

Quarterly Service Performance Review

First Quarter, FY 2018

July - September, 2017

Operations & Safety Committee
December 7, 2017

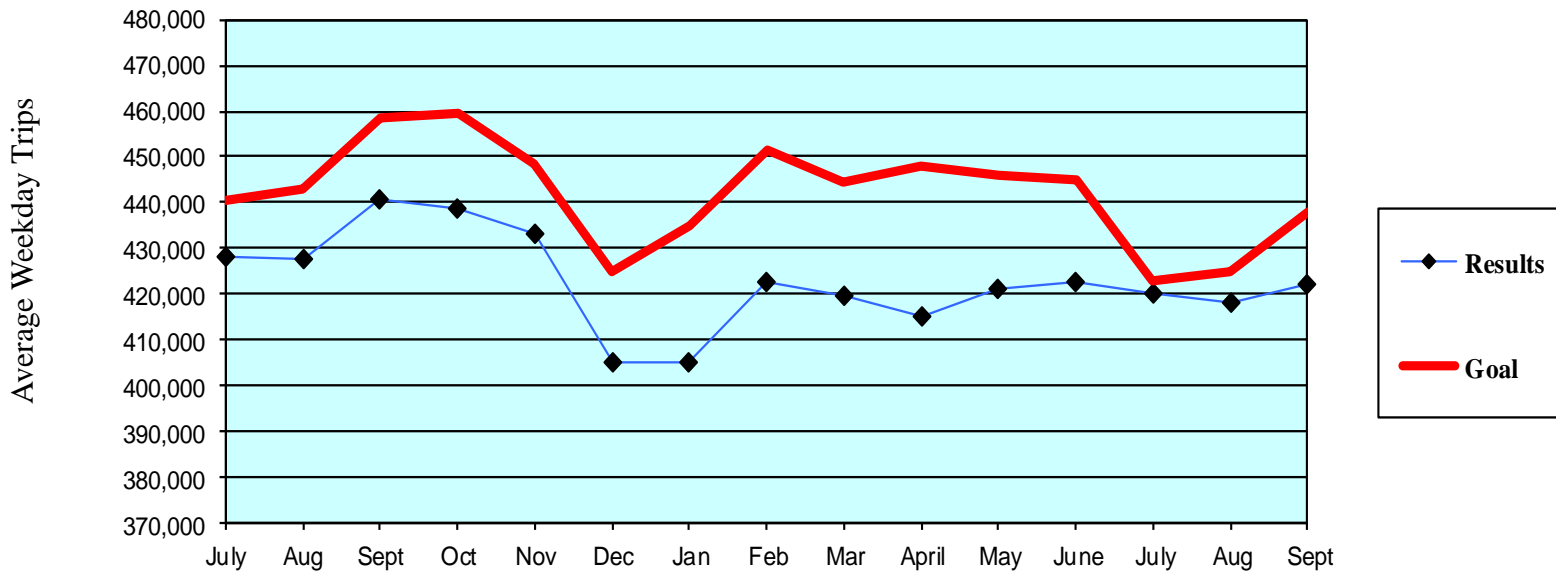
PERFORMANCE INDICATORS updated 10/31/17	SUMMARY CHART 1st QUARTER FY 2018									
	CURRENT QUARTER				PRIOR QTR ACTUALS		YEAR TO DATE			
	ACTUAL	STANDARD	STATUS		LAST QUARTER	THIS QTR LAST YEAR	ACTUAL	STANDARD	STATUS	
Average Ridership - Weekday Customers on Time	419,978	428,268	NOT MET		419,794	432,002	419,978	428,268	NOT MET	
Peak Daily	86.95%	95.00%	NOT MET		83.46%	90.00%	86.95%	95.00%	NOT MET	
Daily	90.04%	95.00%	NOT MET		87.66%	91.97%	90.04%	95.00%	NOT MET	
Trains on Time										
Peak Daily	79.68%	N/A	N/A		73.79%	85.84%	79.68%	N/A	N/A	
Daily	83.14%	92.00%	NOT MET		79.72%	88.24%	83.14%	92.00%	NOT MET	
Peak Period Transbay Car Throughput										
AM Peak	96.68%	97.50%	NOT MET		95.56%	98.71%	96.68%	97.50%	NOT MET	
PM Peak	95.38%	97.50%	NOT MET		96.15%	99.72%	95.38%	97.50%	NOT MET	
Car Availability at 4 AM (0400)	575	595	NOT MET		573	596	575	595	NOT MET	
Mean Time Between Service Delays	3,810	4,000	NOT MET		4,723	5,179	3,810	4,000	NOT MET	
Elevators in Service										
Station	98.10%	98.00%	MET		98.57%	98.50%	98.10%	98.00%	MET	
Garage	96.40%	98.00%	NOT MET		96.60%	97.60%	96.40%	98.00%	NOT MET	
Escalators in Service										
Street	92.10%	95.00%	NOT MET		87.80%	91.40%	92.10%	95.00%	NOT MET	
Platform	96.50%	96.00%	MET		94.73%	96.67%	96.50%	96.00%	MET	
Automatic Fare Collection										
Gates	99.51%	99.00%	MET		99.21%	99.12%	99.51%	99.00%	MET	
Vendors	95.79%	95.00%	MET		95.55%	95.92%	95.79%	95.00%	MET	
Wayside Train Control System	2.00	1.00	NOT MET		1.55	1.08	2.00	1.00	NOT MET	
Computer Control System	0.06	0.08	MET		0.080	0.029	0.063	0.08	MET	
Traction Power	0.12	0.20	MET		0.13	0.12	0.16	0.20	MET	
Track	0.13	0.30	MET		1.48	0.88	0.13	0.30	MET	
Transportation	0.69	0.50	NOT MET		0.52	0.43	0.69	0.50	NOT MET	
Environment Outside Stations	2.62	2.80	NOT MET		2.76	2.71	2.62	2.80	NOT MET	
Environment Inside Stations	2.52	3.00	NOT MET		2.62	2.66	2.52	3.00	NOT MET	
Station Vandalism	2.90	3.19	NOT MET		2.95	2.97	2.90	3.19	NOT MET	
Station Services	2.86	3.06	NOT MET		2.91	2.92	2.86	3.06	NOT MET	
Train P.A. Announcements	3.06	3.17	NOT MET		3.09	3.09	3.06	3.17	NOT MET	
Train Exterior Appearance	2.78	3.00	NOT MET		2.79	2.86	2.78	3.00	NOT MET	
Train Interior Appearance	2.85	3.00	NOT MET		2.85	2.95	2.85	3.00	NOT MET	
Train Temperature	3.06	3.12	NOT MET		3.11	3.10	3.06	3.12	NOT MET	
Customer Complaints										
Complaints per 100,000 Passenger Trips	7.74	5.07	NOT MET		8.89	7.41	7.74	5.07	NOT MET	
Safety										
Station Incidents/Million Patrons	1.56	5.50	MET		1.64	2.05	1.56	5.50	MET	
Vehicle Incidents/Million Patrons	0.62	1.30	MET		0.35	0.59	0.62	1.30	MET	
Lost Time Injuries/Illnesses/Per OSHA	7.24	7.50	MET		7.25	8.48	7.24	7.50	MET	
OSHA-Recordable Injuries/Illnesses/Per OSHA	12.99	13.30	MET		10.12	12.72	12.99	13.30	MET	
Unscheduled Door Openings/Million Car Miles	0.050	0.300	MET		0.100	0.000	0.050	0.300	MET	
Rule Violations Summary/Million Car Miles	0.150	0.500	MET		0.460	0.330	0.150	0.500	MET	
Police										
BART Police Presence	11%	N/A	N/A		10%	N/A	11%	N/A	N/A	
Quality of Life per million riders	99.45	N/A	N/A		112.98	29.08	99.45	N/A	N/A	
Crimes Against Persons per million riders	3.15	2.00	NOT MET		3.28	2.18	3.15	2.00	NOT MET	
Auto Burglaries per 1,000 parking spaces	6.26	8.00	MET		4.64	3.64	6.26	8.00	MET	
Auto Thefts per 1,000 parking spaces	2.04	6.00	MET		2.56	2.08	2.04	6.00	MET	
Police Response Time per Emergency Incident (Minutes)	5.30	5.00	NOT MET		4.24	6.43	5.30	5.00	NOT MET	
Bike Thefts (Quarterly Total and YTD Quarterly Average)	125	150.00	MET		129	163	125	150.00	MET	

LEGEND: Goal met Goal not met but within 5% Goal not met by more than 5%

FY18 First Quarter Overview

- ✓ Ridership down 2-3%, 2.4% below budget
- ✓ Train service reliability improved again, focus area for Ops and BPD
- ✓ Equipment Reliability: Traction Power, Track, and Computer Control System met; Train Control and Cars not met
- ✓ Equipment Availability: Platform Escalators, Fare Gates, Ticket Machines, and Station Elevators met; Street Escalators, Garage Elevators and Cars not met
- ✓ Passenger Environment: Train Interior Cleanliness improved very slightly, the other 7 train or station customer ratings were down including several substantial drops (Station Interior/Exterior Cleanliness)
- ✓ Complaints decreased 13.7%

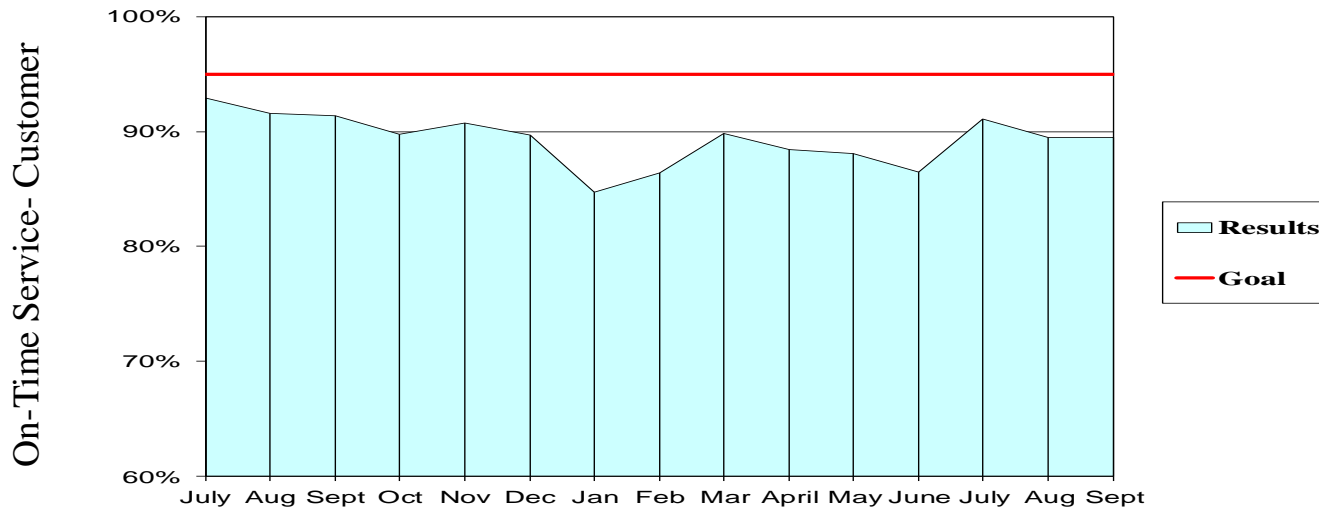
Customer Ridership



- ✓ Total ridership 2.4% below budget
- ✓ Average weekday ridership (419,978) down by 2.8% from same quarter last year
- ✓ Core weekday ridership down by 2.7% from same quarter last year
- ✓ SFO Extension weekday ridership down by 3.6% from same quarter last year
- ✓ Average peak ridership down by 1.5% compared to same quarter last year
- ✓ Saturday and Sunday down by 2.2% and 3.1%, respectively, from same quarter last year



On-Time Service - Customer



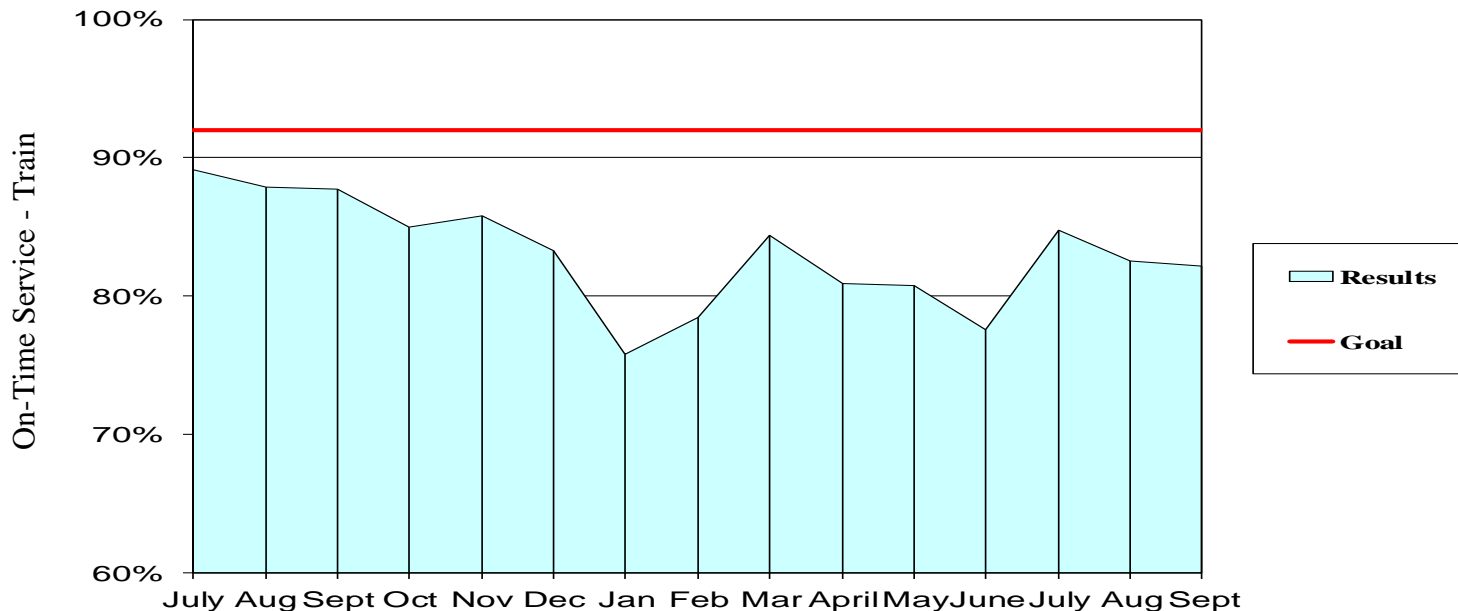
- ✓ 90.04%, up 2.4% from prior quarter, below goal
- ✓ Delay events causing the most late trains:

