Quarterly Service Performance Review
1st Quarter, FY24 (July- September 2023)

Engineering & Operations Committee
November 16, 2023

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
- Transportation Staffing

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

Customer Experience

Customer Service
- Customer Service
  - Overall Customer Satisfaction
  - Station Agent Customer Service
  - Complaints

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

Safety and Security

Safety
- Safety – Passenger
  - Station Incidents
  - Vehicle Incidents
- Safety – Employee
  - Lost Time Injuries
  - OSHA Recordable Injuries
- Safety – Violations
  - 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
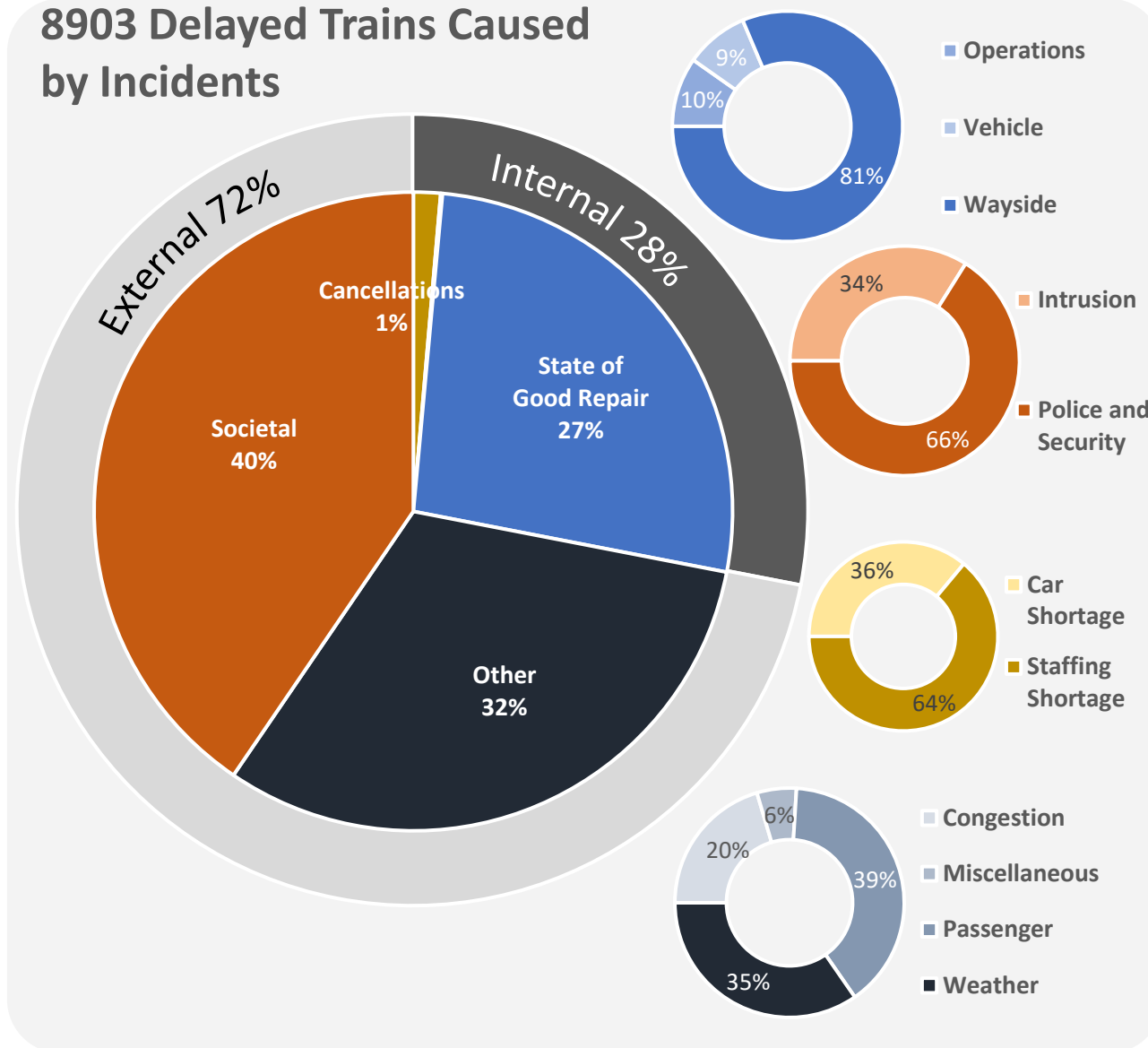- Progressive Policing

