



Quarterly Service Performance Review 4th Quarter, FY20

April – June, 2020

**Engineering & Operations Committee
August 27, 2020**

PERFORMANCE INDICATORS	SUMMARY CHART 4th QUARTER FY 2020									
	CURRENT QUARTER				PRIOR QTR ACTUALS		YEAR TO DATE			
	ACTUAL	STANDARD	STATUS		LAST QUARTER	THIS QTR LAST YEAR	ACTUAL	STANDARD	STATUS	
Average Ridership - Weekday	32,071	404,963	NOT MET		314,816	413,362	288,271	404,825	NOT MET	
Customers on Time										
Peak	95.93%	94.00%	MET		92.69%	91.49%	92.20%	94.00%	NOT MET	
Daily	95.32%	94.00%	MET		93.96%	92.05%	93.14%	94.00%	NOT MET	
Trains on Time										
Peak	92.22%	N/A	N/A		86.83%	85.75%	86.75%	N/A	N/A	
Daily	91.94%	91.00%	MET		89.01%	87.72%	88.71%	91.0%	NOT MET	
Peak Period Transbay Car Throughput										
AM Peak	98.79%	97.50%	MET		96.07%	97.27%	97.20%	97.50%	NOT MET	
PM Peak	98.43%	97.50%	MET		95.66%	98.29%	96.42%	97.50%	NOT MET	
Car Availability at 4 AM (0400)	541	472	MET		667	644	617	591	MET	
Mean Time Between Service Delays	5,556	4,650	MET		5,477	5,138	4,844	4,650	MET	
Elevators in Service										
Station	98.93%	98.00%	MET		99.00%	98.60%	98.81%	98.00%	MET	
Garage	99.60%	97.00%	MET		97.80%	97.67%	97.83%	97.00%	MET	
Escalators in Service										
Street	97.27%	93.00%	MET		93.87%	94.43%	94.68%	93.00%	MET	
Platform	96.03%	96.00%	MET		96.57%	96.93%	96.59%	96.00%	MET	
Automatic Fare Collection										
Gates	99.52%	99.00%	MET		99.40%	99.38%	99.39%	99.00%	MET	
Vendors	96.56%	95.00%	MET		99.00%	98.72%	98.34%	95.00%	MET	
Wayside Train Control System	1.28	1.00	NOT MET		0.93	1.73	1.23	1.00	NOT MET	
Computer Control System	0.17	0.08	NOT MET		0.117	0.163	0.104	0.08	NOT MET	
Traction Power	0.02	0.20	MET		0.36	0.23	0.20	0.20	MET	
Track	0.01	0.30	MET		0.18	0.23	0.08	0.30	MET	
Transportation	0.30	0.50	MET		0.52	0.58	0.46	0.50	MET	
Environment Outside Stations	N/A	N/A	N/A		67.0%	65.4%	65.3%	66.0%	NOT MET	
Environment Inside Stations	N/A	N/A	N/A		65.8%	64.2%	63.2%	64.0%	NOT MET	
Station Vandalism	N/A	N/A	N/A		71.8%	72.4%	70.4%	73.0%	NOT MET	
Train Interior Cleanliness	N/A	N/A	N/A		66.7%	23.4%	66.3%	70.0%	NOT MET	
Train Temperature	N/A	N/A	N/A		84.3%	19.4%	81.0%	82.0%	NOT MET	
Customer Service	N/A	N/A	N/A		75.9%	74.5%	74.7%	75.0%	NOT MET	
Homelessness	N/A	N/A	N/A		23.2%	69.6%	24.5%	N/A	N/A	
Fare Evasion	N/A	N/A	N/A		19.9%	81.2%	20.5%	N/A	N/A	
Customer Complaints										
Complaints per 100,000 Passenger Trips	40.53	5.07	NOT MET		12.26	13.14	19.45	5.07	NOT MET	
Safety										
Station Incidents/Million Patrons	4.13	2.00	NOT MET		0.85	1.16	1.80	2.00	MET	
Vehicle Incidents/Million Patrons	0.41	0.60	MET		0.31	0.46	0.37	0.60	MET	
Lost Time Injuries/Illnesses/Per OSHA	3.96	6.50	MET		3.85	7.25	6.06	6.50	MET	
OSHA-Recordable Injuries/Illnesses/Per OSHA	7.19	12.00	MET		9.69	11.07	11.50	12.00	MET	
Unscheduled Door Openings/Million Car Miles	0.080	0.200	MET		0.160	0.200	0.160	0.200	MET	
Rule Violations Summary/Million Car Miles	0.170	0.250	MET		0.260	0.300	0.183	0.250	MET	
Police										
BART Police Presence	N/A	N/A	N/A		12.6%	12.5%	11.3%	12.0%	NOT MET	
Quality of Life per million riders	446.29	N/A	N/A		73.62	77.02	163.74	N/A	N/A	
Crimes Against Persons per million riders	31.85	2.00	NOT MET		4.82	4.03	11.26	2.00	NOT MET	
Auto Burglaries per 1,000 parking spaces	1.67	6.00	MET		4.85	4.90	4.93	6.00	MET	
Auto Thefts per 1,000 parking spaces	0.49	2.25	MET		1.02	1.30	1.11	2.25	MET	
Police Response Time per Emergency Incident (Minutes)	3.73	5.00	MET		3.58	4.94	4.43	5.00	MET	
Bike Thefts (Quarterly Total and YTD Quarterly Average)	7	100.00	MET		42	76	57	100.00	MET	

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

FY20 Four Quarter Overview



- **Average Weekday Ridership** **decreased** due to the pandemic; Total ridership 92.0% lower; Average peak ridership 93.5% lower; weekends 90.5% lower
- **Train on time performance** **increased** to 91.94%, and was above goal for each month
- **ROW Equipment Reliability:** Rail Cars, Traction Power, and Track **met goal**. Computer Systems and Wayside Train Control **did not meet goal**
- **Station Equipment Availability:** All elements **met goal**. Elevators (Station), Elevators (Garage), Escalators (Platform), Escalators (Street) Ticket Machines and Fare Gates.
- **Passenger Environment:** **Field survey data was not collected this quarter due to the pandemic.** *No score is presented for Environment Inside Stations, Customer Service, Train Temperature, Police Presence, Homeless, Vandalism, Grounds, Train Cleanliness, and Fare Evasion.*
- **Total rate of Customer Complaints** **increased** to 40.5 per 100,000 trips; influenced by the reduction in ridership and numerous schedule changes this quarter

eBART Service Report



eBART SERVICE REPORT FOR 4TH QUARTER FY20										
PERFORMANCE INDICATORS	CURRENT QUARTER			PRIOR QTR ACTUALS		FY20 YEAR TO DATE				
	ACTUAL	STANDARD	STATUS	LAST QUARTER	THIS QTR LAST YEAR	ACTUAL	STANDARD	STATUS		
Ridership										
Average Ridership - Weekday	1,327	6,530	NOT MET		6,650	8,117	6,120	6,530	NOT MET	
Average Ridership - Weekend	424	n/a	n/a		1,662	2,184	1,592	n/a	n/a	
Service Delivery										
On-Time Performance	96.91%	95.00%	MET		95.84%	93.61%	94.57%	95.00%	NOT MET	
Transfers to BART										
On-Time Connections	99.27%	98.50%	MET		98.50%	98.55%	98.44%	98.50%	NOT MET	
Equipment										
Train Mean Distance Between Failures (miles)	21,118	14,000	MET		35,346	12,118	18,673	14,000	MET	
Station Elevator Availability	99.84%	98.50%	MET		98.92%	99.22%	99.50%	98.50%	MET	
Station Escalator Availability	96.29%	96.00%	MET		98.73%	99.60%	98.60%	96.00%	MET	
Customer Feedback										
Complaints/Hundred Thousand Patrons	2.08	7.00	MET		1.51	9.87	3.34	7.00	MET	
Safety										
Passenger Incidents	0.00	0.00	MET		0.00	0.00	0.00	0.00	MET	
Workplace Injuries	0.00	0.00	MET		1.00	0.00	2.00	0.00	NOT MET	

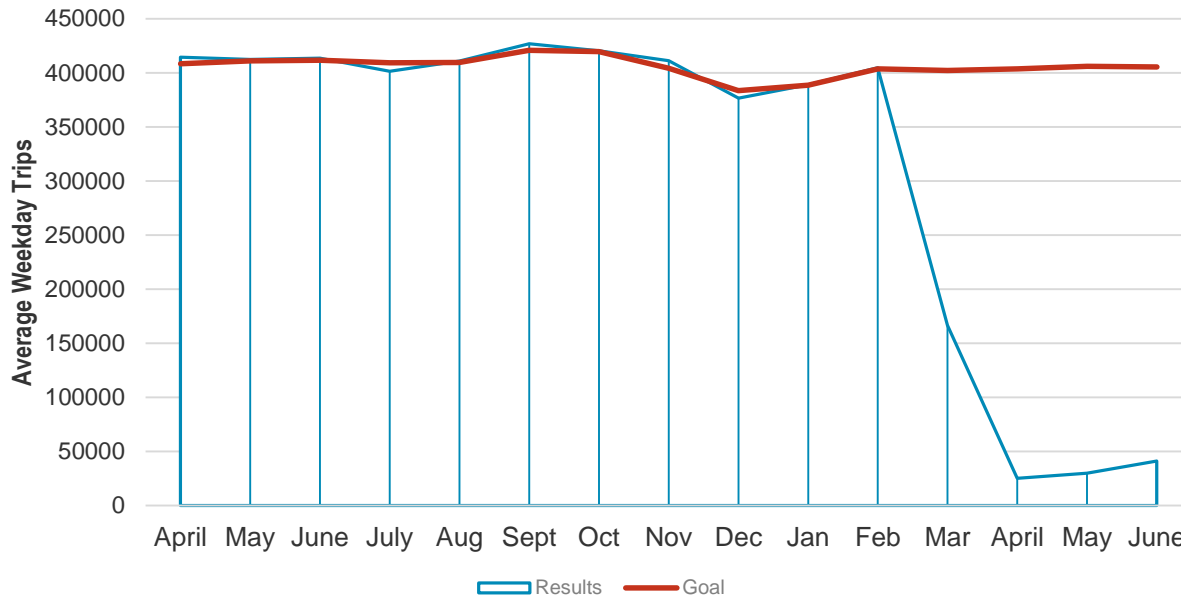
LEGEND:

Goal Met

Goal Unmet by <= 5%

Goal Unmet by > 5%

Customer Ridership - Weekday Trips

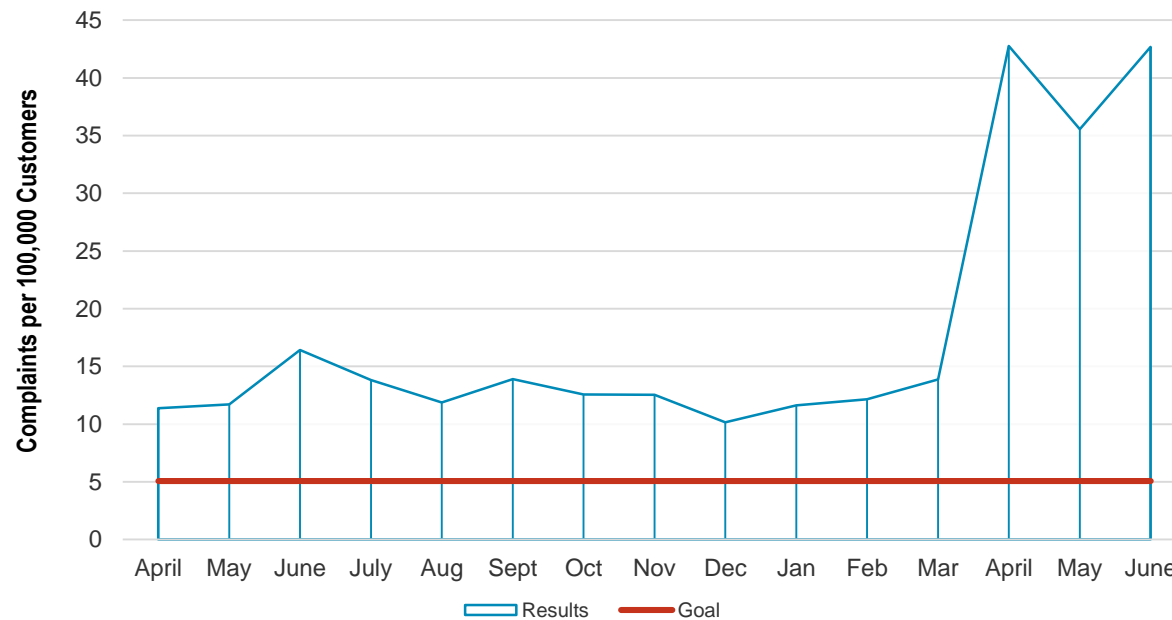


Goal:	404,963
Actual:	32,071
Met:	No

Driven by continued Covid19 orders, this quarter compared to same quarter last year

- Total ridership decreased by 92.0%
- Average weekday ridership down by 92.2%
- SFO Extension weekday ridership down by 94.1%
- Average peak ridership down by 93.5%
- Saturday and Sunday both down by 90.5%

