Title VI Fare Equity Analysis:

Express BusLink Surcharge Elimination

August 2021

Prepared by:

Maryland Department of Transportation Maryland Transit Administration

with assistance from:
CONTENTS

1. Introduction ........................................................................................................................................................... 1
   Background........................................................................................................................................................... 1
   Relevant MDOT MTA Title VI Policies ................................................................................................................ 4
       Title VI Policy Outreach .............................................................................................................................. 4
       MDOT MTA Disparate Impact and Disproportionate Burden Policies for Fare Equity ........................... 4
   Data and Methodology ......................................................................................................................................... 5
       Data Sources .............................................................................................................................................. 5
       Fare Equity Analysis Methodology ............................................................................................................ 5

2. Fare Equity Analysis .............................................................................................................................................. 6
   Assumptions ......................................................................................................................................................... 6
       Definition of Low-Income ........................................................................................................................... 6
       Fare Media Usage ...................................................................................................................................... 6
   Results: Local Services Market ............................................................................................................................ 6

TABLES

Table 1: Express BusLink FY2021 Proposed Fares ................................................................................................... 2
Table 2: Local Services Market Fare Usage by Minority and Low-Income Riders .................................................... 7
Table 3: Local Services Market Application of DI/DB Thresholds ............................................................................. 7
1. INTRODUCTION

Background

In response to reduced demand for transit service due to the COVID-19 pandemic, MDOT MTA suspended its Express BusLink service during April 2020. MDOT MTA plans to reinstate Express BusLink service to coincide with the Fall 2021 service change, scheduled to occur on August 30, 2021. In an effort to encourage riders to return to the Express BusLink service, the agency plans to eliminate an Express BusLink surcharge of $0.60 previously charged on regular fares, and a $19.00 upcharge previously charged on monthly passes. Per the requirements of FTA C 4702.1B, MDOT MTA must undertake a Title VI Fare Equity Analysis to analyze for potential disparate impacts or disproportionate burdens that may arise due to the elimination of these additional charges.

MDOT MTA plans to eliminate these additional charges in conjunction with the reinstatement of Express BusLink service on August 30, 2021.1 In 2013, the Maryland legislature passed House Bill 1515 (Chapter 429), the “Transportation Infrastructure Investment Act of 2013.”2 At the time, MDOT MTA had not increased fares for any of its services since 2003. The 2013 law put a process in place to require regular fare increases for all of MTA’s transit modes and establish a fare policy for future changes.

Based on this law, in 2015, MDOT MTA began using the following schedule to determine regular fare increases:

- **Core Bus, Light RailLink and Metro SubwayLink Service:** On a biennial basis, MTA will increase base fare prices and the cost of multi-use passes to the nearest ten cents for all transit services (except Commuter Rail and Commuter Bus) or by the same percentage as the biennial increase in the Consumer Price Index (CPI) for all urban consumers. These services’ fares were last adjusted in 2019 and are due for an increase in 2021.

- **Commuter Rail (MARC) and Commuter Bus Service:** Every five years, MTA will increase one-way zone fare prices and the cost of multiuse passes to the nearest dollar by at least the same percentage as the five-year increase in the CPI for all urban consumers, as well as any additional amount the administration determines is necessary after considering factors affecting commuting costs applicable to the jurisdictions in which the administration provides commuter service, including monthly parking fees, the retail price per gallon of motor fuel, the amount of any monthly federal commuting subsidy, fare prices for intercity rail service, and any other relevant commuting costs. These services’ fares were scheduled for an increase in 2020, but this increase did not take place due to the impact of the COVID-19 pandemic. These fares will increase on July 1, 2021.3

---

1 An MDOT MTA statutorily mandated fare increase scheduled for July 1, 2021 has been examined in a separate Fare Equity Analysis. This Fare Equity Analysis found no Disparate Impacts or Disproportionate Burdens resulting from the fare increase.
3 Although commuter market fare increases have not yet been implemented, fare increases were analyzed in a June 2020 Fare Equity Analysis. This Fare Equity Analysis found no Disparate Impacts or Disproportionate Burdens resulting from the fare increase.
While the proposal under analysis in this document would eliminate surcharges, in a previous analysis, MDOT MTA assumed that Express BusLink fares would also increase. Thus, the proposed elimination of surcharges is assessed in comparison to the assumed FY2021 increased price, as outlined in Table 1:

- The Express BusLink monthly pass will be eliminated. For FY2021, all monthly passes will now cost $77.00. Had the Express BusLink monthly pass remained in effect, it would have increased to a price of $97.00.
- The Express BusLink single trip upcharge will be eliminated. For FY2021, all single trips will cost $2.00. Had the Express BusLink surcharge remained in effect, it would have increased by $0.70, resulting in a single trip price of $2.70.

