



# Quarterly Service Performance Review

Third Quarter, FY 2019  
January - March, 2019

Engineering & Operations Committee  
June 13, 2019









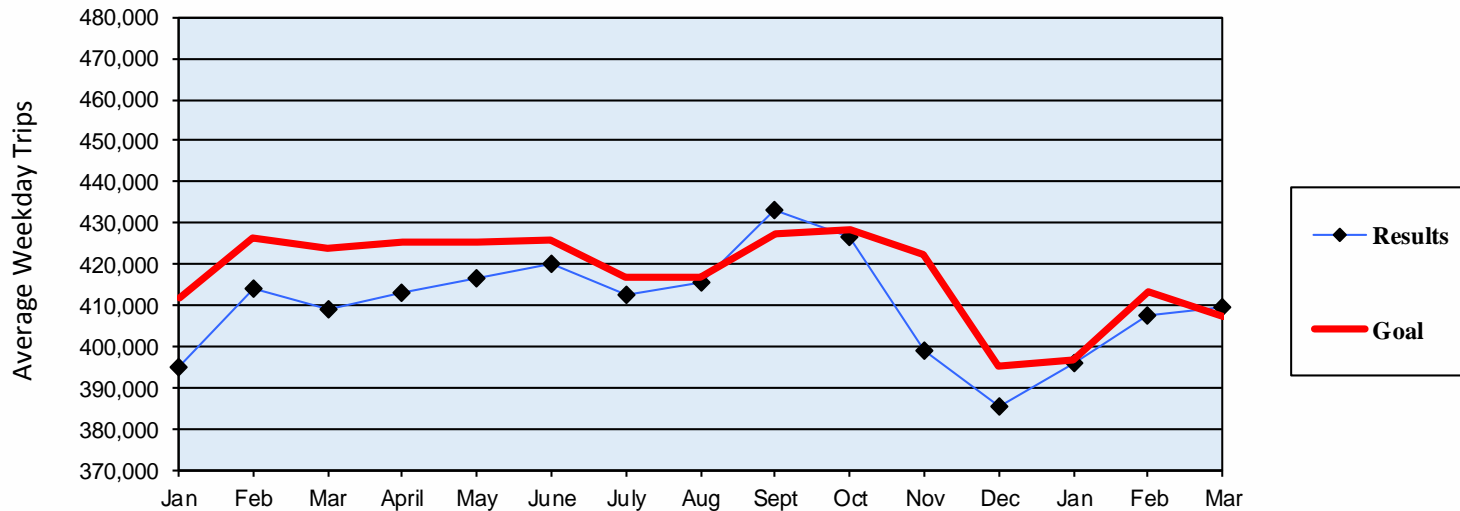
# FY19 Third Quarter Overview



- ✓ Ridership decreased by 2.7% compared to same quarter last year, primary decreases off peak and weekends
- ✓ On-time performance is up 0.24% compared to same quarter last year
- ✓ ROW Equipment Reliability: Car, Train Control, Traction Power and Track, met goal; and Computer Systems did not meet goal
- ✓ Station Equipment Availability: Station Elevators, Ticket Machines and Fare Gates met goal, Escalators (Platform and Street) and Garage Elevators did not meet goal.
- ✓ Passenger Environment: Station Cleanliness, Grounds, Vandalism, Customer service, Train Cleanliness, Fare Evasion and Homeless scores declined; Train Temperature score improved
- ✓ Total Customer Complaints increased 15.5% over last quarter



# Customer Ridership



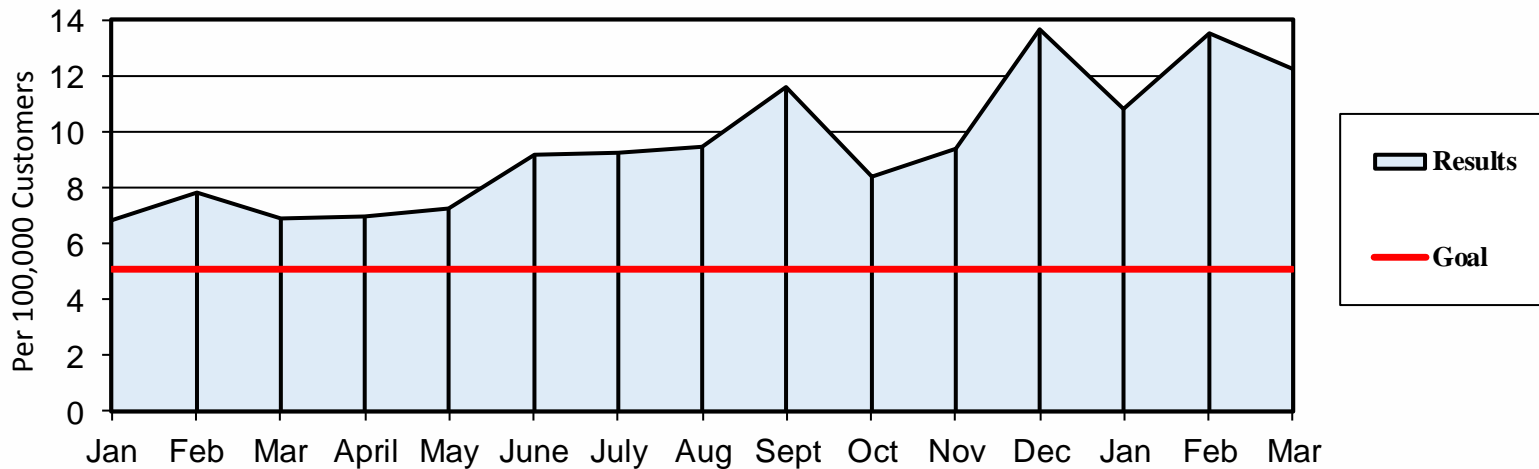
- ✓ Total ridership decreased by 2.7% compared to same quarter last year
- ✓ Average weekday ridership (404,136) down by 0.4% from same quarter last year
- ✓ Core weekday ridership down by 0.2% from same quarter last year
- ✓ SFO Extension weekday ridership down by 1.8% from same quarter last year
- ✓ Average peak ridership up by 1.1% compared to same quarter last year
- ✓ Saturday and Sunday down by 12.5% and 6.4%, respectively, from same quarter last year



# Customer Complaints



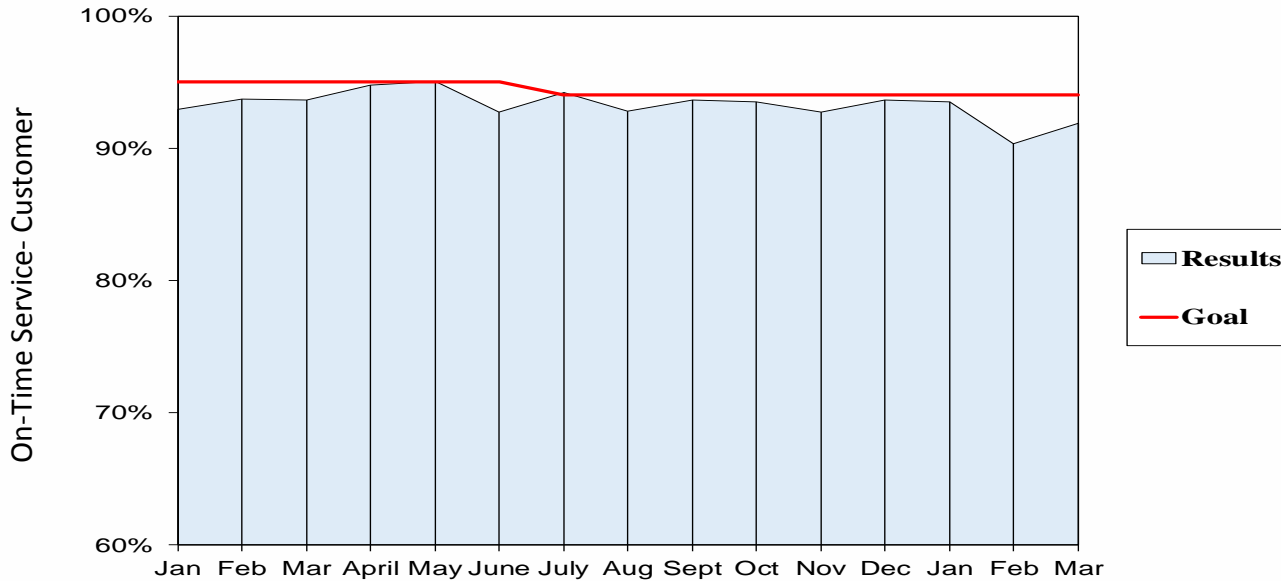
## Complaints Per 100,000 Customers



- ✓ Total complaints increased 15.5% over last quarter, and 67% over same quarter a year ago
  - 102 (3%) from social apps
- ✓ Complaint increased for: “Announcements”, “Apps”, “Bike Program”, “Biohazard”, “M&E”, “Parking”, “Police”, “Policies”, “Quality of Life”, “Service”, and “Train Cleanliness”
- ✓ Complaints decreased for “AFC”, “Personnel”, “Station Cleanliness”, and Trains.
- ✓ “Compliments” increased 14.9% over last quarter, 34.9% over same quarter a year ago



# On-Time Service - Customer



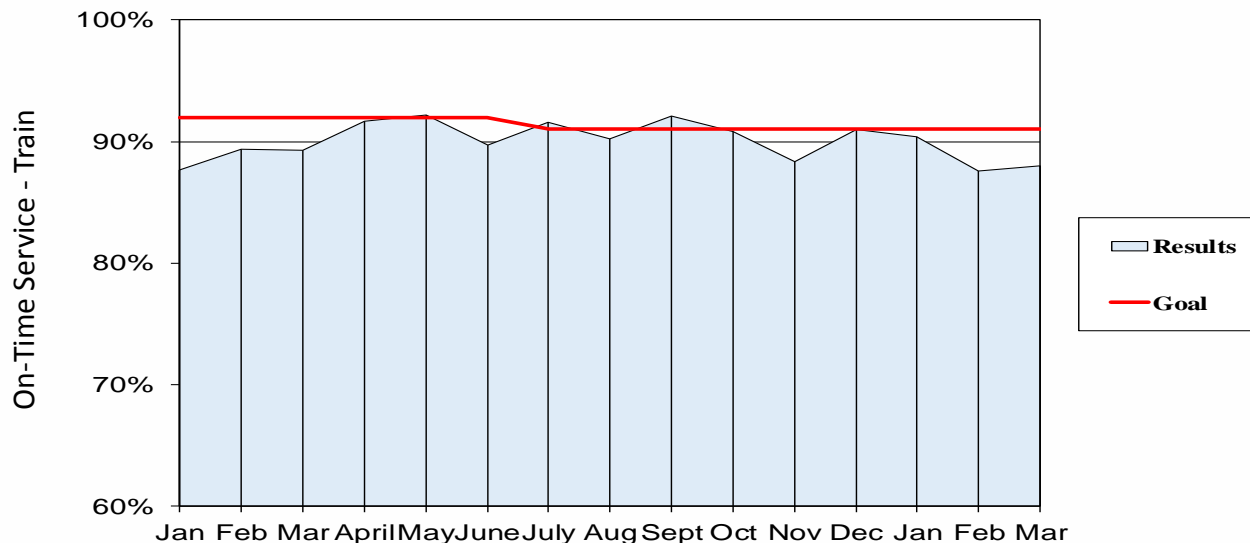
- ✓ Goal not met – Actual 92.0% / Goal 94.00%
- ✓ Down 1.3% from prior quarter, down 1.5% from this quarter last year

1	09-Mar-19	Systemwide	SORS & ICS Computer (No Service 0600 - 0900)	Equip	109
2	17-Jan-19	Systemwide	Earthquake (0611 - 1102)	Earthquake	109
3	20-Mar-19	C.V. I-Lock	Train Struck Object On Trackway(0540-1324)	Debris	72
4	22-Mar-19	Fruitvale	BPD Hold (Fight On Train Became Stabbing)	People	54
5	14-Feb-19	W. Oakland	Vand. (Em Handle)(Multiple Doors Off Track)	People	51
6	15-Feb-19	Glen Park	BPD Hold (Very Suspicious Package)(1307-1622)	People	46
7	16-Jan-19	Systemwide	Earthquake	Earthquake	45
8	08-Feb-19	24th Street	BPD Hold (Battery Suspect)(1736-2010)	People	39
9	07-Jan-19	San Leandro	Medical Emergency	People	40
10	03-Jan-19	W. Oakland	Civil Protest (Station Closed/1800-1910)	People	33





