Quarterly Service Performance Review
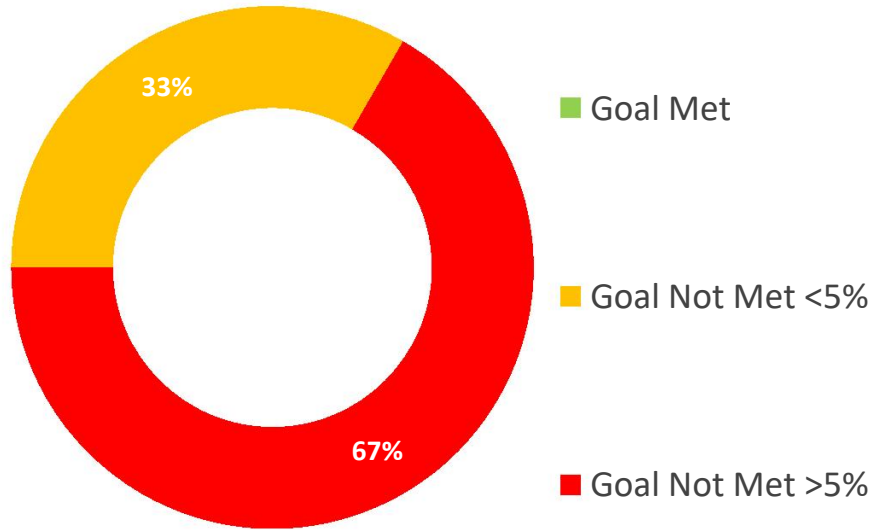# 4th Quarter, FY24 (April – June 2024)

Engineering & Operations Committee
August 15, 2024

KPI Grouping

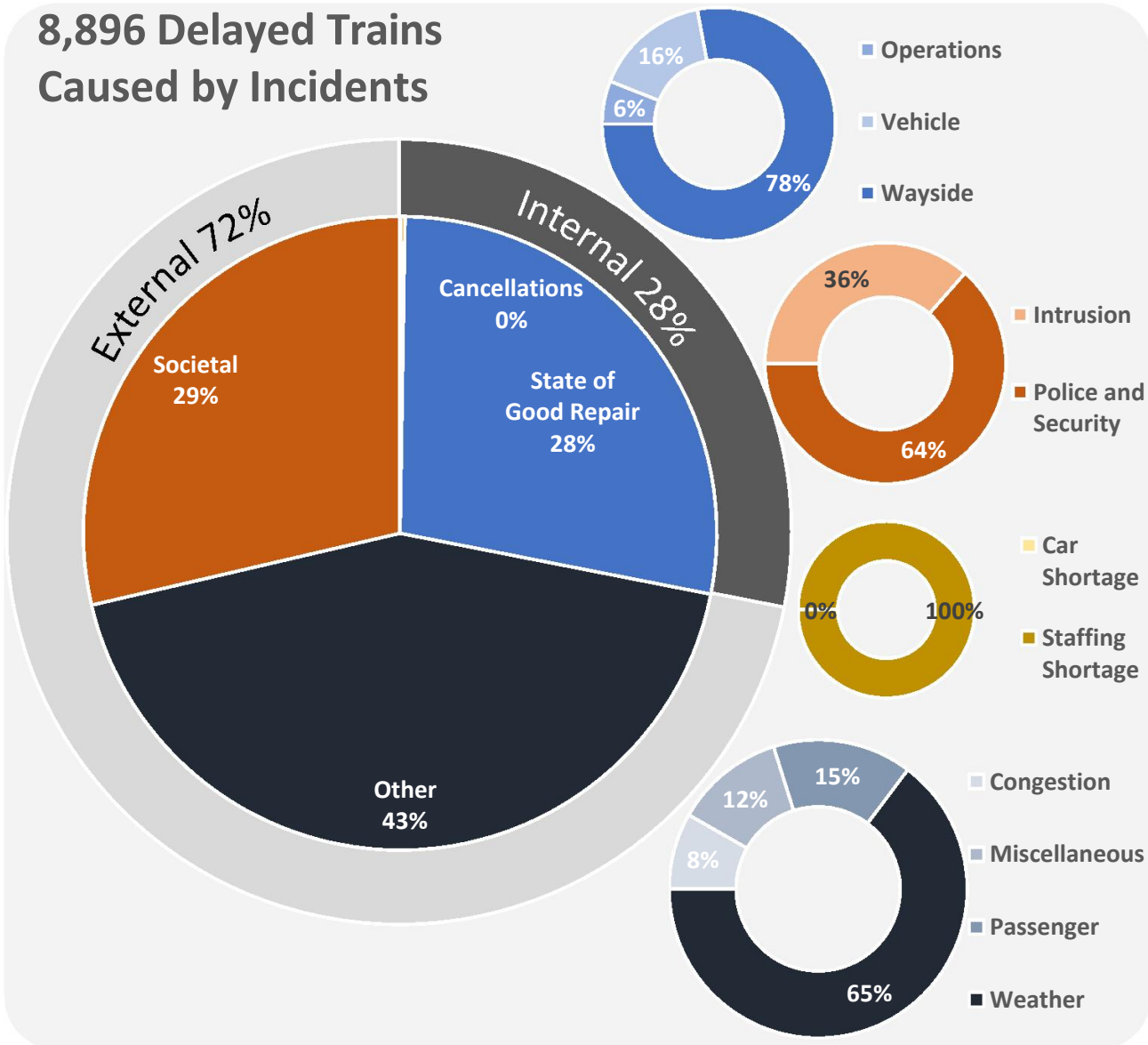## Service Performance

Service Delivery

Capacity
- Weekday - Average Ridership
- Dispatches Operated
- Passenger Loading

Punctuality
- On-time – Customer
  - Daily / Peak
- On-time – Train
  - Daily / Peak
  - Timed Train Meets - K-Line

Railway Asset Availability

Wayside
- Wayside - Train Control Systems
  - Wayside Train Control System
  - Control System
- Wayside - Railway Systems
  - Track
  - Traction Power

Revenue Fleet
- Revenue Fleet - Fleet Reliability
  - 4 AM - Car Availability
  - Vehicle MTBSD - (Hours)

Operations
- Priority Staffing

Stations
- Availability – Elevators
- Availability – Escalators
- Availability – Fare Collection

Customer Experience

Customer Service
-

Environment
- Environment – Stations
  - Outside
  - Inside
- Environment – Trains
  - Cleanliness
  - Temperature
- Environment – Code of Conduct
  - Gender Based Harassment
  - Fare Evasion

Safety and Security

Safety
-
-
-
  - Unscheduled Door Openings
  - OSHA Recordable Injuries

Security
- Police Coverage
  - BPD Presence
  - BPD Response Time
- Crime – Against Person
- Crime – Burglary
  - Bike Thefts
  - Auto Burglaries
  - Auto Thefts
- Progressive Policing

Category | Class | Slide

Summary – Service Delivery

- 🟩 Goal Met
- 🟨 Goal Not Met <5%
- 🟥 Goal Not Met >5%

Metric	FY24 Q4	Goal	% Change from FY24 Q3	
All-Day				
Weekday - Average Ridership	165,455	179,128	4.20%	🔺
Trains On-Time - Daily	85.7%	91.0%	38.55%	🔺
Customers On-Time - Daily	93.8%	94.0%	8.85%	🔺
Peak				
Trains On-Time - Peak	88.4%		39.76%	🔺
Customers On-Time - Peak	94.0%		9.40%	🔺

🔻 *Gray arrows represent change from the previous quarter for metrics which do not have an established goal*

Service Delivery – Delay Incident Detail

8,896 Delayed Trains Caused by Incidents

External 72%
Internal 28%

- Societal 29%
- Other 43%
- Cancellations 0%
- State of Good Repair 28%

Donut chart (top):
- Operations 78%
- Vehicle 6%
- Wayside 16%

Donut chart (Intrusion/Police):
- Intrusion 36%
- Police and Security 64%

Donut chart (Car/Staffing Shortage):
- Car Shortage 0%
- Staffing Shortage 100%

Donut chart (bottom):
- Congestion 15%
- Miscellaneous 12%
- Passenger 8%
- Weather 65%

Trains Delayed - Top Ten Single Incidents

- 4/4/2024, Weather (Rain), 820
- 4/13/2024, Weather (Rain), 517
- 5/4/2024, Weather (Rain), 364
- 4/14/2024, Weather (Rain), 196
- 6/26/2024, Wayside Maintenance (Maintenance Vehicle Derailed), 176
- 6/25/2024, Weather (Rain), 171
- 4/5/2024, Weather (Rain), 167
- 4/18/2024, False Occupancy (Cranks Installed), 131
- 6/30/2024, Substation Fire, 120
- 6/23/2024, Train Struck Object (Missing Paddles), 110
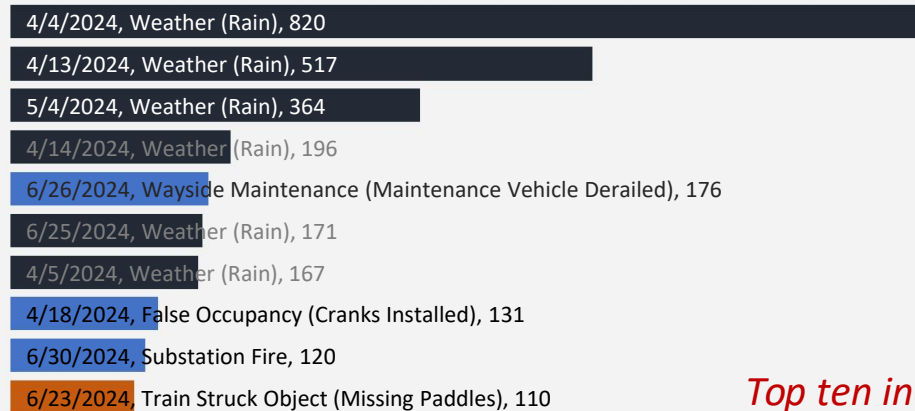
Top ten incidents = 31.2% of delayed trains

Trains Delayed by Month

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
	3403	3131	2369	3153	4975	7095	8831	8751	7935	3968	2739	2189
	FY24 Q1			FY24 Q2			FY24 Q3			FY24 Q4		

Capacity – Ridership

- Total Ridership up 3.7% over last year.

- Average weekday ridership up 3.9% over last year.

- Saturday ridership up 3.9% over last year.

- Sunday ridership up 6.4% over last year.

Weekday Hourly System Activity

Average Ridership - Weekday

Comparison of Ridership by Day of Week
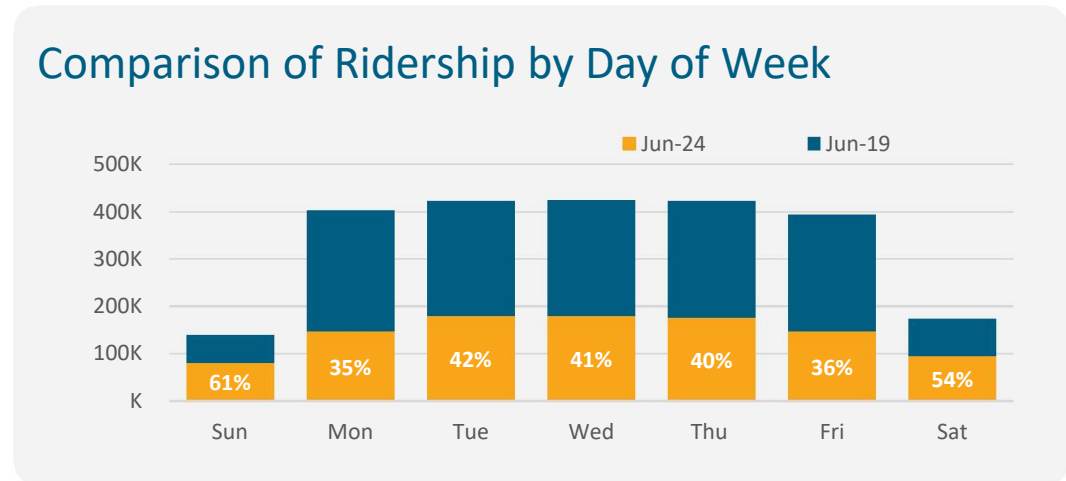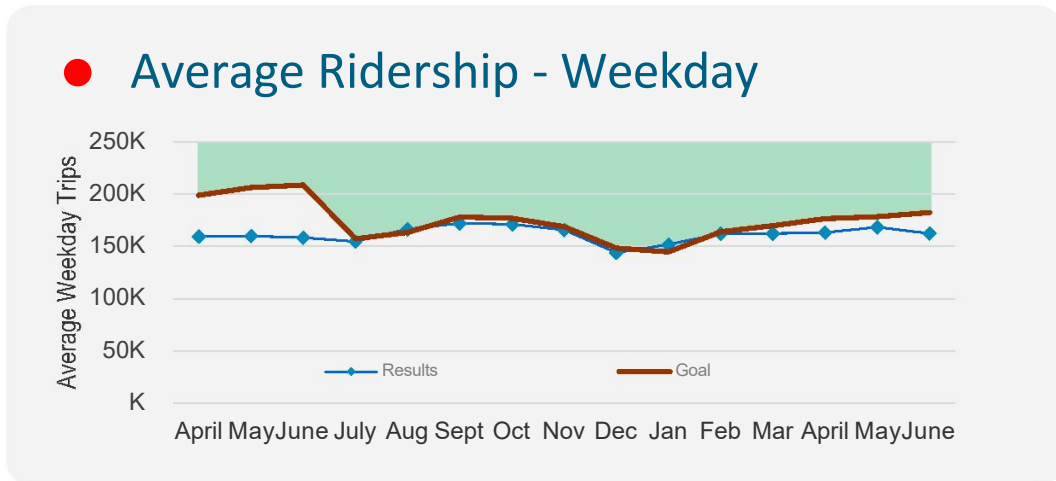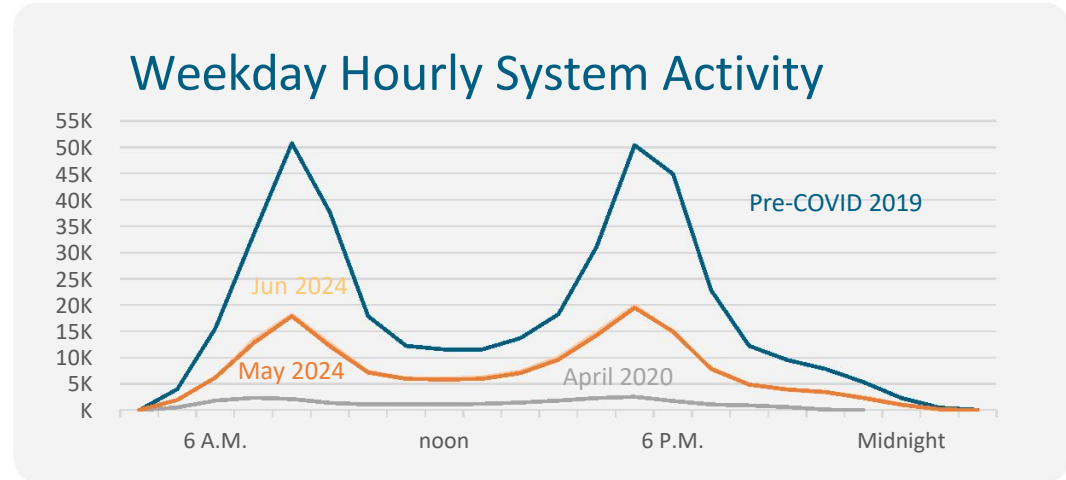
Capacity – Dispatches Operated

