

Quarterly Service Performance Review

Third Quarter, FY 2016

January - March, 2016

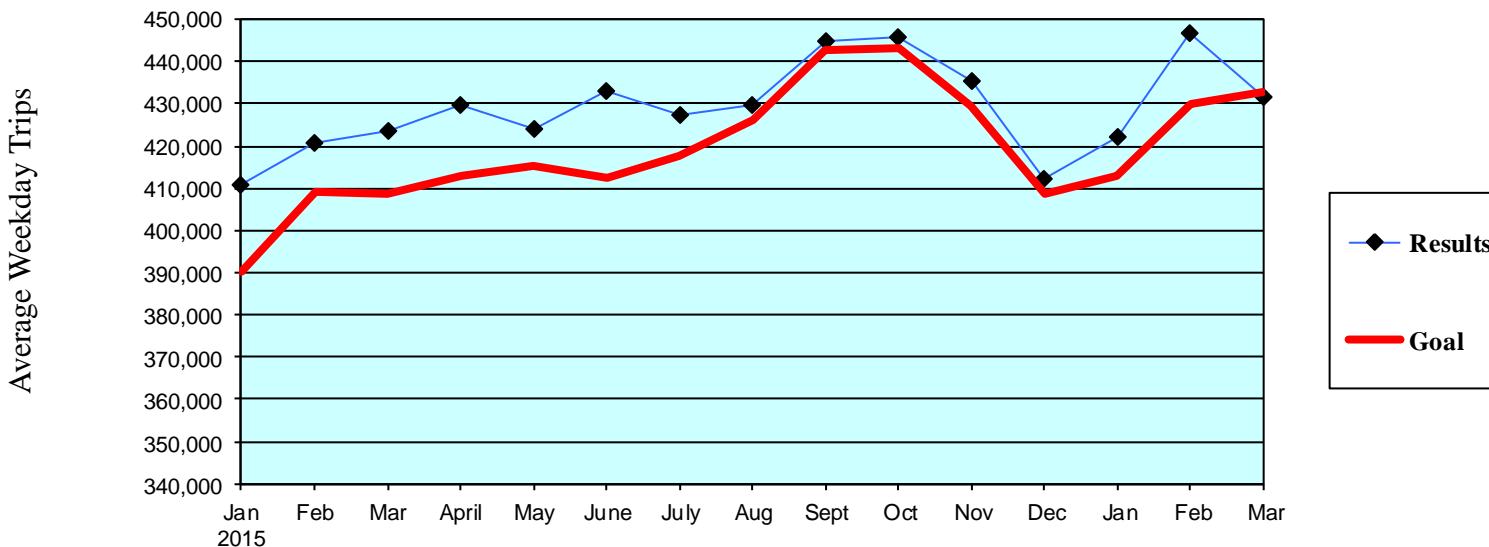
Engineering & Operations Committee
May 26, 2016



FY16 Third Quarter Overview...

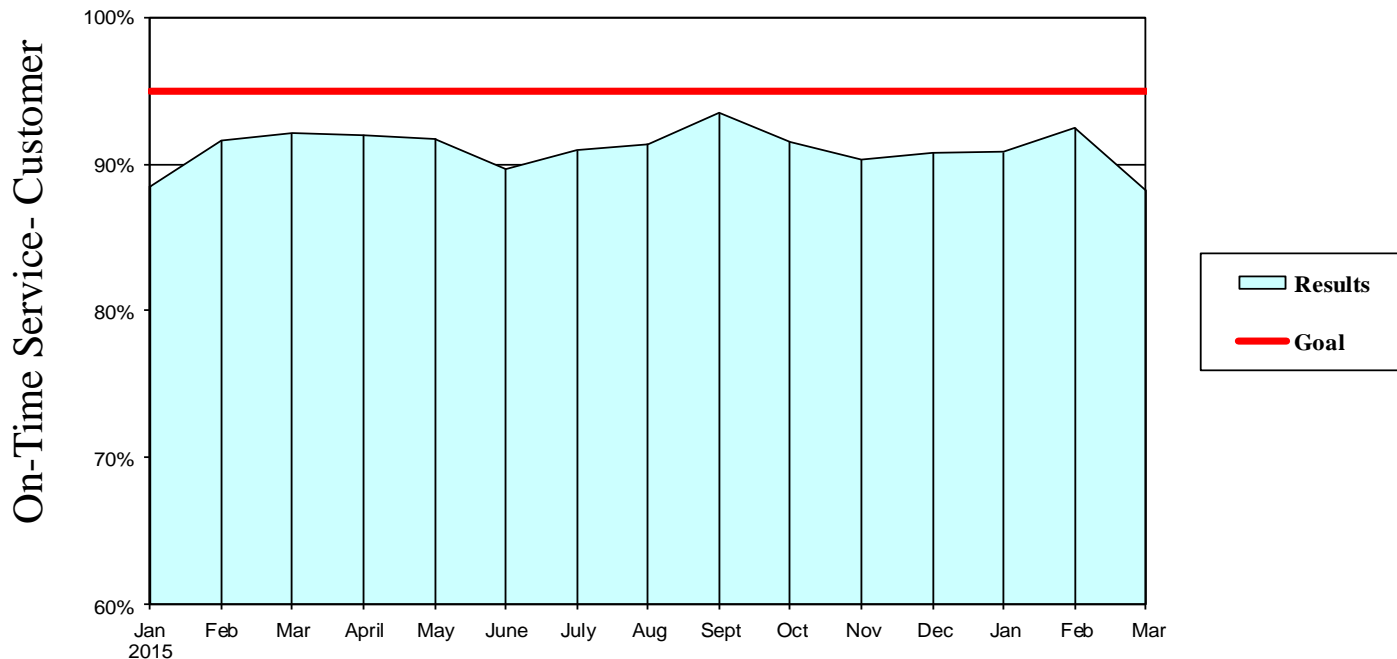
- ✓ Boosted by Super Bowl 50, ridership increased with all time monthly weekday average record in February (446,650)
- ✓ March propulsion failure problems between North Concord and Pittsburg/Bay Point significantly impacted On-Time Performance
- ✓ Reliability: Car and Track met; Transportation, Train Control, Computer Control System and Traction Power not met
- ✓ Availability: Car, Fare Gates and Vendors, Station Elevators met; Escalators and Garage Elevators not met.
- ✓ Passenger Environment indicators: only Train Temperature met; 3 improved, 5 worse
- ✓ Complaints up in all categories

Customer Ridership



- ✓ Average weekday ridership (433,585) up 3.6% from same quarter last year
 - Core up 3.3%, SFO Extension up 5.4%
 - February was the highest ever (446,650) due to Super Bowl 50 festivities
- ✓ Saturday and Sunday up by 4.0% and down by 1.1%, respectively, over same quarter last year
 - #1 Saturday ridership (419,161) on 2/6/16 due to Super Bowl 50 festivities, Warriors game and Metallica concert
- ✓ Total trips for the quarter 1.3% above budget, year to date 0.2% below budget

On-Time Service - Customer

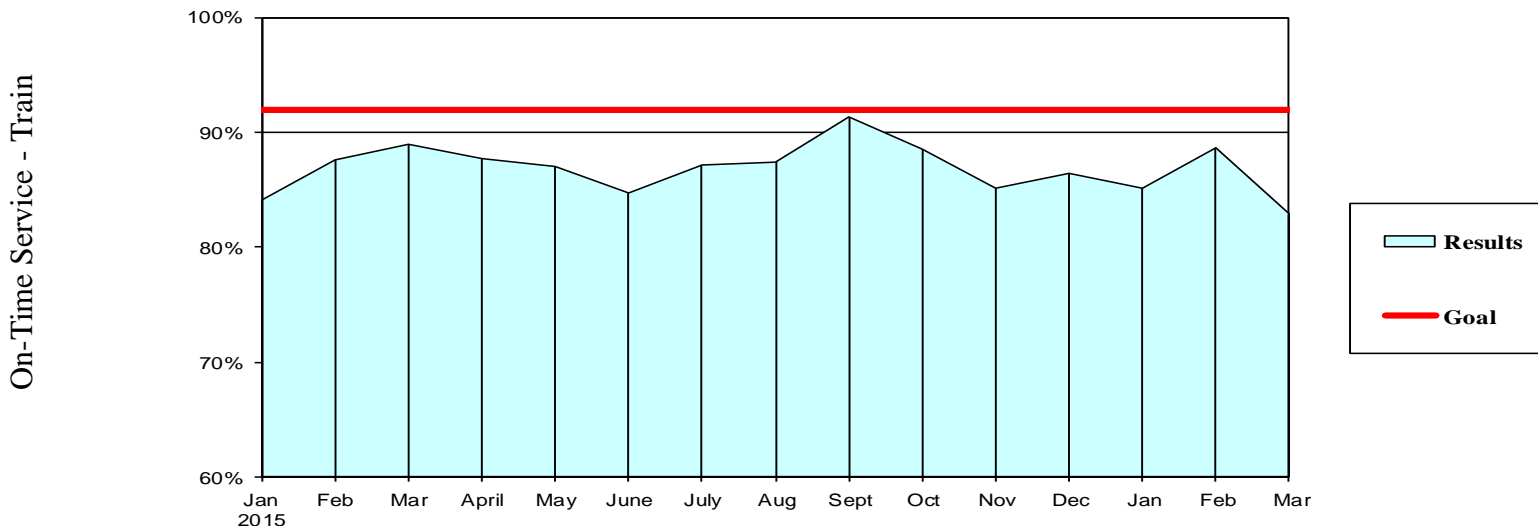


✓ 90.45%, 95.00% goal not met, down 0.40%

✓ Biggest delay events of the quarter:

JAN 06	Balboa Park	MUX (False Occupancy)	170 late trains
JAN 19	N. Berkeley	Train Struck Person On Trackway	127
MAR 18	T-Bay Tube	Track (Defective Rail)	107
MAR 07	24th Street	Atten. Console (EM Stop)	108
MAR 16	C-Line	3rd Rail Power (Power Surge)	98
JAN 05	Balboa Park	MUX (False Occupancy)	85
JAN 19	Montgomery	False Occupancy	65
FEB 19	19th St. I-Lk	Routing (Switch)	63
MAR 28	D.C. Turnbck	T.O. Procedure (Manual Movement)	60
JAN 14	Civic Center	Person On Trackway	57

On-Time Service - Train

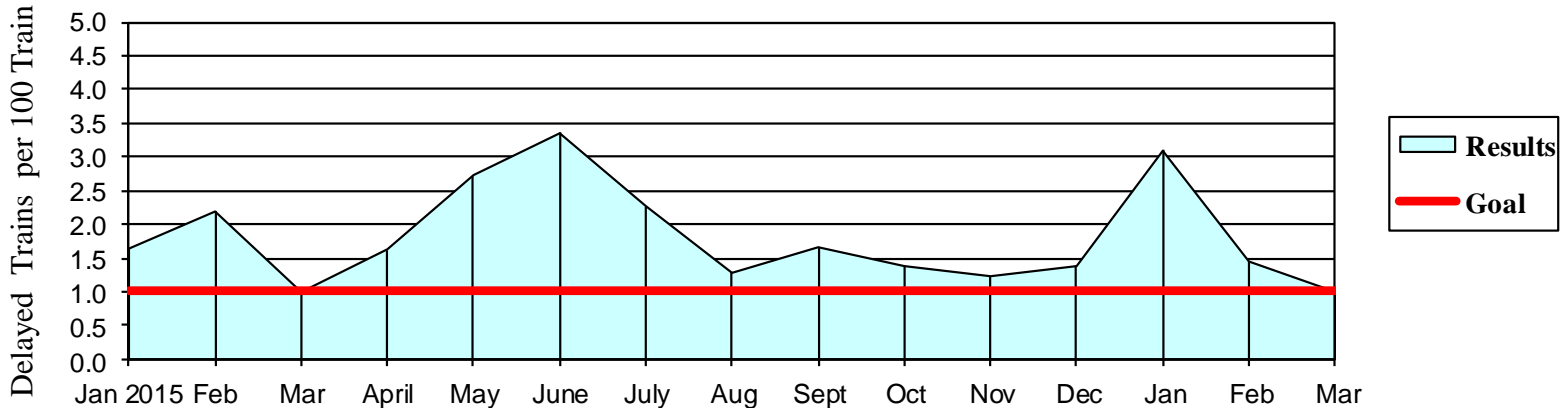


✓ 85.50%, 92.00% goal not met; down 1.25%

Late trains by category:		6055 Total Late Trains	
1. Other: Miscellaneous (patron loading, passenger transfer, congestion, multi-cause delay, person on trackway, weather)	1,616 late trains		26.7%
2. Train Control	997 late trains		16.5%
3. Police	848 late trains		14.0%
4. Revenue Vehicle	525 late trains		8.7%
5. Wayside Maintenance Work	344 late trains		5.7%
6. Operations	309 late trains		5.1%
7. Sick passenger	285 late trains		4.7%
8. Vandalism	262 late trains		4.3%