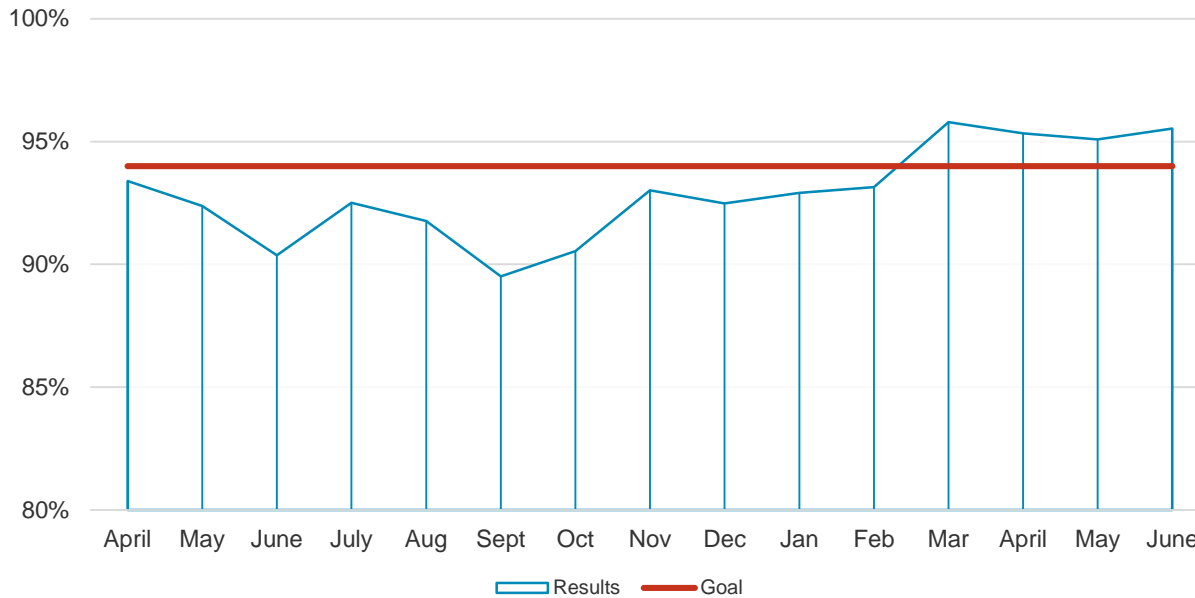
Customer Complaints



Goal:	5.07
Actual:	40.5
Met:	No

- **Complaints/100K riders:** increased 64.2% from the third quarter and 75.5% from same quarter last year, 4th quarter. Quarter over quarter data not meaningful
- **Areas with the greatest number of complaints:** Police Services, Service, Train Cleanliness, Personnel, Quality of Life

On-Time Service - Customer

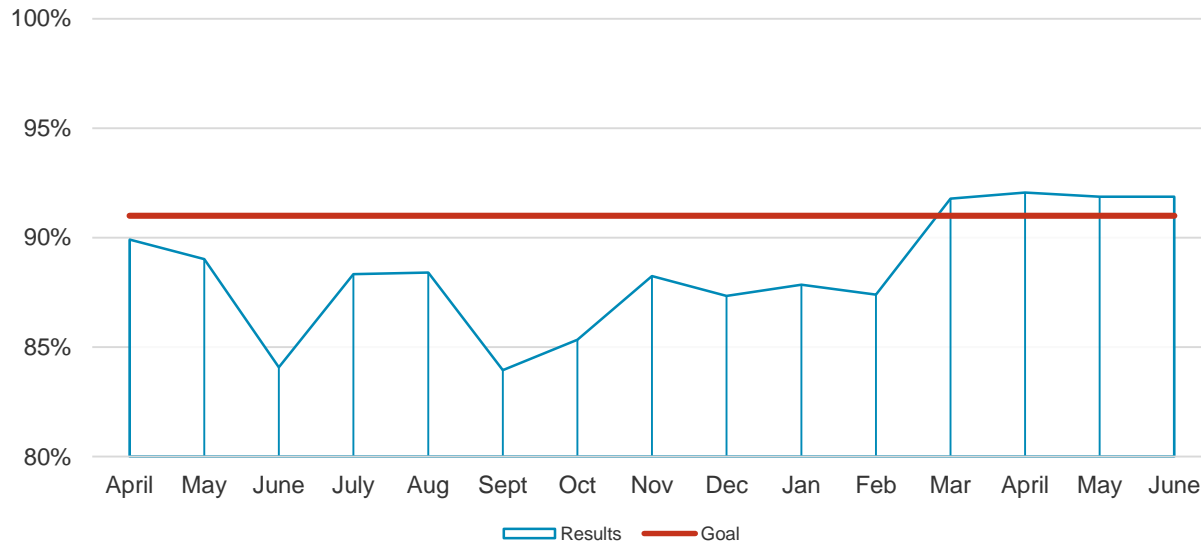


Goal:	94.00%
Actual:	95.32%
Met:	Yes

Delay Source	% of Trains
TRAIN CONTROL	48.2%
POLICE ACTIONS	35.7%
VEHICLE	25.3%
VANDALISM	12.3%
TRANSPORTATION	11.2%
MISC OTHER	8.1%
PERSON ON TRACKWAY	7.8%
COMP. CTRL (ICS/SORS/NET)	6.4%
CONGESTION	6.2%
CIVIL PROTEST	5.9%

- 1.44% improvement over last quarter and 3.55% improvement over last year the same quarter
- Reduced ridership has led to significant decrease in train delays attributable to rider related issue (BPD and Medical calls). Increased headways allow for recovery when there are delays.

On-Time Service - Train

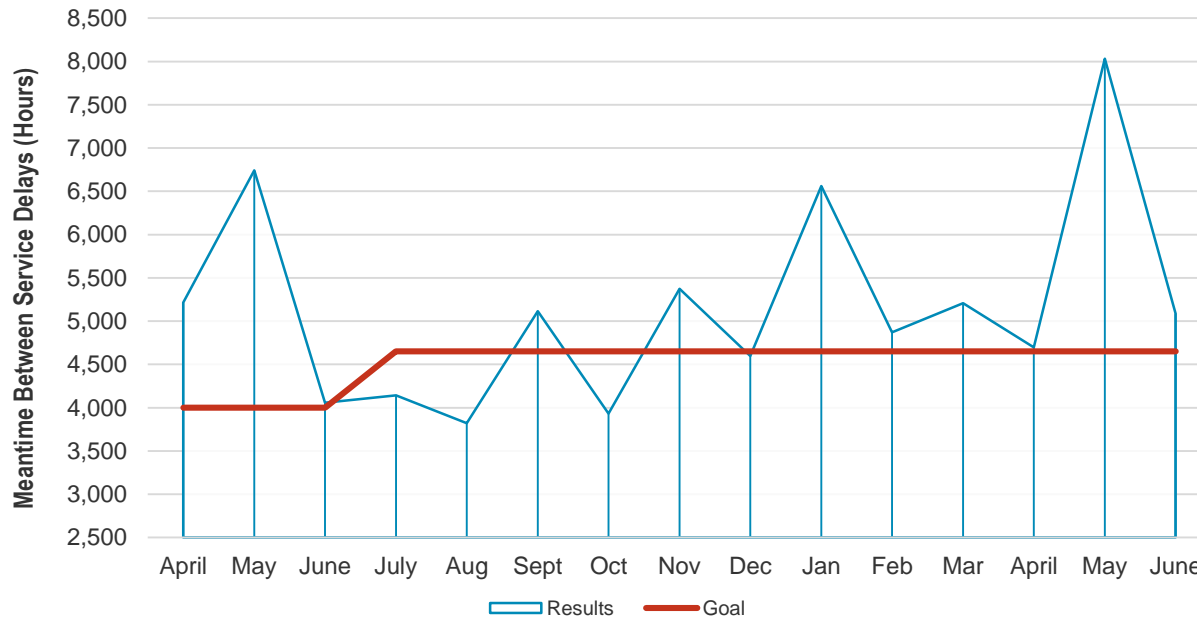


Goal:	91.00%
Actual:	91.94%
Met:	Yes

#	Date	Location	Description	Time	Cause	Trains
1	04/07/20	H.Yd. I-k SLd	False Occupancy(Manual Operation Req.)	0500-1848	Equip	56
2	05/03/20	Pleasant Hill	MUX	0832-2016	Equip	33
3	05/31/20	Bay Fair	Station Closed(Looters at Bayfair Mall)	1718-2200	People	32
4	05/17/20	Fruitvale	Weather (Cyclone Blow Fence Down onto Right of Way)	0750-2036	Environment	29
5	04/04/20	Laf. I-Lock	Zero Speed Code	0946-1426	Equip	26
6	05/22/20	Pleasant Hill	False Occupancy (Bad Eprom on DBO Board)(Crank Installed/Inspection)	0734-1428	Equip	24
7	05/31/20	12th Street	Civil Protest (Station Closed)	1750-2200	People	24
8	04/03/20	E.C.D. Norte	Train Struck A Person On Trackway	1238-1434	People	21
9	04/07/20	Civic Center	ATO(FOTF Post Breakin)(Unable To Move ATO)	0607-0819	Vehicle	20
10	05/19/20	N.C. I-Lock	False Occupancy (Power Amp Board Replaced)	1522-1948	Equip	16

Car Equipment – Reliability

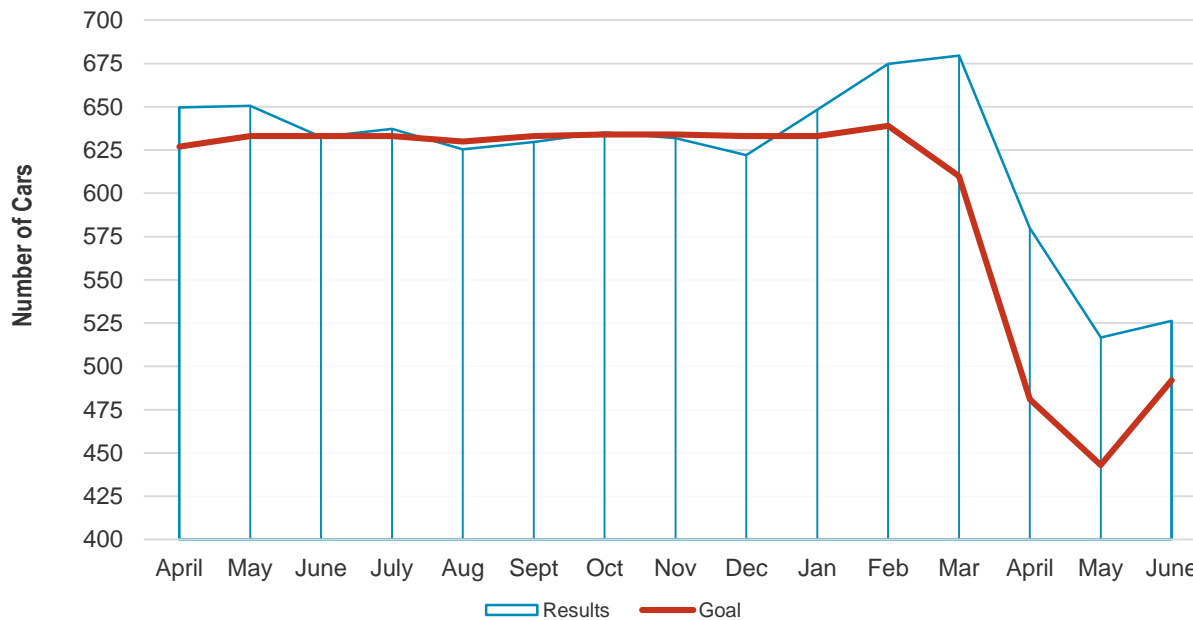
Meantime Between Service Delays



Goal:	4,650 Hours
Actual:	5,556 Hours
Met:	Yes

- 1.44% improvement over last quarter and 8.14% improvement over last year the same quarter
- Overall Mean Time Between System Delays – 5556 hours (Legacy Fleet MTBSD 6865, FOTF MTBSD 3090)

Car Equipment – 4:00AM Availability

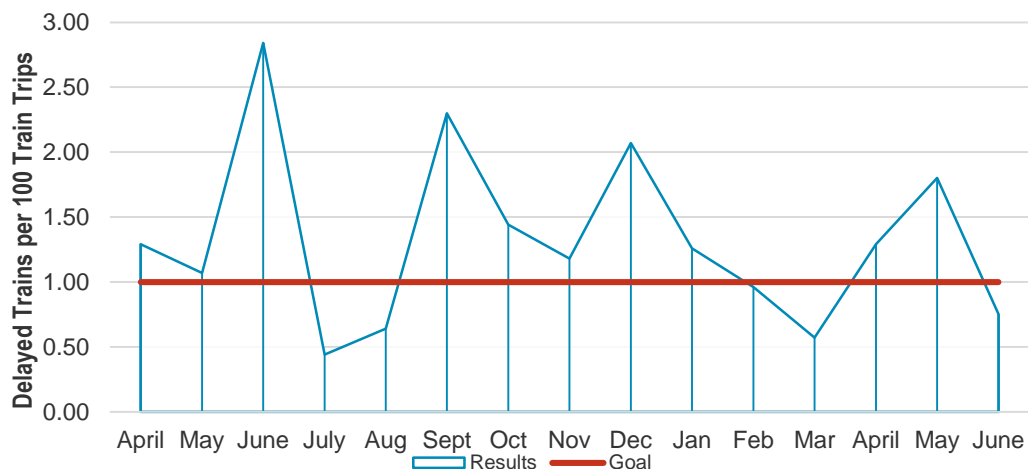


Goal:	472
Actual:	541
Met:	Yes

- Goal changed this quarter: lower with service reductions due to COVID; higher due to opening of Berryessa service
- As a cost saving measure RS&S has parked labor intensive cars above current requirement into 2 fleets:
 - **Contingency Fleet** – Serviceable cars that may be needed to fill in for increased service requirements or should fleet defects arise with FOTF trains.
 - **Inactive Fleet** – Cars with poor reliability and heavy maintenance burden will be first retired.

