

Quarterly Service Performance Review
First Quarter, FY 2017
July - September, 2016

Engineering & Operations Committee
November 17, 2016

SUMMARY CHART 1st QUARTER FY 2017

PERFORMANCE INDICATORS	SUMMARY CHART 1st QUARTER FY 2017						YEAR TO DATE			
	CURRENT QUARTER			PRIOR QTR ACTUALS			ACTUAL	STANDARD	STATUS	
	ACTUAL	STANDARD	STATUS	LAST QUARTER	THIS QTR LAST YEAR					
Average Ridership - Weekday	432,002	447,264	NOT MET		434,495	434,003	432,002	447,264	NOT MET	
Customers on Time										
Peak	90.00%	95.00%	NOT MET		91.20%	90.35%	90.00%	95.00%	NOT MET	
Daily	91.97%	95.00%	NOT MET		92.74%	91.78%	91.97%	95.00%	NOT MET	
Trains on Time										
Peak	85.84%	N/A	N/A		88.29%	87.34%	85.84%	N/A	N/A	
Daily	88.24%	92.00%	NOT MET		89.43%	88.39%	88.24%	92.0%	NOT MET	
Peak Period Transbay Car Throughput										
AM Peak	98.71%	97.50%	MET		98.42%	96.19%	98.71%	97.50%	MET	
PM Peak	99.72%	97.50%	MET		99.39%	95.87%	99.72%	97.50%	MET	
Car Availability at 4 AM (0400)	596	579	MET		577	582	596	579	MET	
Mean Time Between Service Delays	5,179	4,000	MET		5,148	4,551	5,179	4,000	MET	
Elevators in Service										
Station	98.50%	98.00%	MET		98.63%	98.83%	98.50%	98.00%	MET	
Garage	97.60%	98.00%	NOT MET		96.00%	98.37%	97.60%	98.00%	NOT MET	
Escalators in Service										
Street	91.40%	95.00%	NOT MET		87.37%	94.57%	91.40%	95.00%	NOT MET	
Platform	96.67%	96.00%	MET		95.87%	95.70%	96.67%	96.00%	MET	
Automatic Fare Collection										
Gates	99.12%	99.00%	MET		99.43%	99.13%	99.12%	99.00%	MET	
Vendors	95.92%	95.00%	MET		96.02%	95.30%	95.92%	95.00%	MET	
Wayside Train Control System	1.08	1.00	NOT MET		1.11	1.74	1.08	1.00	NOT MET	
Computer Control System	0.029	0.08	MET		0.013	0.033	0.029	0.08	MET	
Traction Power	0.12	0.20	MET		0.19	0.22	0.12	0.20	MET	
Track	0.88	0.30	NOT MET		0.03	0.15	0.88	0.30	NOT MET	
Transportation	0.43	0.50	MET		0.70	0.47	0.43	0.50	MET	
Environment Outside Stations	2.71	2.80	NOT MET		2.73	2.74	2.71	2.80	NOT MET	
Environment Inside Stations	2.66	3.00	NOT MET		2.68	2.73	2.66	3.00	NOT MET	
Station Vandalism	2.97	3.19	NOT MET		2.99	3.01	2.97	3.19	NOT MET	
Station Services	2.92	3.06	NOT MET		2.94	2.97	2.92	3.06	NOT MET	
Train P.A. Announcements	3.09	3.17	NOT MET		3.09	3.09	3.09	3.17	NOT MET	
Train Exterior Appearance	2.86	3.00	NOT MET		2.85	2.90	2.86	3.00	NOT MET	
Train Interior Appearance	2.95	3.00	NOT MET		2.94	3.03	2.95	3.00	NOT MET	
Train Temperature	3.10	3.12	NOT MET		3.09	3.12	3.10	3.12	NOT MET	
Customer Complaints										
Complaints per 100,000 Passenger Trips	7.41	5.07	NOT MET		6.30	5.77	7.41	5.07	NOT MET	
Safety										
Station Incidents/Million Patrons	2.05	5.50	MET		3.85	4.70	2.05	5.50	MET	
Vehicle Incidents/Million Patrons	0.59	1.30	MET		0.56	1.01	0.59	1.30	MET	
Lost Time Injuries/Illnesses/Per OSHA	8.48	7.50	NOT MET		9.58	9.17	8.48	7.50	NOT MET	
OSHA-Recordable Injuries/Illnesses/Per OSHA	12.72	13.30	MET		12.04	10.68	12.72	13.30	MET	
Unscheduled Door Openings/Million Car Miles	0.000	0.300	MET		0.050	0.170	0.000	0.300	MET	
Rule Violations Summary/Million Car Miles	0.330	0.500	MET		0.110	0.170	0.330	0.500	MET	
Police										
BART Police Presence	2.28	2.50	NOT MET		2.30	2.38	2.28	2.50	NOT MET	
Quality of Life per million riders	29.08	N/A	N/A		40.67	62.17	29.08	N/A	N/A	
Crimes Against Persons per million riders	2.18	2.00	NOT MET		2.28	1.35	2.18	2.00	NOT MET	
Auto Theft and Burglaries per 1,000 parking spaces	5.72	8.00	MET		5.93	7.73	5.72	8.00	MET	
Police Response Time per Emergency Incident (Minutes)	6.43	5.00	NOT MET		5.95	4.37	6.43	5.00	NOT MET	
Bike Thefts (Quarterly Total and YTD Quarterly Average)	163	150.00	NOT MET		159	228	163	150.00	NOT MET	

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

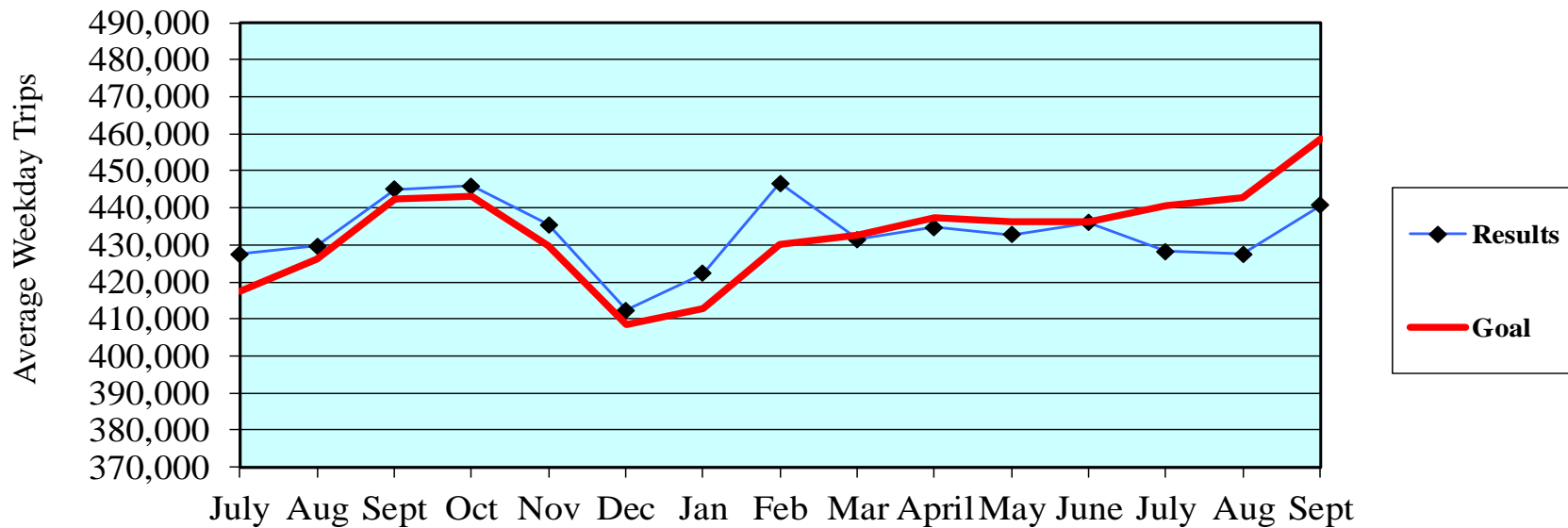


FY17 First Quarter Overview...

- ✓ Six years of ridership growth came to an end, revenue loss requires expenditure reductions.
- ✓ Weekday ridership down slightly (-0.5%), weekends down more significantly (-4.3% and -6.2%).
- ✓ On-time performance down roughly 1%.
- ✓ Reliability: Car Computer Control System, Traction Power, Transportation met; Train Control and Track not met.
- ✓ Availability: Gates, Vendors, Station Elevators, Platform Escalators and Cars met; Street Escalators and Parking Garage Elevators not met.
- ✓ Passenger Environment: four Station indicators worse and goal not met; four Train indicators improved but goal not met.
- ✓ Customer complaints up.



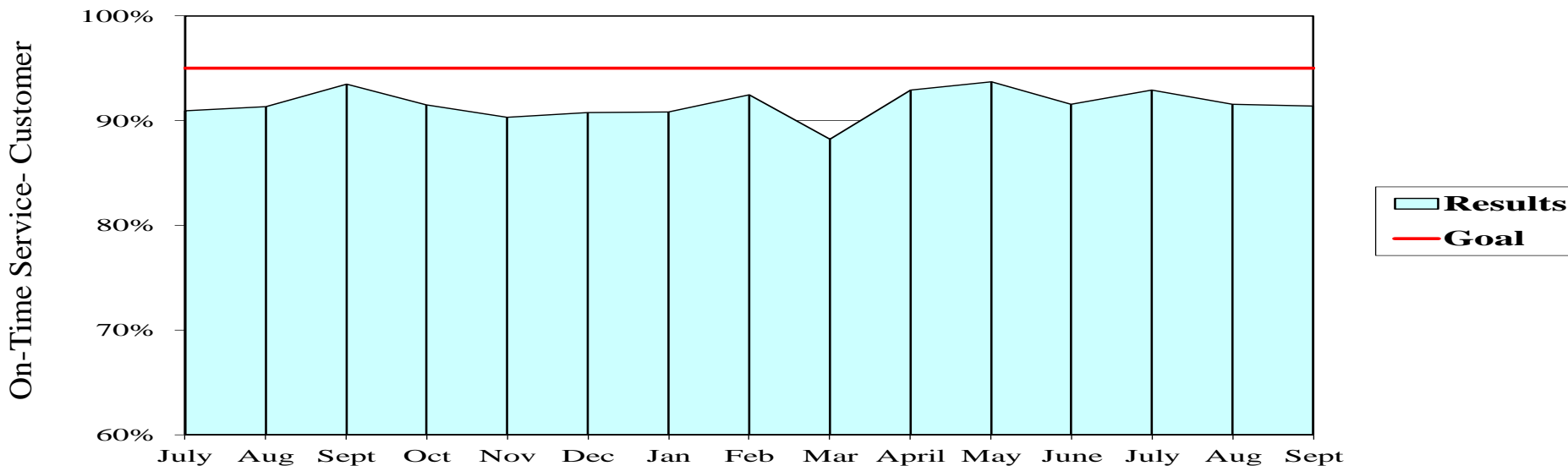
Customer Ridership



- ✓ Total ridership decreased by 1.3% compared to same quarter last year
- ✓ Average weekday ridership (432,002) down 0.5% from same quarter last year
- ✓ Core weekday ridership down by 0.4% from same quarter last year
- ✓ SFO Extension weekday ridership down by 1.3% from same quarter last year
- ✓ Saturday and Sunday down by 4.3% and 6.2%, respectively, over same quarter last year
- ✓ Overall, ridership 6% below budget



On-Time Service - Customer

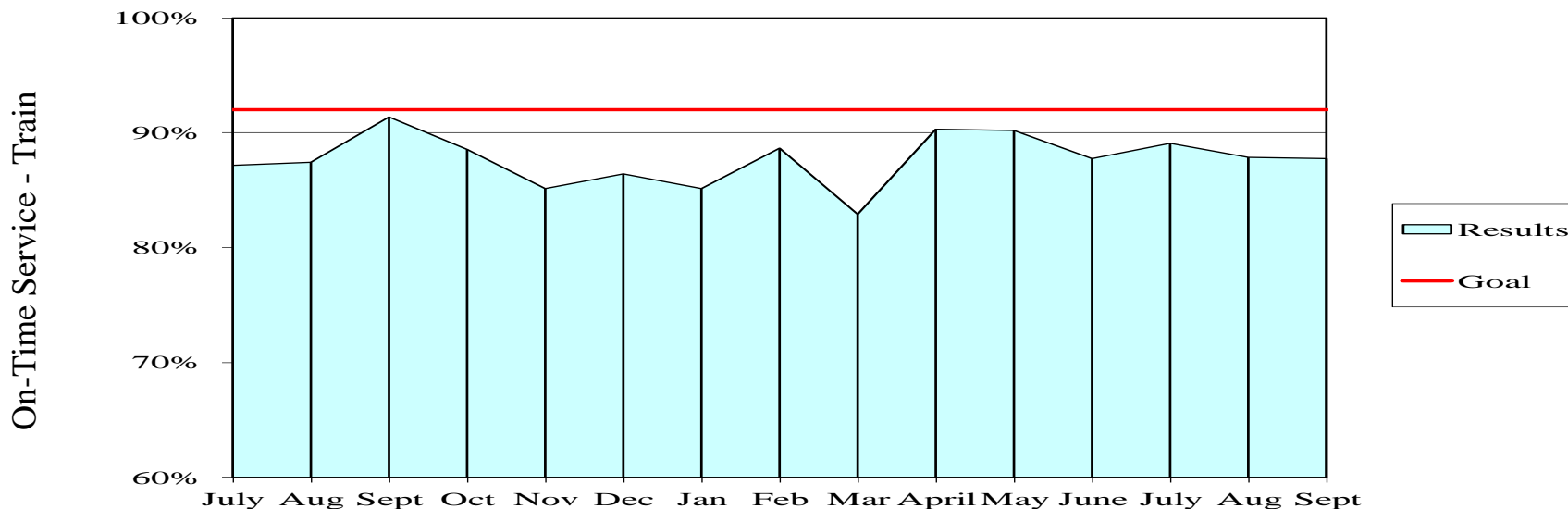


✓ 91.97%, 95.00% goal not met; down 0.77%

	Date	Time	Destination	Location	Cause		
1	12-Aug-16	0416	N-B/S-B	B.Park I-Lock	Ground Wire Touching 3rd-Rail Causing Sparks/Smoke) (MUX Equipment Impaired/Fuses Kept Blowing Every Time They Were Replaced) (Service Truncated)	EQUIP	497
2	19-Sep-16	0538	Northbound	Balboa Park	MUX (Shorted Circuit) (False Occupancy)(0538-1853) Required) (Manual Operation Required) (Multiple Cranks in Place/Renewal Project/Ref.: 0405)	EQUIP	86
3	26-Aug-16	0722	N-B/S-B	Fruitvale	PG&E Power Outage (480 VAC)(0722-1316) (MUX Equipment Impaired/Loss of Speed Codes & Routing) (Congestion in the Oakland Wye/Also Ref.: 0513)	PG&E	72
4	26-Aug-16	0513	Southbound	E.C.D. Norte	MUX (Flashing) (Multiple False Occupancies)(0614-2311) (Manual Operation Required) (Lightning Arrester/Shorting Condition)	EQUIP	62
5	23-Aug-16	1628	S-B/N-B	K & A Lines	PG&E Power (Loss of 3rd-Rail Power)(1628-1903) (MUX Equipment Impaired/Speed Restriction Required)	PG&E	53
6	23-Aug-16	1332	N-B/S-B	W. Oakland	BPD Hold (Vandalism Suspect)(1332-1506) (Patrons Striking Car & Station Windows With Golf Club) (Two Trains Ran Through)	PEOPLE	52



