



Quarterly Service Performance Review 3rd Quarter, FY21

January – March 2021

Engineering & Operations Committee

May 27, 2021

SUMMARY CHART 3rd QUARTER FY 2021

PERFORMANCE INDICATORS	CURRENT QUARTER			PRIOR QTR ACTUALS LAST QUARTER	THIS QTR LAST YEAR		YEAR TO DATE		
	ACTUAL	STANDARD	STATUS		ACTUAL	STANDARD	STATUS		
								ACTUAL	STANDARD
Average Ridership - Weekday	47,698	112,573	NOT MET	50,436	314,816	48,486	106,631	NOT MET	
Service Delivery									
Peak Customers on Time	94.57%	94.00%	MET	95.33%	92.69%	95.19%	94.00%	MET	
Daily Customers on Time	94.59%	94.00%	MET	94.42%	93.96%	94.67%	94.00%	MET	
Daily Train on Time	91.69%	91.00%	MET	91.74%	89.01%	91.69%	91.0%	MET	
<i>On-Time Connections (e-Line to BART)</i>	98.91%	98.50%	MET	98.81%	97.56%	98.97%	98.50%	MET	
AM Peak Period Transbay Car Throughput	99.07%	97.50%	MET	99.19%	96.07%	98.45%	97.50%	MET	
PM Peak Period Transbay Car Throughput	98.90%	97.50%	MET	99.22%	95.66%	98.47%	97.50%	MET	
Equipment									
Car Availability at 4 AM (0400)	566	519	MET	559	667	543	511	MET	
Vehicle Mean Time Between Service Delays	4,204	4,650	NOT MET	3,441	5,477	4,356	4,650	NOT MET	
<i>Train Mean Distance Between Failures (miles) (e-Line)</i>	15,792	14,000	MET	63,164	36,838	38,224	14,000	MET	
Elevators in Service (Station)	98.83%	98.00%	MET	99.33%	99.00%	99.25%	98.00%	MET	
Elevators in Service (Garage)	99.96%	97.00%	MET	99.90%	97.80%	99.88%	97.00%	MET	
Escalators in Service (Street)	93.73%	93.00%	MET	93.93%	93.87%	94.31%	93.00%	MET	
Escalators in Service (Platform)	96.12%	96.00%	MET	97.23%	96.57%	96.81%	96.00%	MET	
Automatic Fare Collection (Gates)	99.54%	99.00%	MET	99.54%	99.40%	99.54%	99.00%	MET	
Automatic Fare Collection (Vendors)	98.65%	95.00%	MET	98.67%	99.00%	98.62%	95.00%	MET	
Wayside Train Control System	0.65	1.00	MET	0.98	0.93	0.82	1.00	MET	
Computer Control System	0.12	0.08	NOT MET	0.150	0.117	0.241	0.08	NOT MET	
Traction Power	0.50	0.20	NOT MET	0.13	0.36	0.23	0.20	NOT MET	
Track	0.01	0.30	MET	0.01	0.18	0.06	0.30	MET	
Transportation	0.36	0.50	MET	0.38	0.52	0.37	0.50	MET	
Customer Complaints and Rating									
Complaints per 100,000 Passenger Trips	24.29	5.07	NOT MET	22.41	12.26	25.43	5.07	NOT MET	
Complaints per 100,000 Passenger Trips (e-Line)	8.19	7.00	NOT MET	2.08	7.55	9.04	7.00	NOT MET	
Environment Outside Stations	71.8%	65.5%	MET	73.8%	67.0%	71.7%	66.0%	MET	
Environment Inside Stations	71.8%	64.0%	MET	67.0%	65.8%	68.7%	64.0%	MET	
Station Vandalism	74.4%	73.0%	MET	73.7%	71.8%	73.9%	73.0%	MET	
Train Interior Cleanliness	67.7%	70.0%	NOT MET	69.1%	66.7%	67.6%	70.0%	NOT MET	
Train Temperature	86.3%	82.0%	MET	84.8%	84.3%	83.9%	82.0%	MET	
Customer Service	78.8%	75.0%	MET	77.4%	75.9%	77.9%	75.0%	MET	
Homelessness	30.1%	N/A	N/A	27.5%	23.2%	30.4%	N/A	N/A	
Fare Evasion	20.0%	N/A	N/A	22.1%	19.9%	21.8%	N/A	N/A	
Safety									
Station Incidents/Million Patrons	2.22	2.00	NOT MET	1.84	0.85	2.00	2.00	NOT MET	
Vehicle Incidents/Million Patrons	1.39	0.60	NOT MET	1.58	0.31	1.36	0.60	NOT MET	
Lost Time Injuries/Innnesses/Per OSHA	5.42	6.50	MET	5.21	3.85	4.69	6.50	MET	
OSHA-Recordable Injuries/Innnesses/Per OSHA	8.54	12.00	MET	8.44	9.69	8.06	12.00	MET	
Unscheduled Door Openings/Million Car Miles	0.160	0.200	MET	0.000	0.160	0.053	0.200	MET	
Rule Violations Summary/Million Car Miles	0.240	0.250	MET	0.080	0.260	0.130	0.250	MET	
Police									
BART Police Presence	13.4%	12.0%	MET	13.6%	12.6%	13.6%	12.0%	MET	
Quality of Life per million riders	434.98	N/A	N/A	348.95	73.62	422.47	N/A	N/A	
Crimes Against Persons per million riders	14.60	2.00	NOT MET	20.81	4.82	20.09	2.00	NOT MET	
Auto Burglaries per 1,000 parking spaces	1.08	6.00	MET	1.02	4.85	1.27	6.00	MET	
Auto Thefts per 1,000 parking spaces	0.28	2.25	MET	0.21	1.02	0.34	2.25	MET	
Police Response Time per Emergency Incident (Minutes)	3.37	5.00	MET	4.25	3.58	4.25	5.00	MET	
Bike Thefts (Quarterly Total and YTD Quarterly Average)	21	100.00	MET	14	42	16	100.00	MET	

LEGEND: *e-Line Performance*

Goal Met

Goal Unmet by < 5%

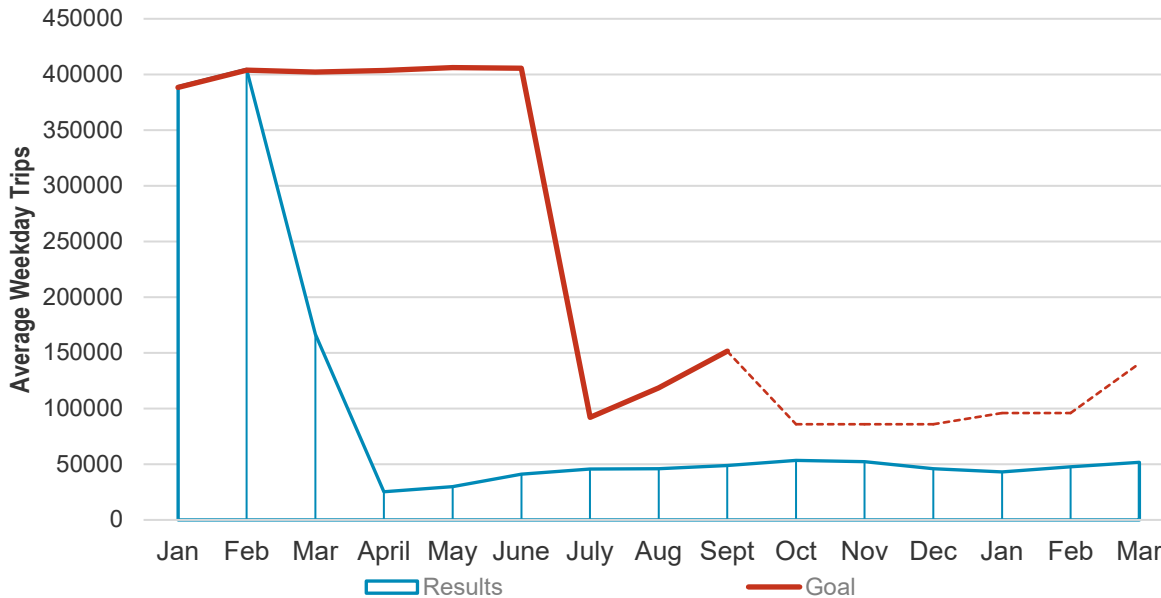
Goal Unmet by > 5%

FY21 Second Quarter Overview



- **Average Weekday Ridership** of 47,698 **decreased** by 5.4% from prior quarter and by 84.8% from prior year; **Average peak ridership** was down 4.9% from prior quarter and 87.1% from prior year; **Saturday and Sunday ridership** are down 4.0% and 4.2% from prior quarter, and 77.7% and 74.7% from prior year, respectively.
- **Customers on time performance** **increased** to 94.6% and **met goal**.
- **ROW Equipment Reliability:** Wayside Train Control and Track **met goal**; Traction Power, Computer Systems and Rail Cars 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 Customer Complaints rate** **increased** to 24.3 per 100,000 passenger trips, showing 8.4% increase.

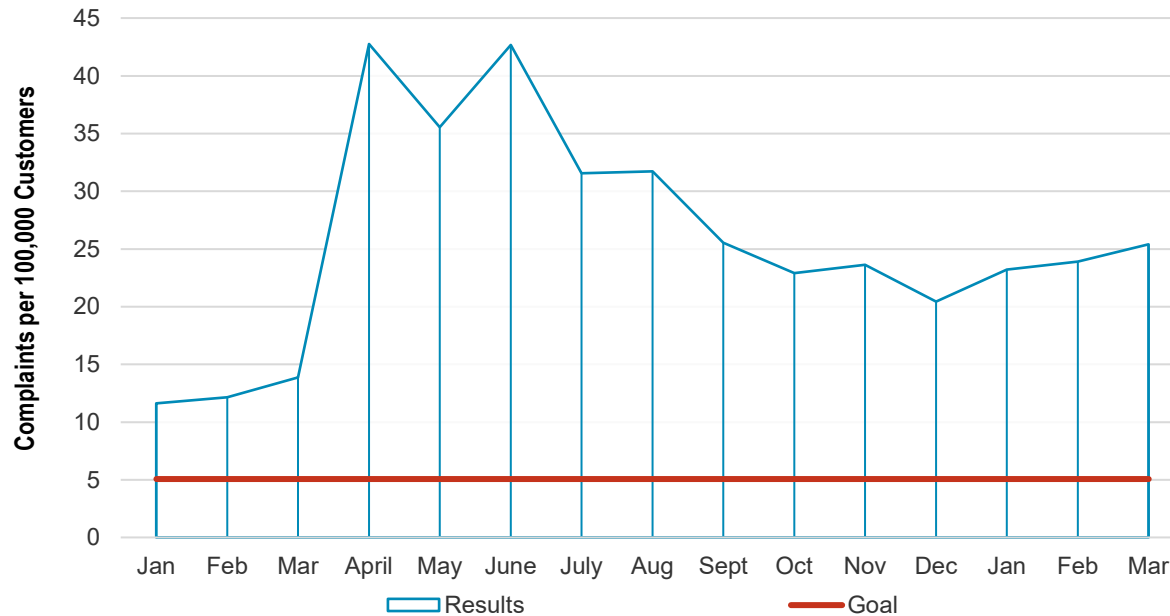
Customer Ridership - Weekday Trips



Goal:	112,573
Actual:	47,698
Met:	No

- Total ridership has decreased by 84.1% compared to the same quarter last year
- Average weekday ridership (47,698) was down by 5.4% from the prior quarter
- Average peak ridership was down by 4.9% compared to the prior quarter
- Saturday and Sunday ridership was down by 4.0% and 4.2% respectively from the prior quarter

Customer Complaints

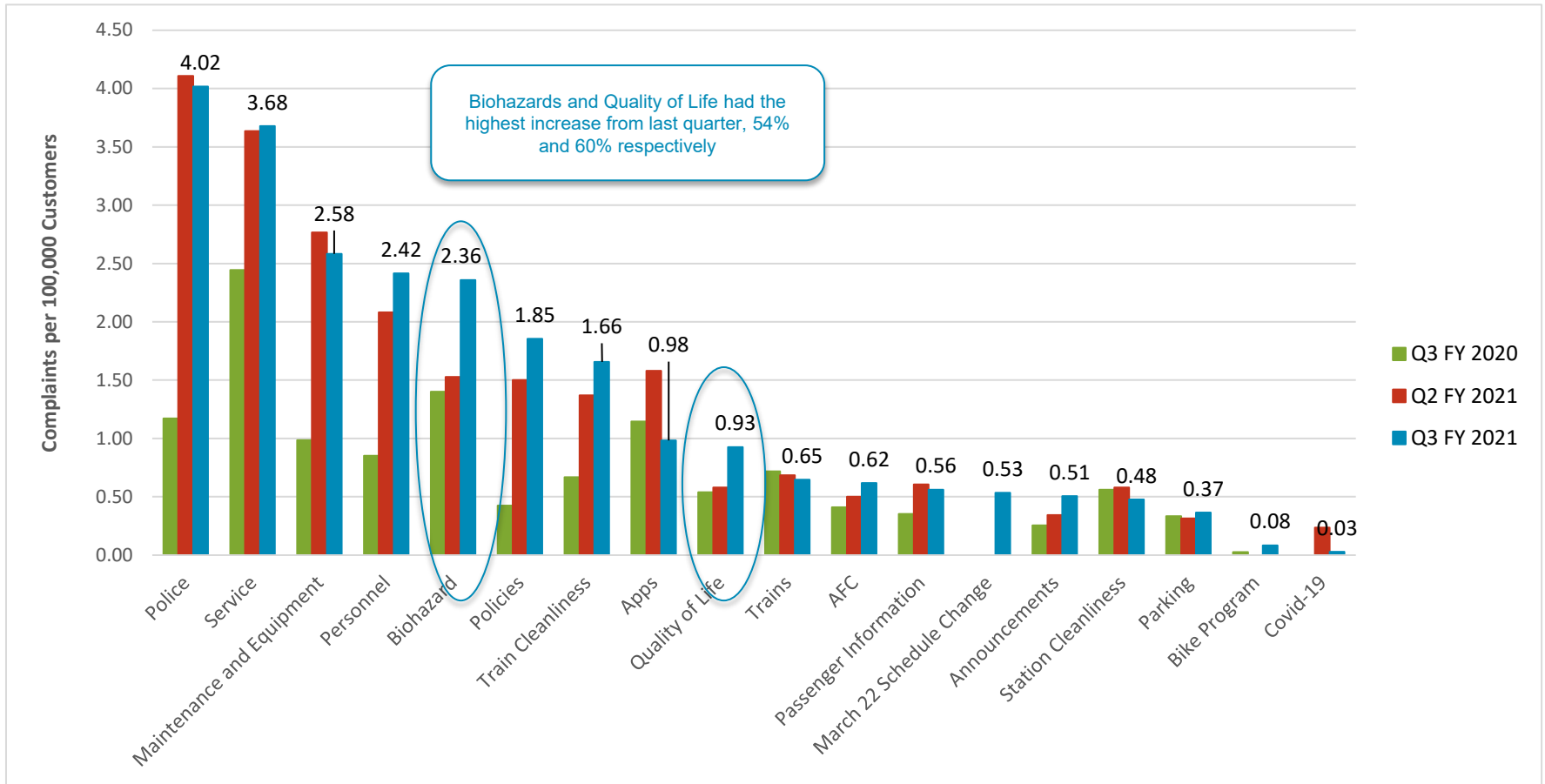


Goal:	5.07
Actual:	24.29
Met:	No

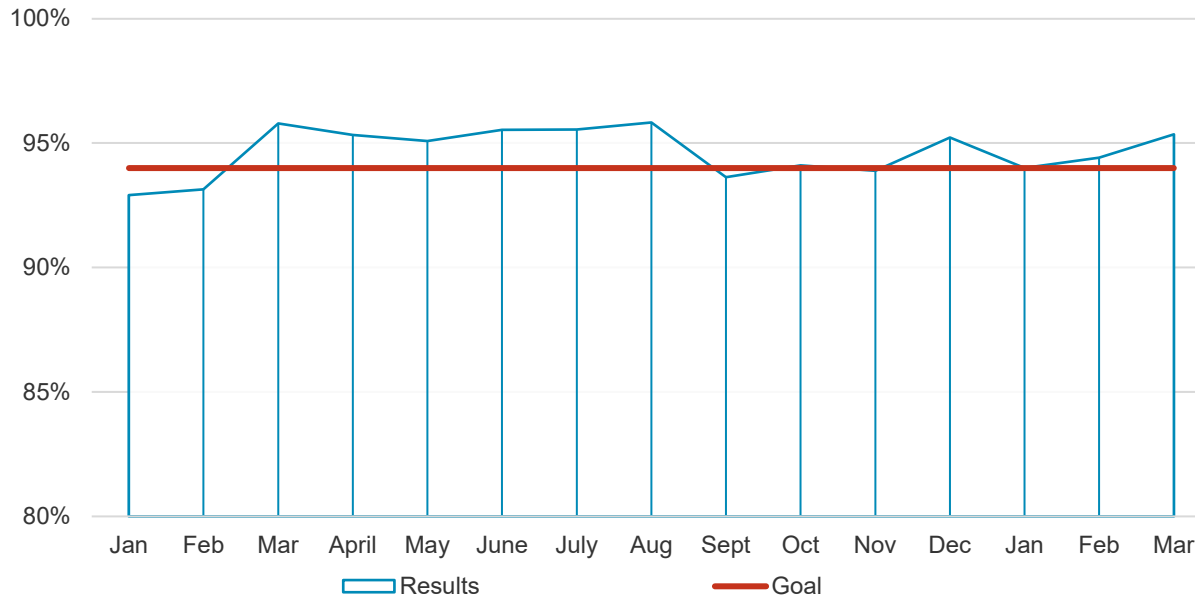
- 8.4% increase from previous quarter
- Biohazards and Quality of Life had the highest increase from previous quarter, 54% and 60% respectively
- Police (Lack of face mask enforcement), Policies (Blocking off front seats and restroom access), and Personnel complaints had the highest increase from the same quarter last year

