Quarterly Service Performance Review
Fourth Quarter, FY 2019
April - June, 2019

Engineering & Operations Committee

August 22, 2019

PERFORMANCE INDICATORS	SUMMARY CHART 4TH QUARTER FY 2019									
	CURRENT QUARTER				PRIOR QTR ACTUALS		YEAR TO DATE			
UPDATED 08/15/19	ACTUAL	STANDARD	STATUS		LAST QUARTER	THIS QTR LAST YEAR	ACTUAL	STANDARD	STATUS	
Average Ridership - Weekday	426,697	423,385	MET	🟩	404,136	416,706	414,131	416,371	NOT MET	🟨
Customers on Time										
Peak	91.49%	94.00%	NOT MET	🟨	90.84%	93.29%	91.72%	94.00%	NOT MET	🟨
Daily	92.05%	94.00%	NOT MET	🟨	91.97%	94.18%	92.72%	94.00%	NOT MET	🟨
Trains on Time										
Peak	85.75%	N/A	N/A		84.79%	90.28%	87.21%	N/A	N/A	
Daily	87.72%	91.00%	NOT MET	🟨	88.73%	91.20%	89.45%	91.0%	NOT MET	🟨
Peak Period Transbay Car Throughput										
AM Peak	97.27%	97.50%	NOT MET	🟨	96.15%	95.95%	94.35%	97.50%	NOT MET	🟨
PM Peak	98.29%	97.50%	MET	🟩	98.37%	96.60%	96.22%	97.50%	NOT MET	🟨
Car Availability at 4 AM (0400)	644	631	MET	🟩	625	589	618	613	MET	🟩
Mean Time Between Service Delays	5,138	4,000	MET	🟩	4,756	4,663	4,931	4,000	MET	🟩
Elevators in Service										
Station	98.60%	98.00%	MET	🟩	97.97%	98.40%	98.71%	98.00%	MET	🟩
Garage	97.67%	97.00%	MET	🟩	96.10%	98.03%	96.99%	97.00%	NOT MET	🟨
Escalators in Service										
Street	94.43%	93.00%	MET	🟩	90.03%	86.70%	91.99%	93.00%	NOT MET	🟨
Platform	96.93%	96.00%	MET	🟩	96.73%	95.33%	97.03%	96.00%	MET	🟩
Automatic Fare Collection										
Gates	99.38%	99.00%	MET	🟩	99.57%	99.57%	99.52%	99.00%	MET	🟩
Vendors	98.72%	95.00%	MET	🟩	98.67%	98.22%	98.71%	95.00%	MET	🟩
Wayside Train Control System	1.73	1.00	NOT MET	🟥	0.68	0.78	0.96	1.00	MET	🟩
Computer Control System	0.16	0.08	NOT MET	🟥	0.243	0.027	0.198	0.08	NOT MET	🟥
Traction Power	0.23	0.20	NOT MET	🟥	0.10	0.06	0.21	0.20	NOT MET	🟨
Track	0.27	0.30	MET	🟩	0.08	0.01	0.14	0.30	MET	🟩
Transportation	0.58	0.50	NOT MET	🟥	0.41	0.54	0.51	0.50	NOT MET	🟨
Environment Outside Stations	0.00	N/A	N/A		0.00	0.00	0.00	N/A	N/A	
Environment Inside Stations	0.00	N/A	N/A		0.00	0.00	0.00	N/A	N/A	
Station Vandalism	0.00%	N/A	N/A		0.00%	0.00%	0.00%	N/A	N/A	
Station Services	0.00	N/A	N/A		0.00	0.00	0.00	N/A	N/A	
Train P.A. Announcements	0.00	N/A	N/A		0.00	0.00	0.00	N/A	N/A	
Train Exterior Appearance	0.00	N/A	N/A		0.00	0.00	0.00	N/A	N/A	
Train Interior Appearance	0.00%	N/A	N/A		0.00%	0.00%	0.00%	N/A	N/A	
Train Temperature	0.00%	N/A	N/A		0.00%	0.00%	0.00%	N/A	N/A	
Customer Complaints										
Complaints per 100,000 Passenger Trips	13.14	5.07	NOT MET	🟥	12.17	7.80	11.42	5.07	NOT MET	🟥
Safety										
Station Incidents/Million Patrons	1.16	2.00	MET	🟩	2.19	1.20	1.59	3.75	MET	🟩
Vehicle Incidents/Million Patrons	0.46	0.60	MET	🟩	0.63	0.36	0.47	0.95	MET	🟩
Lost Time Injuries/Illnesses/Per OSHA	7.25	6.50	NOT MET	🟥	3.96	5.88	5.95	7.00	MET	🟩
OSHA-Recordable Injuries/Illnesses/Per OSHA	11.07	12.00	MET	🟩	8.07	8.34	10.84	12.65	MET	🟩
Unscheduled Door Openings/Million Car Miles	0.200	0.200	NOT MET	🟩	0.050	0.200	0.100	0.250	MET	🟩
Rule Violations Summary/Million Car Miles	0.300	0.250	NOT MET	🟥	0.260	0.200	0.253	0.375	MET	🟩
Police										
BART Police Presence	12.5%	11.9%	MET	🟩	10.4%	10.5%	0.0%	0.0%	N/A	🟩
Quality of Life per million riders	77.02	N/A	N/A		92.32	44.59	63.97	N/A	N/A	
Crimes Against Persons per million riders	4.03	2.00	NOT MET	🟥	4.55	3.87	4.36	2.00	NOT MET	🟥
Auto Burglaries per 1,000 parking spaces	4.90	6.00	MET	🟩	6.07	5.88	5.04	7.00	MET	🟩
Auto Thefts per 1,000 parking spaces	1.30	2.25	MET	🟩	1.39	2.42	1.32	4.13	MET	🟩
Police Response Time per Emergency Incident (Minutes)	4.94	5.00	MET	🟩	5.08	4.36	5.12	5.00	NOT MET	🟨
Bike Thefts (Quarterly Total and YTD Quarterly Average)	76	100.00	MET	🟩	41	99	74	125.00	MET	🟩

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

FY19 Fourth Quarter Overview

- ✓ Ridership has begun to flatten this quarter with a 2.3% increase over last quarter

- ✓ On time performance during the peak was up slightly while all day performance was down slightly

- ✓ ROW Equipment Reliability: Car, and Track, met goal; Computer Systems, Train Control and Traction Power did not meet goal

- ✓ Station Equipment Availability: Elevators (Station and Garage), Escalators (Platform and Street), Ticket Machines and Fare Gates met goal

- ✓ Passenger Environment: Station Cleanliness, Grounds, Vandalism, Customer Service, Train Cleanliness, Fare Evasion and Homeless improved; Train Temperature declined slightly

- ✓ Total Customer Complaints increased 15.6% over last quarter

eBART Service Report

PERFORMANCE INDICATORS	SUMMARY CHART FOR 4th QUARTER FY19				PRIOR QTR ACTUALS		FY19 YEAR TO DATE			
	CURRENT QUARTER				LAST QUARTER	THIS QTR LAST YEAR				
Draft 08/02/2019	ACTUAL	STANDARD	STATUS				ACTUAL	STANDARD	STATUS	
Ridership										
Average Ridership - Weekday	8,117	6,060	MET	🟩	7,855	7,516	7,855	6,060	MET	🟩
Average Ridership - Weekend	2,184	n/a	n/a		2,025	2,365	2,190	n/a	n/a	
Service Delivery										
On-Time Performance	93.61%	95.00%	NOT MET	🟨	94.17%	94.35%	94.22%	95.00%	NOT MET	🟨
Transfers to BART										
On-Time Connections	98.55%	98.50%	MET	🟩	98.30%	97.97%	98.44%	98.50%	NOT MET	🟨
Equipment										
Train Mean Distance Between Failures (miles)	12,118	14,000	NOT MET	🟥	27,429	15,077	14,947	14,000	MET	🟩
Station Elevator Availability	99.08%	98.50%	MET	🟩	99.97%	100.00%	99.46%	98.50%	MET	🟩
Station Escalator Availability	99.53%	96.00%	MET	🟩	98.05%	100.00%	97.25%	96.00%	MET	🟩
Customer Feedback										
Complaints/Hundred Thousand Patrons	9.87	7.00	NOT MET	🟥	13.54	37.58	16.40	7.00	NOT MET	🟥
Safety										
Passenger Incidents	0.00	n/a	n/a		0.00	1.00	4.00	n/a	n/a	
Workplace Injuries	0.00	n/a	n/a		2.00	0.00	3.00	n/a	n/a	

LEGEND: Goal Met 🟩   Goal not met but within 5% 🟨   Goal not met by more than 5% 🟥

Customer Ridership
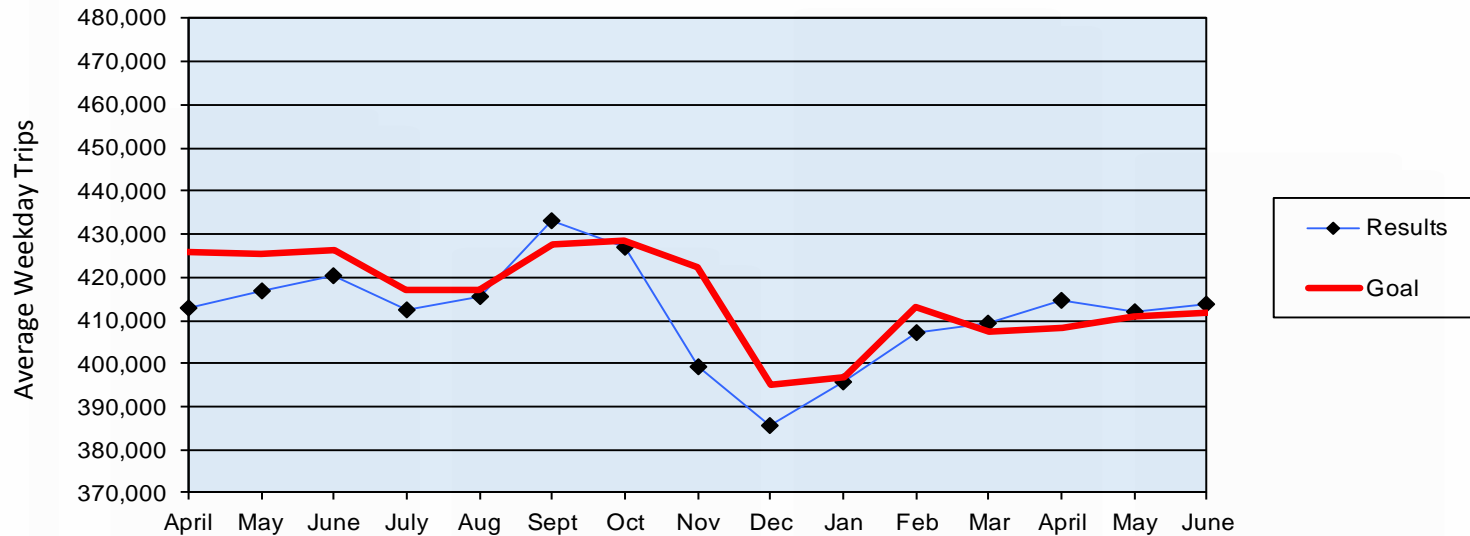
✓Total ridership decreased by 1.6% compared to same quarter last year

✓Average weekday ridership (413,362) was up 2.3% over last quarter

✓Core weekday ridership down by 0.7% from same quarter last year

✓SFO Extension weekday ridership down by 1.7% from same quarter last year

✓Average peak ridership up by 1.2% compared to same quarter last year

✓During Q4 there was one Top 10 Ridership Day:

• 6/30/2019: 234,891 – SF Pride Celebration & Parade; Giants vs. Diamondbacks (#9 Sunday)

✓Saturday and Sunday down by 5.6% and 8.1%, respectively, from same quarter last year

On-Time Service - Customer
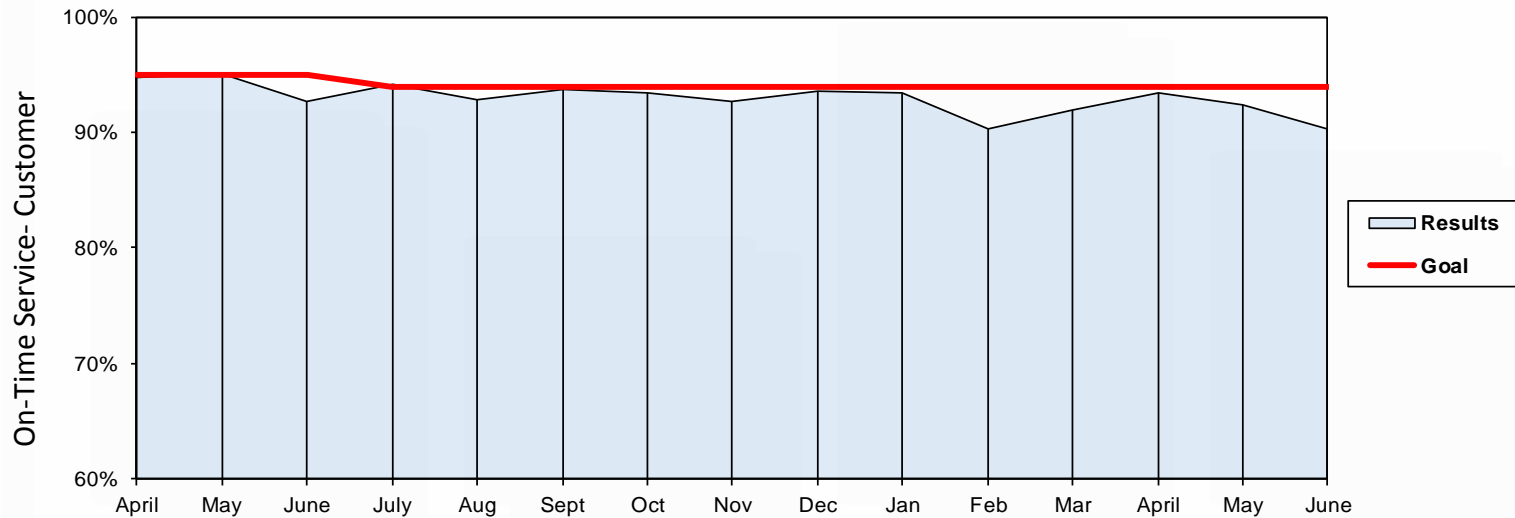
✓ Goal not met – Actual 92.05% / Goal 94.00%

