



# Quarterly Service Performance Review Third Quarter, FY 2019 January - March, 2019

Engineering & Operations Committee
June 13, 2019

		SUMMARY CI	HART 3rd QUA	ART	ER FY 2019					
PERFORM ANCE INDICATORS	Cl	JRRENT QUAR	ΓER			R ACTUALS		YEAR TO DAT	ΓE	
					LAST	THIS QTR				
UPDATED 5/16/19	ACTUAL	STANDARD	STATUS		QUARTER	LAST YEAR	ACTUAL	STANDARD	STATUS	
Average Ridership - Weekday	404,136	405,531	NOT MET		405,321	405,801	409,874	413,995	NOT MET	
Customers on Time										$\Box$
Peak	90.84%	94.00%	NOT MET		92.29%	91.22%	91.80%	94.00%	NOT MET	
Daily	91.97%	94.00%	NOT MET		93.28%	93.43%	92.95%	94.00%	NOT MET	
Trains on Time										П
Peak	84.79%	N/A	N/A		89.04%	86.56%	87.70%	N/A	N/A	П
Daily	88.73%	91.00%	NOT MET		90.09%	88.76%	90.03%	91.0%	NOT MET	
Peak Period Transbay Car Throughput										П
AM Peak	96.15%	97.50%	NOT MET		91.10%	95.45%	93.37%	97.50%	NOT MET	
PM Peak	98.37%	97.50%	MET		93.02%	95.56%	95.53%	97.50%	NOT MET	
Car Availability at 4 AM (0400)	639	620	MET		618	596	616	607	MET	
Mean Time Between Service Delays	4,756	4,000	MET		4,810	4,737	4,864	4,000	MET	
Elevators in Service	.,	,,,,,,			.,	.,	1,001	.,		
Station	97.97%	98.00%	NOT MET		99.23%	97.93%	98.74%	98.00%	MET	
Garage	96.10%	97.00%	NOT MET		97.83%	97.70%	96.77%	97.00%	NOT MET	
Escalators in Service	55576	35576		Г	22370	3370	3070	370		
Street	90.03%	93.00%	NOT MET		93.67%	84.17%	91.18%	93.00%	NOT MET	
Platform	96.73%	96.00%	MET		97.53%	95.30%	97.07%	96.00%	MET	
Automatic Fare Collection	00.1070	00.0070	IVIL		07.0070	00.0070	07.0770	00.0070	IVILI	
Gates	99.57%	99.00%	MET		99.55%	99.33%	99.56%	99.00%	MET	
Vendors	98.67%	95.00%	MET		98.79%	96.90%	98.71%	95.00%	MET	
Wayside Train Control System	0.68	1.00	MET		0.66	0.84	0.70	1.00	MET	-
Computer Control System	0.00	0.08	NOT MET		0.357	0.017	0.209	0.08	NOT MET	
Traction Power	0.10	0.08	MET		0.337	0.017	0.209	0.08	MET	
Track	0.08	0.20	MET		0.40	0.13	0.20	0.20	MET	-
	0.08	0.50	MET		0.54	0.55	0.10	0.50	MET	-
Transportation	0.41		MET			0.00	0.49	0.50	MET	$\mathbf{H}$
Environment Outside Stations	0.00	0.00			0.00	0.00	0.00		MET	-
Environment Inside Stations	0.00%		MET			0.00%		0.00	IVIET	
Station Vandalism		0.00	N ACCT		0.00%		0.00%	0.00	N ACT	$\mathbf{H}$
Station Services	0.00	0.00	MET		0.00	0.00	0.00	0.00	MET	$\mathbf{H}$
Train P.A. Announcements	0.00	0.00	MET		0.00	0.00	0.00	0.00	MET	Ш.
Train Exterior Appearance	0.00	0.00	MET		0.00	0.00	0.00	0.00	MET	
Train Interior Appearance	0.00%	0.00			0.00%	0.00%	0.00%	0.00		$\boldsymbol{-}$
Train Temperature	0.00%	0.00			0.00%	0.00%	0.00%	0.00		-
Customer Complaints										
Complaints per 100,000 Passenger Trips	12.17	5.07	NOT MET		10.31	7.15	10.84	5.07	NOT MET	
Safety										
Station Incidents/Million Patrons	2.19	2.00	NOT MET		1.28	1.10	1.73	4.33	MET	
Vehicle Incidents/Million Patrons	0.63	0.60	NOT MET		0.31	0.38	0.47	1.07	MET	
Lost Time Injuries/Illnesses/Per OSHA	3.96	6.50	MET		6.84	5.60	5.51	7.17	MET	
OSHA-Recordable Injuries/Illnesses/Per OSHA	8.07	12.00	MET		12.99	8.20	10.76	12.87	MET	
Unscheduled Door Openings/Million Car Miles	0.050	0.200	MET		0.050	0.210	0.067	0.267	MET	
Rule Violations Summary/Million Car Miles	0.260	0.250	NOT MET		0.150	0.050	0.237	0.417	MET	
Police										
BART Police Presence	0.0%	0.0%	MET		0.0%	0.0%	0.0%	0.0%	MET	
Quality of Life per million riders	92.32	N/A	N/A		46.17	134.41	59.62	N/A	N/A	
Crimes Against Persons per million riders	4.55	2.00	NOT MET		5.02	3.60	4.46	2.00	NOT MET	
Auto Burglaries per 1,000 parking spaces	0.00	0.00	MET		0.00	0.00	0.00	0.00	MET	
Auto Thefts per 1,000 parking spaces	0.92	2.25	MET		1.39	2.42	1.32	4.75	MET	
Police Response Time per Emergency Incident (Minutes)	5.08	5.00	NOT MET		5.15	4.96	5.18	5.00	NOT MET	
Bike Thefts (Quarterly Total and YTD Quarterly Average)	41	150.00	MET		57	71	73	150.00	MET	
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## FY19 Third Quarter Overview

