



Quarterly Service Performance Review 2nd Quarter, FY22

October – December, 2021

Engineering & Operations Committee

March 10, 2022

FY22 Second Quarter Overview



- **Total Ridership** increased by 11.3% from prior quarter and by 119.6% from prior year. **Average weekday ridership of (108,352)** was up by 14.6% and 114.8% from prior quarter and same quarter last year respectively. **Average peak ridership** was up by 120.8% from prior year; **Saturday and Sunday ridership** are up 148.7% and 118.0% from prior year.
- **ROW Equipment Reliability:** Rail Cars, and Track met goal.
- **Station Equipment Availability:** Ticket Machines, Fare Gates, Escalators (Platform), Escalators (Street), Elevators (Station), and Elevators (Garage) met goal.
- **Passenger Environment:** Environment Outside Stations & Inside Stations, Vandalism, Customer Service, and Train Temperature met goal.
- **Total Customer Complaints rate** decreased to 19.89% per 100,000 passenger trips, showing 5.8% improvement.

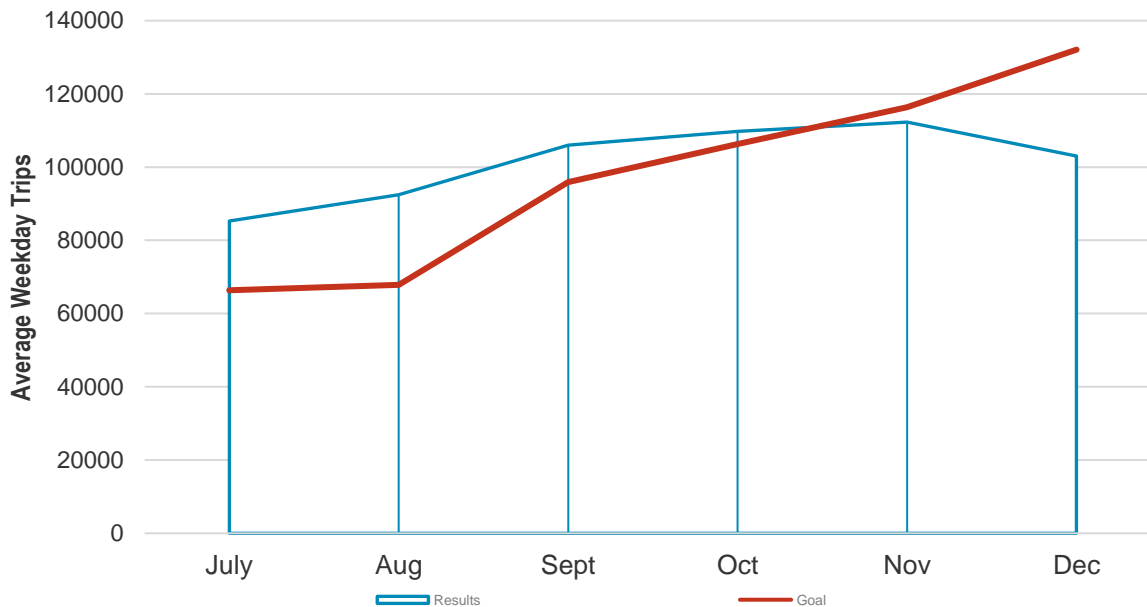
Quadrant Chart



QUADRANT CHART FOR 2nd QUARTER FY22

		BETTER				WORSE				
MET		LAST QTR	CURRENT	CHANGE	GOAL		LAST QTR	CURRENT	CHANGE	GOAL
		Escalators Platform	98.17%	98.30%	0.13%	96.00%	Station Vandalism	79.63%	77.52%	-2.11%
	Train Temperature	85.52%	87.43%	1.92%	82.00%	Environment Inside Stations	71.82%	69.26%	-2.55%	64.00%
	Environment Outside Stations	69.24%	69.71%	0.47%	66.00%	Customer Service	81.97%	77.84%	-4.13%	75.00%
	Track	0.02	0.01	-0.01	0.30	Mean Time Between Service Delays	5936	4886	-1050	4650
	Elevators Station	97.93%	99.33%	1.40%	98.00%	Escalators Street	96.50%	96.27%	-0.23%	93.00%
						Elevators Garage	99.83%	99.57%	-0.27%	97.00%
						AFC Vendors	98.52%	98.13%	-0.39%	95.00%
						AFC Gates	99.35%	99.03%	-0.32%	99.00%
NOT MET		LAST QTR	CURRENT	CHANGE	GOAL		LAST QTR	CURRENT	CHANGE	GOAL
		Cust.Complaints/100KTrips	21.15	19.89	-1.26	5.07	Car Availability at 4 AM (0400)	608.67	596.33	-12.34
	BART Police Presence	10.4%	10.5%	0.1%	12.0%	Train Interior Cleanliness	75.12%	69.29%	-5.83%	70.00%
	Computer Control System	0.24	0.10	-0.14	0.08	Wayside Train Control	0.69	1.16	0.47	1.00
						Traction Power	0.19	0.56	0.37	0.20
						Customers on Time - Daily	93.94%	89.43%	-4.51%	94.00%
						Trains on Time - Daily	90.17%	78.57%	-11.61%	91.00%
						Transportation	0.90	1.11	0.21	0.50

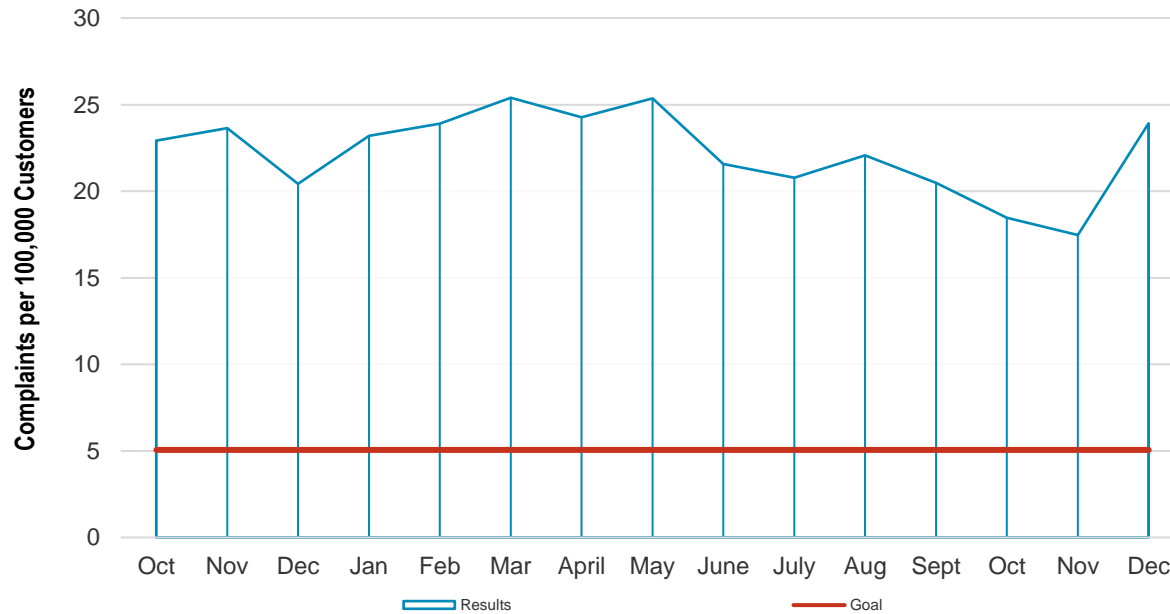
Customer Ridership - Weekday Trips



Goal:	118,238
Actual:	108,352
Met:	No

- Total ridership increased by 11.3% from prior quarter and 119.6% from same quarter last year
- Average weekday ridership (108,352) is up by 14.6% from prior quarter and 114.8% from same quarter last year
- Average peak ridership is up by 120.8% from same quarter last year
- Saturday and Sunday ridership is up by 148.7% and 118.0% from same quarter last year

Customer Complaints

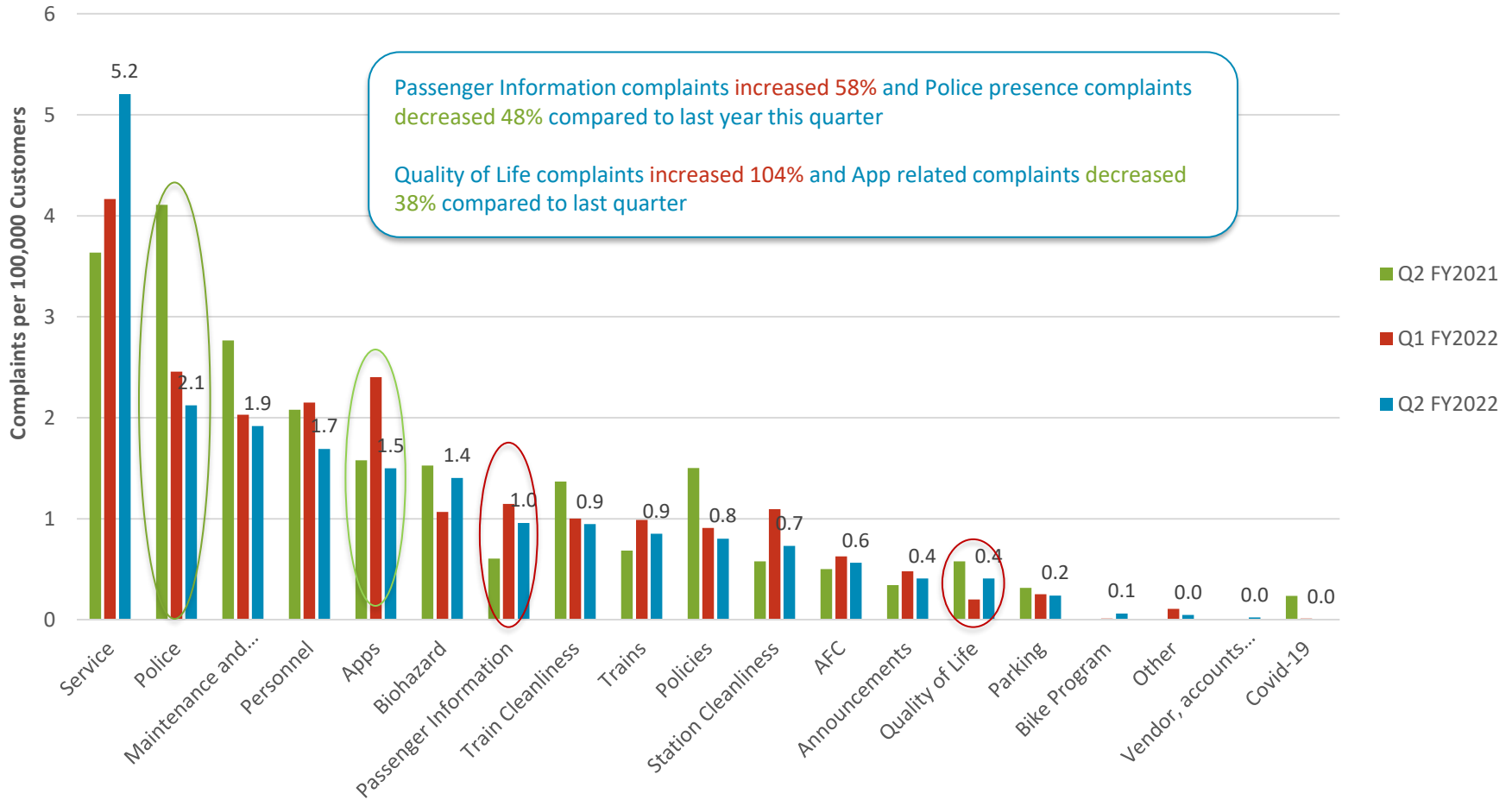


Goal:	5.07
Actual:	19.89
Met:	No

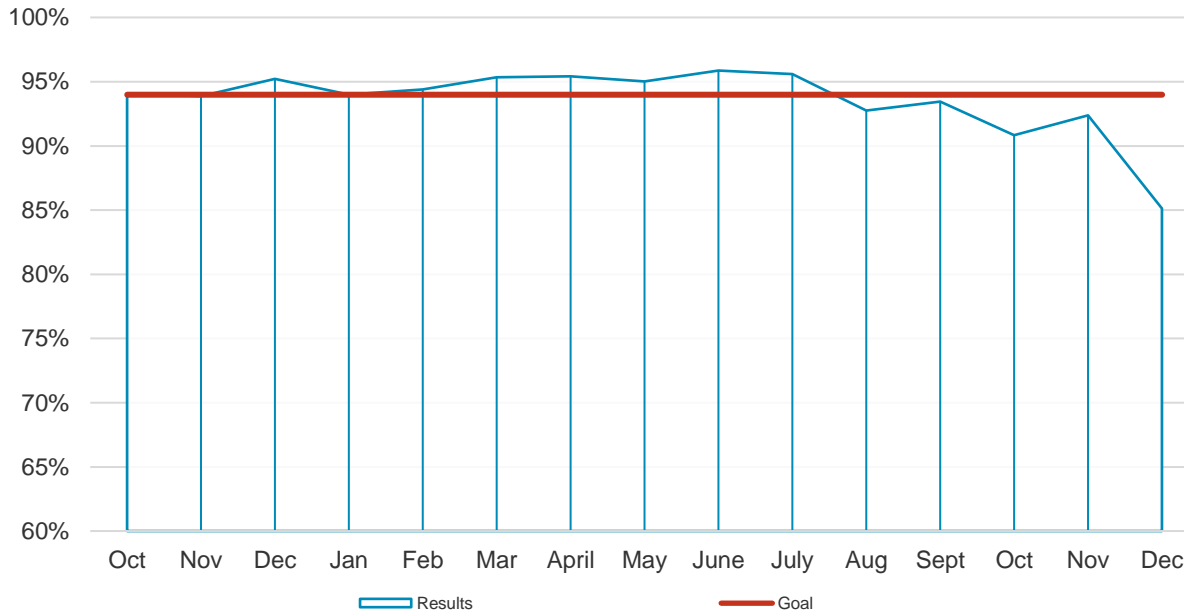
- 5.8% performance improvement from previous quarter, 11.3% improvement from same quarter last year
- Police presence complaints decreased 48% from same quarter last year
- Customer complaints overall were down resulting in a 5.8% improvement from last quarter
- Quality of Life complaints doubled from last quarter. Primarily due to weather, homelessness and the Omicron Variant
- Passenger information complaints spiked 58% from same quarter last year due to cancelled trips and lack of consistent information on third party apps and BART's app and platform signs; cancelled trip info is now shared with 3rd party apps

