in Fresno (704 rooms); two in final planning (215 rooms); and two under construction (199 rooms, incl. 110-room Hilton Garden Inn and 89-room Holiday Inn Express)

CLOVIS HOTEL MARKET MAP

Sources: CoStar; Smith Travel Research (Accessed July 2021; Updated February 2023);

Note: Search parameters include hotels within the City of Clovis. Hotels are of Economy to Upscale class as designated by STR. 20 hotels in total - 12 hotels currently exist and are operating (#1-12 in blue), 5 are in final planning (#13-17 in orange), 2 are proposed (#18-19 in purple), and 1 is under construction (#20 in green).

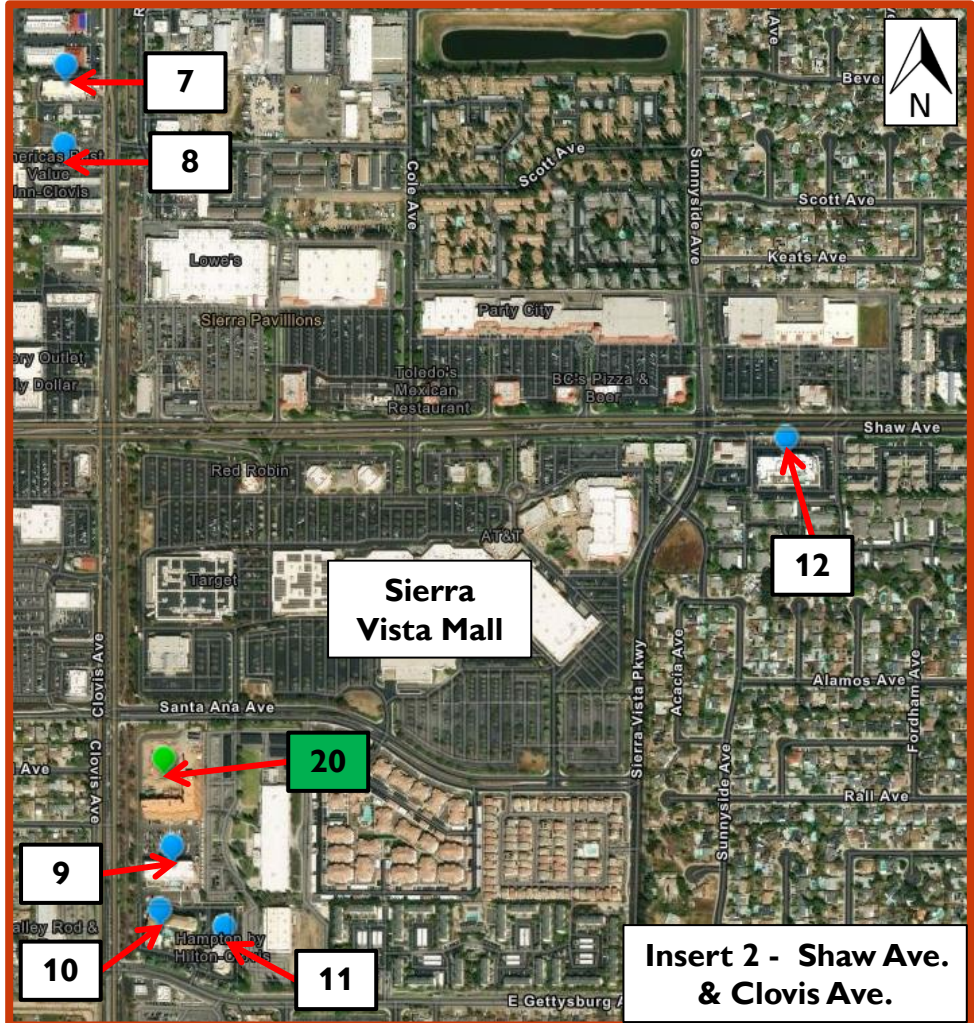
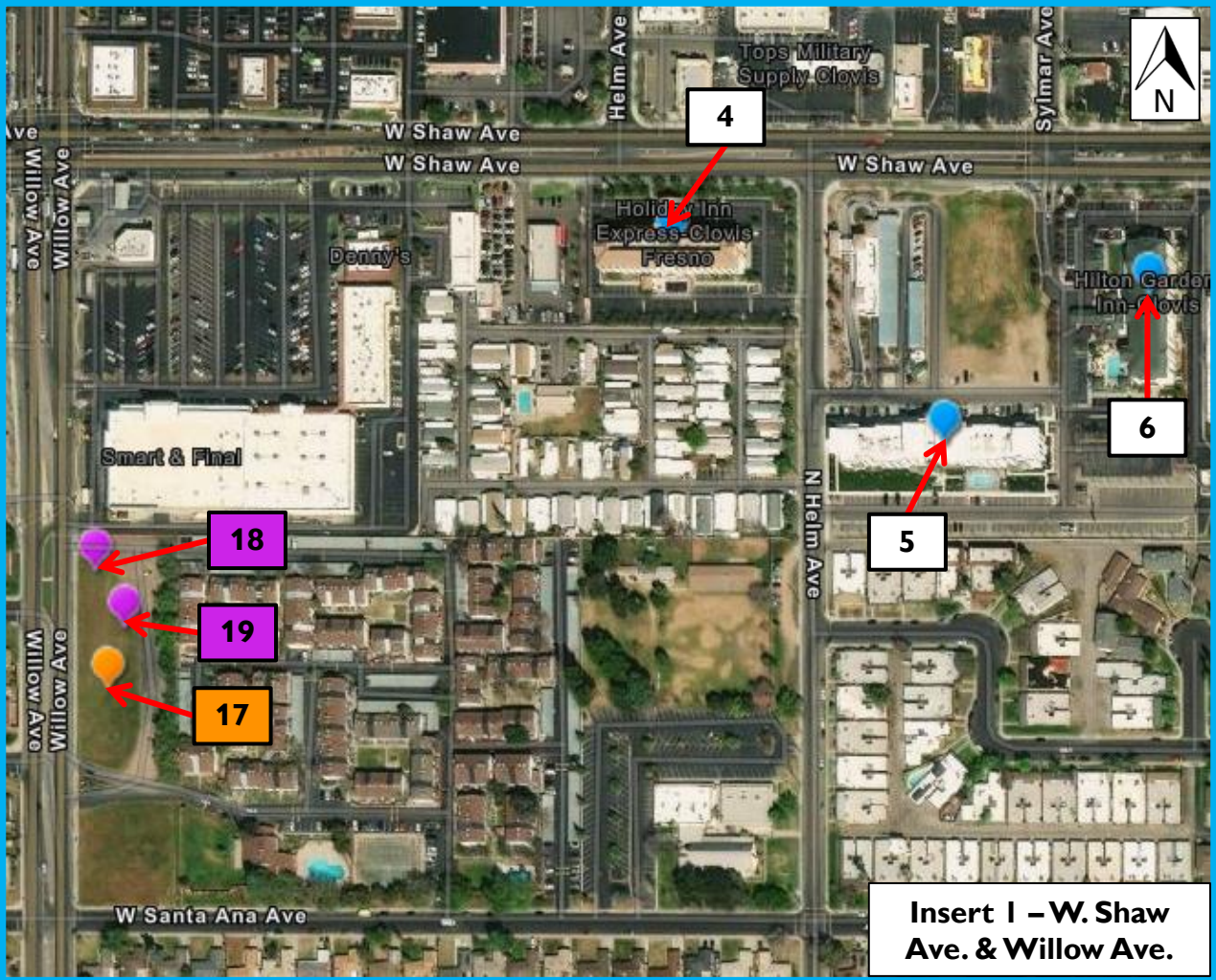


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Clovis City
Boundary

CLOVIS HOTEL MARKET MAP

Inserts 1 and 2



HOTELS WITHIN THE CITY OF CLOVIS

# on Map	Hotel Name	# of Rooms	Hotel Class	Operation Type	Construction Status	Year Built (Renovated)
1	Fairfield Inn & Suites Fresno Clovis	85	Upper Midscale	Franchise	Existing	2009
2	Comfort Suites Clovis	54	Upper Midscale	Franchise	Existing	2005
3	Best Western Clovis	58	Midscale	Franchise	Existing	1997
4	Holiday Inn Express	91	Upper Midscale	Franchise	Existing	2009
5	TownePlace Suites Fresno Clovis	114	Upper Midscale	Franchise	Existing	2019
6	Hilton Garden Inn Clovis	99	Upscale	Franchise	Existing	2009
7	La Quinta Inns & Suites Clovis	79	Upper Midscale	Franchise	Existing	2019
8	Rodeo Lodge	35	Economy	Franchise	Existing	1980
9	Home2 Suites by Hilton Clovis Fresno	111	Upper Midscale	Franchise	Existing	2020
10	Homewood Suites by Hilton	83	Upscale	Franchise	Existing	2010
11	Hampton by Hilton	86	Upper Midscale	Franchise	Existing	2009
12	Courtyard by Marriott Fresno Clovis	123	Upscale	Franchise	Existing	2021
13	Element Clovis	146	Upscale	Franchise	Final Planning	2025 (projected)
14	Aloft Clovis	100	Upscale	Franchise	Final Planning	N/A
15	Hyatt Place Clovis	113	Upscale	Franchise	Final Planning	2026 (projected)
16	WoodSpring Suites Clovis	122	Economy	Franchise	Final Planning	2025 (projected)
17	Avid Clovis	56	Midscale	Franchise	Final Planning	2025 (projected)
18	Studio 6 Clovis	70	Economy	Franchise	Proposed	2025 (projected)
19	Motel 6	88	Economy	Franchise	Proposed	2025 (projected)
20	Residence Inn	111	Upscale	Franchise	Under Construction	2023 (projected)

Sources: CoStar; Smith Travel Research (Accessed July 2021; Updated February 2023);

Note: Search parameters include hotels within the City of Clovis. Hotels are of all classes (Economy to Luxury) as designated by STR.

HOTEL MARKET DEMAND ANALYSIS

MARKET PERFORMANCE SUMMARY*

Year	Occupancy	Average Daily Rate (ADR)	Annual Supply of Room Nights	Annual Demand for Room Nights	Change in Occupied Room Nights	Revenue per Available Room (RevPAR)	Change in RevPAR
Jan. '17 - Dec. '17	72.4%	\$111.80	211,700	153,302	-	\$81.25	-
Jan. '18 - Dec. '18	72.8%	\$116.63	211,700	154,159	0.6%	\$85.32	5.0%
Jan. '19 - Dec. '19	71.4%	\$119.59	231,055	165,320	7.2%	\$85.80	0.6%
Jan. '20 - Dec. '20	53.1%	\$105.23	298,897	159,175	(3.7%)	\$56.90	(33.7%)
Jan. '21 - Dec. '21	65.2%	\$119.07	345,494	225,502	41.7%	\$78.45	37.9%
Jan. '22 - Dec. '22	65.9%	\$136.80	371,570	244,546	8.4%	\$90.51	15.4%
Total Growth (%)	(9.0%)	22.4%	75.5%	59.5%	-	11.4%	-

Source: Smith Travel Research (Accessed February 2023);

Notes: Numbers in parentheses and in red indicate a negative percentage change.

*Annual averages were calculated during the periods shown.

HOTEL MARKET DEMAND ANALYSIS

PERFORMANCE BY MONTH (PRE AND POST-COVID-19 PANDEMIC)

Performance by Month (Jan. 2019 – Dec. 2019)

Month	Avg. Occupancy	ADR	RevPAR
January 2019	57.4%	\$109.55	\$62.89
February 2019	69.5%	\$126.35	\$87.86
March 2019	72.0%	\$116.97	\$84.27
April 2019	75.2%	\$120.14	\$90.32
May 2019	75.7%	\$125.97	\$95.37
June 2019	79.9%	\$124.43	\$99.48
July 2019	75.1%	\$123.41	\$92.70
August 2019	74.6%	\$122.92	\$91.76
September 2019	76.4%	\$120.62	\$92.12
October 2019	77.4%	\$119.35	\$92.41
November 2019	68.6%	\$117.68	\$80.69
December 2019	55.4%	\$107.66	\$59.69
Average	71.4%	\$119.59	\$85.80

Performance by Month (Jan. 2022 – Dec. 2022)

Month	Avg. Occupancy	ADR	RevPAR
January 2022	53.2%	\$117.46	\$62.44
February 2022	68.6%	\$135.86	\$93.25
March 2022	68.5%	\$131.71	\$90.16
April 2022	70.3%	\$137.54	\$96.65
May 2022	70.0%	\$147.46	\$103.29
June 2022	71.9%	\$146.19	\$105.06
July 2022	69.2%	\$144.30	\$99.82
August 2022	67.3%	\$136.94	\$92.10
September 2022	69.0%	\$138.22	\$95.35
October 2022	68.4%	\$140.90	\$96.42
November 2022	60.8%	\$138.36	\$84.18
December 2022	53.2%	\$126.71	\$67.43
Average	65.9%	\$136.80	\$90.51

Pre-COVID-19 pandemic, hotels in the market area performed strongly most of the year, except for the winter months (December to February – avg. occupancy was 60.8%). Late Spring to Early Fall months are the most successful (avg. occupancy of 76.3% between April and October). June was the most successful month with the highest occupancy levels and RevPAR. ADR was slightly higher in May 2019.

The stay-at-home orders enforced due to the COVID-19 pandemic, coupled with increased cases in the beginning of 2021, ravaged the hotel industry. As the state re-opened the economy, hotels performance has gradually improved, but falls short of pre-pandemic numbers. Post-COVID, hotels in the market area followed similar trends to the pre-pandemic period with June remaining the most successful month with the highest occupancy levels and RevPAR. May has slightly higher ADR than June. Winter months are the least successful with January and December having the lowest occupancy.



Sources: CoStar; Smith Travel Research (Accessed February 2023);
Note: *Annual averages were calculated during the periods shown.

HOTEL MARKET DEMAND ANALYSIS

EST. PROJECTION OF SUPPORTABLE NEW ROOMS

Year*	Projected Demand	Existing Supply of Room Nights	Imputed Occupancy	Demand for Room Nights	Supportable # of Rooms
2022	244,546	371,570	65.8%	344,431	0
2027	269,999	371,570	72.7%	380,280	24
2032	298,100	371,570	80.2%	419,859	132
2037	329,127	371,570	88.6%	463,559	252

Sources: CoStar; Smith Travel Research (Accessed July 2021; Updated February 2023);
Notes: Target occupancy of 71%; Based on conservative 2% annual increase in room demand;
 *2022 represents the period between January and December 2022.

SWOT ANALYSIS

LAND USES



Strengths

- Office demand
- Very strong industrial and multifamily market in the City and Market Area
- Increasing demand for industrial and multifamily uses given rise in e-commerce due to the COVID-19 pandemic



Weaknesses

- Saturation of hotel rooms in Clovis may meet/exceed the estimated demand for hotel rooms in the future and could potentially have a negative effect on older/more obsolete hotels in the Clovis/Fresno Market Area
- Office market is relatively strong, but demand is not as strong compared to industrial and multifamily uses
- Demand for retail is not strong



Opportunities

- Reuse or reinvigorate former retail space by blending additional uses – e.g. multifamily residential, industrial
- Opportunity to build smaller-scale industrial – local/regional serving industrial tenants (e.g. last-mile, flex space, sorting facilities)



Threats

- Greater industrial presence in Fresno with key tenants (e.g. Amazon) occupying larger spaces compared to Clovis
- Higher interest rates and inflation may delay future development






ECONOMIC DEVELOPMENT TOOLS

LAND USE EVALUATION

ECONOMIC DEVELOPMENT TOOLS SUMMARY

- This section provides an overview of economic development tools or “currencies”, that the City may utilize to attract, finance, and optimize development opportunities that replace or enhance ailing retail locations and achieve the City’s land use goals
- These “currencies” include:
 - Sales Tax Assessment Revenue (STAR*)[®] agreements to yield sustainable revenues/payments in lieu of sales taxes for non-retail projects (e.g., industrial)
 - Development Opportunity Reserve (D.O.R.)[®] agreements to get public benefits in exchange for density bonuses/increased height limits
 - Using Enhanced Infrastructure Financing Districts (EIFD) to fund critical infrastructure and blended use development
 - Other currency includes pursuing grants from state and federal programs (e.g. Affordable Housing and Sustainable Communities [AHSC], Infill Infrastructure Grant [IIG], Multifamily Housing Program [MHP], and Transit-Oriented Development Housing Program [TOD]) that incentivize housing and blended use development

ECONOMIC DEVELOPMENT TOOLKIT / “CURRENCIES”

		
<h2>Entitlements</h2> <p><i>Community benefits and equivalent tax revenues from PPPs and DA negotiation; Replace revenue with Sales Tax Assessment Revenue (STAR*)[®]</i></p>	<h2>Zoning</h2> <p><i>Development Opportunity Reserve (D.O.R.)[®]: Community benefits for new density</i></p>	<h2>Tax Increment Districts</h2> <p><i>EIFDs / CFDs: Fund infrastructure with value capture and district financing</i></p>
		

REVENUE REPLACEMENT VIA SALES TAX ASSESSMENT REVENUE (STAR*)[®]

The Sales Tax Assessment Revenue (STAR*)[®] program addresses the stagnation and decline in city fiscal revenues as a result of the evolution of consumer spending in today's economy. It is a framework that analyzes the fiscal revenue loss related to lower tax revenue generating uses and eases city general fund pressures by creating an equivalent revenue stream through entitlement / development agreement negotiations.

Use STAR*[®] when reimagining a shopping center with a blend of non-retail uses, re-entitling property for development from retail to residential / office / industrial, or when a developer proposes a project with low fiscal revenue impact.

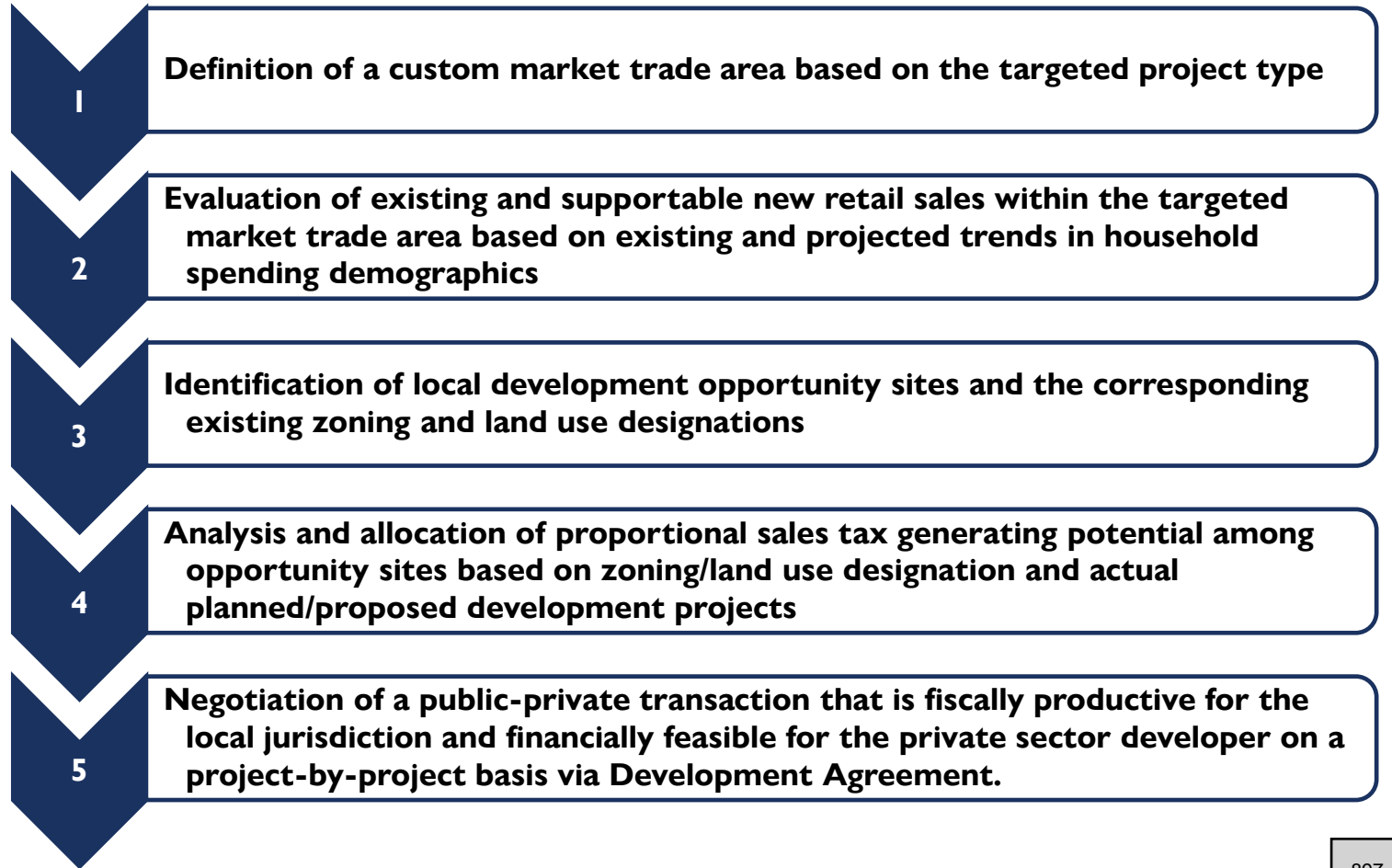
**Loss in retail sales
resulting from online
/ non sales tax
generating uses**

**Analyze sales tax
potential of opportunity
sites & zoning
designations**

**Create equivalent General
Fund revenue through
entitlement document /
development agreement**

SALES TAX ASSESSMENT REVENUE (STAR*)[®] PROCESS

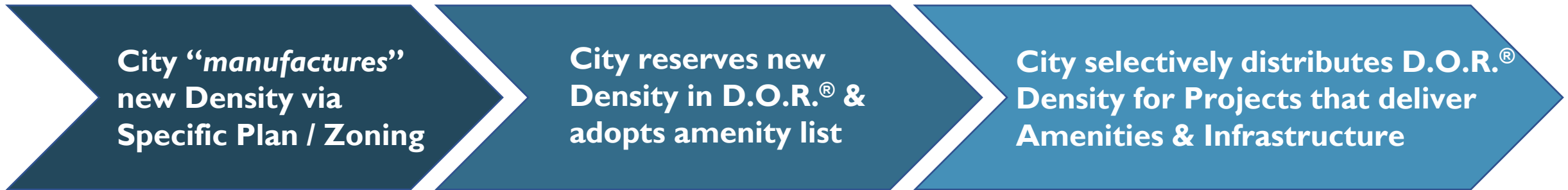
The STAR*[®] program typically involves the following steps:



DENSITY AND COMMUNITY BENEFITS VIA DEVELOPMENT OPPORTUNITY RESERVE (D.O.R.)[®]

Zoning can be one of Clovis’ strongest forms of economic development currency—it should be market-oriented and used strategically. In key development areas, new beneficial zoning should not be given away without tying the zoning to community amenities and infrastructure.

Utilize D.O.R.[®] in specific plans to direct new density and zoning provisions – such as increased density, building heights, reduced parking requirements, setbacks, other land uses, and reduced fees – to projects with specific community / economic benefits, infrastructure, and amenities.



Step 1

City creates density for target areas via planning process & banks new density in D.O.R.[®]

Step 2

Development project applies for density from D.O.R.[®] and specifies amenities to be delivered

Step 3

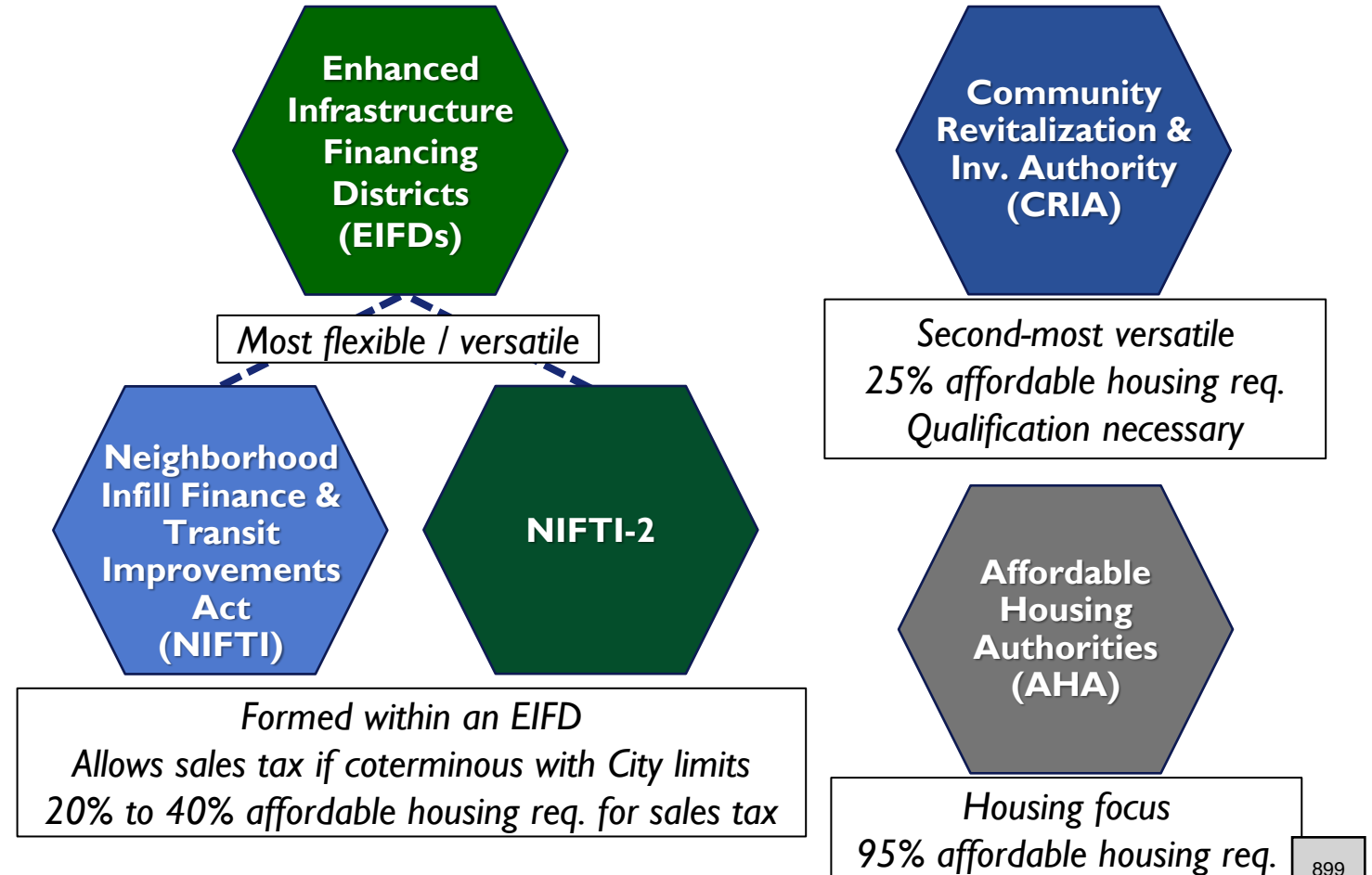
City & Developer sign Development Agreement, assigning D.O.R.[®] density to project **based on contractual commitment to deliver amenities or infrastructure**

SUSTAINABILITY AND HOUSING DISTRICTS

The state has created a variety of public financing district tools to accomplish:

- Sustainability
- Resiliency
- Mobility
- Housing
- Public infrastructure
- Public amenities

Use these districts to target infrastructure improvements, attract additional funds, support investor confidence, and bring a public / private sector return on investment.