Summary – Service Delivery

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

(donut chart center label: 60%)
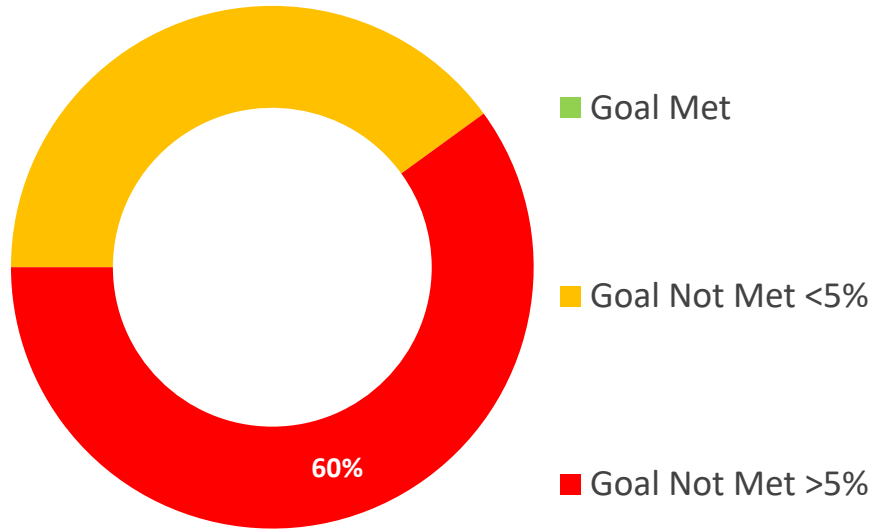
Metric	FY24 Q1	Goal	Change from FY23 Q4	
All-Day				
Weekday - Average Ridership	164606	166062	3.32%	🔼 (yellow)
Trains On-Time - Daily	83.8%	91.0%	5.38%	🔼 (red)
Customers On-Time - Daily	92.1%	94.0%	1.12%	🔼 (yellow)
Peak				
Trains On-Time - Peak	83.5%		8.09%	🔼 (gray)
Customers On-Time - Peak	92.0%		1.08%	🔼 (gray)

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

Service Delivery – Delay Incident Detail

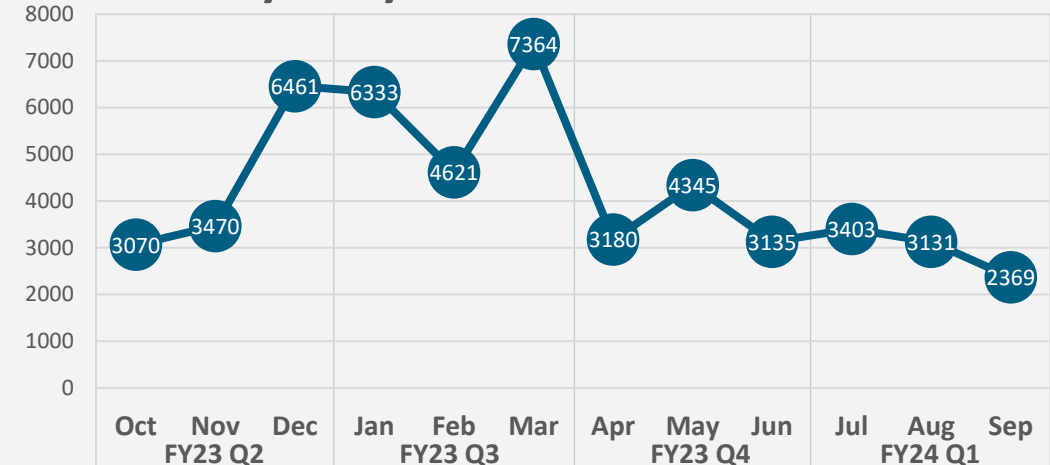## 8903 Delayed Trains Caused by Incidents

- External 72%
  - Societal 40%
  - Other 32%
- Internal 28%
  - State of Good Repair 27%
  - Cancellations 1%

Operations donut:
- Operations 81%
- Vehicle 10%
- Wayside 9%

Intrusion donut:
- Intrusion 34%
- Police and Security 66%

Car/Staffing donut:
- Car Shortage 36%
- Staffing Shortage 64%

Congestion donut:
- Congestion 20%
- Miscellaneous 6%
- Passenger 39%
- Weather 35%

Trains Delayed - Top Ten Single Incidents

- 7/21/2023, Weather (Heat), 342
- 8/21/2023, Weather (Rain), 196
- 7/10/2023, Third Rail, 186
- 9/26/2023, Weather (Rain), 180
- 7/8/2023, Data Comm, 158
- 8/2/2023, Track, 155
- 7/10/2023, Object On Track/Train Struck Object, 107
- 9/13/2023, Vandalism, 87
- 9/24/2023, F.O, 80
- 7/11/2023, Vandalism, 77

Top ten incidents = 17.6% of delayed trains

Trains Delayed by Month

Month	Delayed
Oct (FY23 Q2)	3070
Nov (FY23 Q2)	3470
Dec (FY23 Q2)	6461
Jan (FY23 Q3)	6333
Feb (FY23 Q3)	4621
Mar (FY23 Q3)	7364
Apr (FY23 Q4)	3180
May (FY23 Q4)	4345
Jun (FY23 Q4)	3135
Jul (FY24 Q1)	3403
Aug (FY24 Q1)	3131
Sep (FY24 Q1)	2369

Capacity – Ridership

- Total Ridership up 10.7% over last year.

