

Quarterly Service Performance Review
Second Quarter, FY 2017
October - December, 2016

Operations & Safety Committee
February 9, 2017

SUMMARY CHART 2nd QUARTER FY 2017

PERFORMANCE INDICATORS	CURRENT QUARTER						PRIOR QTR ACTUALS		YEAR TO DATE		
	ACTUAL	STANDARD	STATUS		LAST	THIS QTR	ACTUAL	STANDARD	STATUS		
					QUARTER	LAST YEAR					
Average Ridership - Weekday Customers on Time	425,944	444,589	NOT MET		432,002	431,339	429,122	445,992	NOT MET		
Peak Daily	87.53%	95.00%	NOT MET		90.00%	87.73%	88.77%	95.00%	NOT MET		
Trains on Time	90.09%	95.00%	NOT MET		91.97%	90.85%	91.03%	95.00%	NOT MET		
Peak Daily	82.28%	N/A	N/A		85.84%	82.51%	84.06%	N/A	N/A		
Peak Period Transbay Car Throughput	84.66%	92.00%	NOT MET		88.24%	86.75%	86.45%	92.0%	NOT MET		
AM Peak	98.57%	97.50%	MET		98.71%	94.28%	98.64%	97.50%	MET		
PM Peak	99.16%	97.50%	MET		99.72%	94.61%	99.44%	97.50%	MET		
Car Availability at 4 AM (0400)	592	595	NOT MET		596	583	594	587	MET		
Mean Time Between Service Delays	5,322	4,000	MET		5,179	4,228	5,251	4,000	MET		
Elevators in Service											
Station	98.23%	98.00%	MET		98.50%	97.87%	98.37%	98.00%	MET		
Garage	95.63%	98.00%	NOT MET		97.60%	95.70%	96.62%	98.00%	NOT MET		
Escalators in Service											
Street	92.27%	95.00%	NOT MET		91.40%	91.20%	91.83%	95.00%	NOT MET		
Platform	96.83%	96.00%	MET		96.67%	94.33%	96.75%	96.00%	MET		
Automatic Fare Collection											
Gates	99.07%	99.00%	MET		99.12%	99.14%	99.09%	99.00%	MET		
Vendors	95.68%	95.00%	MET		95.92%	95.90%	95.80%	95.00%	MET		
Wayside Train Control System	1.92	1.00	NOT MET		1.08	1.33	1.50	1.00	NOT MET		
Computer Control System	0.157	0.08	NOT MET		0.029	0.250	0.093	0.08	NOT MET		
Traction Power	0.46	0.20	NOT MET		0.12	0.63	0.29	0.20	NOT MET		
Track	0.13	0.30	MET		0.88	0.67	0.51	0.30	NOT MET		
Transportation	0.42	0.50	MET		0.43	0.46	0.43	0.50	MET		
Environment Outside Stations	2.75	2.80	NOT MET		2.71	2.73	2.73	2.80	NOT MET		
Environment Inside Stations	2.63	3.00	NOT MET		2.66	2.73	2.65	3.00	NOT MET		
Station Vandalism	2.98	3.19	NOT MET		2.97	3.04	2.98	3.19	NOT MET		
Station Services	2.88	3.06	NOT MET		2.92	2.97	2.90	3.06	NOT MET		
Train P.A. Announcements	3.10	3.17	NOT MET		3.09	3.08	3.09	3.17	NOT MET		
Train Exterior Appearance	2.83	3.00	NOT MET		2.86	2.89	2.84	3.00	NOT MET		
Train Interior Appearance	2.89	3.00	NOT MET		2.95	3.00	2.92	3.00	NOT MET		
Train Temperature	3.11	3.12	NOT MET		3.10	3.16	3.11	3.12	NOT MET		
Customer Complaints											
Complaints per 100,000 Passenger Trips	6.53	5.07	NOT MET		7.41	4.20	6.97	5.07	NOT MET		
Safety											
Station Incidents/Million Patrons	2.11	5.50	MET		2.05	4.89	2.08	5.50	MET		
Vehicle Incidents/Million Patrons	0.26	1.30	MET		0.59	1.07	0.43	1.30	MET		
Lost Time Injuries/Illnesses/Per OSHA	6.56	7.50	MET		8.48	6.97	7.52	7.50	NOT MET		
OSHA-Recordable Injuries/Illnesses/Per OSHA	10.80	13.30	MET		12.72	14.63	11.76	13.30	MET		
Unscheduled Door Openings/Million Car Miles	0.110	0.300	MET		0.000	0.110	0.055	0.300	MET		
Rule Violations Summary/Million Car Miles	0.110	0.500	MET		0.330	0.170	0.220	0.500	MET		
Police											
BART Police Presence	0.11	N/A	N/A		N/A	N/A	N/A	N/A	N/A		
Quality of Life per million riders	60.08	N/A	N/A		29.08	65.36	44.58	N/A	N/A		
Crimes Against Persons per million riders	2.24	2.00	NOT MET		2.18	1.61	2.21	2.00	NOT MET		
Auto Theft and Burglaries per 1,000 parking spaces	6.89	8.00	MET		5.72	7.61	6.31	8.00	MET		
Police Response Time per Emergency Incident (Minutes)	6.29	5.00	NOT MET		6.43	4.17	6.36	5.00	NOT MET		
Bike Thefts (Quarterly Total and YTD Quarterly Average)	109	150.00	MET		163	201	136	150.00	MET		

LEGEND:

Goal met



Goal not met but within 5%



Goal not met by more than 5%





SERVICE : How are we doing?

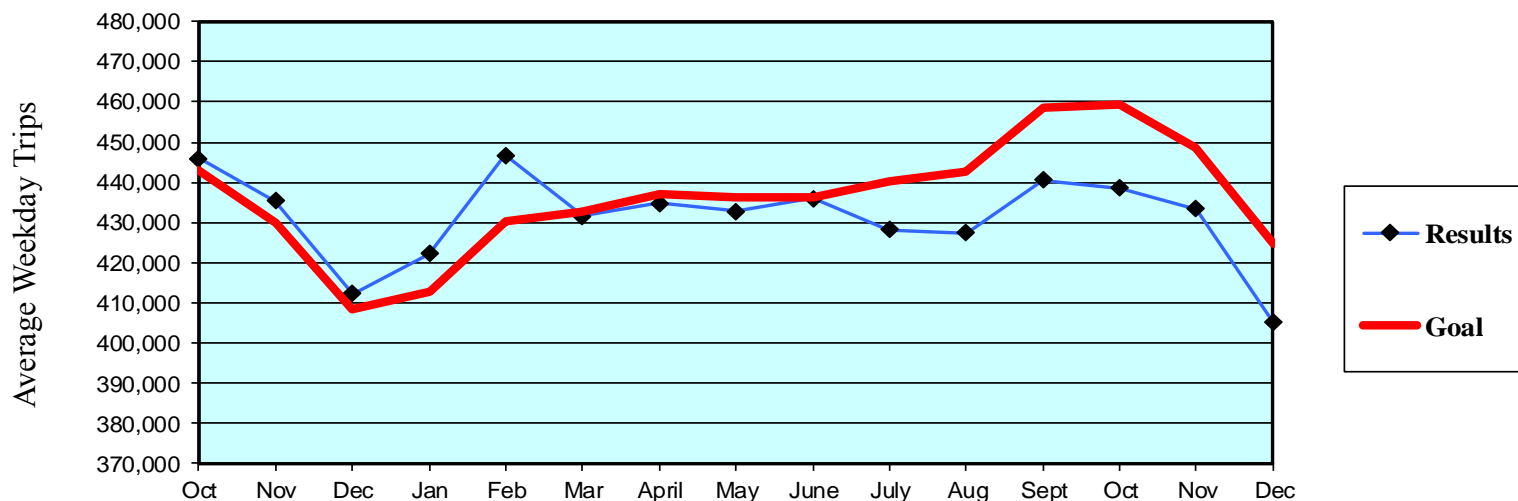


FY17 Second Quarter Overview

- ✓ Ridership declined; down 2.7% overall
- ✓ Peak period ridership not declining
- ✓ Train service reliability declined
- ✓ Equipment Reliability: Car, Track and Transportation met; Traction Power, Train Control and Computer Control System not met
- ✓ Equipment Availability: Platform Escalators, Station Elevators, Fare Gates, Ticket Machines met; Street Escalators, Garage Elevators and Cars not met
- ✓ Passenger Environment: 2 of 4 Station indicators improved, none met goal; 2 of 4 Train indicators improved, none met goal
- ✓ Complaints decreased



Customer Ridership



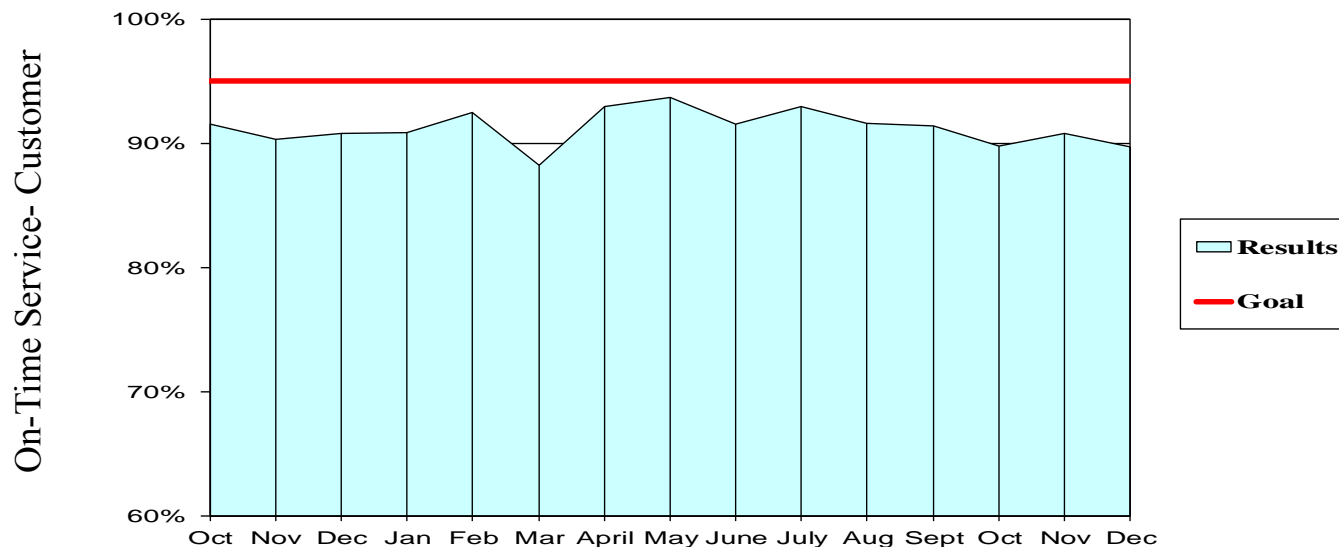
- ✓ Total ridership decreased by 2.7% compared to same quarter last year
- ✓ Average weekday ridership (425,944) down 1.3% from same quarter last year
- ✓ Core weekday ridership down by 1.0% from same quarter last year
- ✓ SFO Extension weekday ridership down by 2.9% from same quarter last year
- ✓ Average peak ridership during the period was up slightly (0.26%) compared to the same quarter last year.
- ✓ During Q2 there were two Top 10 Ridership Days:
 - 10/6/2016 – 465,688 – Dreamforce 2016; 49ers vs. Arizona (#9)
 - 11/3/2016 – 464,224 – Warriors vs. Oklahoma City (#10)
- ✓ Saturday and Sunday down by 7.1% and 2.2%, respectively, over same quarter last year



SERVICE : How are we doing?



On-Time Service - Customer



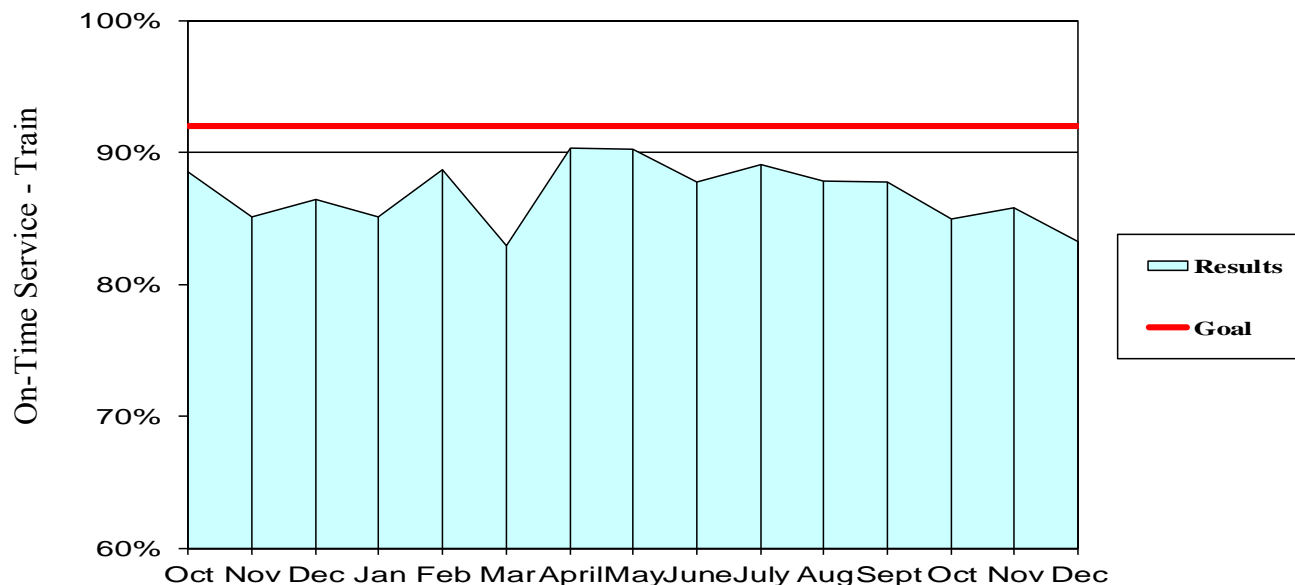
- ✓ 90.1%, 95.00% goal not met, down 1.9 %
- ✓ Delay events causing the most late trains:

1	03-Nov-16	Daly City	Net.com (Field Comm Link)	Equip	124
2	20-Oct-16	Lake Merritt	MUX (False Occupancy)	Equip	86
3	14-Oct-16	Daly City	PG & E Power Outage	Utilities	82
4	19-Oct-16	Emb. I-Lock	Routing (Switch)	Equip	75
5	15-Oct-16	Civic Center	Person On Trackway(Person Refuses to Leave Wayside)	People	66
6	29-Nov-16	24th St. I-Lk	Routing (Switch)	Equip	66
7	16-Dec-16	B.F Merge I-Lk	Routing (Switch)(Broken Spring)(0520-0932)	Equip	62
8	13-Dec-16	T-Bay Tube	Brake (Smoke Odor)(Circuit Breaker Tripped)	Vehicle	62
9	15-Dec-16	Systemwide	Weather (Heavy Rain)(Reduced Speed)(0700-2400)	Weather	62
10	10-Dec-16	Balboa Park	3rd Rail Power(Repeating Sectional Trip)(1318-1709)	Equip	52

SERVICE : How are we doing?