Wayside Train Control System

Includes False Occupancy & Routing, Delays Per 100 Train Runs

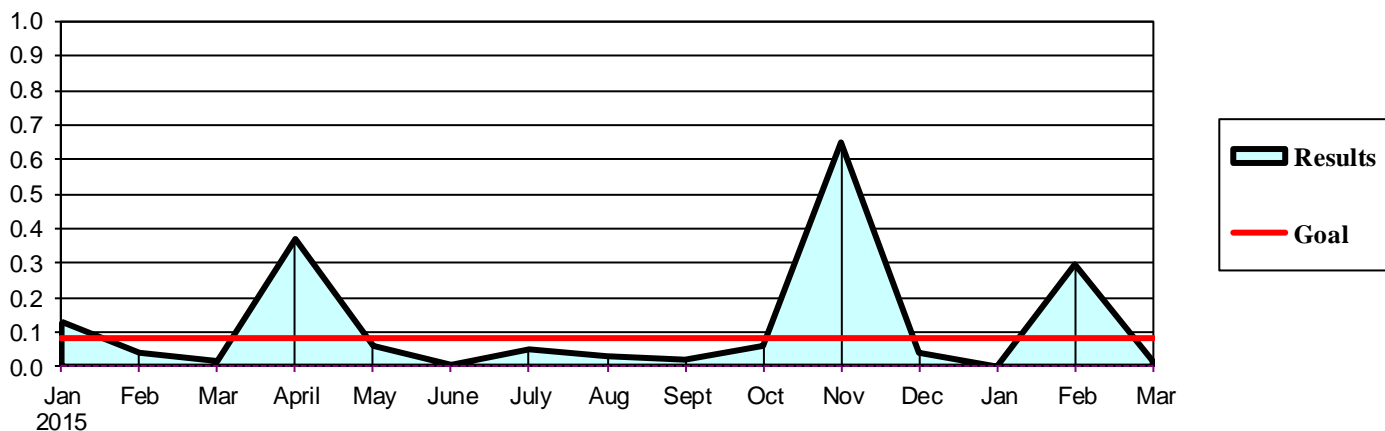


- ✓ 1.85, 1.00 goal not met
- ✓ Two major delays in January caused 36% of total quarterly late trains, otherwise improvement trend continues
- ✓ Major Delay Incidents:
 - January 5-6, 255 Trains Delayed: During repair of multiple damaged Mux cable connectors on M80 C Mux at M85, crew caused an arrestor to short on a “data down” line. Required extensive troubleshooting to locate—two seconds to correct.
 - January 19, 65 Trains Delayed: Intermittent False Occupancy (IFO) in M17 interlocking; multiple compounded delays prior to occurrence increased total trains delayed by IFO.

Computer Control System

Includes ICS computer & SORS, Delays per 100 train runs

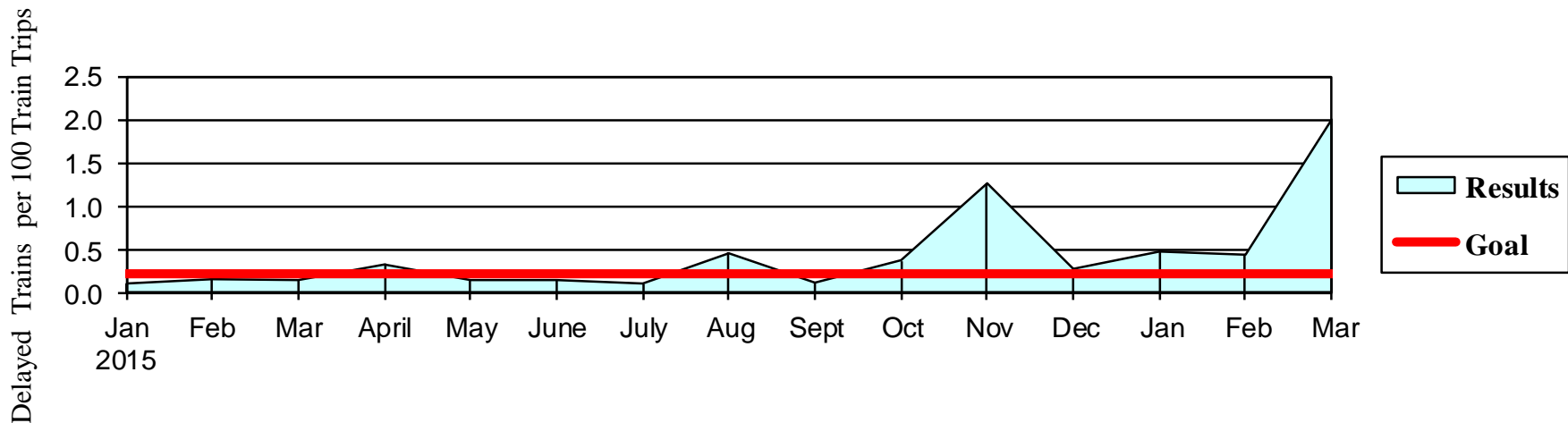
Delayed Trains per 100 Train Trips



- ✓ Goal not met due to an ICS State 3 on Feb. 8, during a routine daily backup procedure. Procedures for this activity were reexamined, and then reviewed with Maintenance personnel.

Traction Power

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

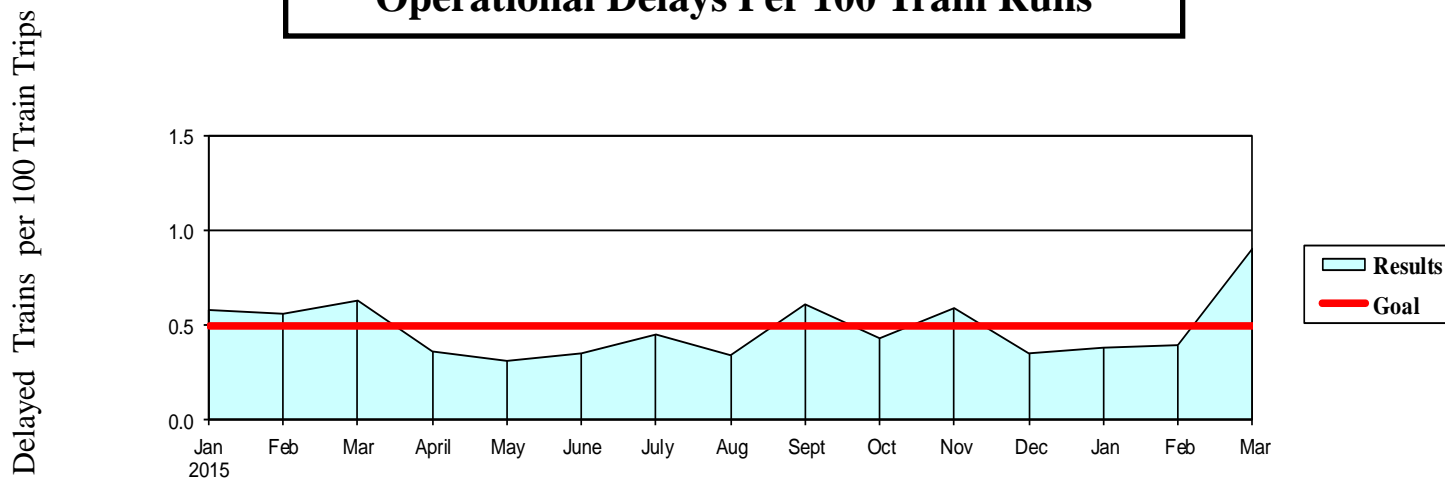


- ✓ Goal not met
- ✓ Major incidents:
 - Water intrusion in W Line tunnel caused 1kV cable failure
 - 34.5kV cable faulted on L Line
 - UPS failure near Pittsburg/Bay Point
 - 28 “Power Surge” incidents



Transportation

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



✓ 0.56; goal not met

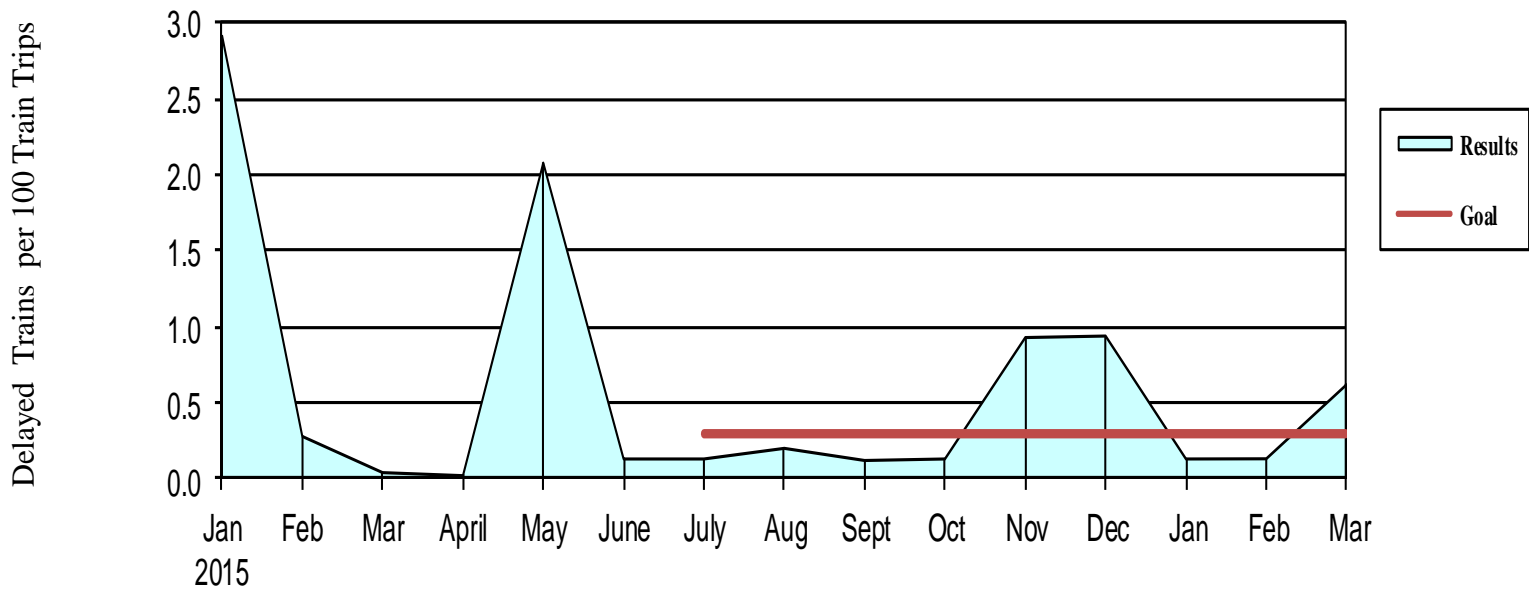
✓ Major incidents:

- Switch correspondence issue in SFO Wye required manual routing by Train Controllers for much of January; resulted in a higher than normal amount of misroutes at the SFO Wye
- Train Operator manual run order violation leaving Daly City transfer tracks



Track

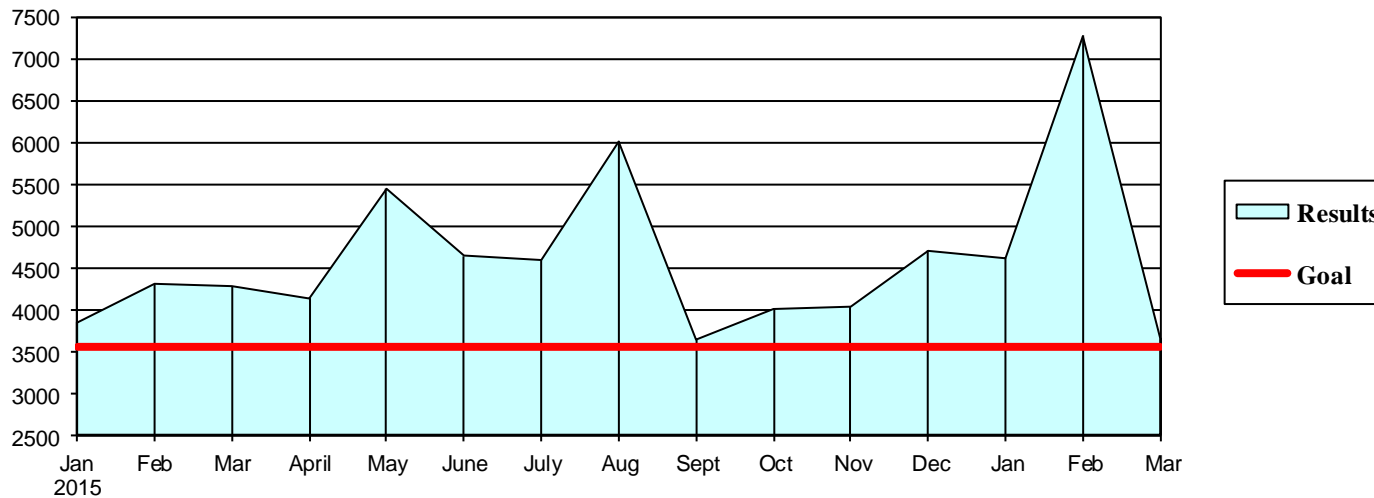
Includes Rail, Track Tie, Misalignment, Switch, Delays Per 100 Train Runs



