

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~~ ~~and~~ removes 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 <del>+</del> 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/ <del>+</del> More barriers	-2
Simplifies fares	Significant simplification for users/ <del>R</del> <del>+</del> reduction in different fare products <del>&amp;</del> and prices	2
	Some simplification for users/ <del>R</del> <del>+</del> reduction in different fare products <del>and</del> & prices	1
	No change for users/ <del>N</del> <del>+</del> No reduction in products <del>+</del> pricesand prices	0
	Additional fare products <del>and</del> <del>+</del> prices	-1
	Significant additional fare products <del>and</del> <del>+</del> 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 $\pm 2\%$ )	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
<b>1. Simplify the Current Fare Structure</b>	<p>Make <del>only those</del> modifications needed to eliminate inconsistencies across current ETD and MAT fares and create a <del>single</del> 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 <del>&amp;and</del> 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-<del>per</del> /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>
<b>2. Introduce New Reduced Fare Categories</b>	<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 <del>per</del> /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>
<b>3. Implement "Best Fare"</b>	<p>This would also build on Option 1, but would require new fare equipment capabilities.</p>	<p>Improves customer convenience-/removes barrier to use <del>&amp;and</del> 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 <del>per</del> /year).</p>	<p>Reduction in fare revenue (-\$13,500--\$18,000 <del>per</del> /year).</p> <p>Requires a new account-based fare collection system with real-time communications with all vehicles.</p>
<b>4. Eliminate Fares for Some Users</b>	<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 <del>per</del> /year for ADA <del>and</del> +132,000 <del>per</del> /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 <del>of \$182,000</del> for students and low-income <u>(\$182,000).</u></p> <p>Additional costs of setting up and administering the program.</p>

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

**Table 3: Evaluation of Alternatives**

Option	Descriptions	<u>Improve</u> Customer Conv <del>en</del> / <del>-/-</del> Remove Barriers	Fares <del>Simpl.</del> <u>Simpl.</u>	Max. Riders	<del>Affordl</del> <u>Improve</u> <del>Afford-</del> <u>ability</u>	Rev. <del>enue</del> Impacts Per Year	Cost Impacts
<b>1. Simplify the Current Fare Structure</b>	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>	1	1	0	0	<u>\$5,400</u> <del>maximum</del> <del>-3,000</del>	\$0

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<u>Option</u>	<u>Descriptions</u>	<u>Improve Customer Conv./ Remove Barriers</u>	<u>Fares Simpl.</u>	<u>Max. Riders</u>	<u>Improve Afford- ability</u>	<u>Rev. Impacts Per Year</u>	<u>Cost Impacts</u>
<b>2. Introduce New Reduced Fare Categories</b>	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.
<u>Table continued on next page...</u>							
<u>Option</u>	<u>Descriptions</u>	<u>Improve Customer Conv./ Remove Barriers</u>	<u>Fares Simpl.</u>	<u>Max. Riders</u>	<u>Improve Afford- ability</u>	<u>Rev. Impacts Per Year</u>	<u>Cost Impacts</u>
<b>3. Implement "Best Fare"</b>	This would also build on Option 1, but would require new fare equipment capabilities.	1	1	1	1	<u>Approximately</u> <u>Approx.</u> <u>loss of-</u> \$6,000 to -\$10,000 <u>per</u> year	<u>Approximately</u> <u>loss</u> <u>of-</u> \$-13,500 to \$-18,000 <u>per</u> year
<b>4. Eliminate Fares for Some Users</b>	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.
<b>5. Eliminate Fixed Route Fares</b>	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 <u>of</u> \$64,500 or more. Capital savings of \$400,000 to \$1,200,000.
<b>6. Eliminate All Fares</b>	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 <a href="#">services</a> . 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 ~~O~~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 ~~O~~option 2, an area-wide reduced fare program for its most transportation-disadvantaged riders, low-income individuals, and for the riders of the future; ~~y~~ 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~~ ~~s 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 ~~“B~~Best ~~E~~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.~~