On-Time Service - Train



✓ 84.7%, 92.00% goal not met; down 3.8%

✓ 8,555 Late trains at End-of-Line

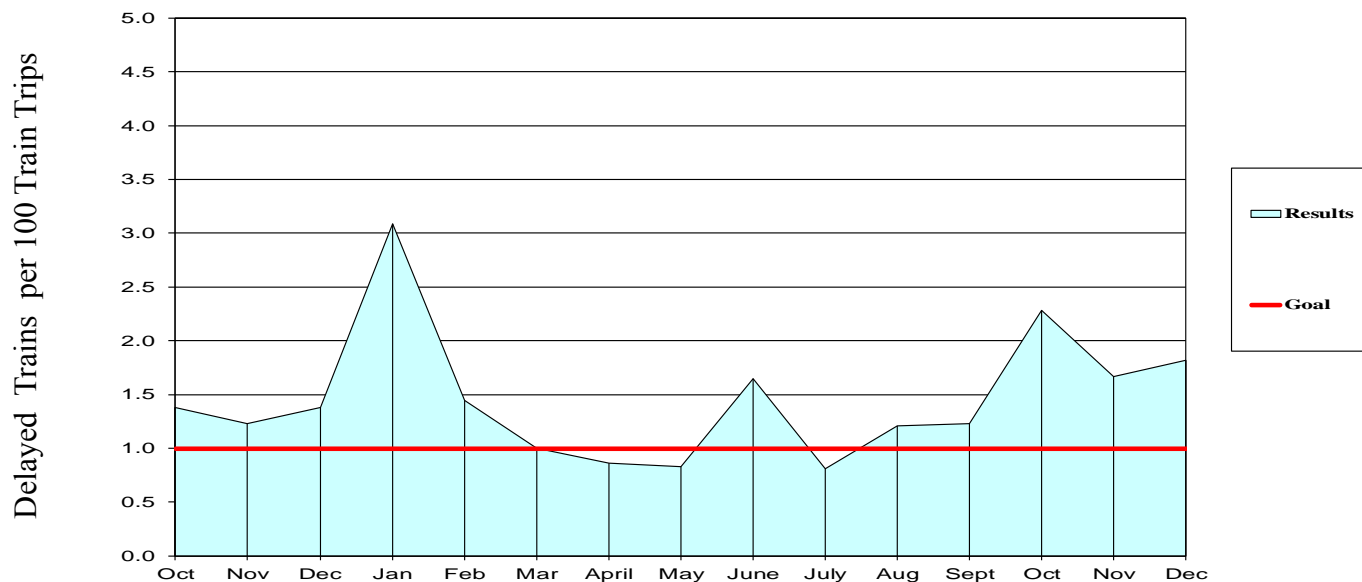
- | | |
|--|-------------------------|
| 1. *Multiple small delays (each under 5 min) | 47.7% of delayed trains |
| 2. Other Miscellaneous (multiple cause, object on track, passenger transfers, person struck) | 15.4% of delayed trains |
| 3. Train Control | 9.9% of delayed trains |
| 4. BPD | 8.4% of delayed trains |
| 5. Revenue Vehicle | 4.3% of delayed trains |
| 6. Wayside Maintenance Work | 3.2% of delayed trains |
| 7. Vandalism | 2.6% of delayed trains |
| 8. Traction Power | 2.3% of delayed trains |
| 9. Operations | 2.2% of delayed trains |
| 10. Sick Passenger | 1.8% of delayed trains |

*new category, not previously included



Wayside Train Control System

Includes False Occupancy & Routing, Delays Per 100 Train Runs



- ✓ 1.92, 1.00 goal not met
- ✓ Working with Alstom to remedy Switch Motor Controller failure in new switches.
- ✓ Biggest Train Control caused delay (86 late trains) due to aged cable insulation on track circuit receiver coil, system wide replacement project underway.

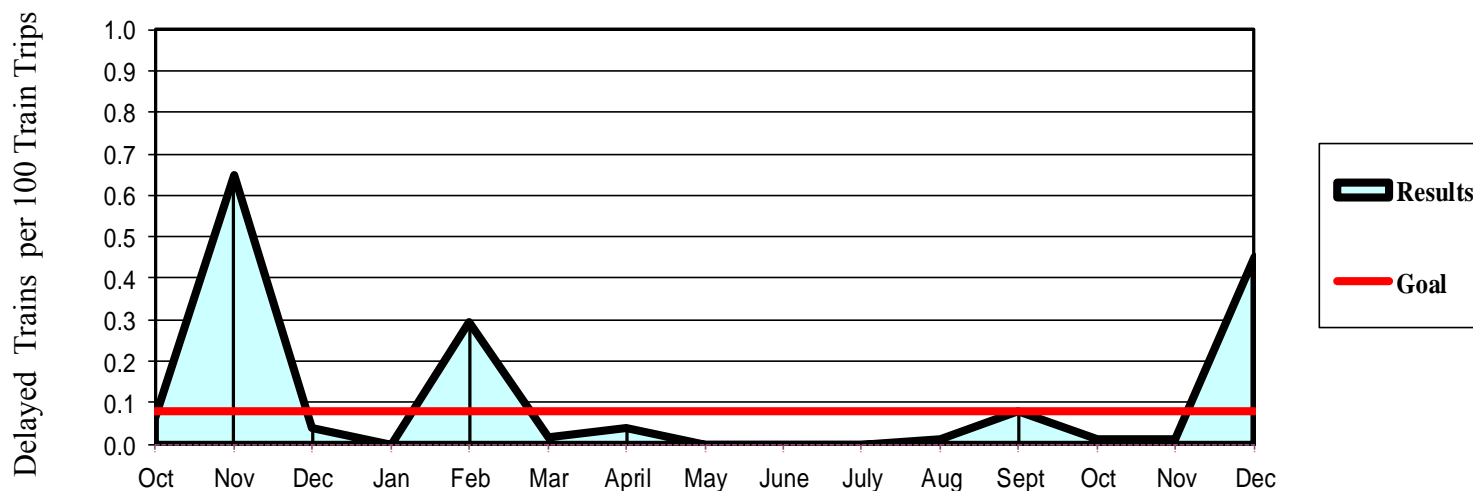


SERVICE : How are we doing?



Computer Control System

Includes ICS computer & SORS, Delays per 100 train runs



- ✓ Goal not met due to one incident in December
- ✓ Local software glitch required engineering support

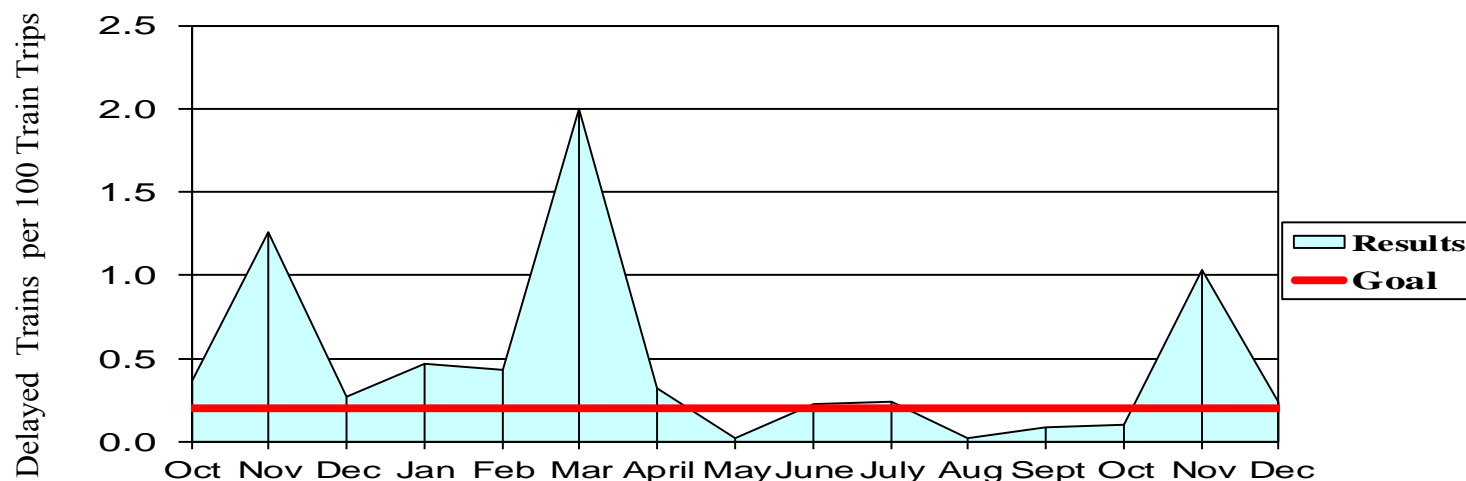


SERVICE : How are we doing?



Traction Power

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



- ✓ Multiple third rail coverboard pin failures throughout quarter identified as pin fatigue; caused by high winds, high speed train vibration. Installing metal collars on pins to mitigate.
- ✓ Debris fire; damage to expansion joint cables at Montgomery repairs completed.
- ✓ Planning underway to move third rail expansion joints out of the platform area and to make them cableless.

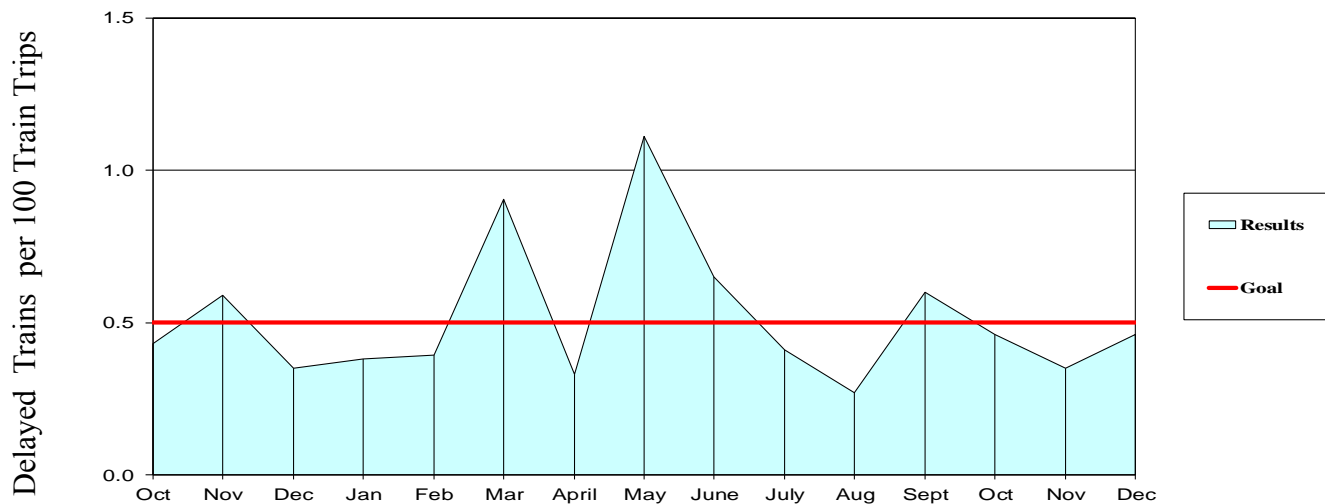


SERVICE : How are we doing?



Transportation

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



✓ Goal met

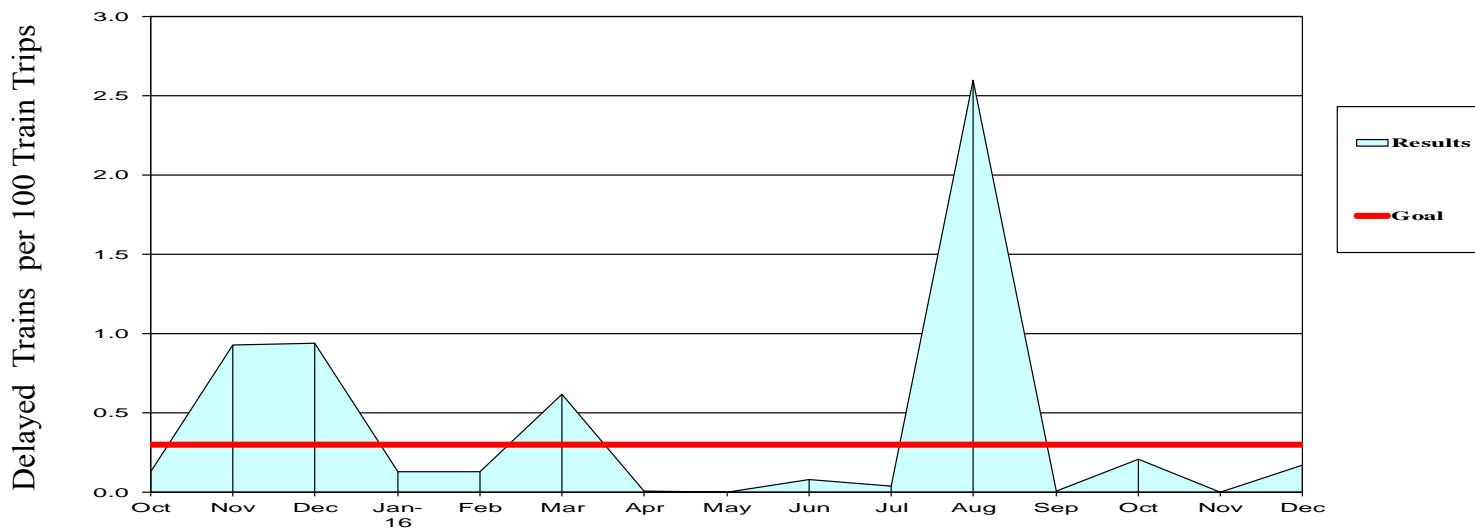


SERVICE : How are we doing?