<table>
<thead>
<tr>
<th>Fare Product</th>
<th>Current Actual Fare (FY2019)</th>
<th>FY2021 Originally Proposed Express BusLink Fare (with Increase)</th>
<th>FY2021 Proposed Fare Decrease (with Elimination of Surcharges)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Express BusLink Monthly Pass</td>
<td>$93.00</td>
<td>$97.00</td>
<td>$77.00</td>
</tr>
<tr>
<td>Express BusLink Single Trip Surcharge</td>
<td>$2.50 ($1.90 + $0.60)</td>
<td>$2.70 ($2.00 + $0.70)</td>
<td>$2.00</td>
</tr>
</tbody>
</table>

The signed approval of this Fare Equity Analysis is found in Figure 1.
I hereby acknowledge the receipt of the Maryland Department of Transportation Maryland Transit Administration (MDOT MTA) Title VI Fare Equity Analysis, June 2021. I have reviewed and approve this document. I am committed to ensuring that no person is excluded from participation in, or denied the benefits of transit services on the basis of race, color, or national origin, as protected by Title VI according to C 4702.1B Title VI requirements and guidelines for Federal Transit Administration recipients.

Holly Arnold
Acting Administrator

Digitally signed by Holly Arnold.
Date: 2021.08.27

08/27/2021
Date
Relevant MDOT MTA Title VI Policies

Title VI Policy Outreach

During the development of the 2020-2023 Title VI Program, MDOT MTA engaged stakeholders, agency staff and frontline employees, and the general public in the establishment of major service change, disparate impact, and disproportionate burden Title VI policies. Outreach efforts included:

- In-person and virtual focus groups with community-based organizations.
- Presentations to the MDOT MTA MARC Riders Advisory Council, Citizens Advisory Committee, and Citizens Advisory Committee on Accessible Transportation.
- An online survey (accompanied by an informative presentation) requesting feedback on proposed policies.

MDOT MTA Disparate Impact and Disproportionate Burden Policies for Fare Equity

Per the requirements of Federal Transit Administration (FTA) Circular 4702.1B, MDOT MTA conducts fare equity analyses for all fare changes, regardless of the amount of fare increase or fare decrease. MDOT MTA conducts its fare equity analysis using two geographical areas/markets:

- **Local Services**, to include Core Bus, Light RailLink, and Metro SubwayLink.
- **Commuter Services**, to include MARC Commuter Rail and Commuter Bus.

MDOT MTA fare changes are analyzed for Disparate Impact and Disproportionate Burden (DI/DB) using a two-step process, which varies depending on whether the fare change involves a fare increase/removal of fare products or a fare decrease/addition of fare products. Steps for each methodology are listed below:

**Process 1 Methodology: Fare Increase or Removal of Fare Media**

*Step 1 - Identify fare media used disproportionately by minority and low-income riders.* MDOT MTA uses survey data to identify fare media that are used disproportionately by minority and low-income riders. When the difference between the share of minority or low-income riders using a particular fare media exceeds the share of all riders using that fare media by 10 percentage points (10.00%), that fare media is judged to be used disproportionately by minority or low-income riders. In cases where fare media are used by less than one percent of all riders, MDOT MTA deems any changes to these media as minimal; these fare media are not considered for further analysis.

*Step 2 - Examine fare increase or removal of fare products for Disparate Impact/Disproportionate Burden on fare media used disproportionately by minority and low-income riders.* When MDOT MTA has a fare increase or removal of fare products, it analyzes the fare media that are used disproportionately by minority and low-income riders for disparate impacts or disproportionate burdens. If the percentage price increase for those fare media is 10 percentage points different than the unweighted average percentage price increase for all ticket types, then the fare change has a disparate impact or disproportionate burden.