- Cancellations remain at about 1% of trains missing dispatch from origin
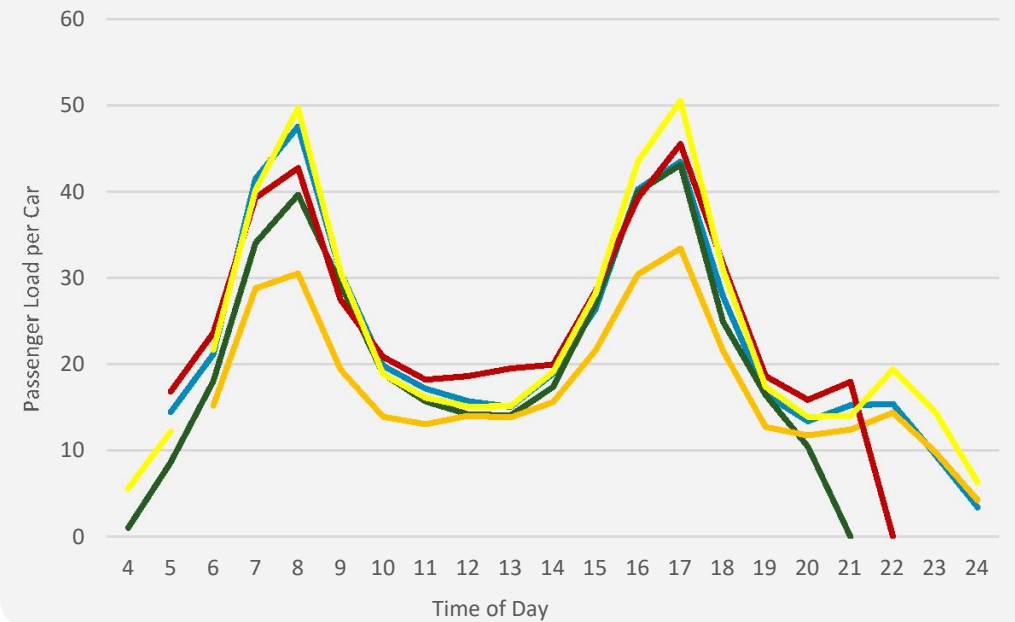
Scheduled Runs Dispatched from Origin

Missed Dispatches

Runs Dispatched

% of Scheduled Dispatches Missed by Cause

Legend: Weather, Major Incidents, Car Shortage, Staffing Shortage, Undertermined Cause
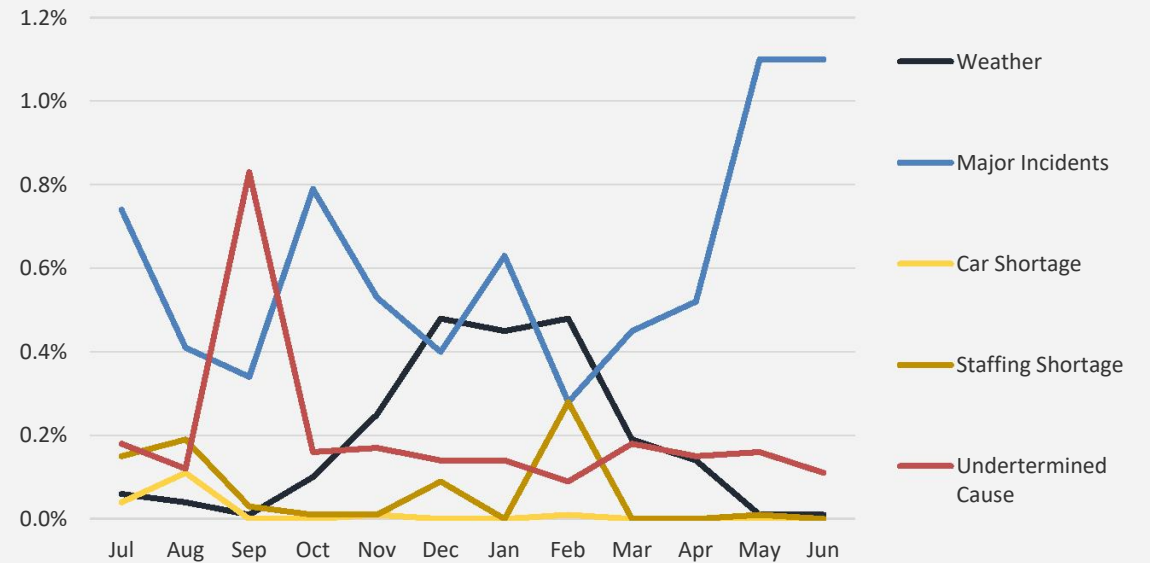
Capacity – Passenger Loading

Passenger Load per Car for Top 5 Crowded Weekday Trains
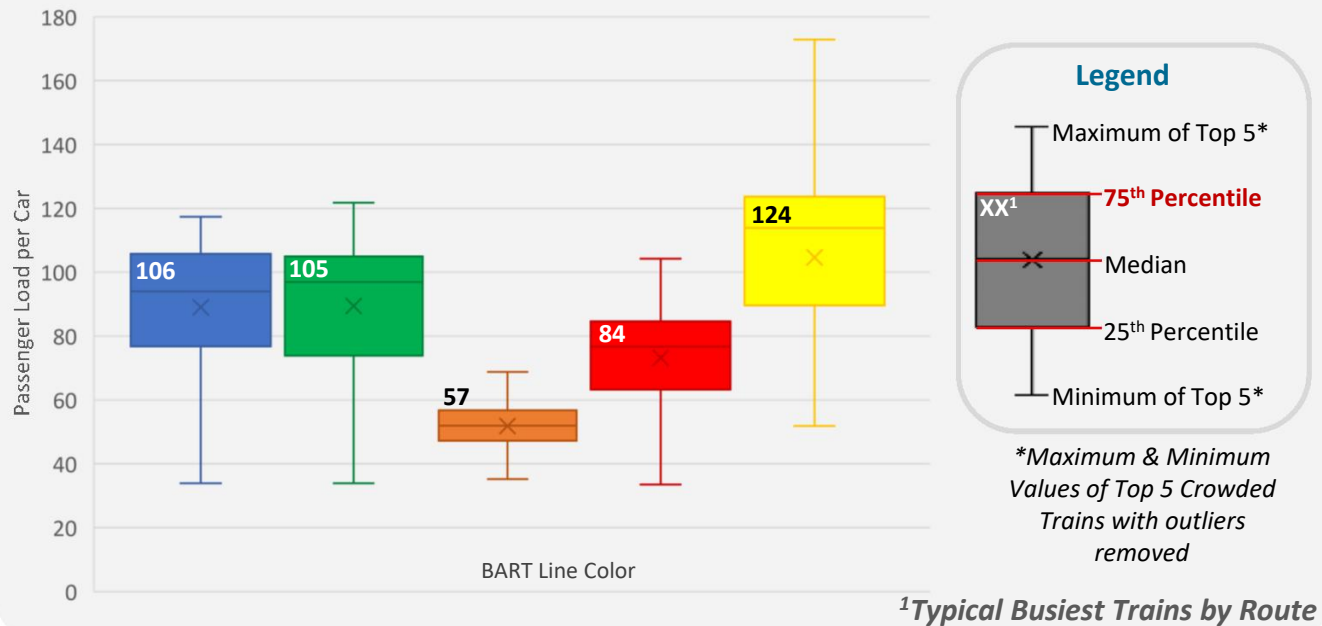
Average Hourly Weekday Passenger Load per Car by Line

Punctuality – Trains On-Time

SAN FRANCISCO BAY AREA RAPID TRANSIT
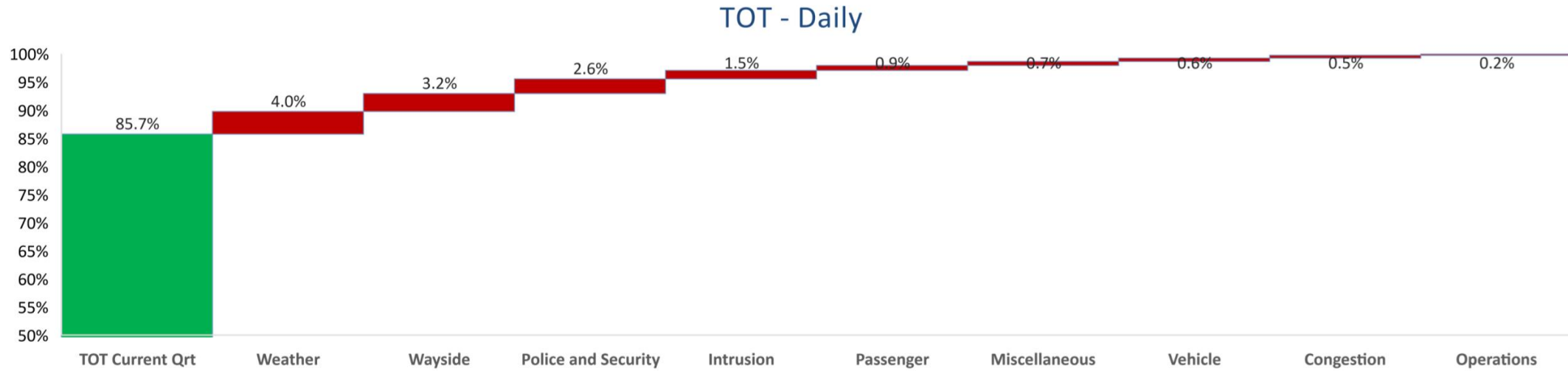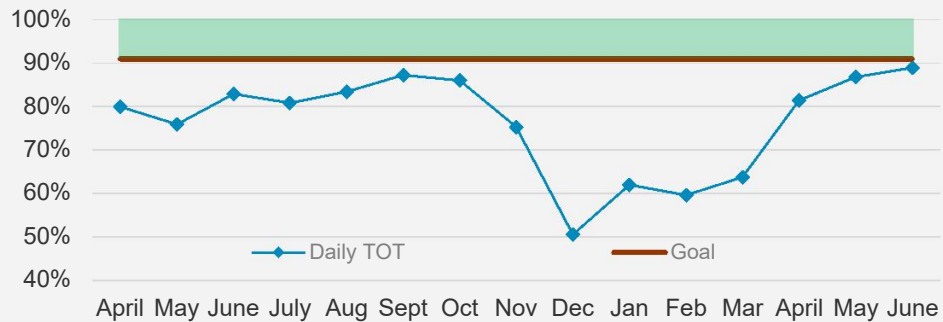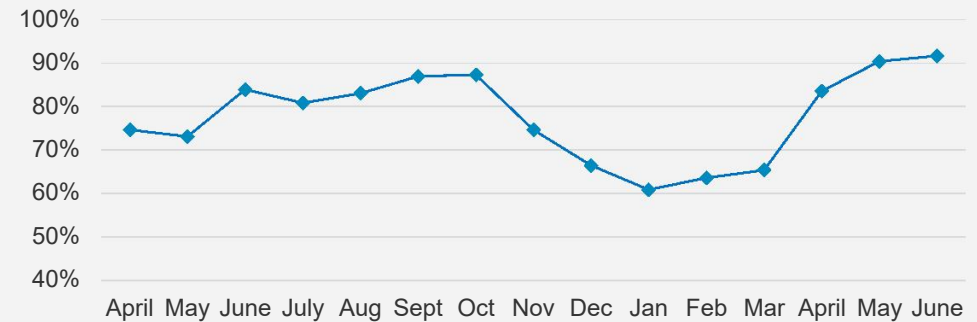
Punctuality – Timed Train Meets

- A meet is considered successful when there is at least 20 seconds of overlap time for both trains at the timed transfer point

- Timed Train Meets on the K-Line <u>between the Yellow and Orange lines</u> occur as follows

Northbound Meets at 19th Street
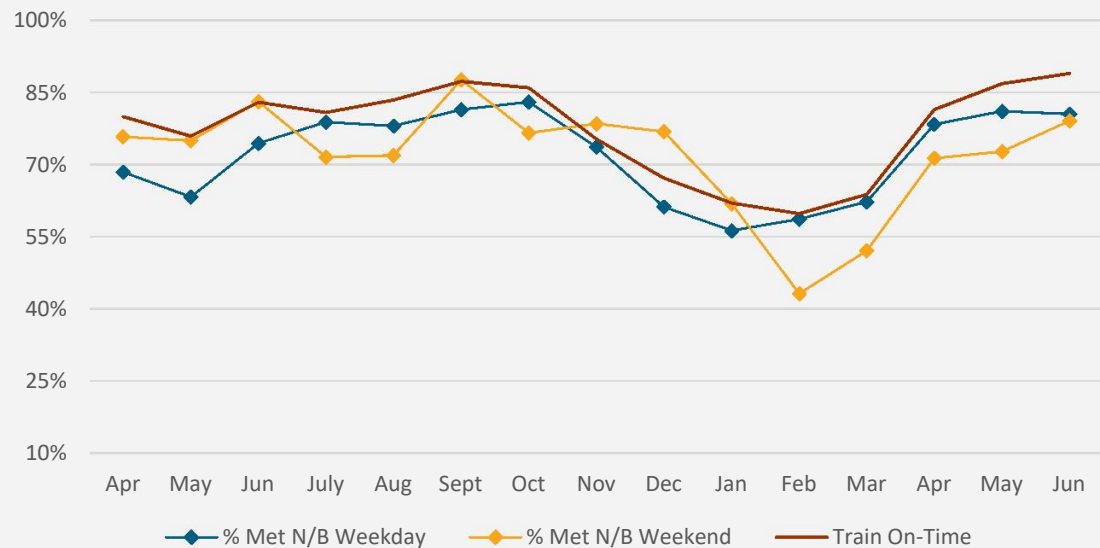
Southbound Meets at MacArthur
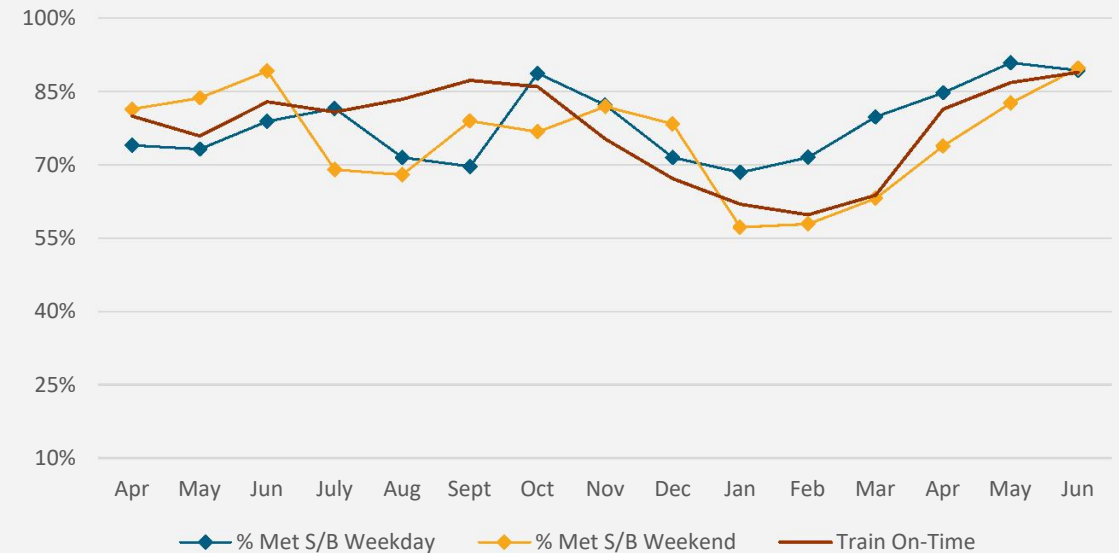
Punctuality – Customer On-Time