Wayside Train Control System

Delayed Trains per 100 Train Trips

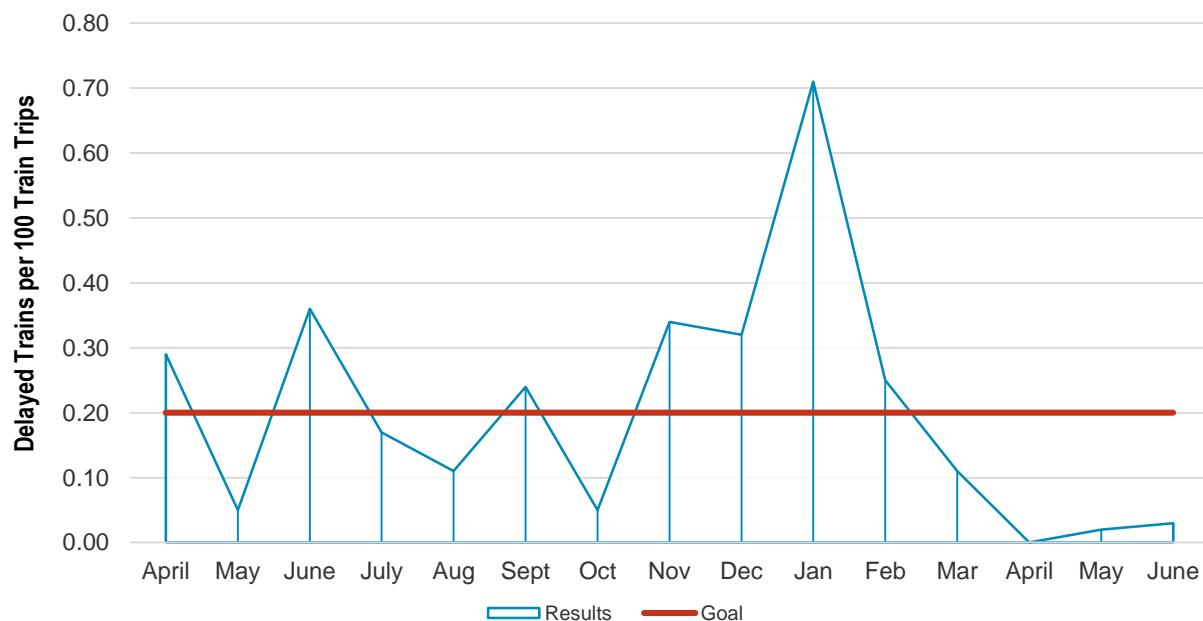


Goal:	1.00
Actual:	1.28
Met:	No

- Up by 0.4 from previous quarter. Down by 0.43 from same quarter in the previous year.
- April 7 – False Occupancy at Hayward – Replaced bad Time Recovery and Data Back card. (MUX synchronization card)
- May 3 – Mux failure at Pleasant Hill – Replaced bad Central Processing Unit and Double Break Output boards.
- April 4 – Zero Speed Codes Lafayette – Replaced bad Speed Code Generation card. (Generates correct speed codes)
- Capital projects progressing (Aspect Signal Lights Complete, NSMUX, Tx Loops / Receiver Coils Replacement, MUX Cable Replacement Project)

Traction Power

Delayed Trains per 100 Train Trips

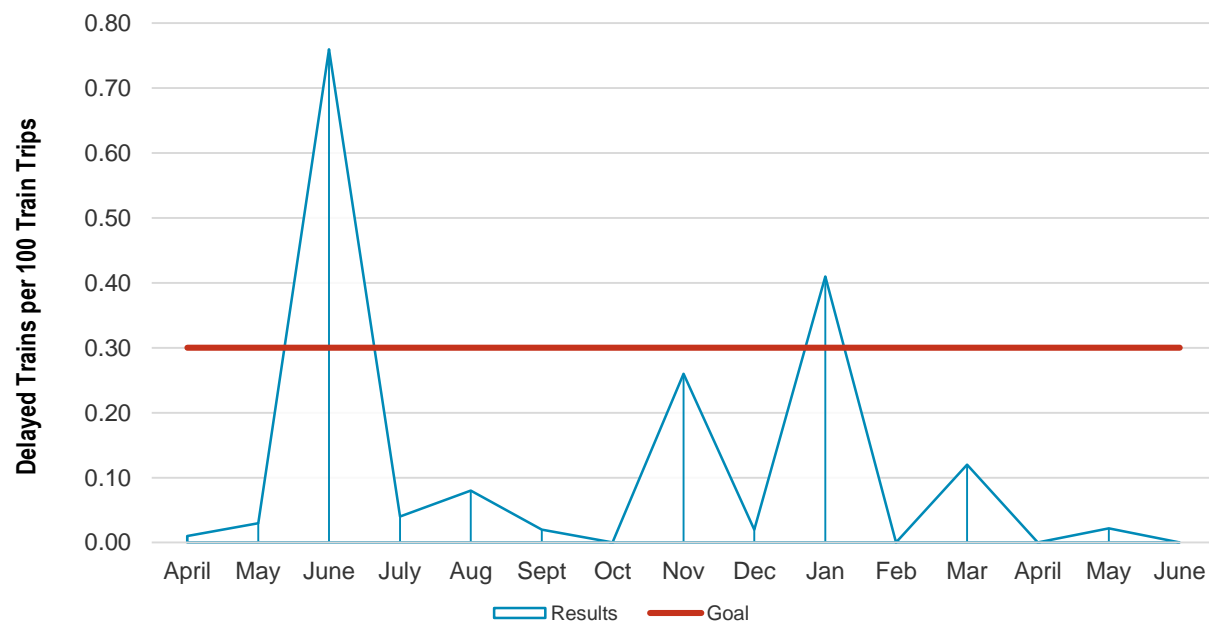


Goal:	0.20
Actual:	0.02
Met:	Yes

- Completed New 34.5kv Cable install downtown Oakland restoring normal configuration with redundancy.
- RR Funded Project are progressing (3rd Rail Replacement, Rectifier Rehab and Multi Protective Relay in Substations Upgrade).

Track

Delayed Trains per 100 Train Trips

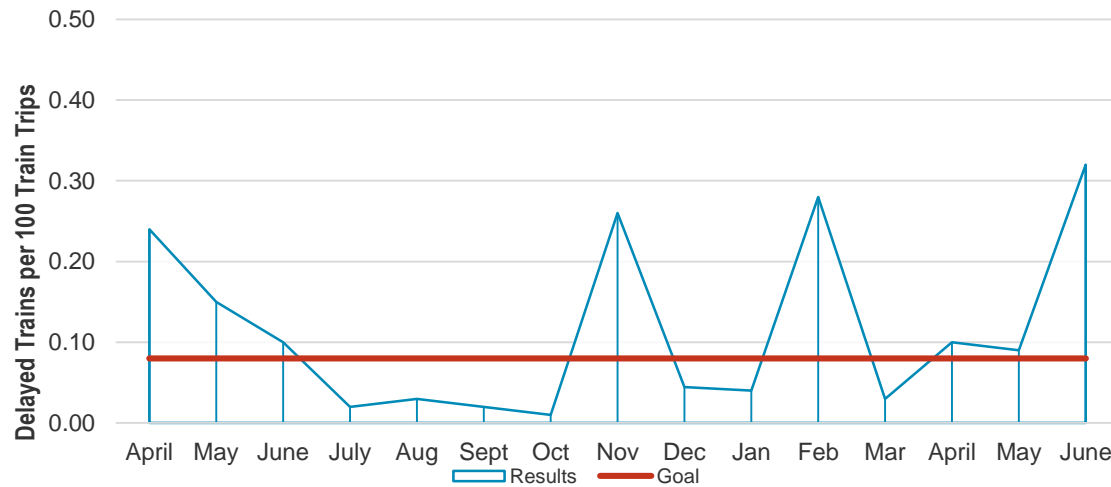


Goal:	0.30
Actual:	0.01
Met:	Yes

- 4th Quarter replaced 3.18 Miles of Mainline Rail. FY20 Rail Total stands at 13.16 Miles.
- 4th Quarter replaced 8820 Direct Fixation Pads. FY20 Total DF Pad count is 23,746 Pads.

Computer Control System

Delayed Trains per 100 Train Trips

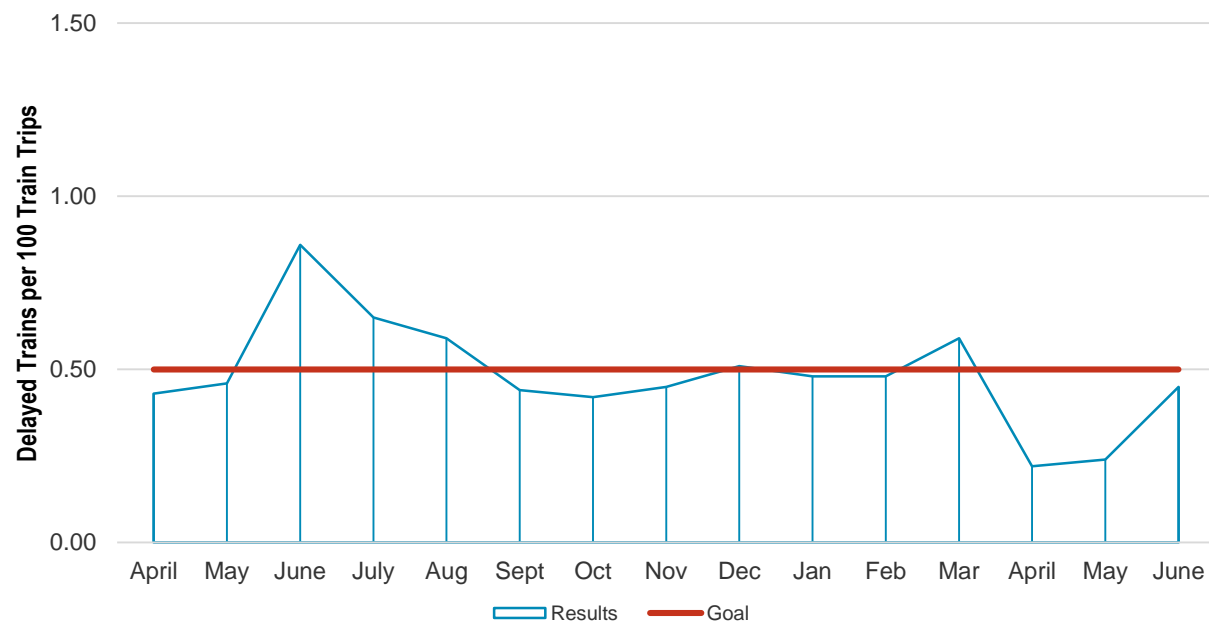


Goal:	0.08
Actual:	0.17
Met:	No

- June 23, 2020 – Net.com power supply failed during Daly City Train Control room Power reset. Replaced power supply to resolve issue.

Transportation

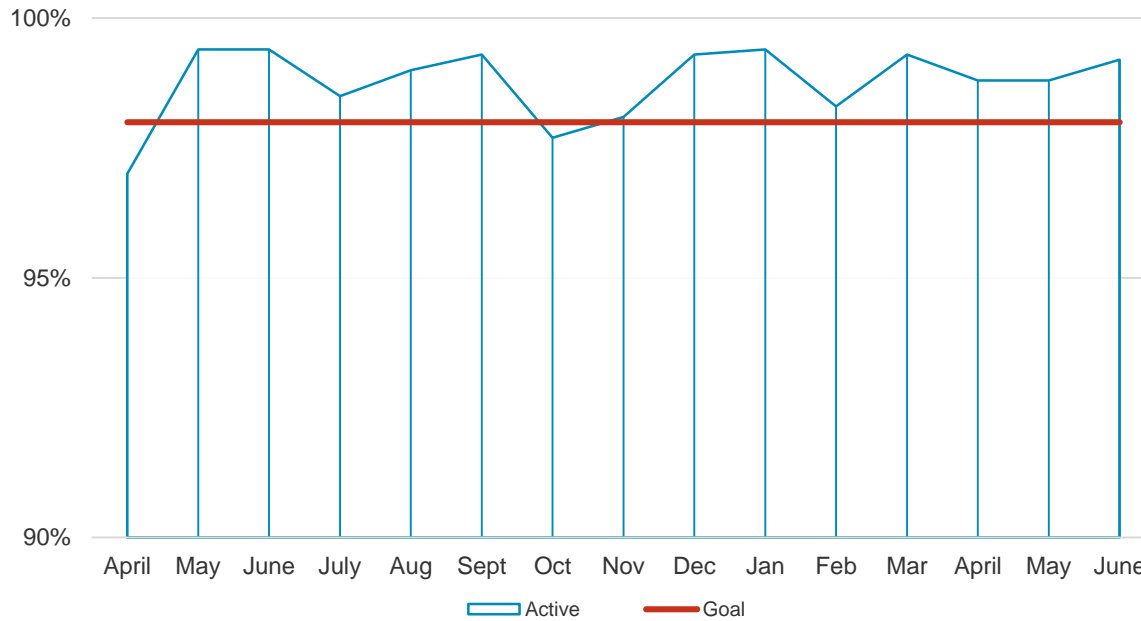
Delayed Trains per 100 Train Trips



Goal:	0.50
Actual:	0.30
Met:	Yes

- Decrease in operational errors resulting in train delays – 63% reduction from last quarter
- No late dispatches this quarter
- Modified schedule allows for more efficient recovery time of delayed trains at merge/diverge points and transfer stations

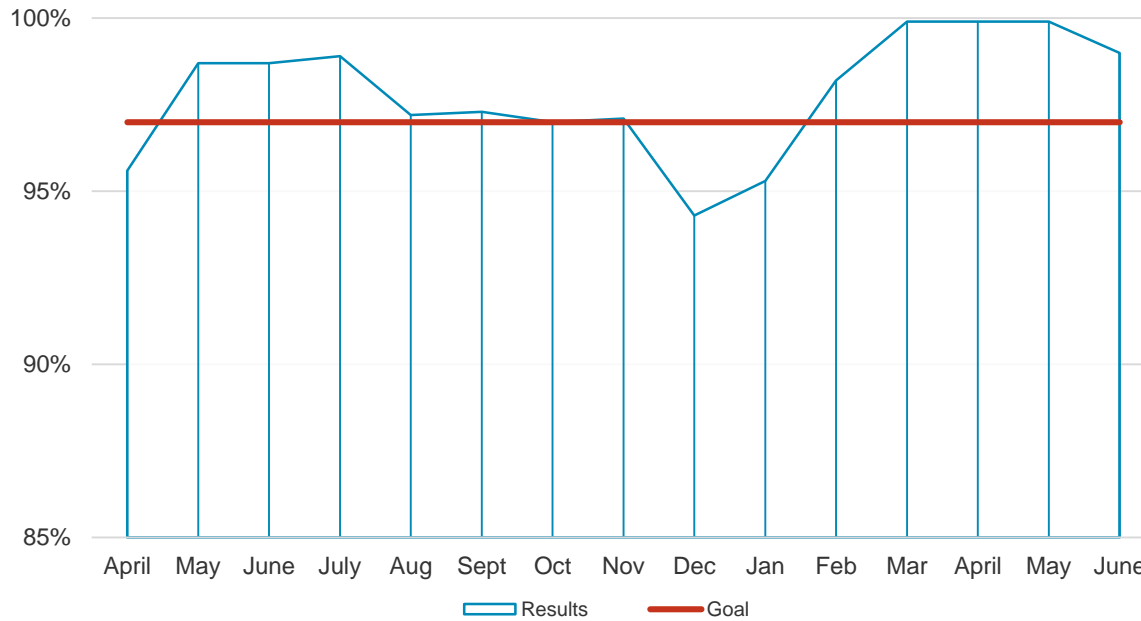
Elevator Availability - Stations



Goal:	98.00%
Actual:	98.93%
Met:	Yes

- Major Outages:
 - 24 St. Station planned motor replacement, out of service 278 hours
 - Powell St Station planned motor replacement, out of service 256 hours
 - MacArthur Station hydraulic valve replacement, out of service 188 hours

