



Quarterly Service Performance Review 2nd Quarter, FY21

October – December 2020

Engineering & Operations Committee

March 11, 2021

PERFORMANCE INDICATORS	SUMMARY CHART 2nd QUARTER FY 2021						YEAR TO DATE		
	CURRENT QUARTER			PRIOR QTR ACTUALS					
	ACTUAL	STANDARD	STATUS	LAST QUARTER	THIS QTR LAST YEAR	ACTUAL	STANDARD	STATUS	
Average Ridership - Weekday Customers on Time	50,436	85,842	NOT MET		47,438	403,426	48,876	103,684	NOT MET
Peak	95.33%	94.00%	MET		95.68%	90.28%	95.51%	94.00%	MET
Daily	94.42%	94.00%	MET		95.01%	92.00%	94.71%	94.00%	MET
Trains on Time									
Peak	91.58%	N/A	N/A		92.14%	84.52%	91.86%	N/A	N/A
Daily	91.74%	91.00%	MET		91.62%	86.94%	91.68%	91.0%	MET
Peak Period Transbay Car Throughput									
AM Peak	99.19%	97.50%	MET		97.10%	95.20%	98.14%	97.50%	MET
PM Peak	99.22%	97.50%	MET		97.29%	93.72%	98.26%	97.50%	MET
Car Availability at 4 AM (0400)	559	521	MET		504	630	531	507	MET
Mean Time Between Service Delays	3,441	4,650	NOT MET		6,116	4,544	4,412	4,650	NOT MET
Elevators in Service									
Station	99.33%	98.00%	MET		99.59%	98.37%	99.46%	98.00%	MET
Garage	99.90%	97.00%	MET		99.80%	96.13%	99.85%	97.00%	MET
Escalators in Service									
Street	93.93%	93.00%	MET		95.27%	92.53%	94.60%	93.00%	MET
Platform	97.23%	96.00%	MET		97.07%	96.77%	97.15%	96.00%	MET
Automatic Fare Collection									
Gates	99.54%	99.00%	MET		99.53%	99.36%	99.54%	99.00%	MET
Vendors	98.67%	95.00%	MET		98.53%	98.93%	98.60%	95.00%	MET
Wayside Train Control System	0.98	1.00	MET		0.84	1.56	0.91	1.00	MET
Computer Control System	0.15	0.08	NOT MET		0.457	0.105	0.280	0.08	NOT MET
Traction Power	0.14	0.20	MET		0.05	0.24	0.18	0.20	MET
Track	0.01	0.30	MET		0.00	0.05	0.15	0.30	MET
Transportation	0.38	0.50	MET		0.35	0.46	0.37	0.50	MET
Environment Outside Stations	73.8%	66.0%	MET		69.4%	64.0%	71.6%	66.0%	MET
Environment Inside Stations	67.0%	64.0%	MET		67.3%	62.4%	67.2%	64.0%	MET
Station Vandalism	73.7%	73.0%	MET		73.6%	68.9%	73.7%	73.0%	MET
Train Interior Cleanliness	69.1%	70.0%	NOT MET		66.9%	65.4%	68.0%	70.0%	NOT MET
Train Temperature	84.8%	82.0%	MET		80.5%	80.0%	82.7%	82.0%	MET
Customer Service	77.4%	75.0%	MET		77.5%	74.3%	77.5%	75.0%	MET
Homelessness	27.5%	N/A	N/A		33.7%	24.7%	30.6%	N/A	N/A
Fare Evasion	22.1%	N/A	N/A		23.3%	21.3%	22.7%	N/A	N/A
Customer Complaints									
Complaints per 100,000 Passenger Trips	22.41	5.07	NOT MET		29.58	11.82	26.00	5.07	NOT MET
Safety									
Station Incidents/Million Patrons	1.84	2.00	MET		1.94	0.63	1.89	2.00	MET
Vehicle Incidents/Million Patrons	1.58	0.60	NOT MET		1.11	0.32	1.35	0.60	NOT MET
Lost Time Injuries/Illnesses/Per OSHA	5.21	6.50	MET		3.44	7.52	4.33	6.50	MET
OSHA-Recordable Injuries/Illnesses/Per OSHA	8.44	12.00	MET		7.19	14.63	7.82	12.00	MET
Unscheduled Door Openings/Million Car Miles	0.000	0.200	MET		0.000	0.050	0.000	0.200	MET
Rule Violations Summary/Million Car Miles	0.080	0.250	MET		0.230	0.150	0.155	0.250	MET
Police									
BART Police Presence	13.6%	12.0%	MET		13.7%	11.4%	13.7%	12.0%	MET
Quality of Life per million riders	348.95	N/A	N/A		483.49	65.64	416.22	N/A	N/A
Crimes Against Persons per million riders	20.81	2.00	NOT MET		24.86	4.83	22.83	2.00	NOT MET
Auto Burglaries per 1,000 parking spaces	1.02	6.00	MET		1.29	6.26	2.21	6.00	MET
Auto Thefts per 1,000 parking spaces	0.21	2.25	MET		0.40	1.39	0.53	2.25	MET
Police Response Time per Emergency Incident (Minutes)	4.25	5.00	MET		4.33	4.74	4.29	5.00	MET
Bike Thefts (Quarterly Total and YTD Quarterly Average)	14	100.00	MET		12	62	13	100.00	MET

LEGEND:

Goal Met

Goal Unmet by < 5%

Goal Unmet by > 5%

FY21 Second Quarter Overview



- **Average Weekday Ridership** increased to 50,436. Due to the pandemic, Total ridership is 87% lower than a year ago; Average peak ridership is 89% lower; weekends is 82% lower.
- **Train On Time Performance** increased to 91.74%, and met goal
- **ROW Equipment Reliability:** Wayside Train Control, Traction Power, and Track met goal. Rail Cars and Computer Systems 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:** Environment Outside Stations & Inside Stations, Vandalism, Customer Service, Train Temperature, and Police Presence met goal. Train Cleanliness did not meet goal
- **Total rate of Customer Complaints** decreased to 22.41 per 100,000 trips, showing 24% improvement.

eBART Service Report



eBART SERVICE REPORT FOR 2nd QUARTER FY21										
PERFORMANCE INDICATORS	CURRENT QUARTER			PRIOR QTR ACTUALS		YEAR TO DATE				
	ACTUAL	STANDARD	STATUS	LAST QUARTER	THIS QTR LAST YEAR	ACTUAL	STANDARD	STATUS		
Ridership										
Average Ridership - Weekday	1,925	8,000	NOT MET		1,802	8,173	1,863	8,000	NOT MET	
Average Ridership - Weekend	667	n/a	n/a		599	2,063	633	n/a	n/a	
Service Delivery										
On-Time Performance	96.75%	95.00%	MET		96.53%	93.59%	96.64%	95.00%	MET	
Transfers to BART										
On-Time Connections	99.19%	98.50%	MET		98.81%	97.56%	99.00%	98.50%	MET	
Equipment										
Train Mean Distance Between Failures (miles)	64,786	14,000	MET		63,164	36,838	127,951	14,000	MET	
Station Elevator Availability	99.72%	98.00%	MET		99.74%	99.96%	99.73%	98.00%	MET	
Station Escalator Availability	98.48%	96.00%	MET		100.00%	99.27%	99.30%	96.00%	MET	
Customer Feedback										
Complaints/Hundred Thousand Patrons	8.48	7.00	NOT MET		2.08	7.55	9.46	7.00	NOT MET	
Safety										
Passenger Incidents	0.00	n/a	n/a		0.00	0.00	1.00	n/a	n/a	
Workplace Injuries	1.00	n/a	n/a		0.00	0.00	1.00	n/a	n/a	

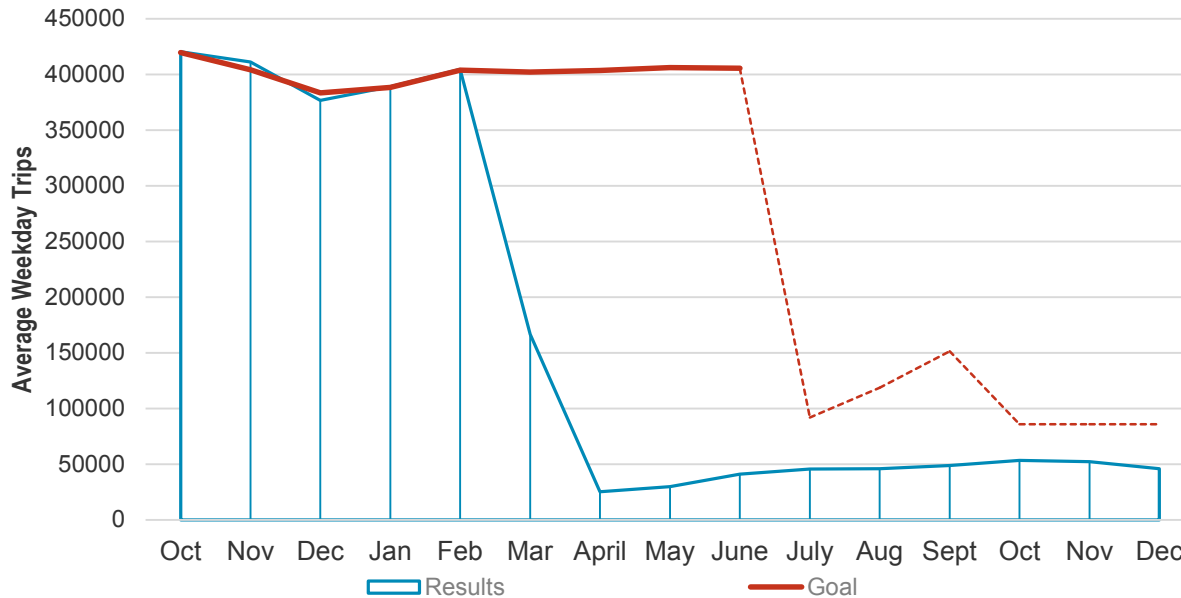
LEGEND:

Goal Met

Goal Unmet by <= 5%

Goal Unmet by > 5%

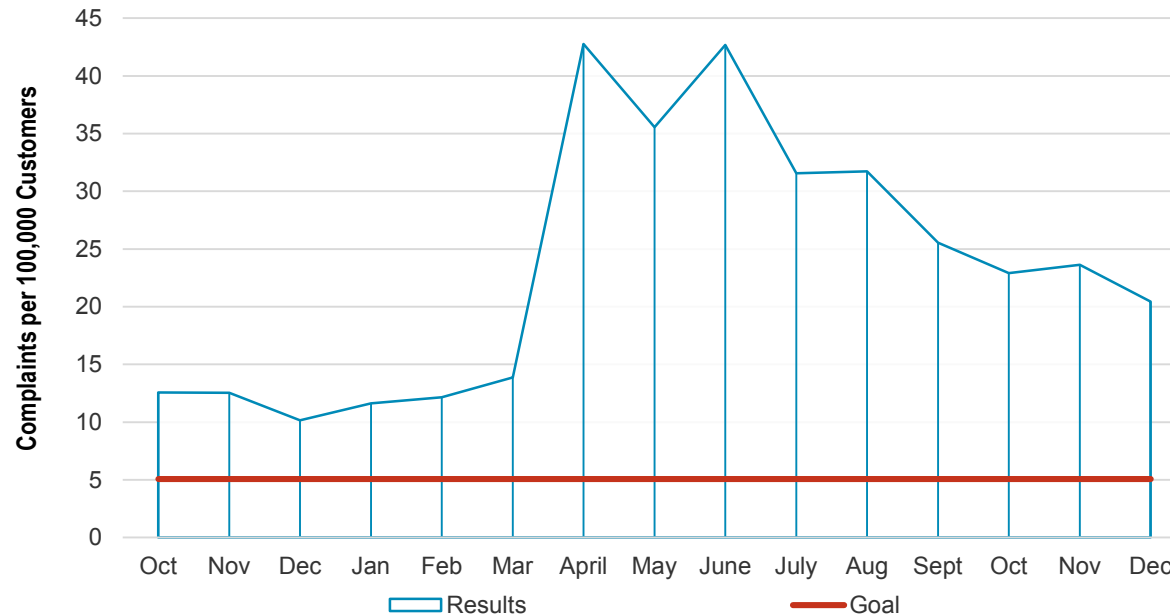
Customer Ridership - Weekday Trips



Goal:	85,842
Actual:	50,436
Met:	No

- Total ridership decreased by 87% compared to same quarter last year
- Average weekday ridership (50,436) decreased by 88% from same quarter last year
- Average peak ridership decreased by 89% compared to same quarter last year
- Saturday and Sunday both decreased by 82% from same quarter last year

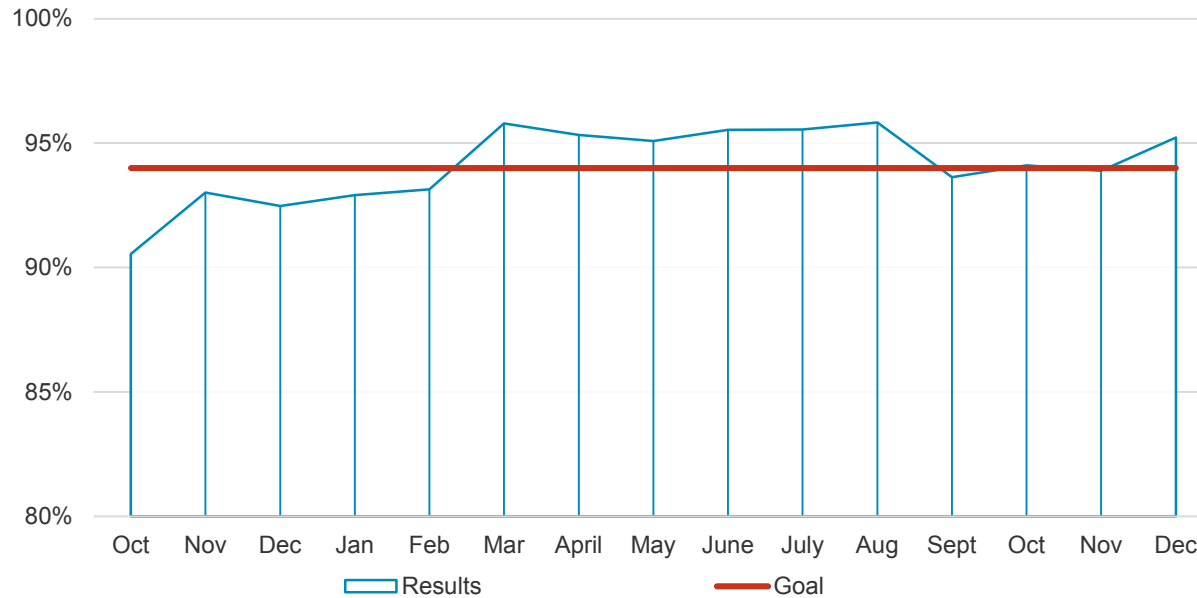
Customer Complaints



Goal:	5.07
Actual:	22.41
Met:	No

- 24% improvement (decrease) in complaints over last quarter per 100K riders. The most significant decreases were in Police, Service, and Parking categories. Biohazards on trains were one of the few to increase.