✓ Up .08% from prior quarter, down 2.3% from this quarter last year

1	14-Jun-19	B.F Merge I-Lk	False Occupancy (0916-1737)	Equip	198
2	10-Jun-19	M,K & C Lines	Congestion(Multiple Delays From F.O.'s Systemwide)(1540-1933)	Congestion	95
3	24-Jun-19	Lake Merritt	Trainline(FOTF Post Brake In)(0925-1254)	Vehicle	88
4	20-Jun-19	Daly City	BPD Hold (Weapon Suspect)(1536-1815)	People	70
5	11-Jun-19	L15 I-Lock	Track Dip(Track Inspection)(1421 - EOR)	Equip	60
6	08-Apr-19	E.C.D. Norte	Train Struck A Person On Trackway(0718-1135)	People	58
7	06-Jun-19	W. Oakland	Gas Line Leak (None BART Construction Off Property)(1434-1743)	PG&E	57
8	10-Jun-19	Rich. Yd.	Routing (Switch)(1515-2111)	Equip	56
9	12-Jun-19	L15 I-Lock	Track (Rail Kink)(Rail Replacement)(0351-2323)	Equip	54
10	23-Apr-19	Daly City	False Occupancy(TC Room is Hot)(1706 - 2111)	Equip	53

On-Time Service - Train
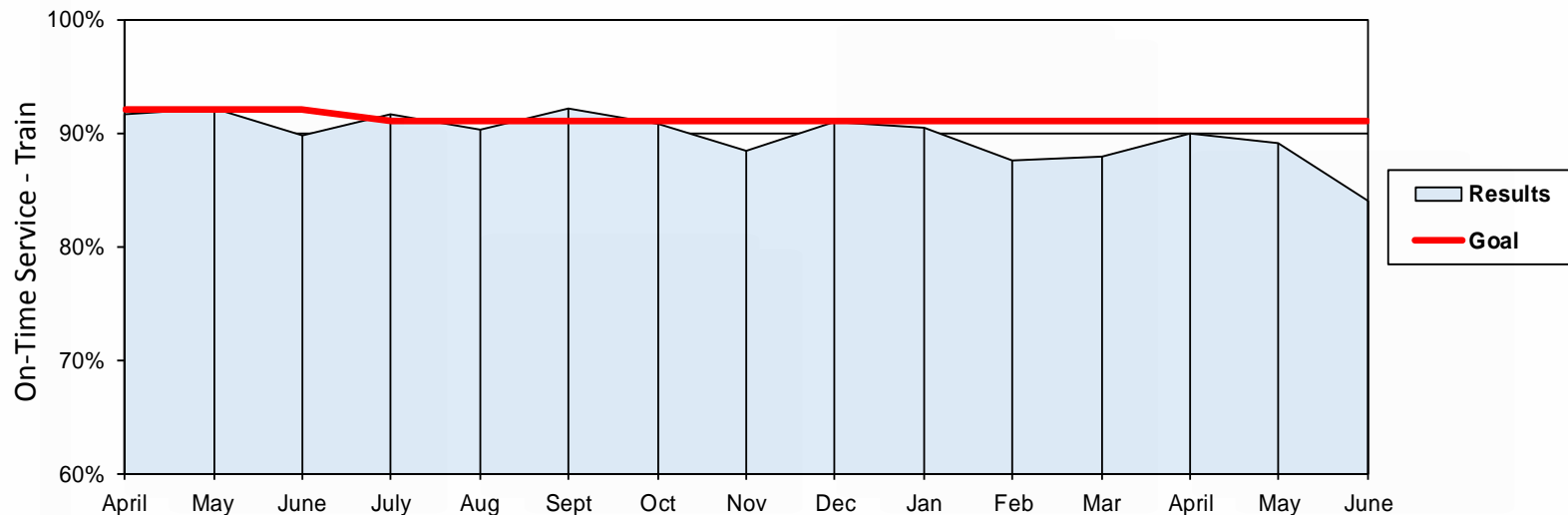
- ✓ Goal not met – Actual 87.7% / 91% Goal
- ✓ Down 1.14% from prior quarter, down 3.9% from this quarter last year
- ✓ 40.4% of late trains were late due to multiple small delays, each under 5 minutes

POLICE ACTIONS	23.0% of delayed trains
TRAIN CONTROL	17.8% of delayed trains
TRANSPORTATION	6.0% of delayed trains
VANDALISM	5.8% of delayed trains
PATRON ILL	5.7% of delayed trains
CONGESTION	4.7% of delayed trains
PERSON ON TRACKWAY	3.6% of delayed trains
MULTIPLE CAUSE	3.0% of delayed trains
TRACK	2.6% of delayed trains
TRACTION POWER	2.4% of delayed trains

Car Equipment - Reliability
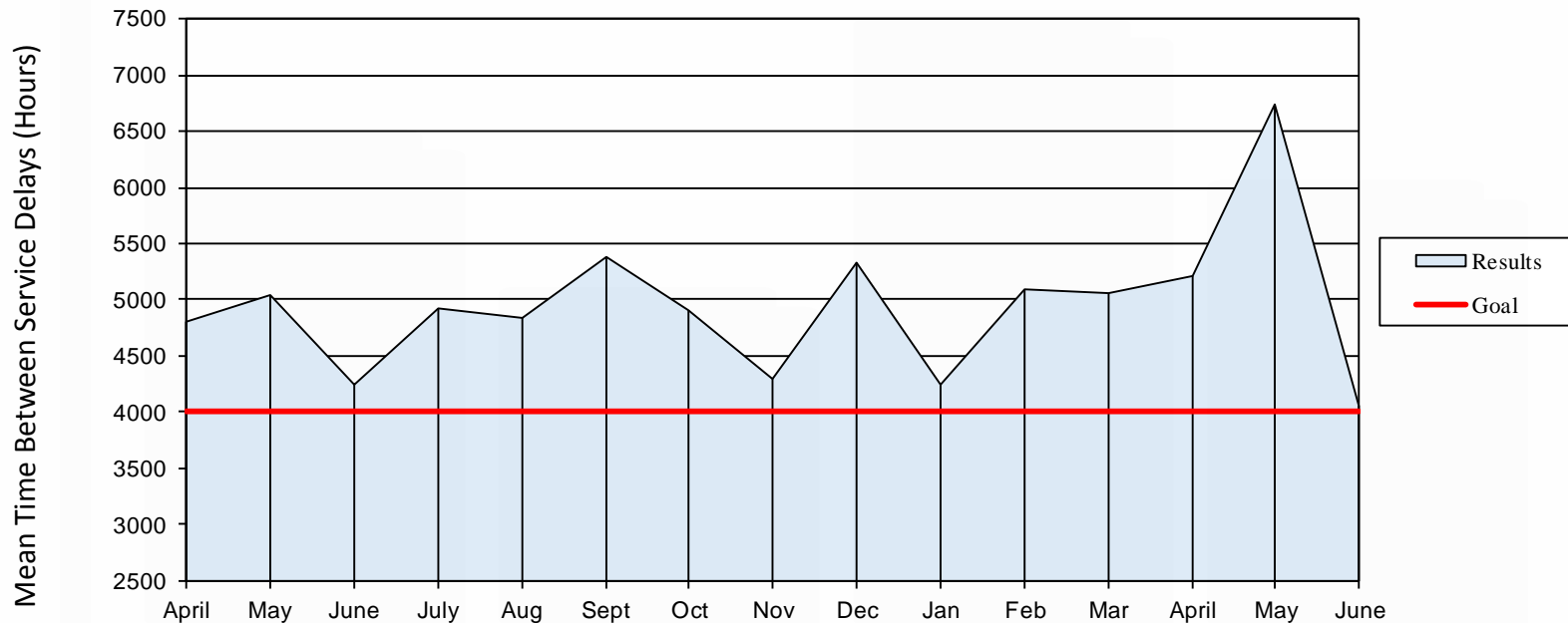
- ✓ Goal met – Actual 5,138 hours / Goal 4,000 hours
- ✓ Record year for fleet reliability; MTBSD at 5200 hours

Car Equipment – Availability @ 0400 hours
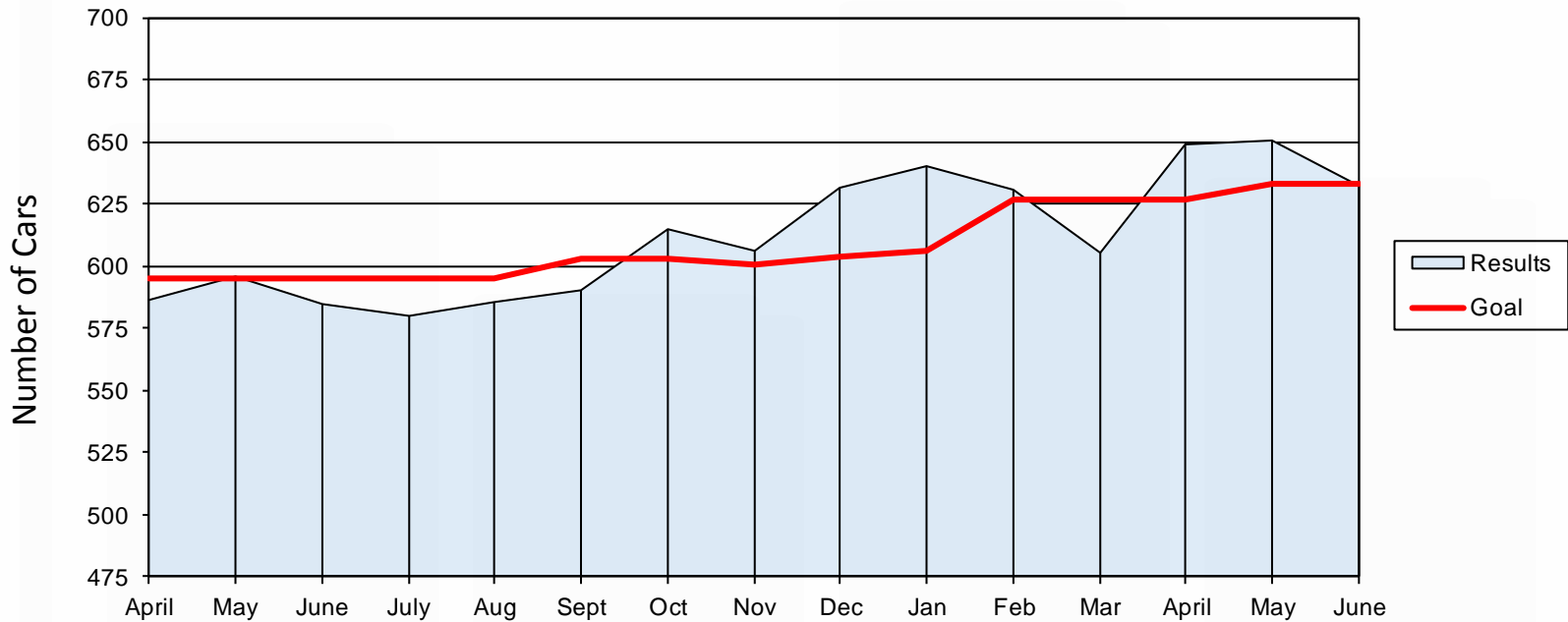
- ✓ Goal met – Actual 644 / Goal 631 (Average for Quarter)
- ✓ 85 FOTF cars conditionally accepted (34 D cars & 51 E cars)
- ✓ 5th FOTF Train (Orange Line) started in May 2019