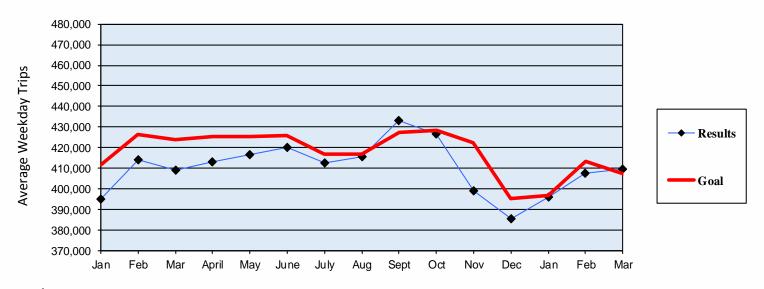


- ✓ Ridership decreased by 2.7% compared to same quarter last year, primary decreases off peak and weekends
- ✓ On-time performance is up 0.24% compared to same quarter last year
- ✓ ROW Equipment Reliability: Car, Train Control, Traction Power and Track, met goal; and Computer Systems did not meet goal
- ✓ Station Equipment Availability: Station Elevators, Ticket Machines and Fare Gates met goal, Escalators (Platform and Street) and Garage Elevators did not met 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





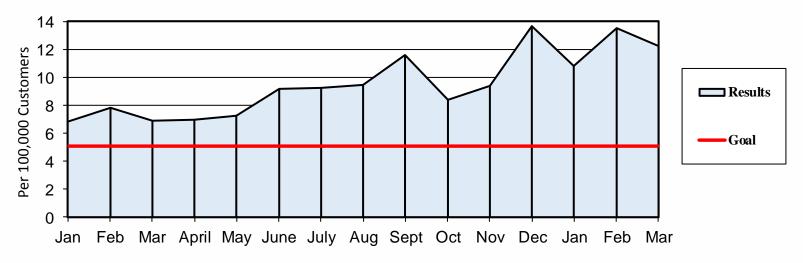
- ✓ Total ridership decreased by 2.7% compared to same quarter last year
- ✓ Average weekday ridership (404,136) down by 0.4% from same quarter last year
- ✓ Core weekday ridership down by 0.2% from same quarter last year
- ✓ SFO Extension weekday ridership down by 1.8% from same quarter last year
- ✓ 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**

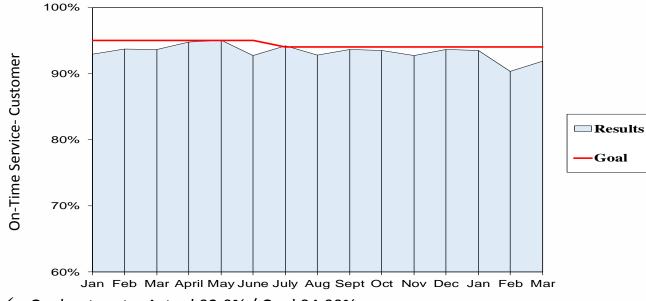


- ✓ Total complaints increased 15.5% over last quarter, and 67% over same quarter a year ago
  - 102 (3%) from social apps
- ✓ Complaint increased for: "Announcements", "Apps", "Bike Program", "Biohazard", "M&E", "Parking", "Police", "Policies", "Quality of Life", "Service", and "Train Cleanliness"
- ✓ 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





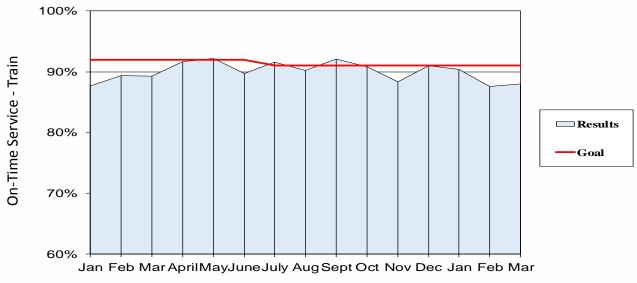
- ✓ Goal not met Actual 92.0% / Goal 94.00%
- ✓ Down 1.3% from prior quarter, down 1.5% from this quarter last year