- Customer On-Time was 93.8% for the quarter

Customer On-Time - Daily
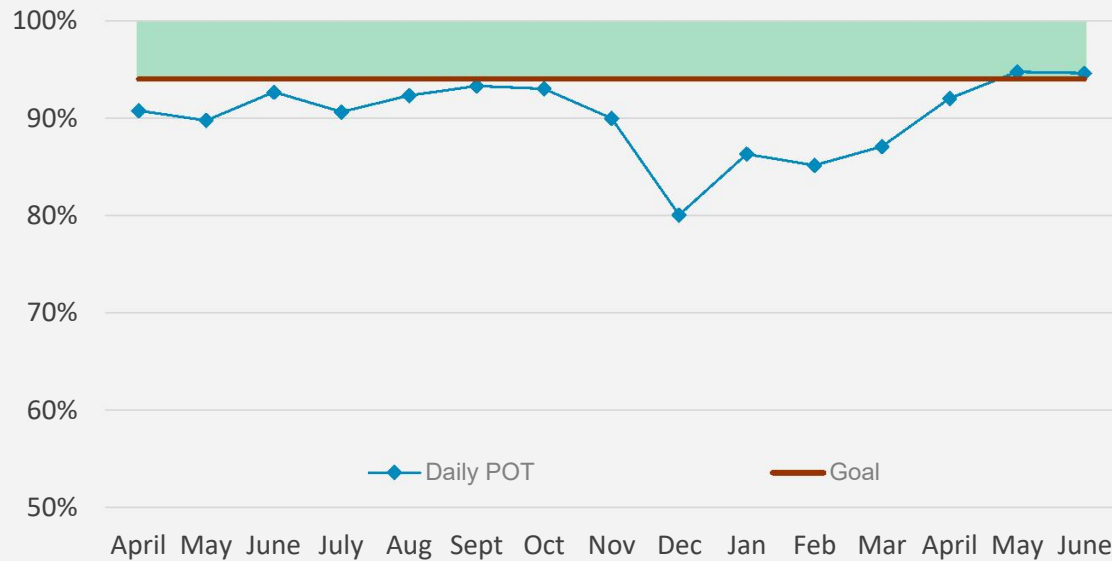
Customer On-Time - Peak
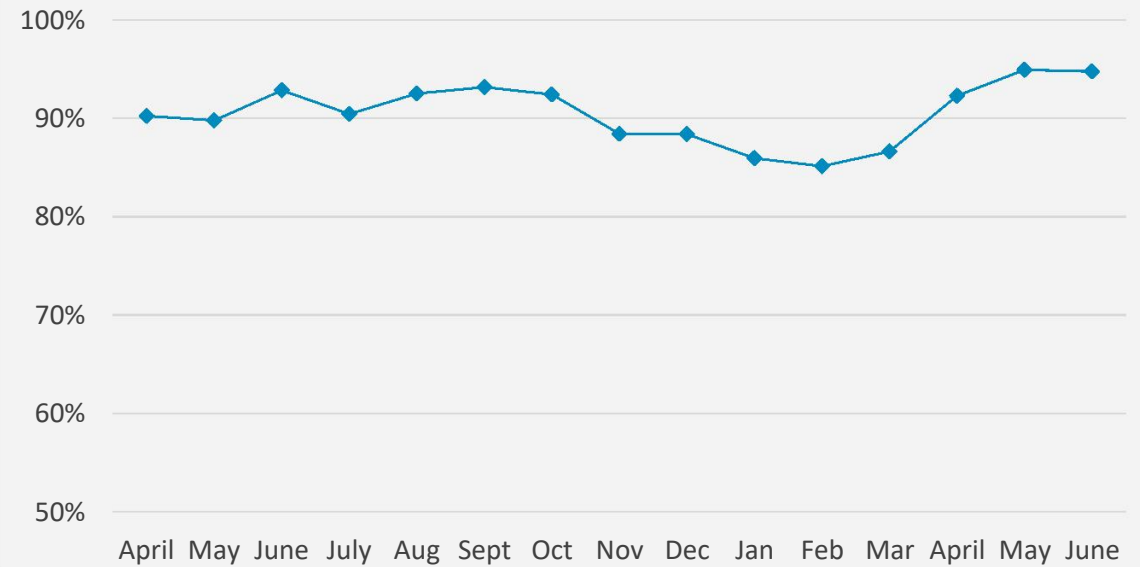
Summary – Railway Asset Availability

Legend:
- Goal Met (green)
- Goal Not Met <5% (yellow)
- Goal Not Met >5% (red)
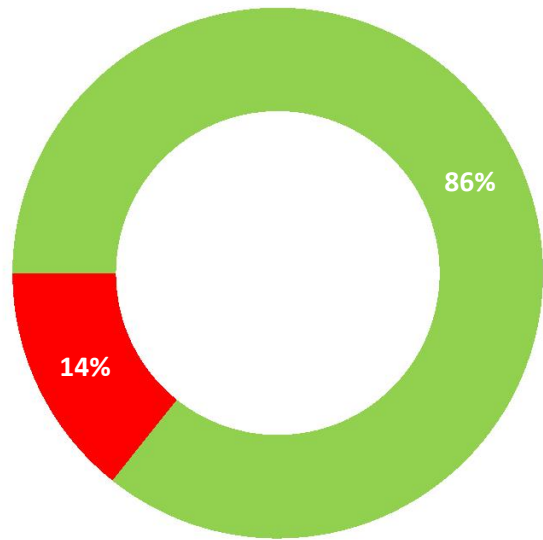
86% Goal Met, 14% Goal Not Met >5%

| Metric	FY24 Q4	Goal	% Change from FY24 Q3	
Wayside Equipment				
Track	0.20	0.30	61.18%	▲
Traction Power	0.59	1.00	(48.41%)	▼
Wayside Train Control System	1.85	1.30	(46.31%)	▼
Computer Control System	0.15	0.30	31.64%	▲
Transportation	0.28	0.50	18.39%	▲
Revenue Vehicle				
Vehicle MTBSD - (Hours)	11524	9600	6.17%	▲
4 AM - Car Availability	596	445	12.68%	▲
DMU - MDBF (Miles)	15182	28000	(48.94%)	▼
Station Equipment				
Elevators in Service - Station	99.4%	98.0%	0.04%	▲
Elevators in Service - Garage	99.7%	97.0%	(0.23%)	▼
Escalators in Service - Street	94.4%	93.0%	0.42%	▲
Escalators in Service - Platform	97.3%	96.0%	0.40%	▲
Automatic Fare Collection - Gates	99.8%	98.0%	0.13%	▲
Automatic Fare Collection - Vendors	99.4%	95.0%	0.23%	▲

Wayside Asset Availability – Detail
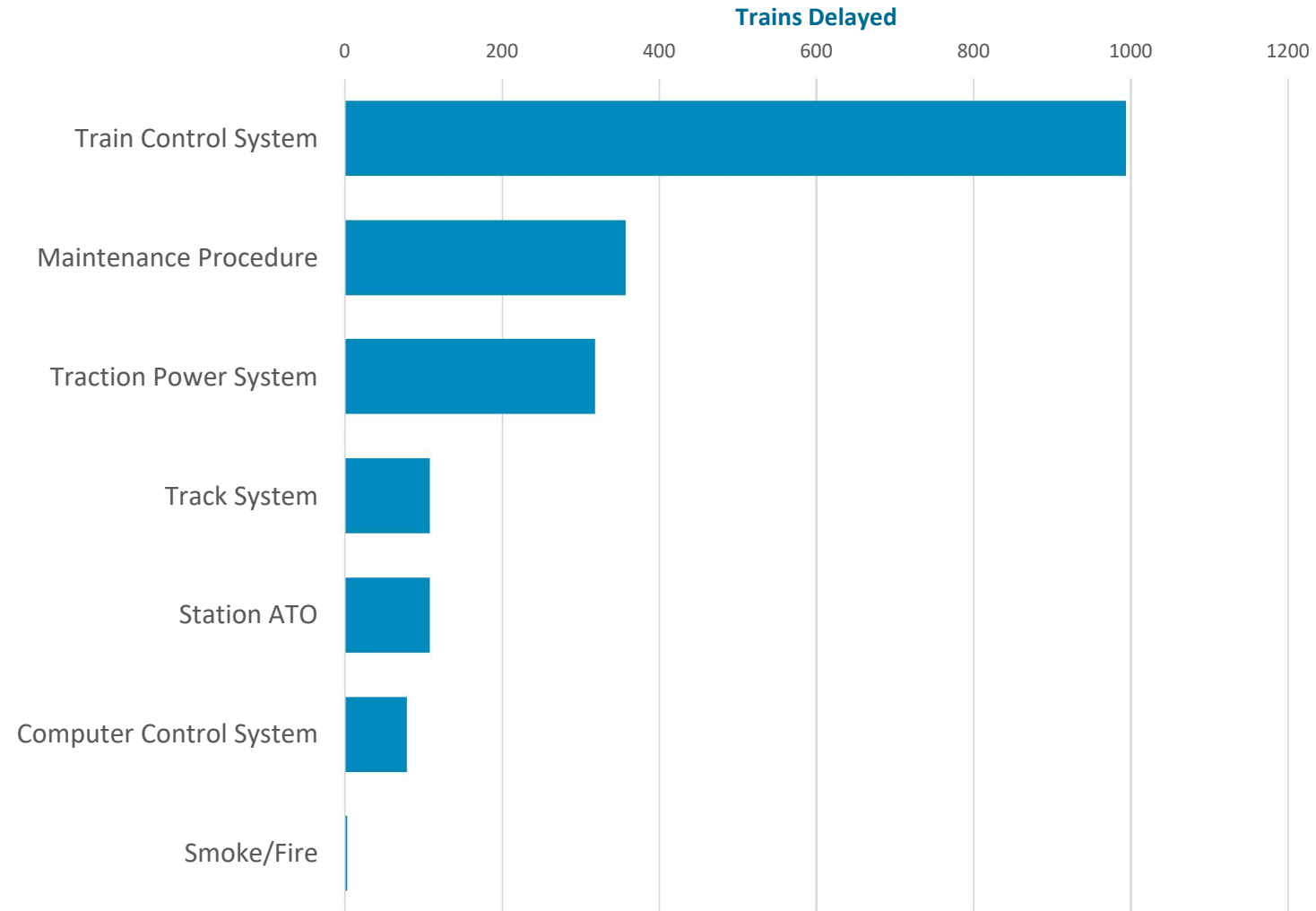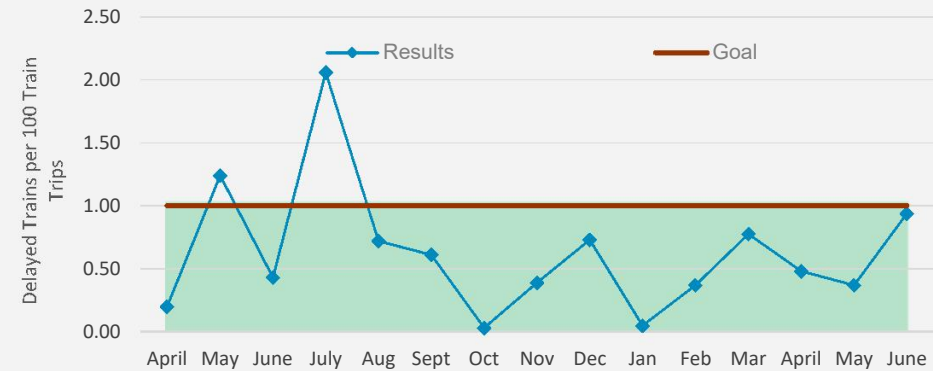
Wayside Equipment – Delayed Trains by System
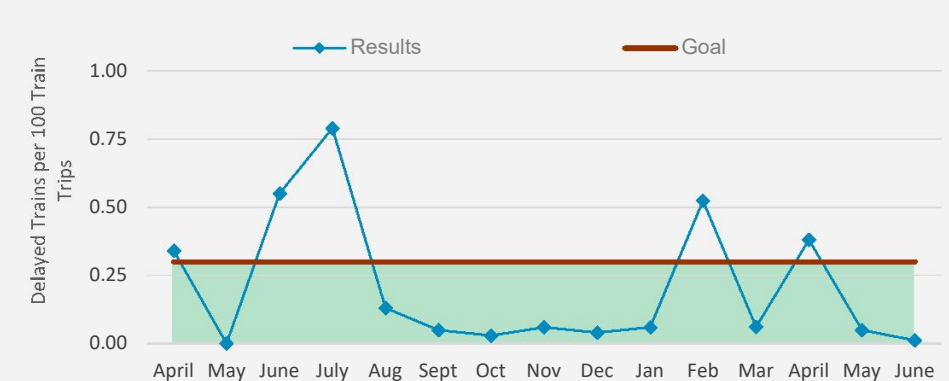

● Track System
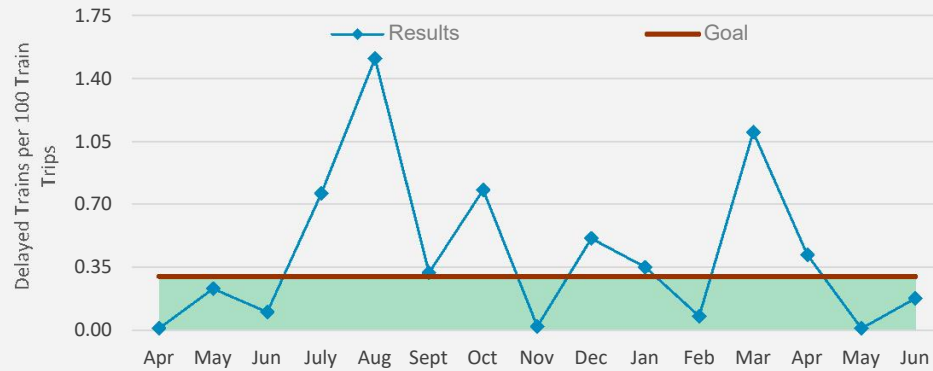
● Wayside Train Control System
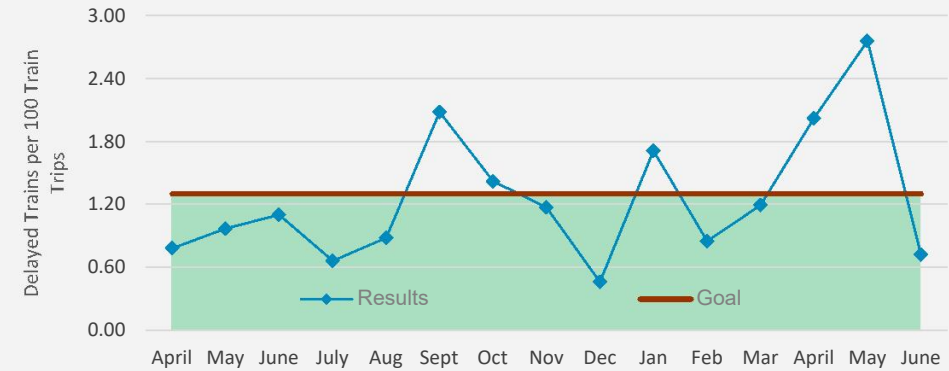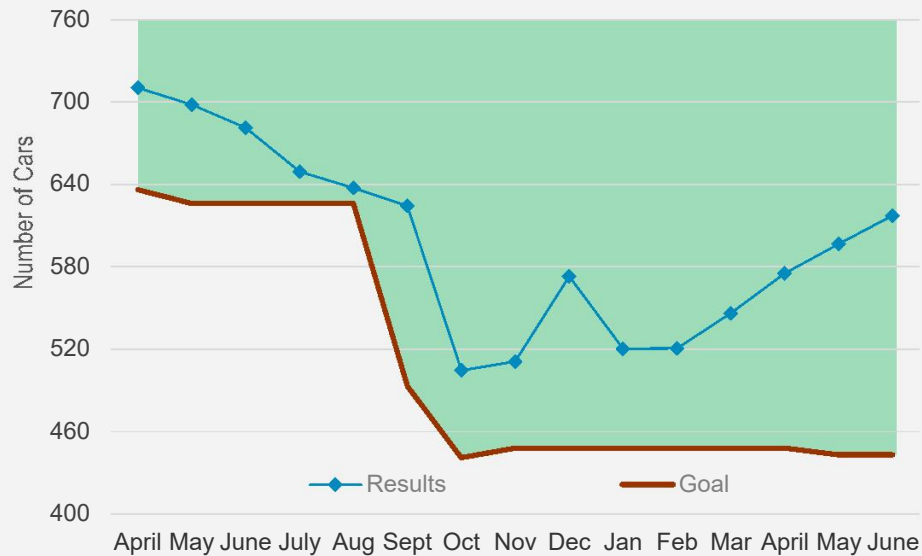