1	3-Jul-17	Balboa Park	Object Struck MUX Equipment(Cable Tray Damaged/Loss of Power)(0442-EOR)	Object on Track	407
2	28-Aug-17	D.C. I-Lock	False Occupancy (Crank Installed)(0405-2200)	Wayside Equip	175
3	24-Aug-17	Bay Fair	Person Under Train(1440-1911)	Misc/People	107
4	1-Sep-17	Systemwide	Weather (Heat)(1332-1900)	Weather	104
5	30-Aug-17	Powell	BPD Hold (Suspicious Package)(1340-1825)	BPD	75
6	27-Sep-17	Coliseum	Animal On Trackway (0749-1006)	Object on Track	75
7	21-Aug-17	Dublin I-lock	Speed Code (L18-L20)(0420-2240)	Wayside Equip	70
8	14-Aug-17	Rich. Yd.	MUX(False Occupancy & Routing Issues)(0714-1509)	Wayside Equip	68
9	21-Aug-17	16th Street	Aux. Electric (Inverter)(Would Not Move in ATO)(1704-1909)	Vehicle*	68
10	22-Sep-17	W & M-Lines	PG&E Power Outage(34.5 VAC Power Loss)(1723-2035)	PG&E	67

*Pending further investigation



On-Time Service - Train



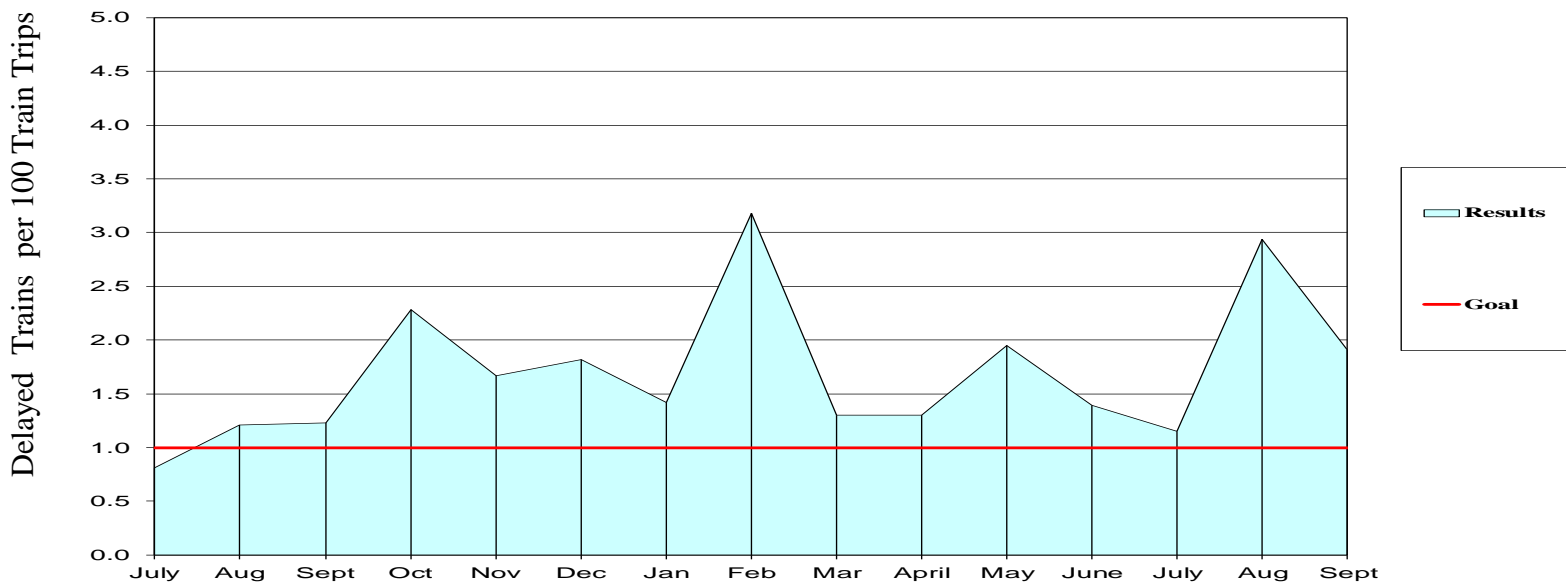
- ✓ 83.1%, up 3.4% from prior quarter, goal not met
- ✓ 43.1% of late trains were late due to multiple small delays, each under 5 minutes
- ✓ Categorization of late trains due to a known delay event of 5 minutes or greater:

1. POLICE ACTIONS	17.4% of delayed trains
2. TRAIN CONTROL	16.9% of delayed trains
3. OBJECT ON TRACKWAY	10.5% of delayed trains
4. RAIL CAR	9.0% of delayed trains
5. MULTIPLE CAUSE	8.2% of delayed trains



Wayside Train Control System

Includes False Occupancy & Routing, Delays Per 100 Train Runs

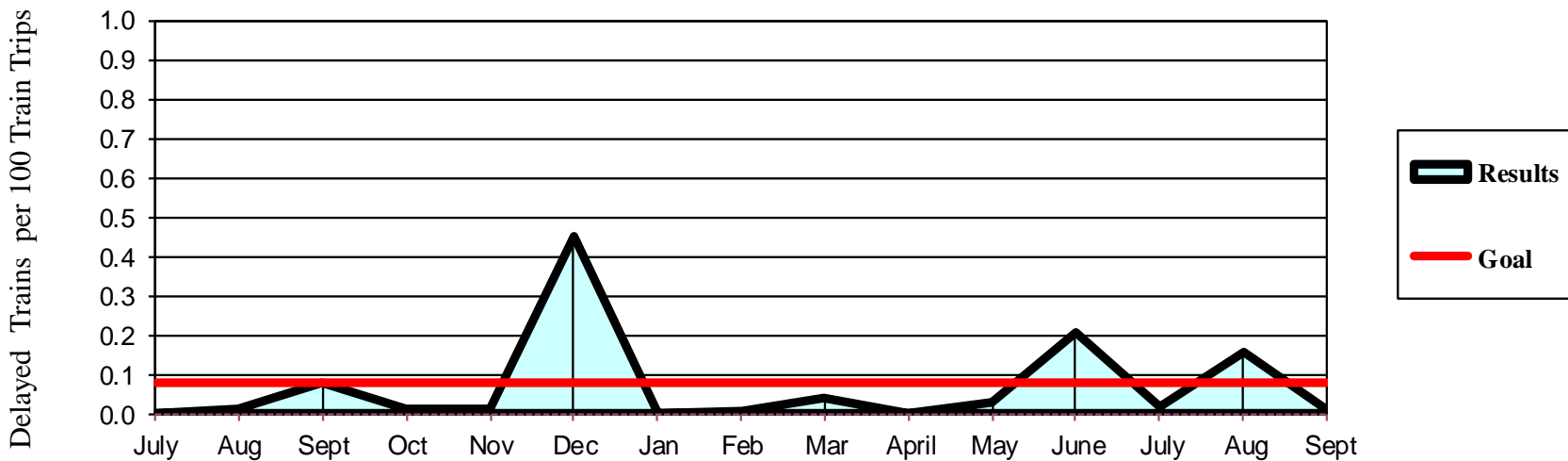


- ✓ Goal not met – Actual 2.0 / Goal 1.00
- ✓ Restructured staffing to focus on Preventative Maintenance
- ✓ PM group increased from 16 to 34 FTE, increasing PM completeness and accuracy
- ✓ Updating PM procedures to increase effectiveness and ensure compliance
- ✓ Installed 40+ TX Loops and RX Coils in core system to increase reliability
- ✓ Added 3 new TC engineers to maintenance group to focus on tough problems



Computer Control System

Includes ICS computer & SORS, Delays per 100 train runs

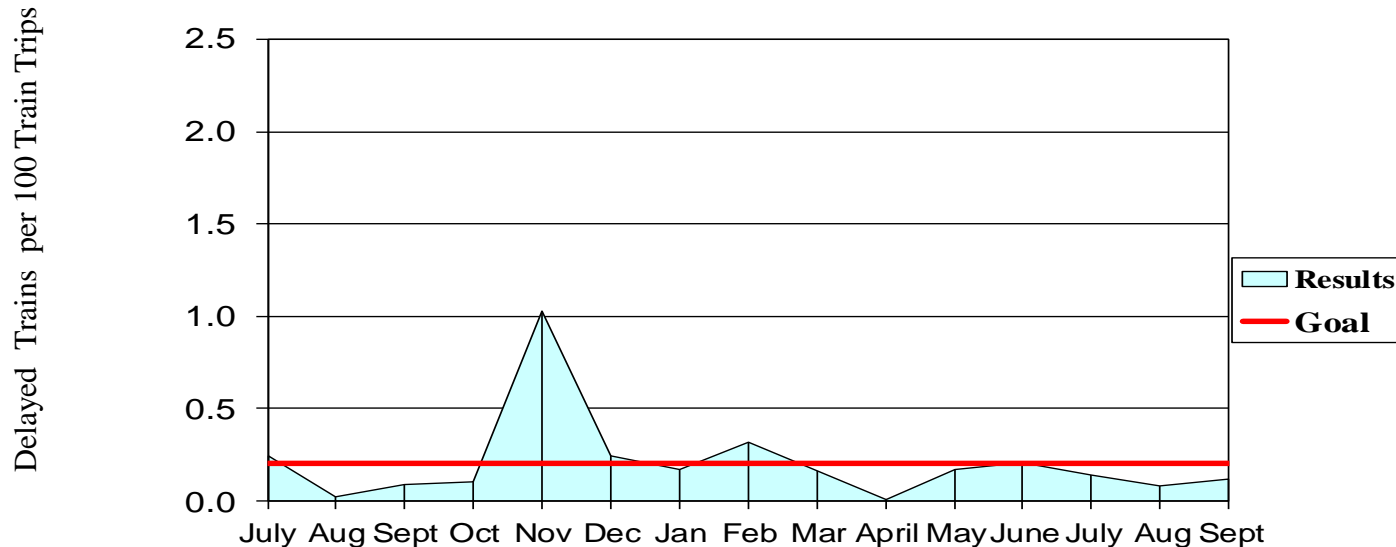


✓ Goal met



Traction Power

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

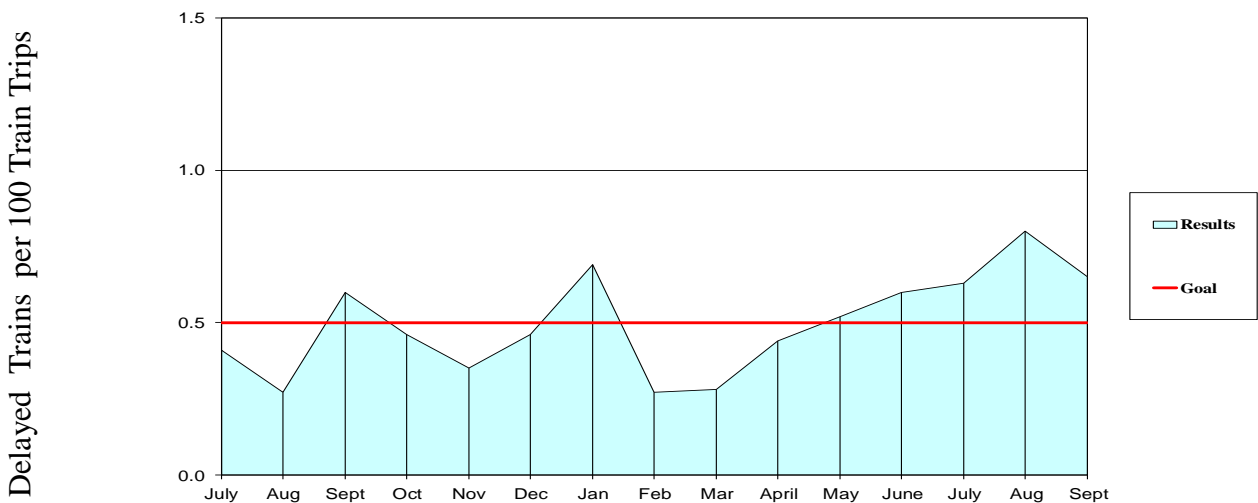


- ✓ Goal Met
- ✓ Replaced 640' of 3rd rail and coverboard on lower A-Line to reduce coverboard caused delays.



Transportation

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

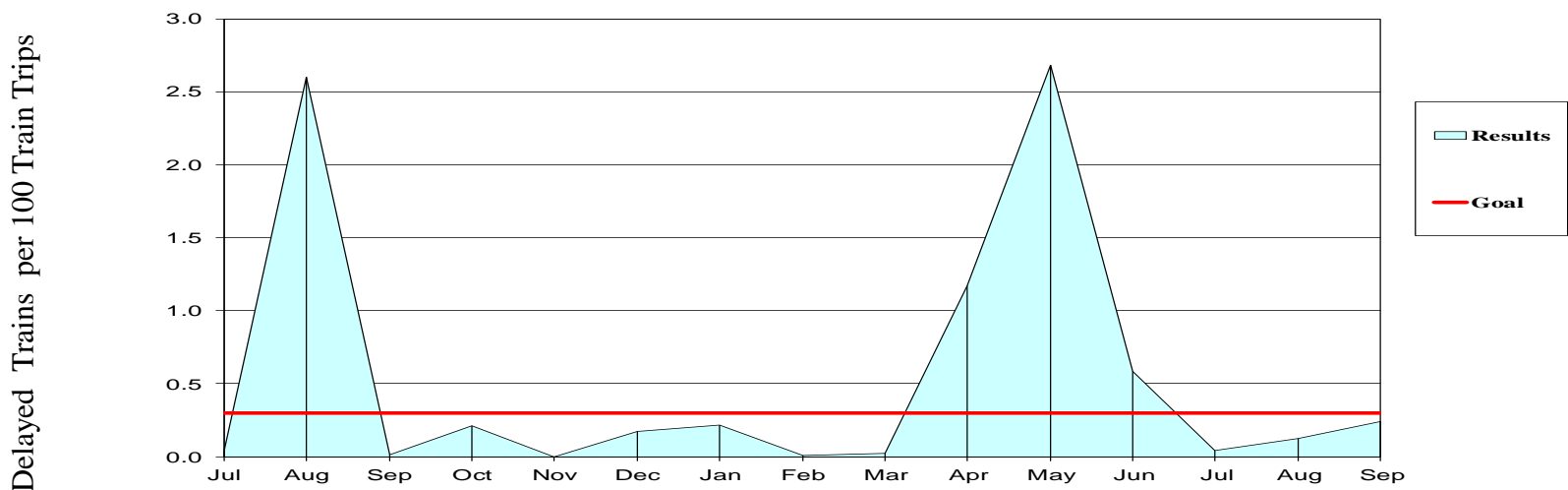


- ✓ Goal not met – Actual .69 / Goal .5
- ✓ T.O. staffing affected by increased training for FOTF and testing commitments for SVBX.
- ✓ Slight upward trend in procedural errors being addressed.