Wayside Train Control System

Includes False Occupancy & Routing, Delays Per 100 Train Runs
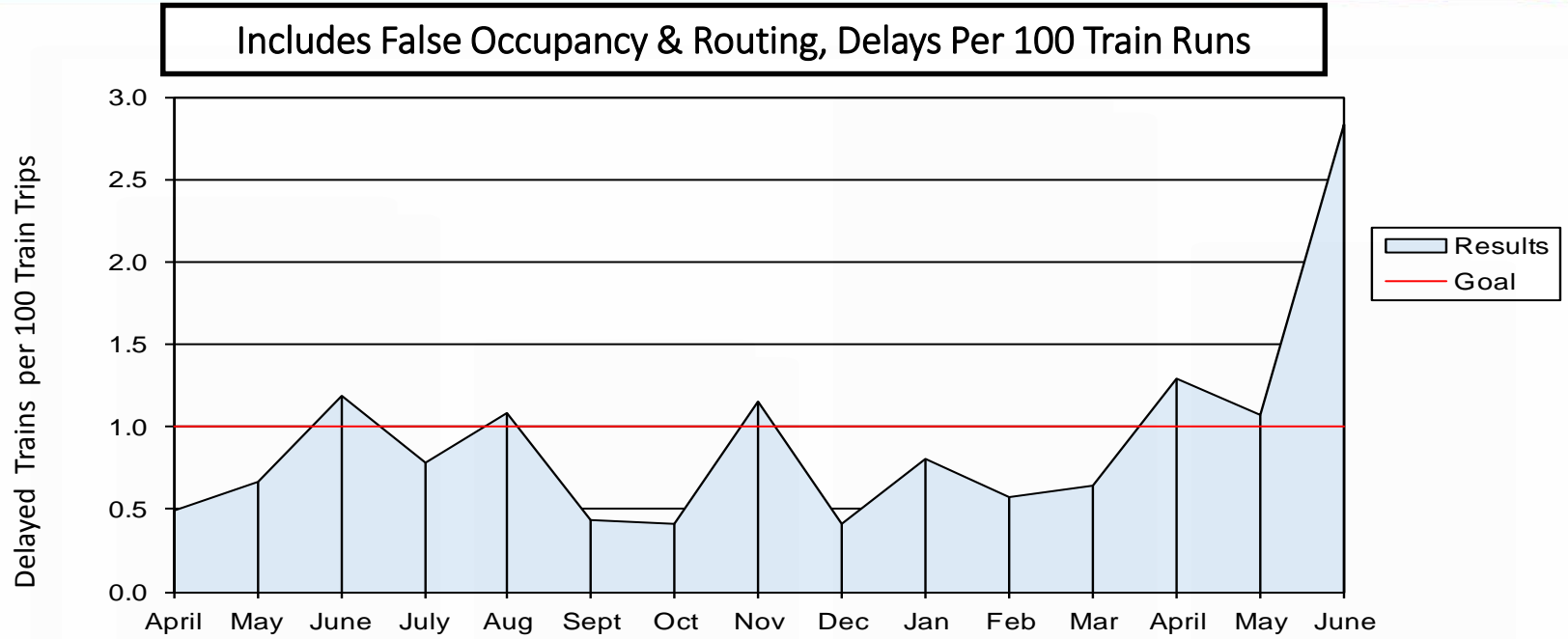
- ✓ Goal not met – Actual 1.73 / Goal 1.00
- ✓ Short circuit at Bay Fair resulted in 198 late trains on June 14
- ✓ Heat Issues contributed to increased failures in June

Traction Power

Includes Coverboards, Insulators, Third Rail Trips, Substations, Delays Per 100 Train Runs
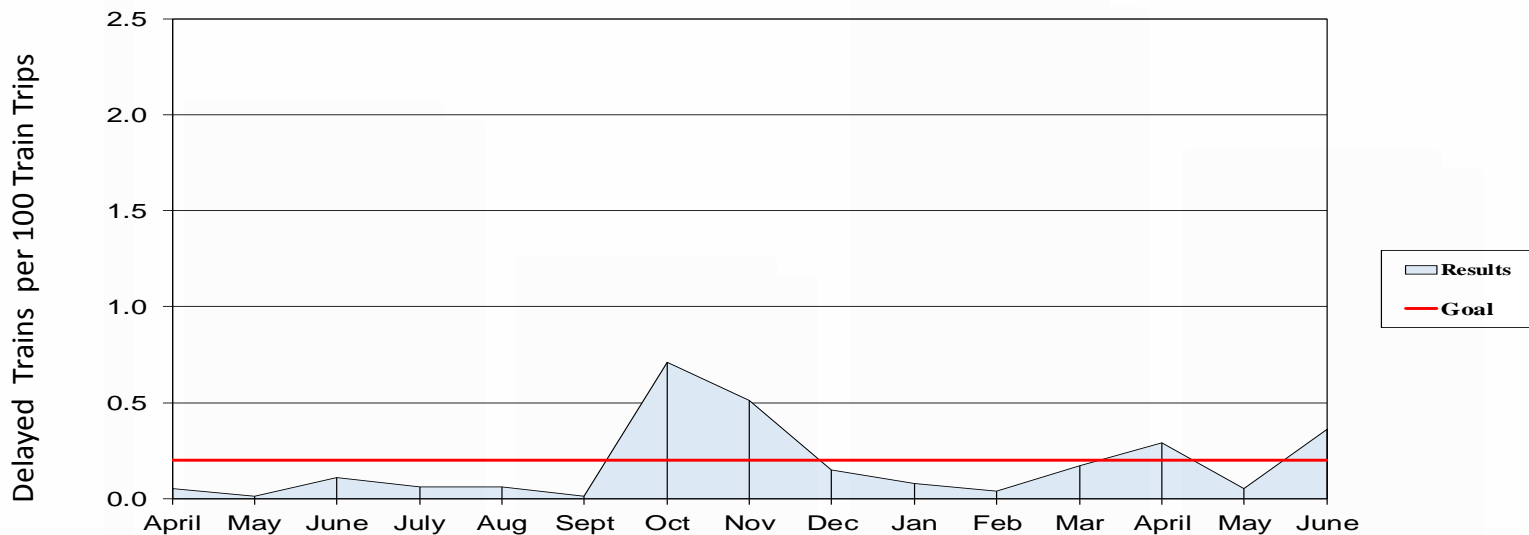
- ✓ Goal not met – Actual .23 / Goal .2
- ✓ Multiple Insulator Failures on M-Line contributed to Quarter performance
- ✓ Replaced 1000 feet of 3rd rail and 100 Insulators on M-line

Track

Includes Rail, Track Tie, Misalignment, Switch, Delays Per 100 Train Runs
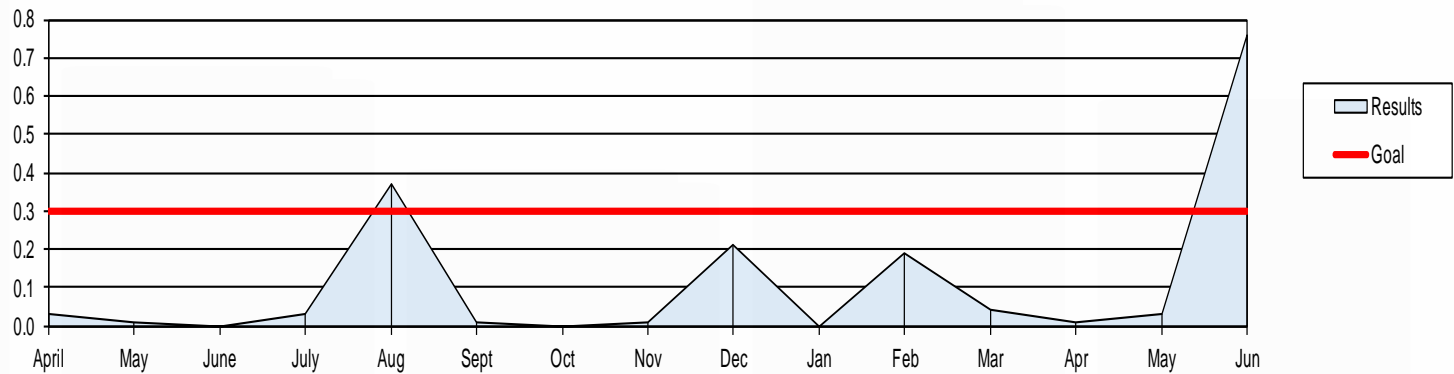
- ✓ Goal met – Actual .27 / Goal .30
- ✓ One Heat Related Issues on the L-Line (Rail Kink)
- ✓ Rail Replacement Program on Schedule

Computer Control System

Includes ICS computer & SORS, Delays per 100 train runs
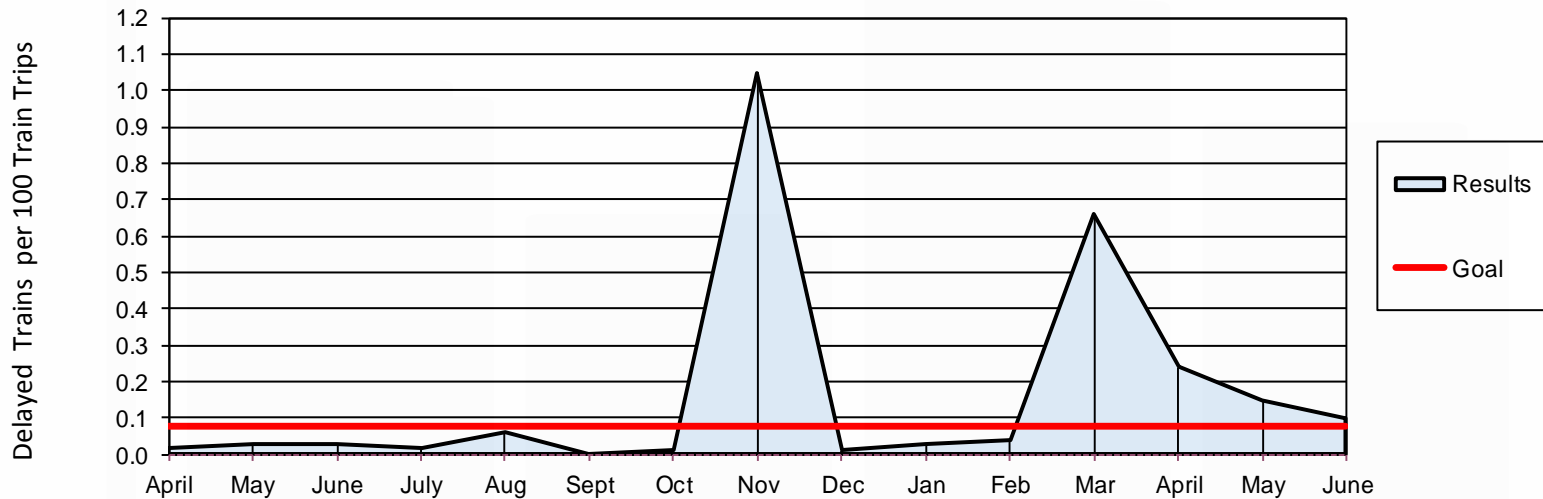
- ✓ Goal not met – Actual 0.16 / Goal 0.08
- ✓ Loss of power to network switches at Colma Station due to human error on April 30
- ✓ Communications link hardware (circuit board) failure on May 10

Transportation

Includes Late Dispatches, Controller-Train Operator-Tower Procedures and Other Operational Delays Per 100 Train Runs
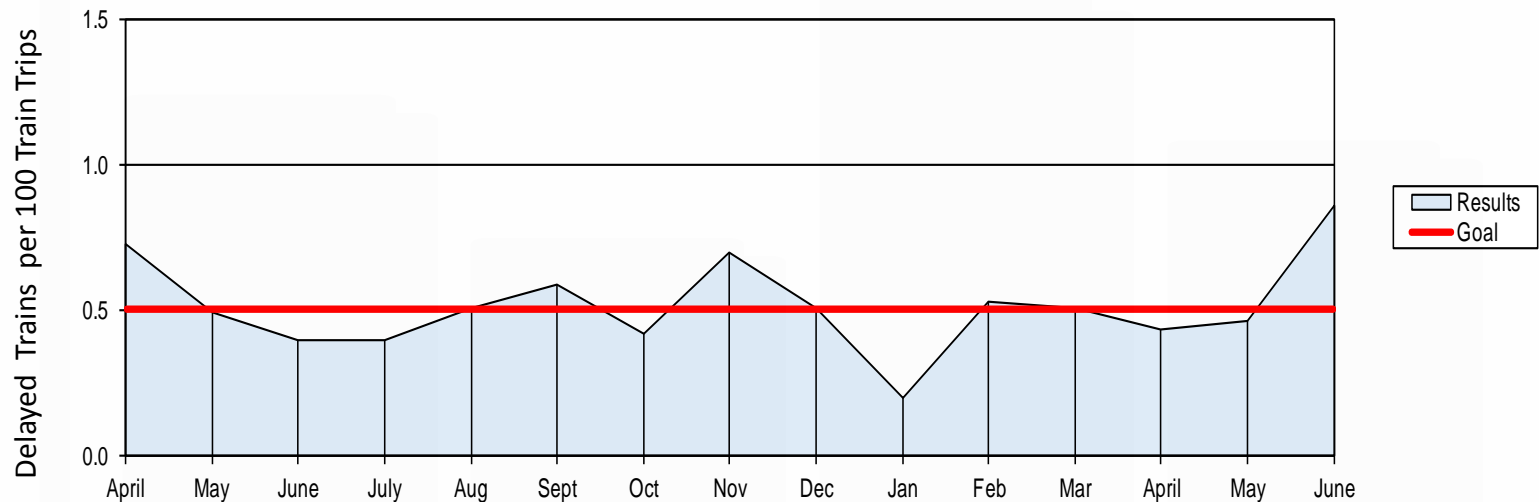
- ✓ Goal not met – Actual .58 / Goal .5
- ✓ Slight increase in procedural errors – Transportation reorganization will allow for better focus on training, compliance and mitigation