Track

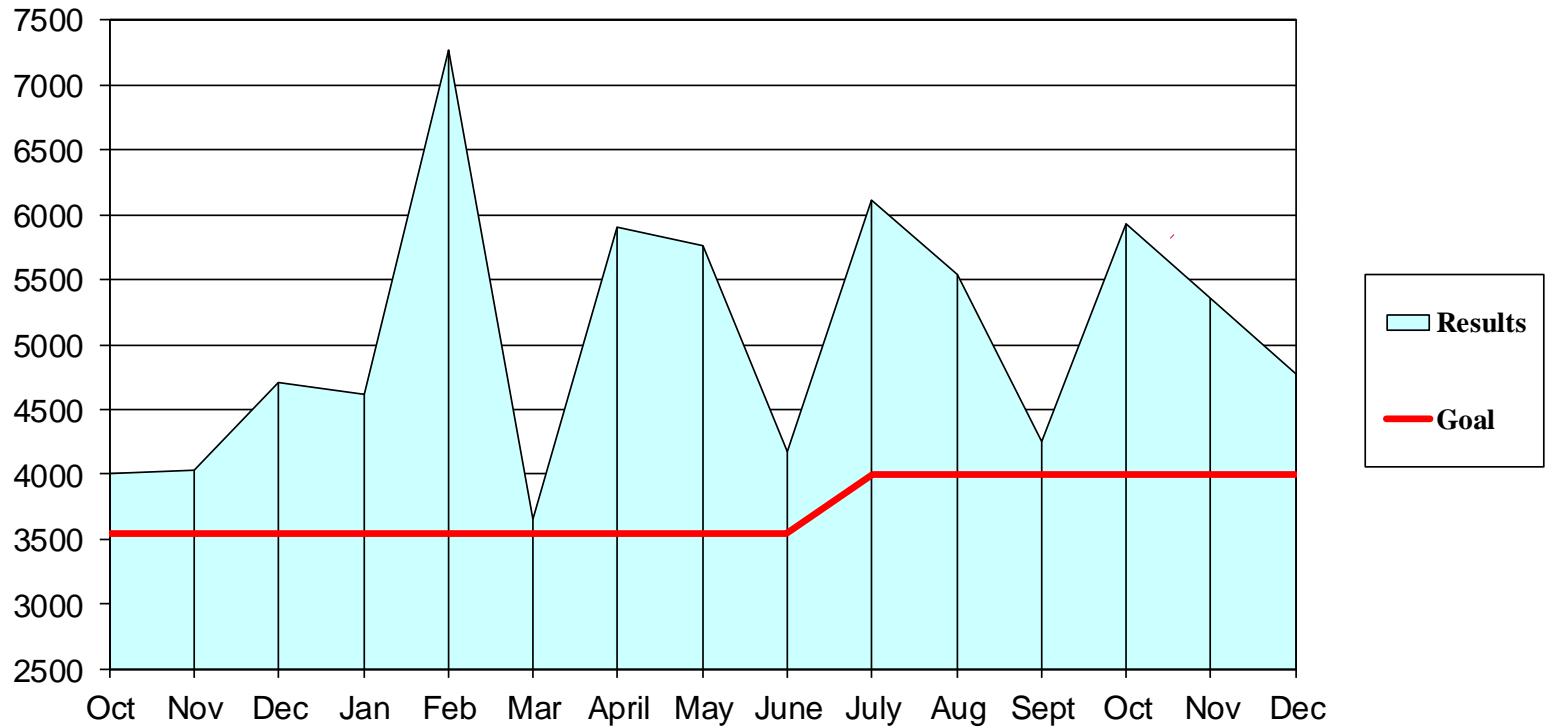
**Includes Rail, Track Tie,
Misalignment, Switch,
Delays Per 100 Train Runs**



✓ Goal met

Car Equipment - Reliability

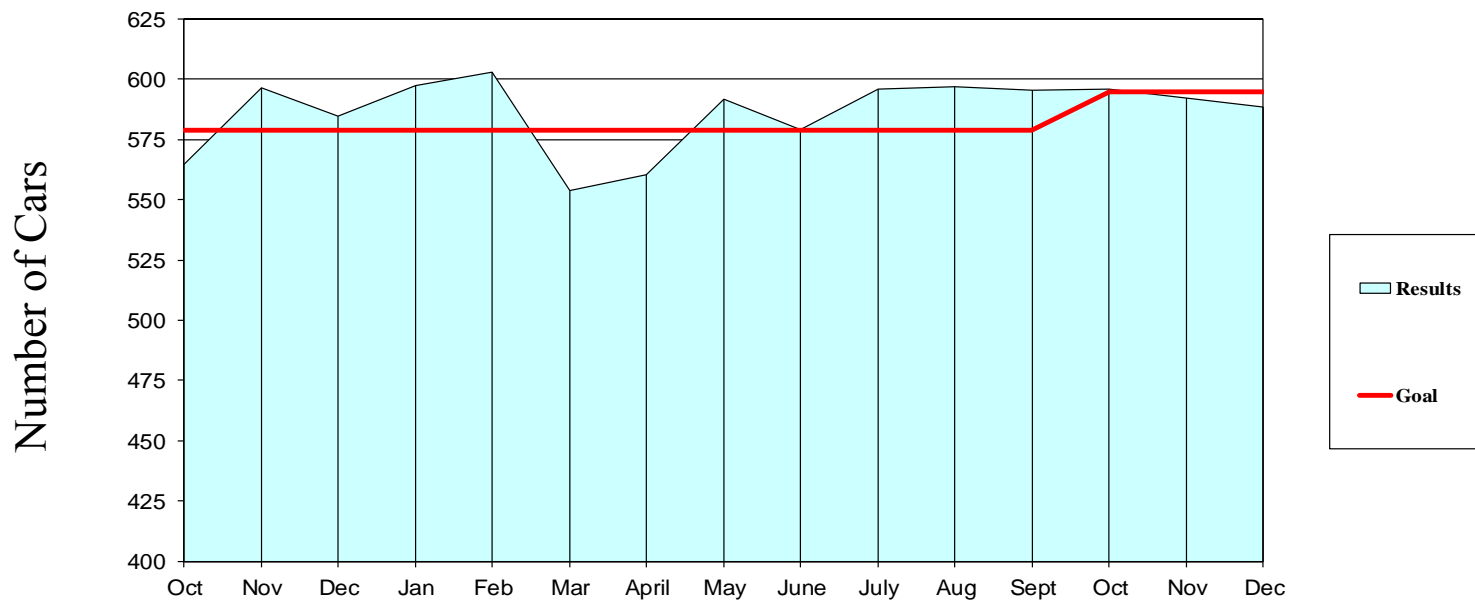
Mean Time Between Service Delays (Hours)



✓ Goal met – MTBSD 5,322 hours



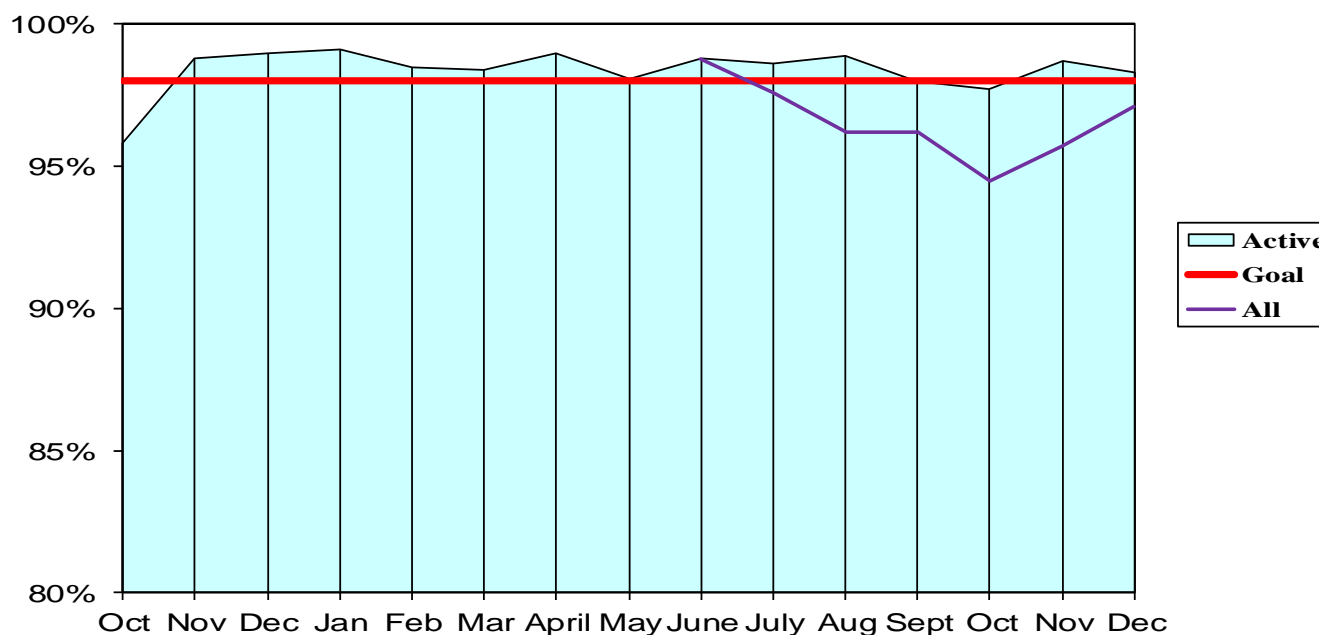
Car Equipment – Availability @ 0400 hours



- ✓ Goal not met – 592 Actual vs. 595 Required
- ✓ Fleet car availability requirement went up to 595 in fall.
- ✓ Rains causing wheel flats impacted mostly the Concord fleet. Due to Concord not having a wheel truing machine, Concord cars were queued up in Hayward for wheel cutting or axle changes.



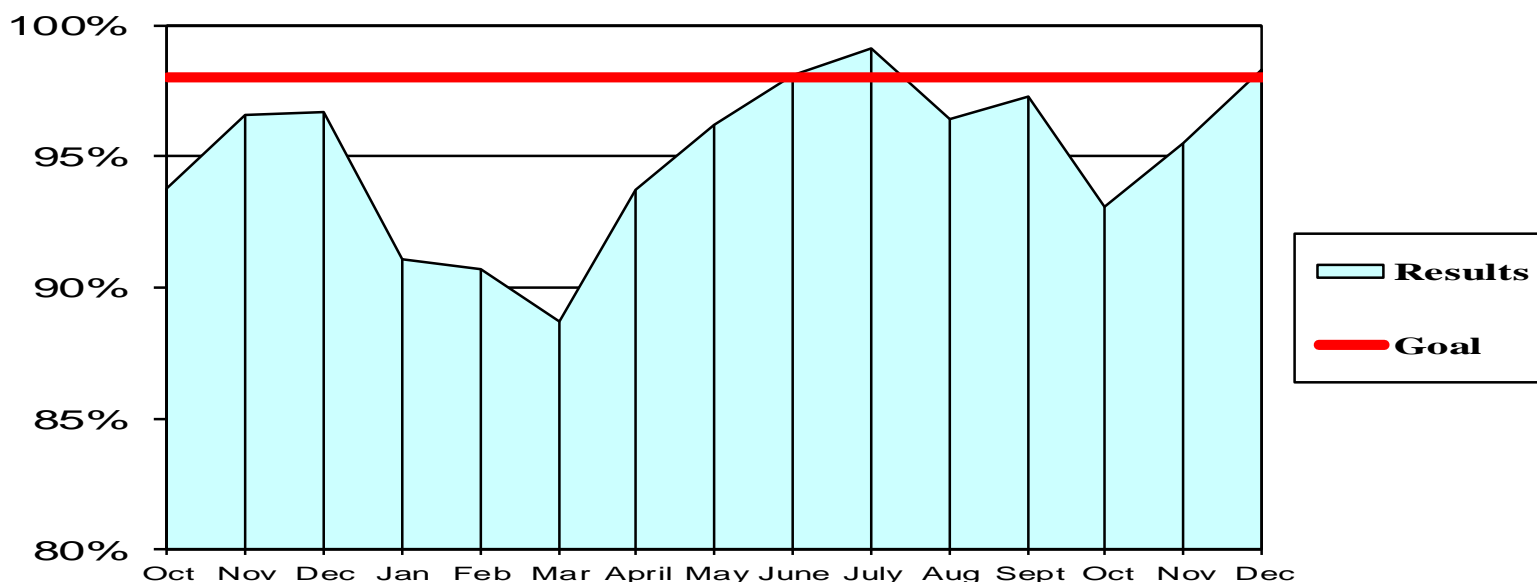
Elevator Availability - Stations



- ✓ Goal met
- ✓ Blue line measures availability including planned project work (doors and floors)



