



**ESTUARY TRANSIT DISTRICT
REGULAR BOARD MEETING**
ETD Offices, 91 N. Main Street, Middletown, CT
with Remote Options
October 14, 2022 at 9:00 AM

AGENDA

- I. Call to Order — L. Strauss, Chair
- II. Roll Call — T. Griswold, Secretary
- III. Visitors' Comments
 - [1.](#) Fare Study Presentation
- IV. Secretary's Report — T. Griswold
 - [1.](#) Acceptance of Board Meeting Minutes of September 9, 2022
 - [2.](#) Acceptance of Facilities (formerly Expansion Transition) Committee Minutes of September 27, 2022
 - [3.](#) Acceptance of Finance Committee Minutes of October 12, 2022
- V. Communications — T. Griswold
- VI. Treasurer's Report — C. Norz
- VII. Committee Reports
 - 1. Facilities Committee — J. Gay, Chair
 - 2. Finance Committee — C. Norz, Chair
 - [3.](#) Marketing Committee — L. Strauss, Chair
 - 4. Legislative Committee — J. Gay, Chair
 - 5. Transit Advisory Committee — T. Griswold, Chair
 - 6. Service Study Committee — C. Norz, Chair
 - 7. Nominating Committee — A. McDonald, Jr., Chair
 - 8. Personnel Committee — K. Kilduff, Chair
 - 9. COG Update — J. Comerford
- VIII. Executive Director's Report — J. Comerford
- IX. Transit Planner's Report — B. Geraghty
- X. Finance Director's Report — H. Famiglietti
 - [1.](#) Budget vs. Actual
 - [2.](#) Cash Flow
- XI. Operations Director's Report — J. Whitcomb

1. 2022 Ridership

XII. Maintenance Director's Report — P. Hevrin

XIII. New Business

1. Bus Purchase Resolutions

XIV. Old Business

XV. Chair Comments

XVI. Board Members Comments

XVII. Executive Session

XVIII. Next Meeting — November 18, 2022 at 9:00 AM with Remote Options

XIX. Adjournment

Join Zoom Meeting

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Language Assistance is available. If you need assistance, please call Lisa at 860-510-0429 ext. 104 at least 48 hours prior to the meeting.

Estuary Transit
District Fare Study

Evaluation Criteria and Conceptual Options

September 12, 2022

HATCH LTK

Positive Change for the Next Century

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Introduction

The Middletown Transit District (aka Middletown Area Transit) (MAT) and Estuary Transit District (ETD) (aka 9 Town Transit) are in the process of merging as one operating entity. The Boards of Directors and member municipalities of their respective agencies have already merged to function as one administrative entity. However, two operations continue to provide service under separate brands, operating fleets, and policies.

Together, MAT and ETD are performing several distinct studies and analyzing various elements of their operations in preparation for a full merger of operations. These efforts include this Fare Study which is evaluating the existing fare structures and fare equipment currently in place at both MAT and ETD, as well as providing recommendations regarding fare policies and collection as one seamless transit operation.

The following sections in this memorandum discuss the development of criteria for evaluating fare policies and structures in this study and provide conceptual options for new fare structures. These criteria will form the basis for evaluating the existing fare structure, proposed fare structure alternatives and products, and targeted fare programs to address concerns regarding revenue, ridership, and special fares for specific groups.

Framework of Fare Decision-Making Process

While the exact decision-making process among transit agencies varies considerably, there are essentially five fundamental parameters related to fare decisions:

- **Fare Policy** is defined in a wide variety of ways. While in the broadest sense it could be used to apply to the entire decision-making process, it is most usefully defined as the principles, goals, objectives, and constraints that guide and restrict the management of a transit agency with respect to setting and collecting fares.
- **Fare Strategy** refers to a general fare collection/payment structural approach, such as flat fare, differential pricing (e.g., by distance traveled, time of day or type of service), market-based or discounted payment options, and transfer pricing.
- **Fare Structure** represents the combination of one or more fare strategies with specific fare levels.
- **Fare Payment Technology** refers to the types of fare payment media (e.g., cash, token, paper tickets, magnetic stripe cards or smart cards) and equipment used for fare collection and sale/distribution of media.
- **Fare Collection Approach** is the basic method used to collect fares, such as payment on entry, payment on exit, and proof of payment.

A transit agency must make decisions, at one point or another, about each of these parameters. While each area is typically evaluated separately, policy generally sets the direction for strategy and specific structures, and often for the technology and system approach.

This memorandum focuses on just one element of the fare decision making process, **Fare Policy**, by establishing a set of prioritized criteria to answer the question: “How do we decide if our fare collection system is doing a good job?”

Fare Policy and Goals

Defining and prioritizing fare policy and goals is often carried out by senior management or the agency's governing board through some form of group decision-making processes, and without any particular quantitative analysis. Policies and goals generally address the following types of issues:

- *Financial goals* (e.g., meeting a specific revenue or farebox recovery level, maintain/increase revenue stream, reduce fare evasion, reduce costs, reduce cash as a method of payment, improve revenue control, and/or reduce future capital outlays).
- *Customer-related goals* (e.g., increase customer satisfaction, reduce complexity, maximize social equity, increase ridership, and/or increase fare options).
- *Management goals* (e.g., improve modal connectivity, improve data collection and reporting, streamline fare collection process, improve operations, improve boarding and alighting speed, and/or maximize ease of implementation).
- *Political goals* (e.g., maximize political acceptability, establish support from local interests, and/or comply with Title VI and Environmental Justice regulations).
- *Vehicle operator goals* (e.g., simplify collections, reduce customer/operator disputes, and/or reduce fare avoidance).

The actual fare policy and goals adopted depend on specific agency needs and principal concerns at the time of adoption.

Fare Policy Considerations for ETD and MAT

Several factors have been taken into consideration in developing fare policy options for ETD/MAT:

- ETD and MAT Board of Directors, management, and staff goals
- CTDOT and CTtransit staff goals
- Federal requirements
- Assessment of Existing ETD Fare Structures (*see separate report*)

Survey of Board, Management, and Staff

During the summer of 2022, members of ETD and MAT's Board of Directors and ETD and MAT senior management and key staff were surveyed on the importance of a set of potential criteria as fare policy goals and on the extent to which the current ETD/MAT fare structure meets these criteria. Key staff of the Connecticut Department of Transportation (CTDOT) and CTtransit were also surveyed on the importance of these potential criteria.

All survey respondents were asked to evaluate ten items relating to future ETD/MAT fare policy. Respondents were asked to rate potential fare policy goals on a scale of 1 to 5, with “1” indicating strong disagreement and “5” indicating strong agreement. The results are presented in Table 1 below, with a discussion of the average results following. Both surveys are attached as appendices.

	ETD/MAT Board Members	ETD/MAT Management and Staff	CTDOT/CTtransit	Average of Groups
1. Extent to which the fare structure improves customer convenience and reduces barriers of use	4.67	3.33	4.86	4.29
2. Extent to which the fare structure is simplified	4.44	3.50	4.71	4.22
3. Extent to which the fare products address the needs of common rider types (e.g. students, commuters, recreational travel, etc..)	3.67	3.83	3.57	3.69
4. Extent to which the fares are equitable with respect to different jurisdictions and geographical areas	4.27	3.50	4.33	4.03
5. Extent to which the fare structure maximizes revenue	2.89	2.33	2.57	2.60
6. Extent to which the fare structure maximizes ridership	4.09	3.83	4.43	4.12
7. Extent to which the fare structure promotes intermodal and interagency travel	3.22	3.50	4.17	3.63
8. Impact on reduced fare discounts (e.g., for seniors, persons with disabilities, youth)	4.00	3.50	4.00	3.83
9. Extent to which the fare structure reflects distance, type/level/speed of service, customer amenities, or cost of service	3.29	3.00	2.14	2.81
10. Extent to which the fare structure is affordable to low-income individuals, seniors, and other transportation-disadvantaged individuals	4.00	4.17	4.43	4.20

Survey Results

ETD and MAT Board members and CTDOT/CTtransit staff both identified the same top two goals: 1) customer convenience/removing barriers to use, and 2) fare simplification. They also agreed that maximizing ridership and affordability for low-income individuals, seniors, and other transportation-disadvantaged individuals were very important goals.

ETD and MAT management and key staff identified fare affordability as most important with maximizing ridership and addressing the needs of common rider types tied for second; these generally align with top Board Members and CTDOT and CTtransit staff goals. The biggest difference is that ETD and MAT staff rated the extent to which the fare products address the needs of common rider types as slightly more important than fare simplification and customer convenience.

Overall, averaging these rankings over the three groups of survey respondents (equally weighted), the most important fare policy goals were identified as:

1. Customer Convenience / Removing Barriers to Use
2. Fare Simplification
3. Fare Affordability
4. Maximizing Ridership

The extent to which the fare structure maximizes revenue and the extent to which the fare structure reflects service attributes were consistently ranked low by all three groups. Unsurprisingly, the greatest difference in ratings related to the extent which the fare structure promotes intermodal and interagency travel, which was ranked second lowest by the Board Members, and moderate by ETD/MAT management, staff, and CTDOT and CTtransit staff. These two sets of ranks are internally consistent and reflect the general effort of transit agencies to restore ridership post-COVID.

Several respondents suggested that ETD/MAT consider the possibility of eliminating fares, at least on fixed route service, suggesting that this would increase ridership and that eliminating the costs of fare collection could significantly offset the lost fare revenue.

Key Federal Requirements

The fare structure of any US transit agency also needs to consider the requirements of *Title VI of the Civil Rights Act of 1964*, the *Executive Order 12898 on Environmental Justice (EJ)*, and the *Americans with Disabilities Act (ADA)*. Title VI, the Executive Order, and their implementing regulations prohibit transit agencies from discriminating against minority populations and require them to identify and address disproportionately high and adverse impacts on minority and low-income populations.

Specific Title VI/EJ requirements for transit agencies are set forth in the Federal Transit Administration's *Circular 4702.1B* and depend on the size of the agency. As long as ETD and MAT fall under the threshold of operating 50 or more fixed route vehicles in peak service, the agency will not be required to complete a formal process to evaluate fare changes for their equity impact. However, ETD and MAT do need to consider the impact of any fare changes on minority and low-income populations and to avoid or mitigate discriminatory and/or disproportionate impacts.

The ADA requires that public transportation be provided to individuals with disabilities be equivalent to the service provided to individuals without disabilities as detailed in *Circular 4710.1*. With respect to fares, the ADA requires that general public services cannot charge a higher fare for individuals with disabilities than the base fare for other members of the public using the same service. For fixed-route services, transit agencies must operate complementary paratransit with a fare no greater than twice that charged for the equivalent fixed-route trip. For a route-deviation service the fare limitations include prohibiting charging excessive surcharges for a deviation.

Findings from the Existing Fare Structures Report

The *Existing Fare Structures Report* (ETD Fare Study, July 2022) identified a set of key issues and opportunities based on the reviews of current MAT and ETD fare structures. These included:

- Creating one uniform fare policy with consistent fare products and pricing. However, it is recognized that in some instances, fare products and pricing may vary depending on the design of local Dial-A-Ride services and the municipal and other subsidies offered
- Establishing consistent senior, youth, and child eligibility criteria and pricing across all services
- Accepting CTtransit GoCT card and other transit agency fare cards for state-wide fare integration
- Uniform transfer agreements with other agencies, including CTtransit, CTrail, and Shore Line East
- Providing adequate sales locations and determining which fare products will be sold at physical locations and on the Token Transit App, and whether product orders will continue to be fulfilled by mail
- Addressing issues of equity in terms of which fare products are available through which sales channels
- Creating one unified website
- Coordinating fare policy decisions with future state and ETD/MAT fare equipment replacement plans
- Clarification of ETD Town Rates and Taxi Vouchers, and inclusion with MAT once merged

Conclusion and Conceptual Options

The overall direction for future ETD and MAT fare policy was clearly indicated by the survey results on evaluation criteria. ETD and MAT Board of Directors, ETD and MAT management and key staff, and CTDOT and CTtransit staff indicated a desire to implement a fare structure that:

- Simplifies fares;
- Maximizes ridership; and,
- Improves affordability for low-income individuals, seniors, and other transportation-disadvantaged individuals.

Ideally the future ETD and MAT fare structure will also serve the needs of all rider groups, be equitable within the new service area, and potentially facilitate intermodal and interagency travel. Some conceptual fare options that potentially meet these requirements are set forth in Table 2 below and are suggested for further analysis within this study.

Table 2: Conceptual Fare Options

Option	Descriptions	Examples	Objectives of Alternative
1. Simplify the Current Fare Structure	Make only those modifications needed to eliminate inconsistencies across current ETD and MAT fares and create a single uniform fare structure.	E.g. setting a single age limit for children traveling free and setting a single price for an All Day pass	Customer convenience / Removing barriers to use Fare simplification
2. Introduce New Reduced Fare Categories	This would build upon the simplified structure of Option 1 by expanding the categories of individuals qualifying for reduced fares.	E.g., extending reduced fares to low-income individuals	Fare simplification Increased ridership Improved affordability
3. Implement "Best Fare"	This would also build on Option 1 or 2, but would require new fare equipment capabilities.	E.g. allowing riders to accumulate the amount they pay for single trips and ride free once they have paid an amount equal to a pass	Customer convenience / Removing barriers to use Fare Simplification Increased ridership Improved affordability
4. Eliminate Fares for Some Users	This would build on Option 1 or 2 by eliminating fares for some individuals who would otherwise pay a reduced fare.	E.g., providing free fares to youth, students, seniors, and/or low-income individuals.	Customer convenience / Removing barriers to use Increased ridership Improved affordability
5. Eliminate Fixed Route Fares	Eliminate fares across all fixed route services while retaining fares for demand-responsive services.		Customer convenience / Removing barriers to use Increased ridership Improved affordability
6. Eliminating All Fares	Eliminate fares across all services		Customer convenience / Removing barriers to use Fare simplification Increased ridership Improved affordability Reduced capital and operating costs

Next Steps

The next step in this process will be to refine the above six conceptual options into developed fare alternatives. Following this we will conduct a qualitative analysis of each option with respect to the evaluation criteria identified in the fare goals surveys. We will also estimate the ridership, revenue, and cost impacts of each option.

Following this analysis, we will work with ETD and MAT staff to develop a preferred alternative based on the priorities established in the fare goals survey. If the preferred alternative is not supported by the current technology, we will identify an interim alternative that will move the agencies toward the preferred alternative while still being supported by the current technology. The preferred alternative and its technological requirements will be an input into later tasks of this project.

Appendix 1 : Evaluation Criteria Fare Structure Surveys

1.1 Evaluation Criteria Fare Structure Survey distributed to ETD and MAT Board of Directors, Management, and Staff

**MAT and ETD Fare Analysis
August 2022**

MAT and ETD have embarked on a fare study to better understand the relationship between fare changes, ridership, and revenue. An important step in this study is to confirm and rank a set of criteria that will be used to develop and evaluate alternative scenarios based on these possible fare structure/payment method changes.

1. Rate your opinion on the relative importance of each of the following criteria on a scale of 1 to 5, with “5” representing strong agreement and “1” strong disagreement.

In the first column, rate each criterion’s importance as a fare policy goal. In the second column, rate how well MAT and ETD’s *current* fare structure meet each criterion:

	Importance as a fare policy goal	Effectiveness of current MAT/ETD fare structure
a. Extent to which the fare structure improves customer convenience and reduces barriers of use		
b. Extent to which the fare structure is simplified		
c. Extent to which the fare products address the needs of common rider types (e.g. students, commuters, recreational travel, etc..)		
d. Extent to which the fares are equitable with respect to different jurisdictions and geographical areas		
e. Extent to which the fare structure maximizes revenue		
f. Extent to which the fare structure maximizes ridership		
g. Extent to which the fare structure promotes intermodal and interagency travel		
h. Impact on reduced fare discounts (e.g., for seniors, persons with disabilities, youth)		
i. Extent to which the fare structure reflects distance, type/level/speed of service, customer amenities, or cost of service		
j. Extent to which the fare structure is affordable to low-income individuals, seniors, and other transportation-disadvantaged individuals		
k. Other		

2. Please identify any specific concerns with the current fare structure, or ideas for a future fare structure, that you would like considered in this fare study:

3. Your Name and Email: _____

Thank you for participating in this effort. Your responses to these questions will assist us in developing and evaluating alternative fare structure scenarios.

