



Quarterly Service Performance Review

Third Quarter, FY 2017

January - March, 2017

Operations & Safety Committee

May 25, 2017

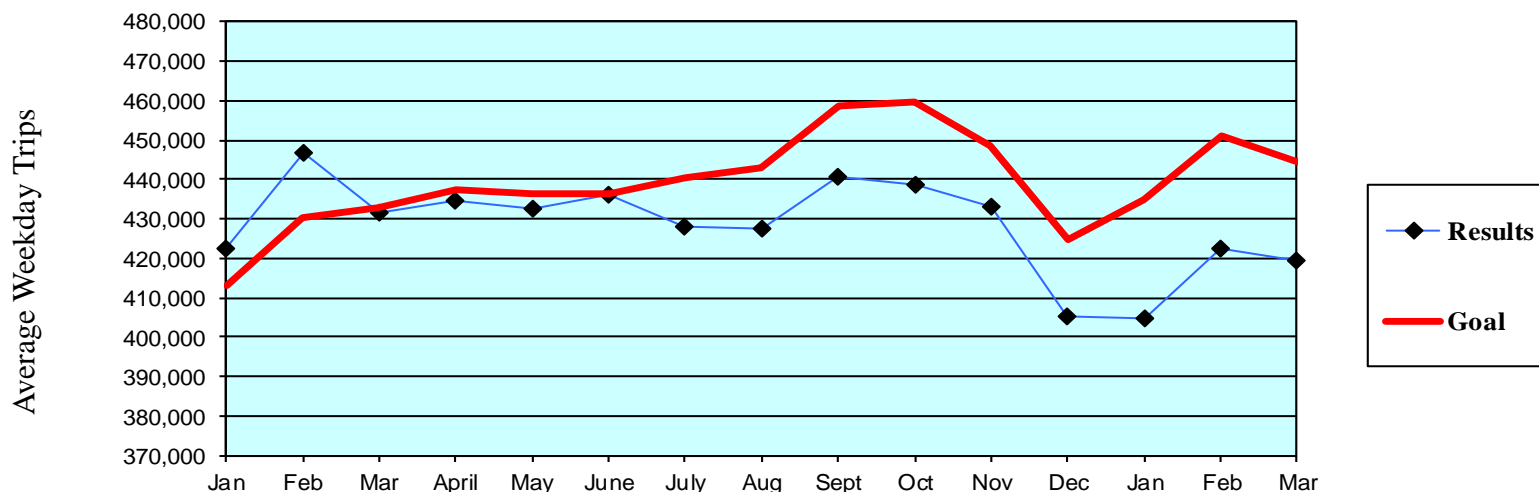


FY17 Third Quarter Overview

- ✓ Ridership decline deepening, across the board
- ✓ Record rainfall impacted service reliability and equipment performance
- ✓ Train service reliability down
- ✓ Equipment Reliability: Car, Track and Computer Control System met; Traction Power and Train Control not met
- ✓ Equipment Availability: Station Elevators, Ticket Machines met; Escalators (Platform and Street), Fare Gates, Garage Elevators and Cars not met
- ✓ Passenger Environment: 1 of 4 Station indicators improved, none met goal; 2 of 4 Train indicators improved, 1 met goal
- ✓ Complaints increased



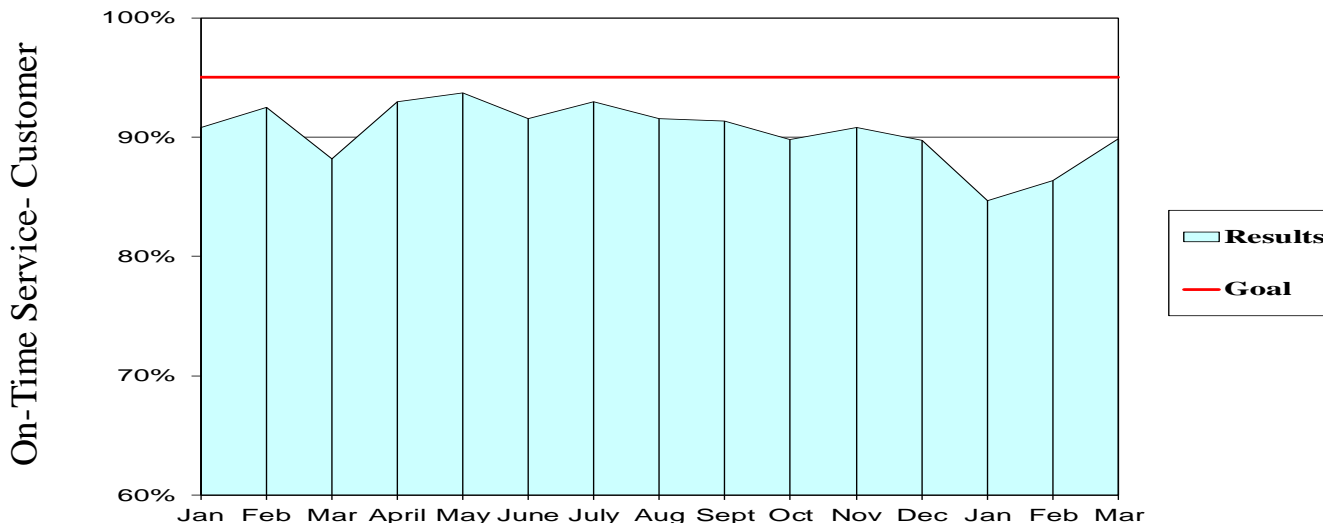
Customer Ridership



- ✓ Total ridership decreased by 5.5% compared to same quarter last year
- ✓ Average weekday ridership (415,844) down 4.1% from same quarter last year
- ✓ Core weekday ridership down by 3.6% from same quarter last year
- ✓ SFO Extension weekday ridership down by 7.9% from same quarter last year
- ✓ Average peak ridership during the period was down (2.36%) compared to the same quarter last year
- ✓ During Q3 there was one Saturday Top 10 Ridership Day:
 - 1/21/2017 – 347,322 – Women’s March–Oakland & SF; SF Protest Walk (#2)
- ✓ Saturday and Sunday down by 7.4% and 11.5%, respectively, over same quarter last year



On-Time Service - Customer

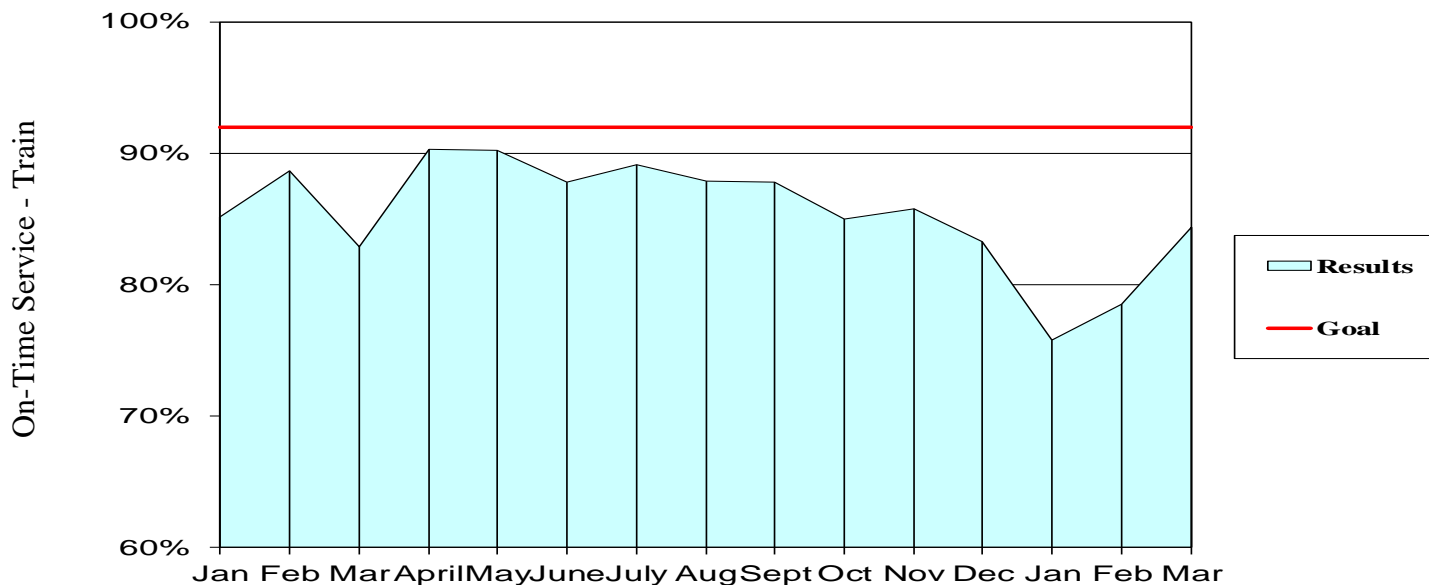


- ✓ 86.99%, 95.00% goal not met, down 3.46 %
- ✓ 8/10 biggest delays due to “People” or “Weather”
- ✓ Delay events causing the most late trains:

1	06-Feb-17	Balboa Park	MUX (False Occupancy) (Single Tracking For Repairs) (Shorted Lightning Arrester Repaired)	Equip	204
2	13-Jan-17	19th St. I-Lk	Maint. Vehicle Derailed (Single Tracking Required)(0407-0915)	Equip	169
3	10-Jan-17	Balboa Park	Southbound Train Struck Tree on Trackway (Weather Conditions)	Weather	160
4	27-Mar-17	W. Oakland	Auto Accident Adjacent To Trackway (0820-1209) (Power Line Knocked Down)	People	93
5	21-Jan-17	M-Line	Civil Protest Women's March(1030-1753)	People	92
6	06-Feb-17	Hayward	BPD Hold (Suspicious Package Under Track)(1642-2037) (Bomb Squad on Scene/Station Closed/1642-1946)	People	80
7	21-Jan-17	K & A Lines	Civil Protest Women's March(0930-1500)(Trains metered A10 - Crowding)	People	75
8	23-Feb-17	Powell	BPD Hold (Weapon Suspect)(0719-0957) (Multiple Holds at M30 & M20)	People	68
9	17-Mar-17	Civic Center	BPD/SFPD Hold (Bomb Threat)(0927-1253) (Station Evacuated/Service Truncated)	People	68
10	07-Feb-17	E.C.D. Norte	Train Struck Person On Trackway (1750-2154)	People	66



On-Time Service - Train



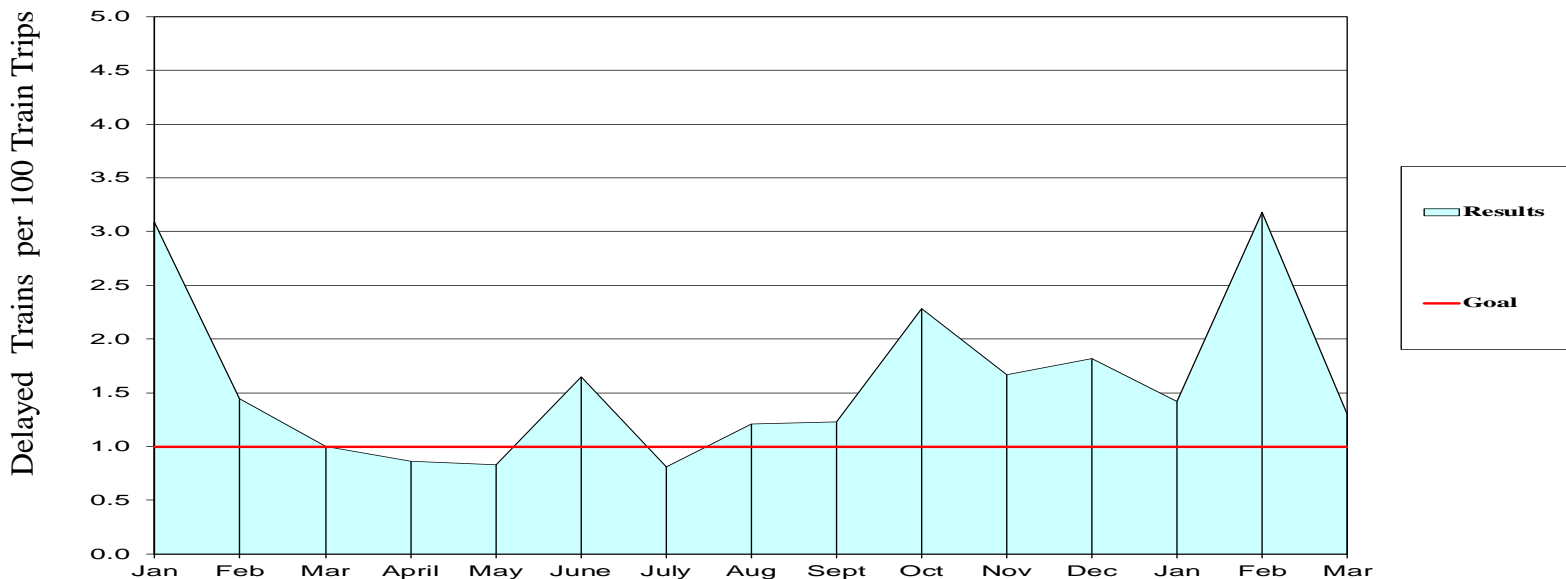
- ✓ 79.7%, 92.00% goal not met; down 5% from prior quarter
- ✓ 49.6% of late trains were late due to multiple small delays, each under 5 minutes
- ✓ Categorization of late trains due to a known delay event of 5 minutes or greater:

1. POLICE ACTIONS	17.9% of delayed trains
2. TRAIN CONTROL	14.6% of delayed trains
3. WAYSIDE MAINT. WORK	8.6% of delayed trains
4. WEATHER	8.5% of delayed trains
5. MULTIPLE CAUSE	8.2% of delayed trains
6. RAIL CAR	6.8% of delayed trains
7. PATRON ILL	5.0% of delayed trains
8. OBJECT ON TRACKWAY	5.0% of delayed trains
9. VANDALISM	3.8% of delayed trains
10. OPERATIONS	3.1% of delayed trains