On-Time Service - Customer

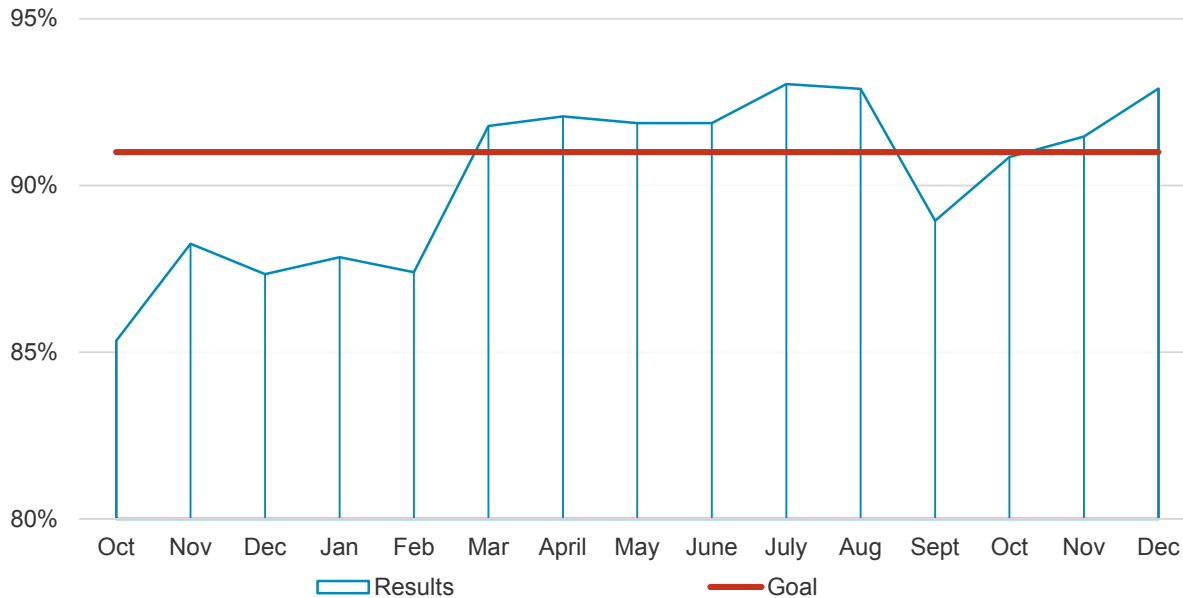


Goal:	94.00%
Actual:	94.42%
Met:	Yes

Delay Source	% of Trains
POLICE ACTIONS	27%
VEHICLE	15%
TRAIN CONTROL	14%
OPERATIONS	6%
VANDALISM	6%
PERSON ON TRACKWAY	5%
CONGESTION	5%
MISC OTHER	4%
OBJECT ON TRACKWAY	4%
MULTIPLE CAUSE (LA/LD)	2%

- 0.62% performance decrease from previous quarter and 2.62% improvement from same quarter last year

On-Time Service - Train

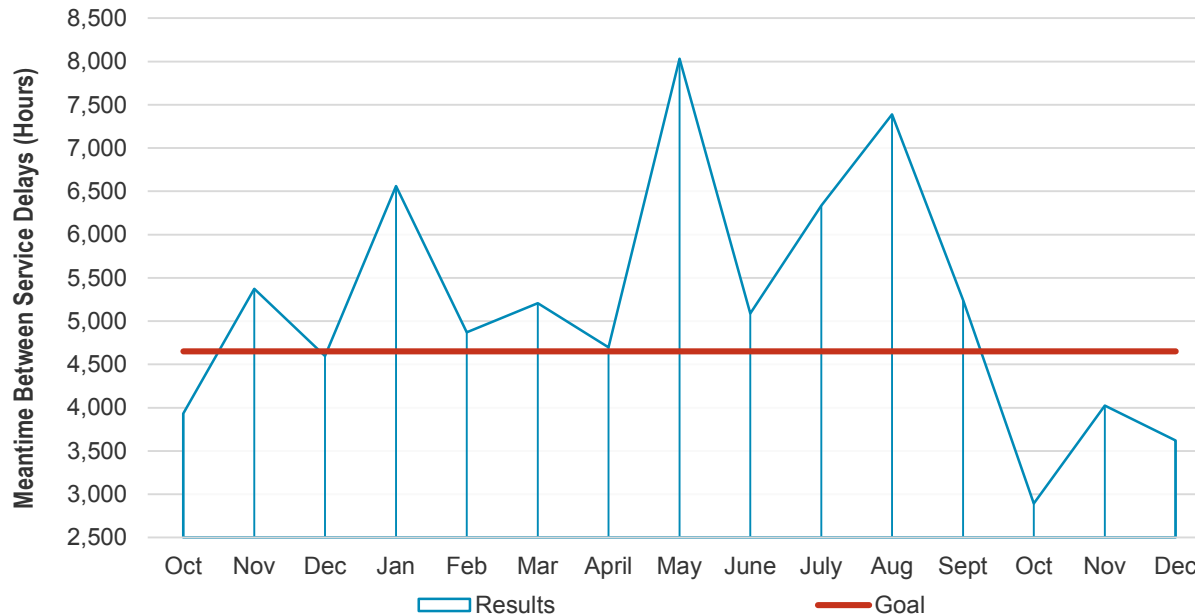


Goal:	91.00%
Actual:	91.74%
Met:	Yes

#	Date	Location	Description	Time	Cause	Trains
1	11/22/20	Coliseum	MUX (Fuse)(Shoe fuse Blown)(FOTF Unable to Move in Road or Yard)	0925-1844	Equip	77
2	11/20/20	E.C.D. Norte	Debris On Track (RR Construction Conduit Inst.) (Conduit left on collector shoe)	0507-0914	Equip	28
3	10/22/20	Civic Center	BPD Hold (Weapon Suspect)(Trains running through)	1502-1620	People	24
4	10/28/20	W. Oak. I-Lk	False Occupancy(Cranks Installed)(PC Cards Replaced)	0524-0632	Equip	24
5	10/13/20	S. Hayward	False Occupancy (A77X3A F/O in the A77XL cross over)	1230-1801	Equip	23
6	11/24/20	Lake Merritt	Train Struck A Person On Trackway (Station Closed 1741-1856)	1737-1915	People	21
7	12/15/20	Emb. I-Lock	Routing (Trap Set)	1608-1630	Equip	19
8	12/14/20	W-Line	False Occupancy/Flooding due to Clogged Drain/Single Tracking (W15-W33)	0354-0914	Environment	17
9	10/23/20	Powell	3rd Rail Power (MR04 tripped)	1601-1651	Equip	17
10	10/13/20	Lake Merritt	3rd Rail Power (KXB, DC01/02/03/04, KTT,AR01, ALM tripped offline)	0813-0938	Equip	14

Car Equipment – Reliability

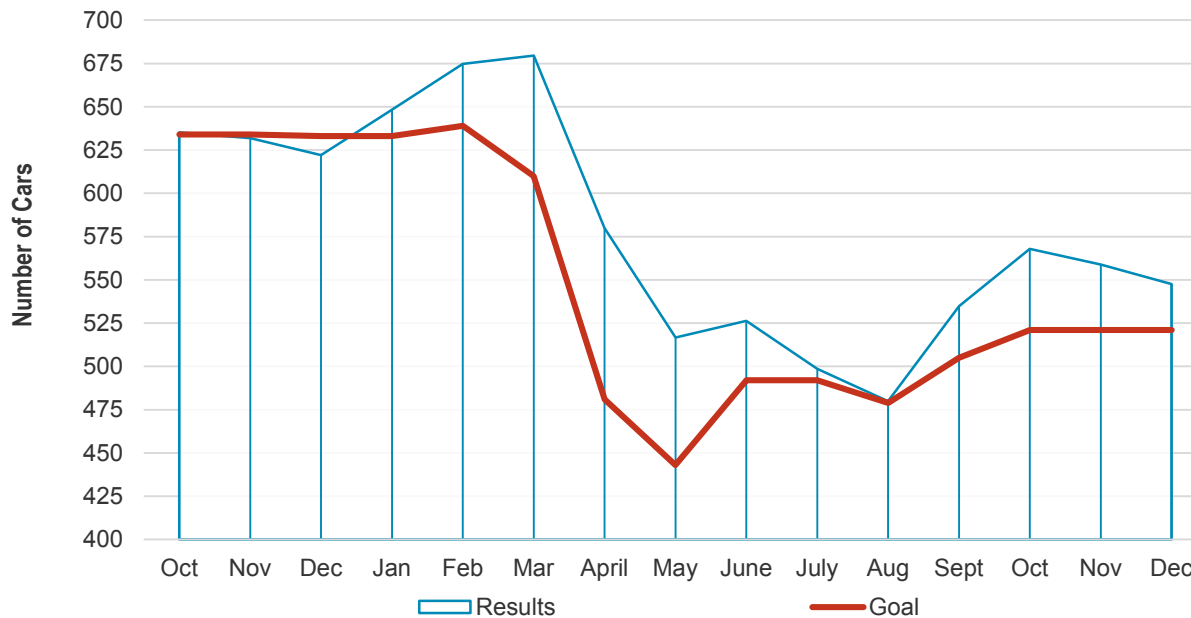
Meantime Between Service Delays



Goal:	4,650 Hours
Actual:	3441 Hours
Met:	No

- 43.74% performance decrease from previous quarter and 24.28% decrease from same quarter last year
- Legacy Fleet MTBSD exceeds goal at 7467
- FOTF Fleet MTBSD 1575
- FOTF VATC failures major driver of poor performance
 - VATC 4.1 software to mitigate failures expected to be released in April

Car Equipment – 4:00AM Availability

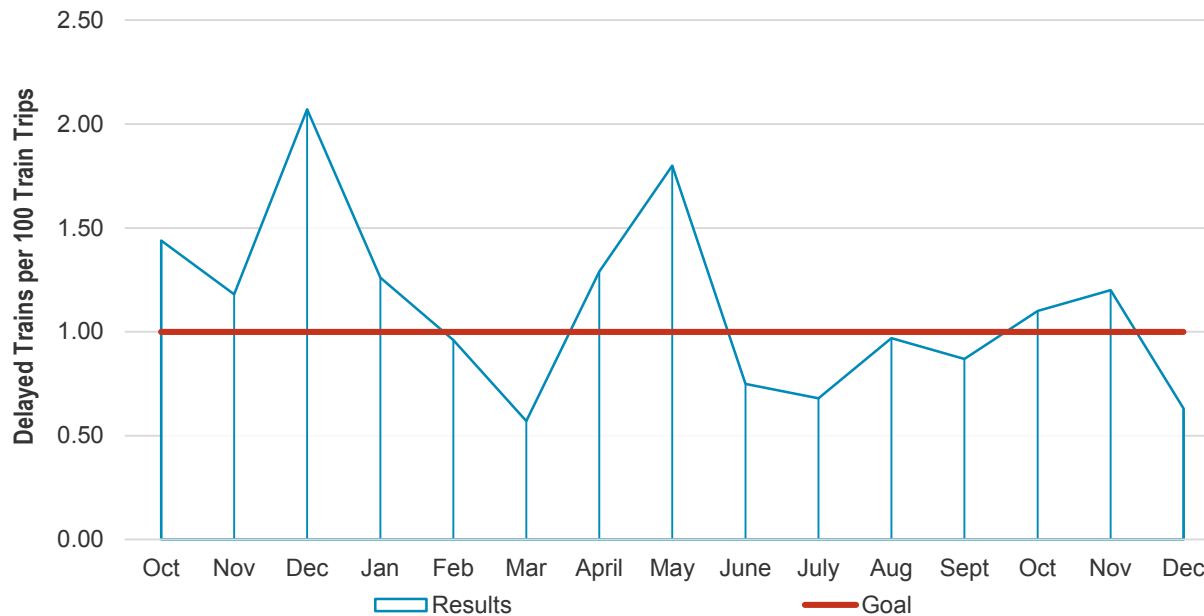


Goal:	521
Actual:	559
Met:	Yes

- 10.84% performance improvement from previous quarter and 11.22% decrease from same quarter last year
- Conditionally accepted 46 FOTF cars during FY21 Q2, as of today total of 286 FOTF cars accepted
- Decommissioned 13 legacy cars during FY21 Q2

Wayside Train Control System

Delayed Trains per 100 Train Trips

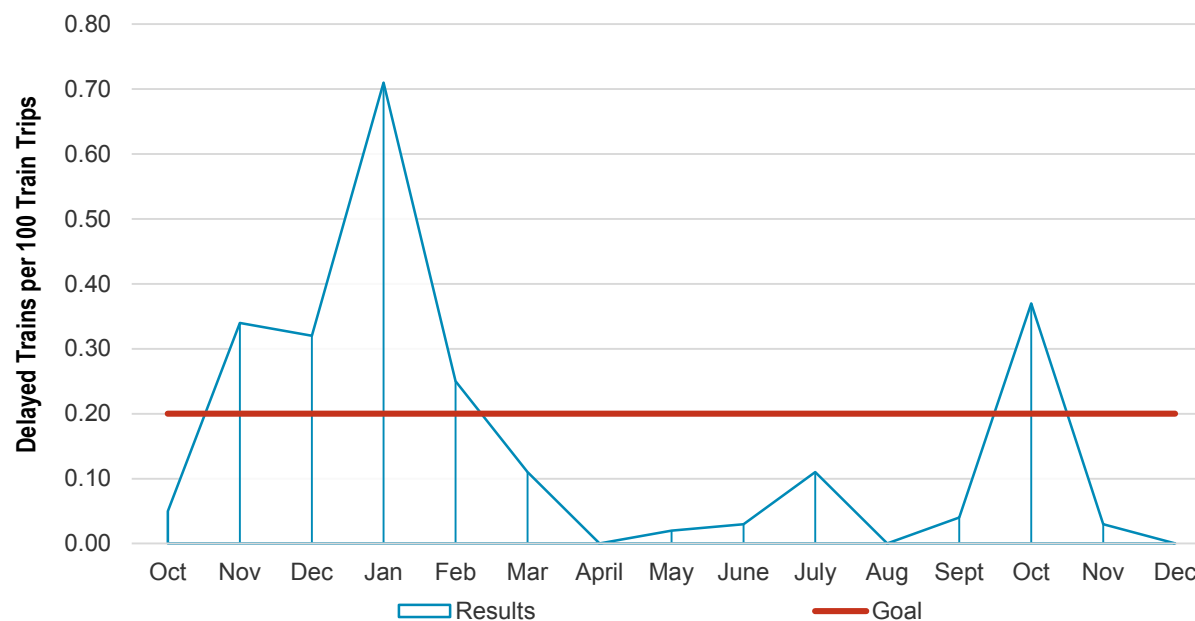


Goal:	1.00
Actual:	0.98
Met:	Yes

- 16.27% performance decrease from previous quarter and 37.58% improvement from same quarter last year
- Major Failures:
 - 10/13/20 – False Occupancy at Hayward –broken connector
 - 10/28/20 – False Occupancy at Embarcadero – bad data cards
 - 12/15/20 – Routing System Failure – reset to clear

