

Washington Metropolitan Area Transit Authority  
**Board Action/Information Summary**

☒ Action ☐ Information

MEAD Number:  
201981

Resolution:  
☒ Yes ☐ No

**TITLE:**

Cash Free Bus Pilot

**PRESENTATION SUMMARY:**

Staff will present and seek approval to pilot cash-free boarding to improve travel times and reliability on MetroExtra route 79 by eliminating cash fares and SmarTrip card value-add transactions.

**PURPOSE:**

Seek Board of Directors' approval to pilot cash-free boarding on MetroExtra Route 79, to authorize a Compact public hearing on cash-free boarding on route 79, and to make the most of the hearing to also seek input on cash-free boarding on all MetroExtra routes, Metroway, and equivalent limited-stop routes.

**DESCRIPTION:**

The time that buses spend servicing stops, known as dwell time, makes up a significant portion of the running time on most bus routes and is a major source of delay. Research at Metro and other agencies shows that cash transactions take much longer than SmarTrip payments; analysis shows that about 12% of transactions systemwide include cash, but these transactions represent 24% of boarding time. Eliminating slow fare payments provides an opportunity to speed up bus service and improve travel times for all customers.

An initial pilot of cash-free boarding is proposed for MetroExtra route 79. This limited-stop route is well-suited for a pilot project, as discussed below.

A Compact public hearing must be conducted prior to making any permanent change to fare payment options, so the Board is asked to authorize a public hearing on cash-free boarding on route 79 so that cash-free boarding can be continued if the pilot is successful. In order to make the most of the hearing, it is recommended that the hearing also seek input on a broader set of routes that includes MetroExtra, Metroway, and other similar limited-stop routes.

Staff will report to the Board on the results of the Compact public hearing. If the initial pilot is successful and staff recommends that MetroExtra Route 79 become a

permanent cash-free bus route, then staff will present to the Board a report on the Title VI equity analysis, including the public participation, of that route.

Additionally, at that time, staff may ask the Board to establish a Cash-Free Bus Program to streamline the process for establishing cash-free routes. If staff recommends that a route or group of routes become permanently cash-free then staff will present to the Board a report on the Title VI equity analysis, including the public participation, on the route(s).

### **Key Highlights:**

- Research at Metro and other agencies indicates that cash transactions disproportionately slow down boarding, increase travel times for all customers, and reduce reliability.
- A 6-month pilot of cash-free boarding is proposed for MetroExtra route 79 (Georgia Avenue/7th Street). The corridor offers numerous alternatives for cash customers, including local route 70 serving most of the same stops, numerous retail locations, and six rail stations.
- A Compact public hearing is required to make cash-free boarding permanent on route 79 if the pilot is successful. The hearing will also seek input on cash-free boarding on all MetroExtra routes, Metroway, and other similar routes.
- A Title VI analysis must be conducted by staff and approved by the Board before MetroExtra route 79 can be made cash-free on a permanent basis.

### **Background and History:**

While Metro moves forward with a comprehensive review of bus service, it will continue to take advantage of opportunities to improve current service. Piloting cash-free boarding will provide important information on operational efficiencies and customer response.

The National Association of City Transportation Officials (NACTO) and the policy group TransitCenter report that up to a third of the running time on a bus route may be spent dwelling at stops while passengers board and pay their fares. Fare payment in cash and loading value onto farecards extends dwell time, slowing trips for all passengers. At Metro, research shows that about 12% of fare payment transactions involve cash, but these transactions represent 24% of total dwell time. Passengers typically take two to four seconds to board and pay with SmarTrip cards but seven to eight seconds to board and pay with cash. Passengers take at least 10 seconds and often significantly longer to board and load value onto a SmarTrip card. Multiplied across many transactions, slower fare payments delay trips by several minutes.

Travel time is a significant influence on ridership, and the slower fare payment transactions may discourage potential riders from choosing Metrobus.

Speeding up the boarding process can shorten customer trip-times, increase ridership, and reduce operational costs. Cash fare payments on buses are also expensive to process, with at least 10 cents out of every dollar going to the administrative and processing costs.