Customer Complaints

Complaints Detail by Category



On-Time Service - Customer

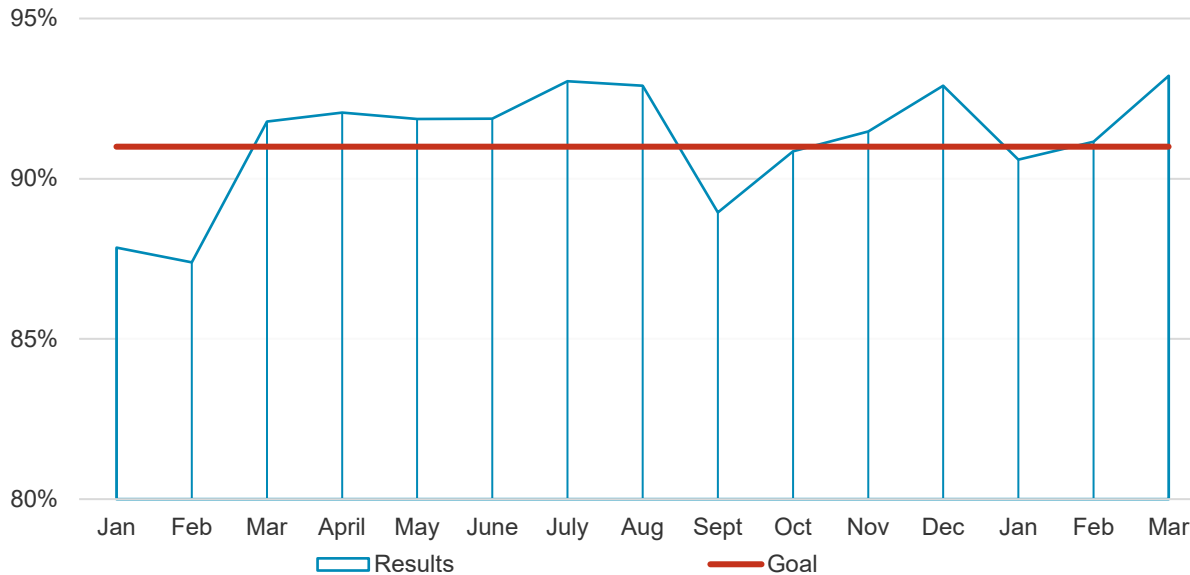


Goal:	94.00%
Actual:	94.59%
Met:	Yes
Delay Source	% of Trains
POLICE ACTIONS	30%
VEHICLE	11%
TRAIN CONTROL	9%
VANDALISM	7%
TRACTION POWER	7%
OPERATIONS	5%
PERSON ON TRACKWAY	4%
CONGESTION	4%
MISC OTHER	3%
WAYSIDE MAINT. WORK	3%

**39 PERSON ON TRACKWAY EVENTS
DELAYED 4% OF TRAINS**

- 0.2% performance improvement from previous quarter, 0.7% improvement from same quarter last year
- Continued emphasis on delay mitigation strategies has resulted in downward trend in secondary train delays
 - Secondary train delays by quarter: 668 (FY21Q1), 608 (FY21Q2), 570 (FY21Q3)

On-Time Service - Train



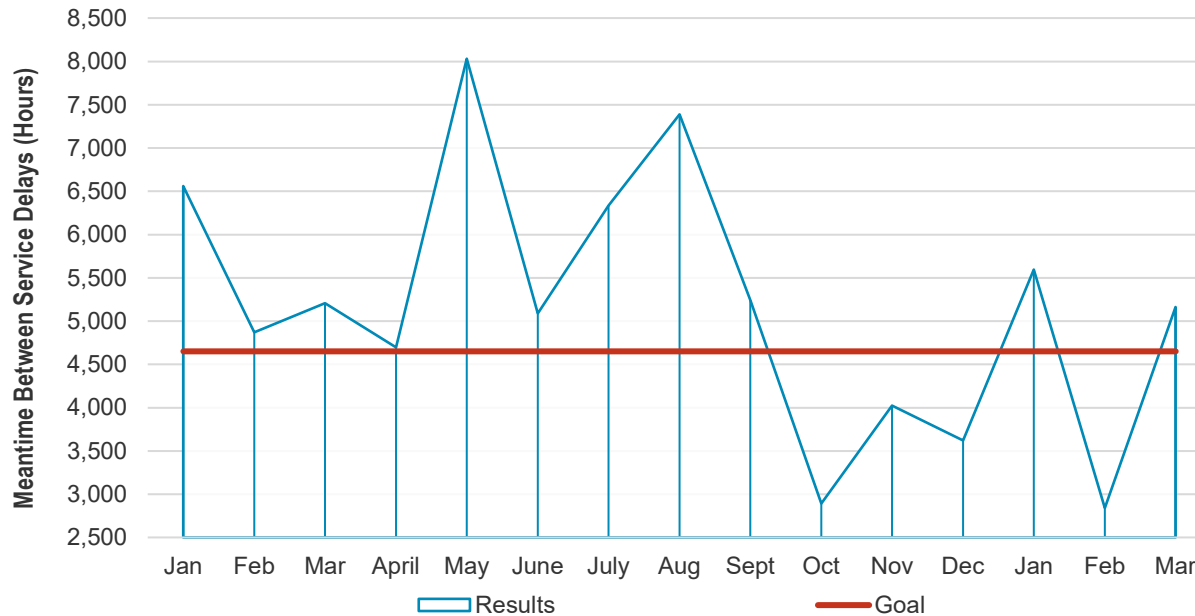
Goal:	91.00%
Actual:	91.69%
Met:	Yes

39 PERSON ON TRACKWAY EVENTS DELAYED 4% OF TRAINS

	Date	Location	Description	Time	Cause	Trains
1	01/14/21	24th Street	3rd Rail Power (Damaged Paddles/Inverter down)	1144-1725	Equip	112
2	02/12/21	24th Street	Vandalism (Platform Trip)	0703-0937	People	34
3	03/20/21	19th Street	PG&E Nat. Gas Leak (Station Closed)	1115-1355	Environment	30
4	02/26/21	Millbrae	False Occupancy	0750-1819	Equip	27
5	01/16/21	19th Street	Earthquake(Track Inspection/NPF)	1948-2106	Earthquake	26
6	01/14/21	Systemwide	Earthquake (Track Inspection/NPF)	1120-1125	Earthquake	24
7	01/19/21	Richmond	Weather (High Winds)(Branches On Trackway)	0503-0756	Weather	17
8	02/03/21	24th Street	Inverter	1235-1407	Equip	17
9	01/11/21	Glen Park	Brake	0457-0656	Equip	16
10	03/15/21	16th Street	Train Struck A Person On Trackway	1216-1313	Equip	13

Car Equipment – Reliability

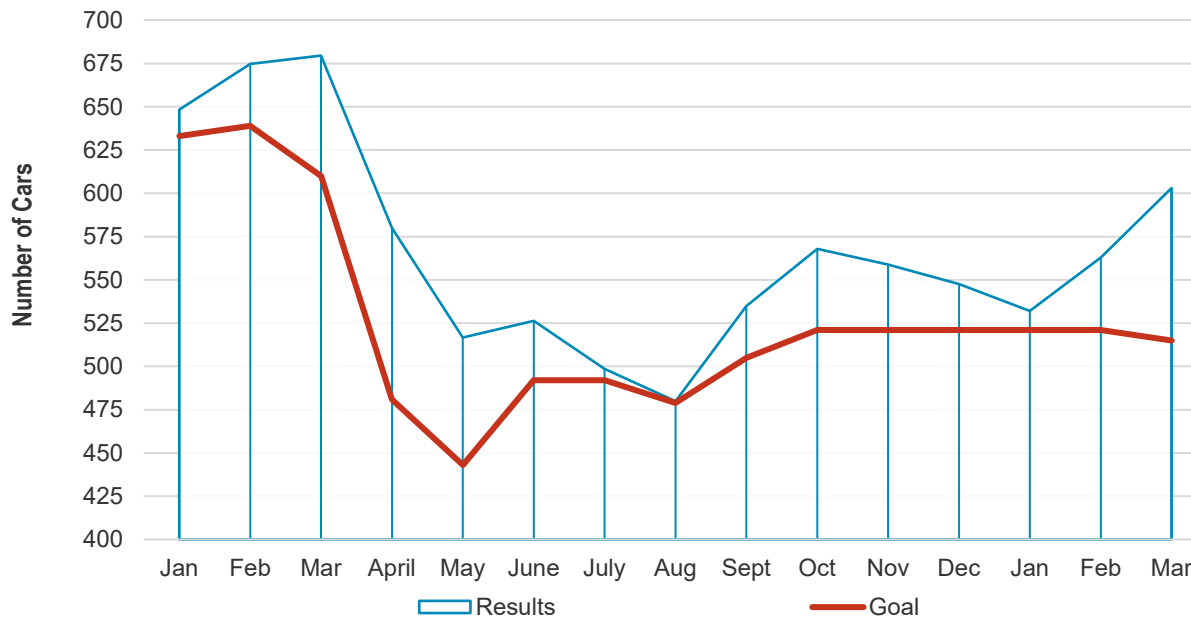
Meantime Between Service Delays



Goal:	4,650 Hours
Actual:	4,204 Hours
Met:	No

- 22% performance improvement from previous quarter, 37% decrease from same quarter last year
- Overall Fleet MTBSD 4204, Legacy Fleet 6171, FOTF Fleet 2459
 - Main contributors for lower MTBSD are FOTF's flats and VATC

Car Equipment – 4:00AM Availability

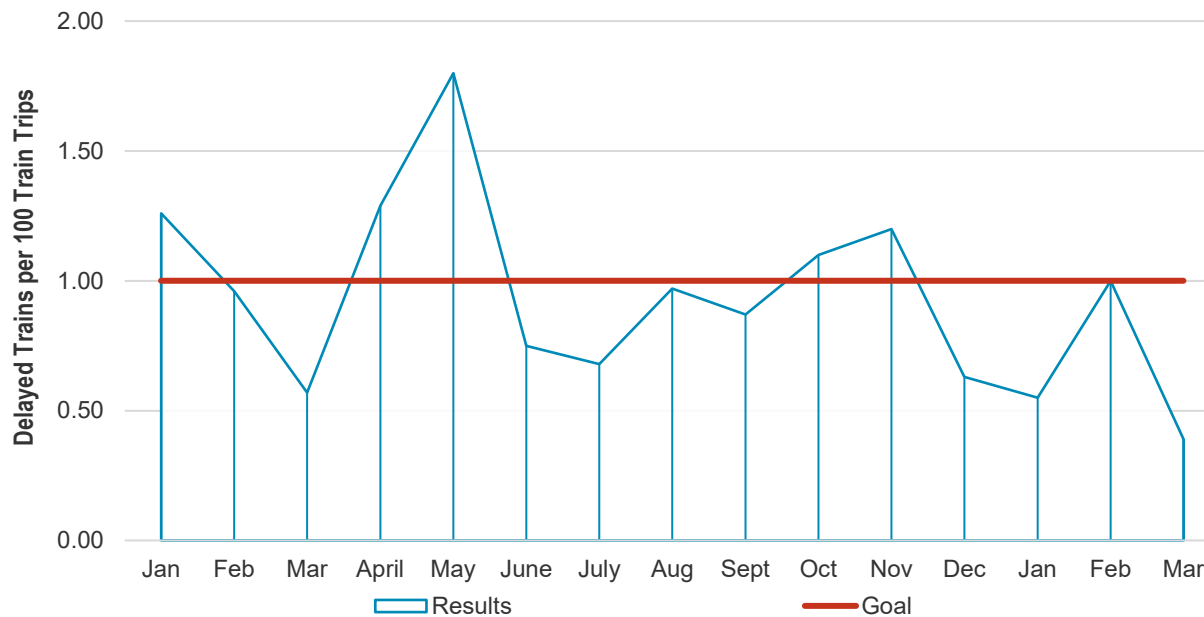


Goal:	519
Actual:	566
Met:	Yes

- 1% performance improvement from previous quarter

Wayside Train Control System

Delayed Trains per 100 Train Trips

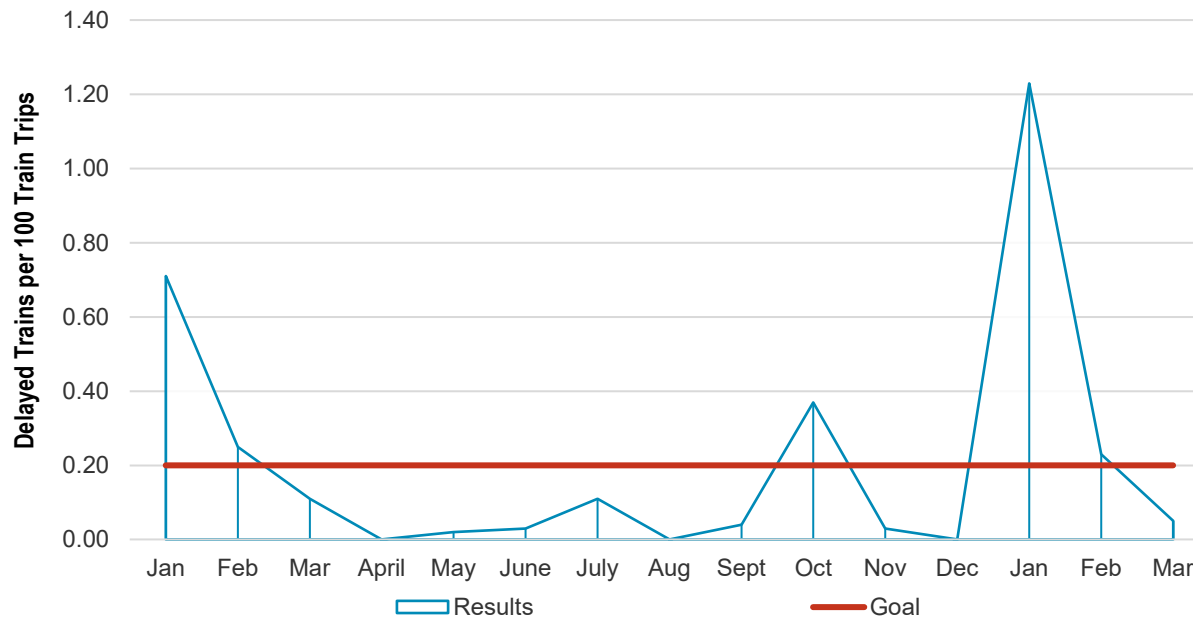


Goal:	1.00
Actual:	0.65
Met:	Yes

- 34% performance improvement from previous quarter, 31% improvement from same quarter last year
- Capital projects are progressing: Coverboard Antenna Replacement, Yard Switch Machine Replacement, OCY VHLC Installation, NSMUX, Tx Loops / Receiver Coils Replacement, MUX Cable Replacement Project
- Major delays this quarter:
 - 02-26-21: False Occupancy due to stray current. Water was drained from the flooded cable vault and the FO cleared