On-Time Service - Train



✓ 88.24%, 92% goal not met; down 1.19%

Late trains by category:

1. Misc.(other)(patron loading, passenger transfer, congestion, multi-cause delay, person on trackway, weather)
2. Police
3. Train Control
4. Wayside Maintenance Work
5. Revenue Vehicle
6. Vandalism
7. Sick Passenger
8. Operations

4880 Total Late Trains

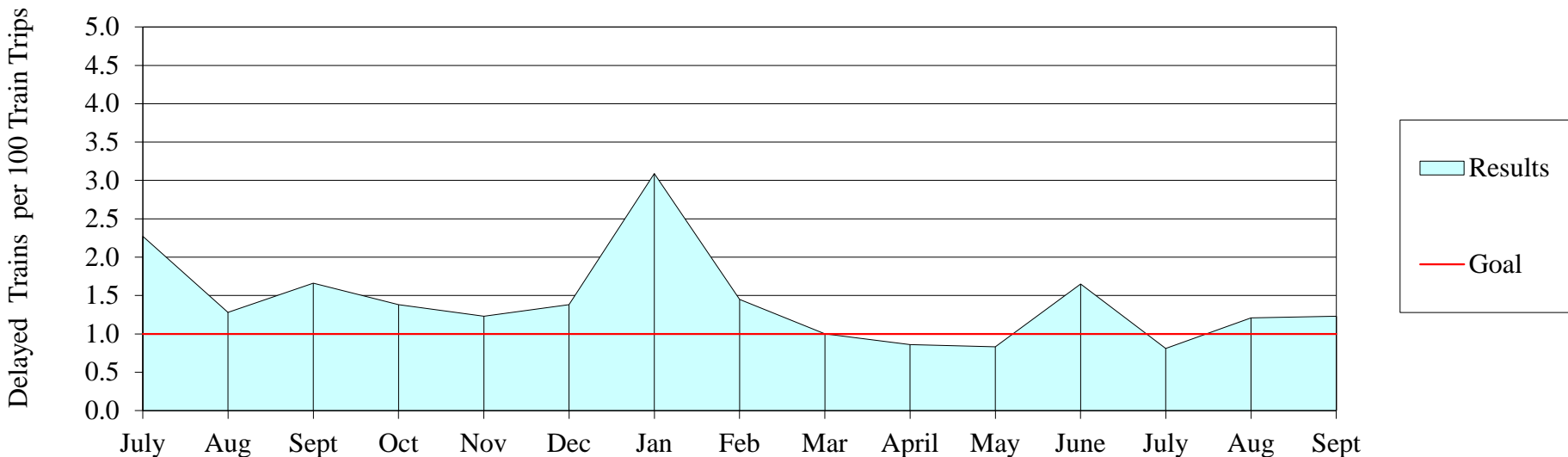
1,299	late trains	26.6%
776	late trains	15.9%
602	late trains	12.3%
418	late trains	8.6%
394	late trains	8.1%
226	late trains	4.6%
224	late trains	4.6%
201	late trains	4.1%

✓ 51.7% of all late trains attributable to non-BART equipment/personnel causes



Wayside Train Control System

Includes False Occupancy & Routing, Delays Per 100 Train Runs

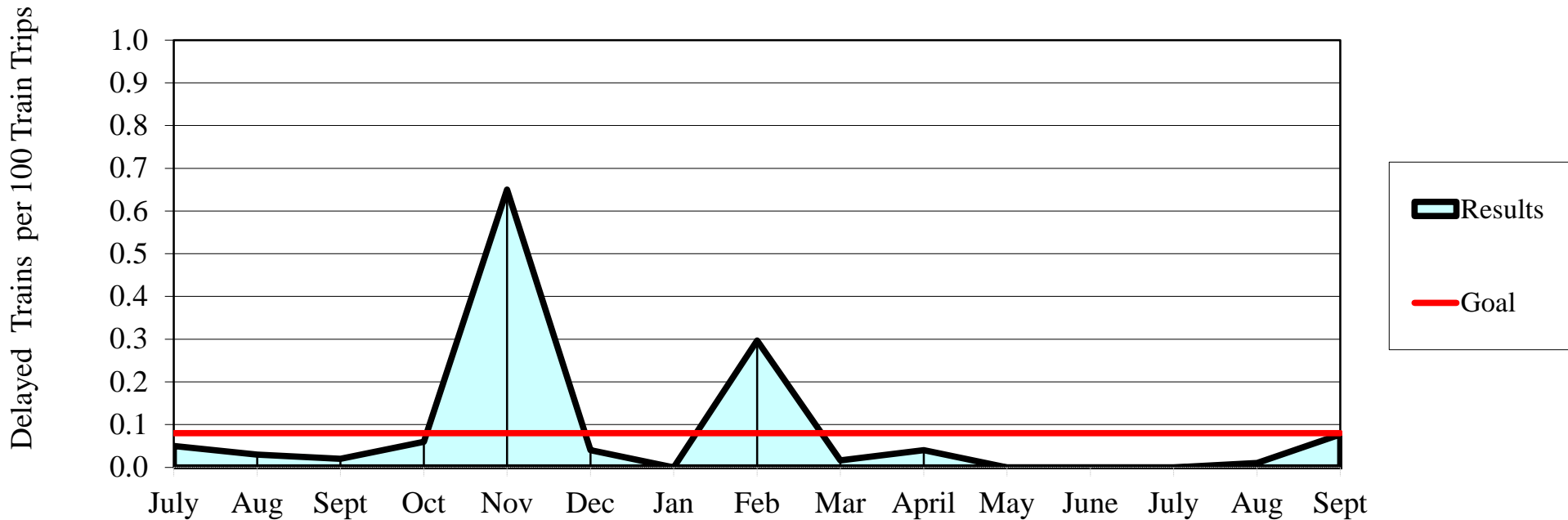


- ✓ Goal not met – Actual 1.08/ Goal 1.00
 - Improvement Over Same Quarter Last Year (1.68): 0.60
 - Improvement Over Last Quarter (1.11): 0.03
 - Two Major Delay Events:
 - August 26 at 0513 Hours, 62 Trains Delayed – R50 A Mux flashing false occupancies from shorted arrestor; no access to aerial until Blanket.
 - September 19, 0538 Hours, 86 Trains Delayed – M80 D Mux flashing false occupancies from debris in Mux box; no access to aerial until Blanket.
- ✓ Continuing progress in challenging/critical area



Computer Control System

Includes ICS computer & SORS, Delays per 100 train runs

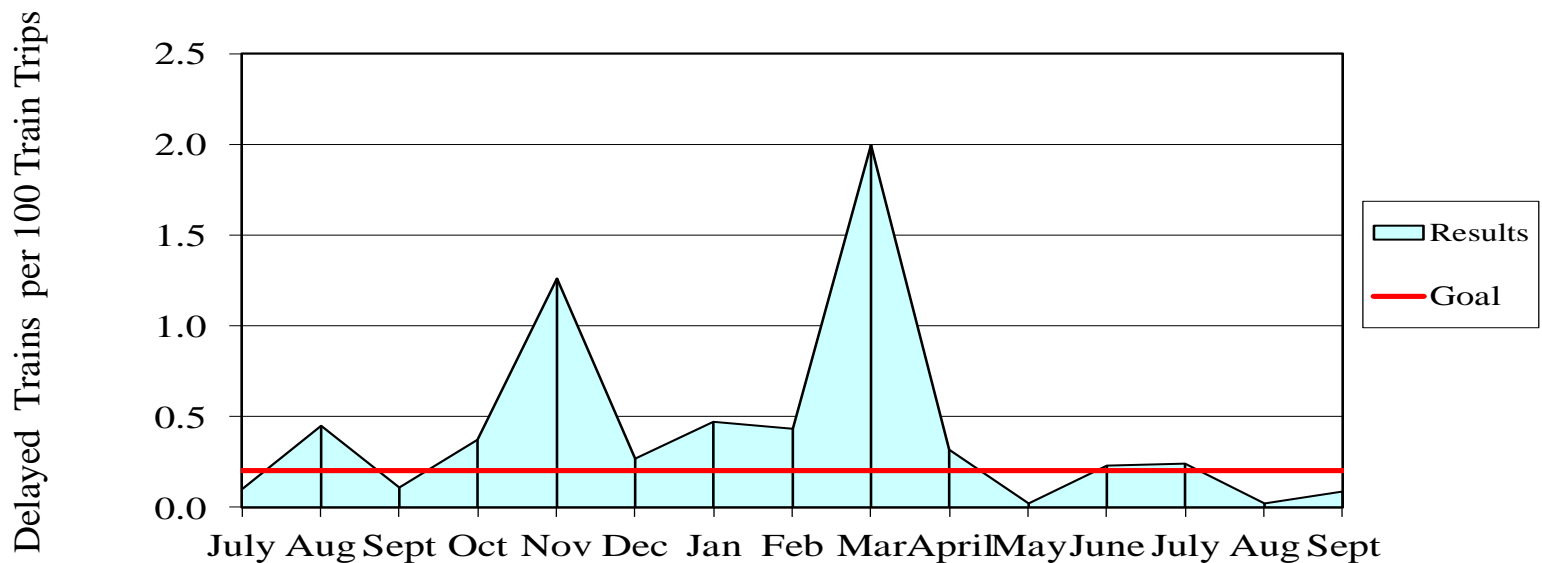


✓ Goal met



Traction Power

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

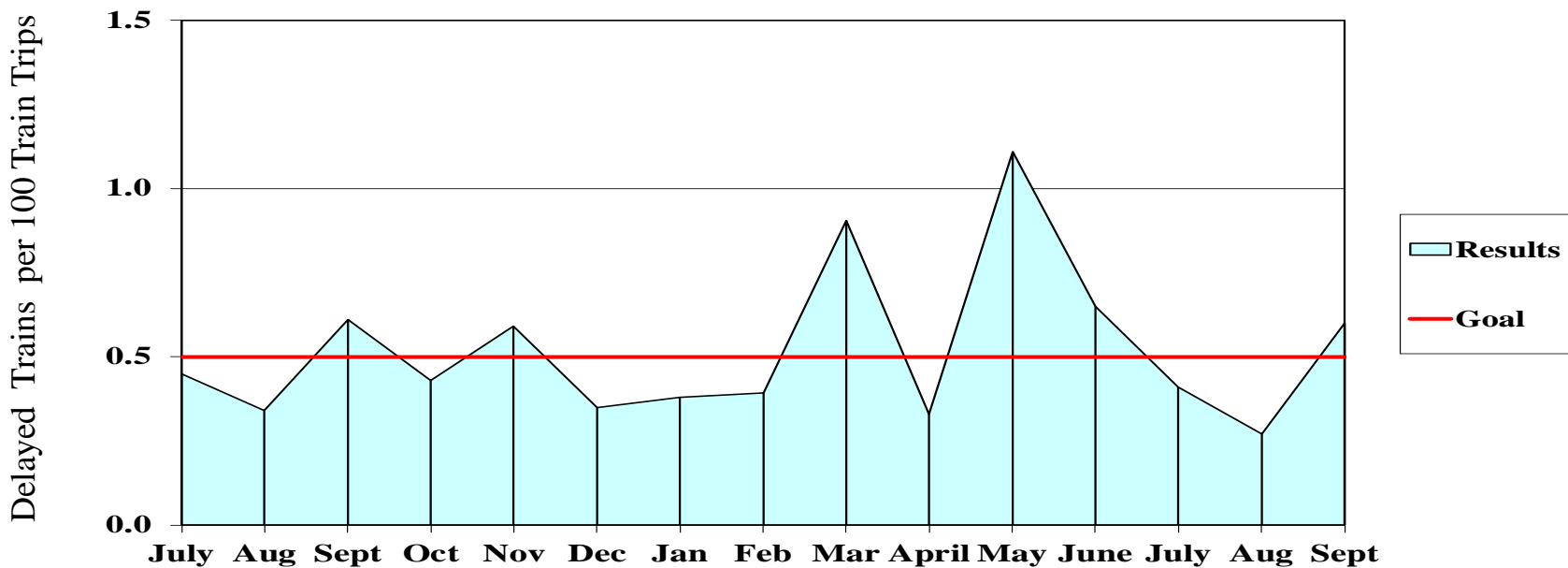


- ✓ Goal met
- ✓ Initiated Quarterly 3rd Rail Inspections (all lines)
- ✓ Traction power distribution system “at risk”
pending delivery of bond projects