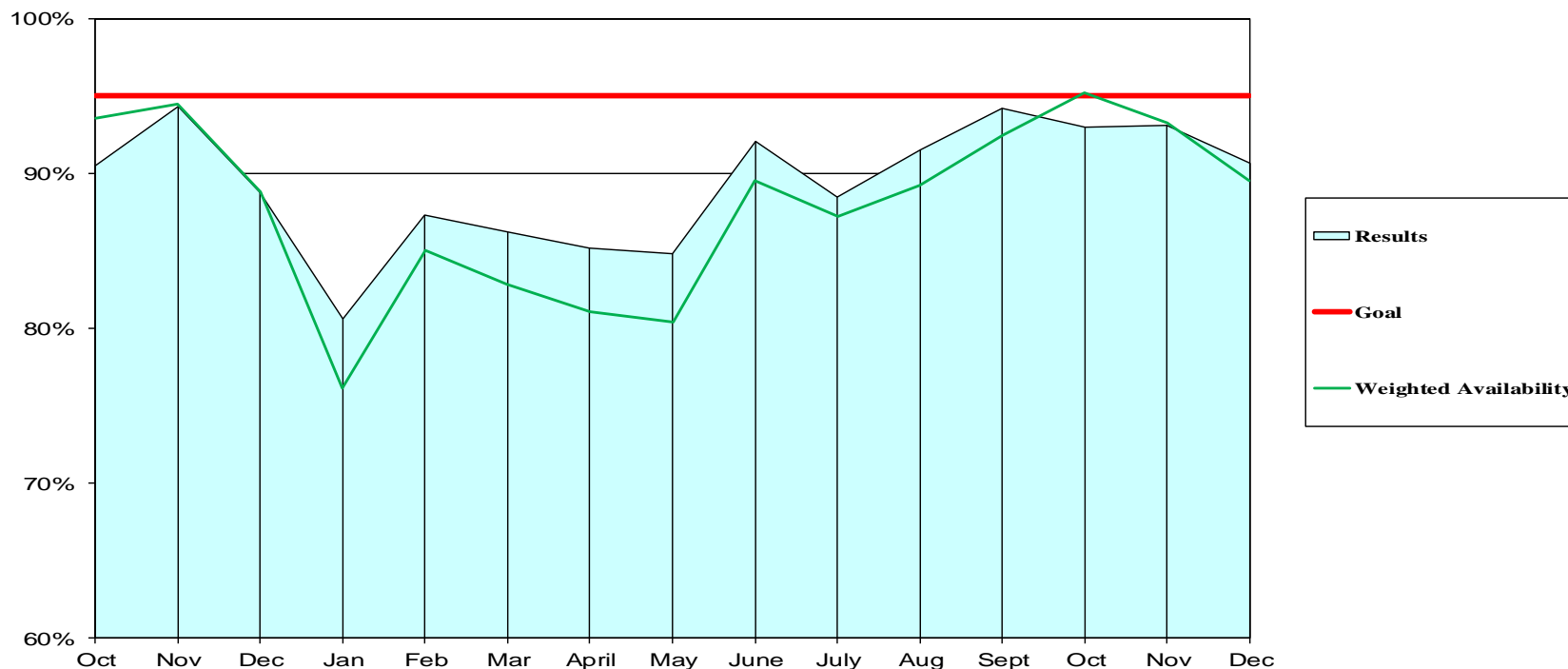
Elevator Availability - Garage



- ✓ Goal 98% not met, attained 95.63%, a drop of 1.97% from last quarter
- ✓ Pleasant Hill and San Bruno were worst performers, San Bruno due to water intrusion which damaged the elevator controller



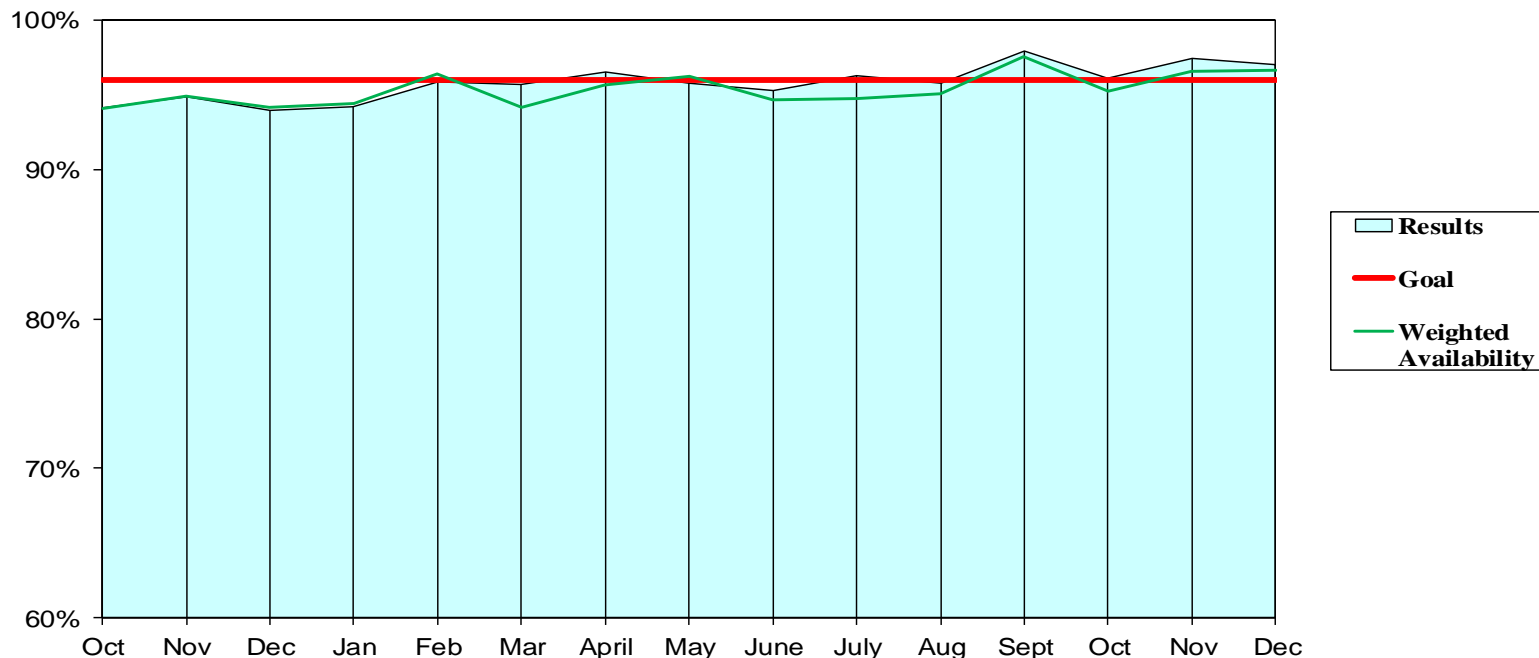
Escalator Availability - Street



- ✓ Goal 95%, actual 92.27%, slight improvement.
- ✓ Escalator electrical shorts due to water intrusion from the rain continue to outpace resources.
- ✓ Major repairs at Civic Center and 16th Street.



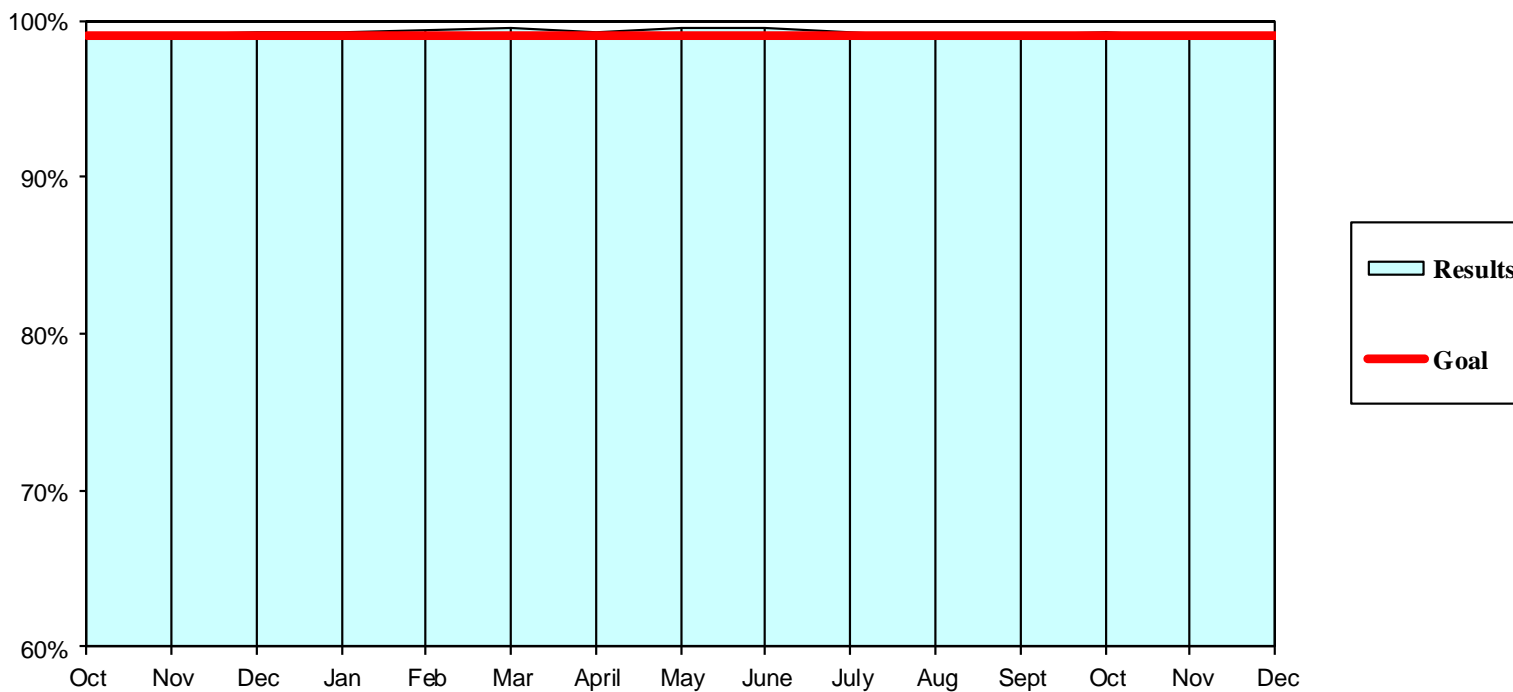
Escalator Availability - Platform



- ✓ Goal met and performance improved
- ✓ Relocated department and bid reworked to improve efficiency
- ✓ Five (5) Trainee's completed CCCM Program & awaiting State Certification
- ✓ Attempt to contract repairs when failures outpace resources, contractor availability limited



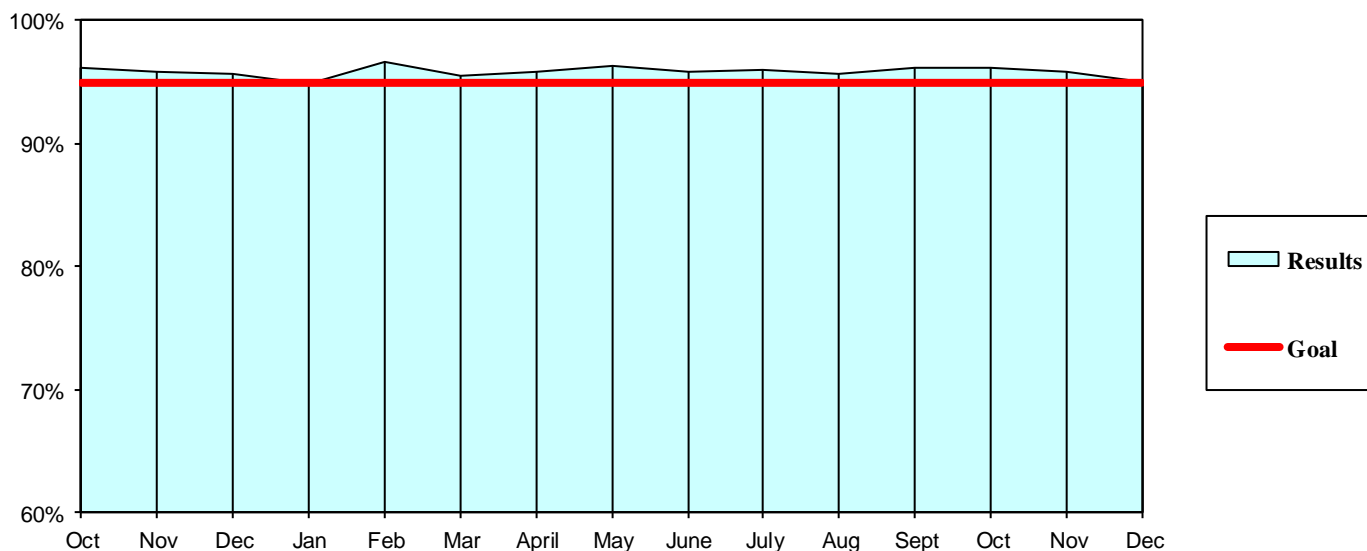
AFC Gate Availability



- ✓ Goal met
- ✓ Working to resolve problem with Gate Aisle Sensor on Asset Refresh



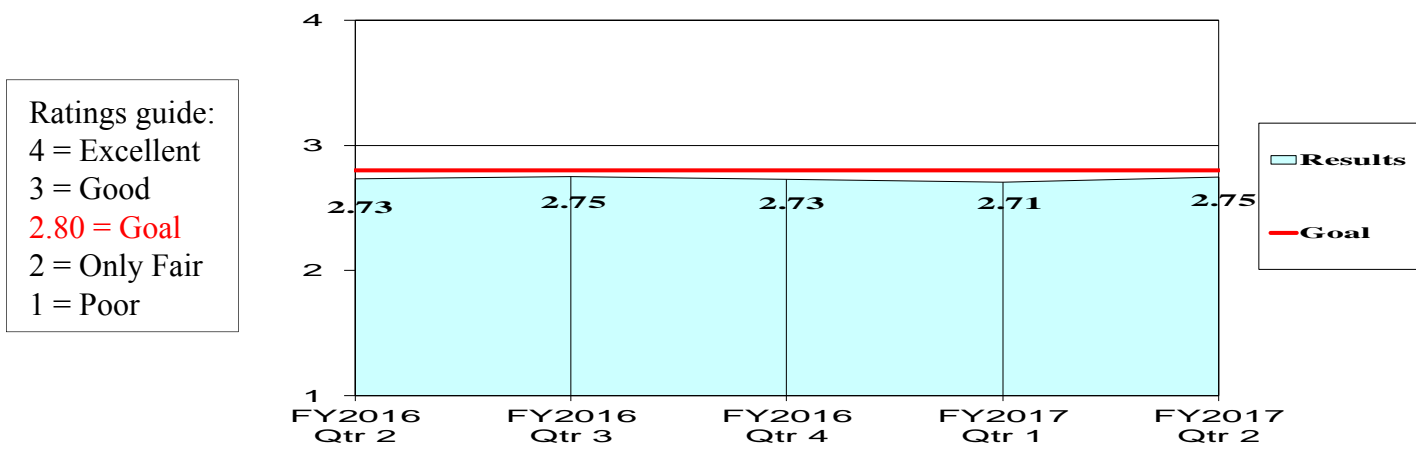
AFC Vendor Availability



- ✓ Goal exceeded, 95.90%
- ✓ Add Fare Availability – 98.35%
- ✓ Add Fare Parking Availability – 98.87%
- ✓ Parking Validation Machines Availability – 99.99%