WHAT CAN SUSTAINABILITY & HOUSING DISTRICTS FUND?

Unlock investment by funding vital infrastructure with tax increment financing and other special district tools

EIFD: Enhanced Infrastructure Financing Districts

CRIA: Community Revitalization & Investment Authorities

NIFTIs, AHAs, & IRFDs

WHOZ, HSD (CEQA Streamlining)



Industrial Structures



Aff./Workforce Housing/Blended Use



Transit Priority/RTP/SCS Projects



Wastewater/Groundwater



Light / High Speed Rail



Civic Infrastructure



Parks & Open Space



Childcare Facilities



Brownfield Remediation

Source: SB 628 / AB 2

WHY PUBLIC AGENCIES AUTHORIZE TIF DISTRICTS?

1. Return on investment: Private sector investment induced by district commitment accelerates growth of net fiscal revenues, job creation, housing production, essential infrastructure improvements
2. Ability to attract additional funds – tax increment from other entities (cities, special districts), federal/state grants/loans (e.g. for TOD, water, housing, and parks)
3. Ability to bundle other revenues – sales tax, property tax in lieu of VLF, ground lease, development impact fees, developer contributions
4. Implement infrastructure, housing and climate action goals; non-contiguous districts allow targeting specific areas
5. Long-term, committed revenues support investor confidence
6. Districts are evolving economic development tools: State is moving to a greener economy, has added 5+ new districts and approved over 2 dozen statutes for sustainability and housing in the past four years; District flexibility, effectiveness, and revenue sources expand with each legislative session
7. No new taxes

EIFD FUNDAMENTALS

Term	45 years from first bond issuance
Governance	Public Financing Authority (PFA) led by city or county implements Infrastructure Financing Plan (IFP) – IFP is the investment plan of the EIFD, managed by the PFA
Eligibility	City, County, Special District; school district increment exempt
Approvals	Mandatory public hearings for formation (includes protest opportunity); no public vote to issue debt (updated as of 10/9/19 with adoption of AB 116)
Eligible Projects	Any property with useful life of 15+ years & of communitywide significance; purchase, construction, expansion, improvement, seismic retrofit, rehabilitation, and <u>maintenance</u>

EIFD WITH A POTENTIAL CITY/COUNTY PARTNERSHIP

- Ideal strategy includes a County contribution
 - Clovis receives approximately **14.35%** of every \$1 collected in property taxes on average (varies by Tax Rate Area)
 - City additionally receives equivalent of approximately **9.07%** of property tax in lieu of MVLF, also available to EIFD
 - County receives approximately **15.01%** of every \$1 collected in property taxes on average
 - School-related entities cannot participate
- TIF Districts which involve a City / County joint effort are more likely to win state grant funding sources

Federal & State Sources

- Cap-and-Trade / HCD grant & loan programs (AHSC, IIG, TCC)
- Prop 1 bond funds / Prop 68
- SB 1 Road funds
- SB 2 Transfer Tax funds
- Federal DOT / EPA / EDA funding



Other Potential Funding Sources

- Property tax revenue including RPTTF
- Vehicle license fee (VLF) prop. tax backfill increment
- Development Agreement / impact fees
- Benefit assessments (e.g. contribution from CFD)
- Local transportation funding (e.g. Measure M/R)
- Private investment

OTHER - GRANT FINANCING MATRIX

Kosmont identified the following grant programs that can assist in providing funding and financing for infrastructure, residential, and mixed/blended use projects:

#	Funding Source / Grant	Purpose
1	Affordable Housing and Sustainable Communities (AHSC) Program	<ul style="list-style-type: none"> - The AHSC Program assists project areas by providing grants and/or loans to a locality, public housing authority, JPA, developer, or facilities districts, that will achieve greenhouse gas (GHG) emissions reduction and benefit Disadvantaged communities (four SB 535 census tracts are fully or partially within the City of Clovis) through increasing accessibility of affordable housing, employment centers, and key destinations via low-carbon transportation - Assistance terms: Minimum award (\$1M), maximum award (\$30M) - Eligible activities: new construction, acquisition, or rehab of affordable housing; housing infrastructure; sustainable transportation infrastructure and related amenities, program costs (active transportation) - Affordability threshold: 20% of homes at 80% median household income (MHI)
2	Infill Infrastructure Grant (IIG) Program	<ul style="list-style-type: none"> - IIG provides grants for capital improvement projects for qualifying infill projects or qualifying infill areas - Used for gap funding to infrastructure improvements for residential or mixed-use developments - Eligible activities: construction, rehab, demolition, relocation, preservation, and acquisition of infrastructure - Affordability threshold: No less than 15% of units as “affordable” units (e.g. affordable units for sale should be sold to a household earning no more than 120% area median income (AMI)) - Assistance terms: Minimum award (\$1M), maximum award (\$7.5M)

Notes: Please refer to Notice of Funding Availability (NOFA) schedule to ensure when financing sources are available. **Source:** California Department of Housing and Community Development (HCD), www.hcd.ca.gov (Accessed July 2021)

OTHER - GRANT FINANCING MATRIX (CONT'D)

#	Funding Source / Grant	Purpose
3	Multifamily Housing Program (MHP)	<ul style="list-style-type: none"> - MHP assist the new construction, rehab, and preservation of permanent and transitional rental housing for lower income households, or the conversion of a non-residential structure to rental housing - Eligible activities: property acquisition, land lease payments, construction and rehabilitation work, offsite improvements (e.g. sewer, utilities, and streets directly related to housing development) - Assistance terms: Maximum award (\$20M), base loan various from \$150K and \$175K based on type of unit
4	Transit-Oriented Development (TOD) Housing Program	<ul style="list-style-type: none"> - Program offers low-interest loans as gap financing for rental housing developments near transit that include affordable units. Grants are available to localities and transit agencies for infrastructure improvements necessary for the development of specified housing projects or to facilitate connections between the project and the transit station - Eligible applicants: developers for rental housing projects; municipalities/transit agencies for infrastructure projects - Assistance terms: Maximum award for a single project is \$15M

Notes: Please refer to Notice of Funding Availability (NOFA) schedule to ensure when financing sources are available. **Source:** California Department of Housing and Community Development (HCD), www.hcd.ca.gov (Accessed July 2021)

FINDINGS

LAND USE EVALUATION

- The growth of e-commerce coupled with the effects of the COVID-19 pandemic has caused major shifts in key land uses (hospitality, retail, office, residential, and industrial). Hospitality and retail uses were the most negatively impacted, while residential and industrial uses recovered quickly and are the fastest growing market segments. Office uses are being resized/reconfigured and becoming more integrated in blended use environments
- The industrial and multifamily residential markets in the City and the Clovis/Fresno Market Area are both very strong. The industrial space in the City is almost fully leased (0.1% vacancy). Additionally, multifamily vacancy has remained below 3.1% in the last 6 years and the market has added over 1,000 units in the last four years.
- While 40% of all office space in the City was built in the last 15 years, demand for office uses is not as strong compared to industrial and multifamily uses
- The forecasted demand for hotel rooms in the City was 132 additional rooms in 10 years and 252 rooms within 15 years. If the seven hotels proposed or in final planning in Clovis were to be built, the total number of rooms will likely meet/exceed the estimated demand for hotel rooms in the next 15 years. The resulting oversaturation could have a negative impact on older/more obsolete hotels in the Clovis/Fresno Market Area
- Given land use trends and market findings, the City could consider reusing or reimagining former retail space by blending additional uses – e.g. multifamily residential units and industrial space. Adding residential units will not only combat the State’s housing crisis and meet RHNA requirements (See *Table 1 on Page 96*) but also bring additional residents to the City. This, in turn, would increase property tax and direct/indirect sales tax revenues to the City upon build-out. Although neighboring Fresno has a greater industrial footprint with key large tenants such as Amazon and Ulta Beauty, Clovis may consider adding local/regional serving industrial tenants that do not require large footprints – e.g. last-mile delivery, flex industrial and smaller-scale sorting facilities
- Furthermore, it is possible that a substantial portion of the existing commercial space built before 1982 could be reimagined as blended use (See *Table 2 on Page 96*)
- City could consider using economic development “currencies” such as STAR*®, D.O.R.®, and EIFD to help finance infrastructure and blended use development that will attract, finance, and optimize development opportunities to replace or enhance retail locations
- Additionally, the City could utilize grant programs to further assist in financing blended use development projects

FINDINGS

COMMERCIAL SF REIMAGINATION AND RHNA ALLOCATION TABLES

Table 1: RHNA Allocation

RHNA Allocation (City of Clovis)	Number of Units
Very-Low Income (<50% AMI)	2,926
Low-Income (50-80% AMI)	1,549
Moderate Income (80-120% AMI)	1,448
Above-moderate Income (>120% AMI)	3,054
TOTAL UNITS	8,977

Table 2: Commercial SF Reimagined

City of Clovis		
Commercial Land Use	% of Space 40+ Years Old	Est. SF to be reimagined in the near future
Retail	19%	700,000
Office	14%	156,500
Industrial	18%	288,100
TOTAL SPACE		1,144,600

CITY OF CLOVIS RETAIL MARKET SURVEY & LAND USE EVALUATION (UPDATED FEBRUARY 2023)



2301 Rosecrans Ave. Suite 4140
El Segundo, CA 90245
TEL: 424-297-1070 | URL: www.kosmont.com

Memorandum

To: Andy Haussler, Assistant City Manager, City of Clovis

From: Ken K. Hira, President, Kosmont Companies
Fernando Sanchez, Vice President, Kosmont Companies

Date: February 22, 2023

Subject: **Work Plan for Real Estate Advisory/Implementation Services - DRAFT**

I. BACKGROUND

In May 2021, the City of Clovis (“City” or “Client”) retained Kosmont Companies (“Kosmont” or “Consultant”) for the following services:

1. Develop a Retail Market Survey which observed the existing conditions of the retail market within the City, with a focus on the Shaw Avenue corridor (including the 761,000 SF Sierra Vista Mall [“Mall”])
2. Create a Land Use Evaluation to examine other land uses that could potentially replace or rejuvenate ailing retail locations and identify economic development tools to attract and optimize future development

Following the completion of these tasks, the City has expressed interest in retaining Kosmont to provide real estate advisory/implementation services related to targeted development projects in the City, with a focus on the Mall. Kosmont proposes the following Work Plan and Budget accordingly.

II. WORK PLAN

Approach to Work Plan Scope of Services: The prospective assignment and consulting services that Kosmont will provide will be of a relatively limited scope and duration, and advisory in nature. Kosmont will be making recommendations only, which advise the Client, including its elected officials, appointed officials and staff, which they can accept or reject. None of Kosmont’s staff will act in a capacity as an elected official, nor appointed official, nor as staff, nor as serving in a “designated” position.

Task 1: Kick-off Meeting and Tour

Kosmont will participate in a kick-off meeting / tour of targeted development projects, including the Mall. Client will provide relevant project and property data (e.g., concept plans, maps)

Task 2: Retail Market Trends Presentation

Consultant will outline the current national and regional land use trends, with a focus on retail. Kosmont will present market trends, along with findings from the Retail Market Survey and Land Use Evaluation, at one (1) City Council meeting. The goal of this meeting will be to provide City

Council with an understanding of current market trends and how these trends impact future development and reimagination of existing retail space in the City, with an emphasis on the Mall.

Task 3: Real Estate Advisory/Implementation Services for Mall

Kosmont will assist the City with real estate advisory and implementation services related to potential development focused on the Mall, including:

- a) Development opportunity site profile
- b) High-level financial pro forma evaluation / feasibility analysis for potential development / redevelopment
- c) High-level project fiscal impact and economic benefit analysis
- d) Exploration of application of potential economic incentives, funding sources, and/or financing structures in the context of a public-private project, such as Development Opportunity Reserve (D.O.R.[®]), special districts (e.g., parking districts, business improvement districts, enhanced infrastructure financing districts [EIFD]), site specific tax revenue pledges, and/or other tools outlined in the Land Use Evaluation
- e) Assist with initial negotiations with Mall owner re potential redevelopment

Task 4: Meetings Summary

Kosmont will participate in:

- a) One (1) kickoff in person meeting / tour per Task 1,
- b) One (1) virtual or in-person meeting with City Council to present market trends and information gathered in the Retail Market Survey and Land Use Evaluation per Task 2,
- c) One (1) virtual meeting using the Zoom teleconference platform to review and discuss progress with City Staff, and
- d) One (1) virtual or in-person (subject to available budget) City Council presentation to present Task 3 findings.

III. BUDGET

Estimated compensation for Tasks 1 through 4 is \$25,000 for professional services (hourly) fees as shown on Attachment A. Budget may be increased by City request at any point in time.

Kosmont is appreciative of the opportunity to continue to work with the City. Thank you.

ATTACHMENT A

**Kosmont Companies
 2023 Public Agency Fee Schedule**

Professional Services

Chairman & CEO	\$445.00/hour
President	\$385.00/hour
Sr. Vice President/Sr. Advisor/Sr. Managing Director	\$350.00/hour
Vice President/Project Advisor	\$225.00/hour
Senior Project Analyst	\$195.00/hour
Project Analyst/Project Research	\$165.00/hour
Assistant Project Analyst/Assistant Project Manager	\$125.00/hour
Project Promotion/Graphics/GIS Mapping Services	\$ 95.00/hour
Clerical Support	\$ 70.00/hour

Additional Expenses

In addition to professional services (labor fees):

- 1) An administrative fee for in-house copy, fax, phone, postage costs, digital/technological support and related administrative expenses will be charged, which will be computed at four percent (4.0 %) of monthly Kosmont Companies professional service fees incurred; plus
- 2) Out-of-pocket expenditures, such as travel and mileage, professional printing, and delivery charges for messenger and overnight packages will be charged at cost.
- 3) Project/Market data sources for support of evaluation and analysis e.g., ESRI, Placer.ai, CoStar/STR, IMPLAN, ParcelQuest and other based on quoted project cost.
- 4) If Kosmont retains Third Party Vendor(s) for Client (with Client’s advance approval), fees and cost will be billed to Client at 1.1X (times) fees and costs.
- 5) Consultant’s attendance or participation at any public meeting, whether such participation is in person, digital, video and/or telephonic (e.g., *City Council, Planning Commission, Public Agency Board, other*) requested by Client and are beyond those specifically identified in the Scope of Work will be billed at the professional services (hourly) fees as shown on this Attachment A.

• **Charges for Court/Deposition/Expert Witness-Related Appearances**

Court-related (non-preparation) activities, such as court appearances, depositions, mediation, arbitration, dispute resolution and other expert witness activities, will be charged at a court rate of 1.5 times scheduled rates, with a 4-hour minimum.

Rates shall remain in effect until December 31, 2023.



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Finance Department

DATE: March 6, 2023

SUBJECT: Receive and File - 2023 Five-Year Financial Forecast for the City of Clovis through 2027/28 and discuss options for budget preparation for 2023/24.

Staff: Jay Schengel, Finance Director
Recommendation: Receive and File

ATTACHMENTS: 1. Five-Year Financial Forecast through 2027/28

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

That the City Council receives, provides comment, and files the Five-Year Financial Forecast.

EXECUTIVE SUMMARY

The Five-Year Financial Forecast is a management tool that is updated and prepared each year to provide the City Council and City management with information on trends for the City's long-term financial condition. The forecast represents a continuing effort to analyze the City's fiscal condition based upon a reasonable set of economic and operational assumptions. It is a very important management tool for identifying fiscal trends and issues which must be addressed early to assure continued financial success. This report will serve as an opportunity to review the information and provides guidance on delivering the City's core services in a sustainable manner.

BACKGROUND

The Five-Year Financial Forecast is a tool intended to be utilized in identifying financial issues confronting the City. The Five-Year Financial Forecast represents a continuing effort to analyze the City's long-term fiscal condition based upon a reasonable set of economic and operational assumptions. As such, any change in any one of the assumptions can impact the forecasted projections.

The document is presented in several sections that include Introduction, Executive Summary, Analysis of Funds, Narratives and Exhibits.

The report presents exhibits that are the financial forecast spreadsheets and assumptions. This provides a quick review of the revenues, expenditures, and fund balances for operations of the General Fund as well as operations of the Public Utility Enterprise Funds, Planning and Development Services and Transit. Throughout the document, selected tables and graphs have been paired with narrative descriptions to help illustrate forecasted City revenue collections and expenditures.

Based on current growth figures, the City of Clovis is expected to reach 135,000 in population over the next five years. The City pays very close attention to growth in our analysis of the General Fund to estimate revenues and expenditures for the day-to-day operations and servicing of the City's population including police, fire, parks, recreation, senior services, and street maintenance.

General Fund Status / Summary

The General Fund forecast that is presented is structurally balanced and provides as much growth in critical services as possible. However, there are three distinct challenges in this forecast for the next five years. Discretionary revenue is projected to grow at a slower rate, California Public Employees' Retirement System (PERS) costs will rise significantly, and the City continues to grow which increases the demand for General Fund services, most notably public safety. Included in the public safety growth are an additional 5 police officers in 2023/24 and an additional 3 officers for the following four forecasted years. Additionally, transfers to the General Government Facilities Fund are needed for various capital projects throughout the forecast period.

Developing accurate revenue estimates during a constantly evolving economy has proven to be challenging. Rising interest rates, inflation at a forty year high, along with production and supply chain disruptions have compounded the uncertainty. Many influences at the local, state, and federal level have significantly impacted revenue sources both on an ongoing and one-time basis. Based on current estimates, revenues are currently projected to be approximately \$1.7 million above expenditures. Because the 2022/23 budget was prepared on a fairly conservative basis, most departmental budgets are experiencing better than originally estimated outcomes such as revenues exceeding budgeted estimates while expenditures are less than budgeted estimates.

General Fund revenues are projected to exceed the current working budget by \$2.8 million for the current fiscal year. This is due to increases in several revenue sources. State reimbursements for wildfires are coming in with an additional \$0.7 million over working budget and Transient Occupancy Taxes has an additional \$0.8 million estimated due to the increase of the hotel tax rate from 10% to 12% effective on January 1, 2023, and includes the anticipated opening of the Marriott Residence Inn in March 2023. Property taxes are projected to be \$1.1 million above budget and sales tax is projected to show a moderate increase of 1.4% in 2022/23 after robust growth in the prior two fiscal years. Card room fees are experiencing a

reduction from the prior year. Franchise fees are projected to be slightly above budget although fees are declining for cable as more residents are opting into satellite and streaming services for home entertainment which are services not subject to Franchise Fees. All additional grant revenues projected are offset with corresponding additional expenditure increases in salaries, benefits, and overtime.

To attain the City's goal of having the emergency reserve funded at 25% of expenditures, the emergency reserve is being maintained at 23% of expenditures during this forecast period.

FISCAL IMPACT

The forecast provides an opportunity to review the historical trends for actual results and consider current economic factors for future decisions. It provides guidance for the City to maintain fiscally sustainable operations into the future.

REASON FOR RECOMMENDATION

The financial forecast provides an assessment of the impacts of past budgetary policy and possible future outcomes based on current budget strategies. Enhancing services while maintaining financial sustainability are shown to be critical to the City's future success. The forecast is a tool to be used for prudent management of the City's resources.

ACTIONS FOLLOWING APPROVAL

The staff will receive comments from the Council to assist with the preparation of the 2023/24 Annual Budget.

Prepared by: Jay Schengel, Finance Director

Reviewed by: City Manager *JH*



City of Clovis

Five-Year Financial Forecast

Through Fiscal Year 2027/28

Prepared March 2023



CITY OF CLOVIS

Five-Year Financial Forecast

Through Fiscal Year 2027/28

PREPARED BY:

John Holt, City Manager

Andrew Haussler, Assistant City Manager

Jay Schengel, Finance Director

Gina Daniels, Assistant Finance Director

Jeff Blanks, Deputy Finance Director

Susan Evans, Accounting Supervisor

Jose Reynoso, Senior Accountant

Jose Cortez, Accountant

Ran Chan, Accountant

CITY OF CLOVIS

FIVE-YEAR FINANCIAL FORECAST

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INTRODUCTION

The Five-Year Financial Forecast through 2027/28 represents a continuing effort to analyze the City's long-term fiscal condition based upon a reasonable set of economic and operational assumptions. It is an important management tool used by both the City Council and senior management to identify fiscal trends and issues which must be addressed to assure continued financial stability. The set of forecasts contained in this report is not a prediction of what will occur. The forecast is a snapshot in time and an **approximate view of what could occur** in the future if all the assumptions are realized. As with any forecast or prediction, the assumptions and projections for the nearer years carry more certainty and confidence than for the years further into the future.

The economic disruption of the past few years has made forecasting even more challenging as financial markets, cost of goods, and the economy overall has grown increasingly volatile, along with various stimulus and assistance programs that have been implemented by the state and federal governments. It is important that the City continue to closely monitor economic conditions locally, statewide, and nationally and policies at state and national levels that will impact the City's financial health.

EXECUTIVE SUMMARY

The Five-Year Financial Forecast is a shift from previous years in the General Fund. In previous years the ability of the City to cover operational expenses and cover capital needs was extremely challenging as sales and property taxes made up 65% of the total General Fund revenues on average. The City received one-time funds from the federal and state governments in response to the COVID-19 pandemic in 2020/21 and 2021/22 totaling over \$20.2 million. This explains some of the significant fluctuations that have occurred in revenues and expenditures in these years. The City also received the Staffing for Adequate Fire and Emergency Response (SAFER) grant funding to hire additional fire fighters in May 2021 for Fire Station 6 and will receive approximately \$4 million over a three-year period. Station 6 opened in August 2022, and funding from the SAFER grant will run through December 2023. From that point forward, the General Fund will incur the additional cost of the nine new firefighters – approximately \$1.5 million annually.

The General Fund forecast that is presented is structurally balanced and provides as much growth in critical services as possible. This is feasible due to the one-time economic stimulus funds the City received that allowed for funding to be transferred to capital projects and fleet replacement that discretionary revenues would have had to contribute to. It should be noted that this forecast also includes a continued level of transfers to the General Government Facilities Fund for much needed capital projects throughout the forecast period, and ongoing transfers to the emergency reserve are being maintained to sustain a level of 23% of expenditures in pursuit of the goal of reaching the target of 25%.

The Water Enterprise Fund forecast maintains stable reserves with annual 3% rate increases that have been adopted and are included in each year of the forecast. The forecast also includes continued contributions to the reserves for drought contingency and for the Sustainable Groundwater Management Act (SGMA) through 2027/28. In 2020/21, there was a \$5 million down payment as required by the Firm Water Supply Agreement with the Fresno Irrigation District (FID). The remaining balance of \$30 million is anticipated to be paid by development impact fees in future years. The forecast includes an interfund loan of \$7.5 million in 2021/22 from the Trichloropropane (TCP) reserves to General Services to fund the construction of Fire Station 6, and annual loan repayments for ten years beginning in 2022/23. This loan will not affect the City's ability to treat for TCP during the term of the loan.

The Sewer Enterprise Fund forecast maintains stable reserves throughout the forecast period. Beginning in 2022/23, a 3% rate increase is included in each year of the forecast period to keep up with rising operating, maintenance, and capital costs, and to maintain a sufficient fund balance for future bonding capacity. An interfund loan is shown beginning in 2023/24 of the forecast because it is projected that the collection of development impact fees for Sewer Major Facilities will be insufficient to cover the debt service payments. However, there are sufficient funds in the bond charge fund balance collected in prior years to continue the full \$7.30 per month rebate to customers until 2026/27. The ability to continue to rebate funds back to ratepayers will be monitored closely throughout the forecast period.

The Community Sanitation Fund maintains stable reserves in this forecast. A 4% annual increase, or portion thereof, was approved by City Council in November 2004 to be implemented as necessary. A decrease of 1.5% was implemented for refuse charges in 2022/23 and increases of 4% are projected thereafter for the remainder of the forecast period. To keep pace with the recycling and green waste contract increases, the approved 4% annual increase is projected for these operations. In 2021/22, Council approved a \$0.50 rate increase for street sweeping charges resulting in a new rate of \$2.75 per month beginning July 1, 2022.

The Transit Fund reflects enough revenues throughout the forecast period to support its operational and capital needs because of increased revenues from the Transportation Development Act, which includes Local Transportation Funds (LTF) and State Transit Assistance (STA) funds allocated to Transit based on population, taxable sales, and transit performance. With funding for Transit constantly in flux, and the Measure C sales tax due to expire after 2027, the types and levels of funding will be closely monitored to make any necessary adjustments to current service levels should the need arise. Project-specific funding, including SB1 and various cap-and-trade grants, are used for capital expenses for enhancement of rider amenities. Beginning with the 2017/18 fiscal year, the Transit Fund was required to defer revenue that it had received but not yet spent. Any working capital that is required to be deferred can be seen on the Transit Fund forecast on the line labeled "Deferred Revenue." The construction of a new transit center is anticipated to be completed in the fall of 2023.

The Planning and Development Services Enterprise Fund forecast maintains adequate and constant reserves. The reserves are included in case of a slow-down and prudent funding is maintained throughout the forecast period. There have been several years of relatively high numbers of residential units per year; however, starting in 2021/22, those numbers have declined from the most recent five-year average of 1,080 units. As a result, the current fiscal year and the following fiscal year will draw from the fund's working capital but will increase working capital in the projection years beginning in 2024/25. The fund maintains a healthy working capital balance throughout the forecast period.

Internal Service Funds are projected to be self-balancing throughout the forecast period. Each of the Internal Service Funds is continually monitored, and more cost-effective programs are implemented wherever possible to reduce costs to all other City operations.

Debt Service Funds will be fully funded to make all debt payments and meet all legal obligations.

ANALYSIS OF FUNDS

The purpose of this forecast is to provide the City Council and senior management with an early identification of financial trends. With early detection, financial trends identified as possible problems can be dealt with in a reasonable manner rather than waiting for a crisis to occur.