**Process 2 Methodology: Fare Decrease or Addition of Fare Media**

*Step 1 - Identify whether fare media is used by a disproportionately low percentage of minority and low-income riders.* MDOT MTA uses survey data to identify fare media that are used by a disproportionately low percentage of minority and low-income riders. When new fare products are introduced, MDOT MTA uses survey data for the most similar type of existing fare media as a proxy for future use of the fare media. When the difference between the share of minority or low-income riders using a particular fare media falls below the share of all riders using that fare media by 10 percentage points, that fare media is judged to be used by a disproportionately low percentage of minority or low-income riders. In cases where fare media are used by less than one percent of all riders, MDOT MTA deems any changes to these media as minimal; these fare media are not considered for further analysis.
Step 2 - Examine fare decrease or addition of fare products for Disparate Impact/Disproportionate Burden on fare media used by disproportionately low percentage of minority and low-income riders. When MDOT MTA has a fare decrease or addition of fare products, it analyzes the fare media that are used by a disproportionately low percentage of minority and low-income riders for disparate impacts or disproportionate burdens. If the percentage price decrease for those fare media is 10 percentage points different than the unweighted average percentage price decrease for all ticket types, then the fare change has a disparate impact or disproportionate burden.

Data and Methodology

Data Sources
To conduct fare equity analyses, the most recent locally available survey data is used for each mode. MDOT MTA’s 2018 Core Bus Origin-Destination Rider Study was used for this Fare Equity Analysis.

Fare Equity Analysis Methodology
1. List all affected fare types in the fare change proposal for the service market (Local or Commuter services).

2. Using the most recent locally available survey data, calculate the numbers and percentages of minority, low-income, and overall riders using each fare type. If a fare type is used by less than one percent of riders, MDOT MTA deems any changes to these media as minimal; these fare media are not considered for further analysis.

3. For each fare type, calculate the absolute difference between the percentage of minority riders using the fare type and the percentage of overall riders using the fare type. Calculate the same difference for low-income riders. MDOT MTA identifies fare media as disproportionately used by minority or low-income riders where the absolute differences are at least 10 percentage points (10.00%) greater for minority or low-income rider usage than for overall rider usage. MDOT MTA identifies fare media as used by a disproportionately low percentage of minority or low-income riders where the absolute differences are at least 10 percentage points (10.00%) lower for minority or low-income rider usage than for overall rider usage.

4. For all fare types in the market, identify the existing cost, the proposed cost, the absolute fare change, and the percentage fare change. Though only fare types that are disproportionately used by minority or low-income riders will be further analyzed, all fare types in the market are included to calculate the average percentage price change for all fare types.

5. Find the unweighted average percentage change for all fare types in the market.

6. For fare types that are used by a disproportionately high or disproportionately low percentage of minority or low-income riders, calculate the absolute difference between the percentage price change of that fare type and the average percentage price change for all fare types in the market.

7. Apply MDOT MTA’s Disparate Impact and Disproportionate Burden threshold for fare equity analyses to determine if the proposed fare changes will result in a Disparate Impact on minority riders or a Disproportionate Burden on low-income riders.

8. If a potential Disparate Impact on minority riders is found, MDOT MTA will consider modifying its proposal to eliminate Disparate Impacts, including reconfiguration of existing services. If MDOT MTA plans to make service changes despite Disparate Impacts, MDOT MTA will clearly demonstrate a substantial legitimate justification for proposed service changes, and clearly demonstrate analysis of alternatives to determine whether proposed service changes represent the least discriminatory alternative. If a potential Disproportionate Burden on low-income riders is found, MDOT MTA will take steps to avoid, minimize, or mitigate impacts where practicable, including describing available alternatives.
2. FAKE EQUITY ANALYSIS

Assumptions

Definition of Low-Income
The MDOT MTA 2020-2023 Title VI Program defines low-income for Core Bus service (including Express BusLink) as a household income less than or equal to $44,999. Although MDOT MTA has committed to using survey questions that delineate this threshold in the future, in the 2018 Origin-Destination Rider Study, when asking riders to describe their annual household income, MDOT MTA used thresholds of $25,000 to $34,999, and $35,000 to $49,999. Given that neither threshold meets the $44,999 delineation, to be more inclusive, the definition of low-income in this Fare Equity Analysis, with regard to 2018 survey data, is assumed to be less than or equal to $49,999 household income.