Elevator Availability - Stations
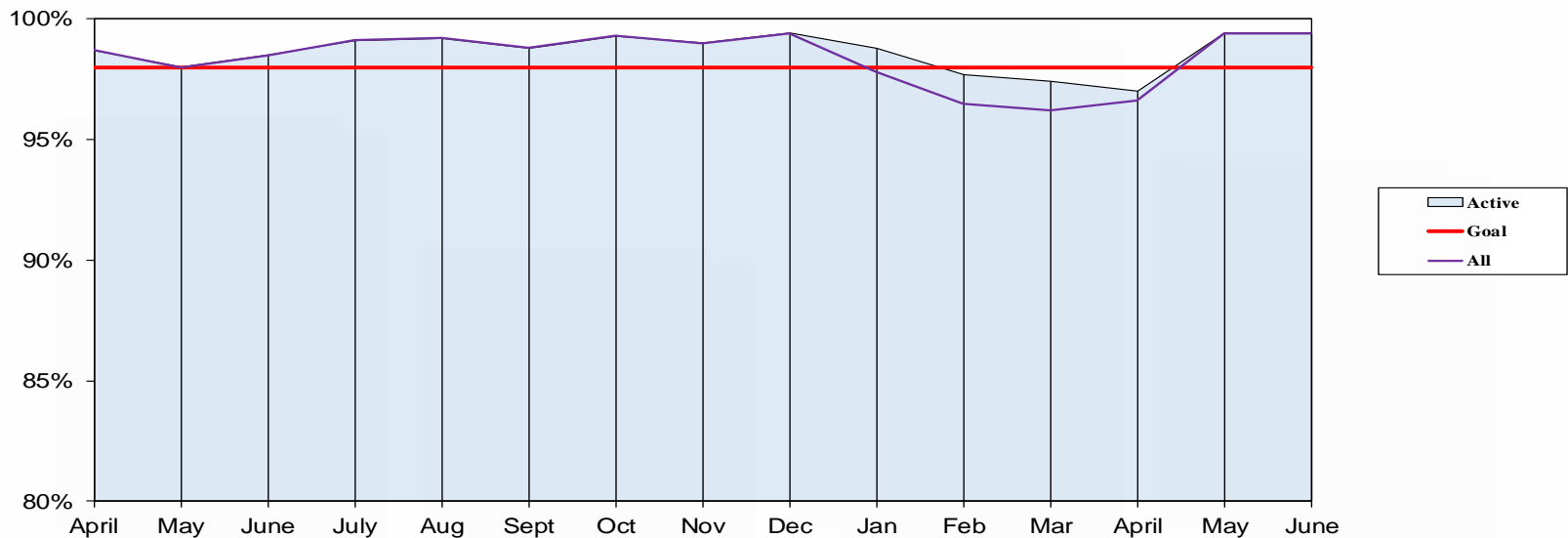
- ✓ Goal met - Actual 98.6% / Goal 98%
- ✓ One major outage at Walnut Creek due to failure of underground hydraulic lines

Elevator Availability - Garage
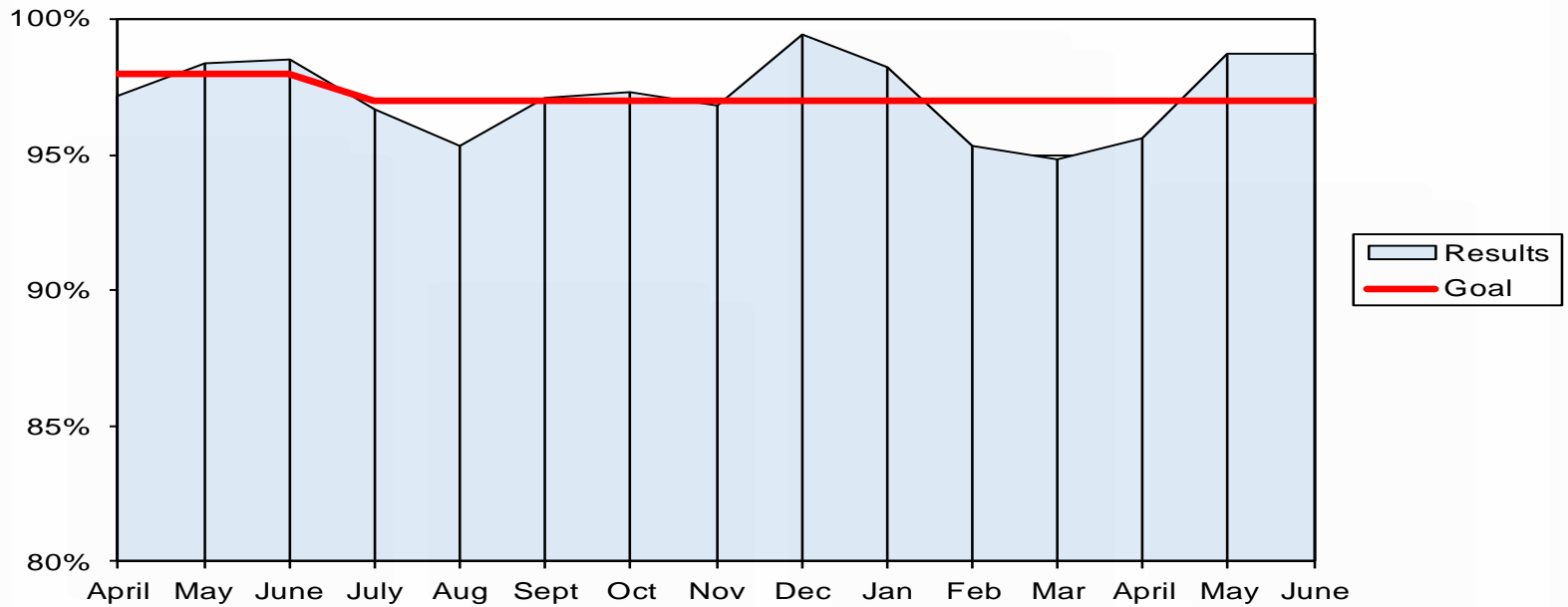
✓ Goal met – Actual 97.7% / Goal 97%

Escalator Availability - Street
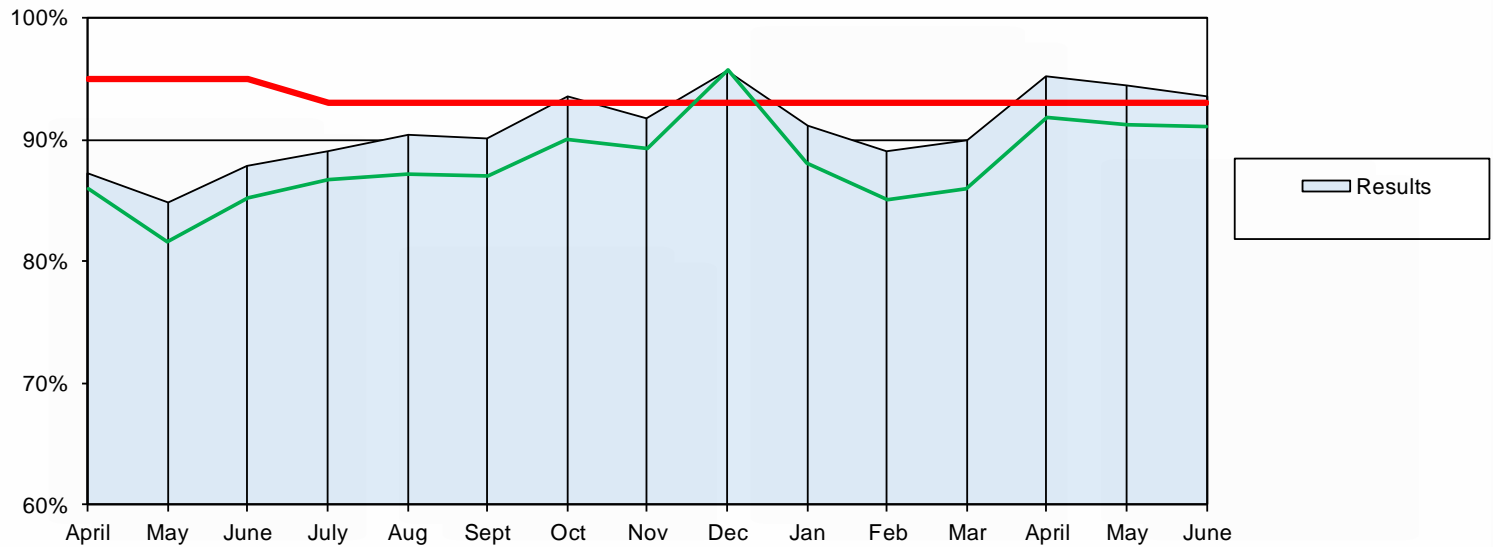
✓ Goal met – Actual 94.4% / Goal 93%

✓ Major repairs this quarter include:

    ✓ Montgomery station for a bull gear replacement

    ✓ Embarcadero station for a step chain replacement

    ✓ 12th St station for a step chain replacement

Escalator Availability - Platform
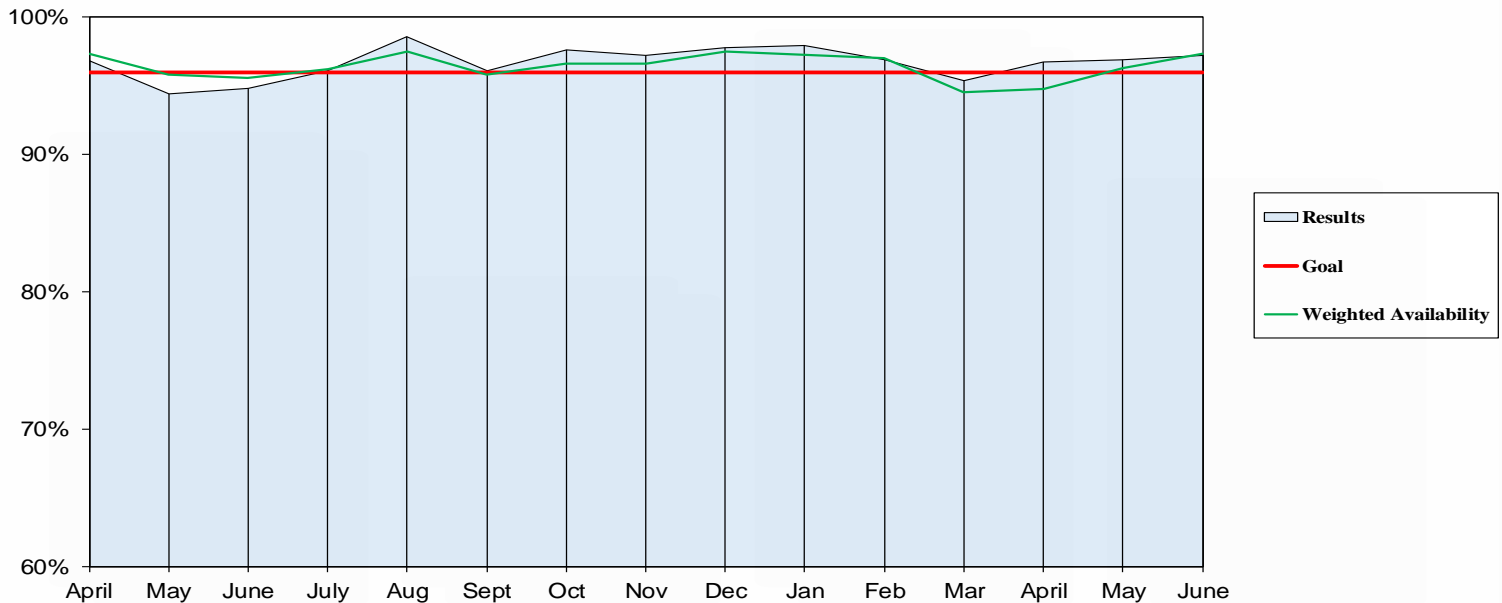
- ✓ Goal met – Actual 96.9% / Goal 96%
- ✓ Major repairs included:
  - ✓ 12th Street for a bull gear replacement
  - ✓ Montgomery for a step crash repair

AFC Gate Availability
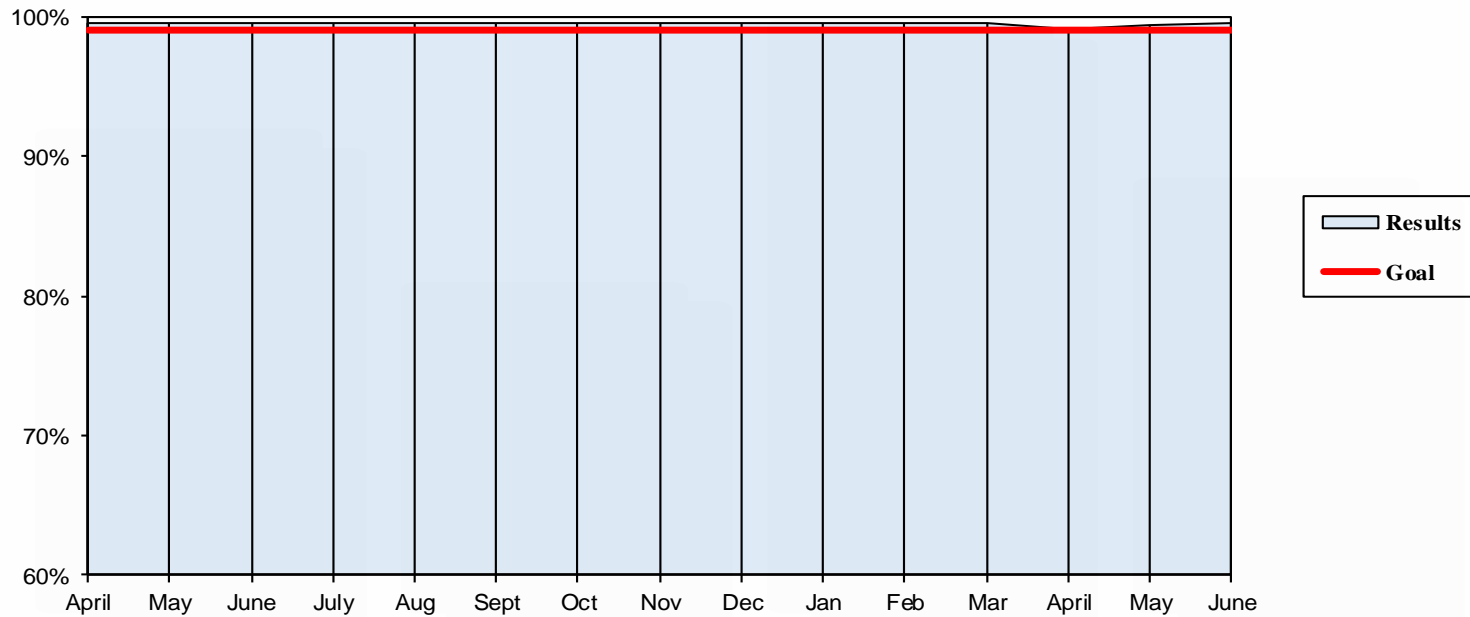
- ✓ Goal met - Actual 99.4% / Goal 99.0%
- ✓ Installed pilot duplex mod at Richmond
- ✓ Continuing cinch mod to assist in fare evasion