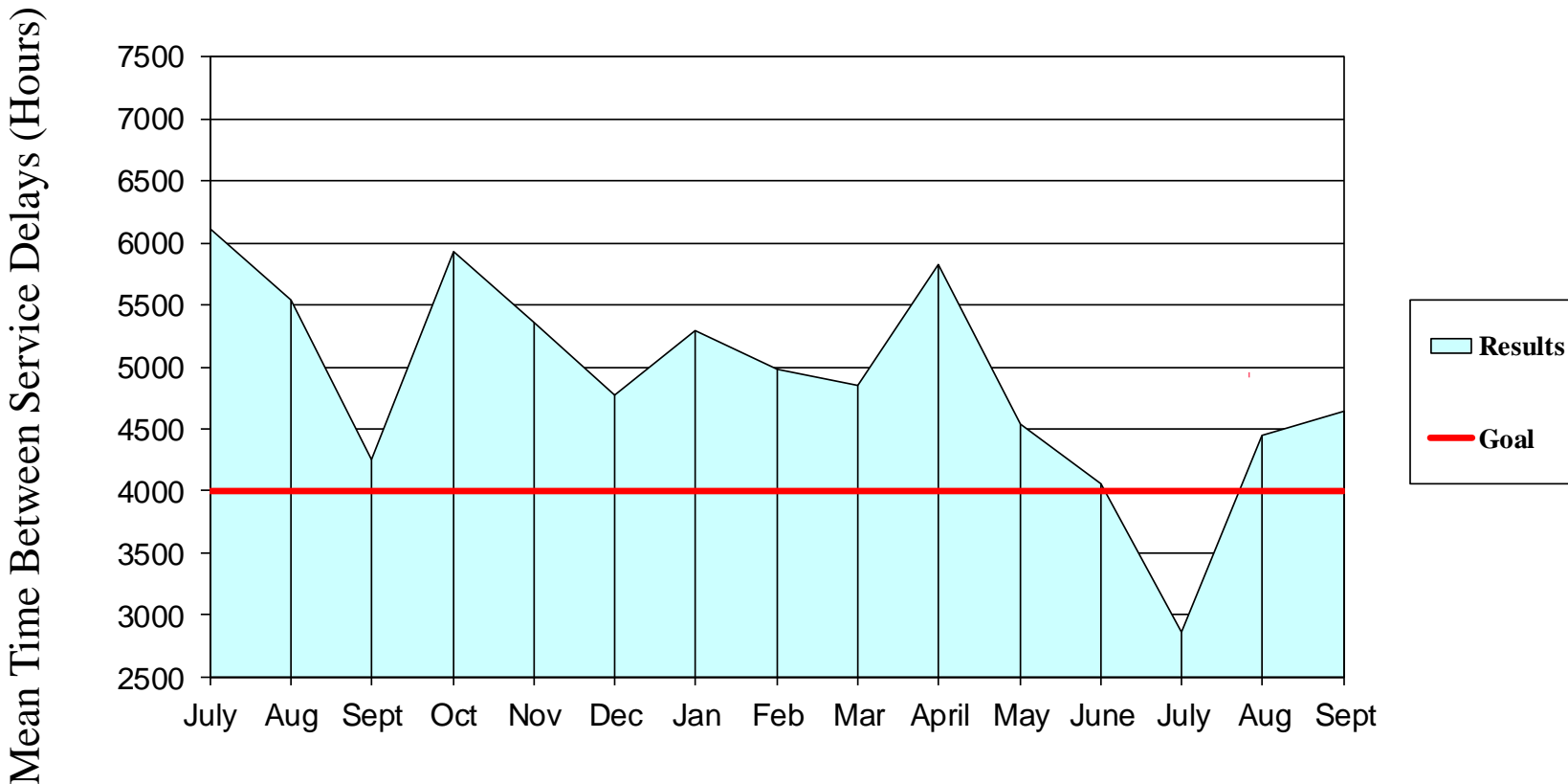
Track

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



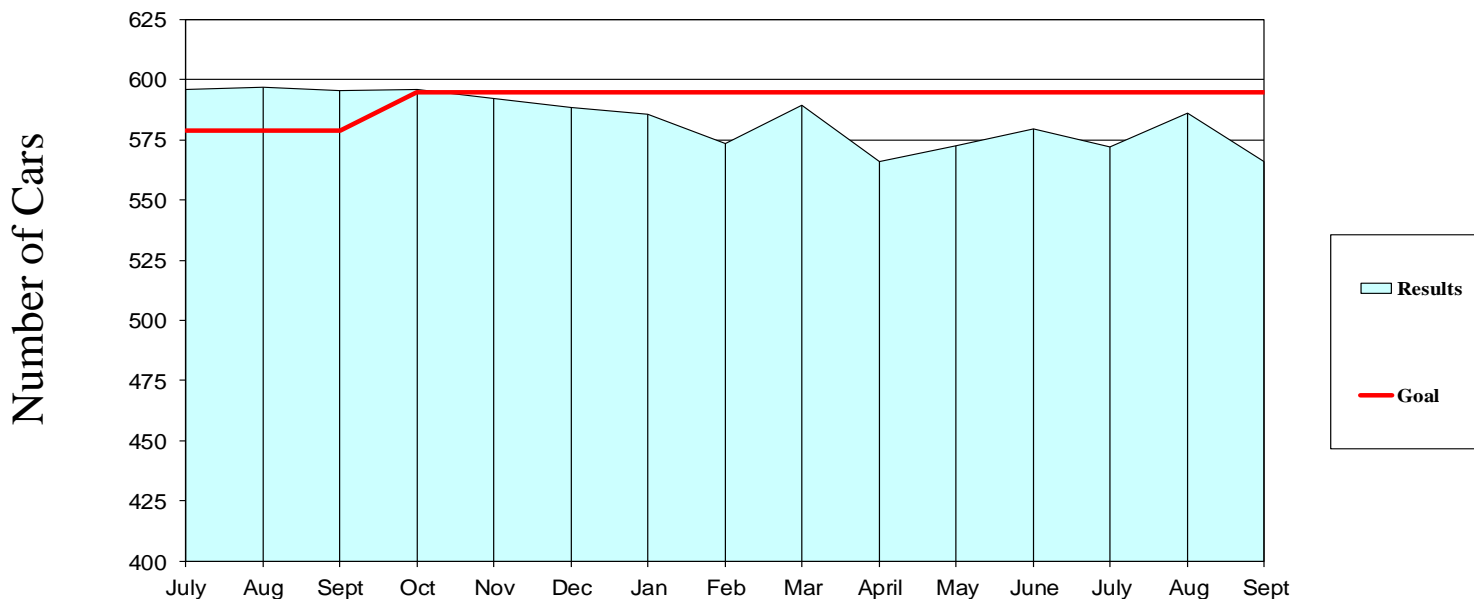
✓ Goal met

Car Equipment - Reliability



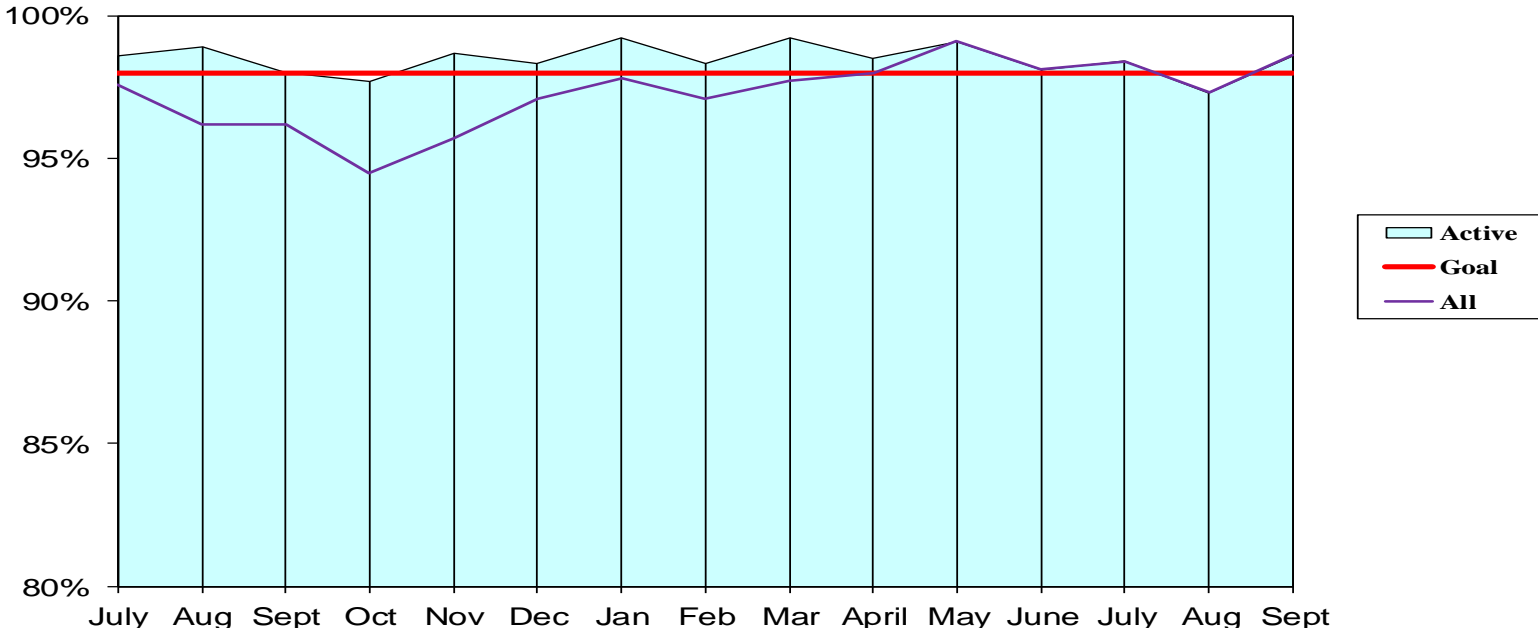
- ✓ Goal not met – MTBSD 3,810 hours / Goal 4,000 hours
- ✓ Continuing root cause failure analysis by Vehicle Engineering, selective component replacement / mods and procedural improvements
- ✓ Turnover of key personnel (Supt, Shop Engineers, and Vehicle Trouble Desk)
- ✓ Managing transition to FOTF

Car Equipment – Availability @ 0400 hours



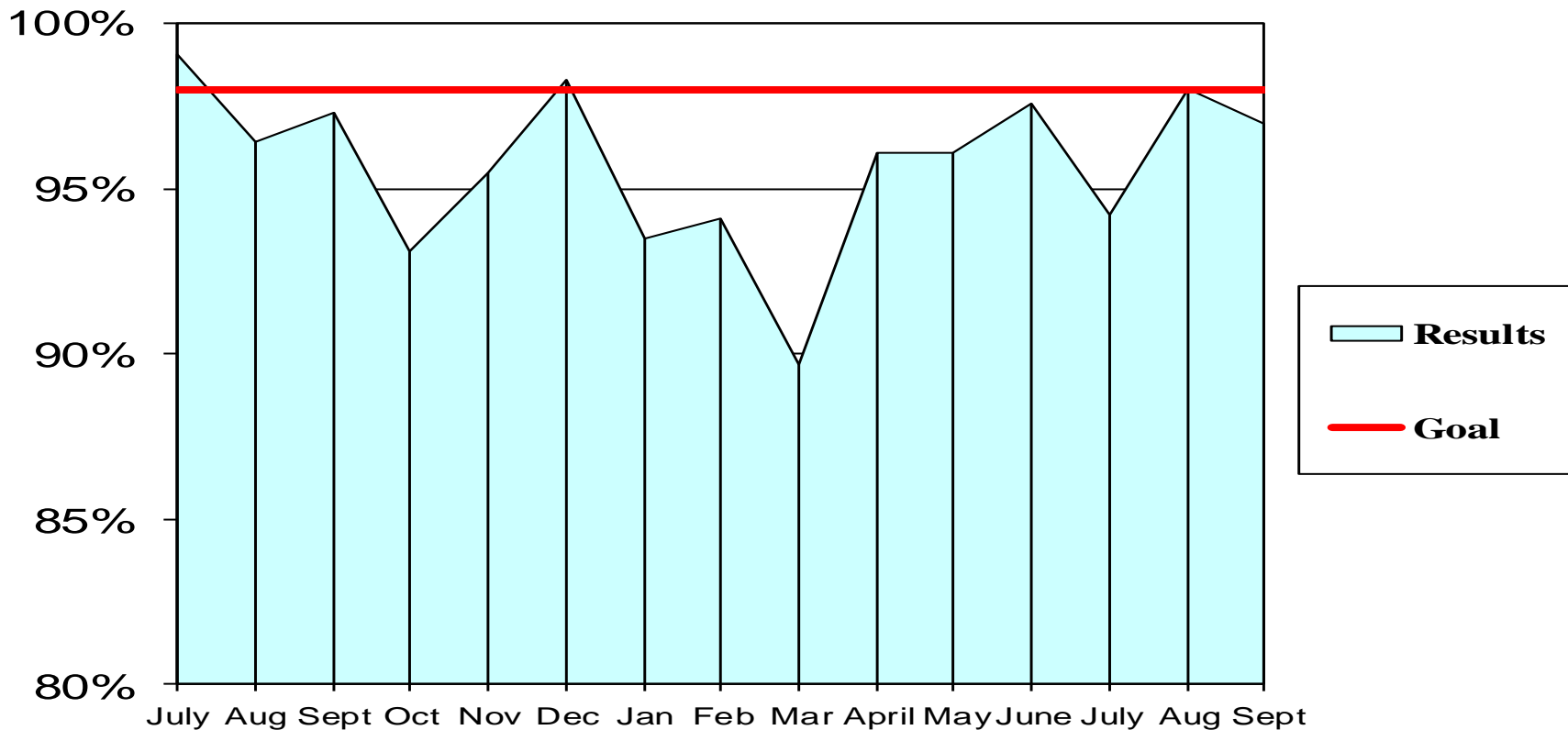
- ✓ Goal not met – 575 Actual vs. 595 Required
- ✓ With a very aggressive availability target (89%), availability impacted by small perturbations; in this case Hayward Shop construction and periods of hot weather.