Fare Media Usage
Data on fare media usage is derived from the MDOT MTA 2018 Origin-Destination Rider Study:

- Express BusLink monthly pass usage percentages are calculated based on riders responding to the survey question, “What fare type did you use for the bus trip where you received this survey?” Express BusLink monthly pass usage is compared to overall fare type usage among minority, low-income, and overall riders to calculate usage percentages.

- Given that all Express BusLink riders who did not use a monthly pass were expected to pay a surcharge at the time of the 2018 Origin-Destination Study, Express BusLink surcharge payment usage percentages are calculated based on rider responses indicating usage of an Express BusLink route as well as a non-monthly pass fare type. Express BusLink surcharge usage is compared to overall fare type usage among minority, low-income, and overall riders to calculate usage percentages.

Results: Local Services Market
The results of the Fare Equity Analysis in the Local Services market are split into two tables: Table 2 summarizes Express BusLink monthly pass and Express BusLink upcharge fare usage, while Table 3 employs MDOT MTA’s methodology for determining whether a Disparate Impact or Disproportionate Burden could result from the fare changes.

As shown in Table 2, given that the percentage difference between overall usage and minority/low-income usage for either fare type neither exceeds ten percent (10.00%) nor is below negative ten percent (-10.00%), neither Express BusLink fare type is considered used by a disproportionately high nor disproportionately low percentage of minority or low-income riders. As shown in Table 3, the proposed decrease of the Express BusLink monthly pass from $97.00 to $77.00 signifies a twenty percent (20.62%) decrease. The proposed removal of the Express BusLink surcharge from single trip fares (from $2.70 to $2.00 for a single trip) signifies an approximately twenty-six percent (25.93%) decrease. The average fare change percentage in the Local Services market is thus negative twenty-three percent (-23.27%).

The difference between both fare decreases and the average fare change percentage in the Local Services market (negative twenty-three percent (-23.27%)) does not equal or exceed ten percent (10.00%). This finding, alongside the finding that neither fare type is used by a disproportionately high nor disproportionately low percentage of minority or low-income riders, reveals no potential for Disparate Impact or Disproportionate Burden in either scenario.
### Table 2: Local Services Market Fare Usage by Minority and Low-Income Riders

<table>
<thead>
<tr>
<th>Mode</th>
<th>Fare Type</th>
<th>Use Number</th>
<th>Use Percentage</th>
<th>Difference from Overall Riders</th>
<th>Fare Type Difference in Use &lt;=-10%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Minority</td>
<td>Low-Income</td>
<td>Overall</td>
<td>Minority</td>
</tr>
<tr>
<td>Core Bus: Express</td>
<td>Express BusLink Monthly</td>
<td>1,808</td>
<td>1,653</td>
<td>3,553</td>
<td>0.04%</td>
</tr>
<tr>
<td>BusLink</td>
<td>Monthly Pass</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Express BusLink Single</td>
<td>19,966</td>
<td>11,368</td>
<td>27,857</td>
<td>0.42%</td>
</tr>
<tr>
<td>Trip Surcharge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 3: Local Services Market Application of DI/DB Thresholds

<table>
<thead>
<tr>
<th>Mode</th>
<th>Fare Type</th>
<th>FY2021 Proposed Cost (with Statutorily Mandated Increase)</th>
<th>FY2021 Proposed Cost (with Decrease)</th>
<th>Cost Change Absolute</th>
<th>Cost Change Percentage</th>
<th>Average Cost Change Percentage (Market)</th>
<th>Fare Change Difference Percentage</th>
<th>Fare Change Difference &gt;= 10%</th>
<th>Disparate Impact</th>
<th>Disproportionate Burden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Bus: Express</td>
<td>Express BusLink Monthly</td>
<td>$97.00</td>
<td>$77.70</td>
<td>-$20.00</td>
<td>-20.62%</td>
<td>-23.27%</td>
<td>2.65%</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>BusLink</td>
<td>Monthly Pass</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Express BusLink Single</td>
<td>$2.70</td>
<td>$2.00</td>
<td>-$0.70</td>
<td>-25.93%</td>
<td>-23.27%</td>
<td>-2.65%</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Trip Surcharge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>