Electronic Repair (ER) Department
Farebox Reliability

Operations Committee

RTA Mission:
To Provide
Safe, Reliable, Clean, and Courteous
Public Transportation
Farebox Defect Rate

Defects per 10,000 Transactions

Year | Defects/10,000 Transactions
---|---
2008 | 2.76
2009 | 2.28
2010 | 1.84
2011 | 2.23
2012 | 2.91
2013 | 2.16
2014 | 2.06
2015 | 1.66
2016 | 2.10
“Continual Process Improvement”
Farebox Maintenance Collaboration

**Teamwork**
- Cohesive teamwork between departments and personnel directly impacts the success of farebox maintenance efforts.
“Continual Process Improvement”
Actions Taken From 2012-Present

- Service Quality entering work requests into maintenance software
  - Allows for improved defect tracking and identification

- 4 Training Modules completed at Tri-C
  - AC/DC circuits, DC theory, solid state components, & circuit card assembly (CCA) repair

- New Repair Facility
  - Increased lab space, additional work benches
“Continual Process Improvement”

Actions Taken cont.

- New test and repair equipment
  - Updated/Standardized equipment for each station

- Modified TRiM Replacement Program
  - The TRiM unit reads and writes fare media
  - Historically the TRiM is responsible for 65-70% of all Farebox defects.
  - Began February 2015
GenFare Inc. (GFI) Odyssey Farebox

- TRiM Unit
- Swipe Reader
- Bill Val
- Coin Val
Electronic Repair Woodhill Lab
Electronic Repair Woodhill Lab cont.
Electronic Repair Woodhill Lab cont.
“Continual Process Improvement”
GFI Database for Predictive Maintenance Program (PMP)

- Database managed and administered by Intelligent Transportation Systems (ITS) Department
- Utilizes nightly probing data from each farebox
- Enables predictive maintenance actions
  - TRiM Diagnostic Report
  - Bus History Report
  - Maintenance Report
“Service Excellence”
Next Steps

- Assign areas of focus for 3 supervisors [Q1 ‘17]
  - Increases effectiveness and streamlines communication

- Analyze PMP pilot results [Q2 ‘17]
  - Determine effectiveness by comparing PMP pilot results vs. historical defect and rebuild data

- Develop farebox operation/inspection SOP [Q2 ‘17]
  - Standardized overnight inspections will reduce pullout defects.
Questions or Comments?