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**





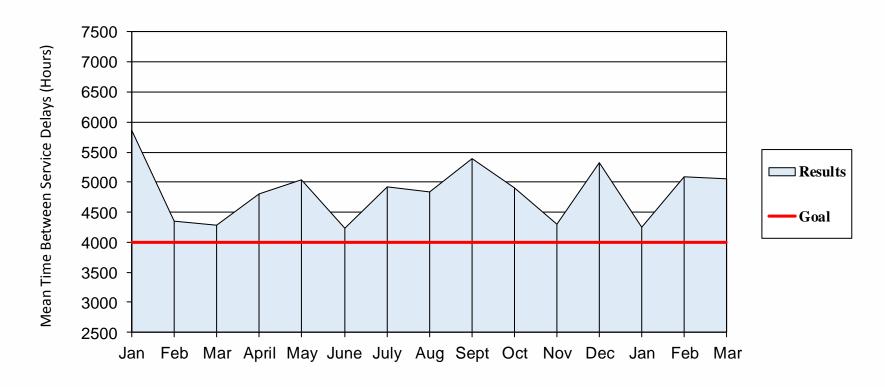
- ✓ Goal Not Met Actual 88.7% / 91% Goal
- ✓ Down 1.4% from prior quarter, down .03% from this quarter last year
- ✓ 40.2% of late trains were late due to multiple small delays, each under 5 minutes

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



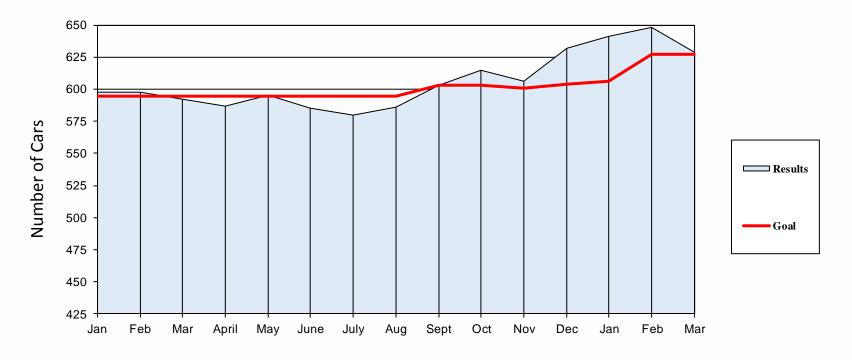


- ✓ Goal met Actual 4,756 hours/Goal 4,000 hours
- ✓ Reliability slightly decreased 1.2% from previous Qtr.
- ✓ CY, HY & RY shop met MTBSD. DY shop MTBSD did not meet goal



### Car Equipment – Availability @ 0400 hours





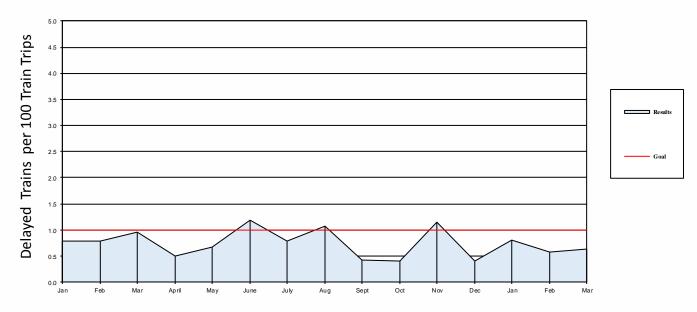
- ✓ Goal met Actual 639/ Goal 620 (Average for Quarter)
- ✓ Additional FOTF revenue vehicles in service provided some relief
- √ 70 FOTF cars conditionally accepted (28 D cars & 42 E cars)
- ✓ 5<sup>th</sup> FOTF Train (Orange Line) scheduled to start service 5/1/2019



## Wayside Train Control System



#### Includes False Occupancy & Routing, Delays Per 100 Train Runs



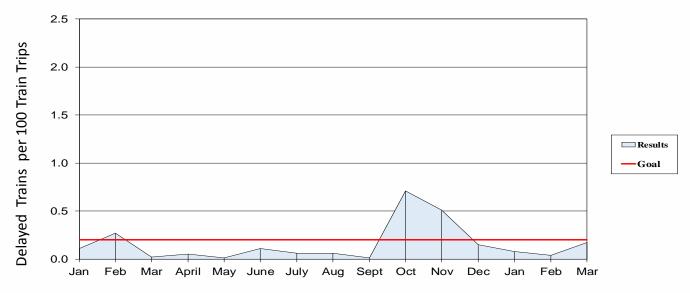
- ✓ Goal met Actual 0.68 / Goal 1.00
   4% above last quarter, 24% improvement over same quarter a year ago
- ✓ Maintenance Activities Contributing to Positive Trend
  - ✓ Replacement of Richmond Yard Switches
  - ✓ Replacement of PSID Antennas
  - ✓ New Mux Cable at Montgomery, West Oakland and Pleasant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