Please return to Joe Comerford, jcomerford@estuarytransit.org, by August 5th, 2022.

1.2 Evaluation Criteria Fare Structure Survey distributed to CTDOT and CTtransit Staff

**MAT and ETD Fare Analysis
August 2022**

MAT and ETD have embarked on a fare study to better understand the relationship between fare changes, ridership, and revenue. An important step in this study is to confirm and rank a set of criteria that will be used to develop and evaluate alternative scenarios based on these possible fare structure/payment method changes.

1. Rate your opinion on the relative importance of each of the following criteria as a fare policy goal using a scale of 1 to 5, with “5” representing strong agreement and “1” strong disagreement.

	Importance as a fare policy goal
a. Extent to which the fare structure improves customer convenience and reduces barriers of use	_____
b. Extent to which the fare structure is simplified	_____
c. Extent to which the fare products address the needs of common rider types (e.g. students, commuters, recreational travel, etc.)	_____
d. Extent to which the fares are equitable with respect to different jurisdictions and geographical areas	_____
e. Extent to which the fare structure maximizes revenue	_____
f. Extent to which the fare structure maximizes ridership	_____
g. Extent to which the fare structure promotes intermodal and interagency travel	_____
h. Impact on reduced fare discounts (e.g., for seniors, persons with disabilities, youth)	_____
i. Extent to which the fare structure reflects distance, type/level/speed of service, customer amenities, or cost of service	_____
j. Extent to which the fare structure is affordable to low-income individuals, seniors, and other transportation-disadvantaged individuals	_____
k. Other	_____

2. Please identify any specific concerns that you would like considered in this fare study, or ideas for a future fare structure:

3. **Your Name and Email:** _____

Thank you for participating in this effort. Your responses to these questions will assist us in developing and evaluating alternative fare structure scenarios.

Please return to Piotr Milczek, piotr.milczek@ct.gov, by August 5th, 2022.

Estuary Transit
District Fare Study

Modeling Ridership and Revenue Impacts

[October 12](#) ~~September 30~~, 2022

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Introduction

The Middletown Transit District (aka Middletown Area Transit) (MAT) and Estuary Transit District (ETD) (aka 9 Town Transit) merged as one combined transit district, ETD, effective July 1, 2022. The Boards of Directors and member municipalities of the respective agencies now function as one administrative entity. However, Middletown and Estuary operations continue to operate under separate brands, fleets, and policies. ~~January 1, 2023, is the target date for rebranding as one operating entity from the customer perspective.~~

To prepare for unified operations, ETD is currently performing several studies and analyzing various elements of their operations. These efforts include this Fare Study which is evaluating existing fare structures and fare equipment in place at both MAT and ETD, as well as providing recommendations regarding unified fare polices and collection methods as one seamless transit operation.

An important consideration is understanding how potential changes in fare structure would impact overall ETD ridership and revenue. The following sections will:

1. Discuss the framework for evaluating these impacts;
2. Review existing ridership on ETD's Middletown and Estuary divisions; and,
3. Estimate the impact of the fare structures alternatives on the ridership and revenue

Framework for Estimating Ridership/Revenue Impacts

Transit agency ridership is driven by multiple factors. In general, the most important are service area population and employment, level, type, and quality of service provided, travel patterns, gas prices, and fares. More people use transit if population and/or employment densities are high, and if higher quality and more extensive transit service is provided. Travel patterns relate to where people live and where they work, shop, and engage in other activities; transit must address an individual's entire trip to be a reasonable option for use. As auto use is the principal competitor for transit, higher gas prices will drive people to use transit if it provides a reasonable option.

In terms of transit fares, higher fares generally make transit-it harder to afford transit and make it easier to justify using a car (if one is available), often reducing ridership. Conversely, lower fares generally make transit more affordable, increasing ridership. However, there are exceptions to this rule as observed during the height of the COVID-19 pandemic: even free transit service will not be used if it does not meet an individual's distinct needs and desires.

Revenue is simply ridership times fares, and thus most factors which increase ridership also increase revenue. However, fare changes almost always result in a ridership impact that is opposite to the change in fares, such that the change in revenue generated by a fare change is smaller than the change in the fare levels, i.e., a 10% increase in fares might yield a 7% increase in revenue.

For this study, which is examining the impacts of fares on ridership, all other factors are assumed to be the same. In particular, we are not forecasting that ridership will recover from the losses of COVID-19 at any specific rate. That recovery will be impacted greatly by how people change their living and working locations and their level of comfort in being in an enclosed space with strangers. Instead, we are examining only how riders will react to the fare changes.

In general, the estimation of the effects of alternative fare structures involves four basic components:

1. **Modeling Current Ridership** – Any estimation of the impact of fare changes must start with understanding current ridership and; understanding at least how many trips are taken using each fare product. Preferably we can gain an understanding of how many riders travel with what frequency and using what fare product.
2. **Price Sensitivity** – Fare option component evaluating the effect of relative changes in the price of each available fare option (e.g., cash, one-day pass, 31-day pass) on the share of riders who use each fare option. The result of this analysis is an estimate of riders' preferred fare product (i.e., what fare product riders would use if they did not increase or decrease their travel on transit).
3. **Ridership Sensitivity** – Ridership change estimates for each fare option, in each market segment, based on the elasticities of ridership, as developed above. Elasticities of ridership are most useful for small changes in fares, and other methods, including the historical experience of other agencies, must be used to analyze extremely low or free fares. Ridership across all fare options and market segments will be totaled to produce the overall ridership impact for each fare alternative.
4. **Revenue Impacts** – Calculation of the revenue effect of each fare alternative estimate. The amount of revenue lost or gained within each market segment and as well as for each fare option and is calculated using the projection of ridership and the prices of each option.

As will be discussed below, COVID-19 and the responses thereto have created a unique situation for transit agencies which requires adaptation and adjustment of the above four components. This will be included in the discussion below of MAT and ETD ridership and the estimation of the ridership and revenue impacts of alternative fare structures.

Current MAT and ETD Ridership

The core of estimating ridership and revenue impacts of fare changes is understanding current ridership and who is using the system and how they are using it. However, any examination of current ridership needs to understand the extent to which it is impacted by COVID-19, including:

1. MAT and ETD suspending fare collection from March 2020 to November 2020 and again starting April 1, 2022;
2. K-12 school closures and use of remote learning during parts of 2020 and 2021;
3. Employers increasing the use of remote work where possible starting in 2020; and
4. Employers reducing the use of remote work and increasing staff presence in their offices beginning late 2021.

The suspension of fares likely increased ridership during March through November 2020, and has clearly increased ridership starting in April 2022. It also means that there is no fare use data for these periods. The closures and increased use of remote work reduced the need to travel and thus transit ridership. The return to schools and decrease in remote work has increased ridership, but it is still unclear whether employee behavior will return entirely to what it was pre-COVID or if at least some employees have made permanent changes in where they work and how they travel. Given the above factors, ridership data from 2020, 2021, and 2022 cannot be considered as a good guide to what ridership will be in the future.

The most recent year with good ridership data is 2019, which can be used as the basis for the ridership estimation, and ~~has~~ will be used by ETD as the basis for its budget after fares are reimplemented. As of August 2022, ridership in what was MAT and what was ETD exceeded the ridership in August 2019, while when fares were last charged in March of 2022 ridership in what was MAT was at about 45% of 2019 levels and ridership on what was ETD was at about 60% of 2019 levels. It is unclear what portion of the recent growth in ridership is due to changing travel needs (e.g., returning to office work), new ETD services, ~~and what portion is due~~ solely to fares continuing to be free. However, for consistency with ETD's current budget, this analysis will use the 2019 ridership and revenue.

Nationally, transit bus ridership has seen less impact from COVID than rail transit ridership, and small agencies have seen less impact than the largest agencies. In general, this reflects the importance of commuters to agencies and to particular services. Transit agencies serving populations of less than 500,000 lost almost 80% of their ridership from late 2019 to April 2020. Since then these agencies have recovered most of their ridership. As of September 2022 these agencies were back to about 88% of their 2019 ridership,¹ even though many agencies have not restored all of their pre-COVID service due to labor shortages. Some of these smaller, bus-only transit agencies are already back to their pre-COVID ridership, while others are expected to reach that point by 2023, assuming that they solve their operator shortages and provide the same level of service. It is therefore not unreasonable to use 2019 ridership and revenue as a base case for ETD ridership after fares are restored.

It should also be noted that the two agencies collected different amounts of data regarding fares and ridership. The previous MAT was a much higher ridership system with 265,000 riders in 2019 and used Odyssey fareboxes which automatically collect data. The previous ETD had almost 68,000 riders in 2019 and used dropbox fareboxes with manual recording of ridership data. 2019 ridership for both agencies is set forth below in Table 1. More recently, both systems used Token Transit (a mobile app) for some fares from November 2020 through March 2022. Token Transit was about 10% of ridership during this period. However, Token Transit is mostly just a change in how fares are paid, those riders still used almost the same fare products as other riders.

The previous MAT had some fare products that are almost identical to each other, but ~~which~~ are slightly different due to the needs of specific purchasers, such as having a 31-Day Pass which better met the needs of the general public and a monthly pass which better met the needs of employer-based programs.

¹ APTA Ridership Trends website, (transitapp.com)

Table 1: MAT and ETD 2019 Ridership

MAT Ridership 2019											
2019	Cash Revenue	Total Ridership	Adult							CT	
			Basic Fare	1 Ride	10 Ride	Day Pass	31 Day	Local 31-Day	Local Monthly	Fare Products	Transfers
January	\$ 14,798.97	22,442	8,517	719	1,186	172	985	744	431	300	1,232
February	\$ 12,605.91	20,700	7,269	543	1,388	207	1,162	959	474	494	1,014
March	\$ 11,718.18	19,530	6,725	546	1,226	203	1,124	880	452	605	1,005
April	\$ 13,710.81	23,328	7,856	588	1,691	276	1,331	934	477	565	1,009
May	\$ 15,336.86	25,617	8,682	786	1,865	339	1,731	1,076	590	550	885
June	\$ 11,772.56	18,725	6,655	335	1,521	393	1,374	690	401	500	665
July	\$ 14,810.36	23,883	8,231	417	1,849	495	1,825	861	466	670	954
August	\$ 15,605.54	24,168	8,836	399	1,946	415	1,947	674	473	550	1,171
September	\$ 13,136.16	21,953	7,377	660	1,753	350	1,970	660	379	618	1,005
October	\$ 14,945.28	24,874	8,320	815	1,999	376	2,170	740	450	559	1,063
November	\$ 13,019.38	20,692	7,227	635	1,656	369	1,555	650	347	503	925
December	\$ 14,231.00	19,239	6,815	438	1,653	389	1,449	955	376	249	799
TOTAL	\$ 165,691.01	265,151	92,510	6,881	19,733	3,984	18,623	9,823	5,316	6,163	11,727

2019	E&H				Youth 31 Day	Transfer	Upass & College	FREE
	SNR/ADA	1 Ride	10 Ride	Monthly				
January	296	-	560	1,273	42	1,547	1,175	1,991
February	363	-	656	1,693	36	2,180	2,107	1,804
March	303	-	724	1,858	23	2,583	1,743	1,006
April	448	13	782	2,463	92	3,293	2,277	996
May	488	6	819	3,037	57	3,220	2,225	911
June	426	-	638	2,171	19	2,258	1,124	320
July	715	-	843	2,683	70	2,805	1,529	473
August	514	-	855	2,705	62	3,036	1,184	307
September	478	-	946	2,555	10	2,666	3,506	274
October	672	-	847	3,141	10	3,114	3,858	302
November	570	1	627	2,392	16	2,630	2,859	333
December	506	14	607	1,800	41	2,555	1,686	266
TOTAL	5,779	34	8,904	27,771	478	31,887	25,273	8,983

ETD Ridership 2019													
2019	Total \$\$ / Shuttle Route	SHUTTLE ROUTE	Driver reported Amt / OFF Route	Driver reported Amt /SHUTTLE Route	REDUCED	TICKETS			FREE RIDE		SR/DIS Monthly	Monthly UnLtd	TOTALS
						Regular	Senior	Xfers	Child/Aid	UPASS			
January	\$ 3,551.20	TOTALS	\$474.25	1,783	507	1,359	373	363	61	135	364	904	5,849
February	\$ 3,345.95	TOTALS	\$334.25	1,690	457	1,374	336	357	27	247	335	822	5,645
March	\$ 3,749.60	TOTALS	\$372.75	1,909	481	1,515	407	372	29	258	436	865	6,272
April	\$ 3,798.15	TOTALS	\$472.50	1,945	464	1,424	372	410	21	344	324	1,042	6,346
May	\$ 3,993.70	TOTALS	\$411.25	2,048	482	1,368	416	522	39	241	528	834	6,478
June	\$ 3,616.55	TOTALS	\$477.75	1,917	308	1,195	372	367	50	120	348	735	5,412
July	\$ 3,946.75	TOTALS	\$666.75	2,112	295	1,167	394	331	37	71	384	854	5,645
August	\$ 4,095.55	TOTALS	\$610.75	2,198	293	1,185	395	360	16	93	455	748	5,743
September	\$ 3,411.35	TOTALS	\$620.50	1,825	256	1,145	399	258	30	266	424	842	5,445
October	\$ 3,508.20	TOTALS	\$665.00	1,841	337	1,233	445	336	44	318	548	813	5,915
November	\$ 2,806.55	TOTALS	\$432.25	1,493	228	1,054	374	283	28	224	494	631	4,809
December	\$ 2,490.40	TOTALS	\$444.50	1,290	274	876	382	274	20	127	373	634	4,250
TOTAL	\$ 42,313.95		\$ 5,982.50	22,051	4,382	14,895	4,665	4,233	402	2,444	5,013	9,724	67,809

Several issues that were identified in the *Existing Fare Structures Report* (ETD Fare Study, July 2022), such as a unified website and improved distribution of fare products, can be expected to increase ridership beyond 2019 levels even absent any change to fares.

Current MAT and ETD Ridership

Findings from the Evaluation Criteria and Conceptual Options Report

As discussed in the *Evaluation Criteria and Conceptual Options Report* (ETD Fare Study, September 2022) the overall direction for future ETD fare policy was clearly indicated by the survey results on evaluation criteria. ETD Board of Directors, ETD management and key staff, and CTDOT and CTtransit staff indicated a desire to implement a fare structure that:

- Improves customer convenience-/~~r~~Removes barriers to use;
- Simplifies fares;
- Maximizes ridership; and,
- Improves affordability for low-income individuals, seniors, and other transportation-disadvantaged individuals.