Transportation

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

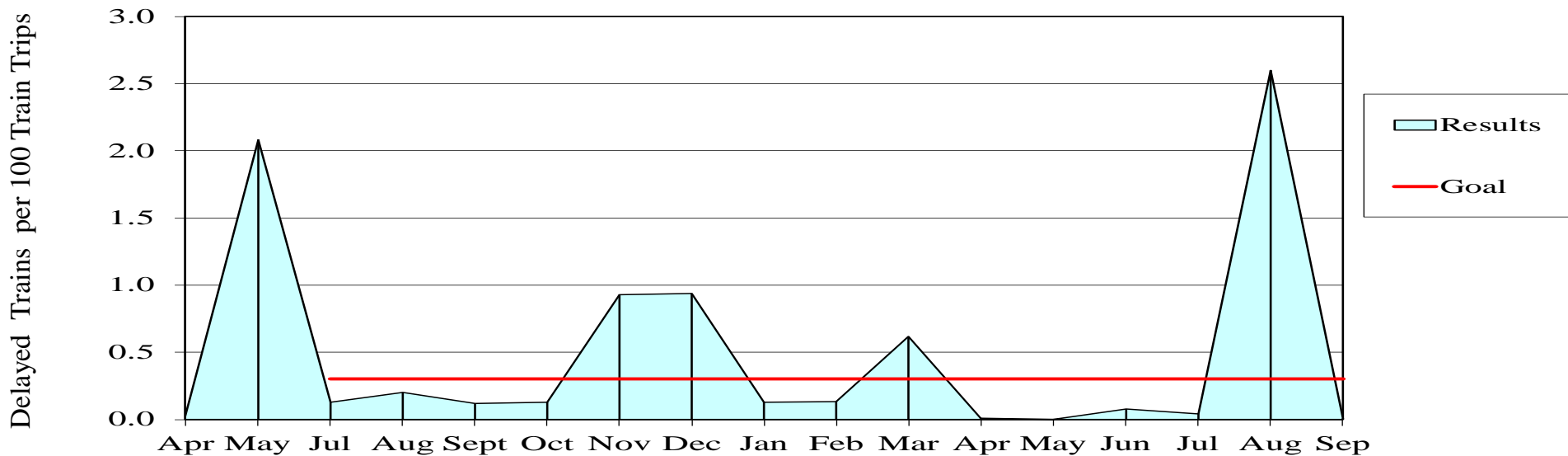


✓ 0.43; goal met and improved performance



Track

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



✓ Goal not met

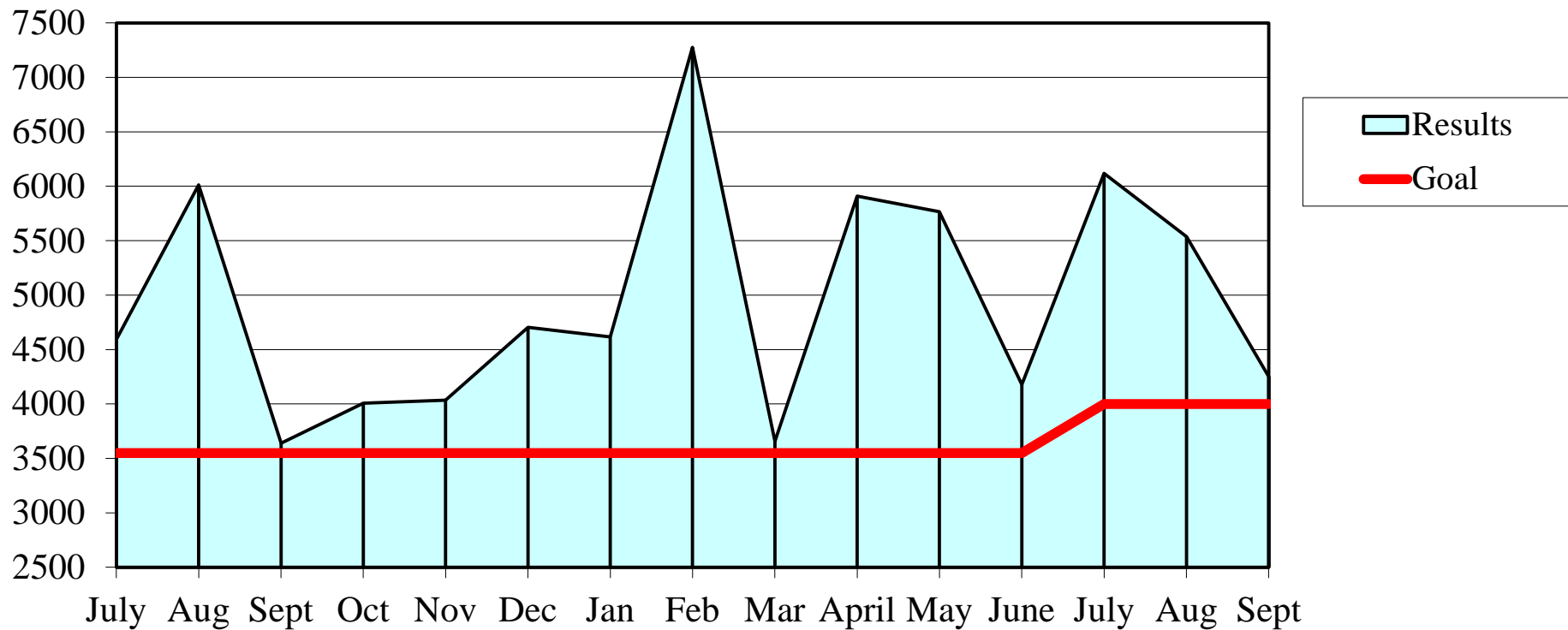
✓ One major delay event:

- 8/12/2016 in preparation for M85 weekend outage ground cable was loosened and not properly secured. It made contact with 3rd rail, shorted wayside mux fuses, resulted in manual operation all day, delayed 497 trains



Car Equipment - Reliability

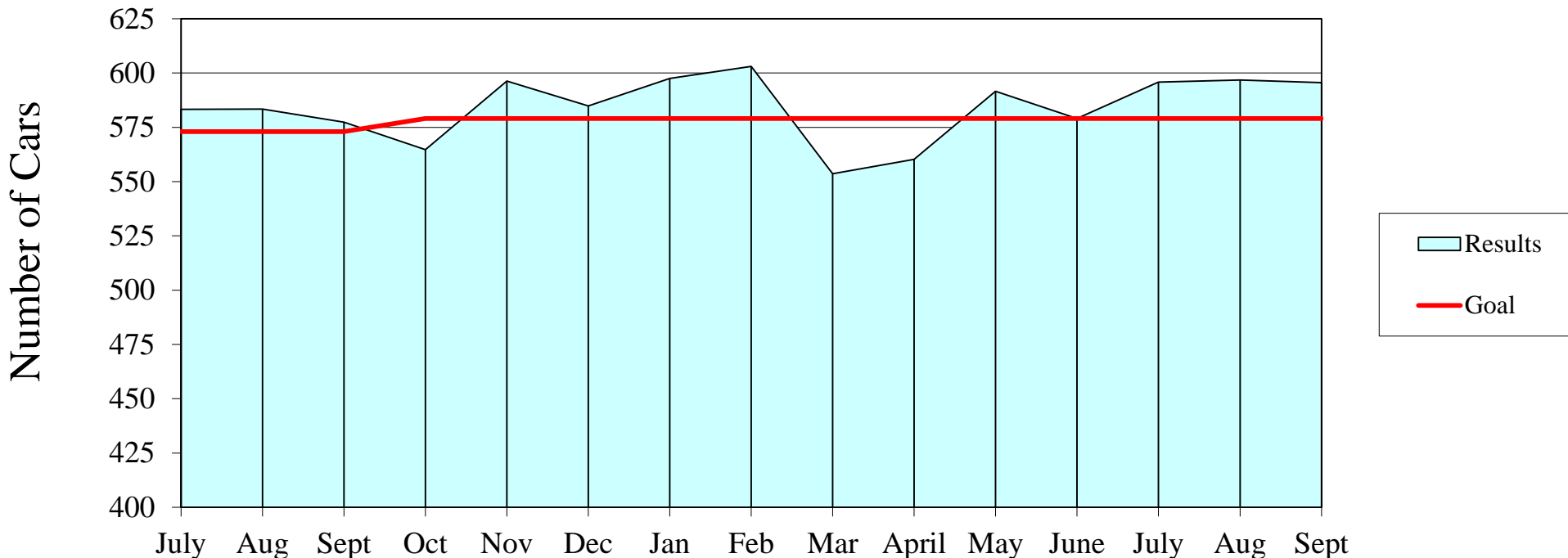
Mean Time Between Service Delays (Hours)



✓ Goal met – MTBSD 5,179 hours



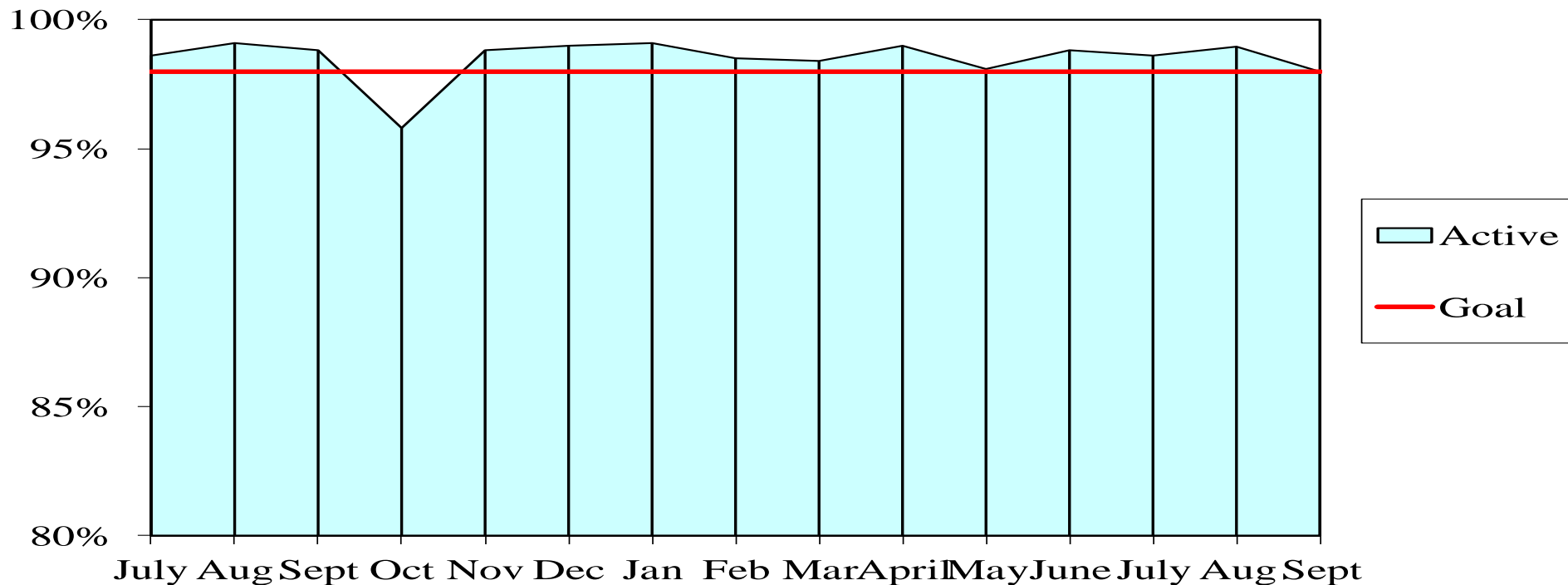
Car Equipment - Availability @ 0400 hours



- ✓ Goal met – 596 Actual vs. 579 Required
- ✓ Shops are delivering on higher car availability as resourced in last year’s budget; mild weather helps
- ✓ Able to make unplanned addition to car requirements – all Green Line trains now scheduled as 10 car trains



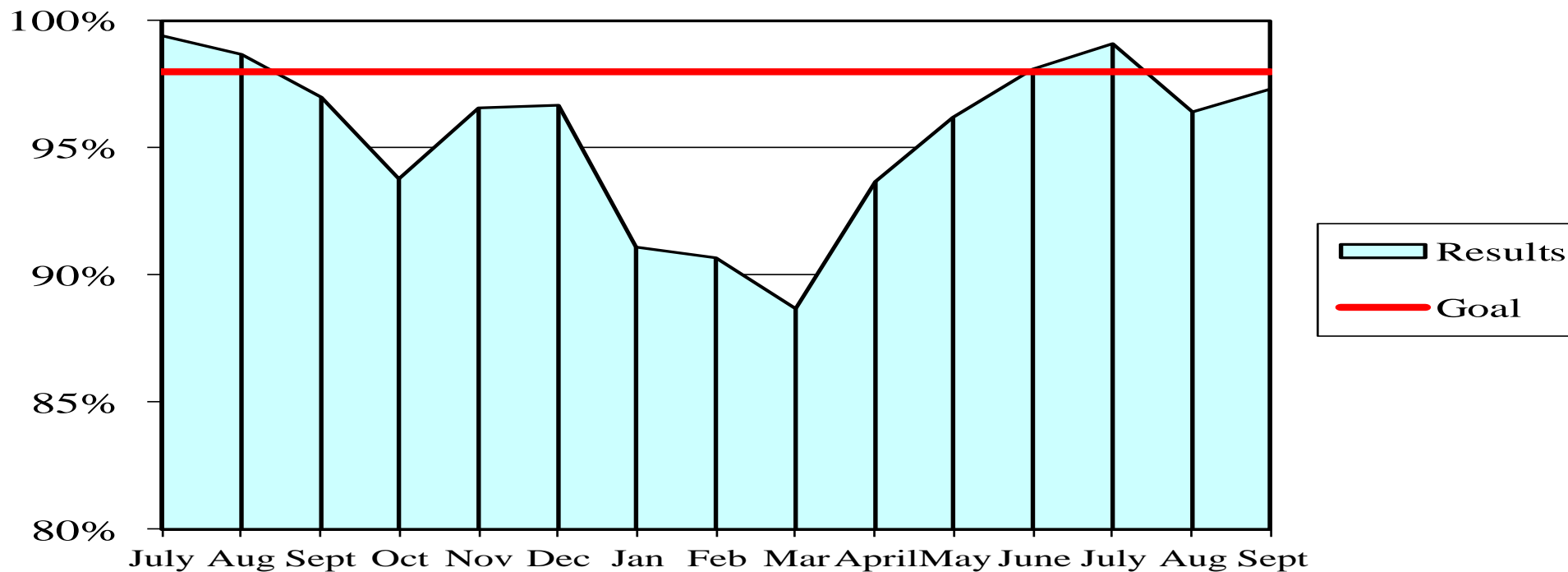
Elevator Availability - Stations



- ✓ Goal met, 98.5%
- ✓ Floor and door replacement projects on schedule to be completed by April 2017



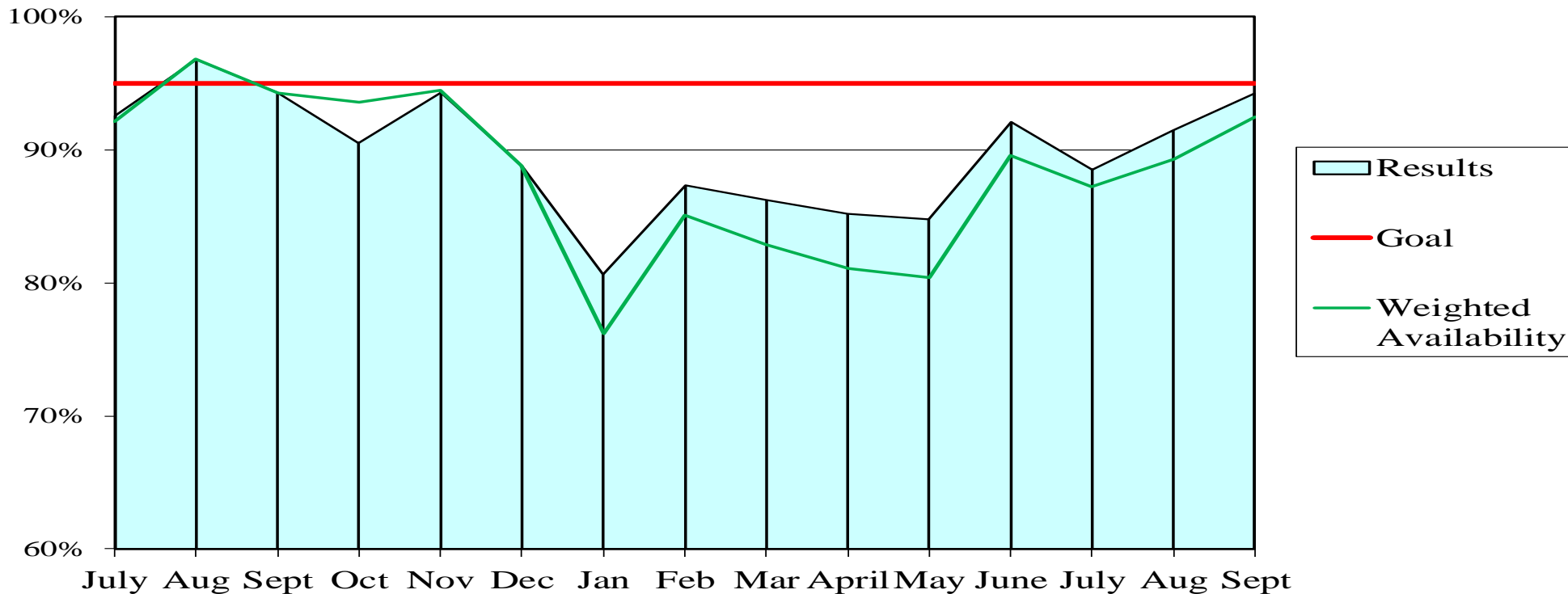
Elevator Availability - Garage



- ✓ Goal not met – Actual 97.6% / Goal 98% but improved performance
- ✓ Pleasant Hill Garage Elevators continue to be problematic - Project to upgrade control electronics expected to begin in August 2017