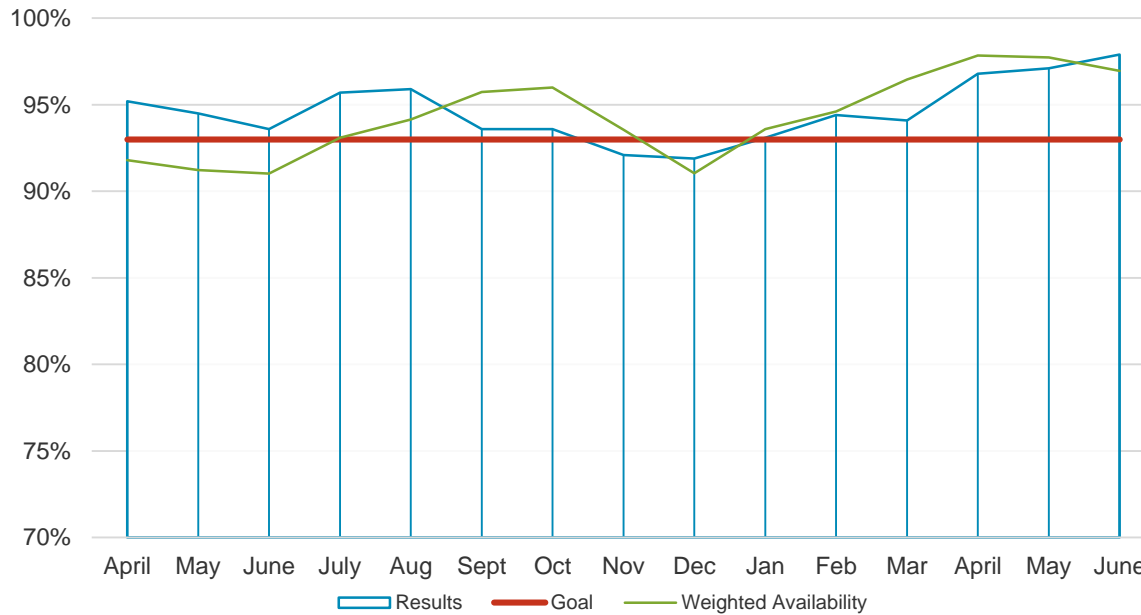
Elevator Availability - Garage



Goal:	97.00%
Actual:	99.60%
Met:	Yes

- Parking structure elevators, where ADA parking is on first floor of structure, disabled on May 14 to reduce maintenance costs.

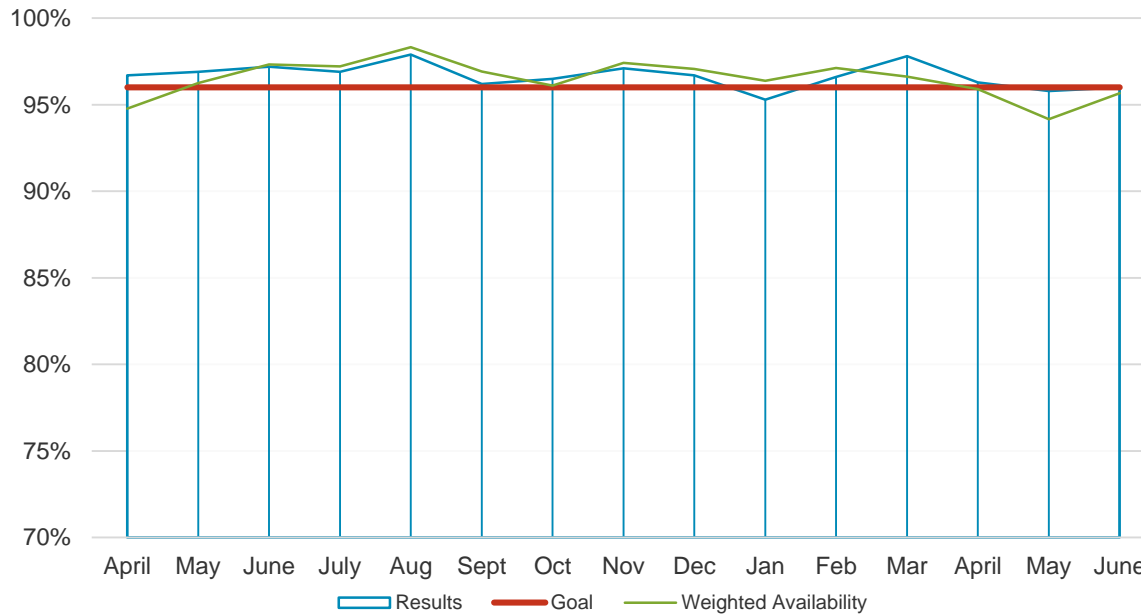
Escalator Availability - Street



Goal:	93.00%
Actual:	97.27%
Met:	Yes

- Major Outage:
 - 12th Street station planned step chain replacement, 237 hours out of service

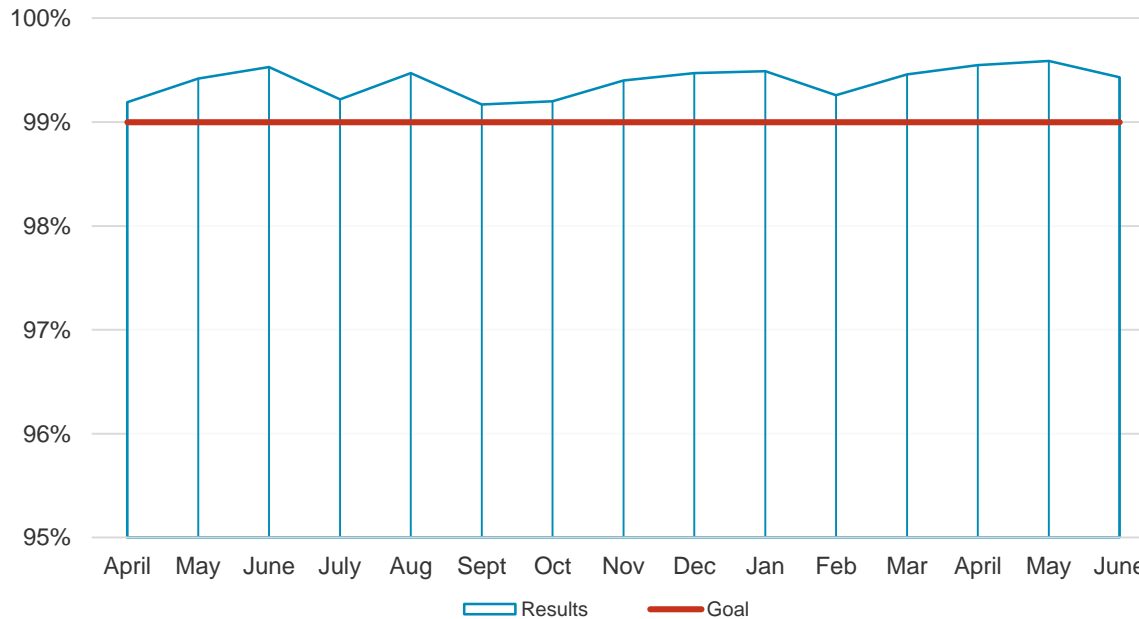
Escalator Availability - Platform



Goal:	96.00%
Actual:	96.03%
Met:	Yes

- Major Outages:
 - Richmond Station bull gear rebuild, out of service 1,163 hours
 - Hayward Station handrails replacement, out of service 513 hours
 - Union City Station handrails replacement, out of service 470

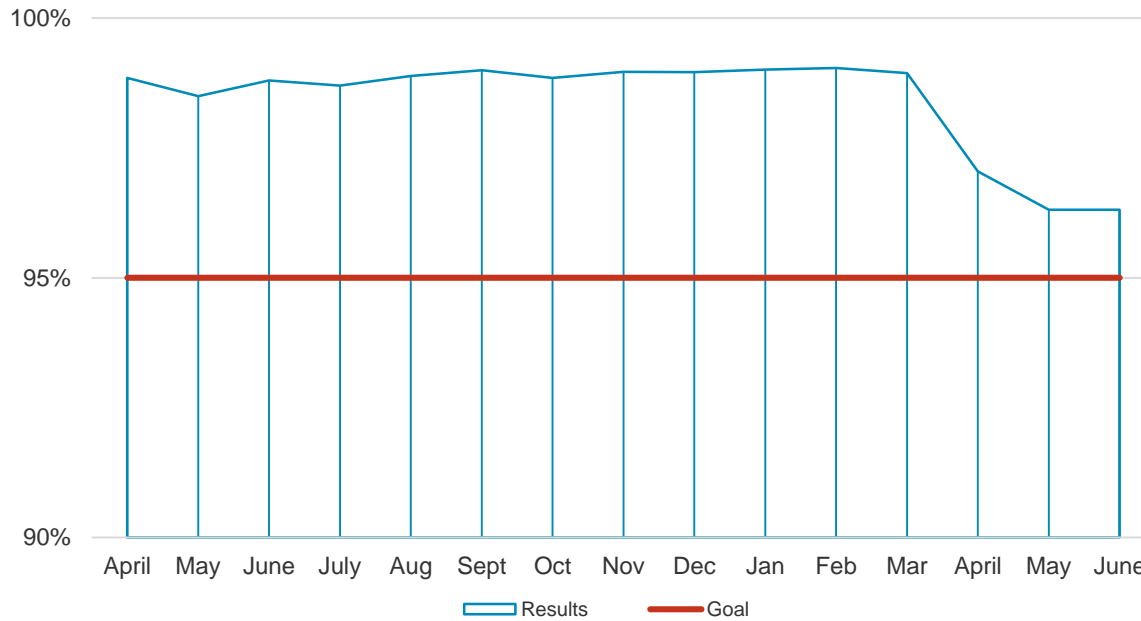
AFC Gate Availability



Goal:	99.00%
Actual:	99.52%
Met:	Yes

- Richmond Pneumatic Swing Gate performing great despite repeated vandalism attempts.

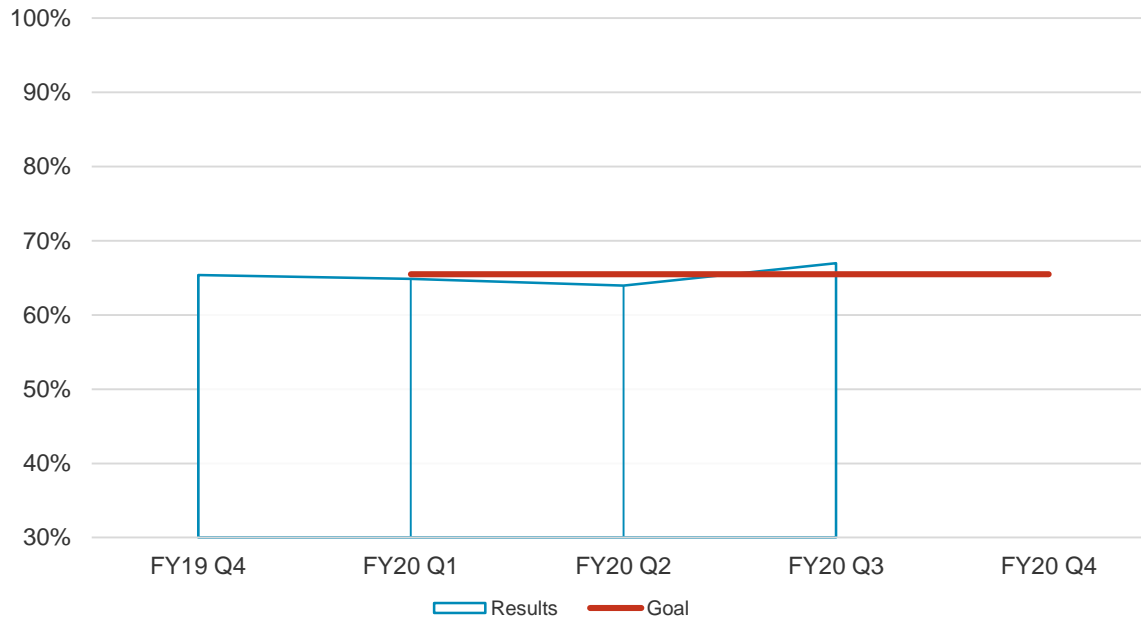
AFC Vendor Availability



Goal:	95.00%
Actual:	96.56%
Met:	Yes

- Clipper ONLY stations conversions ahead of schedule. Expect to complete by January 1, 2021.