Customer Complaints

Complaints Detail by Category



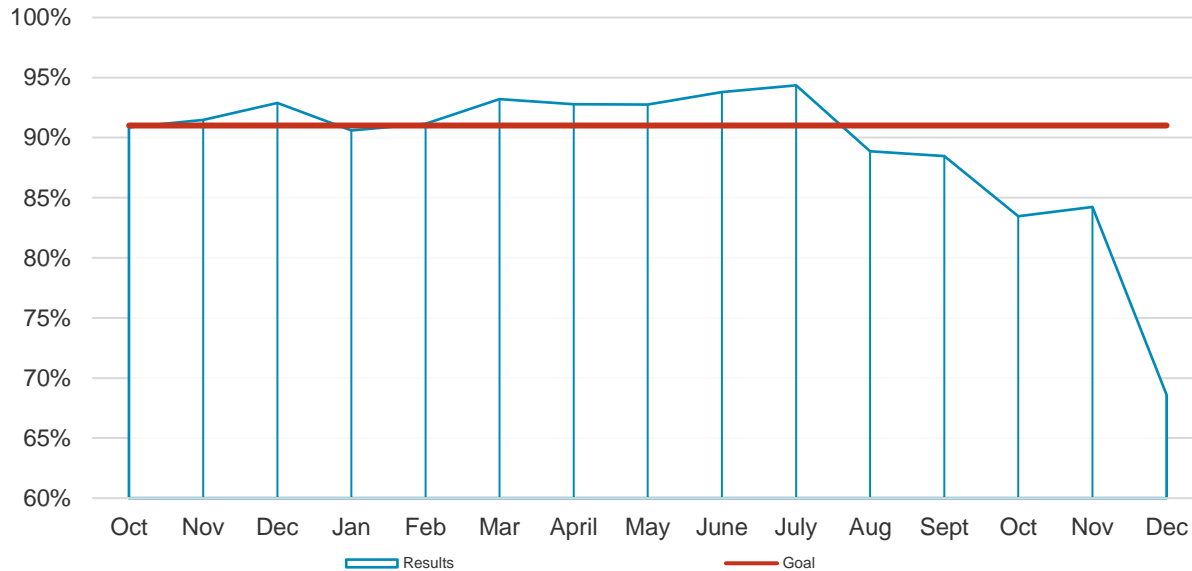
On-Time Service - Customer



Goal:	94.00%
Actual:	89.43%
Met:	No
Delay Source	% of Trains
POLICE ACTIONS	22%
WEATHER	16%
VEHICLE	12%
TRAIN CONTROL	9%
OPERATIONS	9%
PERSON ON TRACKWAY	5%
TRACTION POWER	5%
VANDALISM	4%
OBJECT ON TRACKWAY	3%
PATRON ILL	3%

- 4.8% performance decrease from previous quarter, 5.28% decrease from same quarter last year
- On-Time decreased significantly due to car and staffing shortages which resulted in canceled dispatches: Additional contribution to delays was inclement weather – implemented speed reductions to prevent wheel flats which resulted in system-wide delays

On-Time Service - Train



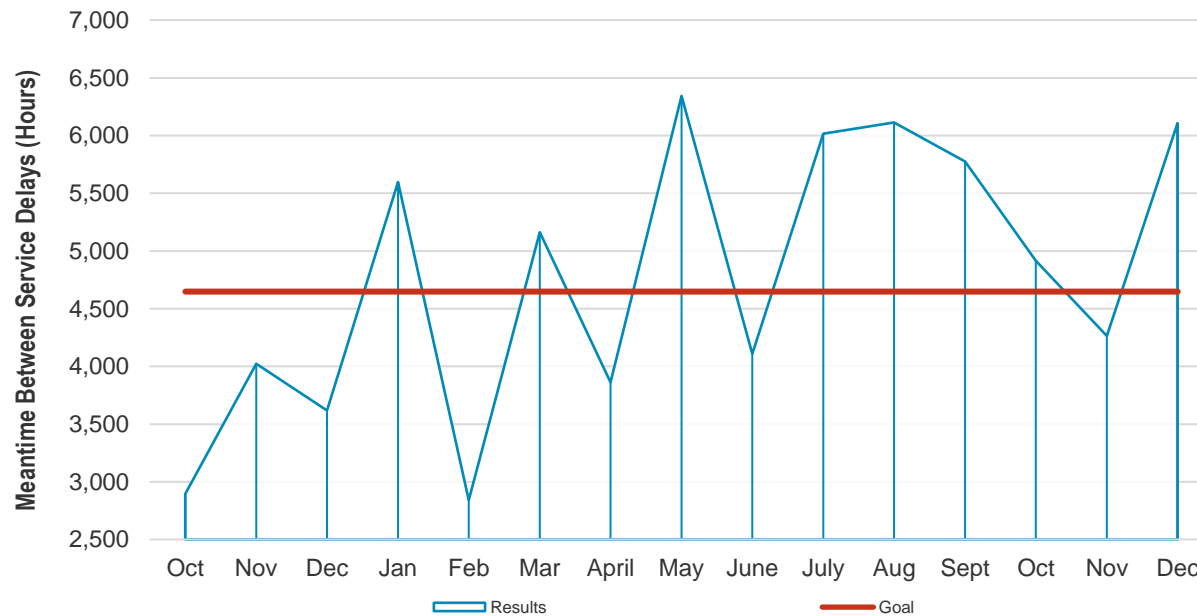
Goal:	91.00%
Actual:	78.57%
Met:	No

58 PERSON ON TRACKWAY EVENTS DELAYED 5% OF TRAINS

	Date	Location	Description	Time	Cause	Trains
1	12/13/21	Systemwide	Weather (Reduced Speed)	04:00-26:08	Weather	330
2	12/21/21	Civic Center	Person On Trackway	16:07-18:20	People	96
3	12/28/21	Systemwide	Car Shortage	06:11-12:15	Vehicle	92
4	12/23/21	Systemwide	Weather (Reduced Speed)	04:00-23:48	Weather	91
5	12/16/21	R-Line	3rd Rail Power	04:00-10:55	Equip	70
6	10/11/21	W. Oakland	Train Struck A Person On Trackway	17:26-19:32	People	69
7	12/14/21	Ashby	3rd Rail Power (Substation)	05:00-10:15	Equip	63
8	12/22/21	Systemwide	Weather (Reduced Speed)	04:30-25:20	Weather	62
9	12/27/21	Millbrae	3rd Rail Power (Sectional Trip)	04:49-11:00	Equip	59
10	12/29/21	Systemwide	Weather (Reduced Speed)	04:30-19:00	Weather	59

Car Equipment – Reliability

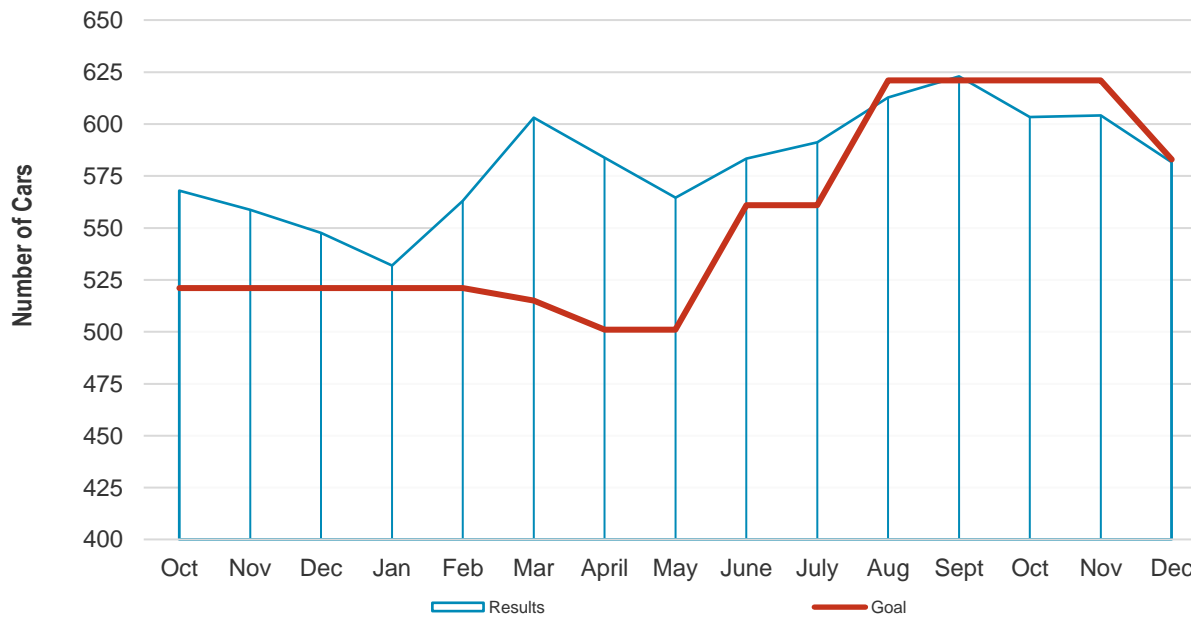
Meantime Between Service Delays



Goal:	4,650 Hours
Actual:	4,886 Hours
Met:	Yes

- 17.69% performance decrease from previous quarter, 42.01% improvement from same quarter last year
- Overall Fleet MTBSD (Mean Time Between Supply Demand) 4886 hours
 - Legacy Fleet MTBSD 4421
 - FOTF Fleet MTBSD 6522
 - Top 3 Q2 FOTF Delay Categories: ATO, Brakes , Doors

Car Equipment – 4:00AM Availability

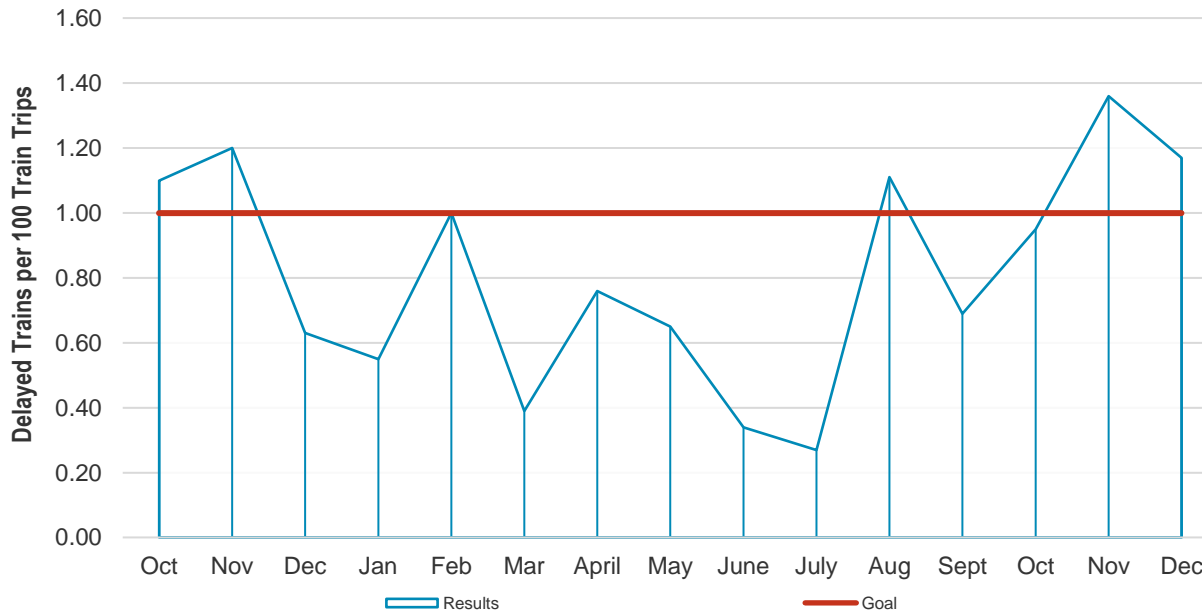


Goal:	608
Actual:	596
Met:	No

- 2.03% performance decrease from previous quarter, 6.75% improvement from same quarter last year
- Several historic storms hit the Bay Area during the Quarter
 - Increased door failures
 - Increased Wheel flats
- Staff Delta/Omicron challenges reduced maintenance capacity

Wayside Train Control System

Delayed Trains per 100 Train Trips

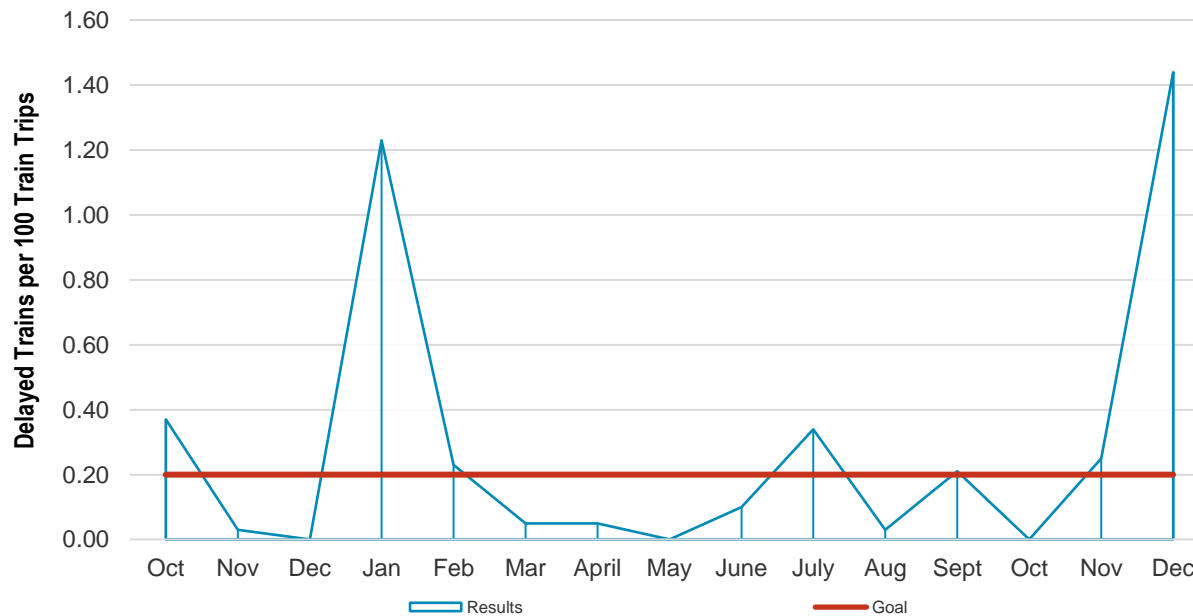


Goal:	1.00
Actual:	1.16
Met:	No

- 56.94% performance decrease from previous quarter, 18.77% decrease from same quarter last year
- Major delays this quarter:
 - 11/20/2021: A report of Misrouted Train entering A90 Fremont Station. It was determined the route was correct per design of track plans. A revision to operating mode setting was implemented to allow for efficient train movement at this location for southbound A85
 - 10/17/2021: A train entering C40 Walnut Creek station experienced a Program Stop Failure (PSF) causing an overrun of the Platform due to the Program Stop Antenna failing during arrival of train. Rain Profile was in effect at the time and no false occupancy was indicated. A Capital Project to replace the Platform Cover Board Antennas and circuitry for Program Stop is underway