- ✓ Goal met
- ✓ Biggest event of the quarter resulted from early detection of developing rail defect via ultrasonic rail testing

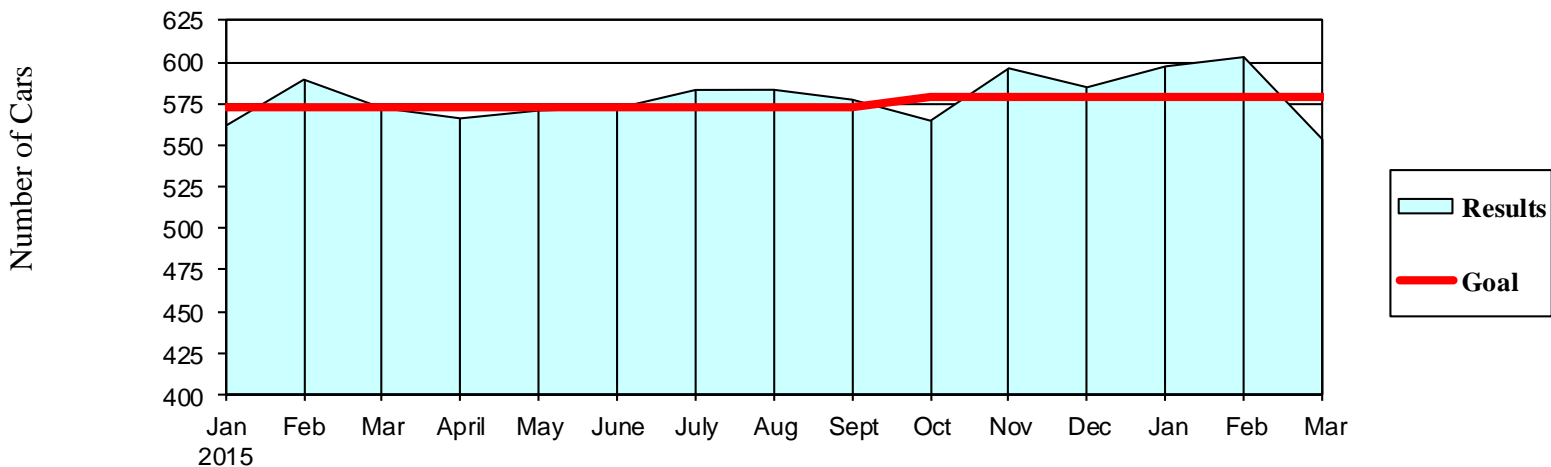
Car Equipment - Reliability

Mean Time Between Failures (Hours)



✓ Goal met – MTBF 4,760 hours

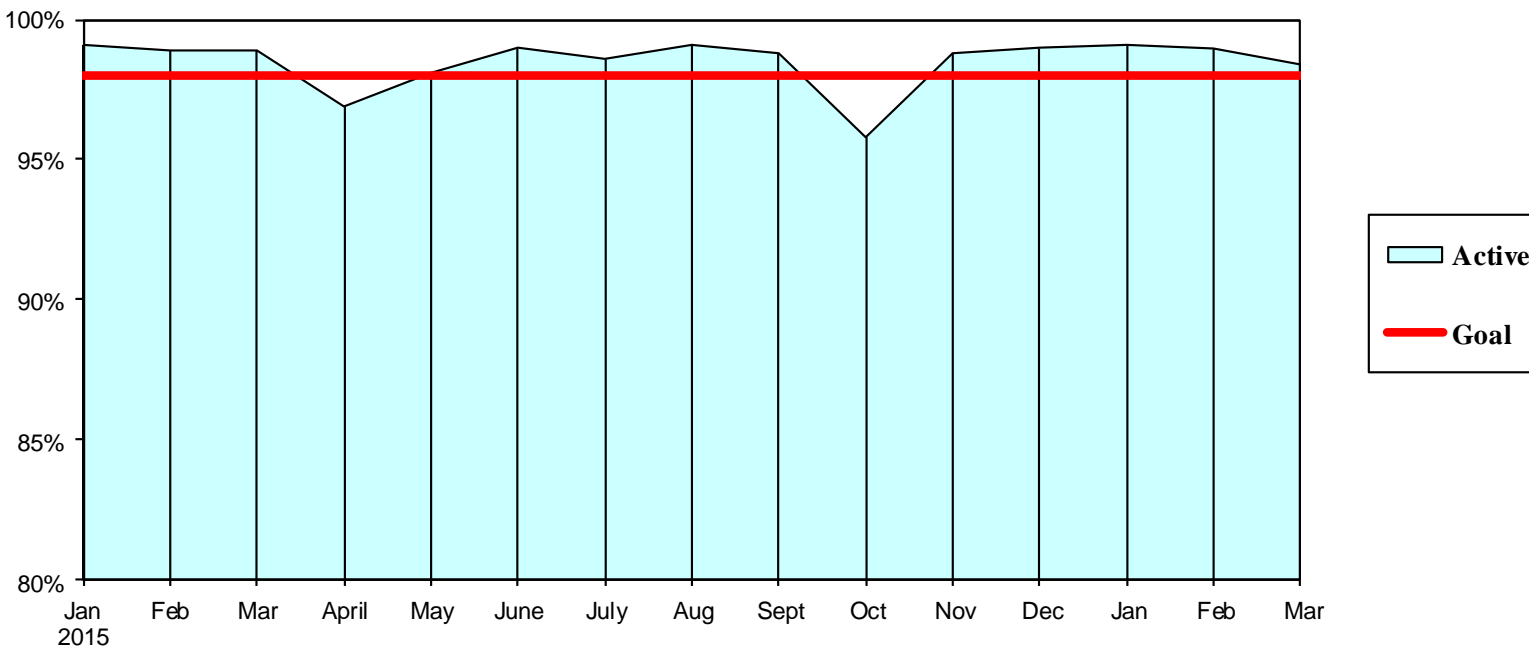
Car Equipment - Availability @ 0400 hours



- ✓ Goal Met – 584 Actual vs. 579 Required
- ✓ Miscellaneous propulsion failures:
 - February: West Oakland
 - March: North Concord – Pittsburg/Bay Point

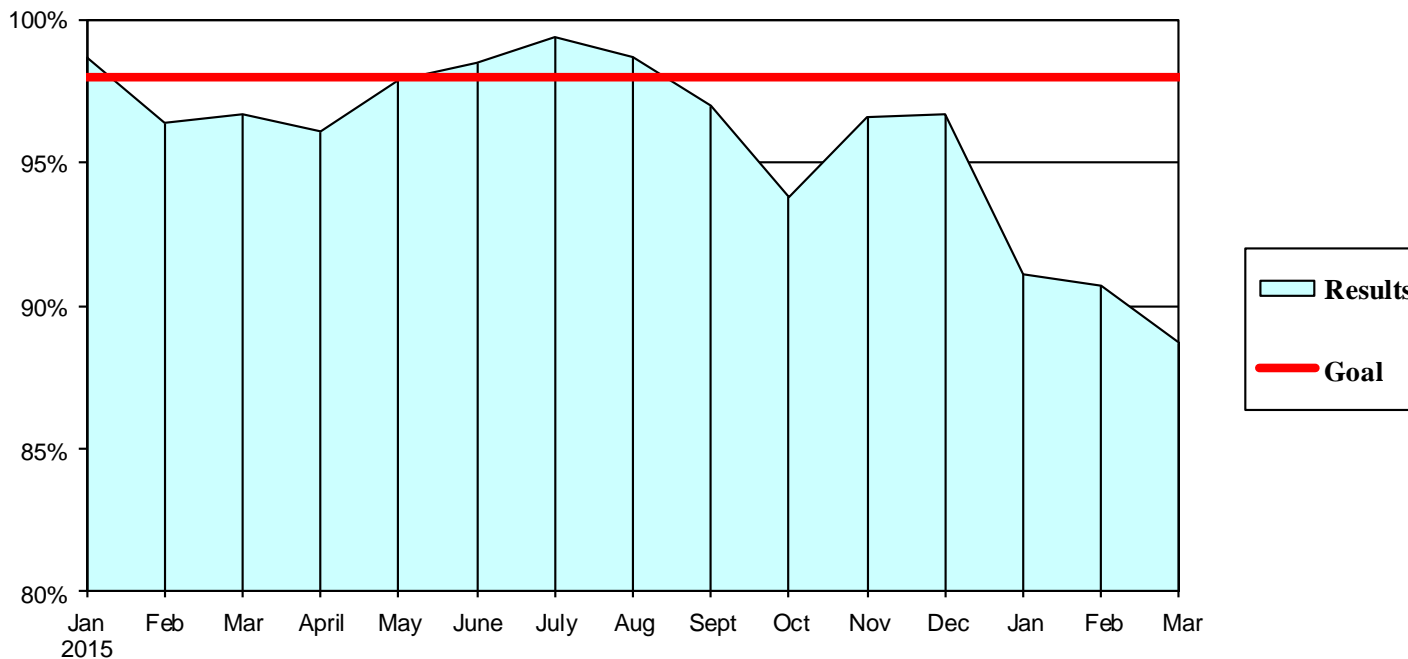


Elevator Availability - Stations



✓ Goal met

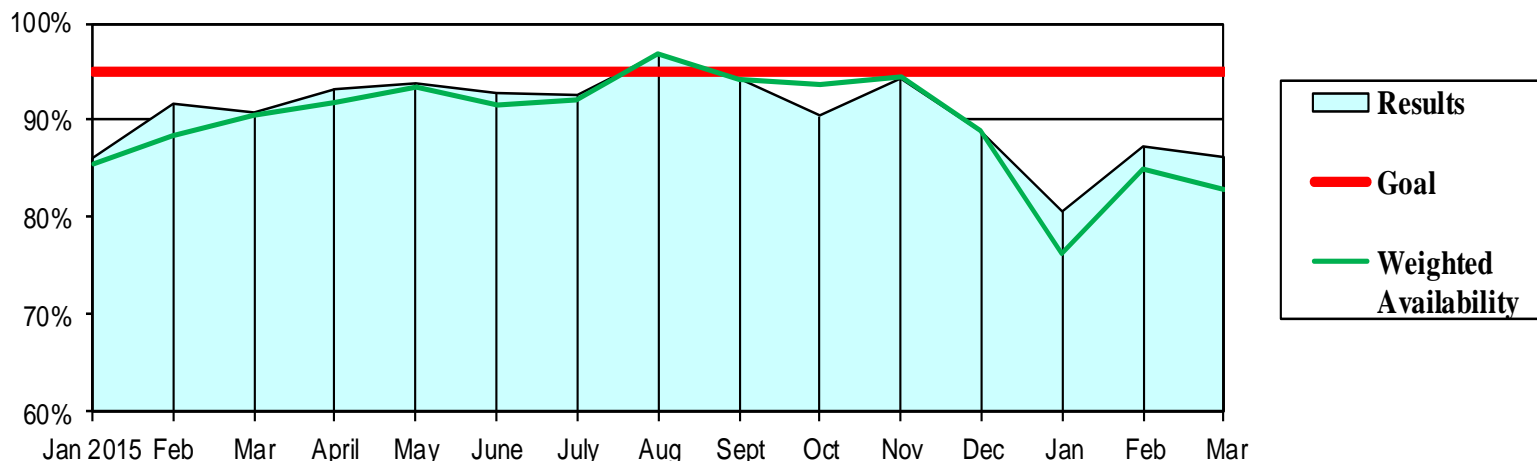
Elevator Availability - Garage



- ✓ 90.17% actual, 98% goal
- ✓ Controller drive failures at Millbrae
- ✓ Multiple, long term problems at Pleasant Hill – turned over to contractor; also CCCTA allocated \$600K Measure J funds for modernization