● Traction Power System
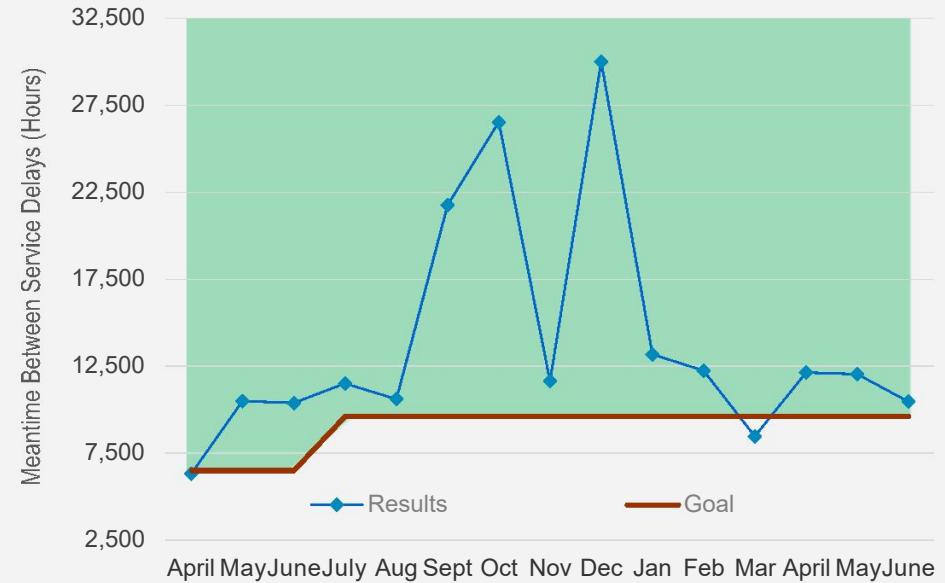

● Wayside Computer Control System

Revenue Fleet – Reliability
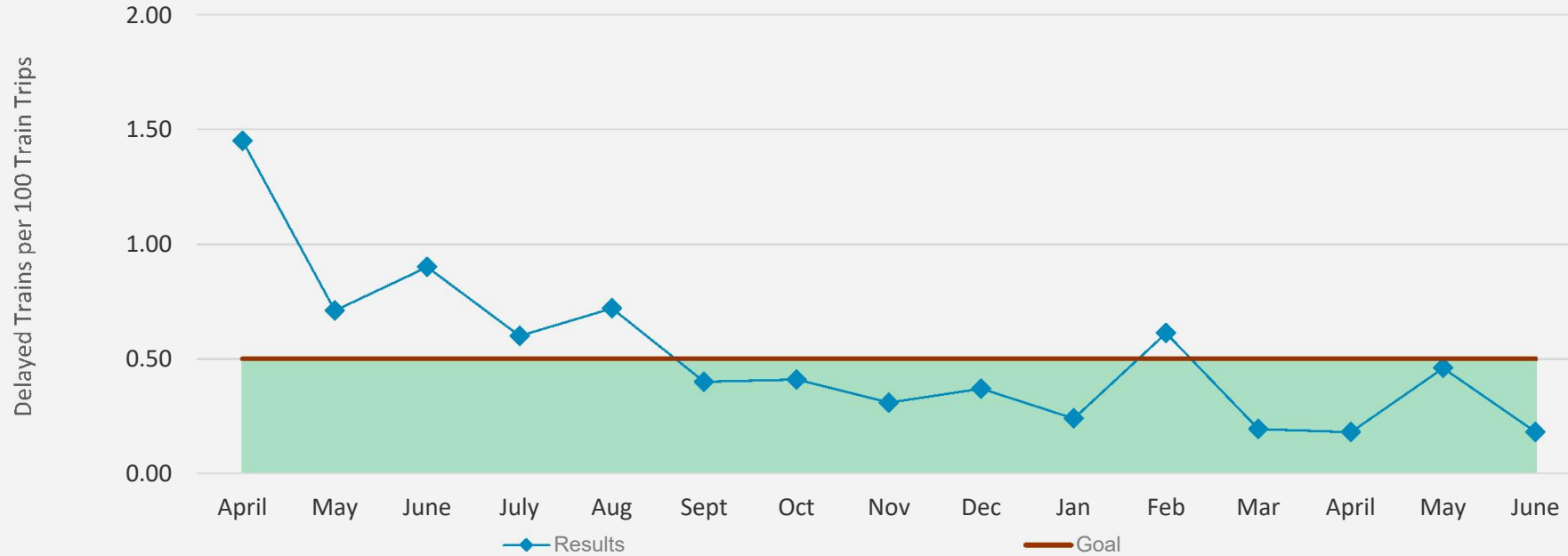

Car Availability at 4 AM

Mean Time Between Service Delays

LEGACY

FOTF

9

757
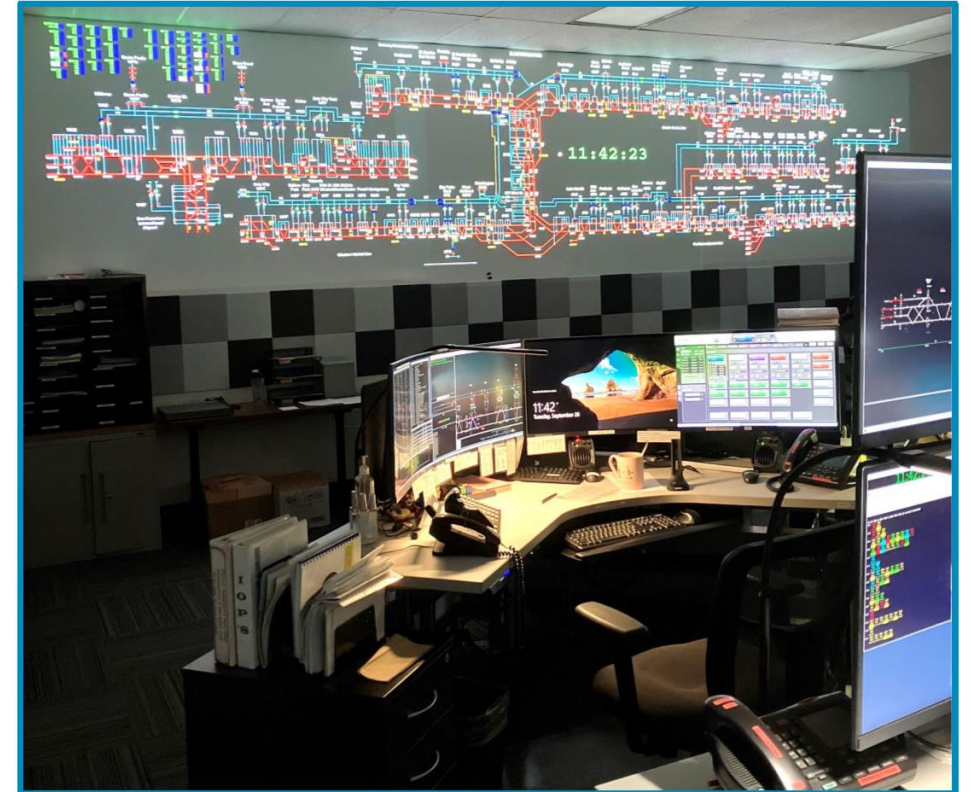
Car count as of 06/30/2024

Hiring Metrics - Priority Positions

Rail Operations Controller

Target Range: 30 to 35

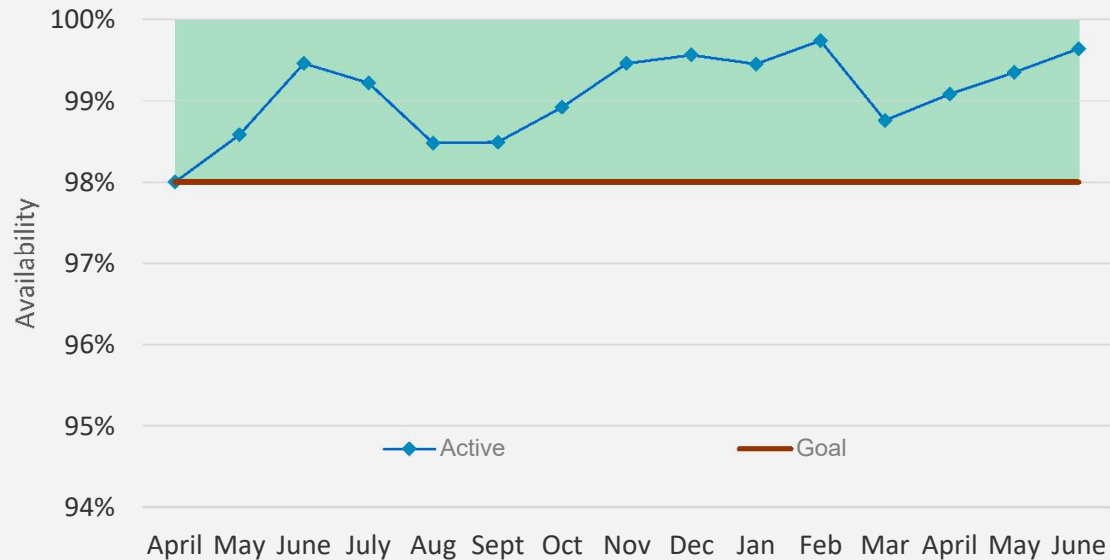| Certified Controllers	Trainees (Cert Phase)	Trainees (Classroom Phase)	Familiarization	In Pipeline
12	1	5	4	12
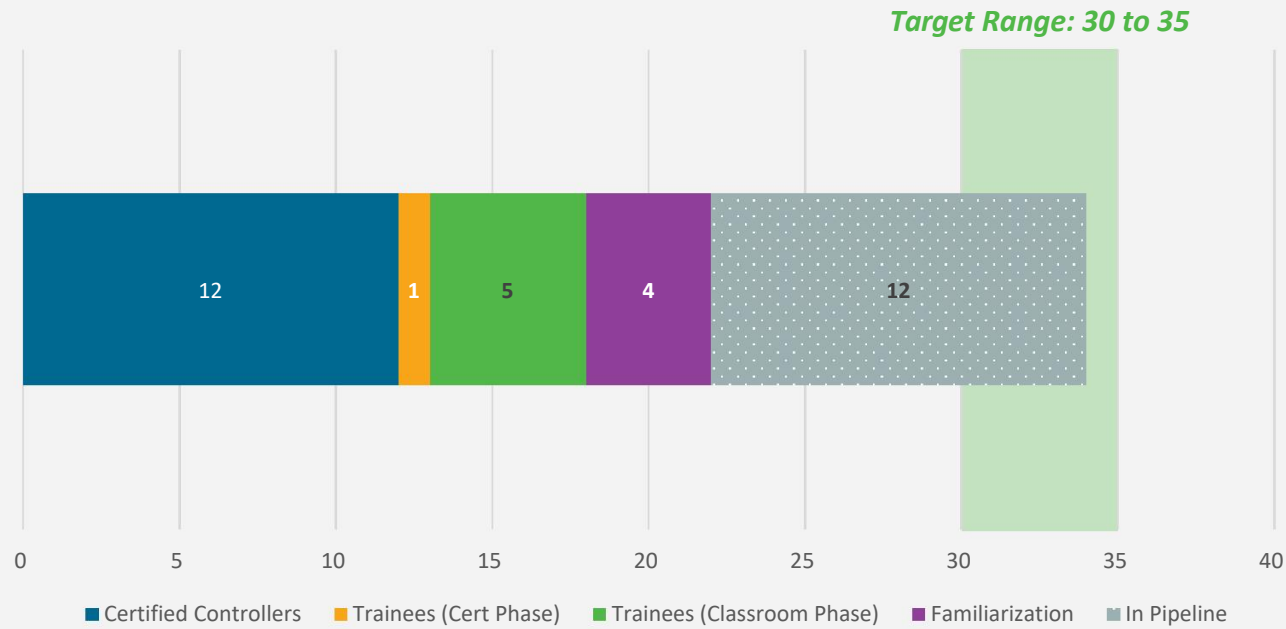
Station Equipment – Elevator Availability

Station Elevator

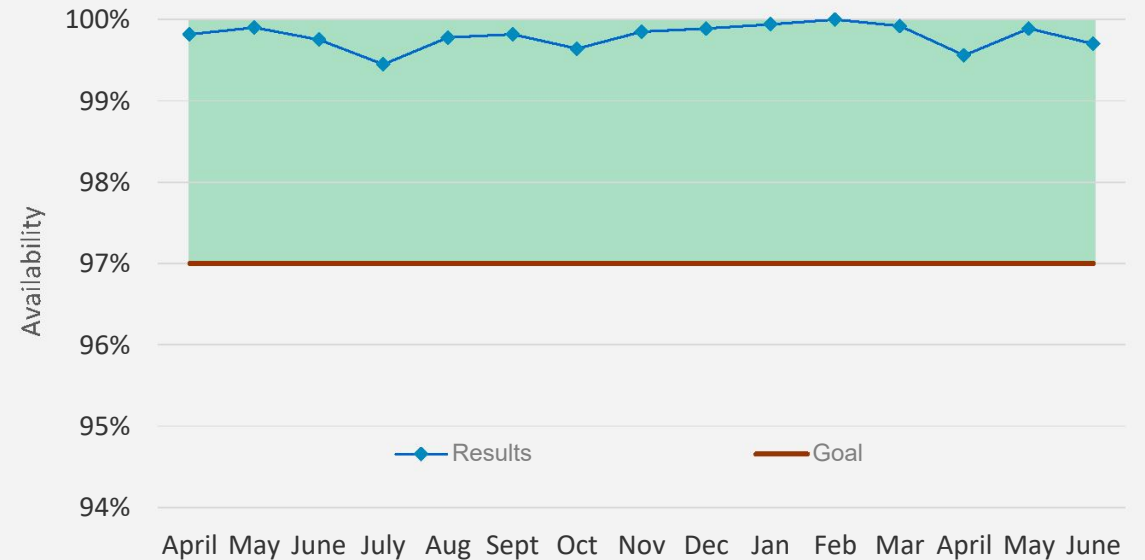- Goal has been met consecutively for the past 12 quarters

Garage Elevator

- Goal has been met consecutively for the past 18 quarters

Station Elevator

Availability chart (y-axis: 94%–100%) across months April, May, June, July, Aug, Sept, Oct, Nov, Dec, Jan, Feb, Mar, April, May, June. Legend: Active, Goal (98%).

Garage Elevator

Availability chart (y-axis: 94%–100%) across months April, May, June, July, Aug, Sept, Oct, Nov, Dec, Jan, Feb, Mar, April, May, June. Legend: Results, Goal (97%).
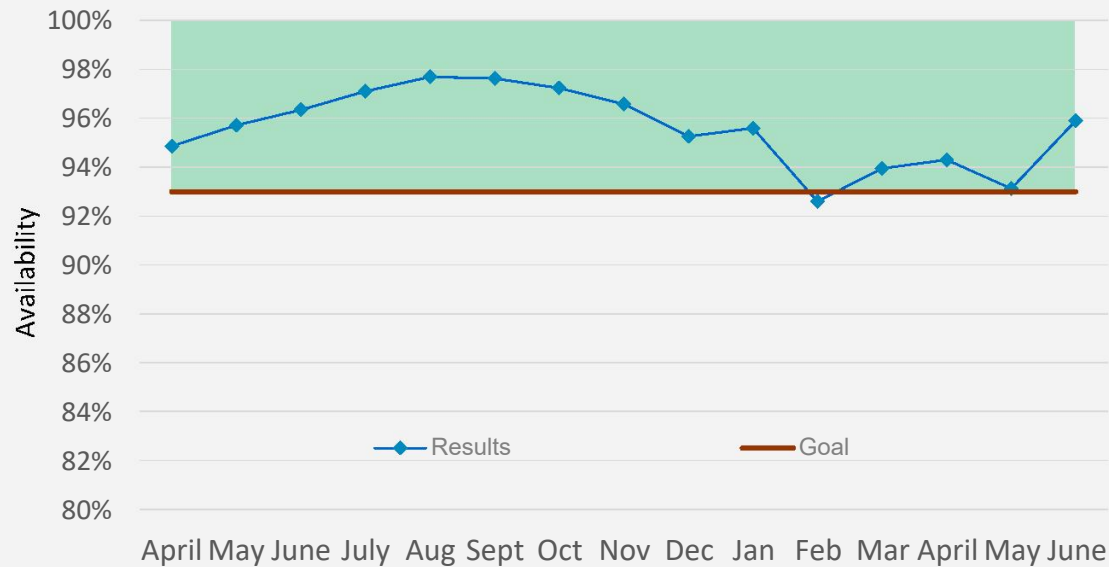
E-line Elevator and Escalator are included