Traction Power

Delayed Trains per 100 Train Trips

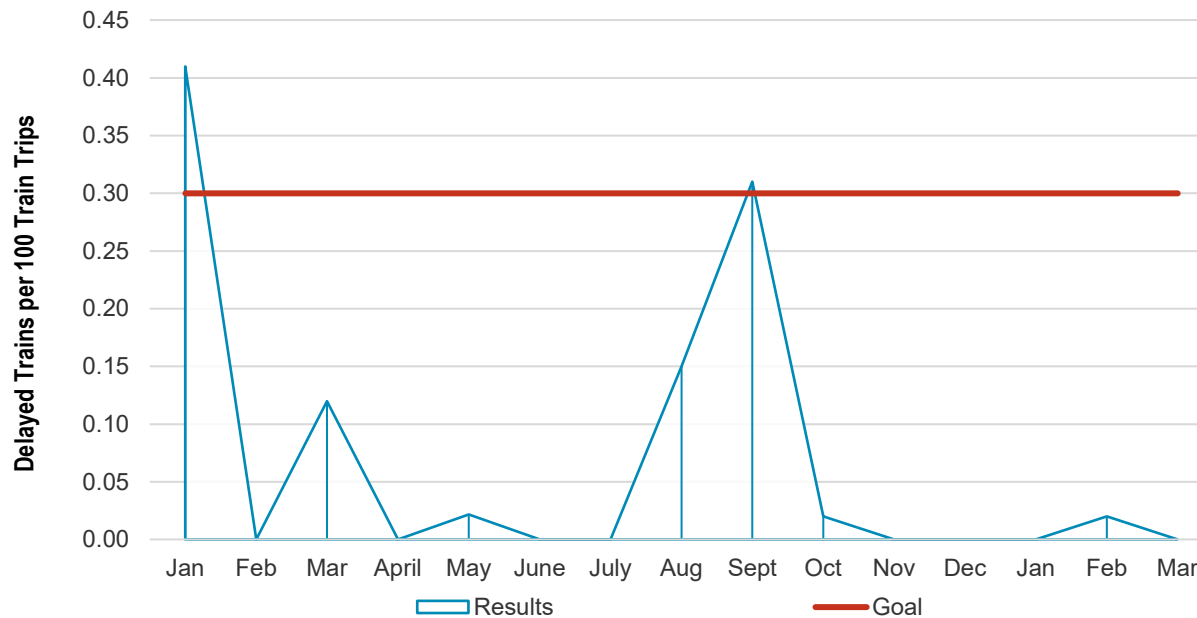


Goal:	0.20
Actual:	0.5
Met:	No

- 260% performance decrease from previous quarter, 40% decrease from same quarter last year
- Major delays this quarter:
 - January 14, 2021: 3rd Rail Power Manufactures defect in new rail ramps (replaced)
 - February 6, 2021: Reported Sparking On Trackway (replaced direct fixation pads and old 3rd rail insulators)
 - February 12, 2021: Loose 3rd-Rail Coverboard (replaced)

Track

Delayed Trains per 100 Train Trips

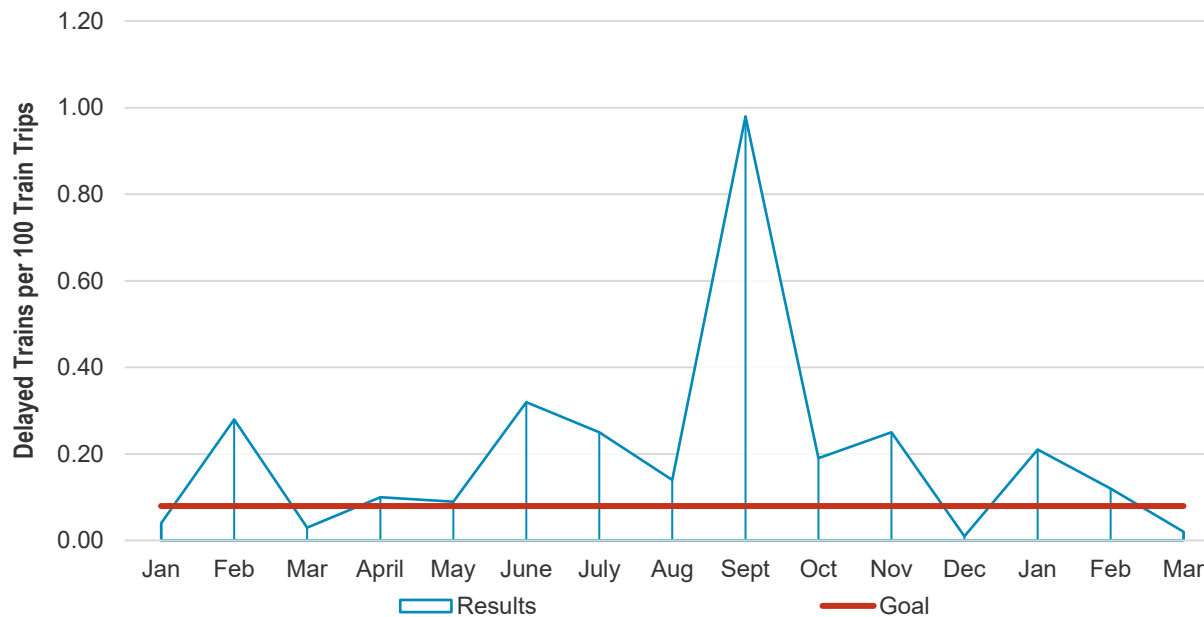


Goal:	0.30
Actual:	0.01
Met:	Yes

- 3% performance decrease from previous quarter, 96% improvement from same quarter last year
- 9.52 miles of rail replacement year to date, annual goal 10 miles
- 8385 Direct Fixation Pads replaced year to date, annual goal 5000
- Contractor Supported Rail Grinding Phase 2 continues.
 - A total of **102** miles have been completed. **103** miles remain.

Computer Control System

Delayed Trains per 100 Train Trips

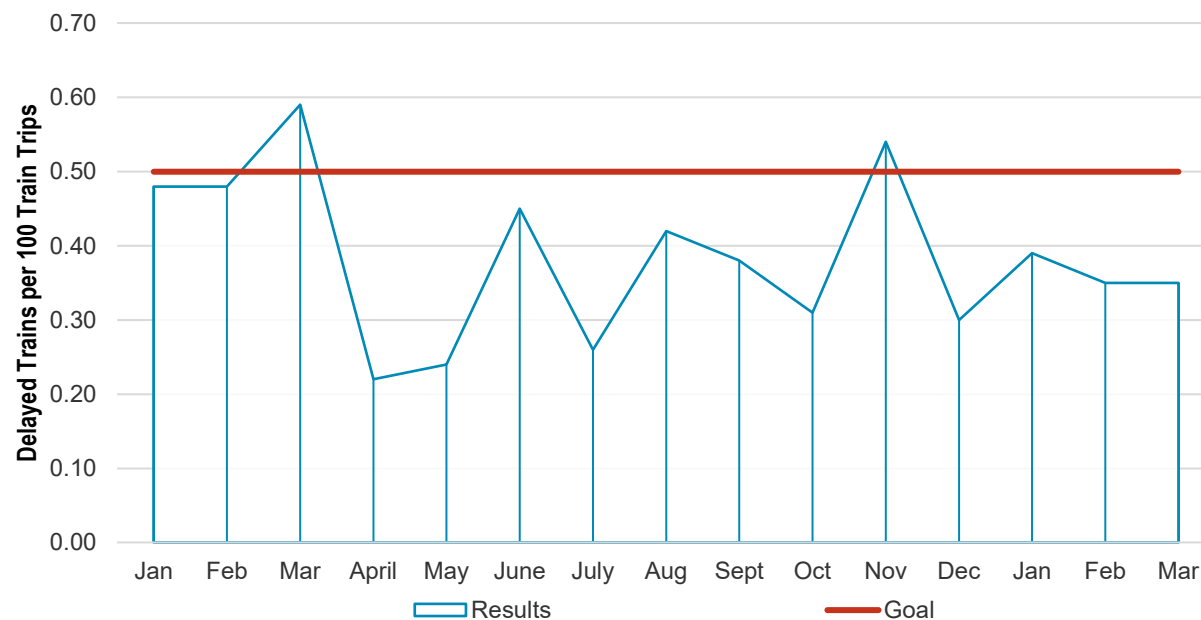


Goal:	0.08
Actual:	0.12
Met:	No

- 22% performance improvement from previous quarter, 30% improvement from same quarter last year
- Major delays this quarter:
 - January 15, 2021: Net.com equipment had a port inactive at Balboa (replaced failed communications circuit board)
 - January 19, 2021: VHLC/FIP Communications Link failure at Daly City (reset serial to ethernet interface)
 - January 26, 2021: SORS Latched out at Daly City (replaced bad circuit board)
 - February 15, 2021: VHLC/FIP Communications Link failure at Daly City (replaced interface terminal server and cabling)

Transportation

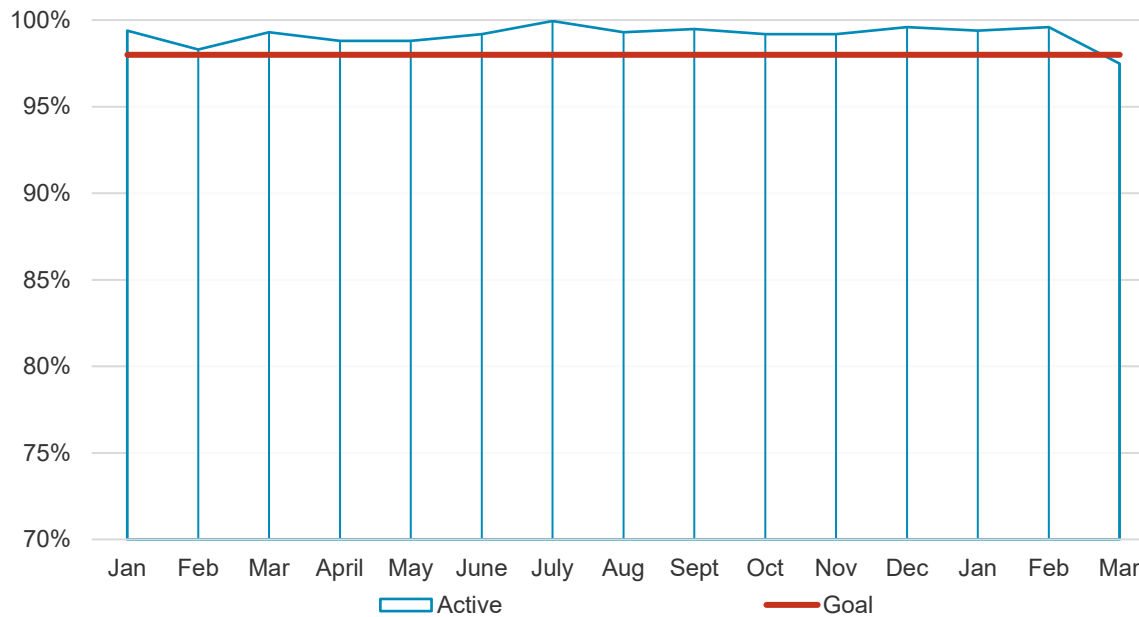
Delayed Trains per 100 Train Trips



Goal:	0.50
Actual:	0.36
Met:	Yes

- 5% performance improvement from previous quarter, 30% improvement from same quarter last year

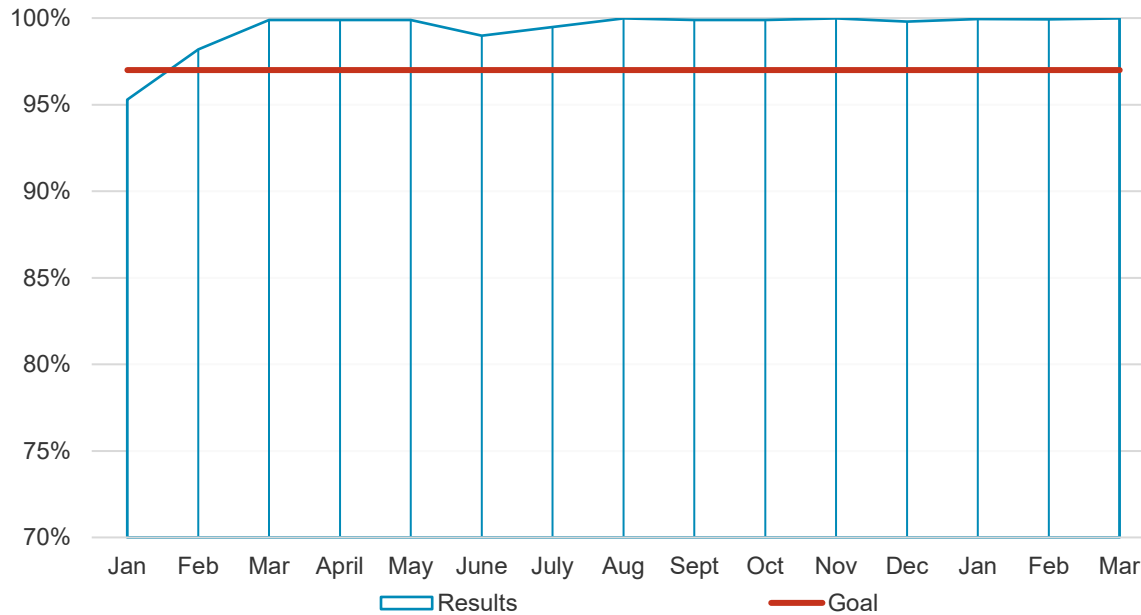
Elevator Availability - Stations



Goal:	98.00%
Actual:	98.83%
Met:	Yes

- 0.5% performance decrease from previous quarter, 0.2% decrease from same quarter last year
- Major Outages:
 - Warm Springs Station unplanned outage for door related issues out of service 21 hours
 - West Dublin/ Pleasanton Station unplanned outage due to platform fire alarm faults out of service 20 hours

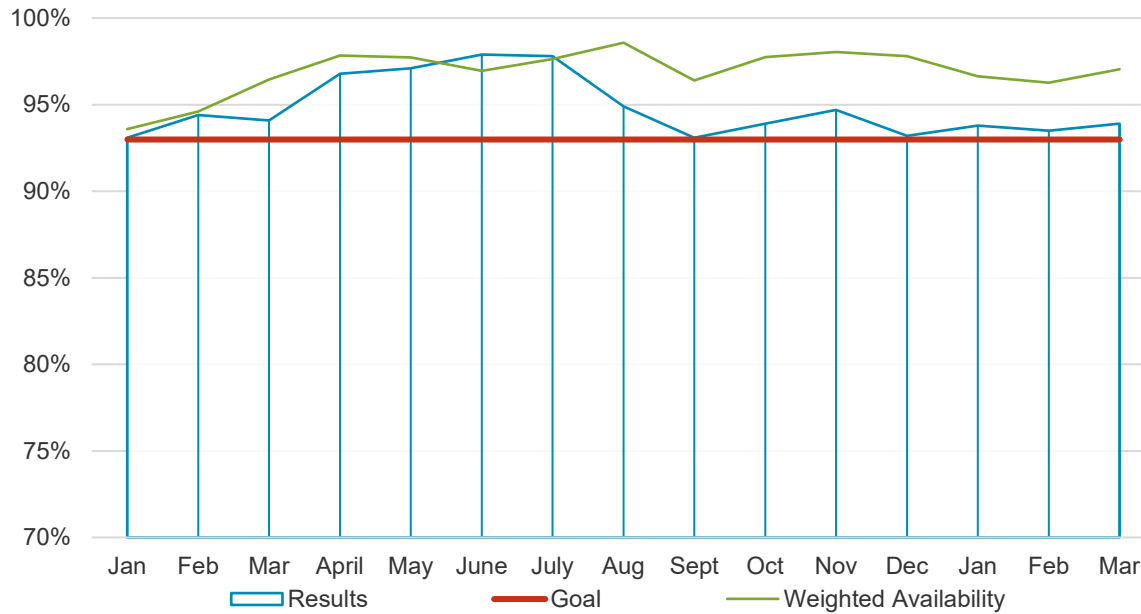
Elevator Availability - Garage



Goal:	97.00%
Actual:	99.96%
Met:	Yes

- Flat performance compared to previous quarter, 2% improvement from same quarter last year
- All parking structure elevators not effecting ADA compliance shut down due to low ridership