Traction Power

Delayed Trains per 100 Train Trips

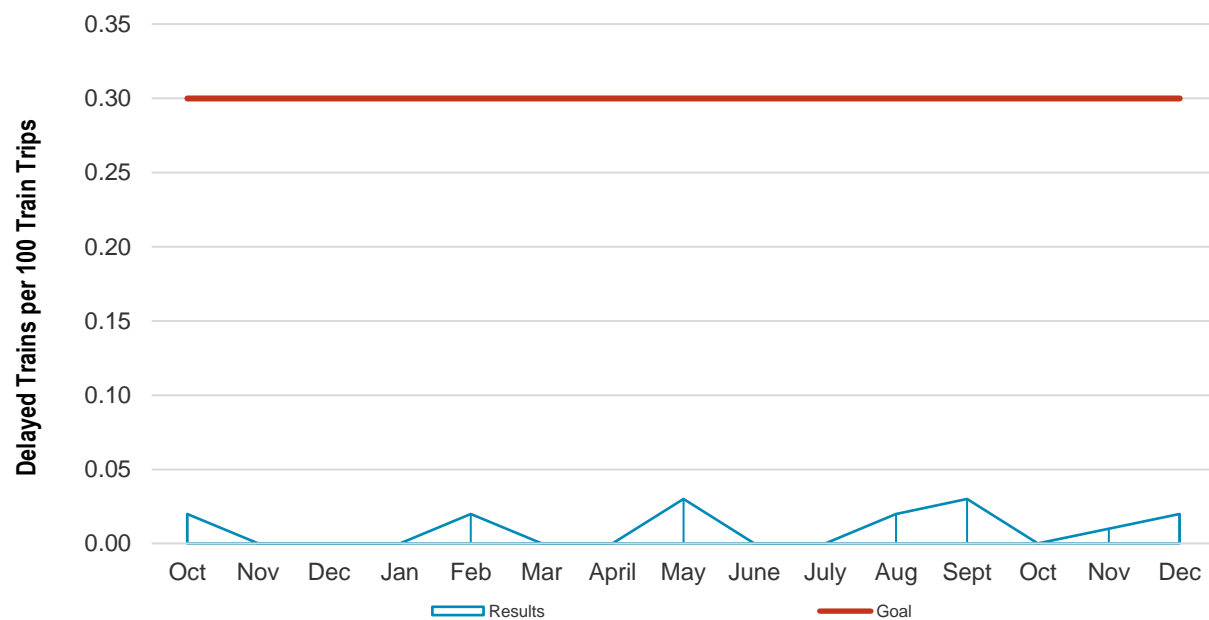


Goal:	0.20
Actual:	0.56
Met:	No

- 191.38% performance decrease from previous quarter, 322.5% decrease from same quarter last year
- Major delays this quarter:
 - 12/11/21: 3rd Rail Power Loss (Sectional Trip) at R-Line, RRC10-7 cable faulted between RCN & RRI. Contractors to replace cable, NTP 06DEC21 and will start demolishing right cable by end of February 2022 between RCN and RRI
 - 12/16/2021: 3rd Rail Power Loss in R-line, Power Restriction PL 4's metering on the R-line. Due to RRC fault on 12/11/21, at this time both left and right 34.5KV cable faulted from RCN to RRY. Completed expedited repairs on the left cable
 - 12/27/2021: 3rd Rail Power Loss (Sectional Trip) at Millbrae, Center Street Sectionalizing Station (WCS) faulted 34.5KV buss insulator. Switchgears have been inspected, cleaned, replaced insulators and 34.5KV cables tested. All passed and back to normal

Track

Delayed Trains per 100 Train Trips

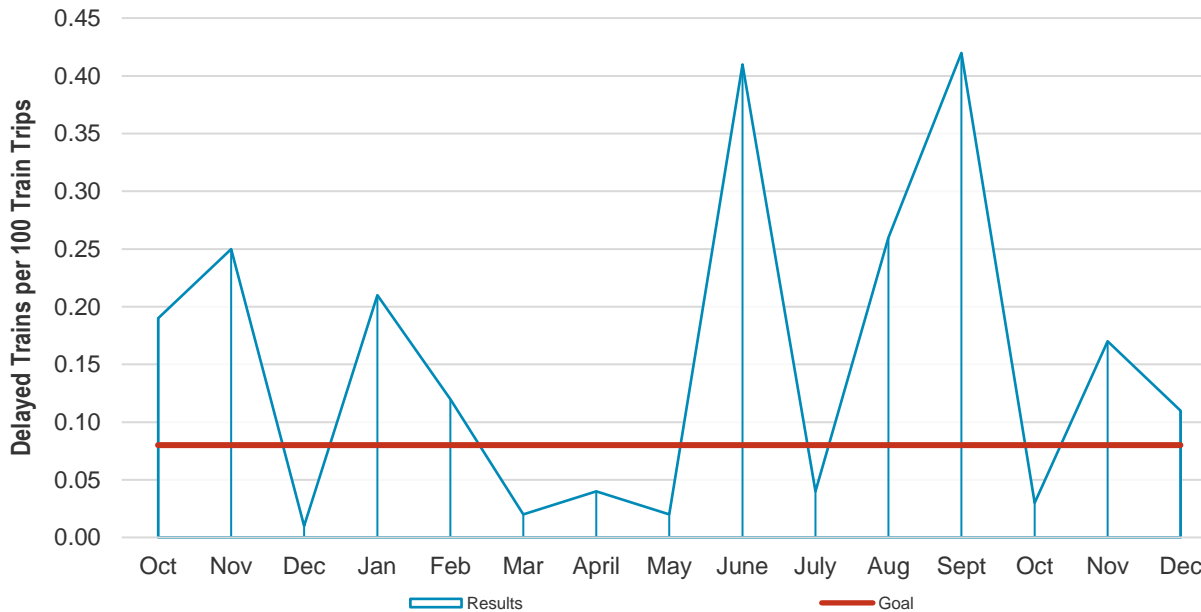


Goal:	0.30
Actual:	0.01
Met:	Yes

- 40% performance improvement from previous quarter, 45.56% decrease from same quarter last year
- On Target to achieve 10-mile goal on Rail Relay Replacement
- On Target to achieve replacing Direct Fixation Pads (10,000 goal)

Computer Control System

Delayed Trains per 100 Train Trips

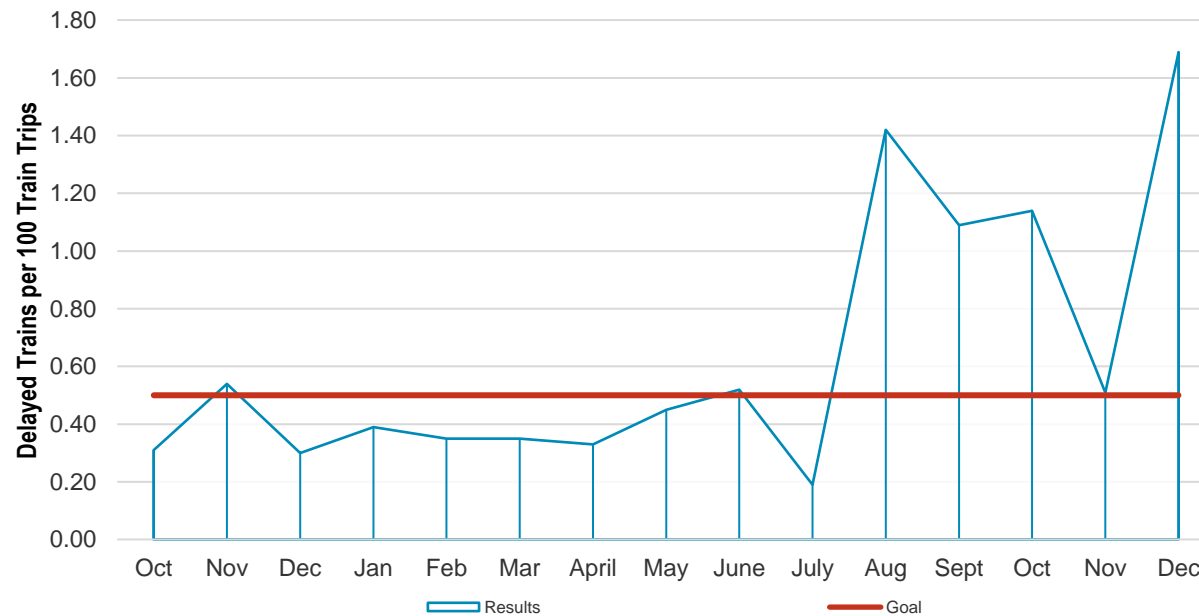


Goal:	0.08
Actual:	0.10
Met:	No

- 56.94% performance improvement from previous quarter, 31.11% improvement from same quarter last year
- Major delays this quarter:
 - 12/09/2021: Net.com loss due to hardware failure, the board was replaced, and service restored
 - 11/8/2021: Error on the Front End Computer (FEC) associated with weather causing an instantaneous power loss, crew restored the failure during safe blanket

Transportation

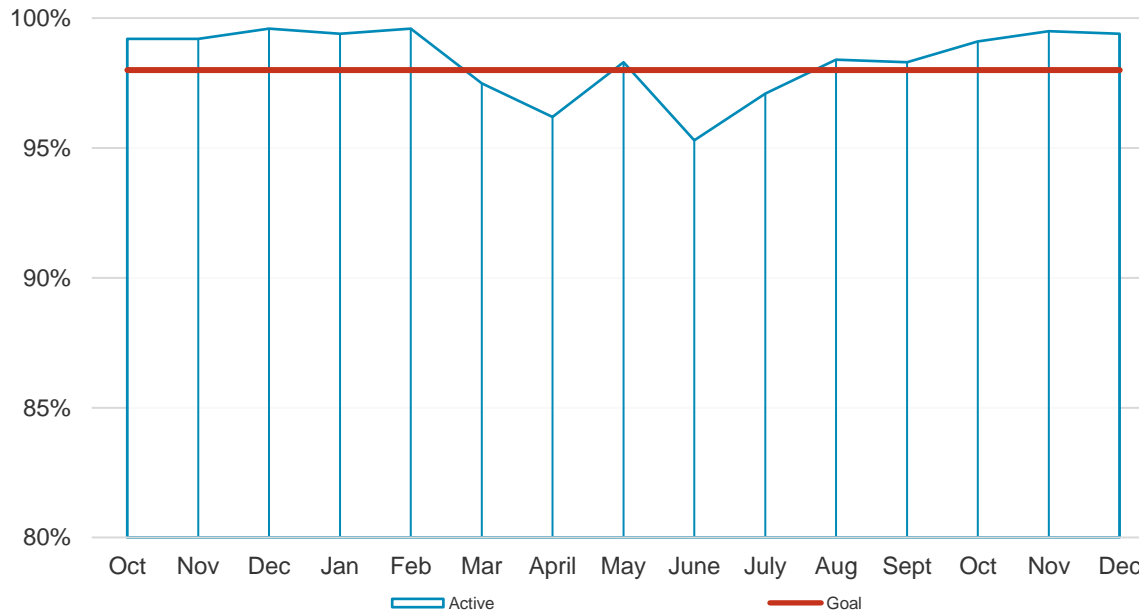
Delayed Trains per 100 Train Trips



Goal:	0.50
Actual:	1.11
Met:	No

- 23.70% performance decrease from previous quarter, 190.43% decrease from same quarter last year
- The top ten major transportation incidents were due to Staff shortage covering 66.73% of the transportation delayed trains
- Addressing the staffing issue:
 - Train Operator recruitment is in progress. Next class tentative start date is March 14, 2022
 - Promoted 17 operators from part-time to full-time in December 2021
 - Working with Leave Management to address long-term absences
 - Monitoring daily attendance

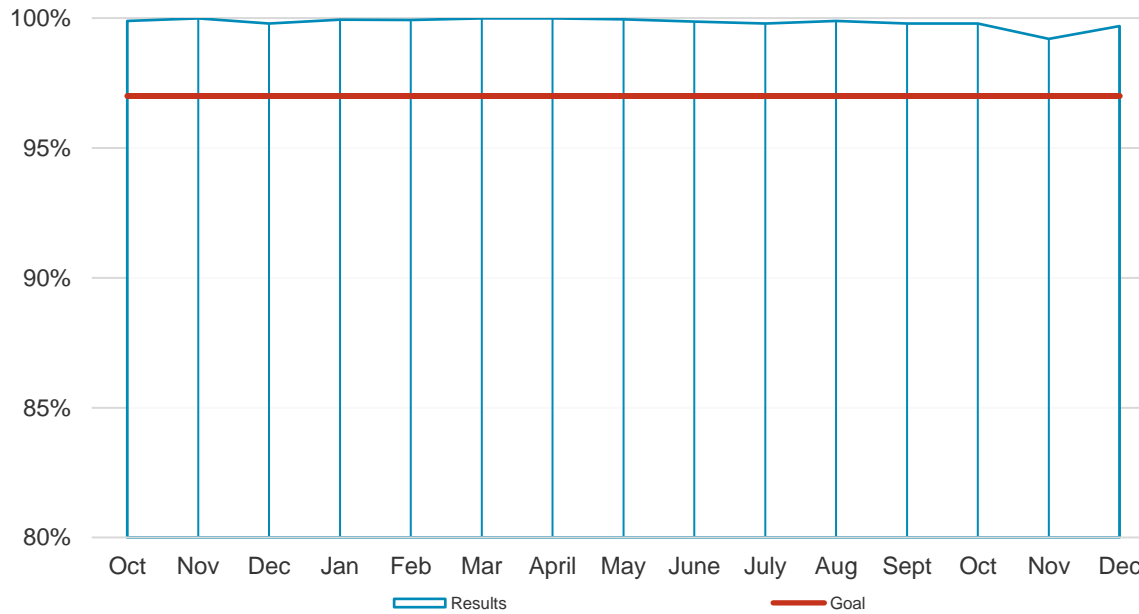
Elevator Availability - Stations



Goal:	98.00%
Actual:	99.33%
Met:	Yes

- 1.43% performance improvement from previous quarter, remained the same from same quarter last year
- Major Outages:
 - Castro Valley station unplanned outage for water intrusion, 80 hours out of service
 - Union City station unplanned repair to door track, 78 hours out of service

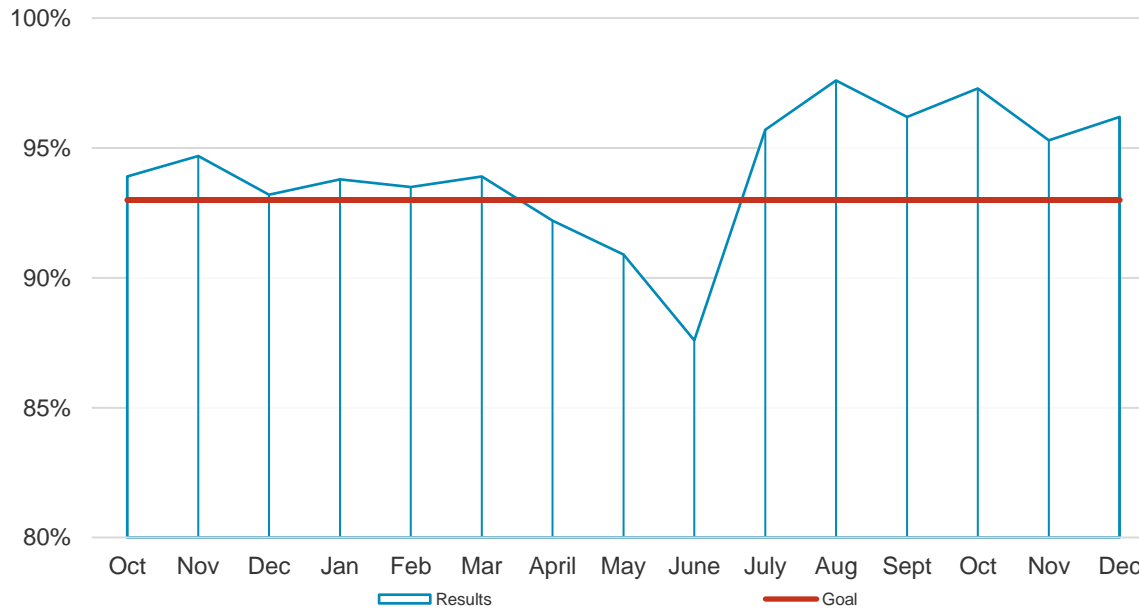
Elevator Availability - Garage



Goal:	97.00%
Actual:	99.57%
Met:	Yes

- 0.27% performance decrease from previous quarter, 0.33% decrease from same quarter last year
- Major Outages:
 - Fruitvale station tape guide replace and control board, 105 hours out of service
 - Pleasant Hill station replaced California lock and adjusted brake, 46 hours out of service