Ideally the future ETD fare structure will also serve the needs of all rider groups, be equitable within the new service area, and potentially facilitate intermodal and interagency travel. The report then presented some conceptual fare options that potentially meet these requirements and are reported in Table 2 below:

Option	Descriptions	Examples	Objectives of Alternative
1. Simplify the Current Fare Structure	Make only those modifications needed to eliminate inconsistencies across previous ETD and MAT fares and create a single uniform fare structure.	E.g. setting a single age limit for children traveling free and setting a single price for an All Day pass	Customer convenience / Removing barriers to use Fare simplification
2. Introduce New Reduced Fare Categories	This would build upon the simplified structure of Option 1 by expanding the categories of individuals qualifying for reduced fares.	E.g., extending reduced fares to low-income individuals	Increased ridership Improved affordability
3. Implement "Best Fare"	This would also build on Option 1 or 2, but would require new fare equipment capabilities.	E.g. allowing riders to accumulate the amount they pay for single trips and ride free once they have paid an amount equal to a pass	Customer convenience / Removing barriers to use Fare Simplification Increased ridership Improved affordability
<i>Table continued on next page...</i>			

<p>4. Eliminate Fares for Some Users</p>	<p>This would build on Option 1, 2, or 3 by eliminating fares for some individuals who would otherwise pay a reduced fare.</p>	<p>E.g., providing free fares to youth, students, seniors, and/or low-income individuals.</p>	<p>Customer convenience / Removing barriers to use Increased ridership Improved affordability</p>
<p>5. Eliminate Fixed Route Fares</p>	<p>Eliminate fares across all fixed route services while retaining fares for demand-responsive services.</p>		<p>Customer convenience / Removing barriers to use Increased ridership Improved affordability Reduced capital and operating costs</p>
<p>6. Eliminating All Fares</p>	<p>Eliminate fares across all services</p>		<p>Customer convenience / Removing barriers to use Fare simplification Increased ridership Improved affordability Reduced capital and operating costs</p>

Findings from the Existing Fare Structures Report

The *Existing Fare Structures Report* (ETD Fare Study, July 2022) identified a number of differences in the fare products available and with certain price points. These included:

- + The previous ETD offered a pre-paid single ride paper ticket in packs of 10; the previous MAT offered a pre-paid single ride paper ticket in packs of 100.
- + Twelve communities in the previous ETD district provided funding for a senior discount to those age 60+ allowing them to make Dial-A-Ride trips on a donation-only basis.
- + The previous ETD provided the opportunity to make same day ADA Dial-A-Ride reservations at twice the base ADA fare.
- + Both systems offered an All-Day Pass, 10-Ride Senior/Disabled Pass, 10-Ride ADA Pass, Monthly Pass and Monthly Senior Disabled Pass, but the prices differed.
 - o The previous MAT charged more for the All-Day Pass and the 10-Ride Dial-A-Ride/ADA
 - o The previous ETD charged more for the 10-Ride Senior/Disabled Pass
 - o The previous ETD charged more for Monthly Pass, but certain towns offer a discount for their residents which is effectively less than the cost of the previous MAT Monthly Pass
- + The previous MAT offered a discounted Youth Monthly Pass.
- + The previous MAT offered free fare for children 5 and under; the previous ETD offered free fare for children 4 and under.

- + The previous ETD operated a deviated fixed route system and charged an additional fare for this Off-Route service.

+

These issues, especially the specific differences in eligibility and pricing, will be addressed in the options below.

Refining Options and Estimating Impacts

The next step in this process will be to refine the above six conceptual options into initial fare alternatives and estimating the ridership and revenue impacts of each option.

Option 1: Simplify the Current Fare Structure

Refining this option means addressing the issues identified in the *Existing Fare Structures Report* (ETD Fare Study, July 2022). We have addressed each of these issues below with recommendations, rationale, and an estimate of the ridership and revenue impact. In addressing these issues, we have assumed that a consistent fare collection approach has been implemented across the combined service area. Implementing that consistent fare collection approach, and issues of phasing in these recommendations, are discussed in a subsequent document.

- + The previous ETD offered a pre-paid single ride paper ticket in packs of 10; the previous MAT offered a pre-paid single ride paper ticket in packs of 100
 - o In considering this option, it needs to be noted that the previous ETD's 10-ticket book is essentially equivalent of the previous MAT's 10-Ride ticket, both are priced at \$15.75, although there is a difference in the ticket form. Making these two products into a single form will have no impact on ridership or revenue. It will result in a minor decrease in costs. The discount for this product is in line with the most common national practice, which is a discount from zero up to about 10%, as a common marketing campaign is to offer 10 rides for the price of 9.
 - o The previous MAT's sale of packs of 100 single-ride tickets is primarily focused on social service agencies to allow them to provide transportation to individuals. The existence of this option does not add to the complexity of the fare structure. Furthermore, providing a fare product that is convenient for social service agencies is an important element of maximizing ridership and improving access to transit. There should be no change to this policy. The sale of these packs of single-ride tickets should be extended to all social service agencies in the region.
- + All communities in the previous ETD district provided funding for a senior discount to those age 60+ allowing them to make Dial-A-Ride trips on a donation-only basis
 - o Under Off-Route and Dial-A-Ride service it states that a pre-registered resident senior has a \$1.75 donation, while the discussion under Senior Fare Program just refers to a donation, which undoubtedly causes confusion as to ETD's willingness to accept other donations, or none at all.
 - o This policy applies only to Dial-A-Ride trips and only in specific locations. It does not add complexity to the fixed route fare structure or have any impact on ADA complementary paratransit. Care does need to be taken when describing general public Dial-A-Ride service, especially on the website, to clarify all limitations on the program. It is also important to note that the communities are not paying the full cost

of this program, and thus increased ridership does result in an increased total deficit. Furthermore, it may be politically difficult to limit this program even if the demand and unsubsidized cost of it grows significantly. Since this program increases ridership, by reducing the effective cost of transit to these seniors, without reducing revenue (since the program is funded by the communities), it should be retained.

- This program is presented on the ETD website as a Senior Fare Program and it is easy to miss that it only applies on Dial-A-Ride service and only when reservations are made in advance.
- The rules for this policy need to be standardized and clearly stated in the fare policy for ETD to ensure that the rules are clear to all riders and to all funding communities.
- + -The previous ETD provided the opportunity to make same day Dial-A-Ride reservations at twice the base Dial-A-Ride fare.
 - ETD's website groups ~~Off-R~~route, Dial-A-Ride, and ADA complementary paratransit fares together, which can be confusing. Because of the strict rules of the Americans with Disabilities Act, it is important to clearly distinguish the rules and prices for ADA complementary paratransit, including that ETD is charging no more than twice the fixed route price for ADA complementary paratransit. Offering general public Dial-A-Ride service at a higher price (even if it is only for same-day reservations) does not violate ~~the~~ADA rules. If this program is limited to reservations made on a space available basis, it can increase ridership and revenue without significantly increasing costs. It should be offered consistently where ETD offers Dial-A-Ride service and thus no change needs to be made to this program.
- + The previous ETD operated a general public demand responsive ride-sharing service, the Shoreline XtraMile, beginning in 2019, which has never charged a fare. ETD has continued that service and in August 2022 implemented a new Middletown XtraMile service, which also does not charge a fare. Riders can arrange for a trip through an app or online, or can walk on to a shuttle bus if it stopped at a convenient location.
 - Each XtraMile service operates within a geographically limited area serving as a supplement to, or substitute for, fixed route transit. An important part of its role is to provide first mile / last mile connections to other transit services.
 - While the most affordable and convenient option for XtraMile is to continue to operate for free, it would be potentially confusing to have one free service while charging fares for others. The simplest option for the XtraMile service would be to treat it the same as another similar ETD service. ETD's Dial-A-Ride service is also general public demand responsive, but it can serve long trips across the entire service area, which is very different from XtraMile which serves a small geographic area.
 - Within the transit industry, services such as XtraMile commonly charge the same fares as fixed route transit. This includes accepting passes as well as free transfers (if they are free on the fixed route system). Adopting passes and transfers are important for first mile / last mile services, especially if there is a greater need for the service among low-income individuals. Examples with this type of fare structure are DART GoLink (Dallas, TX), Metro Transit micro (Minneapolis / St. Paul, MN) and King County Metro's (Seattle, WA) Community Ride, Pingo, and Via services. As with ETS, fare collection equipment issues can require a service to accept a more limited set of fare products. We therefore recommend that XtraMile use the same fare structure as fixed route transit, including fixed route passes and transfers. Fare collection equipment issues may force ETD to temporarily accept a more limited set of fare products.

- Many microtransit services have a lower, or no, introductory fare for a period of 6 months or so to increase the willingness of riders to try this new service. It would be reasonable for ETD to continue operating its new Middletown XtraMile service, as well as any future XtraMile services, with no fare for a total of six months, even if fares are re-implemented on other services earlier.
 - In the small survey of XtraMile passengers that was conducted in 2019, 80% of respondents stated they were willing to pay a fare of at least \$2.00 for the XtraMile service. This suggests that a \$1.75 fare would be accepted by most riders and have a lower than normal impact on ridership. A reasonable estimate of the elasticity of these riders to imposing ETD's fixed route fare structure would be a loss of 30% of these riders. Furthermore, two-thirds of the respondents to this survey rode other ETD services and almost half of all riders paid with some type of monthly pass. Other riders used other transit services and might be able to use a transfer for XtraMile. These riders would be unaffected by implementing a fare equal to ETD's regular fixed route fare. Assuming at least two-thirds of the riders have no impact and the other third have an impact of a 30% loss in ridership, a reasonable estimate for the maximum impact on total ridership on XtraMile would therefore be about a 10% loss from imposing ETD's fixed route fare structure. The impact could be significantly less if a significant share of riders are transferring from ETD or other transit services.
 - In the last 12 months the ridership on the Shoreline XtraMile was 21,428, while the last 31 days ridership on the new Middletown XtraMile was 1,206 (projecting to about 14,500 per year). If ETD imposes its fixed route fare structure, ridership would decrease from a total of about 36,000 to at least 32,400, a loss of 3,600. Revenue increase would also depend on the number of riders transferring from other services, as well as the mix between reduced and full fare riders. However, a reasonable estimate of the revenue per boarding for non-pass boardings would be about \$1.00, which would give the revenue from charging a fare on XtraMile a maximum of \$8,400 per year.
- + The previous MAT charged more for the All-Day Pass
- The previous MAT charged \$4.50 for an adult All-Day Pass while the previous ETD charged \$3.50 for the same product. Both of these prices are within the normal for an All-Day Pass, which is two to three times the price of a single ride.
 - In 2019, MAT had 3,984 rides ~~taken on them~~ use the All-Day Pass and about 1,000 passes sold, while ETD's use was not recorded. Assuming an elasticity of ridership with respect to fares of -0.20, the direct impact of lowering MAT's price from \$4.50 to \$3.50 would therefore be a gain of about 800 riders and a loss of about \$1,000 based on 2019 ridership.
 - Since the previous MAT had free transfers, a day pass priced at ~~\$3.55-50~~ would equal the cost of a round trip, whether or not the rider transfers, thus riders switching between using cash or a ticket plus a transfer for a round trip ~~and-or~~ using a \$3.50 All-Day Pass would have no revenue impact.
 - In studies at other agencies, we have found that riders purchasing an All-Day Pass are more likely to take additional spontaneous trips once they have purchased the pass, as the additional trips have no cost impact. Riders switching from paying per trip to purchasing a Day Pass have been found to take up to 10% more trips. If one-quarter of the previous MAT's 2019 base fare and 1 Ride ticket riders were to switch to an All-Day Pass, this could be an increase of 2,500 trips per year with no reduction in revenue.
 - The total estimated impact of setting a single \$3.50 price for the All-Day Pass is therefore an increase of about 3,300 trips per year and a loss of about \$1,000. Setting a single \$4.50 price for the All-Day Pass

would reduce ridership that served the previous ETD slightly and raise a small amount of revenue. Because of the much greater concern regarding ridership rather than revenue, we are recommending that ETD adopt a price of \$3.50 for the All-Day Pass for this conceptual option.

- CTtransit also charges \$3.50 for their All-Day Pass. Making the cash fare and All-Day Pass prices the same as CTtransit would make fares simpler for riders.
- + The previous MAT charged more for the 10-Ride Dial-A-Ride/ADA
 - The previous MAT charged \$35.00 for a 10-Ride Dial-A-Ride/ADA ticket while the previous ETD accepted 2 tickets from its discounted 10-ride ticket book, for an effective price of \$31.50 for 10 rides on Dial-A-Ride as well as ADA complementary paratransit.
 - Discounted multi-ride fare products are generally offered on fixed route transit because they increase ridership and the agency has an extremely low cost of serving that additional trip. Indeed, discounted 10-Ride tickets can increase ridership by the purchasers by 10%-15%, meaning that a 10% discount on these ticket books can result in an agency increasing both ridership and revenue with virtually no increase in costs.
 - Discounted multi-ride fare products are not generally offered on Dial-A-Ride or other demand-responsive services because the marginal cost of serving those additional trips can be extremely high. This is especially true for ADA complementary paratransit where the agency is required to provide a trip for every rider requesting one. For example, the cost to many agencies of serving an ADA complementary paratransit trip can be \$35 to \$50, and thus any increase in ADA complementary paratransit ridership can have a profound negative impact on agency finances. There is potentially less impact on finances from discounts on other demand-responsive services because the agency is not required to serve every trip, and the discounted fare product is more likely to just fill up available capacity without raising costs. However, refusing to provide trips can lead to public and political pressure to provide more demand-responsive service and thus higher costs.
 - For purposes of this conceptual alternative, we recommend that ETD offer no 10-Ride or other bulk discounts on ADA complementary paratransit or on Dial-A-Ride service because of the potential impact on the costs of providing service.
- + The previous ETD charged more for the 10-Ride Senior/Disabled Pass
 - The previous MAT charged \$7.65 for a 10-Ride senior/disabled ticket, while the previous ETD charged \$7.75
 - This small of a difference will have no significant impact on ridership and revenue regardless of which option is chose for the future
 - The \$7.65 price is consistent with CTtransit's price for their 10-Ride senior/disabled ticket. However, the \$7.75 price is more consistent with other senior/disabled fares at half the full fare price and is slightly easier to pay for since it requires fewer coins. Choosing the lower \$7.65 price for this option is slightly more consistent with the overall effort of increasing ridership, and will also result in less opposition to the proposed fares. It is therefore recommended for use with this conceptual option.
- + The previous ETD charged more for Monthly Pass, but certain towns offer a discount for their residents which is effectively less than the cost of the previous MAT's Monthly Pass
 - The previous MAT charged \$52.50 for a monthly pass while the previous ETD charged \$59, but only \$47.~~00~~ for its town rate

- The previous ETD sold about 300 monthly passes during 2019. Even if they were all full fare passes, reducing the price from \$59 to \$52.50 would result in less than \$2,000 in direct lost revenue and, given a normal elasticity of -0.20, an increase in ridership of about 2.4% or around 200 trips per year.
- Increasing the previous MAT's Monthly Pass price to \$59 would likely result in a drop in ridership of about 1,000 riders or less and an increase of about \$4,000 in revenue. Passes would also be more difficult to afford for low-income riders.
- Most small transit agencies use a breakeven point, at which the monthly pass price is equal to paying cash for each trip, of about 30 or slightly higher. At a price of \$52.50 the breakeven point is 30 trips, while at a price of \$59 the breakeven is 33.7 trips. This entire range is reasonable, but a breakeven of 30 trips is more common. Choosing the lower prices also means that only a narrow range of fairly frequent riders would move from being better off paying for each trip individually to being better off paying for a monthly pass. Indeed, the biggest impact would likely be from making the pass more affordable to lower income riders who are most likely to be frequent users of the transit system.
- We recommend that the option of setting ETD's Monthly Pass price at \$52.50 be used for this conceptual option.
- CTtransit's 31-Day Pass is significantly more expensive than either the previous ETD's or MAT's passes. The new ETD pass will be accepted on all ETD services, while CTtransit only accepts the ETD pass (or previous MAT pass) within the ETD service area. This should not be an issue as it is easy to communicate that a state-wide 31-Day Pass provides significantly greater value, and should therefore cost more, than a 31-Day or Monthly Pass limited to one transit district. In the future it is desirable if ETD's pass is accepted by CTtransit statewide, which should be the subject of future discussions.
- + The previous MAT offered a discounted Youth Monthly Pass.
 - The previous MAT offered a discounted Youth Monthly Pass at \$38 while youth on the previous ETD needed to pay the full price of \$59
 - This is the only discounted fare option either agency offered to youth, and CTtransit does not offer a discounted youth Monthly or 31-Day Pass. Thus fare simplification would suggest that ETD not offer any discounted youth fare products.
 - Discounted student/youth passes are important parts of school transportation in many areas, and the role of this pass in providing school transportation needs to be considered.
 - The potential future riders of transit are today's youth and there can be a long-term benefit to transit agencies of getting youth used to the idea of using transit.
 - It is unclear how many individuals who currently ride ETD would be eligible for a discounted youth pass, but in 2019 only 478 trips were made on MAT using this pass with the sale of only a few passes each month. Eliminating this pass can therefore be expected to have minimal impact on ridership or revenue.
 - We recommend that this pass be eliminated for this conceptual option for reasons of fare simplification. However, if this becomes an important political issue, and/or if schools or other government entities are willing to provide a subsidy or help promote this pass, there are significant long-term benefits to the combined agency implementing it.
- + The previous MAT offered free fare for children 5 and under; the previous ETD offered free fare for children 4 and under.
 - MAT had a total of 8,380 free child riders-rides in 2019 while ETD recorded 402 free child ridersrides.