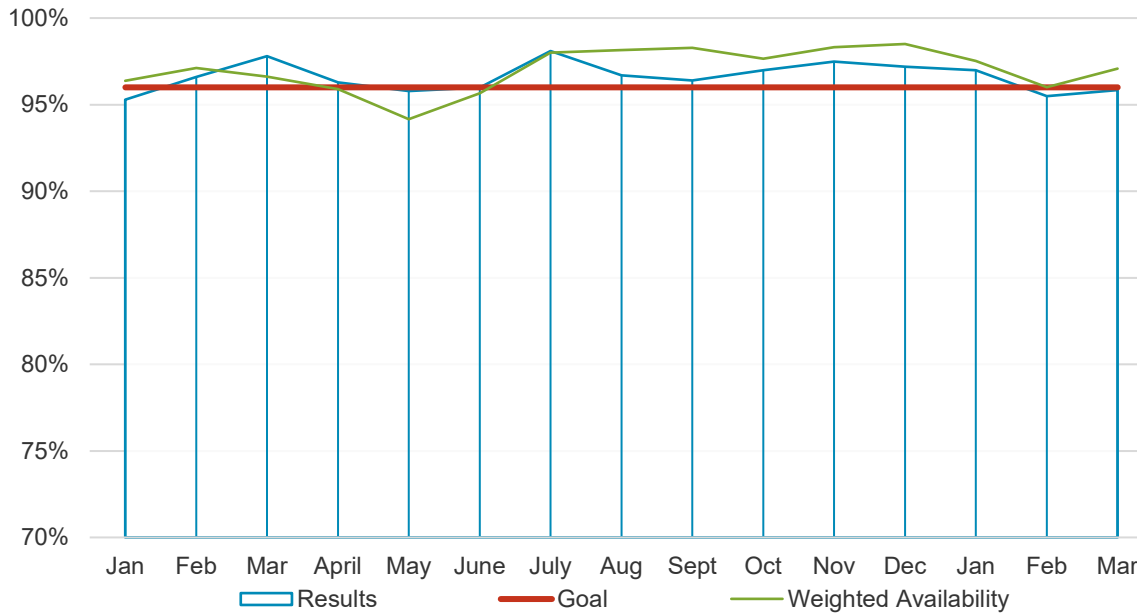
Escalator Availability - Street



Goal:	93.00%
Actual:	93.73%
Met:	Yes

- Flat compared to previous quarter and same quarter last year
- No Major Outages

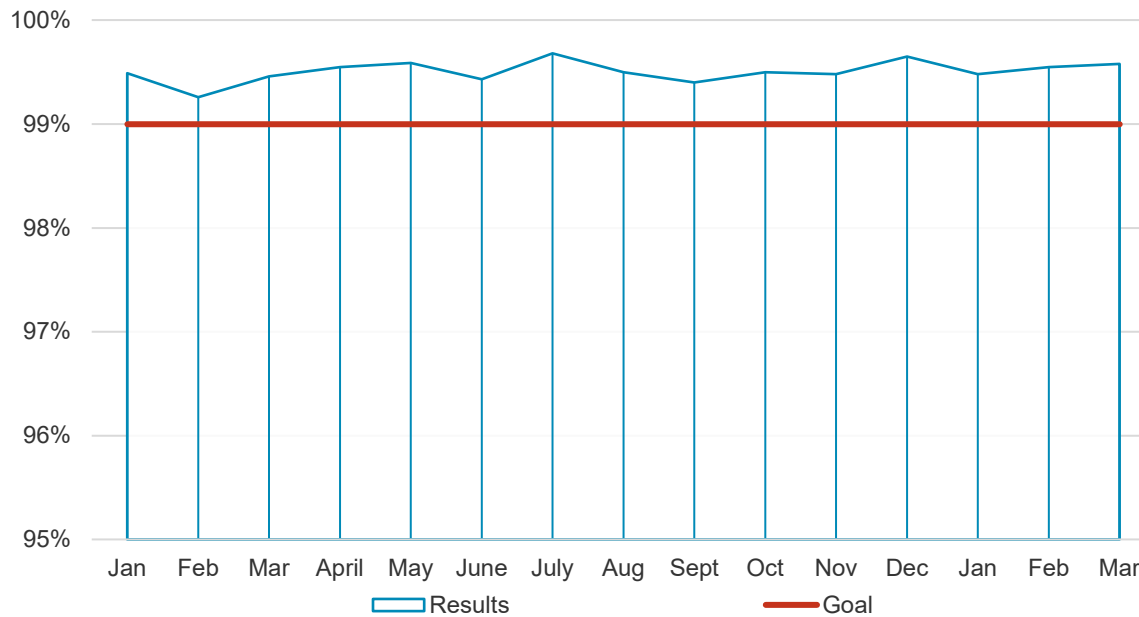
Escalator Availability - Platform



Goal:	96.00%
Actual:	96.12%
Met:	Yes

- 1% performance decrease from previous quarter, 0.5% decrease from same quarter last year
- Major Outages:
 - Warm Springs Station both handrails replaced, out of service 220 hours
 - West Dublin/Pleasanton unplanned repairs to bottom transition track, out of service 160 hours
 - Millbrae Station unplanned repairs to controller boards, out of service 120 hours

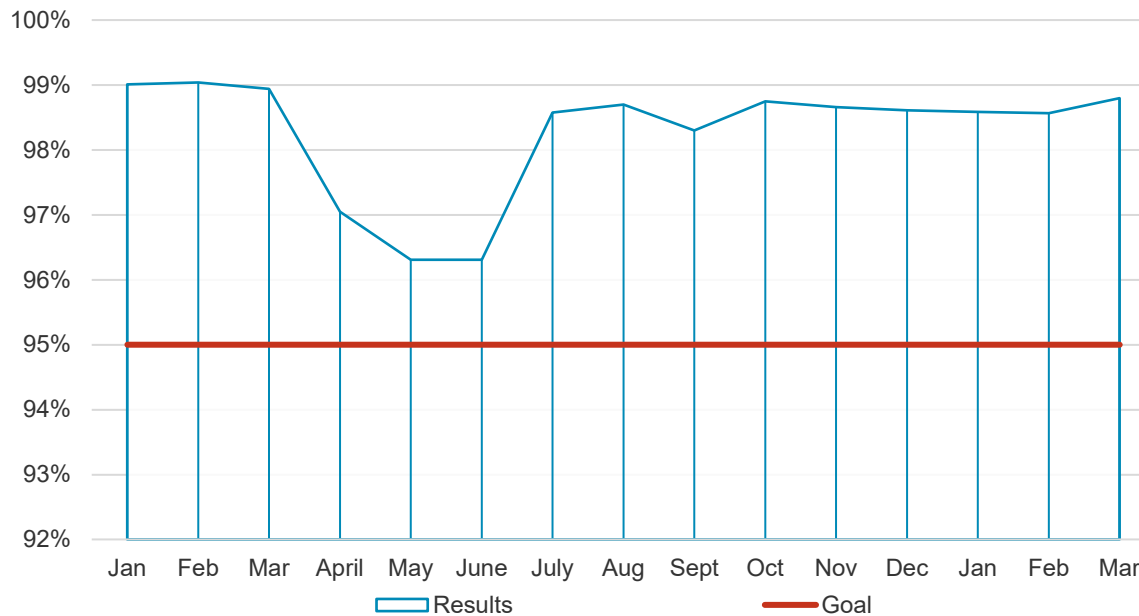
AFC Gate Availability



Goal:	99.00%
Actual:	99.54%
Met:	Yes

- Flat compared to previous quarter and same quarter last year
- Hardware & Software upgrades to Swing Gates are proving very beneficial to reliability
- Design underway for Fare Gate Array retrofit to be deployed at Rockridge station August 2021

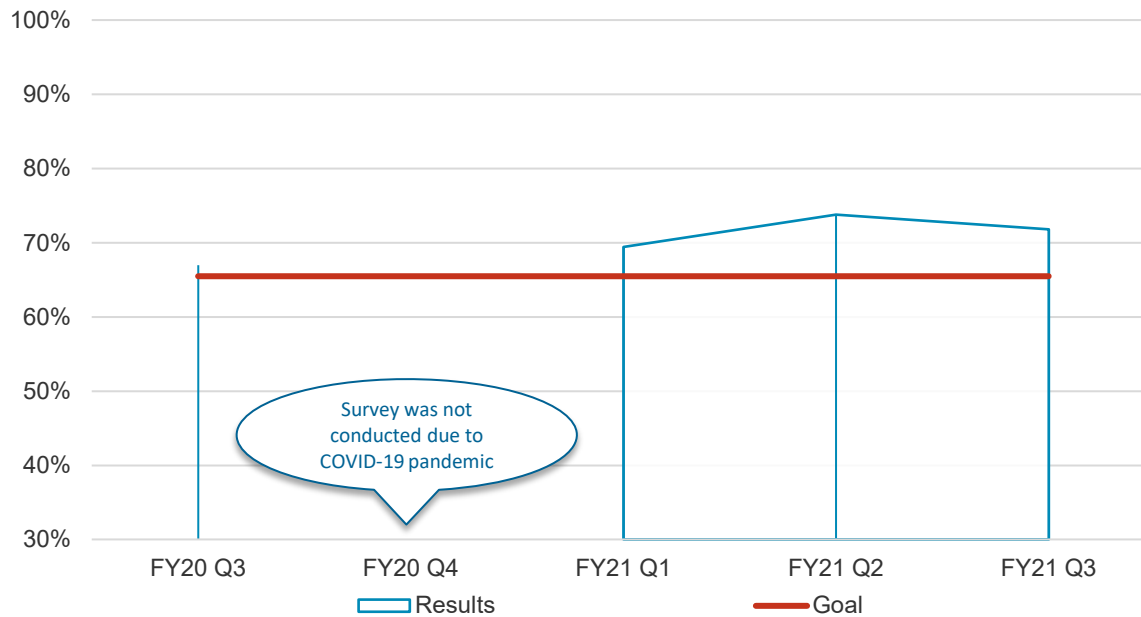
AFC Vendor Availability



Goal:	95.00%
Actual:	98.65%
Met:	Yes

- Flat compared to previous quarter and same quarter last year
- District Vendor hardware and Software updated to support Clipper Mobile App. completed
- Continuing Ingenico high secure Pin Pad Project
- EMV Certification progress underway to allow Bart to accept chipped credit cards at vendors to reduce fraud

Environment – Outside Stations



Goal:	65.5%
Actual:	71.8%
Met:	Yes

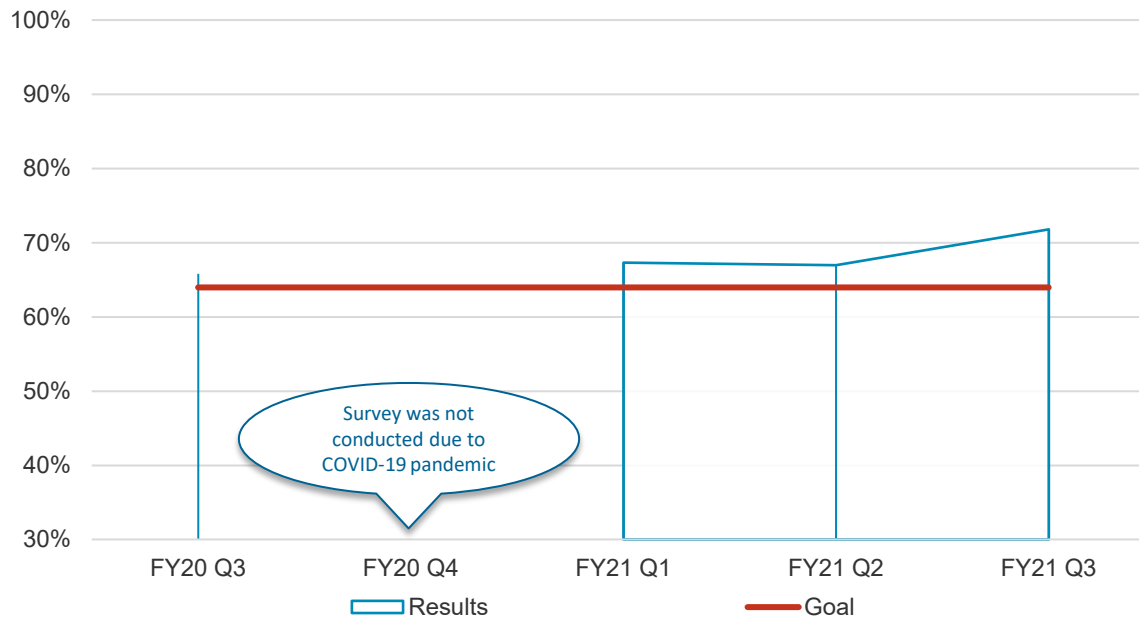
Composite Rating Based on Appearance of:

- **Landscaping Walkways, & Entry Plaza: 67.8%** (Weighted 67%)
- **Parking Lot Cleanliness: 79.9%** (Weighted 33%)

↑ indicates a statistically significant increase from prior quarter

- 3% performance decrease from previous quarter, 7% improvement from same quarter last year
- Homeless camps and excess property maintenance continues to challenge staff

Environment – Inside Stations



Goal:	64.0%
Actual:	71.8%
Met:	Yes

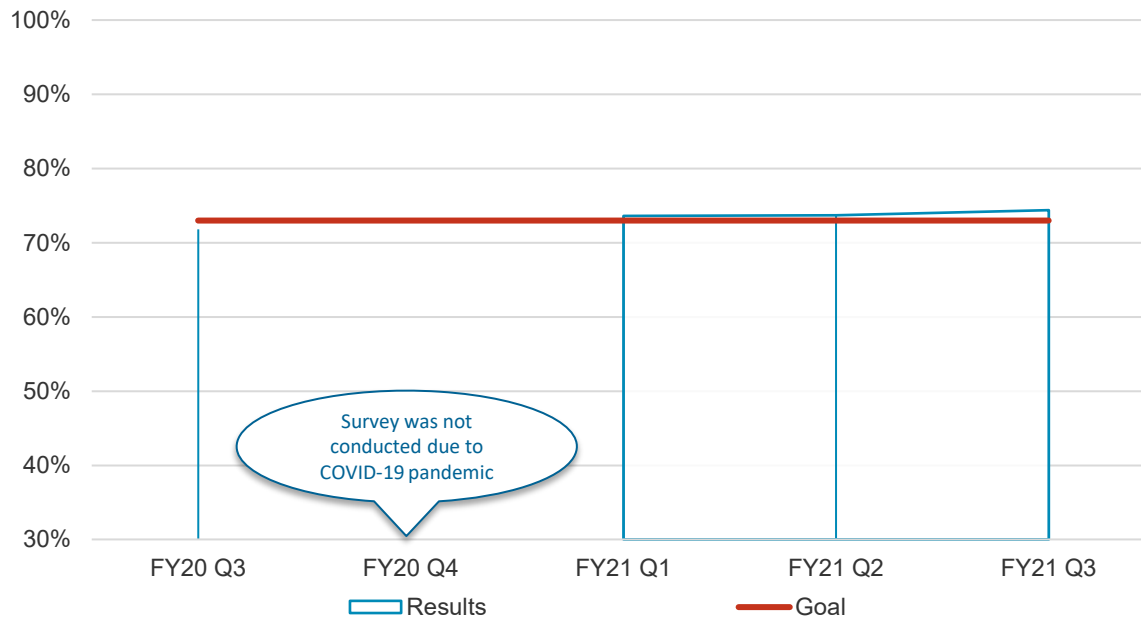
Composite Rating Based on Appearance of :

- **Platform: 75.3%** (Weighted 40%)
- **Concourse: 74.2%** (Weighted 25%)
- **Escalator: 74.0%** (Weighted 10%)
- **Stairwells: 71.2%** (Weighted 7.5%)
- **Elevator: 66.3%** (Weighted 10%)
- **Restroom: 50.3%** (Weighted 7.5%)