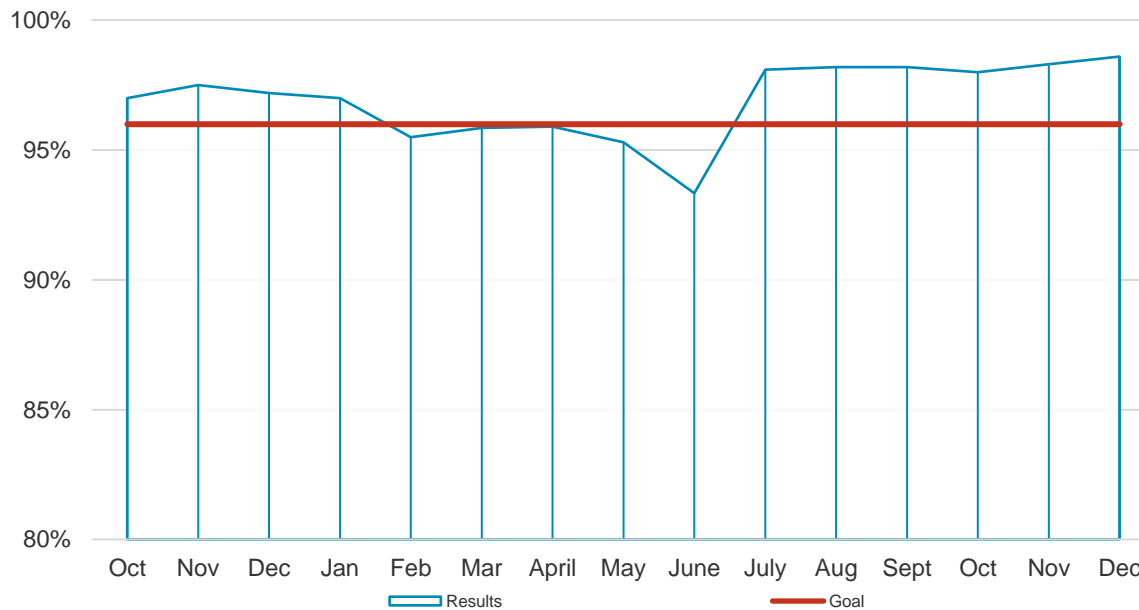
Escalator Availability - Street



Goal:	93.00%
Actual:	96.27%
Met:	Yes

- 0.24% performance decrease from previous quarter and 2.48% improvement from same quarter last year
- Major Outages:
 - Embarcadero station unplanned motor replacement, 272 hours out of service
 - 16th street station planned RH handrail replacement, 210 hours out of service

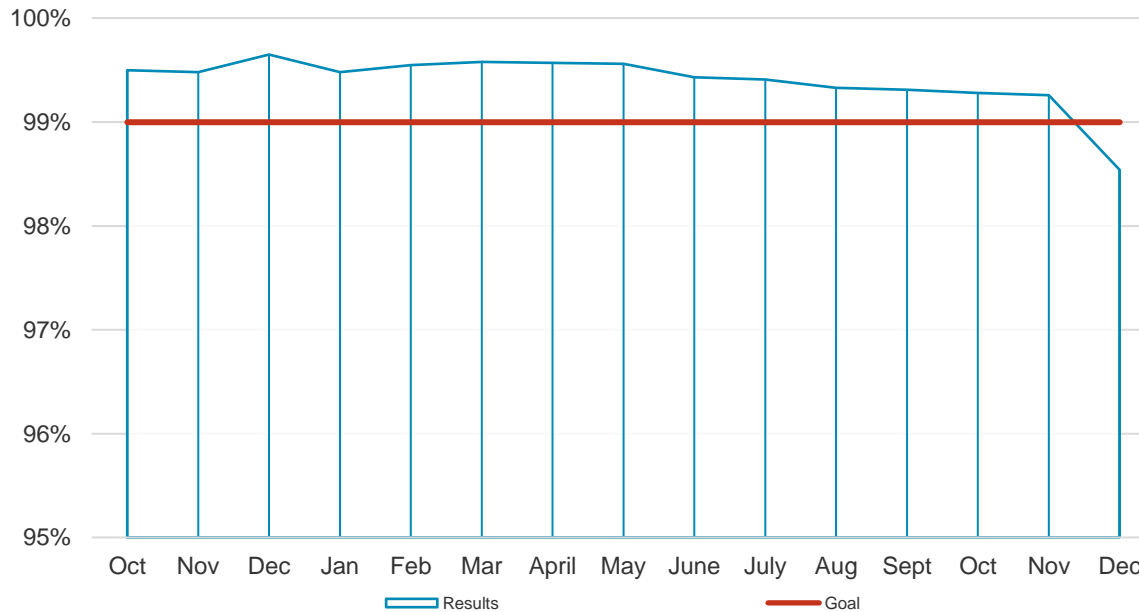
Escalator Availability - Platform



Goal:	96.00%
Actual:	98.30%
Met:	Yes

- 0.14% performance improvement from previous quarter, 1.10% improvement from same quarter last year
- Major Outages:
 - 19th St. station RH handrail required replacement due to vandalism, 238 hours out of service
 - Montgomery St station unplanned gearbox repair, 205 hours out of service

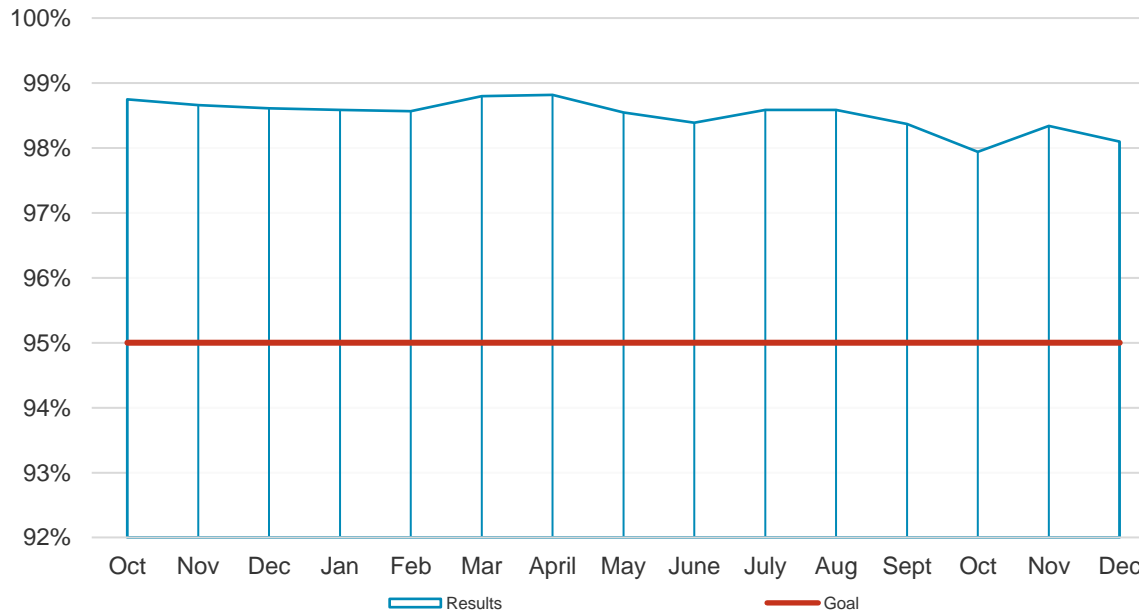
AFC Gate Availability



Goal:	99.00%
Actual:	99.03%
Met:	Yes

- 0.33% performance decrease from previous quarter and 0.52% decrease from same quarter last year
- Performance decrease due to increase of maintenance requests and manpower challenge due to COVID 19 in December. Increased PM frequency in January to regain schedule pace
- Completed 19th street & Powell Street AFC Modernization Project, Gate & Vendor relocations
- Aligning & Initiating Clipper 2 Upgrade project for all District Fare Collection equipment

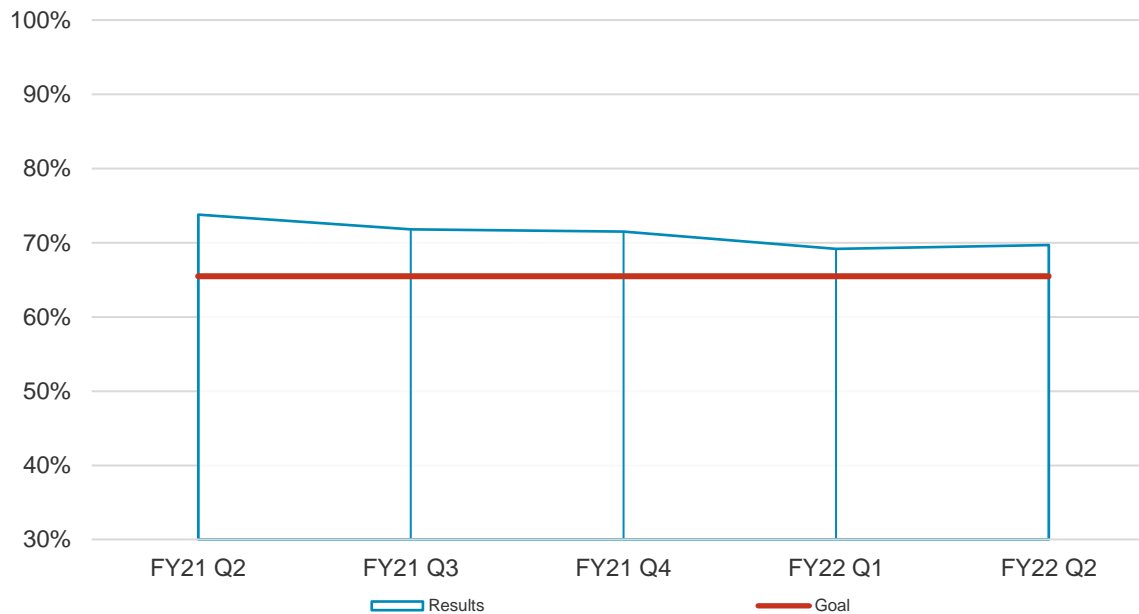
AFC Vendor Availability



Goal:	95.00%
Actual:	98.13%
Met:	Yes

- 0.4% performance decrease from previous quarter, 0.55% decrease from same quarter last year
- Completed districtwide high security Ingenico Pin Pad installation
- Initiating installation of new single-board computers into vendors at Coliseum & Oakland Airport

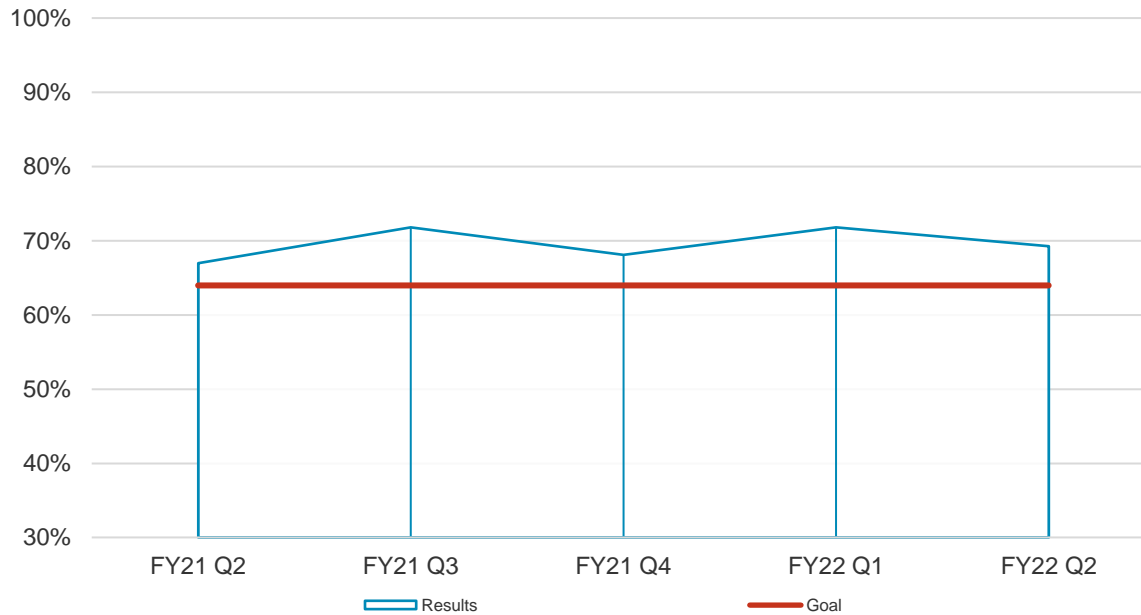
Environment – Outside Stations



Goal:	65.5%
Actual:	69.7%
Met:	Yes
Composite Rating Based on Appearance of: <ul style="list-style-type: none"> ▪ Landscaping Walkways, & Entry Plaza: 65.3%↓ (Weighted 67%) ▪ Parking Lot Cleanliness: 78.7%↑ (Weighted 33%) ↑ or ↓ indicates a statistically significant change from prior quarter	

- 0.68% performance improvement from previous quarter, 5.58% decrease from same quarter last year
- Staffing issues continue to bring challenges for remaining personnel to complete schedules
- Increased assistance from BART Police has aided in clearing of and preventing large homeless encampments in parking lots and structures

Environment – Inside Stations



Goal:	64.0%
Actual:	69.3%
Met:	Yes

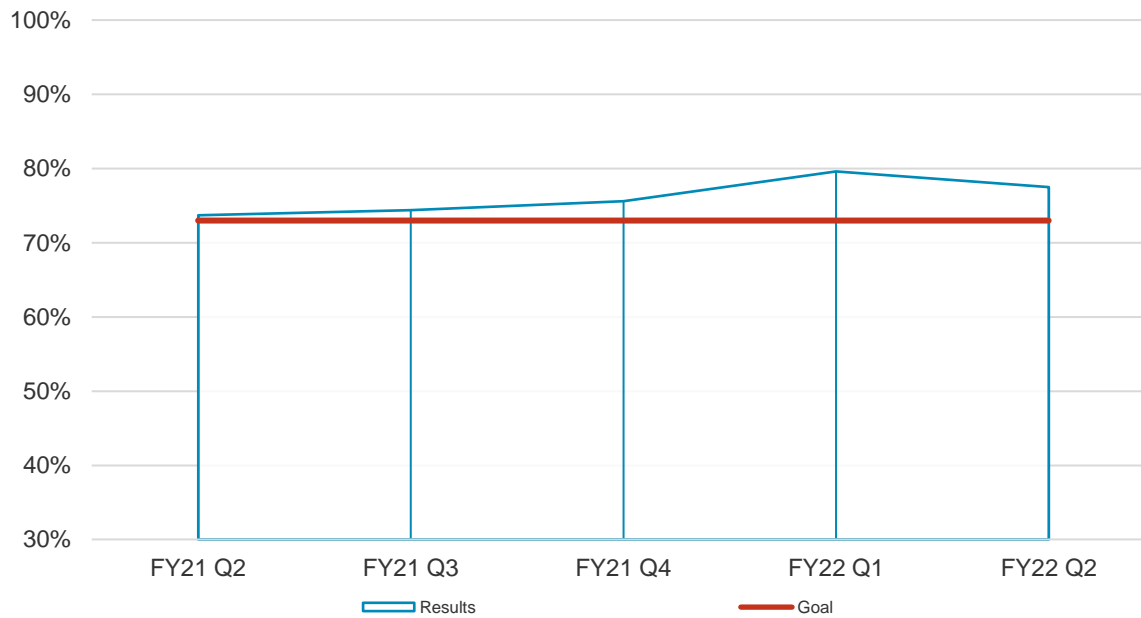
Composite Rating Based on Appearance of :