Traction Power

Delayed Trains per 100 Train Trips

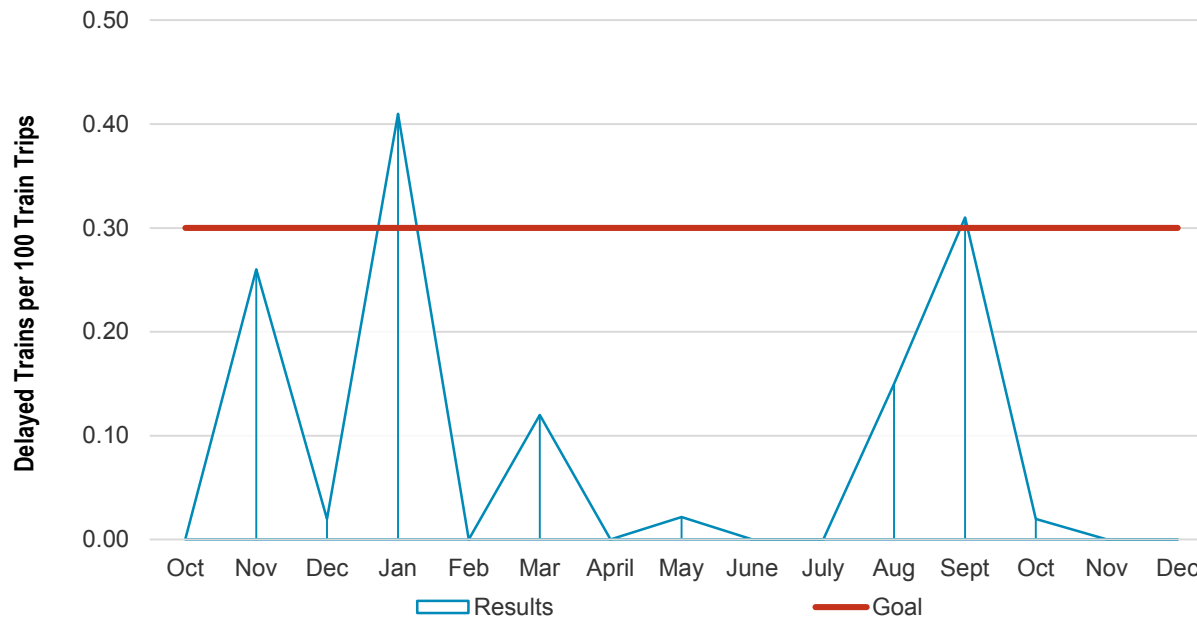


Goal:	0.20
Actual:	0.14
Met:	Yes

- 180% performance decrease from previous quarter and 39.13% improvement from same quarter last year
- Major Failures:
 - October 23 – Blown insulator at Powell Station

Track

Delayed Trains per 100 Train Trips

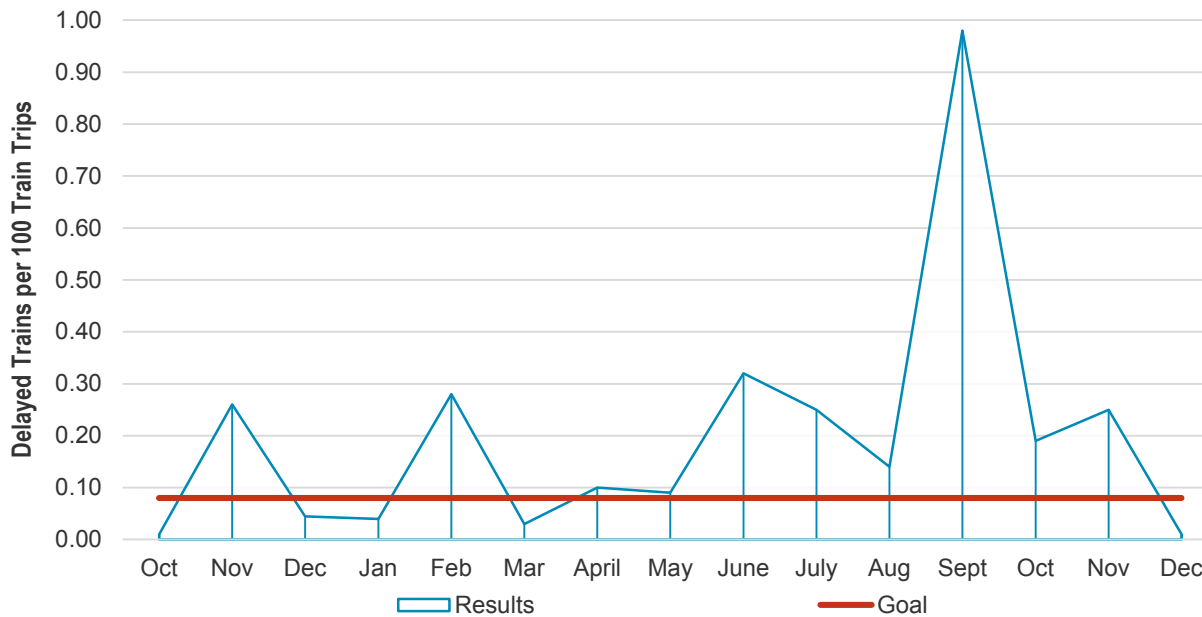


Goal:	0.30
Actual:	0.01
Met:	Yes

- 95.42% performance improvement from previous quarter and 92.37% improvement from same quarter last year
- All Measure RR Track projects are on schedule and meeting goal

Computer Control System

Delayed Trains per 100 Train Trips

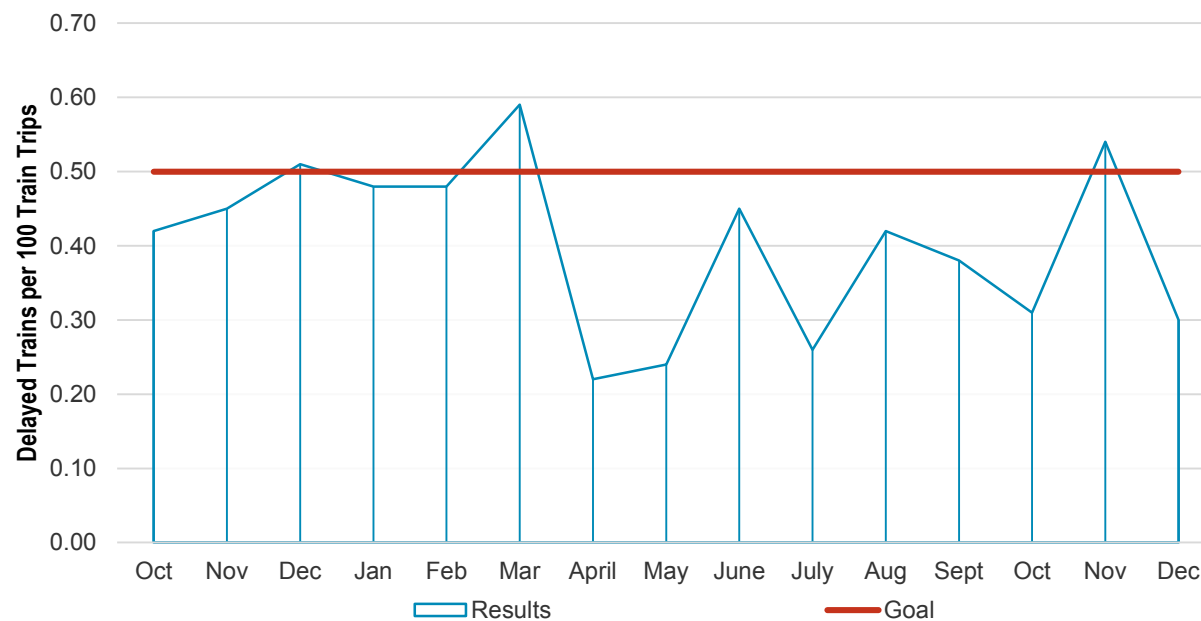


Goal:	0.08
Actual:	0.15
Met:	No

- 67.15% performance improvement from previous quarter and 50.02% decrease from same quarter last year
- Major Delays:
 - November 20 – Daly City; VHLC/FIP Communication terminal server failure required numerous resets; reloaded software to resolve
 - November 22 – Daly City; Loss routing due to Net.com failure; replaced power supply
 - October 4 – Pittsburg Bay Point; SORS Q-Latch issues; SOR & VPI reset

Transportation

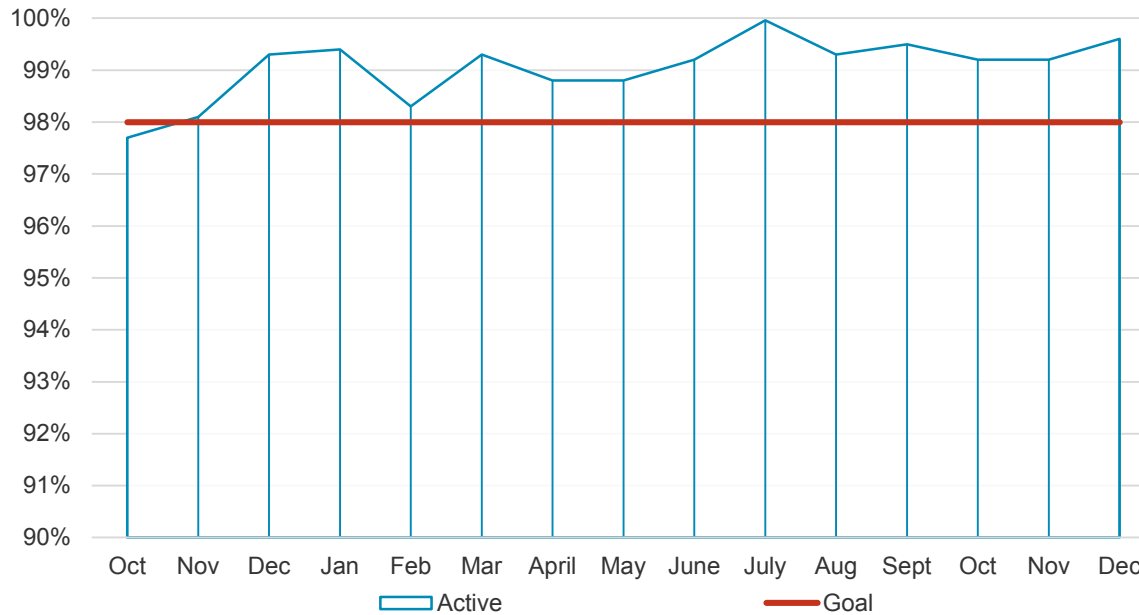
Delayed Trains per 100 Train Trips



Goal:	0.50
Actual:	0.38
Met:	Yes

- 8.49% performance decrease from previous quarter and 16.67% improvement from same quarter last year

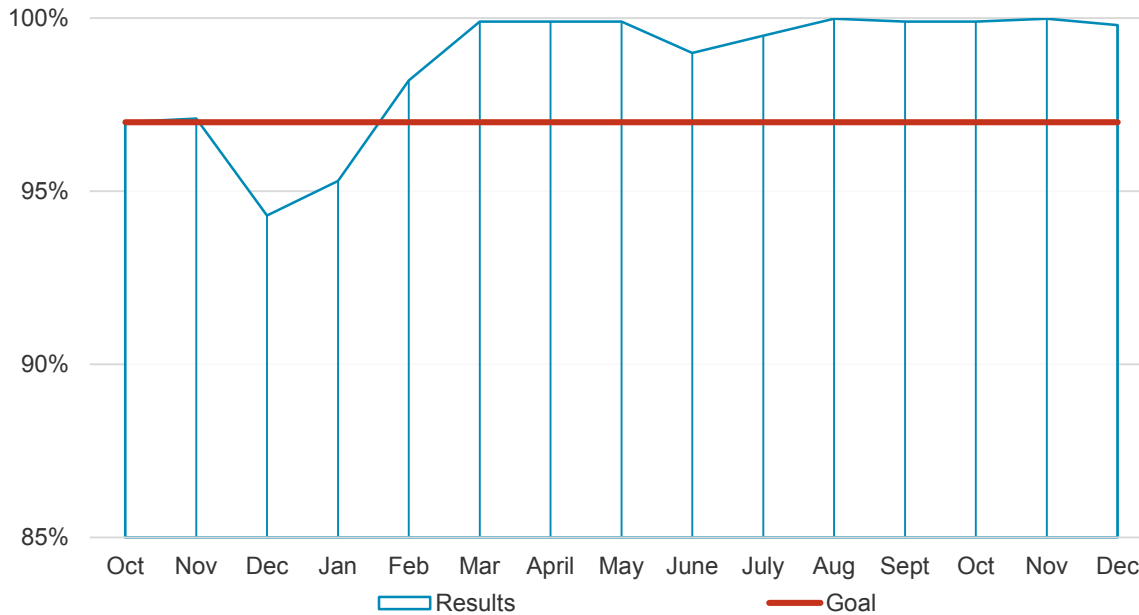
Elevator Availability - Stations



Goal:	98.00%
Actual:	99.33%
Met:	Yes

- 0.25% performance decrease from previous quarter and 0.98% improvement from same quarter last year
- Major Outages:
 - Dublin/Pleasanton station elevator hydraulic pump replacement, out of service 25 hours