# On-Time Service - Train

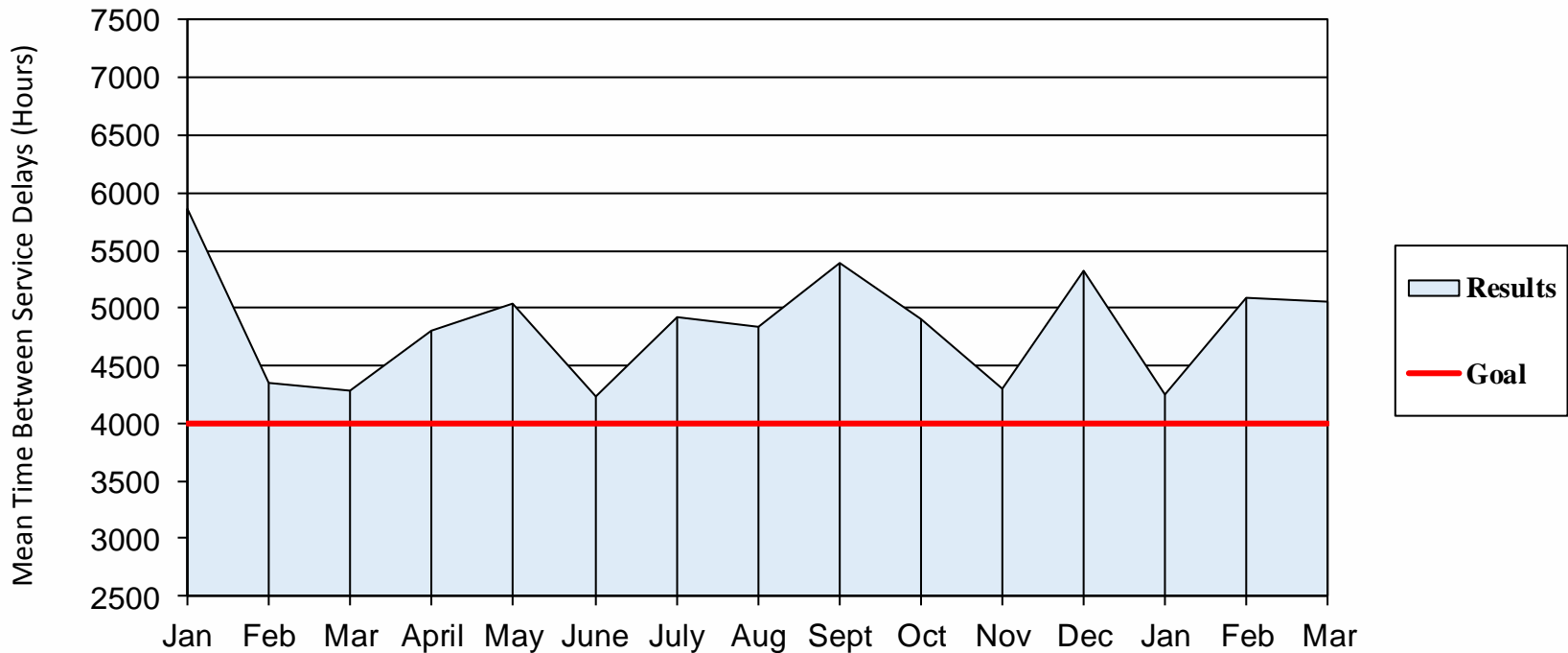


- ✓ Goal Not Met – Actual 88.7% / 91% Goal
- ✓ Down 1.4% from prior quarter, down .03% from this quarter last year
- ✓ 40.2% of late trains were late due to multiple small delays, each under 5 minutes

POLICE ACTIONS	31.2% of delayed trains
RAIL CAR	10.4% of delayed trains
VANDALISM	7.6% of delayed trains
TRAIN CONTROL	7.6% of delayed trains
PATRON ILL	7.4% of delayed trains
OPERATIONS	4.5% of delayed trains
MULTIPLE CAUSE	3.8% of delayed trains
OBJECT ON TRACKWAY	3.4% of delayed trains
EARTHQUAKE	3.2% of delayed trains
CONGESTION	3.1% of delayed trains



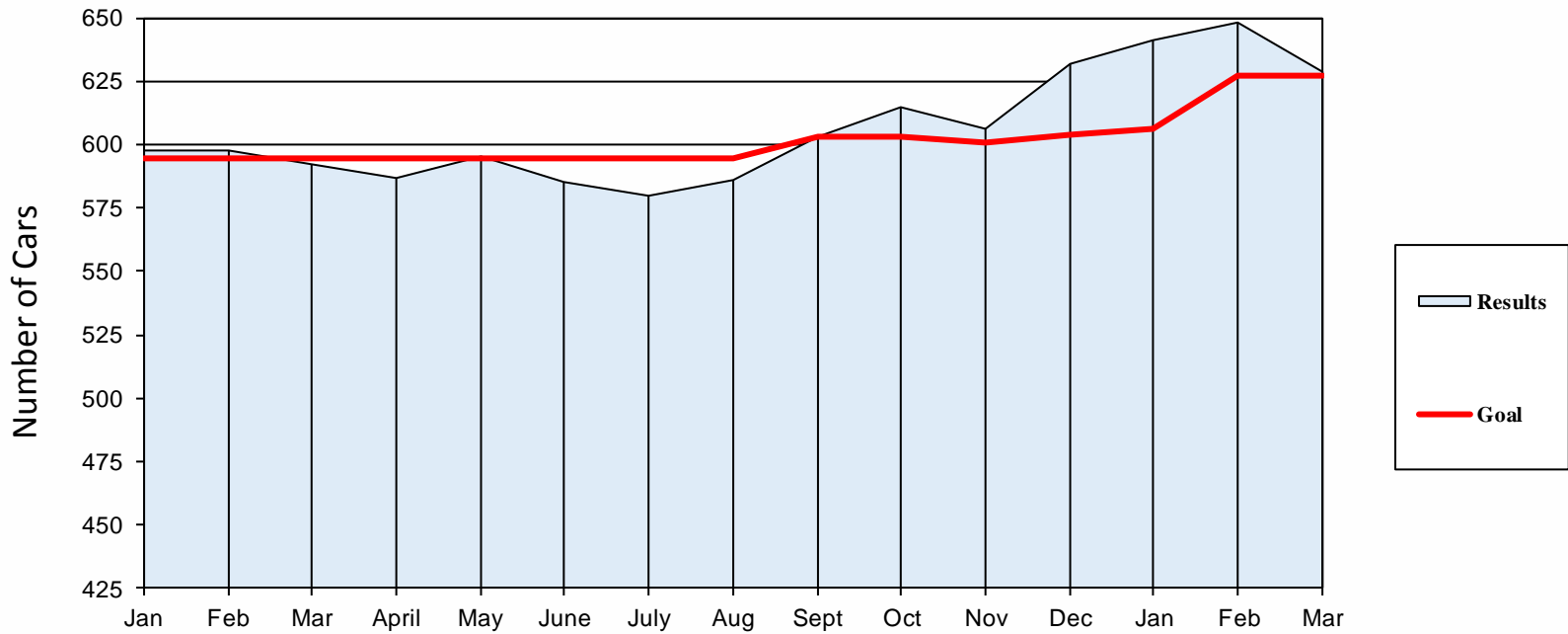
# Car Equipment - Reliability



- ✓ Goal met – Actual 4,756 hours/Goal 4,000 hours
- ✓ Reliability slightly decreased 1.2% from previous Qtr.
- ✓ CY, HY & RY shop met MTBSD. DY shop MTBSD did not meet goal



# Car Equipment – Availability @ 0400 hours



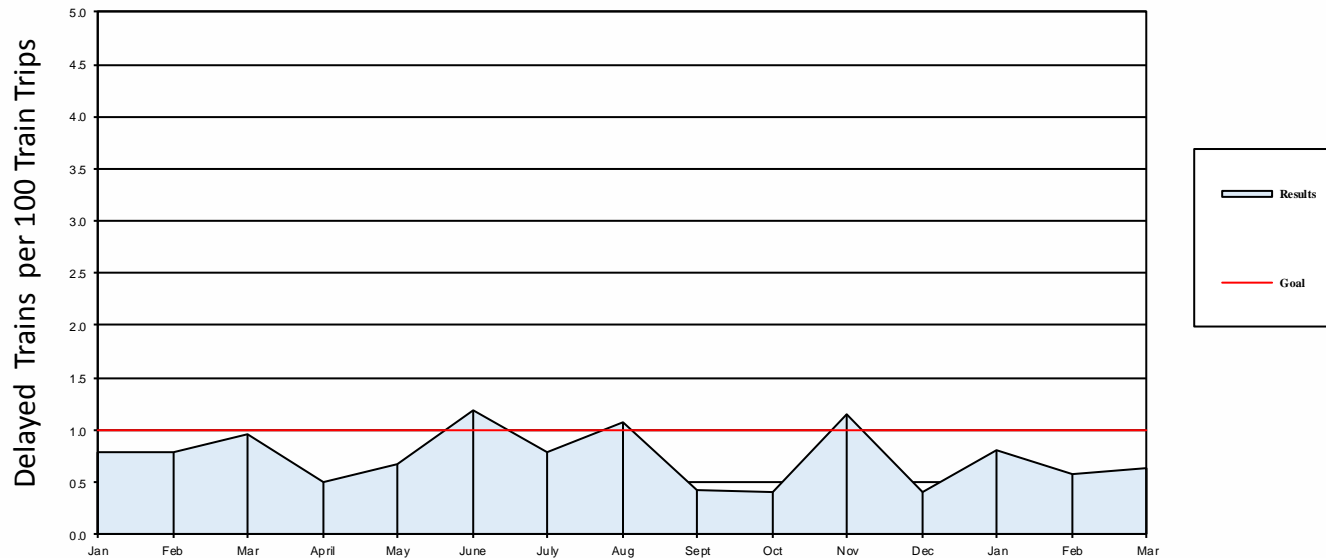
- ✓ Goal met – Actual 639/ Goal 620 (Average for Quarter)
- ✓ Additional FOTF revenue vehicles in service provided some relief
- ✓ 70 FOTF cars conditionally accepted (28 D cars & 42 E cars)
- ✓ 5<sup>th</sup> FOTF Train (Orange Line) scheduled to start service 5/1/2019



# Wayside Train Control System



Includes False Occupancy & Routing, Delays Per 100 Train Runs



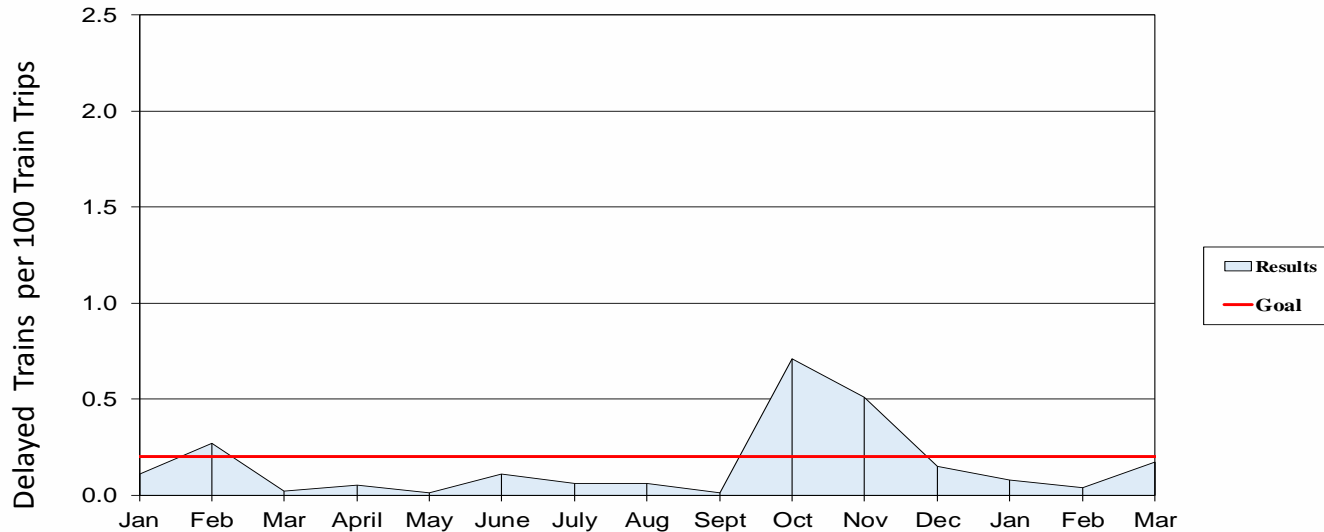
- ✓ Goal met – Actual 0.68 / Goal 1.00  
4% above last quarter, 24% improvement over same quarter a year ago
- ✓ Maintenance Activities Contributing to Positive Trend
  - ✓ Replacement of Richmond Yard Switches
  - ✓ Replacement of PSID Antennas
  - ✓ New Mux Cable at Montgomery, West Oakland and Pleasant Hill