### **Discussion:**

During the pilot of cash-free boarding on MetroExtra route 79, the route will not accept cash fare payments, and passengers will not be permitted to load value onto their SmarTrip cards on board the vehicle. All smart card fare instruments such as the DC One card and other passes will continue to be accepted. Tokens will not be accepted. Staff will collect data, conduct a Title VI analysis, and seek public input before consideration of permanent removal of cash payments on the route.

MetroExtra Route 79 (Georgia Avenue/7th Street) is the ideal route to pilot as cash-free for the following reasons:

- Metrobus is already using the Georgia Avenue corridor to test other service improvements and has transit field supervisors dedicated to the corridor.
- The route serves several rail stations (Silver Spring, Georgia Ave-Petworth, Shaw-Howard Univ, Mt Vernon Sq/7th St-Convention Center, Gallery Pl-Chinatown, and Archives-Navy Mem'l-Penn Quarter) where passengers can use fare vending machines to purchase and reload SmarTrip cards.
- There are numerous retail locations within half a mile of the route where customers can purchase and reload SmarTrip cards, including Giant, Safeway, and Walmart stores and the commuter store at the Silver Spring Transit Center.
- Cash fares represent 3% of boardings, while 6% of customers add value to their SmarTrip cards on board. This represents a small portion of customers that will have to use alternatives, while still being significant enough to have a meaningful impact on running time.
- Local route 70 runs a very similar pattern at high frequency along the corridor and would continue to accept cash.

If the initial pilot on route 79 is successful, staff will return to the Board with the results of the public hearing, outreach, and Title VI analysis to request Board approval to make cash-free boarding permanent on the route. Staff may also recommend the creation of a Cash-Free Bus Program. The Program would delegate to the General Manager/CEO the authority to pilot selected bus routes as cash-free, including MetroExtra routes, Metroway, and any other similar routes. The Board is asked to include these routes in the public hearing on route 79 so that the Program may be enacted in the fall if the initial pilot is successful.

MetroExtra limited-stop routes are excellent candidates for cash-free service, as the MetroExtra brand is already established as a faster alternative to local routes, with some of the features of bus rapid transit. Cash-free boarding on these routes would further improve travel times for customers who have already selected the faster, limited-stop option.

Without the Cash-Free Bus Program, the Board would need to take several actions to designate a single route as cash free, including authorizing separate Compact public hearings. The potential Cash-Free Bus Program would streamline this process so that the Board could establish the Program with one Compact public hearing, then approve particular routes following the Public Participation Process and a Title VI analysis.

In accordance with Title VI of the Civil Rights Act of 1964, a Title VI analysis must be conducted prior to permanent removal of cash as a fare payment option. A separate Title VI analysis will be required for permanent cash-free status on any route or group of routes to be made cash free.

The current list of MetroExtra and equivalent limited-stop routes is provided here for reference. The list currently includes four routes primarily serving Virginia, two primarily serving Maryland, and nine primarily serving the District of Columbia.

16X Columbia Pike - Federal Triangle  
16Y Columbia Pike - Farragut Square  
37 Wisconsin Avenue Limited  
39 Pennsylvania Avenue Limited  
59 14th Street Limited  
79 Georgia Avenue Limited  
A9 Martin Luther King Jr. Avenue Limited  
G9 Rhode Island Avenue Limited  
J4 College Park - Bethesda Limited  
K9 New Hampshire Ave. - Maryland Limited  
S9 16th Street Limited  
W9 South Capital Street Limited  
X9 Benning Road-H St Limited  
REX Richmond Highway Express  
Metroway

#### **FUNDING IMPACT:**

No revenue impact expected. Cash-paying customers are expected to make use of the alternatives available.

Expenses will be incurred for public outreach for the launch of the pilot on route 79. If bus SOGO moves ahead as planned, some of these costs will be shared as the outreach and public hearing will overlap:

\$35,000 for public outreach (including signage and bilingual street teams) for the launch of the pilot on route 79.

\$19,000 for the public hearing.