Elevator Availability - Stations



✓ 98% goal exceeded

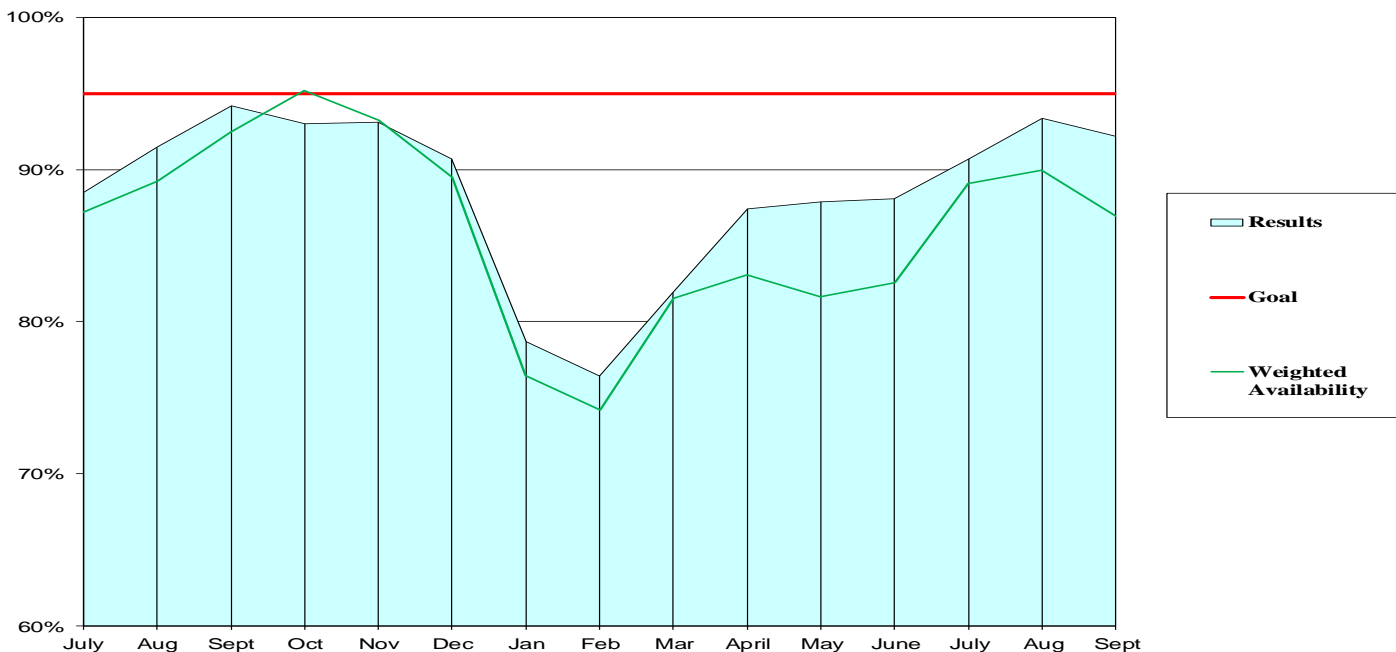
Elevator Availability - Garage



- ✓ 98% goal, actual 96.4%
- ✓ Controller failures and vandalism (broken glass) negatively impacted results



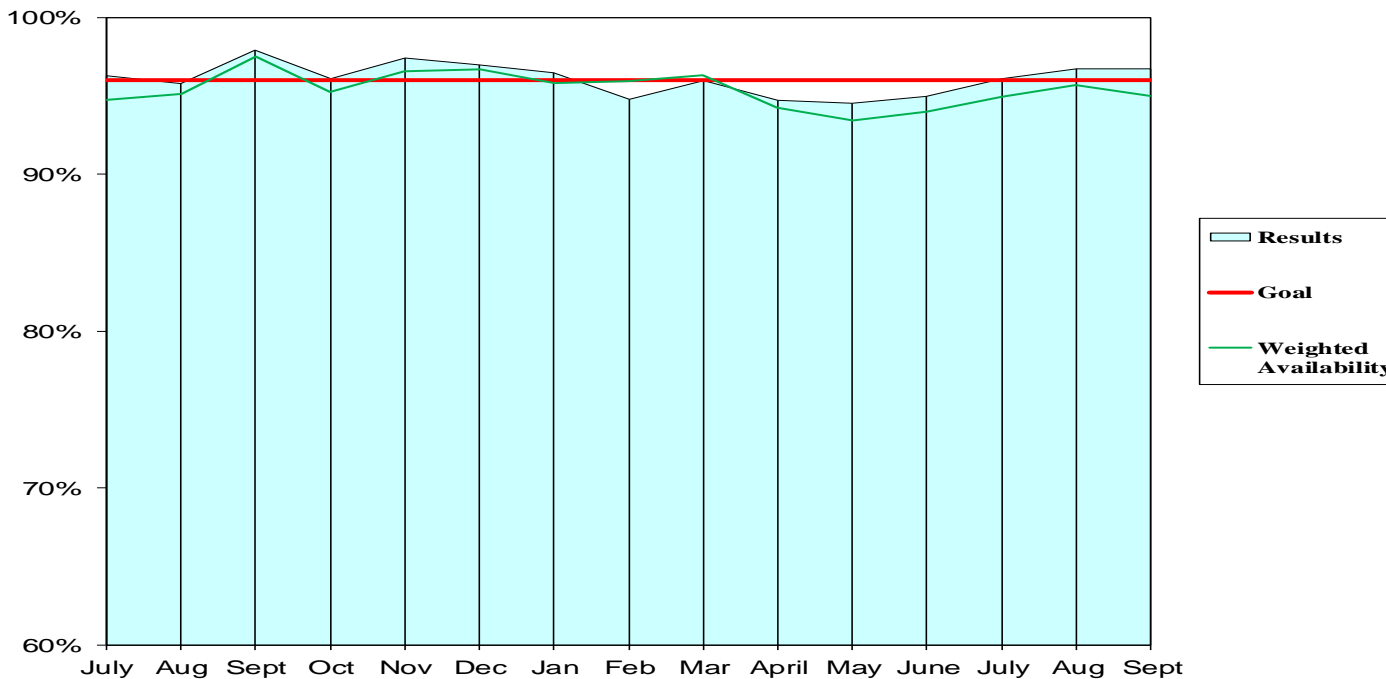
Escalator Availability - Street



- ✓ 95% goal, 92% actual
- ✓ Substantial improvement
- ✓ Four extensive heavy repairs, 3 of the 4 were due to O&K Bull-Gears



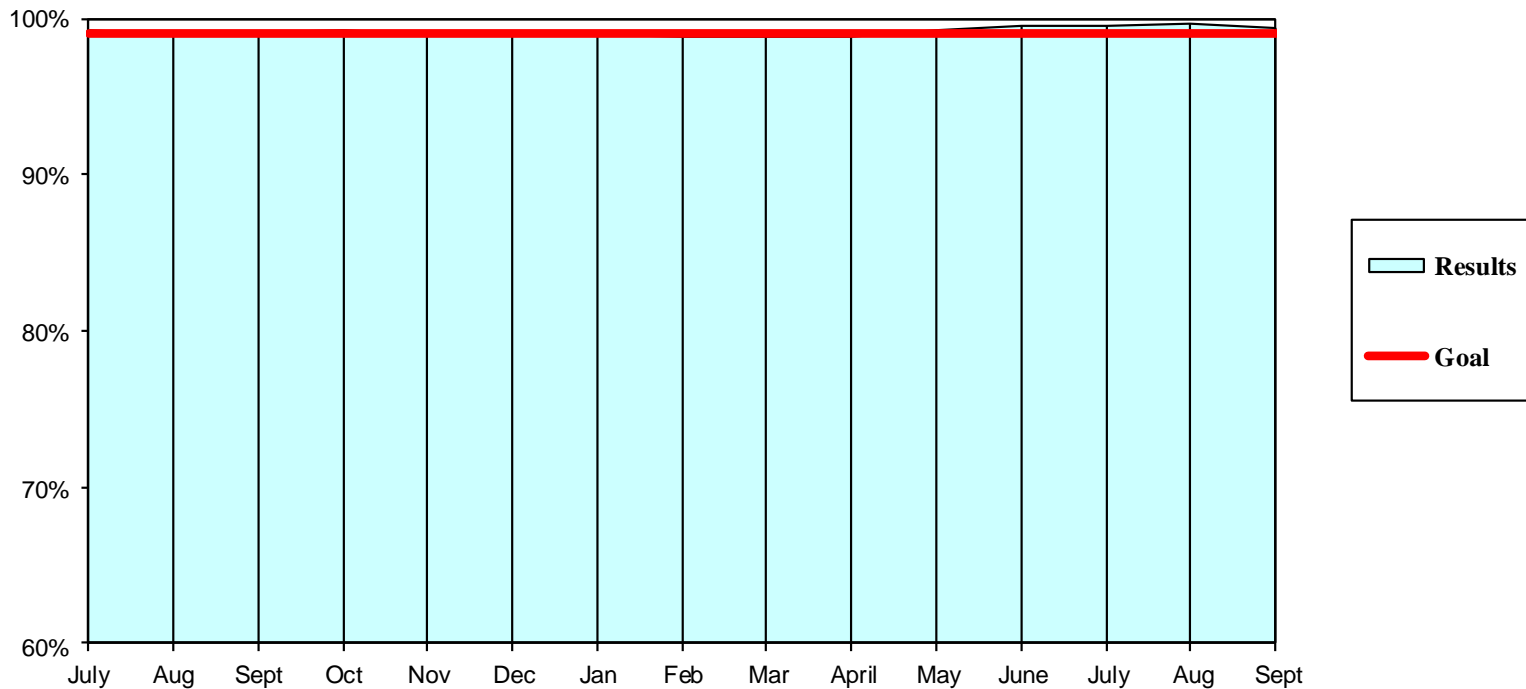
Escalator Availability - Platform



- ✓ Goal met, improved performance
- ✓ Long term Civic Center outage, should be back in service by 11/30/17



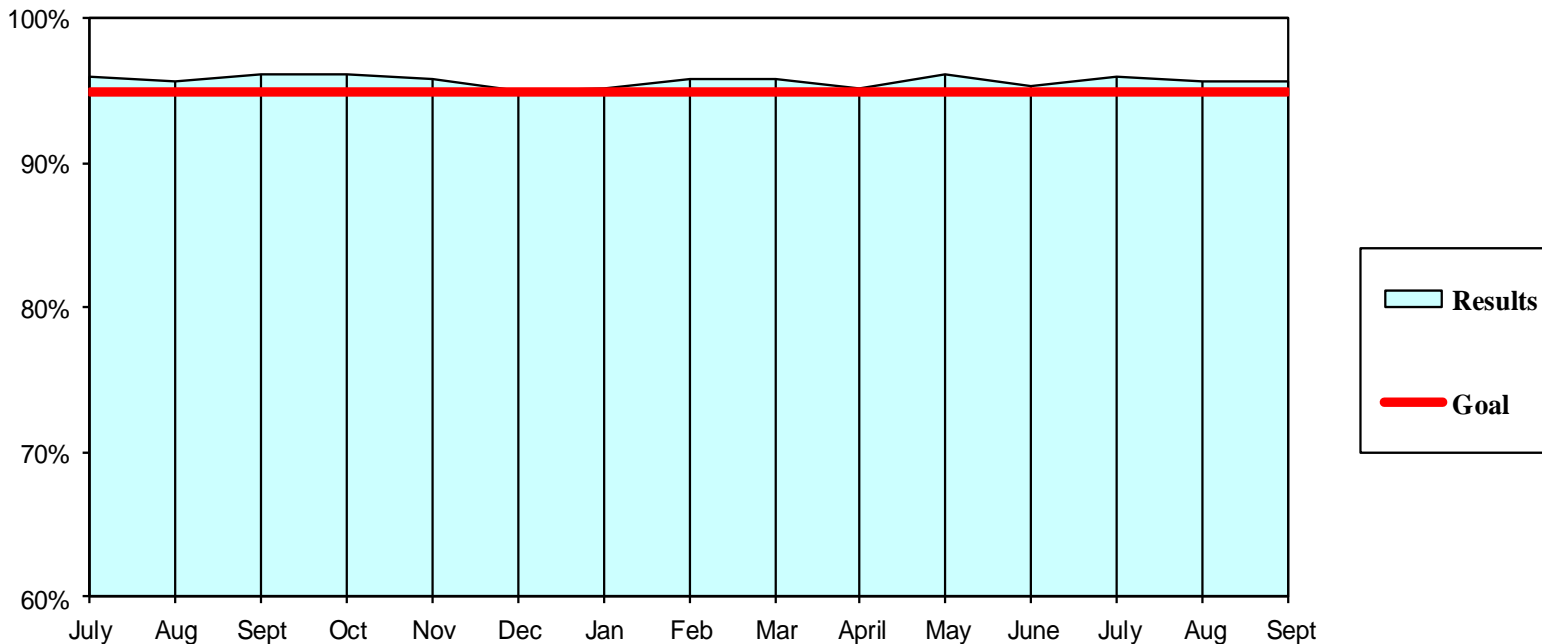
AFC Gate Availability



✓ 99% goal exceeded



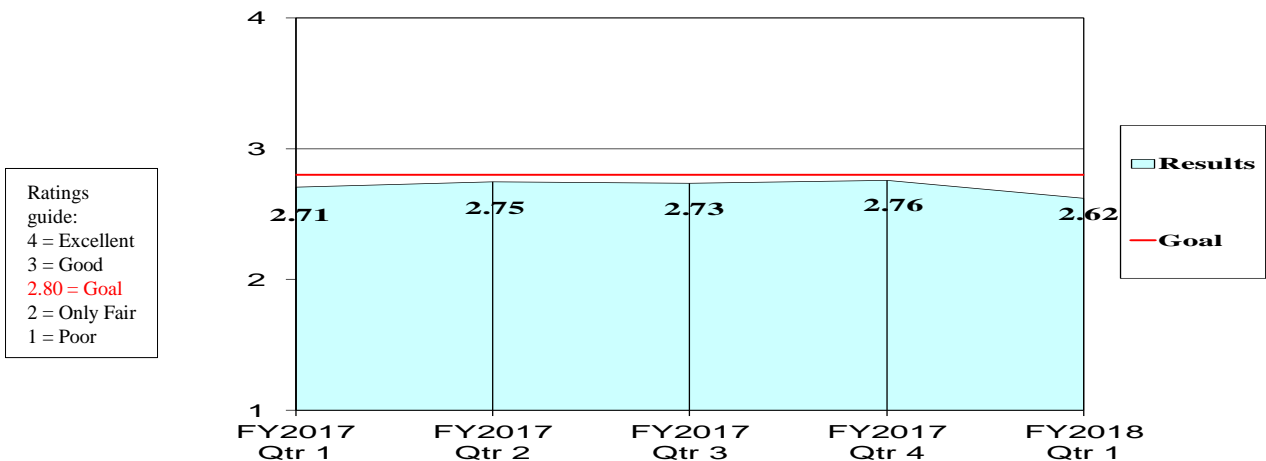
AFC Vendor Availability



- ✓ Goal met, improved performance
- ✓ Add Fare Availability – 98.7%
- ✓ Parking Validation Machines Availability – 99.9%



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%)	2.50 ↓
BART Parking Lot Cleanliness (25%)	2.85 ↓
Appearance of BART Landscaping (25%)	2.62 ↓

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

Walkways/Entry Plazas: 54.3%

Parking Lots: 71.4%

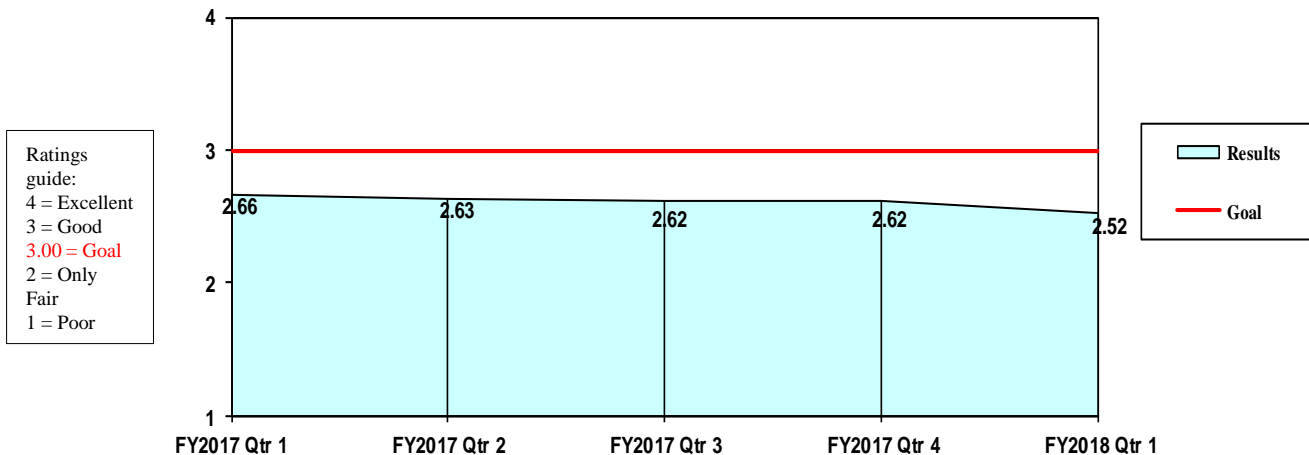
Landscaping Appearance: 59.8%

✓ Filling vacancies

✓ Clearing three large homeless encampments and completing 20 miles of fire breaks was a significant diversion of labor resources.