# Traction Power



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



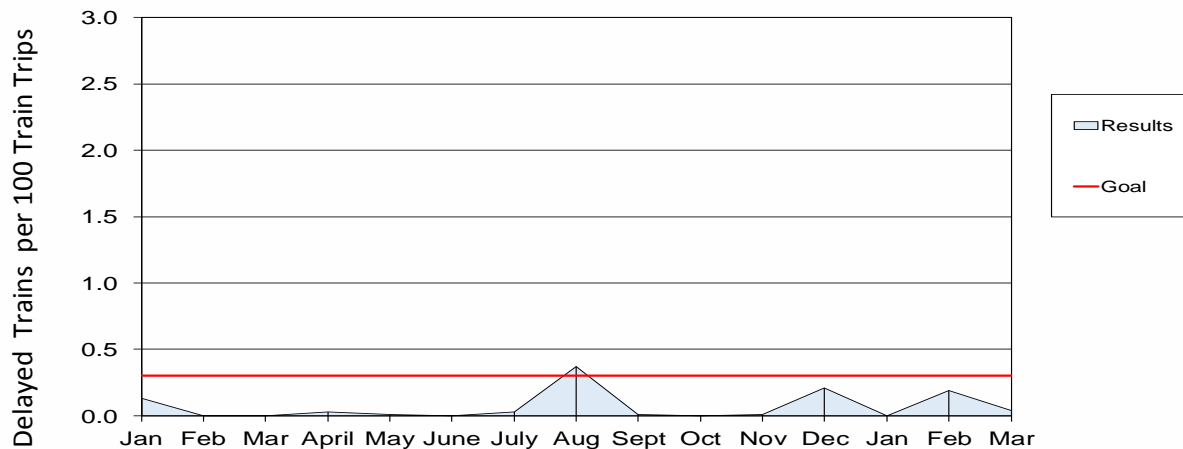
- ✓ Goal met – Actual .10 / Goal .2  
78.8% improvement over last quarter, 27.5% over same quarter a year ago
- ✓ RR Bond Projects helping with reliability improvements:
  - ✓ Commissioned Castro Valley Substation MPR Project, Hayward Yard Rectifier re-hab, Glen Park & 12<sup>th</sup> Street UPS replacement and 34.5KV cable from Valencia Street to Glen Park Station
  - ✓ Replaced 3<sup>rd</sup> rail insulators Downtown San Francisco



# Track



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



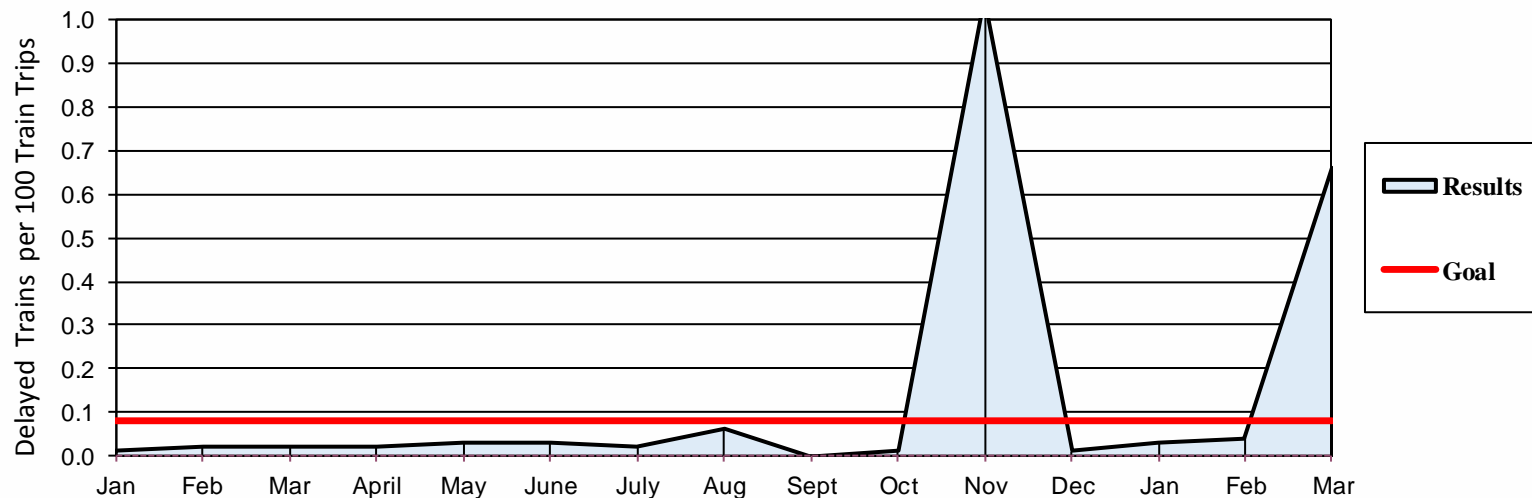
- ✓ Goal met – Actual .08 / Goal .30  
Down 4.5% from last quarter, 76.9% from same quarter a year ago
- ✓ RR Bond Projects helping with reliability improvements this year:
  - ✓ 10,000 Direct Fixation Rail Pads replaced
  - ✓ 10 Mile of Rail replaces
  - ✓ Replacement of last Restraining Rail in Oakland replaced



# Computer Control System



Includes ICS computer & SORS, Delays per 100 train runs



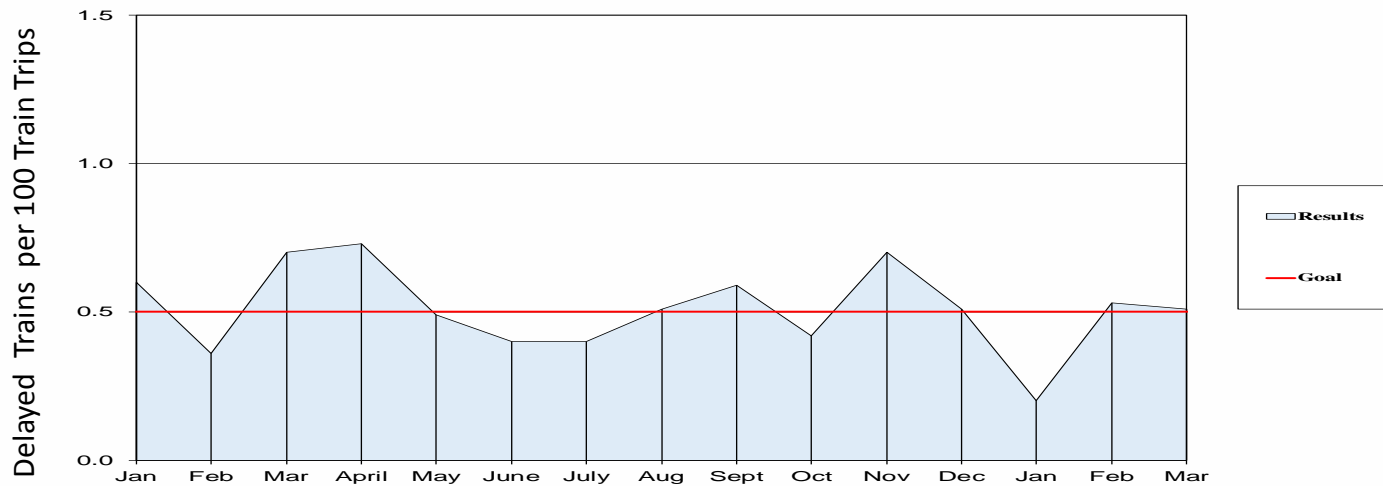
- ✓ Goal not met – Actual 0.24 / Goal 0.08  
31.8% improvement over last quarter
- ✓ Driven by network switch failure on March 9th
  - ✓ Upgraded all switches at same level
  - ✓ Built and commissioned redundant site for control of Train Control, Electrification, and critical station equipment



# Transportation



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

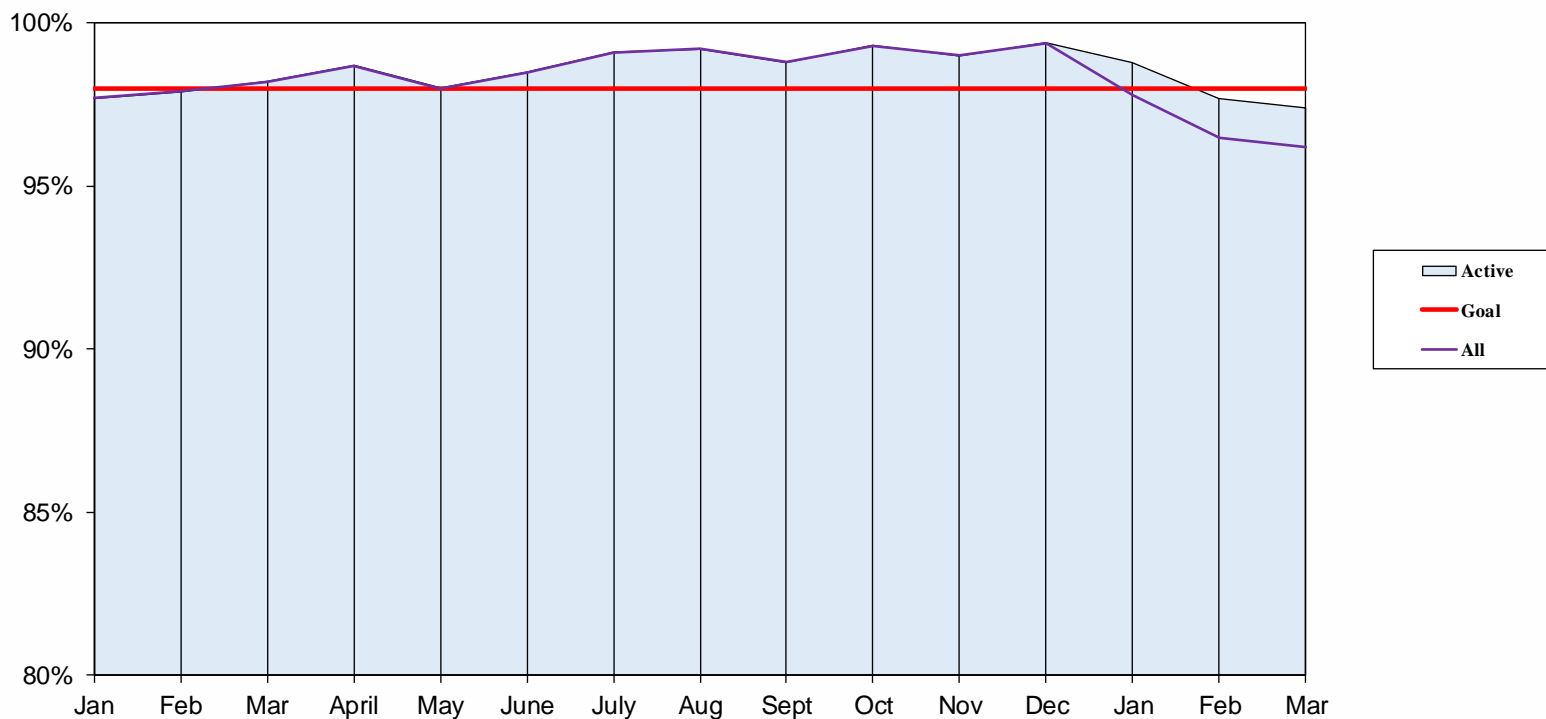


- ✓ Goal met – Actual .41 / Goal .5  
23.9% improvement over last quarter, 25.3% over same quarter a year ago