Wayside Train Control System

Includes False Occupancy & Routing, Delays Per 100 Train Runs

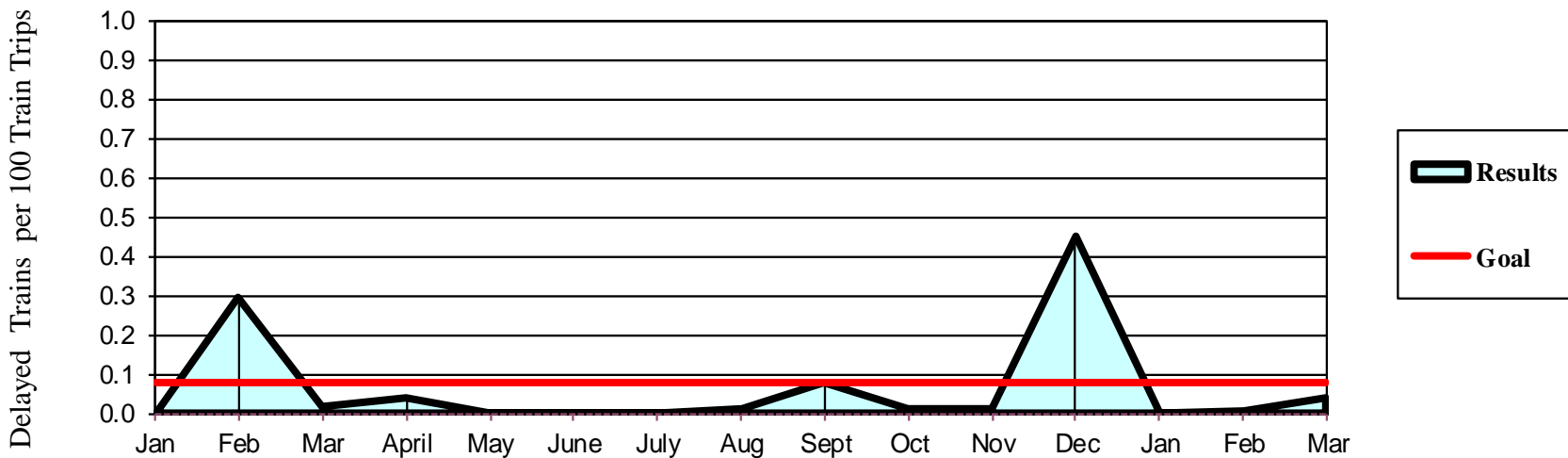


- ✓ Goal not met – Actual 1.97 / Goal 1.00
- ✓ Two Major Delay Events:
 - February 5-6, 247 delayed trains – Stray current flashover shorted M-Line Mux arrestor. Required two days to isolate and correct.
 - March 7, 59 delayed trains – Switch motor controller module failure.
- ✓ System-wide Switch Motor Controller replacement program for new Alstom mainline switch machines finalized and begins this month.



Computer Control System

Includes ICS computer & SORS, Delays per 100 train runs

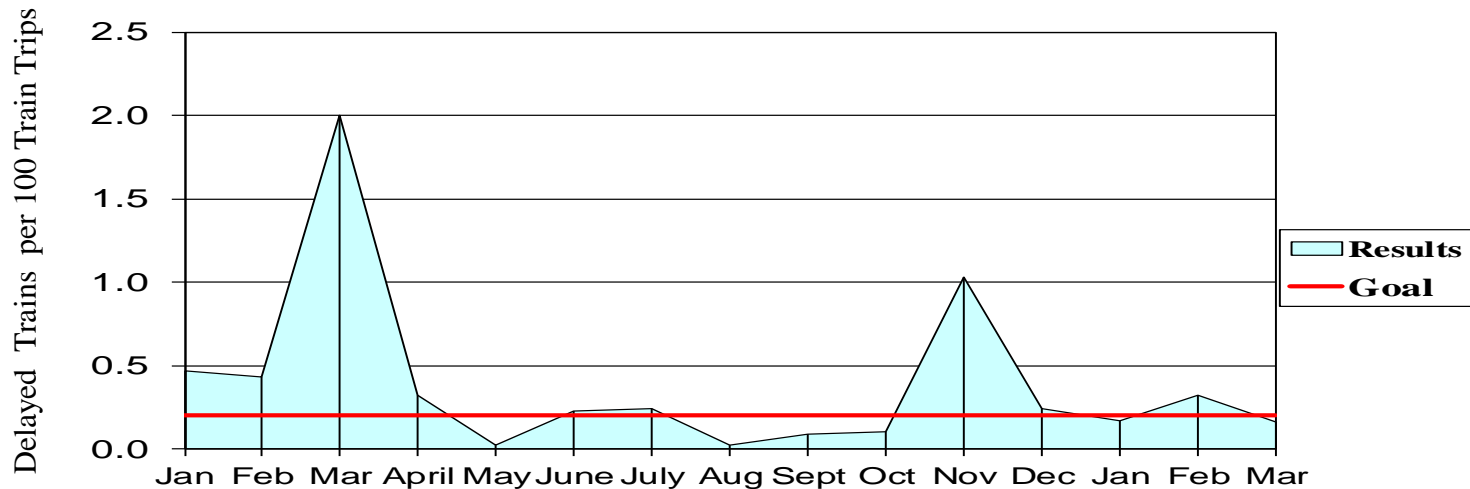


✓ Goal met



Traction Power

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

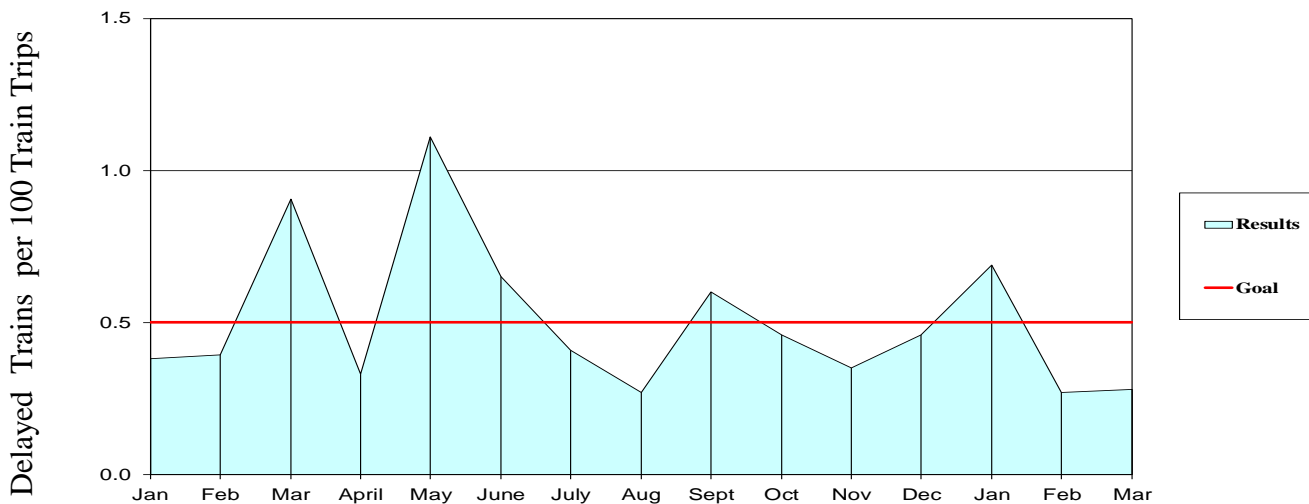


- ✓ Improved but goal not met
- ✓ Mitigation of weather related coverboard issues continuing.
- ✓ Engineering preparing for Phase 4 Coverboard Enhancement Project to increase reliability.
- ✓ Walnut Creek Substation failure in March. Portable Substation installation scheduled next quarter to return redundancy to the C-Line.