The City's Annual Budget represents a total financing plan for all City operations and must be analyzed by its component parts to make any meaningful adjustments. Unlike a private holding company, the City cannot remove cash from any one enterprise operation to help support general tax funded operations. Although there is certainly some financial interdependence between the funds, such as internal service fund charges to allocate common costs, each fund represented in the budget must stand alone.

When analyzing City operations, it is appropriate to look at the budget, department by department. However, when reviewing long range financial policies, it is best to look at the fund structure rather than the department structure. The major fund groups reviewed in this forecast are the operating funds of the City including:

General Fund - This fund includes the functions of general government, including elected officials, administration and finance, public safety, and some field maintenance activities, such as parks and street maintenance.

Enterprise Funds - These funds include operations for water, sewer, solid waste, street cleaning, transit, and planning and development services.

Internal Service Funds - These funds include property and liability insurance, employee benefits, fleet maintenance, and general services.

Debt Service Funds - These funds include all debt service activity for which the City is responsible.

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GENERAL FUND

Current Year – 2022/23

The 2022/23 Annual Budget was developed to grow the City's operations to match growth and provide targeted investments in the City to improve the quality of life for its residents. Compared to the past few years, this is a welcome return from those restrained budgets due to the economic uncertainty of the pandemic. While economic uncertainty still exists and the General Fund is still constrained, the City is in a solid fiscal position. This budget further solidifies the City's financial position in improving reserves, setting aside funds for future needs, and reduces the potential need for debt financing while restoring critical services and making significant investments in our City.

Developing accurate revenue estimates during a constantly evolving economy has proven to be challenging. Rising interest rates, inflation at a forty year high, along with production and supply chain disruptions have compounded the uncertainty. Many influences at the local, state, and federal level have significantly impacted revenue sources both on an ongoing and one-time basis. Based on current estimates, revenues are currently projected to be approximately \$1.7 million above expenditures. Because the 2022/23 budget was prepared on a fairly conservative basis, most departmental budgets are experiencing better than originally estimated outcomes such as revenues exceeding budgeted estimates while expenditures are less than budgeted estimates.

General Fund revenues are projected to exceed the current working budget by \$2.8 million for the current fiscal year. This is due to increases in several revenue sources. State reimbursements for wildfires are coming in with an additional \$0.7 million over working budget and Transient Occupancy Taxes has an additional \$0.8 million estimated due to the increase of the hotel tax rate from 10% to 12% effective on January 1, 2023 and includes the anticipated opening of the Marriott Residence Inn in March 2023. Property Taxes are projected to be \$1.1 million above budget. Card room fees are experiencing a reduction from the prior year. Franchise Fees are projected to be slightly above budget although fees are declining for cable as more residents are opting into satellite and streaming services for home entertainment which are services not subject to Franchise Fees. All additional grant revenues projected are offset with corresponding additional expenditure increases in salaries, benefits, and overtime.

Forecast – 2023/24 through 2027/28

Three distinct challenges are in the General Fund forecast for the next five years. Discretionary revenue is projected to grow at a slower rate, California Public Employees' Retirement System (PERS) costs will rise significantly, and the City continues to grow which increases the demand for General Fund services, most notably public safety. Included in the public safety growth are an additional 5 police officers in 2023/24 and an additional 3 officers for the following four projected years. To attain the City's goal of having the emergency reserve funded at 25% of expenditures, this reserve is being maintained at 23% during this forecast period. As expenditures plus transfers exceed revenues, the General Fund balance is projected to diminish from \$3 million in 2023/24 to \$1 million in 2027/28.

Revenues

Property taxes and sales taxes are the two largest sources of discretionary revenue making up 82% of the total discretionary revenues on average; franchise fees, business licenses, and transient occupancy taxes make up the bulk of the remainder. Property tax growth is largely driven by growth in the City. When residential, commercial or industrial growth occurs, there is a corresponding increase in the demand for services. However, the increase in property tax revenues to support the additional demand for services will not be received by the City until potentially two years after the growth occurs. In addition, the property tax rate cannot exceed 2% growth annually due to Proposition 13 statutory limitations. Property tax growth during the forecast period is projected to increase at a rate corresponding to 800 single and multi-family residential units, which is approximately the 15-year residential unit average. The forecast does not project a housing downturn because those are difficult to anticipate. However, if one was to occur, this would result in property tax growth being lower than forecasted.

Sales tax growth has changed due to a change in how people spend their money and due to the shift to online purchases which was exacerbated by the pandemic. In broad terms, consumers are spending a much higher percentage of their disposable income on services rather than goods. Since only goods are subject to sales tax, the revenue from sales tax is not keeping up with population growth and inflation. Additionally, consumers are purchasing an ever-increasing portion of their goods from online sources rather than local sources. Sales tax is not collected on some online purchases, and sales tax from other online purchases are paid to the locality of distribution rather than locality of delivery. Furthermore, the online sales tax that is nominally paid to the locality of delivery is actually paid to the County of delivery and is then distributed to the cities in proportion to their sales tax revenues from brick-and-mortar vendors.

In June 2018, the U.S. Supreme Court's decision in *South Dakota vs. Wayfair Inc.* overruled the long-standing physical presence rule that prevented states from taxing remote sales. Effective April 1, 2019, California established that all retailers, whether located inside or outside California, are required to collect and remit taxes on all sales made for delivery in any district that imposes such tax if the retailer has more than \$500,000 in annual taxable sales. As a result of California's AB 147-The Marketplace Facilitator Act's response to the "Wayfair" decision, the county pools have experienced vigorous gains creating a new baseline for pools allocations. Consumers have adapted to buying online at a record pace. Although recent

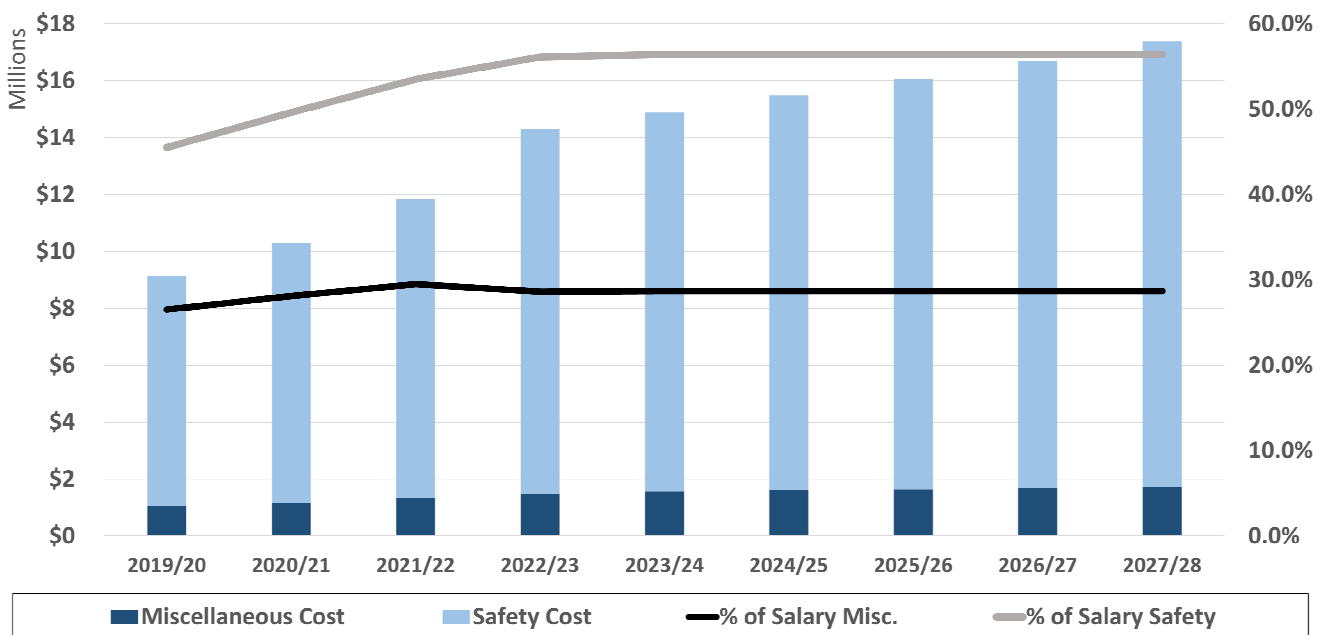
acceleration to online buying should continue growing the pools, current gains have subsided to levels moderately better than pre-Wayfair historical levels.

Sales Tax is projected to show a moderate increase of 1.4% in 2022/23 after robust growth in the prior two fiscal years. Sales tax is expected to be flattening or experiencing modest growth due to inflationary pressures on households shifting household dollars away from discretionary spending as a larger portion of income goes to essentials such as food, transportation and housing costs. For the remaining projected years, Sales Tax is expected to experience normalized growth at 3-4% annually with population growth at 800 residential units per year.

Growth in Franchise Taxes has slowed in recent years as more households move away from traditional hard-wired phone and cable TV service towards cellular and satellite services which are not taxed. All other discretionary revenues are forecast to increase at average growth plus inflation at a three-year average Consumer Price Index.

PERS

PERS costs are projected to rise significantly during the forecast period due to the recent decline of the market resulting in a decline of investment returns for the PERS investment portfolio. PERS has not yet released new rates showing the result of this downturn, so to be prudent, the 2023/24 rates were used throughout the projected years of the forecast. At this point the full impact of the investment fluctuations has not been determined, however, we anticipate the new rates to be at least equal to the 2023/24 rates, if not slightly higher. The following chart shows the expected General Fund PERS costs, both as a percentage of salary and in dollars, for the forecast period.



As can be seen in the chart, annual General Fund PERS costs are projected to rise by \$3 million between the current year and the end of the forecast period.

Growing Demands

The City continues to grow, and in recent years it has grown faster than the long-term average. The growth drives some revenue growth, but it also drives a growing demand for services. Police and Fire comprise the largest expenditures in the General Fund (87% of the City's discretionary revenues go to Police and Fire) and are most impacted by this growing demand. Staff will continue to evaluate different ways of delivering services using technology, social media, and best practices to narrow the gap between increased demand for services and the City's ability to provide without lowering service levels. Failure to grow these departments, as well as other General Fund departments at a rate corresponding to the growth of the City may result in a reduction in the level of service that is provided to the citizens of Clovis.

Approach to the Forecast

The forecast represents staff's best estimate of the City's finances for the next five years and will be the basis on which the budget is developed. The forecast must be structurally sound and sustainable, so projected revenues, expenditures and transfers must be balanced. Some of the components of these revenues, expenditures and transfers are more easily controllable than others. Major increases to revenues, either through tax increases or extraordinary commercial growth, would be challenging to achieve or even completely unfeasible, so they were not considered in the development of the forecast. Expenditures and transfers were adjusted as necessary to best achieve the City's goals and comply with the City's policies within the available revenue.

The impact of the PERS costs is significant; those costs will rise from 12.5% of the General Fund budget a few years ago to 15% by 2027/28. Essentially, that means the level of service plus the transfers to the reserve that can be provided in 2027/28 will be only 97.5% of what could have been provided without this rise in PERS costs.

Service levels are already stretched thin, so this forecast emphasizes growing those services, specifically public safety, as much as revenues allow. Transfers to the General Government Facilities Fund throughout the forecast are for capital projects that were included in the five-year community investment program in the 2022/23 budget for 2023/24 through 2027/28. Transfers to the emergency reserve are being maintained at 23% of expenditures in pursuit of the goal of 25%. The forecast includes five additional police officers in 2023/24 and three additional officers for each of the remaining four forecast years.

CITY OF CLOVIS

General Fund Financial Forecast - Summary

(dollars in thousands)

	ACTUALS			ESTIMATED	PROJECTED				
	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Beginning Available Fund Balance	4,430	4,110	1,280	8,430	3,960	2,700	1,490	1,700	1,630
Reappropriation/Encumbrances	(190)	290	(790)	(1,270)					
REVENUES									
Discretionary	57,710	66,100	73,630	76,590	80,180	83,320	86,280	89,310	92,430
Non-Discretionary	17,550	30,440	30,170	22,590	22,080	21,790	22,500	23,250	24,010
Total Revenues	75,260	96,540	103,800	99,180	102,260	105,110	108,780	112,560	116,440
EXPENDITURES									
Public Safety	54,420	58,590	63,300	73,310	74,100	77,100	80,030	83,090	86,300
Public Utilities	10,050	10,600	11,000	12,490	12,900	13,410	13,830	14,270	14,730
General Government	8,360	8,630	9,660	11,670	11,850	12,420	12,690	13,270	13,620
Total Expenditures	72,830	77,820	83,960	97,470	98,850	102,930	106,550	110,630	114,650
Resources Above/(Below) Operating Expenditures	2,430	18,720	19,840	1,710	3,410	2,180	2,230	1,930	1,790
ADDITIONAL ITEMS									
Transfers In from Successor Agency	450	0	0	0	0	0	0	0	0
Transfers Out to General Government Facilities Fund	0	(11,950)	(5,540)	(2,020)	(2,670)	(1,790)	(1,020)	(1,000)	(1,000)
Transfers Out to PDS/Projects	(300)	(300)	(310)	(300)	(300)	(300)	(300)	(300)	(300)
Transfers Out to Fleet Fund	(2,660)	(6,040)	(3,010)	(990)	0	0	0	0	0
Total Additional Items	(2,510)	(18,290)	(8,860)	(3,310)	(2,970)	(2,090)	(1,320)	(1,300)	(1,300)
Net Increase/(Decrease) to Fund Balance	(80)	430	10,980	(1,600)	440	90	910	630	490
OTHER ITEMS									
(Use of) Addition to Emergency Reserve	50	3,550	3,040	1,600	1,700	1,300	700	700	1,000
Total Other Items	50	3,550	3,040	1,600	1,700	1,300	700	700	1,000
Ending Available Fund Balance	4,110	1,280	8,430	3,960	2,700	1,490	1,700	1,630	1,110
Emergency Reserve-(Dollars)	12,810	16,360	19,400	21,000	22,700	24,000	24,700	25,400	26,400
Emergency Reserve as a % of Expenditures	17.60%	21.00%	23.10%	21.50%	23.00%	23.30%	23.20%	23.00%	23.00%

AGENDA ITEM NO. 16.

General Fund - Financial Forecast (dollars in thousands)

REVENUES	ACTUALS			ESTIMATED	PROJECTED				
	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Residential Units (SF + MF)	1,112	1,238	859	850	800	800	800	800	800
<u>Discretionary</u>									
Property Taxes	15,880	16,960	18,230	19,250	20,140	20,740	21,540	22,340	23,160
Property Tax In Lieu-VLF	10,420	11,160	11,900	12,910	13,450	14,000	14,570	15,170	15,790
Sales Tax	22,070	27,180	30,640	31,070	32,000	33,280	34,280	35,300	36,360
Franchise Fee	2,460	2,600	2,770	2,950	3,130	3,280	3,410	3,540	3,670
Business License	3,490	3,710	4,000	4,190	4,490	4,760	5,000	5,250	5,510
Other Taxes	2,970	4,100	5,780	6,030	6,770	7,040	7,250	7,470	7,690
Interest	180	120	40	60	60	70	80	90	100
Other Revenues-(Disc.)	240	270	270	130	140	150	150	150	150
<u>Total Discretionary</u>	57,710	66,100	73,630	76,590	80,180	83,320	86,280	89,310	92,430
<u>Non-Discretionary</u>									
Community Facility Fee	2,080	2,110	2,170	2,690	2,980	3,260	3,520	3,800	4,090
Sales Tax-(Public Safety)	320	350	470	510	500	520	540	560	580
Other Lic & Permits	90	40	60	100	100	100	100	100	100
Fines & Forfeitures	190	150	190	190	200	200	200	200	200
Building Rentals	40	0	50	50	50	50	50	50	50
State Subvention-Gas Tax	1,260	1,340	1,580	1,730	1,850	1,880	1,910	1,940	1,970
Grants	1,070	3,410	3,900	3,150	1,630	700	700	700	700
From Other Agencies	920	840	620	750	790	820	840	870	900
Current Services	1,620	1,380	1,640	1,710	1,810	1,880	1,940	2,000	2,060
Landscape Maintenance Charges	3,840	4,000	4,270	4,690	4,940	5,140	5,290	5,450	5,610
Other Revenues-(Non-Disc.)	270	10,770	8,780	370	390	410	420	430	440
Impact/Rental Fees	1,700	1,760	1,830	1,870	1,960	2,040	2,100	2,160	2,220
Admin Charges	4,150	4,290	4,610	4,780	4,880	4,790	4,890	4,990	5,090
<u>Total Non-Discretionary</u>	17,550	30,440	30,170	22,590	22,080	21,790	22,500	23,250	24,010
Total Revenues	75,260	96,540	103,800	99,180	102,260	105,110	108,780	112,560	116,440

Revenue Assumptions (dollars in dollars)

AGENDA ITEM NO. 16.

PROPERTY TAXES:	ANNUAL INCREASE	INCREASE IN ASSESSED VALUE	CITY TAX RATE (Before reductions)
	2.00%	\$288,000,000	18.67% of 1%
	<i>Increase in AV above is based on 800 residential units</i>		<i>Nonresidential Units based on % of Residential Units is 23%</i>
PROPERTY TAX IN LIEU-VLF:	INCREASE BY ASSESSED VALUE GROWTH		4.20% (Based on 850 units)
COMMUNITY FACILITY FEE:	2/3 OF NEW RES UNITS PER YR.	540	ANNUAL FEE: \$272 INCREASE BY: 5.17%
SALES TAX:	3 YEAR CPI	SALES TAX RATE	POPULATION GROWTH PER CAPITA PER YEAR
	5.17%	1.00%	2,200 PER YEAR \$261
COUNTY SHARE:	5.00% OF GROSS SALES TAX		(Based on 800 units)
	<u>2023/24</u>		
SALES TAX GROWTH %:	PROJECTED	3.0%	
FRANCHISE TAX:	3 YEAR CPI	NEW RES UNITS PER YEAR	FEE OF GROSS PARTICIPATION % P G & E
	5.17%	800	50.00% Comcast/AT&T \$250 Per Unit per Mo
			\$90 Per Unit per Month
	Note: 5 year average for residential units is 1080, 10 year average is 940, 15 year average is 790 units		
BUSINESS LICENSE:	INCREASE BY 3 YR CPI	5.17%	PLUS 2.00% FOR NEW BUSINESSES
OTHER TAXES:	<i>Includes Transient Occupancy Tax, Cardroom Fees, and Real Property Transfer Tax</i>		
	THREE YR CPI	5.17%	PLUS NEW HOTELS AND INCREASE IN TOT RATE TO 12% EFFECTIVE JAN. 1, 2023
FINES AND FORFEITURES:	PARKING AND VEHICLE	\$177,000	BASED ON THREE YEAR AVERAGE
INTEREST RATE:	2.00% ON PRIOR YEAR'S BALANCE		
BUILDING RENTALS:	INCREASE ANNUALLY BY: 2.00%		
STATE SUBVENTIONS:	GAS TAX PER CAPITA	\$12.80	POPULATION GROWTH 2,200 PER YEAR (Based on 800 units)
	Gas Tax Per Capita based on last year actuals		
GRANTS:	\$700,000 THREE YEAR AVERAGE OF ONGOING GRANTS		
CURRENT SERVICES:	INCREASE BY THREE YEAR CPI AVERAGE		5.17%
OTHER REVENUES:	INCREASE BY THREE YEAR CPI AVERAGE		5.17%
IMPACT/RENTAL FEES:	BASED ON ADD'L ROUTES PROJECTED IN THE ENTERPRISE FUND AND INCREASE BY 3 YEAR CPI AVERAGE		
ADMIN CHARGES:	INCREASE 2.00% PER YEAR		

General Fund - Financial Forecast (dollars in thousands)

EXPENDITURES	ACTUALS			ESTIMATED	PROJECTED				
	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
PUBLIC SAFETY									
Salaries									
Police-CPOA	9,820	9,890	9,820	13,510	14,110	14,840	15,610	16,410	17,250
Fire	5,750	6,040	6,810	7,600	7,550	7,780	8,010	8,250	8,500
Public Safety-Management	3,080	3,380	3,860	3,990	4,010	4,130	4,250	4,380	4,510
Dispatchers									
Police-Non CPOA	3,780	3,790	3,890	4,560	4,510	4,650	4,790	4,930	5,080
Fire-Non Firefighters	200	220	300	320	310	320	330	340	350
Overtime									
Overtime-Police	2,730	2,880	3,090	2,810	2,810	2,810	2,810	2,810	2,810
Overtime-Fire	1,470	2,880	2,800	1,850	300	300	300	300	300
Extra Help	730	760	820	940	900	900	900	900	900
Benefits									
Health	3,380	3,510	3,640	3,840	4,220	4,600	5,010	5,460	5,940
Retirement	8,070	9,140	10,510	12,810	13,320	13,870	14,430	15,010	15,630
Other	2,810	3,290	3,650	4,440	5,090	5,240	5,400	5,560	5,730
SMS	11,940	12,250	13,490	15,810	16,630	17,300	17,820	18,350	18,900
Capital Outlay	660	560	620	830	340	360	370	390	400
Total Public Safety	54,420	58,590	63,300	73,310	74,100	77,100	80,030	83,090	86,300
PUBLIC UTILITIES									
Salaries	2,230	2,350	2,400	2,990	2,950	3,040	3,130	3,220	3,320
Overtime	110	120	130	130	140	150	150	150	150
Extra Help	20	10	30	40	40	40	40	40	40
Benefits									
Health	500	540	530	570	620	670	720	780	840
Retirement	390	450	510	580	610	630	640	660	680
Other	370	360	320	290	300	310	320	330	340
SMS	6,400	6,740	7,020	7,820	8,220	8,550	8,810	9,070	9,340
Capital Outlay	30	30	60	70	20	20	20	20	20
Total Public Utilities	10,050	10,600	11,000	12,490	12,900	13,410	13,830	14,270	14,730
GENERAL GOVERNMENT									
Salaries	3,430	3,540	3,730	4,150	4,150	4,270	4,400	4,530	4,670
Overtime	10	10	50	20	20	20	20	20	20
Extra Help	370	170	440	560	540	540	540	540	540
Benefits									
Health	650	650	660	710	770	830	900	970	1,050
Retirement	670	710	830	910	950	980	1,000	1,030	1,060
Other	230	250	270	300	310	330	360	410	480
SMS	2,980	3,290	3,680	4,970	5,100	5,440	5,460	5,760	5,790
Capital Outlay	20	10	0	50	10	10	10	10	10
Total General Government	8,360	8,630	9,660	11,670	11,850	12,420	12,690	13,270	13,620
Total Expenditures	72,830	77,820	83,960	97,470	98,850	102,930	106,550	110,630	114,650

Expenditure Assumptions (dollars in thousands)

AGENDA ITEM NO. 16.

SALARIES:		<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>
<u>POLICE-CPOA</u>	7/1	5.00%	3.00%	3.00%	3.00%	3.00%	3.00%
SALARY BASE		\$13,510	\$13,600	\$14,530	\$15,290	\$16,080	\$16,900
Additional Officers-Salary		\$0	\$510	\$310	\$320	\$330	\$350
Number of Additional Officers		3	5	3	3	3	3
Additional Non-Sworn Positions		0	0	0	0	0	0
Total Sworn Officer Positions		112	117	120	123	126	129
<u>FIRE</u>	7/1	5.00%	3.00%	3.00%	3.00%	3.00%	3.00%
SALARY BASE		\$7,600	\$7,550	\$7,780	\$8,010	\$8,250	\$8,500
Additional Firefighter-Salary		\$0	\$0	\$0	\$0	\$0	\$0
Number of Addl Firefighters		0	0	0	0	0	0
Total Sworn Positions		67	67	67	67	67	67
<u>PUBLIC UTILITIES</u>	7/1	5.00%	3.00%	3.00%	3.00%	3.00%	3.00%
SALARY BASE		\$2,990	\$2,950	\$3,040	\$3,130	\$3,220	\$3,320
Additional Salaries-Park/Street		\$0	\$0	\$0	\$0	\$0	\$0
Addl Park/Street employees		0	0	0	0	0	0
<u>GENERAL GOVT</u>	7/1	5.00%	3.00%	3.00%	3.00%	3.00%	3.00%
<u>MANAGEMENT</u>	7/1	5.00%	3.00%	3.00%	3.00%	3.00%	3.00%
OVERTIME: INCREASE BY CPI			5.17%	4.00%	3.00%	3.00%	3.00%
EXTRA HELP: FLAT FOR NEXT FIVE YEARS							
HEALTH: INCREASE PER YEAR					8.0%		
					(PERS ESTIMATE)		
RETIREMENT:		<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>
POLICE-SAFETY		56.10%	56.40%	56.40%	56.40%	56.40%	56.40%
DISPATCHERS		28.60%	28.70%	28.70%	28.70%	28.70%	28.70%
FIRE		56.10%	56.40%	56.40%	56.40%	56.40%	56.40%
PUBLIC UTILITIES		28.60%	28.70%	28.70%	28.70%	28.70%	28.70%
GENERAL GOVERNMENT		28.60%	28.70%	28.70%	28.70%	28.70%	28.70%
MANAGEMENT		28.60%	28.70%	28.70%	28.70%	28.70%	28.70%
PERS EE COST SHARING -MISC		-8.40%	-8.40%	-8.40%	-8.40%	-8.40%	-8.40%
PERS EE COST SHARING -SAFETY		-8.00%	-8.00%	-8.00%	-8.00%	-8.00%	-8.00%
WORKERS COMP:							
(included in other benefits)	Police-CPOA	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%
	Fire	3.73%	4.00%	4.00%	4.00%	4.00%	4.00%
	Mgmt & Admin	1.74%	2.00%	2.00%	2.00%	2.00%	2.00%
	Public Utility	5.72%	6.00%	6.00%	6.00%	6.00%	6.00%
OTHER BENEFITS:	Previous year's amount increased by contracted and estimated salary increases. Includes 2% of non-safety salaries for deferred comp, 1% of total salaries for sick leave incentive, 1.45% for medicare and 1% for other benefits.						
OTHER SMS:	INCREASE BY CPI		5.17%	4.00%	3.00%	3.00%	3.00%
CAPITAL OUTLAY:	INCREASE BY CPI		5.17%	4.00%	3.00%	3.00%	3.00%
	50% FOUR YEAR AVERAGE-PUBLIC SAFETY			\$330			
	50% FOUR YEAR AVERAGE-PUBLIC UTILITIES			\$20	+ ADDITIONAL EQUIP FOR NEW EMPLOYEES		
	50% FOUR YEAR AVERAGE-GEN GOVT			\$10			
CONTINGENCY RESERVE:	Maintain not less than 15% with a goal to reach 25% of total expenditures. See the Summary Sheet for reserve amounts.						