Project Manager:	James Hughes/James Hamre
------------------	--------------------------

Project Department/Office:	BPLN
-------------------------------	------

#### **TIMELINE:**

<b>Previous Actions</b>	March 2018 – Office of Customer Research survey of cash-paying customers on route 79
<b>Anticipated actions after presentation</b>	<p>May/June 2018 - Public outreach for pilot on MetroExtra route 79. Pilot to launch with other bus service changes on June 24th.</p> <p>Late summer/early fall 2018 - Compact public hearing on cash-free boarding on route 79 and other MetroExtra routes, Metroway, and equivalent limited-stop routes.</p> <p>Fall 2018 - Staff report to Board on public hearing, outreach, and Title VI analysis. If pilot is successful, request Board approval for permanent cash-free status on MetroExtra route 79 and establishment of a Cash-Free Bus Program</p> <p>December 2018 - Permanent cash-free status on MetroExtra route 79</p> <p>TBD - Program expansion to other MetroExtra routes or Metroway, dependent on fare payment alternatives on each corridor and Title VI analysis</p>

#### **RECOMMENDATION:**

Board approval to pilot cash-free boarding on MetroExtra Route 79, to authorize a Compact public hearing on cash-free boarding on route 79, and to make the most of the hearing to also seek input on cash-free boarding on all MetroExtra routes, Metroway, and equivalent limited-stop routes.

SUBJECT: APPROVAL TO PILOT A CASH-FREE BUS ROUTE FOR METROEXTRA ROUTE 79 AND TO CONDUCT COMPACT PUBLIC HEARING(S) ON A PERMANENT CASH-FREE BUS PROGRAM ON CERTAIN ROUTES

RESOLUTION  
OF THE  
BOARD OF DIRECTORS  
OF THE  
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

WHEREAS, The Washington Metropolitan Area Transit Authority (WMATA) wishes to evaluate whether eliminating on-board cash transactions on Metrobus will reduce boarding times by initiating a pilot of the MetroExtra Route 79 as a cash-free bus route for up to six months; and

WHEREAS, WMATA also wishes to consider the permanent elimination of on-board cash transactions on MetroExtra, Metroway, and equivalent limited stop Metrobus routes; and

WHEREAS, Compact Section 76(e) requires the WMATA Board of Directors to conduct a Compact public hearing prior to the adoption of rules and regulations related to the manner of payment of fares or charges; and

WHEREAS, Title VI of the Civil Rights Act of 1964 requires an equity analysis, including a public participation process, of any proposed changes to fare media on a permanent basis; NOW, THEREFORE, be it

*RESOLVED*, That the Board of Directors authorizes staff to initiate a pilot of the MetroExtra Route 79 as a cash-free bus route for up to six months; and be it further


*RESOLVED*, That, in accordance with Compact Section 76(e), the Board of Directors authorizes staff to conduct Compact public hearing(s) to eliminate on-board cash transactions on certain MetroExtra, Metroway, and equivalent limited stop Metrobus routes on a permanent basis; and be it further

*RESOLVED*, That staff will report back to the Board of Directors on the results of the Compact public hearing(s); and be it further

*RESOLVED*, If staff recommends that MetroExtra Route 79 becomes a permanent cash-free bus route, then staff will present to the Board of Directors a report on the Title VI equity analysis, including the public participation process, of that route; and be it finally

*RESOLVED*, That this Resolution shall be effective 30 days after adoption in accordance with Section 8(b) of the WMATA Compact.

Reviewed as to form and legal sufficiency,

  
\_\_\_\_\_  
Patricia Y. Lee  
General Counsel

WMATA File Structure Nos.:  
6.6.4 Bus Route & Service Planning  
9.12.9 Tariff (WMATA Fare Structure)

PROPOSED



**Subsequent Agenda  
Safety and Service Delivery Committee**

**June 14, 2018**

- I. Information Item**
  - A. Roadway Worker Protection Update (P. Lavin)
  - B. Efficiency Testing Update (J. Leader)

**July 12, 2018**

- I. Information Item**
  - A. Bus Performance Spotlight (J. Leader)

**September 13, 2018**

- I. Information Item**
  - A. Metro Performance Report (P. Lavin/J. Leader)
  - B. Metro Access Passenger Assistance Program Update (J. Leader/C. Blake)