Environment - Outside Stations



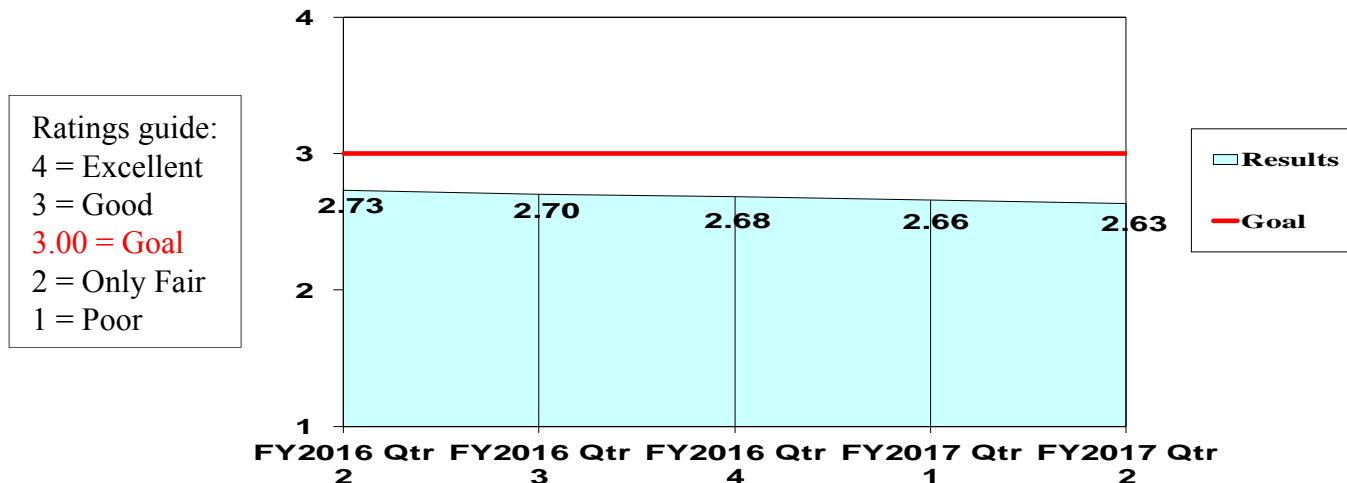
Composite rating of:	
Walkways & Entry Plaza Cleanliness (50%)	2.65 [↑]
BART Parking Lot Cleanliness (25%)	2.96
Appearance of BART Landscaping (25%)	2.72 [↑]

- ✓ Goal not met but improved performance (Walkways/Entry Plaza and Landscaping)
- ✓ Cleanliness ratings of either Excellent or Good:
 - Walkways/Entry Plazas: 61.7%
 - Parking Lots: 77.2%
 - Landscaping Appearance: 65.2%

[↑] indicates a statistically significant increase over the prior quarter



Environment - Inside Stations



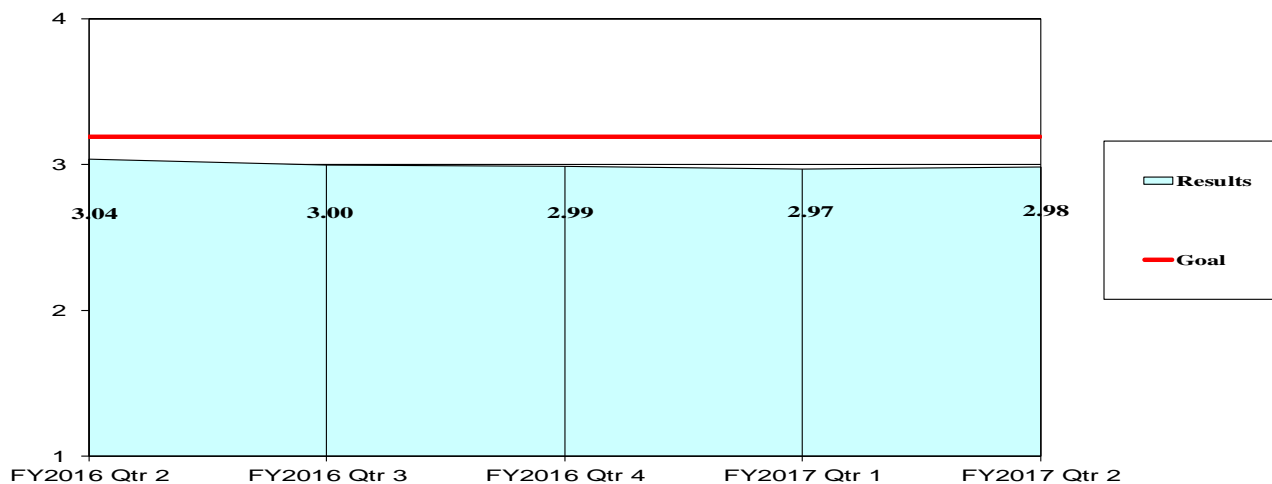
Composite rating for Cleanliness of:	
Station Platform (60%)	2.78
Other Station Areas (20%)	2.59
Restrooms (10%)	2.15
Elevator Cleanliness (10%)	2.31

- ✓ Goal not met, slight improvement on M/W Line
- ✓ Cleanliness ratings of either Excellent or Good:
 - Station Platform: 68.6%
 - Other Station Areas: 58.1%
 - Restrooms: 38.8%
 - Elevators: 46.6%



Station Vandalism

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



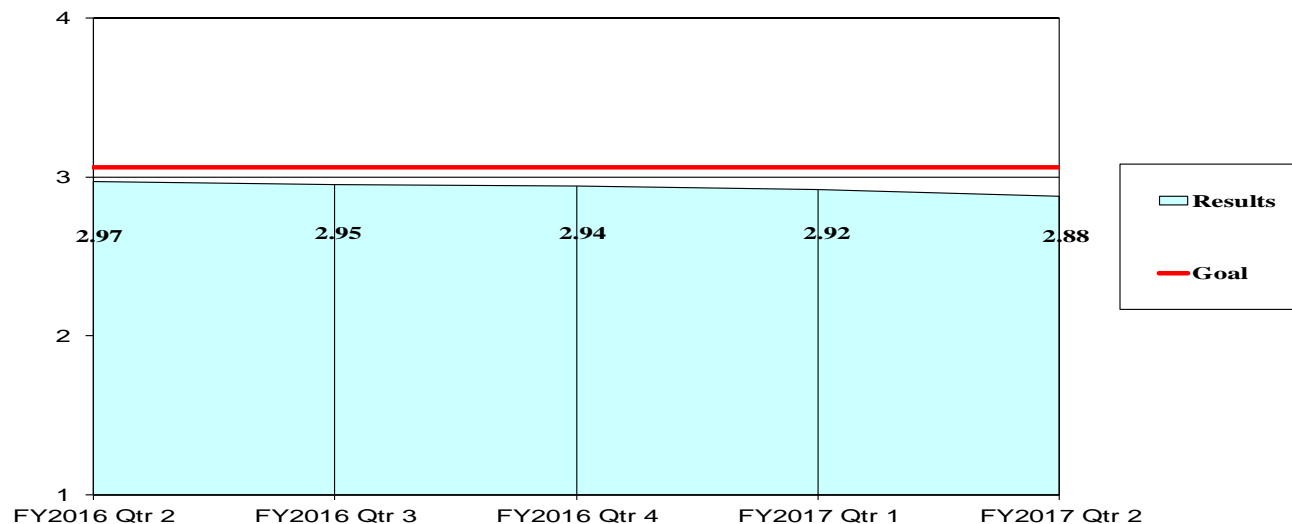
Station Kept Free of Graffiti

- ✓ Goal not met, slight improvement
- ✓ 76.5% 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%)	2.85
Brochures Availability (35%)	2.92 ↓

- ✓ Goal not met, lower rating in both areas
- ✓ Availability ratings of either Excellent or Good:
 - Station Agents: 71.6%
 - Brochures: 74.0%

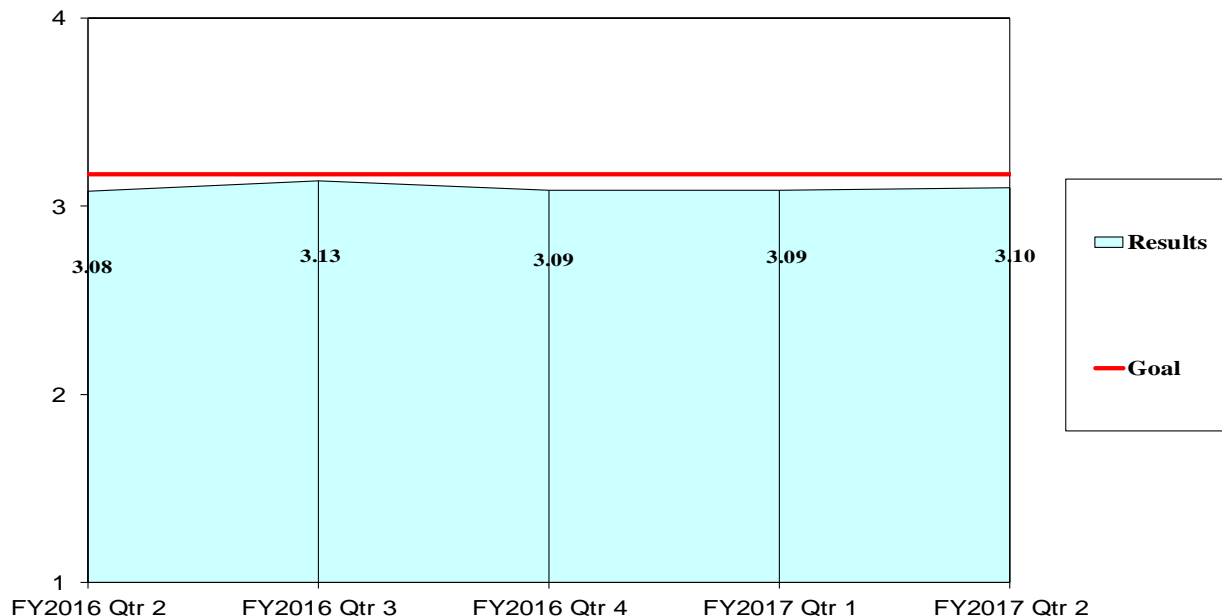
↓ indicates a statistically significant decrease from the prior quarter

SERVICE : How are we doing?



Train P.A. Announcements

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



Composite rating of:

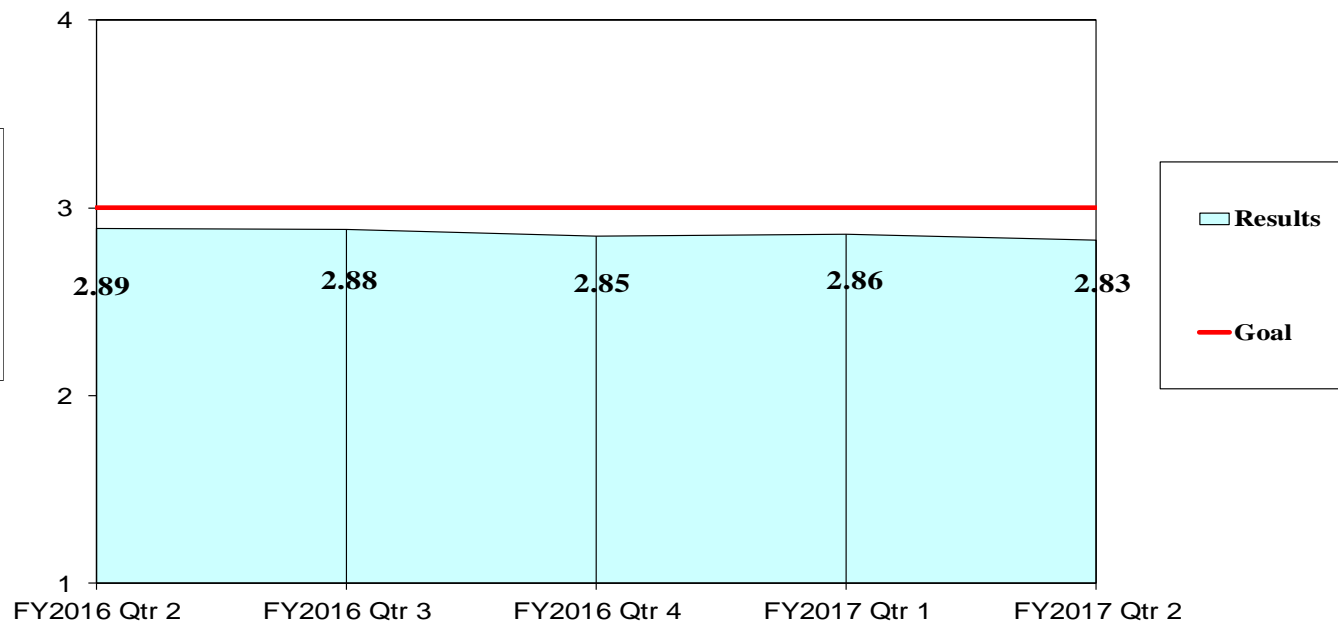
P.A. Arrival Announcements (33%)	3.07
P.A. Transfer Announcements (33%)	3.03
P.A. Destination Announcements (33%)	3.20

- ✓ Goal not met but slight improvement for all three types
- ✓ Announcement ratings of either Excellent or Good:
 - Arrivals: 77.8%
 - Transfers: 76.6%
 - Destinations: 83.7%