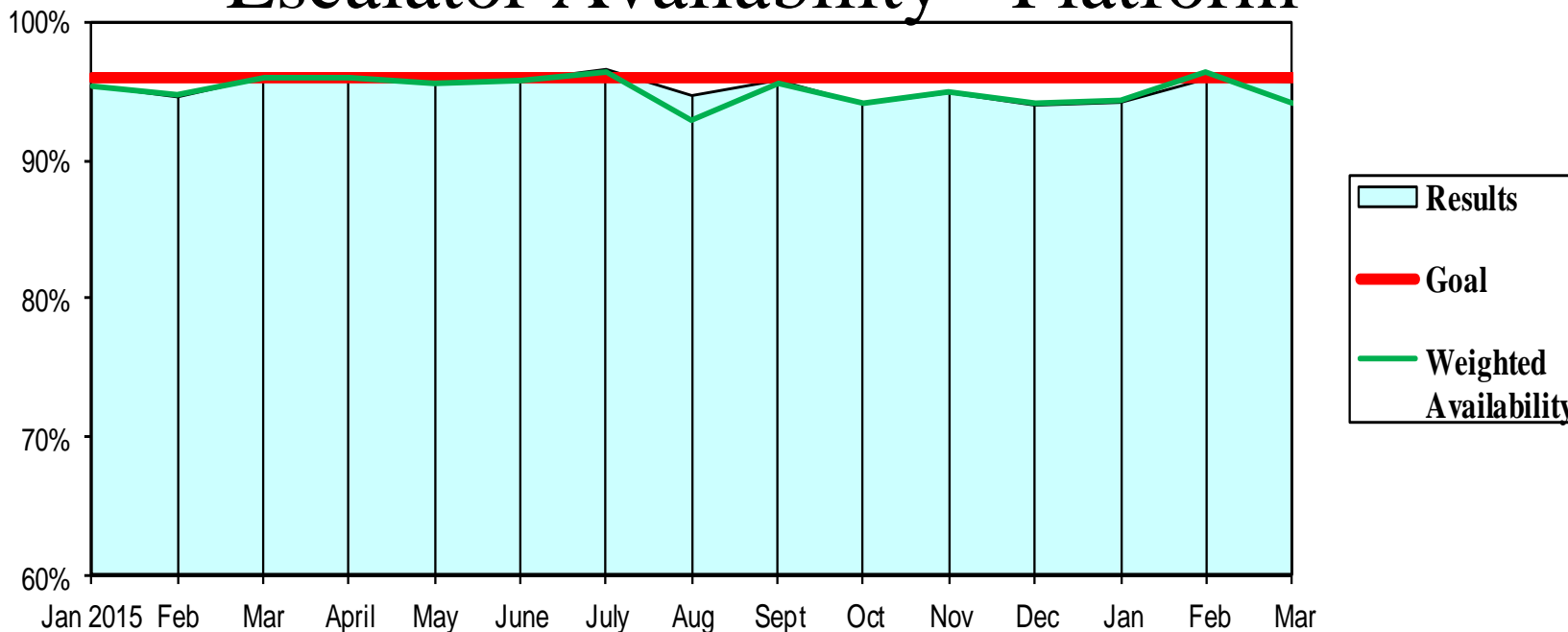


Escalator Availability - Street



- ✓ Actual 84.7%, goal 95%
- ✓ Seven heavy repairs on street units during this quarter.
- ✓ Material obsolescence on Mission Street units resulted in extended outages
- ✓ Staffing levels continue below budget
- ✓ Recovery:
 - Resolved issue with SEIU that will improve staffing
 - Several new hires plus more in the pipeline
 - Received material for the two long term outages on Mission Street
 - Projecting improvement in fourth quarter

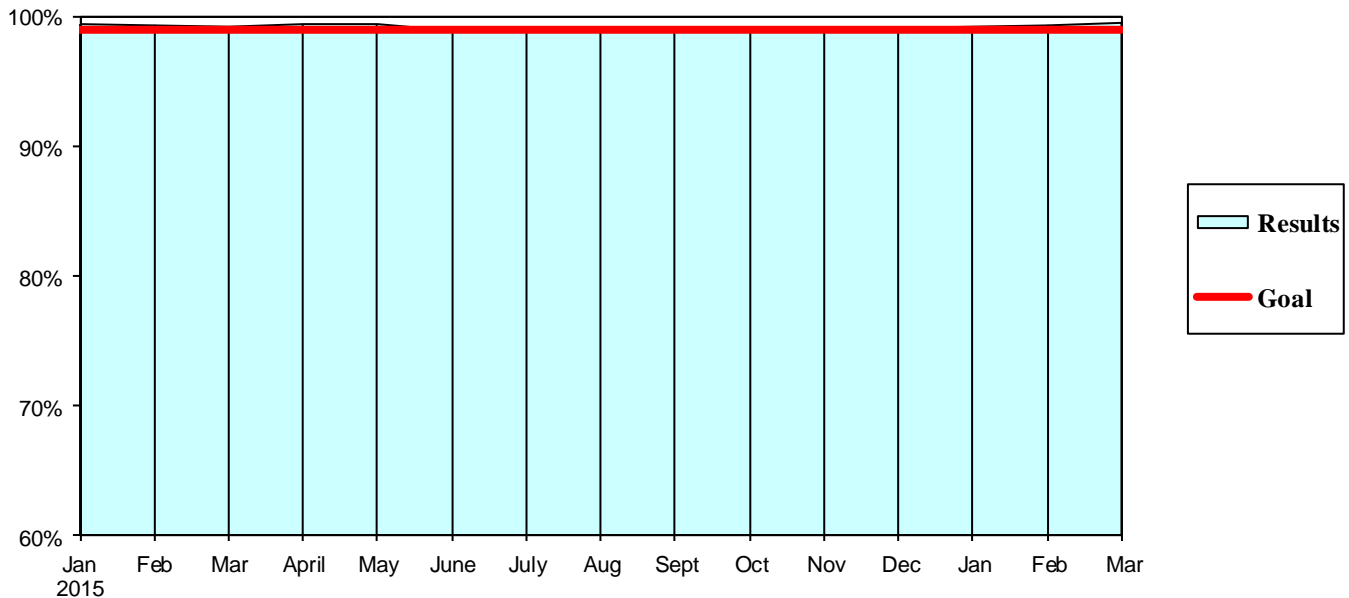
Escalator Availability - Platform



- ✓ 95.27%, goal just missed
- ✓ Improved over last quarter
- ✓ Six heavy repairs completed, one at Daly City in progress



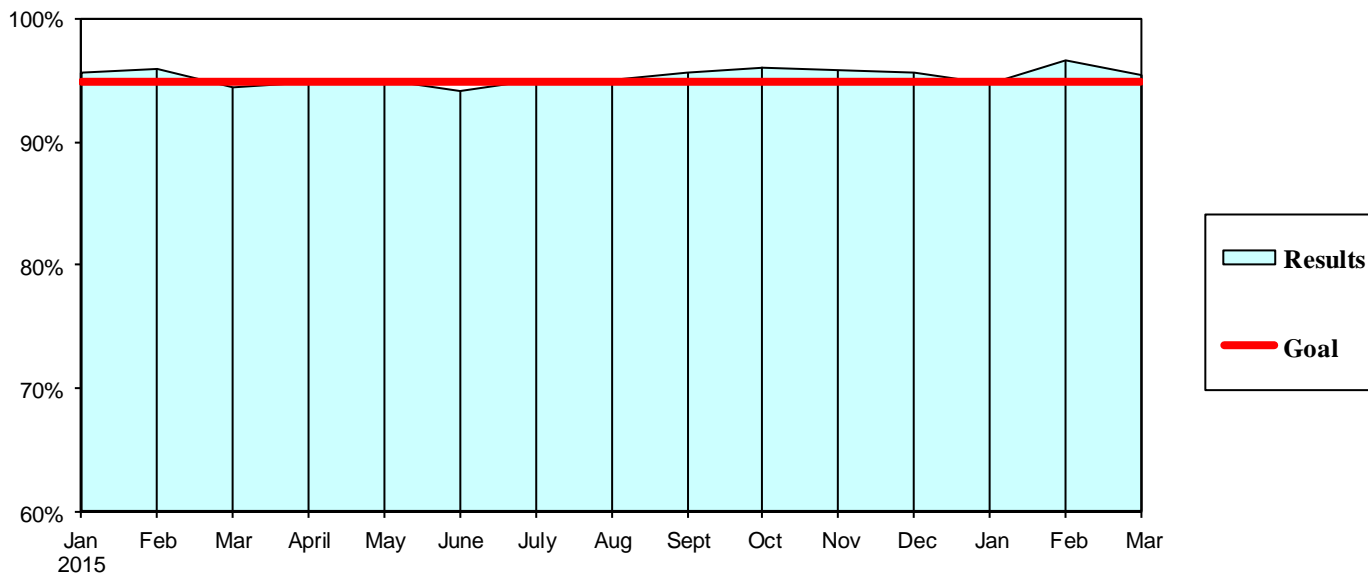
AFC Gate Availability



✓ 99.43 % - goal exceeded



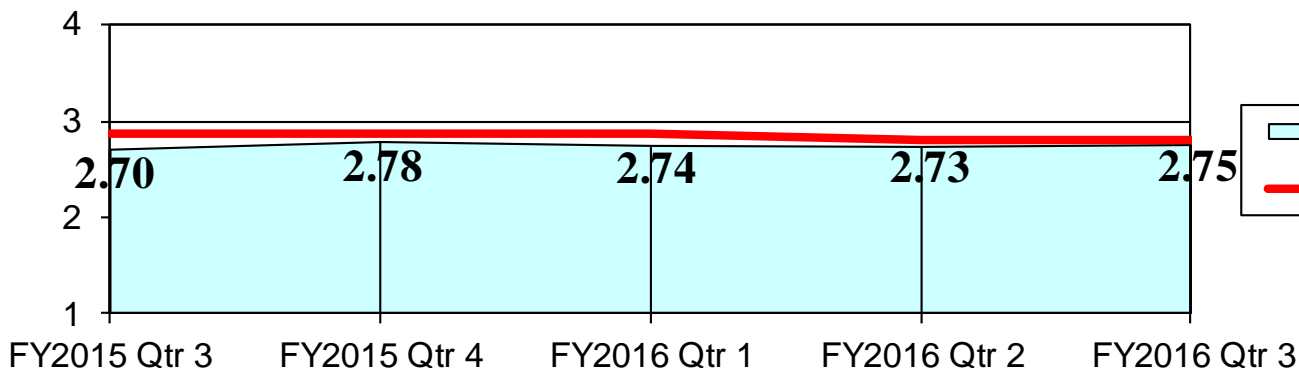
AFC Vendor Availability



- ✓ Ticket Vendor Availability - 95.67% - exceeded goal
- ✓ Add Fare Availability – 98.8%
- ✓ Add Fare Parking Availability – 98.8%
- ✓ Parking Validation Machines Availability – 99.5%

Environment - Outside Stations

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

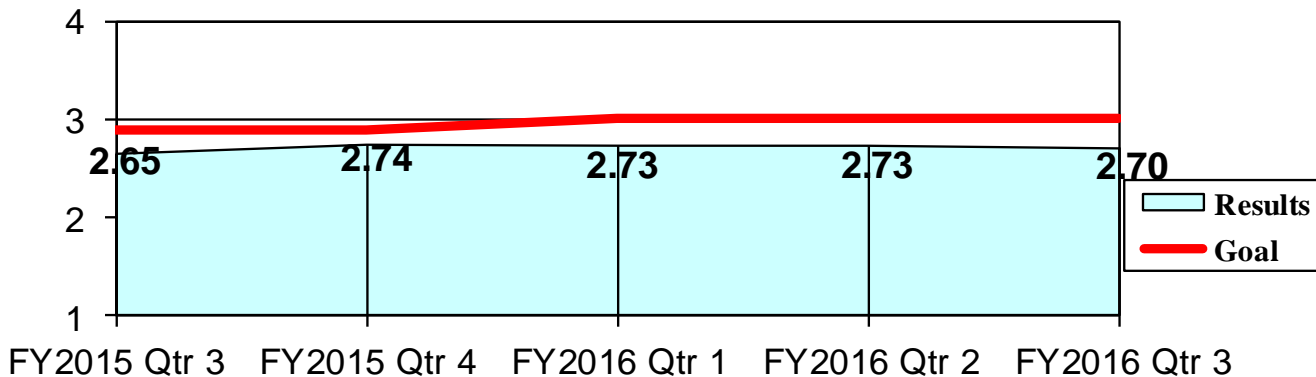


Composite rating of:	
Walkways & Entry Plaza Cleanliness (50%)	2.65
BART Parking Lot Cleanliness (25%)	2.98
Appearance of BART Landscaping (25%)	2.72