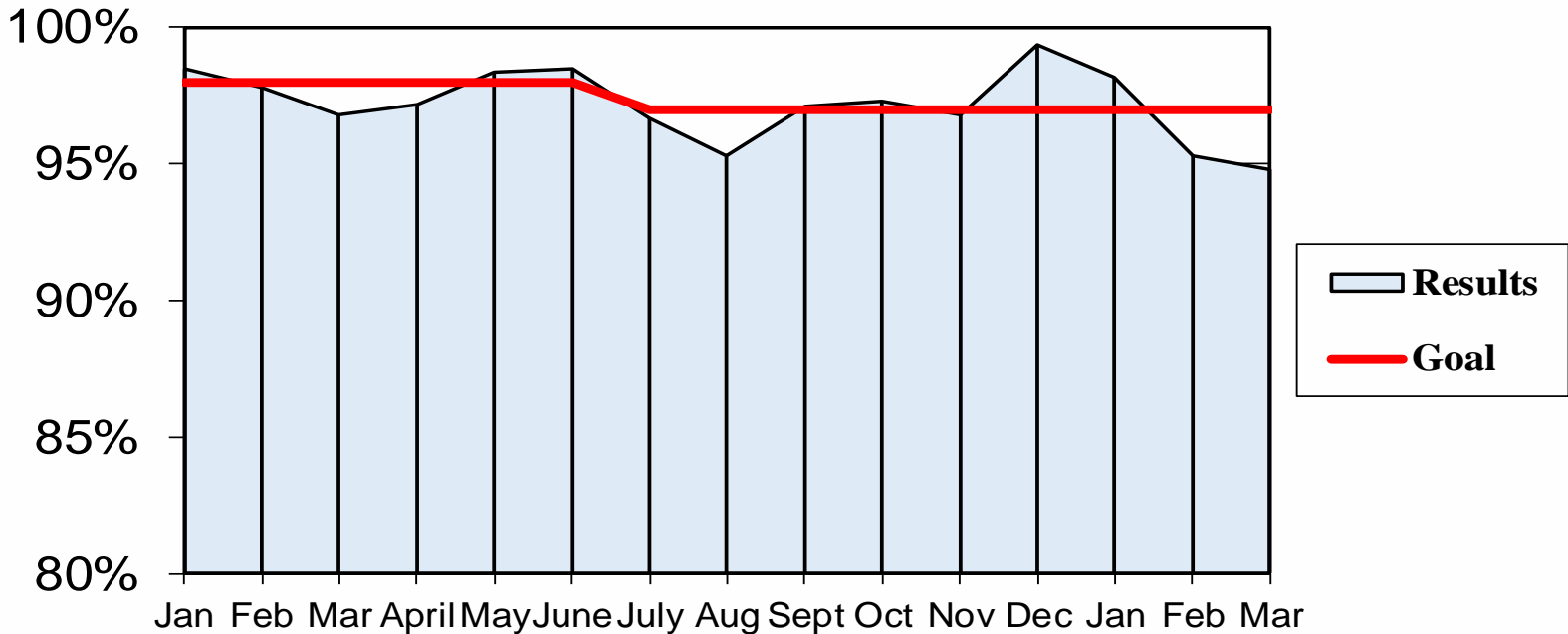
# Elevator Availability - Stations



- ✓ Goal not met - Actual 97.97% / Goal 98%  
1.3% decline from last quarter, 0.03% improvement over same quarter last year
- ✓ Walnut Creek due to damage to underground hydraulic supply lines
- ✓ Embarcadero for door replacement
- ✓ Ashby for vandalism/ glass replacement



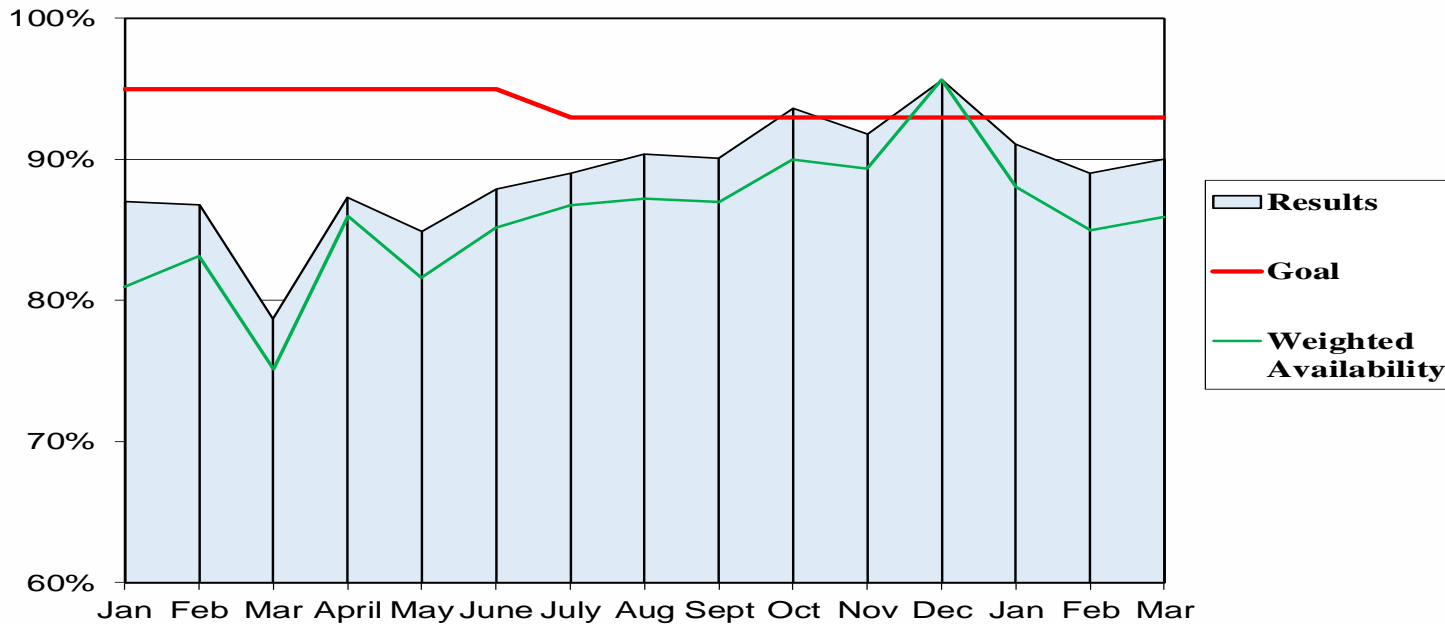
# Elevator Availability - Garage



- ✓ Goal not met – Actual 96.1% / Goal 97%  
1.8% decline from last quarter, 1.7% below same quarter last year
- ✓ Del Norte for Motor/Generator replacement
- ✓ Concord for Motor/ Generator replacement



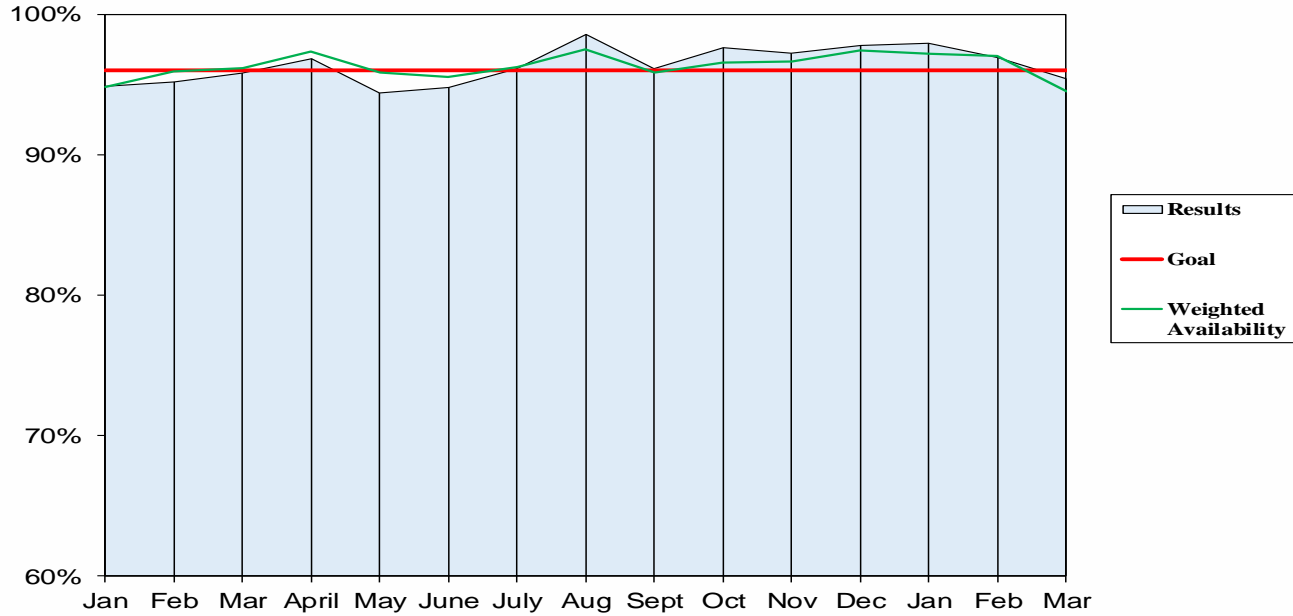
# Escalator Availability - Street



- ✓ Goal not met – Actual 90.03% / Goal 93%  
down 4% from last quarter, 6.5% over same quarter last year
- ✓ Civic Center/ 7<sup>th</sup> Street major repair and step chain replacement
- ✓ 12<sup>th</sup> Street/ 11<sup>th</sup> & Broadway carriage repair
- ✓ Civic Center/ UN Plaza for water intrusion electrical issues



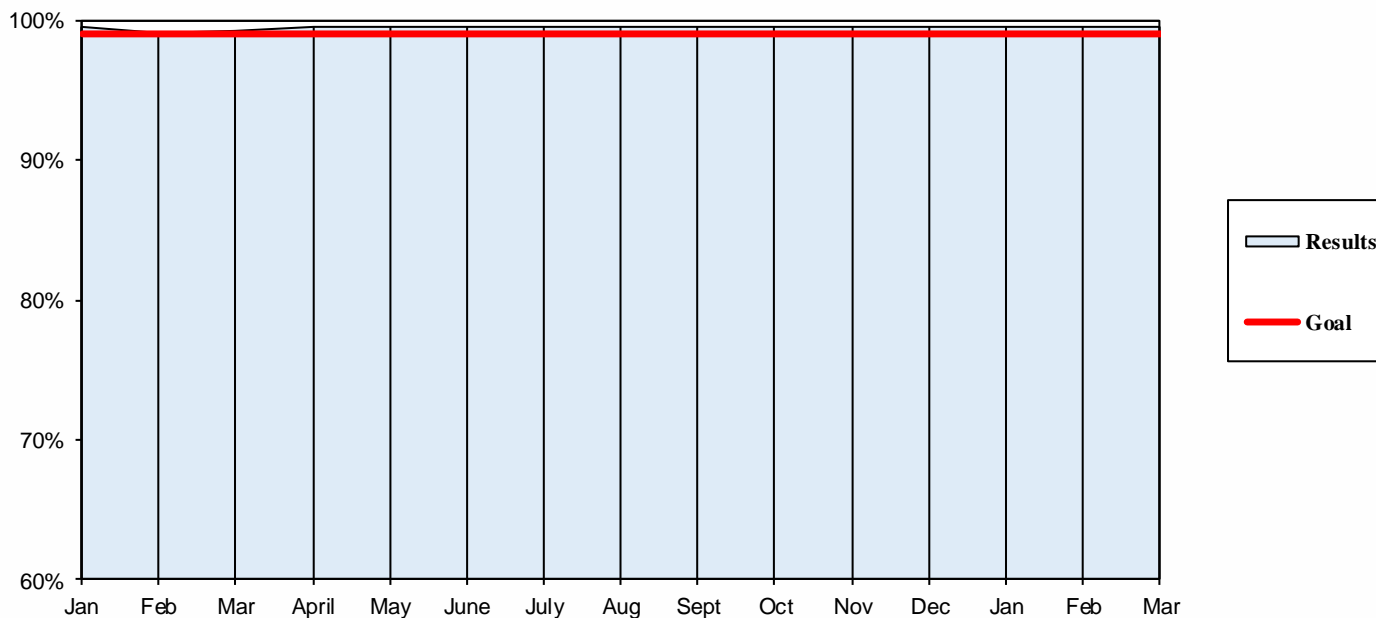
# Escalator Availability - Platform



- ✓ Goal met – Actual 96.73% Goal 96%  
Down 0.82% from last quarter, up 1.5% same quarter one year ago