Transportation

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

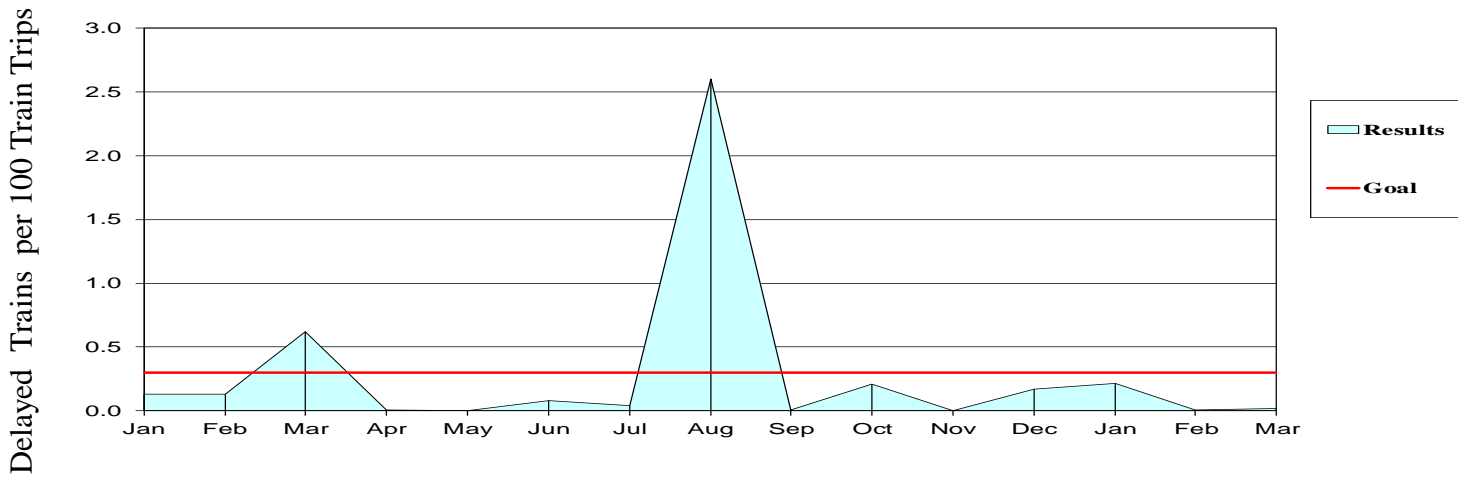


✓ Goal met



Track

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

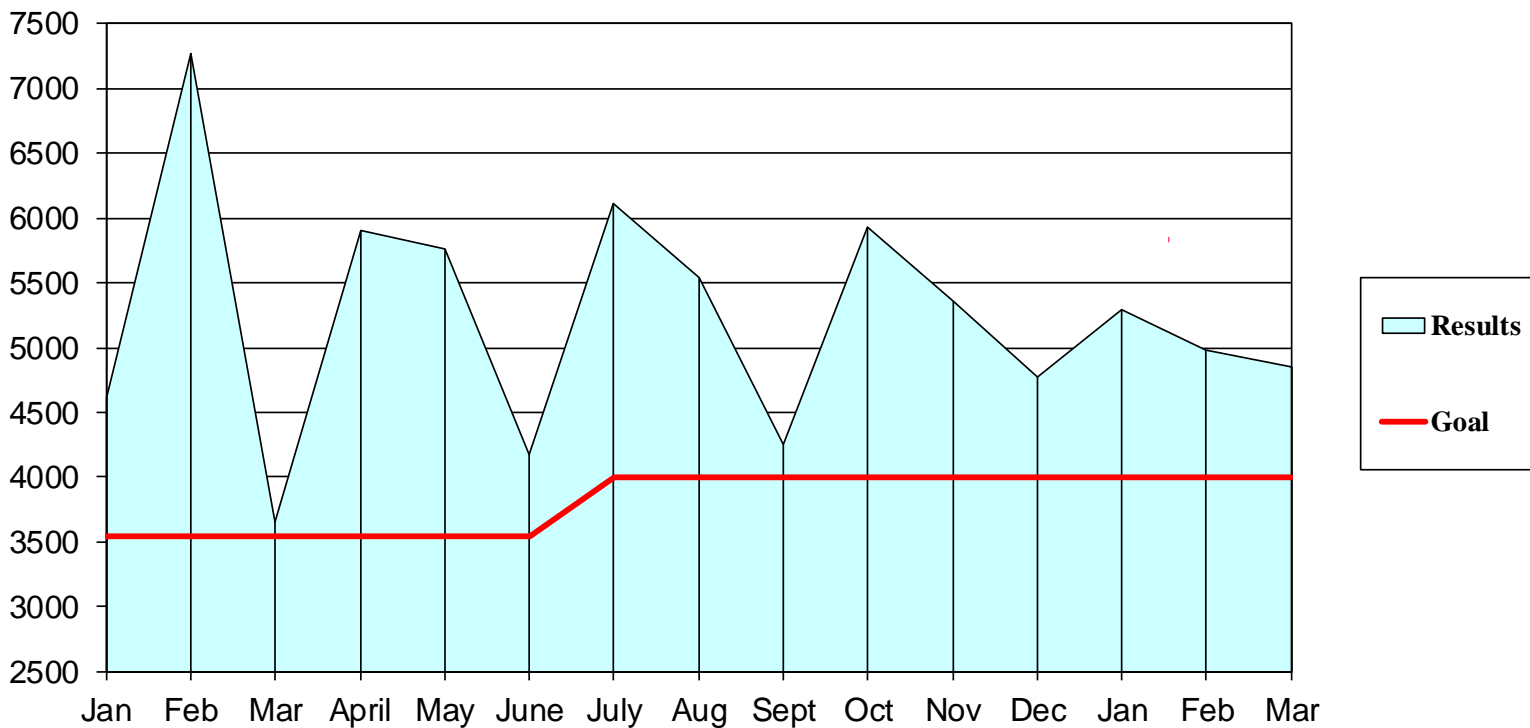


✓ Goal met



Car Equipment - Reliability

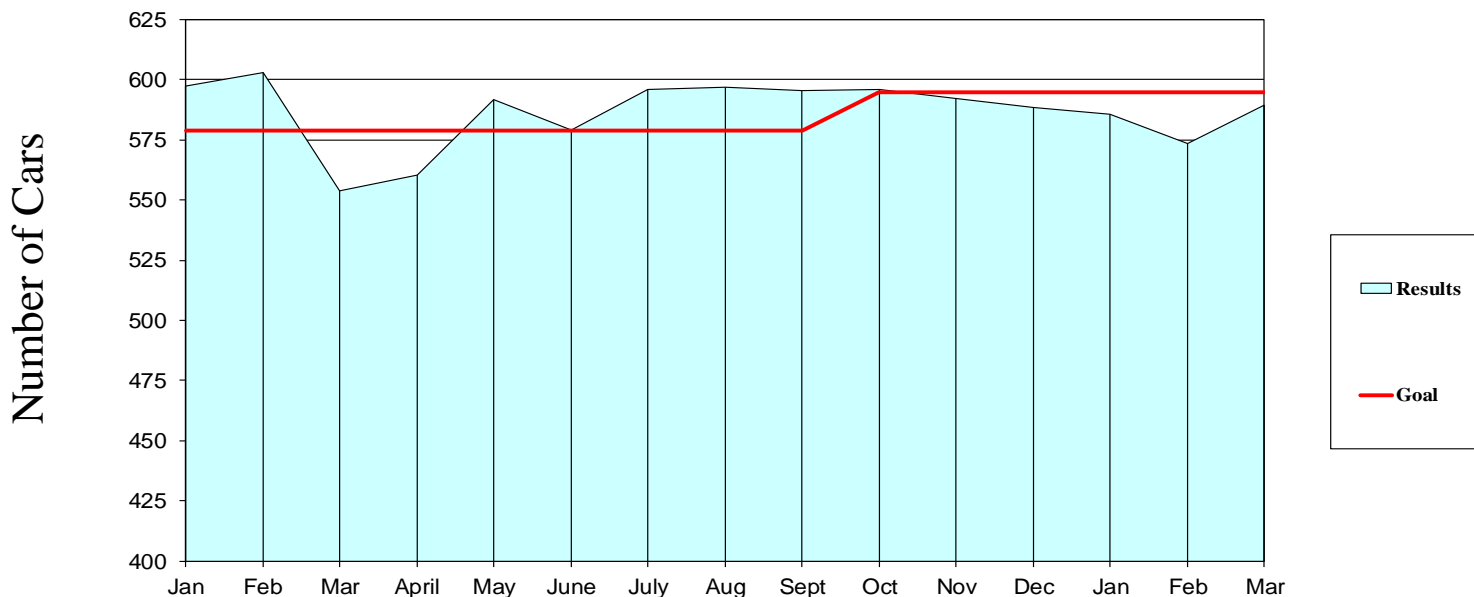
Mean Time Between Service Delays (Hours)



✓ Goal met – MTBSD 5,036 hours



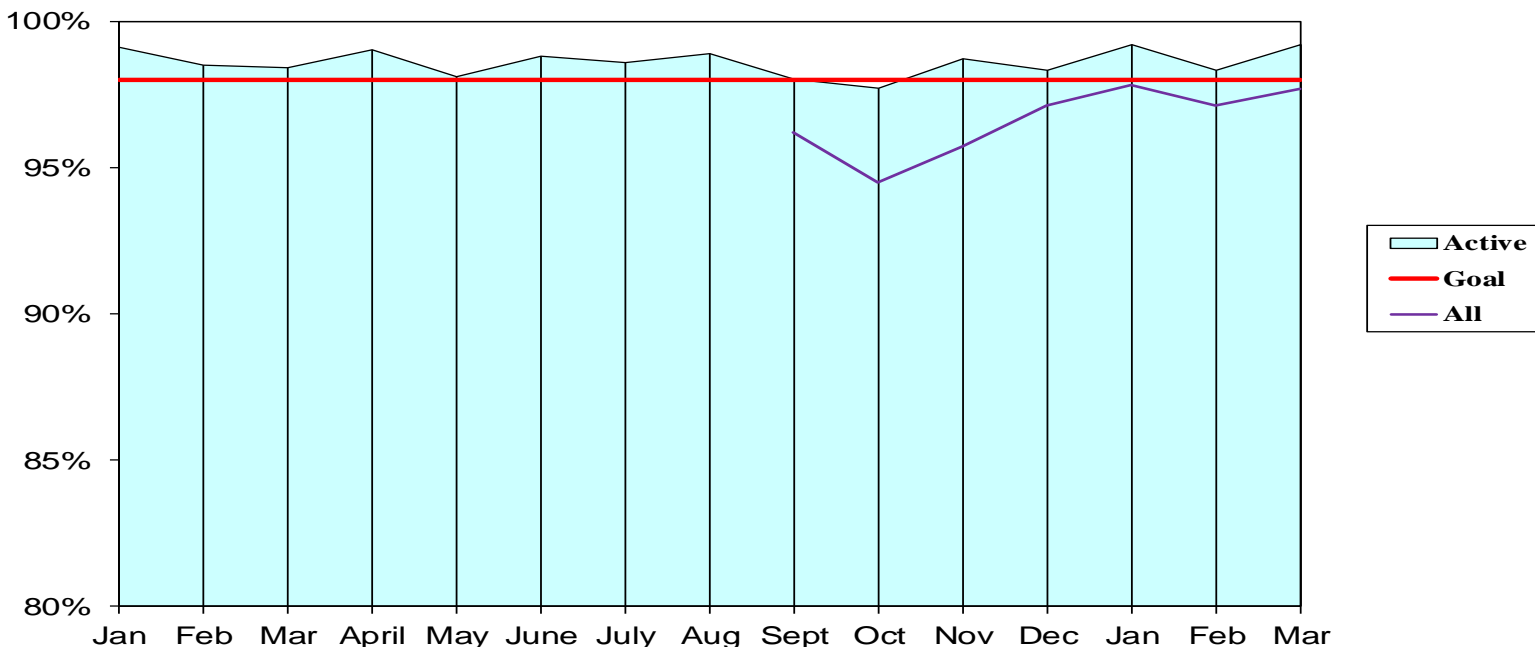
Car Equipment – Availability @ 0400 hours



- ✓ Goal not met – 583 Actual vs. 595 Required
- ✓ Weather impacted availability, water in coupler housing causing corrosion, trainline problems, and flats.
- ✓ Richmond yard electrical is still under repair. The yard is down M-F 0800-1500 hrs.
 - Transportation is not able to deliver bad order cars to the shop during this window.
 - No midday breaks, longer trains = more PM's and unscheduled repairs.



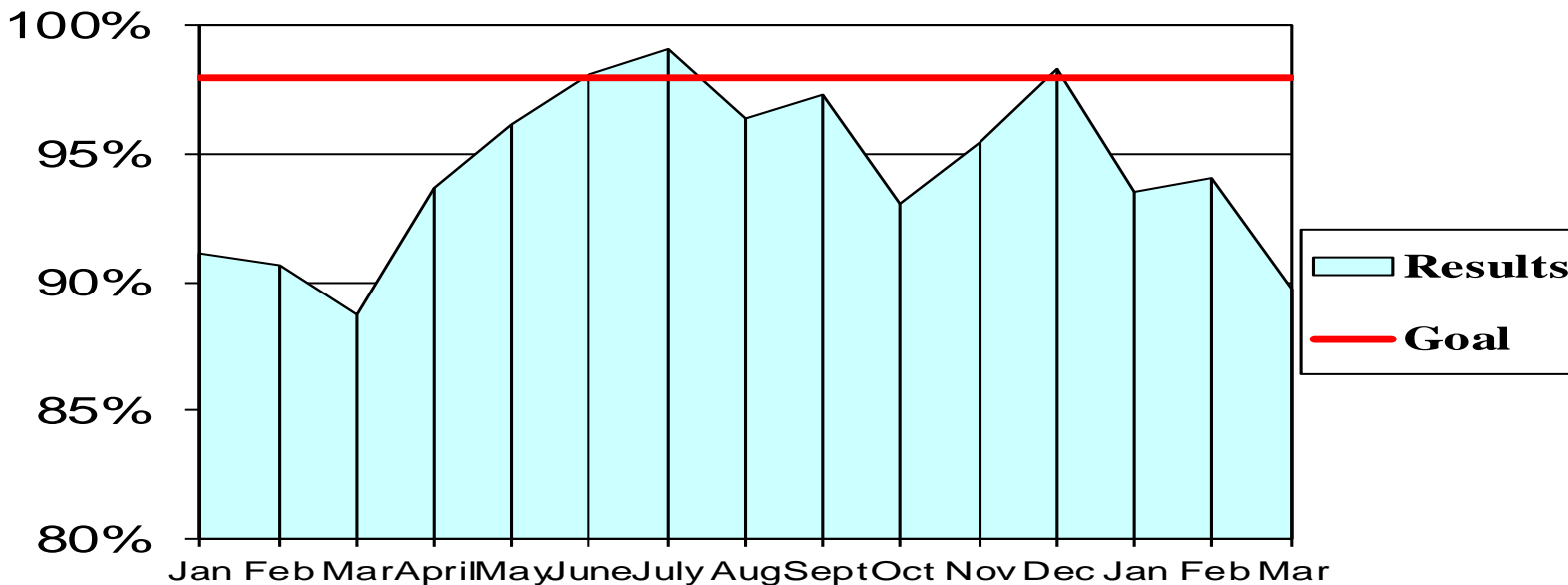
Elevator Availability - Stations



- ✓ Goal 98%. Goal met – Actual 98.9%
- ✓ Blue line measures availability including planned project work (doors and floors)



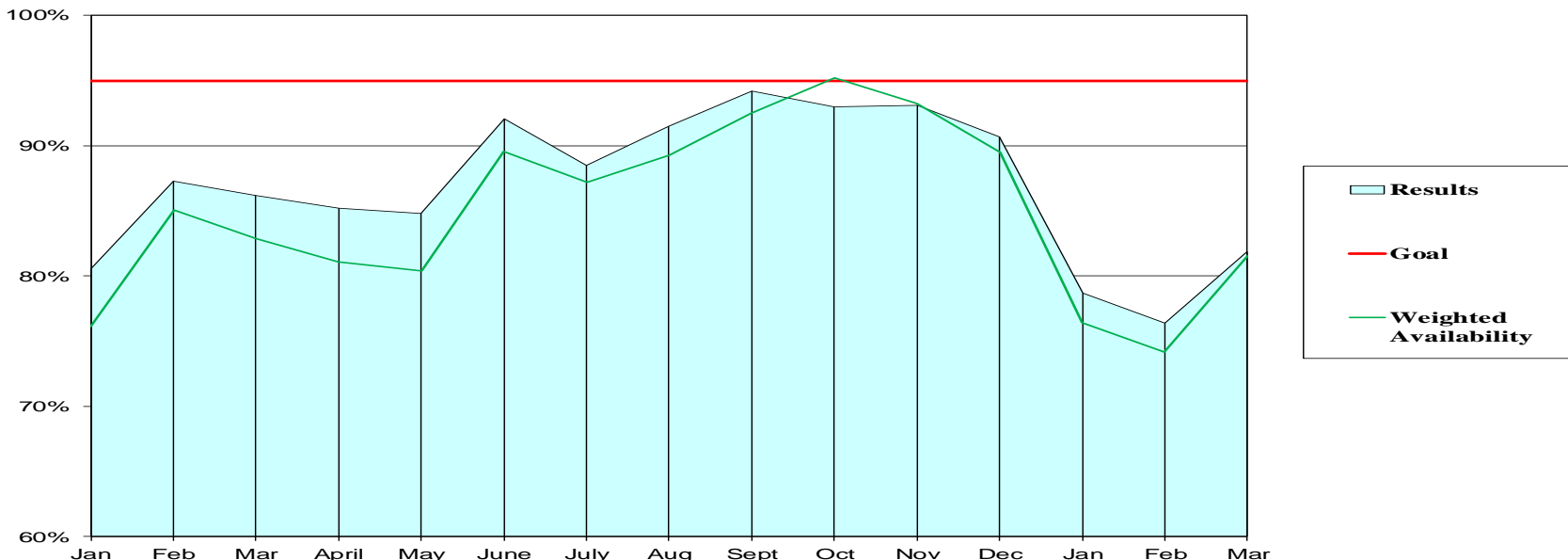
Elevator Availability - Garage



- ✓ Goal 98% - Actual 92.43%
- ✓ Controller drive failures experienced at San Bruno and Del Norte Parking Structures, contractor utilized for both repairs.



Escalator Availability - Street

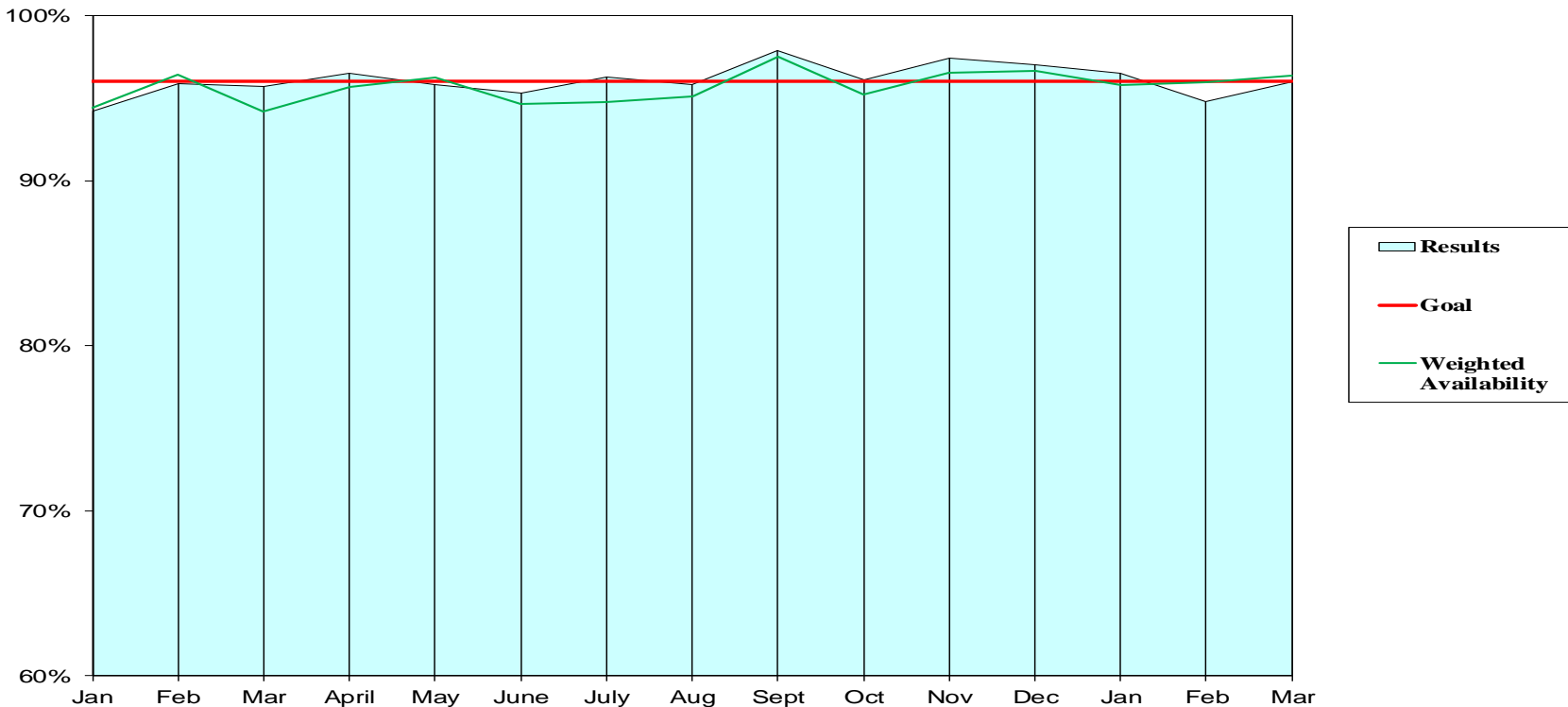


✓ Goal 95% - Actual 79%

- Record rain fall resulted in water intrusion electrical failures in multiple units and impeded our ability to troubleshoot / repair during inclement weather.
- There were 12 significant street failures, 10 of which were O&K units.
- O&K Controller Mod is underway at Montgomery and Embarcadero.