### **Traction Power**



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



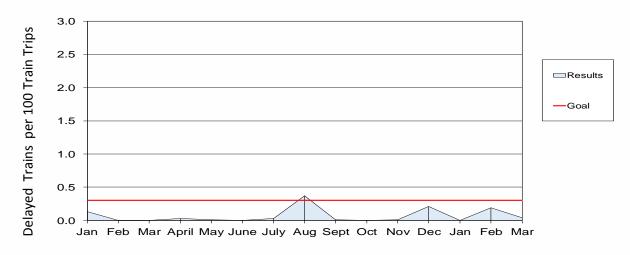
- ✓ Goal met Actual .10 / Goal .2
  - 78.8% improvement over last quarter, 27.5% over same quarter a year ago
- ✓ RR Bond Projects helping with reliability improvements:
  - ✓ Commissioned Castro Valley Substation MPR Project, Hayward Yard Rectifier re-hab, Glen Park & 12<sup>th</sup> Street UPS replacement 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



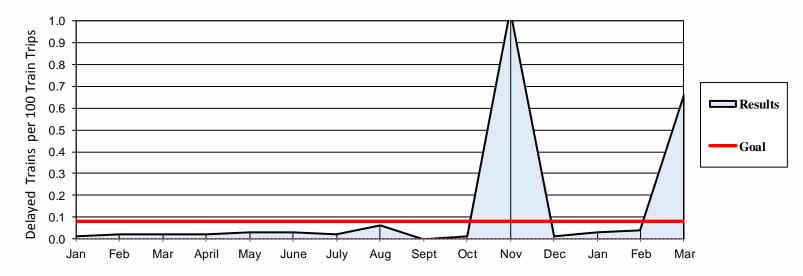
- ✓ Goal met Actual .08 / Goal .30 Down 4.5% from last quarter, 76.9% from same quarter a year ago
- ✓ RR Bond Projects helping with reliability improvements this year:
  - √ 10,000 Direct Fixation Rail Pads replaced
  - √ 10 Mile of Rail replaces
  - ✓ Replacement of last Restraining Rail in Oakland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



## Computer Control System



#### Includes ICS computer & SORS, Delays per 100 train runs



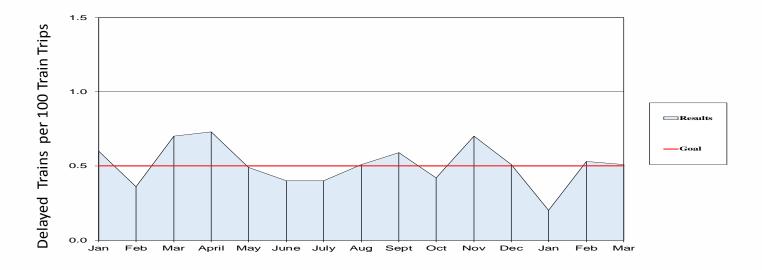
- ✓ Goal not met Actual 0.24 / Goal 0.08
   31.8% improvement over last quarter
- ✓ Driven by network switch failure on March 9th
  - ✓ Upgraded all switches at same level
  - ✓ Built and commissioned redundant site for control of Train Control, Electrification, and critical station equipment



# Transportation



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

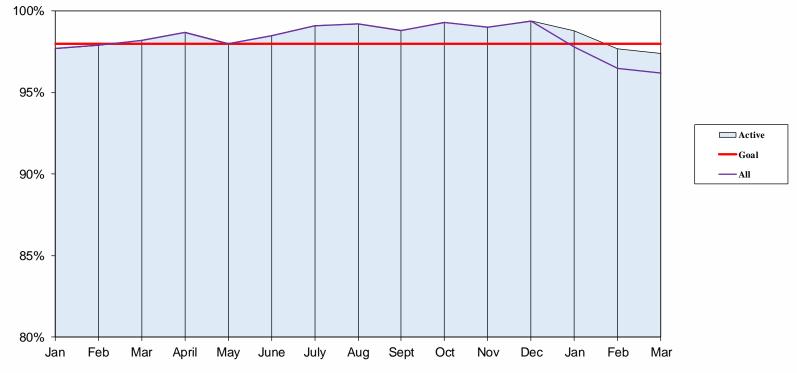


✓ Goal met – Actual .41 / Goal .5
 23.9% improvement over last quarter, 25.3% over same quarter a year ago



## Elevator Availability - Stations



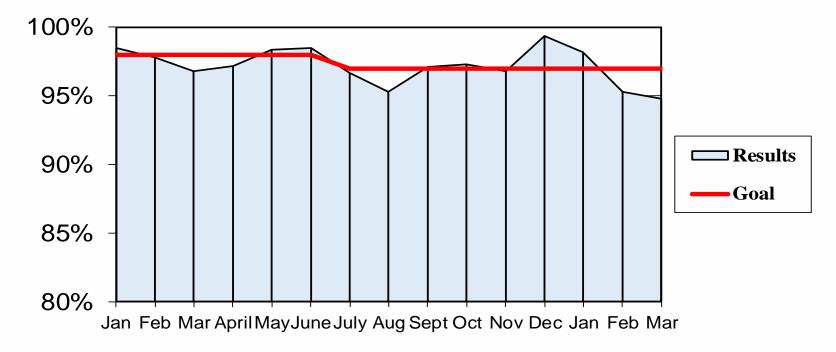


- ✓ Goal not met Actual 97.97% / Goal 98%
   1.3% decline from last quarter, 0.03% improvement over same quarter last year
- ✓ Walnut Creek due to damage to underground hydraulic supply lines
- ✓ Embarcadero for door replacement
- ✓ Ashby for vandalism/ glass replacement



