

Quarterly Service Performance Review Fourth Quarter, FY 2016 April - June, 2016

Engineering & Operations Committee August 11, 2016

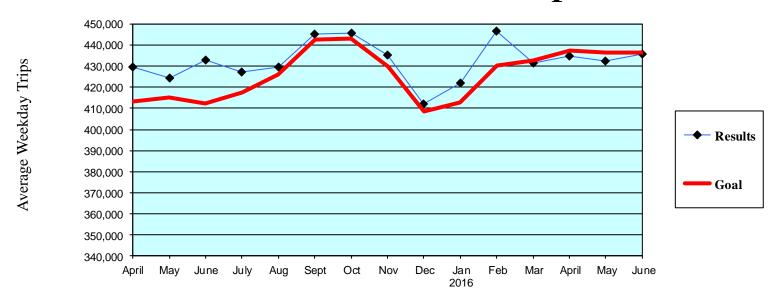


FY16 Fourth Quarter Overview...

- ✓ Ridership growth rate continued to slow including declines on weekends due to track work...
- ✓ But all time quarterly high achieved for average weekday ridership (434,495)
- ✓ Service reliability rebounded nicely from last quarter's propulsion/voltage spike problems
- ✓ Reliability: Car, Computer Control System, Traction Power and Track met; Transportation and Train Control not met although Train Control substantially better
- ✓ Availability: Fare Gates, Ticket Vendors and Station Elevators met. Escalators and Garage Elevators not met although Platform Escalators improved and close to goal.
- ✓ Passenger Environment indicators: all eight declined and none met goal. Decline for five of the indicators was very small, 0.01 or 0.02.
- ✓ Complaints down slightly



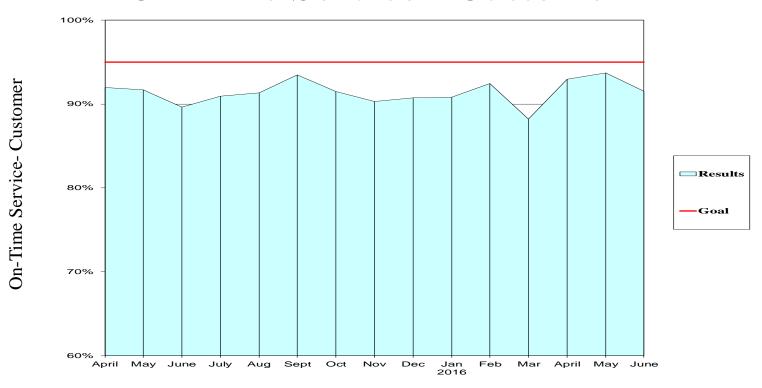
Customer Ridership



- ✓ Total ridership increased by 0.3% compared to same quarter last year
- ✓ Average weekday ridership (434,495) up 1.2% from same quarter last year
- ✓ Core weekday ridership up by 1.0% from same quarter last year
- ✓ SFO Extension weekday ridership up by 2.8% from same quarter last year
- ✓ Saturday and Sunday down by 5.0% and 5.5%, respectively, over same quarter last year



On-Time Service - Customer

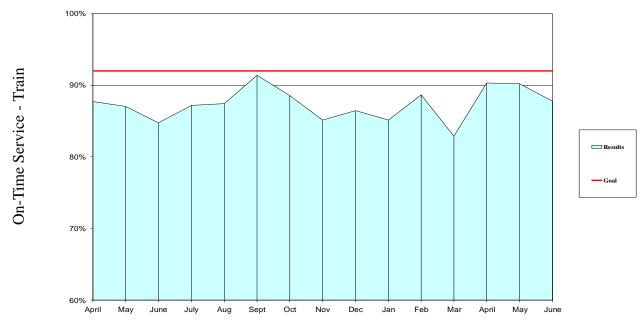


- ✓ 92.74%, 95.00% goal not met, up 2.29 %
- ✓ Biggest delay events of the quarter:
 - May 18 Controller Procedure, Systemwide; 102 delayed trains
 - May 23 Person under train, Embarcadero; 79 delayed trains
 - June 18 Scheduled trackway maintenance (A-Line Cable Project),
 - A-Line; 76 delayed trains
 - June 11 Scheduled trackway maintenance (A-Line Cable Project),
 - A-Line; 74 delayed trains
 - May 19 Train struck a person, South Hayward; 46 delayed trains



SERVICE: How are we doing?

On-Time Service - Train



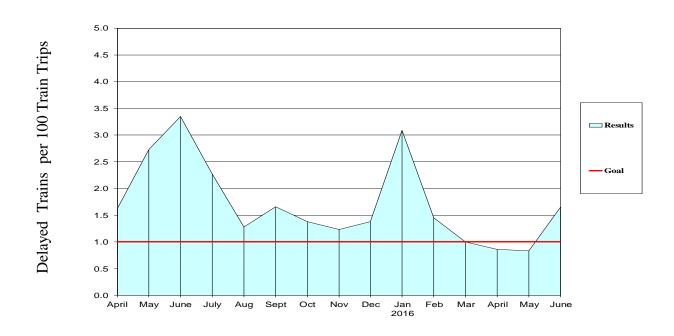
- ✓ 89.43%, 92.00% goal not met; up 3.93%
- ✓ Late trains (4411 total) by category:
- 1. Other Miscellaneous (multiple cause, object on track, passenger transfers, train struck person)
- 2. BPD
- 3. Train Control
- 4. Wayside Maintenance Work
- 5. Operations
- 6. Revenue Vehicle
- 7. Sick Passenger
- 8. Traction Power
- 9. Track
- 10. Computer Control