Escalator Availability - Platform

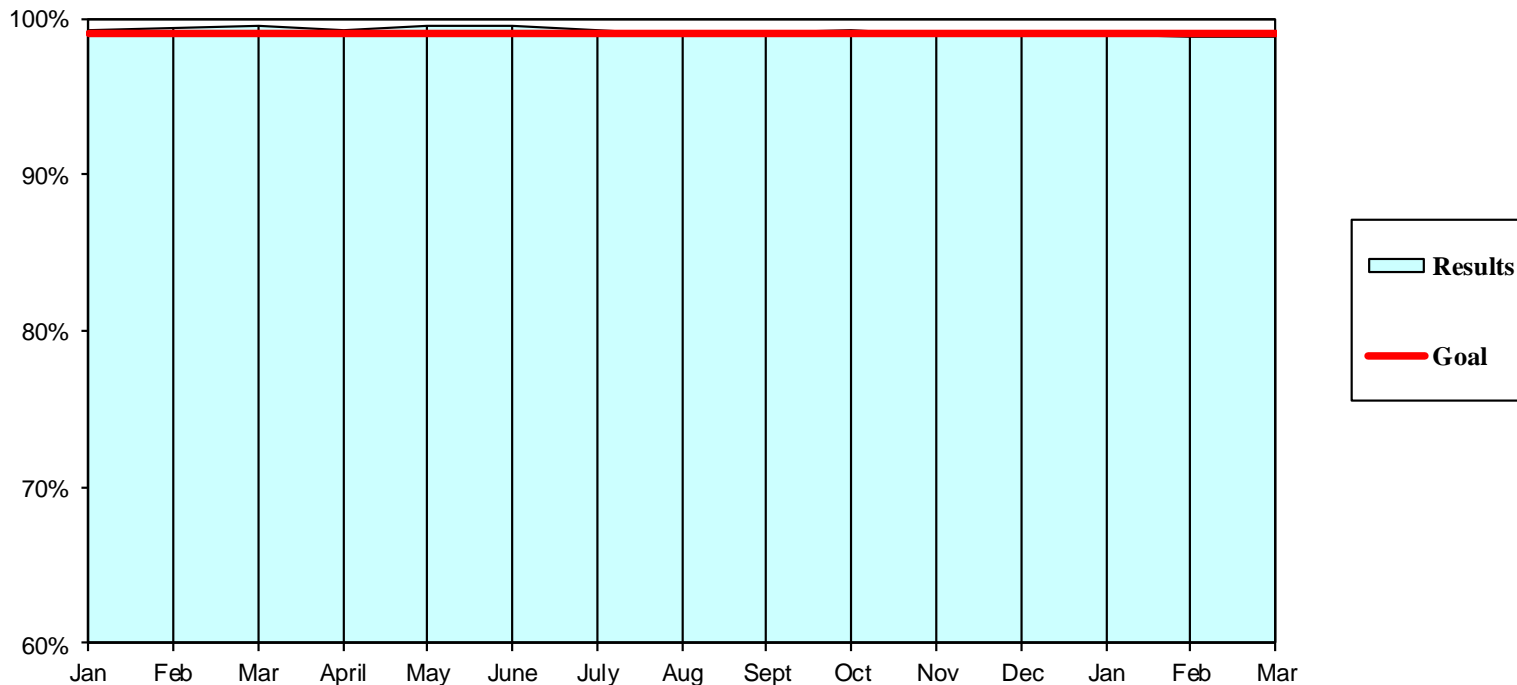


✓ Goal 96% - Actual 95.77%.

- Three major Bullgear repairs Civic Center, 12th St., and 16th St.
- 16th St. should be repaired in May
- Montgomery recently identified as a major bullgear repair.
- Currently looking for additional local machine shops to improve turn around time.



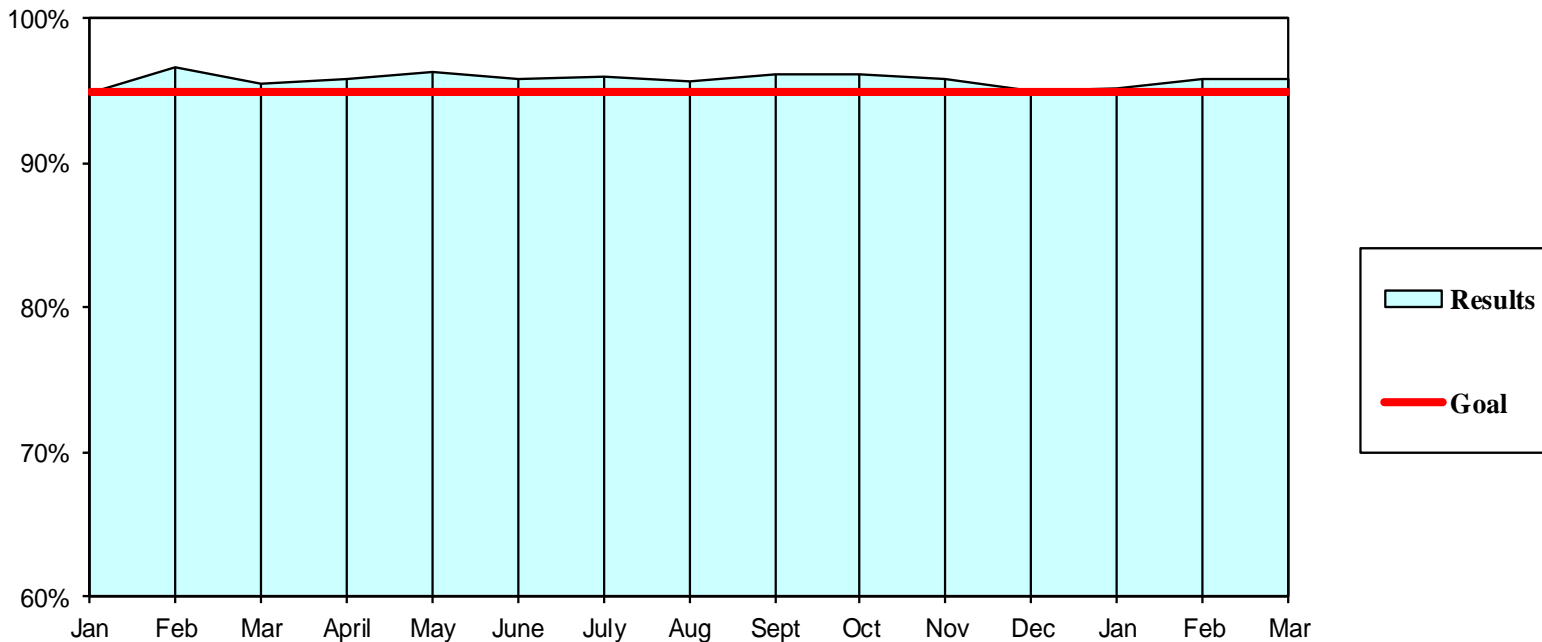
AFC Gate Availability



- ✓ Goal not met - 98.92%
- ✓ Working to resolve problem with Gate Aisle Sensor on Asset Refresh
 - Testing Cubic provided software fix



AFC Vendor Availability

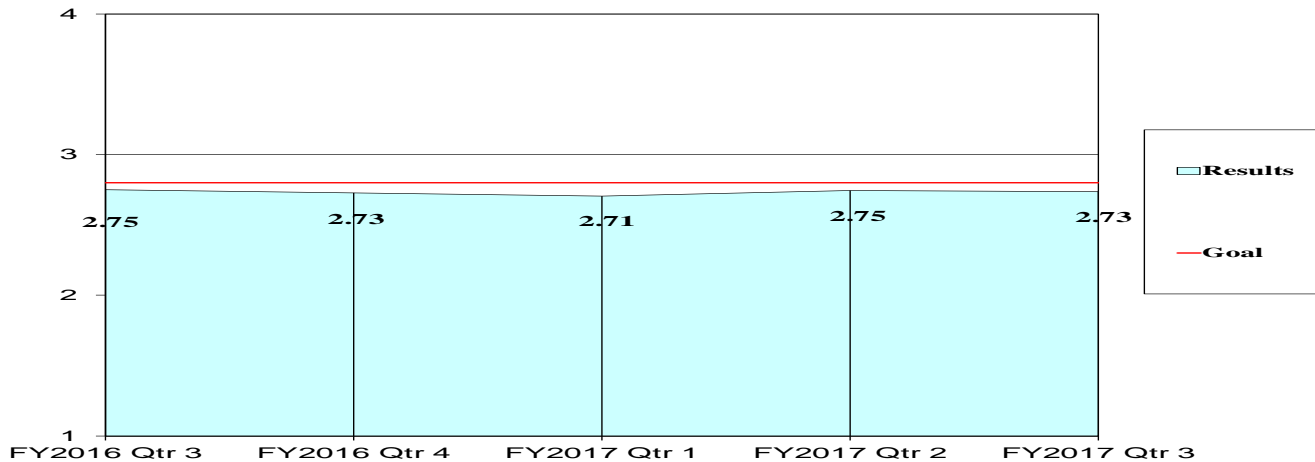


- ✓ Goal met, 95.63%
- ✓ Add Fare Availability – 98.4%
- ✓ Parking Validation Machines Availability – 99.99%



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%)	2.64
BART Parking Lot Cleanliness (25%)	2.92 ↓
Appearance of BART Landscaping (25%)	2.74

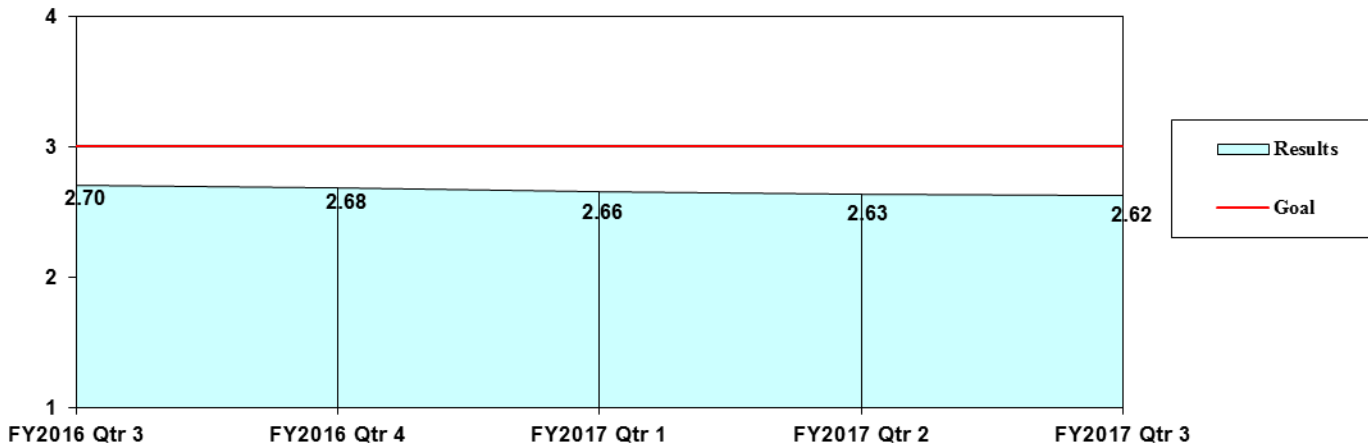
- ✓ Goal not met (Landscaping sub-goal met)
- ✓ Cleanliness ratings of either Excellent or Good:
 - Walkways/Entry Plazas: 59.6%
 - Parking Lots: 75.8%
 - Landscaping Appearance: 66.1%

↓ indicates a statistically significant decrease from the prior quarter



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%)	2.76
Other Station Areas (20%)	2.55 ↓
Restrooms (10%)	2.23
Elevator Cleanliness (10%)	2.36