- ✓ Goal not met but improved
- ✓ Landscaping sub-goal met
- ✓ Cleanliness ratings of either Excellent or Good:
 - Walkways/Entry Plazas: 61.5% Parking Lots: 76.9%
 - Landscaping Appearance: 64.7%

Environment - Inside Stations

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



Composite rating for Cleanliness of:	
Station Platform (60%)	2.85
Other Station Areas (20%)	2.66
Restrooms (10%)	2.20
Elevator Cleanliness (10%)	2.42

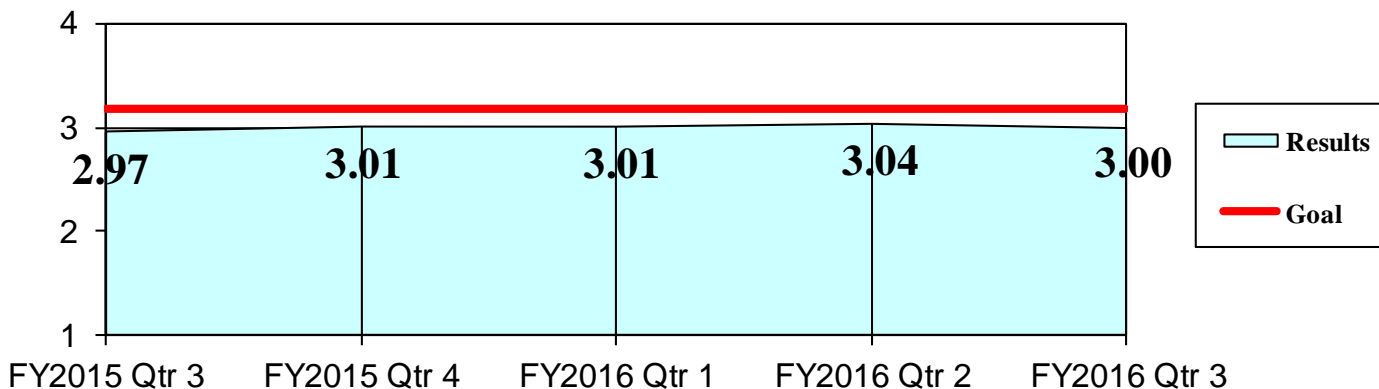
- ✓ Goal not met, all four sub-categories down slightly
- ✓ Cleanliness ratings of either Excellent or Good:

Station Platform: 72.1%	Other Station Areas: 61.0%
Restrooms: 40.3%	Elevators: 49.4%



Station Vandalism

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



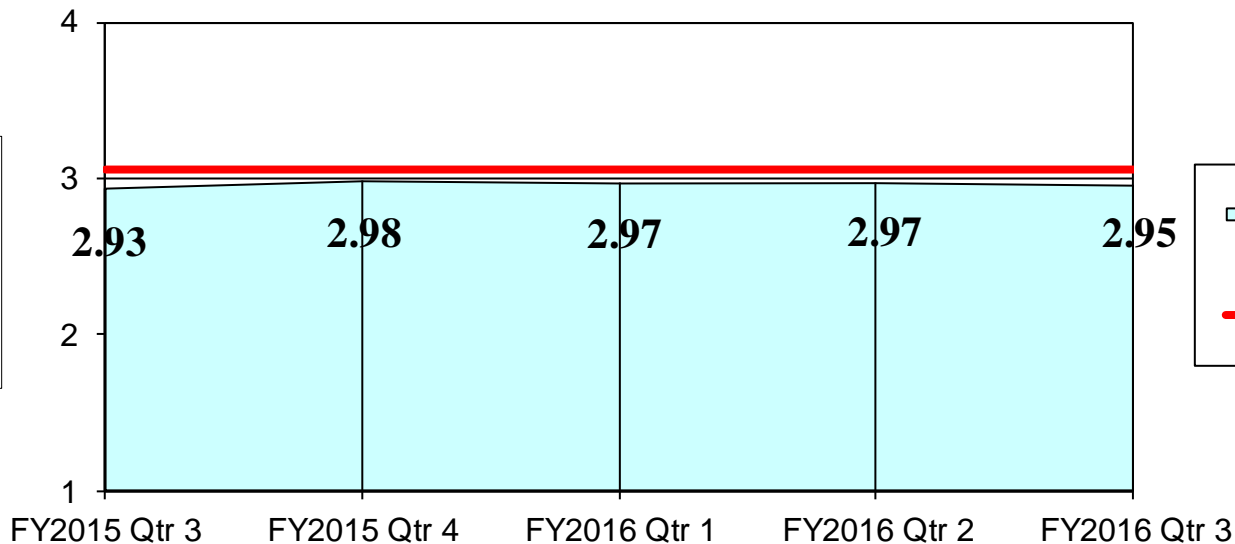
Station Kept Free of Graffiti

- ✓ Goal not met
- ✓ 77.7% of those surveyed ranked this category as either Excellent or Good



Station Services

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



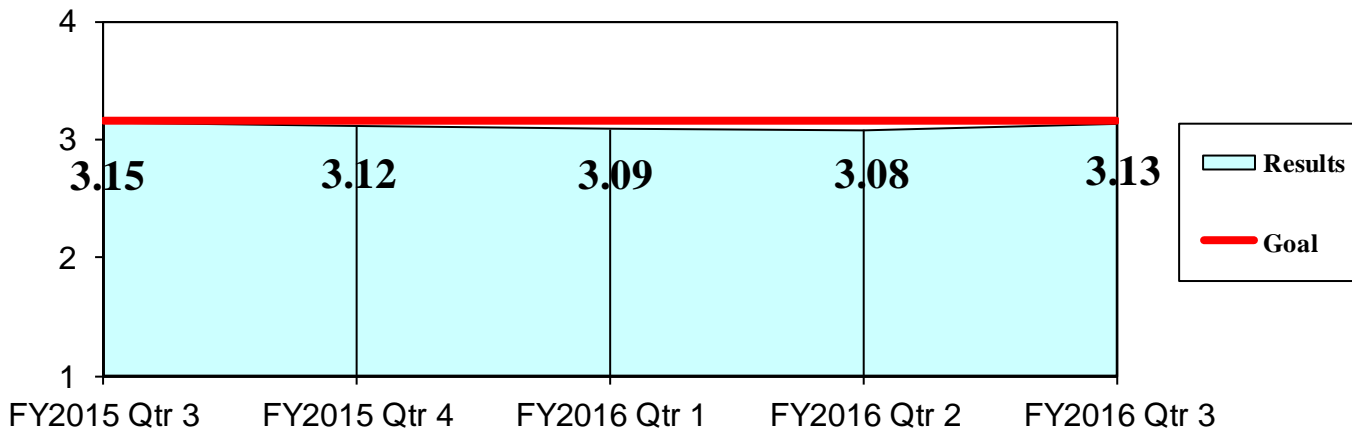
Composite rating of:	
Station Agent Availability (65%)	2.92
Brochures Availability (35%)	3.02

- ✓ Goal not met
- ✓ Availability ratings of either Excellent or Good:
 - Station Agents: 74.9%
 - Brochures: 79.0%



Train P.A. Announcements

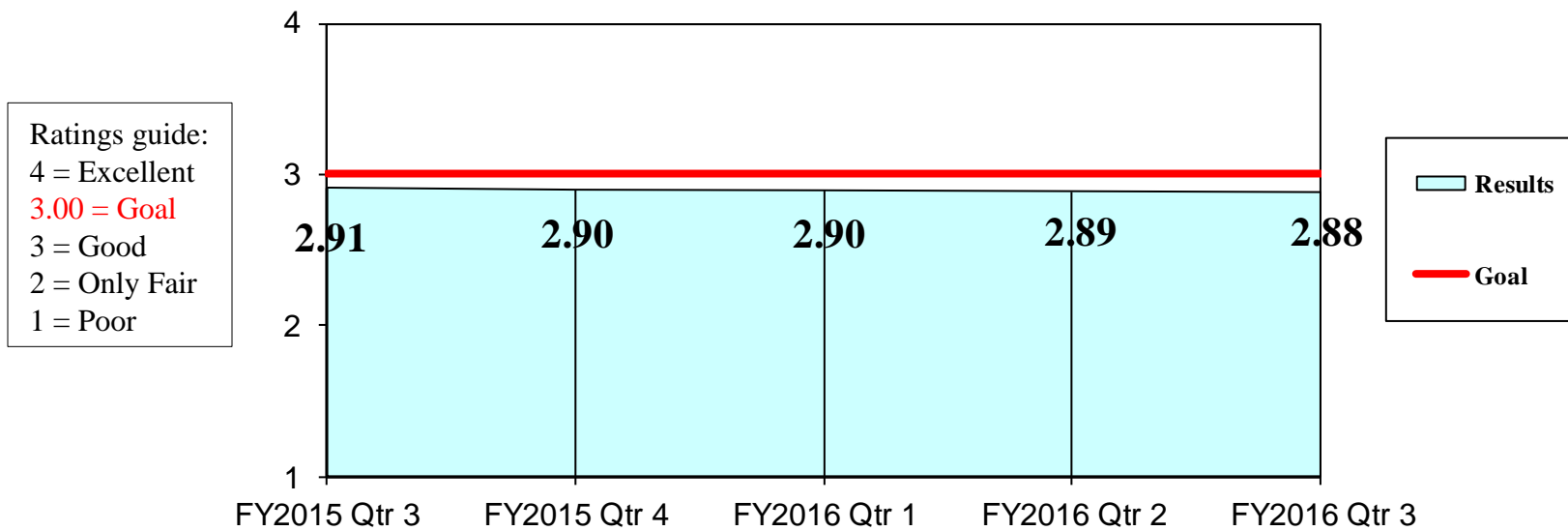
Ratings guide:
 4 = Excellent
 3.17 = Goal
 3 = Good
 2 = Only Fair
 1 = Poor



Composite rating of:	
P.A. Arrival Announcements (33%)	3.10
P.A. Transfer Announcements (33%)	3.07
P.A. Destination Announcements (33%)	3.24

- ✓ Goal not met but improved performance
- ✓ Announcement ratings of either Excellent or Good:
 - Arrivals: 80.2%
 - Transfers: 79.0%
 - Destinations: 85.1%

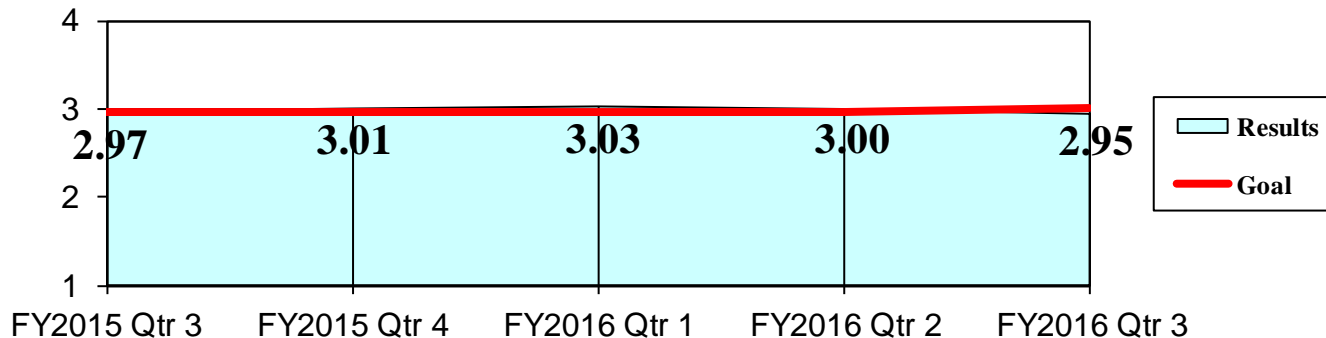
Train Exterior Appearance



- ✓ Goal not met
- ✓ 76.0% of those surveyed ranked this category as either Excellent or Good