- **Platform: 72.7%** (Weighted 40%)
- **Concourse: 73.7%**↑ (Weighted 25%)
- **Escalator: 71.4%** (Weighted 10%)
- **Stairwells: 67.5%** (Weighted 7.5%)
- **Elevator: 62.6%** ↓ (Weighted 10%)
- **Restroom: 43.9%**↓ (Weighted 7.5%)

↑ or ↓ indicates a statistically significant change from prior quarter

- 3.55% performance decrease from previous quarter, 3.30% improvement from same quarter last year
- Staff shortage due to COVID 19 has been a challenge, however 14 new SSW have been hired this month
- 30 vacant positions, currently recruiting

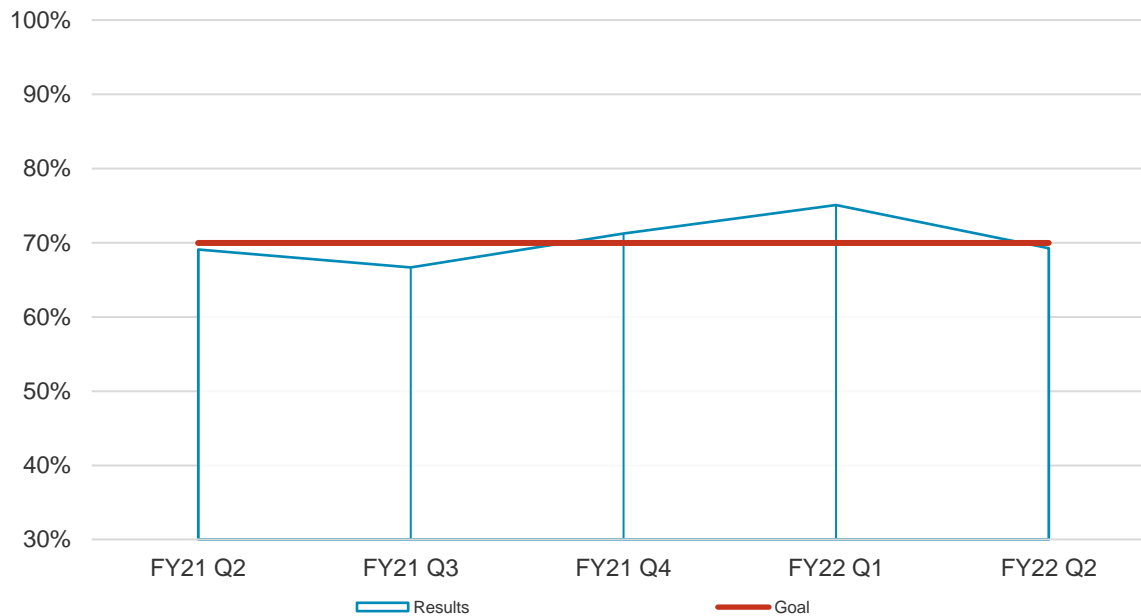
Station Vandalism



Goal:	73.0%
Actual:	77.5%
Met:	Yes

- 2.65% performance decrease from previous quarter, 5.15% improvement from same quarter last year
- Less staff due to COVID-19 and increase in graffiti system wide

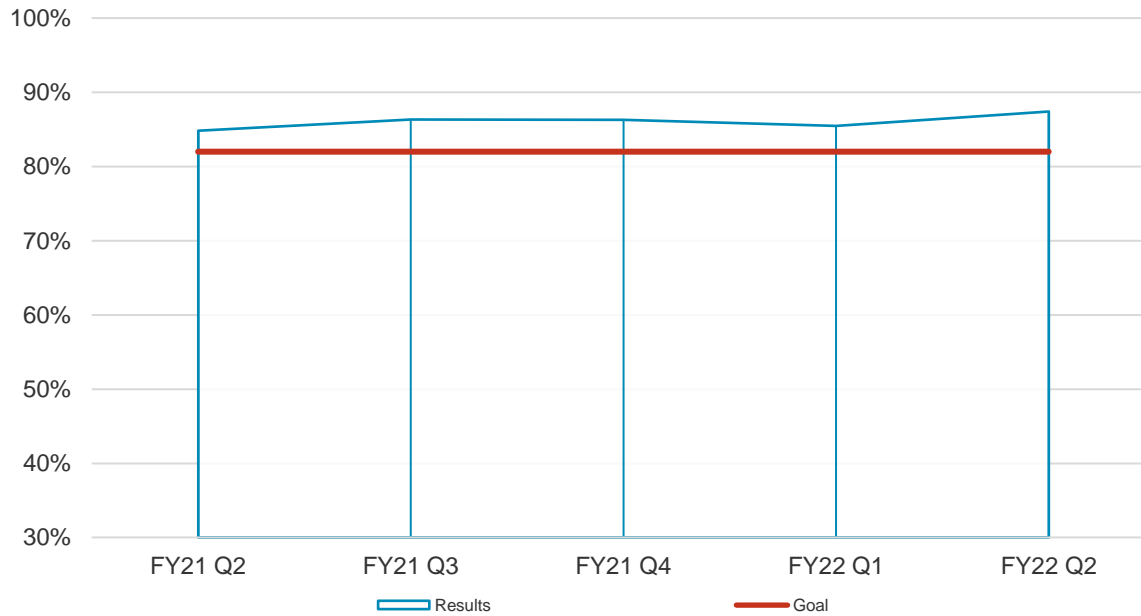
Train Interior Cleanliness



Goal:	70.0%
Actual:	69.3%
Met:	No
Composite Rating Based on Train Interior: <ul style="list-style-type: none"> ▪ Cleanliness: 60.3% ↓ (Weighted 60%) ▪ Kept Free of Graffiti: 82.8% ↓ (Weighted 40%) ↑ or ↓ indicates a statistically significant change from prior quarter	

- 7.77% performance decrease from previous quarter, 0.22% improvement from same quarter last year
- Utility Worker hiring effort still ongoing
 - 24 Utility Workers hired in this quarter
 - 8 Net gain of Utility Worker positions this quarter
 - 59 Utility Workers positions remain vacant

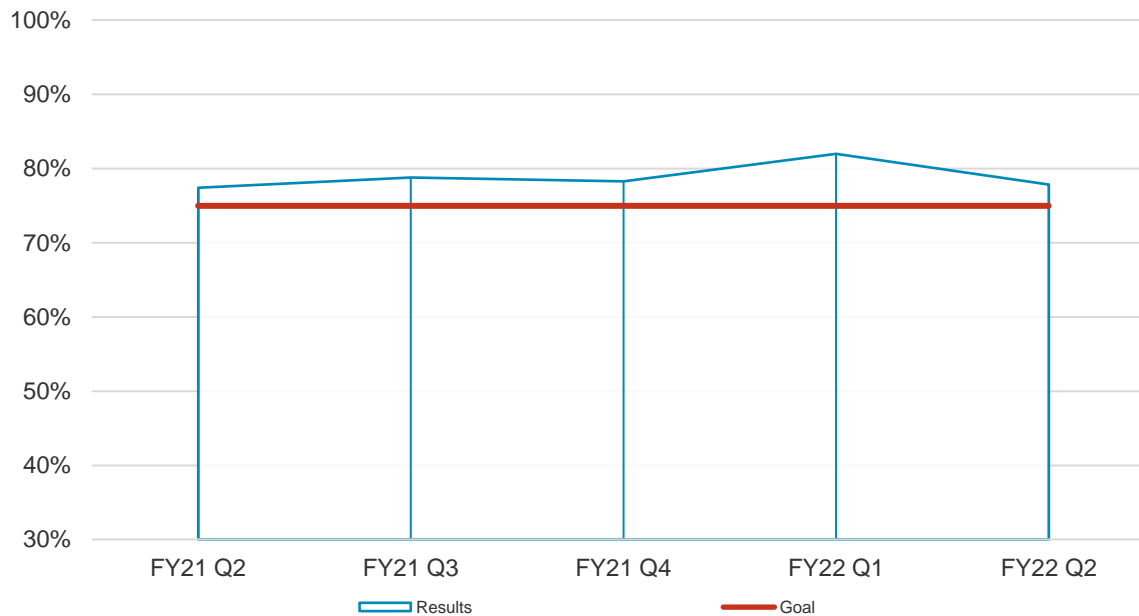
Train Temperature



Goal:	82.0%
Actual:	87.4%
Met:	Yes

- 2.24% performance improvement from previous quarter, 3.05% improvement from same quarter last year

Customer Service

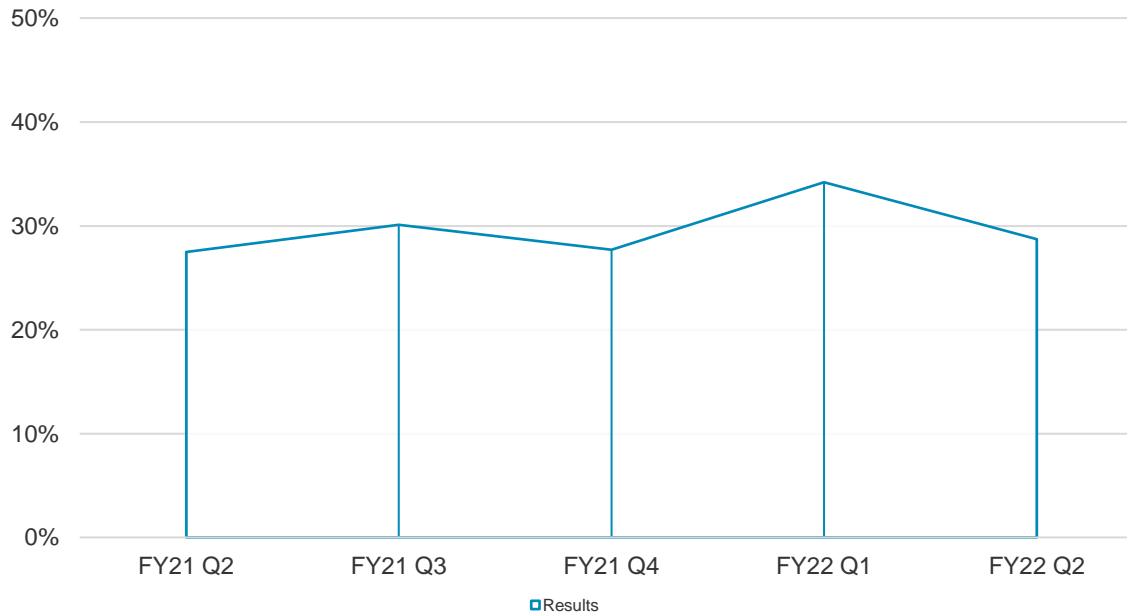


Goal:	75.0%
Actual:	77.8%
Met:	Yes
Average Rating of:	
<ul style="list-style-type: none"> Customer Service Station Agent (if used today): 81.3% Onboard Next Stop, Destination and Transfer Announcements: 77.5% Onboard Delay Announcements (if delayed today): 74.8% ↓ 	
↑ or ↓ indicates a statistically significant change from prior quarter	

- 5.04% performance decrease from previous quarter, 0.51% improvement from same quarter last year
- Improved station equipment availability for TVM's, Clipper Only access, and mobile Clipper for smart phones allowed agents to focus on assisting with customer's travel questions and train arrivals
- Line Management continues focusing on Station Agent availability and better customer service goals

Homelessness - Passenger Survey

“How well is BART addressing homelessness?”



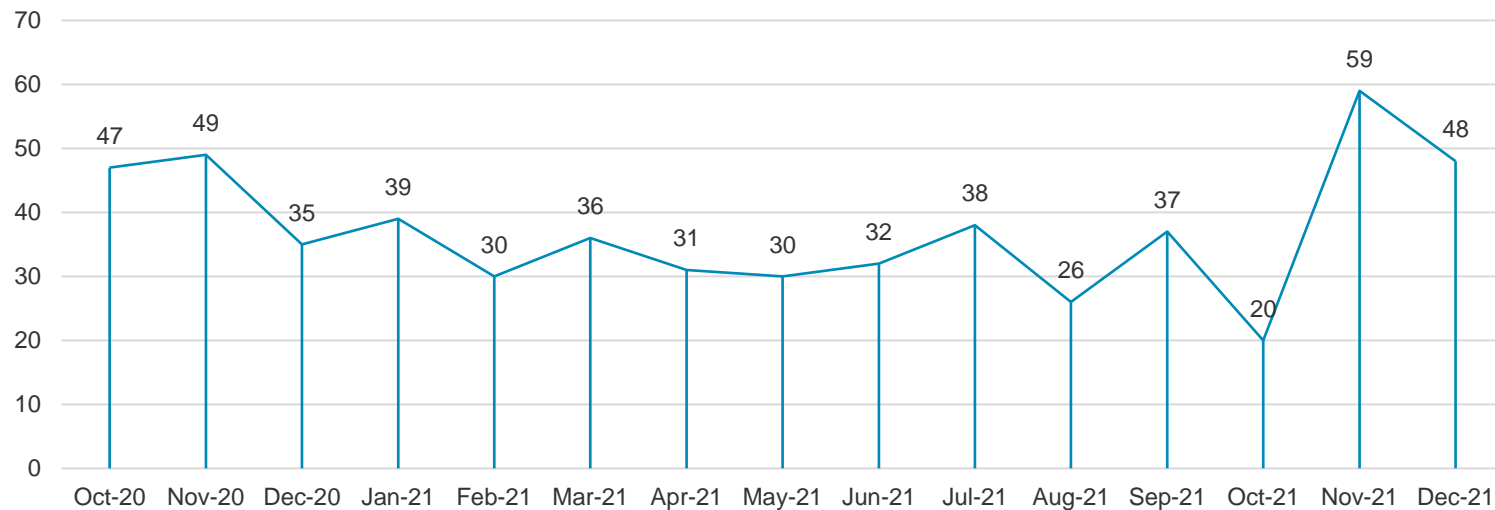
Goal:	N/A
Actual:	28.7%
Met:	N/A

- 15.99% performance decrease from previous quarter, 4.54% improvement from same quarter last year
- The performance decrease from previous quarter can be attributed to colder/wet weather in addition to the rise of the Omicron variant, which closed and/or limited many service options for the unsheltered community