- It is our understanding that most operators do not inquire closely ~~as~~ the age of a child that appears to be sufficiently young and is traveling with a parent/guardian, a practice that is also followed at most agencies across the country. Thus, regardless of the difference in policies, there is likely little difference in how this is implemented in the field. Therefore, we recommend ~~to use~~ using the higher age in this conceptual option as it would be less likely to cause objections when adopting the policies and it is unlikely to have any impact on ridership or revenue.
- Some agencies have implemented a height rule rather than an age rule for children, using a marking such as the height of the farebox or tape on a stanchion at the entry to determine whether the child can travel for free. This method has the advantage of being simple for operators to enforce. We recommend that ETD consider implementing this standard only if enforcing the child age rule becomes a significant issue for ETD and its operators.
- + The previous ETD operated a deviated fixed route system and charged an additional fare for this Off-Route service
 - Route deviation is an important element of the service that ETD provided to its community and decisions regarding providing that should not be driven by fare considerations.
 - Given that ETD will continue to operate route deviation service, having the same surcharge for a deviation as for a base fare, and having the total route deviation fare equal to the fare for Dial-A-Ride service, provides the simplest fare structure.
 -

Based on the above, with a price of \$3.50 for the All-Day Pass, \$7.65 for the 10-Ride Senior/Disabled Pass, and \$52.50 for the Monthly Pass, the elimination of any discounts on 10-Ride tickets for use on ADA or Dial-A-Ride, the elimination of any Youth Monthly Pass, a free fare for children 5 and under, and no change to the previous ETD’s surcharge for route-deviations, ridership would be expected to increase by about 3,500 and revenue drop by about \$3,000. See Table 3.

Table 3: Elements of Option 1 with Impacts: Simplify the Current Fare Structure

Fare Product	Previous ETD	Previous MAT	Proposed	Ridership Impact	Revenue impact
Cash Fare	\$1.75	\$1.75	\$1.75	0	\$0
10-Ride Ticket	\$15.75	\$15.75	\$15.75	0	\$0
Dial-A-Ride Senior for donation- only funded by communities	Y	N/A	Y (where funded)	0	\$0
Same Day Dial-A-Ride (on space available basis)	\$7	N/A	\$7	0	\$0
<u>XtraMile</u>	<u>Free</u>	<u>NA</u>	<u>Same as Fixed Route</u>	<u>Maximum -3,600</u>	<u>Maximum +\$8,400</u>
All-Day Pass	\$3.50	\$4.50	\$3.50	3,300	-\$1,000
Dial-A-Ride multiple <u>Multiple Trip</u>	\$15.75/5	\$35/-10	\$35/10	----	----
Senior-/Disabled 10-Ride	\$7.75	\$7.65	\$7.65	0	0
Monthly Pass	\$59	\$52.50	\$52.50	200	-\$2000
Discounted Youth Monthly Pass	\$59	\$38	\$52.50	0	0
Age for free children with parent	4 -	5 -	5 -	0	0
Surcharge for route deviation <u>Off-Route</u>	\$1.75	NA	\$1.75	0	0

Option 2: Introduce New Reduced Fare Categories

This option builds off of Option 1 above. Agencies are increasingly looking at how to better serve their highest need customers and to develop the use of transit in their customers of the future. youth. To do this, many agencies have implemented, or are considering implementing, reduced (and in some cases free) fares for these groups. Some of the agencies with reduced fares for low-income riders include New York MTA, Los Angeles Metro, San Francisco Muni, King County Metro (Seattle, WA), Denver RTD, TriMet (Portland, OR), and DART (Dallas, TX).

According to the Lower Connecticut River Valley Transit Study (LCRVTS), 37% of the previous ETD riders and 53% of the previous MAT riders had household incomes of less than \$30,000, (half the median household income), while 12% of the previous ETD riders and 14% of the previous MAT riders were students. It is unclear to what extent these groups overlap, or either overlaps with riders who already receive a discount such as senior riders or those with a disability. However, assuming that there is no overlap, implementing a reduced fare of 50% (equal to the discount for senior and disabled riders) for these discounts-riders would reduce revenue from full fare riders by about 25% for the previous ETD and 33% for the previous MAT, or a total of \$132,500 before considering any increase in ridership or revenue from the fare discount.

Our standard elasticity for fare reductions is -0.20, but many lower income riders are financially constrained. They may have a budget for travel and a 50% reduction in price could lead up to a 100% increase in travel. In practice, implementing a low-income discounted fare has found that these riders can increase their travel by about 30%, equal to an elasticity of -0.60. Using this elasticity that has been reported for low-income fare reductions of -0.60, this would result in a 15% increase in ridership and a 17% reduction in revenue for the previous ETD, while the previous MAT would experience closer to a 21% increase in ridership and a 23% reduction in revenue. Based on 2019 ridership and revenue, this would result in increased ridership of almost 66,000 (from almost 333,000 to almost 399,000) and a drop in revenue of over \$91,000 (from \$450,000 to under \$359,000).

While these can be implemented with current technology, they are easier for an agency, and especially its operators, to administer with an account-based system that uses smartcards that also serve as photo IDs. In this case, operators merely check to make sure that the picture on the ID matches the rider, while all other issues are handled at the agency level. A key issue is determining eligibility. Best practices have been to rely on other agencies to determine eligibility and actually distribute the reduced fare cards, such as working through schools to distribute reduced fare student smartcards and working with state administered low-income programs, such as Medicaid and AFDC, for low-income fares. This minimizes the agency’s administrative effort, allowing the agency to focus on its core competency of providing transit service, while also reducing the issue of storing confidential personally identifiable information. This option would still result in increased demand on agency staff to deal with these other agencies and arrange for distribution of the cards.

Table 4: Impacts of Option 2: Introduce New Reduced Fare Categories

Option	Ridership Impact	Revenue Impact	Cost Impact
Reduced fares for students and low-income individuals	+66,000	-\$91,000	Additional demand on staff time

Option 3: Implement “Best Fare”

“Best Fare” or “Fare Capping” provides riders with a free upgrade to a Daily or Monthly Pass after they pay the equivalent amount in other fares, thus riders are always receiving the Best Fare best fare that the agency can offer them for their trips. The intent of this is to provide an equitable solution for riders who cannot afford to purchase a pass up-front or may not know how often they will ride. Like the low-income fare, it is focused primarily on riders with low incomes who cannot afford to pay the upfront cost or of the pass, or cannot afford the risk of losing the pass and having to pay again for all of their transit travel during a month. Best Fare works best for specific, easily defined periods, such as one day, a calendar week starting on a specific day, or a calendar month. Applying the Best Fare concept on a rolling 31-Day period can be a highly complex and confusing effort.

The most common arguments in favor of the best fare strategy are as follows:

- A best fare strategy allows low-income riders who may not be able to afford to purchase an unlimited ride pass to take advantage of a pass even if they pay for their initial rides individually.
- A best fare strategy makes it easy for riders to pay their fares economically, as they do not have to figure out the most cost-effective payment method. This can be used in marketing the service.

The arguments against the concept are as follows:

- A best fare strategy has the potential to result in significant revenue loss to the transit agency, as it converts rides that would otherwise have been paid for to free rides. An agency might then have to increase fares to make up for the lost revenue.
- While the rider does not have to calculate the best payment option, the strategy may cause confusion or uncertainty on the part of a rider: for instance, the rider will have to keep track of how many rides he/she has they have taken to know exactly which ride is the last he/she has they had to pay for. This can particularly be an issue in a system having multiple single-ride fares (e.g., \$2 for Local Bus, \$2.25 for Urban Bus, \$2.50 for Trolley) and/or multiple day passes (e.g., \$5 for the Regional Day Pass and \$4.50 for the NCTD Day Pass).

US transit agencies began implementing best Best fare-Fare beginning in 2017 with TriMet (Portland, OR) and the impacts of it are still unclear. TriMet implemented fare capping together with its partner agencies C-TRAN (Vancouver, WA) and the Portland Streetcar. The three agencies have a regional fare system using the Hot Fastpass, although each agency has control over their own fares. In May 2019, 7-8% of Hop card users used virtual cards, while a similar share used contactless credit or debit cards. The remaining 85% used a physical Hop card. Adoption was initially slow, but has increased steadily. As of February 2019 about 35% of boardings were made with the Hop program, increasing to 50% of boardings in October 2019. This has led TriMet to phase out paper tickets effective December 31, 2019.

Prior to implementation, TriMet informally estimated that fare capping could reduce fare revenue between 1% and 1.5%. In fact, TriMet’s total fare revenue fell 4.0% when comparing the 12 months prior to implementation of fare capping (ending June 2017) with the following 12 month period (ending June 2018). This was due in part to a decrease in boardings, as fare revenue per boarding only fell by 2.2%. However, prior to fare capping TriMet’s boardings had been falling at a rate of

about 2.2% per year, which began leveling off during implementation, and subsequently became almost flat with a decline of 0.4% per year.

C-TRAN operates using a calendar year, so the transition to Hop occurred roughly in the middle of 2017. Prior to 2017, C-TRAN’s ridership was in a downward trend. Operating hours were stable, until ~~the a~~ decrease from 2015 – 2016. In addition to adopting Hop, C-TRAN increased its hours of service by just over 4% from 2016 to 2017, and by just over 1% in 2018 and 2019. The result of these changes ~~was~~ were an increase in boardings of almost 2% in 2017 and over 3% in 2018.

DART (Dallas, TX) introduced fare capping effective August 18, ~~2018~~ 2018, as part of a comprehensive restructuring of fares, its first change since December of 2012. DART introduced the change about 90% of the way through its fiscal 2018, a year which saw ridership and revenue dropping significantly from the previous year. However, in the following year, the new fare structure and fare capping led to a substantial increase in ridership of 10.9%, and a small increase in revenue of 0.6%. This combination resulted in fare revenue per boarding falling by 9.2%.

It is our understanding that DART’s experience is an outlier, but that almost all agencies have seen boardings rise, or at least fall slower than they had previously been falling, while revenue per boarding falls. Total revenue has normally been seen to fall, but on occasion has actually risen due to the increase in ridership. A reasonable estimate for ETD would be that Best Fare ~~best fare~~ could increase ridership by 2%-3% over a period of a couple of years, while reducing revenue 3%-4%.

It must be noted that while “Best Fare ~~best fare~~” results in a substantial improvement in equity, it cannot be implemented with MAT and ETD’s current fare equipment. It requires a real-time, account-based fare collection system.

Table 5: Impacts of Option 3: Implement “Best Fare”

Option	Ridership Impact	Revenue Impact	Cost Impact
Implement “Best Fares”	Increase 6,000-10,000	Loss of \$13,500 - \$18,000	Requires real-time account-based fare collection system

Option 4: Eliminate Fares for Some Users

This option is basically an extension of Option 2, in that some transit riders travel for free.

Multiple agencies have considered eliminating fares on fixed route for individuals eligible for ADA complementary paratransit. The rationale for this is that many of these individuals may have a condition that allows them to use fixed route transit on some days, but forces them to use paratransit on other days and that the need for paratransit can often be foreseen. For example, some of these individuals have conditions that are exacerbated by heat or cold and can predict ahead whether they will be likely to need to use paratransit on a given day in the near future. Providing these individuals with a financial incentive to use paratransit where and when ~~possible~~ possible results in a slight increase ~~to in~~ ridership and generally no significant change to fixed-route revenue, but can also result in a reduction in paratransit demand and a net savings to the agency. The greatest difficulty with eliminating fares for this group is that it has been seen to result in an increased number of applications for ADA paratransit eligibility. If an agency does not have a careful process for determining eligibility, this can result in a significant increase in the number of individuals determined to be eligible,

increased revenue losses from the free fares, and even increased costs if these individuals use paratransit. For ETD, there were about 9,000 trips taken on fixed-route by ADA eligible individuals in 2019 and in March 2022 there were 682 ADA complementary paratransit trips provided. Assuming that it cost ETD \$22 (based on 2022 budget and compared with the \$60-\$90 at many cities) to provide the marginal ADA complementary paratransit trips, converting only 5% of the ADA paratransit trips to fixed-route would cover the lost fare revenue while potentially increasing ridership by 3,000 or more.

Some agencies are also experimenting with free fares for other specific groups, such as Los Angeles Metro (low-income riders and students) and Washington State (students), but has not been widely adopted. Initial indications are that this can result in significant ridership increases, when conducted with a good marketing program. Agencies have also seen that, as with free fares for ADA paratransit eligible individuals, determining eligibility can be key. Failure to tightly control eligibility has led at other agencies to unqualified riders gaining access to the free fares and a resulting drop in revenues. Agencies have also seen that riders who travel for free, especially if they do so without being qualified to travel for free, tend to place a lower value on the service and are more disruptive to other riders.

Free fares for specific groups can be implemented with the current systems, but it again works best with an account-based electronic system. The advantage of this system is that in the event an individual causes problems, their rights can be cancelled/revoked, even if the ID remains in their hands. Furthermore, as with the discounts for specific groups, it is important that determinations be made at the agency level and that the potential for conflict between operators and riders be minimized.

As an example, if fares were eliminated for low-income riders and students, the revenue and ridership impacts would be about double that of just reducing fares for these groups. Based on the data from the LCRVTS and the estimated ridership and revenue for ETD and MAT, this would result in a ridership increase of around 132,000 and a revenue loss of around \$182,000. Demands on staff would increase from having to administer this new program.

Table 6: Impacts of Option 4: Eliminate Fares for Some Users

Option	Ridership Impact	Revenue Impact	Cost Impact
Implement free fares on fixed route for ADA paratransit eligible	Potentially <u>increase</u> +3,000 or more	Uncertain	Reduced ADA paratransit cost. Potential additional cost for eligibility determination
Implement free fares for students and low-income individuals	Increase <u>132,000</u> 10,000	Loss of \$182,000	Additional costs of administering program

Options 5 and 6: Eliminate Fixed Route Fares and Eliminate All Fares

There are many arguments regarding the extent to which transit fares provide a barrier to use and the social benefits of cheaper or free transit. It is clear that eliminating fares increases ridership. Transit Cooperative Research Program TCRP's Report "Implementation and Outcomes of Fare-Free Transit Systems" concludes that providing fare-free public transit service is virtually certain to result in significant ridership increases, giving a range of increases of 20% to 60% in just a few months. ETD has seen ridership increases when fares were eliminated beginning in April of this year, although some portion of that is undoubtedly due to employees returning to working in offices rather than at home. Kansas City has a new

zero-fare trial program, which was analyzed by the Mid-America Regional Council (MARC). MARC found that while the impacts of COVID-19 make conclusions difficult, Kansas City ridership dropped less and recovered more quickly than peer transit agencies. Furthermore, they estimate that continuing zero fare would increase ridership by about 31% for the Kansas City region. Intercity Transit (Olympia, WA) saw a 20% year-over-year ridership increase when implementing free fares.