Environment – Outside Stations



Goal:	66.0%
Actual:	N/A
Met:	N/A

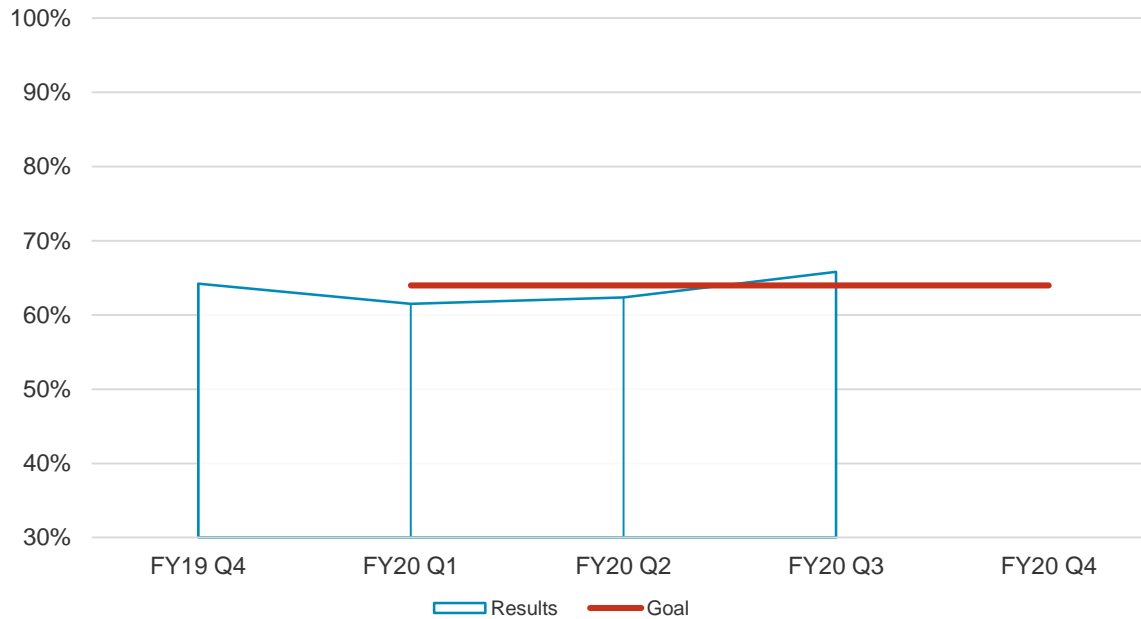
Composite Rating Based on Appearance of:

- **Landscaping Walkways, & Entry Plaza: N/A** (Weighted 67%)
- **Parking Lot Cleanliness: N/A** (Weighted 33%)

↑ indicates a statistically significant increase from prior quarter

- **Field survey data was not collected this quarter due to COVID 19.**

Environment – Inside Stations



Goal:	64.0%
Actual:	N/A
Met:	N/A

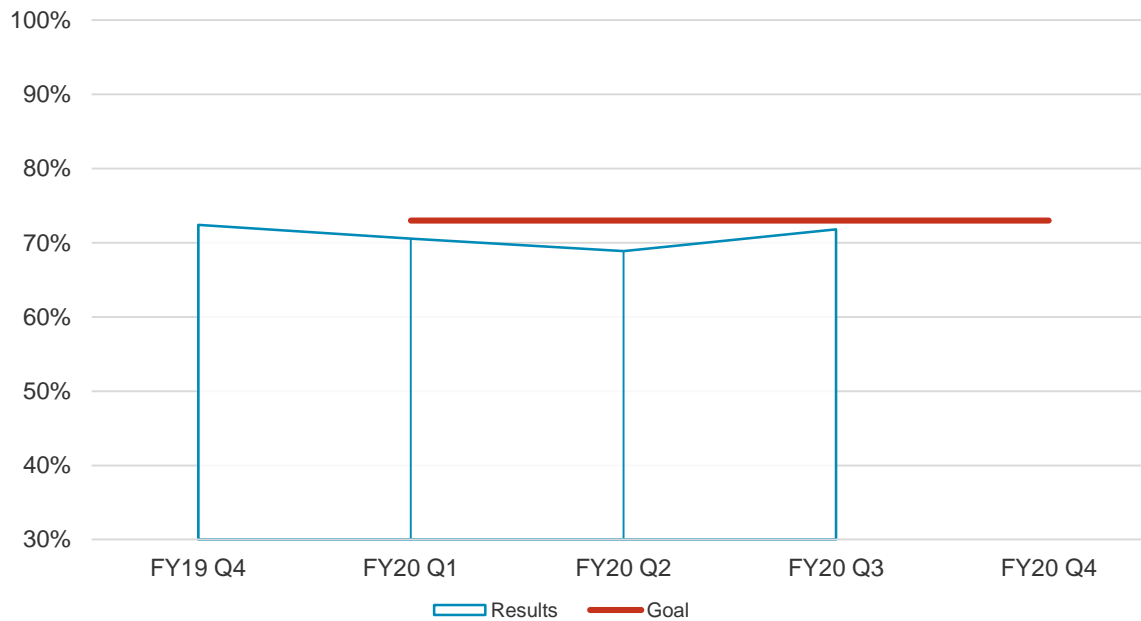
Composite Rating Based on Appearance of :

- Platform: N/A (Weighted 40%)
- Concourse: N/A (Weighted 25%)
- Escalator: N/A (Weighted 10%)
- Stairwells: N/A (Weighted 7.5%)
- Elevator: N/A (Weighted 10%)
- Restroom: N/A (Weighted 7.5%)

↑ indicates a statistically significant increase from prior quarter

- Field survey data was not collected this quarter due to COVID 19.

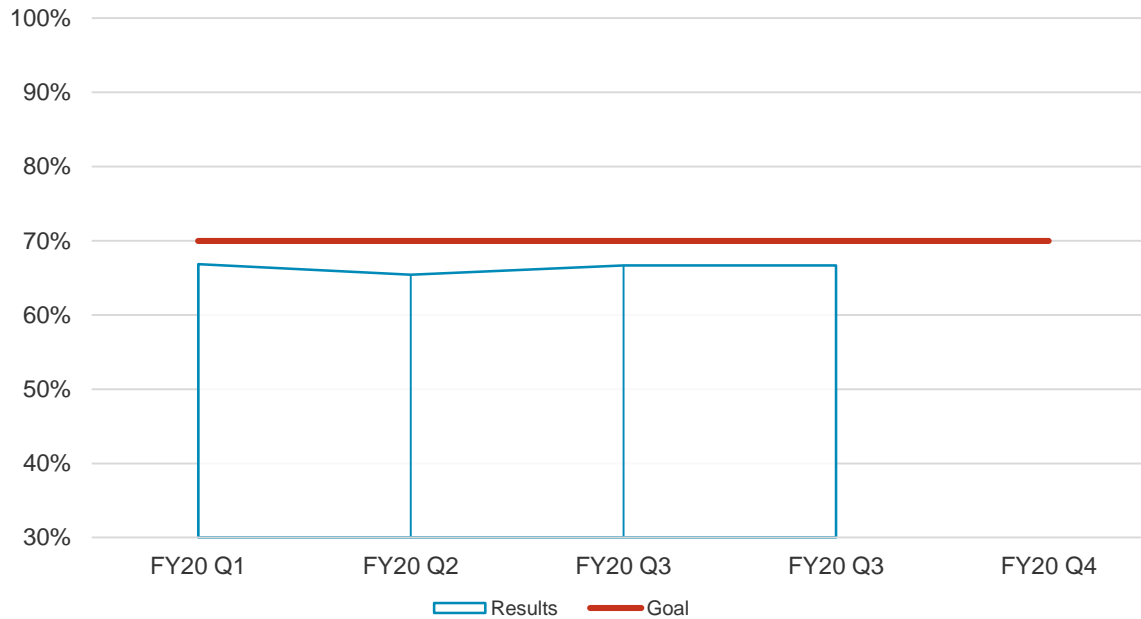
Station Vandalism



Goal:	73.0%
Actual:	N/A
Met:	N/A

- Field survey data was not collected this quarter due to COVID 19.

Train Interior Cleanliness



Goal:	70.0%
Actual:	N/A
Met:	N/A

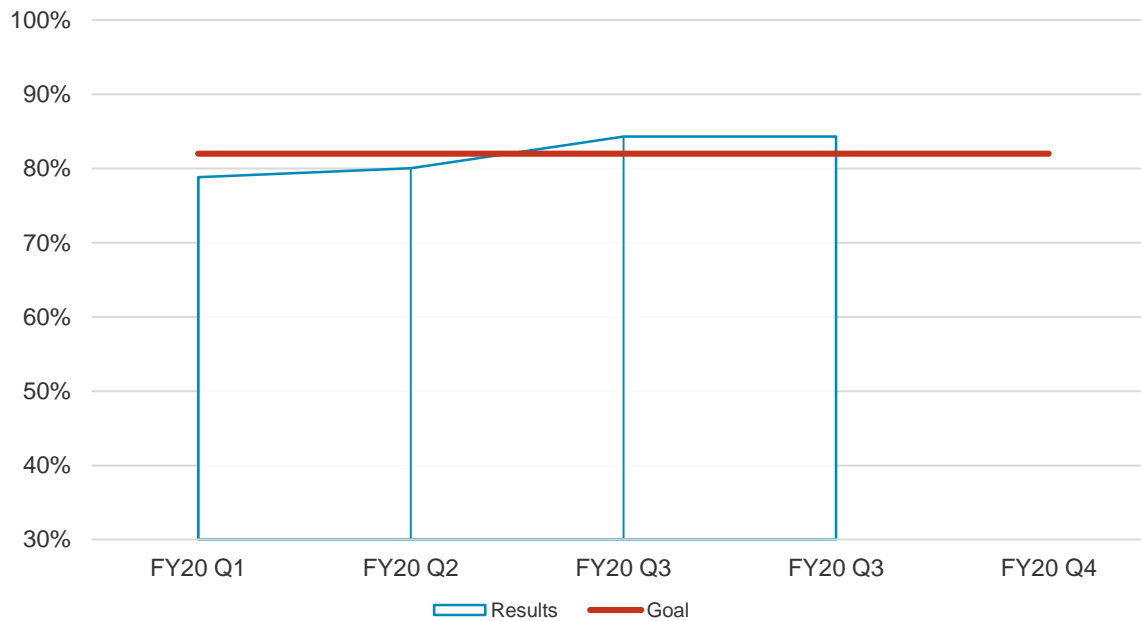
Composite Rating Based on Train Interior:

- **Cleanliness: N/A** (Weighted 60%)
- **Kept Free of Graffiti: N/A** (Weighted 40%)

↑ indicates a statistically significant increase from prior quarter

- **Field survey data was not collected this quarter due to COVID 19.**
- Nightly disinfection of Revenue Vehicles taking place at all home yards and terminal zones.
- 90-day thorough cleaning falling behind due to COVID related activities.

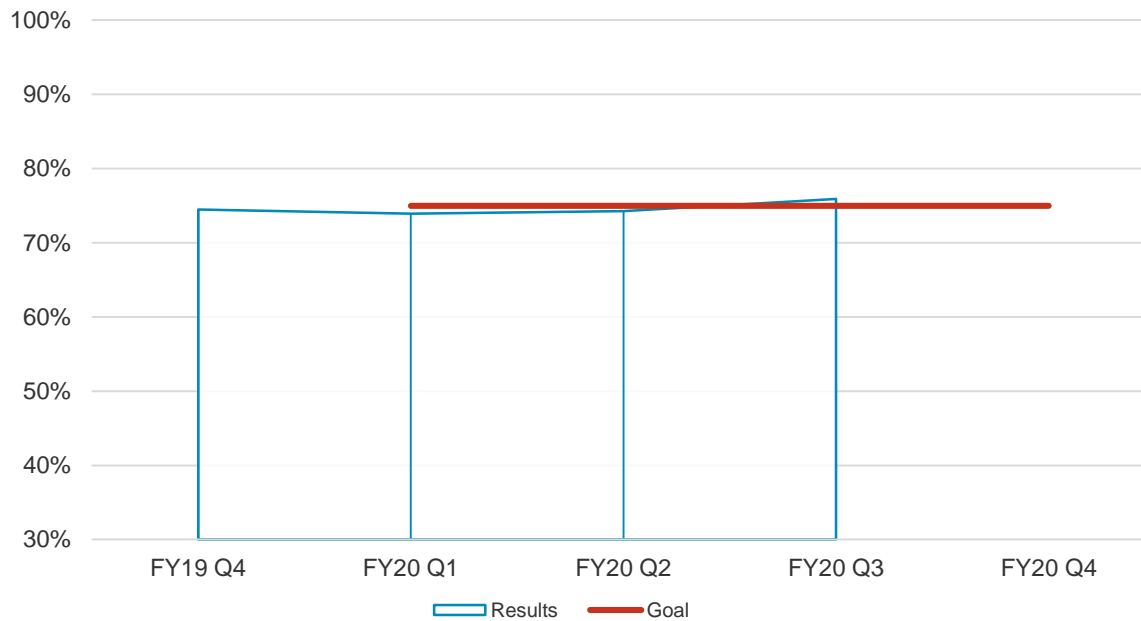
Train Temperature



Goal:	82.0%
Actual:	N/A
Met:	N/A

- Field survey data was not collected this quarter due to COVID 19.