Train Exterior Appearance

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

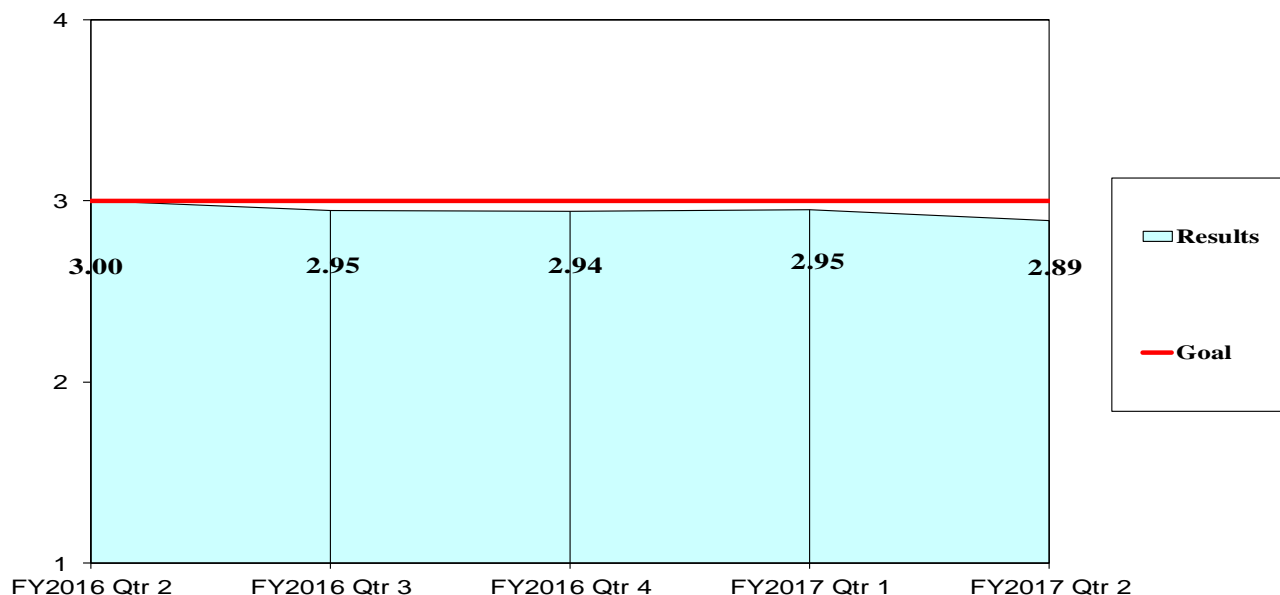


- ✓ Goal not met
- ✓ 73.0% of those surveyed ranked this category as either Excellent or Good



Train Interior Cleanliness

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



Composite rating of:	
Train interior cleanliness (60%)	2.61 ↓
Train interior kept free of graffiti (40%)	3.30 ↓

- ✓ Goal not met
- ✓ Making adjustments to better balance work program
- ✓ Train Interior ratings of either Excellent or Good:
 - Train Interior Cleanliness: 59.5%
 - Graffiti-free: 90.1%

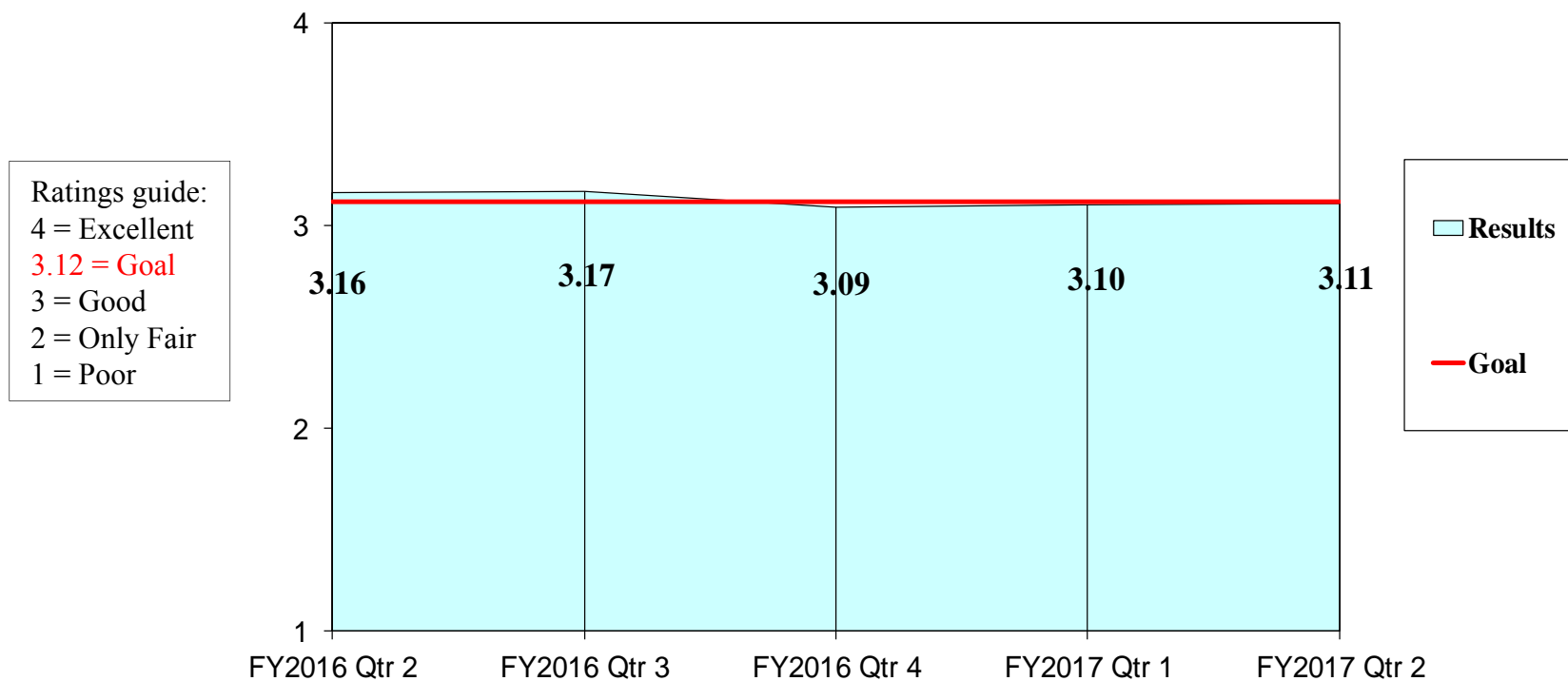
↓ indicates a statistically significant decrease from the prior quarter



SERVICE : How are we doing?



Train Temperature



Comfortable Temperature Onboard Train

- ✓ Goal not met but slight improvement
- ✓ 84.1 % of those surveyed ranked this category as either Excellent or Good

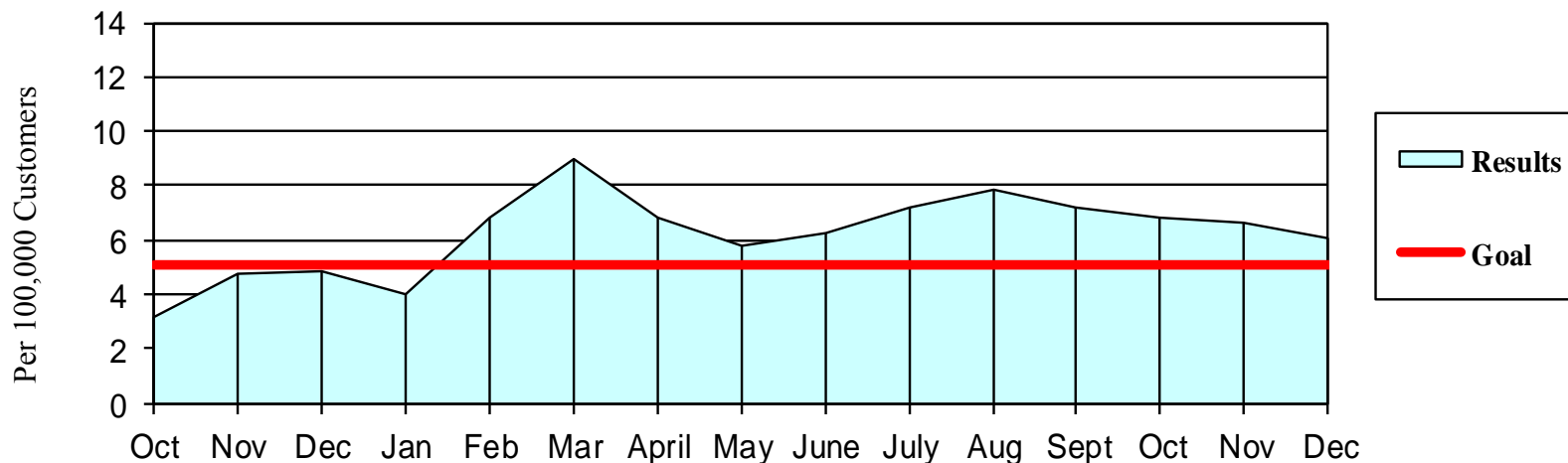


SERVICE : How are we doing?



Customer Complaints

Complaints Per 100,000 Customers



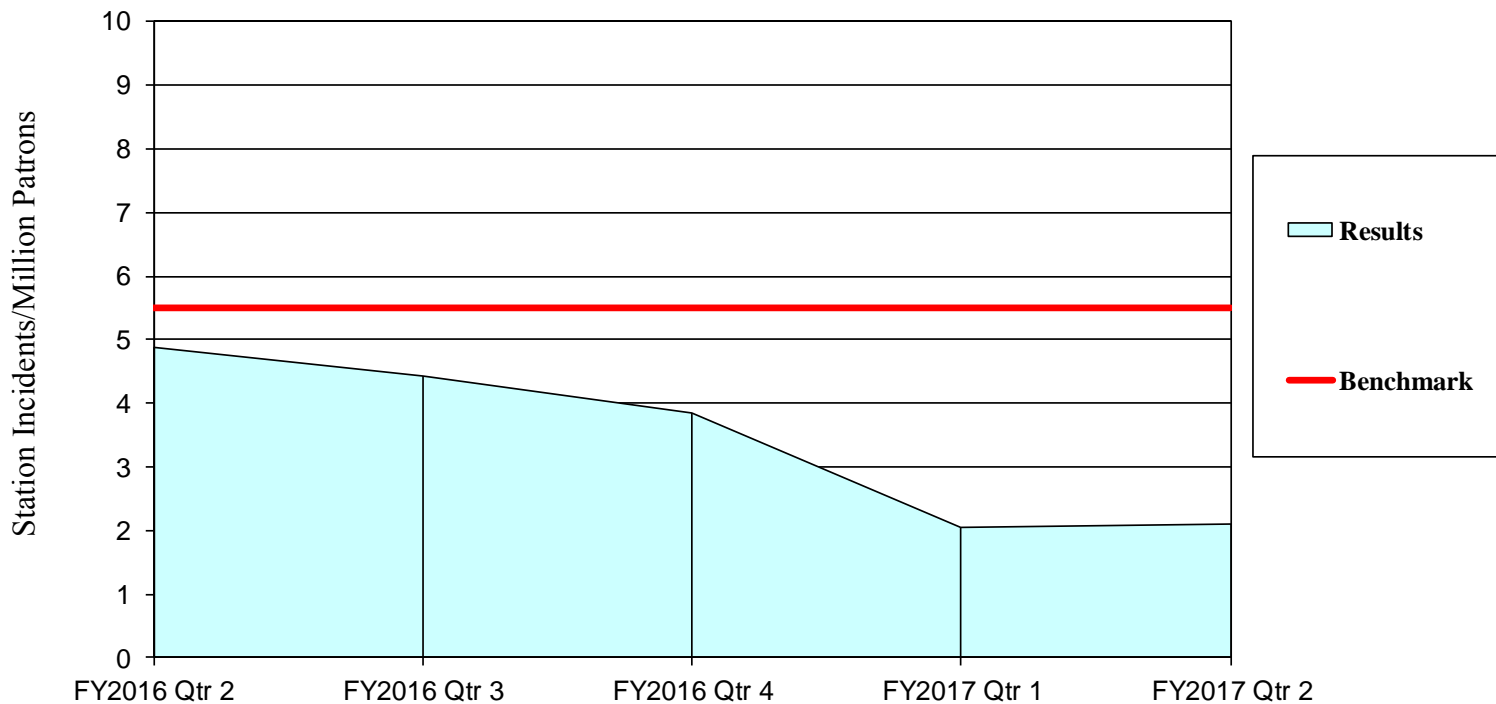
- ✓ 6.53 complaints/100,000 riders, goal 5.07/100,000 riders
- ✓ Total complaints decreased 366 (15.3%) from last quarter
- ✓ All categories improved except Announcements, Passenger Information, and Train Cleanliness.
- ✓ A new category, “Quality of Life” was instituted to capture complaints related to non-criminal matters but formerly logged under BPD.
- ✓ “Compliments” dropped to 86, down from 116



SERVICE : How are we doing?

Patron Safety:

Station Incidents per Million Patrons



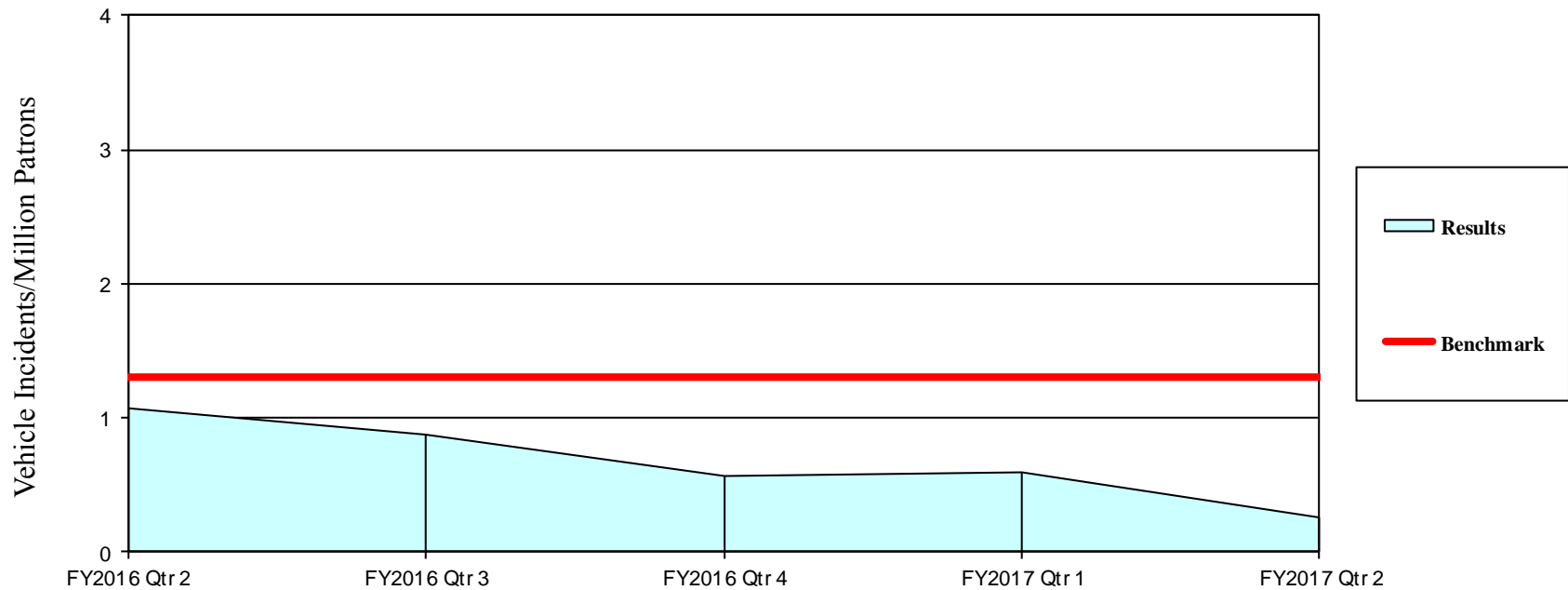
✓ Goal met



SERVICE : How are we doing?