- Average weekday ridership up 12.2% over last year.

- Saturday ridership up 5.5% over last year.
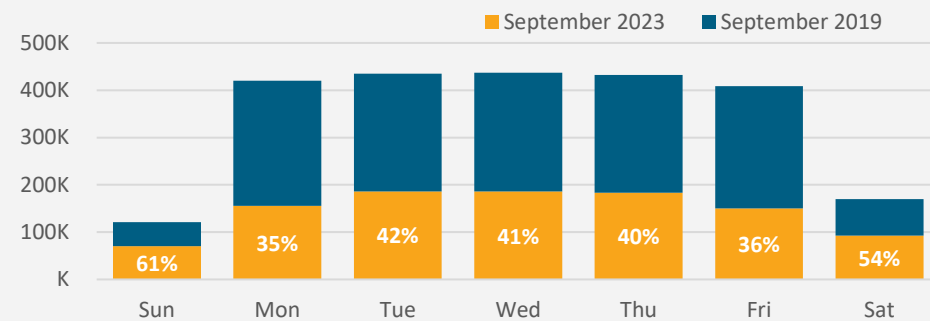
- Sunday ridership up 10.1% over last year.

Weekday Hourly System Activity

Pre-COVID 2019

September 2023
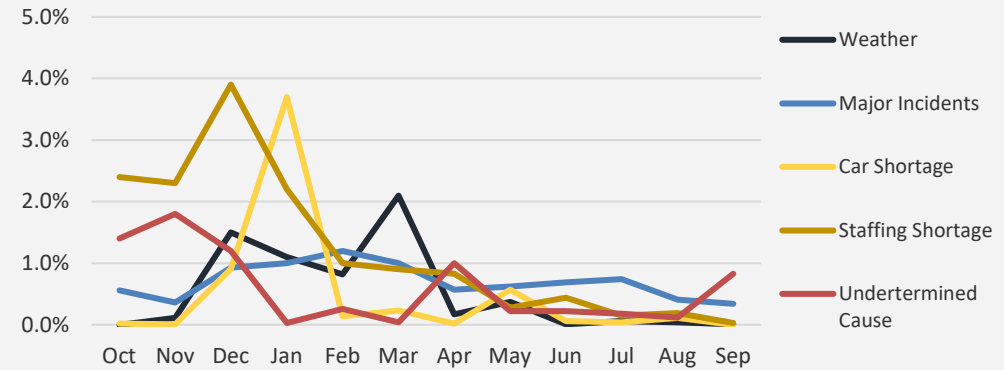
April 2020

6 A.M.   noon   6 P.M.   Midnight
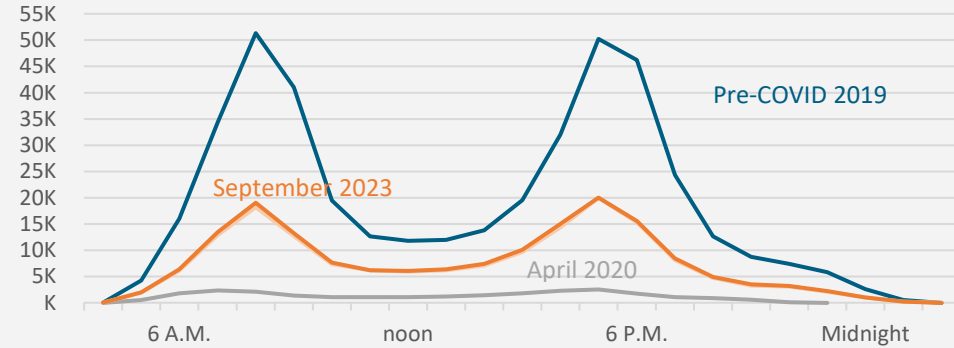
● Average Ridership - Weekday

Average Weekday Trips

July Aug Sept Oct Nov Dec Jan Feb Mar April May June July Aug Sept

Results   Goal
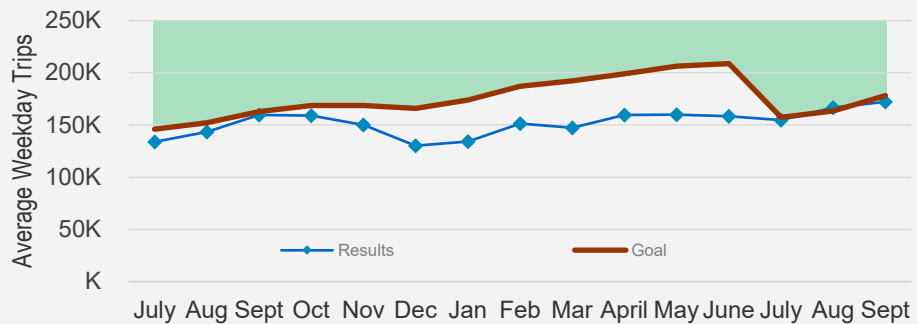
Comparison of September Ridership by Day of Week

September 2023   September 2019

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	61%	35%	42%	41%	40%	36%	54%

Capacity – Dispatches Operated

- Missed Dispatches are scheduled trains that did not run OR partial runs that were not able to dispatch from origin

- Missed dispatches due to staffing shortage continue to decrease

- Cancellations improved to just over 1%.