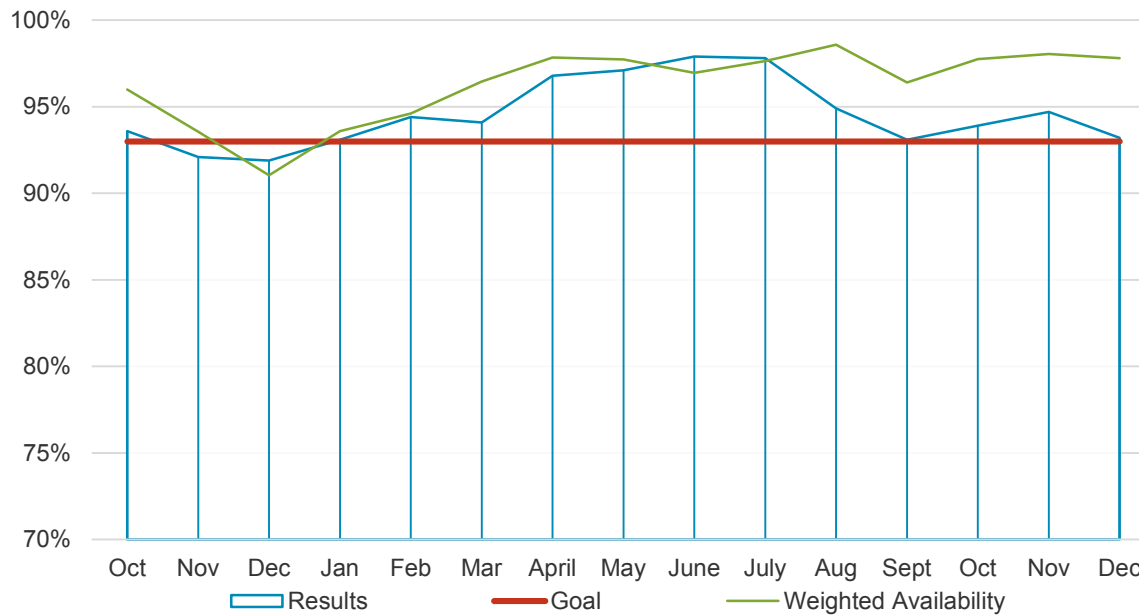
Elevator Availability - Garage



Goal:	97.00%
Actual:	99.90%
Met:	Yes

- 0.1% performance improvement from previous quarter and 3.91% improvement from same quarter last year
- Major Outage:
 - San Bruno elevator planned drive system update, out of service 66 hours

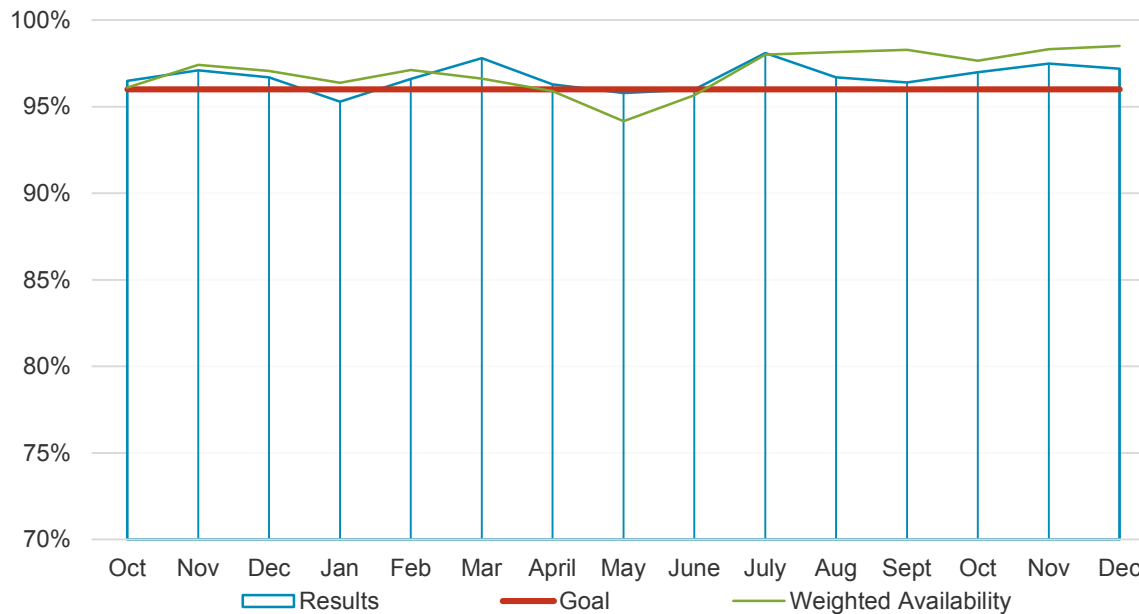
Escalator Availability - Street



Goal:	93.00%
Actual:	93.93%
Met:	Yes

- 1.4% performance decrease from previous quarter and 1.51% improvement from same quarter last year
- Major Outages:
 - Colma garage escalator handrail replacement, out of service 355 hours
 - Civic Center station planned handrail replacement, out of service 228 hours

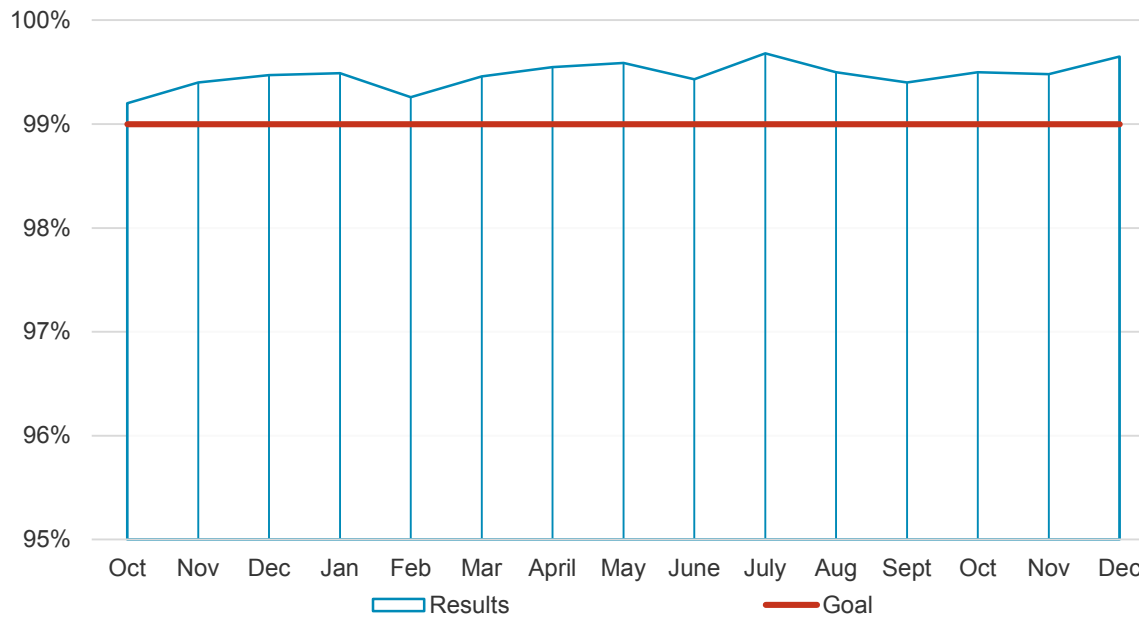
Escalator Availability - Platform



Goal:	96.00%
Actual:	97.23%
Met:	Yes

- 0.17% performance improvement from previous quarter and 0.48% improvement from same quarter last year
- Major Outages:
 - Glen Park station planned step chain replacement, out of service 324 hours
 - Millbrae station repairs to braking system, out of service 184 hours
 - Berryessa station comb impact system repairs, out of service 169 hours

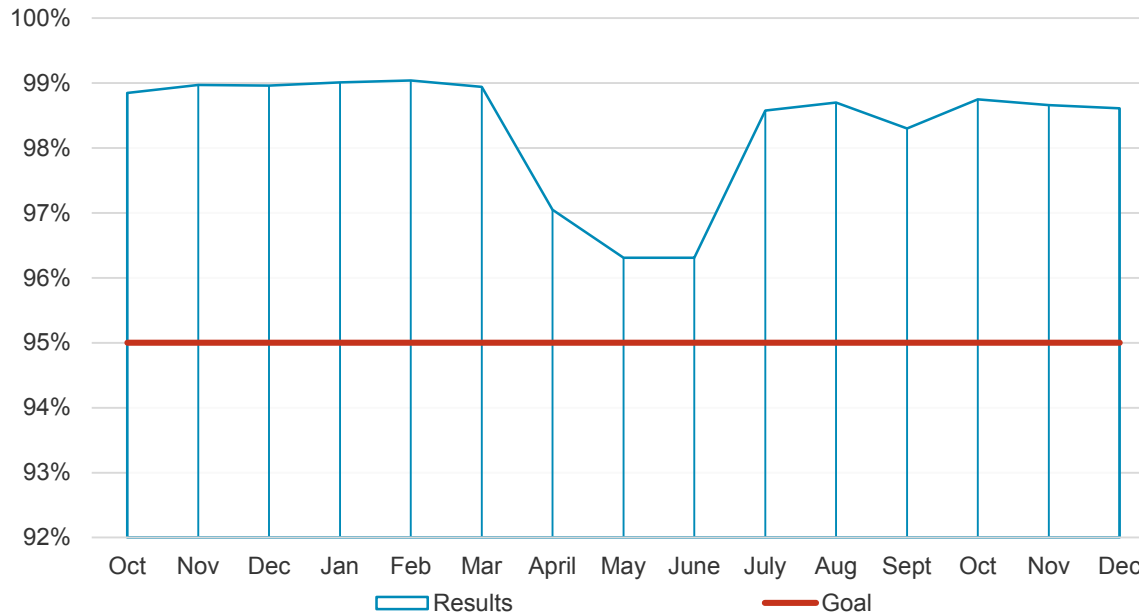
AFC Gate Availability



Goal:	99.00%
Actual:	99.54%
Met:	Yes

- 0.02% performance improvement from previous quarter and 0.19% improvement from same quarter last year
- New Swing Style ADA Fare Gates installed at Richmond, Coliseum, Montgomery and Concord Stations

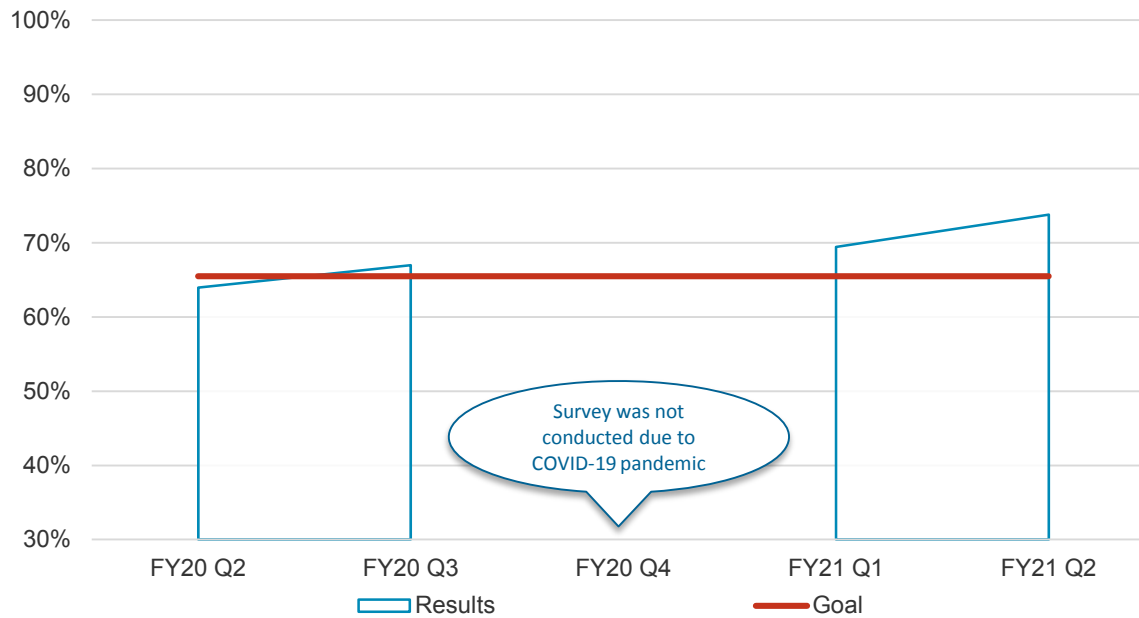
AFC Vendor Availability



Goal:	95.00%
Actual:	98.67%
Met:	Yes

- 0.15% performance improvement from previous quarter and 0.26% decrease from same quarter last year
- Completed District wide Clipper only; eliminated paper tickets

Environment – Outside Stations



Goal:	66.0%
Actual:	73.8%
Met:	Yes

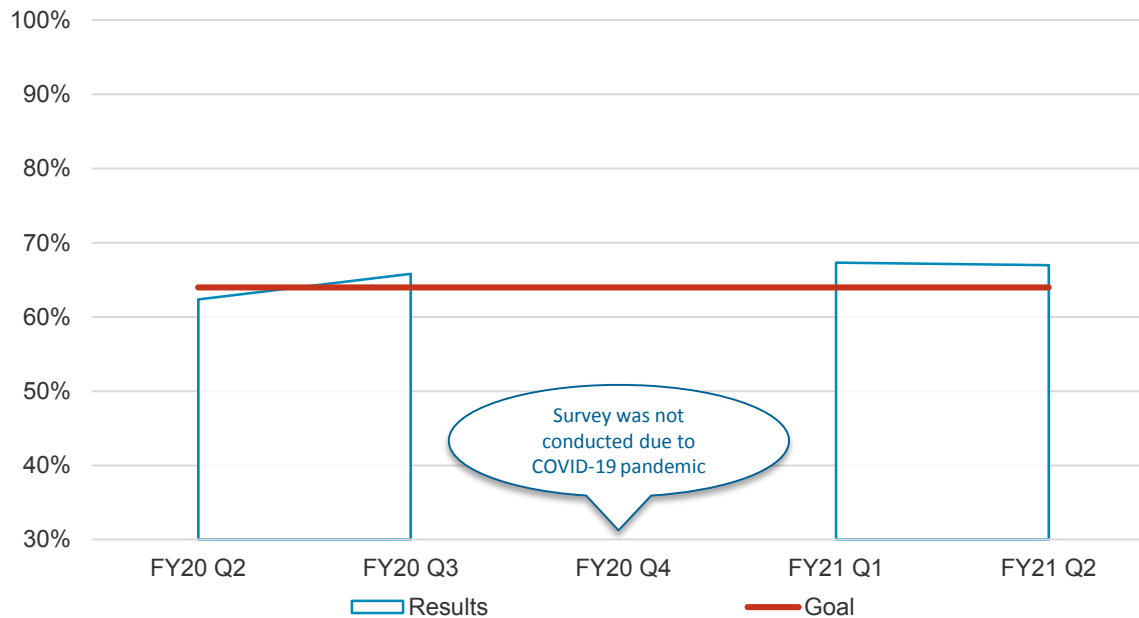
Composite Rating Based on Appearance of:

- **Landscaping Walkways, & Entry Plaza: 72.2%** (Weighted 67%)
- **Parking Lot Cleanliness: 77.2%** ↑ (Weighted 33%)

↑ indicates a statistically significant increase from prior quarter

- 5.73% performance improved from previous quarter and 15.38% improved from same quarter last year

Environment – Inside Stations



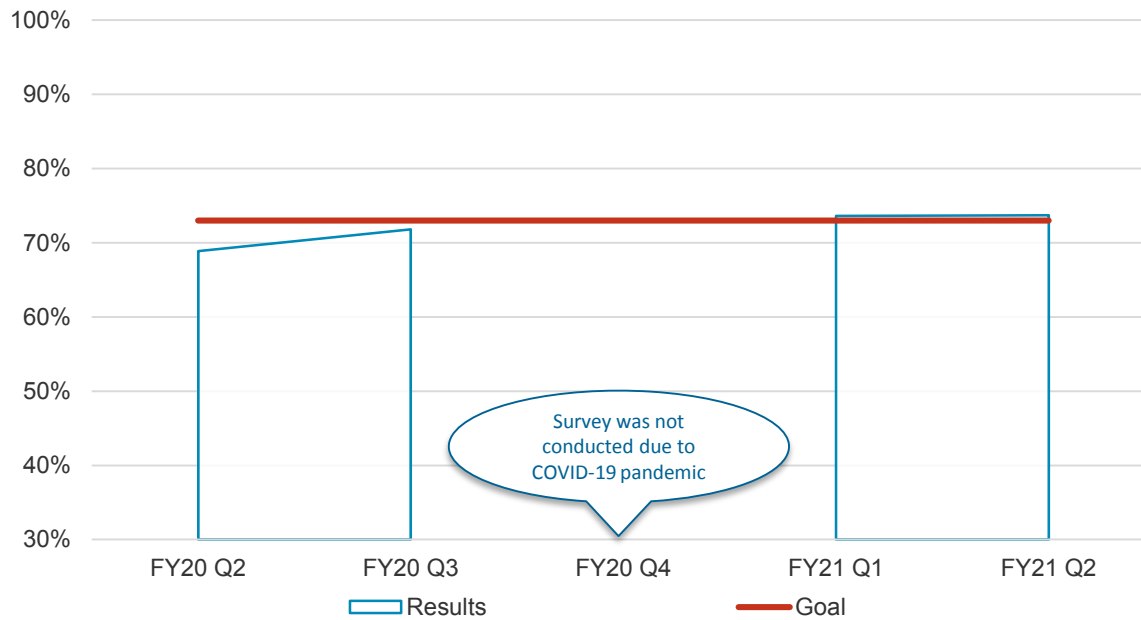
Goal:	64.0%
Actual:	67.0%
Met:	Yes

- Composite Rating Based on Appearance of :
- **Platform: 68.8%** (Weighted 40%)
 - **Concourse: 71.1%** (Weighted 25%)
 - **Escalator: 70.6%** (Weighted 10%)
 - **Stairwells: 64.8%** (Weighted 7.5%)
 - **Elevator: 61.1%** (Weighted 10%)
 - **Restroom: 49.6%** (Weighted 7.5%)

↑Indicates a statistically significant increase from prior quarter

- 0.45% performance decrease from previous quarter and 7.41% improvement from same quarter last year
- Continue to focus on disinfecting wipe down of high touch points in the stations

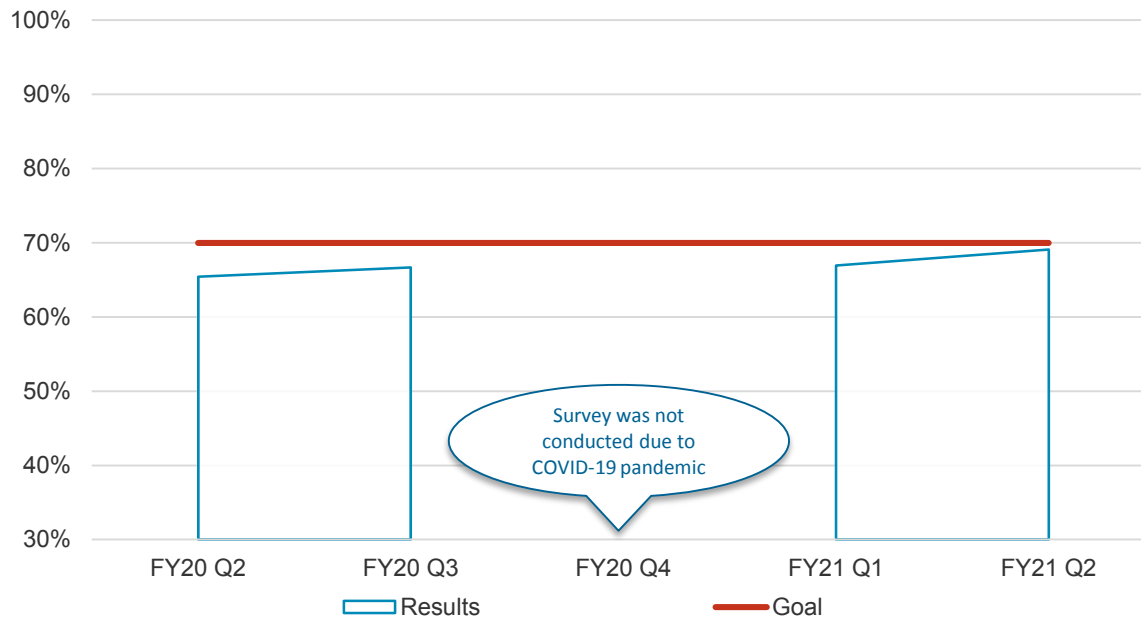
Station Vandalism



Goal:	73.0%
Actual:	73.7%
Met:	Yes

- 0.13% performance improvement from previous quarter and 7.03% improvement from same quarter last year

Train Interior Cleanliness



Goal:	70.0%
Actual:	69.1%
Met:	No

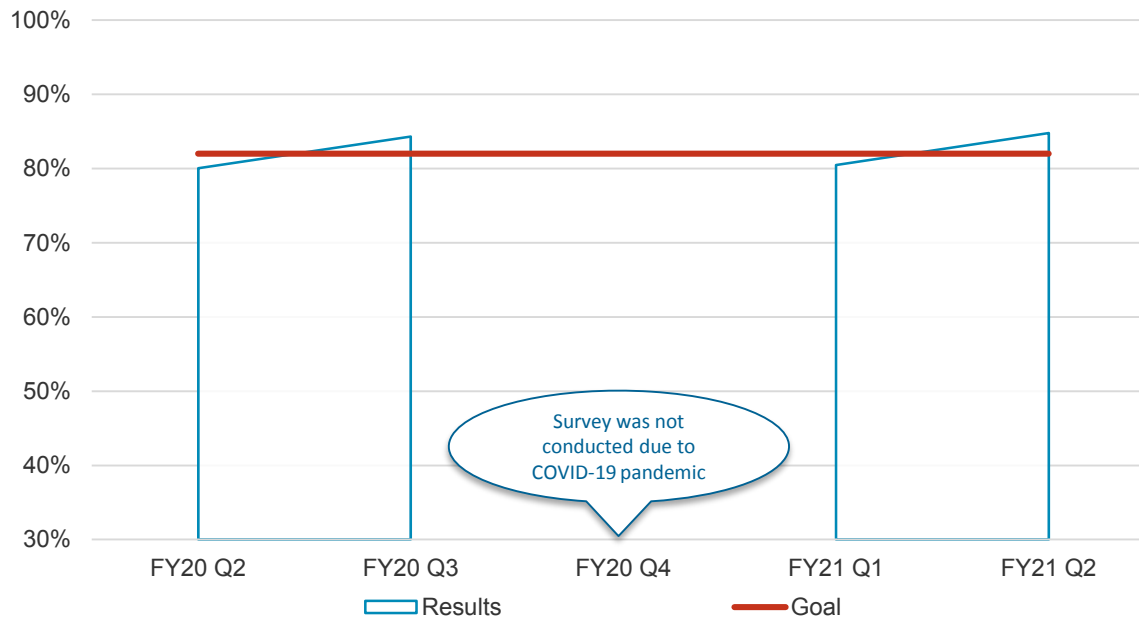
Composite Rating Based on Train Interior:

- **Cleanliness: 62.2%** (Weighted 60%)
- **Kept Free of Graffiti: 82.0%↑** (Weighted 40%)

↑ indicates a statistically significant increase from prior quarter

- 3.60% performance improvement from previous quarter and 5.58% improvement from same quarter last year
- Fleet continues to be electrostatically disinfected nightly
- Increase in Graffiti incidents:
 - Interior 85.71% increase over prior Q1 – FY21
 - Exterior 130.00% increase over prior Q1 – FY21

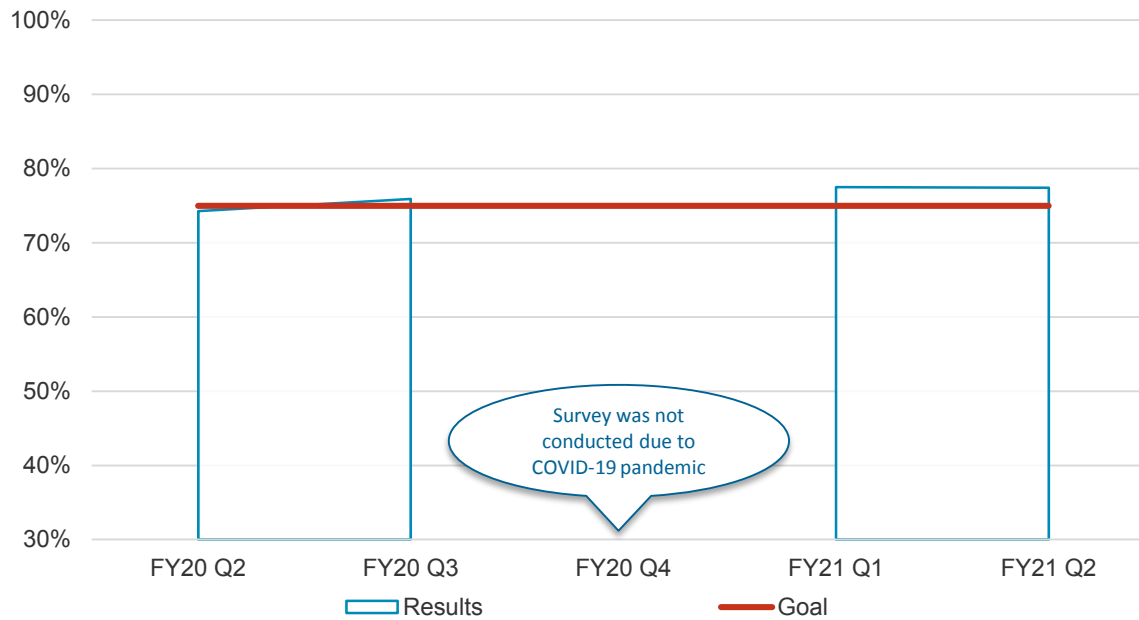
Train Temperature



Goal:	82.0%
Actual:	84.8%
Met:	Yes

- 5.87% performance improvement from previous quarter and 5.94% improvement from same quarter last year
- FOTF HVAC software update released in October - 95% of fleet was updated during the quarter

Customer Service

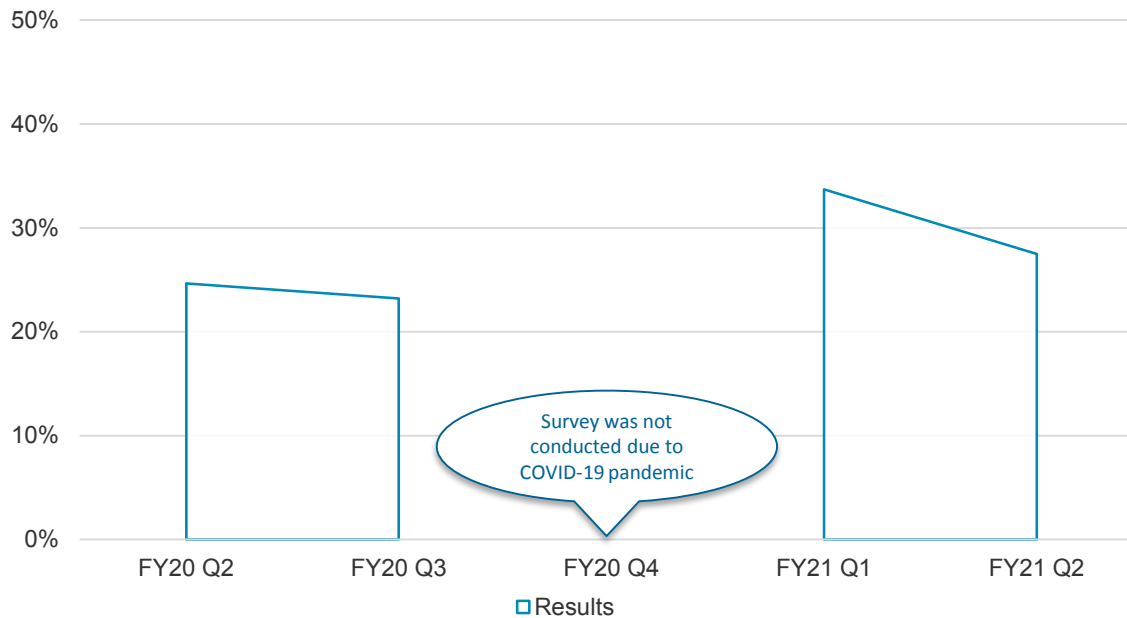


Goal:	75.0%
Actual:	77.4%
Met:	Yes
Average Rating of:	
<ul style="list-style-type: none"> Customer Service Station Agent (if used today): 76.0% Onboard Next Stop, Destination and Transfer Announcements: 79.9% Onboard Delay Announcements (if delayed today): 76.5% 	
↑ indicates a statistically significant increase from prior quarter	

- 0.13% performance decrease from previous quarter and 4.23% improvement from same quarter last year

Homelessness - Passenger Survey

“How well is BART addressing homelessness?”