Transient Counts in San Francisco Stations

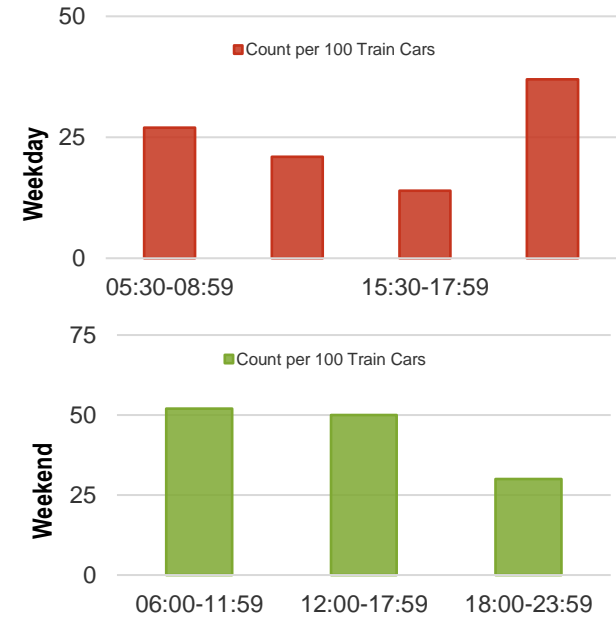
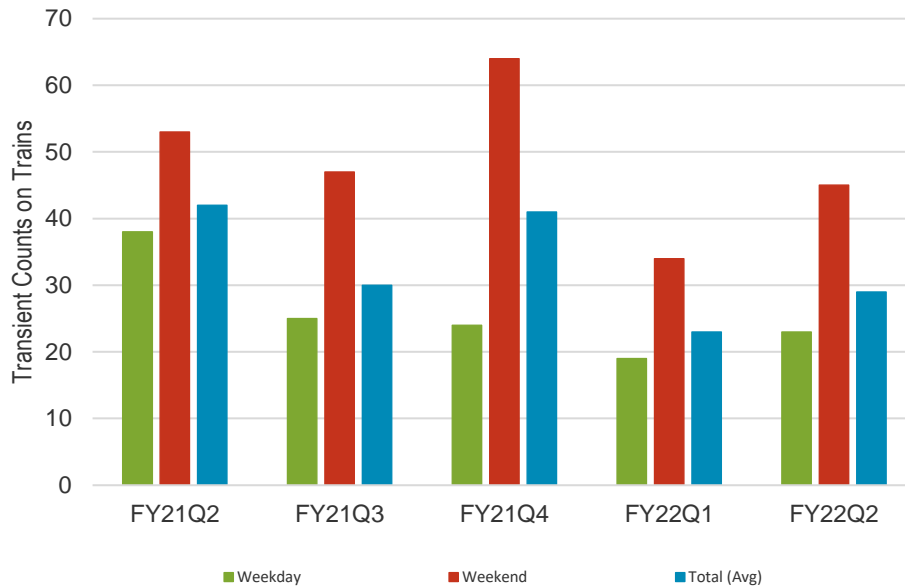


Downtown San Francisco Station Counts
October 2020 - December 2021



- 25.74% increase in count from previous quarter, 3.05% decrease from same quarter last year
- The increase was predictable as the colder/wetter weather leaves the unsheltered population with limited places to go

Transient Counts on Trains



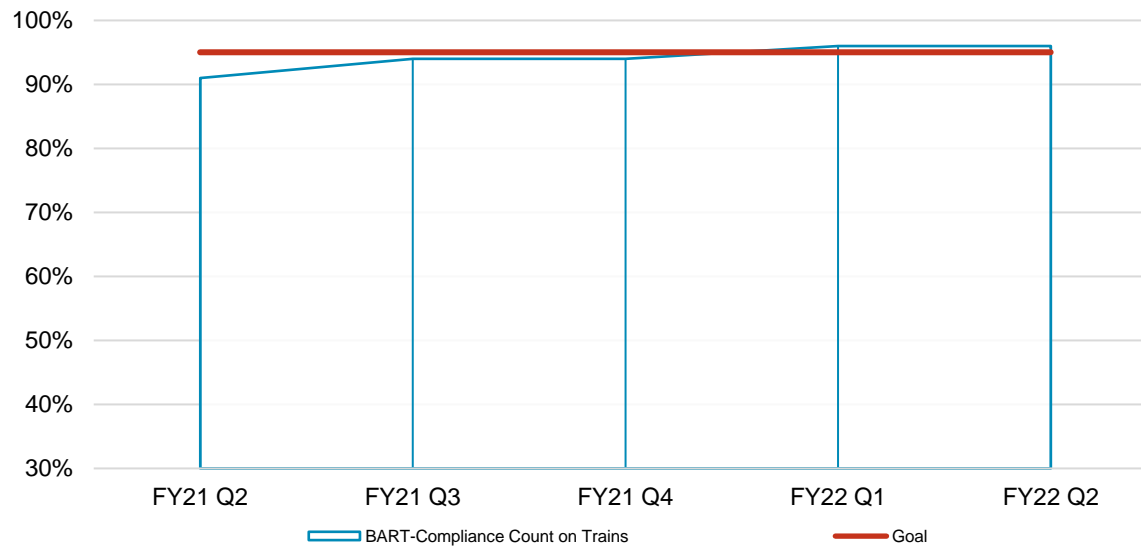
- 26.08% performance decrease from previous quarter, 30.95% improvement from same quarter last year
- The increase in count of transient in trains aligns with the rise of transient in stations. Inherently, there is a positive direct relationship between unhoused individuals on trains and stations
- As the weather warms, and further service connections are made, we should see a decrease again

Face Covering

Face Covering – BART Count on Trains



BART's Count of Mask Compliant Riders



Goal:	95%
Actual:	96%
Met:	Yes

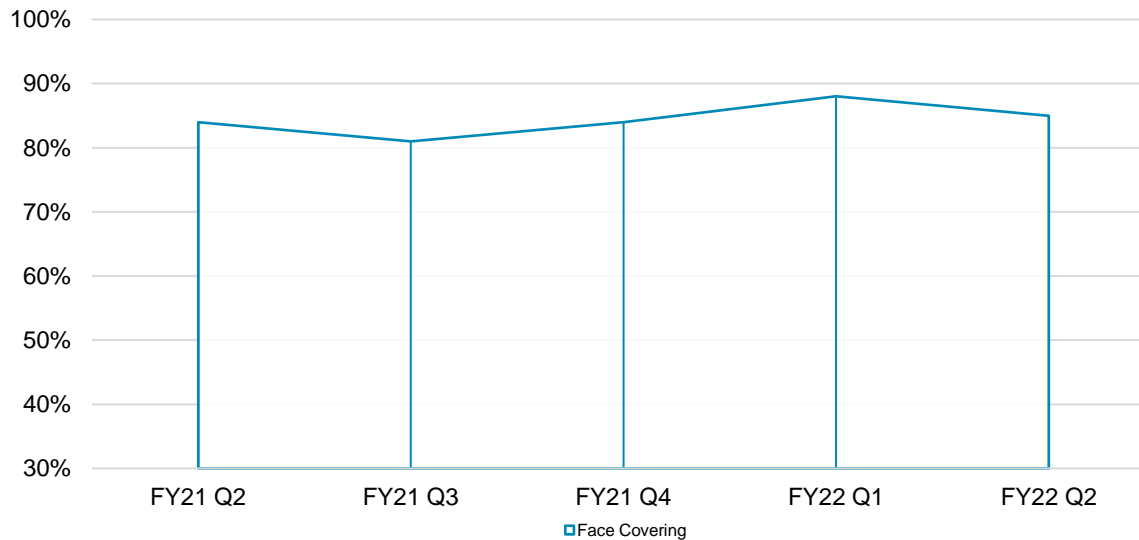
- Flat performance improvement from previous quarter, 5.49% improvement from same quarter last year

Face Covering

Passenger Perception - Passenger Survey



Customer Rating on Compliance (Excellent + Good)

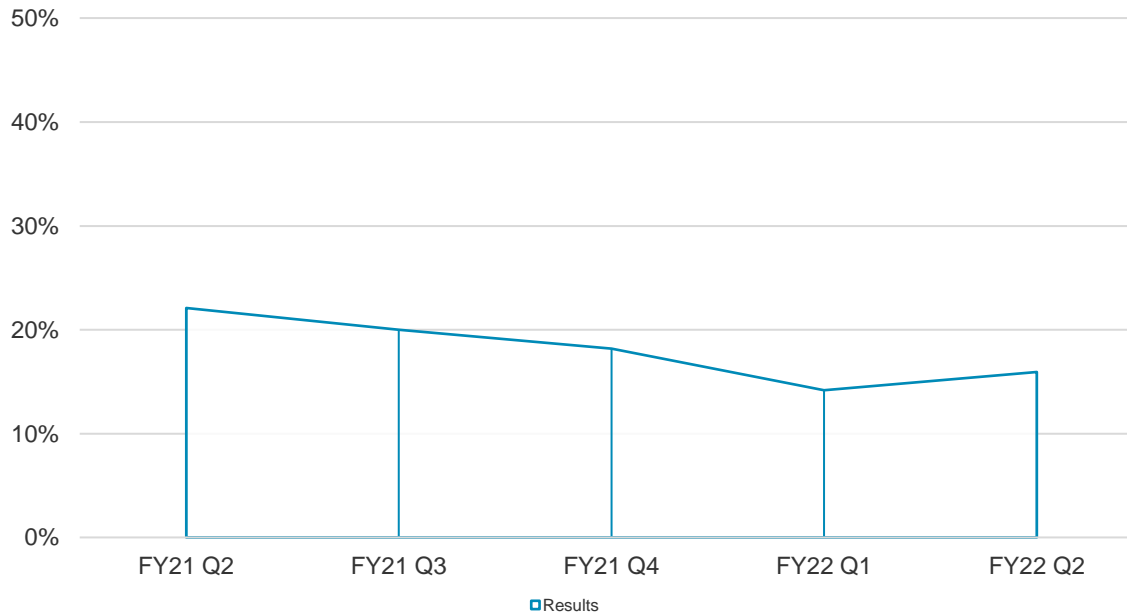


Goal:	N/A
Actual:	85%
Met:	N/A

- 3.41% performance decrease from previous quarter, 1.19% improvement from same quarter last year

Fare Evasion Passenger Survey

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

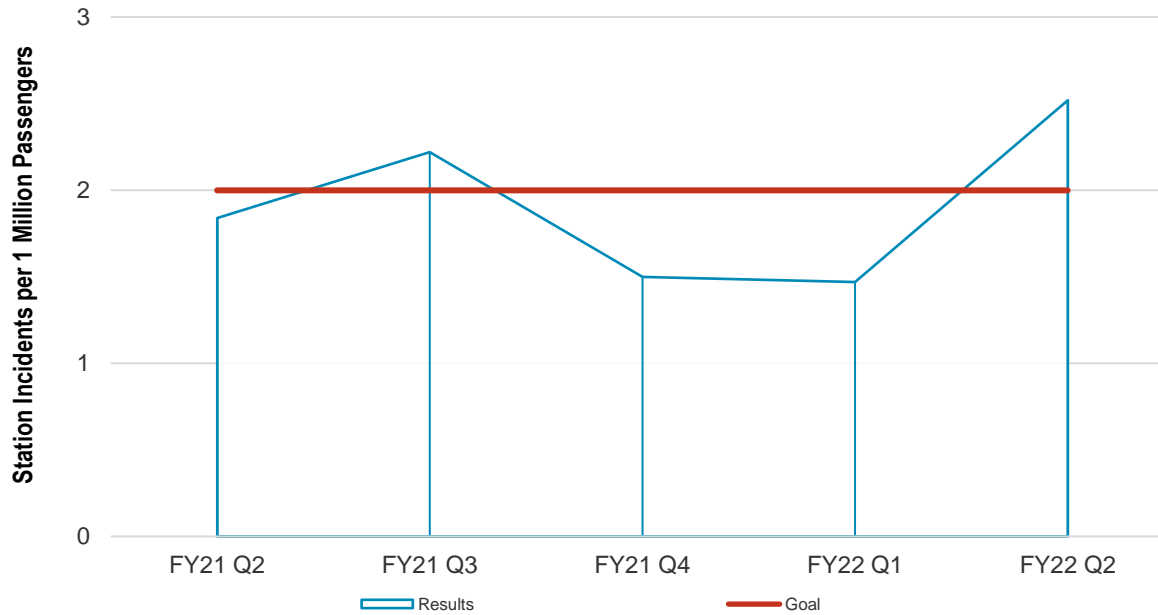


Goal:	N/A
Actual:	15.9%
Met:	N/A

- 12.55% performance decrease from previous quarter, 27.91% improvement from same quarter last year
- The performance decrease might be due to increased movements of unsheltered population

Patron Safety – Station

Incidents per 1 Million Passengers

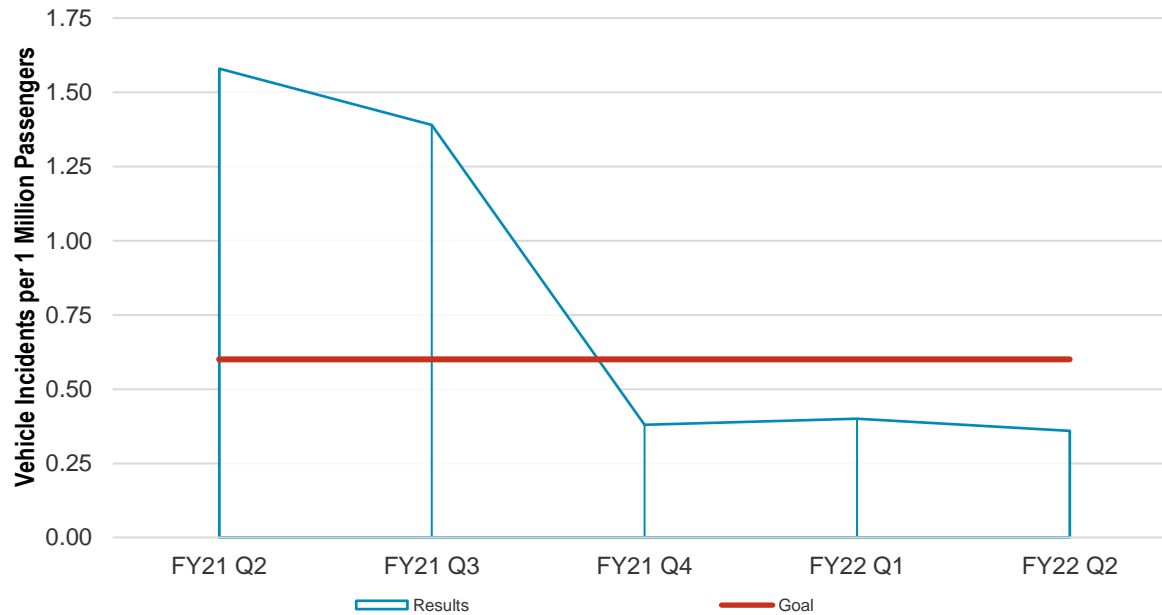


Goal:	2.00
Actual:	2.52
Met:	No

- 71.43% performance decrease from previous quarter, 24.23% decrease from same quarter last year
- Number of incidents this quarter 21; last quarter 11. The increase in incidents is mostly due to adverse weather
 - Stairs – 6
 - Escalator – 11
 - Platform – 1
 - Parking Lot – 1
 - Concourse – 2