↑Indicates a statistically significant increase from prior quarter

- 7% performance improvement from previous quarter and 9% improvement from same quarter last year
- Continue focus on station and bathroom cleanliness

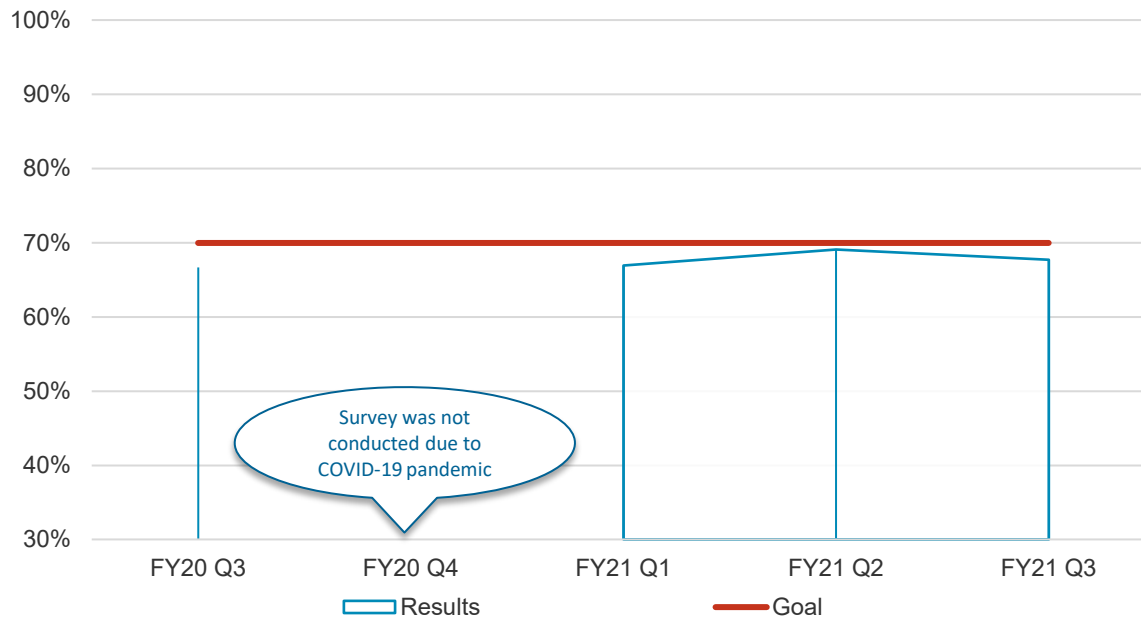
Station Vandalism



Goal:	73.0%
Actual:	74.4%
Met:	Yes

- Flat compared to previous quarter, 4% improvement from same quarter last year

Train Interior Cleanliness



Goal:	70.0%
Actual:	67.7%
Met:	No

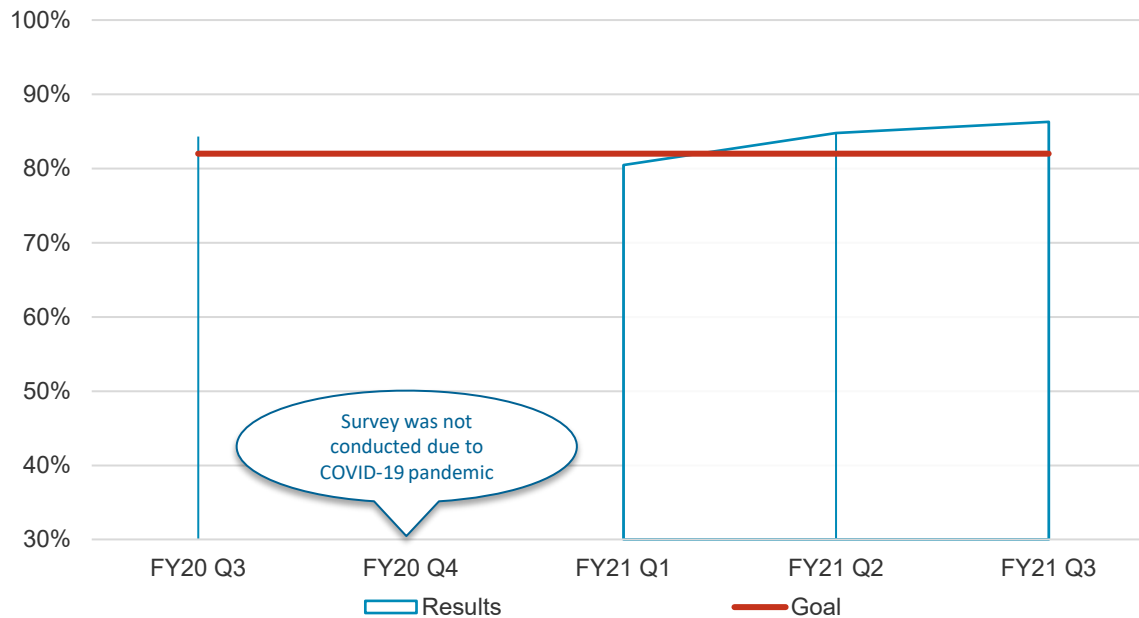
Composite Rating Based on Train Interior:

- **Cleanliness: 60.3%** (Weighted 60%)
- **Kept Free of Graffiti: 78.7%↑** (Weighted 40%)

↑ indicates a statistically significant increase from prior quarter

- 2% performance decrease from previous quarter, 2% improvement from same quarter last year
- During the Quarter, the Fleet was electrostatically disinfected nightly
- Exterior graffiti incidents decreased from 26 on last quarter to 5 this quarter
- Interior graffiti incidents remained the same as last quarter at 23

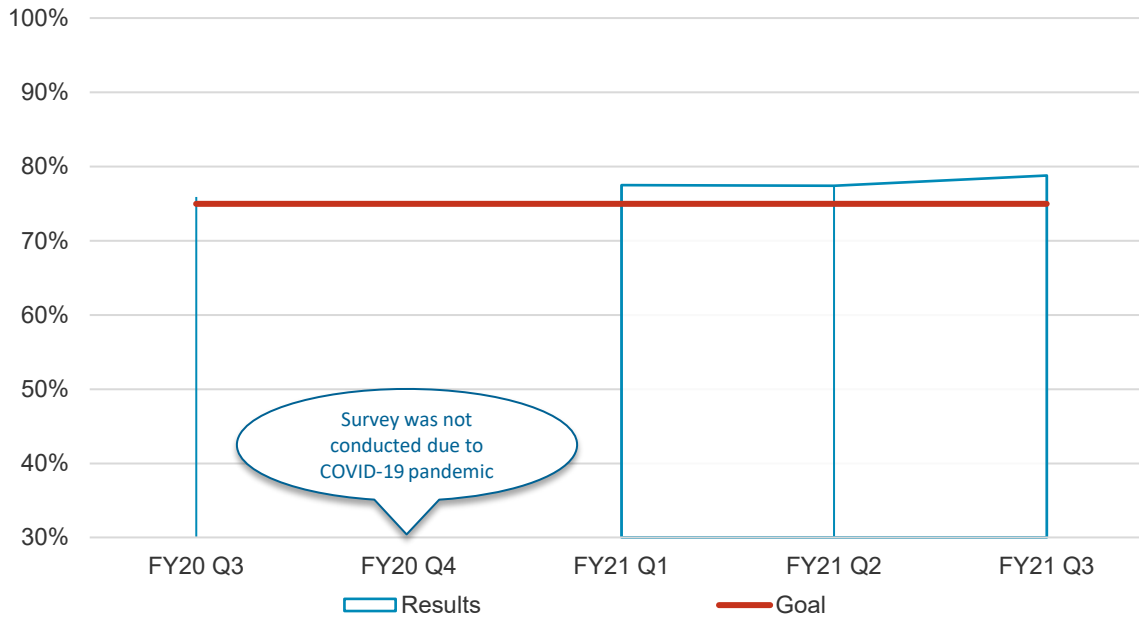
Train Temperature



Goal:	82.0%
Actual:	86.3%
Met:	Yes

- 2% performance improvement from previous quarter, 2% improvement from same quarter last year
- FOTF HVAC software update complete
- FOTF HVAC hardware modifications in progress

Customer Service

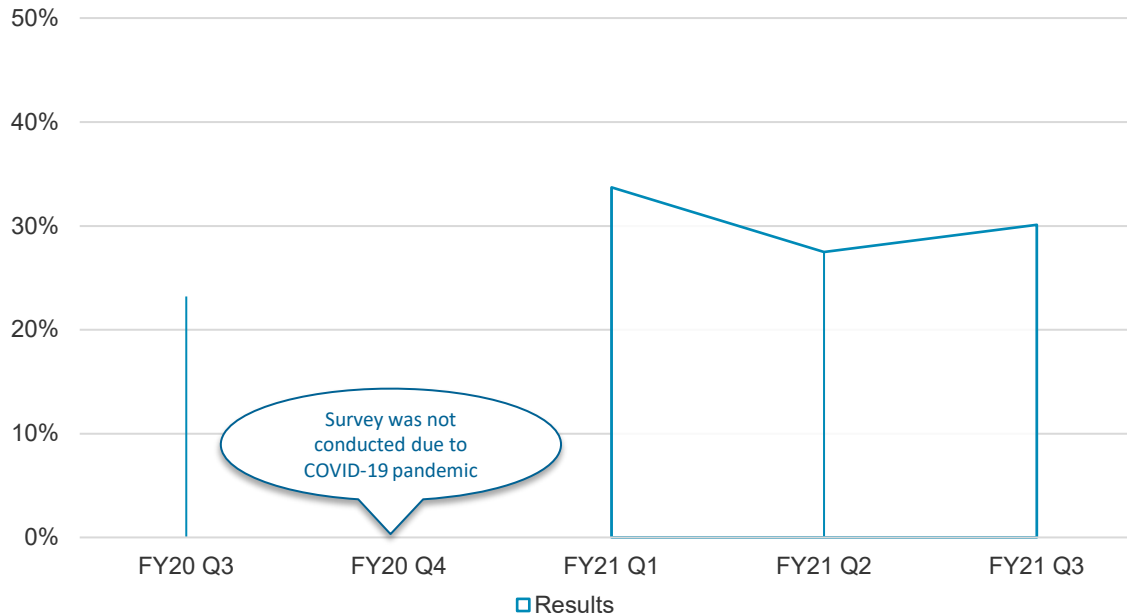


Goal:	75.0%
Actual:	78.8%
Met:	Yes
Average Rating of: <ul style="list-style-type: none"> Customer Service Station Agent (if used today): 79.8% Onboard Next Stop, Destination and Transfer Announcements: 81.2% Onboard Delay Announcements (if delayed today): 75.4% 	
↑ indicates a statistically significant increase from prior quarter	

- 2% performance improvement from previous quarter, 4% improvement from same quarter last year

Homelessness - Passenger Survey

“How well is BART addressing homelessness?”



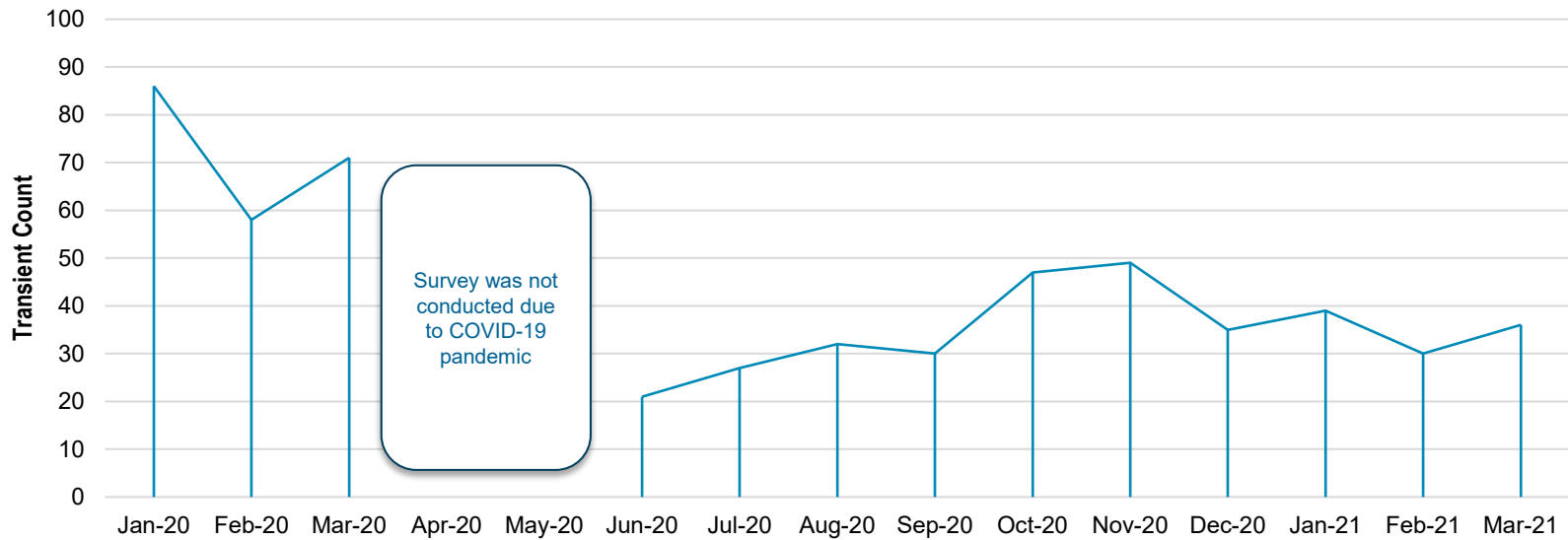
Goal:	N/A
Actual:	30.1%
Met:	N/A

- 10% performance improvement from previous quarter, 30% improvement from same quarter last year
- BART’s ambassador program providing a positive presence on trains and in stations

Transient Counts in San Francisco Stations

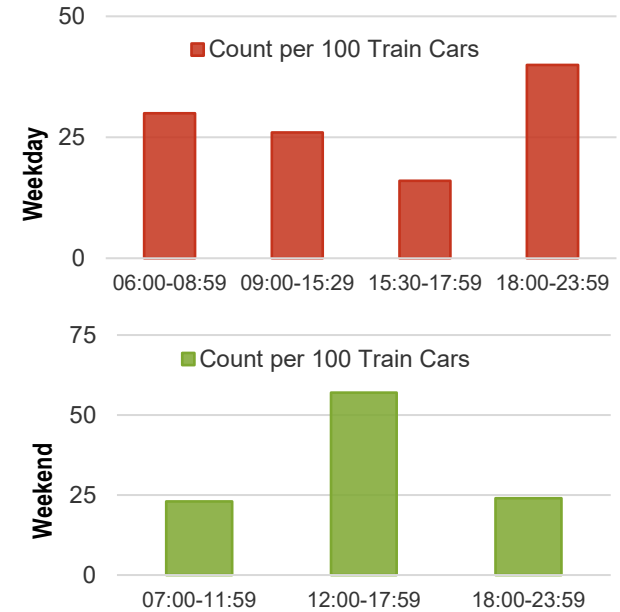
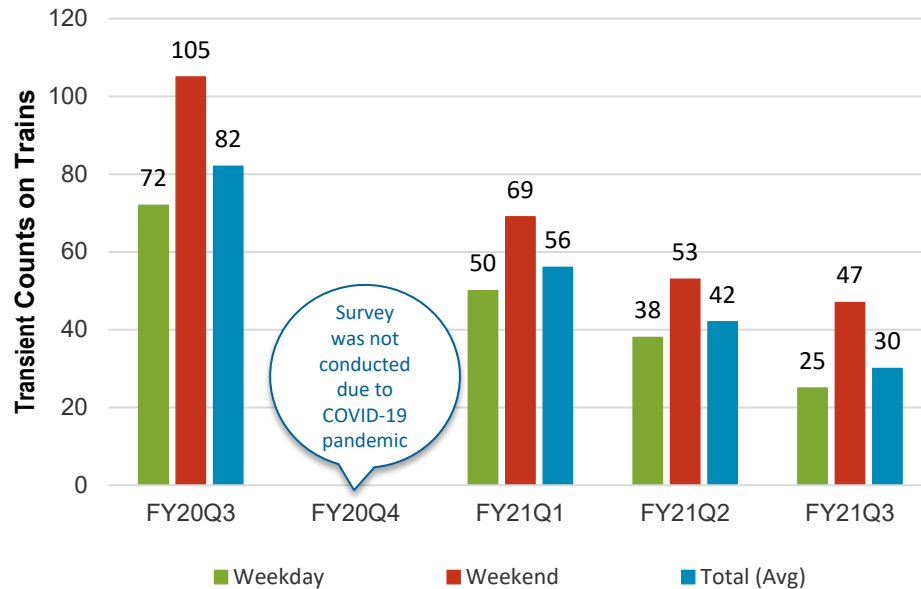