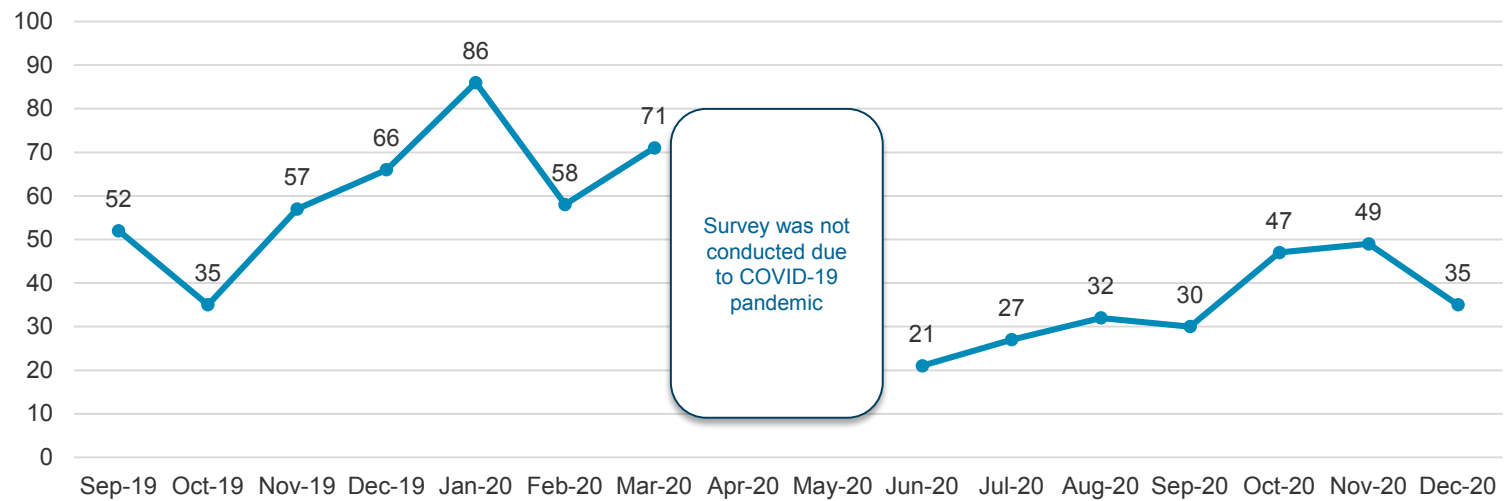
Goal:	N/A
Actual:	27.5%
Met:	N/A

- 18.15% performance decrease from previous quarter and 11.53% improvement from same quarter last year

Transient Counts in San Francisco Stations

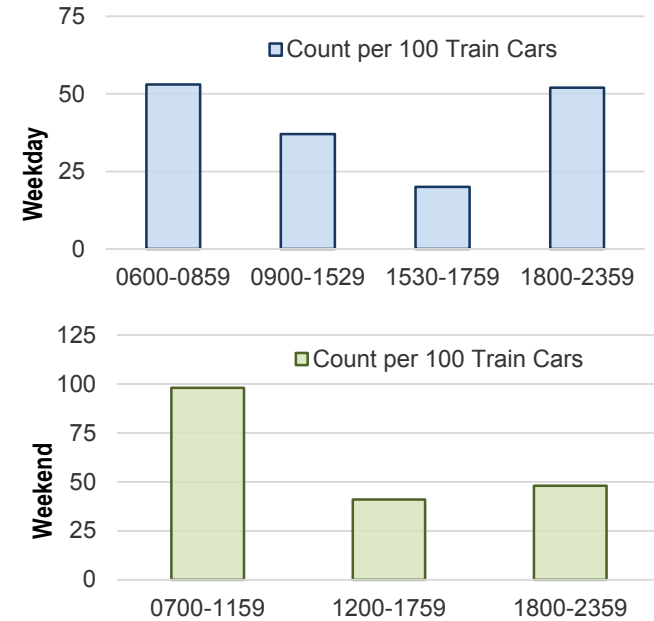
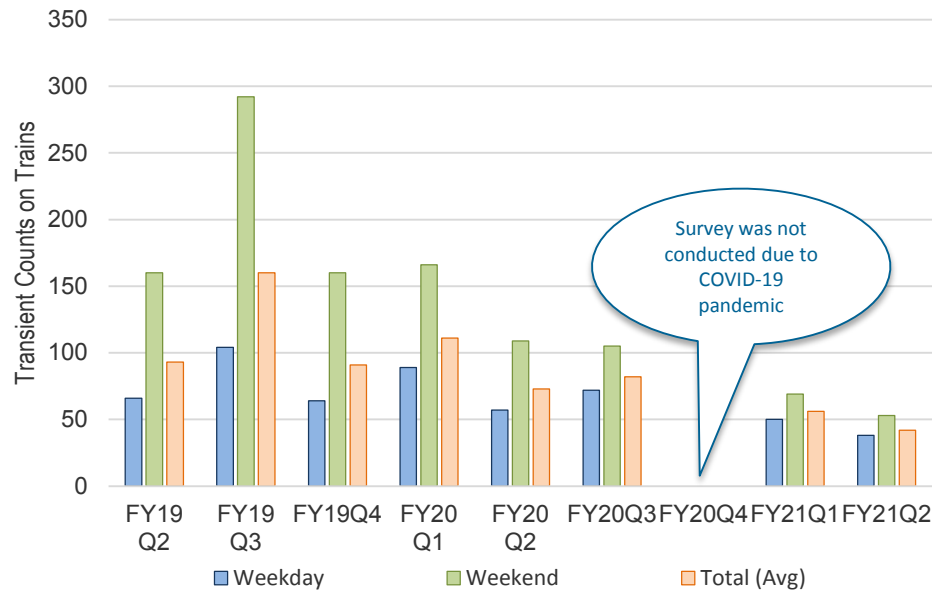


Downtown San Francisco Station Counts September 2019 - December 2020



- 47% increase in count from previous quarter and 17% decrease from same quarter last year

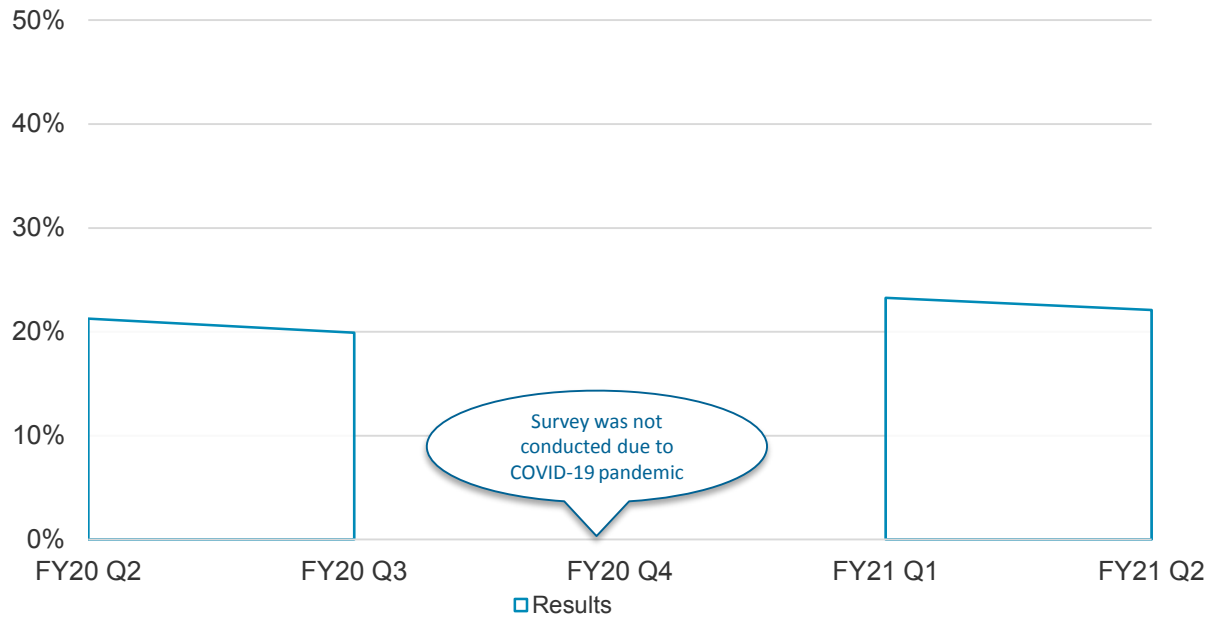
Transient Counts on Trains



- Transient counts on trains remain lower than pre-pandemic levels
- Presence of transients on the trains on the weekends remains higher than on weekdays

Fare Evasion Passenger Survey

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

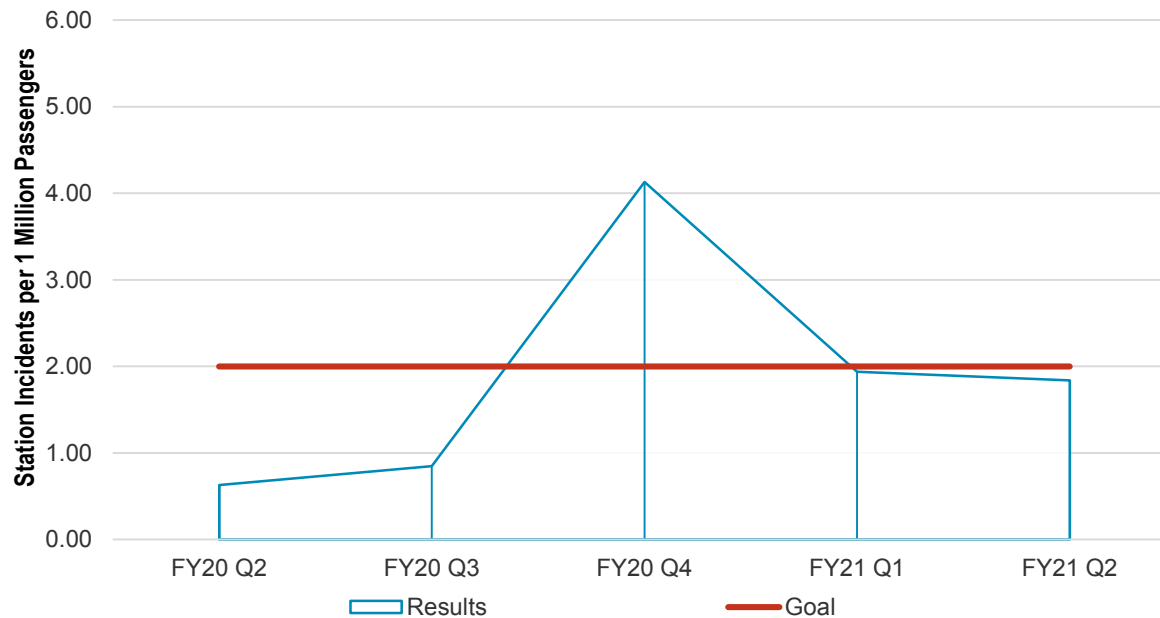


Goal:	N/A
Actual:	22.1%
Met:	N/A

- 5.96% performance decrease from previous quarter and 3.83% improvement from same quarter last year

Patron Safety – Station

Incidents per 1 Million Passengers

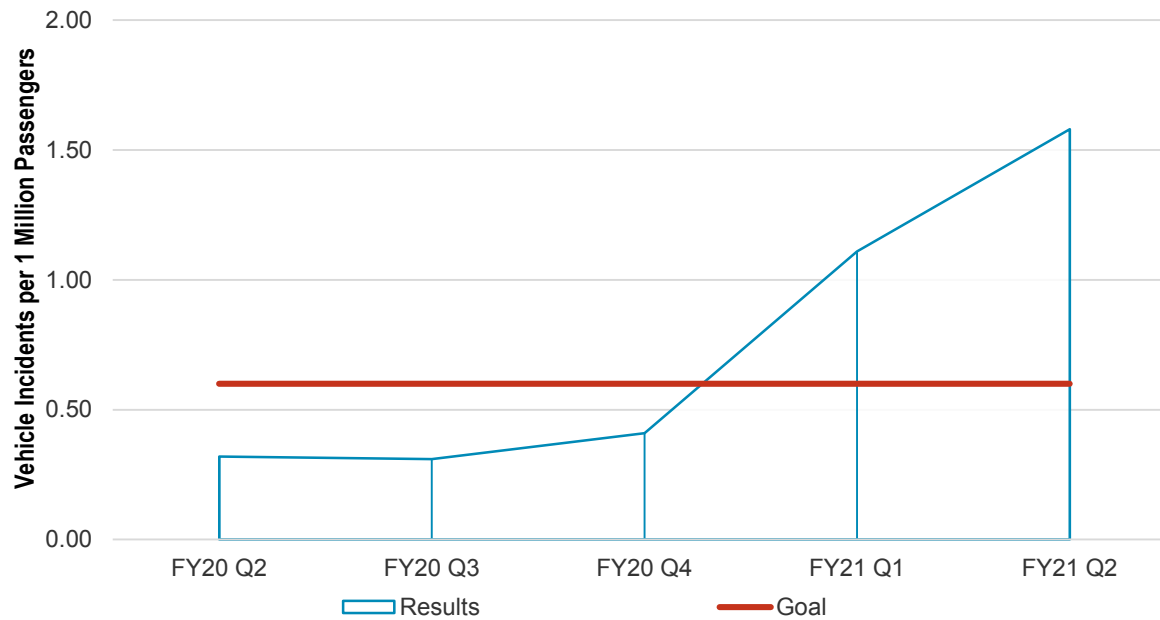


Goal:	2.00
Actual:	1.84
Met:	Yes

- Number of incidents remains unchanged from last quarter (7):
 - Stairs – Ascending – 1
 - Stairs – Descending – 2
 - Escalator – Ascending – 1
 - Escalator – Descending – 1
 - Concourse Level – 1
 - Other – 1

Patron Safety – Vehicle

Incidents per 1 Million Passengers

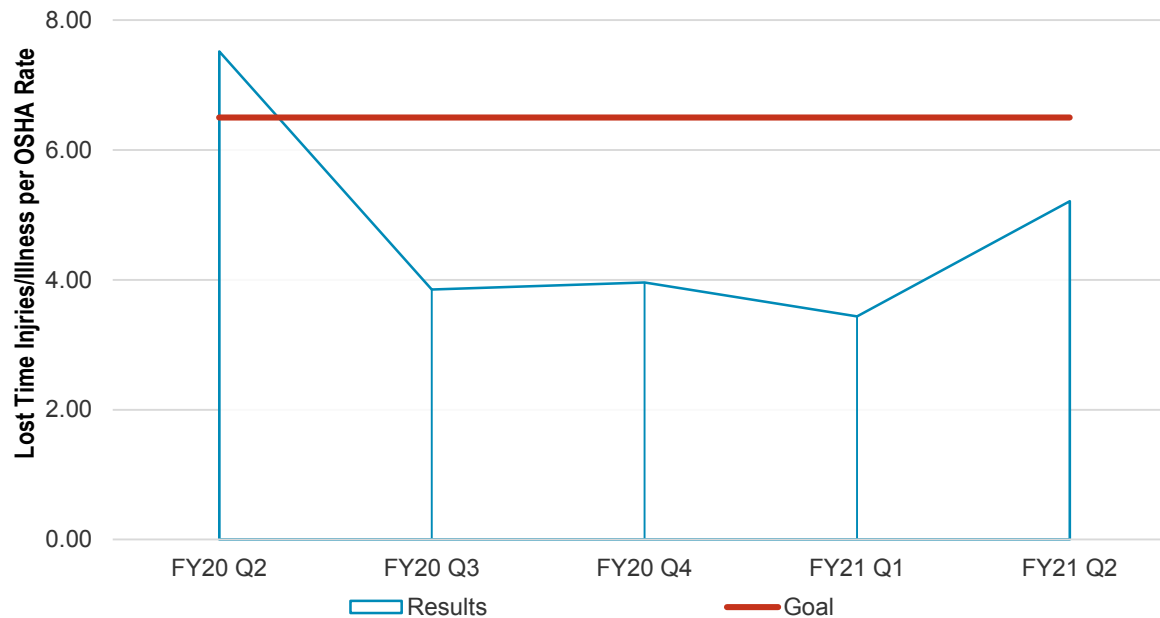


Goal:	0.60
Actual:	1.58
Met:	No

- Six incidents this quarter:
 - On-Board Accident – 1
 - Struck by Door - Alighting - 3
 - Alighting – 1 (Fall)
 - Gap Falls – 1 (Fall)