Station Equipment – Escalator Availability

Street Escalator

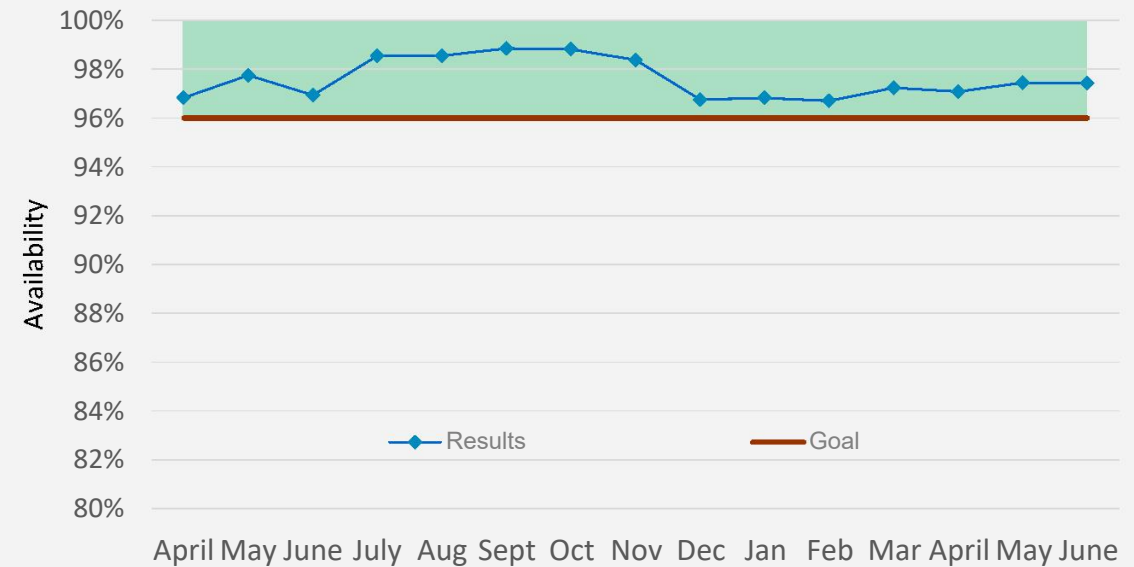- Goal has been met consecutively for the past five quarters

- Platform Escalator

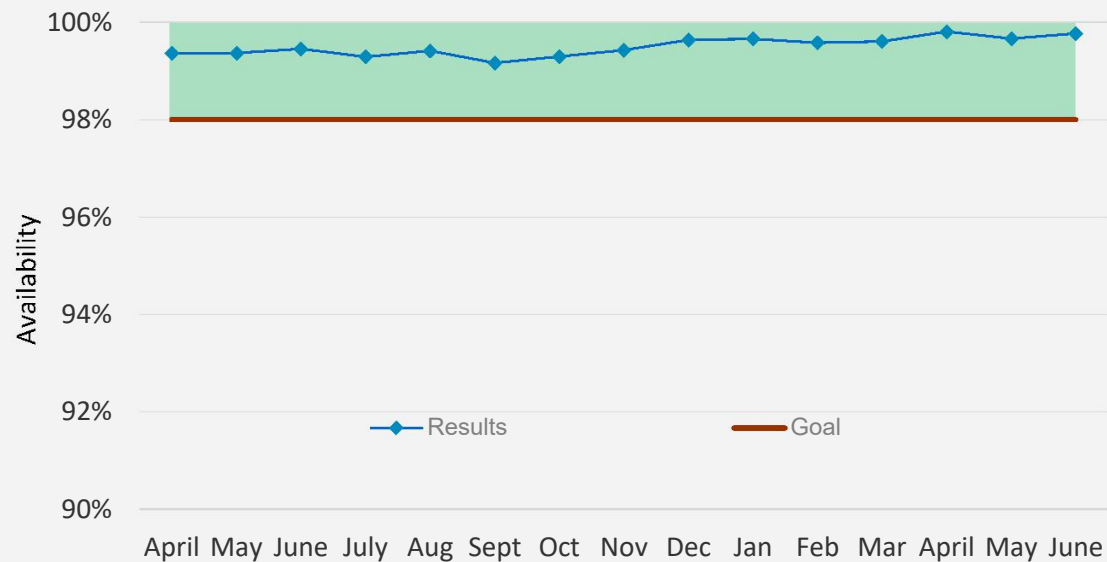- Goal has been met consecutively for the past 12 quarters

Station Equipment – Automated Fare Collection

Gate Availability

- Goal has been met consecutively for the past five quarters
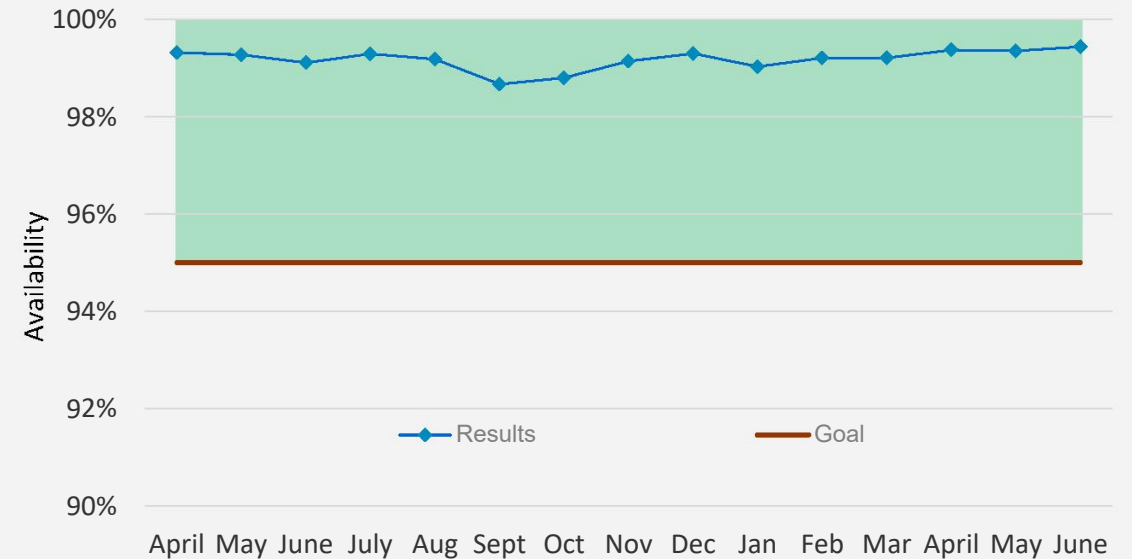
Vendor Availability

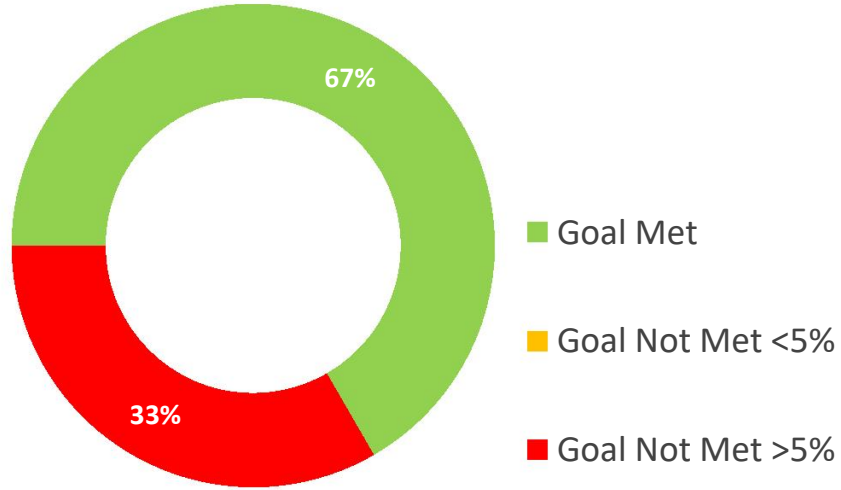- Goal has been met consecutively since 2015

Gate Availability chart showing monthly Results and Goal lines from April to June. Y-axis Availability from 90% to 100%. Goal line at 98%. Results stay near 99%–100%.

Vendor Availability chart showing monthly Results and Goal lines from April to June. Y-axis Availability from 90% to 100%. Goal line at 95%. Results stay near 98.7%–99.5%.

Summary – Customer Experience

Metric	FY24 Q4	Goal	% Change from FY24 Q3	
Customer Experience				
Overall Customer Satisfaction	81%		(6.57%)	▲ (gray)
Station Agent Customer Service	4.31	4.0	(0%)	—
Complaints per 100,000 Passenger Trips	18.17	5.1	20.91%	▲ (red)
Train Environment				
Train Temperature	4.29	4.0	3.18%	▲ (green)
Train Interior Cleanliness	3.83	3.5	3.63%	▲ (green)
Station Environment				
Environment Outside Stations	3.76	3.5	4.46%	▲ (green)
Environment Inside Stations	3.66	4.0	1.93%	▲ (red)
Code of Conduct				
Gender Based Harassment	8%		(14.3%)	▲ (gray)
Fare Evasion	19%		(20.44%)	▼ (gray)
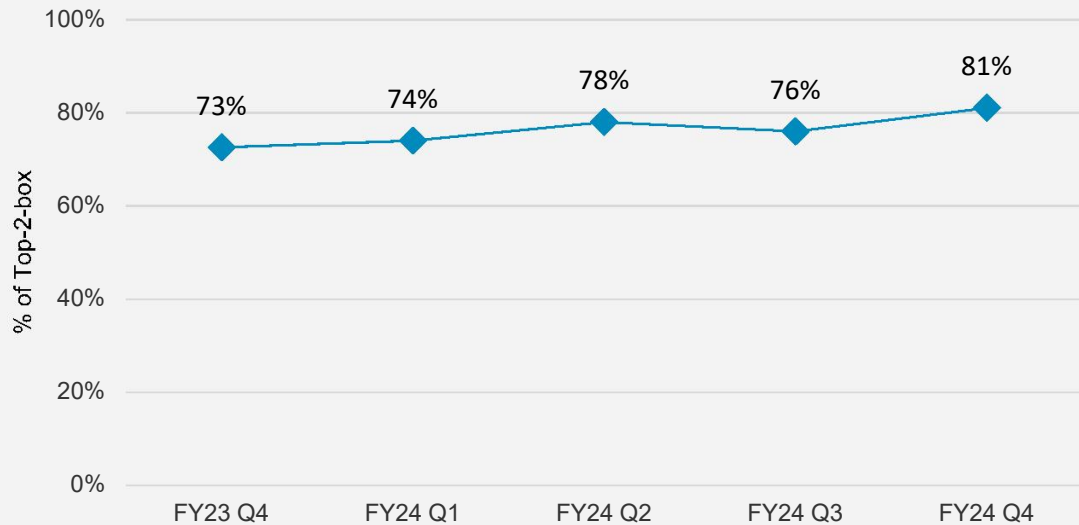
67%

33%

- Goal Met
- Goal Not Met <5%
- Goal Not Met >5%

▲ *Gray arrows represent change from the previous quarter for metrics which do not have an established goal*

Customer Service – Cases by Type

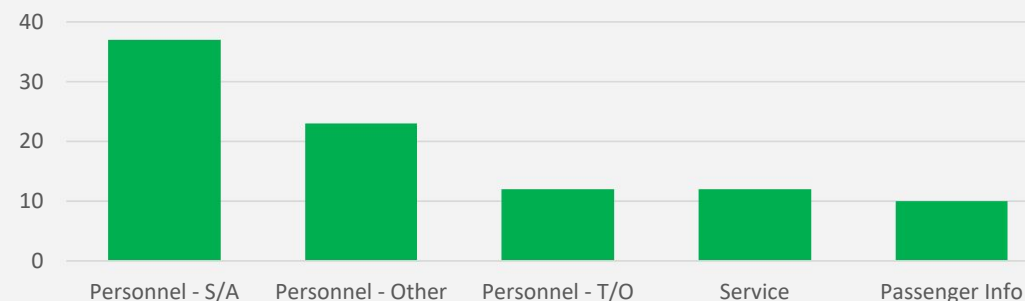**Breakdown of 4,991 Inquiry Cases**

Inquiry, 2380

Complaint, 2324

Comment, 155

Compliment, 132

Inquiry Cases – FY24 Q4

2,000	
1,500	
1,000	
500	
0	

Parking | General | Clipper | Fares/Tickets | Airport discount card

Compliment Cases – FY24 Q4

40	
30	
20	
10	
0	

Personnel - S/A | Personnel - Other | Personnel - T/O | Service | Passenger Info

Customer Service – Complaint Cases

Breakdown of Top Five Complaint Categories of 2,324 Complaints

Service, 320	Maintenance and Equipment, 269	Trains, 252	Biohazard, 244	Personnel, 216
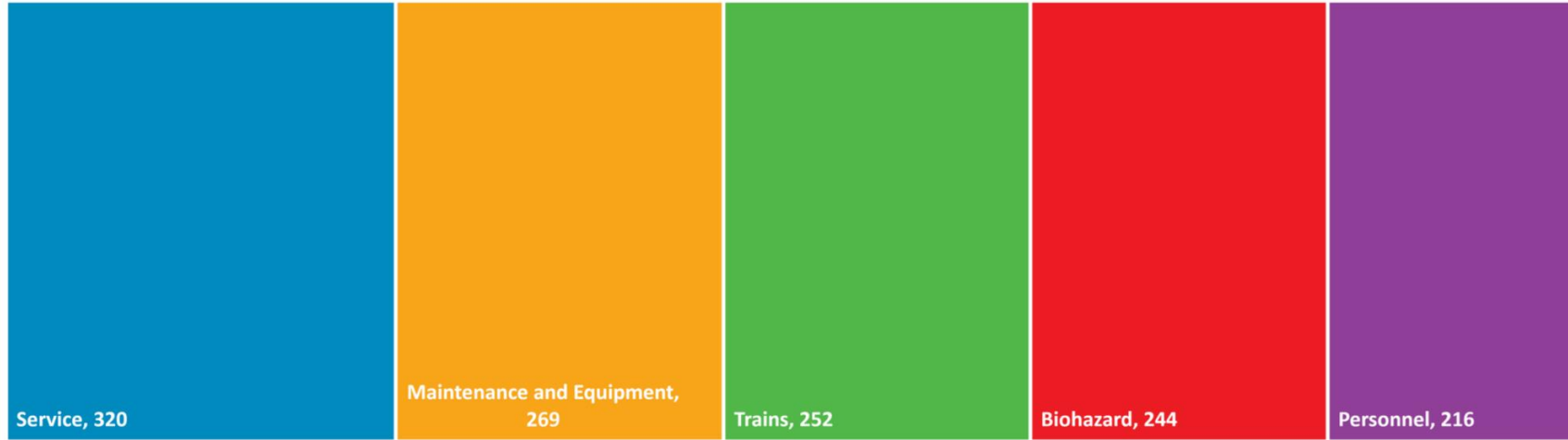
● **Customer Complaints**
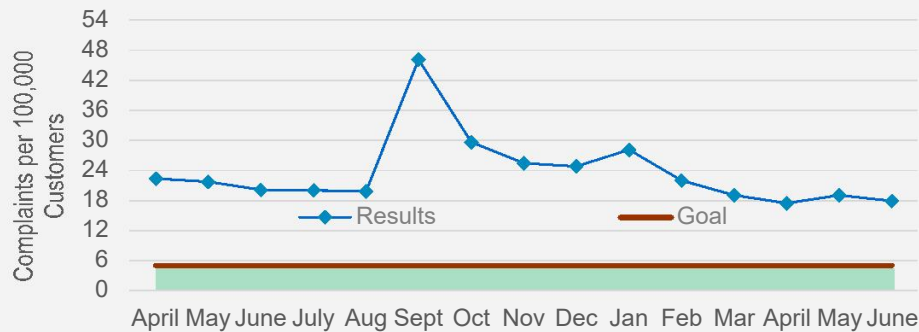
FY24 Q4 Trending Customer Complaints

Environment – Stations
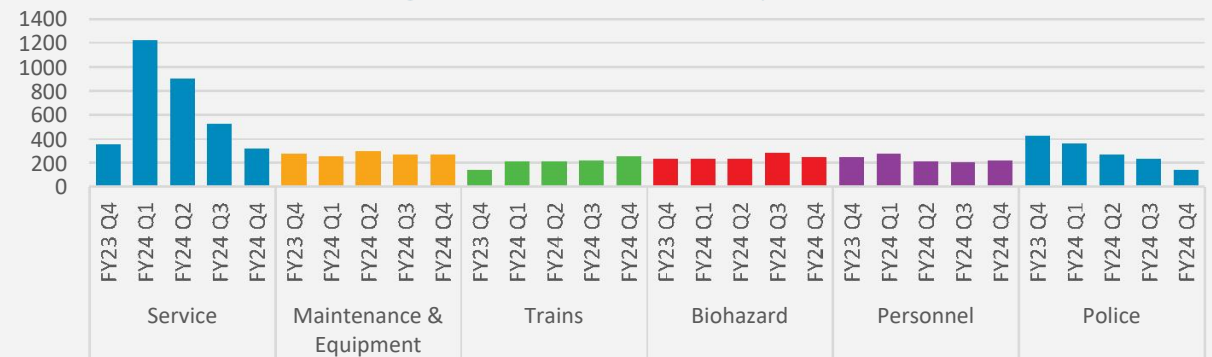
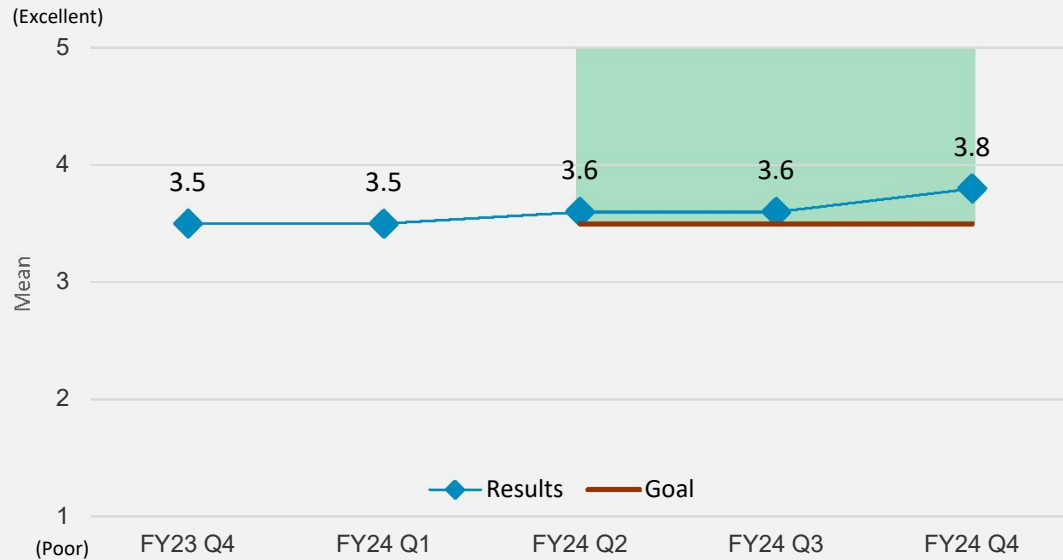## Environment Outside Station

- This is a composite score which incorporates the appearance of BART landscaping, walkways, and entry plaza (67%), and the cleanliness of the parking lot (33%).