AFC Vendor Availability
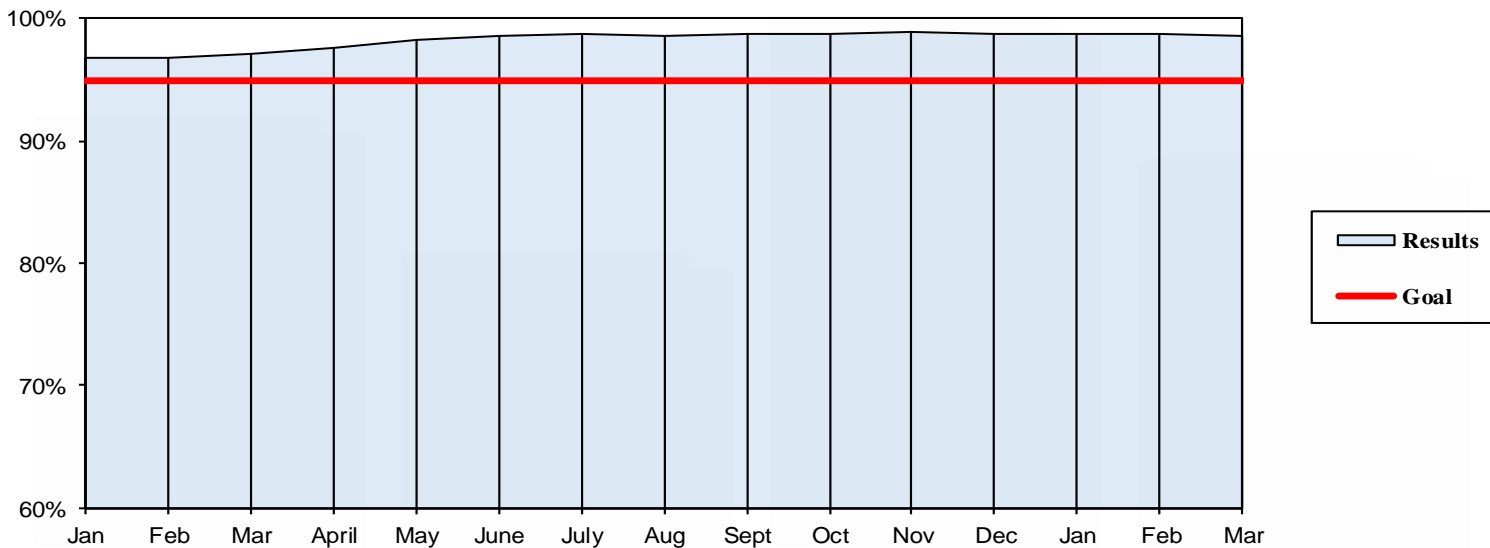
- ✓ Goal met - Actual 98.7% / Goal 95.0%
- ✓ Continue to add clipper load machines in the paid area of stations – 30 Stations complete
- ✓ Clipper only pilot active at 19th Street and Embarcadero Stations

Environment - Outside Stations

- FY19 Q1 changes in the PES questionnaire: *Appearance of BART Landscaping was combined with Walkways and Entry Plaza*

- Significant increase in *Appearance Of BART Landscaping, Walkways & Entry Plaza Just Outside Station*

- Will establish goal for FY20

	FY18 Q4	FY19 Q1	FY19 Q2	FY19 Q3	FY19 Q4	
Environment Outside Stations (composite)		**62.6%**	**65.3%**	**63.2%**	**65.4%**	
Appearance Of BART Landscaping, Walkways & Entry Plaza Just Outside Station (weight 67%)		58.1%	61.6%	58.5%	62.4%	↑
BART Parking Lot Cleanliness (weight 33%)	74.2%	71.7%	72.7%	72.6%	71.4%	

↑ indicates a statistically significant increase from the prior quarter

Environment - Inside Stations

- FY19 Q1 changes in the PES questionnaire: <u>added</u> *Cleanliness of Concourse, Escalator Cleanliness, Stairwell Cleanliness*; <u>dropped</u> *Cleanliness of Other Areas*

- Significant increases in *Cleanliness of Station Platform*, *Cleanliness of Concourse, Stairwell Cleanliness* and *Elevator Cleanliness*

- Will establish goal for FY20

	FY18 Q4	FY19 Q1	FY19 Q2	FY19 Q3	FY19 Q4	
Environment Inside Stations (composite)		**62.2%**	**63.8%**	**61.3%**	**64.2%**	
Cleanliness Of Station Platform (weight 40%)	63.3%	67.6%	68.8%	65.7%	69.8%	↑
Cleanliness Of Concourse (weight 25%)		62.7%	64.1%	63.1%	65.3%	↑
Escalator Cleanliness (weight 10%)		63.7%	66.0%	64.6%	66.2%	
Stairwell Cleanliness (weight 7.5%)		56.8%	59.9%	57.1%	60.2%	↑
Elevator Cleanliness (weight 10%)	42.8%	63.7%	57.9%	53.3%	58.1%	↑
Restroom Cleanliness (weight 7.5%)	35.2%	43.4%	44.6%	41.7%	40.6%	

↑ indicates a statistically significant increase from the prior quarter

Station Vandalism

- FY19 Q1 changes in the PES scoring scale: *percent rating Excellent and Good*
- Will establish goal for FY20

	FY19 Q1	FY19 Q2	FY19 Q3	FY19 Q4
Station kept free of graffiti	71.6%	73.8%	71.4%	72.4%

Train Interior Cleanliness

Ratings guide:
- Scale:
- Excellent
- Good
- Only Fair
- Poor
- Rating=% Excellent and Good

- FY19 Q1 Changes in the PES scoring scale: *percent rating Excellent and Good*
- Significant increase in *Train Interior Cleanliness*
- Will establish goal for FY20

	FY19 Q1	FY19 Q2	FY19 Q3	FY19 Q4
Train Interior Cleanliness (composite)	**70.8%**	**68.3%**	**67.1%**	**69.6%**
Train Interior Cleanliness (weight 65%)	61.7%	58.3%	57.1%	61.1% ↑
Train Interior kept free of graffiti (weight 35%)	87.7%	86.9%	85.5%	85.6%

↑ indicates a statistically significant increase from the prior quarter

Train Temperature

Ratings guide:
- Scale:
- Excellent
- Good
- Only Fair
- Poor
- Rating=% Excellent and Good

- FY19 Q1 changes in the PES scoring scale: *percent rating Excellent and Good*

- Significant decrease in *Comfortable Temperature Onboard train*

- Will establish goal for FY20

	FY19 Q1	FY19 Q2	FY19 Q3	FY19 Q4
Comfortable Temperature Onboard Train	79.7%	80.9%	83.5%	81.2% ↓

↓ indicates a statistically significant decrease from the prior quarter

Customer Service

- New Performance Indicator
- *Customer service from Station Agent <u>replaces</u> Availability of Brochures and Availability of Station Agents*
- *PA Announcements for Transfer, Next Station and Destination* combined into one attribute
- Will establish goal for FY20

	FY19 Q1	FY19 Q2	FY19 Q3	FY19 Q4
Customer Service (composite, all weighted equally)	**74.9%**	**74.9%**	**73.9%**	**74.5%**
Customer service from Station Agent (if used today)	69.8%	69.8%	69.4%	68.4%
Onboard next stop, destination and transfer announcements	76.5%	77.7%	75.7%	77.2%
Onboard delay announcements (if this train was delayed today)	78.5%	77.3%	76.7%	77.8%

Homelessness

- New Performance Indicator
- Building historical data
- Will establish goal for FY20

	FY19 Q1	FY19 Q2	FY19 Q3	FY19 Q4
How well BART is addressing homelessness	23.7%	23.4%	22.8%	23.4%

Homeless Counts in the Station

Counts are conducted at the four downtown SF stations on the second Tuesday of each month at three time periods (6:00am-8:00AM*, 2:00pm-4:00pm and 8:00pm-10:00pm). The graph represents the totals for the three time periods.

Downtown San Francisco Station Counts
May 2018-June 2019

Month	Count
May 18	142
Jun. 18	111
Jul. 18	78
Aug. 18	93
Sept. 18	87
Oct 18	119
Nov 18	111
Dec. 18	85
Jan 19	107
Feb 19	116
Mar 19	107
Apr 19	65
May 19	51
Jun 19	47
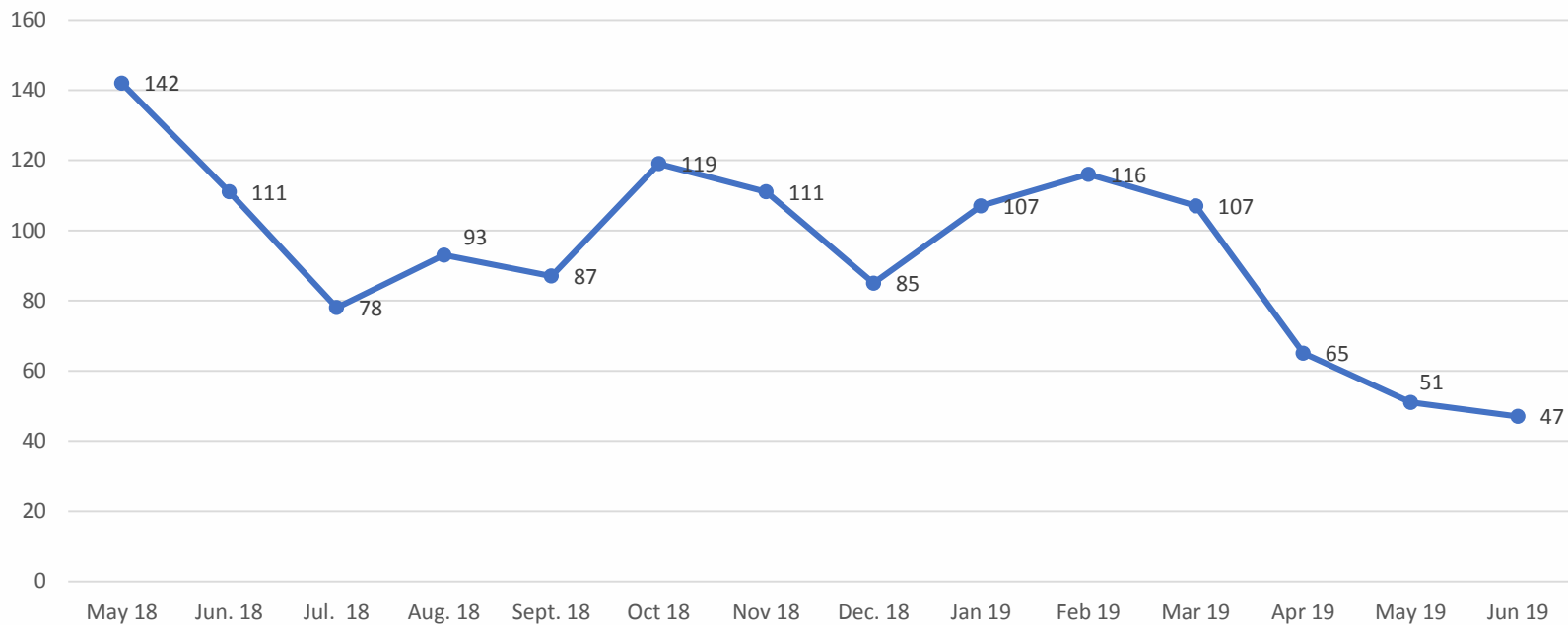
*Starting in Feb 2019, morning counts are conducted one hour later than before due to the change in station opening time

Fare Evasion

- New Performance Indicator

- Building historical data

- Will establish goal for FY20

	FY19 Q1	FY19 Q2	FY19 Q3	FY19 Q4
Rider saw someone not pay their fare	18.1% (Yes)	17.0% (Yes)	20.2% (Yes)	19.4% (Yes)