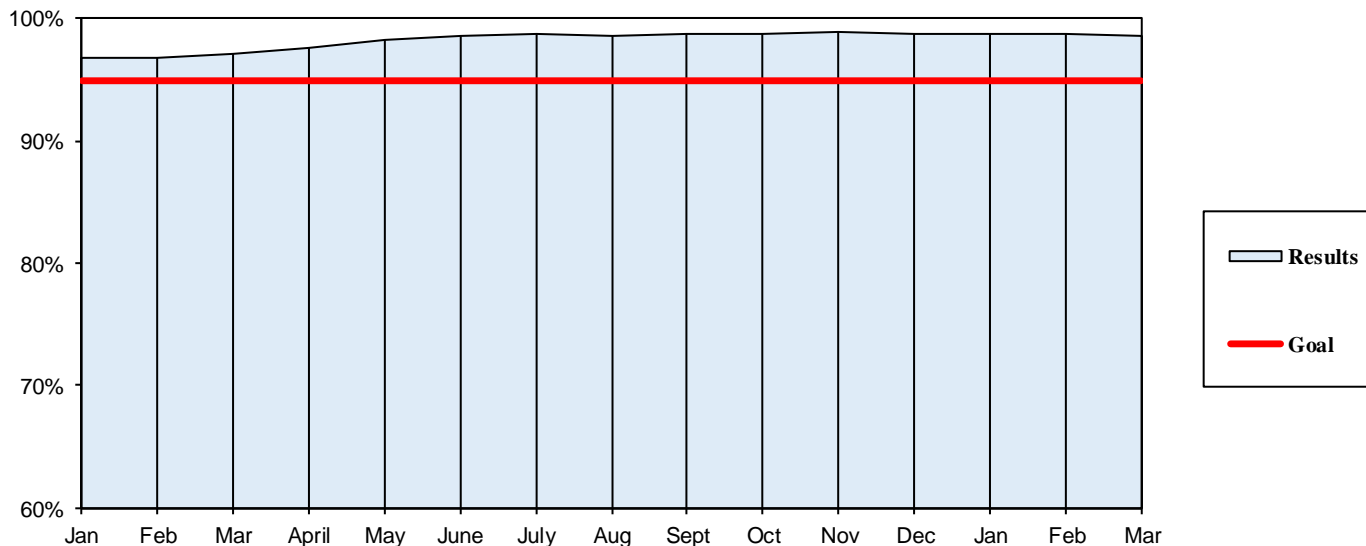
# AFC Gate Availability



- ✓ Goal met - Actual 99.57% / Goal 99.0%
- ✓ Installation of the cinch mod to help with fare evasion is on schedule.
- ✓ Working on pilot program to replace the electric actuators in the AFG gates with pneumatic actuators.



# AFC Vendor Availability



- ✓ Goal met - Actual 98.67% / Goal 95.0%
- ✓ Progressing installation of paid area Clipper Load using credit and debit cards. Project is on schedule.



# Environment - Outside Stations



**Ratings guide:**

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

- FY19 Q1 changes in the PES questionnaire: *Appearance of BART Landscaping was combined with Walkways and Entry Plaza*
- Significant decrease in *Appearance Of BART Landscaping, Walkways & Entry Plaza Just Outside Station*
- Will establish goal for FY20

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



↓ indicates a statistically significant decrease from the prior quarter



# Environment - Inside Stations



- FY19 Q1 changes in the PES questionnaire: added *Cleanliness of Concourse, Escalator Cleanliness, Stairwell Cleanliness*; dropped *Cleanliness of Other Areas*
- Significant decrease in *Cleanliness of Station Platform, Stairwell Cleanliness and Elevator Cleanliness*
- Will establish goal for FY20

**Ratings guide:**

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

	FY18 Q3	FY18 Q4	FY19 Q1	FY19 Q2	FY19 Q3
<b>Environment Inside Stations (composite)</b>			<b>62.2%</b>	<b>63.8%</b>	<b>61.3%</b>
Cleanliness Of Station Platform (weight 40%)	63.9%	63.3%	67.6%	68.8%	65.7% ↓
Cleanliness Of Concourse (weight 25%)			62.7%	64.1%	63.1%
Escalator Cleanliness (weight 10%)			63.7%	66.0%	64.6%
Stairwell Cleanliness (weight 7.5%)			56.8%	59.9%	57.1% ↓
Elevator Cleanliness (weight 10%)	45.7%	42.8%	63.7%	57.9%	53.3% ↓
Restroom Cleanliness (weight 7.5%)	32.9%	35.2%	43.4%	44.6%	41.7%

↓ indicates a statistically significant decrease from the prior quarter





# Station Vandalism



**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 *Station Free from Graffiti*
- Will establish goal for FY20

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



↓ indicates a statistically significant decrease from the prior quarter



# 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*
- Will establish goal for FY20

	FY19 Q1	FY19 Q2	FY19 Q3
<b>Train Interior Cleanliness (composite)</b>	<b>70.8%</b>	<b>68.3%</b>	<b>67.1%</b>
Train Interior Cleanliness (weight 65%)	61.7%	58.3%	57.1%
Train Interior kept free of graffiti (weight 35%)	87.7%	86.9%	85.5%




# 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 Increase in *Comfortable Temperature Onboard train*
- Will establish goal for FY20

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

- ✓ C Car Pre Season Check MD-798 released mid Feb 2019- 83% completed
- ✓ A2/B2 Pre Season Check MD-797 released mid Feb 2019- 86% completed
- ✓ A2B2 MD-794 TCU Faulty Capacitors replacement- 99.5% completed
- ✓ 3 Month Internet of things (IoT) Pilot program - 12 cars equipped with temperature sensors.

 indicates a statistically significant increase from the prior quarter



# Customer Service



**Ratings guide:**

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

- New Performance Indicator
- *Customer service from Station Agent replaces Availability of Brochures and Availability of Station Agents*
- *PA Announcements for Transfer, Next Station and Destination combined into one attribute*
- Significant decrease in *Onboard next stop, destination and transfer announcements*
- Will establish goal for FY20

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



↓ indicates a statistically significant decrease from the prior quarter



# Homelessness



**Ratings guide:**

- Scale:
- Excellent
- Good
- Only Fair
- Poor
- Rating=% Excellent and Good
- Yes/No

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

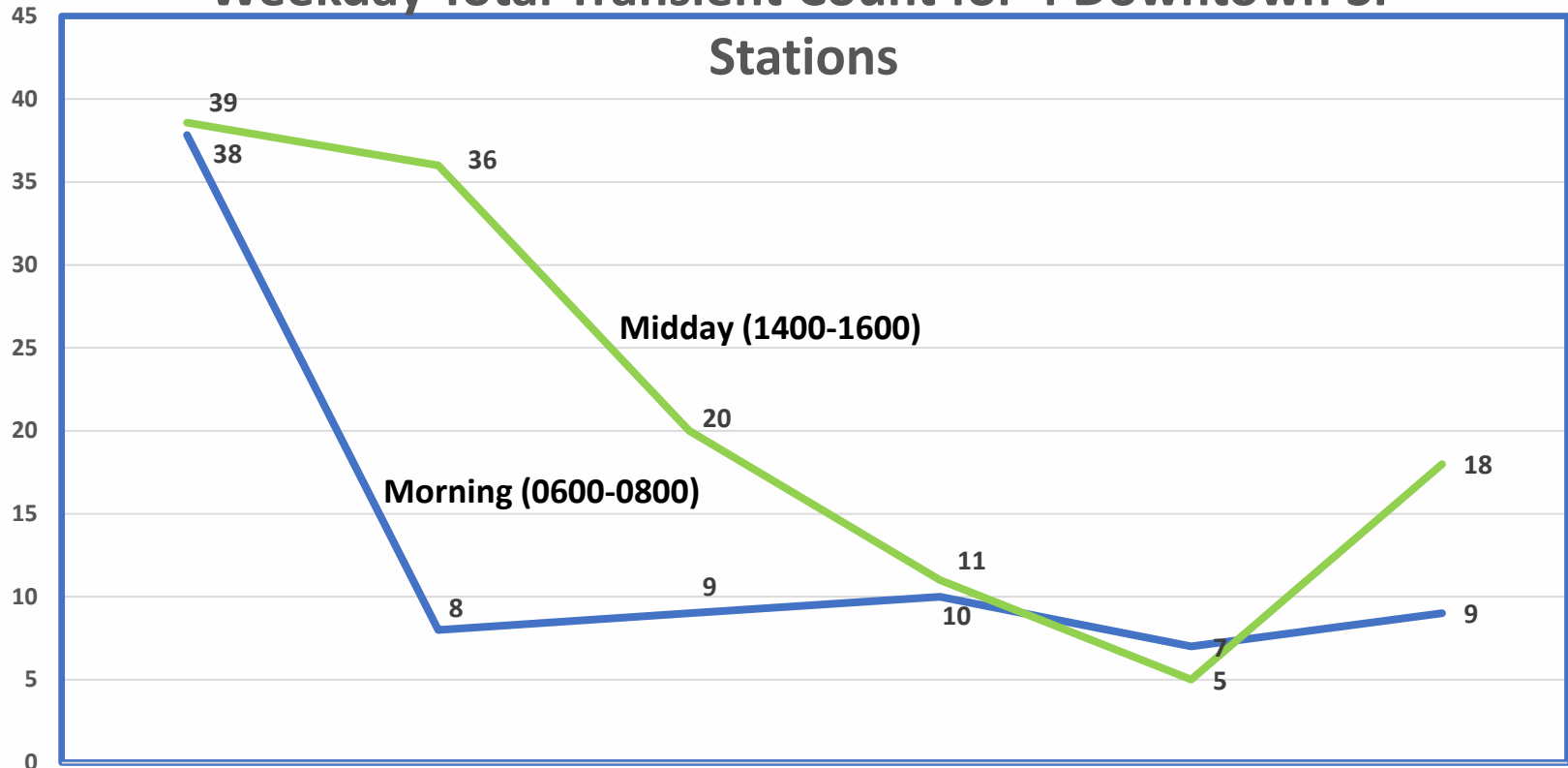
	FY19 Q1	FY19 Q2	FY19 Q3
How well BART is addressing homelessness	23.7%	23.4%	22.8%



# Homeless Counts – Stand-Up Period



## Weekday Total Transient Count for 4 Downtown SF Stations



\* Pre-blitz average is the average of monthly counts from April 2018 to March 2019



# Fare Evasion



**Ratings guide:**

Scale:

- Yes
- No
- I don't know

Rating = % Yes

- New Performance Indicator
- Building historical data
- Significant increase in the number of riders who said they *saw someone not pay their fare*
- Will establish goal for FY20

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



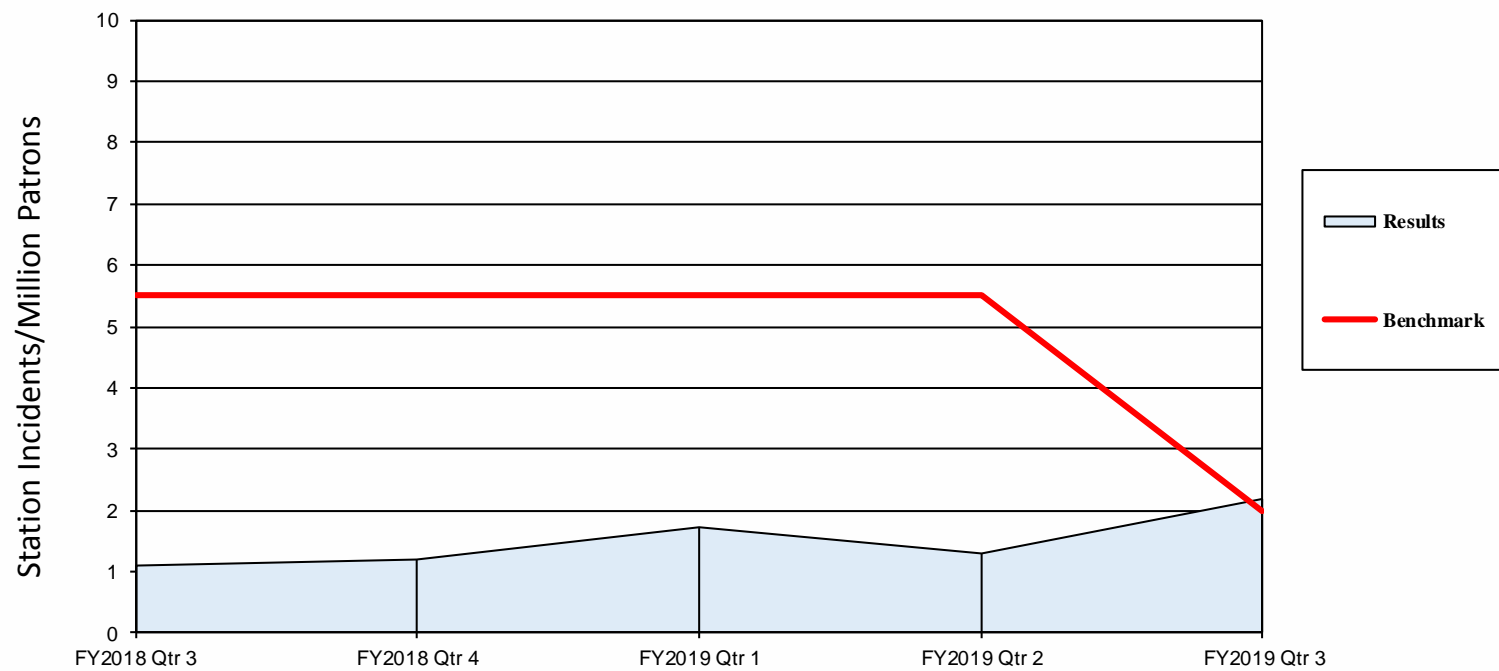
 indicates a statistically significant increase from the prior quarter