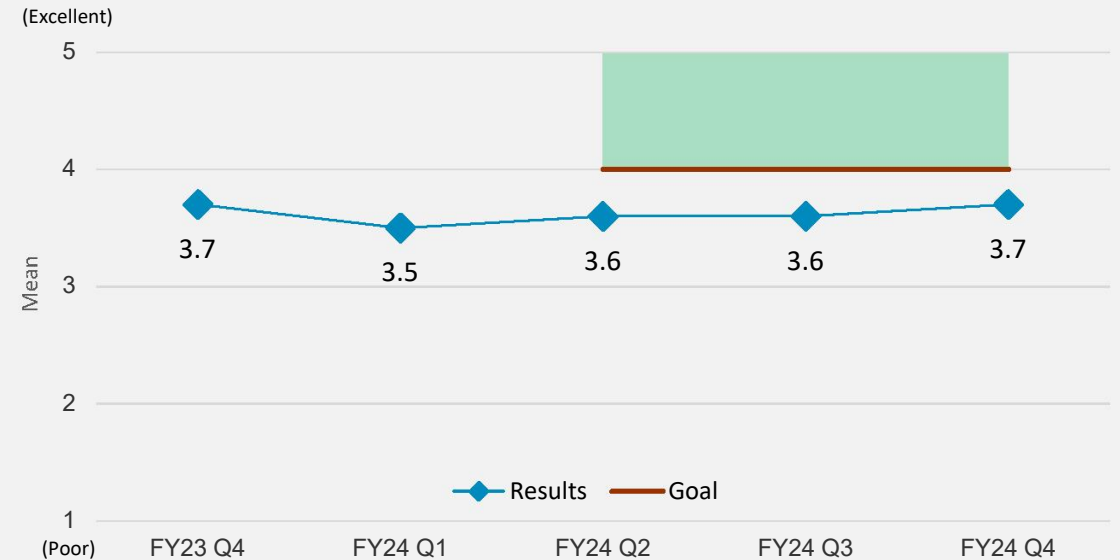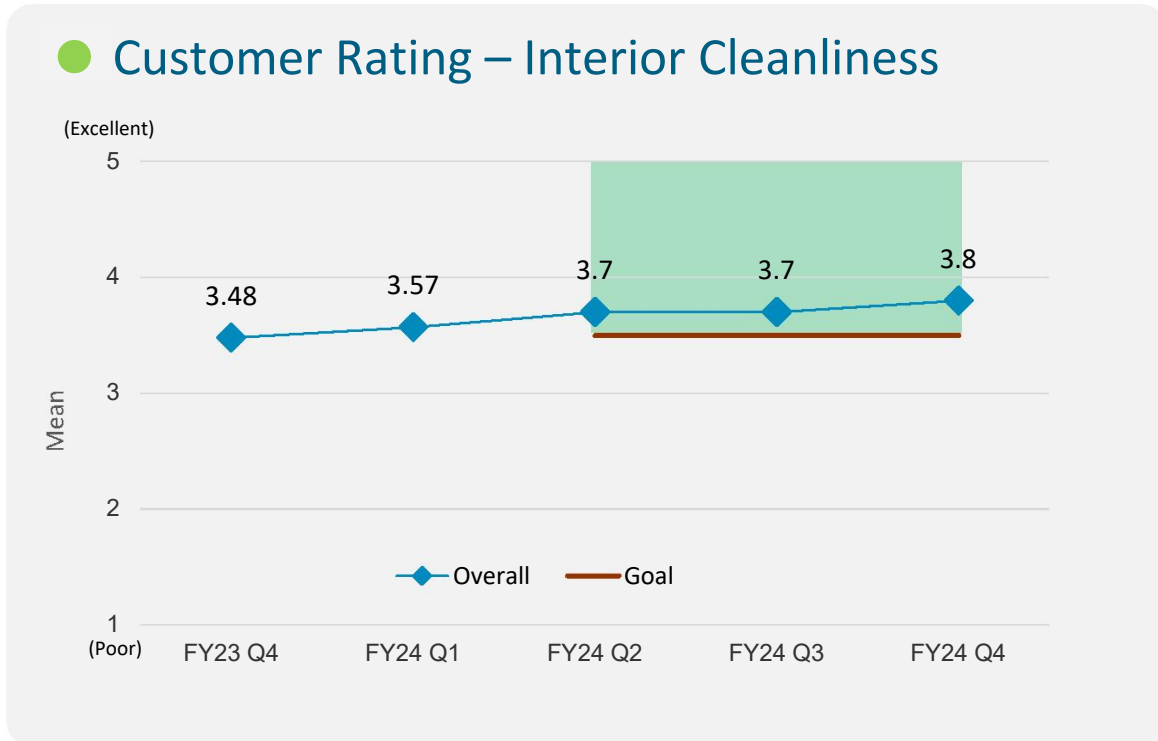## Environment Inside Station

- This is a composite score which incorporates the appearance of the platform (40%), concourse (25%), escalator (10%), stairwells (7.5%), elevator (10%), and restroom (7.5%).

● Environment Outside Station

● Environment Inside Station

Data acquired from PES Survey
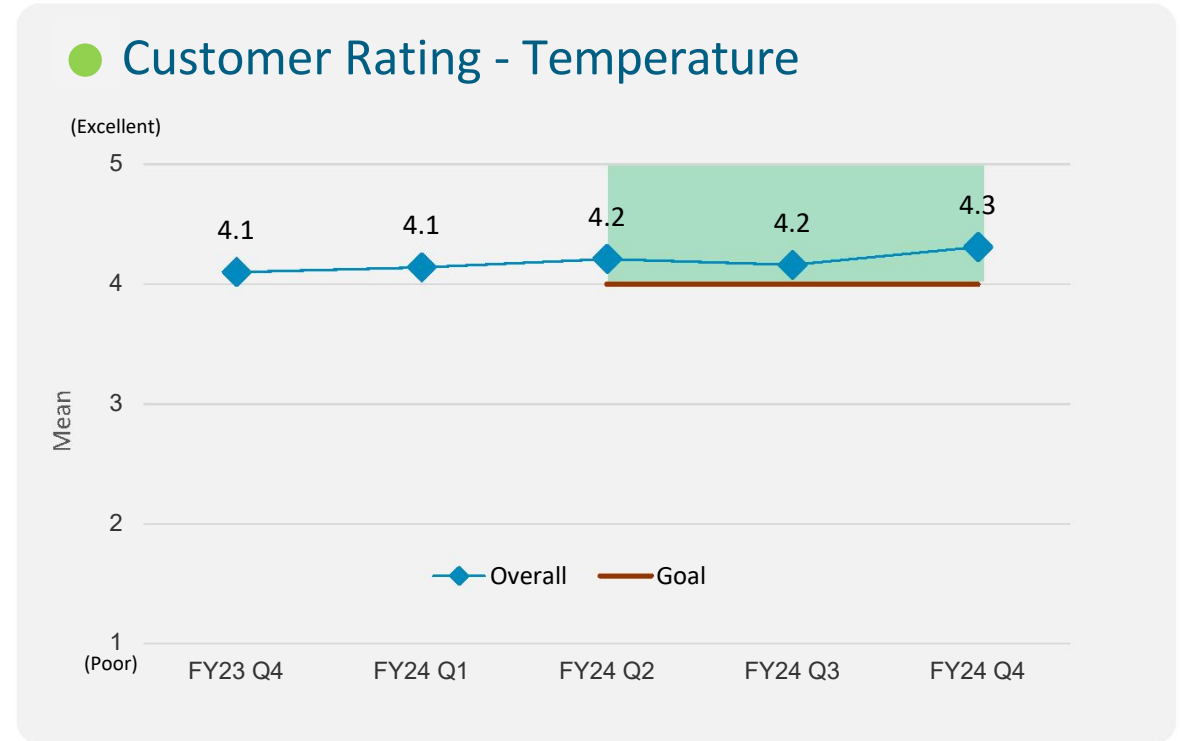
Environment – Trains

Customer Rating – Interior Cleanliness

- This is a composite score which incorporates the cleanliness of the train interior including graffiti (50%), and the appearance of the overall car (50%)

Customer Rating - Temperature

Customer Rating – Interior Cleanliness

(Excellent) 5

3.48   3.57   3.7   3.7   3.8

Mean

(Poor) 1

FY23 Q4   FY24 Q1   FY24 Q2   FY24 Q3   FY24 Q4

◆ Overall   ── Goal

Customer Rating - Temperature

(Excellent) 5

4.1   4.1   4.2   4.2   4.3

Mean

(Poor) 1

FY23 Q4   FY24 Q1   FY24 Q2   FY24 Q3   FY24 Q4

◆ Overall   ── Goal

Environment – Code of Conduct

Gender Based Harassment

Fare Evasion

Have you experienced gender-based sexual harassment at BART in the last six months?
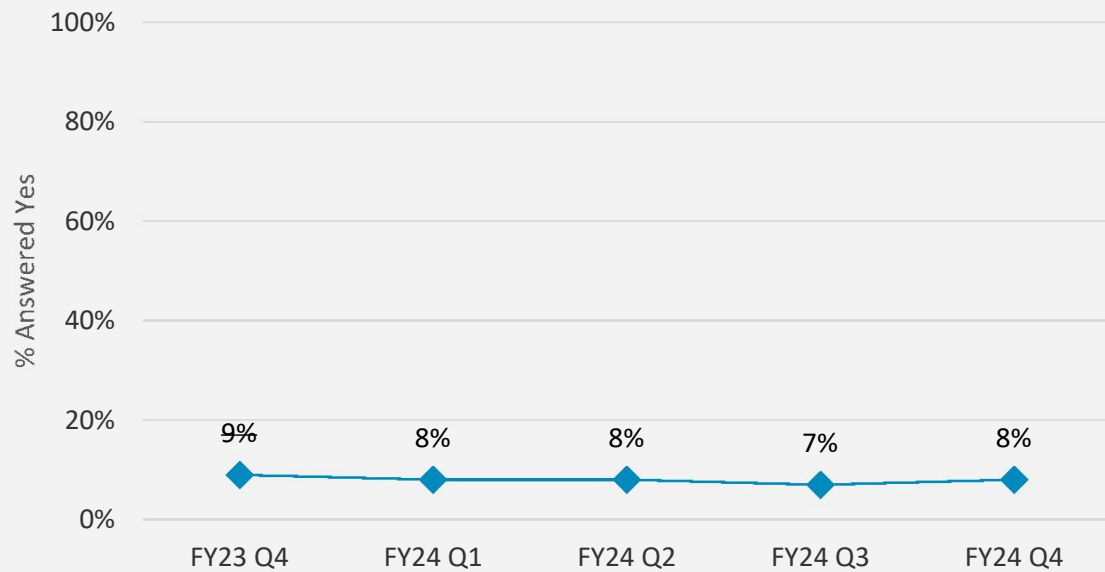
Did you see anyone enter or exit the Station without paying their fare today?

Gender Based Harassment

% Answered Yes

9%	8%	8%	7%	8%
FY23 Q4	FY24 Q1	FY24 Q2	FY24 Q3	FY24 Q4

Fare Evasion

% Answered Yes

25%	24%	25%	24%	19%
FY23 Q4	FY24 Q1	FY24 Q2	FY24 Q3	FY24 Q4

Source: PES Survey
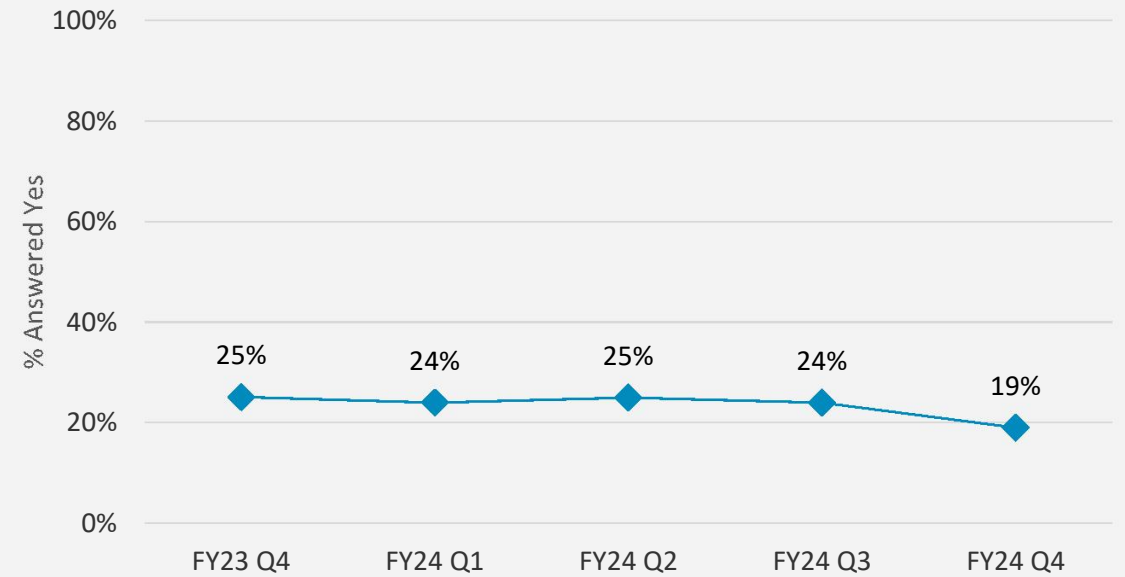
Summary – Safety and Security