Patron Safety – Vehicle

Incidents per 1 Million Passengers

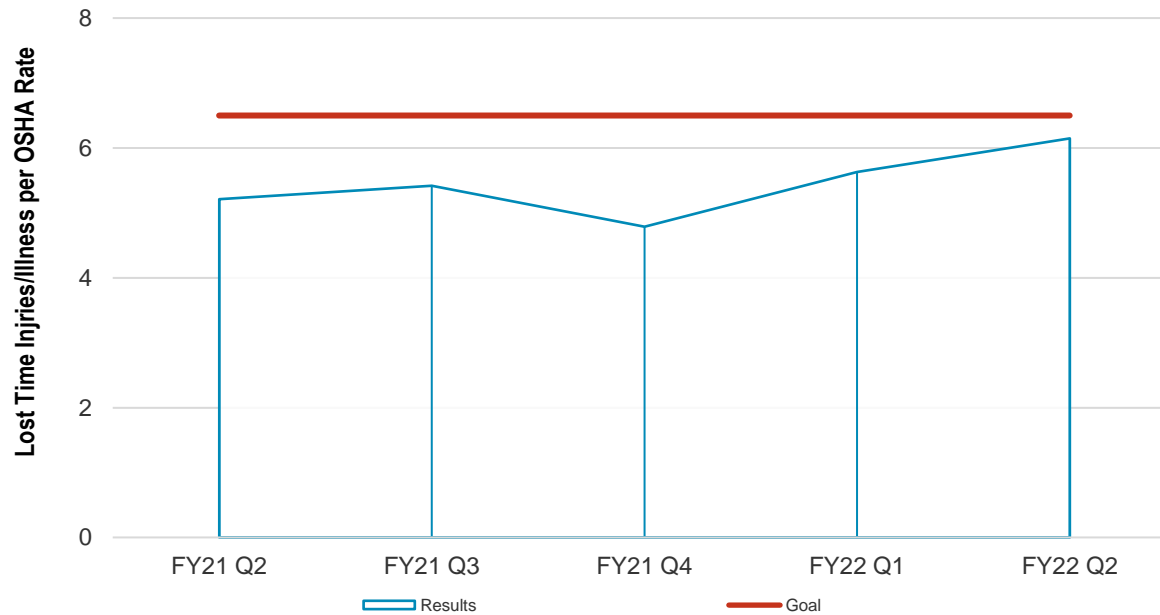


Goal:	0.60
Actual:	0.36
Met:	Yes

- 10% performance improvement from previous quarter, 77.22% improvement from same quarter last year
- Number of incidents this quarter 3; last quarter 3:
 - On-Board – 3
 - Performance improvement due to passenger increase

Employee Safety – Lost Time

Lost Time Injuries per OSHA Rate

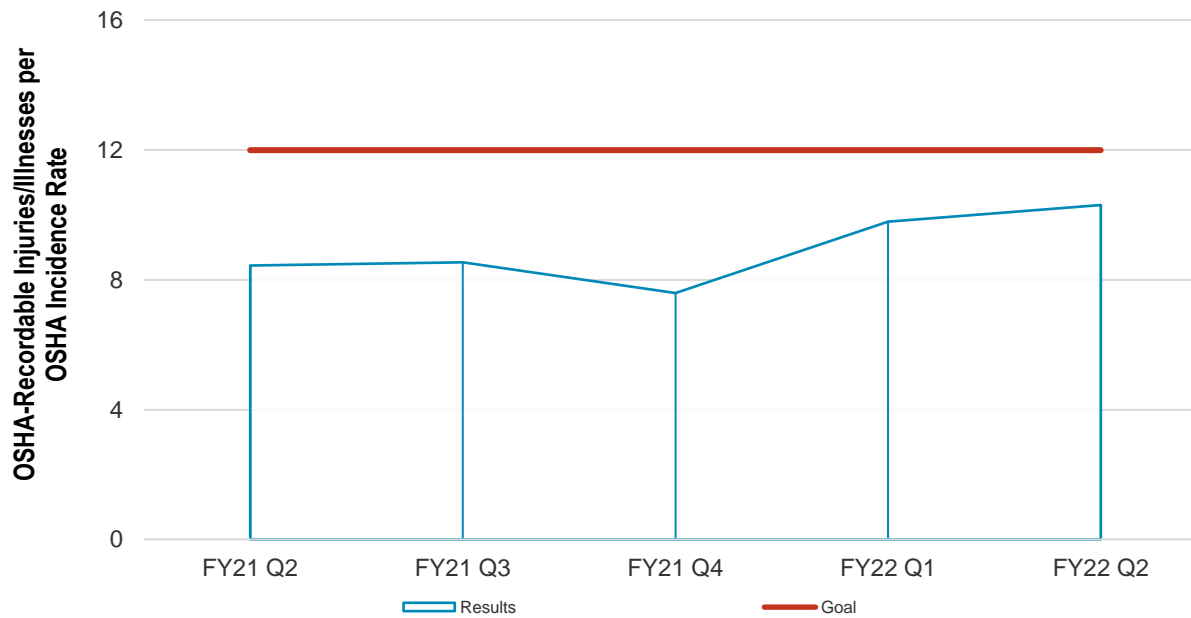


Goal:	6.50
Actual:	6.15
Met:	Yes

- 9.24% performance decrease from previous quarter, 18.04% decrease from same quarter last year
- Lost time cases count increases by 9% (from 54 to 59) from last quarter
 - Strain injury cases decrease from 15 to 14
 - Sprain injury cases remain the same at 8
 - Contusion injury cases decrease from 8 to 7
 - Trauma injury cases remain the same at 15

Employee Safety – Injury Count

OSHA Recordable Injuries per OSHA Incidence Rate

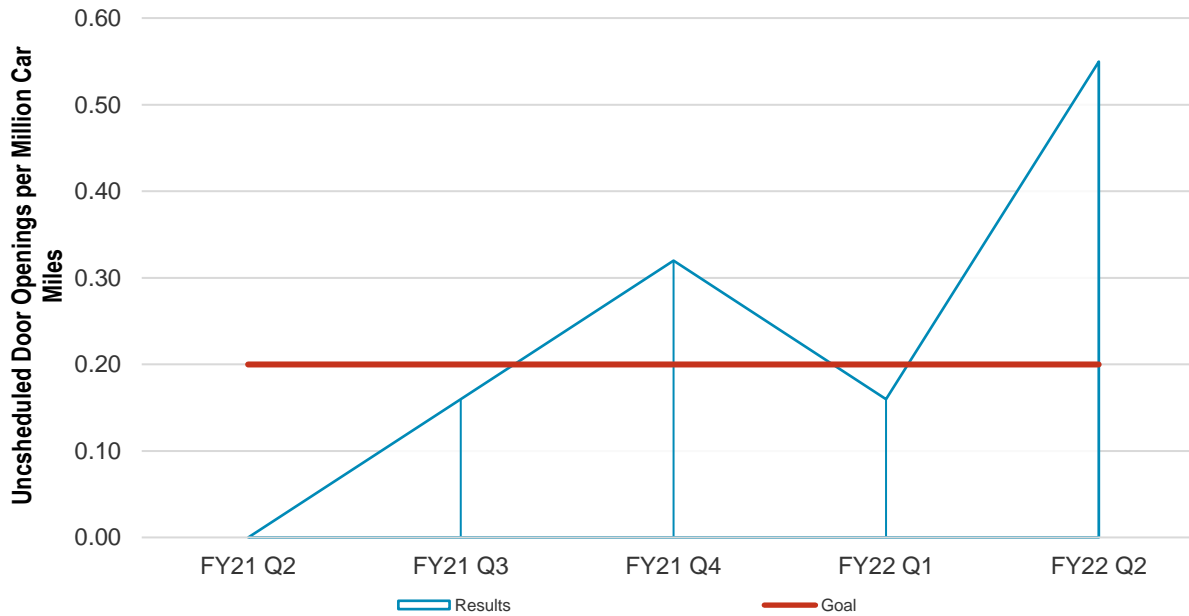


Goal:	12.00
Actual:	10.31
Met:	Yes

- 5.31% performance decrease from previous quarter, 22.16% decrease from same quarter last year
- Injury count increases by 5% (from 94 to 99) from last quarter
 - Strain injuries decrease from 27 to 25
 - Sprain injuries increase from 14 to 15
 - Trauma injuries increase from 16 to 17
 - Contusion injuries decrease from 16 to 14

Operating Safety – Door Openings

Unscheduled Door Openings per Million Car Miles

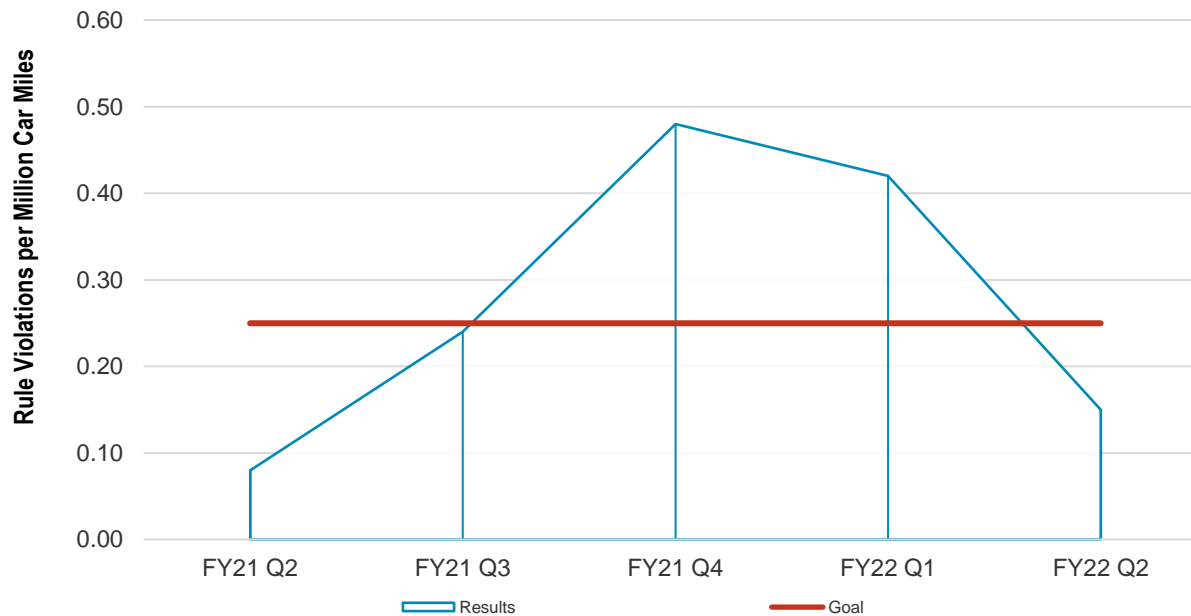


Goal:	0.20
Actual:	0.55
Met:	No

- 243.75% performance decrease from previous quarter
- Number incidents this quarter: 11
- All due to human error (Unauthorized use of emergency door open)
 - October - 3
 - November - 2
 - December – 6

Operating Safety – Rule Violations

Rule Violations per Million Car Miles

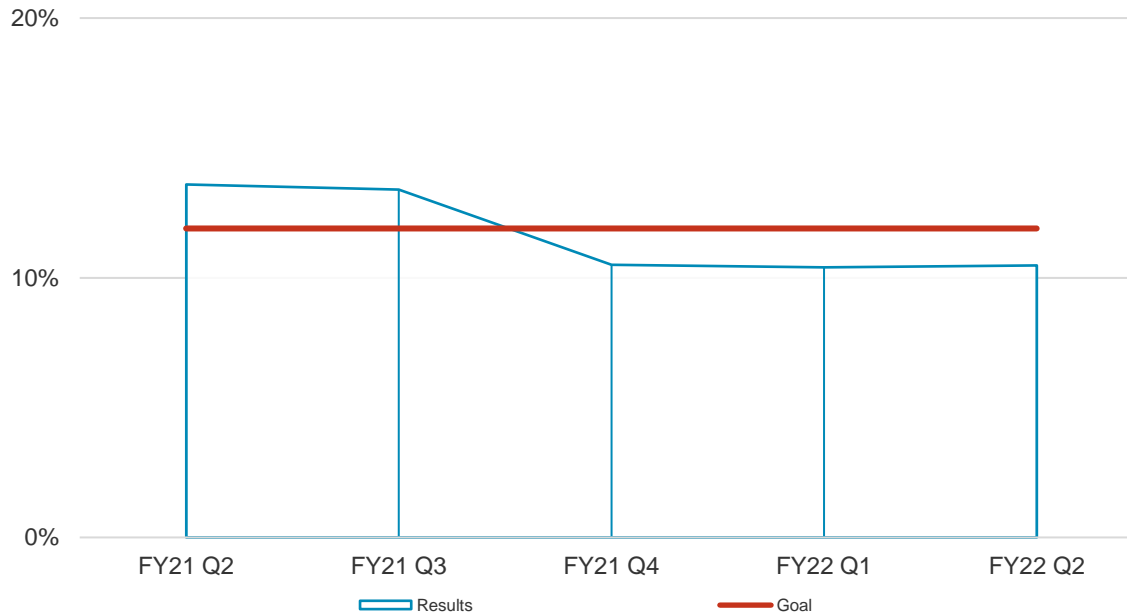


Goal:	0.25
Actual:	0.15
Met:	Yes

- 64.29% performance improvement from previous quarter, 87.5% decrease from same quarter last year
- Numbers of incidents this quarter: 3
 - 10/20/21 – Rules Violation (Transportation)
 - 10/24/21 – Rules Violation (Transportation)
 - 11/21/21 – Clearance Violation (M&E)

BART Police Presence

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



Goal:	12.0%
Actual:	10.5%
Met:	No

Average Score of Police Seen For:
All Time Periods

- On Train **5.0%**
- Outside the Station **12.4%**
- In the Station **14.1%**

After 7PM and Weekends

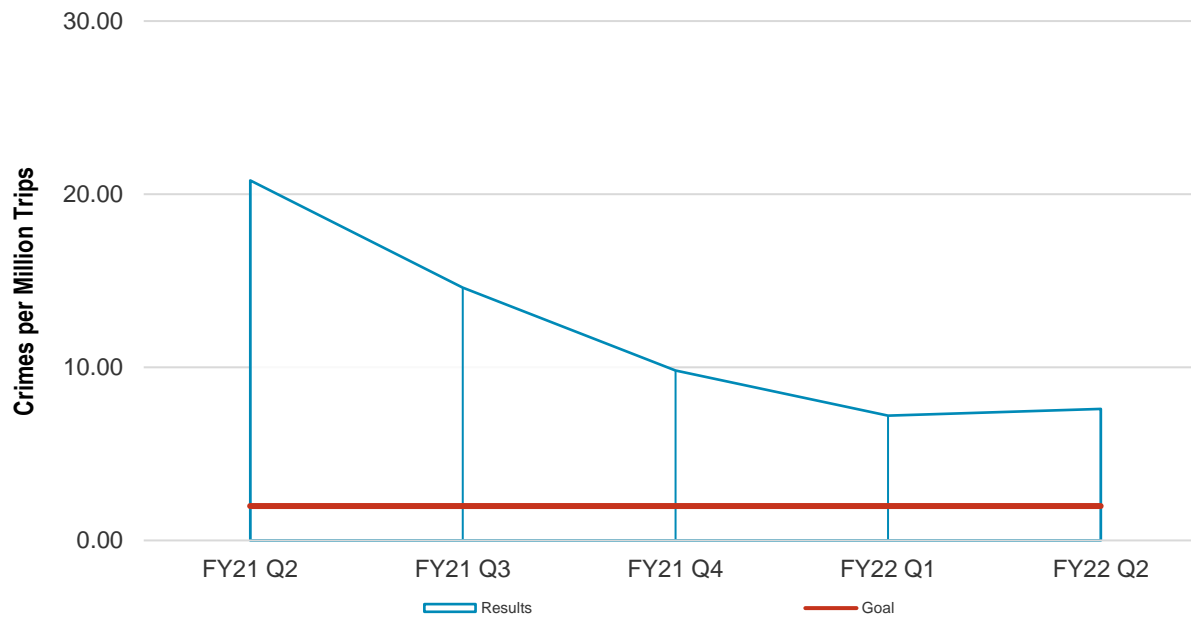
- On Train **4.8%**
- Outside the Station **12.5%**
- In the Station **14.1%**