- Cause categories reduced to less than 1%.

% of Scheduled Dispatches Missed by Cause

Legend: Weather, Major Incidents, Car Shortage, Staffing Shortage, Undetermined Cause

Scheduled Runs Dispatched from Origin

Missed dispatches
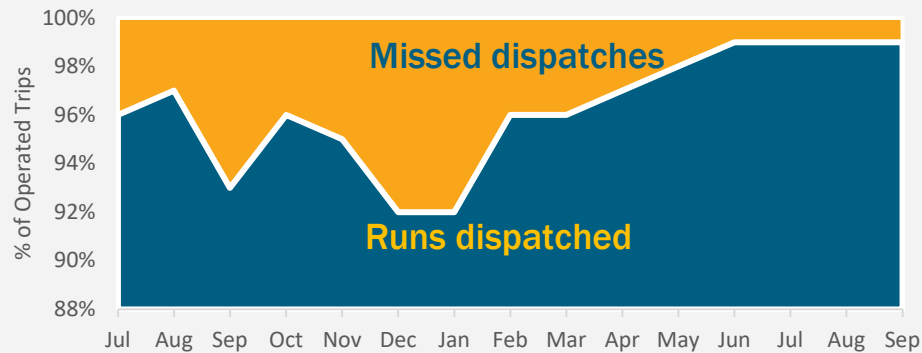
Runs dispatched

Hourly Scheduled Runs Dispatched from Origin

Weekday — Weekend
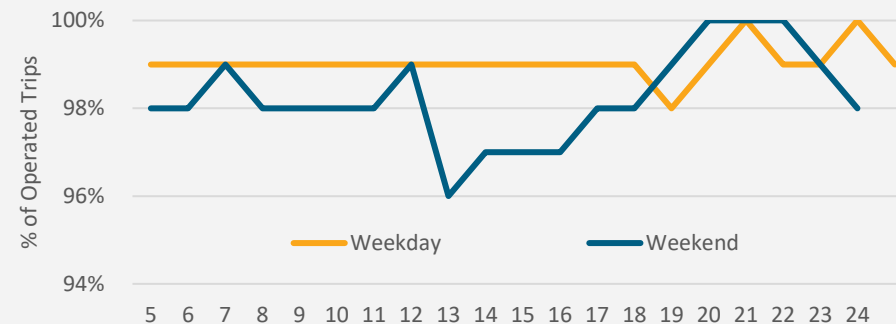
Capacity – Passenger Loading

Average Hourly Weekday Passenger Load per Car by Line

Passenger Load per Car for Top 5 Crowded Weekday Trains

Prior Schedule - July 1st to Sep 10th

Legend

- Maximum of Top 5*
- 75th Percentile
- XX¹
- Median
- 25th Percentile
- Minimum of Top 5*