Customer Complaints

Complaints Per 100,000 Customers
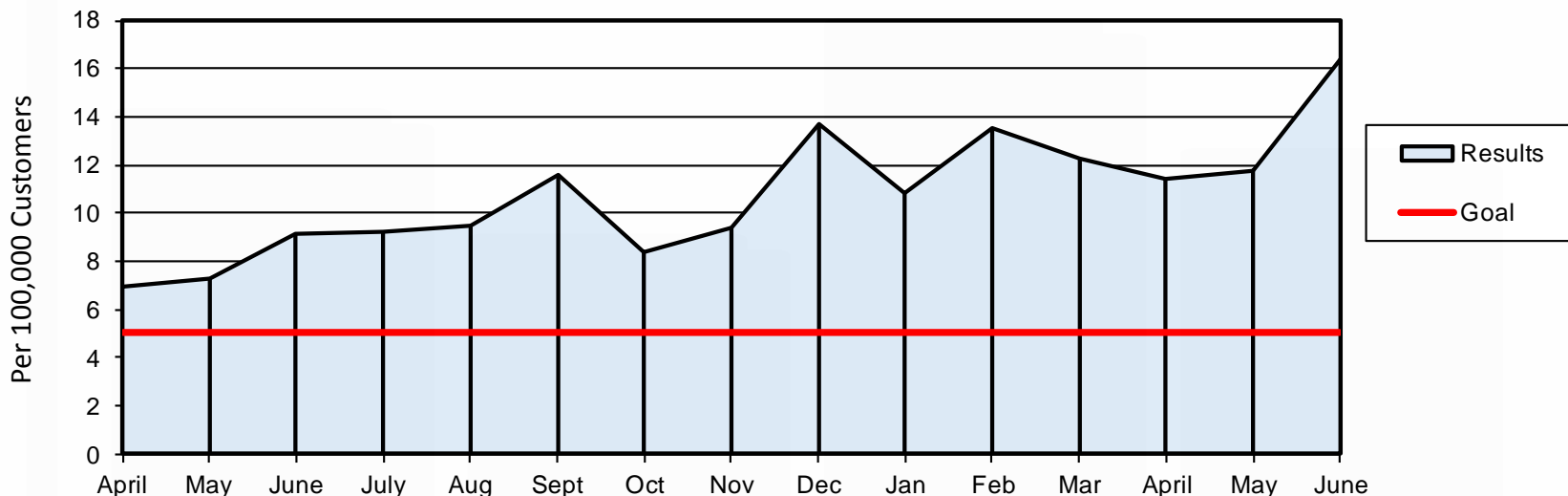
- ✓ Total complaints increased by 543 (15.6%) from last quarter
- ✓ Complaints increased in all category except for Service, "Apps", "Bike Program", "Biohazard", "Quality of Life", and "Service", which decreased
- ✓ Compliments increased to 174 from 147 last quarter, and 137 same quarter last year

Patron Safety - Station

Station Incidents per Million Patrons
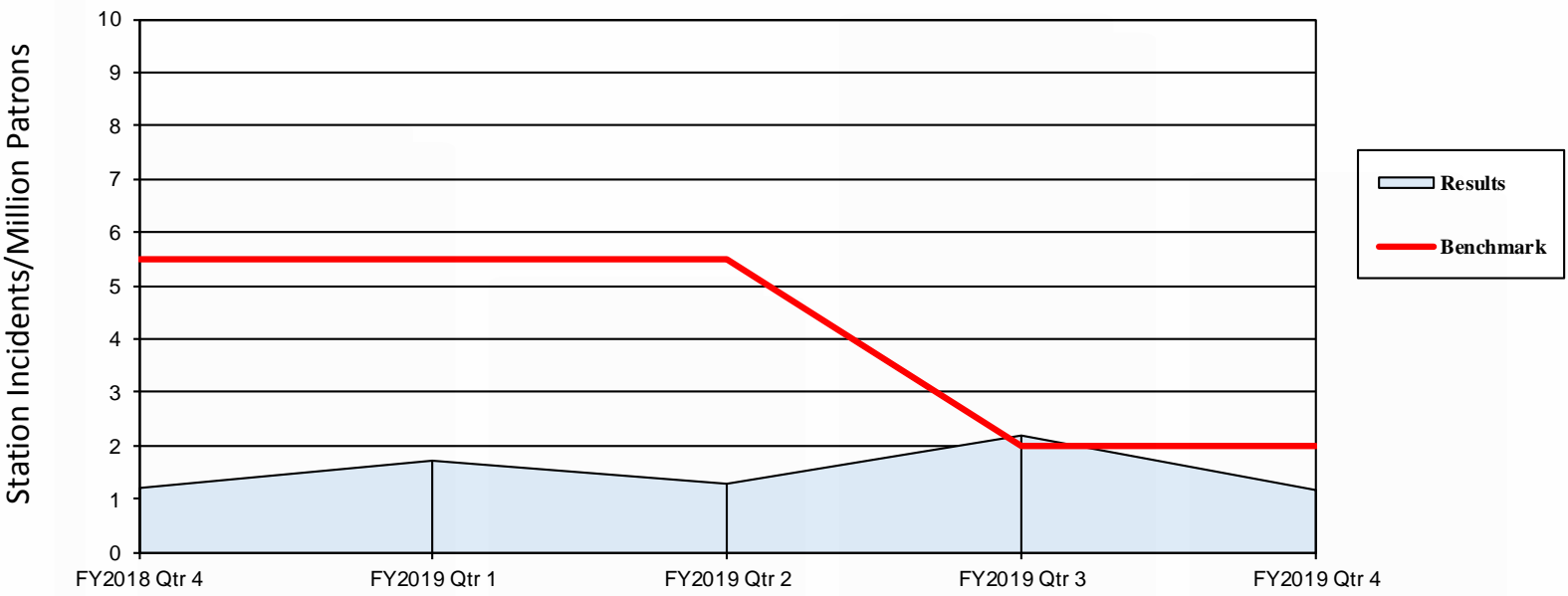
✓ Goal met, Actual 1.16 / Goal 2.0

Patron Safety - Vehicle

Vehicle Incidents per Million Patrons
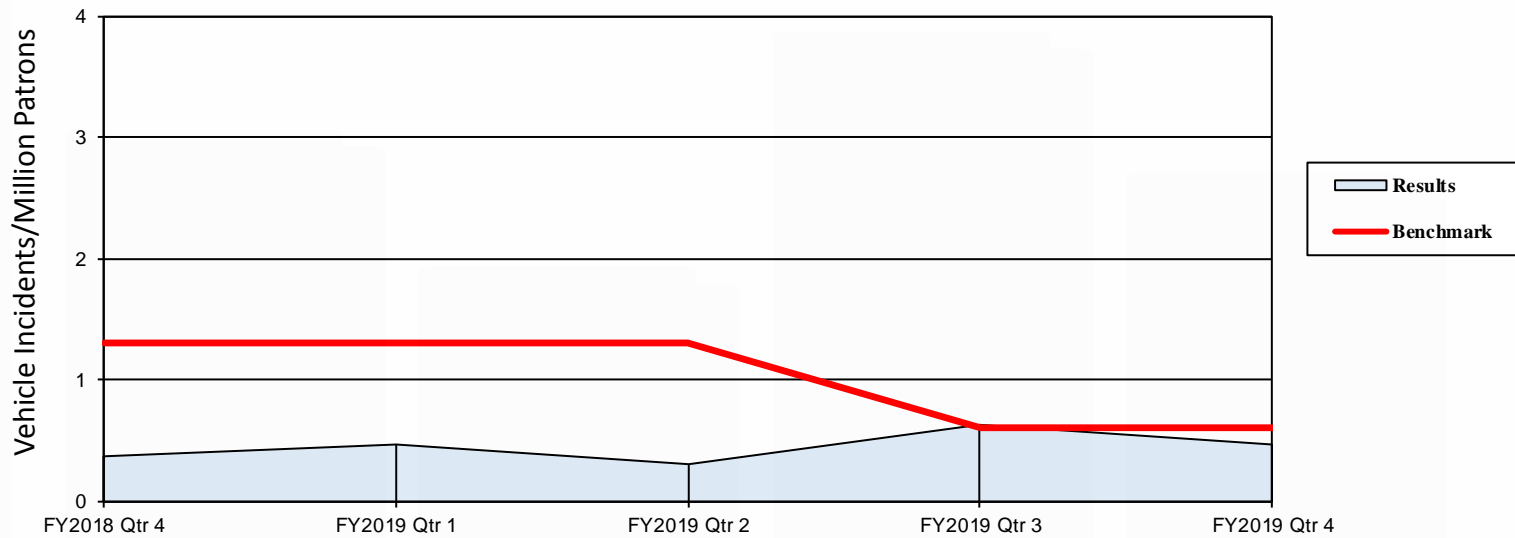
✓ Goal met, Actual .46 / Goal .60

Employee Safety

Lost Time Injuries/Illnesses per OSHA Incidence Rate
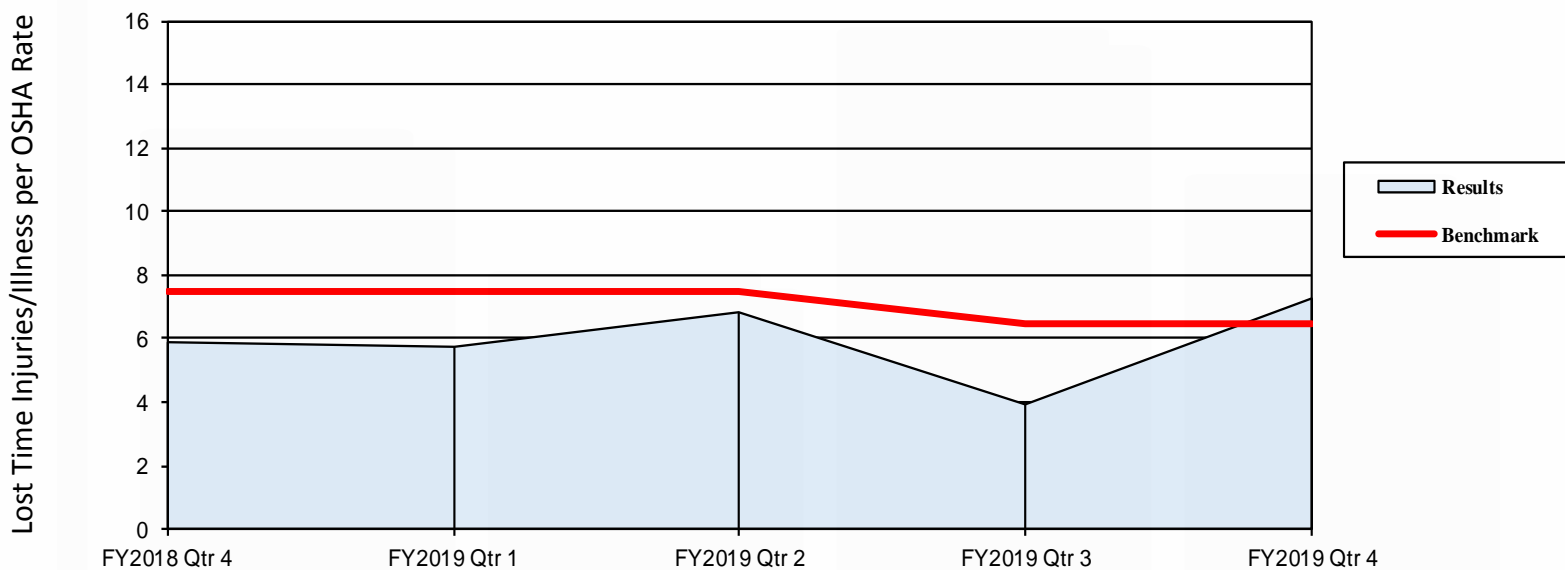
✓ Goal not met, Actual 7.25 / Goal 6.50

Employee Safety

OSHA-Recordable Injuries/Illnesses per OSHA Incidence Rate
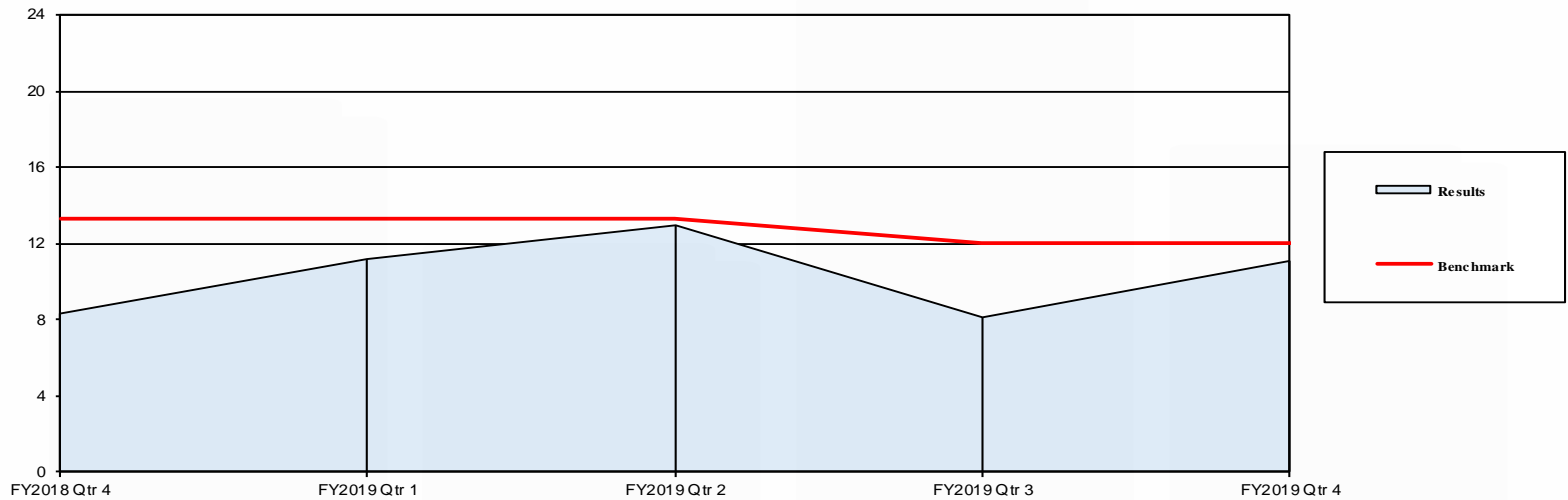
✓ Goal met, Actual 11.07 / Goal 12