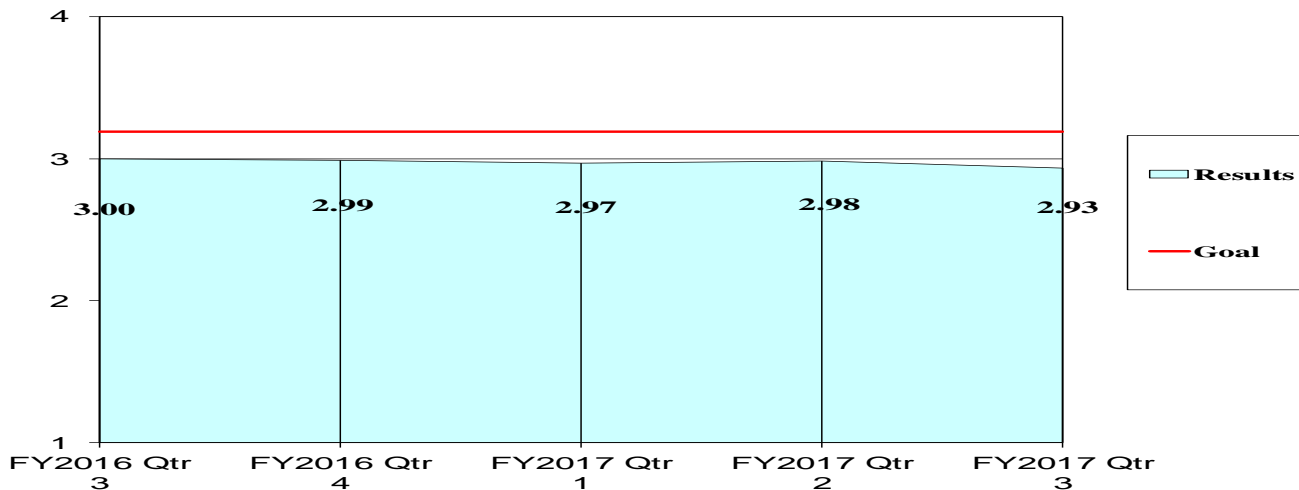
- ✓ Goal not met, Restroom and Elevator scores improved substantially
- ✓ Cleanliness ratings of either Excellent or Good:
 - Station Platform: 67.6%; Other Station Areas: 56.1%
 - Restrooms: 41.5%
 - Elevators: 49.0%

↓ indicates a statistically significant decrease from the prior quarter



Station Vandalism

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



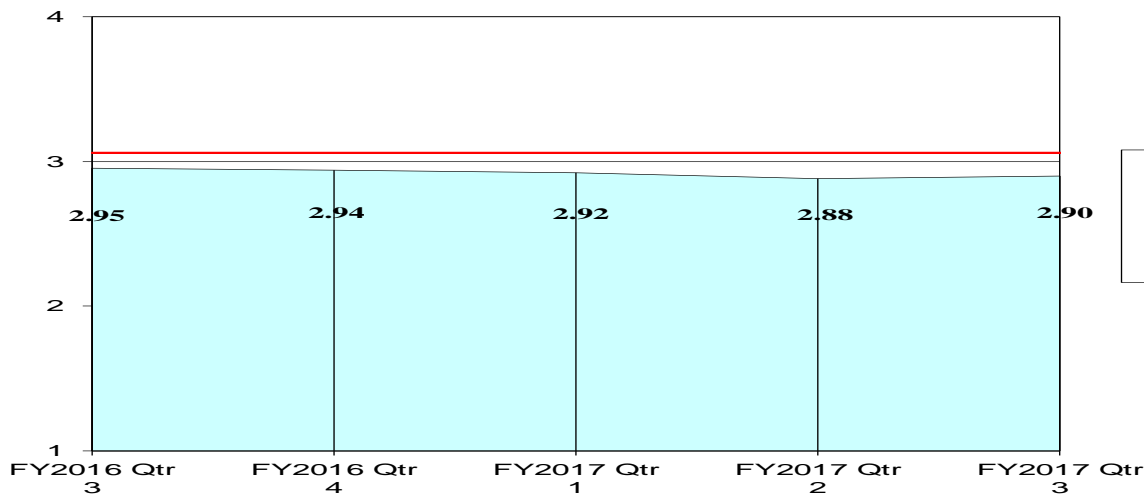
Station Kept Free of Graffiti

- ✓ Goal not met
- ✓ No discernable changes in contractor protocols or procedures.
- ✓ 75.7% 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



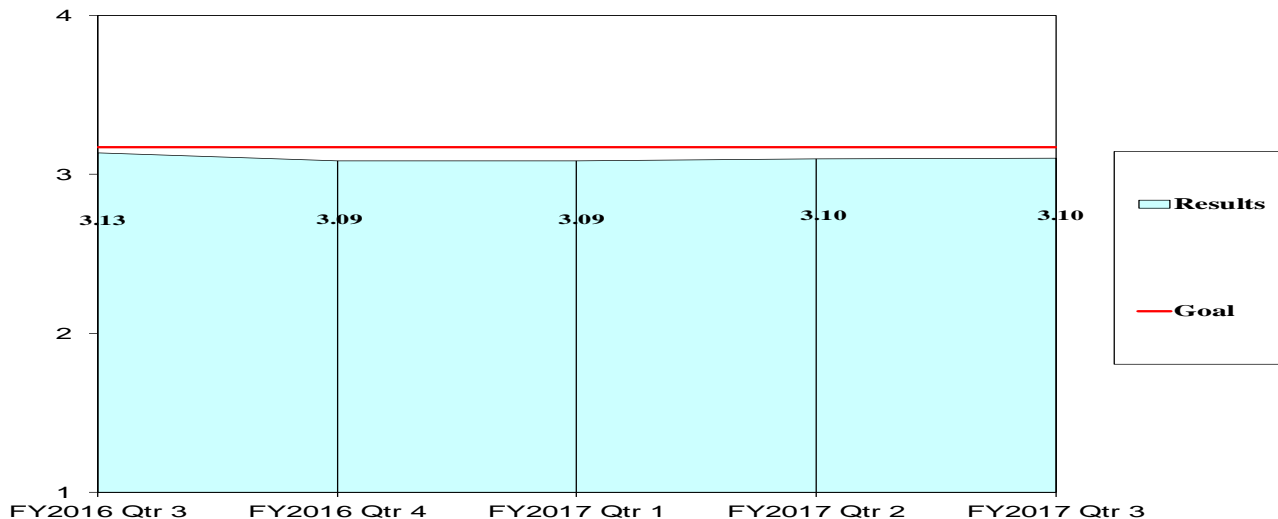
Composite rating of:	
Station Agent Availability (65%)	2.87
Brochures Availability (35%)	2.96

- ✓ Goal not met but slightly improved in both categories
- ✓ Availability ratings of either Excellent or Good:
 - Station Agents: 71.6%
 - Brochures: 76.3%



Train P.A. Announcements

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



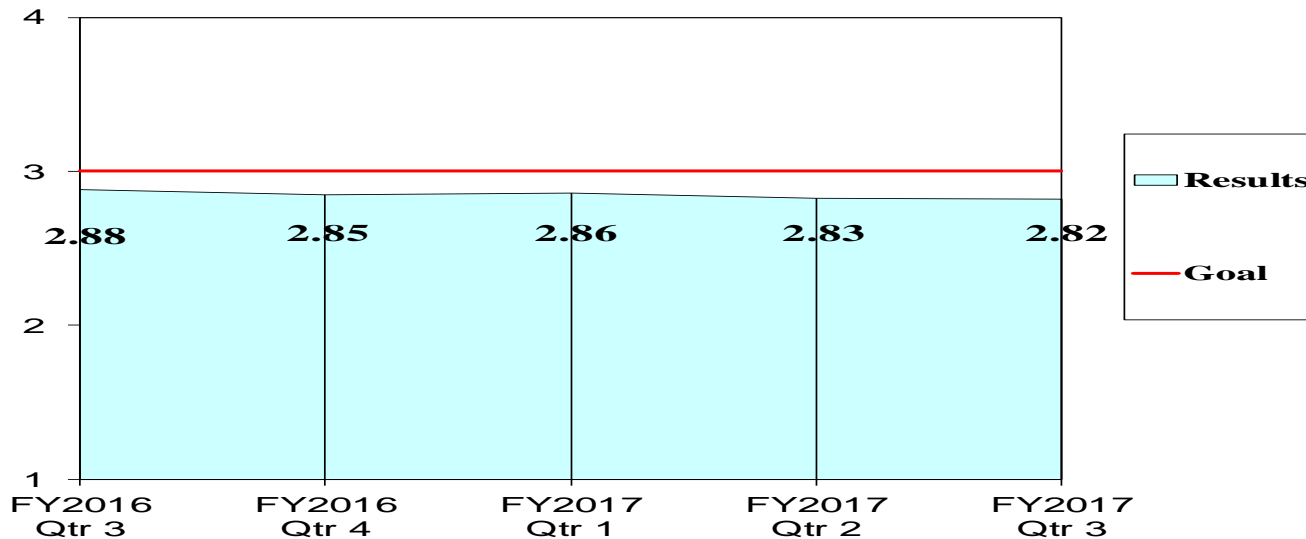
Composite rating of:	
P.A. Arrival Announcements (33%)	3.06
P.A. Transfer Announcements (33%)	3.05
P.A. Destination Announcements (33%)	3.19

- ✓ Goal not met
- ✓ Announcement ratings of either Excellent or Good:
 - Arrivals: 78.2%
 - Transfers: 78.2%
 - Destinations: 83.7%



Train Exterior Appearance

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



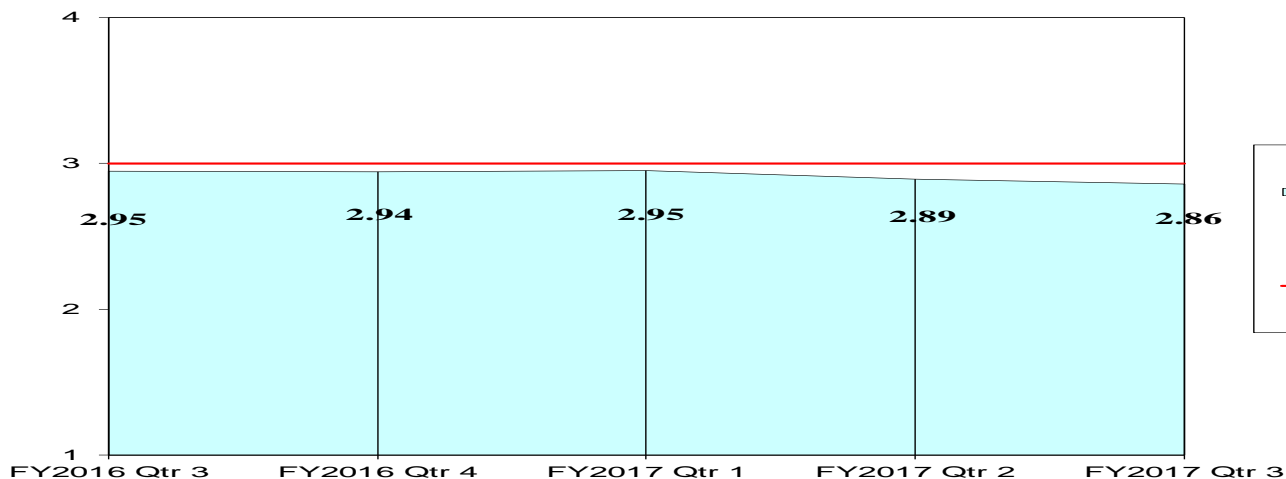
✓ Goal not met

✓ 73.5% 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:

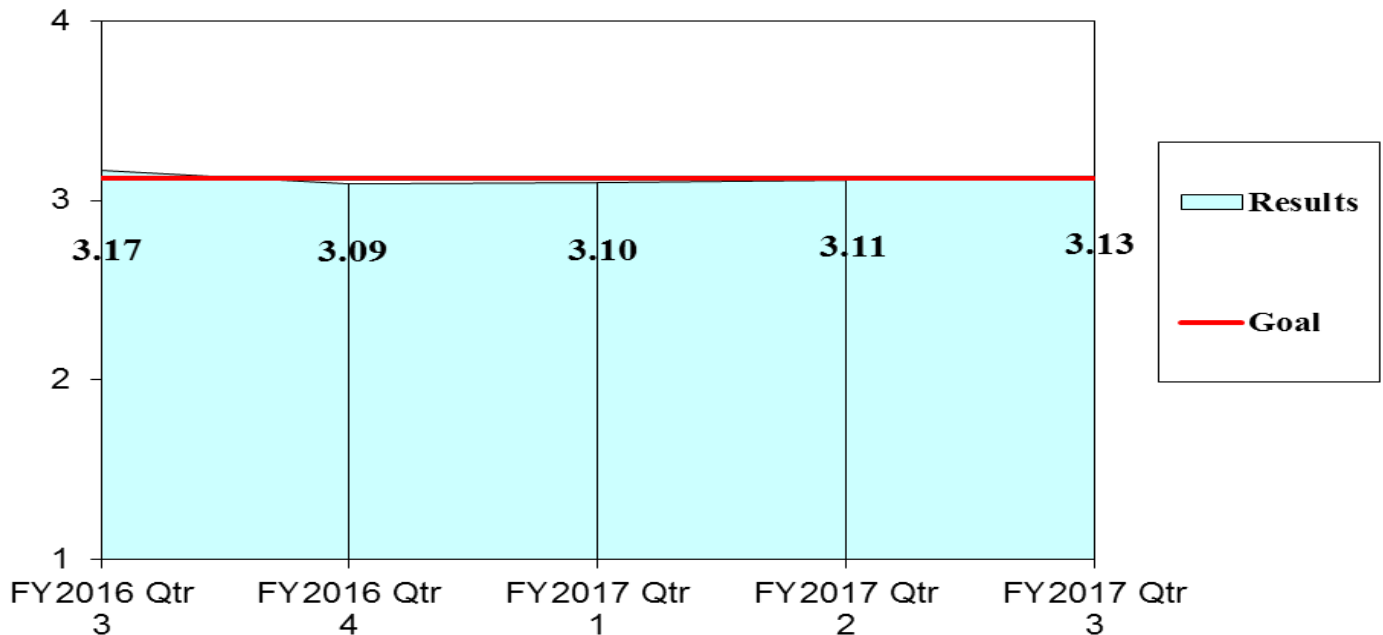
Train interior cleanliness (60%)	2.58 ↓
Train interior kept free of graffiti (40%)	3.27 ↓