*Maximum & Minimum Values of Top 5 Crowded Trains with outliers removed
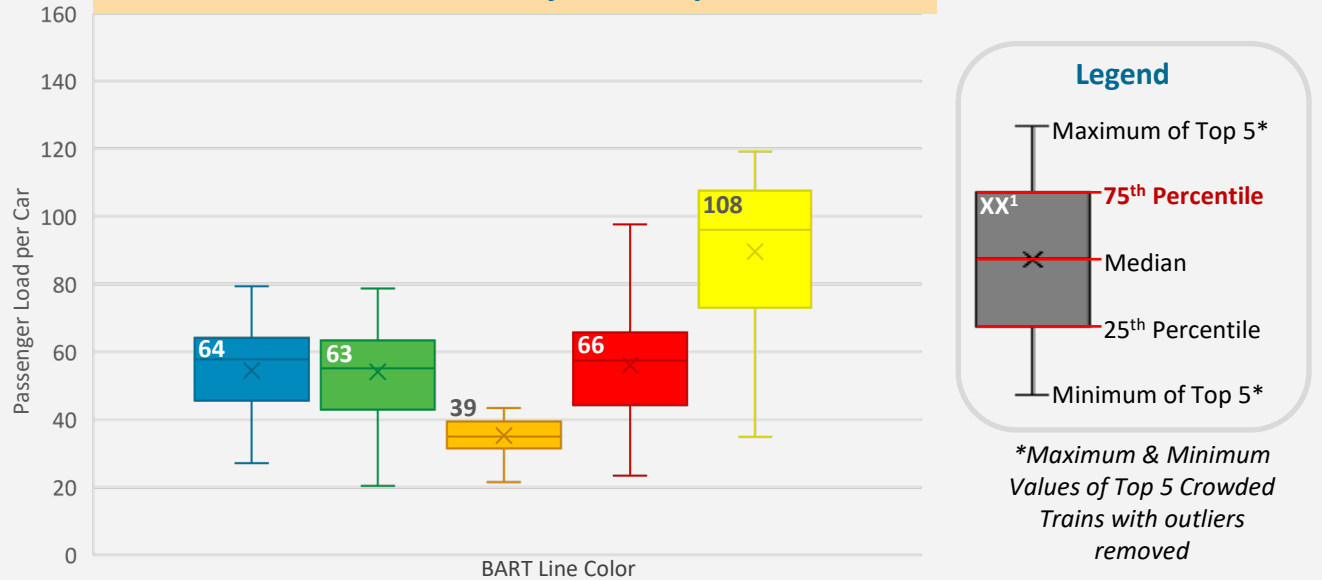
¹Typical Busiest Trains by Route
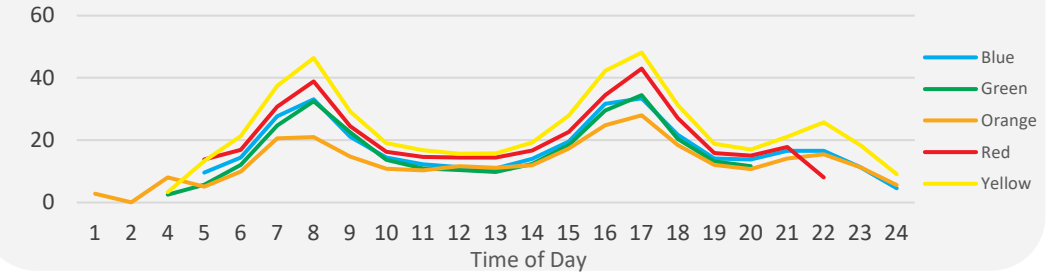
Passenger Load per Car for Top 5 Crowded Weekday Trains

New Schedule - Sep 11th to Sep 30th
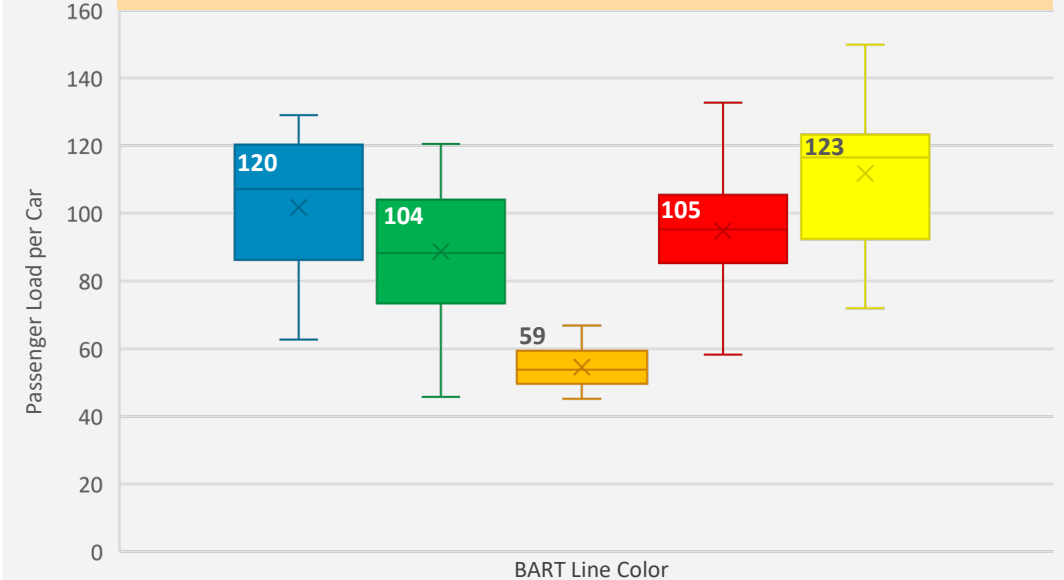
Punctuality – Trains On-Time