- Goal Met
- Goal Not Met <5%
- Goal Not Met >5%
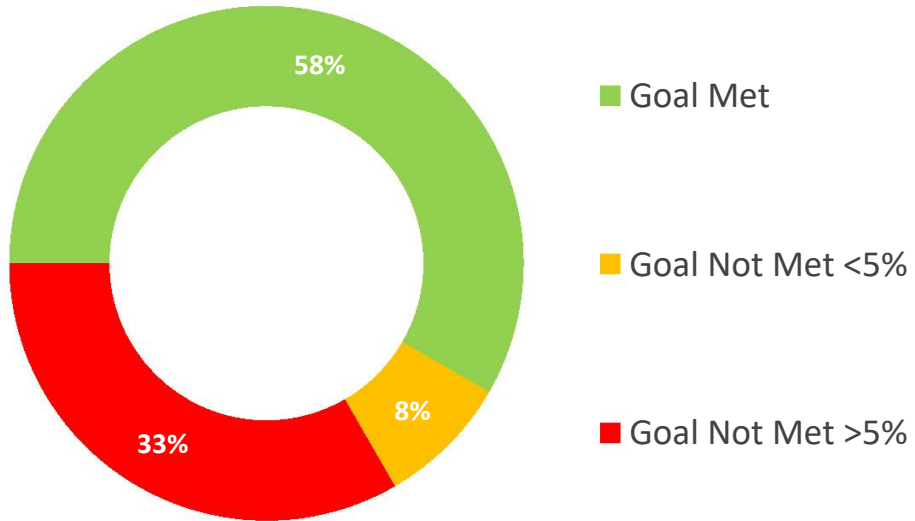
Metric	FY24 Q4	Goal	% Change from FY24 Q3	
Safety				
Vehicle Incidents/Million Patrons	0.47	0.6	(88.00%)	▼
Unscheduled Door Openings/Million Car Miles	0.23	0.2	0.00%	▬
Rule Violations Summary/Million Car Miles	0.57	0.25	(23.91%)	▼
Station Incidents/Million Patrons	1.41	2	(20.51%)	▼
OSHA-Recordable Injuries/Illnesses/Per OSHA	12.40	12	0.79%	▲
Lost Time Injuries/Illnesses/Per OSHA	5.83	6.5	(5.61%)	▼
Security				
Police Response Time per Emergency Incident	4.65	5	1.48%	▲
Bike Thefts	20	50	(33.33%)	▼
Auto Thefts/1,000 Parking Spaces	2.49	2	(19.99%)	▼
Auto Burglaries/1,000 Parking Spaces	3.05	3.5	28.64%	▲
BART Police Presence	19.3%	12%	8.95%	▲
Crimes Against Persons/Million Riders	11.18	2	20.59%	▲

Safety – Passenger

Station Incidents

Breakdown of 18 Station Incidents

Escalator, 9	Platform, 3	Stairs, 2	Trackway, 2
		Elevator, 1	Concourse, 1

● Station Incidents

Incidents per Million Passengers

	FY23 Q4	FY24 Q1	FY24 Q2	FY24 Q3	FY24 Q4
Results					

◆ Results ▬ Goal

Vehicle Incidents

Breakdown of 6 Vehicle Incidents

On-Board, 5	Alighting, 1

● Vehicle Incidents

Incidents per Million Passengers

	FY23 Q4	FY24 Q1	FY24 Q2	FY24 Q3	FY24 Q4
Results					

◆ Results ▬ Goal

Safety – Employee

Lost Time due to Injuries

Breakdown of 56 Lost Time Cases

Trauma, 25
Strain, 10
Sprain, 8
Contusion, 7
Other, 6

Lost Time due to Injuries

OSHA Recordable Injuries

Breakdown of 119 Recordable Injuries

Trauma, 35
Other, 32
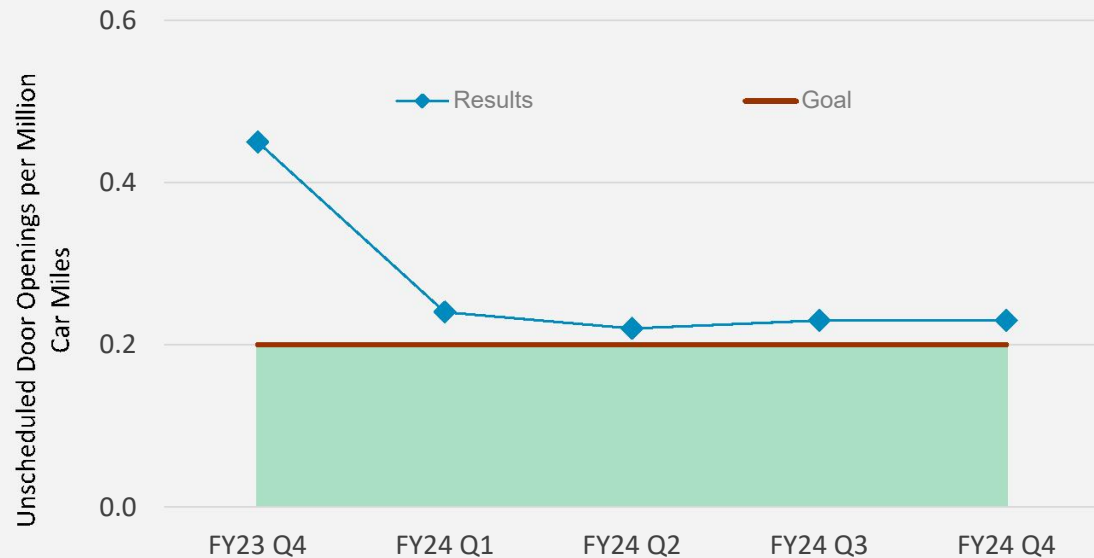Contusion, 19
Strain, 17
Sprain, 16

OSHA Recordable Injuries

Safety – Procedure Violations

Unscheduled Door Openings

- 4 Unscheduled Door Openings in FY24 Q4
  - All due to passenger action/misuse

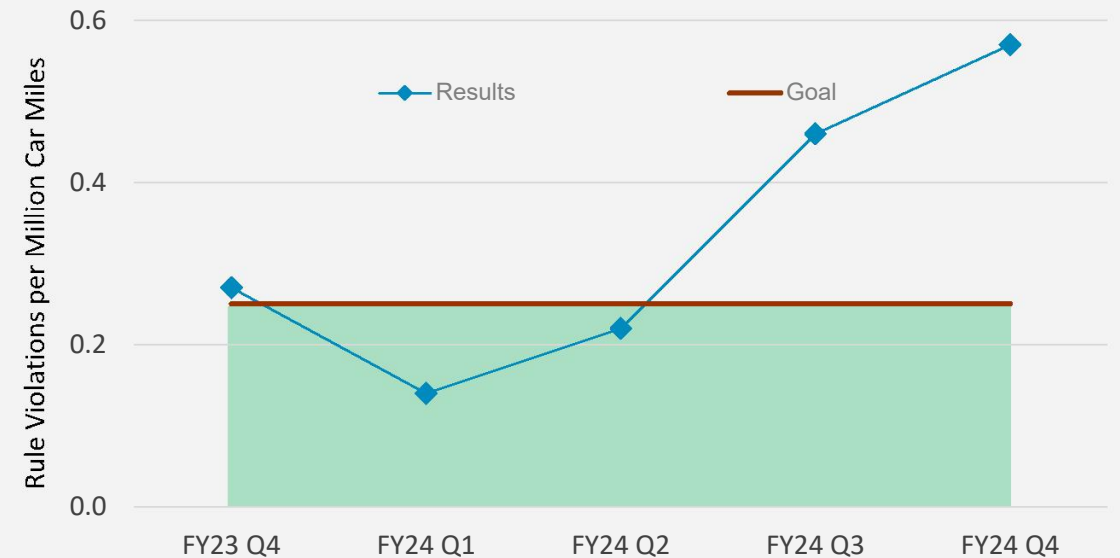## Rule Violations

- 10 Rule Violations in FY24 Q4

Security – Police Coverage

Police Presence

- Continued focus on highly visible presence of BPD uniformed sworn and civilian personnel on trains and in stations.

Did you see BART Police personnel in the station/outside the station/on the train today?
BART Police personnel includes Police Officers, BART Ambassadors, Fare Inspectors, Crisis Intervention Specialists or Community Service Officers
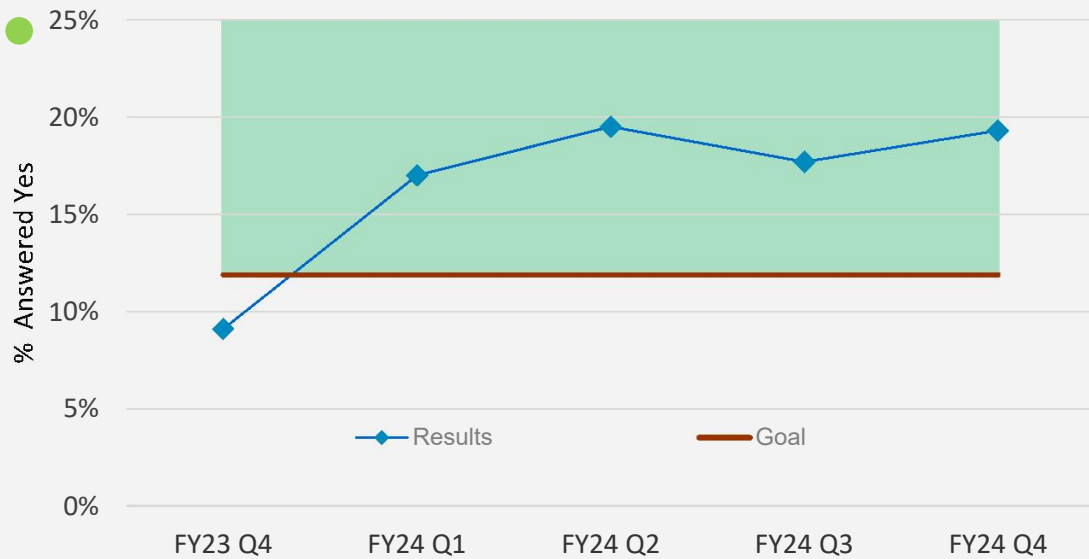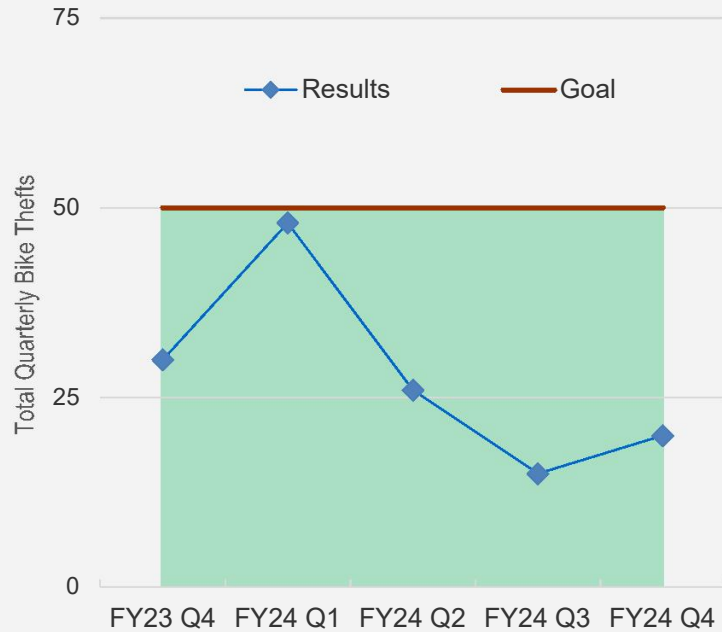

Police Response Time

- Goal met

Crime – Theft and Burglary

Bike Theft
- Goal met

Auto Theft
- Goal not met
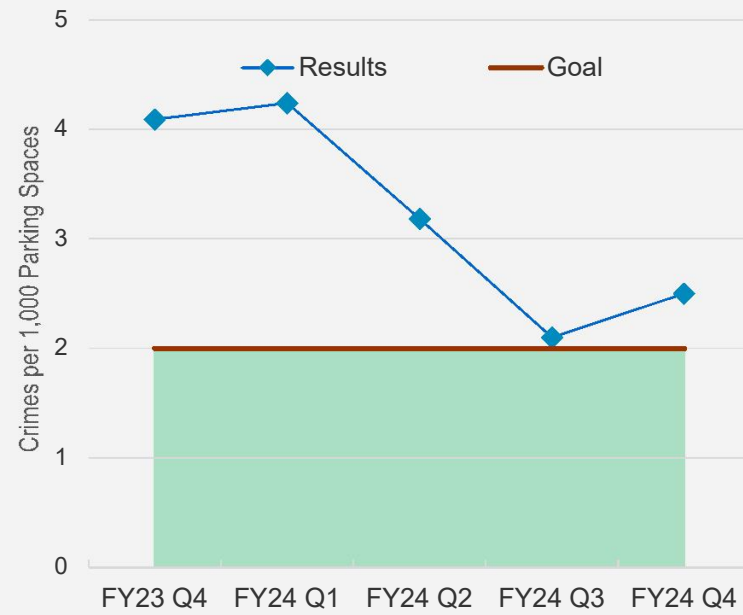
Auto Burglary
- Goal met
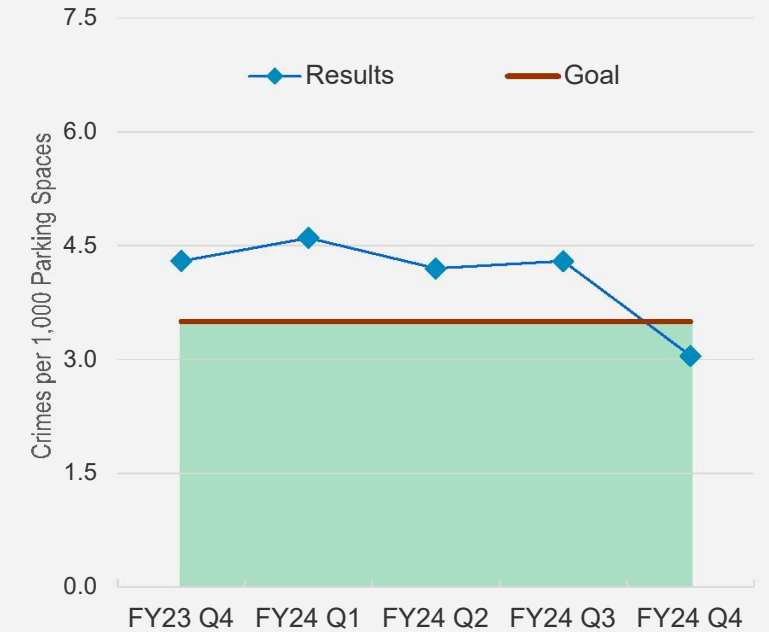
Crime – Against Persons
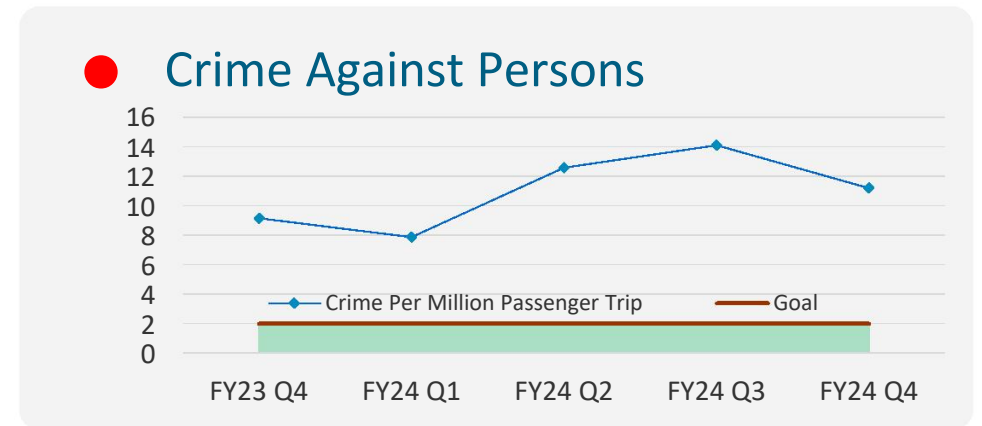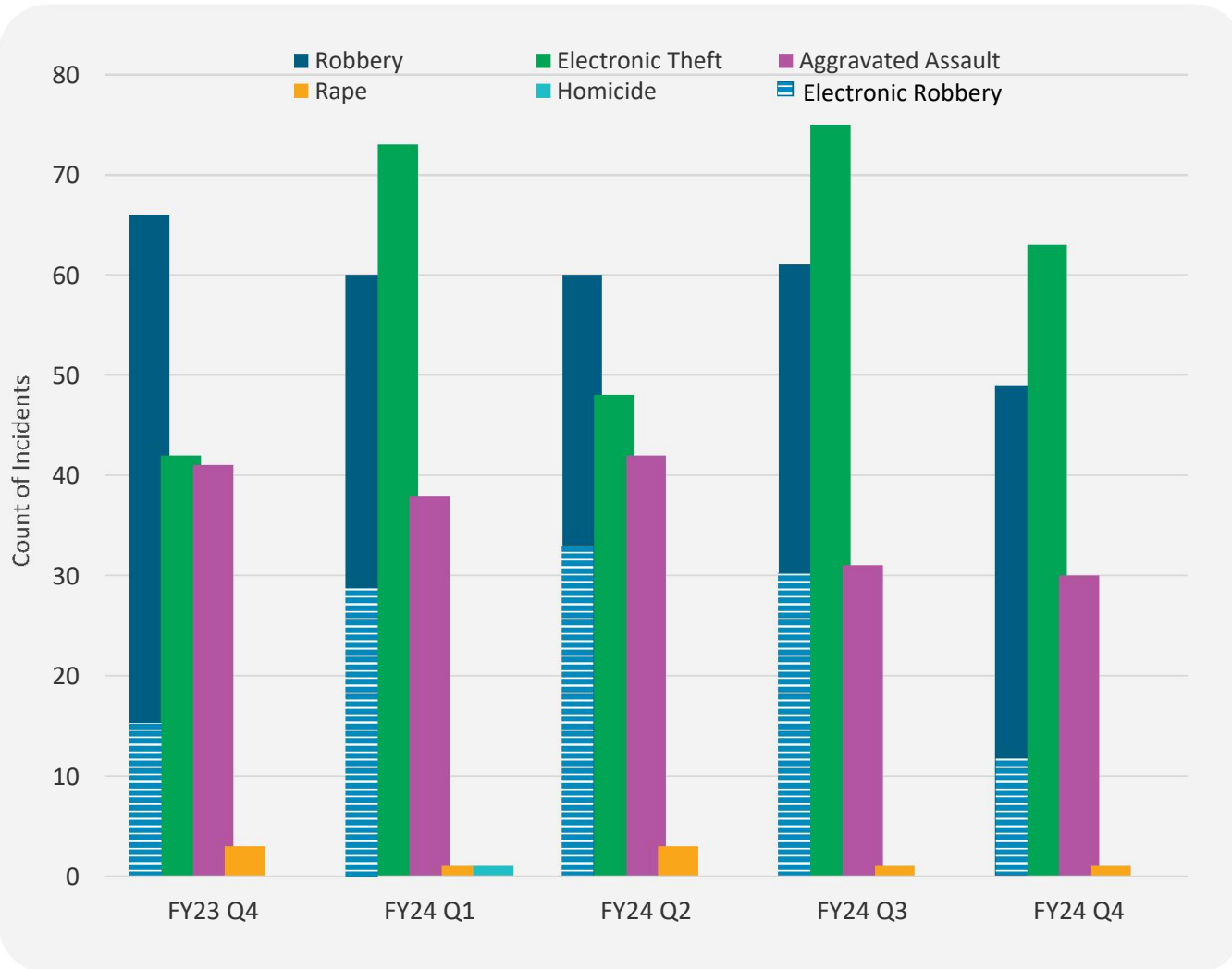
BART Watch App