## Elevator Availability - Garage



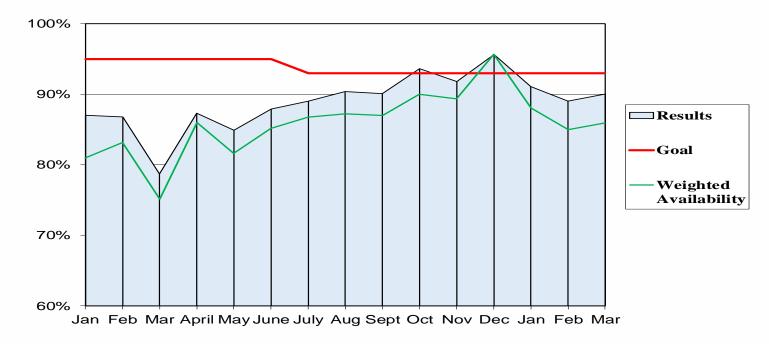


- ✓ Goal not met Actual 96.1% / Goal 97%
   1.8% decline from last quarter, 1.7% below same quarter last year
- ✓ Del Norte for Motor/Generator replacement
- ✓ Concord for Motor/ Generator replacement



## **Escalator Availability - Street**



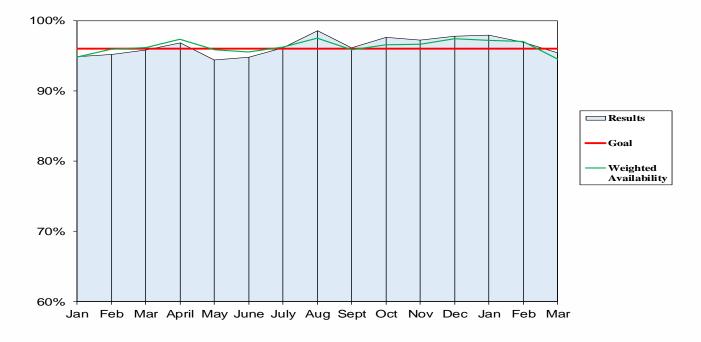


- ✓ Goal not met Actual 90.03% / Goal 93% down 4% from last quarter, 6.5% over same quarter last year
- ✓ Civic Center/ 7<sup>th</sup> Street major repair and step chain replacement
- √ 12<sup>th</sup> Street/ 11<sup>th</sup> & Broadway carriage repair
- ✓ Civic Center/ UN Plaza for water intrusion electrical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



## Escalator Availability - Platform





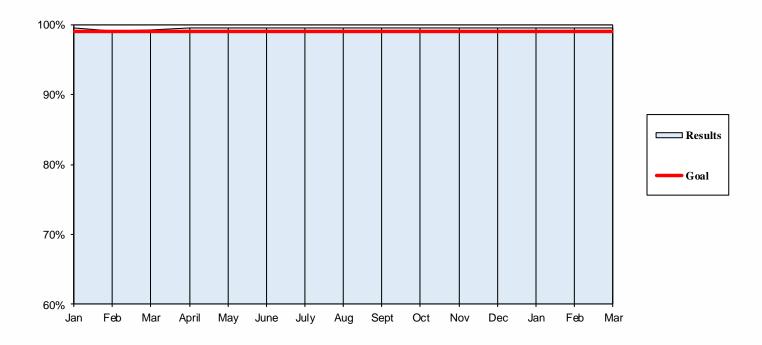
✓ Goal met – Actual 96.73% Goal 96%

Down 0.82% from last quarter, up 1.5% same quarter one year ago



## **AFC Gate Availability**



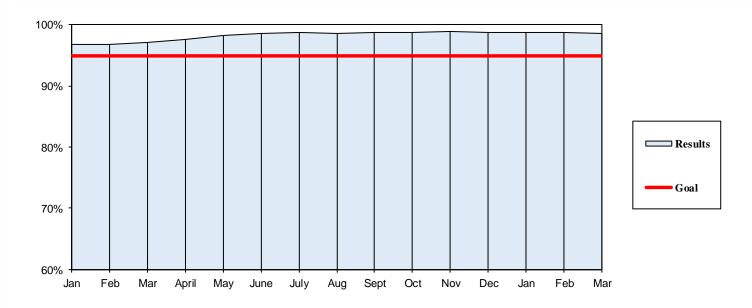


- ✓ Goal met Actual 99.57% / Goal 99.0%
- ✓ Installation of the cinch mod to help with fare evasion is on schedule.
- ✓ Working on pilot program to replace the electric actuators in the AFG gates with pneumatic actuators.