Train Interior Cleanliness

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

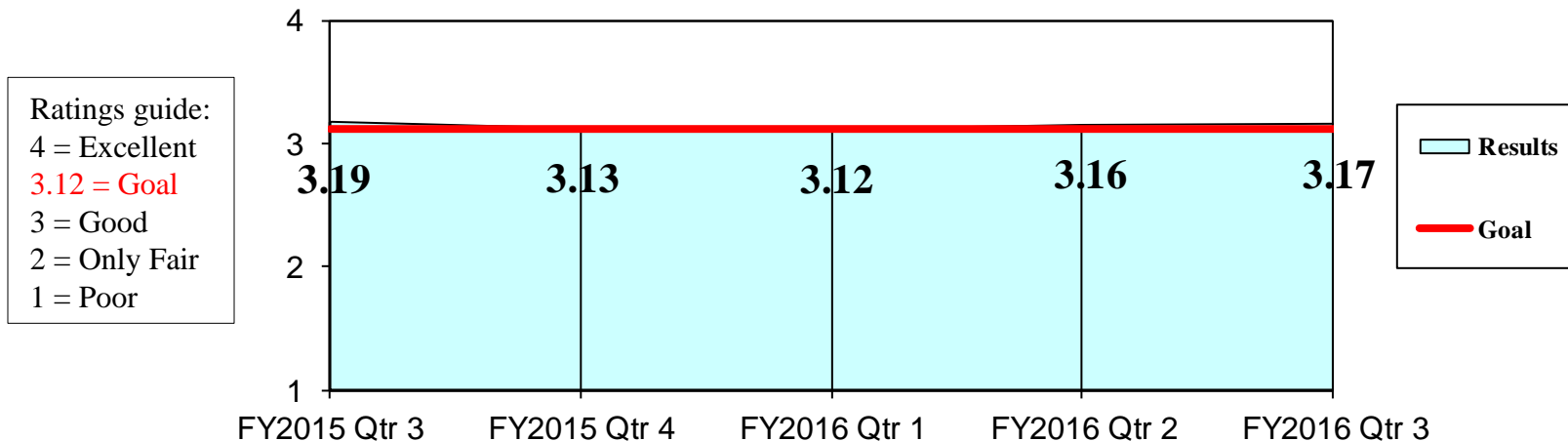


Composite rating of:

Train interior cleanliness (60%)	2.69
Train interior kept free of graffiti (40%)	3.33

- ✓ Score down, below goal for first time in a year
- ✓ Train Interior ratings of either Excellent or Good:
 Cleanliness: 63.5% Graffiti-free: 90.7%

Train Temperature



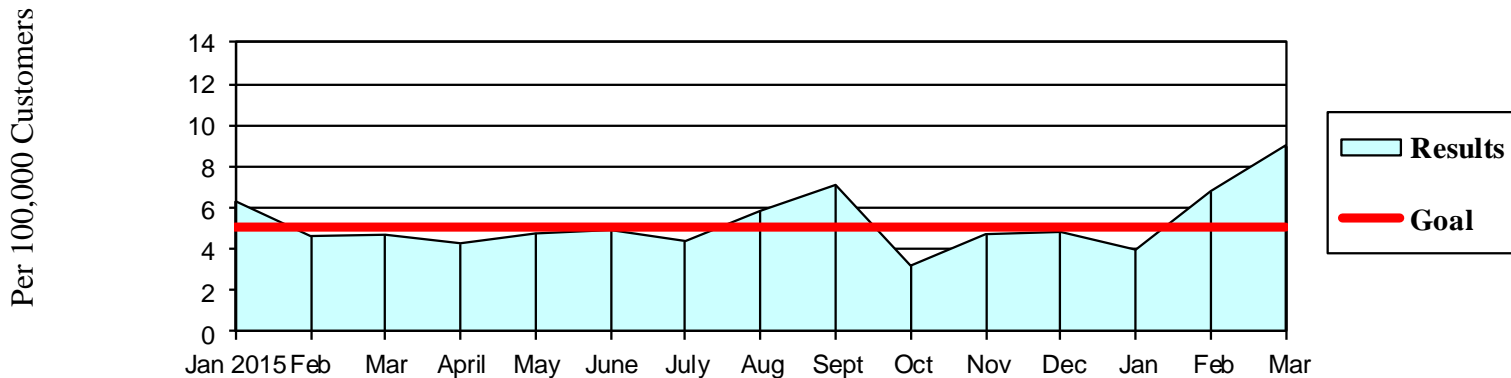
Ratings guide:
 4 = Excellent
 3.12 = Goal
 3 = Good
 2 = Only Fair
 1 = Poor

Comfortable Temperature Onboard Train

- ✓ Goal met
- ✓ 85.7% of those surveyed ranked this category as either Excellent or Good

Customer Complaints

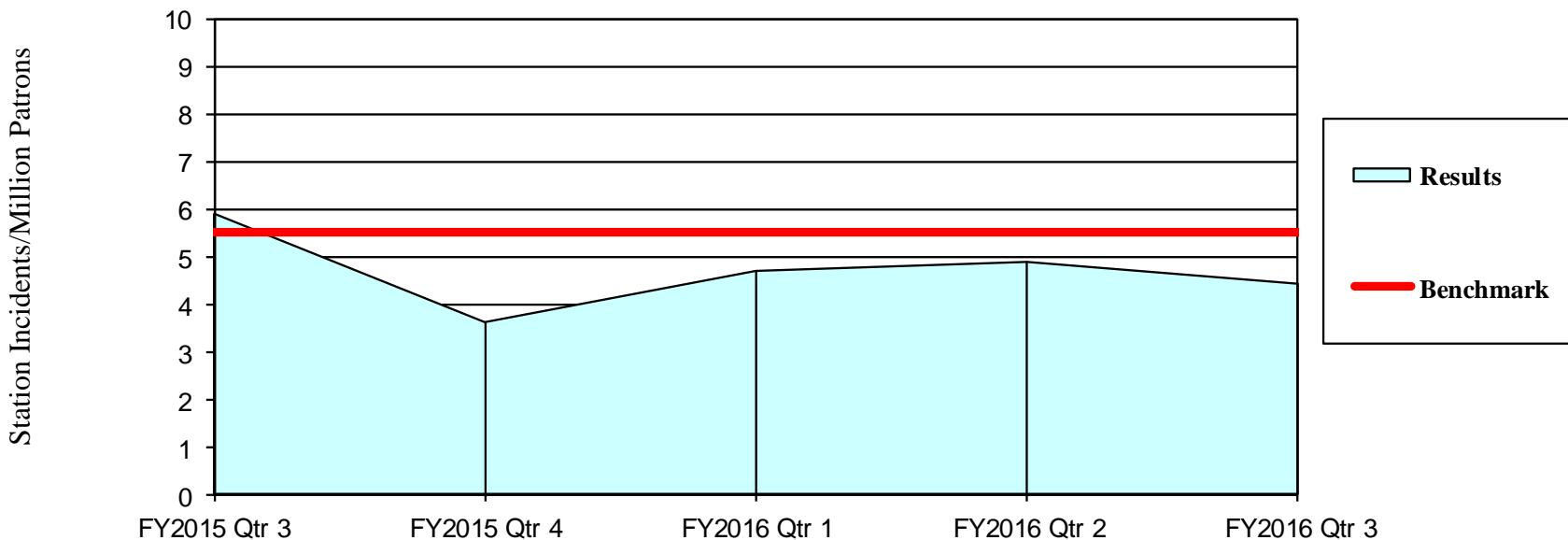
Complaints Per 100,000 Customers



- ✓ 6.68, 5.07 goal not met
- ✓ Total complaints received during this period increased 861 (65.4%) from last quarter, up 605 (38.5%) when compared with FY 15, third quarter.
- ✓ Complaint totals recorded increase in all categories.
- ✓ “Compliments” are up with 140 compared to 90 last quarter (one year ago these numbered 100).



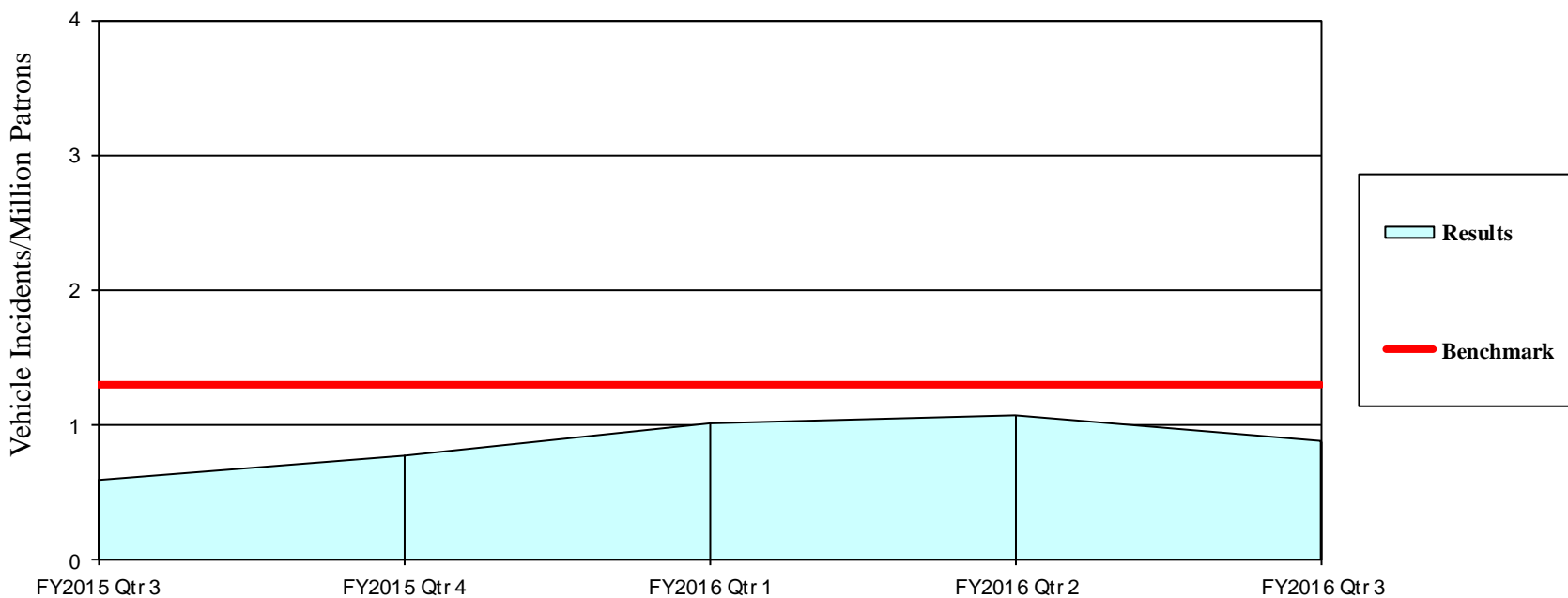
Patron Safety: Station Incidents per Million Patrons