- 1,116 late trains (25.3%)
 - 775 late trains (17.6%)
 - 614 late trains (13.9%)
 - 571 late trains (12.9%)
 - 386 late trains (8.8%)
- 380 late trains (8.6%)
- 163 late trains (3.%)
- 104 late trains (2.4%)
- 15 late trains (0.3%)
- 7 late trains (0.3%)



Wayside Train Control System

Includes False Occupancy & Routing, Delays Per 100 Train Runs

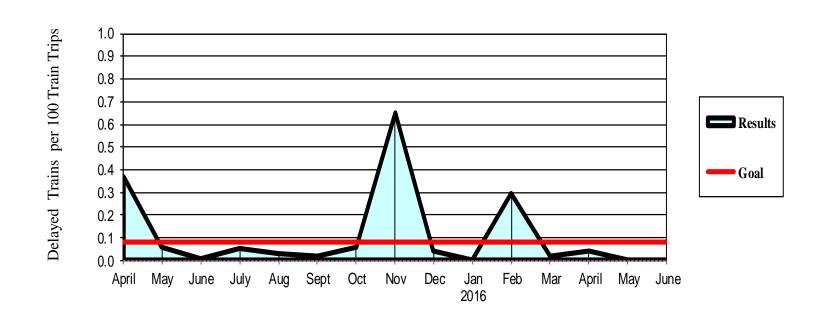


- ✓ 1.11, 1.00 goal not met, but significant improvement
- ✓ Highest Cumulative Delays: The major cause of service delays and main contributor to June's upward trend was routing issues through K25 Switch 213 (between 19th St. and MacArthur). Multiple equipment failures included wayside cable deterioration, DTS communication relay board failures, and vital switch command relay failure. All known deficiencies addressed at this time.



Computer Control System

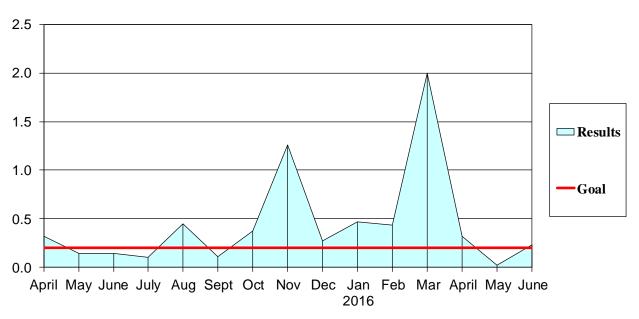
Includes ICS computer & SORS, Delays per 100 train runs





Traction Power

Includes Coverboards, Insulators, Third Rail Trips, Substations, Delays Per 100 Train Runs

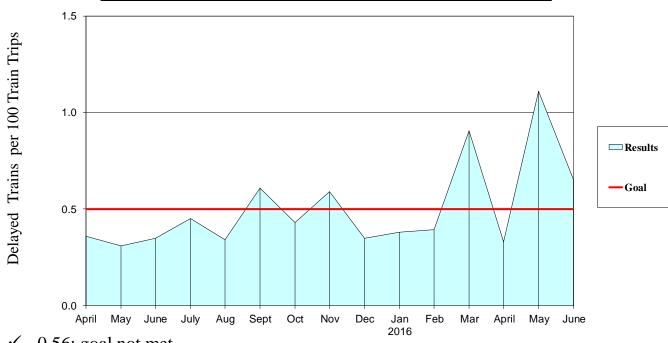


- ✓ Goal met and improved performance
- ✓ 34.5kv cable faults on lower A Line will be addressed through emergency installation of new, above-ground, 34.5kv cable



Transportation

Includes Late Dispatches, Controller-Train Operator-Tower Procedures and Other Operational Delays Per 100 Train Runs

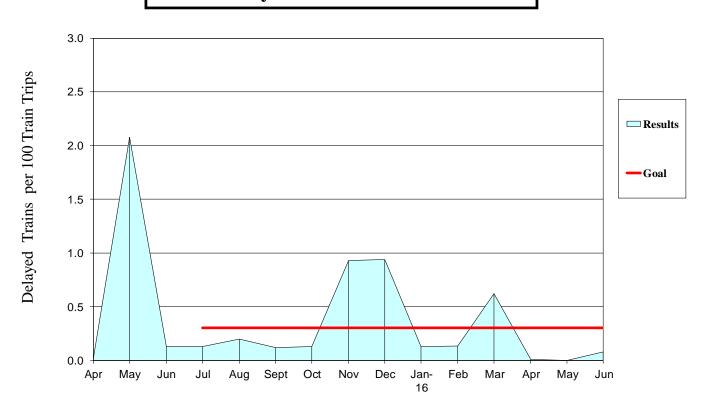


- 0.56; goal not met
- Major incidents:
 - Inadvertent systemwide power breaker trip command issued by Train Controller in May, 102 late trains
 - Delays due to Train Operator errors increased significantly