## **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**



- 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	
Environment Outside Stations (composite)			62.6%	65.3%	63.2%	
Appearance Of BART Landscaping, Walkways &						1
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%	

<sup>↓</sup> indicates a statistically significant decrease from the prior quarter



## **Environment - Inside Stations**



- Scale:
- Excellent
- Good
- Only Fair
- Poor
- Rating=% Excellent and Good
- FY19 Q1 changes in the PES questionnaire: <u>added Cleanliness of Concourse</u>, Escalator Cleanliness, Stairwell Cleanliness; <u>dropped Cleanliness of Other Areas</u>
- Significant decrease in Cleanliness of Station Platform, Stairwell Cleanliness and Elevator Cleanliness
- Will establish goal for FY20

	FY18 Q3	FY18 Q4	FY19 Q1	FY19 Q2	FY19 Q3	
<b>Environment Inside Stations (composite)</b>			62.2%	63.8%	61.3%	
Cleanliness Of Station Platform (weight 40%)	63.9%	63.3%	67.6%	68.8%	65.7%	<b>\</b>
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%	<b>†</b>
Elevator Cleanliness (weight 10%)	45.7%	42.8%	63.7%	57.9%	53.3%	<b>+</b>
Restroom Cleanliness (weight 7.5%)	32.9%	35.2%	43.4%	44.6%	41.7%	



## **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 Kept 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%	ţ



indicates a statistically significant decrease from the prior quarter



## **Train Interior Cleanliness**



- 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
Train Interior Cleanliness (composite)	70.8%	68.3%	67.1%
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



- 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%	<b>↑</b>

- ✓ 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.





### **Customer Service**



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

- 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
- Significant decrease in Onboard next stop, destination and transfer announcements
- Will establish goal for FY20

	FY19 Q1	FY19 Q2	FY19 Q3
Customer Service (composite, all weighted equally)	74.9%	74.9%	73.9%
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%





## Homelessness



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

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

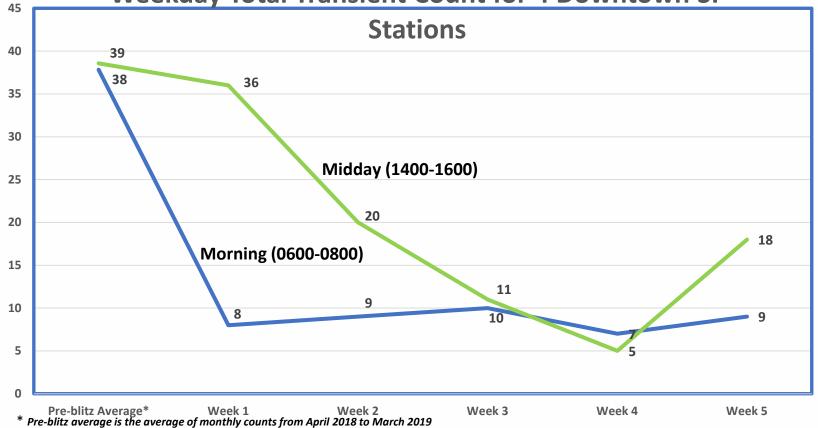
	FY19 Q1	FY19 Q2	FY19 Q3
How well BART is addressing			
homelessness	23.7%	23.4%	22.8%