↓ indicates a statistically significant decrease from the prior quarter

Environment - Inside Stations



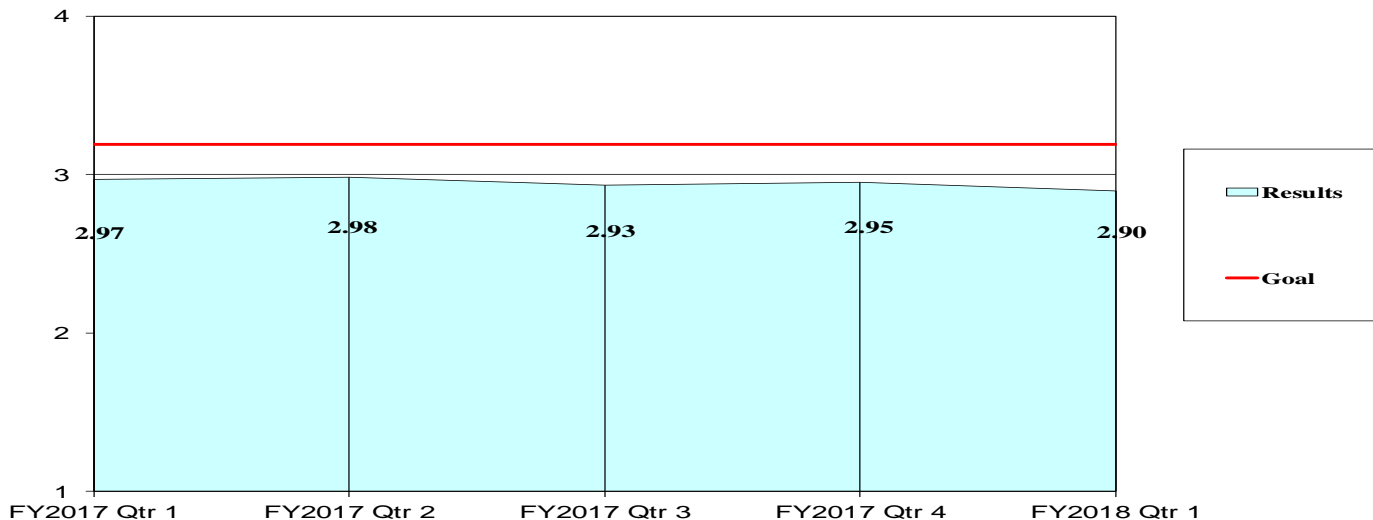
Composite rating for Cleanliness of:	
Station Platform (60%)	2.66 ↓
Other Station Areas (20%)	2.49 ↓
Restrooms (10%)	2.01 ↓
Elevator Cleanliness (10%)	2.27 ↓

- ✓ Goal not met
- ✓ Cleanliness ratings of either Excellent or Good:
 - Station Platform: 62.4%
 - Other Station Areas: 53.2%
 - Restrooms: 32.9%
 - Elevators: 43.8%
- ✓ Moved to M&E end of July, grievance filed, discussions on-going, may go to arbitration
- ✓ 20 vacancies in process of being filled, training program will be developed, dedicated management structure with more reasonable spans of control, developing cleaning SOPs, upgrading equipment, development of KPI's

↓ 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

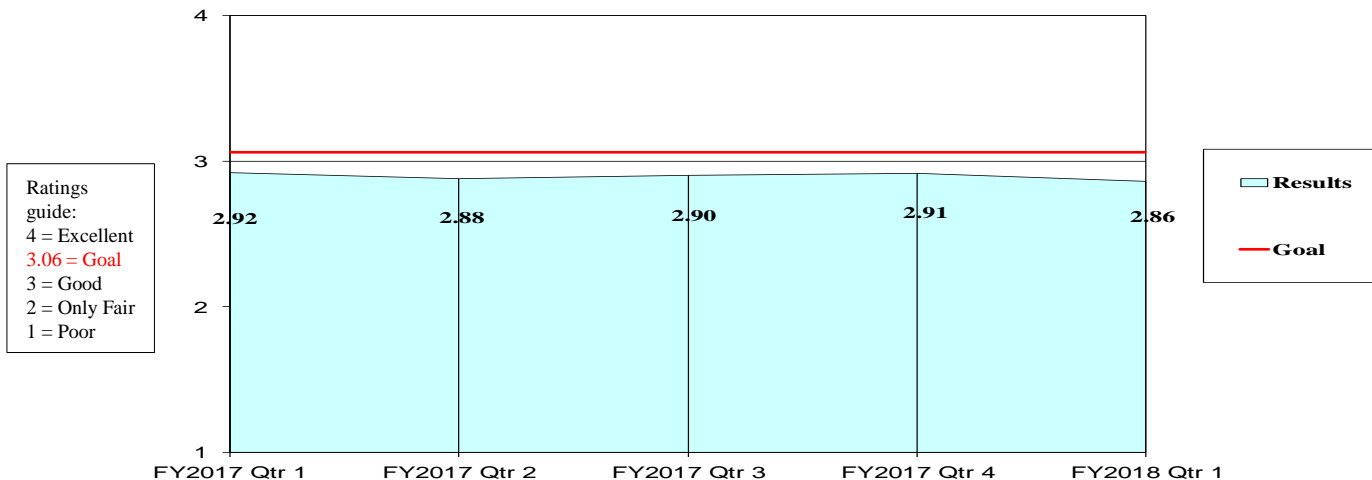


Station Kept Free of Graffiti

- ✓ Goal not met
- ✓ 74.1% of those surveyed ranked this category as either Excellent or Good
- ✓ Holding contractor accountable; expedited in-house response to offensive graffiti



Station Services



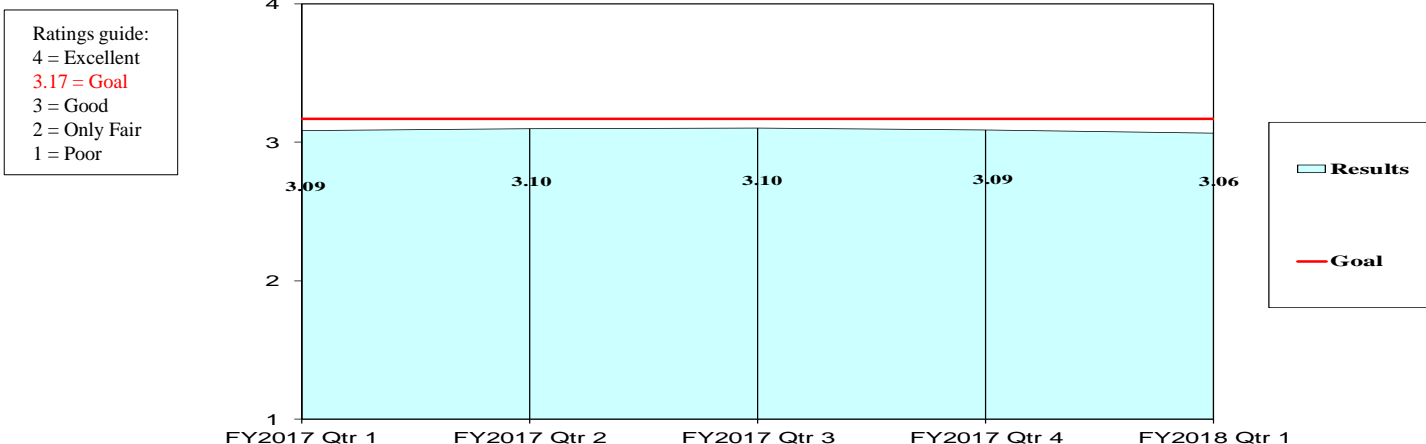
Composite rating of:

Station Agent Availability (65%)	2.82
Brochures Availability (35%)	2.93

- ✓ Goal not met
- ✓ Availability ratings of either Excellent or Good:
 - Station Agents: 69.9%
 - Brochures: 74.9%



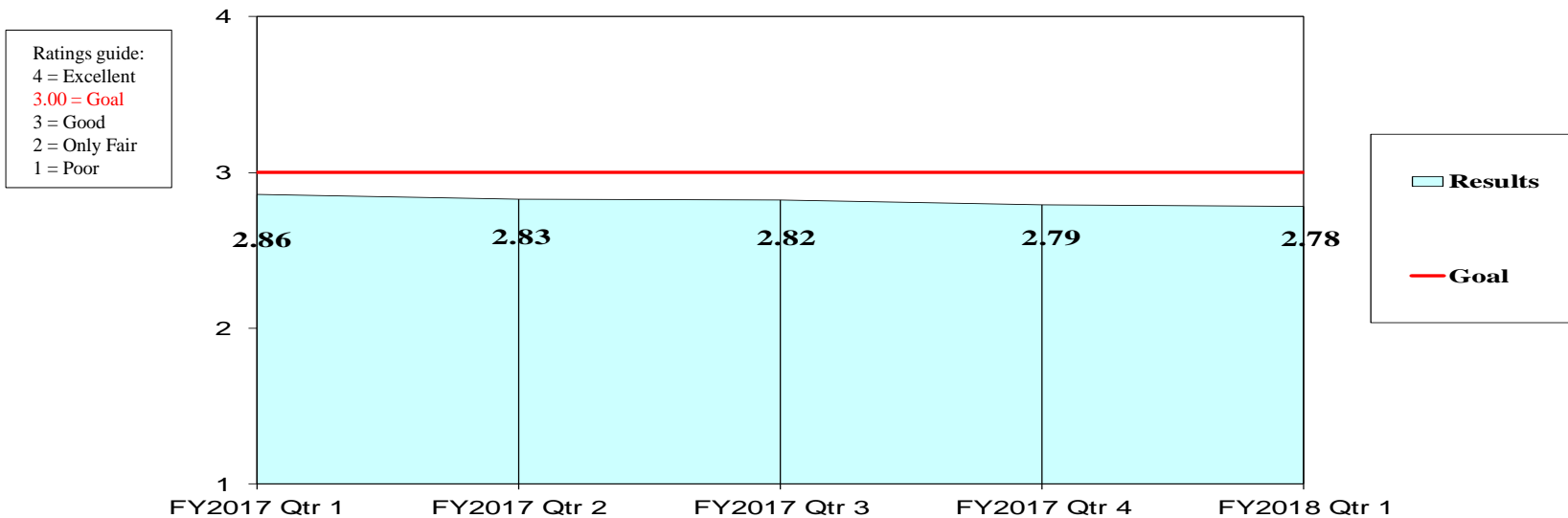
Train P.A. Announcements



Composite rating of:	
P.A. Arrival Announcements (33%)	3.03
P.A. Transfer Announcements (33%)	3.00
P.A. Destination Announcements (33%)	3.16

- ✓ Goal not met
- ✓ Announcement ratings of either Excellent or Good:
 - Arrivals: 76.8%
 - Transfers: 76.0%
 - Destinations: 82.4%
- ✓ Internal compliance checks show substantially better results