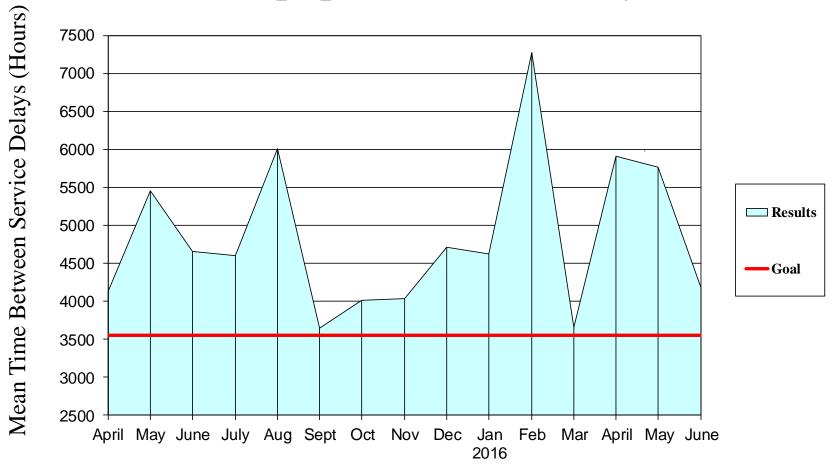
Track

Includes Rail, Track Tie, Misalignment, Switch, Delays Per 100 Train Runs





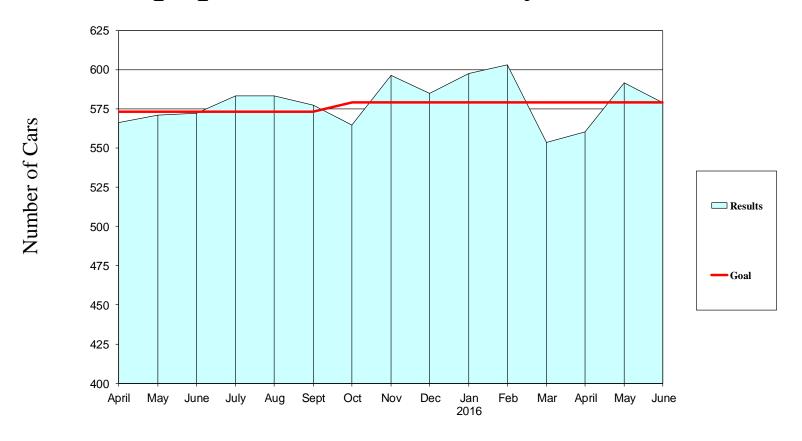
Car Equipment - Reliability



✓ Goal met – MTBSD 5,148 hours



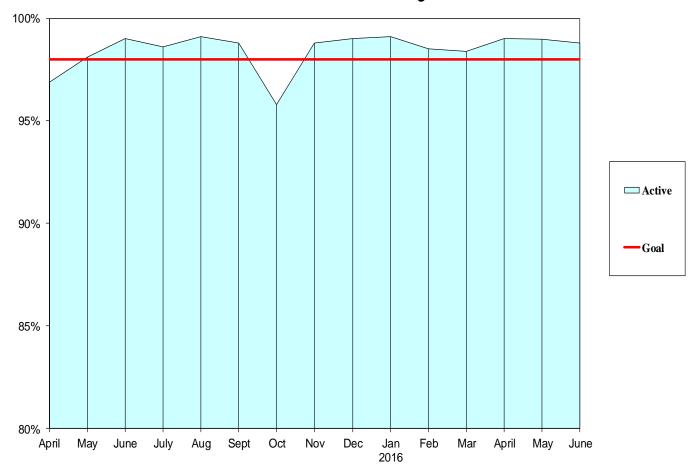
Car Equipment - Availability @ 0400 hours



- ✓ Goal not met 577 Actual vs. 579 Required
- ✓ Voltage spike problem impacted availability, especially in March and April
- ✓ Fleet has recovered, car availability requirement will go to 591 (88.3%) this Fall with Warm Springs opening



