Request for Information: Mass Transit Fare Collection Technology

Bloomington Public Transportation Corporation

RFI Issue Date: May 4, 2021 Response Due Date: June 8, 2021

I. Synopsis

Bloomington Public Transportation Corporation (BPTC) is seeking information from transit vendors, organizations, and agencies on the current state of mass transit fare collection technology. Information obtained through this request for information (RFI) may be used by BPTC staff in preparation for the development of a subsequent request for proposals (RFP) to outfit the BPTC fixed route fleet with new fare collection equipment. BPTC staff seek to gain a more thorough understanding of the current state of fare collection technology in order to best meet the needs of our agency and riders.

II. Instructions

- Written electronic responses to this RFI are due by 4:00pm EST on June 8, 2021
- BPTC prefers responses to be no more than 25 pages in length, not including links to additional webpages or information
- Questions related to this RFI must be emailed by 4:00pm EST on May 19, 2021 using the attached form (Appendix A) using the following contact information:

Subject: **RFI Question: Fare Collection**Zac Huneck, Planning & Special Projects Manager huneckz@bloomingtontransit.com

• Responses are to be submitted in .pdf or similar format, and emailed using the following contact information:

Subject: **RFI Response: Fare Collection**Zac Huneck, Planning & Special Projects Manager huneckz@bloomingtontransit.com

- BPTC staff will review all responses submitted by the above deadline, and may reach out to respondents with further questions
- Respondents to this RFI expressly waive all claims to BPTC for any costs involved in the preparation and submission of responses
- Responses submitted to this RFI are voluntary and for informational purposes only, and in no way does this RFI or submitted responses obligate BPTC to take any further action
- Respondents acknowledge that responses submitted through this RFI are public record

III. Project Timeline

Date	Project Milestone
May 4, 2021	RFI Issued
May 19, 2021 @ 4:00pm EST	Questions related to RFI submitted to BPTC
May 26, 2021	Responses to questions by BPTC staff issued to all interested parties
	and posted on BPTC website
June 8, 2021 @ 4:00pm EST	Responses to this RFI submitted to BPTC staff
June 14-18, 2021	BPTC follow-up questions and interviews with responders

IV. Background

BPTC operates fixed route and paratransit services in Bloomington, IN, a small urbanized area with a population of about 84,000 people. BPTC operates fixed route service on nine (9) routes, and provided over 3.1 million passenger trips in 2019.

BPTC currently maintains a fleet of forty-one (41) buses to operate its fixed route service, and twelve (12) light-duty vehicles to operate BT Access demand-response service. All vehicles in the BPTC fixed route fleet are manufactured by Gillig (with the exception of one Ford cutaway), and range in size between 30' and 40'. All BPTC fixed route vehicles are equipped with the same fare collection equipment—Genfare CENTSaBILL units—originally installed in the late 1990s. All BT Access vehicles are installed with manual fare collection units. In 2019, BPTC began a partnership with Token Transit for the provision of mobile ticketing technology, renewed through 2021. Token Transit allows riders to purchase and store fares directly on their mobile devices for use on both fixed route and demand-response services.

BPTC maintains service agreements with several institutions in Bloomington to allow their respective members to ride fare-free, including Indiana University students and staff, City of Bloomington staff, Monroe County staff. The largest such service agreement is with Indiana University, with IU students annually accounting for over seventy (70) percent of passenger trips on BPTC fixed routes. Beneficiaries of these service agreements are able to ride BT buses fare-free by presenting their respective ID cards for visual verification. Drivers then input via farebox keypad the respective rider type for tracking and accounting.

V. Purpose

BPTC seeks to replace current fare collection equipment on fixed route buses with the latest technology offering enhanced convenience and reliability for riders and the agency. Of particular interest for BPTC is expanding options for riders to purchase fares, aiding a seamless boarding experience, and generating the most accurate ridership and revenue data for in-depth analysis and financial reporting. Through this RFI, BPTC is seeking to gain a better understanding of the current state of the transit fare collection industry, and what technology and features will best fit the needs of the agency. BPTC recognizes that transit technology is evolving, and seeks to be poised to adapt to a changing transit landscape.