TOT - Daily
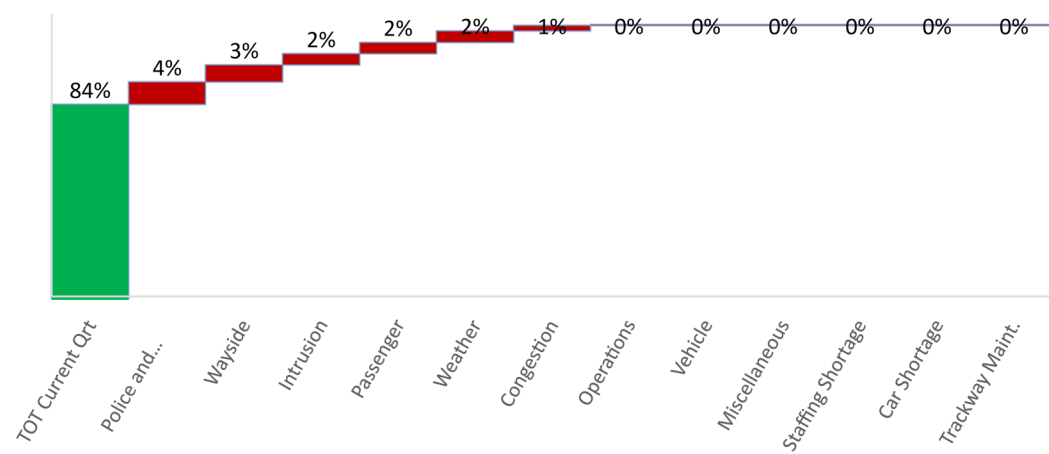
Estimate of Late Trains by Incident Cause (EOL)
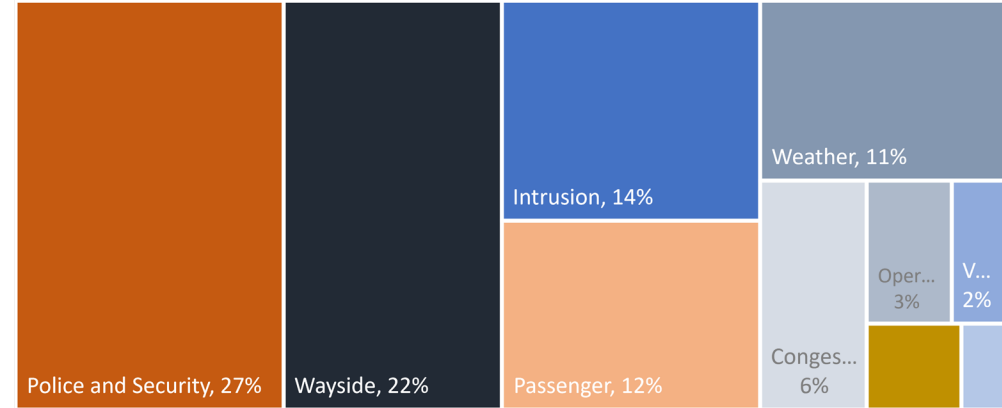
● Trains On-Time - Daily
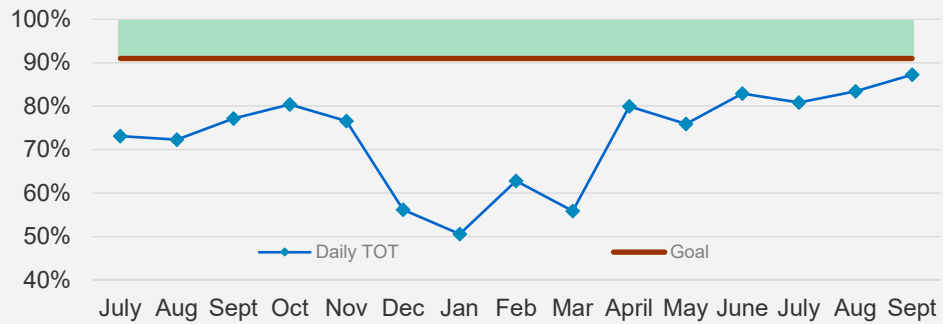
Trains On-Time - Peak
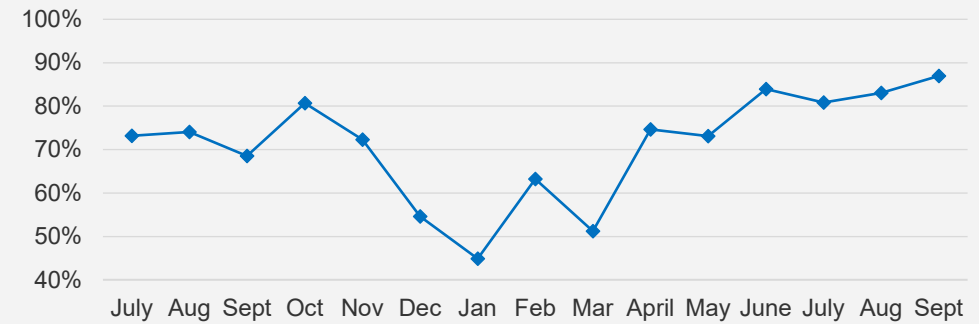
Punctuality – Customer On-Time

- Customer On-Time was 92.1% for the quarter.

- September was the highest performing month in last five quarters.