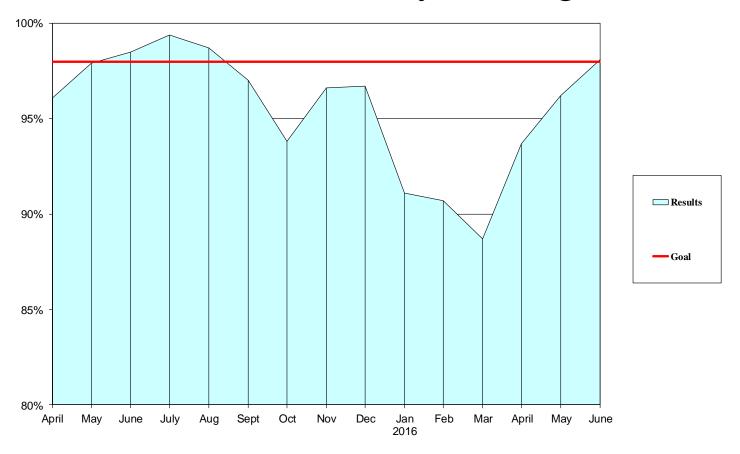
Elevator Availability - Stations



- ✓ Goal met, 98.63%
- ✓ Revamped elevator flooring program well underway



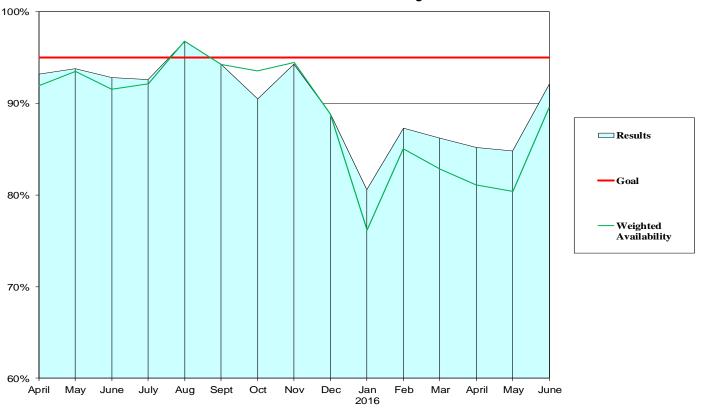
Elevator Availability - Garage



✓ Availability 96%, goal not met but improved performance



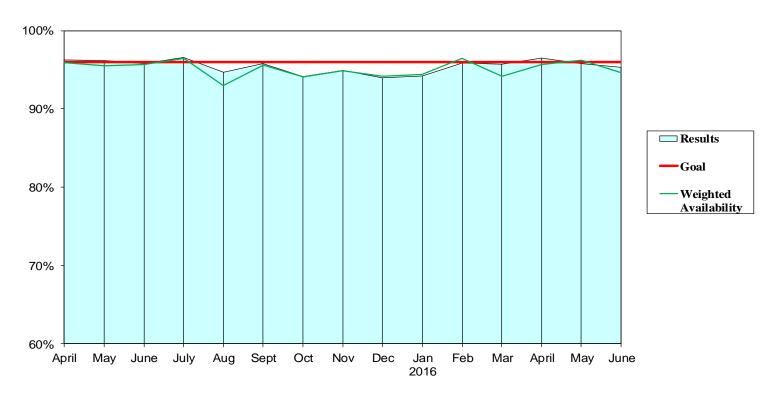
Escalator Availability - Street



- ✓ Goal not met, 87.37%, but performance improved
 - Escalator major repairs continue to outpace resources.
 - 7 chain jobs, 2 bullgear bearing failures, 5 handrail replacements
 - Most failures due to corrosion, abuse & age. Renovation required
 - O&K renovation due to begin Sept 2016
 - Currently improving the escalator sump pumps / drain



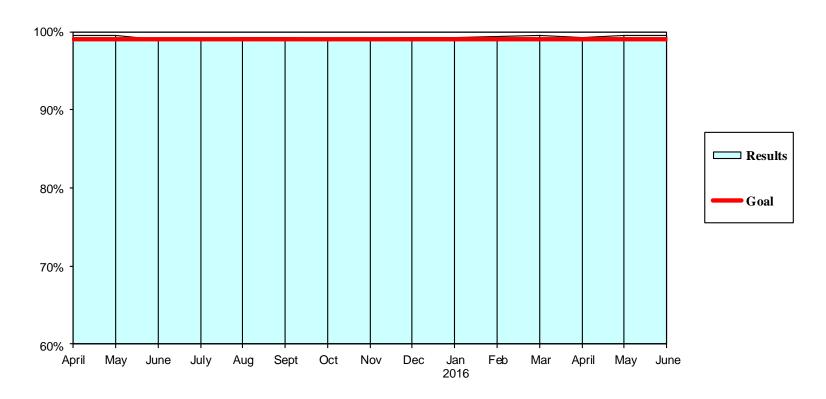
Escalator Availability - Platform



- ✓ 96% just missed, 95.87%, performance slightly improved
- ✓ Major repairs vs. staffing level
 - Hired 17 new personnel since Apr 2016 (11 MWIII & 6 Apprentices)
 - Currently training / developing new staff
 - Contracting repairs when needed



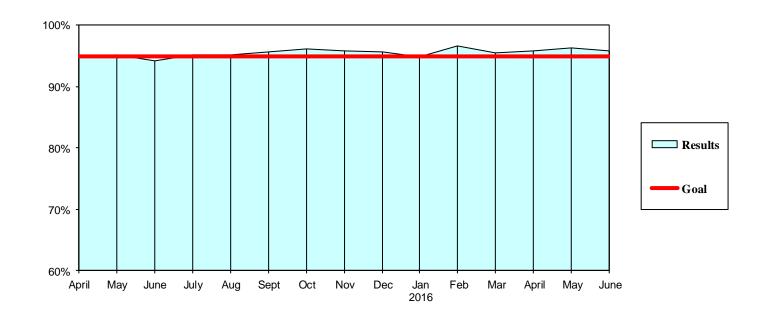
AFC Gate Availability



✓ 99.43 % - goal exceeded



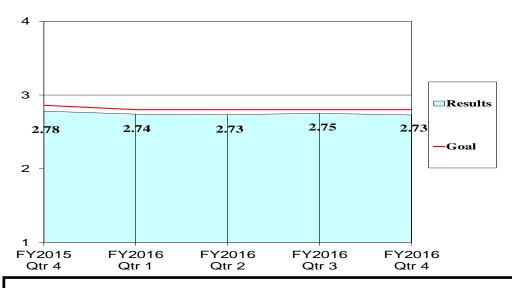
AFC Vendor Availability



- ✓ Goal exceeded, 96.02% TVM Availability
- ✓ Add Fare Availability 98.35%
- ✓ Add Fare Parking Availability 98.87%
- ✓ Parking Validation Machines Availability 99.99%

Environment - Outside Stations

Ratings guide: 4 = Excellent 3 = Good 2.80 = Goal 2 = Only Fair 1 = Poor



Composite rating of:

Walkways & Entry Plaza Cleanliness (50%) 2.62 BART Parking Lot Cleanliness (25%) 2.98 Appearance of BART Landscaping (25%) 2.69

- ✓ Goal not met
- ✓ Cleanliness ratings of either Excellent or Good:

Walkways/Entry Plazas: 58.9% Parking Lots: 77.8%

Landscaping Appearance: 63.9%



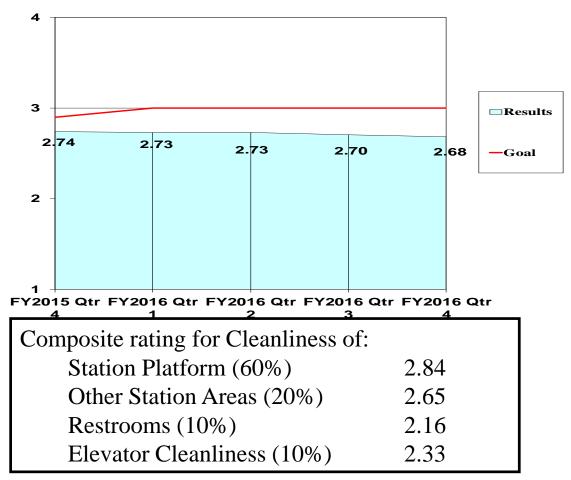
Ratings guide: 4 = Excellent

3 = Good

3.00 = Goal

2 = Only Fair 1 = Poor

Environment - Inside Stations



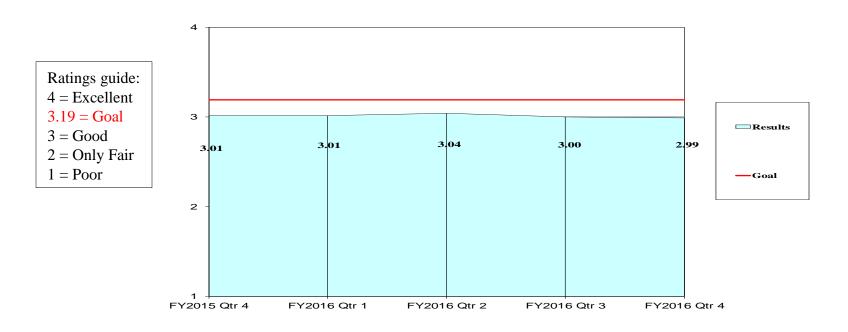
- ✓ Goal not met
- ✓ Cleanliness ratings of either Excellent or Good:

Station Platform: 71.5% Other Station Areas: 61.4%

Restrooms: 39.3% Elevators: 49.0%



Station Vandalism



Station Kept Free of Graffiti

- ✓ Goal not met
- ✓ 78.3% of those surveyed ranked this category as either Excellent or Good

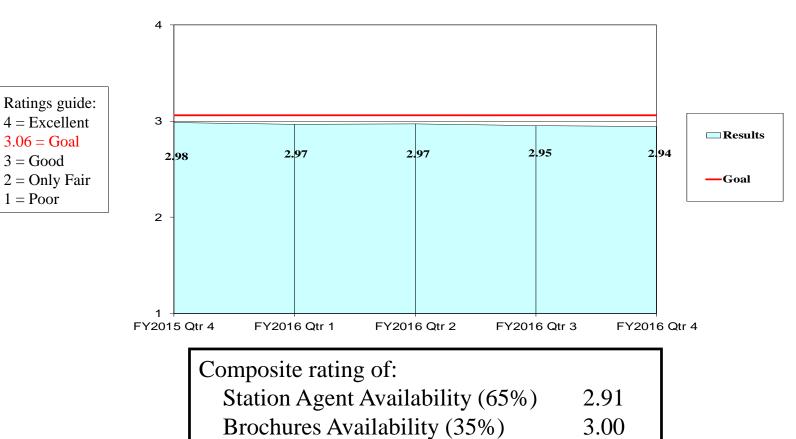


3.06 = Goal

3 = Good

1 = Poor

Station Services



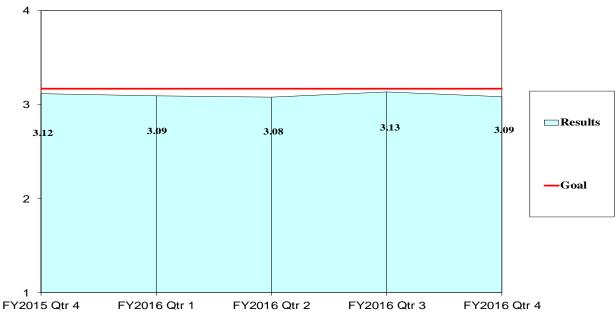
- Goal not met
- Availability ratings of either Excellent or Good: Station Agents: 74.5% Brochures: 78.9%



SERVICE: How are we doing?

Train P.A. Announcements





Composite rating of:	
P.A. Arrival Announcements (33%)	3.04
P.A. Transfer Announcements (33%)	3.02
P.A. Destination Announcements (33%)	3.20

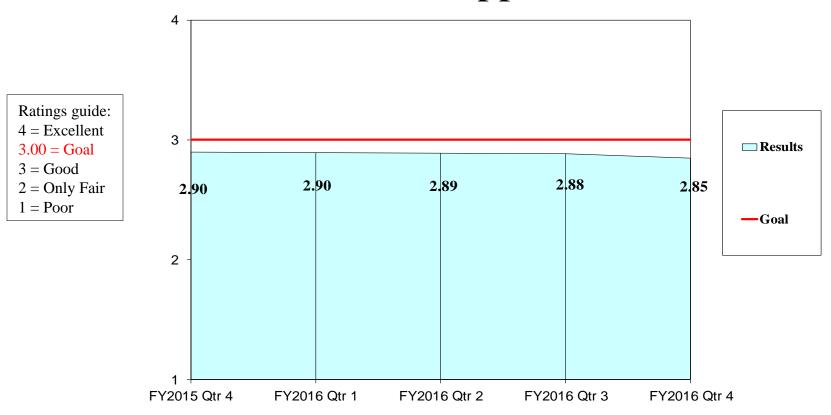
- ✓ Goal not met
- ✓ Announcement ratings of either Excellent or Good:

Arrivals: 77.0% Transfers: 76.1%

Destinations: 83.2%



Train Exterior Appearance



- ✓ Goal not met
- ✓ 74.3% of those surveyed ranked this category as either Excellent or Good



Ratings guide:

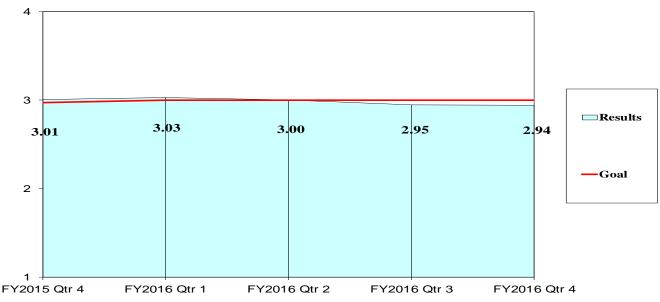
4 = Excellent

3 = Good

1 = Poor

3.00 = Goal2 = Only Fair

Train Interior Cleanliness



Composite rating of:

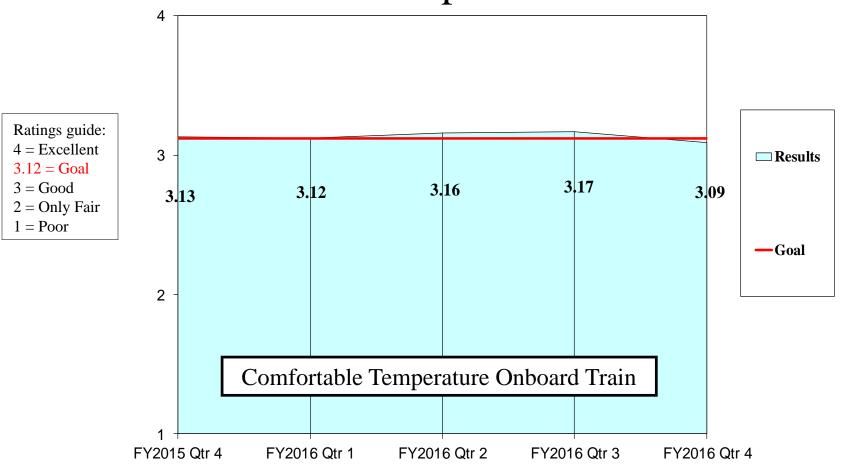
Train interior cleanliness (60%) 2.68
Train interior kept free of graffiti (40%) 3.34

- ✓ Goal not met
- ✓ Train Interior ratings of either Excellent or Good:

Cleanliness: 62.6% Graffiti-free: 91.0%



Train Temperature

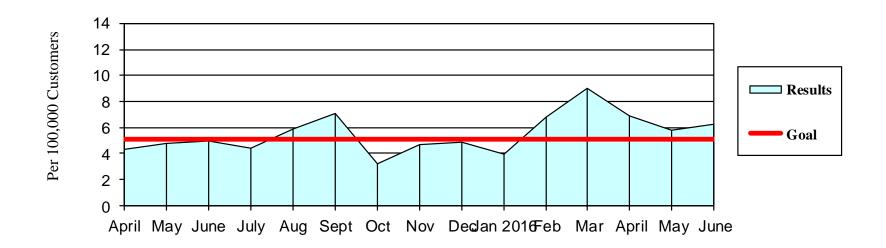


- ✓ Goal not met
- ✓ 82.4 % of those surveyed ranked this category as either Excellent or Good



Customer Complaints

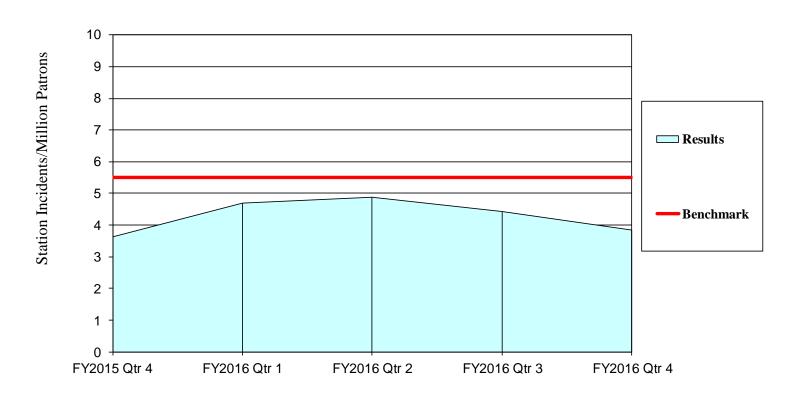
Complaints Per 100,000 Customers



- ✓ 6.30, 5.07 goal not met
- ✓ Total complaints lodged this period decreased 67 (3.1%) from last quarter, up 612 (40.9%) when compared with FY 15, fourth quarter.
- ✓ Complaints saw increases in the areas of AFC, Bike Program, Personnel, Station Cleanliness, and Trains. Complaints decreased for M&E, Parking, Passenger Information, Policies, and Service. Little or no change was reflected in totals of Announcements, Train Cleanliness, and Police Services.
- ✓ "Compliments" are close to last quarter's 140, down one with 139 (one year ago these numbered 128).