Employee Safety – Lost Time

Lost Time Injuries per OSHA Rate

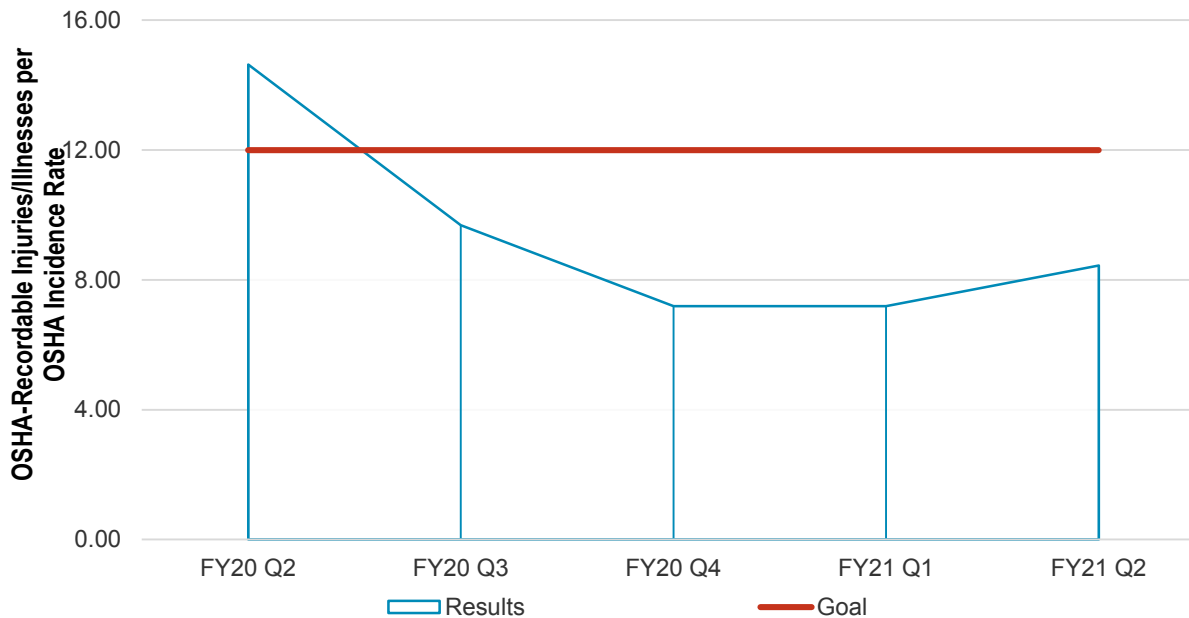


Goal:	6.50
Actual:	5.21
Met:	Yes

- 52% increase in lost time cases over last quarter:
 - Strain injury cases increased from 11 to 16
 - Contusion injury cases increased from 3 to 10
 - Exposure injury cases increased from 0 to 3

Employee Safety – Injury Count

OSHA Recordable Injuries per OSHA Incidence Rate

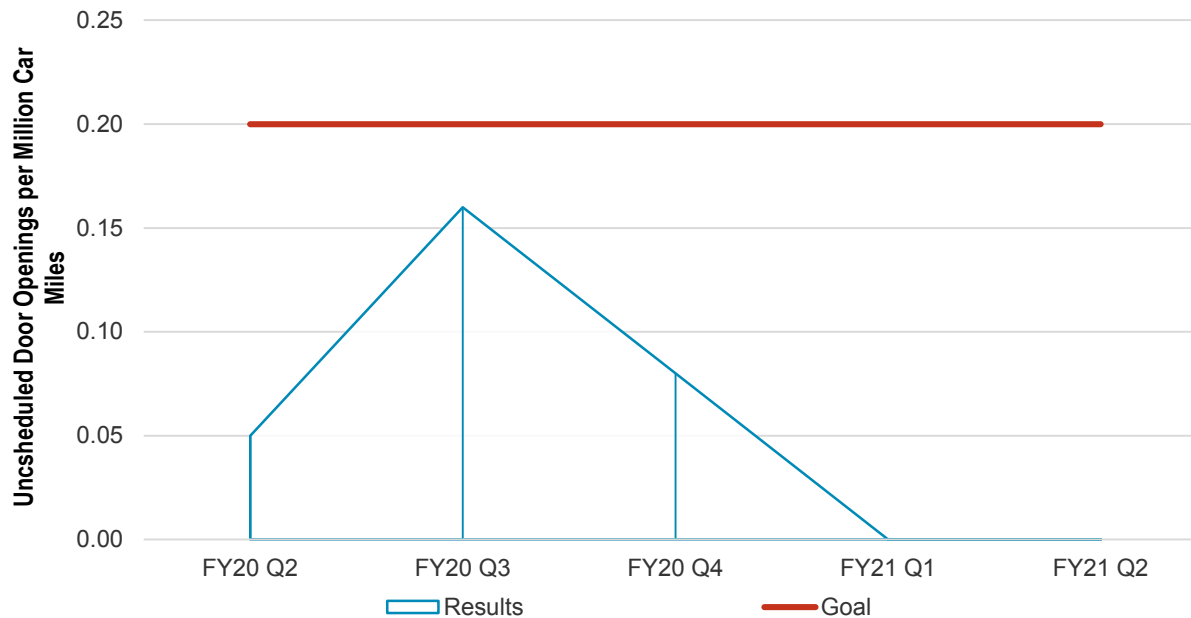


Goal:	12.00
Actual:	8.44
Met:	Yes

- Comparing to last quarter:
 - Strain injuries increased 19%
 - Trauma injuries decreased 23%
 - Contusion injuries increased 22%

Operating Safety – Door Openings

Unscheduled Door Openings per Million Car Miles

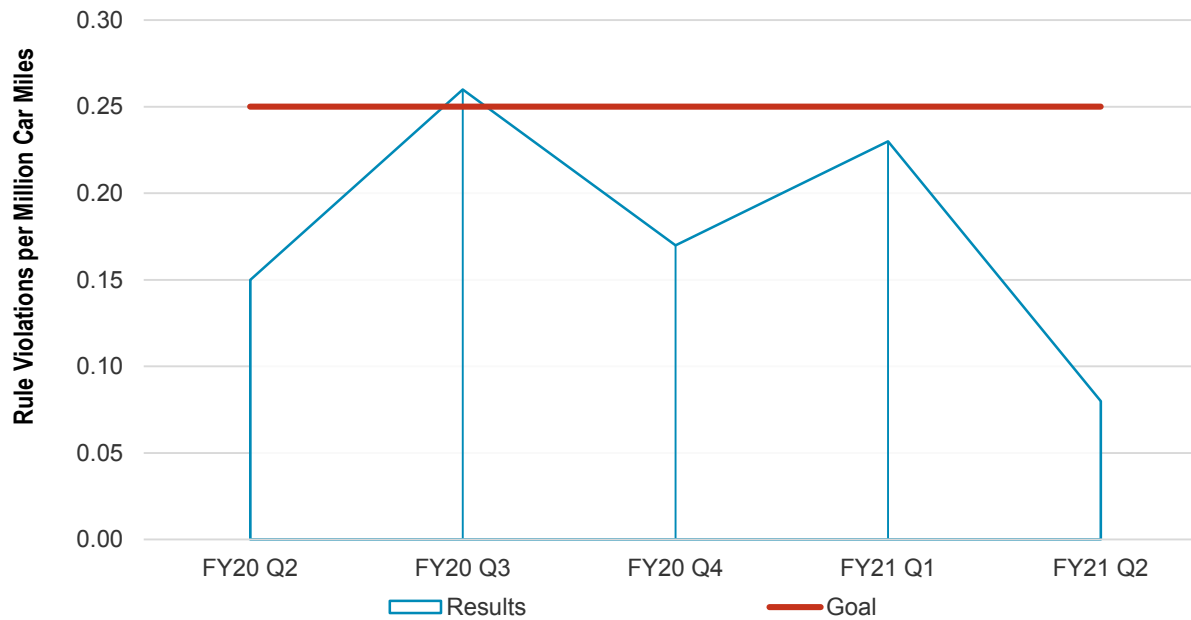


Goal:	0.20
Actual:	0.00
Met:	Yes

- Zero incidents this quarter

Operating Safety – Rule Violations

Rule Violations per Million Car Miles

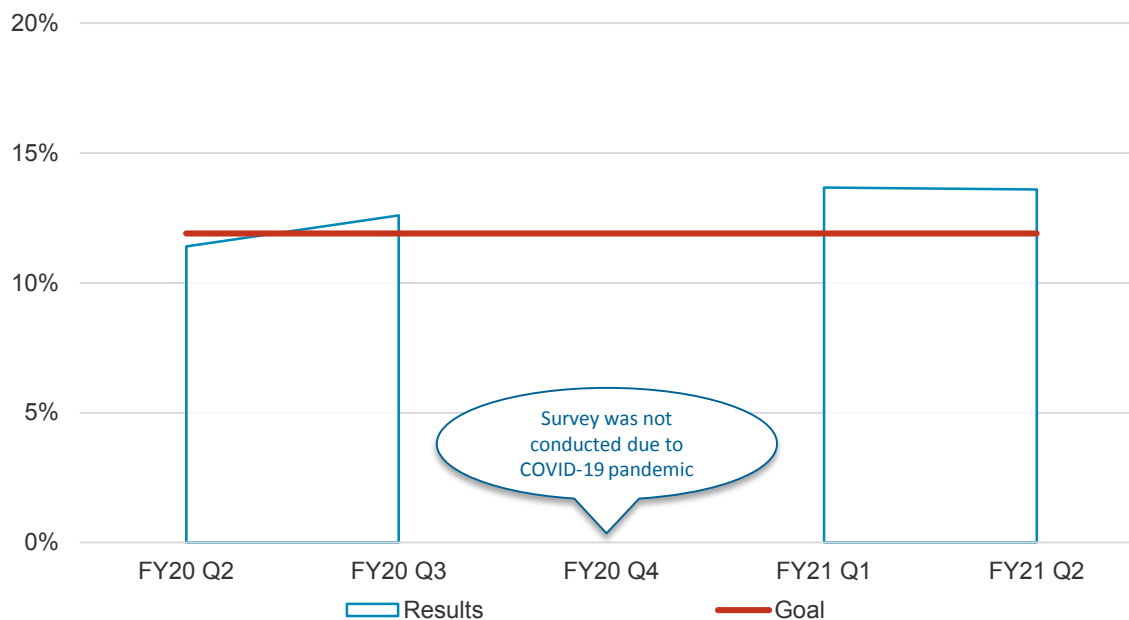


Goal:	0.25
Actual:	0.08
Met:	Yes

- One incident this quarter
 - 12/6/20 – Revenue train signal violation

BART Police Presence

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

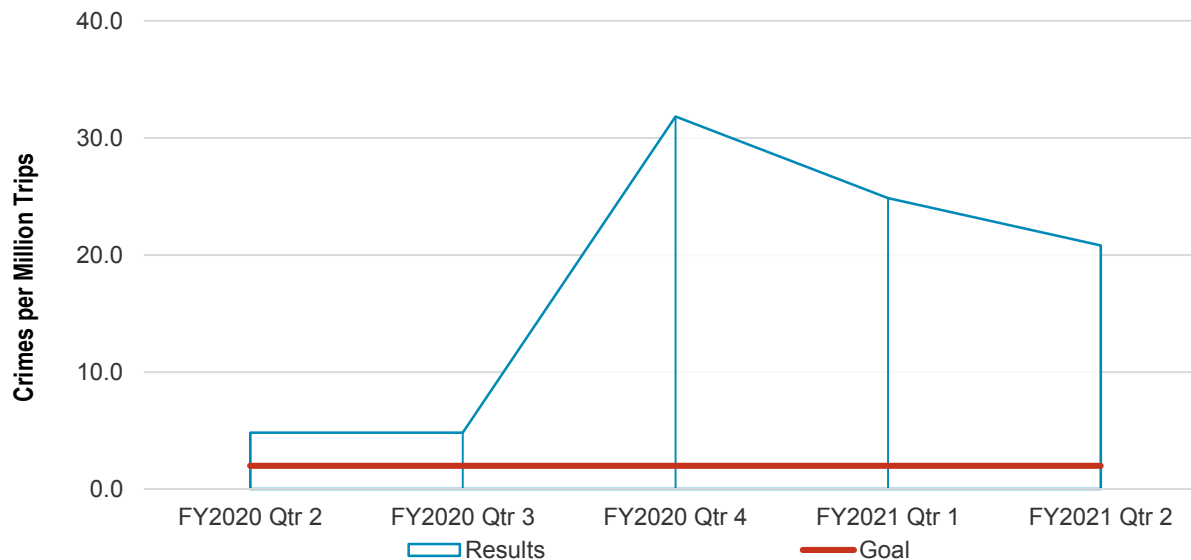


Goal:	12.0%
Actual:	13.6%
Met:	Yes
Average Score of Police Seen For:	
All Time Periods	
<ul style="list-style-type: none"> ▪ On Train ▪ Outside the Station ▪ In the Station 	
and	
After 7PM and Weekends	
<ul style="list-style-type: none"> ▪ On Train ▪ Outside the Station ▪ In the Station 	
↑ indicates a statistically significant increase from prior quarter	