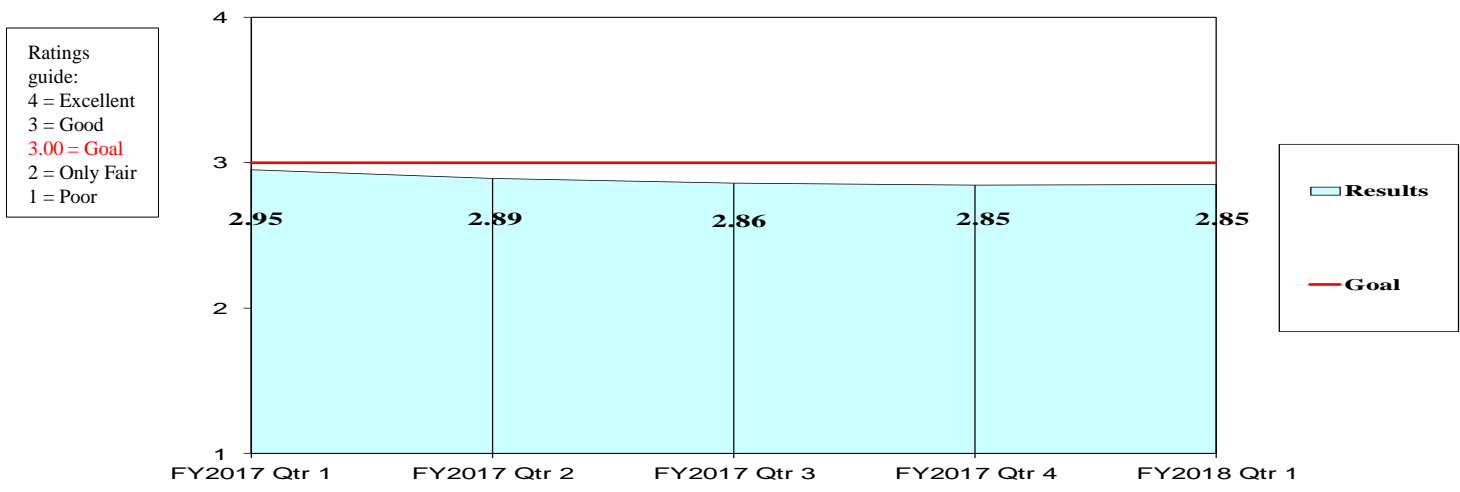
Train Exterior Appearance



✓ Goal not met

✓ 69.7% of those surveyed ranked this category as either Excellent or Good

Train Interior Cleanliness



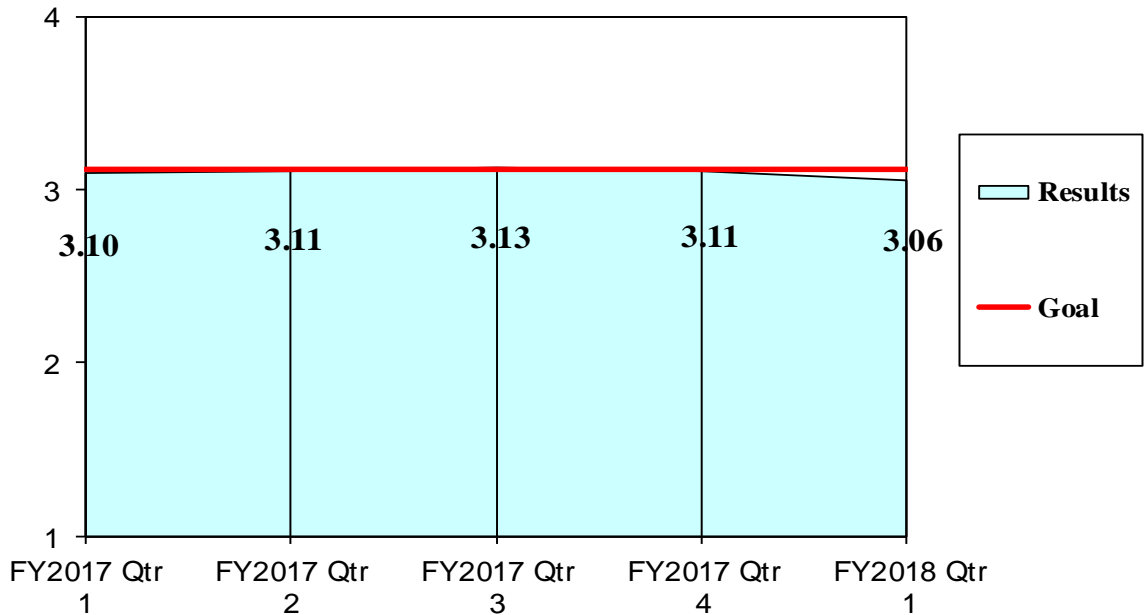
Composite rating of:

Train interior cleanliness (60%)	2.57
Train interior kept free of graffiti (40%)	3.27

- ✓ Goal not met
- ✓ Train Interior ratings of either Excellent or Good:
 Train Interior Cleanliness: 56.1%; Graffiti-free: 89.5%
- ✓ Recent progress in filling vacancies should help

Train Temperature

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



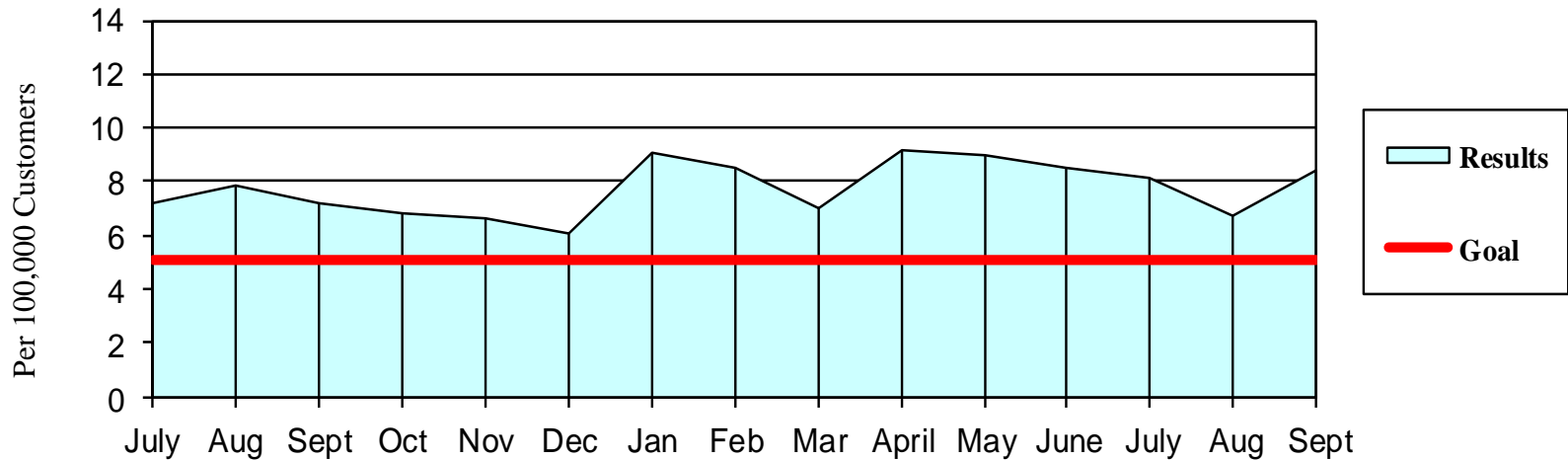
Comfortable Temperature Onboard Train

- ✓ Goal not met
- ✓ 79.9 % of those surveyed rated this category as either Excellent or Good
- ✓ On-going A/B HVAC upgrade 50% complete
- ✓ C car HVAC mod has helped
- ✓ Record high temperatures



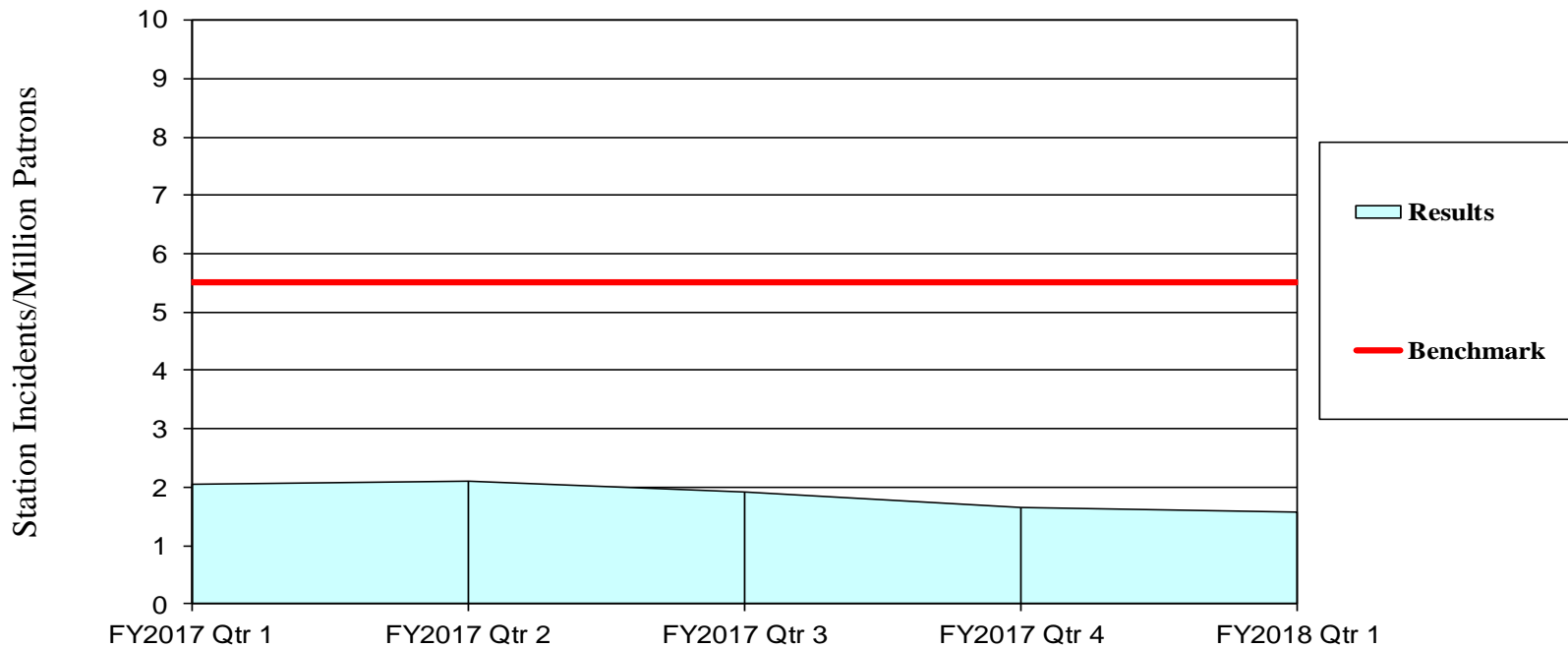
Customer Complaints

Complaints Per 100,000 Customers



- ✓ Total complaints lodged this period decreased 380 (13.7%) from last quarter, up 4 (.01%) when compared with the first quarter FY17.
- ✓ Complaint numbers increased in the categories M&E, Trains, Station Cleanliness, and Quality of Life. Complaint decreases are seen in AFC, Announcements, Bike Program, Parking, Personnel, Police Services, Policies, Service, Train Cleanliness, and Passenger Information.
- ✓ Compliments” are down at 96 from 127 last quarter (one year ago these numbered 116).

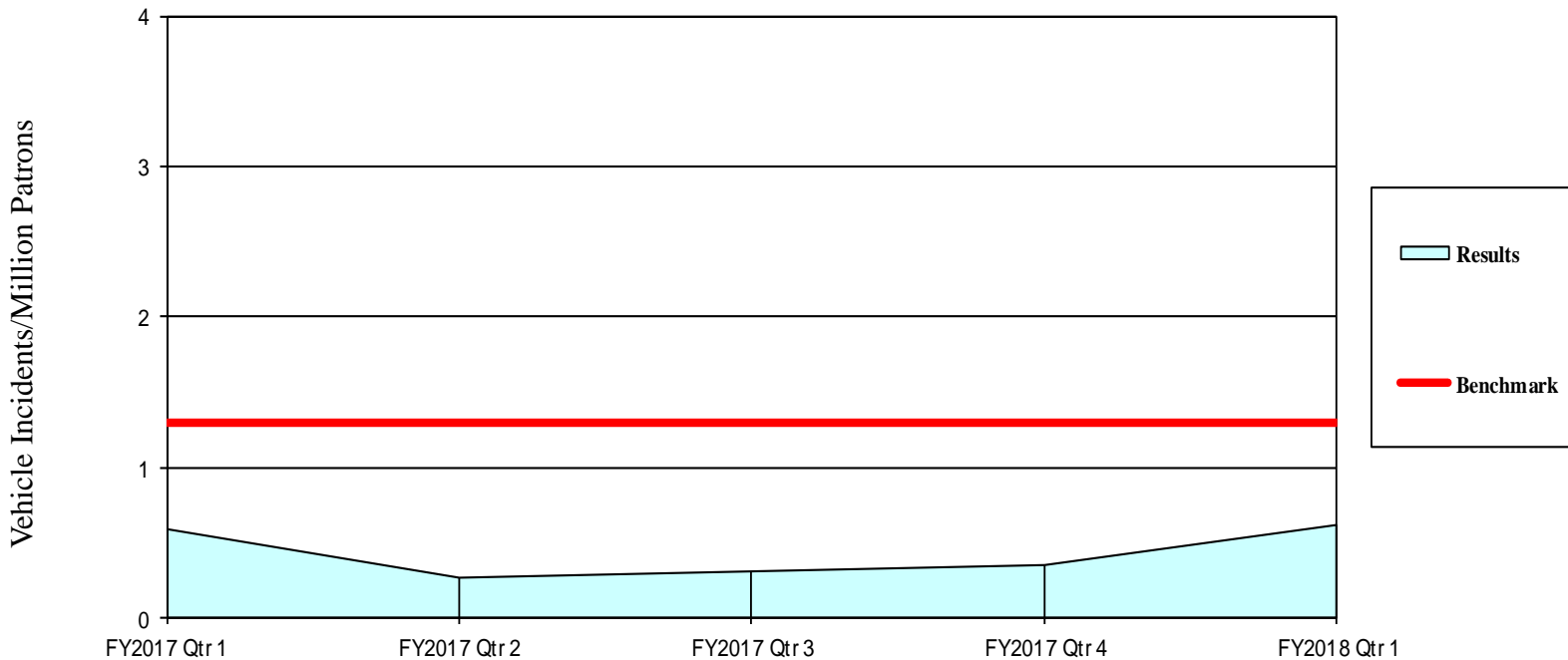
Patron Safety: Station Incidents per Million Patrons