## Homeless Counts – Stand-Up Period









### **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)



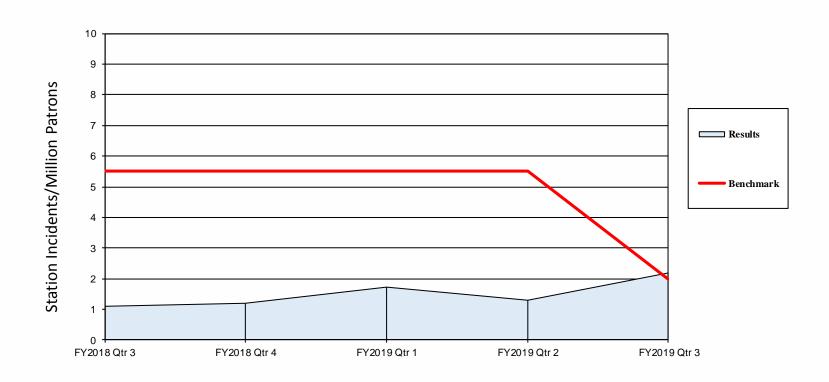




# Patron Safety - Station



#### **Station Incidents per Million Patrons**



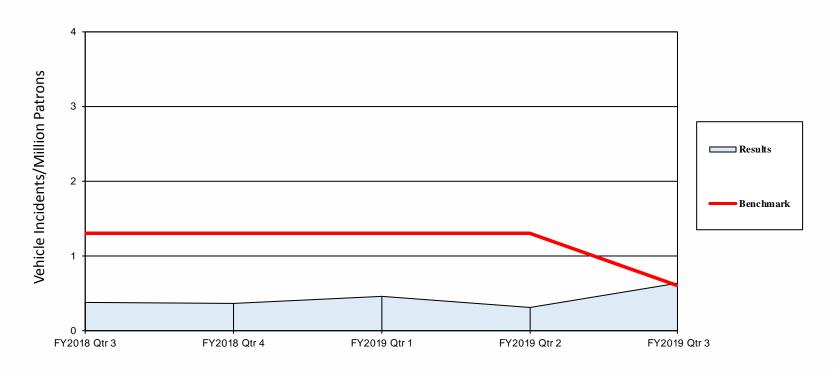
✓ Goal not met Actual 2.19/New Goal 2.0



# Patron Safety - Vehicle



#### **Vehicle Incidents per Million Patrons**



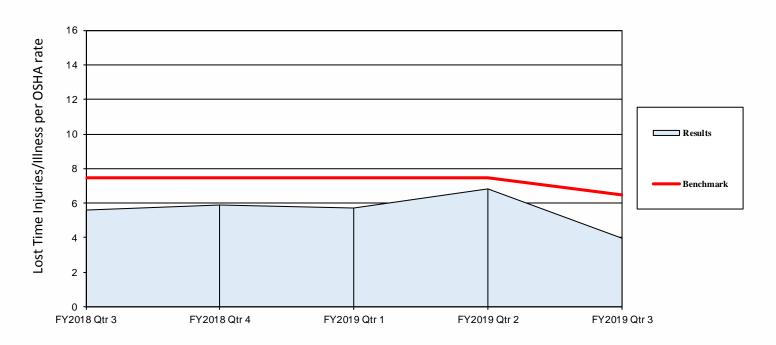
✓ Goal no met Actual .63/New Goal .60



# **Employee Safety**



### Lost Time Injuries/Illnesses per OSHA Incidence Rate



✓ Goal met

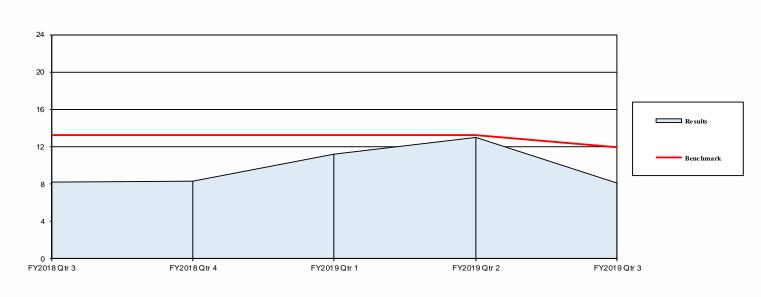


## **Employee Safety**



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





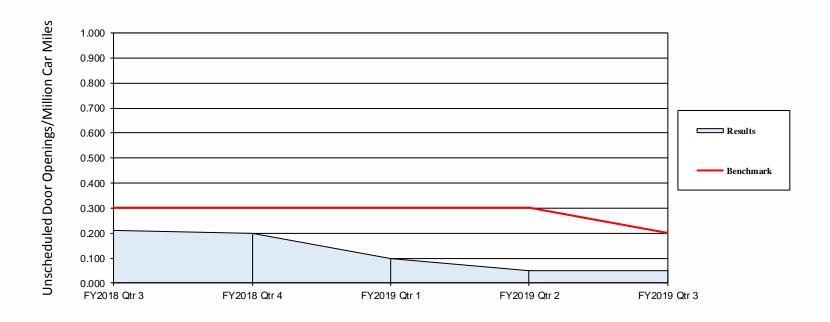
✓ Goal met



# **Operating Safety**



### **Unscheduled Door Openings per Million Car Miles**



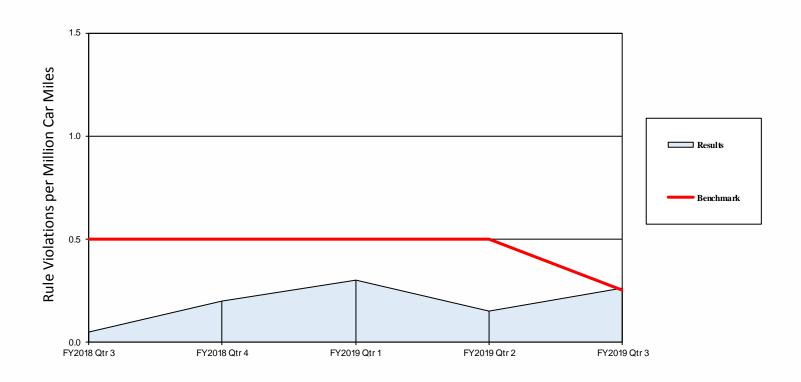
✓ Goal met



# **Operating Safety**



### Rule Violations per Million Car Miles



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



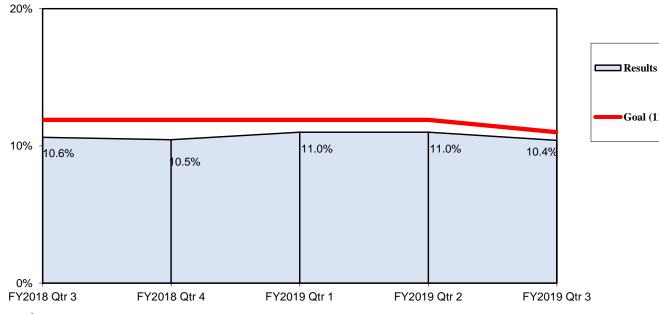
## **BART Police Presence**



Goal (11% Avg.)