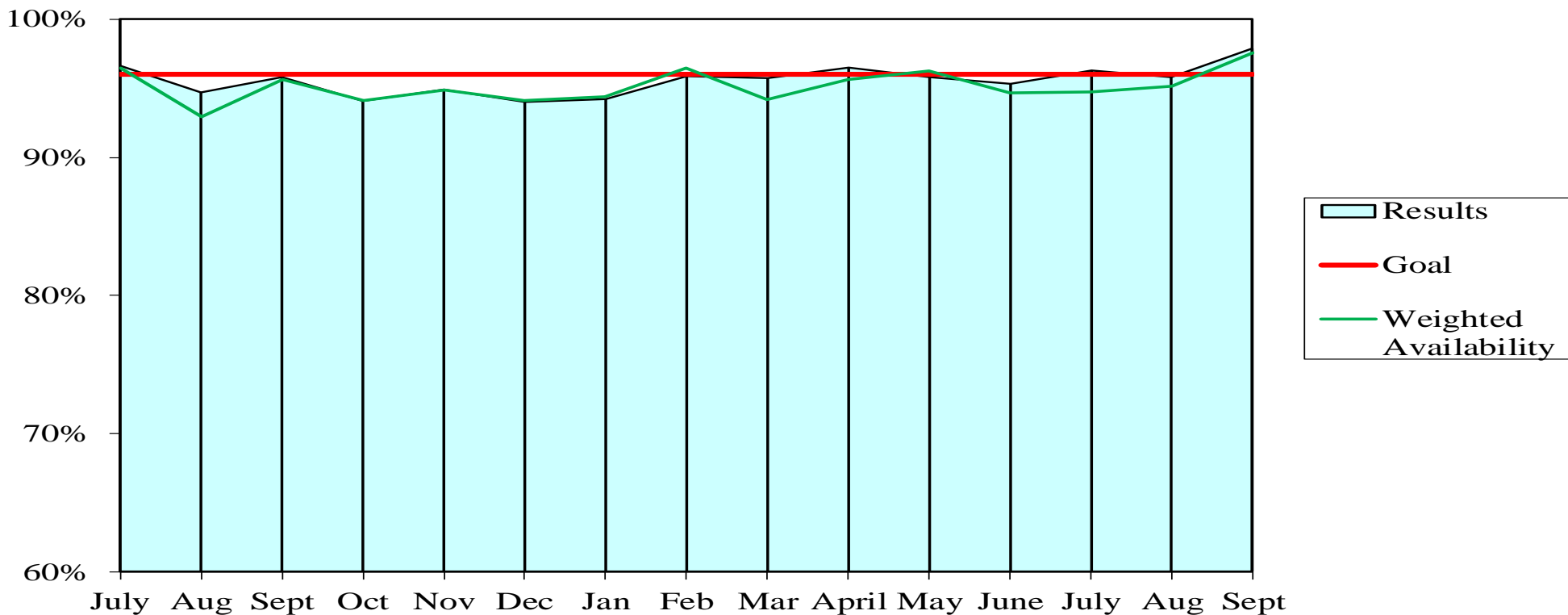
Escalator Availability - Street



- ✓ Goal not met - Actual 91.4%/ Goal 95%
- ✓ Significant 4.6% improvement over last quarter
- ✓ Beginning to see the benefit of a dedicated crew in downtown SF



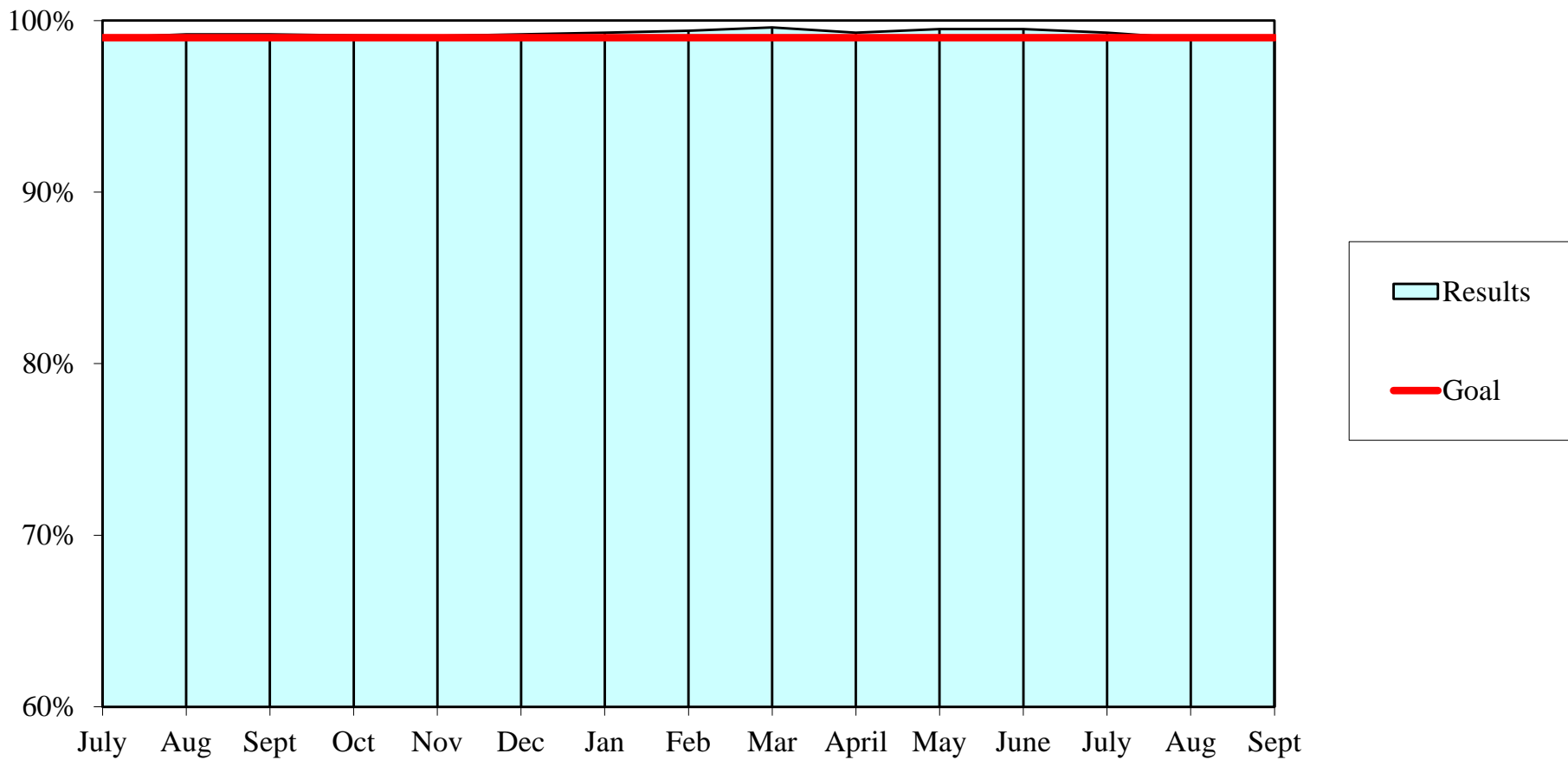
Escalator Availability - Platform



- ✓ Goal exceeded – 96.67%, improved performance
- ✓ Several major planned & scheduled jobs initiated to improve reliability



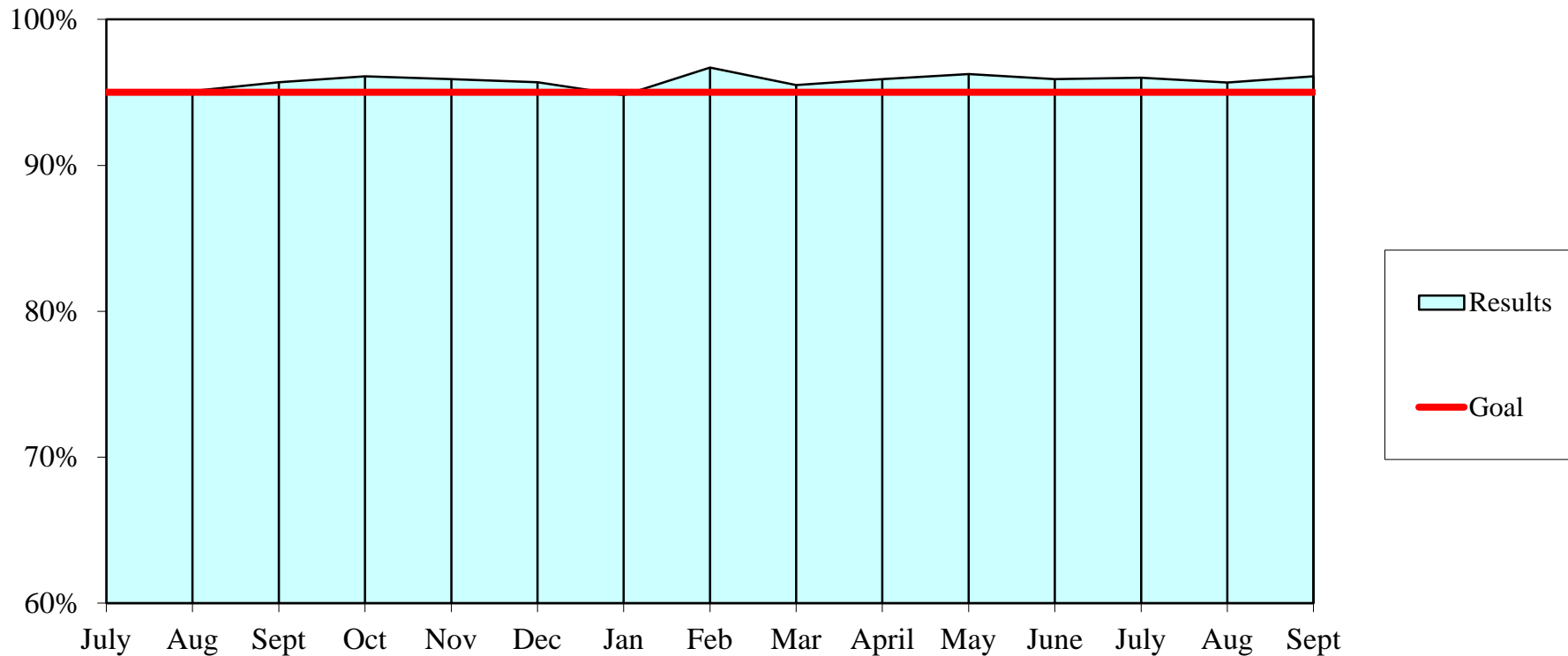
AFC Gate Availability



- ✓ Goal exceeded - 99.12
- ✓ Asset Refresh in full swing- A, L &R lines complete
- ✓ Reboot times increased, Station Agent training in progress



AFC Vendor Availability

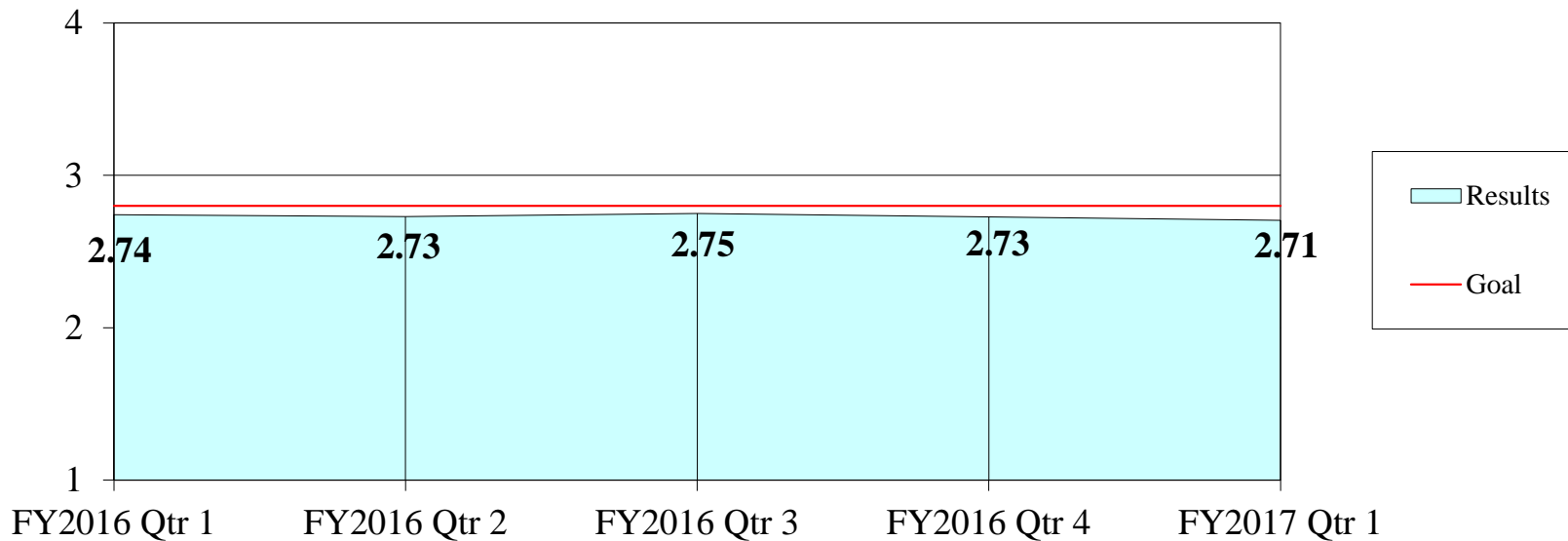


- ✓ Goal exceeded, 95.92%
- ✓ Asset Refresh complete on A, L & R lines



Environment - Outside Stations

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



Composite rating of:

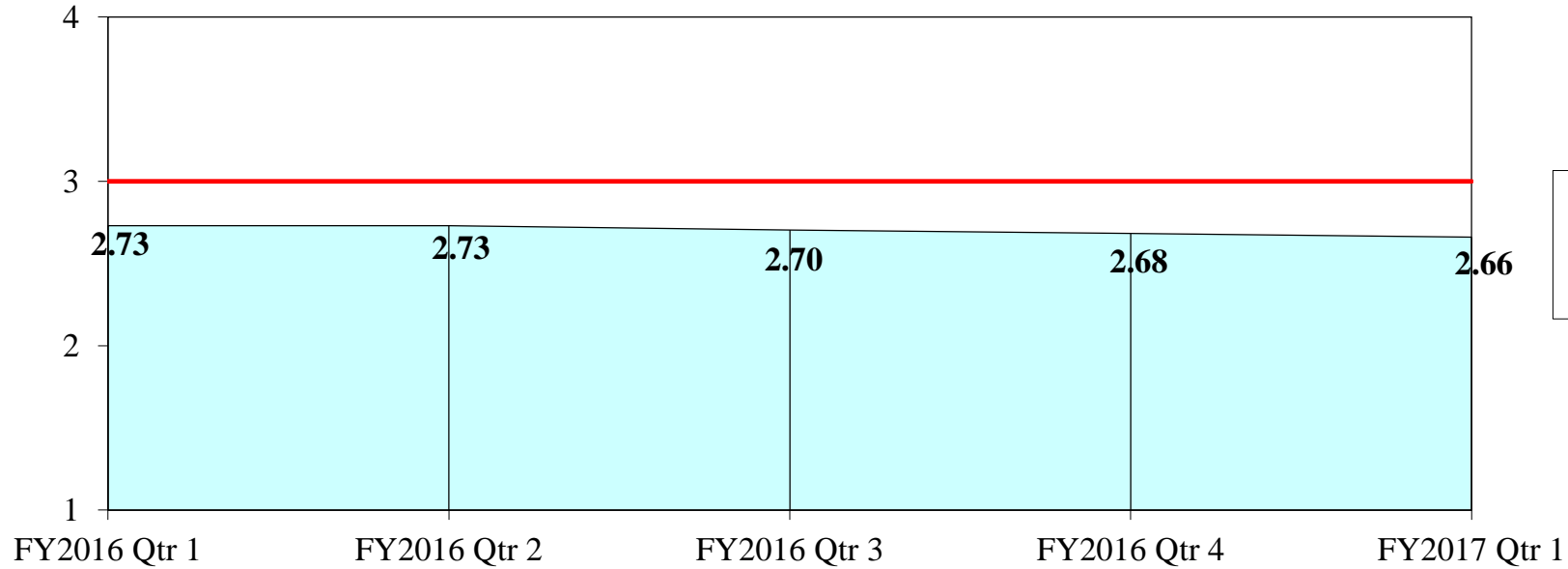
Walkways & Entry Plaza Cleanliness (50%)	2.60
BART Parking Lot Cleanliness (25%)	2.96
Appearance of BART Landscaping (25%)	2.66

- ✓ Goal not met
- ✓ Cleanliness ratings of either Excellent or Good:
 - Walkways/Entry Plazas: 58.5%
 - Parking Lots: 75.5%
 - Landscaping Appearance: 62.0%



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%)	2.81
Other Station Areas (20%)	2.60
Restrooms (10%)	2.17
Elevator Cleanliness (10%)	2.37

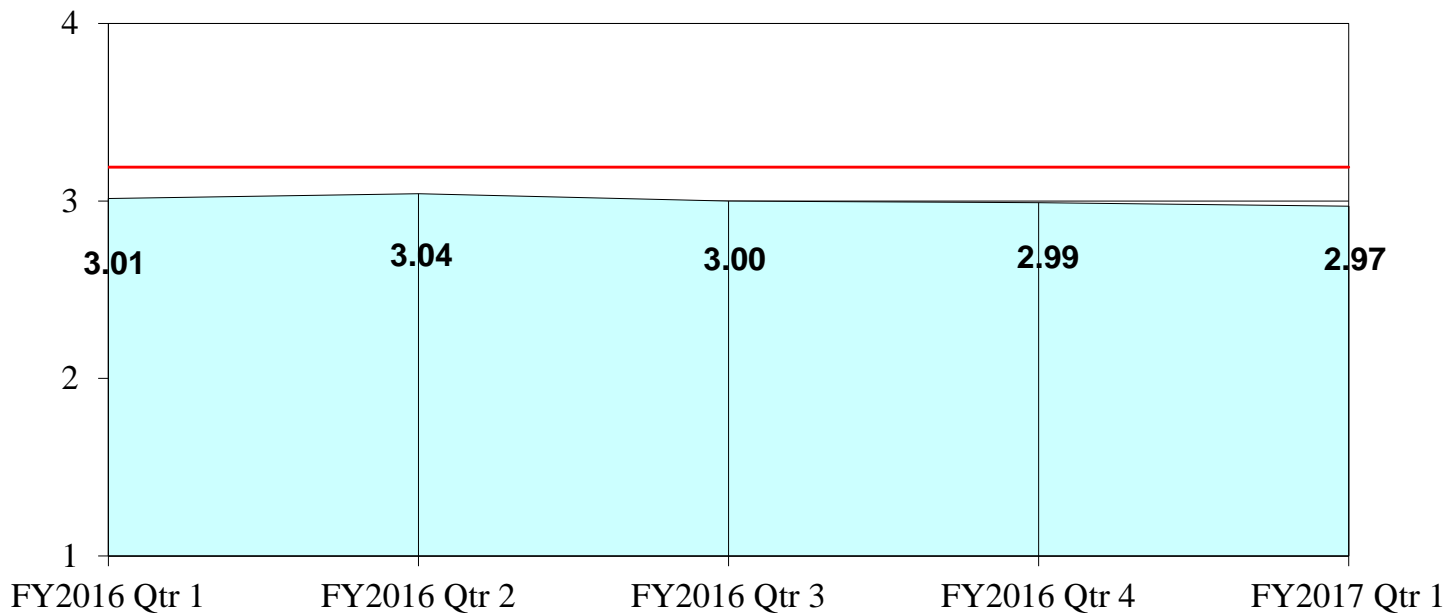
- ✓ Goal not met
- ✓ Cleanliness ratings of either Excellent or Good:

Station Platform: 70.0%	Other Station Areas: 58.9%
Restrooms: 38.9%	Elevators: 49.3%



Station Vandalism

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



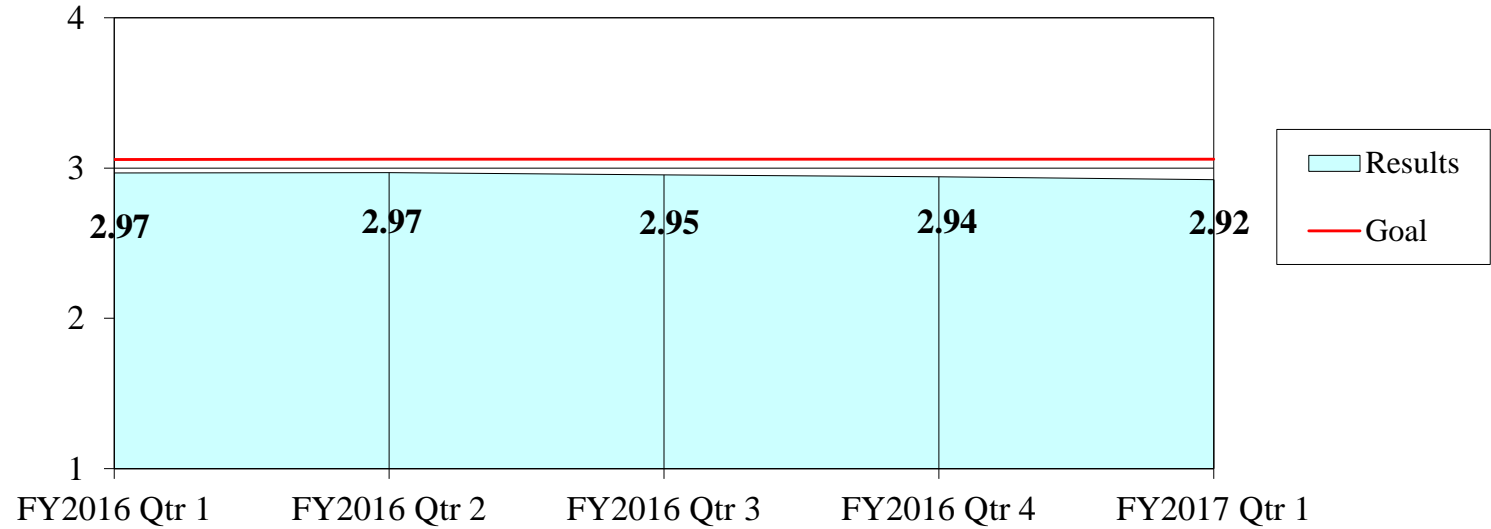
Station Kept Free of Graffiti

- ✓ Goal not met
- ✓ 76.3% 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



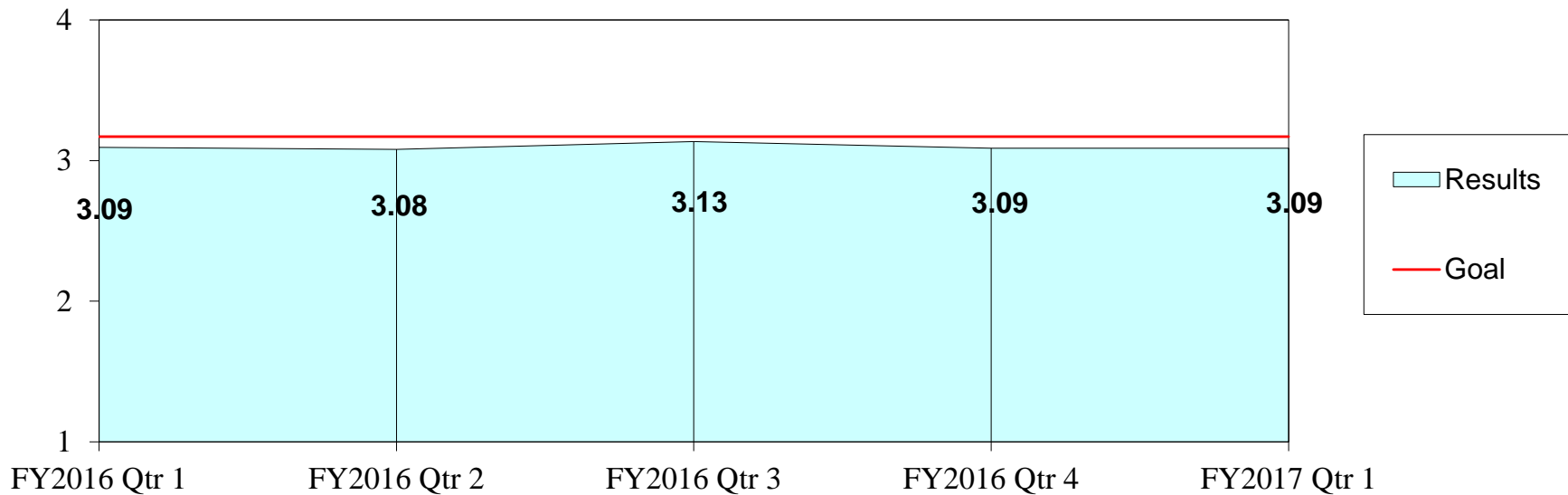
Composite rating of:	
Station Agent Availability (65%)	2.88
Brochures Availability (35%)	3.00

- ✓ Goal not met
- ✓ Availability ratings of either Excellent or Good:
 - Station Agents: 73.5%
 - Brochures: 78.2%



Train P.A. Announcements

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

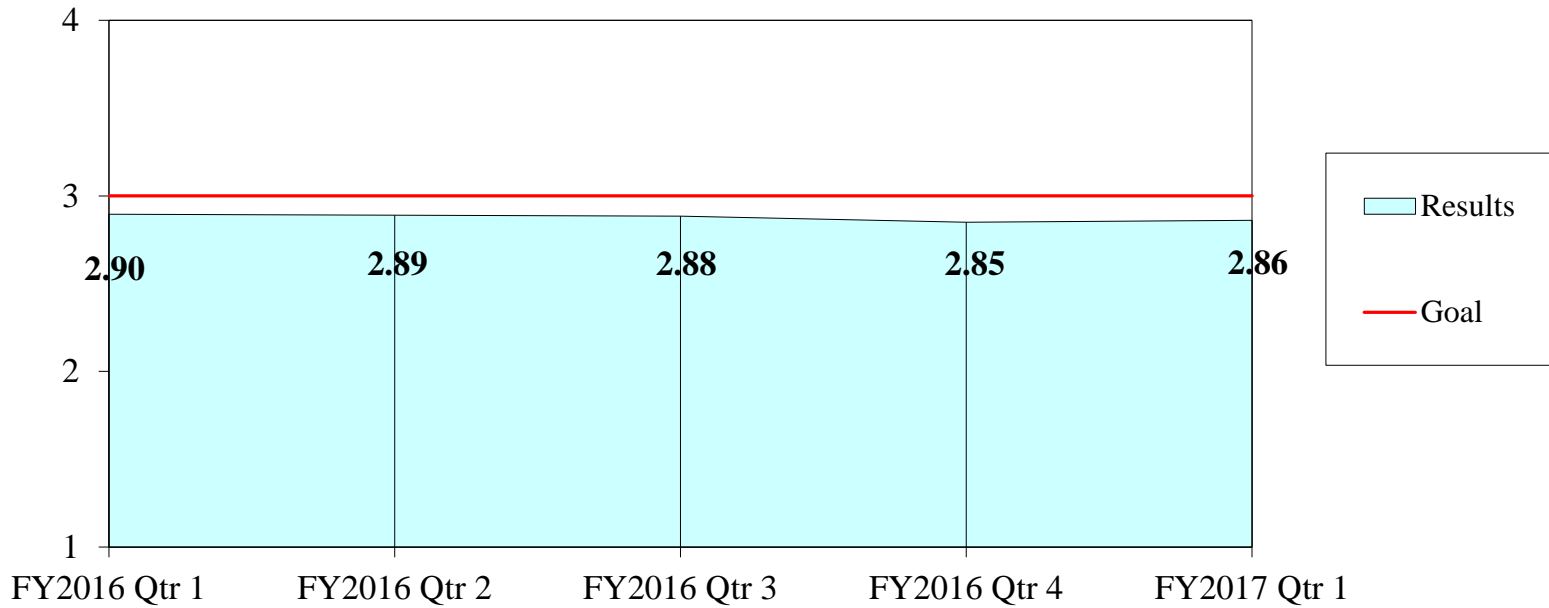


Composite rating of:	
P.A. Arrival Announcements (33%)	3.06
P.A. Transfer Announcements (33%)	3.01
P.A. Destination Announcements (33%)	3.19

- ✓ Goal not met
- ✓ Announcement ratings of either Excellent or Good:
 - Arrivals: 77.9%
 - Transfers: 75.8%
 - Destinations: 83.7%