The economic impacts of fare-free transit are more complex. While it is simple to calculate the lost fare revenue, fare-free transit eliminates some operating costs (such as printing fare products, sales of fare products, and handling cash fares) and can reduce the time required for each rider to board and the variability of the required boarding time. Reducing the variability of boarding time directly improves service reliability, while an overall reduction in boarding time can be used to improve route design and/or to add service. In addition, while less staff time will be required for maintaining fare collection equipment or addressing fare collection issues, there are other demands on their time and it is unlikely that ETD would be able to make any staff reductions. ETD’s estimated annual operating cost savings of eliminating fares are set forth in Table 7 below.

Table 7: ETD Annual Operating Costs of Fare Collection	
Armored Vehicle Cost	\$2773
Money County Supplies	\$450
Token Transit Fees	\$4500
Outlet Delivery	\$1600
Bank Fees (Braintree)	\$1800
Fare Media (tickets)	\$3250
Credit Card Fees (est.)	\$2500
Farebox Maintenance Parts & Labor (est.)	\$2600
GFI Software Maintenance	\$1000
ESTIMATED TOTAL AVOIDABLE COSTS	\$20473

Increased ridership can require an increase in total boarding time, cause excessive loads on buses, and require the provision of additional service. These factors can lower the extent to which free fares increase ridership or raise costs. As ETD currently has significant excess capacity, we have assumed that it will not need to provide additional fixed route service in the near future if fares are eliminated.

One of the greatest concerns of free fares is the impact of the Americans with Disabilities Act and the required provision of ADA complementary paratransit. The FTA has consistently ruled that if all or a portion of an agency’s fixed route system is free, trips on ADA complementary paratransit in the same area must also be free. They have not addressed the impact of temporary eliminations of fares, and several agencies that have temporarily eliminated fares (such as Kansas City) are still charging fares on ADA paratransit. Furthermore, the FTA has also consistently ruled that an agency may not refuse to serve riders who request an ADA complementary paratransit for next day service that complies with agency rules (within the area of service and hours of operation). Capacity constraints on ADA complementary paratransit are a de facto violation of the ADA. Agencies experimenting with broad elimination of fares therefore need to be prepared for significant increases in ADA demand. The study *Cost Estimation of Fare-free ADA Complementary Paratransit Service in Illinois* by Paul Metaxatos and Lise Dirks concluded that it would not be unreasonable to expect increases in ADA paratransit ridership approaching 100%. Intercity Transit (Olympia, QA) has a much lower forecast that free fares would only add about 30% to ADA complementary

paratransit demand over the next four years. ETD has seen a 51% increase in ADA ridership from March 2022, the month before going fare free, to August 2022, and considering the experience of other cities it would be reasonable to assume that ADA paratransit demand would be 60% - 80% higher if there were no fares than if ETD charged its pre-COVID fares.

Note that the ridership increases from free fares are higher for ADA paratransit than for fixed route service because:

- ADA paratransit begins at a higher fare (\$3.50 versus \$1.75) and thus there is a greater reduction in the fare,
- ADA paratransit riders are more likely to be lower income and limited in the number of trips that they can currently take, and therefore more likely to increase ridership.

Tables 8 & 9 below presents a range of potential ridership and revenue impacts for ETD with a 30%-40% increase in fixed route ridership, a 60%-80% increase in ADA demand and a cost to serve each ADA paratransit trip of between \$22 (current ETD budget) and \$60 (low end of the national average range).

Factor	Ridership	Revenue	Cost
Annual Operating Costs of Fare Collection			-\$20,473
Eliminating Fares on Fixed Route (est. 30% increase)	+100,000	-\$450,000	
Eliminating Fares on ADA Paratransit (est. 60% increase @ \$22 per ride Increased cost)	+4,800		+\$105,000
TOTAL IMPACT	+104,800	-\$450,000	+\$85,021

Factor	Ridership	Revenue	Cost
Annual Operating Costs of Fare Collection			-\$20,473
Eliminating Fares on Fixed Route (est. 40% increase)	+133,000	-\$450,000	
Eliminating Fares on ADA Paratransit (est. 80% increase @ \$60 per ride Increased cost)	+6,400		+\$384,000
TOTAL IMPACT	+137,800	-\$450,000	+\$363,527

As shown above, eliminating all fares is likely to increase ridership by at least 104,000, but to lower revenue annually by \$450,000 and increase costs annually by at least \$85,000. However, eliminating fares would eliminate the cost to ETD of acquiring a new fare collection system. The cost of a new fare collection system can vary greatly depending on the design of the system, but a reasonable range of the total cost for a system that would service ETD is from \$400,000 to \$1,200,000.

Options 5 &and 6 have minimal differences, in that Option 5 would still have fares on general public demand-responsive services which would generate less than \$10,000 in fare revenue. Option 6 would lose that revenue and have increased demand for the general public demand-responsive services. Serving this additional demand could increase costs similarly to serving the increased demand for ADA paratransit trips. We have not included the cost of serving this demand in the impacts as there is no legal requirement that ETD serve this additional demand. However, not serving this demand could be politically difficult.

Next Steps

The next step in this process is to evaluate all options presented in this report and provide recommendations for ETD's future unified fare structure.

Estuary Transit
District Fare Study

Evaluation of Fare Options and Recommendations

October 12~~September 30~~, 2022

HATCH LTK

Positive Change for the Next Century

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Introduction

The Middletown Transit District (aka Middletown Area Transit) (MAT) and Estuary Transit District (ETD) (aka 9 Town Transit) merged as one combined transit district, ETD, effective July 1, 2022. The Boards of Directors and member municipalities of the respective agencies now function as one administrative entity. However, Middletown and Estuary operations continue to operate under separate brands, fleets, and policies.

To prepare for unified operations, ETD is currently performing several studies and analyzing various elements of their operations. These efforts include this Fare Study which is evaluating existing fare structures and fare equipment in place at both MAT and ETD, as well as providing recommendations regarding unified fare policies and collection methods as one seamless transit operation.

This study has previously:

- Assessed the previous fare structures of MAT and ETD;
- Developed evaluation criteria and conceptual fare options; and,
- Modeled ridership and revenue impacts of these conceptual fare options.

In this document we provide:

- An evaluation of the fare options and recommendation regarding the preferred conceptual option; and,
- Recommendations regarding unified fare policies for the combined ETD agency.

Evaluation of Fare Options

As discussed previously, a survey of ETD/MAT Board members, agency management and staff, and of CTDOT/-CTtransit indicated that there are four key goals for the combined [agency-ETD](#) fare policy and structure. These are:

- Improves customer convenience [and /Rr](#)emoves barriers to use;
- Simplifies fares;
- Maximizes ridership; and,
- Improves affordability for low-income individuals, seniors, and other transportation-disadvantaged individuals.

As three of these goals are qualitative, and the ridership estimate has additional uncertainty due to the impacts of COVID-19, the policies used to address it, and the current fare free policies, we established a set of guidelines to use in evaluating the extent to which a particular fare structure supports that goal. These guidelines are set forth in Table 1 below.:

Table 1: Evaluation Goals and Guidelines		
Goal	Evaluation Guidelines	Rating
Improve customer convenience + Remove barriers to use	Significant improvement in convenience/ - Barriers removed	2
	Some improvement in convenience/ - Barriers removed	1
	No change	0
	Less convenient/ - More barriers	-1
	Significantly less convenient/ + More barriers	-2
Simplifies fares	Significant simplification for users/ R + reduction in different fare products & and prices	2
	Some simplification for users/ R + reduction in different fare products and and prices	1
	No change for users/ N + No reduction in products + prices and prices	0
	Additional fare products and prices	-1
	Significant additional fare products and prices	-2
Maximizes ridership	Significant increase in ridership (greater than 10%)	2
	Small increase in ridership (2%-10%)	1
	No significant change in ridership (less than ±2%)	0
	Reduction in ridership (2%-10% reduction)	-1
	Significant reduction in ridership (greater than 10% reduction)	-2
Improves affordability for low-income individuals, seniors, and other transportation-disadvantaged individuals	Fares significantly reduced for multiple groups	2
	Some fare reduction for one or more groups	1
	No net change to fares for these groups	0
	Slight increase in fares for one or more groups	-1
	Significant fare increase for multiple groups	-2

Any ~~e~~-evaluation needs to be measured against a consistent base scenario, generally the “no action” scenario. In this case, if no action is taken ~~then~~ the fare structure in place as of March 2022 would be restored, ~~including charging no fares on XtraMile~~. The estimated ridership and revenue that will occur when that fare structure is restored in December 2022 is based on the combined ridership and revenue of the agencies in 2019, which was used as the basis of ~~the~~-ETD’s future budget. This estimation process gives us a base fixed-~~r~~-route ridership for ETD of about 333,000 riders per year and farebox revenue of \$450,000 per year.

Table 2 below describes the conceptual fare options and identifies ~~the~~ benefits and costs of each. Table 3 which follows summarizes these benefits and costs using the ~~above~~-evaluation guidelines ~~in Table 1~~. Operating costs ~~include changes~~ include fare collection costs and other costs of operating both fixed route transit and paratransit (including ADA complementary paratransit). Capital costs for a new fare collection system have not been determined, but are estimated at being in the range of \$400,000 to \$1,200,000. Therefore options that do not require a new fare collection system have a significant cost savings.

Table 2: Costs and Benefits of Alternatives

Option	Descriptions	Benefits	Costs
<p>1. Simplify the Current Fare Structure</p>	<p>Make only those modifications needed to eliminate inconsistencies across current ETD and MAT fares and create a single uniform fare structure.</p> <p><u>XtraMile adopts the fixed route fare structure, including transfers and passes, after an introductory free/low-fare period.</u></p>	<p>Simplifies the fare structure by eliminating duplicate or similar fare products with different prices.</p> <p>Improves customer convenience by simplifying fares &and improving access to the fare products.</p> <p>Slight reduction in ongoing costs by eliminating duplicate fare products.</p> <p>Slight increase in ridership (3,500-per year) from consolidating fares at the lower prices <u>balance by loss of ridership by charging fares on XtraMile (-3,600).</u></p>	<p>Slight reduction in revenue from consolidating fares at lower price points (-\$3,000) <u>and slight gain from charging fixed route fares on XtraMile (\$8,400) for potential net gain of \$5,400.-</u></p>
<p>2. Introduce New Reduced Fare Categories</p>	<p>Builds upon the simplified structure of Option 1 by expanding the individuals qualifying for reduced fares. (This option could be implemented together with Options 3 and/or 4.)</p>	<p>Improved affordability by those with lowest income.</p> <p>Increased ridership (+66,000 per year) in the short and long-term by lowering fares for the most transit dependent riders and the riders of the future.</p>	<p>Reduction in fare revenue from discounts (-\$91,000).</p> <p>Additional administrative effort in setting up program, including arranging for other agencies to determine eligibility and distribute cards.</p> <p>Slight additional administrative effort for ongoing administration.</p>
<p>3. Implement "Best Fare"</p>	<p>This would also build on Option 1, but would require new fare equipment capabilities.</p>	<p>Improves customer convenience-/removes barrier to use &and improves affordability by removing need to pay for monthly passes at one time.</p> <p>Simplifies fare decisions for riders by providing the benefit of passes with payment over time.</p> <p>Increases ridership (6,000-10,000 per year).</p>	<p>Reduction in fare revenue (-\$13,500--\$18,000 per year).</p> <p>Requires a new account-based fare collection system with real-time communications with all vehicles.</p>
<p>4. Eliminate Fares for Some Users</p>	<p>This would build on Option 1 or 2 by eliminating fares for some individuals who would otherwise pay a reduced fare.</p>	<p>Increased customer convenience-/remove barrier to use and improve affordability for ADA paratransit riders and those with lowest income.</p> <p>Increased ridership (+3,000 per year for ADA <u>and</u> +132,000 per year for student and low-income) in the short and long-term by lowering fares for key groups.</p> <p>Potentially reduce ADA complementary paratransit operating costs.</p>	<p>Potential increases to ADA paratransit determination costs.</p> <p>Minor loss of fare revenue for free rides for ADA riders.</p> <p>Revenue loss of \$182,000 for students and low-income <u>(\$182,000).</u></p> <p>Additional costs of setting up and administering the program.</p>

[Table continued on next page...](#)

<p>5. Eliminate Fixed Route Fares</p>	<p>Eliminate fares across all fixed route services while retaining fares for demand-responsive services. Under federal law, ADA paratransit fares are eliminated.</p>	<p>Increase customer convenience/r/remove barriers to use, simplify fares, improve affordability/affordability, and increase ridership by eliminating the need of riders to pay fares.</p> <p>Eliminate most of the cost of collecting fares (\$20,473 per/year).</p> <p>Eliminate the cost of installing a new fare collection system (using current app and dropboxes on demand-responsive service).</p>	<p>Loss of most fare revenue (\$440,000).</p> <p>Increased costs from meeting increased demand for ADA complementary paratransit (\$85,000 or more).</p>
<p>6. Eliminate All Fares</p>	<p>Eliminate fares across all services.</p>	<p>Increase customer convenience/r/remove barriers to use, simplify fares, improve affordability, and increase ridership by eliminating the need of riders to pay fares.</p> <p>Eliminate the cost of collecting fares (\$20,473 per/year).</p> <p>Eliminate the cost of installing a new fare collection system.</p>	<p>Loss of all fare revenue (\$450,000 per year).</p> <p>Increased costs from meeting increased demand for ADA complementary paratransit (\$85,000 or more per year).</p> <p>Potential increased costs if ETD chooses to meet the demand for general public demand responsive service (\$85,000 or more per year).</p>

Table 3: Evaluation of Alternatives

Option	Descriptions	Improve Customer Conv. en / Remove Barriers	Fares Simpl. Simpl.	Max. Riders	Affordl improve / Afford-ability	Rev. enue Impacts Per Year	Cost Impacts
<p>1. Simplify the Current Fare Structure</p>	<p>Make only those modifications needed to eliminate inconsistencies across current ETD and MAT fares and create a single uniform fare structure. <u>XtraMile adopts the fixed route fare structure, including transfers and passes, after an introductory free/low-fare period.</u></p>	<p>1</p>	<p>1</p>	<p>0</p>	<p>0</p>	<p>\$5,400 maximum -3,000</p>	<p>\$0</p>

Table continued on next page...

<u>Option</u>	<u>Descriptions</u>	<u>Improve Customer Conv./ Remove Barriers</u>	<u>Fares Simpl.</u>	<u>Max. Riders</u>	<u>Improve Affordability</u>	<u>Rev. Impacts Per Year</u>	<u>Cost Impacts</u>
2. Introduce New Reduced Fare Categories	This would build upon the simplified structure of Option 1 by expanding the categories of individuals qualifying for reduced fares. (This option could be implemented together with Options 3 and/or 4.)	1	0	2	1	\$-91,000	Increase in demand on agency staff-
<i>Table continued on next page...</i>							
<u>Option</u>	<u>Descriptions</u>	<u>Improve Customer Conv./ Remove Barriers</u>	<u>Fares Simpl.</u>	<u>Max. Riders</u>	<u>Improve Affordability</u>	<u>Rev. Impacts Per Year</u>	<u>Cost Impacts</u>
3. Implement "Best Fare"	This would also build on Option 1, but would require new fare equipment capabilities.	1	1	1	1	Approximately Approx. loss of-\$6,000 to -\$10,000 per year	Approximately loss of-\$13,500 to -\$18,000 per year
4. Eliminate Fares for Some Users	This would build on Option 1 or 2 by eliminating fares for some individuals who would otherwise pay a reduced fare.	2	1	2	2	\$-182,000	Increase in demand on agency staff-
5. Eliminate Fixed Route Fares	Eliminate fares across all fixed route services while retaining fares for demand-responsive services. Under federal law, ADA paratransit fares are eliminated.	2	1	2	2	\$-440,000	Net operating cost increase -of \$64,500 or more. Capital savings of \$400,000 to \$1,200,000.-
6. Eliminate All Fares	Eliminate fares across all services	2	2	2	2	\$-450,000	Net operating cost increase of \$64,500 or more, especially if ETD serves the additional demand for general public

								demand-response <u>services</u> . Capital savings of \$400,000 to \$1,200,000.
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Recommendations

All six of the options take steps toward achieving the four goals identified ~~above~~ by ETD Board Members, ETD management and staff, and CT DOT/CT transit staff for the combined ETD fare policy and structure. ~~and, w~~ While increasing revenues was not a goal, the ability of ETD to absorb reduced revenue and, potentially, higher operating costs is key to determining which option is best. If the reduced revenue of \$450,000 and net increased operating costs of \$64,500 or more is acceptable to ETD, then ~~e~~Option 6, eliminating all fares, provides the greatest benefits. Option 5 has only slightly more revenue and greater net costs than ~~option~~ Option 6, while providing fewer benefits and is ~~this~~ inferior to Option 6.

