

Estuary Transit
District Fare Study

Evaluation Criteria and Conceptual Options

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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.

Table 1: Importance of Potential Fare Goals				
	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.