- ✓ Goal not met
- ✓ Train Interior ratings of either Excellent or Good:
 Train Interior Cleanliness: 57.3%; Graffiti-free: 89.4%
- ✓ Pulled resources from scrub crew to address increased reports of bio-waste and debris, impacts cycle time for thorough cleaning
- ✓ Changed start times for some cleaners to provide better AM Rush coverage

↓ indicates a statistically significant decrease from the prior quarter

Train Temperature

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



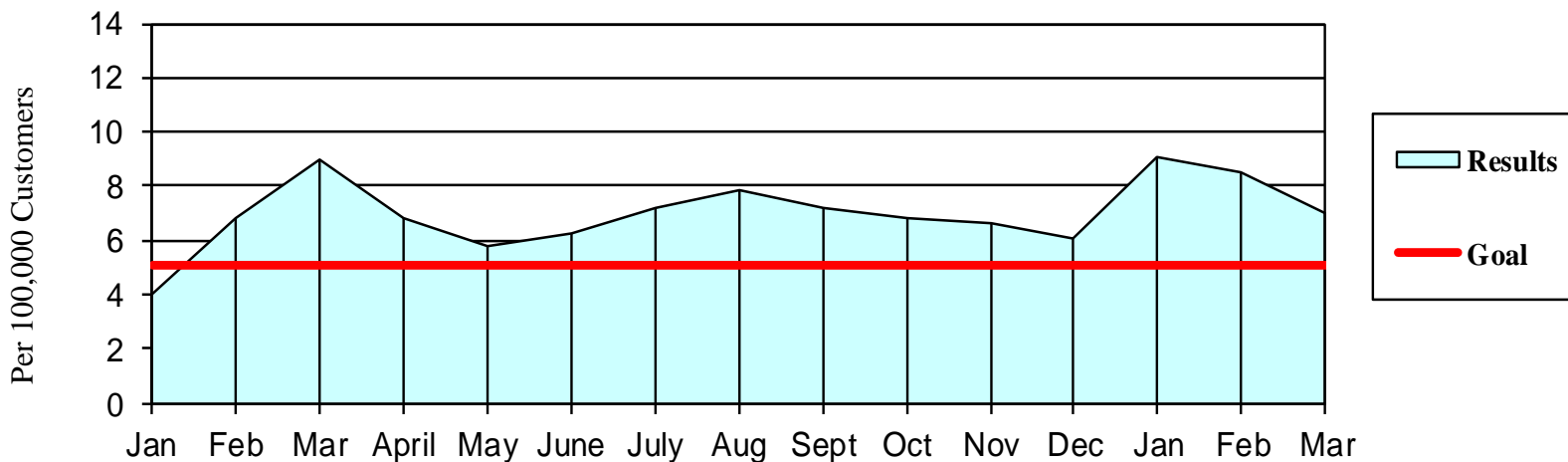
Comfortable Temperature Onboard Train

- ✓ Goal met
- ✓ 85.0 % of those surveyed rated this category as either Excellent or Good



Customer Complaints

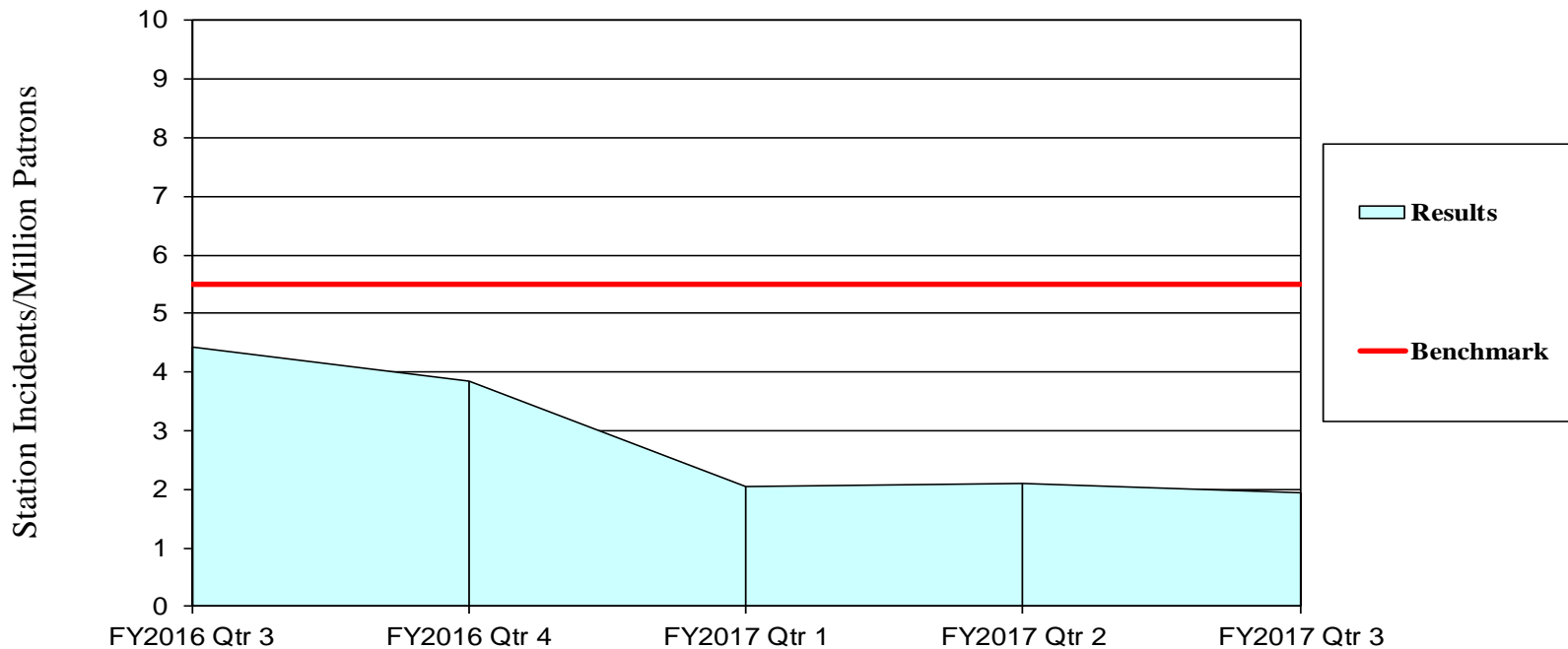
Complaints Per 100,000 Customers



- ✓ Total complaints increased 437 (21.7%) from last quarter, up 274 (12.6%) when compared with the third quarter of last Fiscal Year.
- ✓ Complaint numbers increased in all categories except “AFC”, “Trains” and “Passenger Information” which all improved.
- ✓ “Compliments” are up at 157 from 86 last quarter (one year ago these numbered 140).

Patron Safety:

Station Incidents per Million Patrons

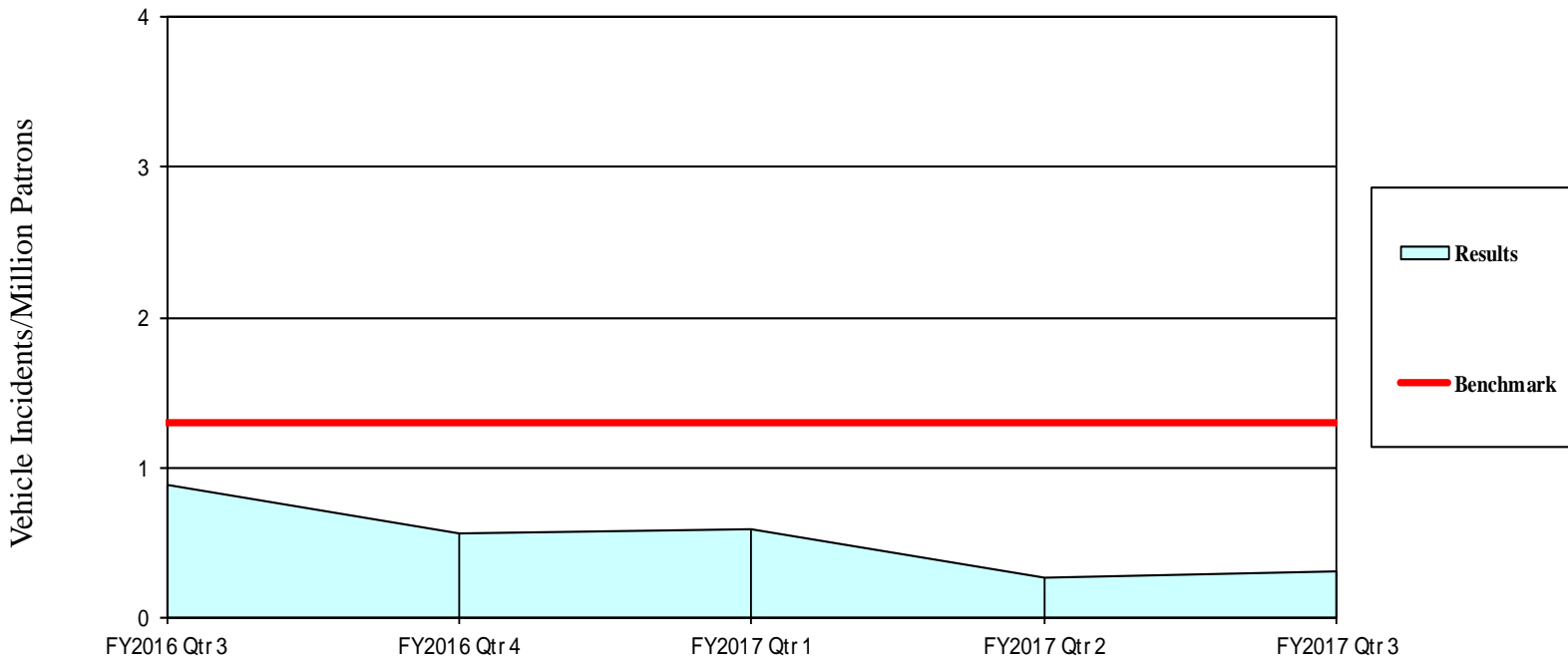


✓ Goal met



Patron Safety

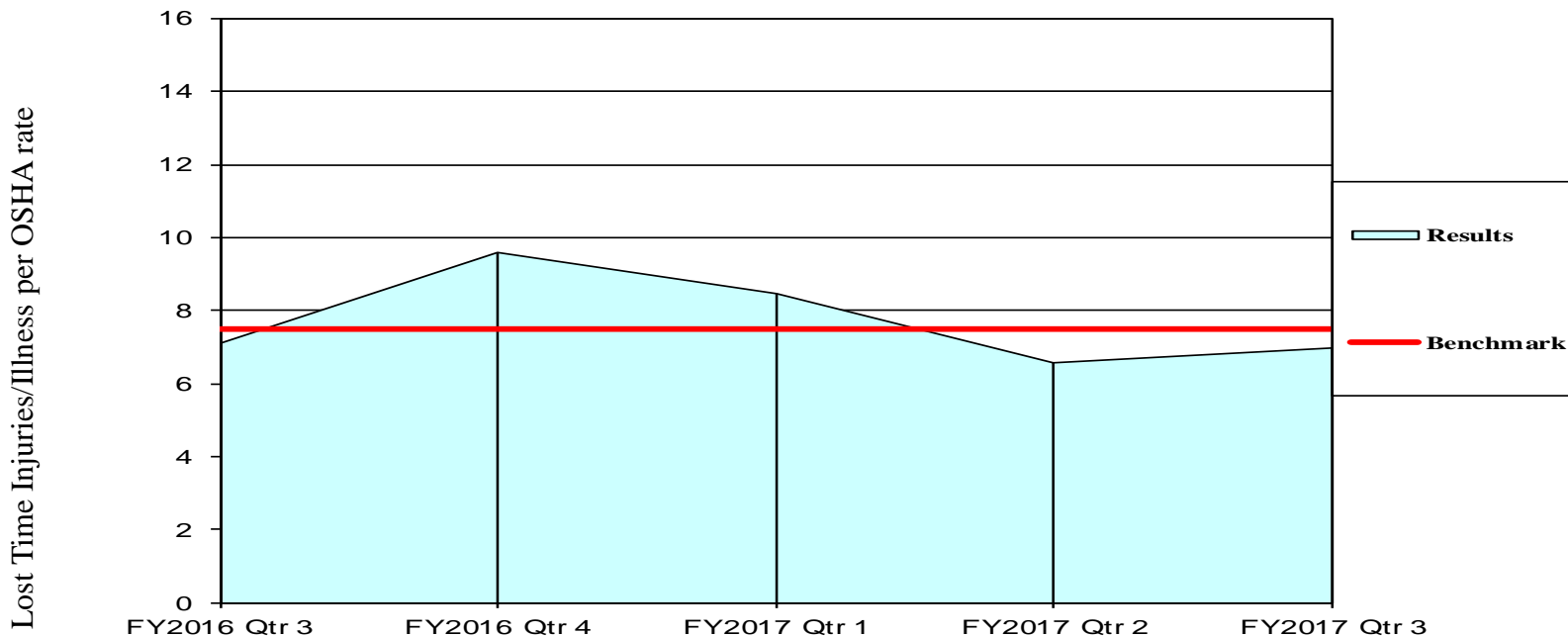
Vehicle Incidents per Million Patrons



✓ Goal met

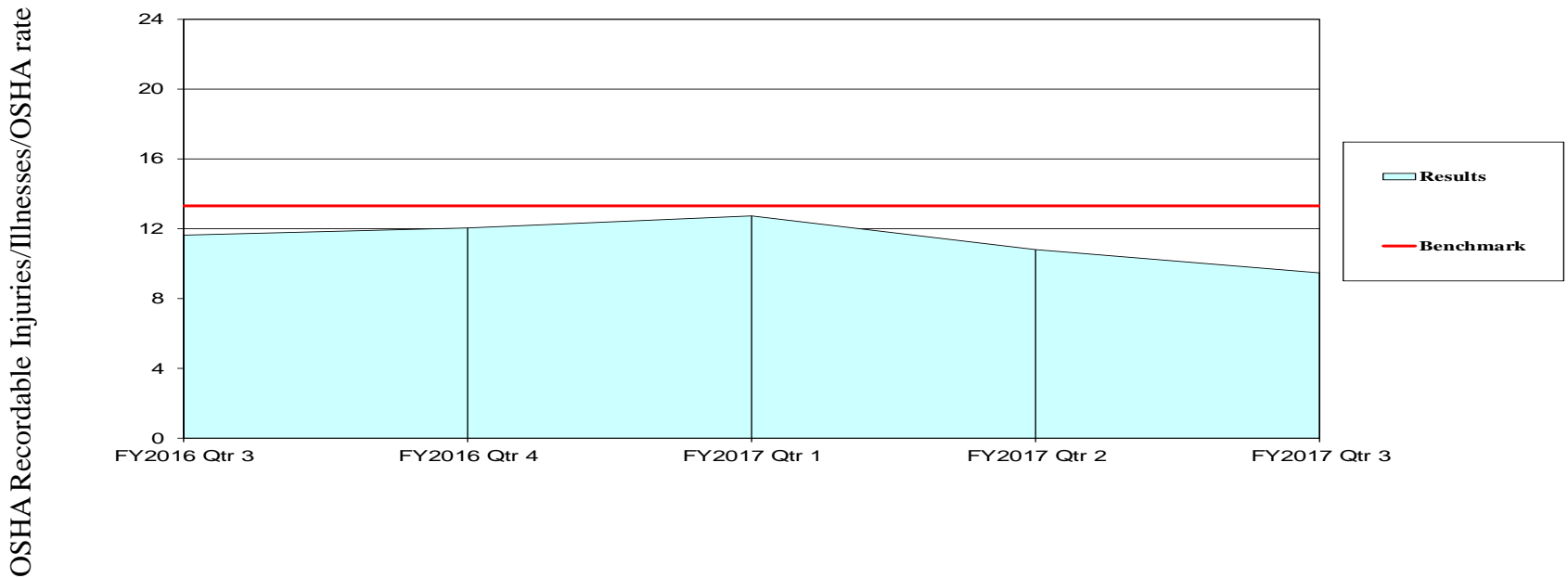


Employee Safety: Lost Time Injuries/Illnesses per OSHA Incidence Rate



✓ Goal met

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

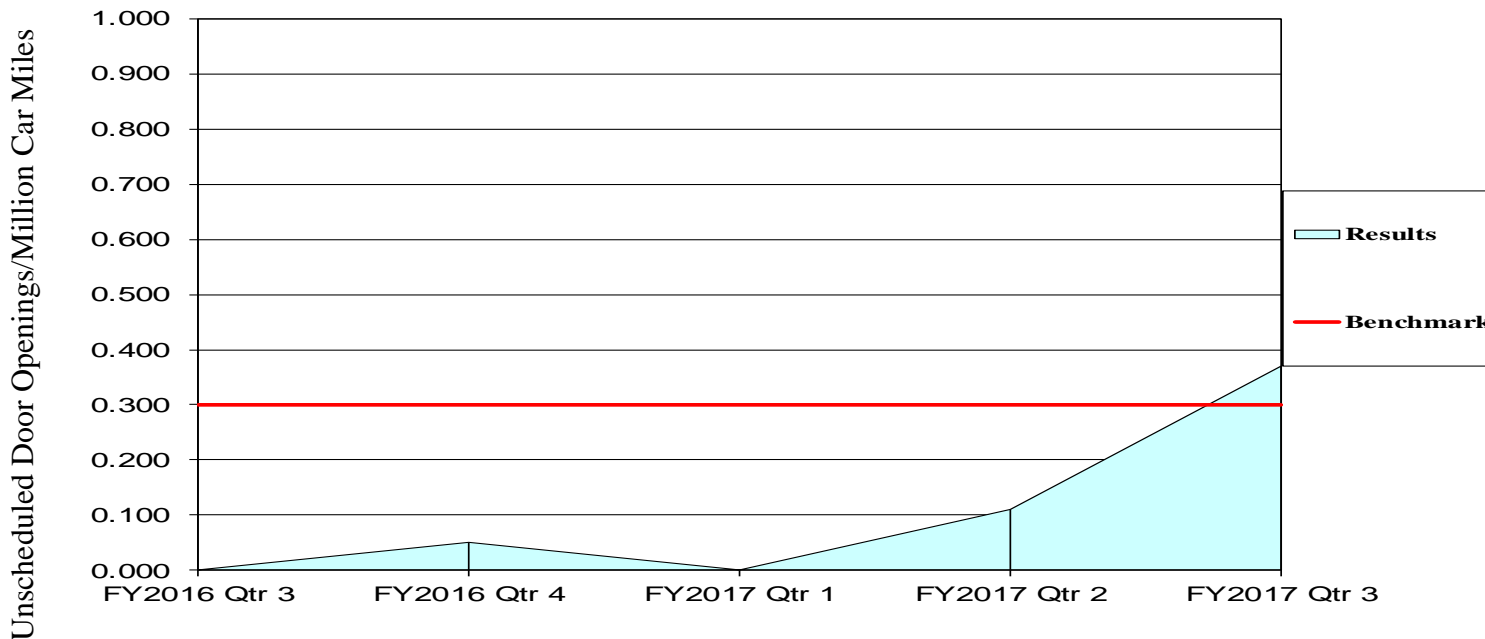


✓ Goal met



Operating Safety:

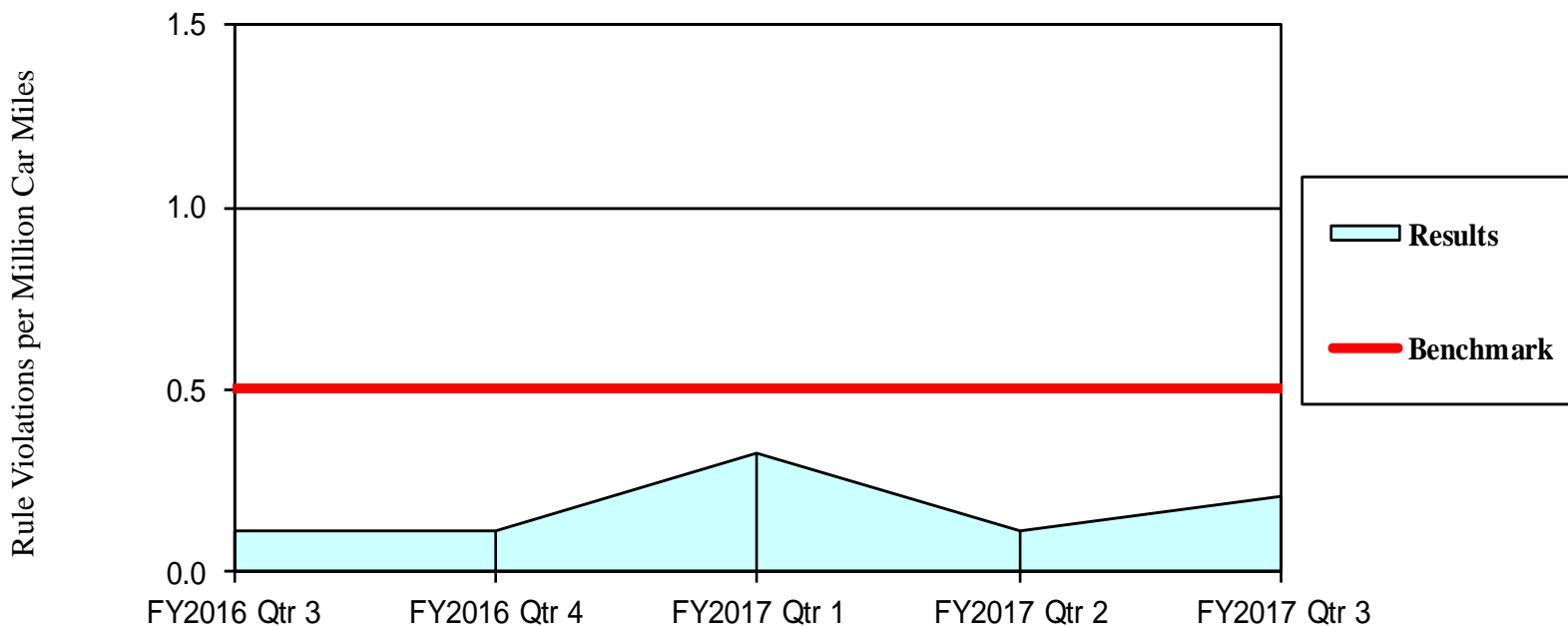
Unscheduled Door Openings per Million Car Miles



- ✓ Goal not met – Train Operators reminded to adhere to proper procedures.
- ✓ Types of violations:
 - Non-platform side (2)
 - Improper lock out
 - Train moved with doors open (2)

Operating Safety:

Rule Violations per Million Car Miles



✓ Goal met



BART Police Presence

Starting FY17 Q2, the way BART Police Presence is measured was changed. The new questions are:

- Did you see BART Police on the Train? (Yes, No, Don't Know)
- Did you see BART Police Outside the Station? (Yes, No, Don't Know)
- Did you see BART Police in the Station? (Yes, No, Don't Know)

Results are reported for all revenue hours and for after 7:00 PM.

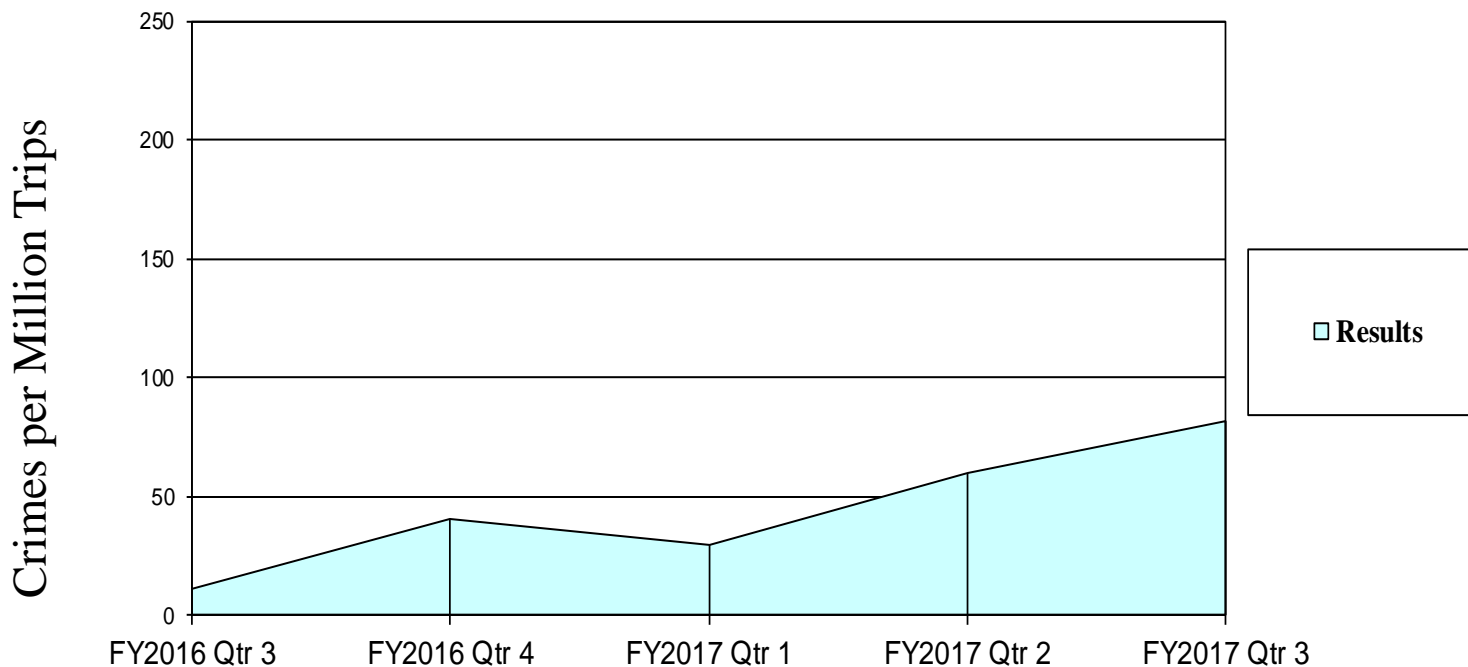
Goals will be set after approximately a year of using the new measures.

	FY 17 Q2		FY17 Q3	
		Avg. 10.9%		Avg. 9.6%
BART Police Presence				
Rider saw Police on train	5.6%		5.6%	
Rider saw Police outside the station	16.3%		15.6%	
Rider saw Police in the station ↓	11.1%		9.6%	
Rider saw Police on train after 7:00PM	4.8%		3.8%	
Rider saw Police outside the station aft 7:00PM	16.0%		13.5%	
Rider Saw Police in the station after 7:00PM	11.4%		9.7%	

↓ indicates a statistically significant decrease from the prior quarter



Quality of Life*



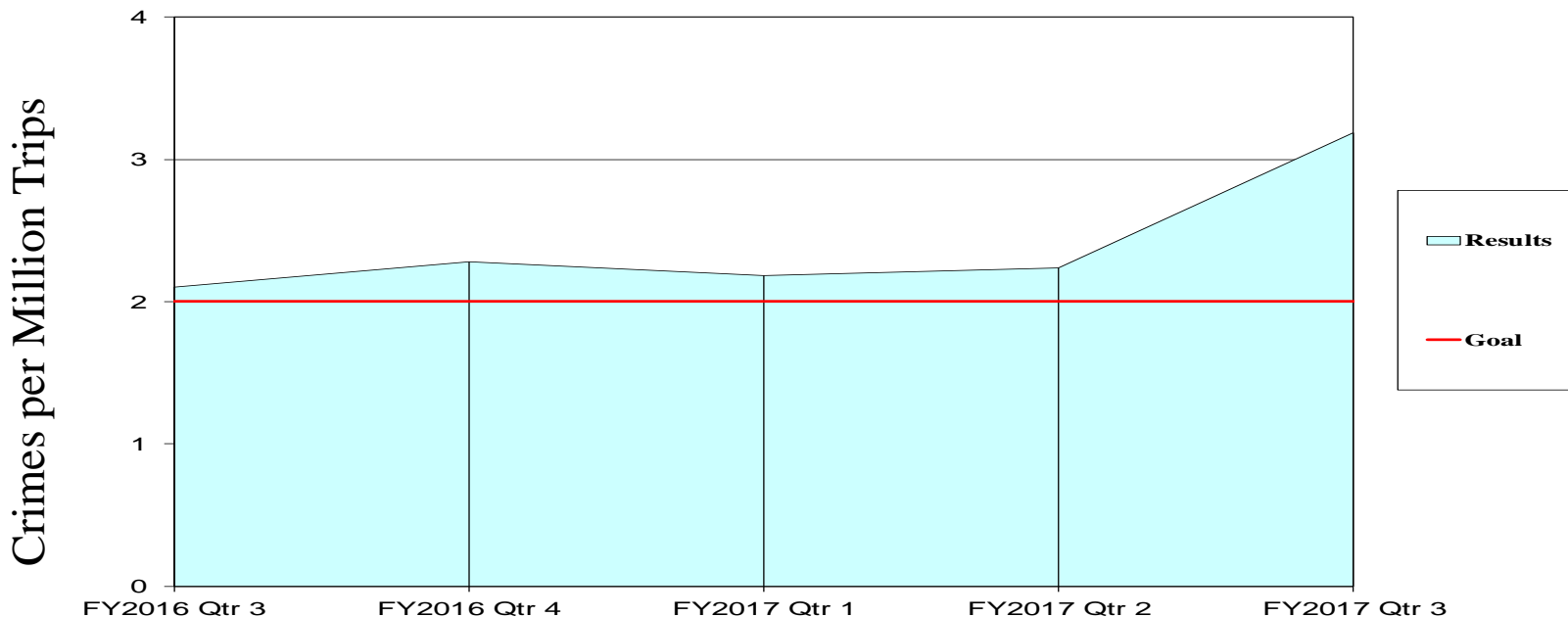
- ✓ Quality of Life incidents are up from the last quarter and up the corresponding quarter of the prior fiscal year.