## Customer On-Time - Daily
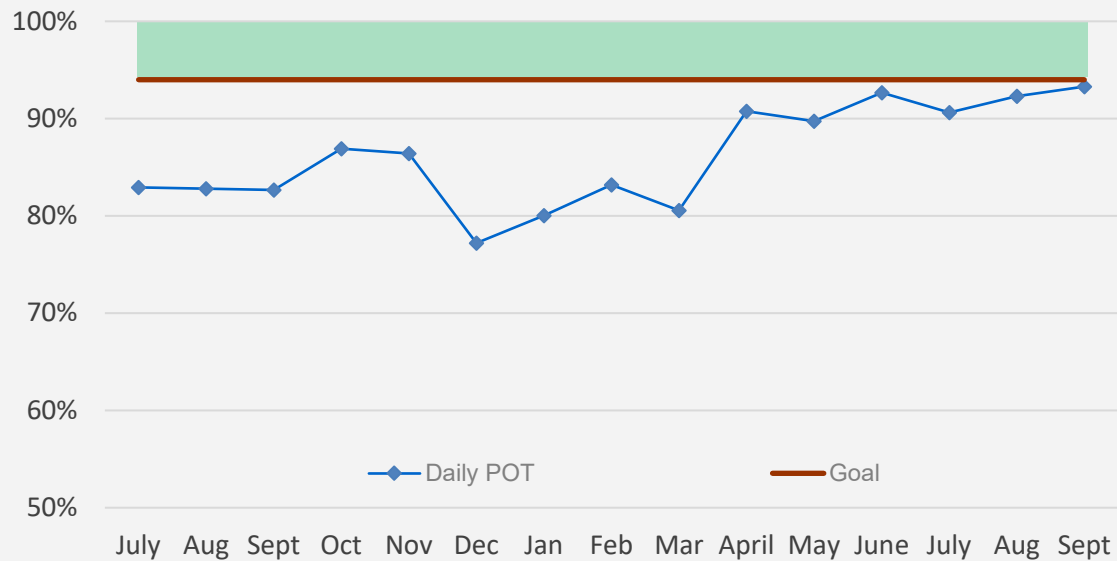
Customer On-Time - Peak
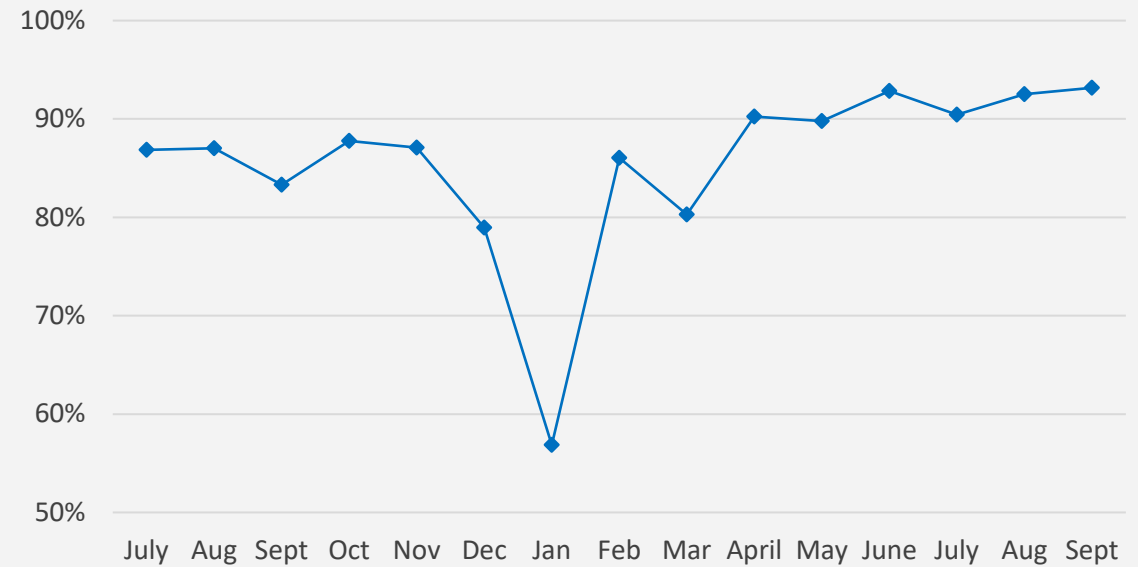
Punctuality – Timed Train Meets