Patron Safety

Vehicle Incidents per Million Patrons



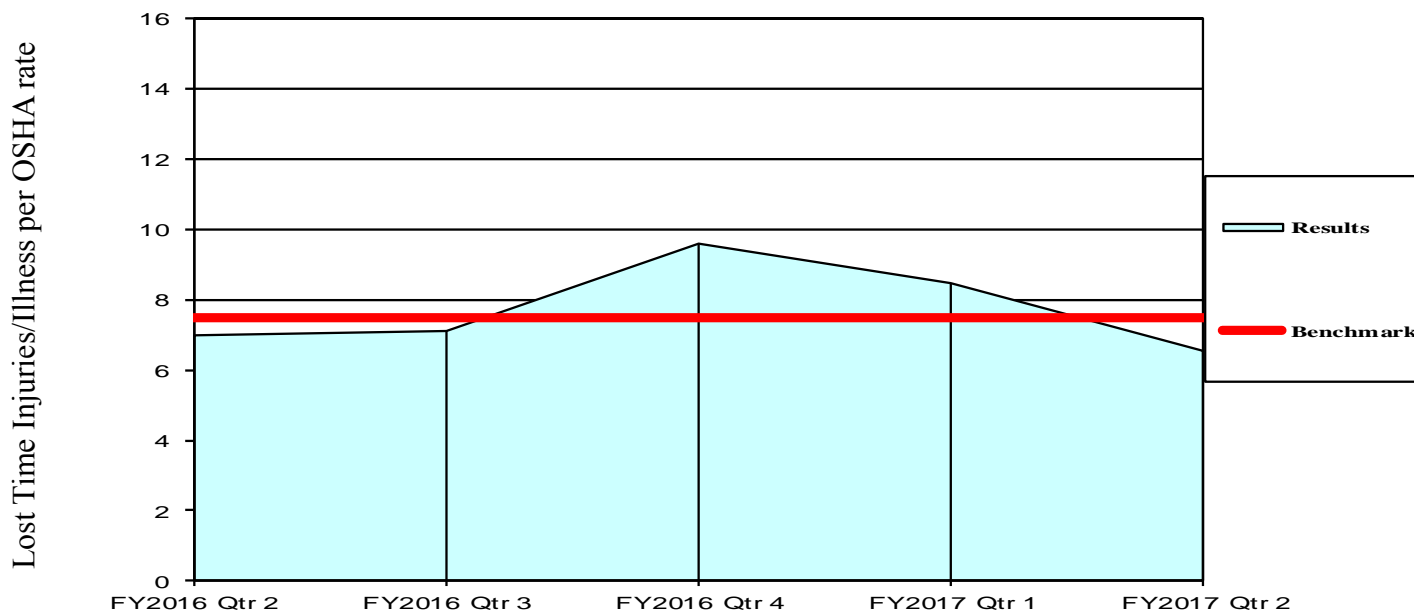
✓ Goal met



SERVICE : How are we doing?



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



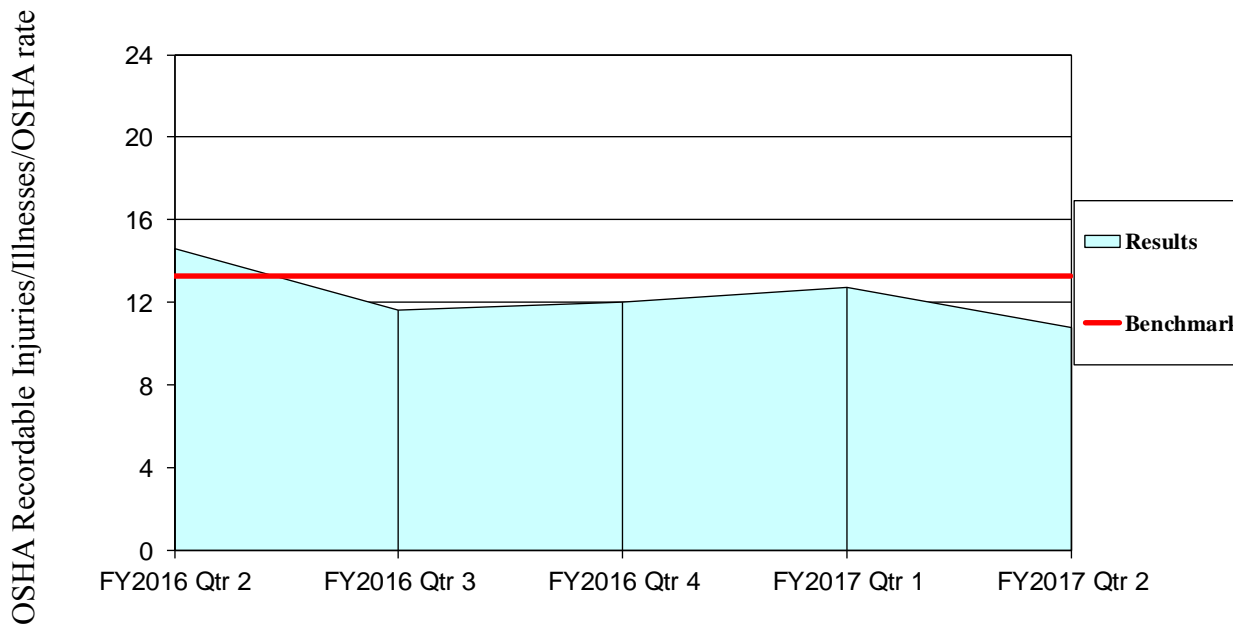
✓ Goal met



SERVICE : How are we doing?



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



✓ Goal met

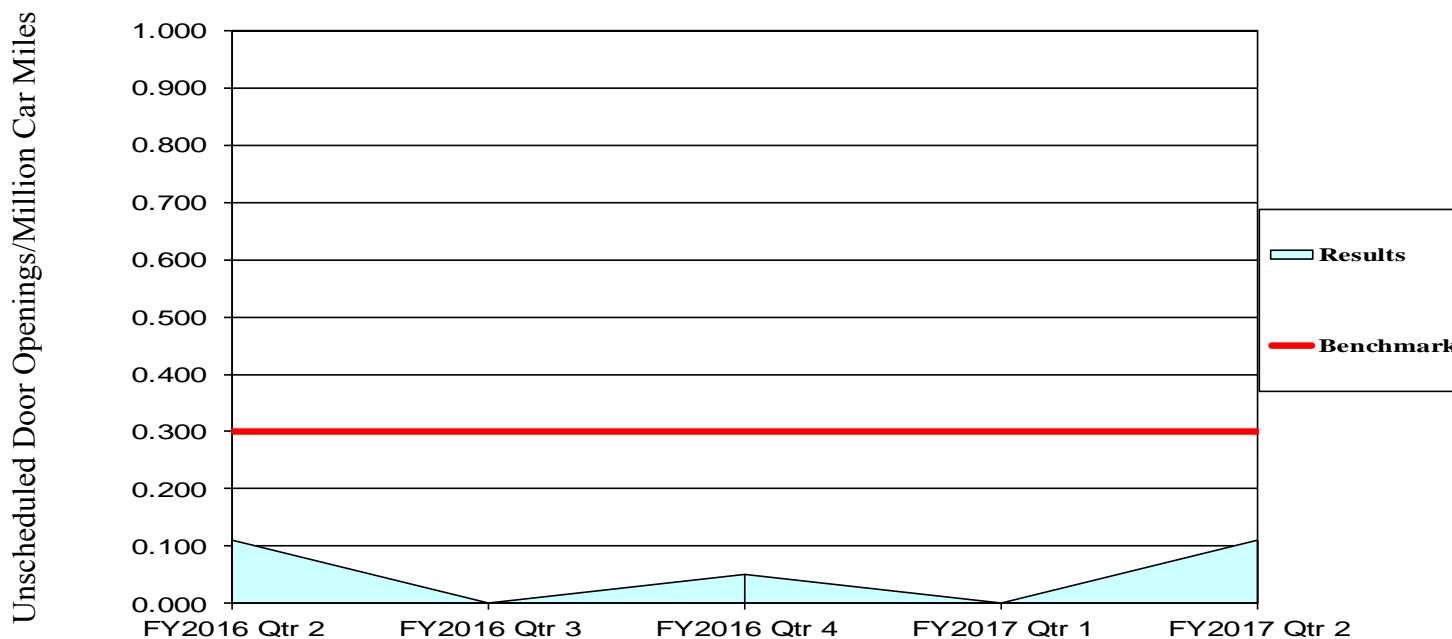


SERVICE : How are we doing?



Operating Safety:

Unscheduled Door Openings per Million Car Miles



✓ Goal met

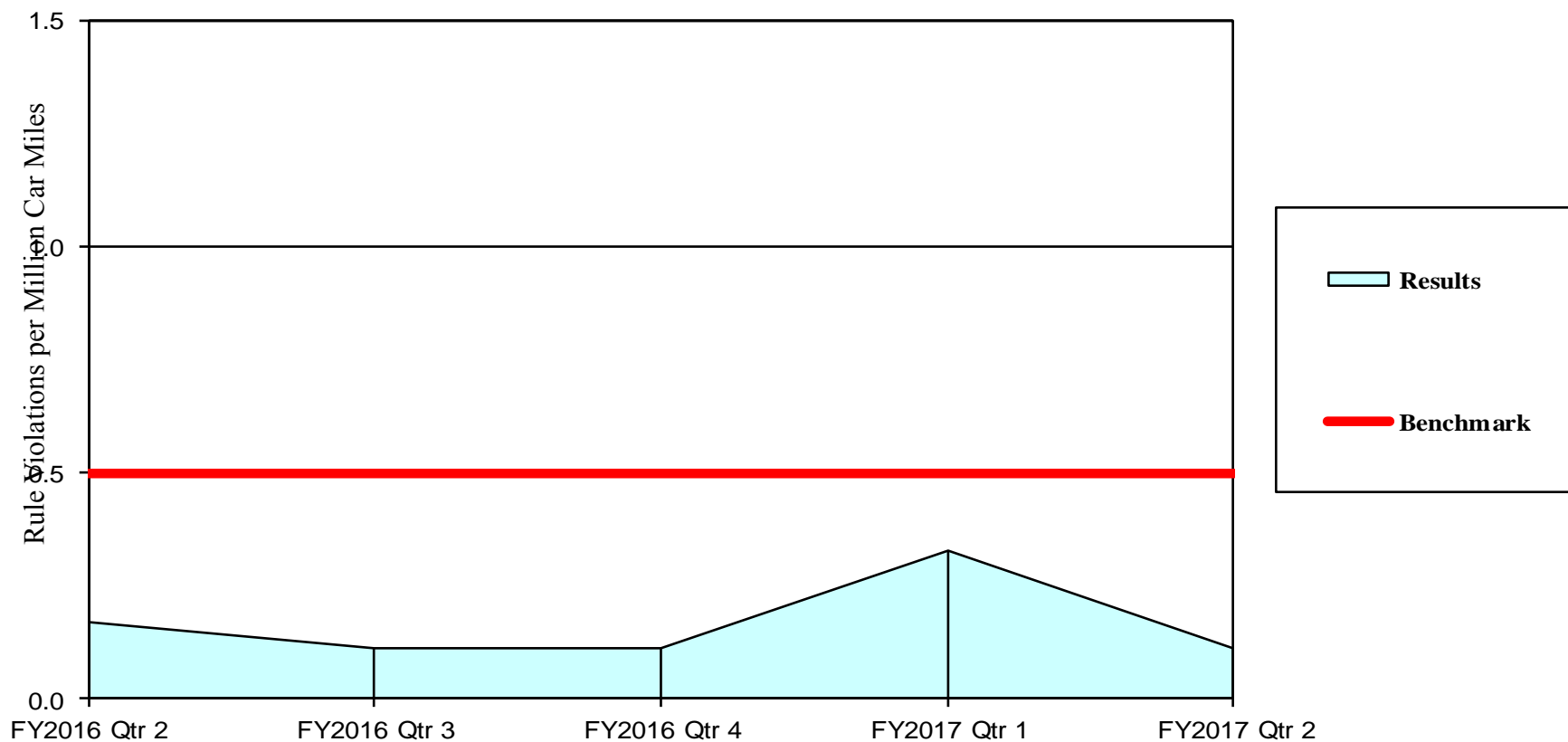


SERVICE : How are we doing?



Operating Safety:

Rule Violations per Million Car Miles



✓ Goal met



SERVICE : How are we doing?