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ENTERPRISE FUNDS

The purpose of the forecast for the Enterprise Funds is to provide the City Council and the City Manager with an early identification of financial trends along with the future financial costs of legislative and regulatory requirements, and the ability to respond appropriately. Enterprise Funds, by definition, are supported by rates set to recover the full cost of services, including capital outlays and debt service. The rate setting process requires advance planning, preparation of rate studies, a public hearing process, and a final decision to implement new rates if approved. This process can take up to six months to complete. For this reason, the forecast is a critical management tool for the City.

Further detail regarding each Enterprise Fund is discussed in the following pages. Annually, staff re-evaluates all enterprise operations to determine if any adjustments to rates are needed. At this time, water, sewer, and community sanitation enterprise operations have increases approved sufficient to carry the operations through the forecast period, barring any unforeseen or catastrophic event. Once these rate increases meet their objectives, staff will begin to evaluate implementing smaller, more measured increases on an annual basis to avoid large one-time increases.

Water Enterprise

The Water Enterprise Fund is projected to have a working capital balance of approximately \$18.6 million at June 30, 2023. The City Council approved adjusted water rates in the Water Enterprise Fund beginning in June 2016 to comply with state legal requirements regarding a tiered water rate structure. The rate adjustment was revenue neutral. Council also approved a 3% annual increase that can be implemented when necessary to fund the increased cost to treat and distribute potable water, for capital improvements, and to provide debt service coverage for the 2013 Surface Water Treatment Plant bonds. A 3% rate increase to water rates is included in each of the five years of the projected forecast. The forecast also includes continued contributions to the reserves for the Sustainable Groundwater Management Act (SGMA) and for drought contingency through 2027/28. In 2020/21, there was a \$5 million down payment as required by the Firm Water Supply Agreement with the Fresno Irrigation District (FID). The remaining balance of \$30 million is anticipated to be paid by development impact fees in future years. In 2016/17, the Water Enterprise Fund received a legal settlement for Trichloropropane (TCP) treatment. The Water Enterprise Fund is required to treat potable water for any TCP present, and a reserve for TCP treatment has been established for the treatment costs. The forecast includes an interfund loan of \$7.5 million in 2021/22 from the TCP reserves to General Services to fund construction of Fire Station 6, and annual repayment of the loan beginning in 2022/23 for ten years. This loan will not affect the City's ability to treat for TCP during the term of the loan. Included in 2023/24 is a \$1.7 million transfer from the Parks Development Fund to reimburse the Water Enterprise Fund for its share of a property purchase for a future basin and park site. The capital outlay includes an expenditure of \$2.5 million per year for five years to fund an Advanced Metering Infrastructure (AMI) project.

	Actual 2019/20	Actual 2020/21	Actual 2021/22	Estimated 2022/23	Projected 2023/24	Projected 2024/25	Projected 2025/26	Projected 2026/27	Projected 2027/28
BEGINNING WORKING CAPITAL	26,770	27,100	22,510	22,060	18,660	18,980	18,500	17,760	17,270
REVENUES									
WATER CHARGES	17,820	18,580	19,190	23,410	24,240	25,100	25,980	26,890	27,830
DBCP-LEGAL SETTLEMENTS	260	240	130	170	180	190	200	210	220
TOTAL REVENUES	18,080	18,820	19,320	23,580	24,420	25,290	26,180	27,100	28,050
EXPENDITURES									
SALARIES	2,870	3,100	3,190	3,790	4,050	4,260	4,390	4,520	4,750
EXTRA HELP	0	10	0	30	30	30	30	30	30
OVERTIME	120	120	130	140	140	140	140	140	140
BENEFITS									
RETIREMENT	520	620	680	780	820	860	890	920	960
HEALTH	560	570	570	640	690	750	810	870	940
OTHER	480	510	390	360	490	510	530	540	570
SERVICES, MATERIALS & SUPPLIES	8,310	14,180	11,900	13,160	12,440	13,070	13,730	14,420	15,150
MEMBRANE REPLACEMENT	280	300	450	0	0	1,000	0	0	0
TCP TREATMENT	0	100	100	150	1,100	150	150	150	150
CAPITAL OUTLAY	1,290	1,420	910	5,590	4,650	4,650	4,650	4,650	4,650
TOTAL EXPENDITURES	14,430	20,930	18,320	24,640	24,410	25,420	25,320	26,240	27,340
OTHER REVENUE AND EXPENSE									
INTEREST/RENTAL/GRANTS	1,130	620	1,250	360	360	750	750	750	750
	1,130	620	1,250	360	360	750	750	750	750
TRANSFERS-OUT (CAPITAL)	(3,550)	(1,000)	(1,000)	(500)	(1,000)	(500)	(500)	(250)	(250)
WATER BANKING LOAN TO DEV FUND	1,250	0	0	0	0	0	0	0	0
PARK DEV PAYBACK - BASIN/PARK	0	0	0	0	1,700	0	0	0	0
INTERFUND LOAN TO GENERAL SERVICES	0	0	(7,500)	770	770	770	770	770	770
CONTRIBUTION-SURFACE WTP	(750)	(750)	(750)	(750)	(750)	(750)	(750)	(750)	(750)
MEMBRANE REPLACEMENT RESERVE	0	300	450	(100)	(100)	1,000	(250)	(250)	(250)
RESERVE FOR DROUGHT CONTINGENCY	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)
RESERVE FOR SGMA	(1,000)	(1,250)	(1,000)	(1,000)	(500)	(500)	(500)	(500)	(500)
RESERVE FOR TCP TREATMENT	100	100	7,600	(620)	330	(620)	(620)	(620)	(620)
ENDING WORKING CAPITAL	27,100	22,510	22,060	18,660	18,980	18,500	17,760	17,270	16,720
RESERVE FOR MEMBRANE REPLACEMENT	1,730	1,430	980	1,080	1,180	180	430	680	940
RESERVE FOR DROUGHT CONTINGENCY	5,500	6,000	6,500	7,000	7,500	8,000	8,500	9,000	9,500
RESERVE FOR SGMA	1,750	3,000	4,000	5,000	5,500	6,000	6,500	7,000	7,500
RESERVE FOR TCP TREATMENT	15,350	15,250	7,650	8,270	7,940	8,560	9,180	9,800	10,420

AGENDA ITEM NO. 16.

Water Enterprise - Revenue Assumptions (dollars in dollars)

Bi-monthly Meter Charges: Residential - \$25.36 Commercial - \$20.41
 Residential Usage Rates: \$1.04 per 1,000 gallons for 0 to 23,000 gallons, \$1.73 per 1,000 gallons for 23,000 - 40,000 gallons, \$2.12 per 1,000 gallons above 40,000 gallons. Dwelling unit charge \$12.68 per month (\$25.36 bi-monthly).
 Commercial Usage Rates: \$1.04 per 1,000 gallons, \$1.41 per 1,000 gallons over 23,000 gallons. Monthly charge from \$10.21 (1") to \$1,034.43 (10").

Current Charges: INCREASED EACH YEAR BY THE AVERAGE INCREASE OF THE PREVIOUS THREE YEARS

	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Rate Increase:	7/1	3.00%	3.00%	3.00%	3.00%	3.00%
Rate Increase:	3%	Based on Council approved annual rate increase unless not necessary.				
Interest:	2.00%	OF PREVIOUS YEAR'S WORKING CAPITAL OR A MINIMUM OF \$10,000				

Water Enterprise - Expense Assumptions (dollars in thousands)

	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Salaries: CPWEA						
7/1	5.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Salary Base	\$3,790	\$3,990	\$4,210	\$4,390	\$4,520	\$4,660
Additional Employee	\$85	\$100	\$50			\$90

Extra Help: FLAT FOR NEXT FIVE YEARS

Overtime: FLAT FOR NEXT FIVE YEARS

	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Retirement:	28.60%	28.70%	28.70%	28.70%	28.70%	28.70%
PERS Cost Sharing:	-8.40%	-8.40%	-8.40%	-8.40%	-8.40%	-8.40%
Health:	INCREASE PER YEAR					
Other Benefits:	-WORKERS COMP 6.00% FOR CPWEA					
	-MEDICARE 1.45% OF SALARIES					
	-DEFERRED COMP/SICK LEAVE/OTHER 5.25% OF SALARIES					
	INCREASE BY CPI FOR FUTURE YEARS 5.17%					
	(Increase energy cost by 50% for the Surface Water Treatment Plant operation beginning in 2004/05)					
	Rental of the New Corp Yard-beginning 2002/03 \$320 per year					
	FOUR YEAR AVERAGE INCREASED BY CPI FOR FUTURE YEARS 5.17%					

Other SMS: FOR CAPITAL CONTRIBUTIONS FOR DISTRIBUTION SYSTEM IMPROVEMENTS
 FOR LAND ACQUISITION DESIGN AND CONSTRUCTION OF RECHARGE FACILITIES-100%
 WELLHEAD TREATMENT CONTINGENCY ESTABLISHED FOR CLEANUP OF DBCP CONTAMINATION
 MEMBRANE REPLACEMENT RESERVE ESTABLISHED FOR NEW MEMBRANE COSTS
 DROUGHT CONTINGENCY ESTABLISHED FOR WATER PURCHASE DURING POSSIBLE DROUGHT
 TCP TREATMENT RESERVE FOR TREATMENT CAPITAL AND O&M
 SUSTAINABLE GROUNDWATER MANAGEMENT ACT RESERVE

Capital Outlay: \$320 per year

Transfers Out: 5.17%

Reserves:

AGENDA ITEM NO. 16.

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Sewer Enterprise

The Sewer Enterprise Fund is projected to have a working capital balance of approximately \$24.7 million at June 30, 2023. The City Council approved a series of rate increases for the Sewer Enterprise Fund beginning August 1, 2010. Rate increases are driven by the rising cost of treatment and capital improvements at the Regional Treatment facility as well as the increase in the costs to operate new pump stations, the Sewer Treatment Water Reuse Facility (ST-WRF), and to meet bond covenants normally borne by development fees which are projected to be insufficient to meet the City's obligations in a portion of the forecast period. A 3% rate increase is included in each year of the forecast period to keep up with rising operating, maintenance and capital costs, and to maintain a sufficient fund balance for future bonding capacity. An interfund loan is shown beginning in 2023/24 of the forecast because it is projected that the collection of development impact fees for Sewer Major Facilities will be insufficient to cover the debt service payments. However, there are sufficient funds in the bond charge fund balance collected in prior years to continue the full \$7.30 per month rebate to customers until 2026/27. The ability to continue to rebate funds back to ratepayers will be monitored closely throughout the forecast period.

	Actual 2019/20	Actual 2020/21	Actual 2021/22	Estimated 2022/23	Projected 2023/24	Projected 2024/25	Projected 2025/26	Projected 2026/27	Projected 2027/28
BEGINNING WORKING CAPITAL	20,830	24,820	26,260	26,720	24,670	22,010	20,190	18,510	18,400
REVENUES									
SEWER CHARGES	13,470	13,540	13,780	14,780	15,350	16,030	16,730	17,460	18,210
PRETREATMENT CHARGES	50	50	50	50	50	50	50	50	50
TOTAL REVENUES	13,520	13,590	13,830	14,830	15,400	16,080	16,780	17,510	18,260
EXPENDITURES									
SALARIES	950	1,030	1,090	1,390	1,380	1,570	1,710	1,760	1,810
EXTRA HELP	0	0	0	10	10	10	10	10	10
OVERTIME	10	10	20	20	20	20	20	20	20
BENEFITS									
RETIREMENT	170	200	230	270	270	320	350	360	370
HEALTH	150	180	190	230	250	270	290	310	330
OTHER	160	160	120	130	120	190	210	210	220
SERVICES, MATERIALS & SUPPLIES	4,000	4,400	5,090	5,790	6,060	6,360	6,670	7,000	7,350
FRESNO TREATMENT PLANT	3,060	2,900	3,180	3,800	4,000	4,210	4,430	4,660	4,900
CLOVIS TRMT/REUSE PLANT (ST-WRF)	2,300	2,300	2,460	2,630	2,790	2,960	3,140	3,330	3,540
DEBT SERVICE	1,220	1,220	1,220	1,240	1,250	0	0	0	0
CAPITAL	170	70	110	650	390	220	230	240	260
CAPITAL-FRESNO PLANT IMPROVEMENTS	320	690	460	3,000	2,500	750	350	500	500
TOTAL EXPENDITURES	12,510	13,160	14,170	19,160	19,040	16,880	17,410	18,400	19,310
OTHER REVENUE AND EXPENSE									
INTEREST	860	580	500	400	730	660	630	610	610
GRANTS/MISC/SALE OF ASSETS/REFUNDS	390	430	350	180	50	50	50	50	50
BOND COVERAGE CHARGES/(REBATE)	1,850	0	0	0	0	0	0	1,850	1,850
TRANSFERS IN-DEBT SERVICE	3,100	1,010	850	580	780	710	680	2,510	2,510
TRANSFERS OUT-CAPITAL	430	430	430	430	430	0	0	0	0
FROM DEVELOPER-PLANT CAPITAL IMPROV	(250)	(200)	0	0	0	0	0	0	0
INTERFUND (LOANS)/REPAYMENT	400	270	270	270	270	270	270	270	270
(INC)/USE OF FRESNO PLANT CAP RESERVE	(200)	0	0	0	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)
ENDING WORKING CAPITAL	(500)	(500)	(750)	1,000	1,000	(500)	(500)	(500)	(500)
RESERVE FOR FRESNO PLANT CAPITAL	24,820	26,260	26,720	24,670	22,010	20,190	18,510	18,400	18,210
RESERVE FOR RATE STABILIZATION	1,500	2,000	2,750	1,750	750	1,250	1,750	2,250	2,250
	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000

AGENDA ITEM NO. 16.

Sewer Enterprise - Revenue Assumptions (dollars in dollars)

Current Charges: Population Increase	2,200	New Units Per Year	800	Additional Commercial	\$42,000	Residential:	2022/23 Per Unit Per Month	\$22.77	2022/23 Per Unit Per Month	\$22.77	Bond Charge Per Unit Per Month	\$7.30 (\$7.30) Beginning FY 20/21	Pretreatment Per Unit Per Month	\$0.06
Rate Rebate:							2024/25	2025/26	2026/27	2027/28				
Rate Increase:*	Percentage	3.00%		2023/24	3.00%	2024/25	3.00%	2025/26	3.00%	2026/27	3.00%	2027/28	3.00%	2027/28
	Revised Monthly Rate	\$22.77		\$23.45	\$24.16	\$24.88	\$25.63	\$26.40						

Interest: 2.00% OF PREVIOUS YEAR'S WORKING CAPITAL

* **Rate Increase:** Note: The Council can approve up to a 3% annual rate increase if deemed necessary.

Sewer Enterprise - Expense Assumptions (dollars in thousands)

Salaries: (CPWEA) 7/1	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
	5.00%	3.00%	3.00%	3.00%	3.00%	3.00%
SALARY BASE	\$1,390	\$1,520	\$1,570	\$1,620	\$1,760	\$1,810
Additional employee	\$85		\$90			

Extra Help: FLAT FOR NEXT FIVE YEARS

Overtime: FLAT FOR NEXT FIVE YEARS

Retirement: (PERS ESTIMATE)

	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
	28.60%	28.70%	28.70%	28.70%	28.70%	28.70%
	-8.40%	-8.40%	-8.40%	-8.40%	-8.40%	-8.40%

PERS Cost Sharing: INCREASE PER YEAR

Health: -RETIREMENT

Benefits: -WORKERS COMP

-MEDICARE

- DEFERRED COMP/SICK LEAVE/OTHER

INCREASE BY AVERAGE CPI FOR PREVIOUS 3 YEARS

Rental of the New Corp Yard-Beginning in 2002/03

Clovis Treatment/Reuse Plant Operations-Beginning 1/1/2009

Annual payment for original plant buy-in plus O&M costs.

Adjusted for average 3 year CPI and per capita amount

Fresno/Clovis Regional WWTP Renovation

96/97 - 2023

Debt Service: FUTURE YEARS @

- ADJUSTED BY 3 YEAR AVERAGE CPI

Capital Outlay: Based on estimates from the City of Fresno for sewer main and plant refurbishments

Cap-Plant Improvements: In from Major Facilities-34.57% of debt service for 1993 WWTP Renovation

Transfers In-Debt Service: Out for on-going capital improvements-per Five Year CIP

Transfers Out: Temporary cash loans to conform with various bond covenants

Interfund Loans:

AGENDA ITEM NO. 16.

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Community Sanitation Enterprise

The Community Sanitation Enterprise Fund is projected to finish the current fiscal year with a working capital balance of approximately \$9.9 million at June 30, 2023. A 4% annual increase, or portion thereof, was approved by Council in November 2004 to be implemented as necessary. In 2022/23, the Council implemented a refuse rate decrease of 1.5%. An increase of 4% is recommended in 2023/24 and increases of 4% are projected thereafter for the remainder of the forecast period. To keep pace with the recycling and green waste contract increases, the approved 4% annual increase is projected for these operations. In 2021/22, Council approved a \$0.50 rate increase for street sweeping charges in the City of Clovis Municipal Code resulting in a new rate of \$2.75 per month beginning July 1, 2022. An increase to the street sweeping charges of 4% is recommended in 2023/24. The forecast reflects an increase in closure and post closure costs identified in the revised Joint Technical Document (JTD) dated March 2017 prepared in agreement with the California Department of Resources Recycling and Recovery (CalRecycle) and the California Regional Water Quality Control Board (RWQCB).

CITY OF CLOVIS

Community Sanitation - Financial Forecast (dollars in thousands)

	Actual 2019/20	Actual 2020/21	Actual 2021/22	Estimated 2022/23	Projected 2023/24	Projected 2024/25	Projected 2025/26	Projected 2026/27	Projected 2027/28
REVENUES									
BEGINNING WORKING CAPITAL	13,860	12,420	13,520	13,390	9,860	7,590	7,750	7,980	8,370
REFUSE CHARGES	15,390	16,510	17,770	17,620	18,490	19,400	20,350	21,340	22,380
RECYCLING CHARGES	1,780	1,880	2,110	2,220	2,320	2,430	2,550	2,670	2,800
GREEN WASTE CHARGES	2,220	2,380	2,540	2,630	2,770	2,910	3,060	3,210	3,370
STREET SWEEPING CHARGES	1,210	1,250	1,280	1,530	1,550	1,630	1,710	1,790	1,880
TOTAL REVENUES	20,600	22,020	23,700	24,000	25,130	26,370	27,670	29,010	30,430
EXPENDITURES									
SALARIES	3,380	3,660	3,900	4,570	4,630	4,770	4,990	5,130	5,280
EXTRA HELP	40	90	70	140	140	140	140	140	140
OVERTIME	380	370	400	430	430	430	430	430	430
BENEFITS									
RETIREMENT	630	740	840	940	940	970	1,010	1,040	1,070
HEALTH	710	780	790	860	930	1,000	1,080	1,170	1,260
OTHER	610	660	610	480	570	590	610	630	650
SERVICES, MATERIALS & SUPPLIES	8,670	8,630	10,350	11,000	11,360	11,950	12,570	13,220	13,900
RECYCLING	1,540	1,640	1,640	1,790	1,880	1,940	2,000	2,060	2,120
GREEN WASTE PROGRAM	1,860	1,920	2,010	2,070	2,180	2,260	2,340	2,420	2,500
STREET SWEEPING	1,700	1,580	1,770	1,780	1,840	1,940	2,040	2,150	2,260
LANDFILL CLOSURE	240	340	380	290	310	330	350	370	390
CAPITAL	1,890	800	1,390	1,960	1,630	500	500	500	500
LANDFILL IMPROVEMENTS	900	60	30	1,690	1,360	200	200	200	200
TOTAL EXPENDITURES	22,550	21,270	24,180	28,000	28,200	27,020	28,260	29,460	30,700
OTHER REVENUE AND EXPENSE									
INTEREST	320	150	170	60	320	280	290	310	320
GRANTS/MISC/SALE OF ASSETS	40	50	30	260	330	330	330	330	330
TRANSFERS	360	200	200	320	650	610	620	640	650
ENDING WORKING CAPITAL	150	150	150	150	150	200	200	200	200
RESERVE FOR CLOSURE	12,420	13,520	13,390	9,860	7,590	7,750	7,980	8,370	8,950
RESERVE FOR LIABILITY INS	4,280	4,620	5,000	5,290	5,600	5,930	6,280	6,650	7,040
Note: Maintain minimum ending working capital at 15% of expenditures or the bond covenant requirements.	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

AGENDA ITEM NO. 16.

Community Sanitation – Revenue Assumptions (dollars in dollars)

Current Charges:	New Units	22/23 Avg Unit	Recycling	Green Waste	Street Cleaning
	Per Year	Per Month	Per Month	Per Month	Per Month
	800	\$25.42	\$4.43	\$6.50	\$2.75
Additional Commercial Annual Revenue ----->	\$35,000				

Rate Increase/(Decrease):	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
	7/1	4.0%	4.0%	4.0%	4.0%	4.0%
Adjusted Monthly Rate:	\$25.42	\$26.44	\$27.49	\$28.59	\$29.74	\$30.93

Rate Increase: Based on Council approved 4% annual rate increase unless not necessary.

Green Waste/Recycling: Based on current year charges, increased by new unit growth and projected rate increases of 4% per year.

Street Cleaning: Based on charge of \$2.75 effective July 1, 2022, increased by new unit growth and projected rate increases of 4% per year.

Interest: 2.00% OF PREVIOUS YEAR'S WORKING CAPITAL

Community Sanitation – Expense Assumptions (dollars in thousands)

Salaries: (CPWEA)	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
	7/1	3.00%	3.00%	3.00%	3.00%	3.00%
Salary Base:	\$4,570	\$4,510	\$4,770	\$4,910	\$5,130	\$5,280
Additional Personnel: Res/Comm		\$120		\$75		

Extra Help: \$140 for Operations per year

Overtime: FLAT FOR FUTURE YEARS

Retirement:	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
	28.60%	28.70%	28.70%	28.70%	28.70%	28.70%
PERS Cost Sharing:	-8.40%	-8.40%	-8.40%	-8.40%	-8.40%	-8.40%

Health: INCREASE PER YEAR

Other Benefits: -WORKERS COMP 6.00% FOR CPWEA
-MEDICARE 1.45% OF SALARIES
-DEFERRED COMP/SICK LEAVE/OTHER 5.25% OF SALARIES

Other SMS: INCREASE BY AVERAGE CPI FOR PREVIOUS 3 YEARS

Rental of the Corp Yard beginning 2002/03 5.17%

Capital Outlay: Flat for future years \$320 per year

Adjusted by 3 year average CPI \$500

In-For Toters 5.17%

Transfers: FROM 98/99, INCREASE BY 3 YEAR AVERAGE CPI \$200 /year

Reserve For Closure: 5.17%

AGENDA ITEM NO. 16.

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Transit Enterprise

The Transit Fund shows no net position in the near-term as a result of the revenue recognition policy changing for State and Local Transportation Funds (LTF). The State and Local Transportation Funds are required to be deferred until the funds are spent. Recently deferred revenues have been used to cover construction costs of a transit center, with an estimated completion date in the fall of 2023. However, continuing from 2021/22, deferred revenue is projected to increase and to be spent on future operating and capital needs. With funding for Transit constantly in flux due State and local revenues and budgeting, the types and levels of funding will be closely monitored to make any necessary adjustments to current service levels should the need arise.

CITY OF CLOVIS

Transit - Financial Forecast (dollars in thousands)

	Actual 2019/20	Actual 2020/21	Actual 2021/22	Estimated 2022/23	Projected 2023/24	Projected 2024/25	Projected 2025/26	Projected 2026/27	Projected 2027/28
BEGINNING WORKING CAPITAL	60	(150)	320	620	0	0	0	0	0
REVENUES									
MEASURE C FUNDS	1,520	1,820	2,130	2,170	2,280	2,390	2,510	2,640	2,770
LOCAL TRANSPORTATION FUNDS (LTF)	4,320	4,250	5,050	4,970	5,720	5,130	5,350	5,500	5,740
STATE TRANSIT ASSISTANCE (STA)	200	2,870	1,020	1,490	580	960	1,010	1,060	1,110
OTHER (Fares, Advertising, Trolley Rents)	190	0	50	50	50	50	50	50	50
TOTAL REVENUES	6,230	8,940	8,250	8,680	8,630	8,530	8,920	9,250	9,670
EXPENDITURES									
SALARIES	1,440	1,540	1,690	2,050	1,960	2,020	2,080	2,140	2,200
EXTRA HELP	970	940	1,050	1,390	1,460	1,530	1,610	1,690	1,770
OVERTIME	50	40	80	110	110	120	130	140	150
BENEFITS									
RETIREMENT	270	310	360	400	400	410	420	430	450
HEALTH	320	330	330	340	360	390	420	450	490
OTHER	510	530	550	550	540	590	610	640	660
SERVICES, MATERIALS & SUPPLIES	2,470	2,390	2,900	3,060	3,300	3,470	3,650	3,760	3,950
CAPITAL-OTHER	410	220	160	450	0	0	0	0	0
CAPITAL-BUSES	0	0	110	1,390	500	0	0	0	0
TOTAL EXPENDITURES	6,440	6,300	7,230	9,740	8,630	8,530	8,920	9,250	9,670
OTHER REVENUE AND EXPENSE									
INTEREST/GRANTS/MISC	50	490	180	440	0	0	0	0	0
	50	490	180	440	0	0	0	0	0
TRANSFERS (TRANSIT STATION)	(50)	(2,660)	(900)	0	0	0	0	0	0
ENDING WORKING CAPITAL	(150)	320	620	0	0	0	0	0	0
DEFERRED REVENUE	5,200	4,050	5,740	6,080	6,930	9,220	11,390	13,800	16,160

AGENDA ITEM NO. 16.