Assuming ~~options~~ Options 5 and 6 are not financially feasible, we recommend that ETD at least implement ~~e~~Option 1; ~~f~~ Fare ~~s~~ Simplification, including incorporating XtraMile into the complete fixed route fare structure of single ride fares, transfers, multiple ride fares and passes. (Continuing to charge no fare on the Middletown XtraMile service for its entire first 6 months to build ridership is a common and reasonable way of introducing new service. Continuing to charge temporary free or low fares to introduce a new service, including new XtraMile services, in order to build initial ridership is also recommended.) Dial-A-Ride and similar services should continue to have a separate higher fare structure. We also recommend that ETD work with its partners to fund and adopt Option 2, an area-wide reduced fare program for its most transportation-disadvantaged riders, low-income individuals, and for the riders of the future; youth/students. Finally, we recommend that ETD adopt free fares on fixed route service only for individuals eligible for ADA complementary paratransit service, but only if ETD's ADA eligibility determination process is tightly structured to ensure that eligibility is granted only to individuals who actually qualify under the ADA. Free fares on fixed route service for these individuals has been shown to both improve their mobility and ~~to~~ reduce ADA complementary paratransit demand, reducing the agency's costs.

Option 3; "Best Fare" works well to make transit more affordable for low-income riders, but only if there is a convenient way for unbanked and underbanked riders to add small amounts of cash to their transit accounts. In some urban settings, this is accomplished by contracting with private companies that distribute gift cards through ~~small~~ local stores, ~~and~~ ~~which/who~~ already have a network in place to accept small amounts of cash ~~and~~ ~~and~~ use this process to load ~~apply to~~ account ~~based~~ ~~represented by~~ smartcards. In some rural settings, this is accomplished by accepting cash on board vehicles (with a limit of \$20 or less), applying that to the rider's account, and then letting the rider pay with stored value. We will work with ETD to explore the feasibility of ETD implementing "Best Fare", and the benefits ~~to it~~ of doing so.

Next Steps and Implementation of Fare Options

Implementing any new fare collection system will take time, and the current mix of fare technologies between ETD and MAT creates difficulties in implementing an integrated fare structure. This will be addressed during Task 2; ~~f~~ Fare ~~technology~~ Collection System Recommendations ~~and~~ will also include recommendations on interim steps for implementation prior to the purchase of any new fare collection equipment.

THESE MINUTES ARE SUBJECT TO APPROVAL AT THE NEXT RVT MEETING

RIVER VALLEY TRANSIT
REGULAR MEETING
September 9, 2022
Middletown Offices and via ZOOM

CALL TO ORDER

The meeting was called to order by Leslie Strauss, Chairman at 9:03 a.m.

ROLL CALL

A quorum was established with the following board members present: Leslie Strauss, DG Fitton, Karl Kilduff, Charlie Norz, Joan Gay, John Hall, Dave Lahm, Tim Griswold, Beverly Lawrence, and Angus McDonald.

Also in attendance: Sam Gold, Christine Denison, Joe Comerford

VISITOR COMMENTS –

COG Update

Sam Gold reported:

- The COG is working with DOT on a process to provide transparency on projects and implementation of projects resulting from DOT funded studies.
- Work continues on the Regional Transportation Plan. The District will be provided a draft for their input. It is anticipated that a draft will be available in the spring.
- An application for the Safe Streets for All Grant (possible use of Infrastructure funding) will be submitted. Will enhance the safety of roads for pedestrians, bicyclists and transit users.
- The COG and District provided comments to DEEP relative to broad band internet - requested that free WIFI be provided on transit.

SECRETARY’S REPORT

Joan Gay made a motion to accept the minutes from the Board Meeting dated 8/12/22 as presented. Angus McDonald seconded the motion. The motion passed unanimously.

CORRESPONDENCE – None.

TREASURER’S REPORT – None.

COMMITTEE REPORTS

Facilities – formerly Expansion Transition Committee – meets monthly, 4th Tuesday, 1 p.m.

Joan reported:

- The Committee is in the process of streamlining the Implementation Plan with an emphasis on facilities and maintenance items.
- Facilities –Shoreline property status – discussions on-going. If no resolution by November, the District may wish to pursue another site.
 - Cannot move forward with the Master Plan until the status of the shoreline property is determined.

Charlie Norz made a motion to accept the Facilities Committee Report as presented. Tim Griswold seconded the motion. The motion passed unanimously.

Finance Committee – No Report.

Legislative Committee – No Report.

EXECUTIVE DIRECTOR’S REPORT

A copy of the Executive Director’s Report was included in the Board packet. Joe Comerford reported:

- We are waiting for the signed Supplemental Agreement from DOT.
- The FY 23 TOD has been received. We are now able to submit invoices.
- Site visits were conducted for radio connections – there is a 6 week “build out”.
- Met with the AVL vendor to select displays for terminals – final pricing expected next week.
- Fare Study – consultants conducted surveys and interviews with stakeholders – expect recommendation for fare structure in October.
- Marketing Study – consultants presented the first round of branding concepts to the committee.
- Website wireframes were completed – next step is to finalize the branding and begin work on graphics/photos for the website.
- Xtra Mile Middletown service began on 3/31
 - App being used – working on updating the app as it is not “user friendly”
 - Ridership increasing
 - Working with Wesleyan University students
- Park Connect CT service ended on 9/5
- Mike Sanders is the interim Transit Administrator

Angus McDonald made a motion to accept the Executive Director’s Report as presented. Joan Gay seconded the motion. The motion passed unanimously.

NEW BUSINESS

Personnel Policy – The Final Draft of the Estuary Transit District Personnel Policy Manual was included in the Board packet. The draft was a result of the HR study recommendations. The document has been reviewed by the District’s attorney. The Committee recommends board approval of the document.

Joan Gay made a motion to approve the Estuary Transit District Personnel Policy Manual as presented. Tim Griswold seconded the motion. The motion passed unanimously.

EEO Policy – The EEO Policy was included in the Board’s packet. The policy was a result of HR Study recommendations.

DG Fitton made a motion to approve the EEO Policy as presented. David Lahm seconded the motion. The motion passed unanimously.

OLD BUSINESS – None.

CHAIR COMMENTS

Regarding the content of the website, the consensus of the Board was that contact information for Board members would be facilitated via the District, not personal emails. In addition. Board member pictures on the website would not be mandatory but personal preference.

Board Meetings – The consensus of the Board was to retain monthly board meetings using the hybrid model.

BOARD MEMBER COMMENTS – None.

EXECUTIVE SESSION – None.

ADJOURNMENT

Joan/Angus McDonald made a motion to adjourn the meeting at 9:50 a.m. seconded the motion. The motion passed unanimously.

Next Meeting – October 14, 2022 – 9:00

Respectfully Submitted,

Suzanne Helchowski
Clerk

THESE MINUTES ARE SUBJECT TO APPROVAL AT THE NEXT
ESTUARY TRANSIT DISTRICT and MIDDLETOWN TRANSIT DISTRICT BOARD MEETINGS

ESTUARY TRANSIT DISTRICT
MIDDLETOWN TRANSIT DISTRICT
FACILITIES COMMITTEE MEETING
MTD GARAGE, 91 N. Main Street, Middletown, CT with Remote Options
TUESDAY, SEPTEMBER 27, 2022, AT 1:00 PM.

CALL TO ORDER

The meeting was called to order by Joan Gay, Chair, at 1:01 p.m.

ROLL CALL

A quorum was established with the following committee members present: Joan Gay, Karl Kilduff, and Angus McDonald

Also in attendance:

Staff: Joe Comerford and Christina Denison

Board Members: Leslie Strauss, ETD Board Chair; and Charles Norz, ETD Board Member, Old Saybrook

CT DOT: Piotr Milczek, Transportation Planner 1, CT DOT, Bureau of Transportation, Office of Transit and Riderssharing; and Mike Sanders, Interim Public Transit Administrator, CT DOT (joined at 1:17 p.m.).

Gay reported that representatives from CT DOT were attending a meeting with the DOT Deputy Commissioner and would be joining the meeting later.

McDonald made a motion to move the discussion of the Facilities Plan with DOT until such time that representatives from CT DOT were in attendance. Kilduff seconded the motion. The motion passed unanimously.

EXECUTIVE DIRECTOR'S REPORT

Comerford reported:

- Phoenix Fiber Optics has inquired about extending their lease of the N. Main Street property in Middletown and leasing additional space at the same address. Comerford noted that since the District's project is moving slowly, extending the lease would be acceptable. Graham Curtis, Bus Capital Programs Assistant Administrator, CT DOT, is working on the lease extension.

OLD BUSINESS

None.

NEW BUSINESSMarketing Committee- Strauss reported:

- An URL has been procured.
- The marketing firm is on target and has provided the committee with sample logos, mock-ups of buses and color schemes.
- Logo designs have been narrowed down to 2. The marketing firm is tweaking the designs based on comments from the committee and will forward them to stakeholders for further comment.

FACILITIES PLAN WITH DOT

Sanders joined the meeting at 1:17 p.m. Gay explained the transition of the Implementation Committee to the Facilities Committee.

The committee reviewed the Facilities Progress Plan which was included in the meeting packet.

Architecture & Engineering

- a. *Facilities Master Plan* – Sanders reported that the Master Plan cannot be started until plans for the shoreline facility are resolved. However, there is currently no time schedule for initiating the Master Plan.
- b. *Middletown Terminal Renovation & Design* - Sanders reported that the site plan has been reviewed and although the downtown location is the most desirable, it may be necessary to look at “alternatives” due to lack of space. He stated that DOT’s top priority is the electrification of buses within the State; the Middletown project is “second tier.”

Right of Way Acquisition

- a. *Shoreline Facility* – Sanders reported that plans to acquire a shoreline property remain “idle” due to “internal political barriers within DOT”. He also noted the Master Plan must be completed before prioritizing capital projects.

Gay, Kilduff, McDonald and Strauss all expressed concern and frustration over the delay in completing the Master Plan and the lack of progress in moving forward with a shoreline facility. She stressed that the committee has worked tirelessly for two years, noting the two districts merged with a promise from DOT that a shoreline facility would be built and the DOT Commissioner signed a commitment letter to that effect. She also indicated that per the agreement, the Master Plan was to be completed by July 1, 2022. Sanders said that he was not aware of such an agreement and asked that Comerford forward him a copy.

Discussion followed as to what the Committee could do to make the Master Plan and shoreline site a priority. McDonald strongly suggested engaging the State legislators. Sanders disagreed.

Comerford suggested the District initiate a Master Plan on its own, keeping DOT on the advisory committee. Sanders agreed that doing so might make the project a priority for DOT. He noted that DOT would help develop the scope.

Sanders questioned how the Master Plan would be funded. Comerford reported the district received a federal grant in 2016 and has been holding onto these funds; however, the District would need matching funds from the State. Sanders suggested Comerford write a letter to DOT requesting funds.

Comerford stressed that the District does not want to be involved in the acquisition of property or in construction, noting that CT DOT verbally indicated it would control all transit district construction projects. Sanders indicated he was unaware of this decision.

He stated that he will contact the DOT Commissioner to discuss the District’s concerns and frustration. Gay asked Sanders to keep her apprised of the discussion and if political assistance is needed from the state legislators.

DISCUSSION OF NEXT STEPS

1. Comerford will forward a copy of the October 7, 2021, letter regarding “Merger-Estuary Transit District/Middletown Transit District”, signed by DOT Commissioner Joseph J. Giulietti, Leslie Strauss, ETD Chair, and Joseph Samolis, MTD Chair, to Sanders.
2. Comerford will send a letter to Sanders and Sandra Infantino, Transportation Supervising Planner, Bureau of Finance and Administration, CTDOT, requesting the release of funds to move forward with the Master Plan.
3. Gay will send the “Facilities Progress Report” file to Graham Curtis and Sanders for updating.

NEXT MEETING

The next meeting is scheduled for Tuesday, October 25, 2022, at the MTD Garage, 91 N. Main Street, Middletown at 1:00 p.m. with remote options.

ADJOURNMENT

Gay thanked Sanders for attending the meeting and for his candid assessment. She asked Sanders to share the committee’s frustration with the DOT Commissioner.

The meeting was adjourned at 2:19 p.m.

Respectfully submitted,

Christina Denison
Clerk

THESE MINUTES ARE SUBJECT TO APPROVAL AT THE NEXT
ESTUARY TRANSIT DISTRICT BOARD MEETING

ESTUARY TRANSIT DISTRICT
FINANCE COMMITTEE MEETING
MTD GARAGE, 91 N. Main Street, Middletown, CT with Remote Options
WEDNESDAY, OCTOBER 12, 2022, AT 9:30 A.M.

CALL TO ORDER

The meeting was called to order by Charles Norz, Chair, at 9:33 a.m.

ROLL CALL

A quorum was established with the following committee members present: Karl Kilduff and Charles Norz

Absent: Joan Gay

Also in attendance: Joseph Comerford, Christina Denison, and Halyna Famiglietti

DISCUSSION OF BUDGET VS. ACTUALS

Copies of Budget vs. Actuals were included in the meeting packet.

The budget was reviewed and discussed. There are no issues.

DISCUSSION OF CASH FLOW

Copies of the Cash Flow report were included in the meeting packet.

Famiglietti reported that there are no concerns regarding cash flow despite CTDOT's slow payment schedule. She noted that a strong General Fund has helped with cash flow and the District has not had to borrow against its line of credit.

Comerford reported that CTDOT is extremely short-staffed and is undergoing numerous staffing changes as well. As a result, the processing of TODs is behind. He noted that the District is getting paid for the majority of its programs but at last year's figures because DOT has yet to establish a budget for the current fiscal year. He reported that CTDOT is in the process of reviewing each transit district's budgets to avoid giving a flat across the board increase to each district. He expects payments from CTDOT to slow down even more due to staffing issues.

Kilduff made a motion to recommend that the Board accept the Budget vs. Actual report and the Cash Flow report. Norz seconded the motion. The motion passed unanimously.

DISCUSSION OF ITEMS FOR THE AUGUST 12, 2022, REGULAR BOARD MEETING

Famiglietti reported that the auditors are working on the preliminary audits for MTD and ETD.

OTHER BUSINESS

None

ADJOURNMENT

Kilduff made a motion to adjourn the meeting at 9:54 a.m. Norz seconded the motion. The motion passed unanimously.