# Patron Safety - Station



## Station Incidents per Million Patrons



✓ Goal not met, Actual 2.19/New Goal 2.0

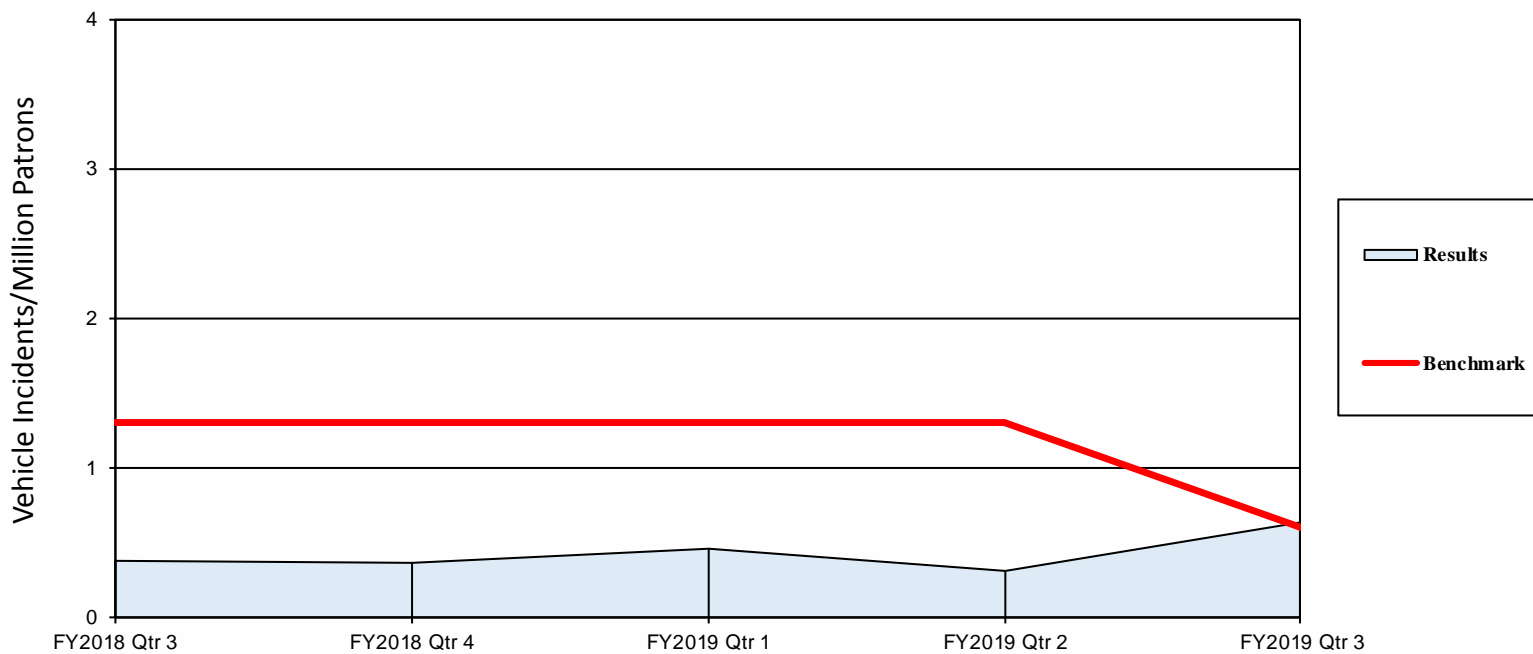




# Patron Safety - Vehicle



## Vehicle Incidents per Million Patrons



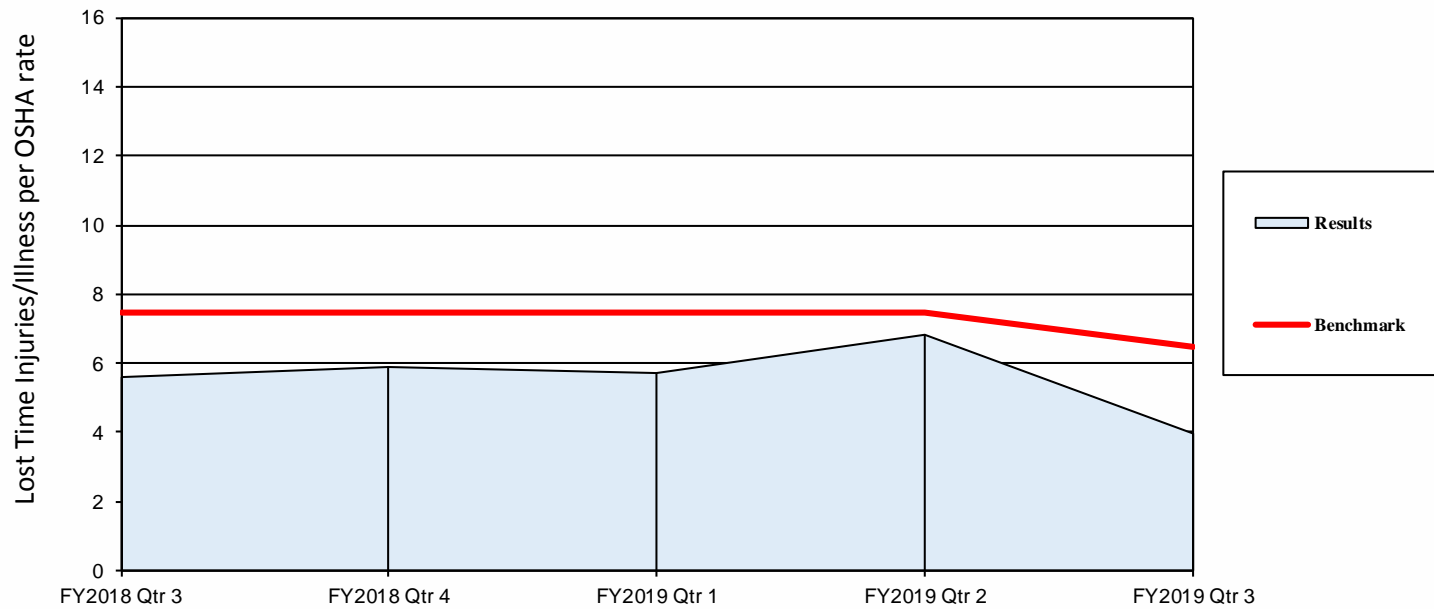
✓ Goal not met, Actual .63/New Goal .60



# Employee Safety



## Lost Time Injuries/Illnesses per OSHA Incidence Rate



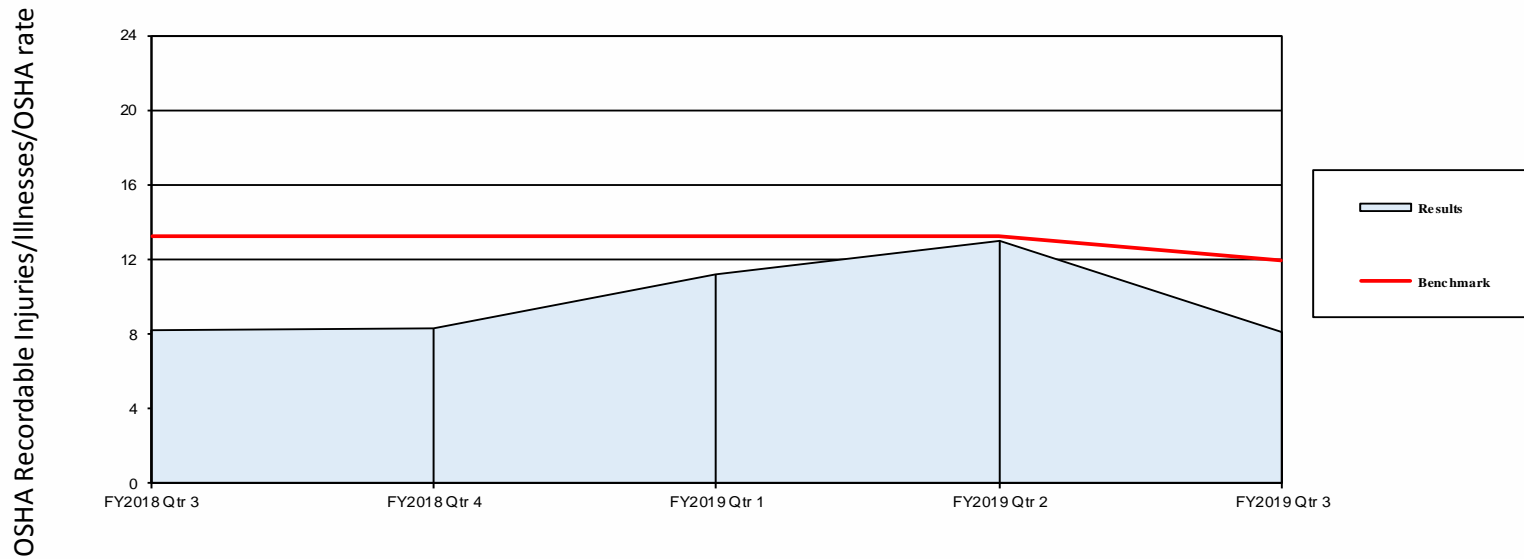
✓ Goal met



# Employee Safety



## OSHA-Recordable Injuries/Illnesses per OSHA Incidence Rate



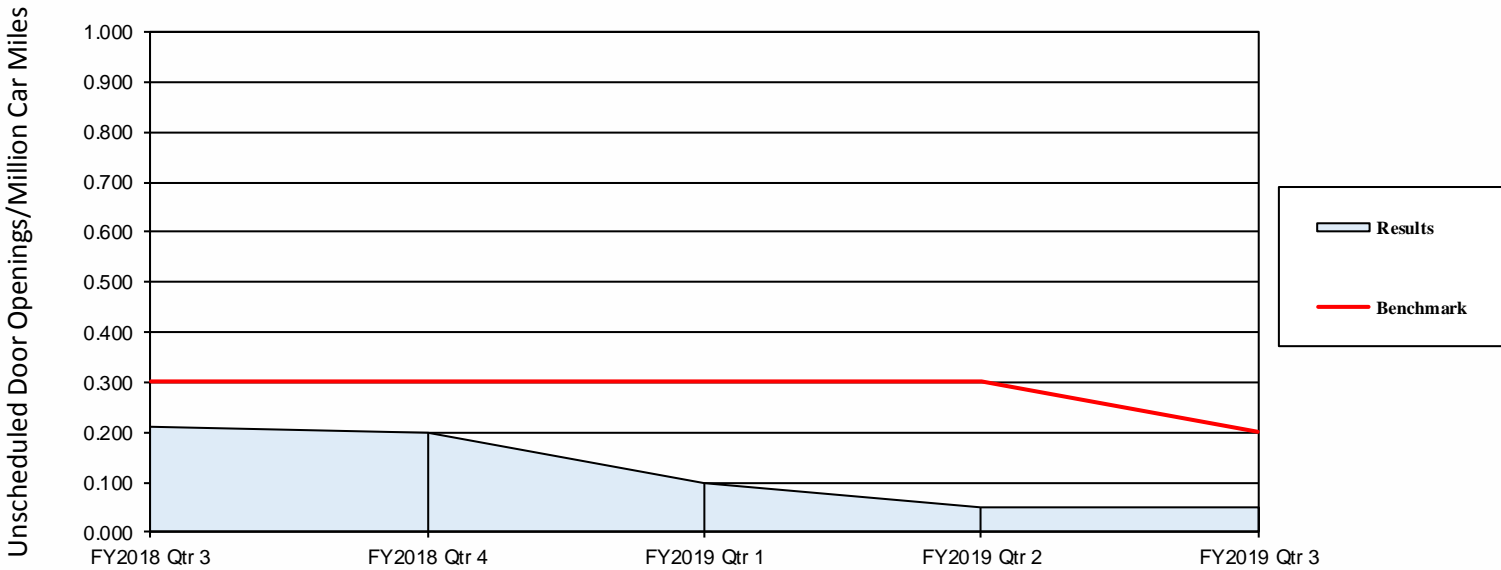
✓ Goal met



# Operating Safety



## Unscheduled Door Openings per Million Car Miles



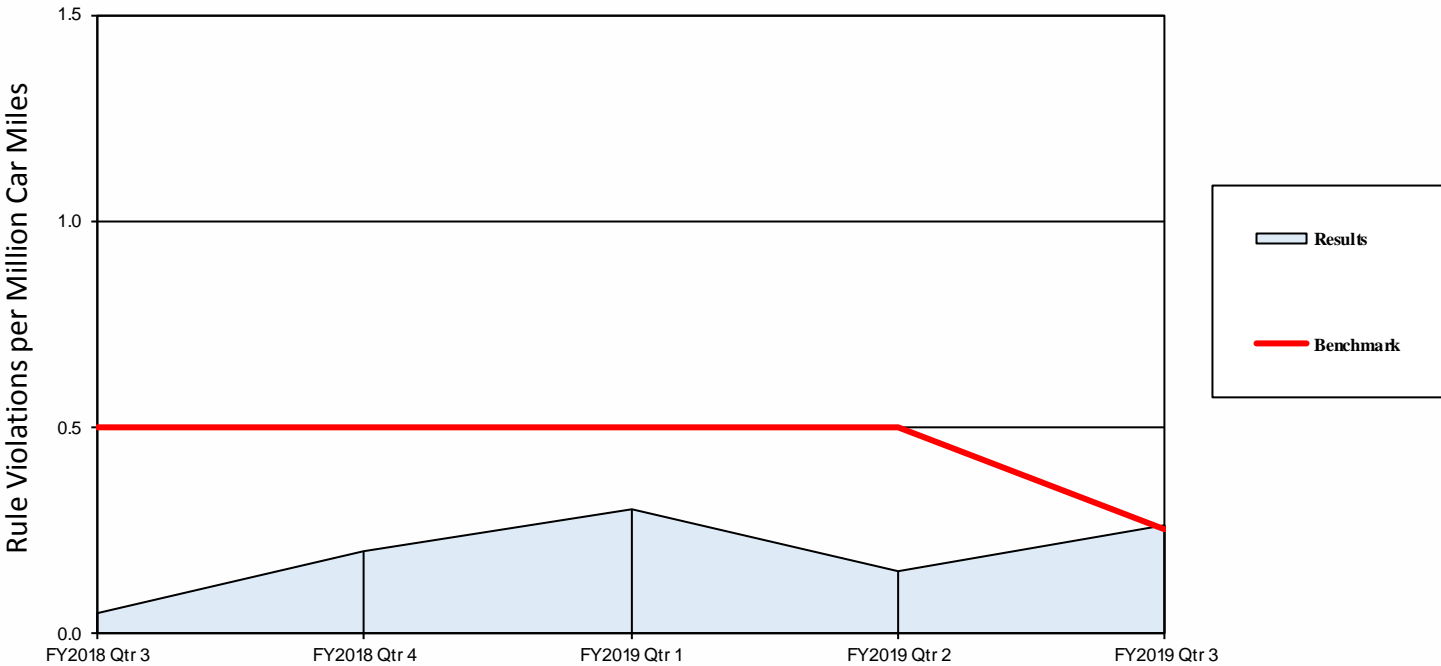
✓ Goal met



# Operating Safety



Rule Violations per Million Car Miles



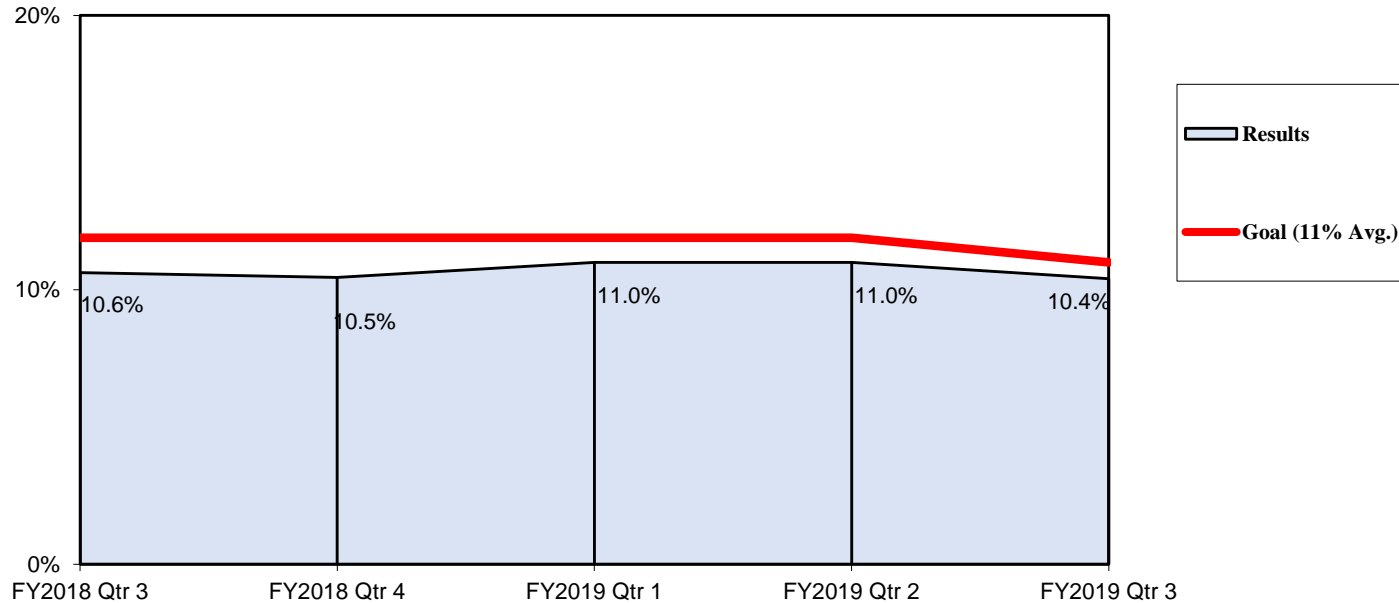