Specific areas of interest about which BPTC seeks further information through this RFI include: account-based fare payment methods, various fare media options, automatic fare collection systems, fare capping, and integration with third party applications.

VI. Objectives

Through this RFI, BPTC is pursuing the following objectives:

- Gain a more complete understanding of the current state of fare collection technology for mass transit
- Identify opportunities for integration of fare collection technology with other recent and emerging transit technologies, e.g. real-time bus trackers, microtransit services
- Develop performance specifications for a potentially forthcoming RFP for the replacement of fixed route fare collection equipment

VII. Preferred Functionality and Areas for Evaluation

- 1. Retain features of existing fare collection system
 - a. Cash payments rapidly processed, with reliable performance
 - b. Ability for bus operators to input specific rider types via customizable keypad
- 2. Mobile ticketing technology
 - a. Ability to purchase and store all fare options on mobile devices
 - b. Ability to purchase mobile tickets using cash
 - c. Accessibility features for riders with disabilities
 - d. Contactless validation, e.g. visual validation, RFID, QR scan
- 3. Account-based system
 - a. Ability for riders to purchase all fare types and store them indefinitely
 - b. Fare-capping
 - c. Ability to verify accounts based on rider type, including riders eligible for reduced fares
- 4. Ability to issue printed or electronic transfers
- 5. Support for new fare media and vending
 - a. Smart cards
 - b. FOBs
 - c. Support for purchases at automated vending machines
- 6. Integration with AVL and APC technology to collate ridership data with route, bus stop location, date/time information
 - a. BT utilizes TransLoc AVL technology on fixed route vehicles
 - b. BT utilizes UTA APC technology on fixed route vehicles
- 7. Integration of fare system across platforms, services, and third-party transportation providers
 - a. BT Access demand-response
 - b. Bike share, car share, scooter share
 - c. TNCs, including Uber and Lyft
- 8. Integration with external organization user IDs
 - a. IU student ID cards
 - b. City of Bloomington ID cards
 - c. Monroe County ID cards
 - d. Additional ID cards as needed
- 9. Cloud-based data storage system that requires minimal impact upon BPTC's existing server capacity
- 10. User-friendly reporting software
 - a. Ability to sort ridership data by route, date/time, bus stop location
- 11. Preventive maintenance regimen to ensure reliable performance

VIII. Preferred Functionality Responses

Upon review of BPTC's preferred functionality outlined above, indicate if your fare collection system may fulfill preferred features with 'Yes' or 'No' followed by a brief explanation using this template.

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Functionality	Y/N	Explanation
1. Retain features of		
existing fare collection		
system		
2. Mobile ticketing		
technology		
3. Account-based system		
4. Ability to issue printed		
or electronic transfers		
5. Support for new fare		
media		
6. Integration with AVL		
and APC technology to		
collate ridership data		
with route, bus stop		
location, date/time		
information		
7. Integration of fare		
system across		
platforms, services,		
and third-party		
transportation		
providers		
8. Integration with		
external organization		
user IDs		
9. Cloud-based data		
storage		
10. User-friendly		
reporting software		
11. Preventive		
maintenance		
regimen to ensure		
reliable performance		

IX. Submission

Responses to this RFI should follow the general structure and address the points below:

- 1. Cover letter
 - a. Executive summary of company
 - b. Mission statement and business philosophy
- 2. Experience
 - a. How many years has your company been in the transit fare collection industry?
 - b. Experience of senior leadership team
 - c. In how many transit agencies is your fare collection system currently deployed?
 - d. Provide reference contact information for at least three (3) current customers with operating conditions similar to BPTC
- 3. Product features and information
 - a. Years fare collection system has been deployed in transit industry
 - b. Expected lifespan of fare collection system
 - c. Data storage and transfer technology
 - d. Mobile ticketing and fare media options
 - e. Accessibility features for riders with disabilities across all applicable products
 - f. Modular features or systems that are included as options in your fare collection system
- 4. Preferred Functionality Response Form

APPENDIX A

Question Submittal Form Submission Due Date: May 19, 2021

Submitted by:	
Date Submitted:	
Company Name:	
Phone:	
Email:	

Use this space to list any questions for BPTC staff related to this RFI. If referencing this RFI, please include page, section numbers: