



Information Technology

Ad Hoc Technology Meeting

December 8th, 2022



EZfare Update

Improve How Customer Pay



RESPONSIBILITIES

Champion: RTA

Supporting partners:

- NOACA
- Private mobility providers



OUTCOMES

Outcomes Include:

Short term improvements can improve equity and communications to address findings in Fare Analysis pillar study. A new fare collection system will provide a seamless customer experience that is cloud-based and contactless with open architecture, regional multimodal accounts, stored value, fare capping, and open payments. RTA will be positioned for a changing mobility landscape with an innovative, modern fare system.

Fare Collection Vision

Short Term:

- Replace RTA's current mobile payment app
- Purchase and install ticket validators on vehicles
- Keep the current fareboxes
- Begin to incorporate fare capping and smart cards
- Create a connected, regional fare system

Long Term:

- While implementing the short term objectives
 - Evaluate the replacement of TVMs, CSKs and fareboxes

Project Summary

Project is split into 3 phases

- Proof of Concept – **Complete**
 - 16 HL Vehicles
 - Software configuration
 - Visual Validation
- Phase 1 – **In-Process**
 - Fleet wide installation of JRVs
 - Marketing and Training
- Phase 2 – **Not Started**
 - Smartcard configuration and deployment
 - Account Based Ticketing/Fare Capping

EZFare Overview

Total Sales: (since June)

- \$2,300,000
- All day and 1-trip most popular passes

Total Users:

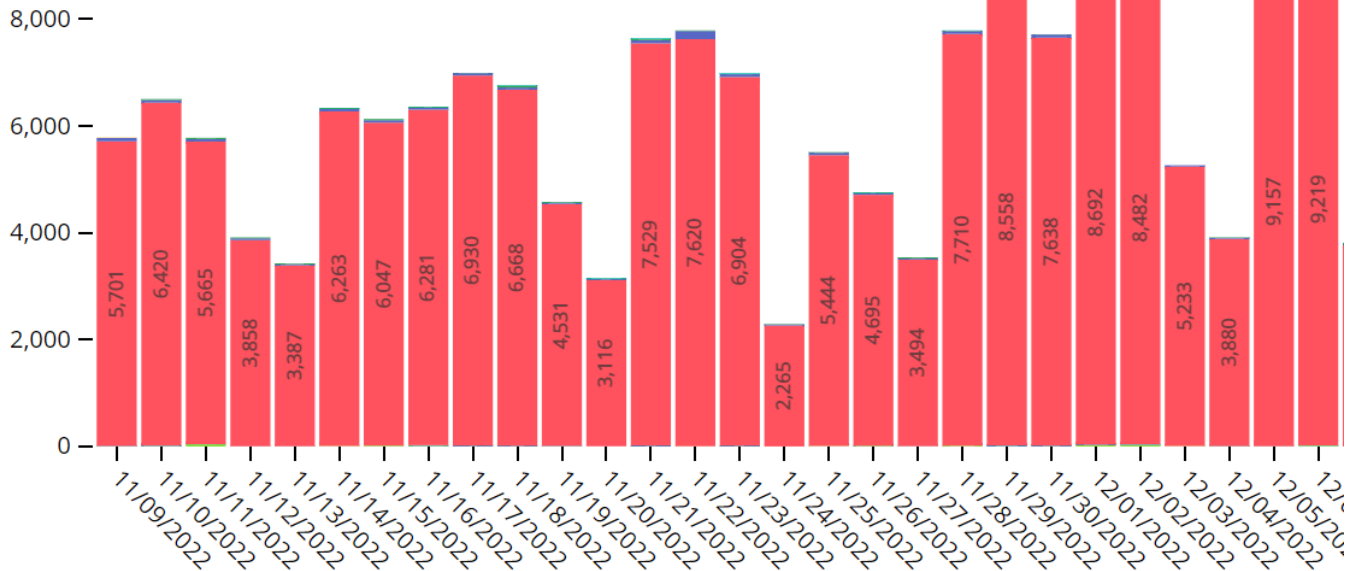
- 150,000 total EZfare users

Validator Installs:

- 225 vehicles are equipped with validators
 - More than 60% of the fixed route fleet (313)

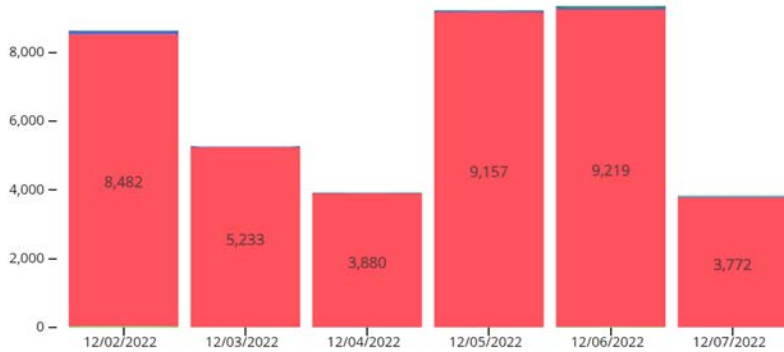


Daily EZfare Scans

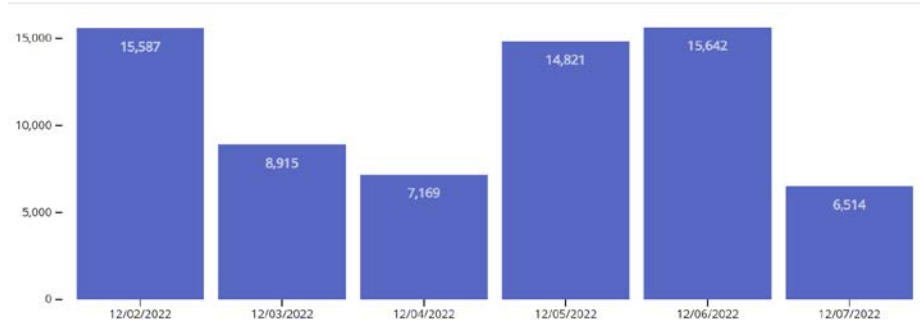


EZfare Scans

7-Day Scans



7-Day Activations



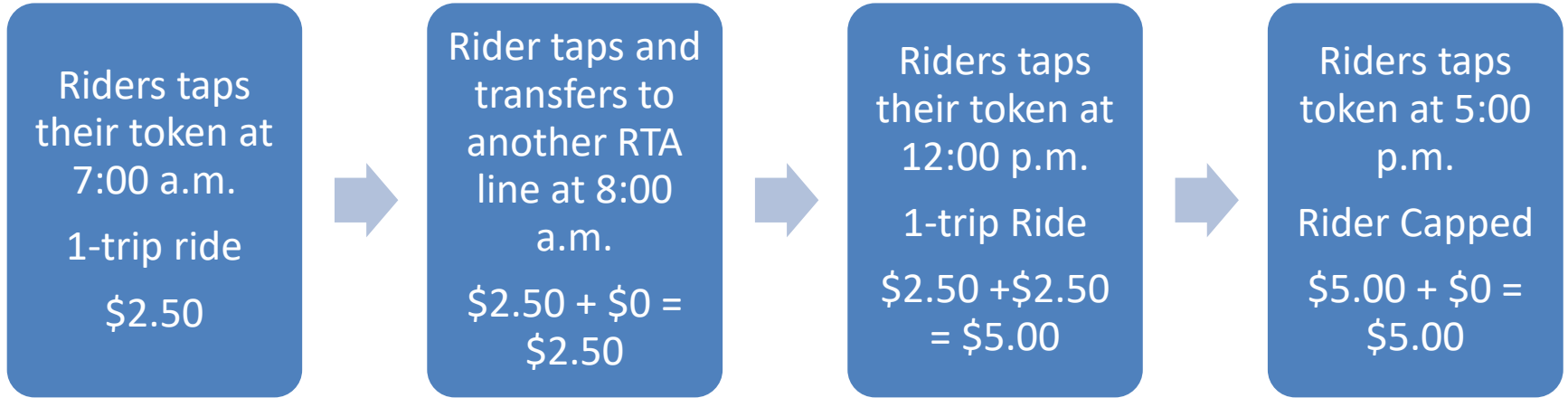
- 68,648 activations
- 40,193 scans
- 58% of riders are utilizing validators
- Increasing scans assists with smart card deployment and ABT

Account Based Ticketing

ABT

- Open loop system
- Transition from physical fare media and cash
- Use of smart cards with mobile wallets and stored values (cash to value on card)
- ABT is a key driver in fare capping
- Utilizes tokens as identification and tracking

Fare Capping: All Day Pass



Current State: Rider could pay \$7.50 in a single day (without an all-day pass)

Future State: Rider is capped at \$5.00.

Fare Capping: Weekly Pass

Weekly Fare Capping	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
All Day Pass	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$0.00	\$0.00

Current State: Rider could pay more than \$5.00 in 1-day and more than \$25.00 during the week

Future State: Rider is capped at \$5.00 each day and \$25.00 in the week

Overall Project Next Steps

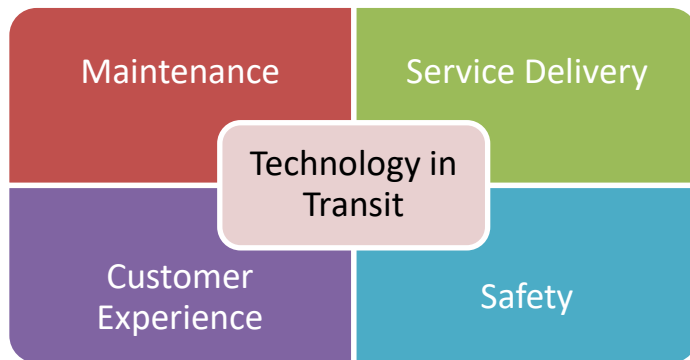
Tasks	Estimated Completion
Installation of HealthLine Validators	Complete
RTA CLE Discontinuation	December 2022
Fixed Route Validator Installation	December 2022
Light Rail/Paratransit Validator Installation	Q2 2023
Red Line Station Validator Installation	Q2 2023
Smart Card Implementation/Distribution	Q2 2023
Implementation of Account Based Ticketing (ABT)	2023
Partner Portal Implementation	2023
Development of regional transfer policy	2023
Evaluation of TVMs and Fareboxes	On-going - Finance

Other 2022-2023 Projects

Technology in Transit

RTA is committed to improving the user experience through continued technology enhancements.

Goal: Implement cost effective solutions internally to create efficiencies that result in future benefits to the customers and community.



2022-2023 IT Projects

Pillar	Technology Projects	Status
Maintenance	Maintenance Software Upgrade (Hosted)	In-Process
	Oracle Database Upgrade	In-Process
	Active Directory Upgrade	In-Process
	Novell Decommission	Complete
Service Delivery	Mobile Routers for Non-revenue vehicles	Complete
	Tough Tablets for Non-revenue vehicles	Not Stated
	Hastus Software Upgrade (Hosted)	In-Process
	Computer Refresh (Laptop and PC)	In-Process
	Red Line Fiber	In-Process
	Wi-Fi Expansion	In-Process
	Sprint Cellphone Replacement: ATT FirstNet Devices	Complete
	Network Core	Complete
Customer Experience	Proof of Concept: Contactless Payment/Trip Planning	Complete
	Phase 1: Conference Room Refresh	In-Process
	Upgraded ATT Services: District Bandwidth	In-Process
	Paperless Document Workflow	Complete
Safety and Security	Police Cruiser Routers and Radios	Complete
	Police Body Worn Cameras (BWC)	Complete
	Transit Amabassadors: Radios and Tablets	Complete
	GPS Units for Non-revenue vehicles	Complete
	Enhanced Computer Imaging and Patching	Complete
	CyberSecurity - Security Operations Center (SOC) for Disaster Recovery	In-Process

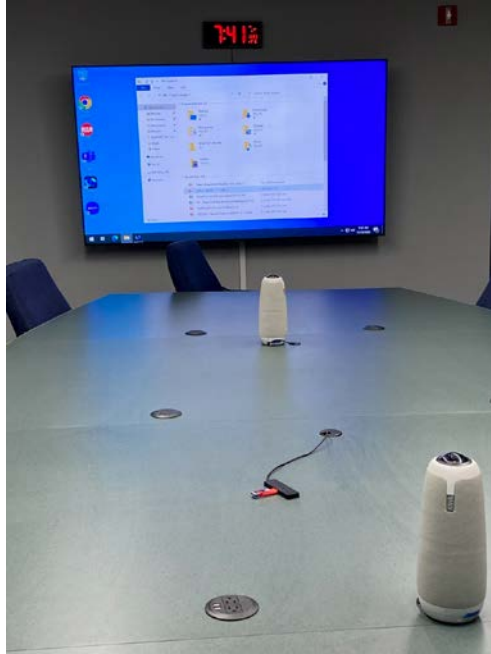


Computer Refresh

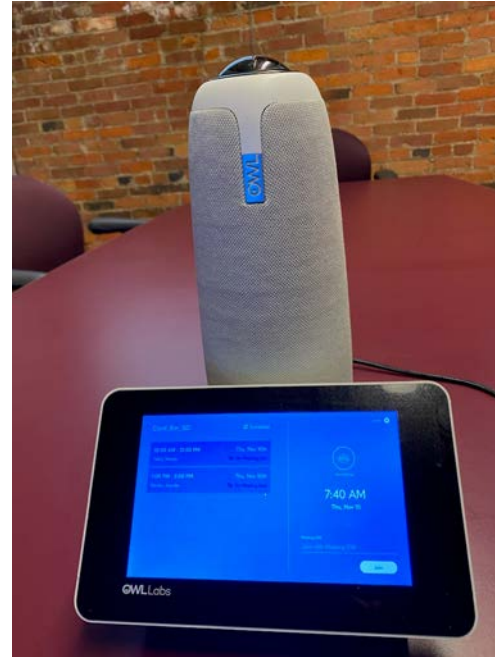


- 145 laptops and 55 desktops replaced
 - State-of-good-repair cycle to limit age of devices
- Bi-weekly patches for applications
- Matching customer need with deployed machine (Profiles)
 - Microsoft Surface
 - PC
 - Laptop
- Training Laptops for classroom sessions

Conference Room Refresh



Dual Owl Setup with PC



Owl Lab with no PC

Non-revenue Tough-tablets



- Implementing Tough-tablets in non-revenue vehicles
- Provides remote capabilities
 - Transit Police
 - Mobile Trucks
 - Electronic Repair
 - Service Quality
- Tablet is removable when team members are out of their vehicles

Paperless Workflows

Request for Network System Access

Information Technology Department Network systems access form

Access request for *

- Yourself
 Someone else

Requested completion date *

Employee ID # *

Contact Email *

Employee First Name *

Employee Last Name *

Employee Title *

Employee Phone number

Please use numbers only.

Department *

Location *

- IT continues to convert paper forms to digital forms
 - Time and cost savings
- 37+ forms complete and in process
 - Pre-filled based on employee ID
 - Sign-offs and approvals

Communication Screens



- Installing TVs around the organization to increase employee and rider communication (waiting and common areas)
- Screens utilize a Fire stick and Screen Cloud software

Tablet Deployment

- Cellular tablets have been deployed in multiple business areas to increase productivity
 - Electronic Repair
 - Service Management
 - Transit Ambassadors
 - Employee Surveys



Network Enhancements

- Implemented a new core to manage various networks within our business
- Upgraded Firewall
- Enhanced Wi-Fi network and security
- New ATT circuits and devices to improve district bandwidth/management
- Oracle 19C upgrade to support IaaS



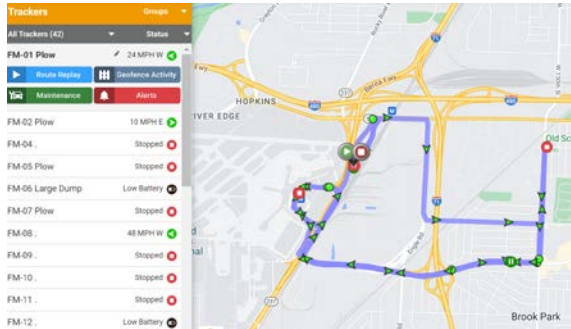
Disaster Recovery



- Multiple network paths into Bluebridge Data Center (Euclid Ave.)
- Secondary site being established in Columbus (100+ miles away)
- Provides disaster recovery for applications and alternatives for phone outages



GPS for Non-revenue Vehicles



- Allows RTA to monitor vehicles in real-time
 - Location
 - Maintenance
- Allows RTA to deploy shelter cleaners and snow plows to key areas



Maintenance Software

- Manages facility and vehicle maintenance, supply chain and work hours
- Q2 2023 Go-live
- New Features:
 - Cloud-hosted
 - Packaging to improve maintenance planning
 - Enhanced sorting options
 - Improved labor tracking
 - Mobile mechanic (field work)

Work Order	Title	Description	Maint Class	Serial	Part	Shop Of Asset	WO Status	Due	WO Priority	Complexity	Cust
000020	4720 slow coach	4720 slow coach on down lane since 9-20-04 Send to CBM for Bostic	CM	9999-4720		9999	CW	10/04/2004		3	

Entry

Work Order

Usage Transactions

WO: 0000020 Title: 4720 slow coach Status: CW

Serial: 9999-4720 Fixible 4700 CHG Bus Opens: 10/04/2004 10:39

Part: Part: Due Date: 10/04/2004

Top Serial: 9999-4720 Top Part: Closed: 11/04/2004 20:25

MR: Rev No: 0 Finished: 01/10/2005 20:25

MR Period: 0 MR Effective Date: / / Act Close: 01/10/2005 20:25

System: 0050040 Engine Raised By: Arndt, Mark

Maint Class: CM Corrective Maintenance Prod Group: Account: - - - -

Shop: 4743 Complexity: Ref Type:

Customer: Ext Ref: Ref ID:

Vendor: Vendor Work WO Pri: 3 Cust Pri: 0

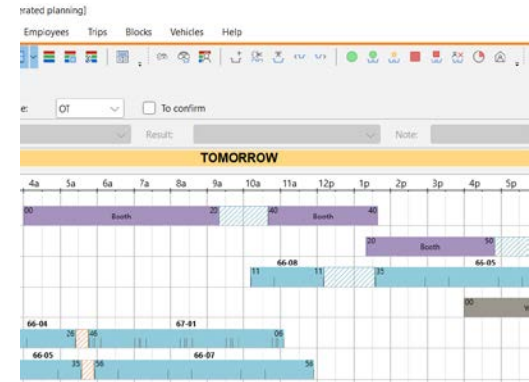
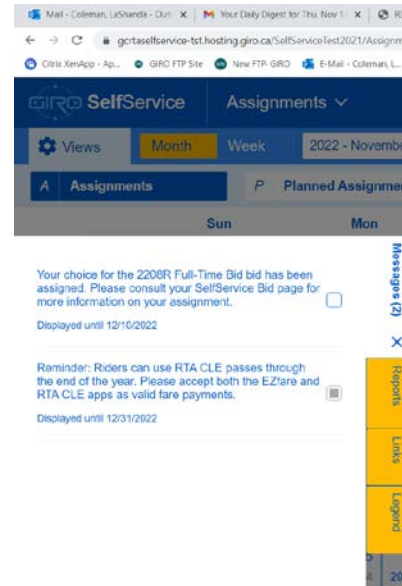
Req Dept: Billable Bill Type:

Dept: 4740 Harvard/Eq - Budget Comeback Orig WO:

Description: 4720 slow coach

Schedule Software Upgrade

- Manages operator's work performance, scheduling, daily work and payroll
- Q1 2023 Go-live
- New Features:
 - Cloud-hosted
 - Trip Generation
 - Enhanced Algorithm
 - Graphical Tools
 - Mapping Interface
 - Impact Simulator



Questions

Public Comments

- In person
- Call 440-276-4600
- Web form:
 - Submit comments and IT topic suggestions for future meetings. Webform comments will be sent to the committee and staff.