✓ Goal met

Patron Safety

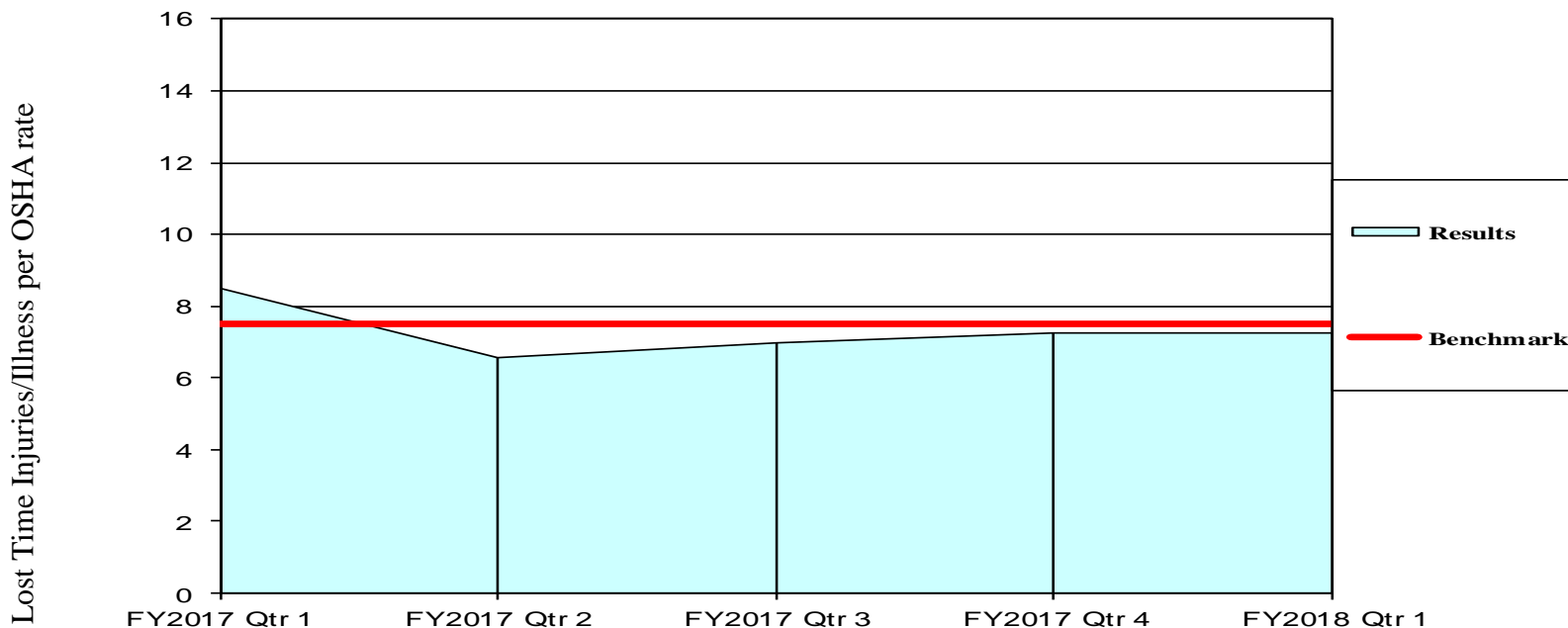
Vehicle Incidents per Million Patrons



✓ Goal met

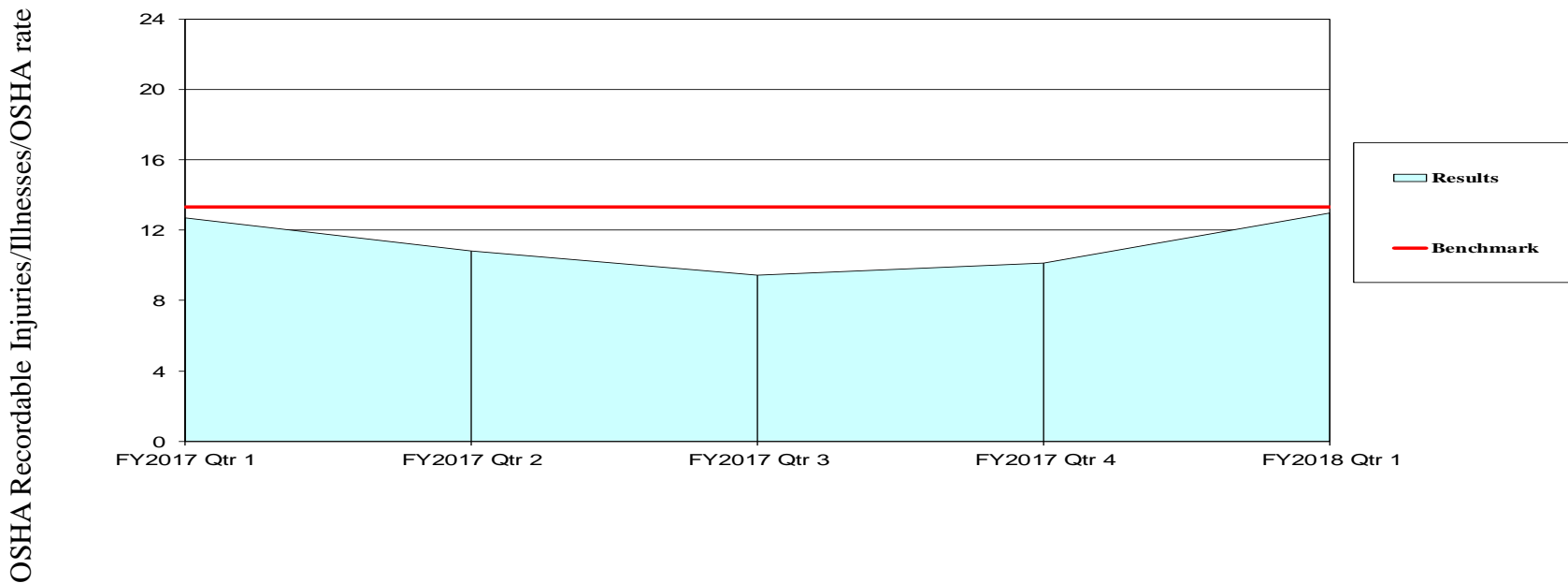


Employee Safety: Lost Time Injuries/Illnesses per OSHA Incidence Rate



✓ Goal met

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

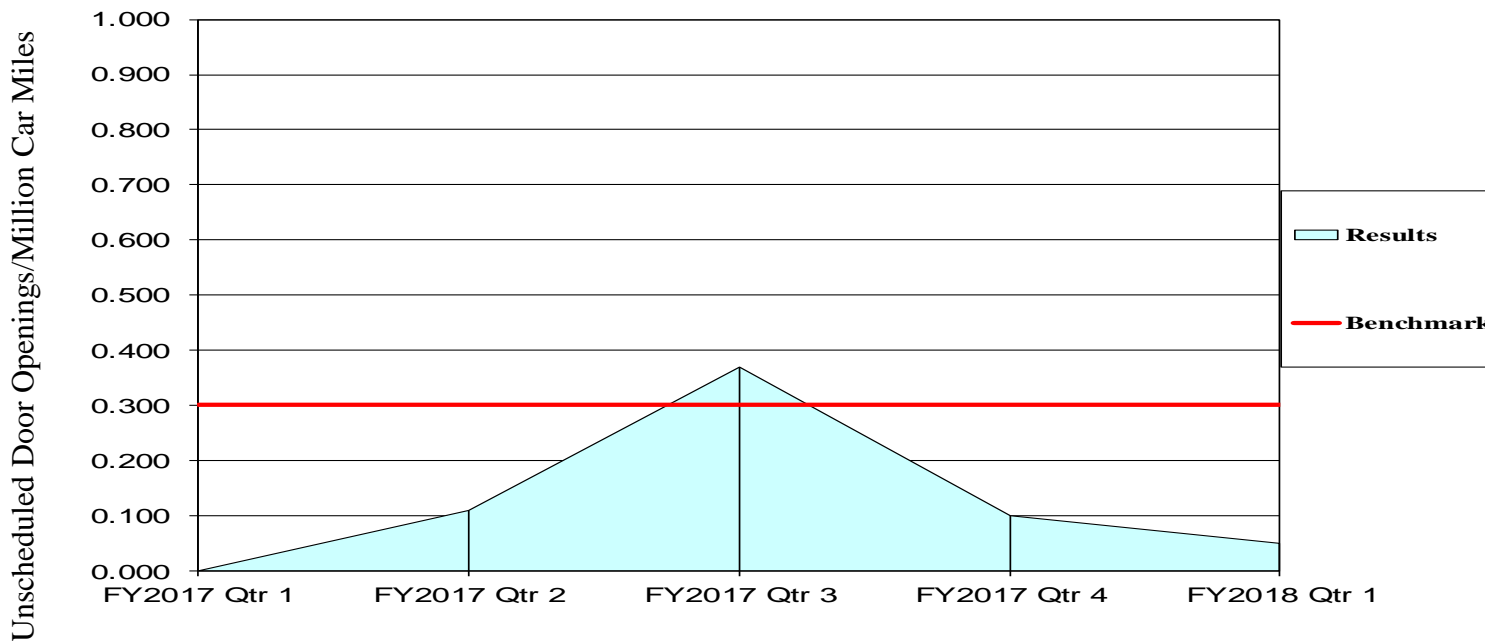


✓ Goal met



Operating Safety:

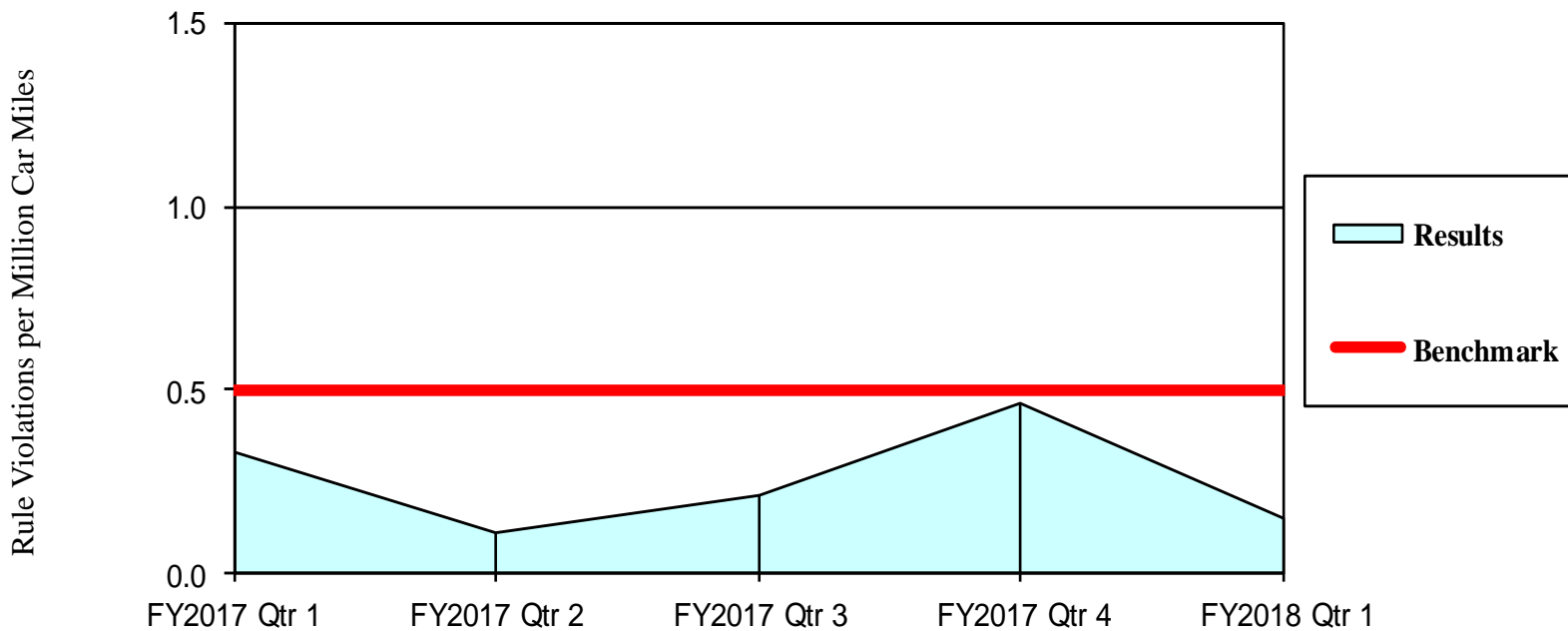
Unscheduled Door Openings per Million Car Miles



✓ Goal met

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)

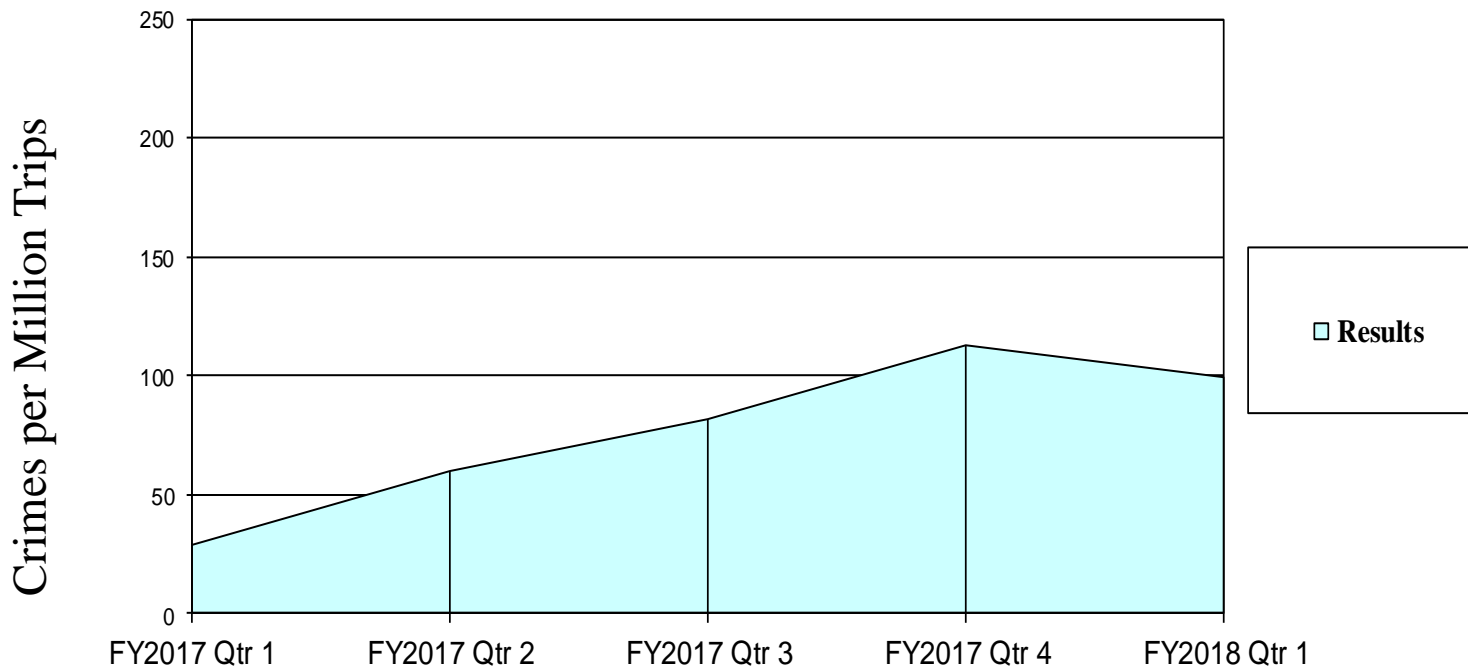
Results are reported for all revenue hours and for after 7:00 PM.