☑ Train Exterior Appearance

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

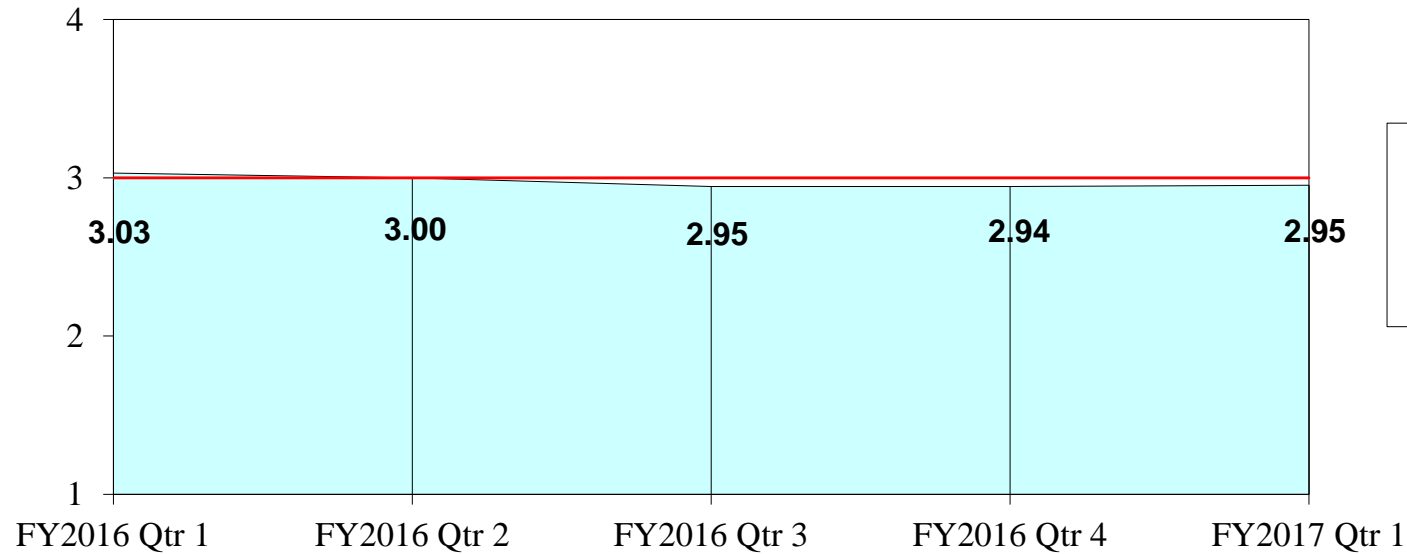


- ✓ Goal not met
- ✓ 74.4% of those surveyed ranked this category as either Excellent or Good



Train Interior Cleanliness

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



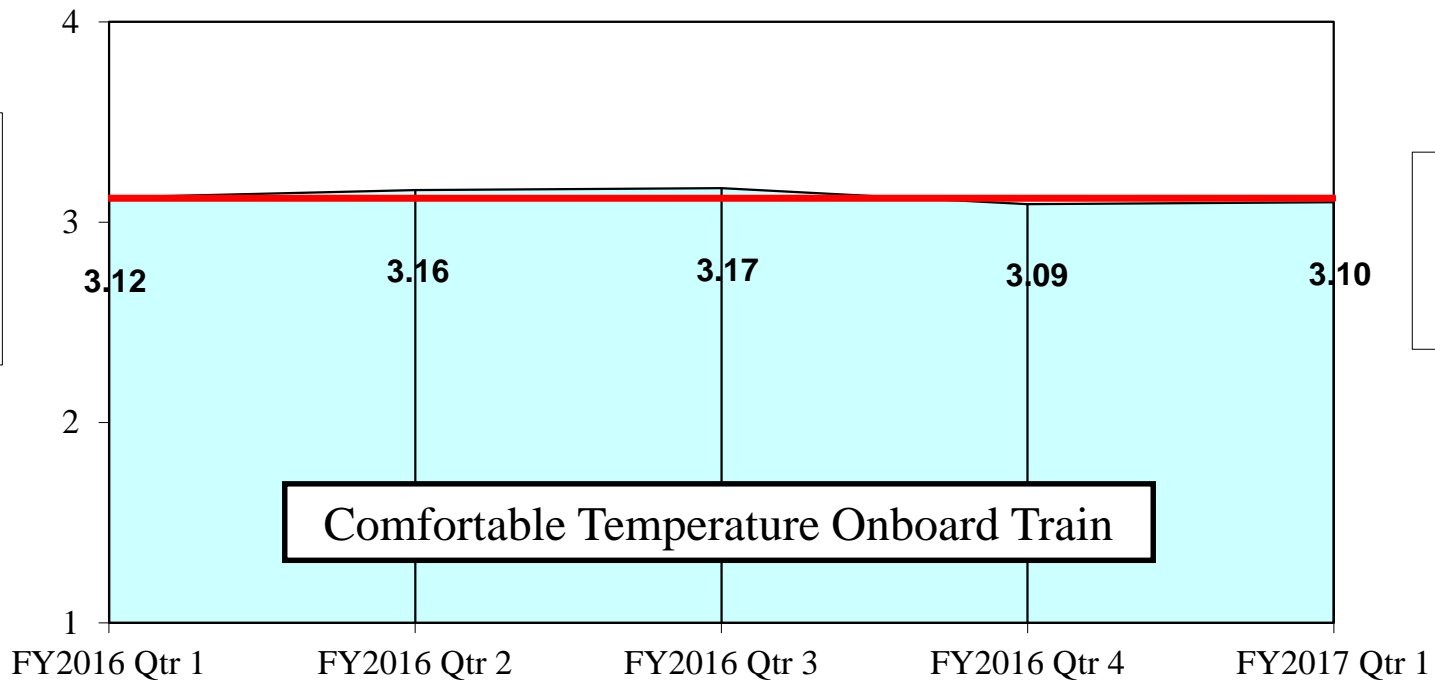
Composite rating of:	
Train interior cleanliness (60%)	2.70
Train interior kept free of graffiti (40%)	3.33

- ✓ Goal not met
- ✓ Train Interior ratings of either Excellent or Good:
 Cleanliness: 63.8% Graffiti-free: 91.3%



Train Temperature

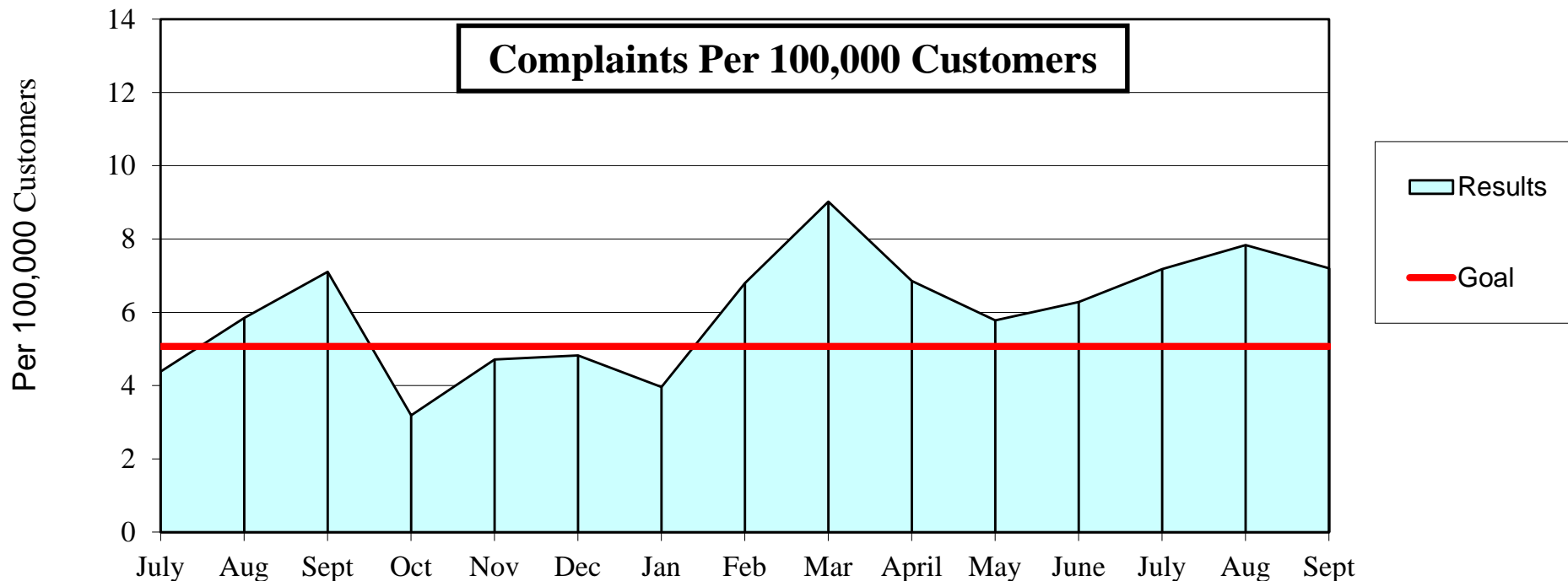
Ratings guide:
 4 = Excellent
 3.12 = Goal
 3 = Good
 2 = Only Fair
 1 = Poor



- ✓ Goal not met
- ✓ 82.1% of those surveyed ranked this category as either Excellent or Good



Customer Complaints

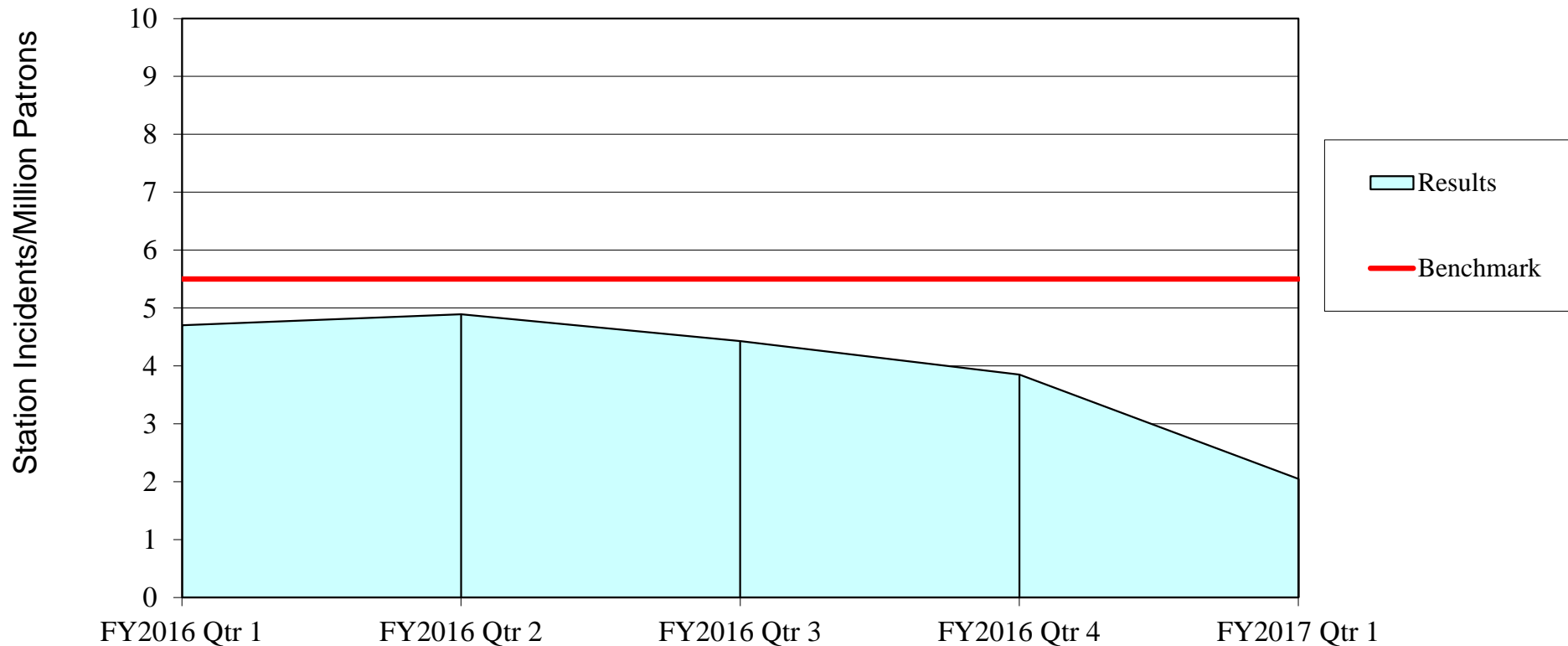


- ✓ Total complaints lodged this period increased 270 (12.8%) from last quarter, up 504 (26.9%) when compared with the first quarter FY16.
- ✓ Complaints saw increase in the areas of AFC, M&E, Parking, Passenger Information, Police Services, Policies, Station Cleanliness, Train Cleanliness and Trains.
- ✓ Decreases occur in Announcements, Personnel and Service. No changes was reflected in complaints about the Bicycle Program.
- ✓ “Compliments” dropped to 116, down from 139 (one year ago these numbered 140)



Patron Safety:

Station Incidents per Million Patrons

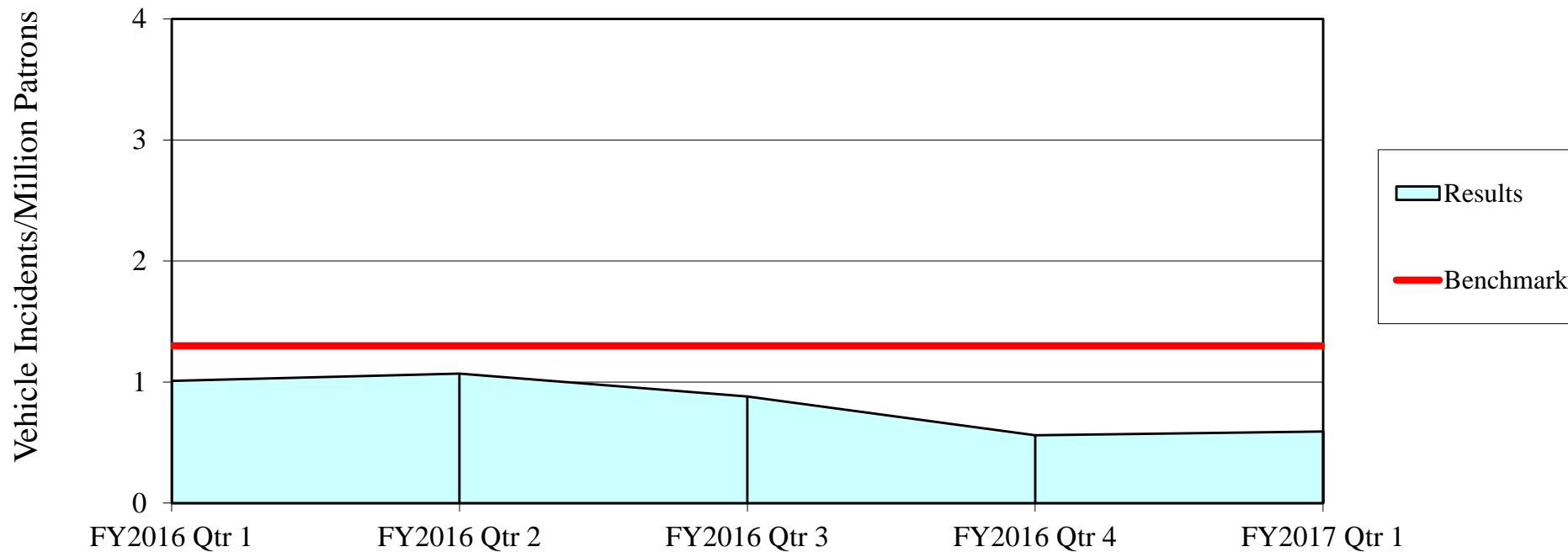


✓ Goal met



Patron Safety

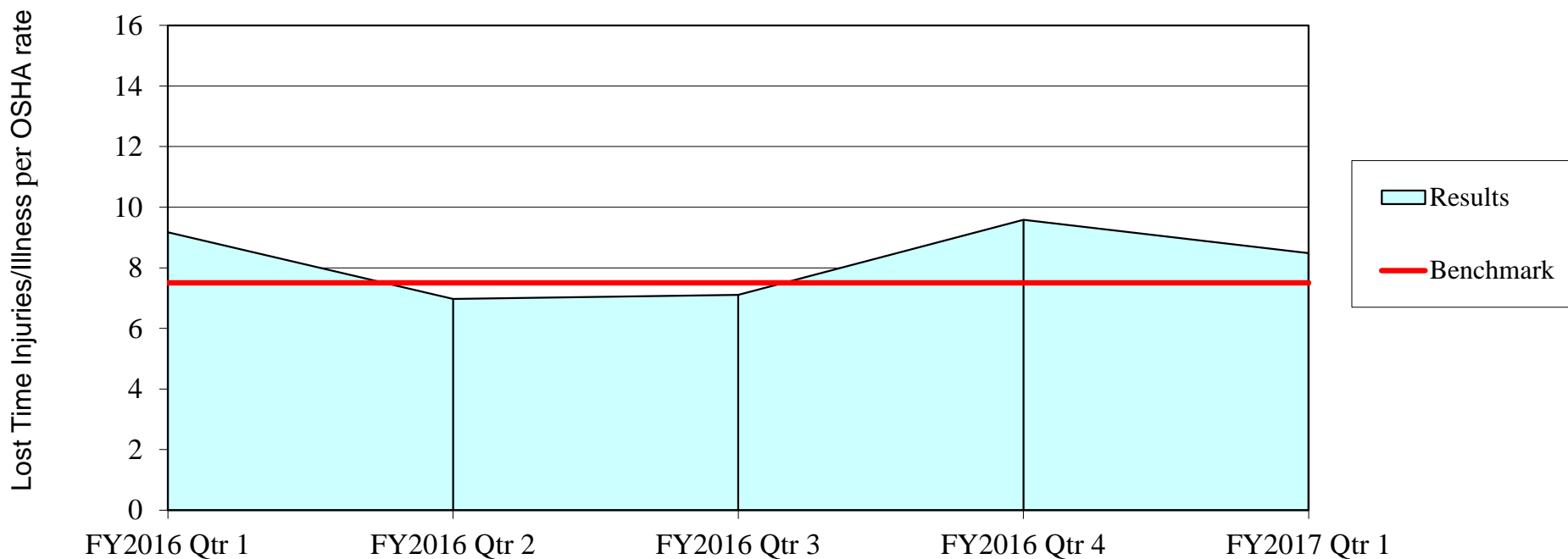
Vehicle Incidents per Million Patrons



✓ Goal met



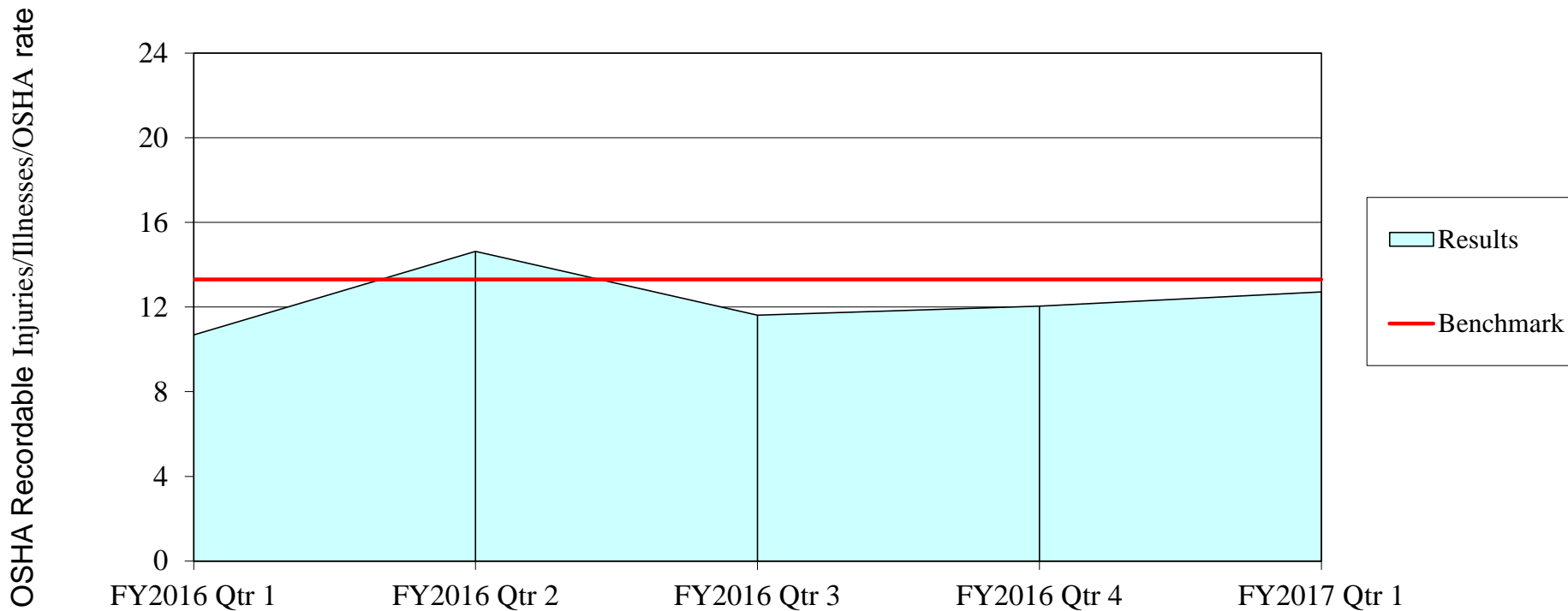
Employee Safety: Lost Time Injuries/Illnesses per OSHA Incidence Rate



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



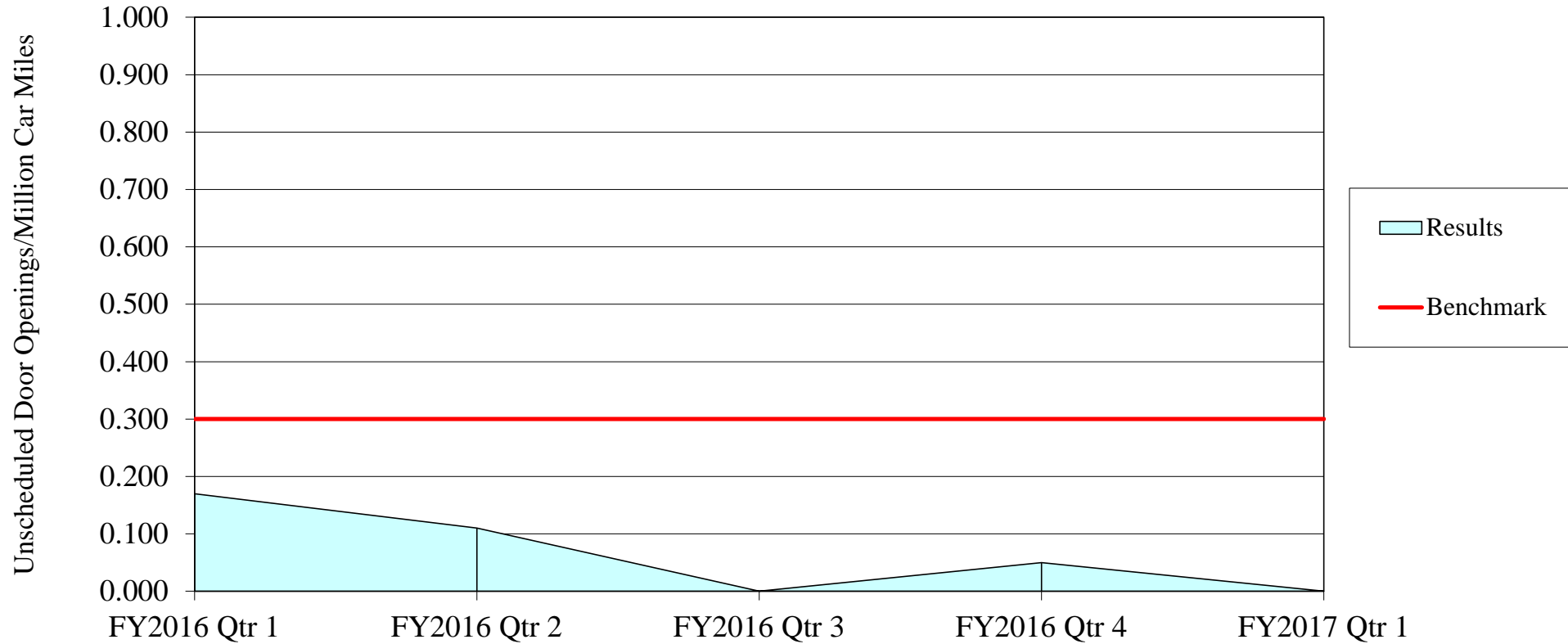
Employee Safety: OSHA-Recordable Injuries/Illnesses per OSHA Incidence Rate



✓ Goal met

Operating Safety:

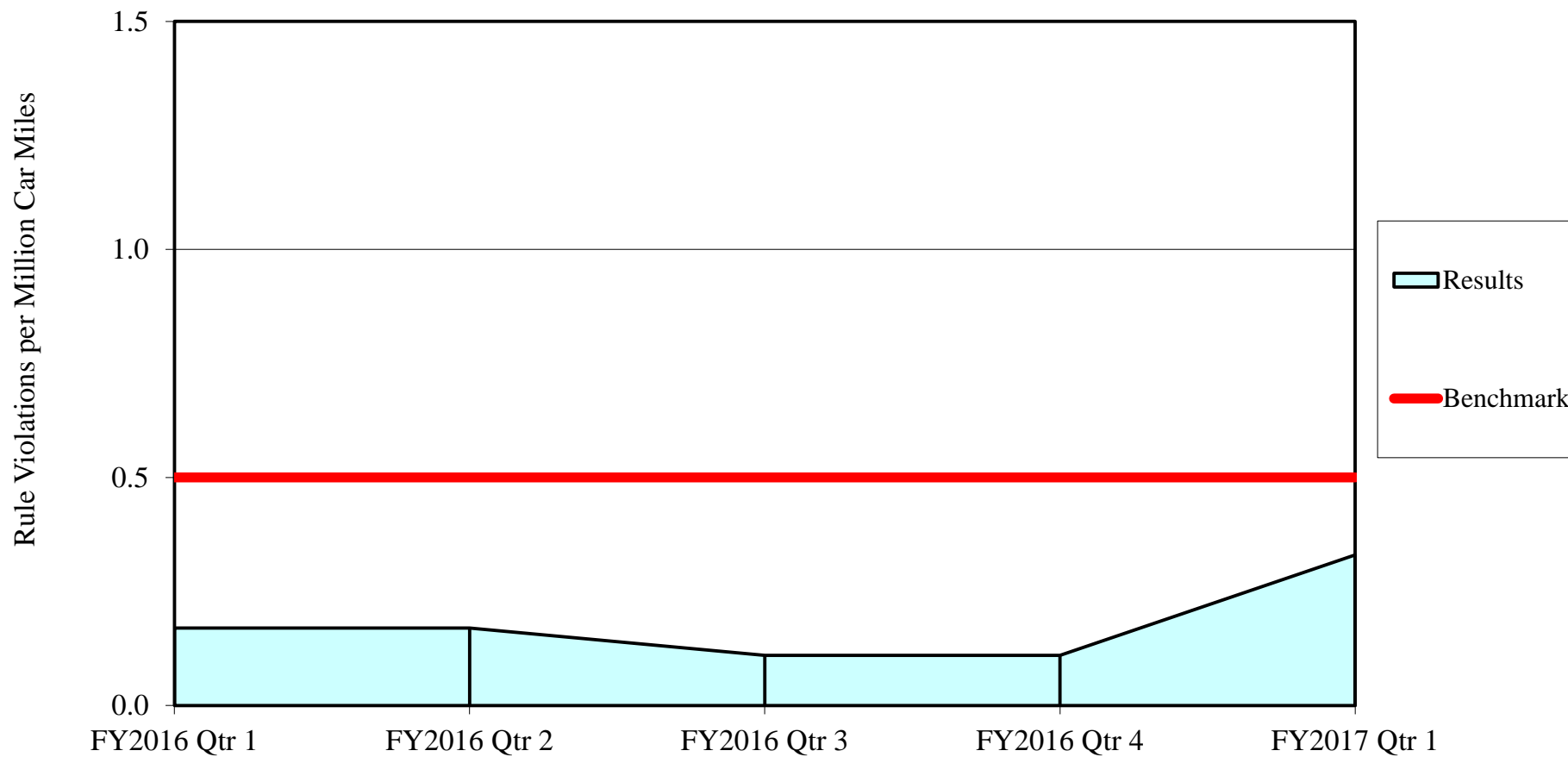
Unscheduled Door Openings per Million Car Miles