Customer Service

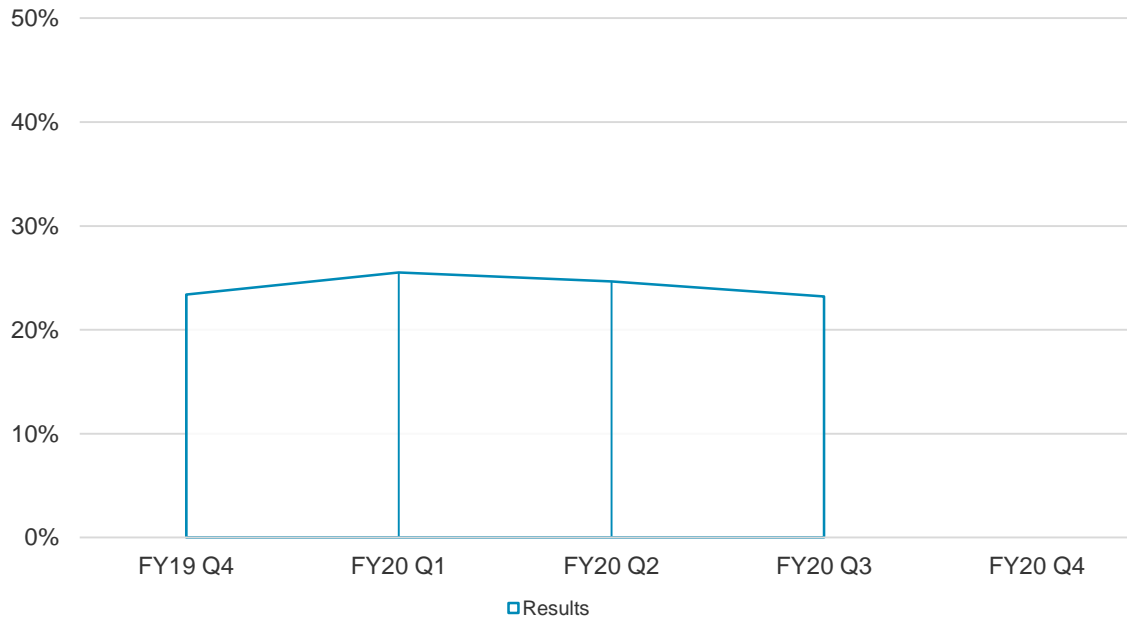


Goal:	75.00%
Actual:	N/A
Met:	N/A
Average Rating of:	
<ul style="list-style-type: none"> Customer Service Station Agent (if used today): N/A Onboard Next Stop, Destination and Transfer Announcements: N/A Onboard Delay Announcements (if delayed today): N/A 	
↑ indicates a statistically significant increase from prior quarter	

- Field survey data was not collected this quarter due to COVID 19.

Homelessness - Passenger Survey

“How well is BART addressing homelessness?”



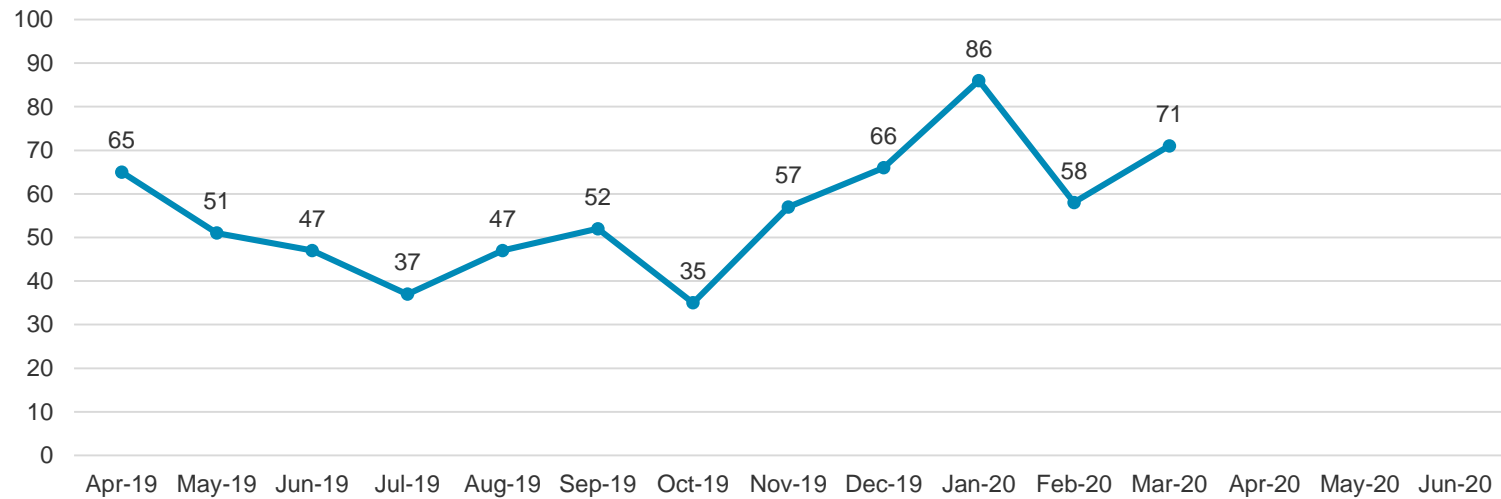
Goal:	N/A
Actual:	N/A
Met:	N/A

- Field survey data was not collected this quarter due to COVID 19.

Transient Counts in San Francisco Stations

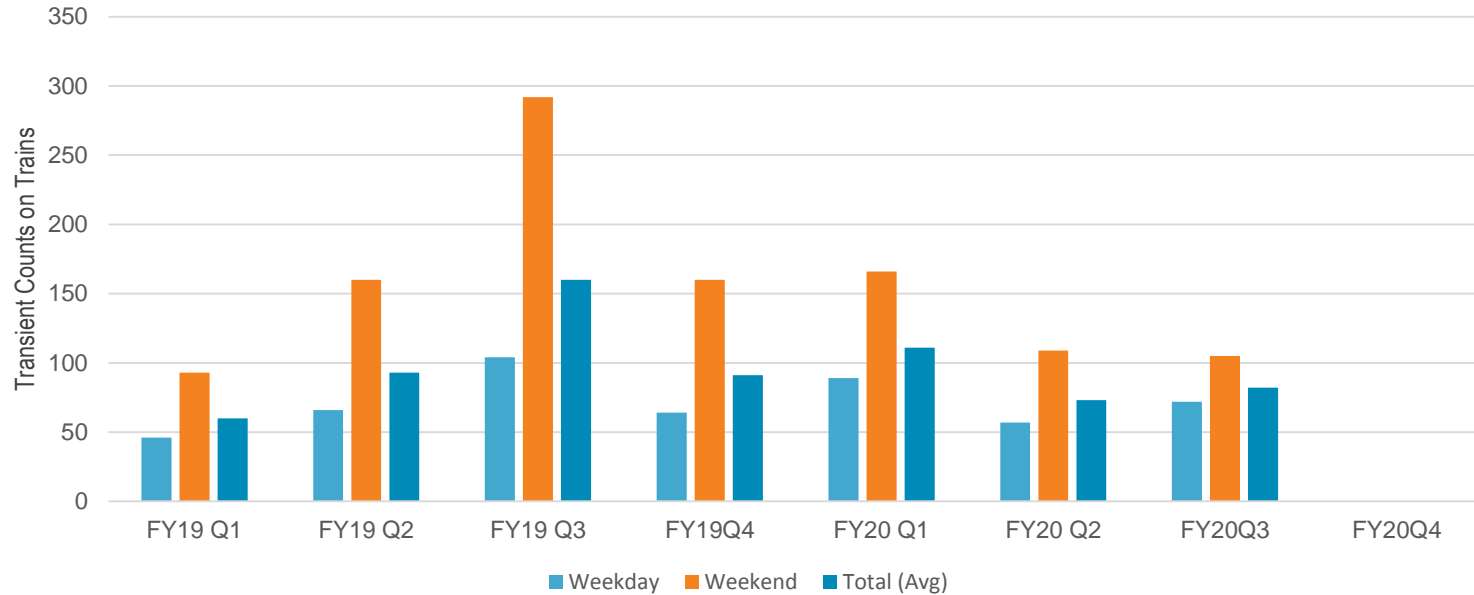


Downtown San Francisco Station Counts April 2019 - January 2020



- Field survey data was not collected this quarter due to COVID 19.

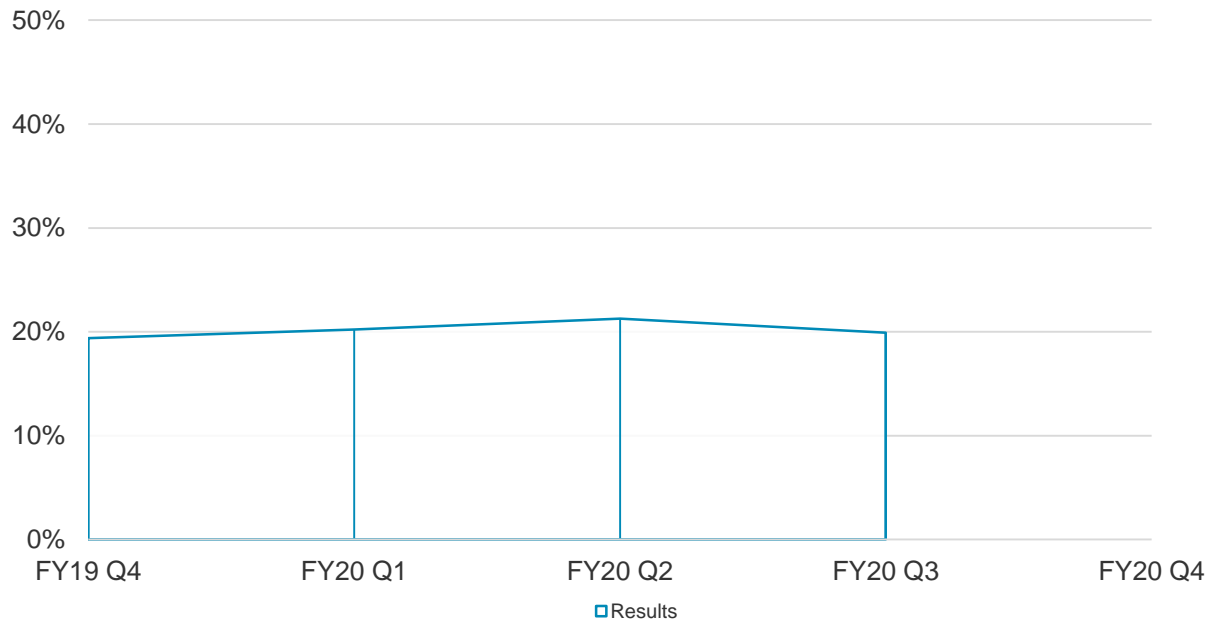
Transient Counts on Trains



- Field survey data was not collected this quarter due to COVID 19.

Fare Evasion Passenger Survey

“Did you see anyone not pay their fare at the station you entered?”

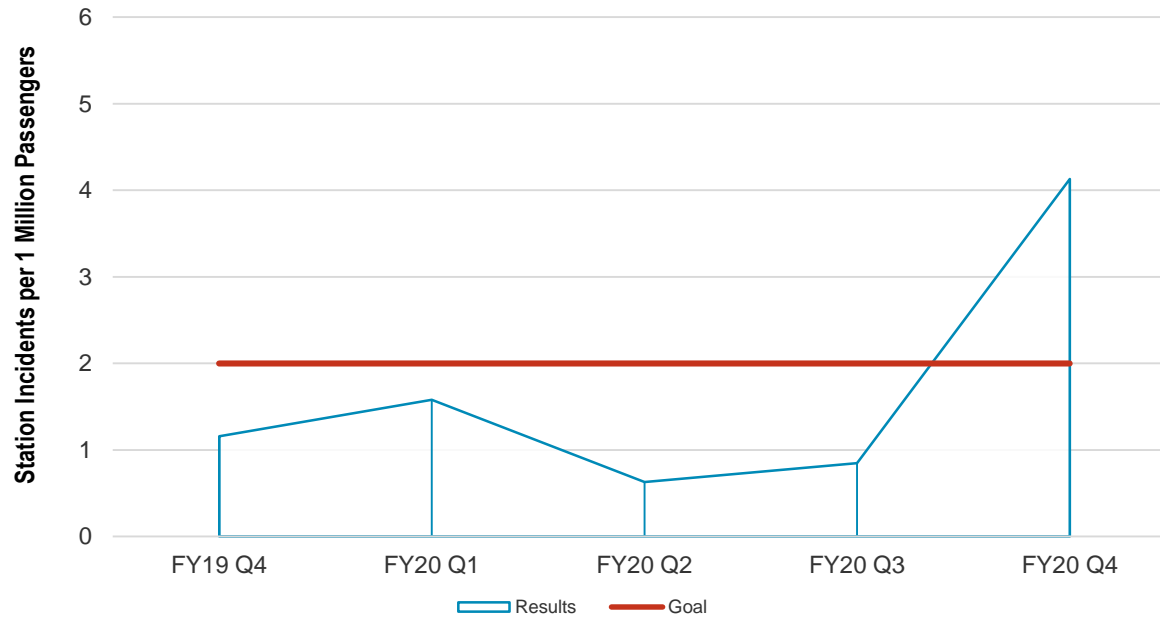


Goal:	N/A
Actual:	N/A
Met:	N/A

- Field survey data was not collected this quarter due to COVID 19.

Patron Safety – Station

Incidents per 1 Million Passengers

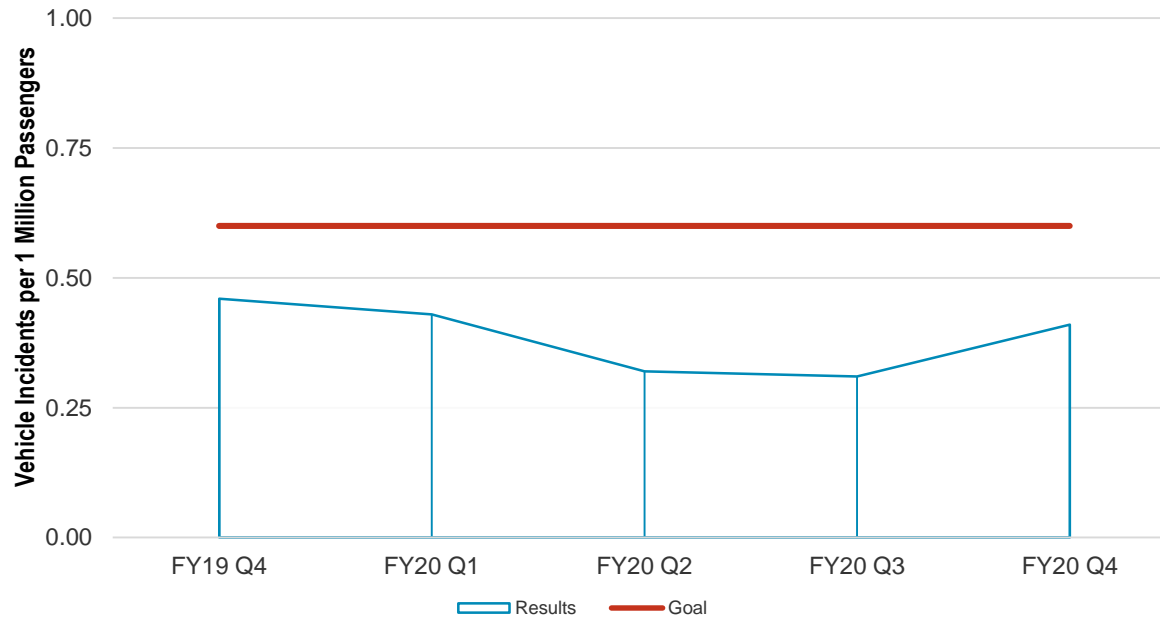


Goal:	2.00
Actual:	4.13
Met:	No

- Total station incidents (10) divided by the much smaller ridership yields this high number: 6 individuals fell down, 3 were struck by train or elevator doors and 1 was struck by closing fare gate.