Transit - Revenue Assumptions

Transit Revenue: Measure C revenue is projected to grow by its historical average increase 5.00%
 LTF revenue is projected to grow by its historical average increase 5.00%
 State Transit Assistance, for fiscal years 2019/20 through 2022/23, a transit agency may expend funds apportioned on any operating or capital costs to maintain transit service levels.
 Other revenue is projected to grow by the 3 year average CPI 5.17%
Interest: 2.00% OF PREVIOUS YEAR'S WORKING CAPITAL

Deferred Revenue: REVENUE RECEIVED AND NOT SPENT

Transit - Expense Assumptions

Salaries:	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>
7/1	5.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Salary Base:	\$1,900	\$1,960	\$2,020	\$2,080	\$2,140	\$2,200
Additional Personnel:						

Extra Help: INCREASE PER YEAR FOR ADDITIONAL DEMAND IN ROUNDUP TRANSIT SERVICES 5.00%

Overtime: INCREASE BY PREVIOUS THREE YEAR CPI 5.17%

Retirement:	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>
	28.60%	28.70%	28.70%	28.70%	28.70%	28.70%
PERS Cost Sharing:	-8.40%	-8.40%	-8.40%	-8.40%	-8.40%	-8.40%

Health: INCREASE PER YEAR 8.00%

Other Benefits: -WORKERS COMP 5.72% OF SALARIES 1.74% FOR ADMIN
 -MEDICARE 1.45% OF SALARIES and EXTRA HELP
 -DEFERRED COMP/SICK LEAVE/OTHER 5.25% OF SALARIES

Other SMS: INCREASE BY AVERAGE PREVIOUS 3 YEAR CPI 5.17%

Capital Outlay: BASED ON BEST ESTIMATES FOR BUSES AND OTHER
 ADJUSTED BY 3 YEAR AVERAGE CPI 5.17%

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Planning and Development Services Enterprise

The Planning and Development Services (PDS) Department transitioned into an Enterprise Fund in 2012/13. This allows for services to be adjusted as demand fluctuates. The 2023/24 forecast estimates 800 residential units to be constructed; this is consistent with our historical average of 800 units per year. Commercial activity is expected to be trending higher than our historical average. The Building Division revenue fluctuates based on construction valuation of the different projects; dwelling unit numbers are just one indicator. The PDS Department is projected to finish 2022/23 with a working capital balance of approximately \$9.9 million. In addition, if needed, PDS can shift staff resources from its Development Review Unit to its Community Investment Program, should development activity dramatically slow down. The forecast reflects that the PDS Department will continue to maintain a prudent reserve that allows for immediate adjustments, should they become necessary.

CITY OF CLOVIS

Planning & Development Services - Financial Forecast (dollars in thousands)

RESIDENTIAL UNITS PER YEAR	1,112	1,238	859	850	800	800	800	800	800	800	800
	Actual 2019/20	Actual 2020/21	Actual 2021/22	Estimated 2022/23	Projected 2023/24	Projected 2024/25	Projected 2025/26	Projected 2026/27	Projected 2027/28		
REVENUES											
BEGINNING WORKING CAPITAL	7,660	9,090	10,080	9,890	9,900	9,700	9,700	9,700	9,710		
BUILDING PERMITS	3,830	4,020	3,390	4,570	4,510	4,740	4,990	5,250	5,520		
PLANNING FEES	1,800	1,870	1,310	2,230	1,930	1,980	1,910	1,970	2,040		
GENERAL PLAN CONSULTANT	260	250	180	680	1,440	1,930	2,130	1,030	830		
ENGINEERING FEES	3,160	2,580	2,700	2,320	2,490	2,620	2,760	2,900	3,050		
CAPITAL IMPROVEMENT CHARGES	2,650	2,500	2,690	3,800	4,110	4,320	4,540	4,770	5,020		
TOTAL REVENUES	11,700	11,220	10,270	13,600	14,480	15,590	16,330	15,920	16,460		
EXPENDITURES											
SALARIES	5,040	5,080	5,060	6,120	6,580	6,780	6,980	7,190	7,410		
EXTRA HELP	350	190	70	140	190	190	190	190	190		
OVERTIME	140	70	80	100	90	90	90	90	90		
BENEFITS											
RETIREMENT	900	970	1,050	1,150	1,230	1,410	1,460	1,500	1,540		
HEALTH	850	780	790	790	870	940	1,020	1,100	1,190		
OTHER	490	460	420	460	470	490	520	550	580		
SERVICES, MATERIALS & SUPPLIES	2,600	2,940	3,460	4,690	3,980	4,190	4,410	4,640	4,880		
GENERAL PLAN CONSULTANT	260	250	180	680	1,440	1,930	2,130	1,030	830		
CAPITAL	10	20	40	290	380	10	10	10	10		
TOTAL EXPENDITURES	10,640	10,760	11,150	14,420	15,230	16,030	16,810	16,300	16,720		
ADDITIONAL ITEMS											
INTEREST	270	150	180	60	60	190	190	190	190		
OTHER REVENUES/GRANTS	70	310	200	470	190	200	200	200	200		
TRANSFERS FROM GENERAL FUND	300	300	310	300	300	300	300	300	300		
TOTAL ADDITIONAL ITEMS	640	760	690	830	550	690	690	690	690		
NET INC/(DEC) TO WORKING CAPITAL	1,700	1,220	(190)	10	(200)	250	210	310	430		
OTHER ITEMS											
(USE OF)/ADDITION TO EMERGENCY RESERVE	270	230	0	0	0	250	210	300	80		
ENDING WORKING CAPITAL	9,090	10,080	9,890	9,900	9,700	9,700	9,700	9,710	10,060		
Emergency Reserve - (Dollars)	2,270	2,500	2,500	2,500	2,500	2,750	2,960	3,260	3,340		
Emergency Reserve as a % of Expenditures	21.3%	23.2%	22.4%	17.3%	16.4%	17.2%	17.6%	20.0%	20.0%		

AGENDA ITEM NO. 16.

Planning & Development Services - Revenue Assumptions (dollars in dollars)

	<u>2021/22 (Act.)</u>	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>
Residential Units Per Year:	859	850	800	800	800	800	800
Non-Residential %:	13%	23%	25%	25%	25%	25%	25%

Averages based on two years actuals and estimate to close

Average Permit Fees Per Unit:	Building	Planning	Engineering
	\$3,600	\$1,600	\$2,300

3 Year Average CPI:	<u>2021/22 (Act.)</u>	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>
	5.17%						
Planning Program Fee (Staff):	\$670,000	\$1,190,000	\$1,200,000	\$1,230,000	\$1,260,000	\$1,290,000	\$1,320,000
Plan. Prgm. Fee (Consultant):	\$180,000	\$680,000	\$1,440,000	\$1,930,000	\$2,130,000	\$1,030,000	\$830,000
Other Planning Fees:	\$640,000	\$1,040,000	\$730,000	\$750,000	\$650,000	\$680,000	\$720,000
Total FY	\$1,490,000	\$2,910,000	\$3,370,000	\$3,910,000	\$4,040,000	\$3,000,000	\$2,870,000

Capital Improvement Charges: BASED ON HOURLY RATE CHANGES (AS NEEDED)

Interest: 2.00% OF PREVIOUS YEAR'S WORKING CAPITAL

Other Revenues: INCREASE BY AVG CPI FOR PREVIOUS 3 YEARS 5.17%

Grants: BASED ON AWARDED GRANTS

Planning & Development Services - Expense Assumptions (dollars in thousands)

	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>
Salaries: (CPTA)						
7/1						
Salary Base:	5.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Additional Personnel:	\$6,390	\$6,580	\$6,780	\$6,980	\$7,190	\$7,410
Extra Help:	\$140	\$190	\$190	\$190	\$190	\$190
Overtime:						

WILL REMAIN FLAT THROUGHOUT PROJECTION YEARS

(PERS ESTIMATE)

	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>
Retirement:	28.60%	28.70%	28.70%	28.70%	28.70%	28.70%
PERS Cost Sharing:	-8.40%	-8.40%	-8.40%	-8.40%	-8.40%	-8.40%
Health:				8.00%	8.00%	8.00%
Other Benefits:				5.17%	5.17%	5.17%
Other SMS:				5.17%	5.17%	5.17%

General Plan Consultant:

General Plan Update	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>
Misc. Services (Legal, Housing, Design, Engr)	\$175	\$1,000	\$1,000	\$750	\$0	\$0
Specific Plan/Master Plan Prep/Updates	\$225	\$225	\$230	\$230	\$230	\$230
Utility Plans & Engineering Studies	\$70	\$0	\$450	\$850	\$300	\$100
Planning Studies Guidelines	\$100	\$100	\$100	\$100	\$100	\$50
	\$110	\$115	\$150	\$200	\$400	\$50

Total FY

	\$680	\$1,440	\$1,930	\$2,130	\$1,030	\$830
Capital Outlay:	BASED ON CAPITAL NEEDS PROJECTED FOR DEPARTMENT					
Transfers:	GENERAL FUND DISCRETIONARY FUNDING \$300 PER YEAR					

INTERNAL SERVICE FUNDS

The Internal Service Fund group is projected to be self-balancing throughout the Five-Year Forecast. Since the Internal Service Fund group is funded by charges to the operating funds, issues that will affect the Internal Service Funds are dealt with in conjunction with analysis of the impact on the operating funds. Each of the funds within the Internal Service Fund group is continually reviewed to determine where more cost-effective programs and services can be utilized, and expenditure reductions have been made in recent years to reduce the impact of cost sharing on all other City operations.

DEBT SERVICE FUNDS

The Debt Service Fund group, out of necessity and legal obligation, will be fully funded in order to make the required debt payments.



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Planning and Development Services

DATE: March 6, 2023

SUBJECT: Consider Approval - Res. 23-____, A request to initiate a rezoning of property within the area generally bound by Shepherd Avenue on the south, Willow Avenue on the west, the Enterprise Canal on the north and the Peach Avenue alignment on the east and authorizing staff to prepare an annexation application for the same boundary. City of Clovis, applicant.

Staff: Dave Merchen, City Planner

Recommendation: Approve

ATTACHMENTS: 1. Resolution 23-____
2. Willow Avenue Corridor Parcel Details

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

Staff recommends that the City Council adopt a resolution initiating a rezoning and authorizing staff to prepare an annexation application for the proposed project area.

EXECUTIVE SUMMARY

The City has been working with various property owners and developers for several years on plans to annex and develop property along the Willow Avenue corridor as envisioned by the City's General Plan and the Heritage Grove Design Guidelines. These plans continue to progress and is likely that the area will begin to develop within the next couple of years. Staff is recommending that the City Council initiate the rezoning and annexation process as a City-led project now because the project boundary contains properties designated for residential development that are important in helping the City to meet State housing requirements. These properties must be annexed into the City by the end of calendar year 2023 to meet the State's requirements. If the Council initiates this process, the rezoning will be considered by the

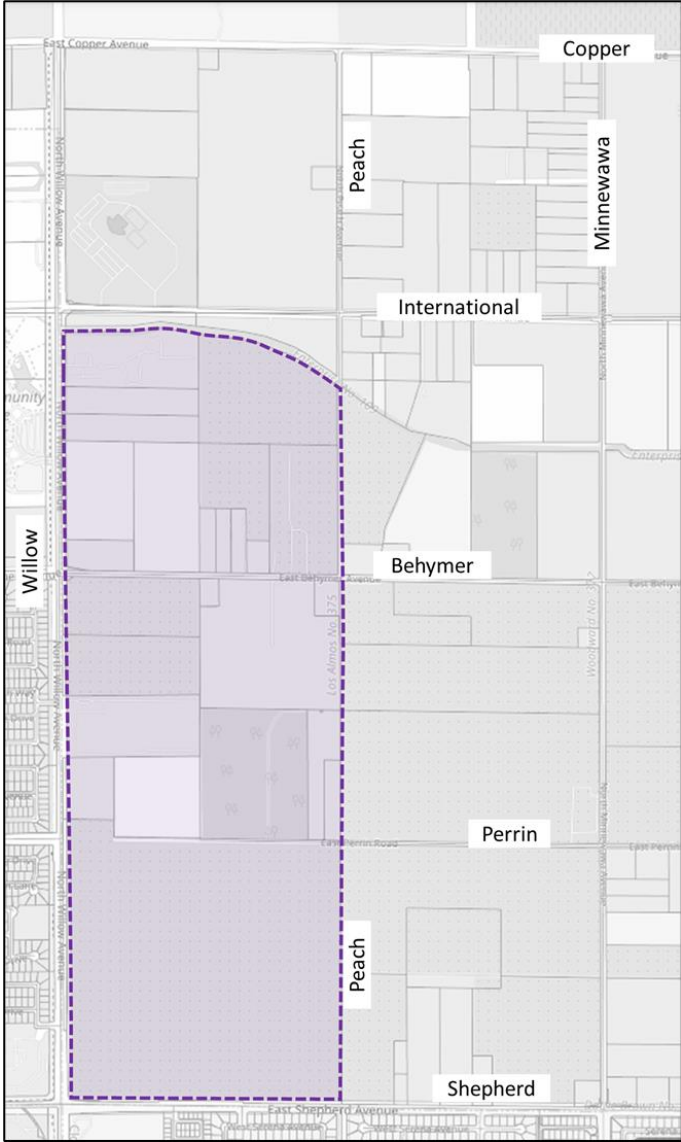
Planning Commission and then both the rezoning and the annexation will return to the Council for final action in late spring or early summer of this year.

BACKGROUND

The City has been working with various property owners and developers for several years on plans to annex and develop property in Heritage Grove as envisioned by the City’s General Plan and the Heritage Grove Design Guidelines. Based on those plans, several sites along the Willow Avenue corridor have been identified as having the potential to help the City meet state housing requirements in the upcoming Sixth Cycle Housing Element. For this discussion, the Willow Avenue Corridor and the proposed project area include the property generally bound by Shepherd Avenue on the south, Willow Avenue on the west, the Enterprise Canal on the north and the Peach Avenue alignment on the east. This area is illustrated on the graphic to the right. A total of 26 parcels are included. Information regarding each of the individual parcels within the project area is provided in **Attachment 2**.

Housing Sites Inventory

After reviewing the status of annexation projects in Heritage Grove with the City’s Housing Element consultant (Ascent) in January, it became clear that Clovis needs to prezone and annex properties within the Willow Avenue corridor before the end of calendar year 2023. There are several properties that are designated for high density residential development within this area that cannot be counted in the City’s housing sites inventory if they are not within the City limits before January 1, 2024. Although staff was already working on annexing this area in conjunction with two developer-based projects, a City-initiated process is necessary to meet the required year-end deadline.



Proposed Annexation Boundary

The proposed project area encompasses sites that have been identified for high density housing in the City’s preliminary housing sites inventory as well as surrounding parcels that are required to form a logical, contiguous boundary. Staff also evaluated the surrounding area within Heritage

Grove to identify the potential for additional parcels designated for high density residential development. Within Heritage Grove, only the area immediately north of the project area, between the Enterprise Canal and Copper Avenue, has the potential to accommodate high density residential projects. However, the area north of the Enterprise Canal has many uncertainties with water allocations and the timing of development that cannot be resolved in time to include these parcels in the housing inventory. Therefore, staff is not proposing to include that area in the City-initiated annexation.

Purpose of Prezoning

Prior to being annexed, all properties must be prezoned by the City to establish the land use and development standards that will be applied after the properties are incorporated into the City limits. The prezoning needs to be consistent with the underlying Clovis General Plan land use designations.

Prezoning of Properties North of Behymer Avenue

Properties within the project area north of Behymer Avenue are located within the Heritage Grove City Centers Master Plan, which was adopted by the City in 2019. This process included the adoption of an ordinance prezoning all the properties within the Master Plan. The only change proposed to the prezoning north of Behymer at this time is to clarify that the zone district previously described in the Master Plan as “Mixed-Use Village” is actually “UC - Urban Center”. This is a technical change to better correspond to the terminology in the Clovis Development Code and no changes to the Master Plan, land use schedule, or development standards are proposed.

Properties South of Behymer Avenue

Properties south of Behymer Avenue were not previously prezoned. If initiated by the Council, the proposed prezoning will identify zone districts that implement the current General Plan land use designations. Where mixed-use zoning is called for, sufficient detail will be included to define how the zone will be implemented.

Public Outreach and Comments

Staff met individually with two developer representatives that represent the majority of the land within the annexation area. Individual written notices were also mailed to the owners of all 26 parcels within the annexation boundary informing them of the project and inviting them to an informational meeting conducted by staff on February 28th. A second set of notices was sent out notifying owners within the project boundary, plus a 600 foot radius, of the March 6th Council meeting. The second notice was sent to 358 properties, with the bulk of the recipients being the owners of single family residential lots in the City of Fresno on the west side of Willow Avenue.

February 28, 2023 Informational Meeting

An informational meeting was scheduled on February 28, 2023 for property owners to ask questions and provide initial feedback regarding the proposed rezoning and annexation. A total of 13 participants attended the meeting, representing 18 of the 26 parcels included in the project boundary. No objections were noted regarding the rezoning. Several questions were raised regarding City sewer and water connection requirements after annexation is completed. These questions generally came from the owners of smaller parcels where the existing rural residential home site will likely be retained for the foreseeable future. Staff addressed some of these questions during the meeting and is following up to provide specific responses.

FISCAL IMPACT

None.

REASON FOR RECOMMENDATION

The project boundary contains properties designated for residential development that are important in helping the City to meet State housing requirements. These parcels have been incorporated into the draft housing sites inventory for the Sixth Cycle Housing Element. However, the parcels must be within the City limits by the end of 2023. The City has been working with various property owners and developers for several years on plans to annex and develop property along the Willow Avenue corridor as envisioned by the City's General Plan and the Heritage Grove Design Guidelines. While these plans continue to progress and is likely that the area will begin to develop within the next couple of years, a City initiated rezoning and annexation process is necessary to meet the required timeline.

ACTIONS FOLLOWING APPROVAL

If the Council initiates the rezoning and annexation process, the rezoning will be considered by the Planning Commission and then both the rezoning and the annexation will return to the Council for final action in late spring or early summer of this year. Following final action by the City, an annexation application will be filed with LAFCO. The proceedings conducted by LAFCO are projected to take three to five months to complete.

Prepared by: Dave Merchen, City Planner

Reviewed by: City Manager *JH*

RESOLUTION 23-_____**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS APPROVING THE INITIATION OF PREZONING OF PROPERTY WITHIN THE AREA GENERALLY BOUND BY SHEPHERD AVENUE ON THE SOUTH, WILLOW AVENUE ON THE WEST, THE ENTERPRISE CANAL ON THE NORTH AND THE PEACH AVENUE ALIGNMENT ON THE EAST AND AUTHORIZING STAFF TO PREPARE AN ANNEXATION APPLICATION FOR THE SAME BOUNDARY**

WHEREAS, the City of Clovis has been working with various property owners and developers for several years on plans to annex and develop property in Heritage Grove as envisioned by the City's General Plan and the Heritage Grove Design Guidelines; and

WHEREAS, several properties within Heritage Grove located along the Willow Avenue corridor, in the area generally bound by Shepherd Avenue on the south, Willow Avenue on the west, the Enterprise Canal on the north and the Peach Avenue alignment on the east, have been identified as having the potential to help the City meet state housing requirements in the upcoming Sixth Cycle Housing Element; and

WHEREAS, properties within the Willow Avenue corridor need to be annexed before the end of calendar year 2023 to be counted in the City's housing sites inventory; and

WHEREAS, a City-initiated process to annex the Willow Avenue corridor is necessary to meet the required timeline; and

WHEREAS, prior to being annexed, all properties must be rezoned by the City in conformance with the underlying Clovis General Plan land use designations to establish the land use and development standards that will be applied after the properties are incorporated into the City limits; and

WHEREAS, properties with the Willow Avenue corridor north of Behymer Avenue were previously rezoned in conjunction with the City's approval of the Heritage Grove City Centers Master Plan in 2019; and

WHEREAS, City has identified the need to clarify that rezoning classification for certain properties identified with the City Centers Master Plan as being rezoned to the Mixed Use Village zone district should be instead be rezoned to the UC – Urban Center zone district to better correspond to the terminology in the Clovis Development Code.

NOW, THEREFORE, BE IT RESOLVED, by City of Clovis:

1. The initiation of a rezoning of property within the area generally bound by Shepherd Avenue on the south, Willow Avenue on the west, the Enterprise canal on the north and the peach avenue alignment on the east is hereby approved.
2. Staff is authorized commence work on the preparation of an annexation application for the Willow Avenue Corridor with boundaries identified in Item 1.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on March 6, 2023, by the following vote, to wit.

AYES:
 NOES:
 ABSENT:
 ABSTAIN:

DATED: March 6, 2023

Mayor

City Clerk

Parcel Ref #	APN	Approx Acres	GP Designation	Prezoning (Preliminary)	Owner Name
Properties North of Behymer - Master Planned and Prezoned in 2019 Through Ordinance 2019-908					
13	58007103	29.9	Mixed Use Village	R-2, U-C (MU-V), PF, R-4	SMITTCAMP WILLIAM S & LINDA L TRUSTEES
14	58007104	20.5	Mixed Use Village	R-3, PF	SMITTCAMP WILLIAM S & LINDA L TRS
15	58007113	19.7	Mixed Use Village	R-3	INTERNATIONAL CHURCH OF THE
16	58007116	12.3	Mixed Use Village & Park	R-4, P-F, P-C-C	SMITTCAMP WILLIAM S & LINDA L TRUSTEES
17	58007132	8.4	Mixed Use Village	U-C (MU-V)	MAIN STREET PROMENADE LLC
18	58007134	8.4	Mixed Use Village	U-C (MU-V)	MAIN STREET PROMENADE LLC
19	58007140	4.8	Mixed Use Village	P-C-C	INTL CHURCH OF THE FOUR SQ GOSPEL
20	58007142	15.7	Mixed Use Village	P-C-C	INTL CHURCH OF THE FOUR SQ GOSPEL
25	58007138S	17.5	Mixed Use Village	R-2	DE PRIMA NANCY TRUSTEE
28	58007105	1.8	Mixed Use Village & Park	P-F	GEORGE STANLEY C TRUSTEE
29	58007117	2.3	Mixed Use Village & Park	P-F & P-C-C	LACEY JON D
30	58007118	2.3	Mixed Use Village & Park	P-F & P-C-C	DIMAR
31	58007119	2.5	Mixed Use Village & Park	P-F & P-C-C	CALIFORNIA DEVELOPMENT CO LLC FBO
Properties South of Behymer That Have Not Previously Been Prezoned					
1	55601033	1.3	High Density Residential	R-3	GROOM KENDALL TRUSTEE
2	55601034	2.1	High Density Residential	R-3	HERBOLD JEANNETTE L
3	55601005S	0.0	High Density Residential	R-3	CONTINENTAL TITLE COMPANY
4	55601006S	32.6	Med-High Density Resid	R-2	PALOMATE PACKING CO INC
5	55601007S	6.9	Med-High Density Resid	R-2	CONTINENTAL TITLE COMPANY
6	55601008S	3.1	Med-High Density Resid	R-2	CONTINENTAL TITLE COMPANY
7	55601032	38.8	High Density Res & Park	R-3	BEHYMER/MINNEWAWA LLC
8	55601017	18.9	Mixed Use Bus Campus	U-C	EASTBAK L P
9	55601037	18.0	Mixed Use Bus Campus	U-C	P R FARMS INC
10	55601039	18.6	Mixed Use Bus Campus	U-C	P R FARMS INC
11	55601041	6.9	Mixed Use Bus Campus	U-C	RUDD PATRICIA L TRS
21	55602029S	169.7	Mixed Use Village	U-C	RICCHIUTI VINCENT ANTHONY TRS
34	55601023ST	16.3	Water	P-F	FRESNO MET FLD CONT DIST



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Administration

DATE: March 6, 2023

SUBJECT: Consider Approval - Res. 23-____, a Resolution Opposing Initiative No. 21-0042A1, the Taxpayer Protection and Government Accountability Act sponsored by the California Business Roundtable.

Staff: John Holt, City Manager
Recommendation: Approve

ATTACHMENTS: 1. Res. 23-____ Opposing Initiative No. 21-0042A1
 2. Draft Letter Opposing
 3. Text - The Taxpayer Protection and Government Accountability Act

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

Staff recommends Council adopt a Resolution opposing Initiative No. 21-0042A1, the Taxpayer Protection and Government Accountability Act.

EXECUTIVE SUMMARY

On Jan. 4, 2022, the California Business Roundtable filed the "Taxpayer Protection and Government Accountability Act" or AG# 21-0042A1. On Feb. 1, 2023, the measure qualified for the November 2024 ballot.

The Taxpayer Protection and Government Accountability Act would amend the California Constitution with provisions that limit voters' authority and input, adopt new and stricter rules for raising taxes and fees, and may make it more difficult to impose fines and penalties for violation of state and local laws. The measure puts billions of local government tax and fee revenues at risk statewide with related core public service impacts. The measure would have significant negative impacts on City of Clovis operations and core service delivery.

BACKGROUND

From Ballotpedia:

“The California Two-Thirds Legislative Vote and Voter Approval for Fee and Charge Increases Initiative (#21-0042) has qualified for the ballot in California as an initiated constitutional amendment on November 5, 2024.

A "yes" vote supports amending the state constitution to define all state and local levies, charges, and fees as taxes and to require new state taxes proposed by the state legislature to be enacted via a two-thirds legislative vote and voter approval and new local taxes to be enacted via a two-thirds vote of the electorate.

A "no" vote opposes amending the state constitution, thereby maintaining that new state taxes require a two-thirds vote in each legislative chamber or a simple majority vote of electors and new or increased local taxes require approval of the local governing board as well as voter approval.

Supermajority vote requirements for taxes: Increase in vote requirements for state and local taxes.

The ballot title is as follows:

“Limits Ability of Voters and State and Local Governments to Raise Revenues for Government Services. Initiative Constitutional Amendment.”

Petition summary

The summary provided for inclusion on signature petition sheets is as follows:

“For new or increased state taxes currently enacted by two-thirds vote of Legislature, also requires statewide election and majority voter approval. Limits voters’ ability to pass voter-proposed local special taxes by raising vote requirement to two-thirds. Eliminates voters’ ability to advise how to spend revenues from proposed general tax on same ballot as the proposed tax. Expands definition of 'taxes' to include certain regulatory fees, broadening application of tax approval requirements. Requires Legislature or local governing body set certain other fees.”

The fiscal impact statement is as follows:

“Lower annual state and local revenues, potentially substantially lower, depending on future actions of the Legislature, local governing bodies, voters, and the courts.”

End Ballotpedia.

The Taxpayer Protection and Government Accountability Act would amend the California Constitution with provisions that limit voters' authority and input, adopt new and stricter rules for raising taxes and fees, and may make it more difficult to impose fines and penalties for violation of state and local laws.

I. MAJOR PROVISIONS

Fees and Charges:

- Except for licensing and other regulatory fees, fees and charges may not exceed the "actual cost" of providing the product or service for which the fee is charged. "Actual cost" is the "minimum amount necessary." The burden to prove the fee or charge does not exceed "actual cost" is changed to "clear and convincing" evidence.
- Requires fees and charges paid for the use of local and state government property and the amount paid to purchase or rent government property to be "reasonable." These fees and charges are currently allowed to be market-based. Whether the amount is "reasonable" (introducing a new legal standard aiming to force below market fee and charge amounts) must be proved by "clear and convincing evidence." The standard may significantly reduce the amount large companies (e.g., oil, utilities, gas, railroads, garbage/refuse, cable, and other corporations) will pay for the use of local public property.
- Prohibits fees on new development based on vehicle miles traveled (VMT).