BART Police Presence

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

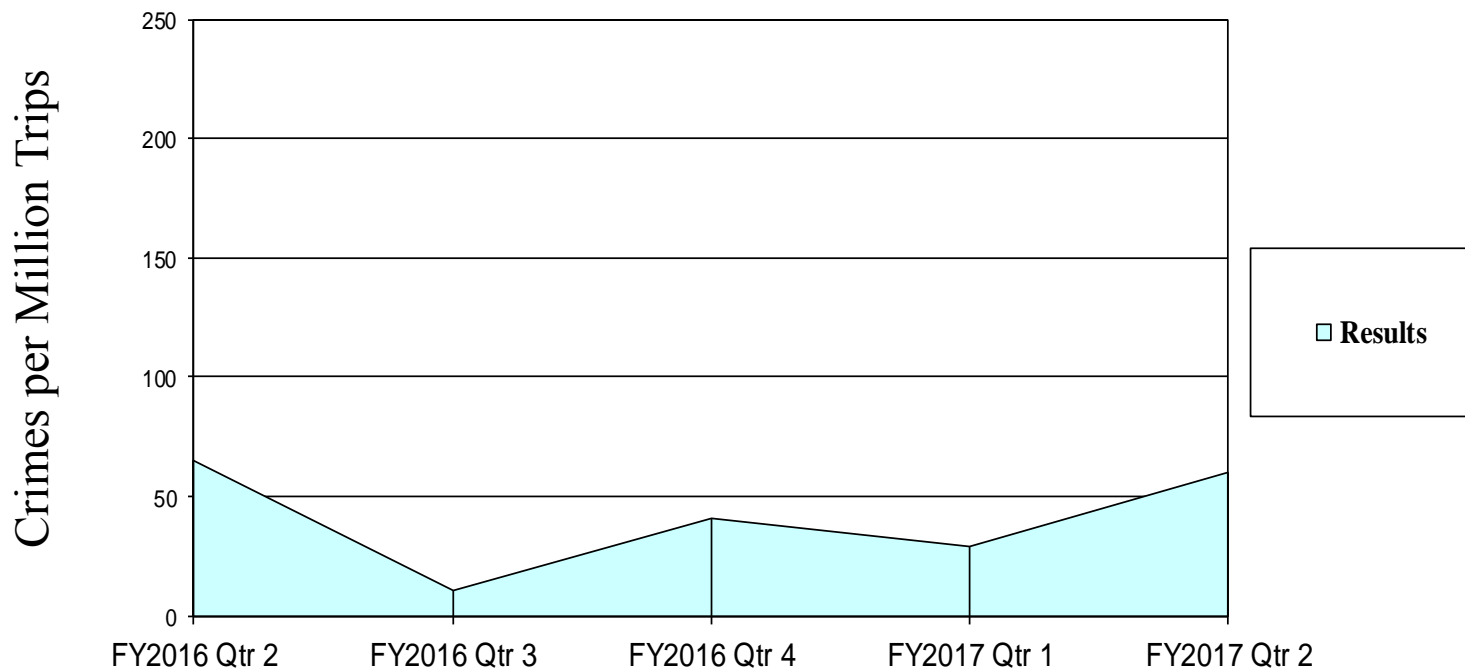
- Did you see BART Police on the Train? (Yes, No, Don't Know)
- Did you see BART Police Outside the Station? (Yes, No, Don't Know)
- Did you see BART Police in the Station? (Yes, No, Don't Know)

Overall Police Presence is also reported as are results for after 7:00 PM. Goals will be set after approximately a year of using the new measures.

BART Police Presence		Avg. 10.9%
Rider saw Police on train	5.6%	
Rider saw Police outside the station	16.3%	
Rider saw Police in the station	11.1%	
Rider saw Police on train after 7:00PM	4.8%	
Rider saw Police outside the station after 7:00PM	16.0%	
Rider Saw Police in the station after 7:00PM	11.4%	



Quality of Life*

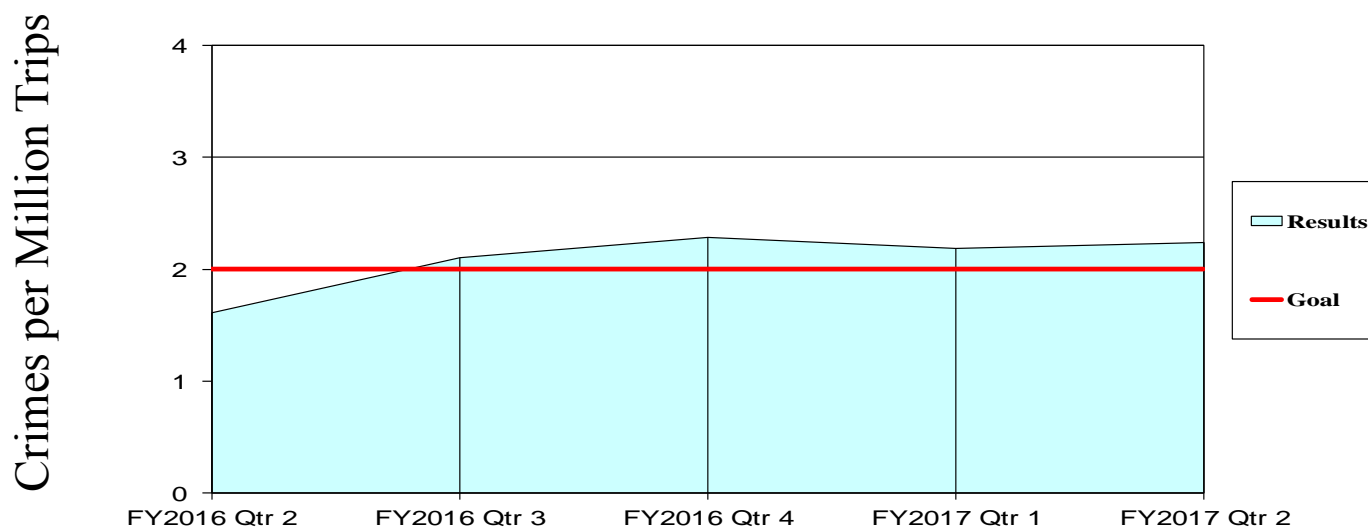


- ✓ Quality of Life incidents are up from the last quarter and down from the corresponding quarter of the prior fiscal year.

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



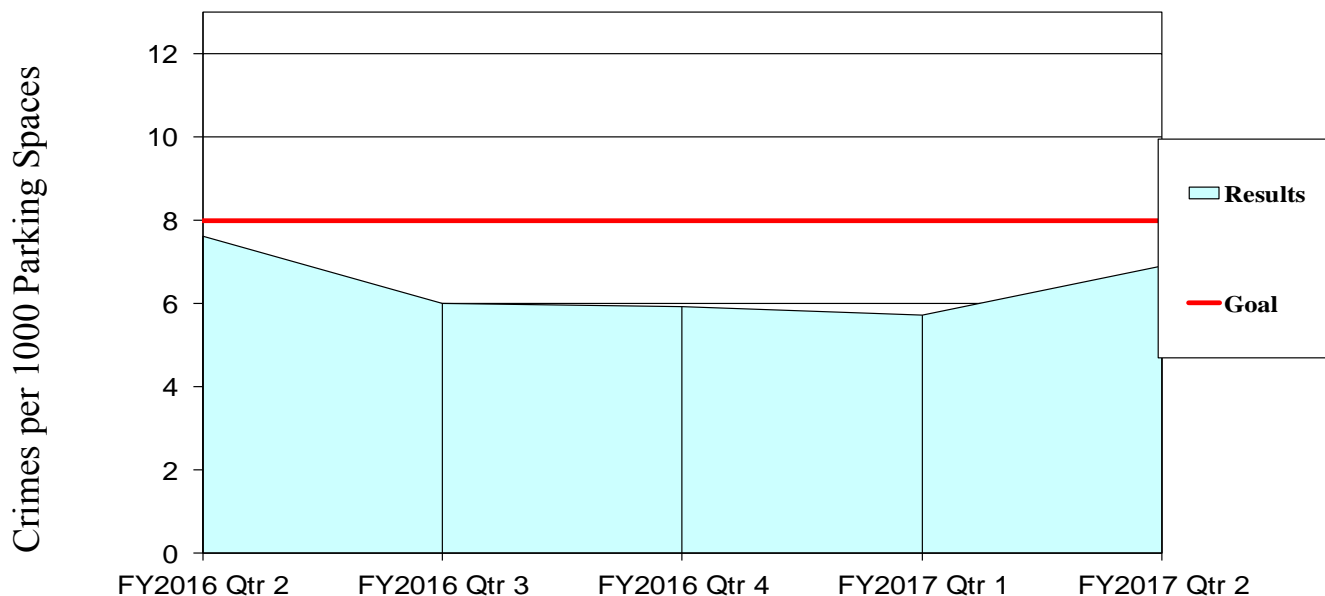
Crimes Against Persons (Homicide, Rape, Robbery, and Aggravated Assault)



- ✓ 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



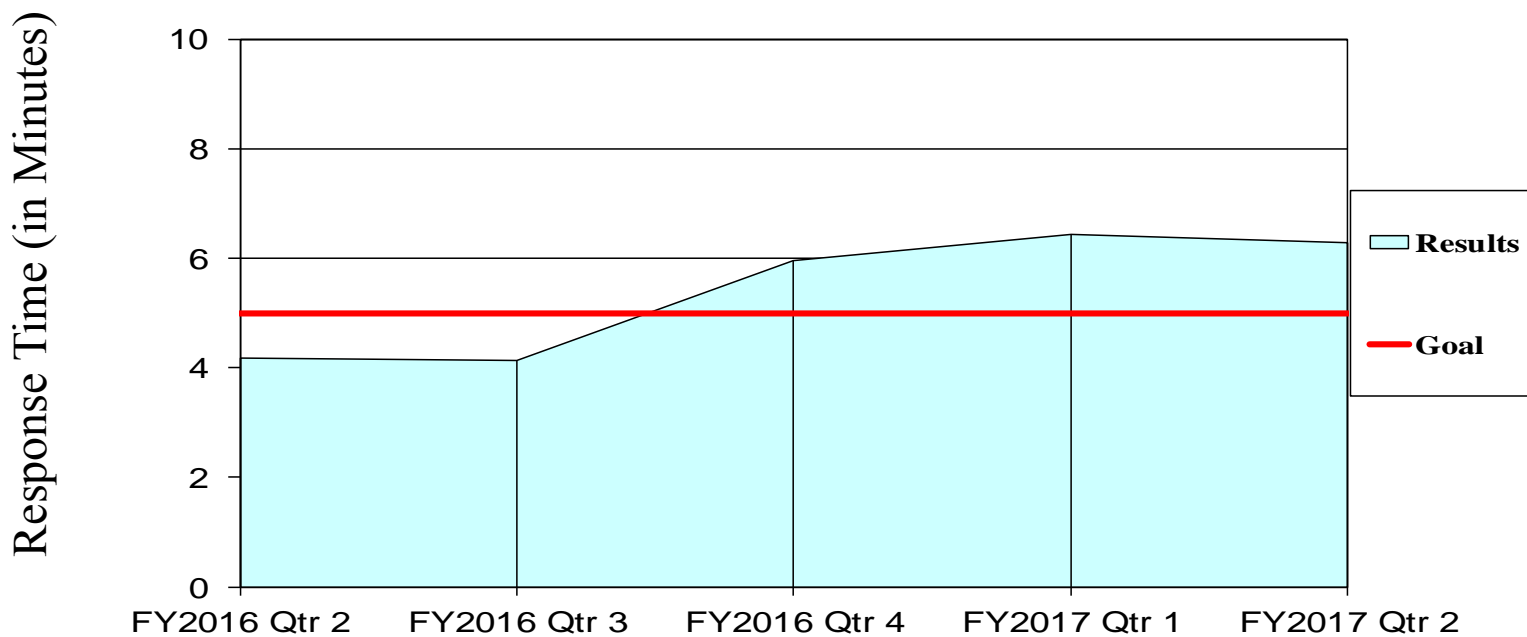
- ✓ Goal met
- ✓ The number of incidents per thousand parking spaces are up from last quarter and down from the corresponding quarter from the prior fiscal year.



SERVICE : How are we doing?



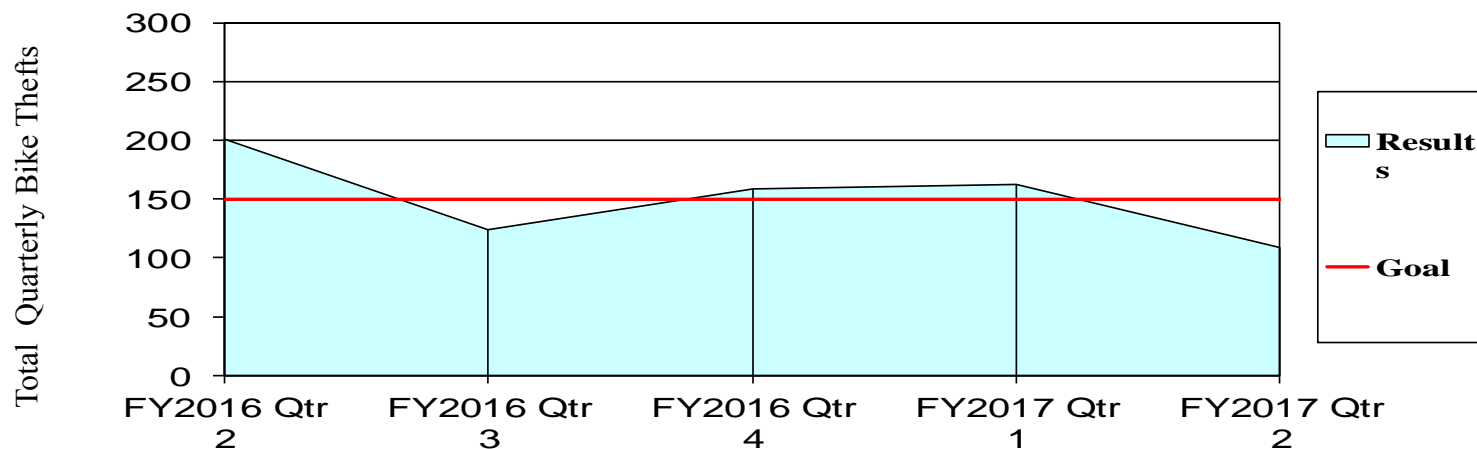
Average Emergency Response Time



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



Bike Theft



- ✓ Goal met
- ✓ 109 bike thefts for current quarter, down 54 from last quarter and down 92 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.