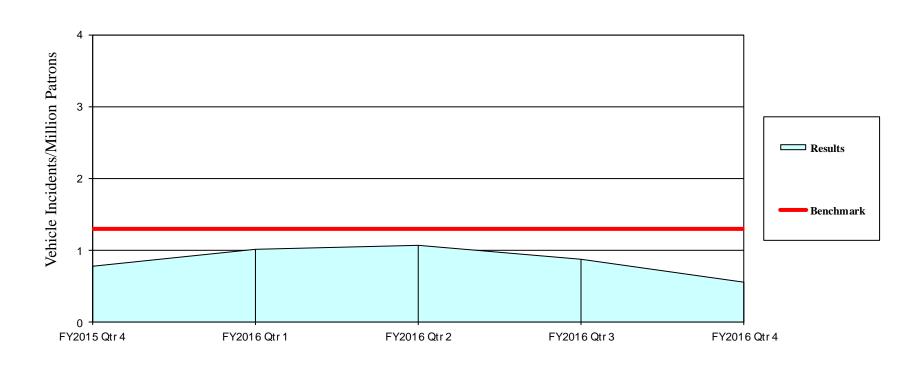


Patron Safety: Station Incidents per Million Patrons





Patron Safety Vehicle Incidents per Million Patrons



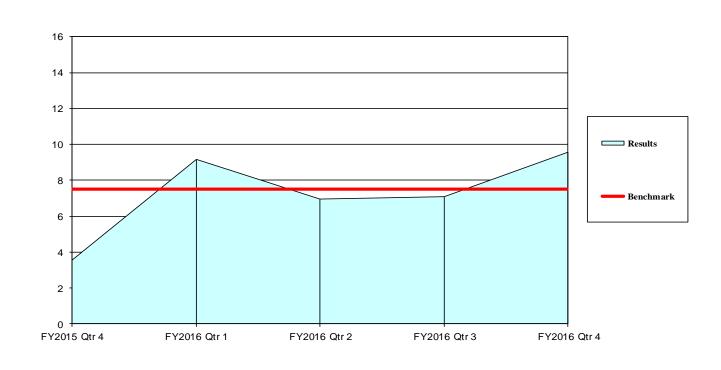


SERVICE: How are we doing?

Employee Safety: Lost Time Injuries/Illnesses

per OSHA Incidence Rate

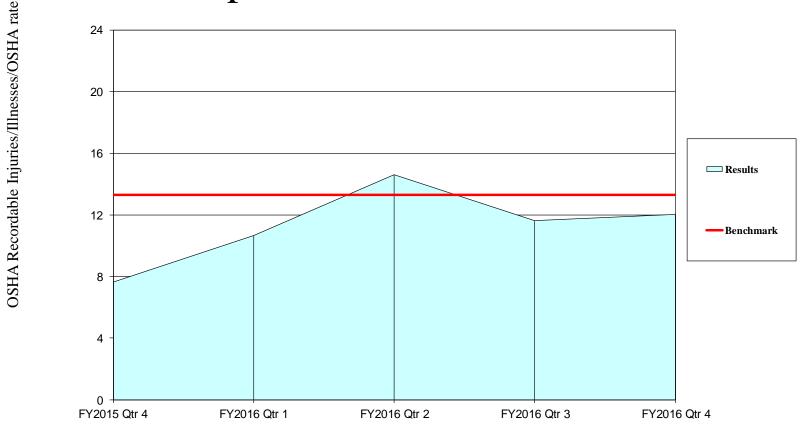




- ✓ Goal not met
- ✓ Sprains and strains are the most common reported injury
- ✓ ~70% of employees reporting injuries have reported injuries previously



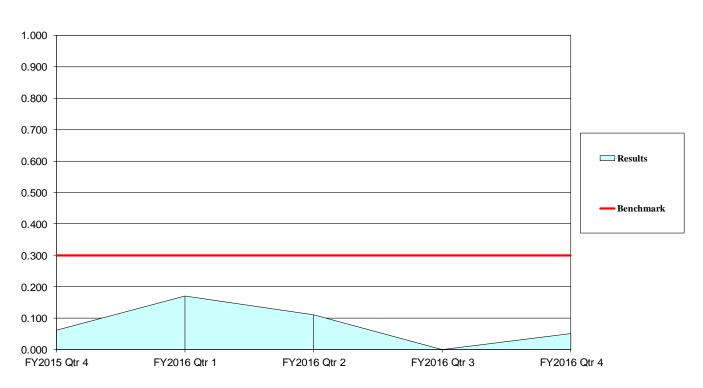
Employee Safety: OSHA-Recordable Injuries/Illnesses per OSHA Incidence Rate





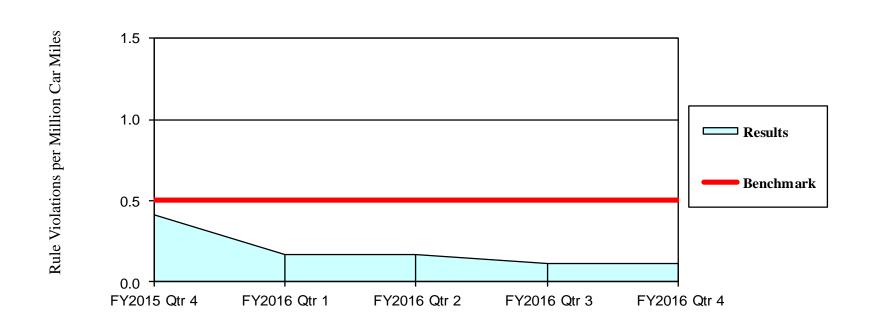
Operating Safety: Unscheduled Door Openings per Million Car Miles





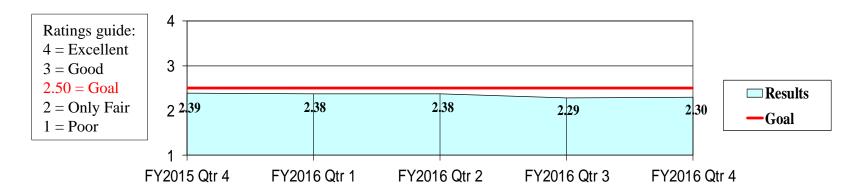


Operating Safety: Rule Violations per Million Car Miles





BART Police Presence



Composite Rating of Adequate BART Police Presence in:
Stations (33%)

Parking Lots and Garages (33%)

Trains (33%)

2.22

- ✓ Goal not met
- ✓ Adequate Presence ratings of either Excellent or Good:

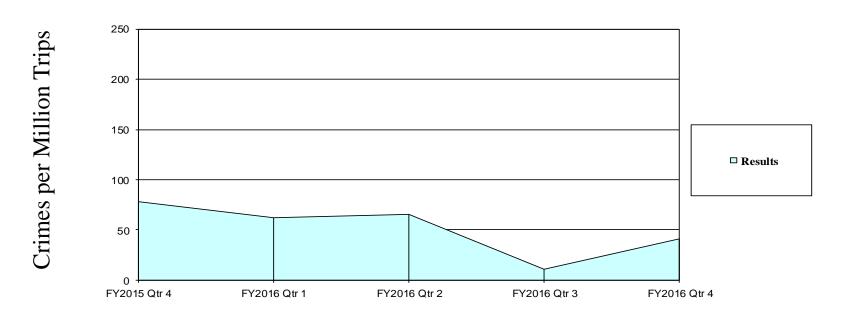
Stations: 44.0% Parking Lots/Garages: 49.2%

Trains: 40.5%



SERVICE: How are we doing?