Taxes:

- Taxes and fees adopted after Jan. 1, 2022, that do not comply with the new rules, are void unless reenacted.
- Invalidates the Upland decision that allows a majority of local voters to pass special taxes. The measure specifies that taxes proposed by the initiative are subject to the same rules as taxes placed on the ballot by a city council.
- Expressly prohibits local advisory measures which allow local voters to express a preference for how local general tax dollars should be spent.
- Requires voter approval to expand existing taxes (e.g., Utility, Transient Occupancy) to new territory (e.g., annexations) or to expand the tax base (e.g., new utility service)
- New taxes can only be imposed for a specific time period.
- City charters may not be amended to include a tax or fee.
- All state taxes require majority voter approval.

Fines and Penalties:

- May require voter approval of fines, penalties, and levies for corporations and property owners that violate state and local laws unless a new, undefined adjudicatory process is used to impose the fines and penalties.

II. DISCUSSION/ADDITIONAL BACKGROUND

On Jan. 4, 2022, the California Business Roundtable filed the “Taxpayer Protection and Government Accountability Act” or AG# 21-0042A1. On Feb. 1, 2023, the measure qualified for the November 2024 ballot.

The League of California Cities, along with a broad coalition of local governments, labor and public safety leaders, infrastructure advocates, and businesses, strongly opposes this initiative.

Local government revenue-raising authority is currently substantially restricted by state statute and constitutional provisions, including the voter approved provisions of Proposition 13 of 1978, Proposition 218 of 1996, and Proposition 26 of 2010. The Taxpayer Protection and Government Accountability Act adds and expands restrictions on voters and local government tax and fee authority.

Fees and Taxes

Local governments levy a variety of fees and other charges to provide core public services. Major examples of affected fees and charges are:

- Nuisance abatement charges, such as for weed, rubbish, and general nuisance abatement to fund community safety, code enforcement, and neighborhood cleanup programs.
- Commercial franchise fees.
- Emergency response fees, such as in connection with DUI.
- Advanced Life Support (ALS) transport charges.
- Document processing and duplication fees.
- Transit fees, tolls, parking fees, and public airport and harbor use fees.
- Facility use charges, fees for parks and recreation services, garbage disposal tipping fees.

Virtually every city, county, and special district must regularly (e.g., annually) adopt increases to fee rates and charges and revise rate schedules to accommodate new users and activities. Most of these would be subject to new standards and limitations under threat of legal challenge. Based on the current volume of fees and charges imposed by local agencies, including council-adopted increases to simply accommodate inflation, Cal Cities estimates the amount of local government fee and charge revenue at risk is approximately \$2 billion per year including those adopted since Jan. 1, 2022. Over ten years, \$20 billion of local government fee and charge revenues will be at heightened legal peril.

Statewide, hundreds of local tax measures were approved in 2022 that likely do not comply with the provisions of the initiative. Nearly \$2 billion of annual revenues from these voter-approved measures will cease a year after the effective date of the measure, reducing the local public services funded by these measures, unless the tax is re-submitted for voter approval.

Reductions on local government tax revenues have impacts on core services and infrastructure including fire and emergency response, law enforcement, streets and roads, drinking water, sewer sanitation, parks, libraries, public schools, affordable housing, homelessness prevention, and mental health services.

Fines and Penalties

Under existing law, cities are required to provide due process before imposing a penalty or fine for violation of its municipal code:

1. A local agency must adopt administrative procedures that govern imposing fines and penalties, including providing a reasonable period of time for a person responsible for a continuing violation to correct or remedy the violation [Gov't Code 53069.4].
2. Notice must be given to the violating party before imposing the penalty; and give the party an opportunity to be heard and present any facts or arguments [Merco Construction Engineers v. Los Angeles Unified School District (1969) 274 CA 2d 154, 166].
3. The fine may not be "excessive" [U.S. Constitution amendments VIII and XIV].

The initiative converts administratively imposed fines and penalties into taxes unless a new, undefined, and ambiguous "adjudicatory due process" is followed. This provision may put at risk authority to impose fines and penalties for violations of state and local law.

FISCAL IMPACT

The Taxpayer Protection and Government Accountability Act will take billions of dollars away from local government services statewide and make it more difficult for the City to raise future revenues. The impact on the City of Clovis could include fee revenue amount put at risk, increased legal defense costs, invalidation of taxes or future reduction of tax revenues, delayed annexations/development.

REASON FOR RECOMMENDATION

The position on this initiative recommended are in the best interest of the City in preventing the expansion of restrictions on voters and local government tax and fee authority.

ACTIONS FOLLOWING APPROVAL

Staff will draft a letter of opposition for the Mayor's signature.

Prepared by: John Holt, City Manager

Reviewed by: City Manager 

RESOLUTION 23-___

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CLOVIS
APPROVING THE OPPOSITION TO INITIATIVE 21-0042A1**

WHEREAS, an association representing California’s wealthiest corporations and developers is spending millions to push a deceptive proposition aimed for the November 2024 statewide ballot; and

WHEREAS, the measure includes undemocratic provisions that would make it more difficult for local voters to pass measures needed to fund local services and infrastructure, and would limit voter input by prohibiting local advisory measures where voters provide direction on how they want their local tax dollars spent; and

WHEREAS, the measure creates new constitutional loopholes that allow corporations to pay far less than their fair share for the impacts they have on our communities, including local infrastructure and our environment; and

WHEREAS, the measure may make it much more difficult for state and local regulators to issue fines and levies on corporations that violate laws intended to protect our environment, public health and safety, and our neighborhoods; and

WHEREAS, the measure puts billions of dollars currently dedicated to local services at risk and could force cuts to fire and emergency response, law enforcement, public health, parks, libraries, affordable housing, services to support homeless residents, mental health services, and more; and

NOW, THEREFORE, BE IT RESOLVED, that the City of Clovis opposes Initiative 21-0042A1;

BE IT FURTHER RESOLVED, that the City of Clovis will join the No on Initiative 21-0042A1 coalition, a growing coalition of public safety, education, labor, local government, and infrastructure groups throughout the state.

* * * * *

The foregoing resolution was introduced and adopted at a regular meeting of the City Council of the City of Clovis held on March 6, 2023, by the following vote, to wit.

AYES:

NOES:

ABSENT:

ABSTAIN:

DATED:

Mayor

City Clerk



CITY of CLOVIS
— CLOVIS CITY COUNCIL —

March 7, 2023

Bismarck Obando
Director of Public Affairs, League of California Cities
1400 K Street, Suite 400
Sacramento, CA 95814

RE: Letter Opposing Initiative 21-0042A1 - “Taxpayer Protection and Government Accountability Act”

On March 6, 2023, the City of Clovis voted to oppose Initiative 21-0042A1, a deceptive, developer-sponsored proposition aimed for the November 2024 statewide ballot that would significantly jeopardize cities’ ability to provide essential services and infrastructure for our residents.

On Jan. 4, 2022, the California Business Roundtable filed the “Taxpayer Protection and Government Accountability Act” or AG# 21-0042A1. On Feb. 1, 2023, the measure qualified for the November 2024 ballot. The City of Clovis strongly opposes this initiative.

The City of Clovis revenue-raising authority is currently substantially restricted by state statute and constitutional provisions, including the voter approved provisions of Proposition 13 of 1978, Proposition 218 of 1996, and Proposition 26 of 2010. The Taxpayer Protection and Government Accountability Act adds and expands restrictions on voters and local government tax and fee authority.

The measure includes undemocratic provisions that would make it more difficult for local voters to pass measures needed to fund local services and projects and would limit voter input by prohibiting local advisory measures where voters can express a preference on how they want their local tax dollars spent.

This measure creates new constitutional loopholes that allow corporations to pay far less than their fair share for the impacts they have on our communities, including impacts on local infrastructure and our environment.

This measure also may make it much more difficult for state and local regulators to issue fines and levies on corporations that violate laws intended to protect our environment, public health and safety, and our neighborhoods.

Unless defeated, the measure puts billions of dollars currently dedicated to local services at risk, and could force cuts to fire and emergency response, law enforcement, public health, parks, libraries, affordable housing, services to support homeless residents, mental health services, and more.

The measure benefits wealthy corporations and real estate developers while decimating our local communities and neighborhoods.

You may list the City of Clovis in formal opposition to Initiative #21-0042A1 and include our city as part of the growing coalition of public safety, labor, local government, infrastructure advocates, and other organizations throughout the state opposed to this deceptive proposition.

Sincerely,

Lynne Ashbeck, Mayor
City of Clovis

The Taxpayer Protection and Government Accountability Act

[Deleted codified text is denoted in ~~strikeout~~. Added codified text is denoted by *italics and underline*.]

Section 1. Title

This Act shall be known, and may be cited as, the Taxpayer Protection and Government Accountability Act.

Section 2. Findings and Declarations

(a) Californians are overtaxed. We pay the nation's highest state income tax, sales tax, and gasoline tax. According to the U.S. Census Bureau, California's combined state and local tax burden is the highest in the nation. Despite this, and despite two consecutive years of obscene revenue surpluses, state politicians in 2021 alone introduced legislation to raise more than \$234 billion in new and higher taxes and fees.

(b) Taxes are only part of the reason for California's rising cost-of-living crisis. Californians pay billions more in hidden "fees" passed through to consumers in the price they pay for products, services, food, fuel, utilities and housing. Since 2010, government revenue from state and local "fees" has more than doubled.

(c) California's high cost of living not only contributes to the state's skyrocketing rates of poverty and homelessness, they are the pushing working families and job-providing businesses out of the state. The most recent Census showed that California's population dropped for the first time in history, costing us a seat in Congress. In the past four years, nearly 300 major corporations relocated to other states, not counting thousands more small businesses that were forced to move, sell or close.

(d) California voters have tried repeatedly, at great expense, to assert control over whether and how taxes and fees are raised. We have enacted a series of measures to make taxes more predictable, to limit what passes as a "fee," to require voter approval, and to guarantee transparency and accountability. These measures include Proposition 13 (1978), Proposition 62 (1986), Proposition 218 (1996), and Proposition 26 (2010).

(e) Contrary to the voters' intent, these measures that were designed to control taxes, spending and accountability, have been weakened and hamstrung by the Legislature, government lawyers, and the courts, making it necessary to pass yet another initiative to close loopholes and reverse hostile court decisions.

Section 3. Statement of Purpose

(a) In enacting this measure, the voters reassert their right to a voice and a vote on new and higher taxes by requiring any new or higher tax to be put before voters for approval. Voters also intend that all fees and other charges are passed or rejected by the voters themselves or a governing body elected by voters and not unelected and unaccountable bureaucrats.

(b) Furthermore, the purpose and intent of the voters in enacting this measure is to increase transparency and accountability over higher taxes and charges by requiring any tax measure placed on the ballot—

either at the state or local level—to clearly state the type and rate of any tax, how long it will be in effect, and the use of the revenue generated by the tax.

(c) Furthermore, the purpose and intent of the voters in enacting this measure is to clarify that any new or increased form of state government revenue, by any name or manner of extraction paid directly or indirectly by Californians, shall be authorized only by a vote of the Legislature and signature of the Governor to ensure that the purposes for such charges are broadly supported and transparently debated.

(d) Furthermore, the purpose and intent of the voters in enacting this measure is also to ensure that taxpayers have the right and ability to effectively balance new or increased taxes and other charges with the rapidly increasing costs Californians are already paying for housing, food, childcare, gasoline, energy, healthcare, education, and other basic costs of living, and to further protect the existing constitutional limit on property taxes and ensure that the revenue from such taxes remains local, without changing or superseding existing constitutional provisions contained in Section 1(c) of Article XIII A.

(e) In enacting this measure, the voters also additionally intend to reverse loopholes in the legislative two-thirds vote and voter approval requirements for government revenue increases created by the courts including, but not limited to, *Cannabis Coalition v. City of Upland*, *Chamber of Commerce v. Air Resources Board*, *Schmeer v. Los Angeles County*, *Johnson v. County of Mendocino*, *Citizens Assn. of Sunset Beach v. Orange County Local Agency Formation Commission*, and *Wilde v. City of Dunsmuir*.

Section 4. Section 3 of Article XIII A of the California Constitution is amended to read:

Sec. 3(a) Every levy, charge, or exaction of any kind imposed by state law is either a tax or an exempt charge.

(b)(1) (a) Any change in state statute law which results in any taxpayer paying a new or higher tax must be imposed by an act passed by not less than two-thirds of all members elected to each of the two houses of the Legislature, and submitted to the electorate and approved by a majority vote, except that no new ad valorem taxes on real property, or sales or transaction taxes on the sales of real property, may be imposed. Each Act shall include:

(A) A specific duration of time that the tax will be imposed and an estimate of the annual amount expected to be derived from the tax.

(B) A specific and legally binding and enforceable limitation on how the revenue from the tax can be spent. If the revenue from the tax can be spent for unrestricted general revenue purposes, then a statement that the tax revenue can be spent for "unrestricted general revenue purposes" shall be included in a separate, stand-alone section. Any proposed change to the use of the revenue from the tax shall be adopted by a separate act that is passed by not less than two-thirds of all members elected to each of the two houses of the Legislature and submitted to the electorate and approved by a majority vote.

(2) The title and summary and ballot label or question required for a measure pursuant to the Elections Code shall, for each measure providing for the imposition of a tax, including a measure proposed by an elector pursuant to Article II, include:

(A) The type and amount or rate of the tax;

(B) The duration of the tax; and

(C) The use of the revenue derived from the tax.

(c) Any change in state law which results in any taxpayer paying a new or higher exempt charge must be imposed by an act passed by each of the two houses of the Legislature. Each act shall specify the type of exempt charge as provided in subdivision (e), and the amount or rate of the exempt charge to be imposed.

(d) (b) As used in this section and in Section 9 of Article II, "tax" means every any levy, charge, or exaction of any kind imposed by the State state law that is not an exempt charge. except the following:

(e) As used in this section, "exempt charge" means only the following:

~~(1) a charge imposed for a specific benefit conferred or privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the State of conferring the benefit or granting the privilege to the payor.~~

(1) (2) A reasonable charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable actual costs to the State of providing the service or product to the payor.

(2) (3) A charge imposed for the reasonable regulatory costs to the State incident to issuing licenses and permits, performing investigations, inspections, and audits, enforcing agricultural marketing orders, and the administrative enforcement and adjudication thereof.

(3) A levy, charge, or exaction collected from local units of government, health care providers or health care service plans that is primarily used by the State of California for the purposes of increasing reimbursement rates or payments under the Medi-Cal program, and the revenues of which are primarily used to finance the non-federal portion of Medi-Cal medical assistance expenditures.

(4) A reasonable charge imposed for entrance to or use of state property, or the purchase, rental, or lease of state property, except charges governed by Section 15 of Article XI.

(5) A fine, or penalty, or other monetary charge including any applicable interest for nonpayment thereof, imposed by the judicial branch of government or the State, as a result of a state administrative enforcement agency pursuant to adjudicatory due process, to punish a violation of law.

(6) A levy, charge, assessment, or exaction collected for the promotion of California tourism pursuant to Chapter 1 (commencing with Section 13995) of Part 4.7 of Division 3 of Title 2 of the Government Code.

(f) (e) Any tax or exempt charge adopted after January 1, ~~2022~~ 2010, but prior to the effective date of this act, that was not adopted in compliance with the requirements of this section is void 12 months after the effective date of this act unless the tax or exempt charge is reenacted by the Legislature and signed into law by the Governor in compliance with the requirements of this section.

(g) (1) (d) The State bears the burden of proving by a preponderance of the clear and convincing evidence that a levy, charge, or other exaction is an exempt charge and not a tax. The State bears the burden of proving by clear and convincing evidence that the amount of the exempt charge is reasonable and that the amount charged does not exceed the actual cost of providing the service or product to the payor. ~~that the amount is no more than necessary to cover the reasonable costs of the governmental activity and~~

that the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor's burdens on, or benefits received from, the governmental activity

(2) The retention of revenue by, or the payment to, a non-governmental entity of a levy, charge, or exaction of any kind imposed by state law, shall not be a factor in determining whether the levy, charge, or exaction is a tax or exempt charge.

(3) The characterization of a levy, charge, or exaction of any kind as being voluntary, or paid in exchange for a benefit, privilege, allowance, authorization, or asset, shall not be a factor in determining whether the levy, charge, or exaction is a tax or an exempt charge.

(4) The use of revenue derived from the levy, charge or exaction shall be a factor in determining whether the levy, charge, or exaction is a tax or exempt charge.

(h) As used in this section:

(1) "Actual cost" of providing a service or product means: (i) the minimum amount necessary to reimburse the government for the cost of providing the service or product to the payor, and (ii) where the amount charged is not used by the government for any purpose other than reimbursing that cost. In computing "actual cost" the maximum amount that may be imposed is the actual cost less all other sources of revenue including, but not limited to taxes, other exempt charges, grants, and state or federal funds received to provide such service or product.

(2) "Extend" includes, but is not limited to, doing any of the following with respect to a tax or exempt charge: lengthening its duration, delaying or eliminating its expiration, expanding its application to a new territory or class of payor, or expanding the base to which its rate is applied.

(3) "Impose" means adopt, enact, reenact, create, establish, collect, increase or extend.

(4) "State law" includes, but is not limited to, any state statute, state regulation, state executive order, state resolution, state ruling, state opinion letter, or other legal authority or interpretation adopted, enacted, enforced, issued, or implemented by the legislative or executive branches of state government. "State law" does not include actions taken by the Regents of the University of California, Trustees of the California State University, or the Board of Governors of the California Community Colleges.

Section 5. Section 1 of Article XIII C of the California Constitution is amended, to read:

Sec. 1. Definitions. As used in this article:

(a) "Actual cost" of providing a service or product means: (i) the minimum amount necessary to reimburse the government for the cost of providing the service or product to the payor, and (ii) where the amount charged is not used by the government for any purpose other than reimbursing that cost. In computing "actual cost" the maximum amount that may be imposed is the actual cost less all other sources of revenue including, but not limited to taxes, other exempt charges, grants, and state or federal funds received to provide such service or product.

(b) "Extend" includes, but is not limited to, doing any of the following with respect to a tax, exempt charge, or Article XIII D assessment, fee, or charge: lengthening its duration, delaying or eliminating its expiration, expanding its application to a new territory or class of payor, or expanding the base to which its rate is applied.

~~(c)~~ ~~(a)~~ "General tax" means any tax imposed for general governmental purposes.

~~(d)~~ *"Impose" means adopt, enact, reenact, create, establish, collect, increase, or extend.*

~~(e)~~ ~~(b)~~ "Local government" means any county, city, city and county, including a charter city or county, any special district, or any other local or regional governmental entity, or an elector pursuant to Article II or the initiative power provided by a charter or statute.

~~(f)~~ *"Local law" includes, but is not limited to, any ordinance, resolution, regulation, ruling, opinion letter, or other legal authority or interpretation adopted, enacted, enforced, issued, or implemented by a local government.*

~~(g)~~ ~~(c)~~ "Special district" means an agency of the State, formed pursuant to general law or a special act, for the local performance of governmental or proprietary functions with limited geographic boundaries including, but not limited to, school districts and redevelopment agencies.

~~(h)~~ ~~(d)~~ "Special tax" means any tax imposed for specific purposes, including a tax imposed for specific purposes, which is placed into a general fund.

~~(i)~~ ~~(e)~~ As used in this article, and in Section 9 of Article II, "tax" means every ~~any~~ levy, charge, or exaction of any kind, imposed by a local government law that is not an exempt charge., ~~except the following:~~

~~(j)~~ *As used in this section, "exempt charge" means only the following:*

~~(1)~~ ~~A charge imposed for a specific benefit conferred or privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege.~~

~~(1)~~ ~~(2)~~ A reasonable charge imposed for a specific local government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable actual costs to the local government of providing the service or product.

~~(2)~~ ~~(3)~~ A charge imposed for the reasonable regulatory costs to a local government for issuing licenses and permits, performing investigations, inspections, and audits, enforcing agricultural marketing orders, and the administrative enforcement and adjudication thereof.

~~(3)~~ ~~(4)~~ A reasonable charge imposed for entrance to or use of local government property, or the purchase, rental, or lease of local government property.

~~(4)~~ ~~(5)~~ A fine, or penalty, ~~or other monetary charge~~ including any applicable interest for nonpayment thereof, imposed by the judicial branch of government or a local government administrative enforcement agency pursuant to adjudicatory due process, as a result of to punish a violation of law.

~~(5)~~ ~~(6)~~ A charge imposed as a condition of property development. No levy, charge, or exaction regulating or related to vehicle miles traveled may be imposed as a condition of property development or occupancy.

~~(6)~~ ~~(7)~~ An Assessments and property related fees assessment, fee, or charge imposed in accordance with the provisions of subject to Article XIII D, or an assessment imposed upon a business in a tourism marketing district, a parking and business improvement area, or a property and business improvement district.

(7) A charge imposed for a specific health care service provided directly to the payor and that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of providing the health care service. As used in this paragraph, a "health care service" means a service licensed or exempt from licensure by the state pursuant to Chapters 1, 1.3, or 2 of Division 2 of the Health and Safety Code.

The local government bears the burden of proving by a preponderance of the evidence that a levy, charge, or other exaction is not a tax, that the amount is no more than necessary to cover the reasonable costs of the governmental activity and that the manner in which these costs are allocated to a payor bear a fair or reasonable relationship to the payor's burdens on, or benefits received from, the governmental activity.

Section 6. Section 2 of Article XIII C of the California Constitution is amended to read:

Sec. 2. Local Government Tax Limitation. Notwithstanding any other provision of this Constitution:

(a) Every levy, charge, or exaction of any kind imposed by local law is either a tax or an exempt charge. All taxes imposed by any local government shall be deemed to be either general taxes or special taxes. Special purpose districts or agencies, including school districts, shall have no power to levy general taxes.

(b) No local law government, whether proposed by the governing body or by an elector, may impose, extend, or increase any general tax unless and until that tax is submitted to the electorate and approved by a majority vote. A general tax shall not be deemed to have been increased if it is imposed at a rate not higher than the maximum rate so approved. The election required by this subdivision shall be consolidated with a regularly scheduled general election for members of the governing body of the local government, except in cases of emergency declared by a unanimous vote of the governing body.

(c) ~~Any general tax imposed, extended, or increased, without voter approval, by any local government on or after January 1, 1995, and prior to the effective date of this article, shall continue to be imposed only if approved by a majority vote of the voters voting in an election on the issue of the imposition, which election shall be held within two years of the effective date of this article and in compliance with subdivision (b).~~ (d) No local law government, whether proposed by the governing body or by an elector, may impose, extend, or increase any special tax unless and until that tax is submitted to the electorate and approved by a two-thirds vote. A special tax shall not be deemed to have been increased if it is imposed at a rate not higher than the maximum rate so approved.

(d) The title and summary and ballot label or question required for a measure pursuant to the Elections Code shall, for each measure providing for the imposition of a tax, include:

(1) The type and amount or rate of the tax;

(2) the duration of the tax; and

(3) The use of the revenue derived from the tax. If the proposed tax is a general tax, the phrase "for general government use" shall be required, and no advisory measure may appear on the same ballot that would indicate that the revenue from the general tax will, could, or should be used for a specific purpose.

(e) Only the governing body of a local government, other than an elector pursuant to Article II or the initiative power provided by a charter or statute, shall have the authority to impose any exempt charge. The governing body shall impose an exempt charge by an ordinance specifying the type of exempt charge

as provided in Section 1(j) and the amount or rate of the exempt charge to be imposed, and passed by the governing body. This subdivision shall not apply to charges specified in paragraph (7) of subdivision (j) of Section 1.

(f) No amendment to a Charter which provides for the imposition, extension, or increase of a tax or exempt charge shall be submitted to or approved by the electors, nor shall any such amendment to a Charter hereafter submitted to or approved by the electors become effective for any purpose.

(g) Any tax or exempt charge adopted after January 1, 2022, but prior to the effective date of this act, that was not adopted in compliance with the requirements of this section is void 12 months after the effective date of this act unless the tax or exempt charge is reenacted in compliance with the requirements of this section.

(h)(1) The local government bears the burden of proving by clear and convincing evidence that a levy, charge or exaction is an exempt charge and not a tax. The local government bears the burden of proving by clear and convincing evidence that the amount of the exempt charge is reasonable and that the amount charged does not exceed the actual cost of providing the service or product to the payor.

(2) The retention of revenue by, or the payment to, a non-governmental entity of a levy, charge, or exaction of any kind imposed by a local law, shall not be a factor in determining whether the levy, charge, or exaction is a tax or exempt charge.

(3) The characterization of a levy, charge, or exaction of any kind imposed by a local law as being paid in exchange for a benefit, privilege, allowance, authorization, or asset, shall not be factors in determining whether the levy, charge, or exaction is a tax or an exempt charge.

(4) The use of revenue derived from the levy, charge or exaction shall be a factor in determining whether the levy, charge, or exaction is a tax or exempt charge.

Section 7. Section 3 of Article XIII D of the California Constitution is amended, to read:

Sec. 3. Property Taxes, Assessments, Fees and Charges Limited

(a) No tax, assessment, fee, or charge, or surcharge, including a surcharge based on the value of property, shall be assessed by any agency upon any parcel of property or upon any person as an incident of property ownership except:

(1) The ad valorem property tax imposed pursuant to described in Section 1(a) of Article XIII and Section 1(a) of Article XIII A, and described and enacted pursuant to the voter approval requirement in Section 1(b) of Article XIII A.

(2) Any special non-ad valorem tax receiving a two-thirds vote of qualified electors pursuant to Section 4 of Article XIII A, or after receiving a two-thirds vote of those authorized to vote in a community facilities district by the Legislature pursuant to statute as it existed on December 31, 2021.

(3) Assessments as provided by this article.

(4) Fees or charges for property related services as provided by this article.

(b) For purposes of this article, fees for the provision of electrical or gas service shall not be deemed charges or fees imposed as an incident of property ownership.

Section 8. Sections 1 and 14 of Article XIII are amended to read:

Sec. 1 Unless otherwise provided by this Constitution or the laws of the United States:

(a) All property is taxable and shall be assessed at the same percentage of fair market value. When a value standard other than fair market value is prescribed by this Constitution or by statute authorized by this Constitution, the same percentage shall be applied to determine the assessed value. The value to which the percentage is applied, whether it be the fair market value or not, shall be known for property tax purposes as the full value.

(b) All property so assessed shall be taxed in proportion to its full value.

(c) All proceeds from the taxation of property shall be apportioned according to law to the districts within the counties.