Patron Safety – Vehicle

Incidents per 1 Million Passengers

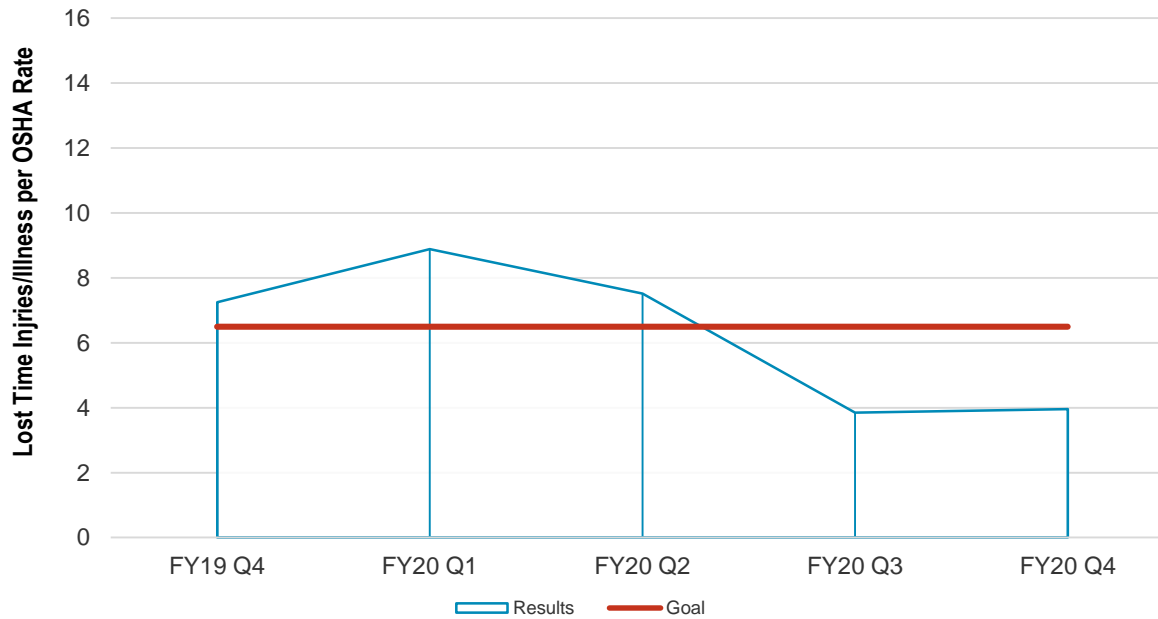


Goal:	0.60
Actual:	0.41
Met:	Yes

- One incident this quarter.

Employee Safety – Lost Time

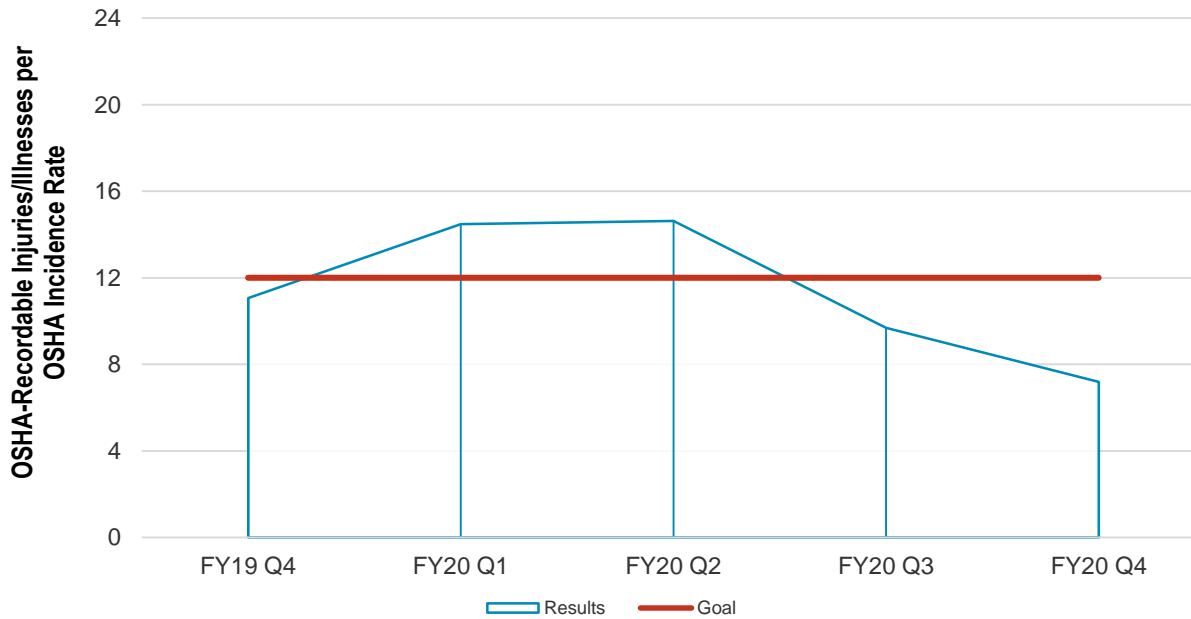
Lost Time Injuries per OSHA Rate



Goal:	6.50
Actual:	3.96
Met:	Yes

Employee Safety – Injury Count

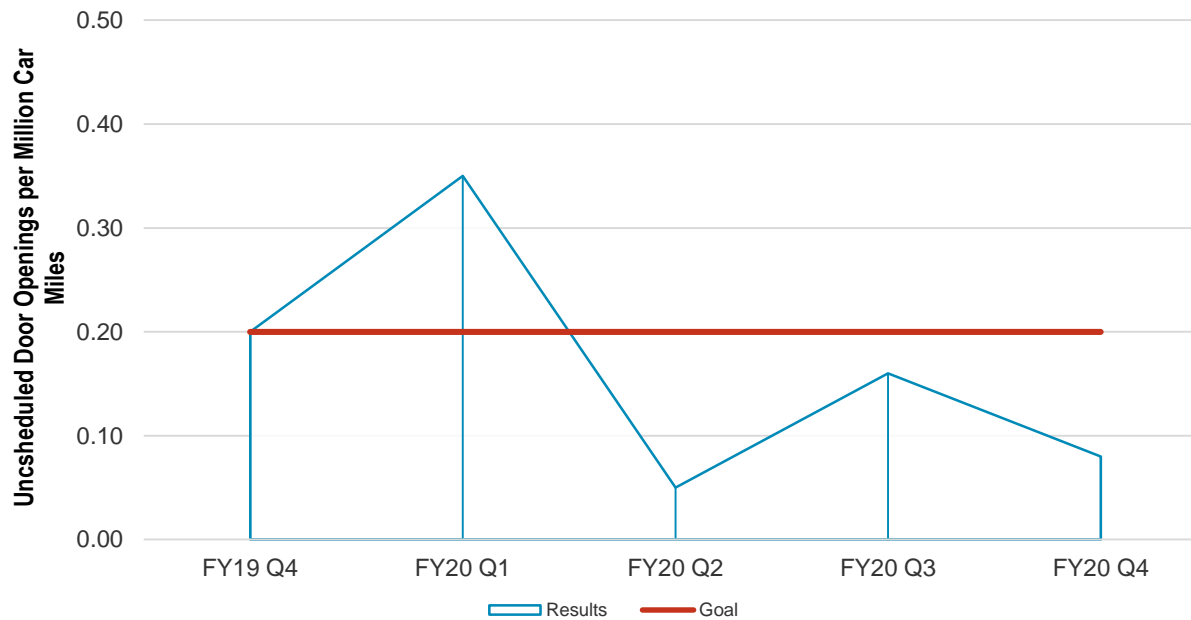
OSHA Recordable Injuries per OSHA Incidence Rate



Goal:	12.00
Actual:	7.19
Met:	Yes

Operating Safety – Door Openings

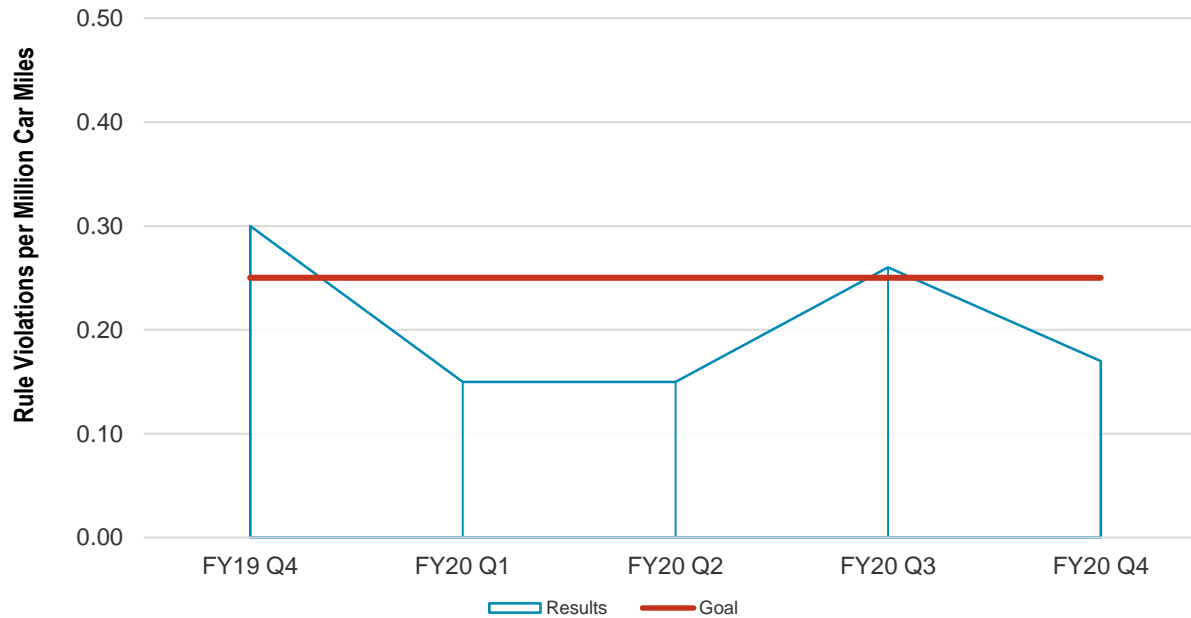
Unscheduled Door Openings per Million Car Miles



Goal:	0.20
Actual:	0.08
Met:	Yes

Operating Safety – Rule Violations

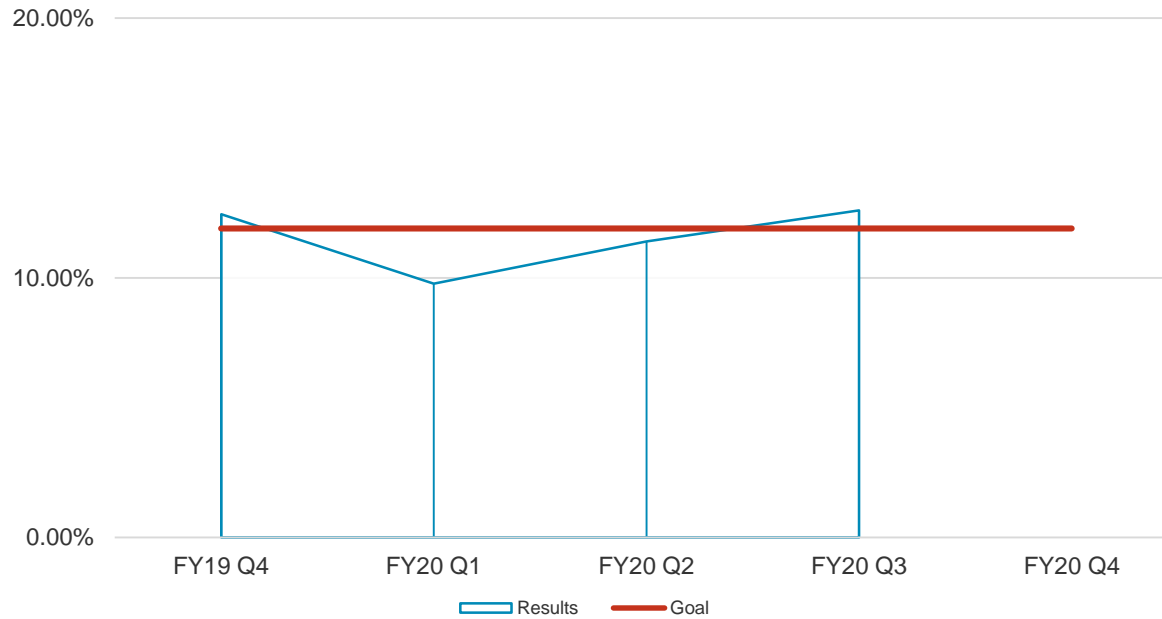
Rule Violations per Million Car Miles



Goal:	0.25
Actual:	0.17
Met:	Yes

BART Police Presence

“Did you see BART Police on the Train/Inside Station?”