Quality of Life*

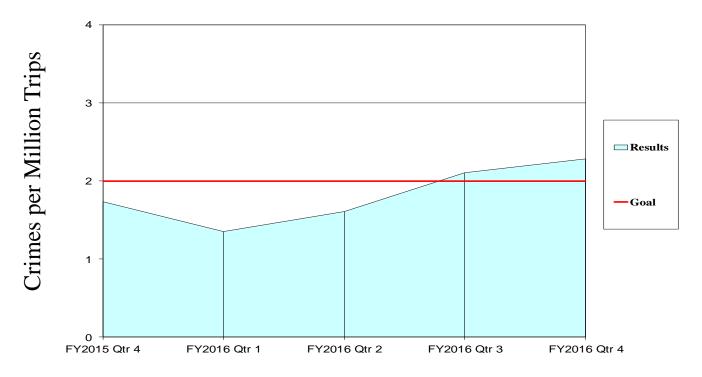


✓ Quality of Life incidents are up from the last quarter, and down from the corresponding quarter of the prior fiscal year.

^{*}Quality of Life Violations include: Disturbing the Peace, Vagrancy, Public Urination, Fare Evasion, Loud Music/Radios, Smoking, Eating/Drinking and Expectoration



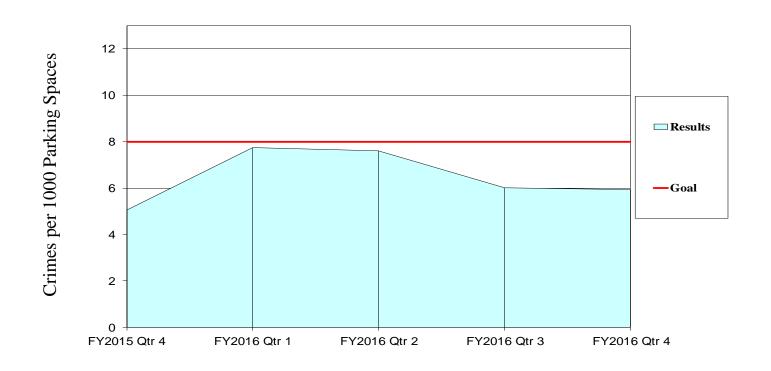
Crimes Against Persons (Homicide, Rape, Robbery, and Aggravated Assault)



- ✓ Goal not met
- ✓ Crimes against persons are up from the last quarter, and up from the corresponding quarter of the prior fiscal year.



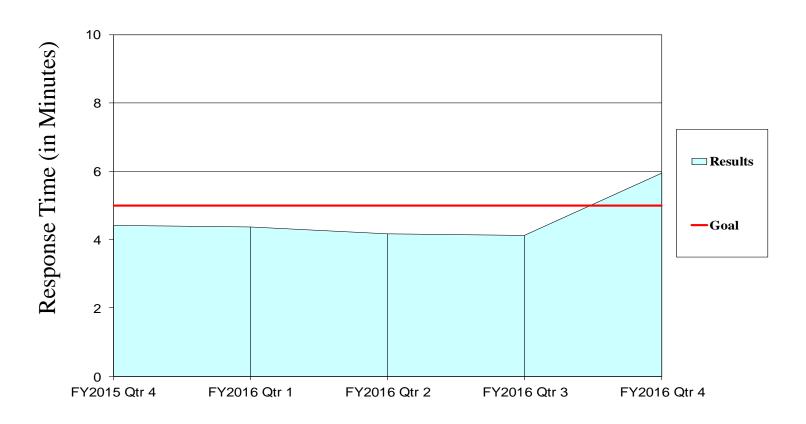
Auto Theft and Burglary



- ✓ Goal met
- ✓ The number of incidents per thousand parking spaces are down from last quarter, and up from the corresponding quarter from the prior fiscal year.

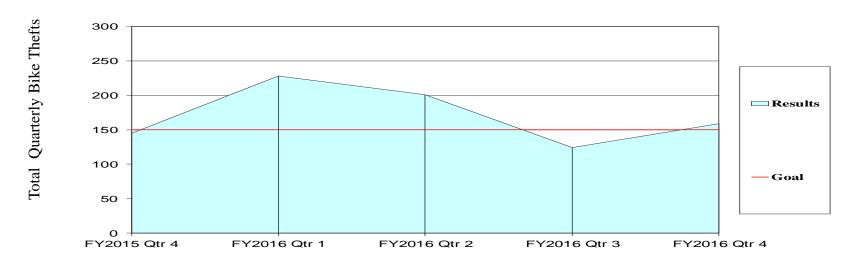


Average Emergency Response Time



✓ The Average Emergency Response Time goal was not met for the quarter.

Bike Theft



- ✓ Goal not met
- ✓ 159 bike thefts for current quarter, up 35 from last quarter and up from the corresponding quarter of the prior fiscal year.

^{*} The penal code for grand theft value changed in 2011. The software was updated, which resulted in a change of bicycle theft statistics effective FY12-Q3.