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



Crimes Against Persons

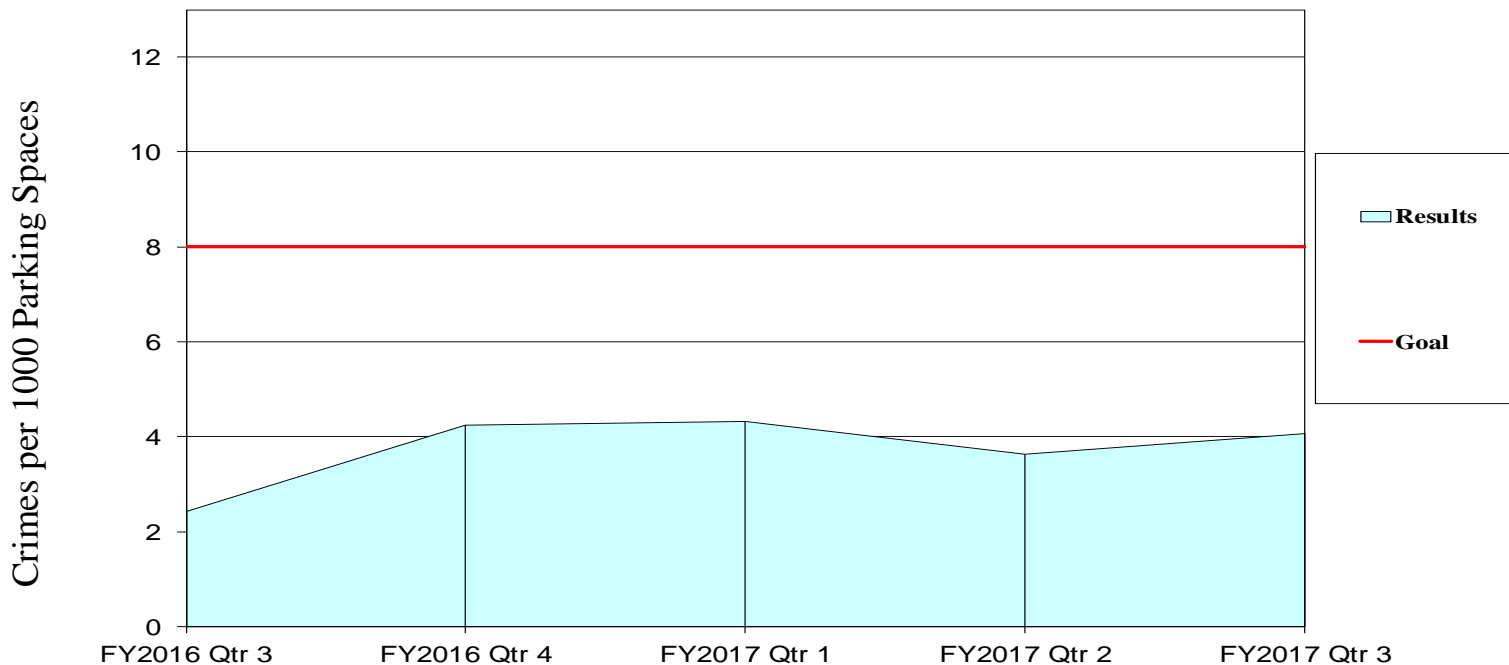
(Homicide, Rape, Robbery, and Aggravated Assault)



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



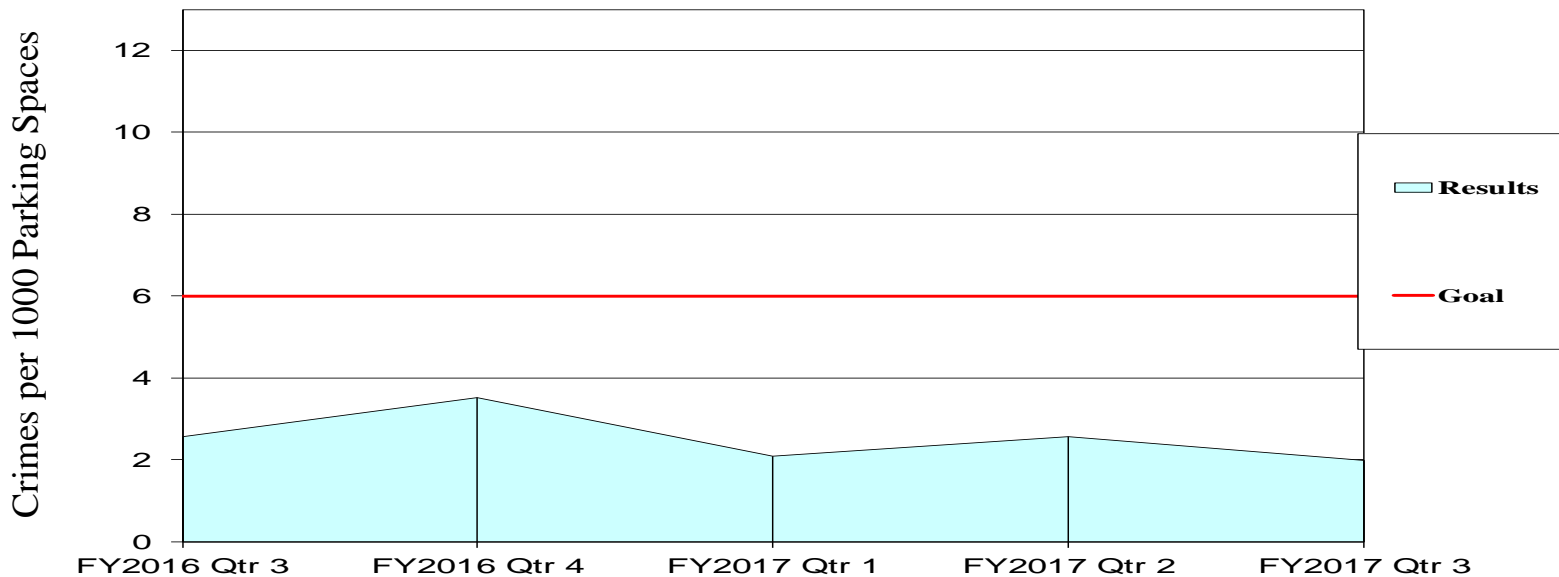
Auto Burglary



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



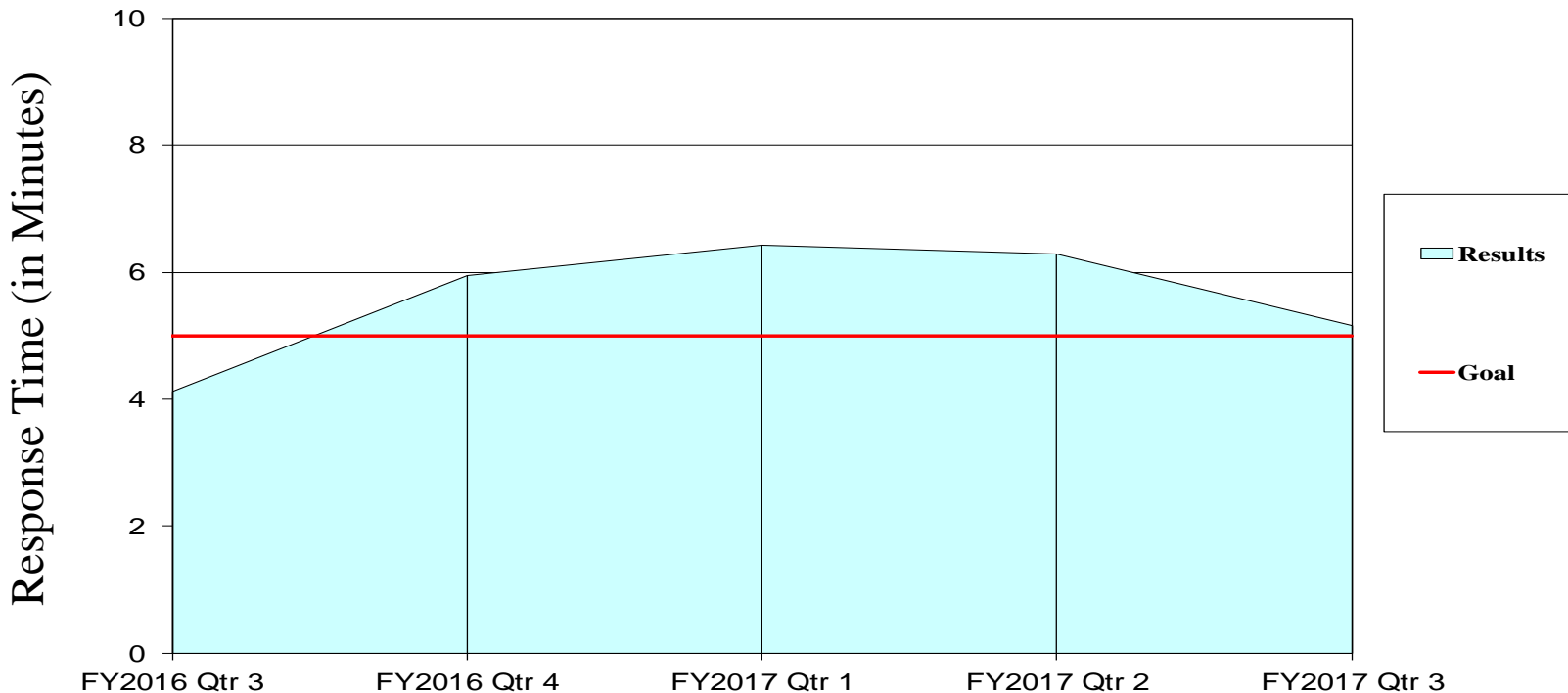
Auto Theft



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



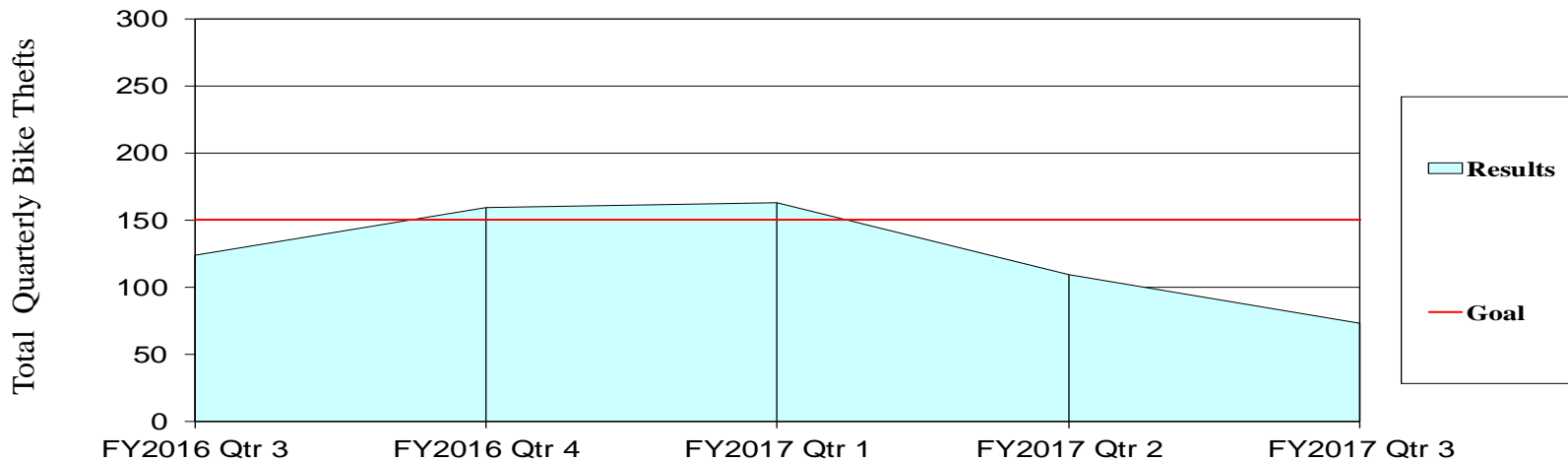
Average Emergency Response Time



- ✓ The average Emergency Response Time goal was not met for the quarter but improved over the previous 3 quarters.



Bike Theft



- ✓ Goal met
- ✓ 73 bike thefts for current quarter, down 36 from last quarter.