Respectfully submitted,

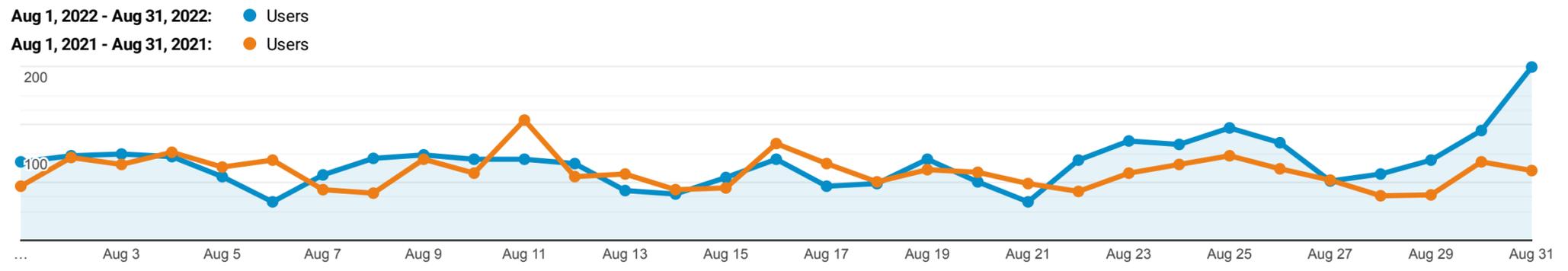
Christina Denison
Clerk

Audience Overview


 All Users
 +0.00% Users

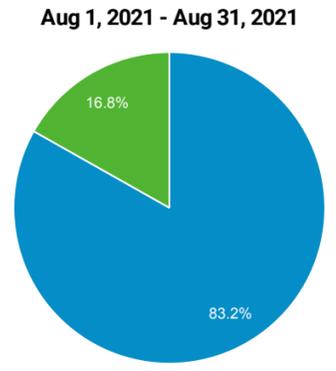
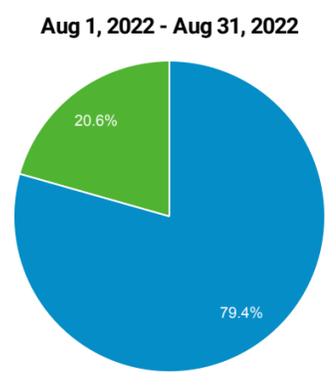
Aug 1, 2022 - Aug 31, 2022
 Compare to: Aug 1, 2021 - Aug 31, 2021

Overview



Users 10.02% 2,206 vs 2,005	New Users 7.86% 2,032 vs 1,884	Sessions 16.20% 3,220 vs 2,771	Number of Sessions per User 5.62% 1.46 vs 1.38
Pageviews 15.79% 5,523 vs 4,770	Pages / Session -0.36% 1.72 vs 1.72	Avg. Session Duration 2.20% 00:01:51 vs 00:01:49	Bounce Rate -0.34% 68.73% vs 68.96%

■ New Visitor ■ Returning Visitor



Language	Users	% Users
1. en-us		
Aug 1, 2022 - Aug 31, 2022	1,991	90.17%
Aug 1, 2021 - Aug 31, 2021	1,863	92.87%
% Change	6.87%	-2.91%
2. zh-cn		
Aug 1, 2022 - Aug 31, 2022	41	1.86%
Aug 1, 2021 - Aug 31, 2021	13	0.65%
% Change	215.38%	186.53%
3. en		
Aug 1, 2022 - Aug 31, 2022	34	1.54%
Aug 1, 2021 - Aug 31, 2021	28	1.40%
% Change	21.43%	10.32%
4. en-gb		
Aug 1, 2022 - Aug 31, 2022	26	1.18%
Aug 1, 2021 - Aug 31, 2021	15	0.75%
% Change	73.33%	57.48%
5. es-419		
Aug 1, 2022 - Aug 31, 2022	7	0.32%
Aug 1, 2021 - Aug 31, 2021	10	0.50%
% Change	-30.00%	-36.40%
6. es-us		
Aug 1, 2022 - Aug 31, 2022	7	0.32%
Aug 1, 2021 - Aug 31, 2021	42	2.09%
% Change	-83.33%	-84.86%
7. en-au		

7. enPa			
Aug 1, 2022 - Aug 31, 2022		6	0.27%
Aug 1, 2021 - Aug 31, 2021		4	0.20%
% Change		50.00%	36.28%
8. fr			
Aug 1, 2022 - Aug 31, 2022		6	0.27%
Aug 1, 2021 - Aug 31, 2021		0	0.00%
% Change		100.00%	100.00%
9. c			
Aug 1, 2022 - Aug 31, 2022		4	0.18%
Aug 1, 2021 - Aug 31, 2021		4	0.20%
% Change		0.00%	-9.15%
10. es			
Aug 1, 2022 - Aug 31, 2022		4	0.18%
Aug 1, 2021 - Aug 31, 2021		0	0.00%
% Change		100.00%	100.00%

Section VII, Item 3.

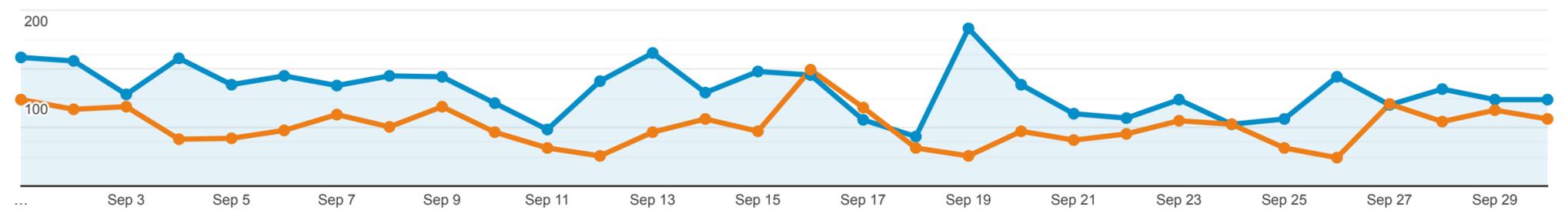
Audience Overview

 All Users
+0.00% Users

Sep 1, 2022 - Sep 30, 2022
 Compare to: Sep 1, 2021 - Sep 30, 2021

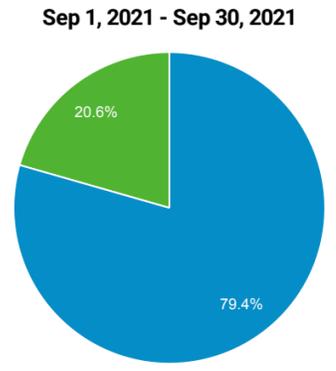
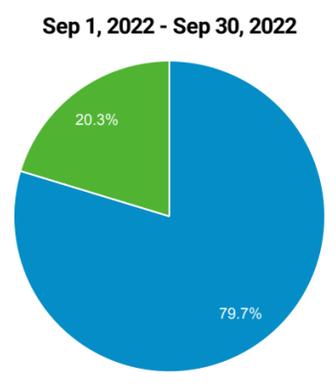
Overview

Sep 1, 2022 - Sep 30, 2022: ● Users
 Sep 1, 2021 - Sep 30, 2021: ● Users



Users 66.04% 2,630 vs 1,584	New Users 69.47% 2,442 vs 1,441	Sessions 58.91% 3,790 vs 2,385	Number of Sessions per User -4.29% 1.44 vs 1.51
Pageviews 34.51% 5,952 vs 4,425	Pages / Session -15.36% 1.57 vs 1.86	Avg. Session Duration -30.09% 00:01:39 vs 00:02:22	Bounce Rate 12.73% 72.98% vs 64.74%

■ New Visitor ■ Returning Visitor



Language	Users	% Users
1. en-us		
Sep 1, 2022 - Sep 30, 2022	2,367	89.93%
Sep 1, 2021 - Sep 30, 2021	1,452	91.67%
% Change	63.02%	-1.89%
2. en-gb		
Sep 1, 2022 - Sep 30, 2022	59	2.24%
Sep 1, 2021 - Sep 30, 2021	15	0.95%
% Change	293.33%	136.72%
3. zh-cn		
Sep 1, 2022 - Sep 30, 2022	37	1.41%
Sep 1, 2021 - Sep 30, 2021	28	1.77%
% Change	32.14%	-20.47%
4. c		
Sep 1, 2022 - Sep 30, 2022	23	0.87%
Sep 1, 2021 - Sep 30, 2021	17	1.07%
% Change	35.29%	-18.58%
5. en		
Sep 1, 2022 - Sep 30, 2022	21	0.80%
Sep 1, 2021 - Sep 30, 2021	22	1.39%
% Change	-4.55%	-42.55%
6. es-419		
Sep 1, 2022 - Sep 30, 2022	12	0.46%
Sep 1, 2021 - Sep 30, 2021	11	0.69%
% Change	9.09%	-34.35%
7. es-us		

Sep 1, 2022 - Sep 30, 2022	9	0.34%
Sep 1, 2021 - Sep 30, 2021	16	1.01%
% Change	-43.75%	-66.15%
8. fr-fr		
Sep 1, 2022 - Sep 30, 2022	8	0.30%
Sep 1, 2021 - Sep 30, 2021	1	0.06%
% Change	700.00%	381.46%
9. ko-kr		
Sep 1, 2022 - Sep 30, 2022	8	0.30%
Sep 1, 2021 - Sep 30, 2021	0	0.00%
% Change	100.00%	100.00%
10. en-in		
Sep 1, 2022 - Sep 30, 2022	6	0.23%
Sep 1, 2021 - Sep 30, 2021	2	0.13%
% Change	200.00%	80.55%

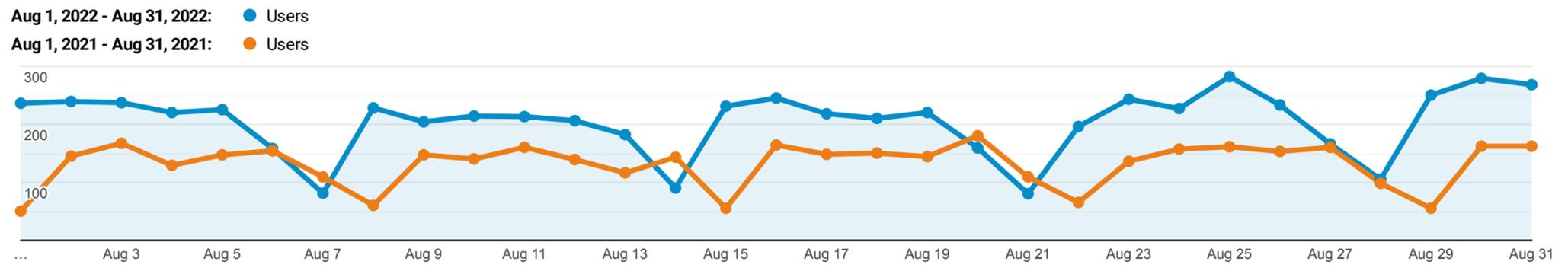
Section VII, Item 3.

Audience Overview

All Users
+0.00% Users

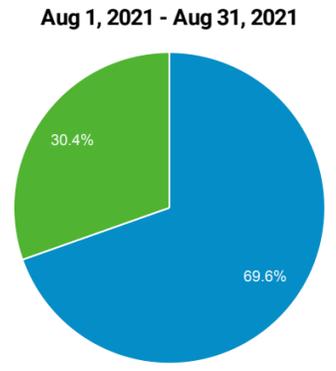
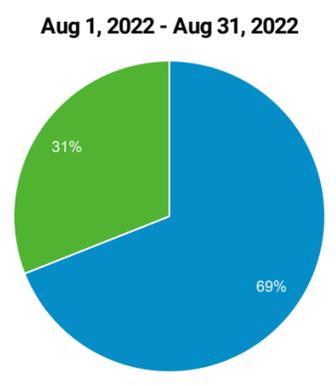
Aug 1, 2022 - Aug 31, 2022
Compare to: Aug 1, 2021 - Aug 31, 2021

Overview



Users 45.61% 3,352 vs 2,302	New Users 45.01% 2,864 vs 1,975	Sessions 59.39% 9,739 vs 6,110	Number of Sessions per User 9.46% 2.91 vs 2.65
Pageviews 49.57% 22,646 vs 15,141	Pages / Session -6.17% 2.33 vs 2.48	Avg. Session Duration -2.30% 00:02:55 vs 00:02:59	Bounce Rate -0.85% 48.20% vs 48.61%

■ New Visitor ■ Returning Visitor



Language	Users	% Users
1. en-us		
Aug 1, 2022 - Aug 31, 2022	3,064	91.35%
Aug 1, 2021 - Aug 31, 2021	2,230	96.75%
% Change	37.40%	-5.57%
2. c		
Aug 1, 2022 - Aug 31, 2022	67	2.00%
Aug 1, 2021 - Aug 31, 2021	4	0.17%
% Change	1,575.00%	1,051.13%
3. en		
Aug 1, 2022 - Aug 31, 2022	39	1.16%
Aug 1, 2021 - Aug 31, 2021	26	1.13%
% Change	50.00%	3.09%
4. en-gb		
Aug 1, 2022 - Aug 31, 2022	31	0.92%
Aug 1, 2021 - Aug 31, 2021	13	0.56%
% Change	138.46%	63.88%
5. es-us		
Aug 1, 2022 - Aug 31, 2022	24	0.72%
Aug 1, 2021 - Aug 31, 2021	2	0.09%
% Change	1,100.00%	724.69%
6. es-419		
Aug 1, 2022 - Aug 31, 2022	12	0.36%
Aug 1, 2021 - Aug 31, 2021	8	0.35%
% Change	50.00%	3.09%
7. fr-fr		

Aug 1, 2022 - Aug 31, 2022	10	0.30%	Section VII, Item 3.
Aug 1, 2021 - Aug 31, 2021	1	0.04%	
% Change	900.00%	587.24%	
8. es			
Aug 1, 2022 - Aug 31, 2022	7	0.21%	
Aug 1, 2021 - Aug 31, 2021	0	0.00%	
% Change	100.00%	100.00%	
9. en-ca			
Aug 1, 2022 - Aug 31, 2022	6	0.18%	
Aug 1, 2021 - Aug 31, 2021	5	0.22%	
% Change	20.00%	-17.53%	
10. zh-cn			
Aug 1, 2022 - Aug 31, 2022	6	0.18%	
Aug 1, 2021 - Aug 31, 2021	1	0.04%	
% Change	500.00%	312.34%	

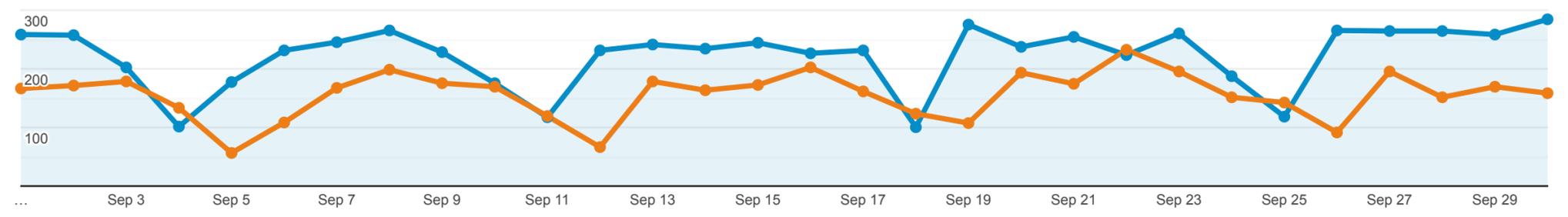
Audience Overview

 All Users
+0.00% Users

Sep 1, 2022 - Sep 30, 2022
Compare to: Sep 1, 2021 - Sep 30, 2021

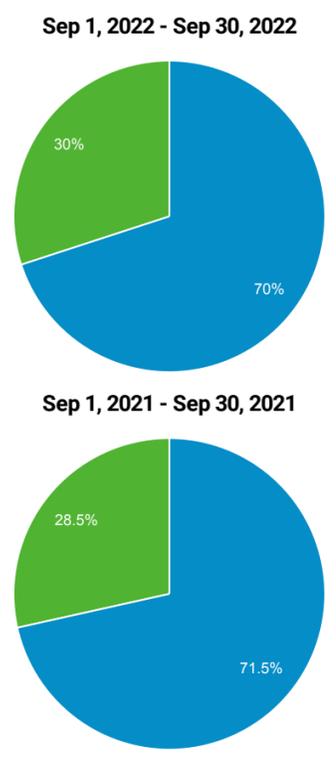
Overview

Sep 1, 2022 - Sep 30, 2022: ● Users
Sep 1, 2021 - Sep 30, 2021: ● Users



Users 34.43% 3,670 vs 2,730	New Users 33.43% 3,145 vs 2,357	Sessions 43.52% 9,840 vs 6,856	Number of Sessions per User 6.76% 2.68 vs 2.51
Pageviews 34.83% 22,265 vs 16,513	Pages / Session -6.06% 2.26 vs 2.41	Avg. Session Duration -6.12% 00:02:38 vs 00:02:49	Bounce Rate 2.22% 50.08% vs 48.99%