Sec. 14. All property taxed by state or local government shall be assessed in the county, city, and district in which it is situated. Notwithstanding any other provision of law, such state or local property taxes shall be apportioned according to law to the districts within the counties.

Section 9. General Provisions

A. This Act shall be liberally construed in order to effectuate its purposes.

B. (1) In the event that this initiative measure and another initiative measure or measures relating to state or local requirements for the imposition, adoption, creation, or establishment of taxes, charges, and other revenue measures shall appear on the same statewide election ballot, the other initiative measure or measures shall be deemed to be in conflict with this measure. In the event that this initiative measure receives a greater number of affirmative votes, the provisions of this measure shall prevail in their entirety, and the provisions of the other initiative measure or measures shall be null and void.

(2) In furtherance of this provision, the voters hereby declare that this measure conflicts with the provisions of the "Housing Affordability and Tax Cut Act of 2022" and "The Tax Cut and Housing Affordability Act," both of which would impose a new state property tax (called a "surcharge") on certain real property, and where the revenue derived from the tax is provided to the State, rather than retained in the county in which the property is situated and for the use of the county and cities and districts within the county, in direct violation of the provisions of this initiative.

(3) If this initiative measure is approved by the voters, but superseded in whole or in part by any other conflicting initiative measure approved by the voters at the same election, and such conflicting initiative is later held invalid, this measure shall be self-executing and given full force and effect.

C. The provisions of this Act are severable. If any portion, section, subdivision, paragraph, clause, sentence, phrase, word, or application of this Act is for any reason held to be invalid by a decision of any court of competent jurisdiction, that decision shall not affect the validity of the remaining portions of this Act. The People of the State of California hereby declare that they would have adopted this Act and each and every portion, section, subdivision, paragraph, clause, sentence, phrase, word, and application not

declared invalid or unconstitutional without regard to whether any portion of this Act or application thereof would be subsequently declared invalid.

D. If this Act is approved by the voters of the State of California and thereafter subjected to a legal challenge alleging a violation of state or federal law, and both the Governor and Attorney General refuse to defend this Act, then the following actions shall be taken:

(1) Notwithstanding anything to the contrary contained in Chapter 6 of Part 2 of Division 3 of Title 2 of the Government Code or any other law, the Attorney General shall appoint independent counsel to faithfully and vigorously defend this Act on behalf of the State of California.

(2) Before appointing or thereafter substituting independent counsel, the Attorney General shall exercise due diligence in determining the qualifications of independent counsel and shall obtain written affirmation from independent counsel that independent counsel will faithfully and vigorously defend this Act. The written affirmation shall be made publicly available upon request.

(3) A continuous appropriation is hereby made from the General Fund to the Controller, without regard to fiscal years, in an amount necessary to cover the costs of retaining independent counsel to faithfully and vigorously defend this Act on behalf of the State of California.

(4) Nothing in this section shall prohibit the proponents of this Act, or a bona fide taxpayers association, from intervening to defend this Act.



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council
 FROM: Administration
 DATE: March 6, 2023
 SUBJECT: Consider Approval – Appointments to the City of Clovis Historic Preservation Committee.

Staff: John Holt, City Manager

Recommendation: Approve

ATTACHMENTS: 1. September 12, 2022, staff report regarding Historic Preservation Committee

CONFLICT OF INTEREST

Councilmembers should consider recusal if a campaign contribution exceeding \$250 has been received from the project proponent (developer, applicant, agent, and/or participants) since January 1, 2023 (Government Code 84308).

RECOMMENDATION

Staff is recommending the City Council approve the appointments to the Clovis Historic Preservation Committee.

EXECUTIVE SUMMARY

On February 13, 2023, the Clovis City Council directed staff to seek the nominations from City Council for appointment to the Clovis Historic Preservation Committee. Staff has received nominations from City Council.

Motion from February 13, 2023 – “Motion for each Councilmember to appoint 1-2 members who live, work, own property, or can articulate their historical ties to Clovis to the ad hoc committee by the February 21, 2023, Council Meeting. Motion for approval by Councilmember Bessinger, seconded by Councilmember Mouanoutoua. Motion carried by unanimous vote.”

Nominated for appointment:

- Mayor Ashbeck - Sayre Miller / Adam Holt
- Mayor Pro Tem Mouanoutoua - John Wright / Tom Wright

- Councilmember Basgall - Desiree Haus / Rachael Orlando
- Councilmember Bessinger - Ron Silva / Greg Newman
- Councilmember Pearce - Cora Shipley / Mark Wall

Actions required and charge of the committee based on prior council action:

1. Have City Council appoint 1 – 2 members each.
2. Committee Members must live, work, own property, or can articulate their historical ties to Clovis to the ad hoc committee.
3. This is an ad hoc committee that will meet until the objectives are achieved.
4. The Committee will be subject to the Brown Act.
5. The Committee will be charged with:
 - a. Identifying criteria they would use to assess historic resources in the City of Clovis.
 - b. Assessing historic resources in the City of Clovis – this would consist of surveying historic resources within the city limits of the City of Clovis. The historic survey would not designate a property as historic. Instead, the survey would identify properties that could be a historic resource.
 - c. Provide recommendations to the City Council on the preservation of those identified resources.
6. The Committee would report back to City Council on items included in number 5 above.

Staff is recommending the Committee meet on a monthly basis until they are prepared to report back to City Council.

BACKGROUND

The origin of the creation of a Historic Preservation Committee began with a May 16, 2022, letter from Sayre Miller, representing the Clovis-Big Dry Creek Historical Society requesting the City Council create a Historic Preservation Committee. The letter indicates that the Clovis-Big Dry Creek Historical Society created a committee approximately three years ago to advocate for the preservation of the Carnegie Library building in Old Town Clovis. The Carnegie Library is owned by the Clovis Chamber of Commerce and the City of Clovis has limited control over how that building is used.

Attachment 1 includes all background material. On May 2, 2022, the City Council received an update on 325 Pollasky Avenue, Clovis Chamber of Commerce building. On May 16, 2022, the Clovis-Big Dry Creek Historical Society submitted a letter to the City Manager requesting that

the City form a Historical Preservation Commission. From the May 2, 2022, meeting, it was the consensus of the Council to pursue the formation of a historical preservation committee to assist the effort in updating and preserving the building.

On June 6, 2022, the City Council considered the request from Clovis-Big Dry Creek Historical Society for the Council to create a Historical Preservation Commission. From the June 6, 2022, meeting Council directed staff to establish the Advisory Board as described in the Clovis Municipal Code 9.120.020 - *Historic Preservation Board. A City review board designated to promote the cultural, economic, educational, and general welfare of the City through the preservation and protection of buildings, sites, structures, areas, and districts of historic significance and interest.*

On September 12, 2022, staff presented a two options for Council to consider: **Option A** - Establish a temporary committee that would assess historic resources in the City of Clovis and provide recommendations to City Council on the protection of those identified resources; or **Option B** - Consider Introduction – Ord. 22-____, an Ordinance of the City Council of the City of Clovis adding Chapter 9.81 of Title 9 of the Clovis Municipal Code creating a Historic Preservation Board.

City Council chose Option A with the following motion: to establish an ad hoc committee that would assess historic resources in the City of Clovis and provide recommendations to the City Council on the protection of those identified resources. Membership of the committee will consist of ten (10) members and each member shall be appointed by the City Council following a recommendation by the Mayor and members must be a resident of the City of Clovis.

In October 2022 City Council provided additional direction to table the creation of the Committee until after the November 8, 2022, election. Staff is now returning to City Council to confirm the actions taken on September 12, 2022.

On February 13, 2023, staff returned to council seeking direction on path forward.

FISCAL IMPACT

There is currently no funding to support the establishment of a Historic Preservation Committee. Staff time to support would likely be limited but it would have an impact on workload.


REASON FOR RECOMMENDATION

Staff is now returning to the City Council to approve the appointments to the Clovis Historic Preservation Committee.

ACTIONS FOLLOWING APPROVAL

Staff will implement Council direction.

Prepared by: John Holt, City Manager

Reviewed by: City Manager 



CITY *of* CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council
 FROM: Administration
 DATE: September 12, 2022
 SUBJECT: Consider Various Options Regarding the Creation of a Historic Preservation Board:

a. Establish a temporary committee that would assess historic resources in the City of Clovis and provide recommendations to City Council on the protection of those identified resources;

b. Consider Introduction – Ord. 22-___, An Ordinance of the City Council of the City of Clovis adding Chapter 9.81 of Title 9 of the Clovis Municipal Code creating a Historic Preservation Board;

c. Take no action at this time.

Staff: Andrew Haussler, Assistant City Manager / Renee Mathis, Director of Planning and Development Services

Recommendation: Consider options and provide staff policy direction

ATTACHMENTS:

1. Background on 325 Pollasky – Clovis Chamber of Commerce
2. May 2, 2022, Staff Report - Update on 325 Pollasky Avenue (Clovis Chamber of Commerce Building)
3. May 16, 2022, Letter from the Clovis-Big Dry Creek Historical Society to form a historical preservation commission
4. June 6, 2022, Staff Report - Consider – A request from Clovis-Big Dry Creek Historical Society for the City Council to Create a Historical Preservation Commission
5. Draft Ordinance

CONFLICT OF INTEREST

None.

RECOMMENDATION

For the City Council to consider various options regarding the creation of a Historic Preservation Board (Board) and provide staff direction going forward.

EXECUTIVE SUMMARY

On May 2, 2022, the City Council received an update on 325 Pollasky Avenue, Clovis Chamber of Commerce building (Attachment 2). On June 6, 2022, City Council considered a request from Clovis-Big Dry Creek Historical Society for the City Council to create a Historical Preservation Commission (Attachment 4). From the June 6, 2022, meeting, Council directed staff to establish an advisory board as described in the Clovis Municipal Code 9.120.020.

Over the past two months, staff has worked with the City Attorney's office in developing a draft ordinance creating a Historic Preservation Board. This is proposed to be an advisory board to the Planning Commission and City Council tasked with developing an initial list of historic landmarks and historic sites within the Historic District for consideration. The Board would also be responsible for maintaining that list of historic landmarks and historic sites. The draft ordinance establishes the process by which an initial list of historic landmarks and historic sites could be established and how one might be added at a future date.

The following are challenges that have been identified during the development of the draft ordinance:

1. There is no funding for the creation and support of Board.
2. In communicating with the City of Visalia who established a Historic Preservation Advisory Committee in 1979, there is a significant amount of work in establishing the criteria and initial list which could initially consume full-time support of one staff member. Once established, ongoing support is significantly reduced.
3. Staff would likely need to outsource support to the Board such as an architect, engineer, or historian (assuming the initial Board was not made up of this expertise).
4. There is currently no in-house expertise on historic preservation.
5. Defining a historic landmark and maintenance of it is subjective – staff would be charged with defining what is significant, minor, and maintenance work.

After developing the draft ordinance, staff is recommending the City Council consider the following options:

- A. Establish a temporary committee that would assess historic resources in the City of Clovis and provide recommendations to City Council on the protection of those identified resources;
- B. Consider Introduction – Ord. 22-____, an Ordinance of the City Council of the City of Clovis adding Chapter 9.81 of Title 9 of the Clovis Municipal Code creating a Historic Preservation Board;
- C. Take no action at this time.

BACKGROUND

On May 2, 2022, the City Council received an update on 325 Pollasky Avenue, Clovis Chamber of Commerce building (Attachment 2). On May 16, 2022, the Clovis-Big Dry Creek Historical Society submitted a letter to the City Manager requesting that the City form a Historical Preservation Commission (Attachment 3). Attachment 1 provides some of the history on the building located at 325 Pollasky Avenue. From the May 2, 2022, meeting, it was the consensus of the Council to pursue the formation of a historical preservation committee to assist the effort in updating and preserving the building.

On June 6, 2022, the City Council considered the request from Clovis-Big Dry Creek Historical Society for the Council to create a Historical Preservation Commission (Attachment 4). From the June 6, 2022, meeting Council directed staff to establish the Advisory Board as described in the Clovis Municipal Code 9.120.020 - *Historic Preservation Board. A City review board designated to promote the cultural, economic, educational, and general welfare of the City through the preservation and protection of buildings, sites, structures, areas, and districts of historic significance and interest.*

Over the past two months, staff has worked with the City Attorney's office to develop a draft ordinance to create a Historic Preservation Board, provided as Attachment 5. Through that process, staff has developed an alternative option to consider: to establish a temporary committee that would assess historic resources in the City of Clovis and provide recommendations to the City Council on the protection of those identified resources. A third option available is to continue the City's current policies on historical preservation with Council taking no action at this time.

The following is a review of the three proposed options:

Option A - Establish a temporary committee that would assess historic resources in the City of Clovis and provide recommendations to City Council on the protection of those identified resources.

After developing the draft ordinance and realizing that staff has very little expertise regarding historic sites nor the criteria to judge, staff wanted to present the option to City Council to consider forming a committee that would be charged with assessing historic resources in the City of Clovis and providing recommendations on tools the Council could implement to protect the identified resources, such as an ordinance. The committee could stand up for a specified period and provide recommendations to the City Council at its conclusion.

Option B - Consider Introduction – Ord. 22-____, an Ordinance of the City Council of the City of Clovis adding Chapter 9.81 of Title 9 of the Clovis Municipal Code creating a Historic Preservation Board:

In crafting the ordinance and knowing that it will likely need to be amended, staff is recommending the City Council consider narrowing the scope of the ordinance initially to allow somewhat of a learning curve upon initial implementation. It should also be noted that the City is now on the front end of updating the 2014 General Plan, which could be an opportunity to refine the ordinance in the future.

Highlights of the draft ordinance:

A summary of the ordinance and the proposed draft ordinance is in Attachment 5.

Purpose:

The proposed Historic Preservation Ordinance establishes a Historic Preservation Board (Board). The Board would be created to act as the City's steward for historic preservation causes and protector of historic structures. The Board would be an advisory body to the Planning Commission and City Council. The Board would consist of five members appointed by the Mayor and confirmed by the City Council and meet monthly.

Scope:

Staff is recommending Council consider limiting the initial historic district to the original one square mile of the City of Clovis, bounded by Barstow Avenue to the south, Sunnyside Avenue to the east, Sierra Avenue to the north, and Minnewawa Avenue to the west (this area represents the original one square mile that was incorporated in 1912). Staff is further recommending Council consider initially limiting consideration of historic sites to non-residential properties.

Initial Role:

The Board would be primarily responsible for developing a list of Historic Landmarks within the Historic District for Planning Commission and City Council to consider for designation.

Ongoing Role:

The Board would periodically update the Historic Landmarks within the Historic District and reviewing building/planning actions related to historically designated structures. Review of proposals for the exterior alteration of historically designated sites and structures would likely be the most frequent task undertaken by the Board. The Board reviews would be conducted with a focus on preserving the integrity of historic structures and maintaining the unified architectural character of the Historic District. The Board would also be tasked with recommending criteria to be used during such review.

Limitations on Changes to Designated Historic Sites:

Reviews of exterior alterations to buildings would need to occur prior to issuance of a permit. For land use actions, the Board would only review the impact of a proposed land use change on a historic landmark and would provide a recommendation to the Planning Commission. The Board would not have authority to approve or deny land use actions and would not make determinations on what uses are allowed. That power rests solely with the Planning Commission. Any action of the Board would be appealable to the City Council.

Expenses:

All reviews by the Board would be conducted at no expense to the applicant. Similarly, any appeals of Board actions would be processed free of charge.

Staff time to support the Board has not been budgeted for and resources would need to be identified.

Summary:

In summary, a property owner will be notified of the potential for a property to be listed on the historic register before public hearings held by the Historic Preservation Board and again by the Planning Commission. The final recommendation would be noticed to the property owner before the item is heard by the City Council when the Council could officially add the property to the local historic register. The property owner will be allowed the opportunity to state whether they want their property to be included as an historic landmark. There is a provision in the ordinance that allows the Planning Commission to consider a hardship by a property owner that would result from denial of a permit to carry out proposed work.

If a site is added to the register before altering the exterior of, or demolishing, an historic landmark or historic site, the property owner must first obtain approval either from the Director of Planning and Development Services or, depending on the significance of the change, the Board would provide a recommendation to the Planning Commission. This is appealable to City Council. In addition, for Historic Landmarks, property owners must seek permission to do work that does not require a permit and would not normally require City approval. This will increase the time it takes property owners to complete work on their property, compared to a site that is not on the historic register.

Option C – Take no action at this time.

Currently in the City of Clovis, historic preservation is governed by the General Plan in the Open Space and Conservation Element under *Goal 2: Natural, agricultural, and historic resources that are preserved and promoted as key features for civic pride and identity*. This is implemented by the following policies:

- Policy 2.9: National and state historic resources. Preserve historical sites and buildings of state or national significance in accordance with the Secretary of Interior Standards for Historic Rehabilitation.
- Policy 2.10: Local historic resources. Encourage property owners to maintain the historic integrity of the site by (listed in order of preference): preservation, adaptive reuse, or memorialization.
- Policy 2.11: Old Town. Prioritize the preservation of the historic character and resources of Old Town.
- Policy 2.12: Public education. Support public education efforts for residents and visitors about the unique historic, natural, and cultural resources in Clovis.

In addition, the Central Clovis Specific Plan further implemented the above goal and policies with design guidelines and language desiring to preserve the historic nature of the Old Town area.

FISCAL IMPACT

Implementation of the ordinance will need to be supported by staff time as well as supporting the Board and meetings. The exact cost to support the Board is unknown at this time.

REASON FOR RECOMMENDATION

City Council provided direction to draft an ordinance to develop an advisory body to the Planning Commission and City Council to develop an initial list of historic landmarks and historic sites within the Historic District for consideration. The Board would also be responsible for maintaining that list of historic landmarks and historic sites. Staff has provided Council with various options to consider.

ACTIONS FOLLOWING APPROVAL

Staff will implement Council direction.

Prepared by: Andrew Haussler, Assistant City Manager
Renee Mathis, Director of Planning & Development Services.

Reviewed by: City Manager *AM*

325 Pollasky Avenue (Clovis Chamber of Commerce) Building Update

The building owned by the Clovis Chamber of Commerce is located at 325 Pollasky Avenue. It was built in 1914 and originally served as the Clovis Library. The construction was financed through a grant from the Carnegie Foundation, which funded 2,509 such libraries between 1883 and 1929. The building remained in continuous use as a public library until 1976, when the new Clovis Library opened at 1133 Fifth Street. In exchange for the new library site, the County of Fresno deeded ownership of the building and land at 325 Pollasky to the City of Clovis.

Upon taking possession of the property, the City of Clovis was committed to renovating and converting the building into a use which could serve as a public meeting space. However, the costs for renovation ranged from \$150,000 to \$160,000.

In 1979, the City of Clovis replaced the foundation at a cost of \$70,000. By 1983, a group of citizens managed to raise \$13,000 for additional restoration work. Those funds, along with donations of labor and supplies, enabled the group to complete some additional restoration work.

In 1986, the City of Clovis entered into an agreement with the Clovis Chamber of Commerce to transfer ownership of the building and property to the Chamber. The agreement included several conditions (“Reversionary Interest Conditions”), which were to be included in the deed conveying the property to the Chamber:

- Chamber must complete remodeling of the building.
- Chamber may not convey any interest in the property without consent of the City.
- Chamber must remain as a non-profit corporation organized as a chamber of commerce.
- Chamber must maintain the upper floor of the building for public use or short-term rental for public and community groups.
- Chamber must maintain the building in good condition and repair.
- As part of the agreement, the City was also to retain the ability to take back title to the property in the event of a default by the Chamber.

Since 1986, the Chamber has continuously occupied the building. During that time, the Clovis Chamber of Commerce bore all costs for repairs and maintenance for the building and property. Some of these repairs and upgrades include total replacement of roof, total overhaul of landscaping and irrigation, and overhaul of front entry. Between 2012 and 2016, the building experienced issues which included the total failure of HVAC equipment, severe roof leak, and a water main break.

The building is also not ADA compliant, which has prevented the Chamber of Commerce from being able to legally operate inside the building.

In 2016, City of Clovis staff discovered that although the deed conveying the property from the City to the Chamber was executed in 1986, none of the Reversionary Interest Conditions required by the agreement were included in the deed. Also, the 1986 agreement was not recorded. Therefore, the legally enforceable status of the Reversionary Interest Conditions was in doubt.

In 2017, facing significant repairs to the HVAC system and building plumbing, and significant and costly upgrades to bring the building into compliance with ADA standards, the Chamber asked the City to be released from the Reversionary Interest Conditions. On September 10, 2018, the City Council approved Resolution 18-121 and released any interest the City had in the building and property, including releasing

the Chamber from all Reversionary Interest Conditions. The stated purpose in Resolution 18-121 of releasing the Chamber was "so that the Chamber may move forward with future planning for the property and building consistent with the City's Central Clovis specific plan and applicable zoning." As a result of Resolution 18-121, the City has no legal or equitable interest in the building or property, and the Chamber is not subject to any conditions restricting the use of the building or development of the property other than the Central Clovis Specific Plan and applicable zoning.

Since 2018, the Chamber of Commerce Board of Directors and staff have explored the following four options for the property:

1. Repair the building
2. Sell the property
3. Scrape and rebuild the building
4. Create a partnership with a developer who will remove the current building and construct a new building. The Chamber would enter into this partnership on the strength of the equity of land with the developer covering the cost of construction. The outcome for the Chamber would be a condominium-type office that would remain the property of the Chamber of Commerce in perpetuity.

To date, the Chamber staff has explored all options, but has not made a final decision.



CITY of CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council
 FROM: Administration
 DATE: May 2, 2022
 SUBJECT: Receive and File – Update on 325 Pollasky Avenue (Clovis Chamber of Commerce Building).

Staff: Andrew Haussler, Assistant City Manager

Recommendation: Receive and File

ATTACHMENTS: 1. Background Documentation

CONFLICT OF INTEREST

Mayor Jose Flores maintains financial interest in a property within 1,000 feet of subject property and, pursuant to law, must abstain from participation and decision regarding this item.

RECOMMENDATION

That the City Council receive and file the update on 325 Pollasky Avenue (Clovis Chamber of Commerce Building).

EXECUTIVE SUMMARY

Since 1986, the building located at 325 Pollasky has been occupied and maintained by the Clovis Chamber of Commerce through an agreement for conveyance of use. In 2018, City Council approved a resolution releasing all interest in the subject property. Since that time, the Clovis Chamber of Commerce has continued exploring future use of the property.

BACKGROUND

The building owned by the Clovis Chamber of Commerce is located at 325 Pollasky Avenue. It was built in 1914 and originally served as the Clovis Library. The construction was financed through a grant from the Carnegie Foundation, which funded 2,509 such libraries between 1883 and 1929. The building remained in continuous use as a public library until 1976, when the new Clovis Library opened at 1133 Fifth Street. In exchange for the new library site, the County of Fresno deeded ownership of the building and land at 325 Pollasky to the City of Clovis.

Upon taking possession of the property, the City of Clovis was committed to renovating and converting the building into a use which could serve as a public meeting space. However, the costs for renovation ranged from \$150,000 to \$160,000.

In 1979, the City of Clovis replaced the foundation at a cost of \$70,000. By 1983, a group of citizens managed to raise \$13,000 for additional restoration work. Those funds, along with donations of labor and supplies, enabled the group to complete some additional restoration work.

In 1986, the City of Clovis entered into an agreement with the Clovis Chamber of Commerce to transfer ownership of the building and property to the Chamber. The agreement included several conditions ("Reversionary Interest Conditions"), which were to be included in the deed conveying the property to the Chamber:

- Chamber must complete remodeling of the building.
- Chamber may not convey any interest in the property without consent of the City.
- Chamber must remain as a non-profit corporation organized as a chamber of commerce.
- Chamber must maintain the upper floor of the building for public use or short-term rental for public and community groups.
- Chamber must maintain the building in good condition and repair.

As part of the agreement, the City was also to retain the ability to take back title to the property in the event of a default by the Chamber.

Since 1986, the Chamber has continuously occupied the building. During that time, the Clovis Chamber of Commerce bore all costs for repairs and maintenance for the building and property. Some of these repairs and upgrades include total replacement of roof, total overhaul of landscaping and irrigation, and overhaul of front entry. Between 2012 and 2016, the building experienced issues which included the total failure of HVAC equipment, severe roof leak, and a water main break.

The building is also not ADA compliant, which has prevented the Chamber of Commerce from being able to legally operate inside the building.

In 2016, City of Clovis staff discovered that although the deed conveying the property from the City to the Chamber was executed in 1986, none of the Reversionary Interest Conditions required by the agreement were included in the deed. Also, the 1986 agreement was not recorded. Therefore, the legally enforceable status of the Reversionary Interest Conditions was in doubt.

In 2017, facing significant repairs to the HVAC system and building plumbing, and significant and costly upgrades to bring the building into compliance with ADA standards, the Chamber asked the City to be released from the Reversionary Interest Conditions. On September 10, 2018, the City Council approved Resolution 18-121 and released any interest the City had in the building and property, including releasing the Chamber from all Reversionary Interest Conditions. The stated purpose in Resolution 18-121 of releasing the Chamber was "so that the Chamber may move forward with future planning for the property and building consistent with the City's Central Clovis Specific Plan and applicable zoning." As a result of Resolution 18-121, the City has no legal or equitable interest in the building or property, and the Chamber is not subject to any conditions restricting the use of the building or development of the property other than the Central Clovis Specific Plan and applicable zoning.

Since 2018, the Chamber of Commerce Board of Directors and staff have explored options for the future of this building and property but have not made a final decision. Likewise, the City of Clovis has not been in receipt of any plans or applications for demolition, improvements, or redevelopment.

The City of Clovis has no legal interest in the subject property.

FISCAL IMPACT

The City of Clovis has no financial interest in the subject property.

REASON FOR RECOMMENDATION

The attached report serves as information only. Beyond the review of information by Council, no action is requested.

ACTIONS FOLLOWING APPROVAL

Staff will file information.

Prepared by: Shawn Miller, Business Development Manager

Reviewed by: City Manager *SM*

SAVE OUR 1914 CARNEGIE LIBRARY COMMITTEE

c/o Clovis-Big Dry Creek Historical Society

401 Pollasky Avenue
Clovis, CA 93612-1141

AGENDA ITEM NO. 19.

AGENDA ITEM NO. 18.

May 16, 2022

Mr. John Holt
City Manager
City of Clovis
1033 Fifth Street
Clovis, CA 93612

Dear Mr. Holt,

Two years ago the Clovis-Big Dry Creek Historical Society formed a committee to advocate for the preservation of the Carnegie Library building in Old Town Clovis, listed among the Fresno County Historical Landmarks and Records Advisory Commission's Inventory of Historic Sites in Fresno County.