✓ Goal met – No Incidents for this quarter



Operating Safety: Rule Violations per Million Car Miles

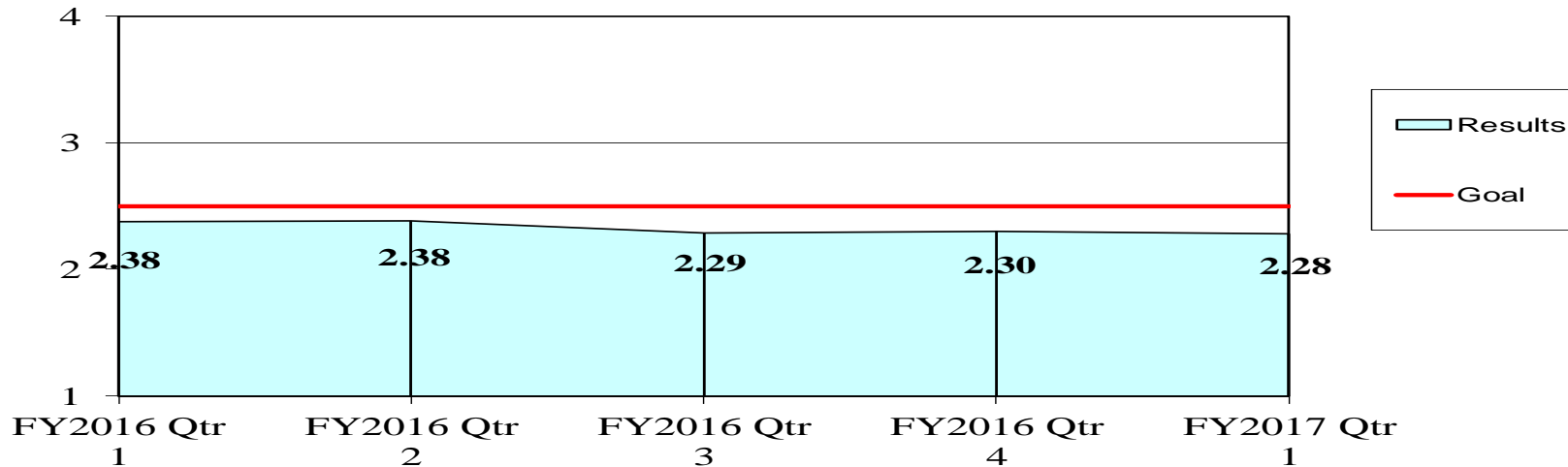


✓ Goal met



BART Police Presence

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

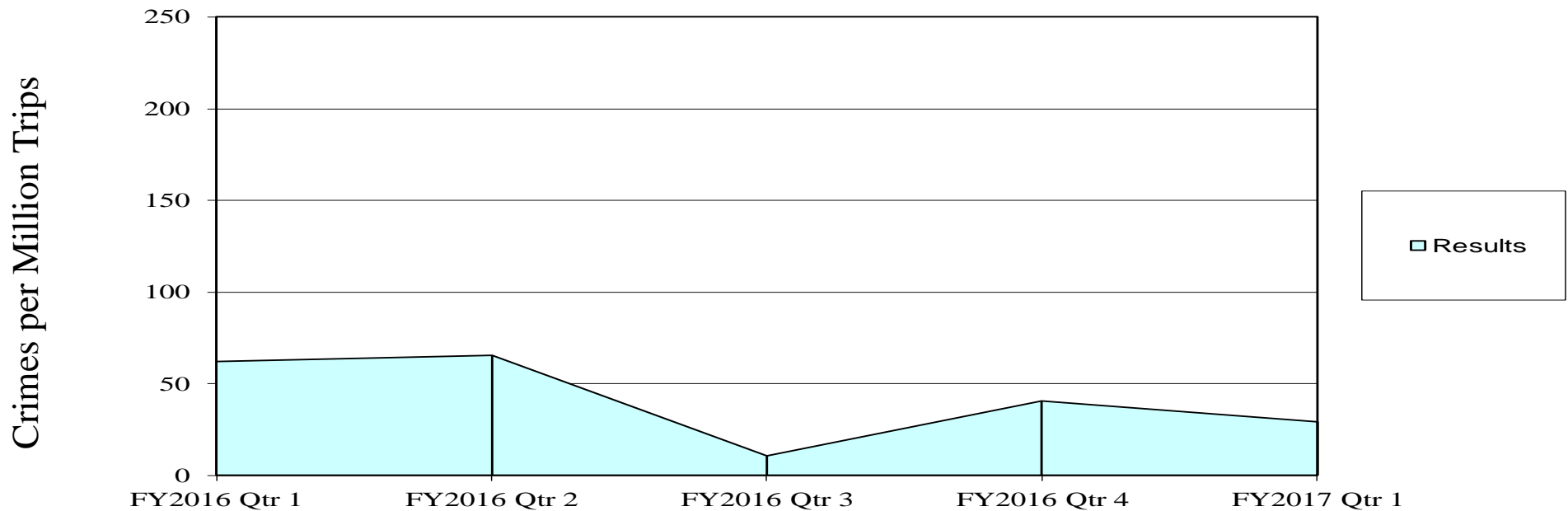


Composite Rating of Adequate BART Police Presence in:	
Stations (33%)	2.23
Parking Lots and Garages (33%)	2.38
Trains (33%)	2.24

- ✓ Goal not met
- ✓ Adequate Presence ratings of either Excellent or Good:
 - Stations: 41.4%
 - Trains: 41.4%
 - Parking Lots/Garages: 48.1%



Quality of Life*



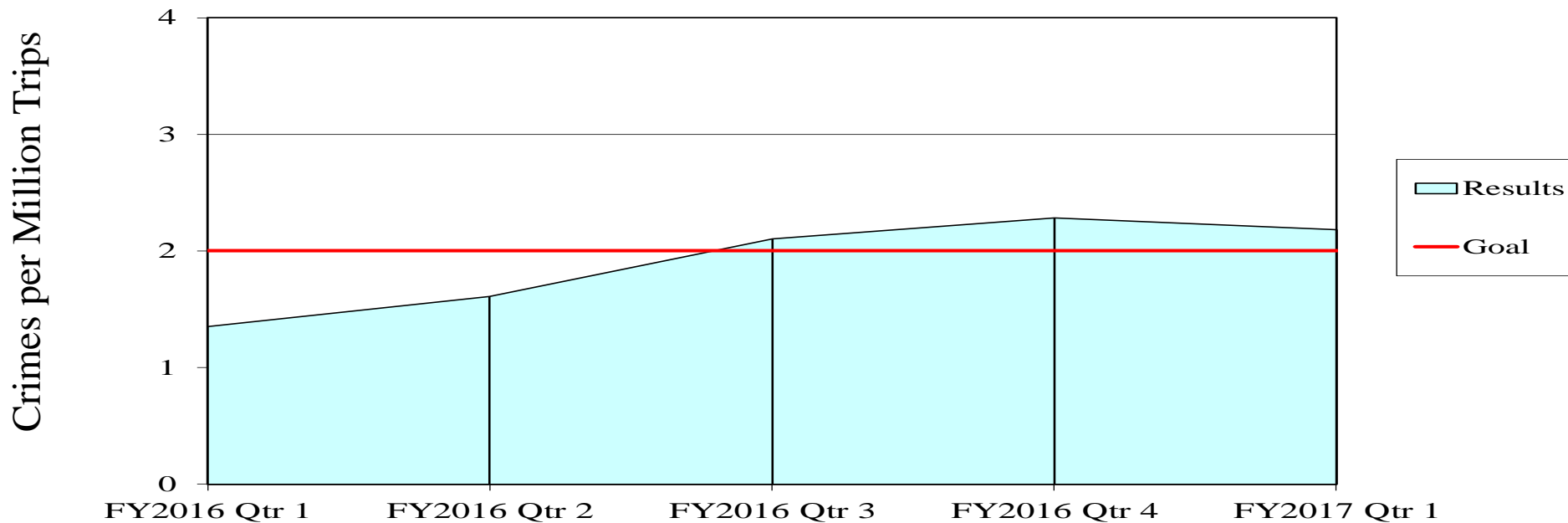
✓ Quality of Life incidents are down from the last quarter, and down from the corresponding quarter of the prior fiscal year.

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



Crimes Against Persons

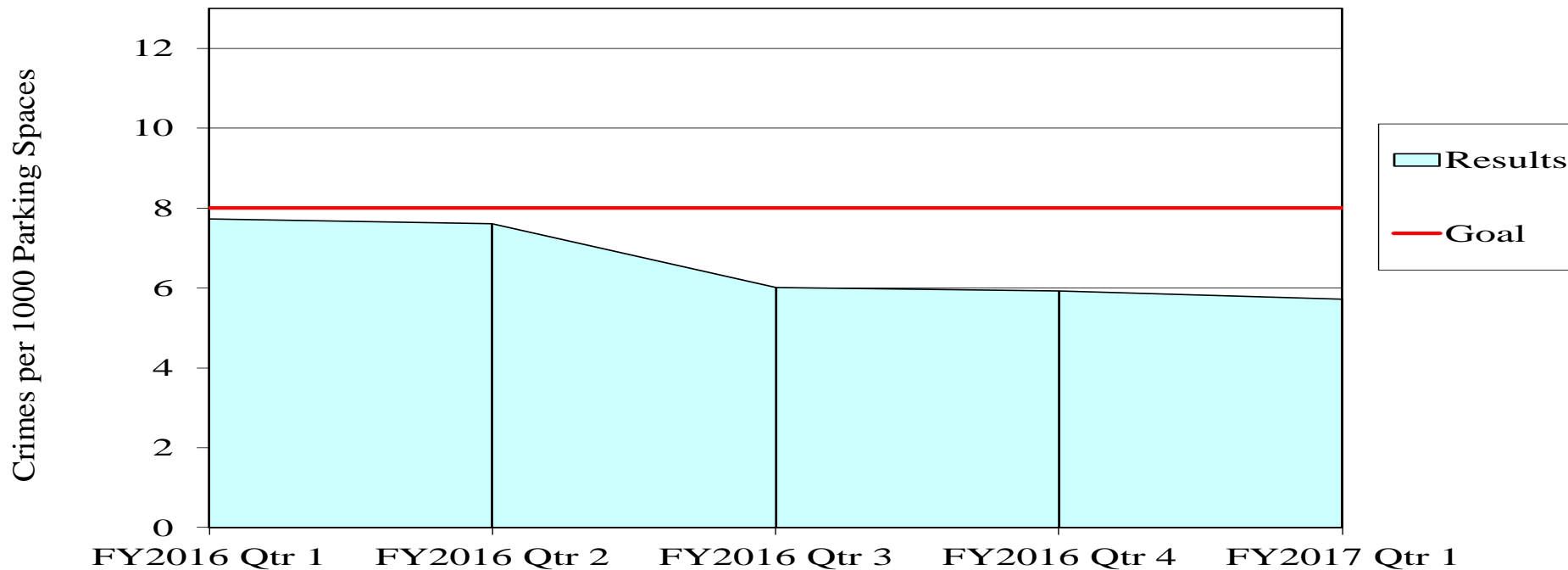
(Homicide, Rape, Robbery, and Aggravated Assault)



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



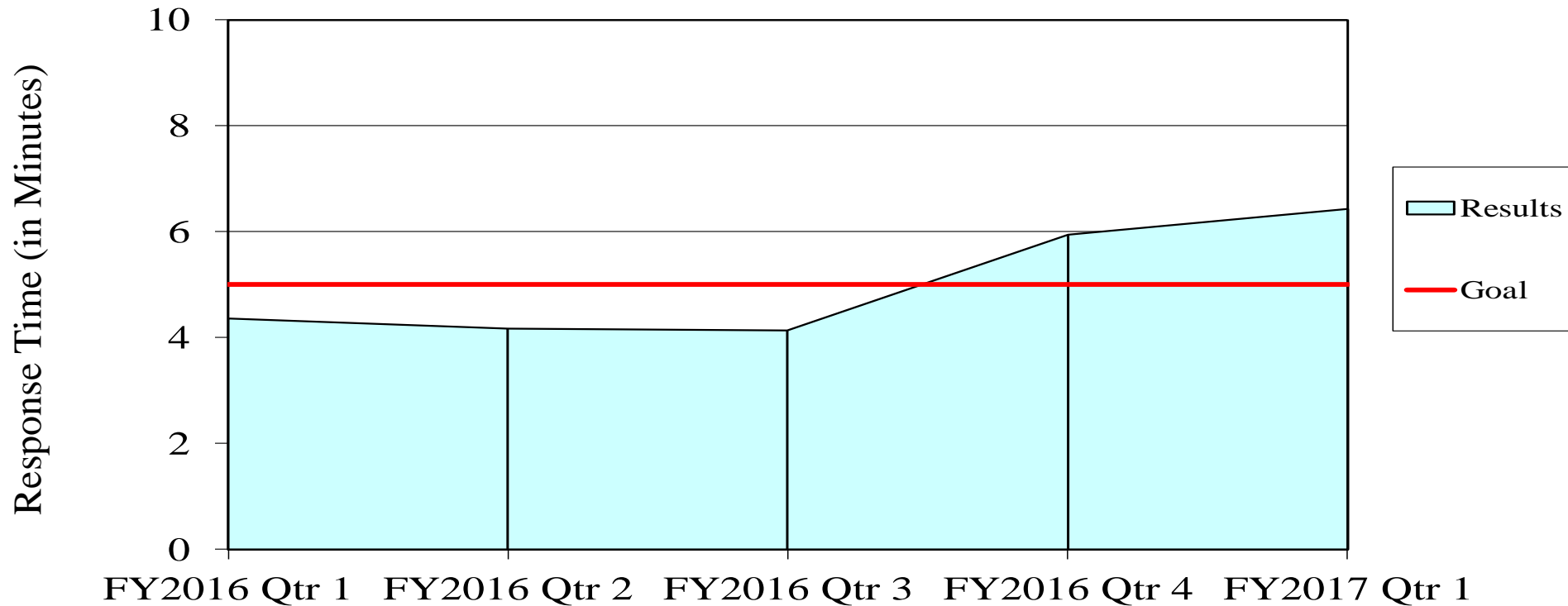
Auto Theft and Burglary



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



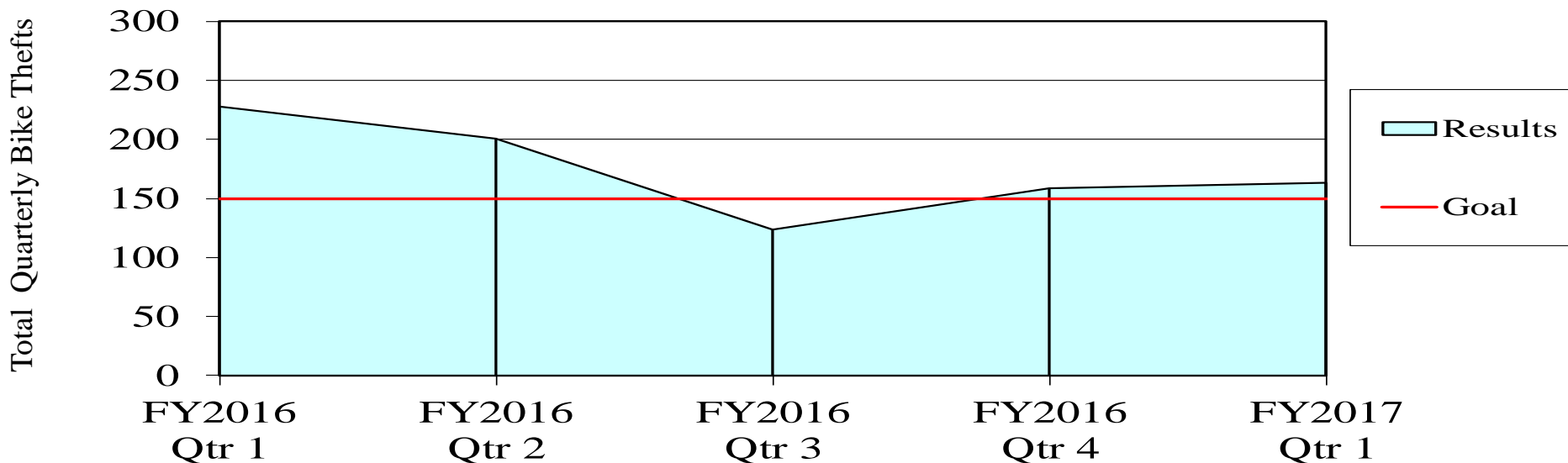
Average Emergency Response Time



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



Bike Theft



- ✓ Goal not met
- ✓ 163 bike thefts for current quarter, up 4 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.