✓ Goal not met, Actual .26/new goal .25



# BART Police Presence



**Ratings Guide:**  
 • Yes  
 • No  
 • I Don't Know  
**Rating = % Yes**



✓ Goal not met

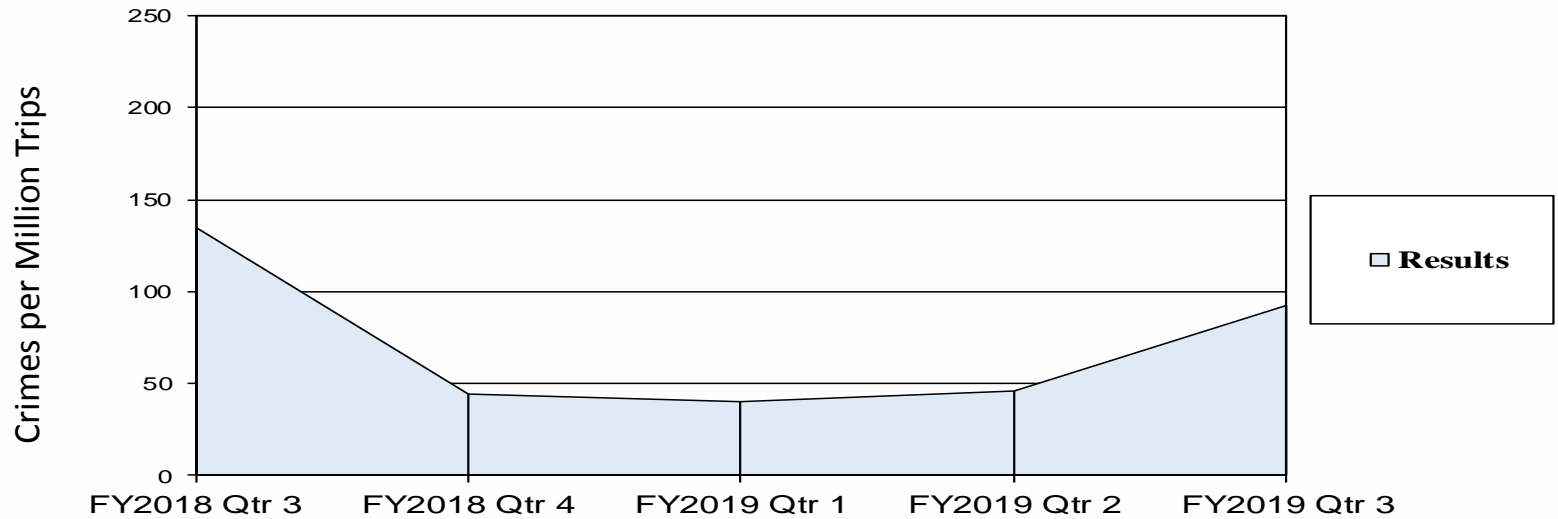
<b>Police Presence Composite (All items equally weighted)</b>	<b>10.4%</b>
Police seen on train	7.2%
Police seen outside the station	13.9%
Police seen in the station	9.4%
Police seen on train after 7:00PM and Weekends	7.7%
Police seen outside the station after 7:00PM and Weekends	14.3%
Police seen in the station after 7:00PM and Weekends	10.2%



# Quality of Life\*



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



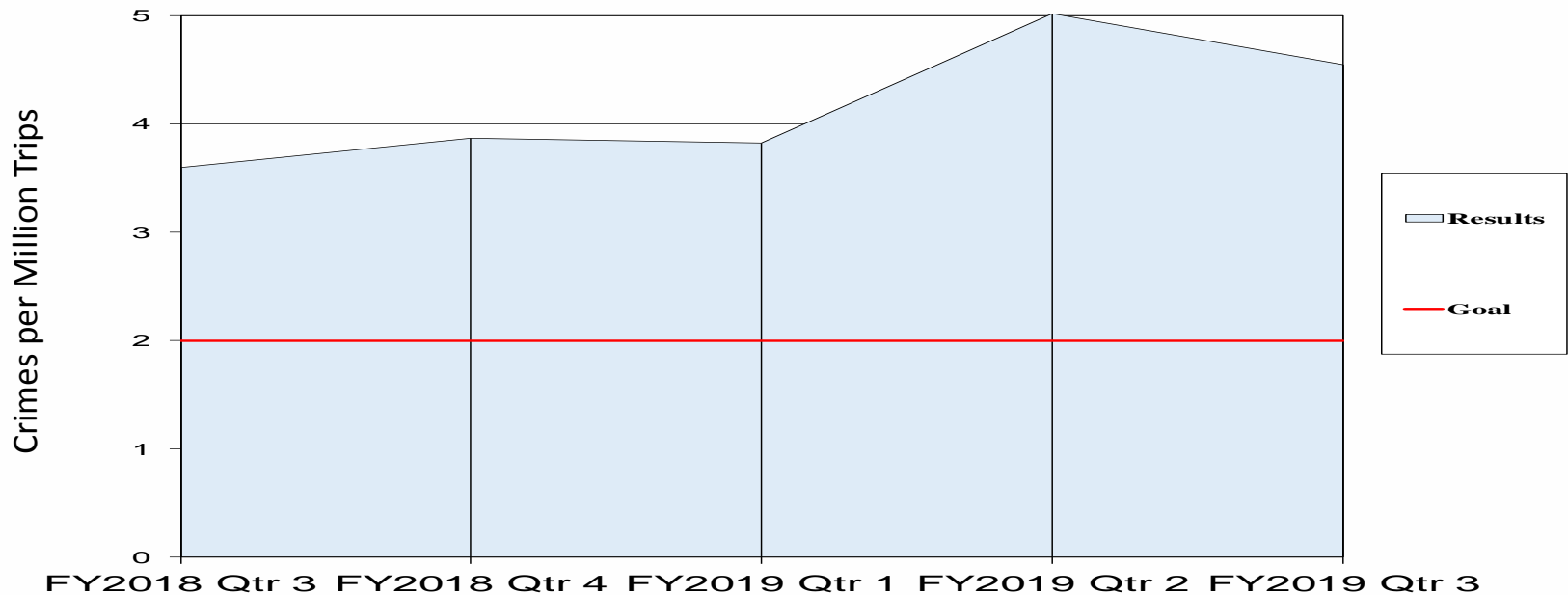
- ✓ Quality of Life incidents are up from the last quarter but down from the corresponding quarter of the prior fiscal year.