Operating Safety

Unscheduled Door Openings per Million Car Miles
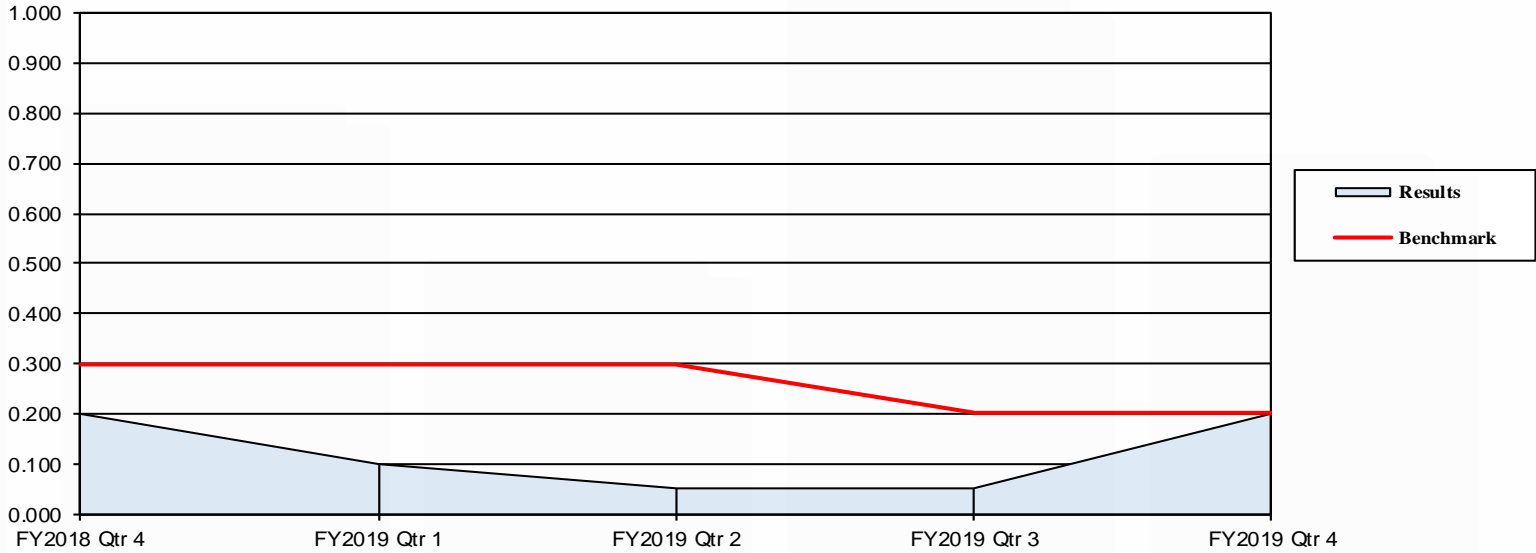
✓ Goal met, Actual 2 / Goal 2

Operating Safety

Rule Violations per Million Car Miles
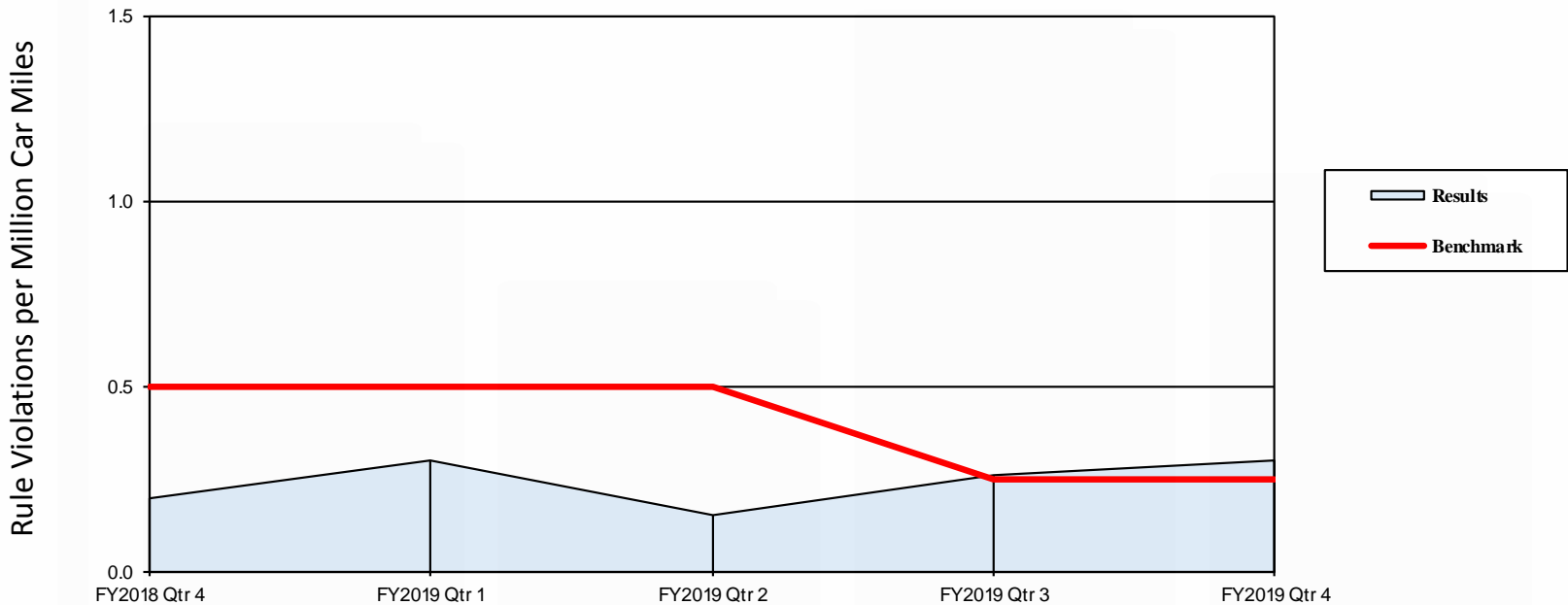
✓ Goal not met, Actual .26 / Goal .25

BART Police Presence

Ratings Guide:
- Yes
- No
- I Don't Know

Rating = % Yes

Chart showing Results (filled area) and Goal (11% Avg.) line:
- FY2018 Qtr 4: 10.5%
- FY2019 Qtr 1: 11.0%
- FY2019 Qtr 2: 11.0%
- FY2019 Qtr 3: 10.4%
- FY2019 Qtr 4: 12.5%

Legend: Results, Goal (11% Avg.)
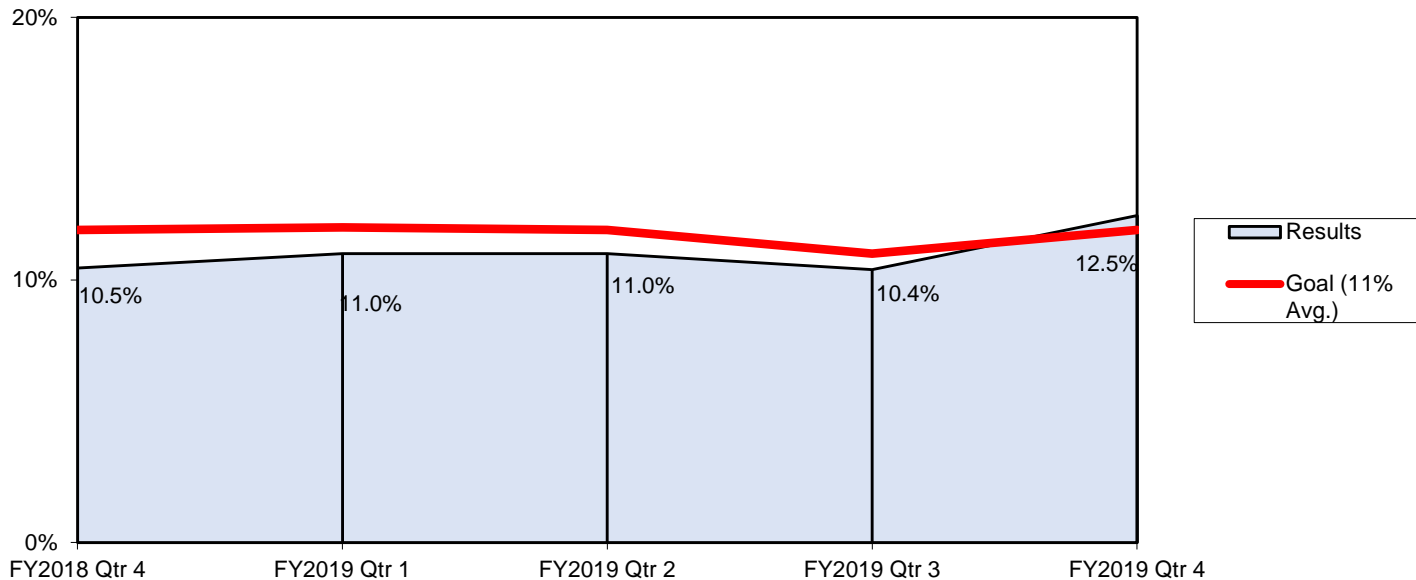
✓ Goal met

Police Presence Composite (All items equally weighted)	12.5%
Police seen on train	7.2%
Police seen outside the station	17.2% ↑
Police seen in the station	11.6% ↑
Police seen on train after 7:00PM and Weekends	7.7%
Police seen outside the station after 7:00PM and Weekends	17.7% ↑
Police seen in the station after 7:00PM and Weekends	13.2% ↑

↑ indicates a statistically significant increase from the prior quarter

Quality of Life Contacts*

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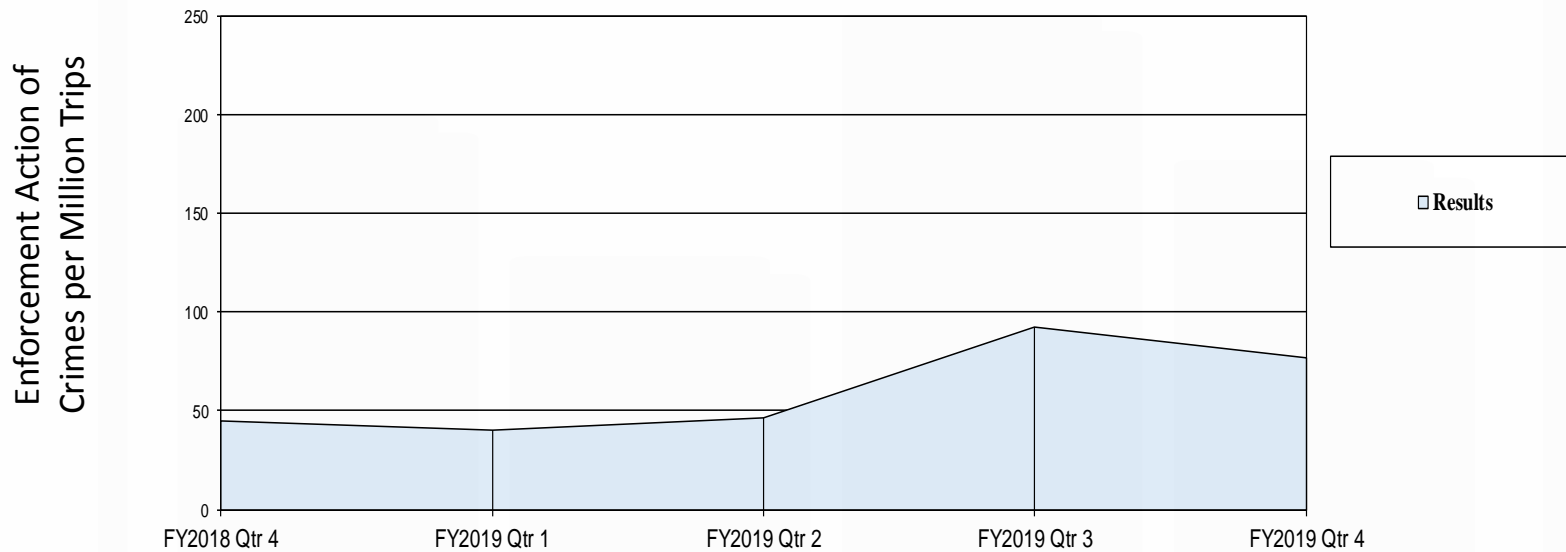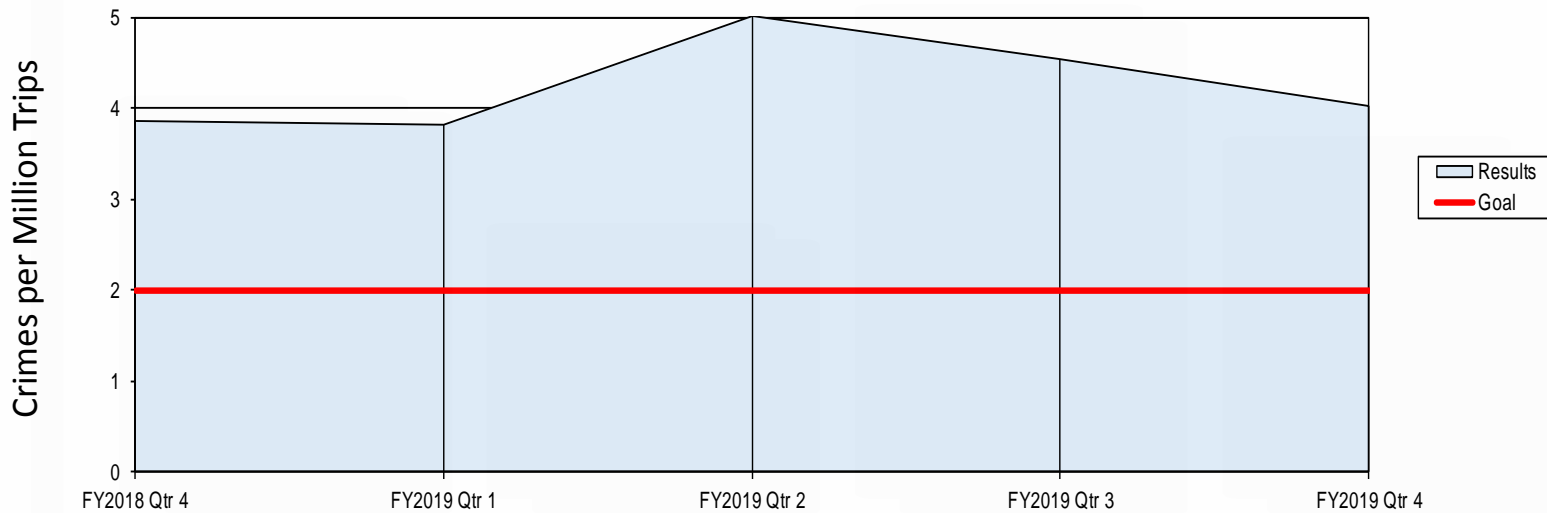