✓ Goal met

Patron Safety

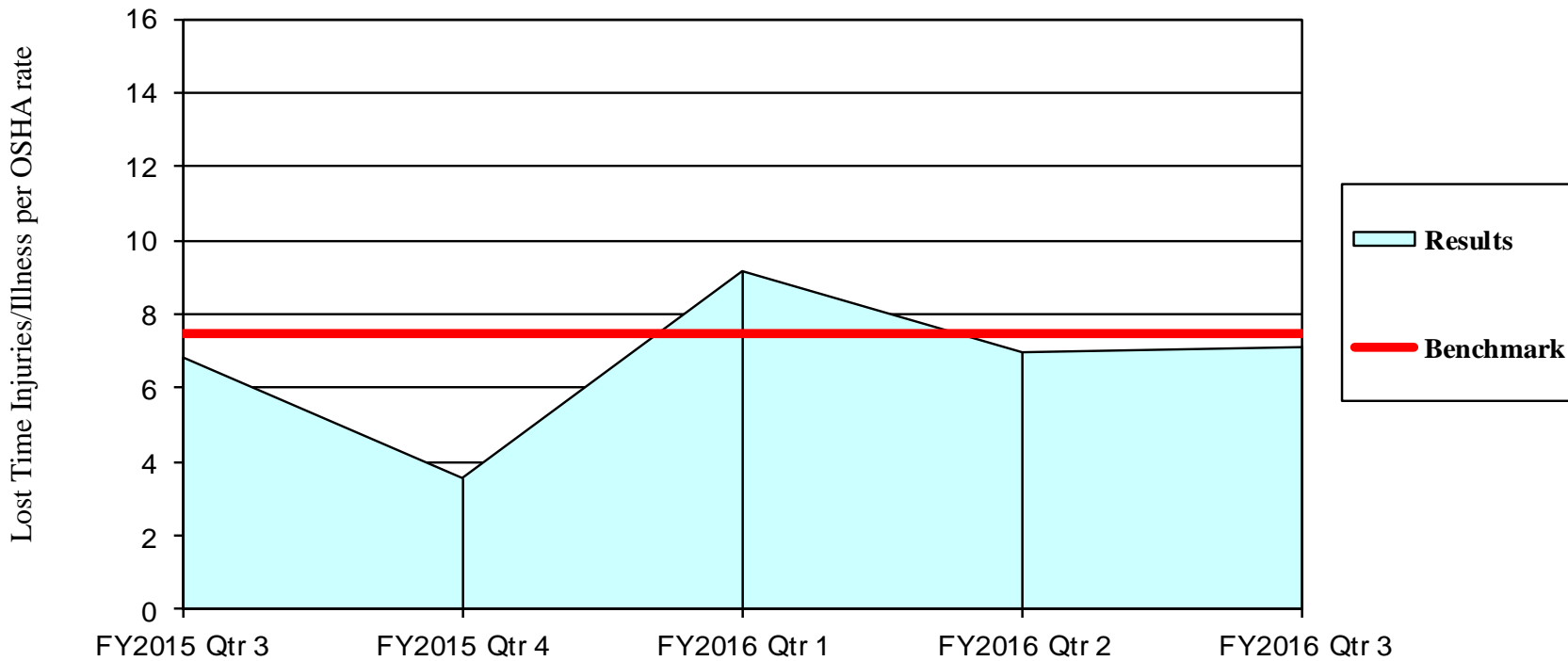
Vehicle Incidents per Million Patrons



✓ Goal met



Employee Safety: Lost Time Injuries/Illnesses per OSHA Incidence Rate

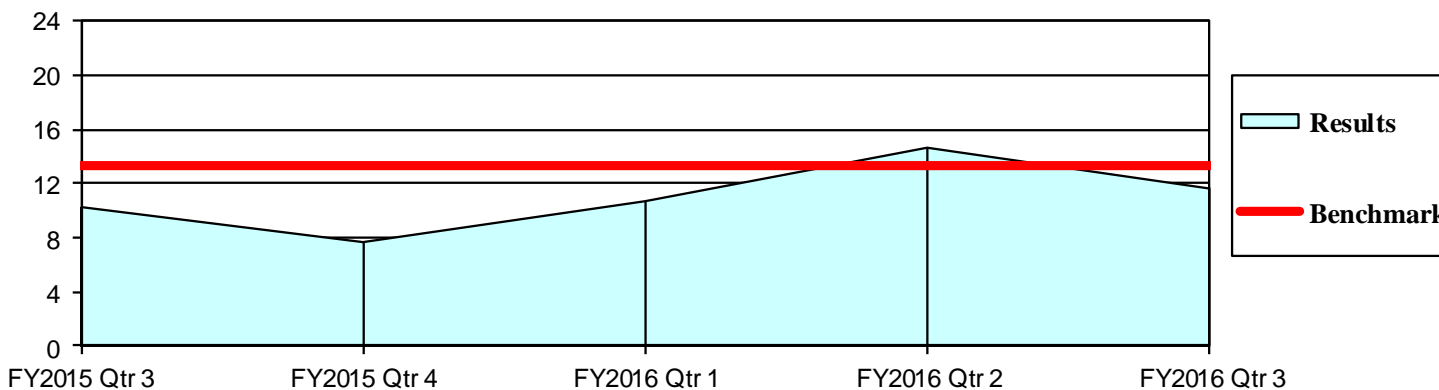


✓ Goal met



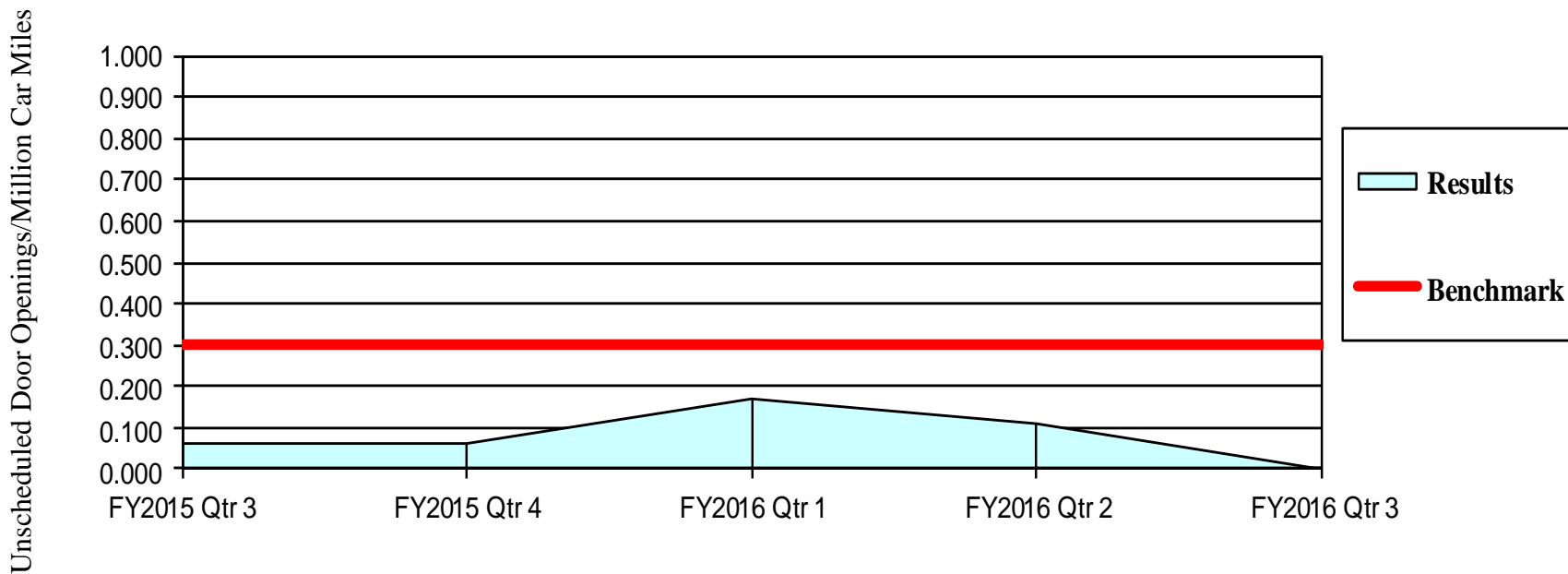
Employee Safety: OSHA-Recordable Injuries/Illnesses per OSHA Incidence Rate

OSHA Recordable Injuries/Illnesses/OSHA rate



✓ Goal met

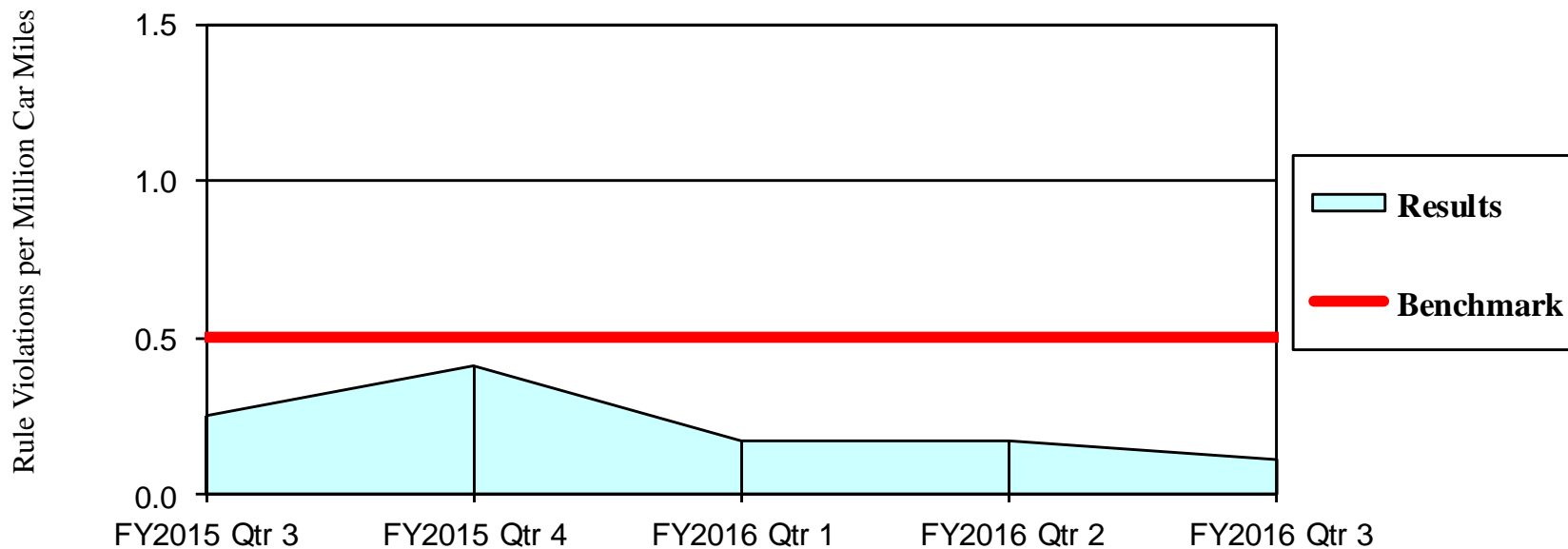
Operating Safety: Unscheduled Door Openings per Million Car Miles



✓ Goal met

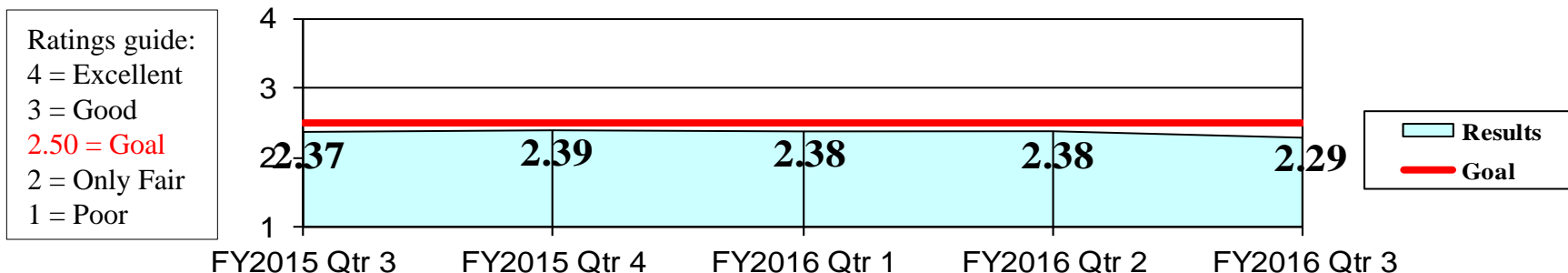


Operating Safety: Rule Violations per Million Car Miles



✓ Goal met

BART Police Presence

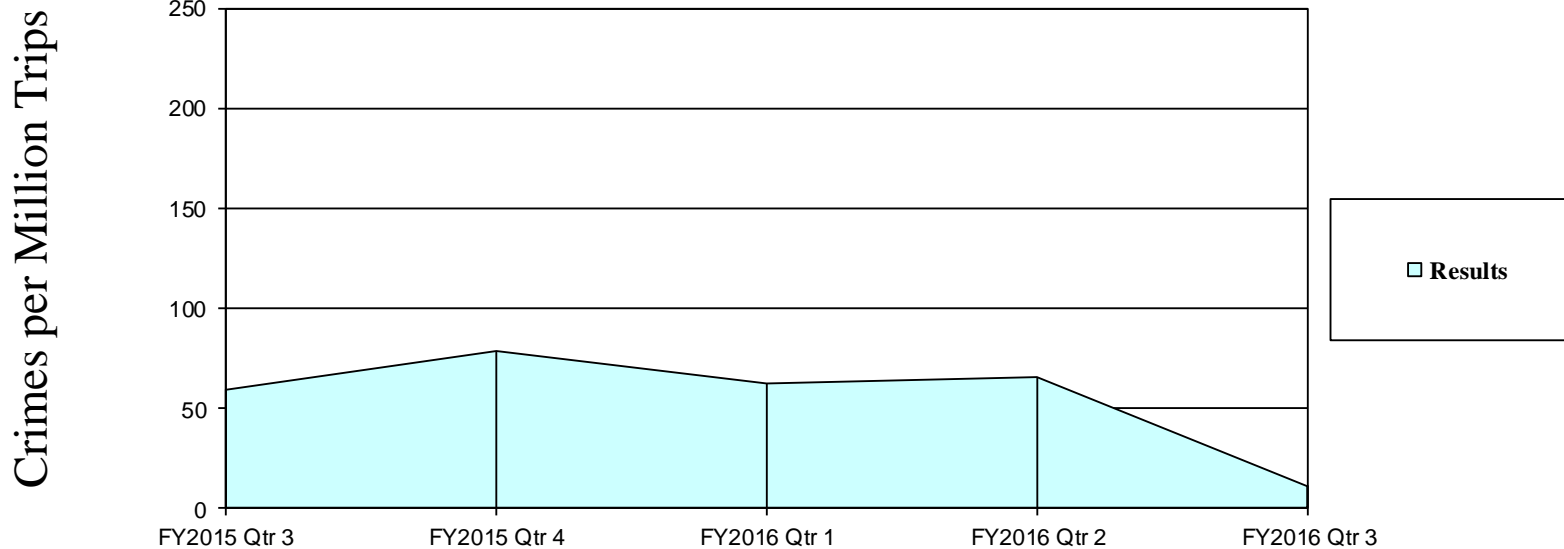


Composite Rating of Adequate BART Police Presence in:	
Stations (33%)	2.25
Parking Lots and Garages (33%)	2.41
Trains (33%)	2.21