# Crimes Against Persons



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

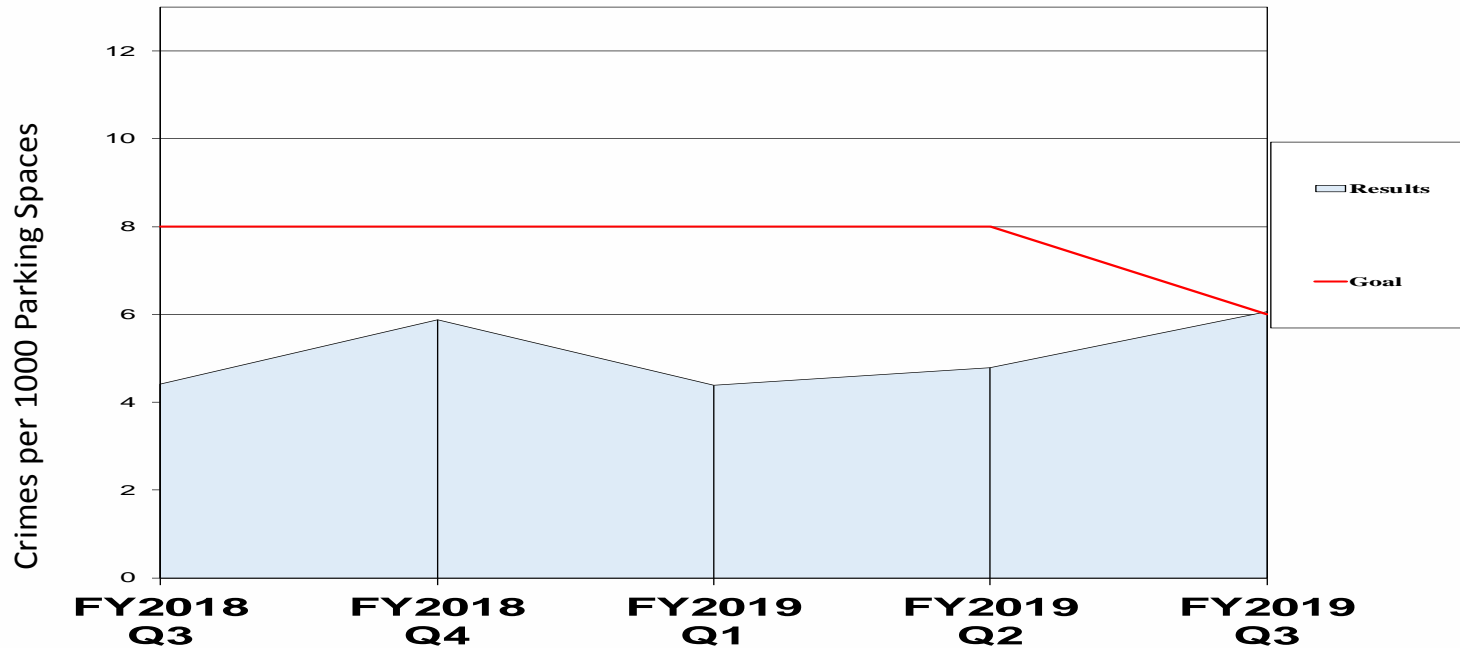


- ✓ Goal not met
- ✓ The number of incidents per Million trips are down from last quarter but up from same quarter last year





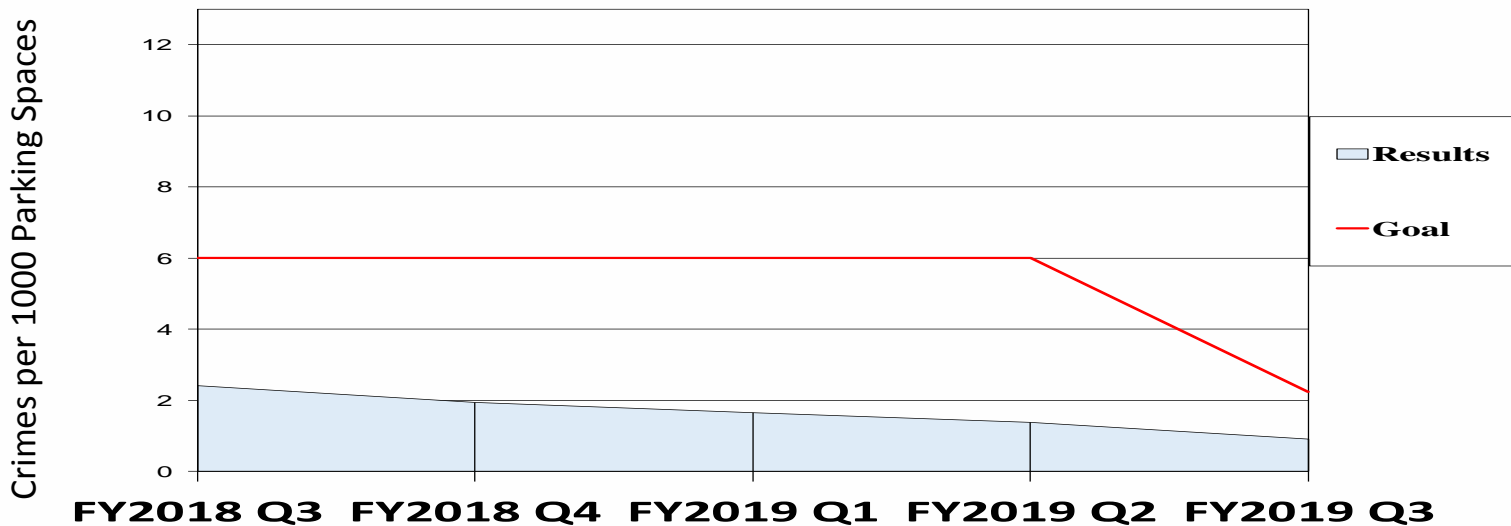
# Auto Burglary



- ✓ Goal not met, Actual 6.07/New Goal 6.0
- ✓ The number of incidents per thousand parking spaces are up from last quarter and up from same quarter last year



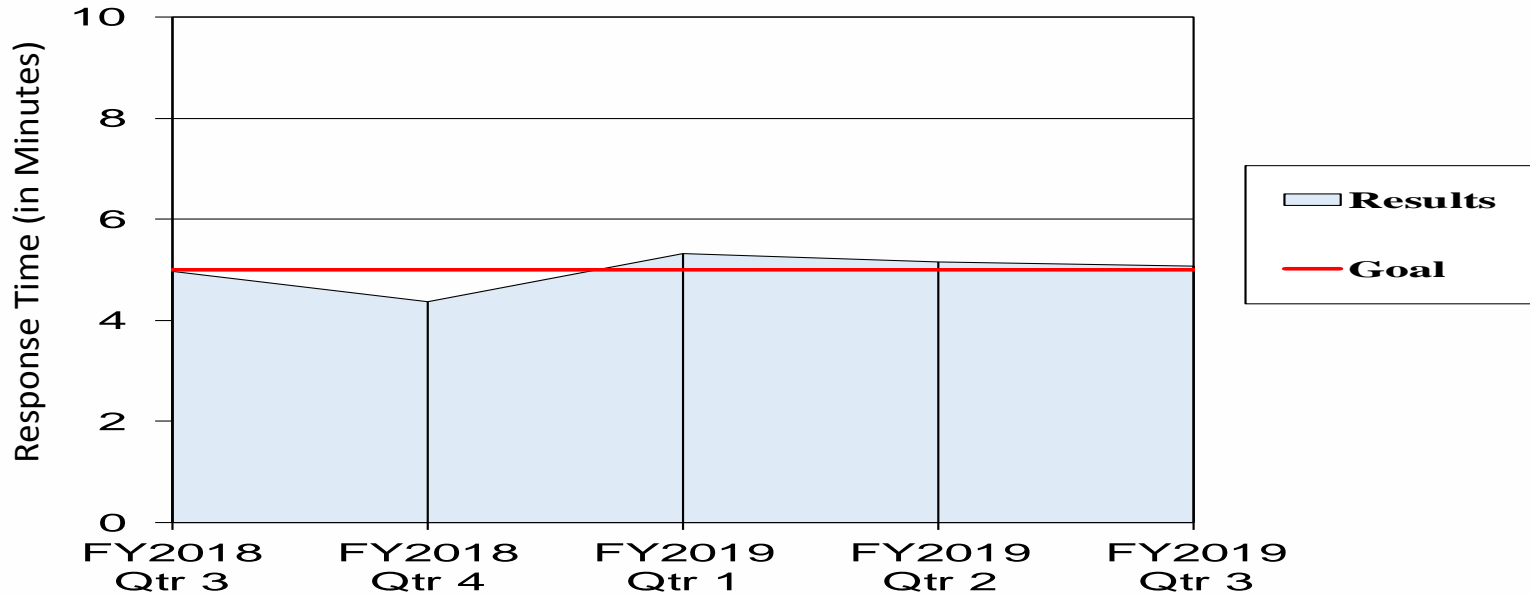
# Auto Theft



- ✓ Goal met
- ✓ The number of incidents per thousand parking spaces are down from last quarter and from same quarter last year



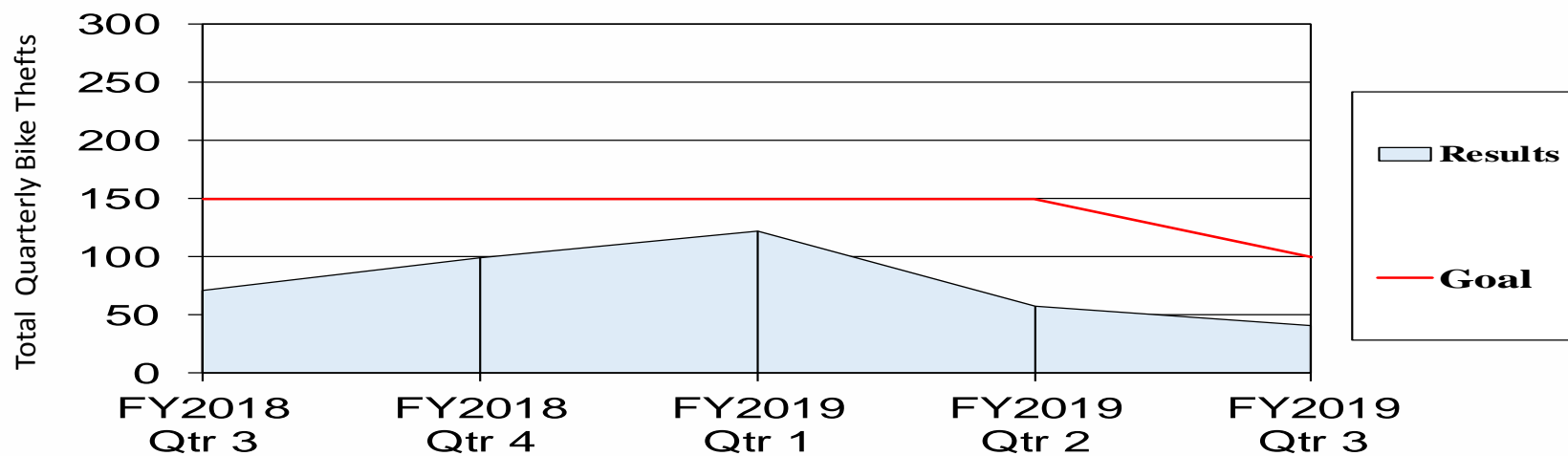
# Average Emergency Response Time



- ✓ Goal not met
- ✓ Average Emergency Response Time was down from prior quarter and slightly up from the same quarter last year



# Bike Theft



- ✓ Goal met
- ✓ There were 41 bike thefts, down 16 from last quarter .