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

	FY 17 Q2		FY17 Q3		FY 17 Q4		FY18 Q1	
		Avg.		Avg.		Avg.		Avg.
BART Police Presence		10.9%		9.6%		10.4%		10.8%
Rider saw Police on train	5.6%		5.6%		4.7%		5.4%	
Rider saw Police outside the station	16.3%		15.6%		13.8%		13.7%	
Rider saw Police in the station	11.1%		9.6%		9.7%		10.6%	
Rider saw Police on train after 7:00PM	4.8%		3.8%		4.9%		5.1%	
Rider saw Police outside the station aft 7:00PM	16.0%		13.5%		16.6%		16.4%	
Rider Saw Police in the station after 7:00PM	11.4%		9.7%		12.9%		13.8%	



Quality of Life*



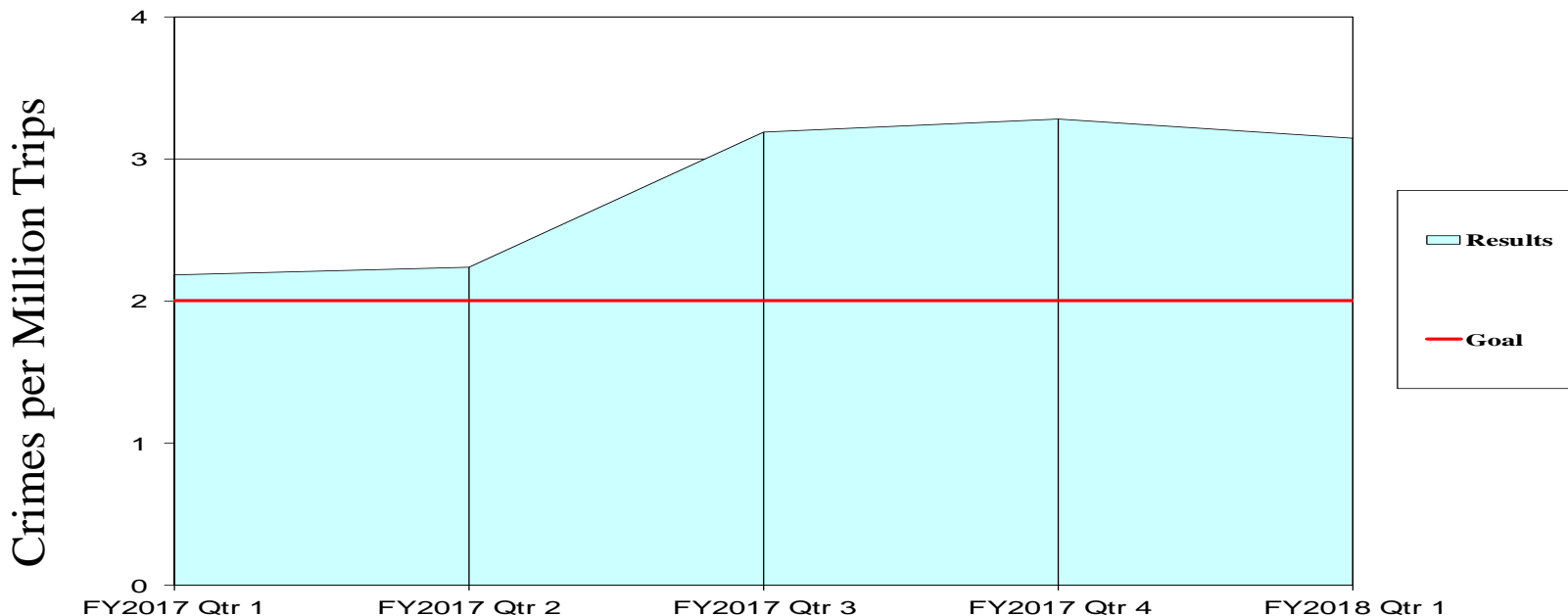
- ✓ Quality of Life incidents are down from the last quarter and up from the corresponding quarter of the prior fiscal year.

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



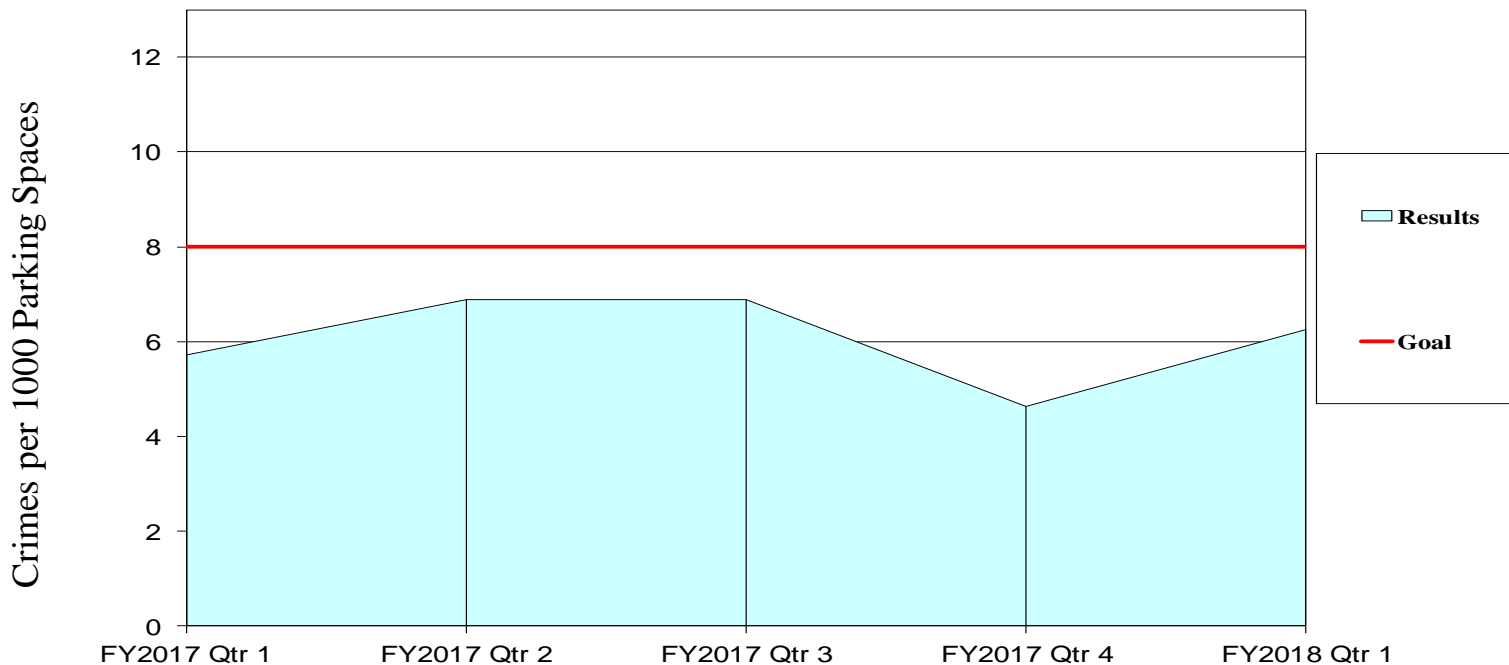
Crimes Against Persons

(Homicide, Rape, Robbery, and Aggravated Assault)



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

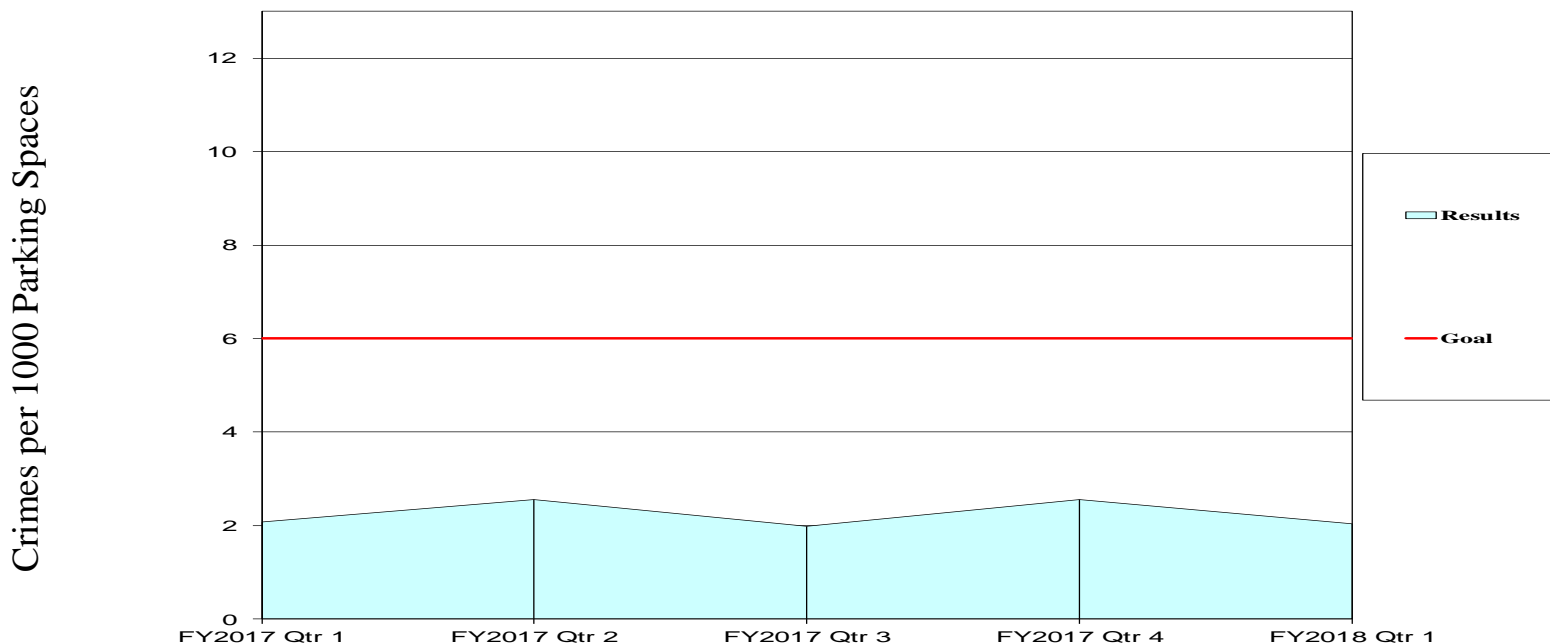
Auto Burglary



- ✓ 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.



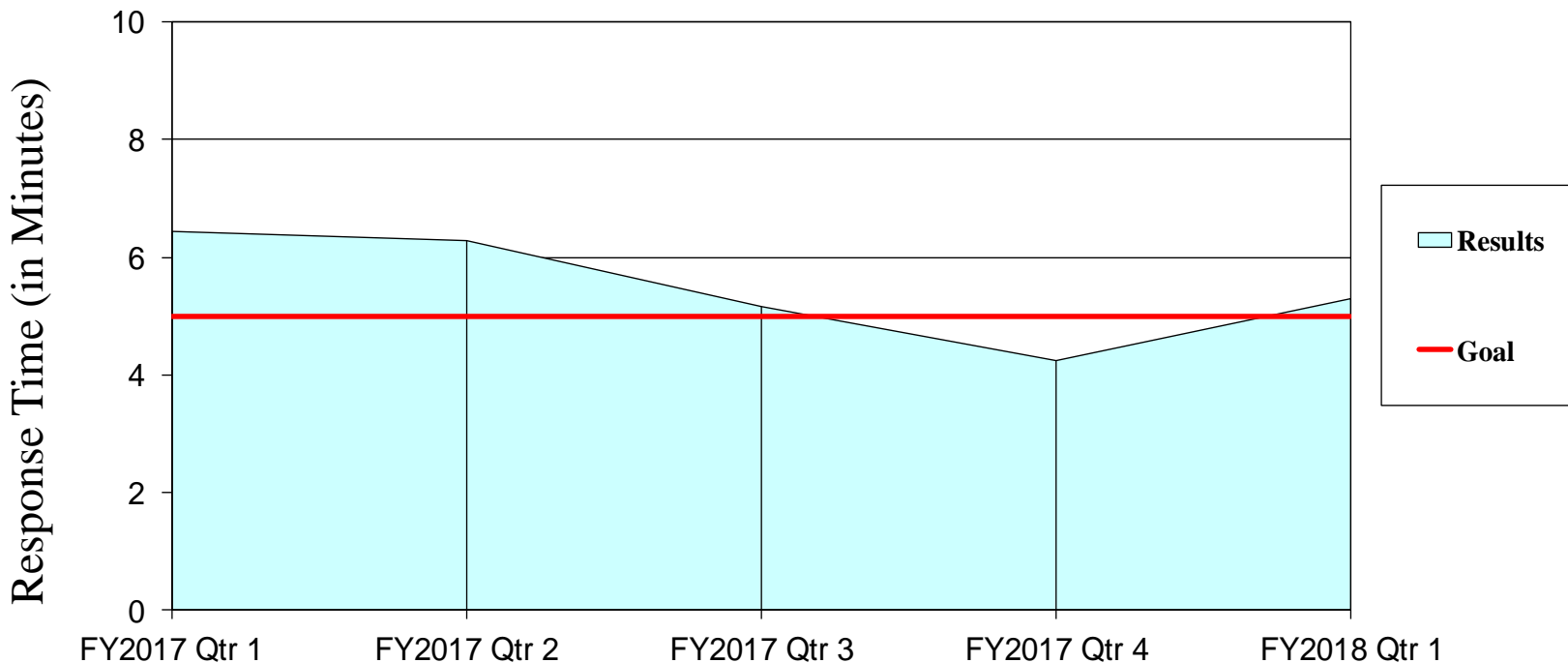
Auto Theft



- ✓ 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.



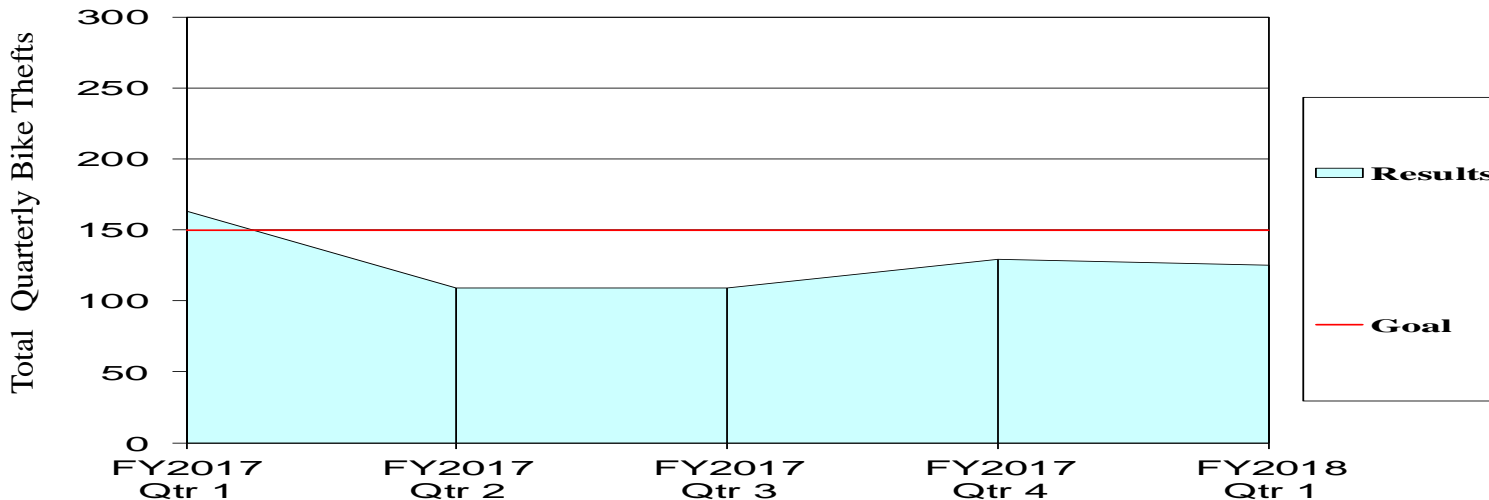
Average Emergency Response Time



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



Bike Theft



- ✓ Goal met
- ✓ 125 bike thefts for current quarter, down 4 from last quarter.