#### **Ratings Guide:**

- Yes
- No
- I Don't Know Rating = % Yes



#### ✓ Goal not met

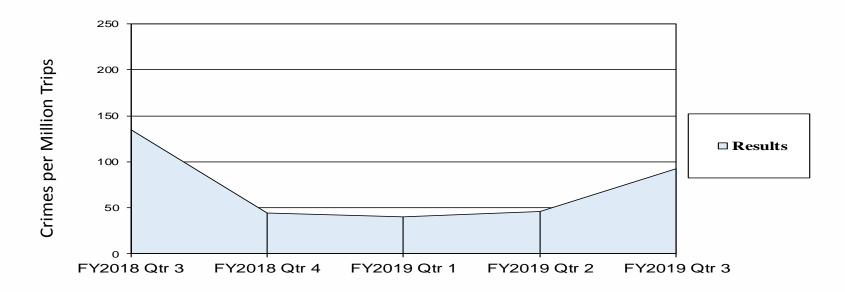
Police Presence Composite (All items equally weighted)	10.4%
Police seen on train	7.2%
Police seen outside the station	13.9%
Police seen in the station	9.4%
Police seen on train after 7:00PM and Weekends	7.7%
Police seen outside the station after 7:00PM and Weekends	14.3%
Police seen in the station after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



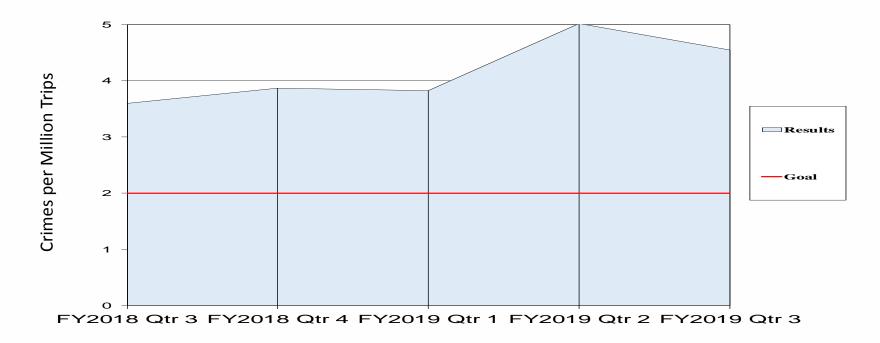
✓ Quality of Life incidents are up from the last quarter but down from the corresponding quarter of the prior fiscal year.



# 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**



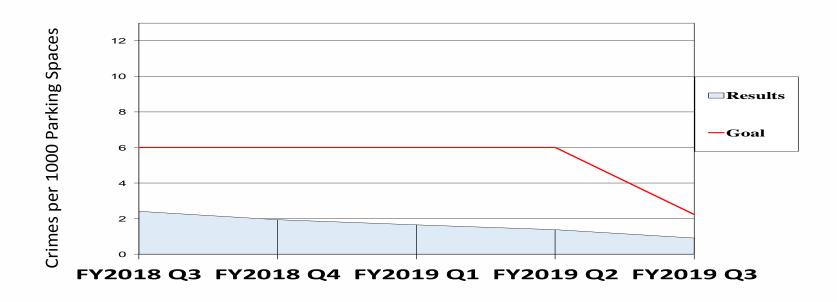


- ✓ Goal not met Actual 6.07/New Goal 6.0
- ✓ The number of incidents per thousand parking spaces are up from last quarter and up from same quarter last year



## **Auto Theft**



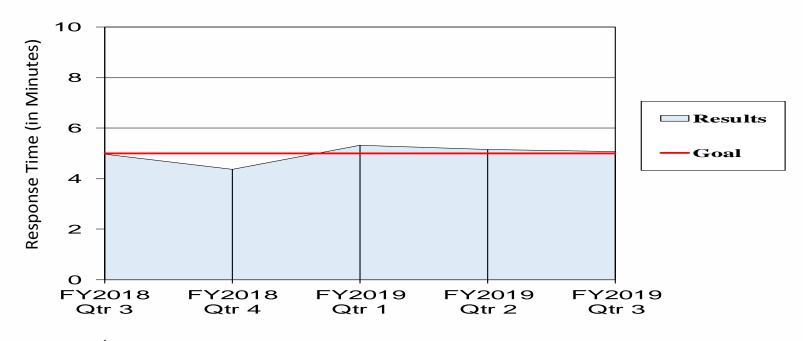


- ✓ Goal met
- ✓ The number of incidents per thousand parking spaces are down from last quarter and from same quarter last year



### **Average Emergency Response Time**



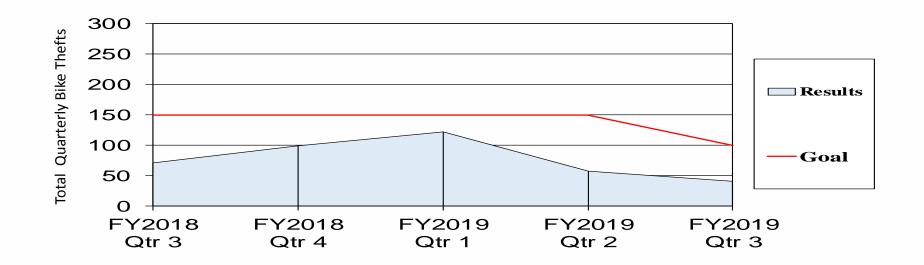


- ✓ Goal not met
- ✓ Average Emergency Response Time was down from prior quarter and slightly up from the same quarter last year



## Bike Theft





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