- Add comment

Crimes Against Persons

Crimes per Million Trips

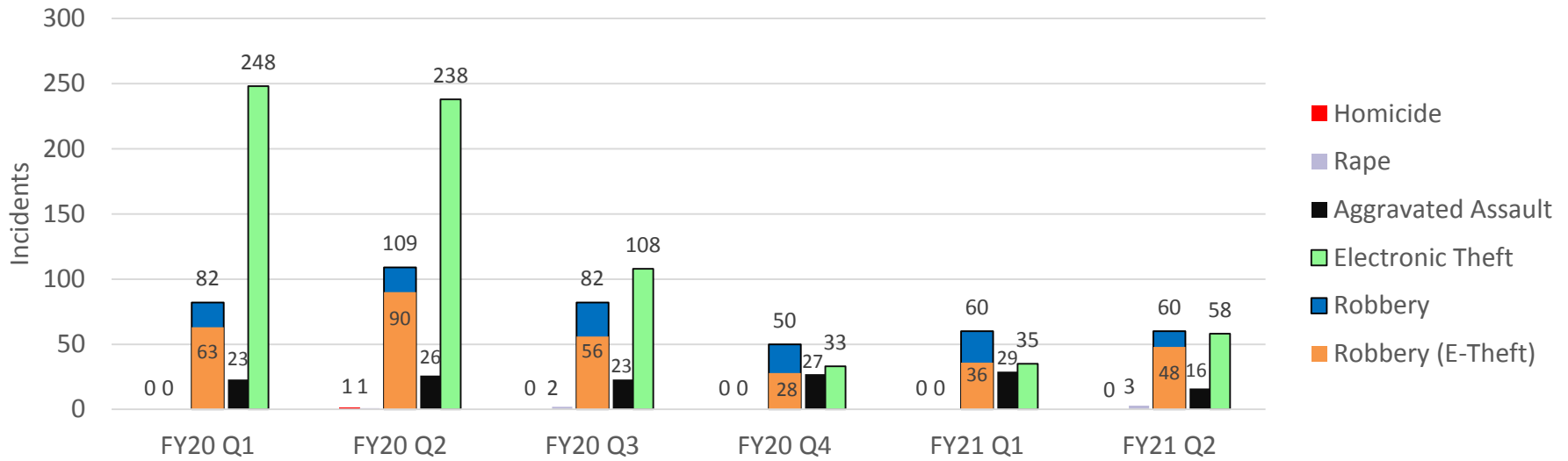


Goal:	2.00
Actual:	20.81
Met:	No
Violations Include:	
<ul style="list-style-type: none"> ▪ Homicides ▪ Rape ▪ Robbery ▪ Aggravated Assault ▪ Electronic Theft 	

- FY20 Q1 - 82 robbery cases reported (63 of 82 cases had electronics taken), 248 thefts from person involving electronic devices
- FY20 Q2 - 109 robbery cases reported (90 of 109 cases had electronics taken), 238 thefts from person involving electronic devices.
- FY20 Q3 - 82 robbery cases reported (56 of 82 cases had electronics taken), 108 thefts from person involving electronic devices.
- FY20 Q4 - 50 robbery cases reported (28 of 50 cases had electronics taken), 33 thefts from person involving electronic devices.
- FY 21 Q1 - 60 robbery cases reported (36 of 60 cases had electronics taken), 36 thefts from person involving electronic devices.
- FY21 Q2 - 60 robbery cases reported (48 of 60 cases had electronics taken), 58 thefts from person involving electronic devices.

Crimes Against Persons

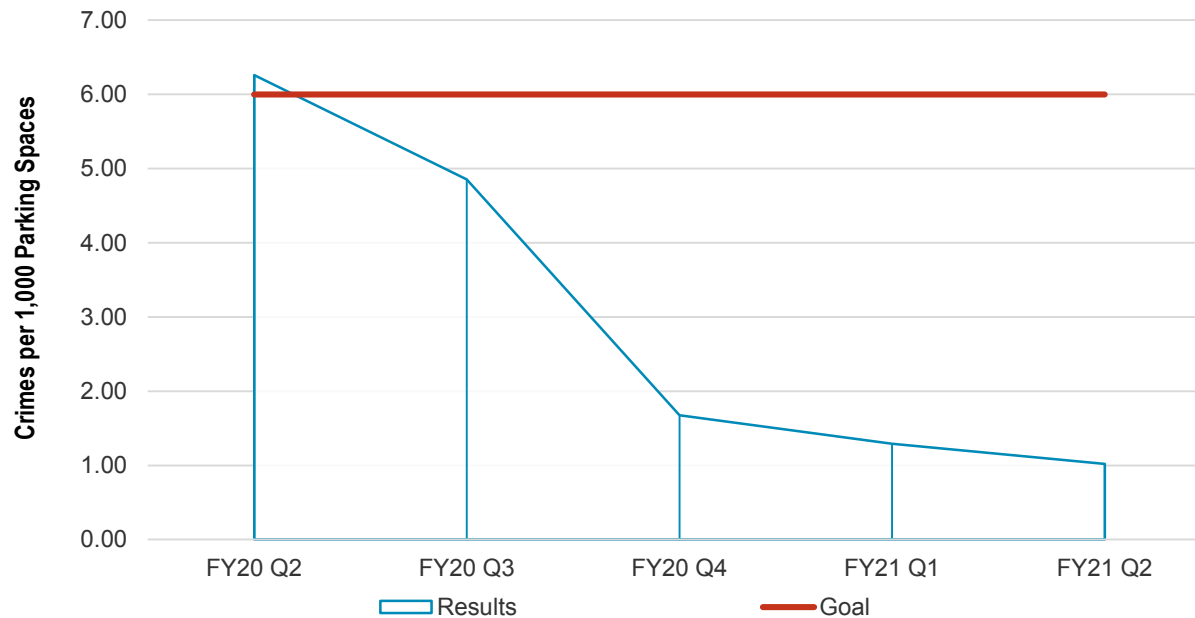
Crimes Detail by Category



Category	FY20 Q1	FY20 Q2	FY20 Q3	FY20 Q4	FY21 Q1	FY21 Q2
Homicide	0	1	0	0	0	0
Rape	0	1	2	0	0	3
Robbery (E-Theft)	82 (63)	109 (90)	82 (56)	50 (28)	60 (36)	60 (48)
Aggravated Assault	23	26	23	27	29	16
Electronic Theft	248	238	108	33	35	58

Auto Burglary

Crimes per 1,000 Parking Spaces

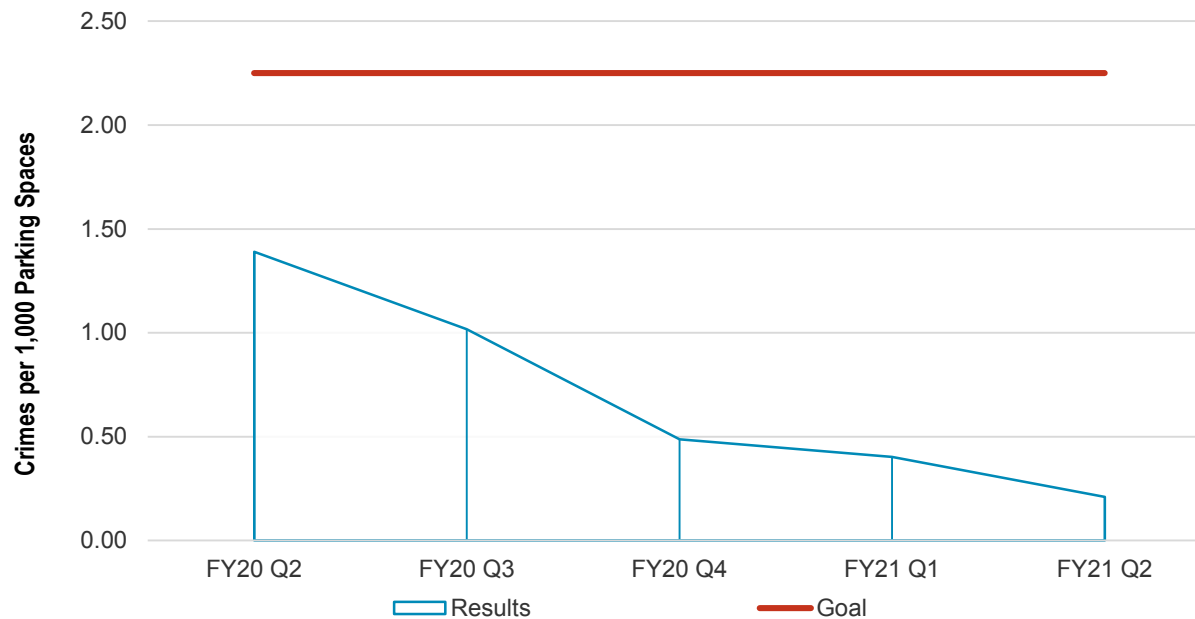


Goal:	6.00
Actual:	1.02
Met:	Yes

- Total of 48 vehicle break-in reported in FY 21 Q2; A decrease of 21% from previous quarter
- Estimate one vehicle break in per 1,000 parking spaces during this quarter
- BPD personnel continue to proactively monitor district parking lots and structures for suspicious activity

Auto Theft

Crimes per 1,000 Parking Spaces

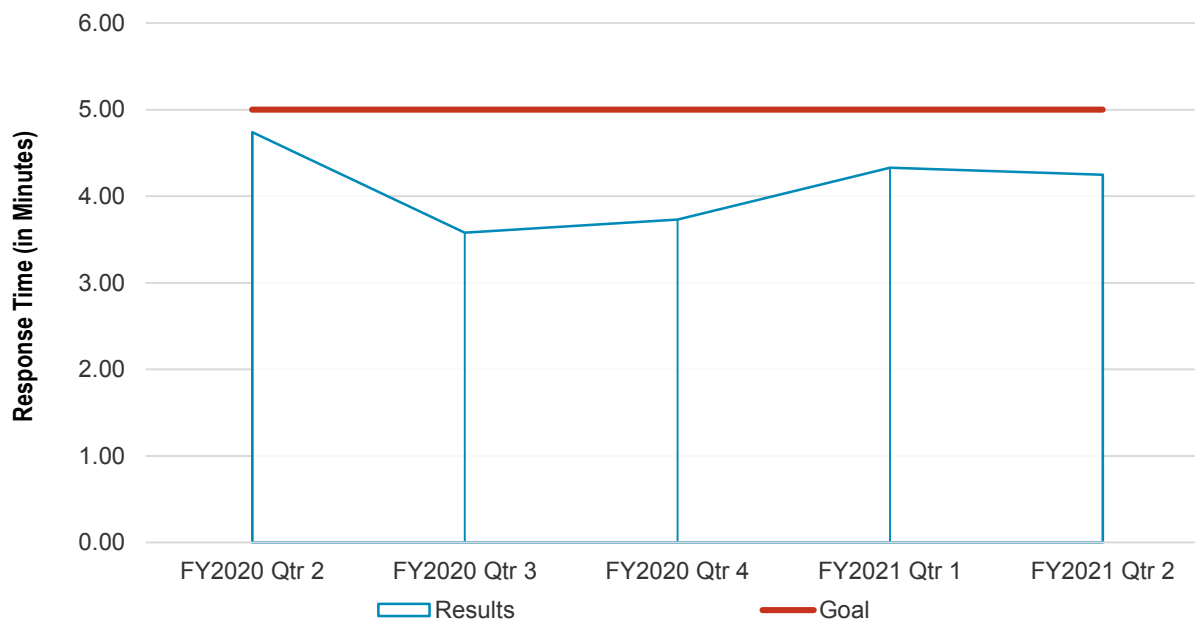


Goal:	2.25
Actual:	0.21
Met:	Yes

- 10 vehicle thefts were reported in FY21 Q2, down 47% from previous quarter
- Estimates about one vehicle theft per 5,000 parking spaces during this quarter
- BPD personnel continue to proactively monitor district parking lots and structures for suspicious activity

Average Emergency Response Time

Response Time (in Minutes)

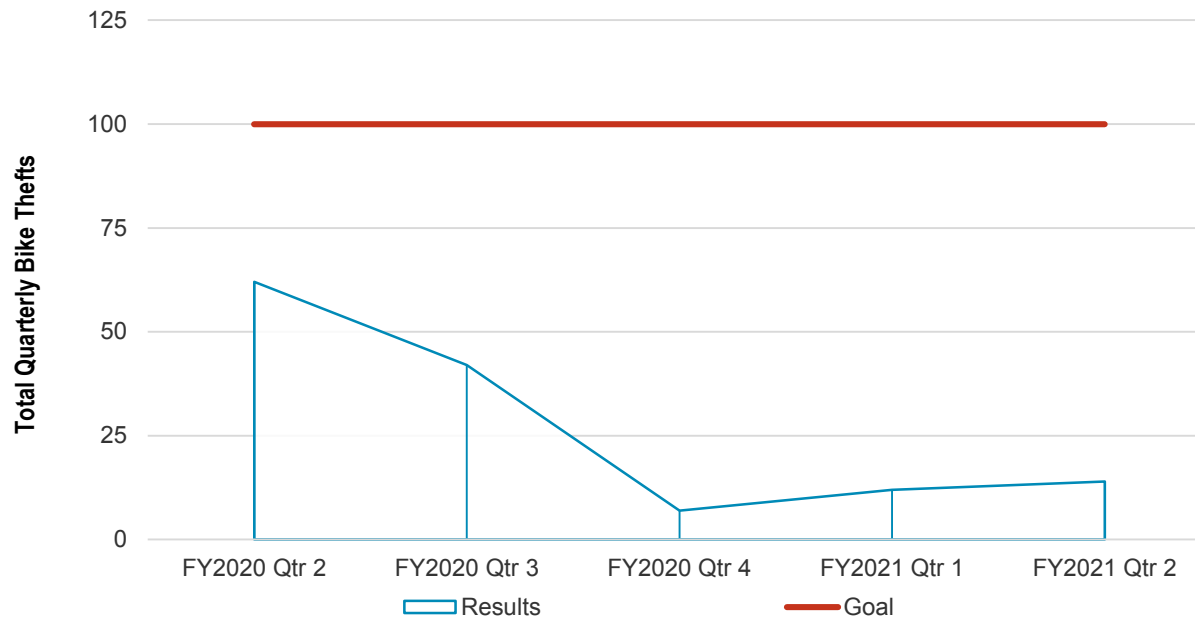


Goal:	5.00
Actual:	4.25
Met:	Yes

- Average emergency response times improved slightly at San Francisco stations, 4 minutes and 8 seconds
- Increase of 13% of police service calls at San Francisco stations during FY21 Q2 compared to the previous quarter
- Overall, the districtwide emergency response time averaged at 4 minutes and 15 seconds this quarter

Bike Theft

Count of Bike Thefts



Goal:	100
Actual:	14
Met:	Yes

- 14 bike thefts reported during this quarter, up two thefts from previous quarter