Downtown San Francisco Station January 2020 - March 2021



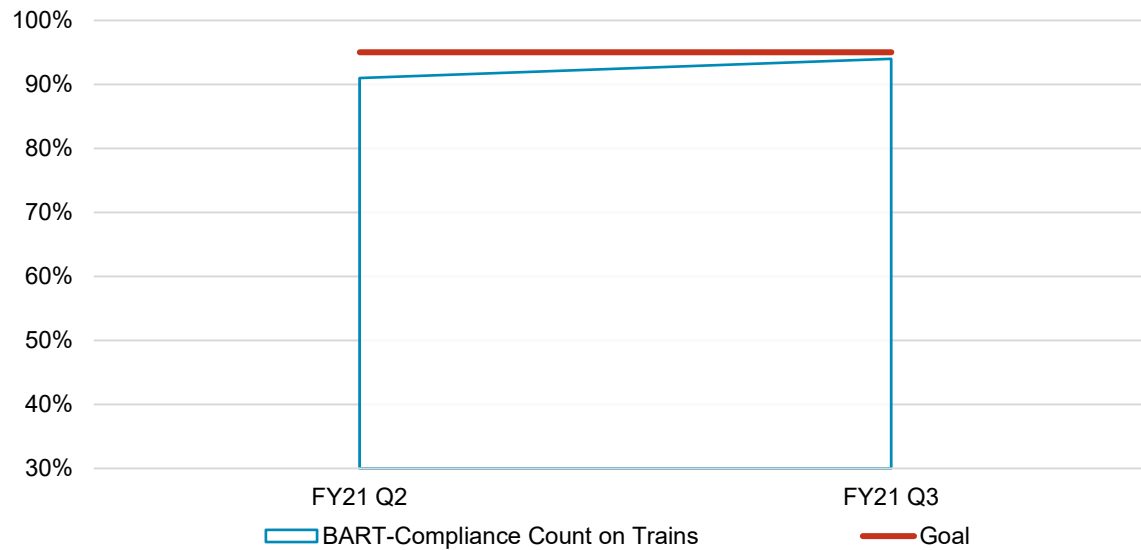
- 20% decrease in count from previous quarter, 51% decrease from same quarter last year

Transient Counts on Trains



- 28.6% decrease compared to previous quarter, 63.4% decrease to same quarter last year
- BART's ambassador program also had a positive impact of monitoring the trains and stations

Face Covering: Actual Counts



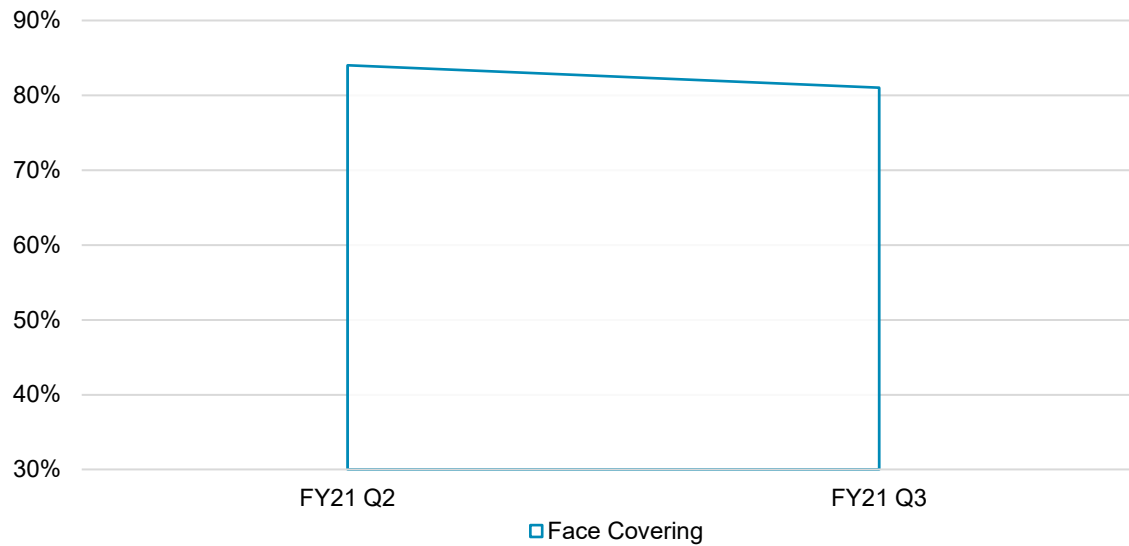
Goal:	95%
Actual:	94%
Met:	No

- 3% performance improvement from previous quarter

Face Covering: Passenger Survey



Customer Rating on Compliance (Excellent + Good)

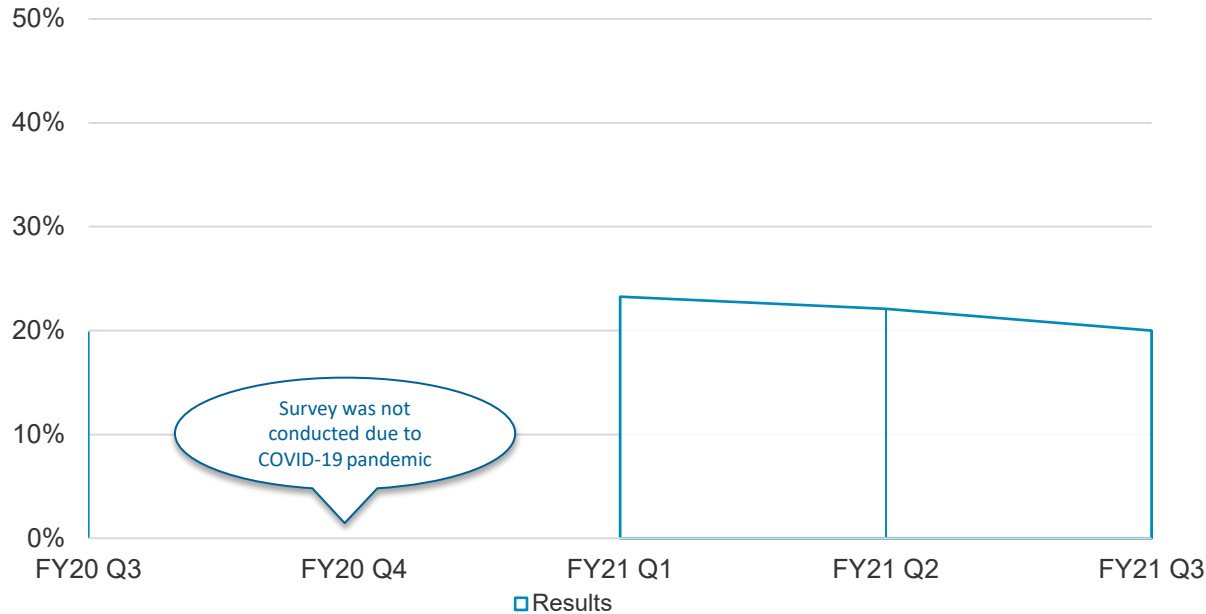


Goal:	N/A
Actual:	81%
Met:	N/A

- 4% performance decrease in Face Covering from previous quarter

Fare Evasion Passenger Survey

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

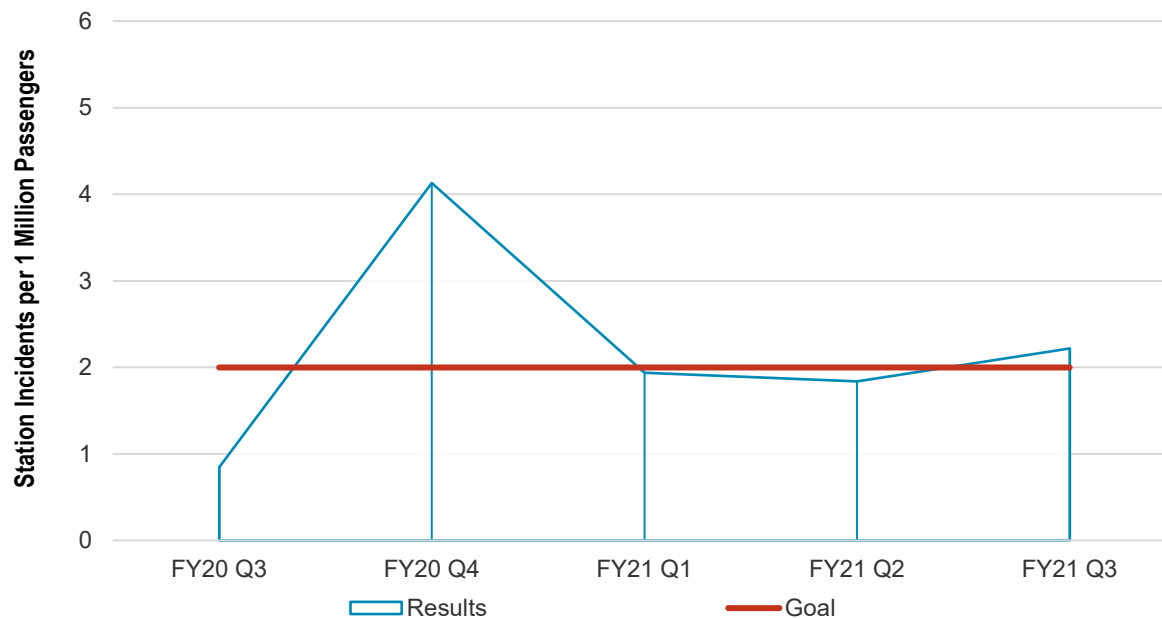


Goal:	N/A
Actual:	20.0%
Met:	N/A

- 9% performance decrease from previous quarter, 1% improvement from same quarter last year

Patron Safety – Station

Incidents per 1 Million Passengers

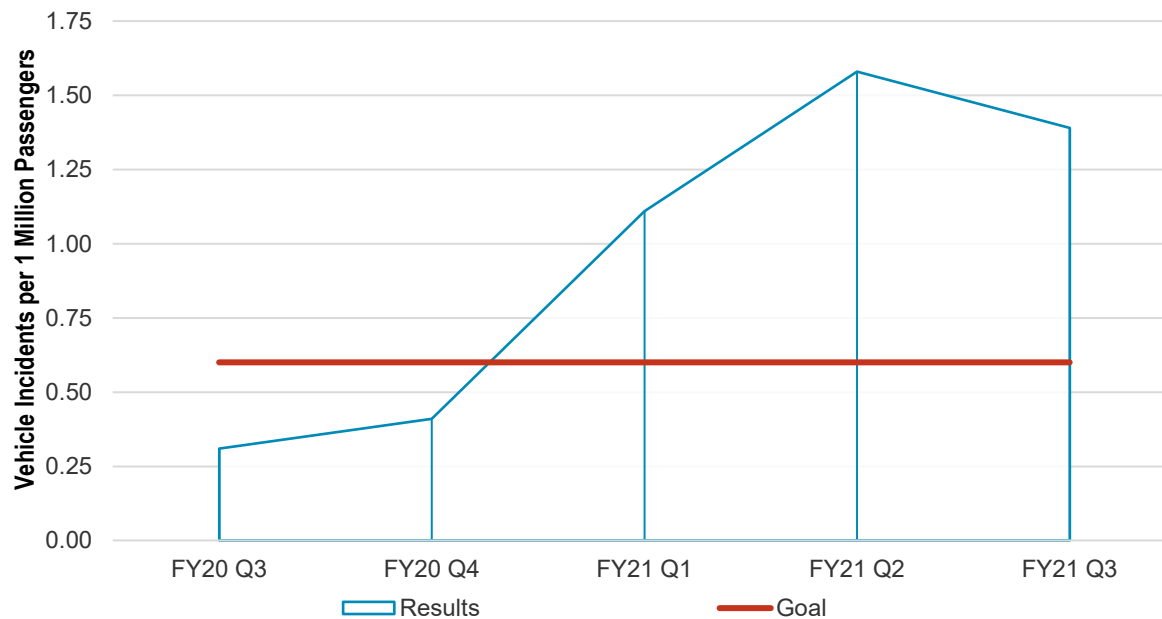


Goal:	2.00
Actual:	2.22
Met:	No

- 21% performance decrease from previous quarter and 161% decrease from same quarter last year
- Number of incidents this quarter (8); last quarter (7):
 - Stairs – Ascending – 1
 - Escalator – Ascending – 3
 - Escalator – Descending – 1
 - Concourse Level – 1
 - Fare Gate Incidents – 1
 - Parking Lot – 1

Patron Safety – Vehicle

Incidents per 1 Million Passengers

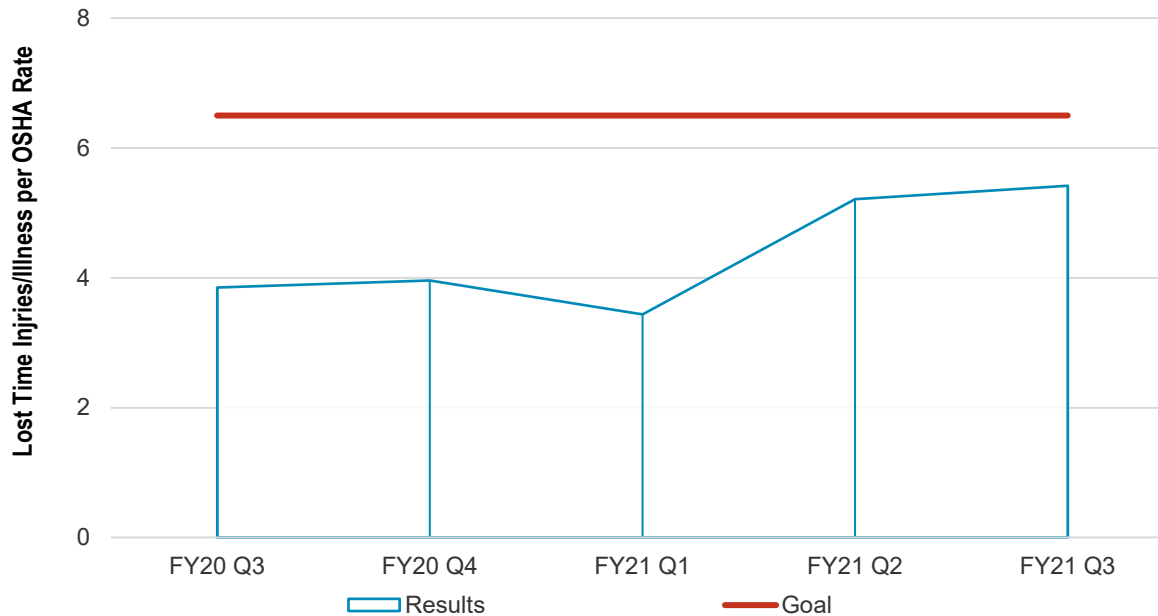


Goal:	0.60
Actual:	1.39
Met:	No

- 12% performance improvement from previous quarter, 348% decrease from same quarter last year
- Number of incidents this quarter (5); last quarter (6):
 - On-Board Accident – 1
 - Struck by Door - Alighting – 2
 - Hand stuck in door - Alighting – 1
 - Other – 1