↑ or ↓ indicates a statistically significant change from prior quarter

- 1.07% performance improvement from previous quarter, 23.22% decrease from same quarter last year
- Fixed post police officers and community service officers at Civic Center

Crimes Against Persons

Crimes per Million Trips

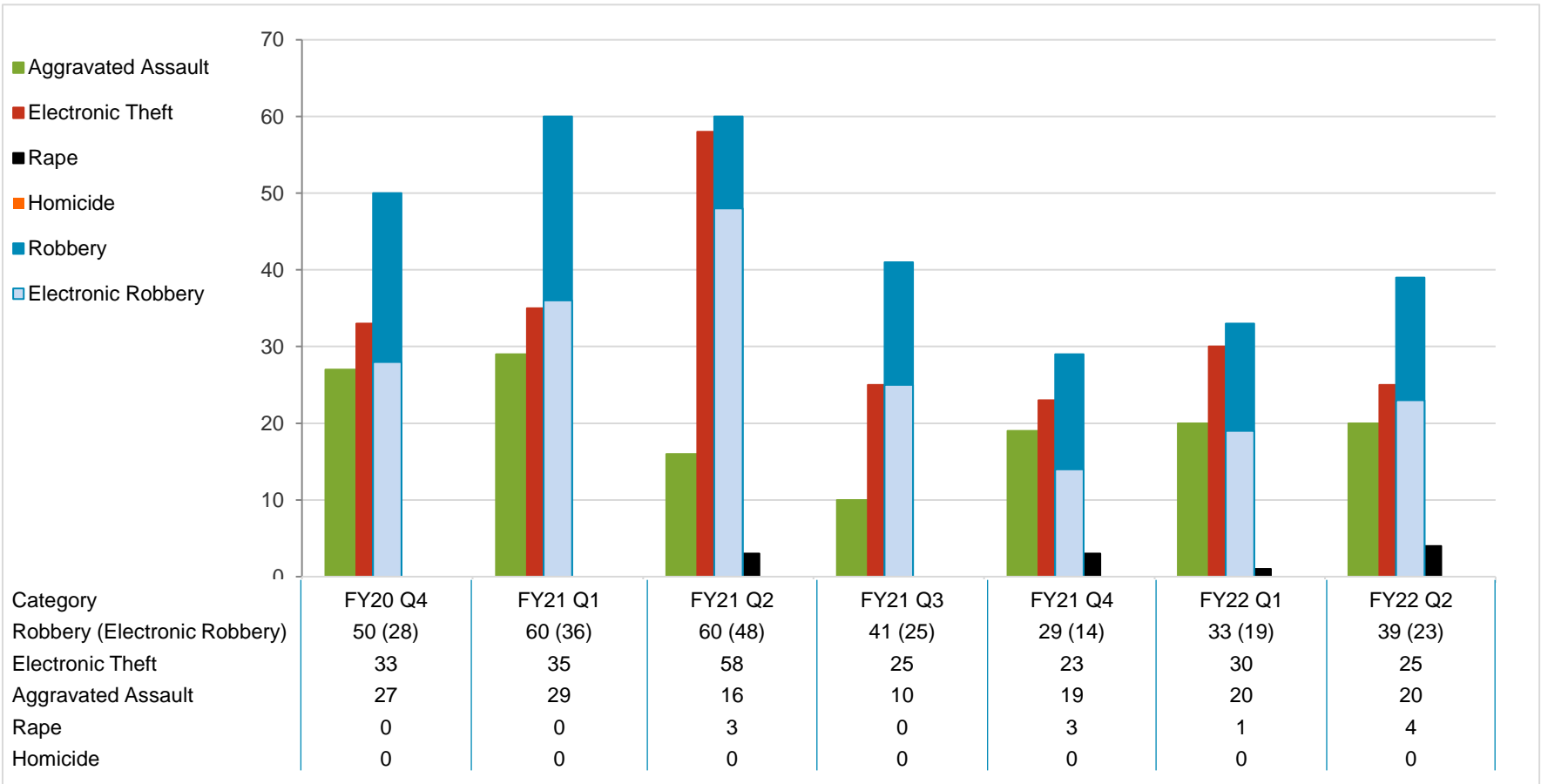


Goal:	2.00
Actual:	7.80
Met:	No

- 8.14% increase from previous quarter, 62.53% decrease from same quarter last year
- Averaging 20 cases per month current quarter. Past year (FY21 Q2) averaged 26 cases per month
- Calendar year 2021 averaged 18 cases per month, compared with 29 in 2020 (-38% reduction)

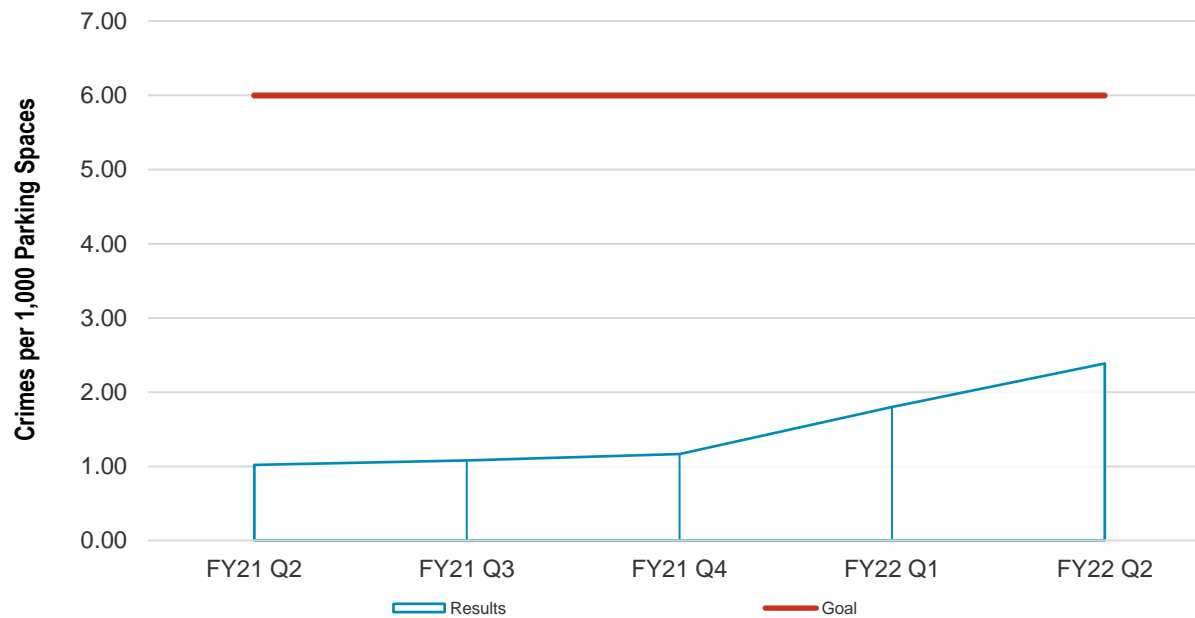
Crimes Against Persons

Crimes Detail by Category



Auto Burglary

Crimes per 1,000 Parking Spaces

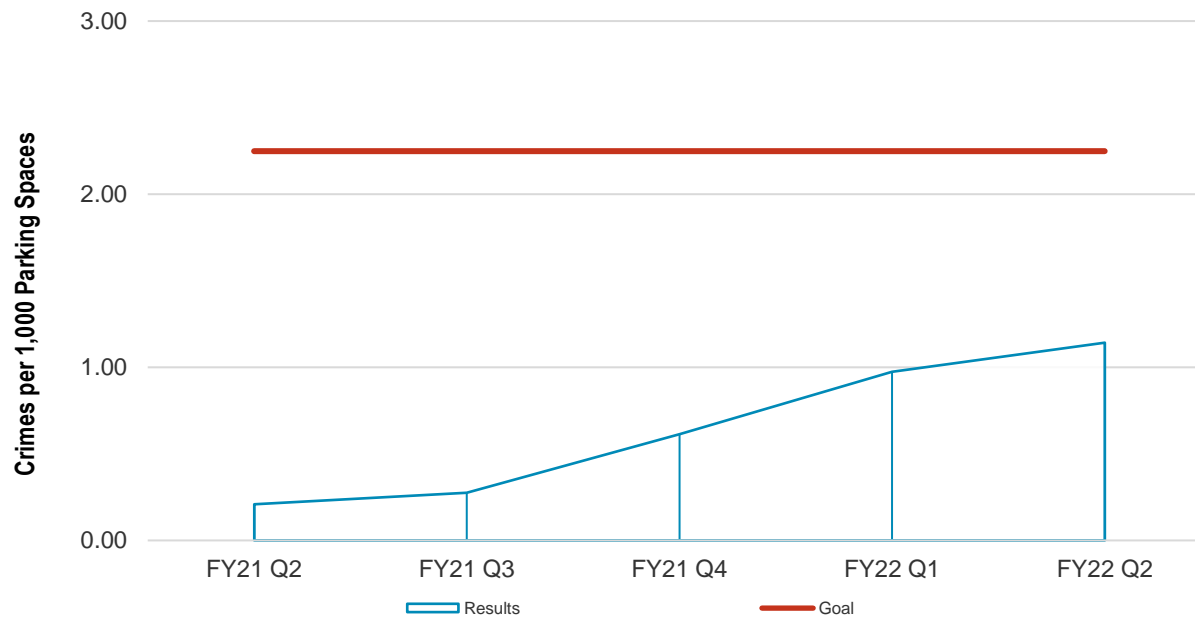


Goal:	6.00
Actual:	2.39
Met:	Yes

- 32.6% increase from previous quarter, 134.81% increase from same quarter last year
- This quarter observed an increase, average 38 reported incidents per month. Prior quarter averaged 28 per month

Auto Theft

Crimes per 1,000 Parking Spaces

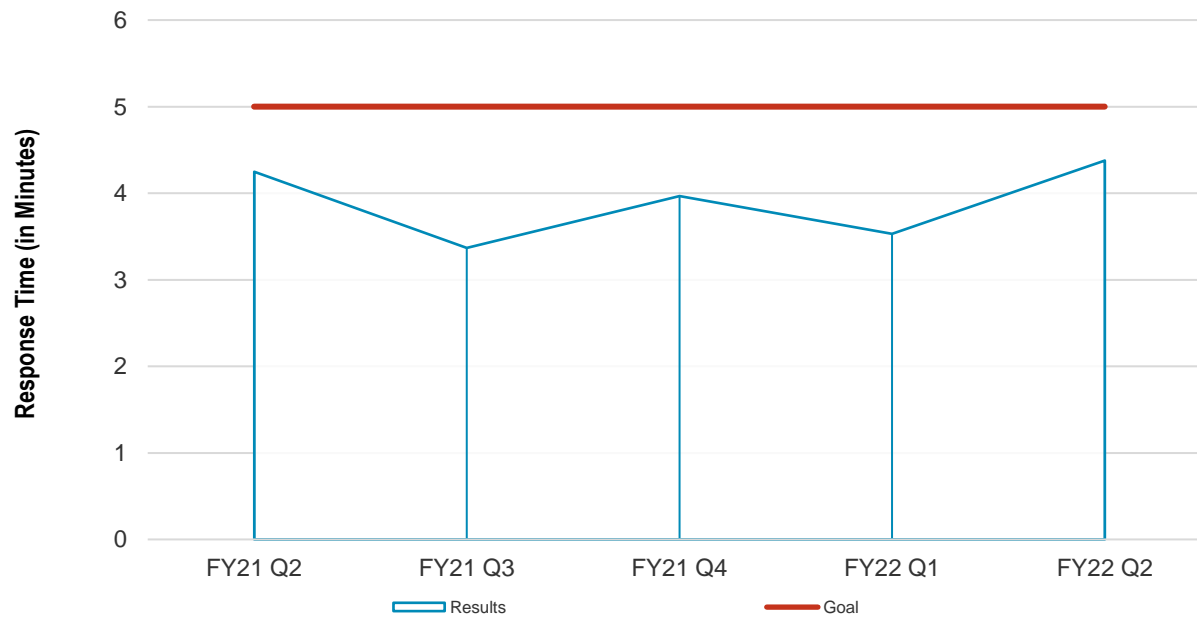


Goal:	2.25
Actual:	1.14
Met:	Yes

- 17.18% performance increase from previous quarter, 439.02% increase from same quarter last year
- Observed an increase this quarter, average 18 reported incidents per month, up from 14 in prior quarter

Average Emergency Response Time

Response Time (in Minutes)

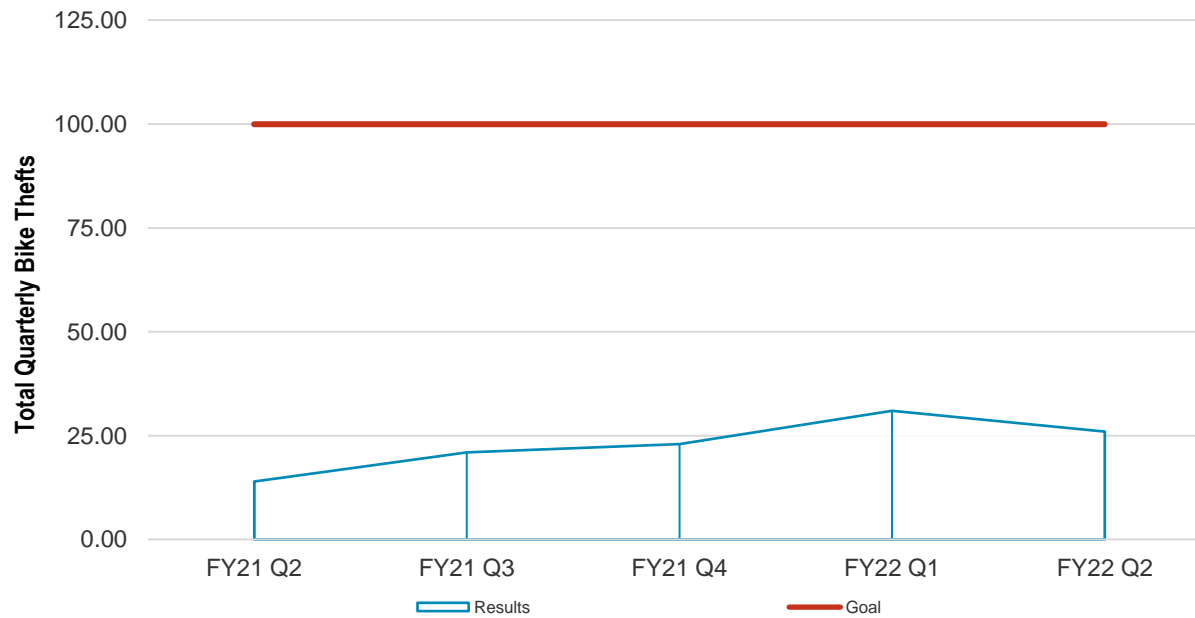


Goal:	5.00
Actual:	4.38
Met:	Yes

- Response time this quarter averages around 4 minutes and 23 seconds, compared to 3 minutes and 32 seconds in prior quarter

Bike Theft

Count of Bike Thefts



Goal:	100
Actual:	26
Met:	Yes

- 3.23% decrease from previous quarter, 114.29% increase from same quarter last year
- Average of 9 bicycle thefts per month this quarter, drop from 10 previous quarter. This quarter last year bicycle theft averaged 2