We believe that Old Town Clovis should continue to be defined by its authentic historical buildings wherever feasible. The campaign to protect the Carnegie Library building has accentuated the absence of a City of Clovis Historic Preservation Commission to review projects and plans that may affect the City's historic and cultural heritage. Typically such commissions encourage public participation.

We believe that prompt action by the City to establish a Historic Preservation Commission will:

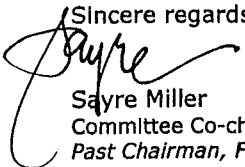
- discourage demolition of our cultural history
- take a vital step toward applying to be a state Certified Local Government to expedite environmental reviews and create opportunities for grant funding
- promote conservation of resources and reduce waste and expense by repairing and reusing existing buildings, greatly reducing their carbon footprint
- encourage identification of significant buildings to educate the public about local history
- contribute expertise in period architecture to maintain the authenticity of Old Town and other historical sites, and
- generate enthusiasm for Clovis' unique character, both as a destination and for the benefit of local citizens.

Many municipalities maintain a Local Register of Historic Resources. Such resources are researched and evaluated as to their significance, and often are marked by plaques or other insignia to illuminate a town's historical development. We believe that Clovis is worthy of such a project.

The Council gave verbal direction to staff at the City Council meeting on May 2, 2020, to initiate the formation of a Historic Preservation Commission. Our citizen group endorses this action with enthusiasm. In addition to the committee—comprised of seven Clovis citizens who are passionate about the preservation of historically significant landmarks—we have consulted an advisory group comprised of John Wright, former City of Clovis Planning Director; Elizabeth Laval, President, Fresno County Historical Society; Karana Hattersley-Drayton, former City of Fresno Historic Preservation Project Manager; and Chris Johnson, AIA, Principal and Project Lead for the 2005 restoration of Fresno's Santa Fe Depot. We offer our services to aid the City in the establishment of a Clovis Historic Preservation Commission.

If you would like to discuss this issue, please contact me by phone at (559) 930-3619, or by email at sayremcfarlanemiller@gmail.com.

Sincere regards,



Sayre Miller
Committee Co-chair
Past Chairman, Fresno County Historical Society

Peg Bos, Committee Co-chair
Past President, Clovis-Big Dry Creek Historical Society

Paul Halajian
Architect, Old Town Clovis

Tom Wright
Board Chairman, Clovis Veterans Memorial District

Carol Smittcamp Copeland
Business Owner, Old Town Clovis

Don Bremseth
Architect / 1979-85 Carnegie Library
Restoration Committee Member

Betsy Smittcamp Kimball
President, Smittcamp Family Foundation

ATTACHMENT 3



CITY of CLOVIS

REPORT TO THE CITY COUNCIL

TO: Mayor and City Council

FROM: Administration

DATE: June 6, 2022

SUBJECT: Consider – A request from Clovis-Big Dry Creek Historical Society for the City Council to Create a Historical Preservation Commission.

Staff: Andrew Haussler, Assistant City Manager
Recommendation: Consider request and provide direction.

ATTACHMENTS: 1. Letter from Clovis-Big Dry Creek Historical Society

CONFLICT OF INTEREST

None.

RECOMMENDATION

For the City Council to provide direction to staff based on the request from the Clovis-Big Dry Creek Historical Society to form a Historical Preservation Commission.

EXECUTIVE SUMMARY

Staff is in receipt of a request (attached) to the City Manager from the Clovis-Big Dry Creek Historical Society to form a historical preservation commission.

BACKGROUND

After the discussion regarding the status of the Clovis Carnegie Library Building on May 2, 2022, the Clovis-Big Dry Creek Historical Society submitted a letter on May 16, 2022, to the City Manager requesting that the City form a Historical Preservation Commission. The City currently does not have a Historical Preservation Commission. The letter from the Clovis-Big Dry Creek Historical Society refers to the Council giving verbal direction to staff at the May 2nd Council meeting to initiate the formation of a Historical Preservation Commission. However, no action was taken at that meeting. Staff now seeks Council's direction on the potential formation of such a Commission.

When the Zoning Code was updated in 2014, a definition for "Historical Preservation Board" was included in Chapter 9.120, and defined to be a *City review board designated to promote the cultural, economic, educational, and general welfare of the City through the preservation and*

protection of buildings, sites, structures, areas, and districts of historic significance and interest. Although a definition for the Board was included, no other provisions in the Zoning Code address a Historic Preservation Board or require its creation, *and* the City has not taken action to establish such a Board. To establish a Historic Preservation Commission (or Board) the City Council would need to initiate and approve an amendment to the Zoning Code to incorporate such a Board into the development review process for designated buildings and sites.

The role of a Historic Preservation Commission can vary as determined by the City Council. Many similar commissions in other cities review historic resources such as buildings, sites, structures, areas, and districts of historic significance and interest, and determine what should be recommended as designated for protection, subject to City Council approval. A commission may also serve as an additional reviewing/advisory body, reviewing and making recommendations on a designated site application to the Planning Commission. If an owner of one of those designated buildings, sites, structures, areas, and districts of historic significance and interest wants to make improvements and/or changes the Historic Preservation Commission would review and determine if the request is appropriate and then recommend approval or denial of the application to the Director, Planning Commission, and City Council, depending on the entitlement. While this would add a layer of protection to designated historic resources it may also deter investment as it could increase approval timeframes and potentially increase expenses to make improvements.

It is likely amendments and/or additions to the City's General Plan would also be required for the Historic Preservation Commission to determine standards to apply. Currently in the City of Clovis, historic preservation is governed by the General Plan in the Open Space and Conservation Element under *Goal 2: Natural, agricultural, and historic resources that are preserved and promoted as key features for civic pride and identity.* This is implemented by the following policies:

- Policy 2.9: National and state historic resources. Preserve historical sites and buildings of state or national significance in accordance with the Secretary of Interior Standards for Historic Rehabilitation.
- Policy 2.10: Local historic resources. Encourage property owners to maintain the historic integrity of the site by (listed in order of preference): preservation, adaptive reuse, or memorialization.
- Policy 2.11: Old Town. Prioritize the preservation of the historic character and resources of Old Town.
- Policy 2.12: Public education. Support public education efforts for residents and visitors about the unique historic, natural, and cultural resources in Clovis.

In addition, the Central Clovis Specific Plan further implemented the above goal and policies with design guidelines and language desiring to preserve the historic nature of the Old Town area.

Staff is currently seeking direction from Council regarding a request to establish a Historic Preservation Commission. Below are some options for Council to consider:

- 1) Keep status quo as currently determined in the General Plan as provided above.
- 2) Direct staff to review historic preservation in the General Plan Update currently underway to determine any new goals, policies, and implementation steps such as establishing a Historical Preservation Commission.
- 3) Direct staff to bring back the necessary items for Council to consider establishing a Historical Preservation Commission before completing the General Plan Update.

FISCAL IMPACT

At this point in the discussion there is no fiscal impact.

REASON FOR RECOMMENDATION

Staff is in receipt of a request to the City Manager from the Clovis-Big Dry Creek Historical Society to form a historical preservation commission.

ACTIONS FOLLOWING APPROVAL

Staff will implement Council direction.

Prepared by: Andrew Haussler, Assistant City Manager

Reviewed by: City Manager *JH*

SUMMARY OF DRAFT ORDINANCE

1. The Historic Preservation Board (“Board”) will consist of five (5) members.
2. Each member shall be:
 - a. Appointed by the City Council, following recommendation by the Mayor; and
 - b. A resident of the City; and
 - c. Appointed to a four (4) year term. For the initial appointment, three (3) members will be appointed for a four-year term and the remaining two (2) members will be appointed to a two-year term.
3. The Council and Mayor may consider appointing members from, but not limited to, such professions, disciplines, and interests as: licensed architects and structural engineers; urban planners and landscape architects; attorneys and real estate experts; members of community groups and residents within historic districts, occupants of historic landmarks, and owners of historic sites.
4. The Board will meet at least once per month.
5. The Board will be an advisory body to the Planning Commission and City Council.
6. “Historic District” means the original one square mile of the City of Clovis, bounded by Barstow Avenue to the south, Sunnyside Avenue to the east, Sierra Avenue to the north, and Minnewawa Avenue to the west.
7. “Historic Landmark” means any non-residential improvement in the Historic District.
8. The Board would:
 - a. Develop and recommend an initial list of historic landmarks and historic sites within the Historic District for the Planning Commission and City Council to consider.
 - b. Establish criteria for, conduct and keep current a register of historic resources within the boundaries of the City subject to approval by the City Council.
 - c. Recommend to the Planning Commission and City Council guidelines for the designation of historic landmarks and historic sites.

9. Historic landmarks and historic sites will be established in the following manner:
 - a. The Board may request the designation of an improvement as a historic landmark or the designation of a historic site or historic district, on its own accord, or based on testimony by members of the public.
 - b. The Board will conduct a study of the proposed designation and make a recommendation to the Planning Commission.
 - c. The Planning Commission will conduct a hearing to consider and make a recommendation of City Council.
 - d. The City Council will consider the Planning Commission request and approve by resolution or deny. If approved, it will be added to the register of historic designations.
 - e. Annually, the Historic Preservation Board shall review the register of historic designations and present it to the Council, along with any recommended changes.
10. Before altering the exterior of, or demolishing, a historic landmark or historic site, the property owner must first obtain approval as follows:
 - a. For work that would not normally require a permit (i.e., exterior building paint color), the Director of Planning and Development Services shall approve an application if it complies with the Central Clovis Design Standards.
 - b. If a building permit is required and seeks to make minor alterations or repairs, the Director of Planning and Development Services shall approve if it complies with the Central Clovis Design Standards.
 - c. If an application is to tear down, demolish, construct, alter, remove, or relocate a historic landmark, the Planning Commission will hold a noticed public hearing and approve or disapprove the application. Such decision is appealable to the Council.
 - d. City approval is not required for ordinary maintenance and repairs.

ORDINANCE 22-__

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CLOVIS ADDING
CHAPTER 9.81 OF TITLE 9 OF THE CLOVIS MUNICIPAL CODE CREATING A
HISTORIC PRESERVATION BOARD**

The City Council of the City of Clovis does ordain as follows:

Section 1. Chapter 9.81 of Title 9 of the Clovis Municipal Code is hereby added to read as follows:

Chapter 9.81

HISTORIC PRESERVATION BOARD

Sections:

- 9.81.01 Purpose and Findings.
- 9.81.02 Definitions.
- 9.81.03 Creation of Historic Preservation Board.
- 9.81.04 Powers and Duties of Historic Preservation Board.
- 9.81.05 Historic Designation Criteria.
- 9.81.06 Historic Designation Procedures.
- 9.81.07 Permit Required.
- 9.81.08 Permit Approval Procedure.
- 9.81.09 Permit Approval Criteria.
- 9.81.10 Appeals.
- 9.81.11 Ordinary Maintenance and Repair.
- 9.81.12 Unsafe or Dangerous Conditions.
- 9.81.13 Duty to Keep in Good Repair.
- 9.81.14 Showing of Hardship.
- 9.81.15 No Retroactive Application.
- 9.81.16 Failure to Act

9.81.01 Purpose and Findings.

The purpose of this Chapter is to promote the cultural, economic, educational, and general welfare of the City through the preservation and protection of buildings, sites, structures, areas, and districts of historic significance and interest.

9.81.02 Definitions.

- A. "Alteration" means any exterior change or modification, of any historic resource including, but not limited to, exterior changes to or modifications of structure, architectural details, or visual characteristics such as paint color and surface texture, grading, surface paving, new structures, cutting or removal of trees and other natural features, disturbance of archaeological sites or areas, and the

placement or removal of any exterior objects such as signs, plaques, light fixtures, street furniture, walls, fences, steps, paintings and landscape accessories affecting the exterior visual qualities of the property.

- B. "Historic District" means the original one square mile of the City of Clovis, bounded by Barstow Avenue to the south, Sunnyside Avenue to the east, Sierra Avenue to the north, and Minnewawa Avenue to the west.
- C. "Historic Landmark" means any non-residential improvement in the historic district that has special historic, cultural, aesthetic, or architectural character, interest, or value as part of the development, heritage, or history of the City, the State, or the nation, and that has been designated pursuant to this Chapter.
- D. "Historic Resource" means non-residential improvements, buildings, structures, signs, features, sites, places, areas, or other objects of historic aesthetic, educational, cultural, or architectural significance to the citizens of the City, within the historic district, which may or may not have been officially designated as "historic landmarks" or "historic sites" as hereinafter defined.
- E. "Historic Site" means a parcel or part thereof, within the historic district, on which a historic resource is situated and any abutting parcel or part thereof constituting part of the premises on which the historic resource is situated, and which has been designated a historic site pursuant to this Chapter.
- F. "Improvement" means any building, structure, place, parking facility, fence, gate, wall, work of art or other object constituting a physical betterment of real property, or any part of such betterment.
- G. "Preservation" means the identification, study, protection, restoration, rehabilitation, or enhancement of historic resources.

9.81.03 Creation of Historic Preservation Board.

- A. Establishment. In order to execute the purposes declared in this Chapter, there is created a Historic Preservation Board.
- B. Appointment.
 - 1. The Historic Preservation Board shall consist of five (5) members.
 - 2. Each member shall be:
 - a. Appointed by the City Council, following recommendation by the Mayor;
and

- b. A resident of the City; and
 - c. Appointed to a four (4) year term. For the initial appointment, three (3) members will be appointed for a four-year term and the remaining two (2) members will be appointed to a two-year term.
3. The Council and Mayor may consider appointing members from, but not limited to, such professions, disciplines, and interests as: licensed architects and structural engineers; urban planners and landscape architects; attorneys and real estate experts; members of community groups and residents within historic districts, occupants of historic landmarks, and owners of historic sites.
- C. Meetings. The Historic Preservation Board shall hold regular meetings at least once per month.

9.81.04 Powers and Duties of Historic Preservation Board.

The Historic Preservation Board shall have the following powers and duties:

- A. The Historic Preservation Board will be an advisory body to the Planning Commission and City Council.
- B. The Historic Preservation Board will develop and recommend an initial list of historic landmarks and historic sites within the Historic District for the Planning Commission and City Council to consider.
- C. Establish criteria for, conduct and keep current a register of historic resources within the boundaries of the City subject to approval by the City Council.
- D. Recommend to the Planning Commission and City Council guidelines for the designation of historic landmarks and historic sites subject to the provisions of Section 9.81.05 of this Chapter.
- E. Review and comment upon the conduct of land use, housing and redevelopment, municipal improvements and other types of planning and programs undertaken by any other agency of the City, the County or State as they relate to the historic resources of the community as requested by City Council.
- F. Recommend standards to be considered by the City Council to be used by the Director of Planning and Development Services, Historic Preservation Board, and the Planning Commission in reviewing applications for permits to construct, change, alter, modify, remodel, remove or significantly affect any historic resource. Such standards shall include the Standards for Rehabilitation adopted by the United States Secretary of the Interior, as set forth in 36 Code of Federal Regulations part 1208, as said part may from time to time be amended.

- G. Investigate and report to the City Council on the use of various Federal, State, local or private funding sources and mechanisms available to promote historic preservation in the City.
- H. Recommend approval or disapproval, in whole or in part, applications for permits pursuant to this Chapter.
- I. Render advice and guidance, upon the request of the owner or occupant of the property affected, on the restoration, alteration, decoration, landscaping, or maintenance of any historic resource, including a landmark, landmark site, , or property in the vicinity of the foregoing within public view thereof.
- J. Participate in, promote, and conduct public information, educational and interpretive programs pertaining to historic resources.
- K. Review and make recommendations to the City Council regarding applications for and the administration of historic property contracts submitted or entered into pursuant to Government Code sections 50280 through 50290.
- L. Perform such other duties and exercise such other powers as may be specified by the City Council.

9.81.05 Historic Designation Criteria.

- A. For the purposes of this Chapter, an improvement may be designated an historic landmark or historic site by the City Council pursuant to Section 9.81.06 of this Chapter if it meets the following criteria:
 - 1. It exemplifies or reflects special elements of the City's cultural, aesthetic, or architectural history; or
 - 2. It is identified with persons or events significant in local, State, or national history; or
 - 3. It embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship; or
 - 4. It is representative of the notable work of a builder, designer, or architect.

9.81.06 Historic Designation Procedures.

Historic landmarks and historic sites shall be established by the City Council in the following manner:

- A. The Historic Preservation Board may request the designation of an improvement as an historic landmark or the designation of an historic site or historic district, on its own accord, or based on testimony by members of the public.

- B. The Historic Preservation Board shall conduct a study of the proposed designation and, based on such documentation as it may require, make a written recommendation to the Planning Commission as to the appropriateness of the designation.
- C. Upon receipt of the written recommendation of the Historic Preservation Board, the Planning Commission shall schedule a public hearing.
- D. The Director of Planning and Development Services shall give notice of the date, place, time and purpose of the hearing, and the recommendation of the Historic Preservation Board by first class mail to all applicants, owners, and occupants of the improvement at least twenty (20) days prior to the date set for the public hearing, using the name and address of such owners as shown on the latest equalized assessment rolls, if they are otherwise not known. Notice of the hearing shall also be advertised once in the newspaper.
- E. The Planning Commission shall conduct a public hearing and shall provide a reasonable opportunity for all interested parties to express their opinions.
- F. At the conclusion of the public hearing, but in no event more than thirty (30) days from the date set for the initial public hearing or any continuance thereof for the designation of a proposed historic landmark or historic site, the Planning Commission shall recommend, in writing, approval in whole or in part, or disapproval in whole or in part, of the application. Such written determination shall contain a description of the actual property or properties to be designated and shall be filed with the City Council, the City Clerk, and the Building Official. The City Clerk shall mail notice of such decision to the applicants and the owners and occupants of the proposed designated historic site or historic landmark. Notice shall also be mailed to any other interested parties as may request a copy thereof.
- G. The City Council, within thirty (30) days of receipt of the recommendations from the Planning Commission, or as soon thereafter as possible, shall by resolution approve the application in whole or in part, or shall by motion disapprove it in its entirety. The City Council shall hold a public hearing on such proposed resolution. Notice of the time and date set for the public hearing on such proposed resolution shall be mailed to all applicants and the owners and occupants of the proposed designated historic site or historic landmark. The Council, in its public hearing on the proposed resolution, shall provide a reasonable opportunity for all interested persons to express their opinions.
- H. The City Clerk shall notify the Building Official of any official designation adopted by resolution by the City Council. The Clerk shall also file within ninety (90) days of such designation with the County Recorder a certified copy of the resolution which shall include the name of the current property owner, the designating entity, the specific historic resources designation and a legal description of the property, together with a notice briefly stating the fact of said designation and a summary of the effects said designation will have. The Clerk further shall mail a copy of the

resolution approving said designation or a copy of the minute order showing disapproval of said designation, to all applicants and the owners and occupants of the proposed designated historic site or historic landmark, and to any other person who requests a copy.

- I. Failure to send any notice by mail to any property owner where the address of such owner is not a matter of public record shall not invalidate any proceedings in connection with the proposed designation. The Planning Commission and Council may also give such other notice as they may deem desirable and practicable.
- J. While an application for designation of an improvement as an historic landmark or the designation of an historic site is pending, no building, alteration, demolition, or removal permits for any proposed historic site or historic landmark shall be issued. Exceptions may be considered in case of hardship as defined in Section.9.81.14 of this Chapter.
- K. Annually, the Historic Preservation Board shall review the register of historic designations and present it to the Council, along with any recommended changes.

9.81.07 Permit Required.

It is unlawful for any person to tear down, demolish, construct, alter, remove or relocate any improvement, or any portion thereof, which has been designated an historic landmark or historic site pursuant to the provisions of this Chapter, or to alter in any manner any exterior architectural feature of such an historic landmark or historic site, or to place, erect, alter, or relocate any sign on an historic landmark or historic site, without first obtaining written approval to do so in the manner provided in this Chapter from the Director of Planning and Development Services.

9.81.08 Permit Approval Procedure.

The following procedures shall be followed in processing applications for approval of work covered by this Chapter:

- A. The Building Official shall report any application for a demolition permit or a building permit to work on a designated historic site or historic landmark to the Director of Planning and Development Services. If the permit seeks to demolish or significantly alter or reconstruct the historic site or historic landmark, the Director of Planning and Development Services shall refer such application to the Historic Preservation Board for its review and recommendation. The Historic Preservation Board shall review the application and shall submit its written recommendation to the Planning Commission within sixty (60) days after receipt of the application from the Director of Planning and Development Services. In connection with its review, the Historic Preservation Board may hold hearings and may require any documentation it believes reasonably necessary to make its recommendation. The Historic Preservation Board shall make all recommendations in accordance with the prescriptive standards adopted pursuant to Section 9.81.05 and 9.81.04 F.

- B. If the permit seeks to make minor alterations or repairs, the Director of Planning and Development Services shall review the permit and, if the proposed work complies with the Central Clovis Design Standards, as may be amended, approve the permit. Minor alterations are those alterations which the Director of Planning and Development Services or his/her designee determines will not adversely affect the exterior architectural characteristics nor the historical or aesthetic value of the historic structure, its site, or surroundings.
- C. If no building permit would otherwise be required pursuant to the City Code, application for approval to pursue work on a designated historic site or historic landmark shall be made to the Director of Planning and Development Services. If the proposed work is in compliance with the Central Clovis Design Standards, as may be amended, the Director of Planning and Development Services shall approve the application.
- D. All applications shall be accompanied by plans and specifications describing the proposed work as well as any other material considered by the Director of Planning and Development Services, Historic Preservation Board, or the Planning Commission to be reasonably necessary for the proper review of the proposed project.
- E. Whenever the application is to tear down, demolish, construct, alter, remove, or relocate any improvement, or any portion thereof, which has been designated a historic landmark or historic site pursuant to the provisions of this Chapter, the Planning Commission shall hold a public hearing thereon. The Planning Commission may hold public hearings on other applications as they deem necessary.

The hearing shall be held at the next available regularly scheduled Planning Commission meeting after receipt of the Historic Preservation Board's recommendation, and after proper notice has been given of such hearing. Notice of such hearing shall be given by first class mail to each applicant at least ten (10) days prior to the date set for such hearing. Notice of the hearing shall also be advertised once in the newspaper not less than five (5) calendar days prior to said hearing. Any hearing may be continued from time to time by the Planning Commission.

- F. At the close of the hearing, the Planning Commission shall approve or disapprove, in whole or in part, such application in accordance with the standards adopted pursuant to Section 9.81.05 and 9.81.04 F, considering the recommendations of the Historic Preservation Board. The Planning Commission's decision shall be in writing and shall state the findings of fact relied upon in reaching such decision. Such decision may be appealed to the City Council.

9.81.09 Permit Approval Criteria.

The Director of Planning and Development Services, Planning Commission, or the City Council upon appeal, shall issue an approval for any proposed work as described in Section 9.81.08 based upon the following criteria or other criteria as determined by the Planning Commission pursuant to Section 9.81.05:

- A. In the case of any property designated a historic landmark, the proposed work would not detrimentally alter, destroy, or adversely affect any exterior architectural feature; or
- B. In the case of construction of a new improvement, building, or structure upon a historic site, the exterior of such improvements will not adversely affect and will be compatible with the external appearance of existing designated improvements, buildings, and structures on said site.

9.81.10 Appeals.

Any interested party may appeal any decision of the Planning Commission pursuant to Section 9.81.09 to the City Council by filing an appeal within fifteen (15) days after the date of the notice of the Planning Commission's decision in accordance with the procedures and requirements set forth in Chapter 9.90 of the Municipal Code.

9.81.11 Ordinary Maintenance and Repair.

Nothing in this Chapter shall be construed to prevent any reasonable uses of any property or properties covered by this Chapter that are not in conflict with the purposes of this Chapter, including the ordinary maintenance or repair of said property that does not involve a change in design, material, or external appearance thereof.

9.81.12 Unsafe or Dangerous Conditions.

Nothing in this Chapter shall be construed to prevent any measures of construction, alteration or demolition necessary to correct the unsafe or dangerous condition of any structure, or feature or part thereof, covered by this Chapter, where such condition has been declared unsafe or dangerous by the Building Official or the Fire Marshal, and where the proposed measures have been declared necessary by such officials to correct such condition; provided, however, that only such work as is reasonably necessary to correct the unsafe or dangerous condition may be performed. In making a determination as to whether such work is reasonably necessary as aforesaid, the above-mentioned officials may refer to, and be guided by, the State Historical Building Code (H&S Code section 18950 et seq.) as the same may from time to time be amended, revised, or replaced.

9.81.13 Duty to Keep in Good Repair.

The owner, occupant, or other person in actual charge of a historic resource shall keep in good repair all of the exterior portions of such improvement, building or structure. It shall be the duty of the Building Official to enforce this Section.

9.81.14 Showing of Hardship.

The Planning Commission need not disapprove an application for a permit to carry out any proposed work on a historic landmark or a historic site, if the applicant presents clear and convincing evidence of facts demonstrating to the satisfaction of the Planning Commission that such disapproval will cause immediate and substantial hardship on the applicant because of conditions peculiar to the person seeking to carry out the proposed work, whether this be the property owner, tenant, or resident, or because of conditions peculiar to the particular improvement, building, or structure or other feature involved, and that failure to disapprove the application will be consistent with the purposes of this Chapter. In determining whether extreme hardship exists, the Planning Commission shall consider, among others, the following criteria:

- A. Whether denial of the applicant will diminish the value of the subject property so as to leave substantially no value.
- B. Whether reasonable utilization of the property is prohibited or impractical.

If a hardship is found to exist under this Section, the Planning Commission shall make a written finding to that effect and shall specify the facts and reasons relied upon in making such finding. Such finding may be appealed to the City Council pursuant to the provisions of Section 9.81.10.

9.81.15 No Retroactive Application.

The provisions of this Chapter shall be inapplicable to the construction, alteration, demolition or removal of any structure or other feature on a designated historic landmark or historic site, where a permit for the performance of such work was issued prior to initiation of proceedings for such designation, and where such permit has not expired or been cancelled or revoked, provided that construction is started and diligently prosecuted to completion in accordance with the City Building Code.

9.81.16 Failure to Act.

If for any reason, the Historic Preservation Board fails to take action within the timelines provided in this Chapter, the matter shall automatically proceed to the Planning Commission for consideration and action.

Section 2. This Ordinance shall go into effect and be in full force from and after thirty (30) days after its final passage and adoption.

APPROVED:

Mayor

City Clerk

* * * * *

The foregoing Ordinance was introduced and read at a regular meeting of the City Council held on this ___ day of _____ 2022, and was adopted at a regular meeting of said Council held on this ___ day of _____, 2022, by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

Dated:

DRAFT

City Clerk