Employee Safety – Lost Time

Lost Time Injuries per OSHA Rate

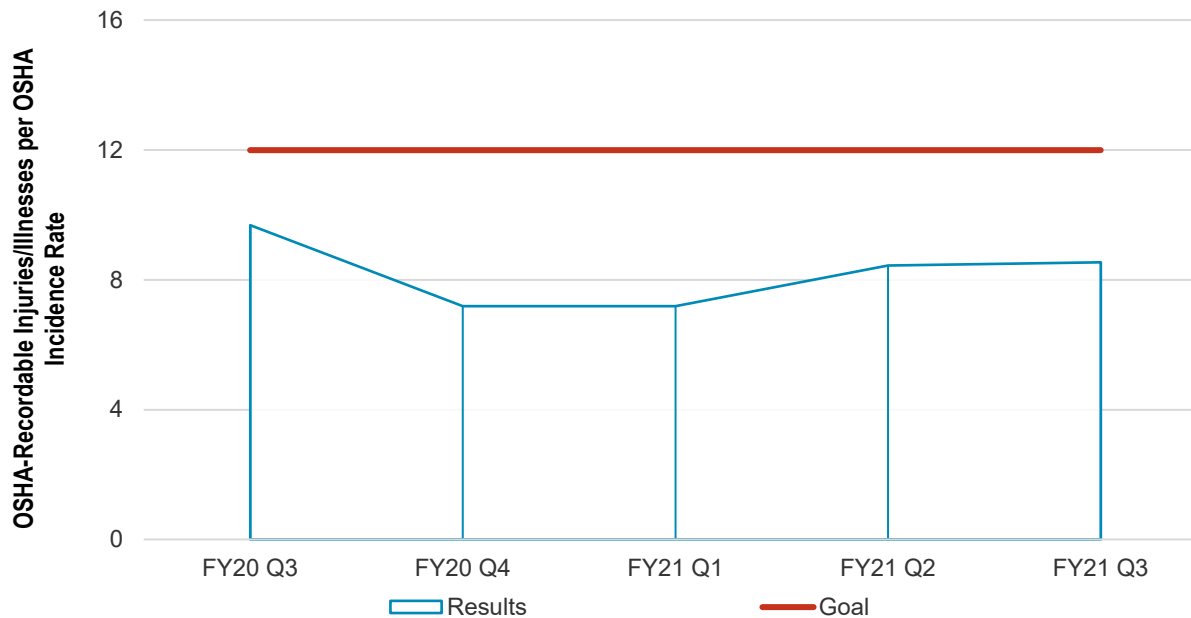


Goal:	6.50
Actual:	5.42
Met:	Yes

- 4% performance decrease from previous quarter, 41% decrease from same quarter last year
- Lost time cases count decreased by 22% compared to last quarter
 - Strain injury cases decreased from 16 to 10
 - Contusion injury cases decreased from 10 to 6
 - Trauma injury cases increased from 10 to 14

Employee Safety – Injury Count

OSHA Recordable Injuries per OSHA Incidence Rate

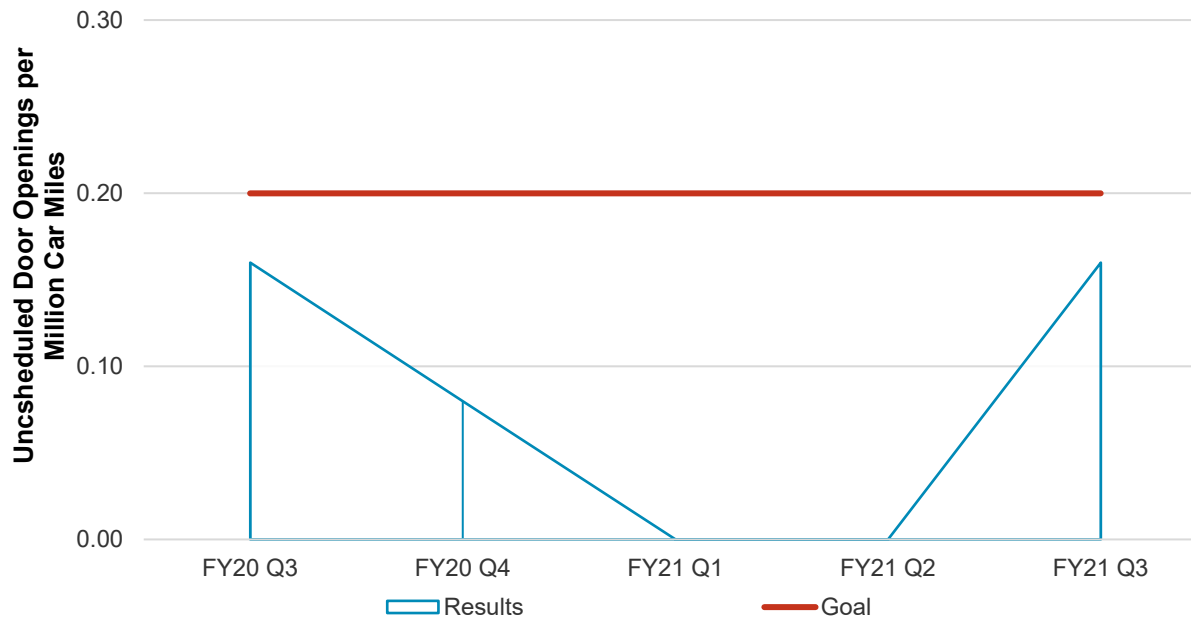


Goal:	12.00
Actual:	8.54
Met:	Yes

- 1% performance decrease from previous quarter, 12% improvement from same quarter last year
- Comparing to last quarter:
 - Strain injuries remained the same at 31 cases
 - Sprain injuries increased 11%
 - Trauma injuries increased 90%
 - Contusion injuries decreased 18%

Operating Safety – Door Openings

Unscheduled Door Openings per Million Car Miles

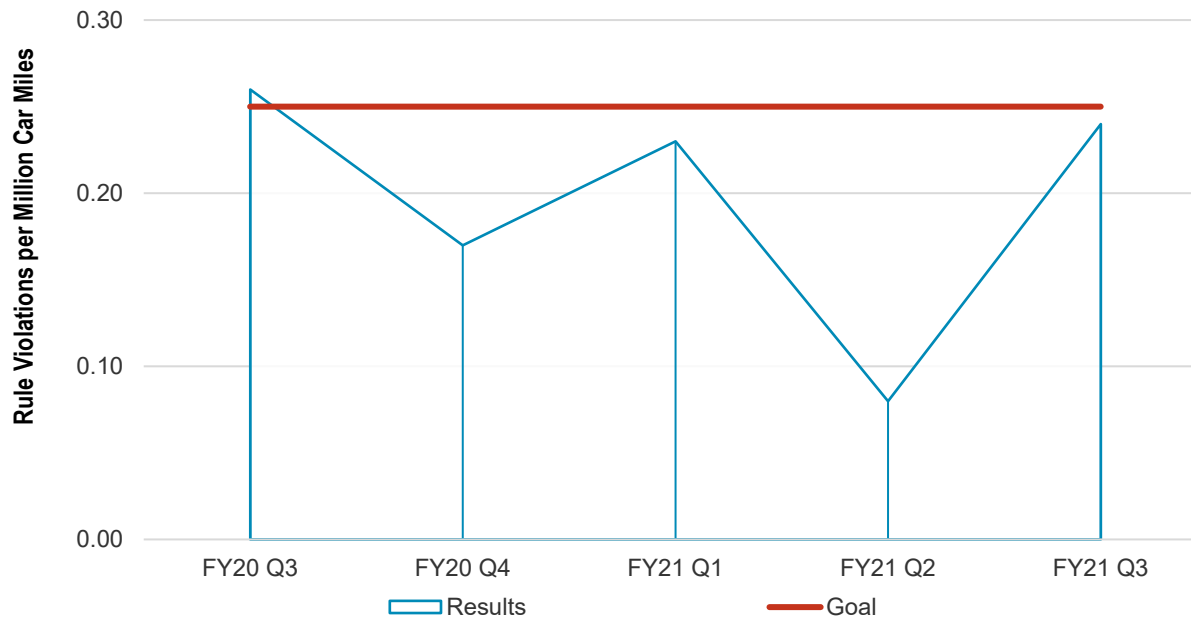


Goal:	0.20
Actual:	0.160
Met:	Yes

- Flat compared to previous quarter and same quarter last year
- Two incidents this quarter:
 - March 1, 2021: Human error when cutting outdoors
 - March 22, 2021: Criminal trespass by patron

Operating Safety – Rule Violations

Rule Violations per Million Car Miles

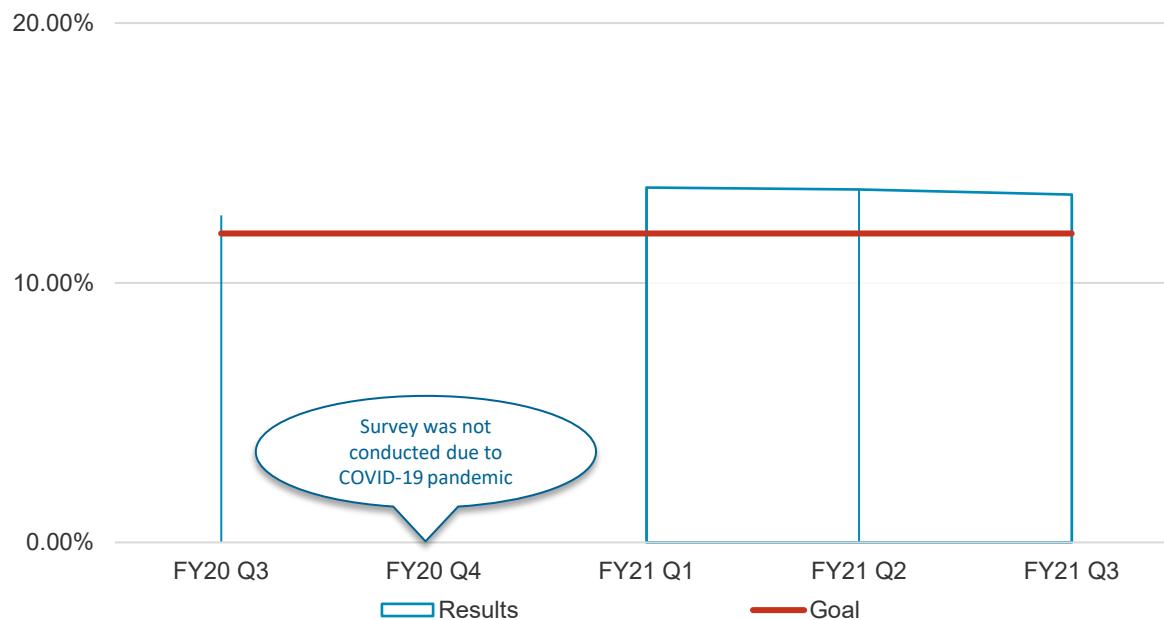


Goal:	0.25
Actual:	0.24
Met:	Yes

- 200% performance decrease from previous quarter, 8% improvement from same quarter last year
- 3 incidents for this quarter:
 - February 6, 2021: Revenue train signal violation in yard
 - February 18, 2021: OCC Controller gave manual run instruction through closed gate
 - February 22, 2021: Violation of OCC Hold Instruction

BART Police Presence

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



Goal:	12.0%
Actual:	13.4%
Met:	Yes

Average Score of Police Seen For:

All Time Periods

- On Train
- Outside the Station
- In the Station

After 7PM and Weekends

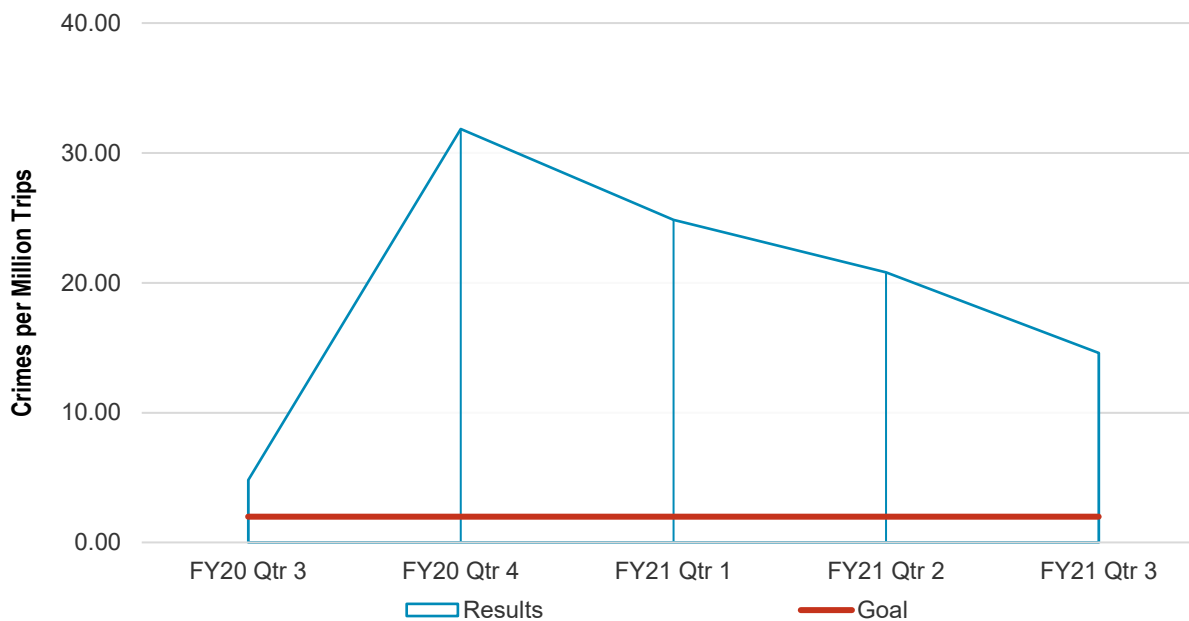
- On Train
- Outside the Station
- In the Station

↑ indicates a statistically significant increase from prior quarter

- 7% performance improvement from same quarter, last year; 2% decrease from last quarter
- Increased uniform visibility and patrols

Crimes Against Persons

Crimes per Million Trips

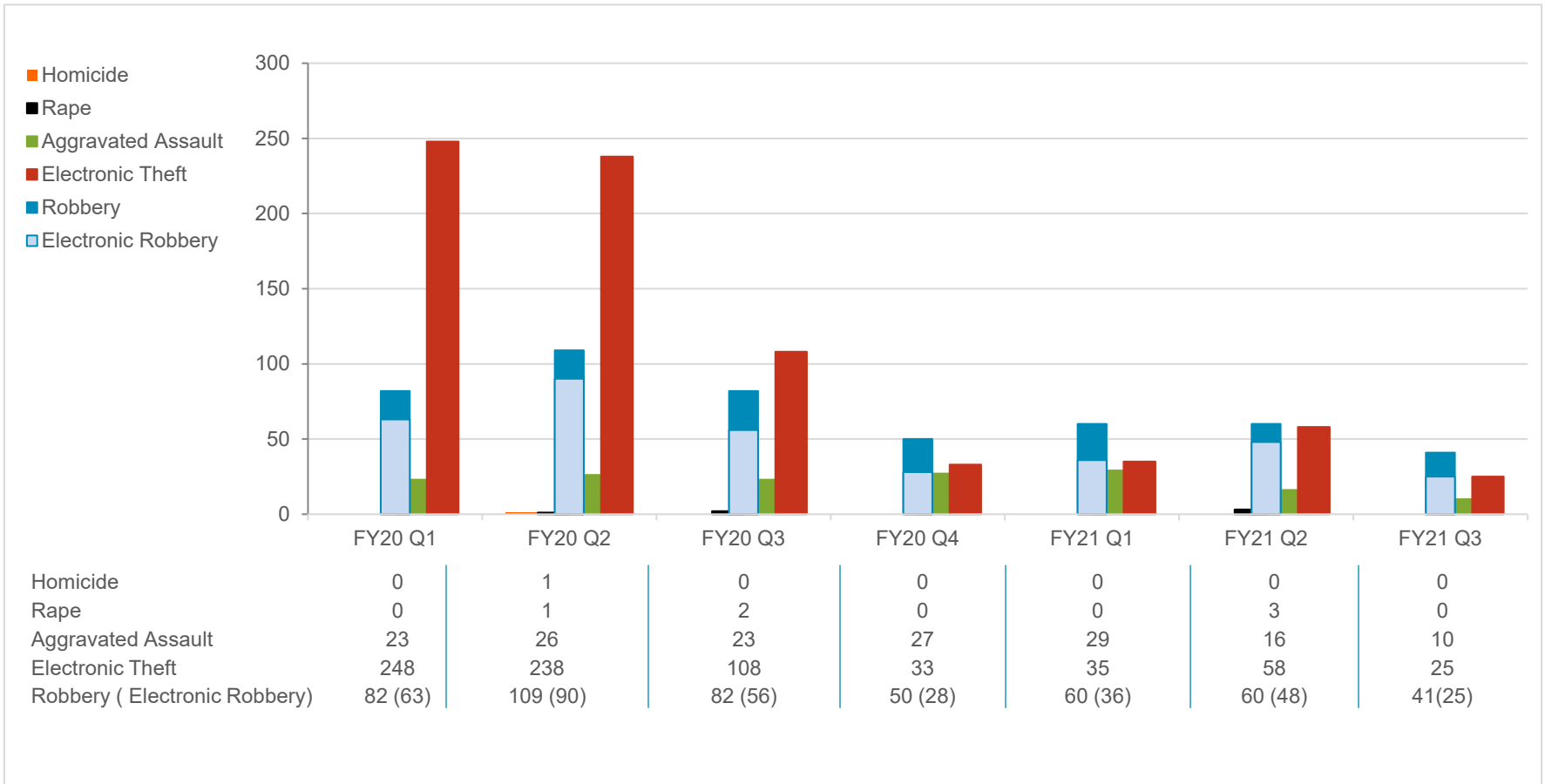


Goal:	2.00
Actual:	14.60
Met:	No
Violations Include:	
<ul style="list-style-type: none">▪ Homicides▪ Rape▪ Robbery▪ Aggravated Assault▪ Electronic Theft	