Goal:	12.0%
Actual:	N/A
Met:	N/A

Average Score of Police Seen For:

- All Time Periods
 - On Train N/A
 - Outside the Station N/A
 - In the Station N/A

and

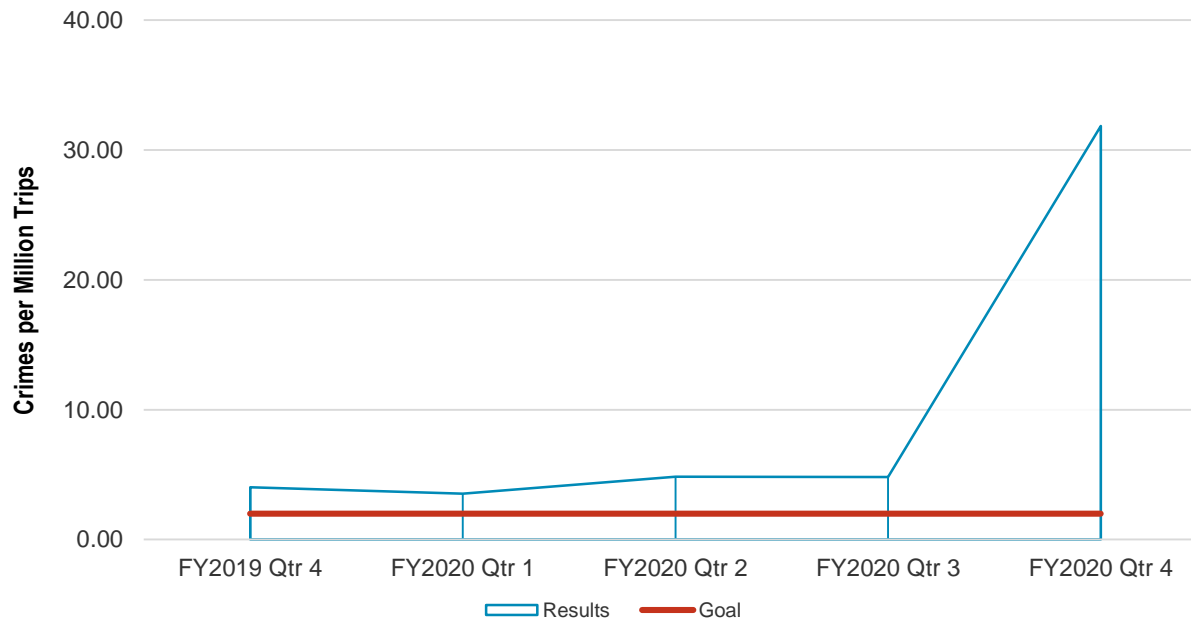
- After 7PM and Weekends
 - On Train N/A
 - Outside the Station N/A
 - In the Station N/A

↑ indicates a statistically significant increase from prior quarter

- Field survey data was not collected this quarter due to COVID 19.

Crimes Against Persons

Crimes per Million Trips

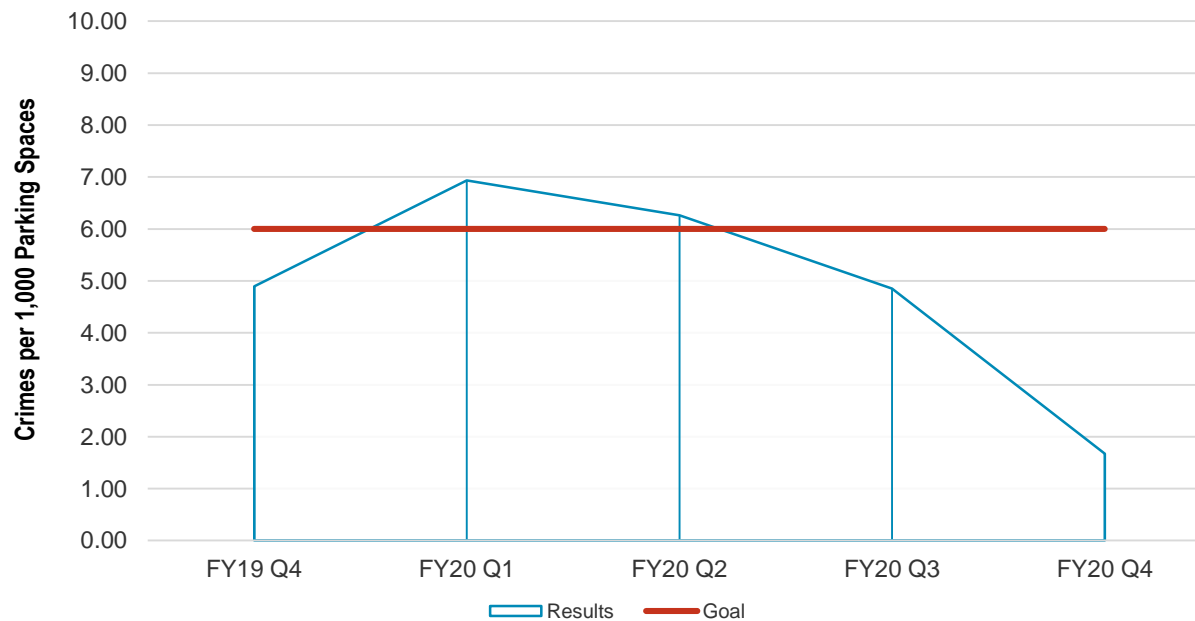


Goal:	2.00
Actual:	31.85
Met:	No
Violations Include:	
<ul style="list-style-type: none"> ▪ Homicide ▪ Rape ▪ Robbery ▪ Aggravated Assault 	

- During FY20 Quarter 4, the number of passenger trips decreased from 22.4 million (Q3) to 2.4 million (Q4).
- Respectively, the total cases of violent crimes against persons dropped at -28% from 108 incidents (Q3) and 77 incidents (Q4).

Auto Burglary

Crimes per 1,000 Parking Spaces

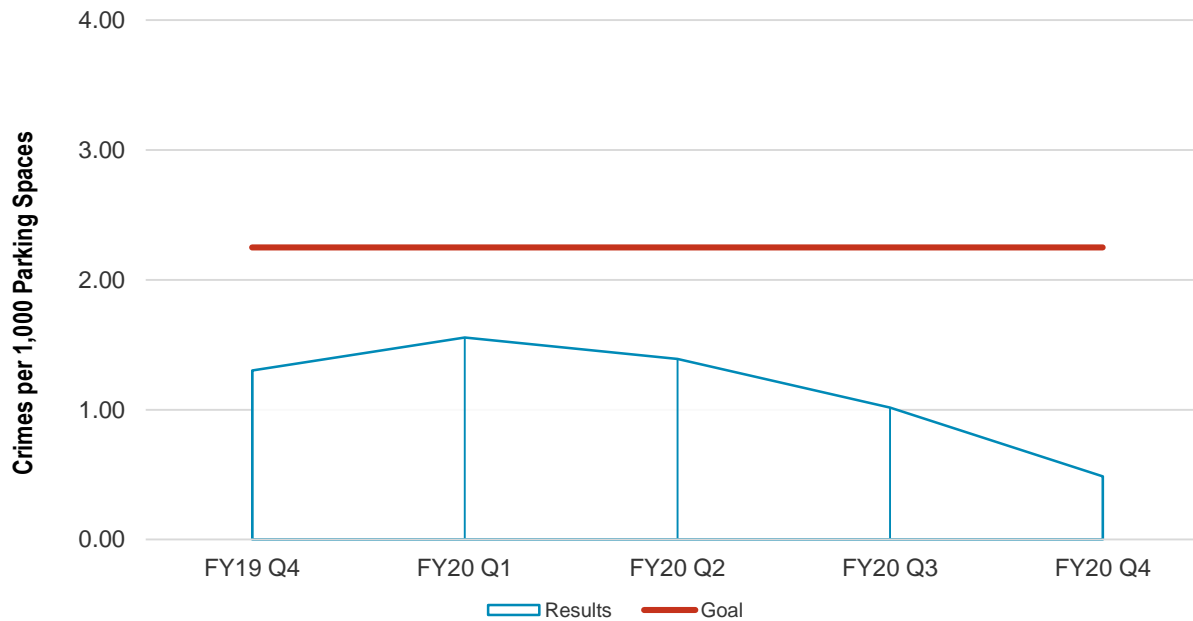


Goal:	6.00
Actual:	1.67
Met:	Yes
Violations Include:	
<ul style="list-style-type: none">Auto Burglary	

- Continue to see a significant drop in auto break-in's at stations.
- This quarter shows a total of 79 instances compared to 229 in the previous quarter, a 65% drop.

Auto Theft

Crimes per 1,000 Parking Spaces

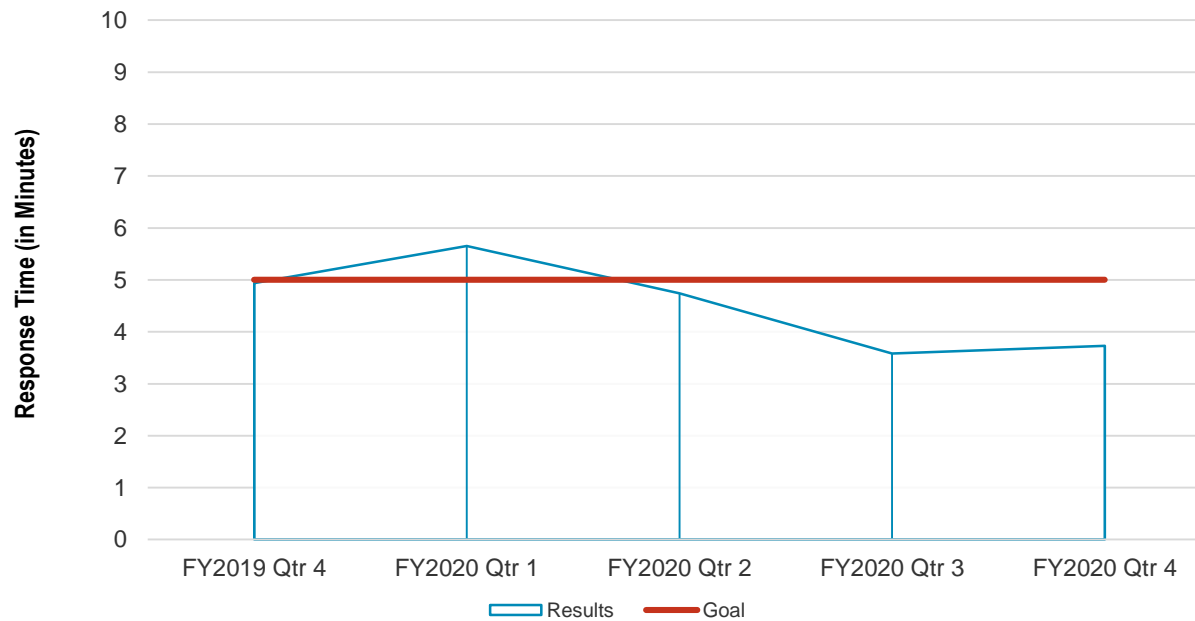


Goal:	2.25
Actual:	0.49
Met:	Yes
Violations Include:	
▪ Auto Theft	

- Continued drop in auto thefts at District wide.
- This quarter shows a total of 23 incidents compared to 48 in the previous quarter, which is a 52% drop.

Average Emergency Response Time

Response Time (in Minutes)

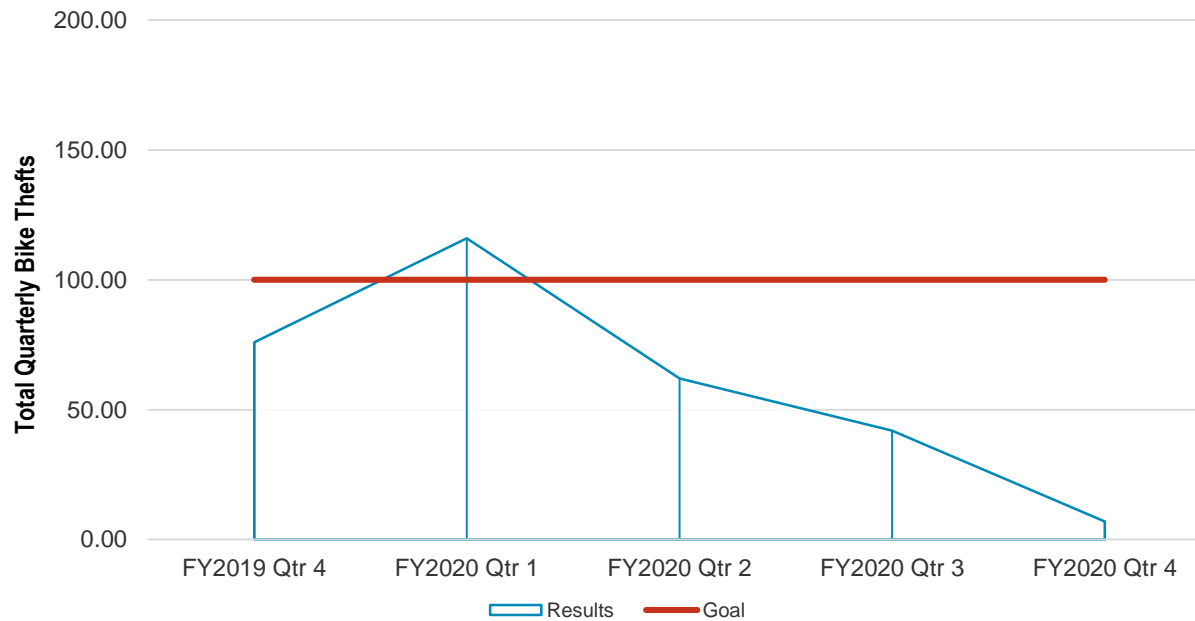


Goal:	5.00
Actual:	3.73
Met:	Yes

- In the pandemic, we improved our response times **meeting the 5-minute goal**.
- This quarter, our average emergency response time was 3 minutes and 43 seconds to a priority call.

Bike Theft

Count of Bike Thefts



Goal:	100
Actual:	7
Met:	Yes
Violations Include:	
▪ Bicycle Thefts	

- Bike thefts continue with a sharp decline due to the Pandemic.
- In this quarter 7 bikes were reported stolen compared to 42 in the previous quarter, an 83% drop.