✓ Quality of Life Contacts are down from the last quarter but up from the corresponding quarter of the prior fiscal year.
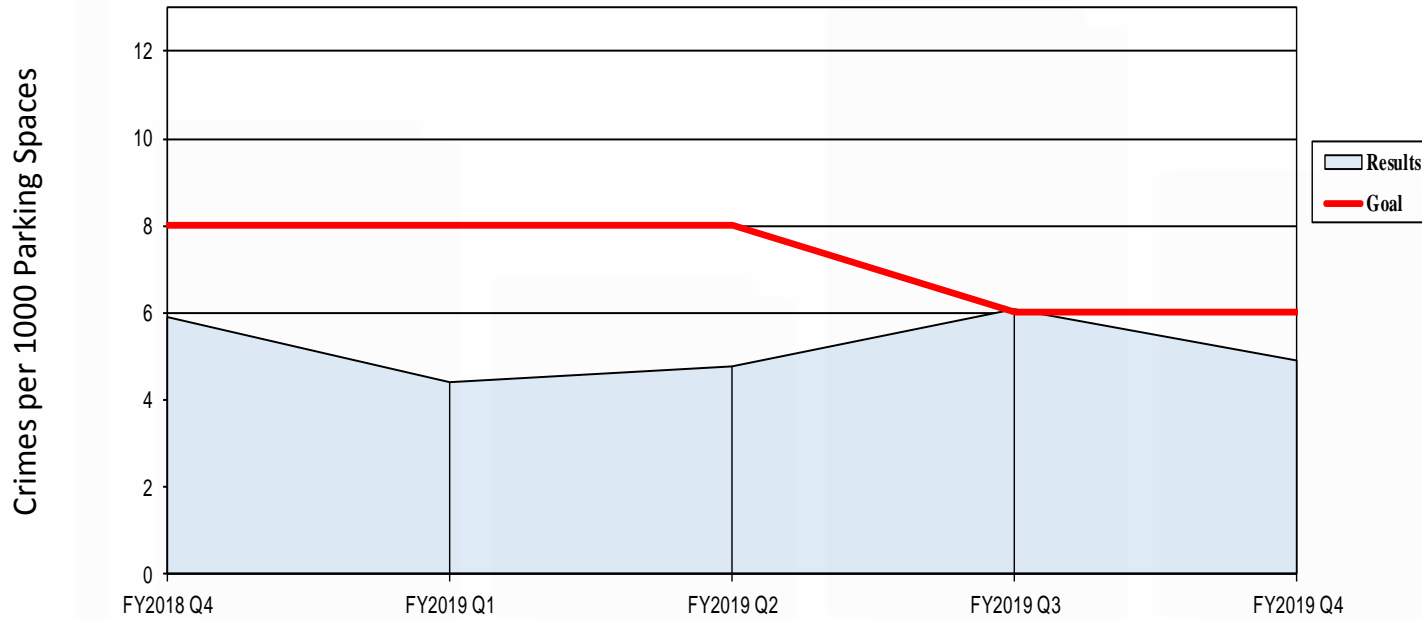
Crimes Against Persons

Crimes Against Persons include: Homicide, Rape, Robbery and Aggravated Assaults

- ✓ Goal not met, Actual 4.03 / Goal 2
- ✓ The number of incidents per Million trips are down from last quarter but up from same quarter last year
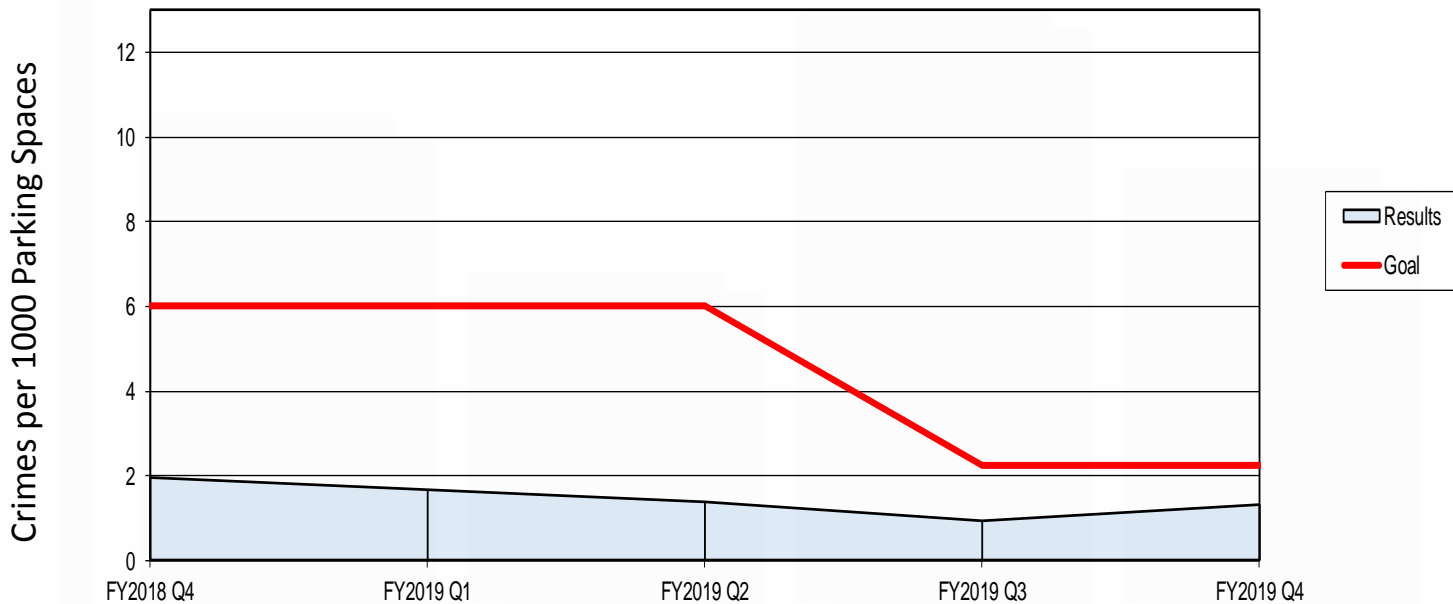
Auto Burglary

- ✓ Goal met, Actual 4.9 / Goal 6.0
- ✓ The number of incidents per thousand parking spaces are down from last quarter and down from same quarter last year
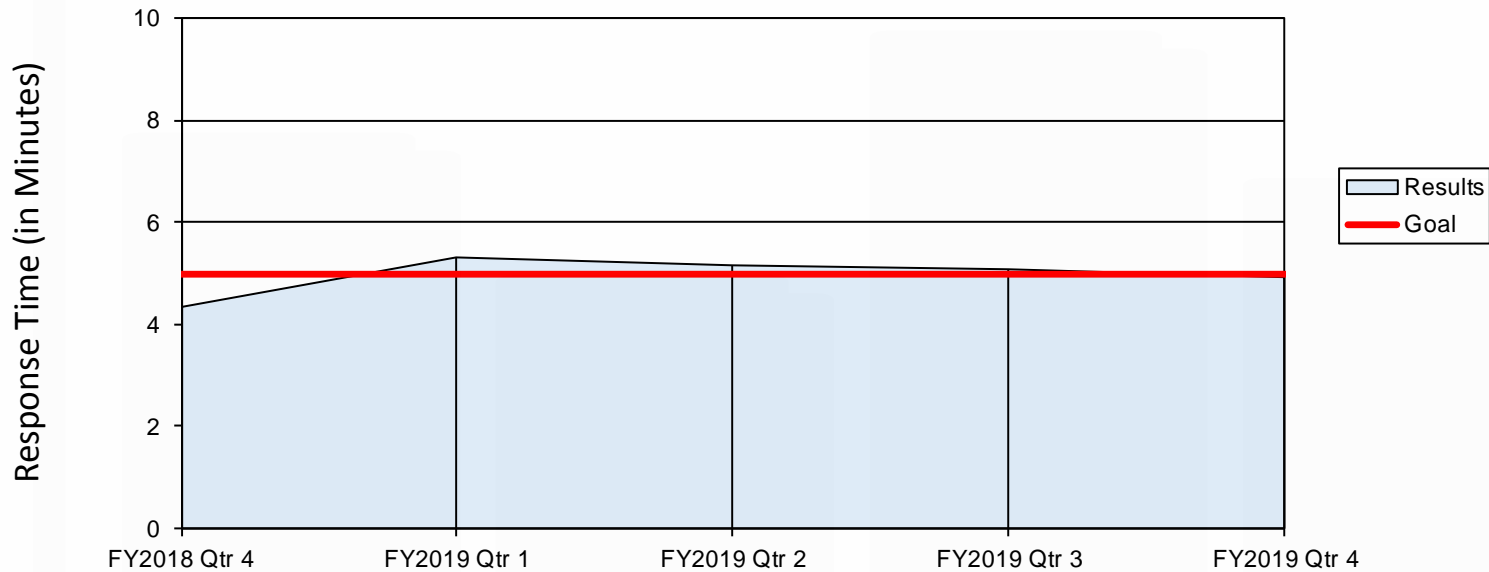
Auto Theft

- ✓ Goal met, Actual 1.3 / Goal 2.25
- ✓ The number of incidents per thousand parking spaces are down from last quarter and from same quarter last year
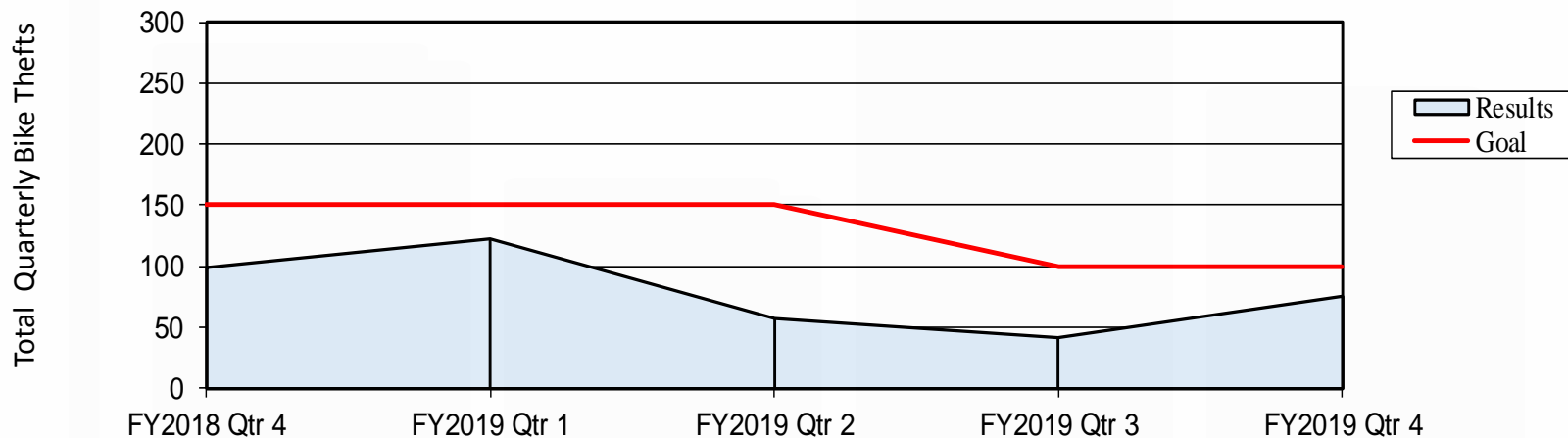
Average Emergency Response Time

- ✓ Goal met, Actual 4.94 / Goal 5
- ✓ Average Emergency Response Time was down from prior quarter and slightly up from the same quarter last year

Bike Theft

✓ Goal met, Actual 76 / Goal 100
✓ There were 76 bike thefts, up by 35 from last quarter.