Breakdown of 4,350 BART Watch Reports

- Code of Conduct, 3125
- Wellness, 799
- Possible Crime, 417
- Security, 350

Total BART Watch & Text Counts by Month
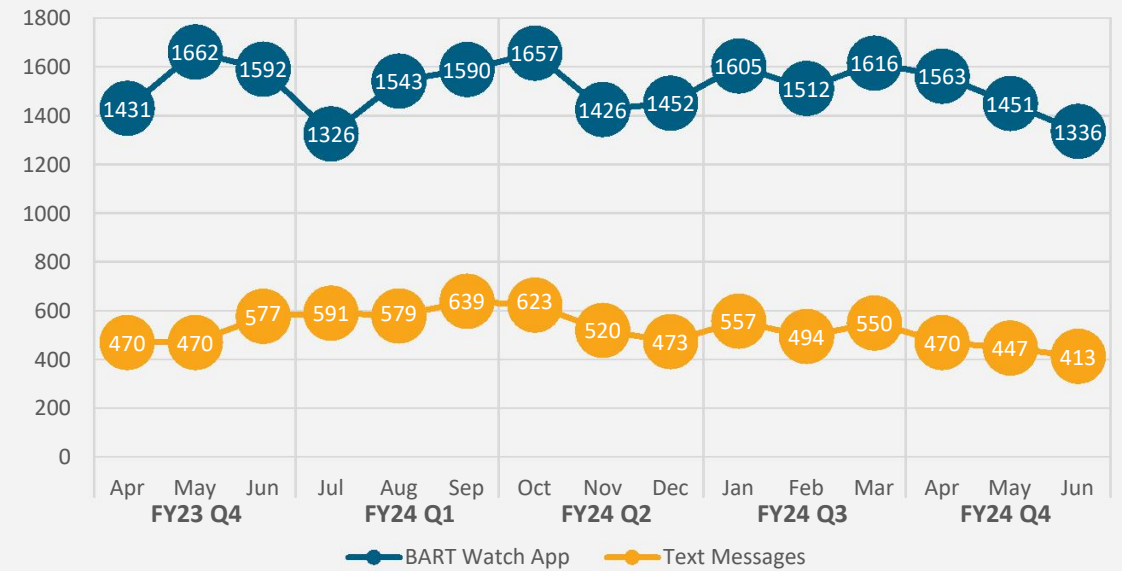
BART Watch App values by month:
- Apr (FY23 Q4): 1431
- May: 1662
- Jun: 1592
- Jul (FY24 Q1): 1326
- Aug: 1543
- Sep: 1590
- Oct (FY24 Q2): 1657
- Nov: 1426
- Dec: 1452
- Jan (FY24 Q3): 1605
- Feb: 1512
- Mar: 1616
- Apr (FY24 Q4): 1563
- May: 1451
- Jun: 1336

Text Messages values by month:
- Apr (FY23 Q4): 470
- May: 470
- Jun: 577
- Jul (FY24 Q1): 591
- Aug: 579
- Sep: 639
- Oct (FY24 Q2): 623
- Nov: 520
- Dec: 473
- Jan (FY24 Q3): 557
- Feb: 494
- Mar: 550
- Apr (FY24 Q4): 470
- May: 447
- Jun: 413

Legend: BART Watch App, Text Messages
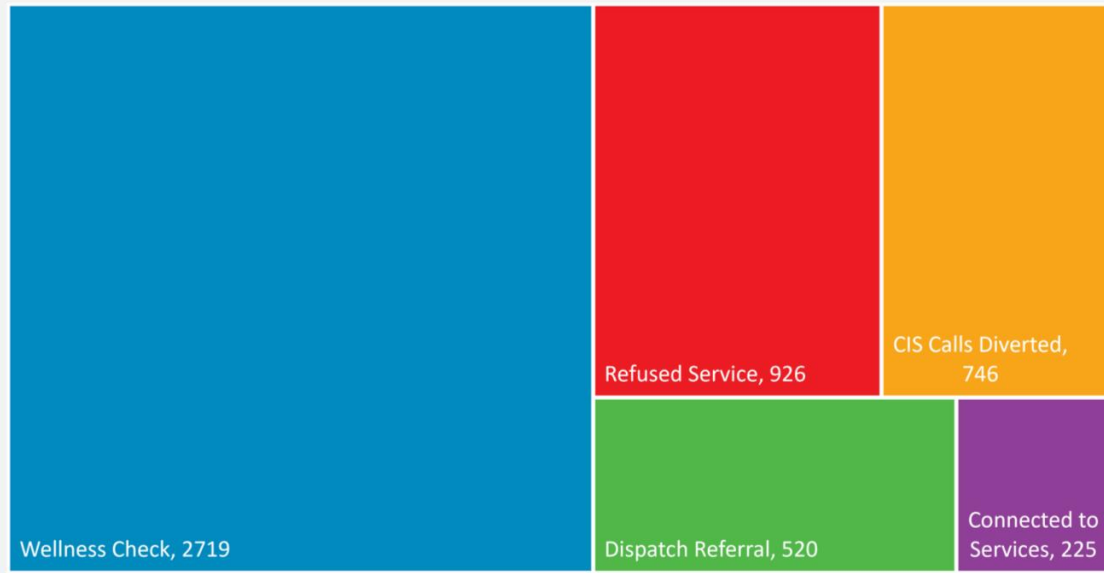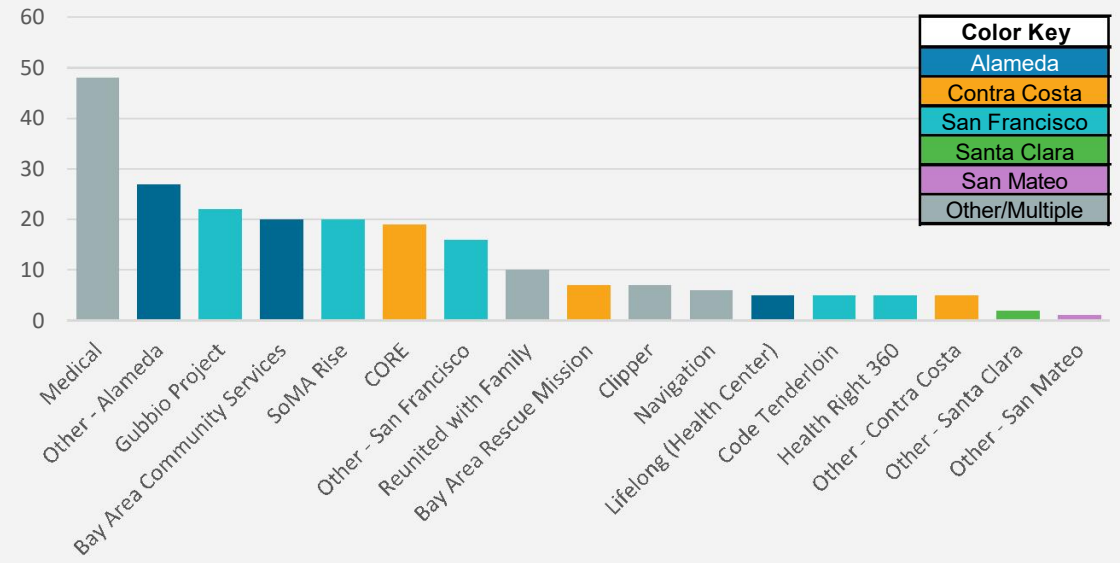
Police Hiring Metrics

Police Hiring Pipeline – FY24 Q4

Stage	Count
Applications Received	797
Attended Testing	174
Interviewed	100
Passed Interview	78
Passed Background Check	8
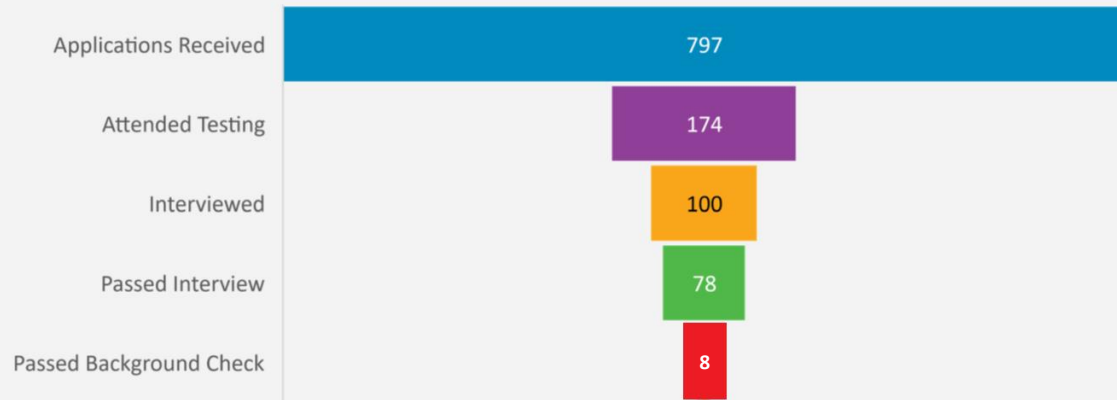
Police Headcount Tracking

Sworn Officers	139
Field Training	10
In Academy	22
Vacancies	14

Current PCNs: 185

As of 07/31/24 ■ Sworn Officers ■ Field Training ■ In Academy ■ Vacancies
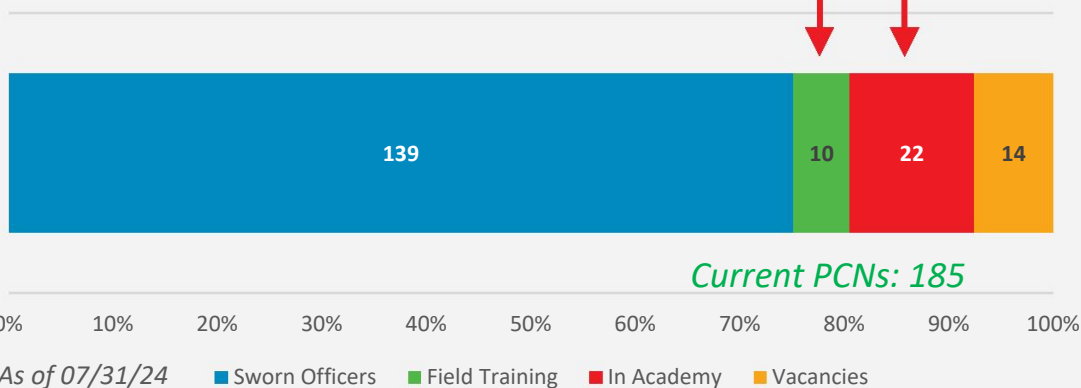
- 33 Police Officers hired since January
  - 9 Police Officer candidates accepted final job offers and began in the month of July
  - 22 new recruits in the Police Academy
  - 10 sworn officers currently in field training
- Recruitment team participated in 11 off-site recruitment outreach events since January
- 105K views and 78K engagements on JOINBARTPD.COM website since launch in July 2023
  - 12K new users since January 2024
- More than 395 prospects attended a total of 6 Police Officer Recruitment Open House events held at BPD Headquarters
  - The next open house is scheduled on August 24th
- Number of applicants interviewed
  - FY23 Q4: 57
  - FY24 Q1: 146
  - FY24 Q2: 131
  - FY24 Q3: 108
  - FY24 Q4: 100

Questions?

Glossary by KPI Category and Class

Service Delivery

Capacity

- Dispatched Train: A train whose wheels have rolled from its first station
- Missed Dispatches: Scheduled trains which were never dispatched or partial runs that were not able to dispatch from their planned origin

Punctuality

- Cancellation: A scheduled train unable to be dispatched, e.g., system delays or car shortage
- Delayed Train: A train that has been delayed by the amount of the delay threshold of five minutes and/or one or more of the following:
  - unscheduled cumulative train delay(s) that exceed delay threshold at end of line
  - cancelled train dispatch(es)
  - train offload(s)
  - station run-through(s)
- Incident: An observed system anomaly of the railroad entities that may or may not inhibit train movement
- Timed Train Meets: The percentage of trains that connected on-time, relative to the published schedule. A meet is successful when there is more than 20 seconds of overlap between the two trains
  - K-Line Meets consist of timed transfers between the Yellow and Orange lines. Northbound trains transfer at 19th St and Southbound trains at MacArthur

Railway Asset Availability

Wayside

- ATO: Automated Train Operation
- PM: Planned Maintenance

Revenue Fleet

- DMU: Diesel Multiple Unit (eBART Train)
- FOTF: Fleet of the Future
- MTBSD: The mean time between service delays in hours

Stations

- Gate Availability: The percentage of time automated fare gates are in service during operating hours
- Vendor Availability: The percentage of time ticket vending machines are in service during operating hours

Customer Experience

Customer Service

- Personnel – S/A: Station Agent
- Personnel – T/O: Train Operator

Environment

- PES: Passenger Environment Survey

Safety and Security

Safety

- Alighting: To come down from something (such as a vehicle)
- OSHA: Occupational Safety and Health Administration
- Rule Violation: A violation of procedural rules by a train operator or other BART staff
- Safety Incident: An occupational injury or illness, including deaths

Security

- CIS: Crisis Intervention Specialists serve as liaisons between BART Police and community-based organizations that provide mental health, housing, and other services
- **Progressive Policing Contact Types:**
  - CIS Calls Diverted: The number of calls that were diverted from sworn officers to CIS Staff
  - Connected to Services: The number of individuals who were connected to services
  - Dispatch Referral: The number of calls which were referred to CIS staff by BPD Dispatch
  - Refused Service: The number of individuals who were offered connections to local services by CIS staff but refused
  - Wellness Check: The number of contacts made to check on the wellbeing of a person in a station or on a train