- ✓ Goal not met
- ✓ Adequate Presence ratings of either Excellent or Good:
 - Stations: 42.7%
 - Trains: 39.7%
 - Parking Lots/Garages: 48.6%



Quality of Life*

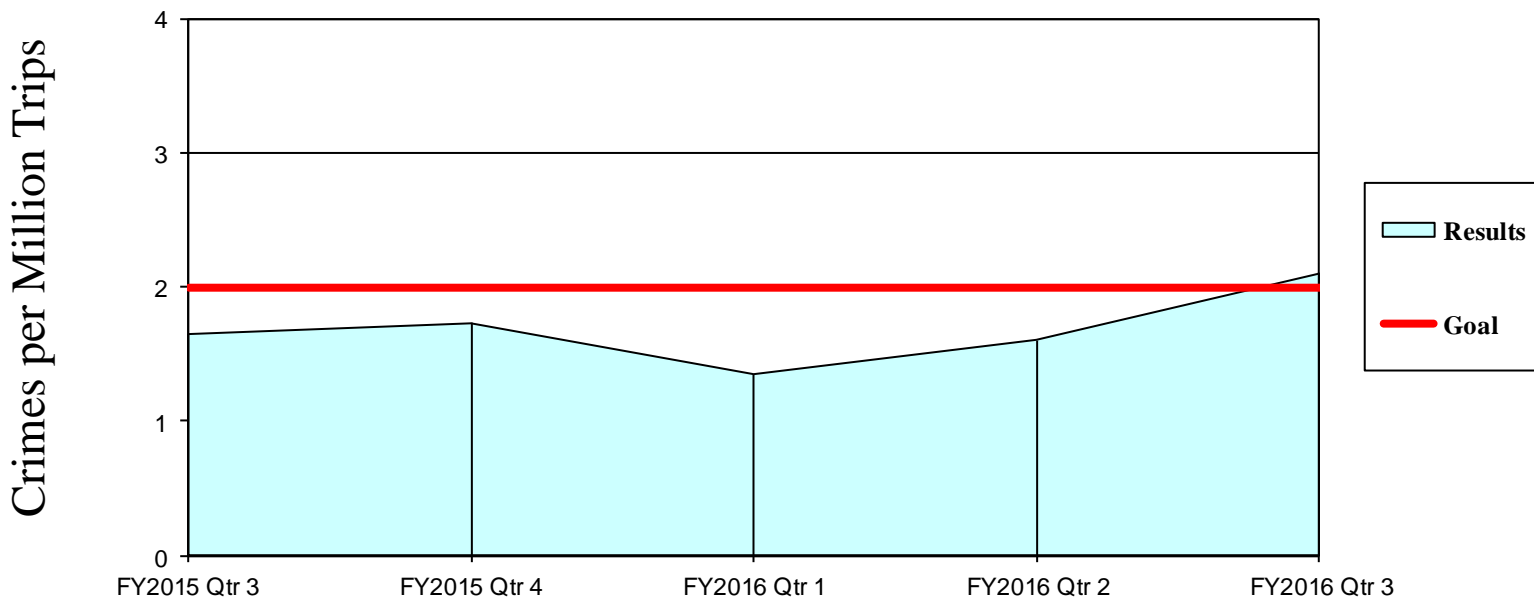


- ✓ Quality of Life incidents are down from the last quarter, and down from the corresponding quarter of the prior fiscal year.

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



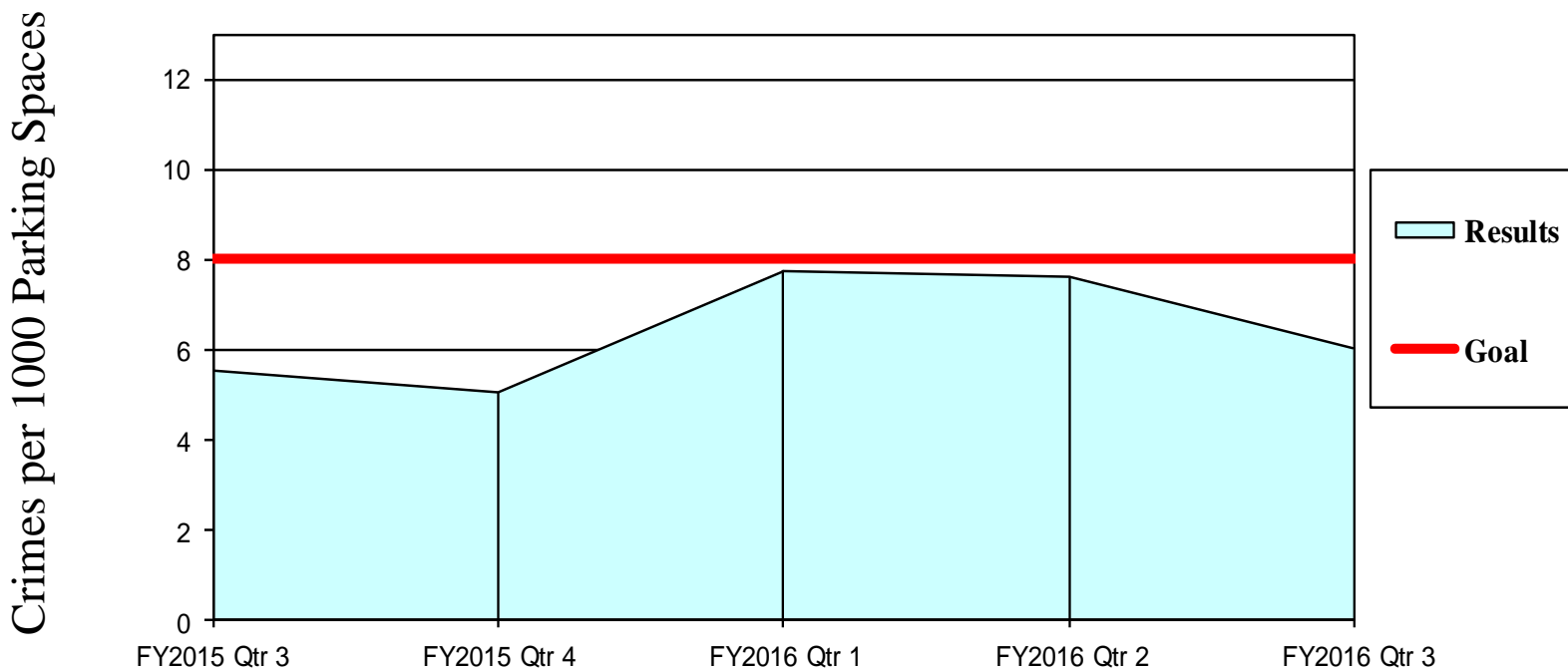
Crimes Against Persons (Homicide, Rape, Robbery, and Aggravated Assault)



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

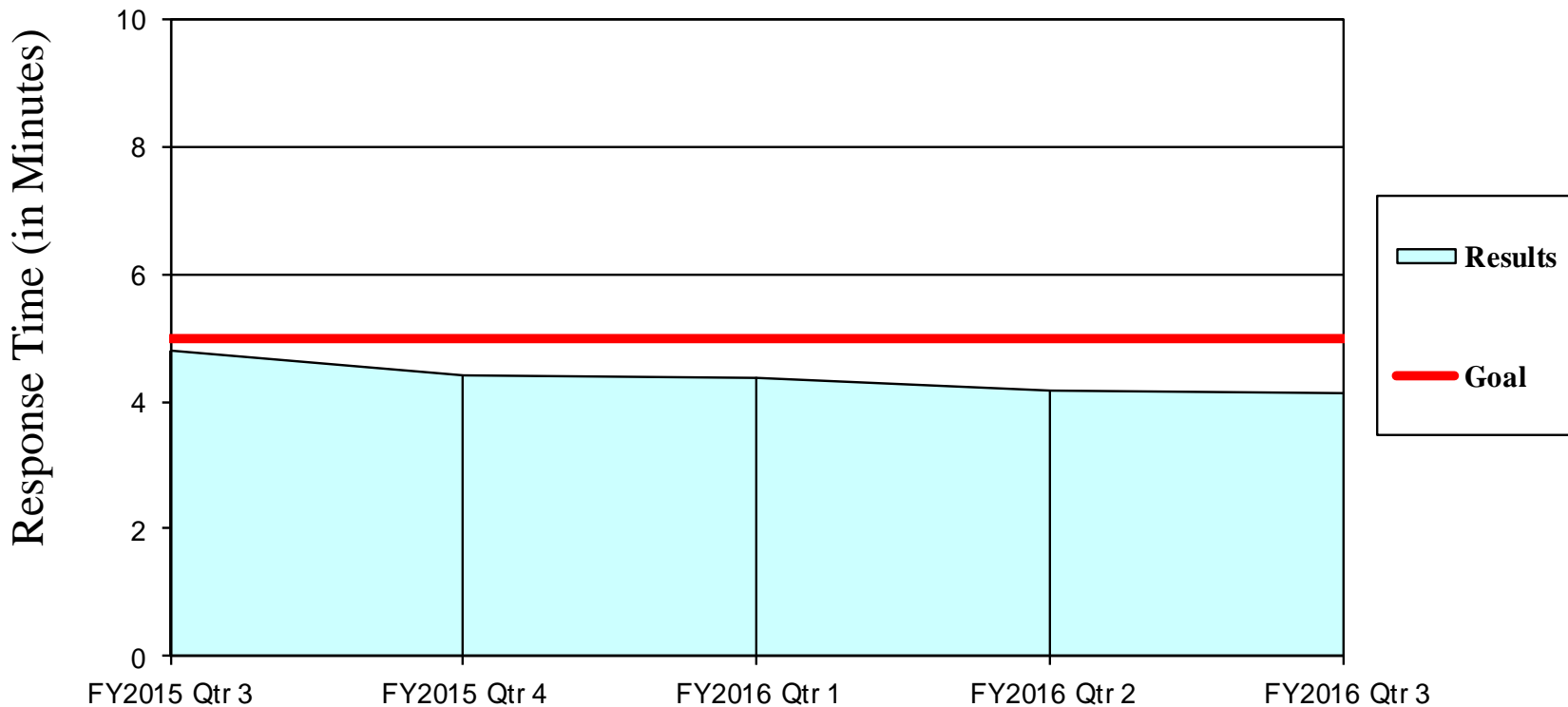


Auto Theft and Burglary



- ✓ 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.

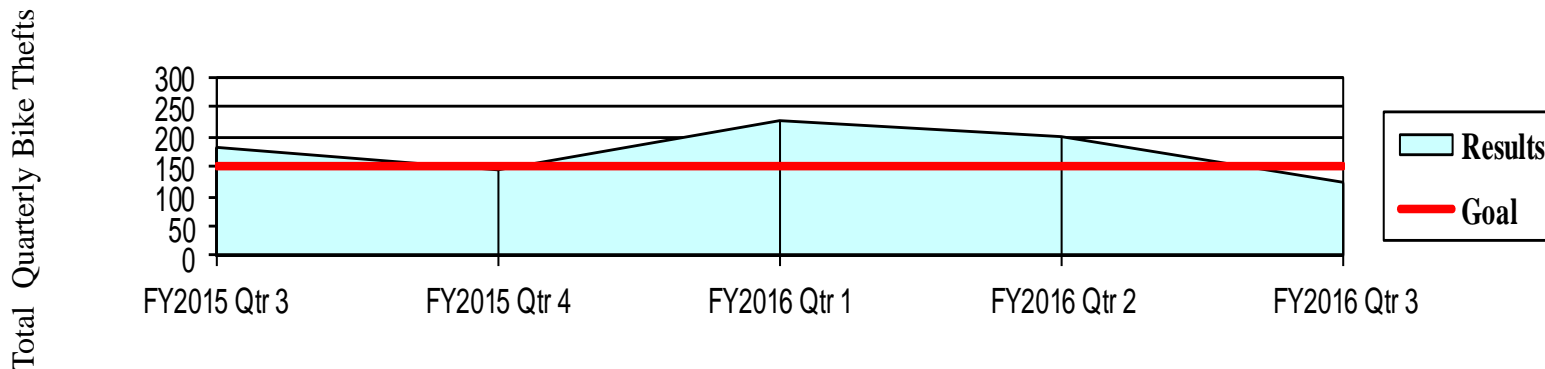
Average Emergency Response Time



✓ The Average Emergency Response Time goal was met for the quarter.



Bike Theft



- ✓ Goal met
- ✓ 124 bike thefts for current quarter, down 77 from last quarter and down 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.