- 30% performance improvement from previous quarter
- Violent crime incidents trending down: FY20Q3 – 35 cases, FY21Q2 – 26 cases, FY21Q3 – 17 cases

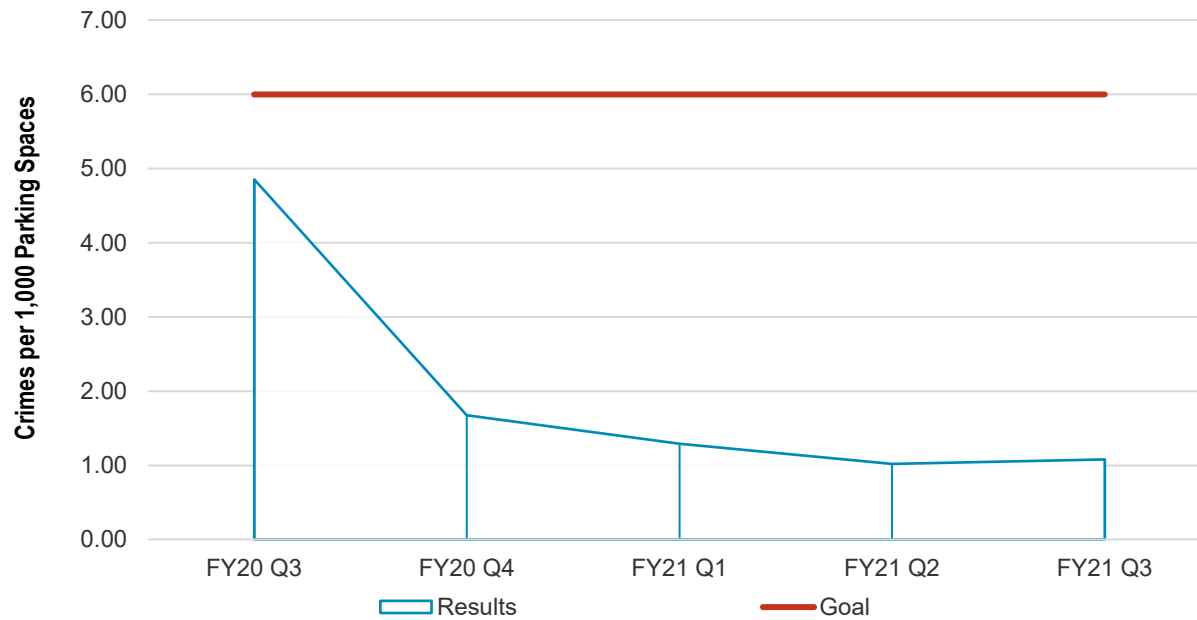
Crimes Against Persons

Crimes Detail by Category



Auto Burglary

Crimes per 1,000 Parking Spaces

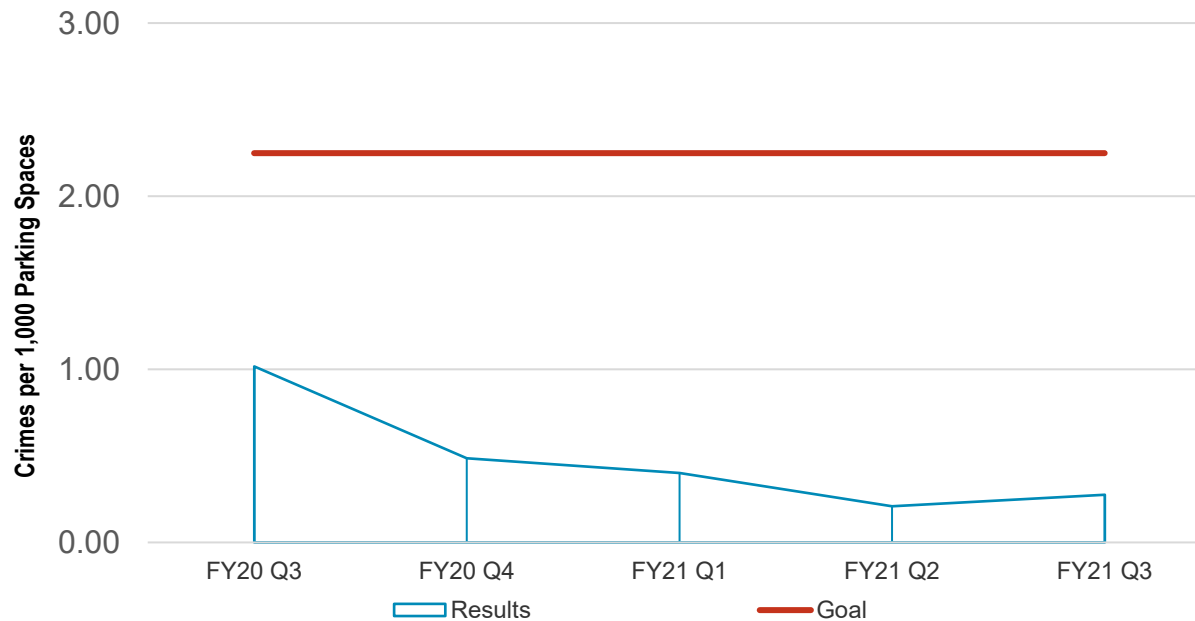


Goal:	6.00
Actual:	1.08
Met:	Yes

- 6% performance decrease from previous quarter and 203% improvement from same quarter last year

Auto Theft

Crimes per 1,000 Parking Spaces

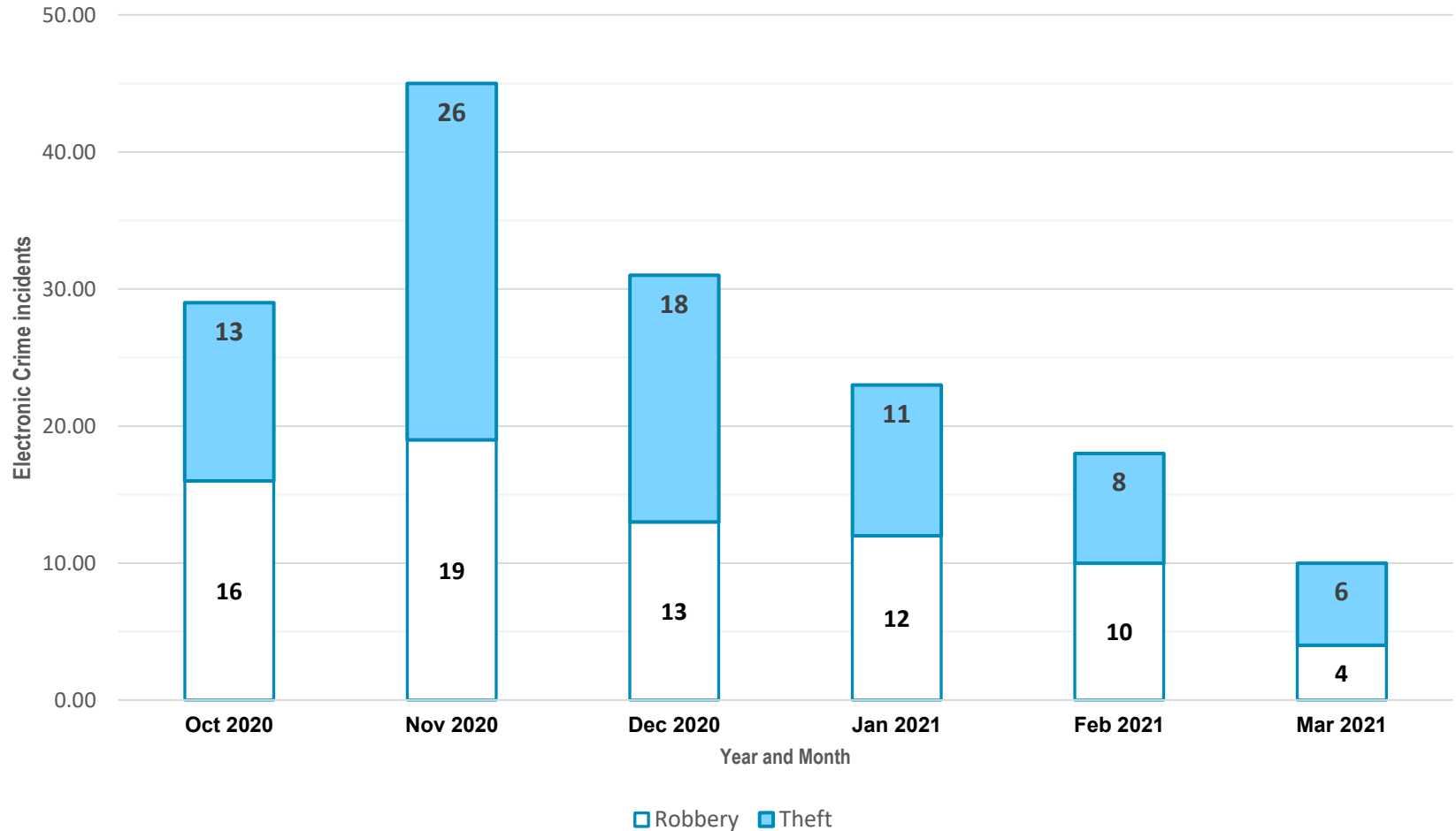


Goal:	2.25
Actual:	0.28
Met:	Yes

- 30% performance improvement from previous quarter and 72.92% increase from same quarter last year
- Antioch Station, 4 reported incidents (4 cases per 1,000 of the station's parking spaces)
- Concord Station, 2 reported incidents (1 case per 1,000 of the station's parking spaces)

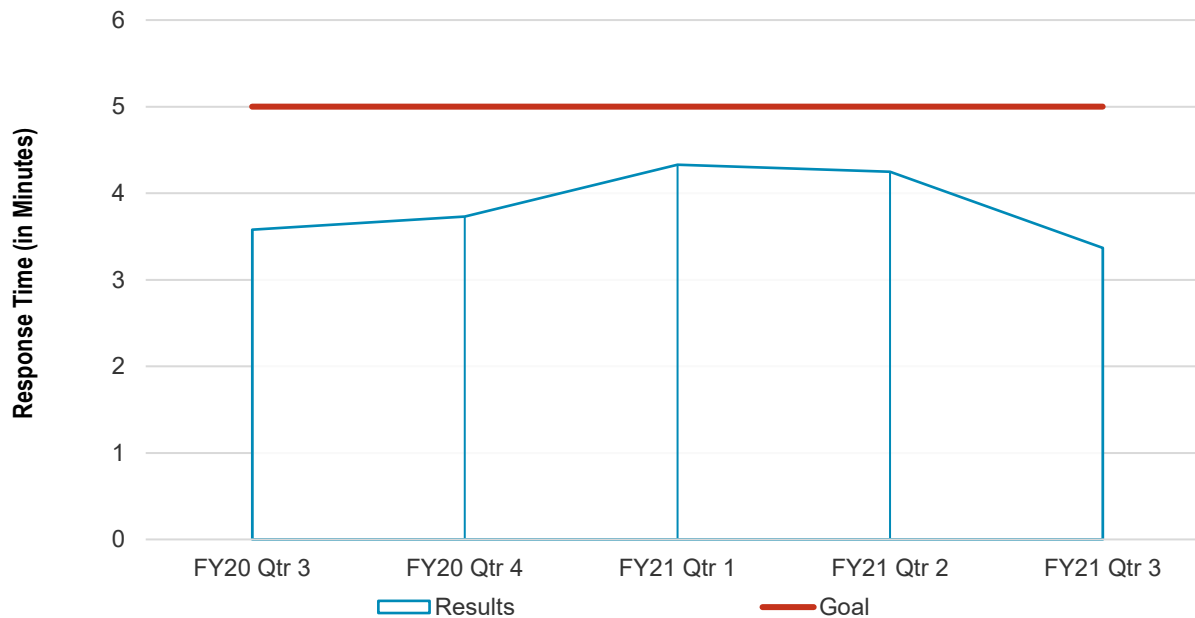
Electronic Crimes

Crime by month



Average Emergency Response Time

Response Time (in Minutes)

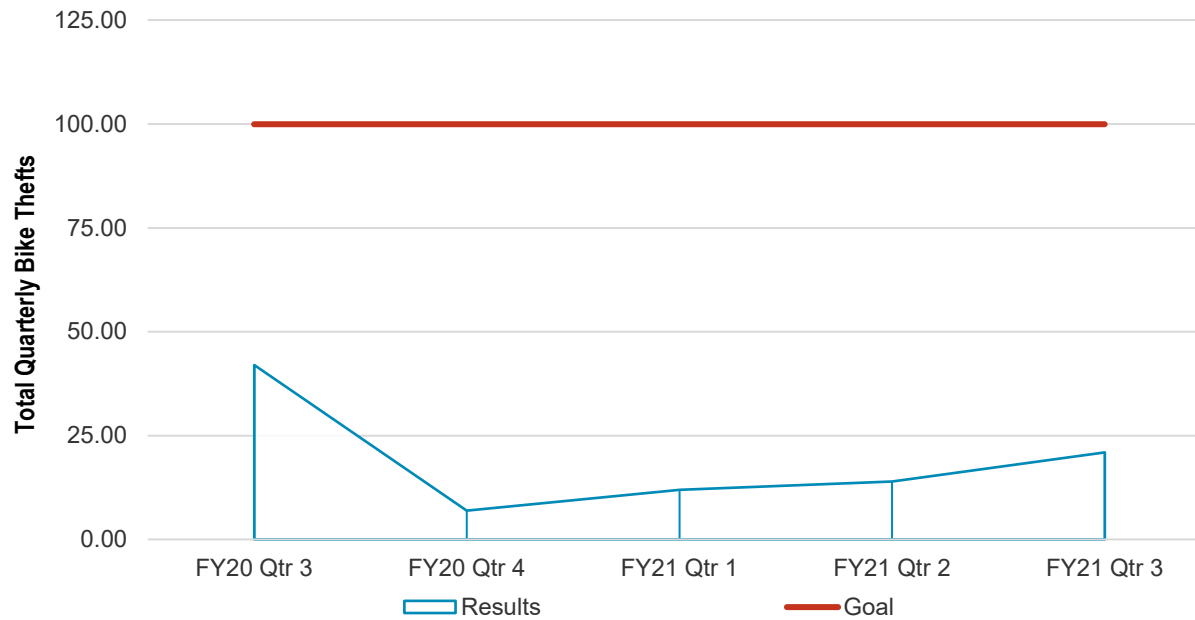


Goal:	5.00
Actual:	3.37
Met:	Yes

- 21% performance improvement from previous quarter, 6% improvement from same quarter last year
- Overall continued to meet goal under the five-minute average response time
- 24% of emergency incidents (67 of 243) were initiated and viewed by BPD officers

Bike Theft

Count of Bike Thefts



Goal:	100
Actual:	14
Met:	Yes

- 50% performance decrease from previous quarter, 50% improvement from same quarter last year
- “A” Line is highest with seven incidents, followed by “C” Line at five incidents