■ New Visitor ■ Returning Visitor



Language	Users	% Users
1. en-us		
Sep 1, 2022 - Sep 30, 2022	3,392	92.35%
Sep 1, 2021 - Sep 30, 2021	2,624	96.01%
% Change	29.27%	-3.81%
2. c		
Sep 1, 2022 - Sep 30, 2022	87	2.37%
Sep 1, 2021 - Sep 30, 2021	4	0.15%
% Change	2,075.00%	1,518.37%
3. en-gb		
Sep 1, 2022 - Sep 30, 2022	49	1.33%
Sep 1, 2021 - Sep 30, 2021	17	0.62%
% Change	188.24%	114.47%
4. en		
Sep 1, 2022 - Sep 30, 2022	22	0.60%
Sep 1, 2021 - Sep 30, 2021	22	0.80%
% Change	0.00%	-25.59%
5. es-us		
Sep 1, 2022 - Sep 30, 2022	17	0.46%
Sep 1, 2021 - Sep 30, 2021	13	0.48%
% Change	30.77%	-2.70%
6. es-419		
Sep 1, 2022 - Sep 30, 2022	12	0.33%
Sep 1, 2021 - Sep 30, 2021	7	0.26%
% Change	71.43%	27.56%
7. zh-cn		

7. zifcn			
Sep 1, 2022 - Sep 30, 2022	7		0.19%
Sep 1, 2021 - Sep 30, 2021	6		0.22%
% Change			16.67% -13.19%
8. en-ca			
Sep 1, 2022 - Sep 30, 2022	5		0.14%
Sep 1, 2021 - Sep 30, 2021	16		0.59%
% Change			-68.75% -76.75%
9. de-de			
Sep 1, 2022 - Sep 30, 2022	3		0.08%
Sep 1, 2021 - Sep 30, 2021	1		0.04%
% Change			200.00% 123.22%
10. en-gb-oxendict			
Sep 1, 2022 - Sep 30, 2022	3		0.08%
Sep 1, 2021 - Sep 30, 2021	0		0.00%
% Change			100.00% 100.00%

Section VII, Item 3.

	ESTUARY TRANSIT DISTRICT		
	For the Period July 1, 2022 to August 30, 2022		
	YTD ACTUAL	BUDGET AMOUNT	YTD % of BUDGET
REVENUE			
FAREBOX REVENUE	\$ 47,000	\$ 284,150	17%
URBAN CARES ACT	\$ 150,500	\$ 859,600	18%
RURAL CARE ACT	\$ 15,500	\$ -	0%
TOTAL REVENUE	\$ 213,000	\$ 1,143,750	19%
EXPENSES			
LABOR	\$ 441,582	\$ 2,820,000	16%
FRINGE BENEFITS	\$ 168,375	\$ 1,011,500	17%
PROFESSIONAL SERVICES	\$ 121,917	\$ 448,600	27%
MATERIALS & SUPPLIES	\$ 7,805	\$ 103,700	8%
RENT&UTILITIES	\$ 37,945	\$ 244,500	16%
INSURANCE	\$ 29,583	\$ 86,400	34%
MAINTENANCE	\$ 73,622	\$ 631,500	12%
FUEL	\$ 139,816	\$ 783,500	18%
MISCELLANEOUS EXPENSE	\$ 3,804	\$ 90,800	4%
TOTAL EXPENSES	\$ 1,024,450	\$ 6,286,000	15%

17%

DEFICIT \$ 811,450

DOT \$ 759,750

LOCAL \$ 51,700

Surplus/(Deficit) \$ 0.00

PARK CONNECT \$ 31,900 \$ 39,877 80%

STATEMENT OF CASH FLOWS
Wednesday, October 12, 2022

Combined Transit District	
Operating Checking	\$ 711,916
Payroll Checking	\$ 44,055
Capital Checking	\$ 56,156
Savings	\$ 5,853
BALANCE TOTAL	\$ 817,979

Account Payable	Oct-22	Nov-22	Dec-22
Payroll	\$ 112,250	\$ 224,500	\$ 224,500
Benefits	\$ 45,000	\$ 76,500	\$ 76,500
CIRMA	\$ 7,500	\$ 7,500	\$ 7,500
Fuel	\$ 45,000	\$ 45,000	\$ 45,000
Management Services	\$ 19,695	\$ 19,695	\$ 19,695
Services	\$ 20,750	\$ 20,750	\$ 20,750
Vehicle Maintenance and Repairs	\$ -	\$ 21,000	\$ 21,000
Rent & Utilities	\$ -	\$ 20,500	\$ 20,500
Insurance	\$ -	\$ 7,200	\$ 7,200
Other Monthly Expenses	\$ 5,500	\$ 10,500	\$ 10,500
TOTAL EXPENSES	\$ 255,695	\$ 453,145	\$ 453,145

Account Receivable			
CT DOT FY17 MGP Grant	\$ -	\$ 19,425	\$ -
CT DOT FY21 All Grants	\$ 46,200	\$ -	\$ -
CT DOT FY22 All Grants	\$ 478,830	\$ -	\$ -
RURAL Care Act (DOT)	\$ 7,750	\$ 7,750	\$ 7,500.00
URBAN Care Act (FTA)	\$ -	\$ 150,500	\$ -
FIXED 5307	\$ -	\$ -	\$ 686,473
MGP Grant	\$ 63,540	\$ -	\$ 63,540
DAR	\$ 28,085	\$ -	\$ 28,085
ADA	\$ 65,599	\$ -	\$ 65,599
Madison/Middletown (RT.81)	\$ 30,000	\$ 15,500	\$ 15,500
RURAL 5311	\$ 36,000	\$ 18,500	\$ 18,500
X-Mile	\$ 50,000	\$ 25,500	\$ 25,500
Park Connect	\$ 51,070	\$ 39,877	\$ -
New Freedom 5310	\$ 55,000	\$ 27,500	\$ 27,500
Middlesex Hospital	\$ -	\$ 3,950	\$ 3,950
TOTAL REVENUE	\$ 857,074	\$ 277,052	\$ 910,697

Cash at the beginning of the period	\$ 817,979	\$ 1,419,359	\$ 1,243,266
Cash at the end of the period	\$ 1,419,359	\$ 1,243,266	\$ 1,700,818

641 Old Saybrook - Madison

	January	February	March	April	May	June	July	August	September	October	November	December	Total	Change
2017	4818	4677	5464	4821	5353	5328	4816	5087	4427	4618	4344	3965	57718	-14%
2018	4116	4122	4341	4531	4912	4629	4789	5154	4282	5252	4355	3747	54230	-6%
2019	4213	3961	4358	4396	4631	3902	4021	3892	3639	3970	3222	2919	47124	-13%
2020	3525	3450	2346	568	648	1126	1546	1831	2313	2317	1683	1466	22819	-52%
2021	1502	1422	1872	1943	2186	2533	2752	2754	3239	3122	3102	2766	29193	28%
2022	2260	2660	2873	3638	3484	3753	3769	3848	3783				30068	
	50%	87%	53%	87%	59%	48%	37%	40%	17%	35%	84%	89%		
	-36%	-23%	-34%	-20%	-25%	-4%	-6%	-1%	-11%	-21%	-4%	-5%		

642 Chester

	January	February	March	April	May	June	July	August	September	October	November	December	Total	Change
2017	747	717	647	625	691	687	625	570	599	646	591	638	7783	-9%
2018	512	502	570	553	603	513	504	531	571	532	500	554	6445	-17%
2019	586	605	641	575	588	418	414	430	456	461	396	348	5918	-8%
2020	362	319	269	132	168	294	357	438	355	473	209	206	3582	-39%
2021	230	146	222	300	349	346	433	378	420	440	404	398	4066	14%
2022	287	289	344	351	388	394	424	411	417				3305	
	25%	98%	55%	17%	11%	14%	-2%	9%	-1%	-7%	93%	93%		
	-21%	-9%	28%	-39%	-34%	-6%	2%	-4%	-9%	-5%	2%	14%		

643 New London

	January	February	March	April	May	June	July	August	September	October	November	December	Total	Change
2017	641	582	675	619	678	643	564	684	588	574	537	442	7227	-26%
2018	430	508	502	492	565	541	644	654	583	775	629	595	6918	-4%
2019	582	535	661	632	709	616	527	622	445	562	448	422	6761	-2%
2020	485	436	466	260	266	394	456	412	404	467	343	343	4732	-30%
2021	359	273	393	377	361	417	505	504	467	356	282	309	4603	-3%
2022	269	269	325	338	279	430	436	577	477				3400	
	-25%	-1%	-17%	-10%	-23%	3%	-14%	14%	2%	-24%	-18%	-10%		
	-45%	-38%	-30%	-47%	-61%	-30%	-17%	-7%	7%	-37%	-37%	-27%		

644 Old Saybrook - Middletown

	January	February	March	April	May	June	July	August	September	October	November	December		
2017	700	622	647	709	787	710	631	850	909	980	801	688	9034	-9%
2018	662	721	732	776	816	737	750	801	732	844	645	543	8759	-3%
2019	613	645	656	642	592	474	539	591	609	760	584	452	7157	-18%
2020	513	526	367	151	148	227	315	307	340	390	261	208	3753	-48%
2021	194	139	219	305	281	303	301	355	404	378	409	334	3622	-3%
2022	278	379	418	415	443	541	551	528	526				4079	
	43%	173%	91%	36%	58%	79%	83%	49%	30%	-3%	57%	61%		-100%
	-46%	-28%	14%	-35%	-25%	14%	2%	-11%	-14%	-50%	-30%	-26%		

645 Madison - Middletown

	January	February	March	April	May	June	July	August	September	October	November	December		
2018								22	113	197	177	187	696	
2019	227	246	291	365	271	224	286	318	333	254	215	157	3187	
2020	237	220	194	124	154	200	222	226	215	239	319	306	2656	
2021	232	212	281	302	291	269	323	261	324	275	360	358	3488	
2022	252	290	360	445	419	597	494	551	436				3844	
	9%	37%	28%	47%	44%	122%	53%	111%	35%	15%	13%	17%		
						167%	73%	73%	31%	8%	67%	128%		

Shoreline Routes Total

	January	February	March	April	May	June	July	August	September	October	November	December		
2019	6221	5992	6607	6610	6791	5634	5787	5853	5482	6007	4865	4298	70147	
2020	5122	4951	3642	1235	1384	2241	2896	3214	3627	3886	2815	2529	37542	
2021	2517	2192	2987	3227	3468	3868	4314	4252	4854	4571	4557	4165	44972	
2022	3346	3887	4320	5187	5013	5715	5674	5915	5639	0	0	0	44696	
	33%	77%	45%	61%	45%	48%	32%	39%	16%					
	-46%	-35%	-35%	-22%	-26%	1%	-2%	1%	3%					

581 Saybrook Rd (Mon - Sat)

	January	February	March	April	May	June	July	August	September	October	November	December		
2022						4357	4423	4817	4707				18304	

582 Wesleyan Hills (Mon - Fri)

	January	February	March	April	May	June	July	August	September	October	November	December		
2022						1594	1502	2090	1993				7179	

Clinton Trolley

	January	February	March	April	May	June	July	August	September	October	November	December			
2019							68	245	528	0	0	0	0	841	
2020	0	0	0	0	0	0	7	46	73	41	0	0	0	167	-80%
2021	0	0	0	0	0	18	287	479	452	101	0	0	0	1337	701%
2022	0	0	0	0	0	41	284	199	148	96				768	
						128%	-1%	-58%	-67%	-5%					

Madison Shuttle

	January	February	March	April	May	June	July	August	September	October	November	December		
2021						5	86	97	65	18	0	0	0	271
2022						34	13	29	9	15				100
						580%	-85%	-70%	-86%	-17%				

XtraMile

	January	February	March	April	May	June	July	August	September	October	November	December		
2019						268	496	731	813	904	1049	1033	848	6142
2020	1019	1108	852	595	670	821	876	885	925	1073	904	1,068	10796	
2021	853	869	1130	1218	1149	1294	1447	1391	1501	1566	1554	1,566	15538	
2022	1393	1724	1954	1955	1918	2047	2029	2108	2965				18093	
	63%	98%	73%	61%	67%	58%	40%	52%	98%	46%	72%	47%		

Dial-A-Ride

	January	February	March	April	May	June	July	August	September	October	November	December		
2017	818	678	932	750	805	736	765	813	748	753	731	646	9175	-10%
2018	713	768	785	948	1417	1020	931	957	698	999	880	932	11048	20%
2019	1212	1141	1198	1343	1272	1022	1138	1026	915	1099	866	779	13011	18%
2020	999	934	560	200	209	276	346	272	468	616	286	536	5702	-56%
2021	593	504	800	731	661	631	559	589	916	753	692	715	8144	43%
2022	606	661	829	746	750	709	856	834	754				6745	
	2%	31%	4%	2%	13%	12%	53%	42%	-18%	22%	142%	33%		
	-100%	-73%	-45%	-80%	-70%	-44%	-33%	-23%	-21%					

ADA

	January	February	March	April	May	June	July	August	September	October	November	December	
2019	0	0	0	0	0	0	7	13	42	49	51	46	208
2020	42	19	16	2	11	18	28	34	71	81	61	65	448
2021	69	47	81	76	110	112	75	97	173	186	186	273	1485
2022	216	168	193	167	204	223	1265	1099	740				4275
	213%	257%	138%	120%	85%	99%	1587%	1033%	328%	130%	205%	320%	

Monthly Totals

	January	February	March	April	May	June	July	August	September	October	November	December	Total	
2017	7724	7276	8365	7524	8314	8104	7401	8004	7271	7571	7004	6379	90937	-14%
2018	6433	6621	6930	7300	8313	7440	7618	8119	6979	8599	7186	6558	88096	-3%
2019	7439	7141	7806	7956	8335	7221	7918	8246	7364	8215	6826	5981	90448	3%
2020	7188	7020	5071	2035	2278	3364	4202	4491	5153	5667	4077	4207	54753	-39%
2021	4044	3612	4998	5252	5411	6278	6971	6846	7563	7076	6989	6719	71,759	31%
2022	5561	6440	7296	8055	7960	8977	33044	36574	36804	0	0	0	150,711	
	38%	78%	46%	53%	47%	43%	22%	26%	25%	25%	71%	60%		

**STATE OF CONNECTICUT)
COUNTY OF MIDDLESEX)**

**SS: ESTUARY TRANSIT DISTRICT
October 14, 2022**

**RESOLUTION NO. 23-001
AUTHORIZING RESOLUTION
ESTUARY TRANSIT DISTRICT**

CERTIFICATION:

I, Timothy Griswold, Secretary of the Estuary Transit District, do hereby certify that the following is a true and correct copy of a resolution adopted at its meeting on October 14th, 2022, in which a quorum was present and acting throughout and that the resolution has not been modified, rescinded, or revoked and is at present in full force and effect.

RESOLVED, that the Executive Director, Joseph Comerford, hereby is authorized on behalf of the Estuary Transit District to negotiate and execute all necessary contract documents required to purchase four (4) heavy duty transit buses for the Estuary Transit District from Gillig LLC in an amount not to exceed \$3,000,000.00.

IN WITNESS WHEREOF the undersigned has affixed his signature, the 14th day of October in the year 2022.

ESTUARY TRANSIT DISTRICT SECRETARY

Timothy Griswold, Secretary