- 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 between the Yellow and Orange lines occur as follows
  - *Northbound trains meet at 19th Street*
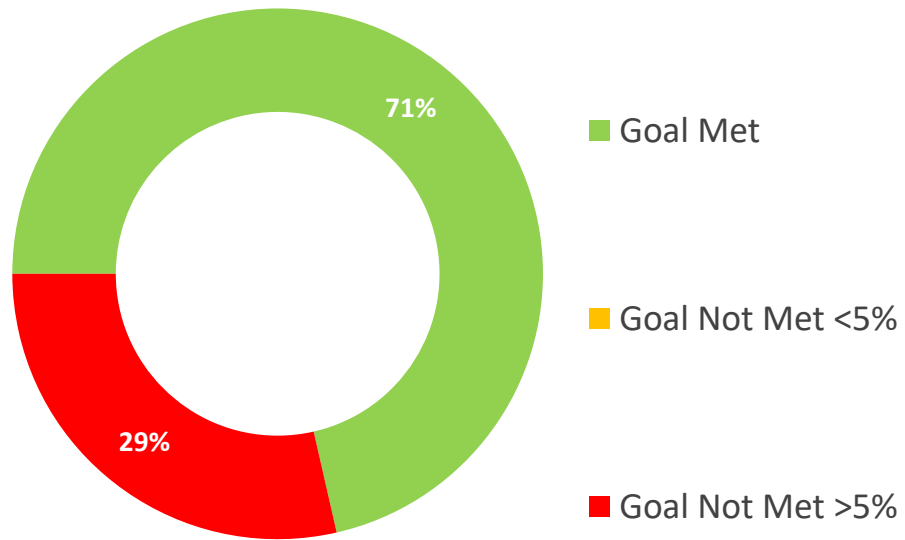 - *Southbound trains meet at MacArthur*

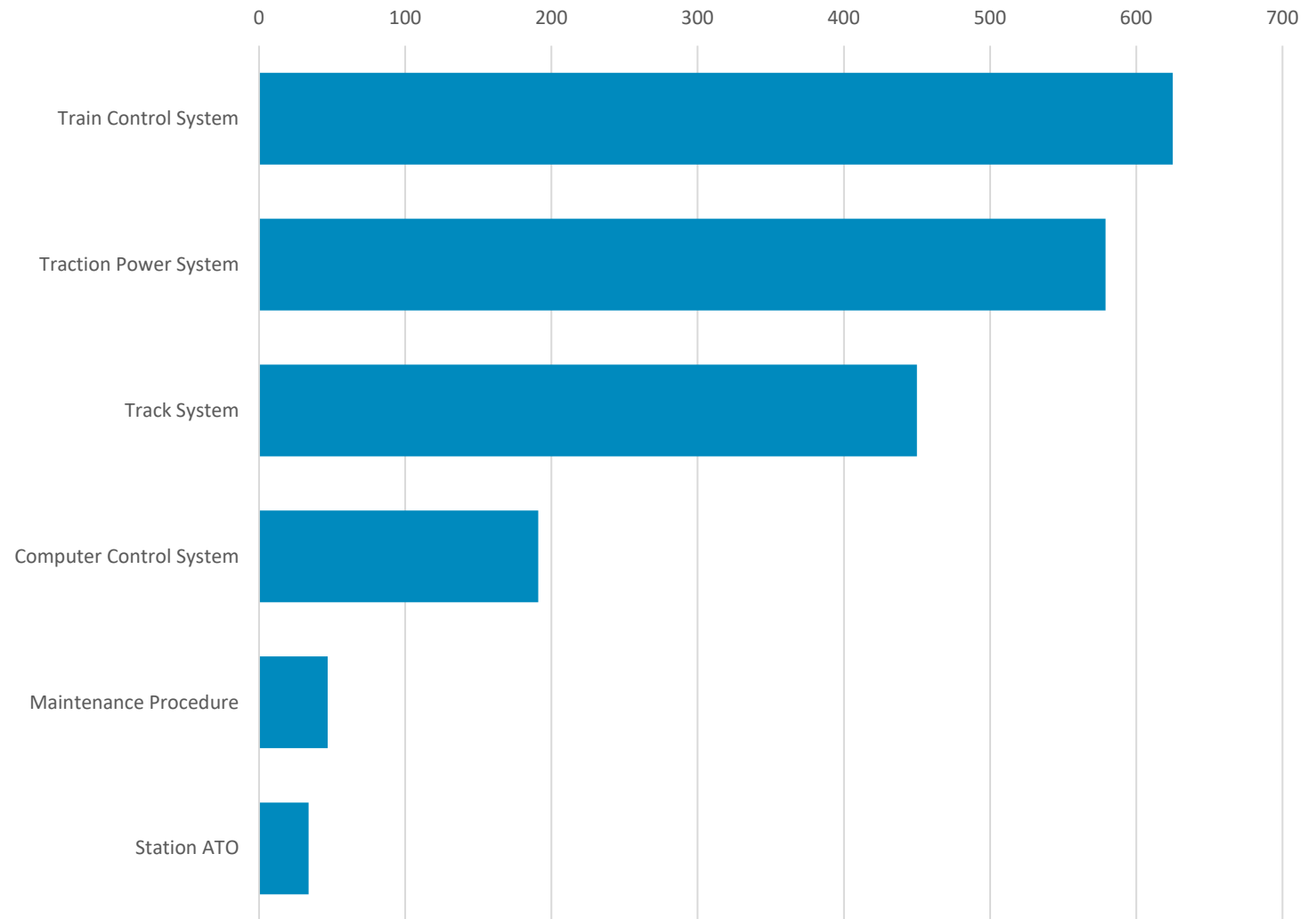### Northbound Meets at 19th Street
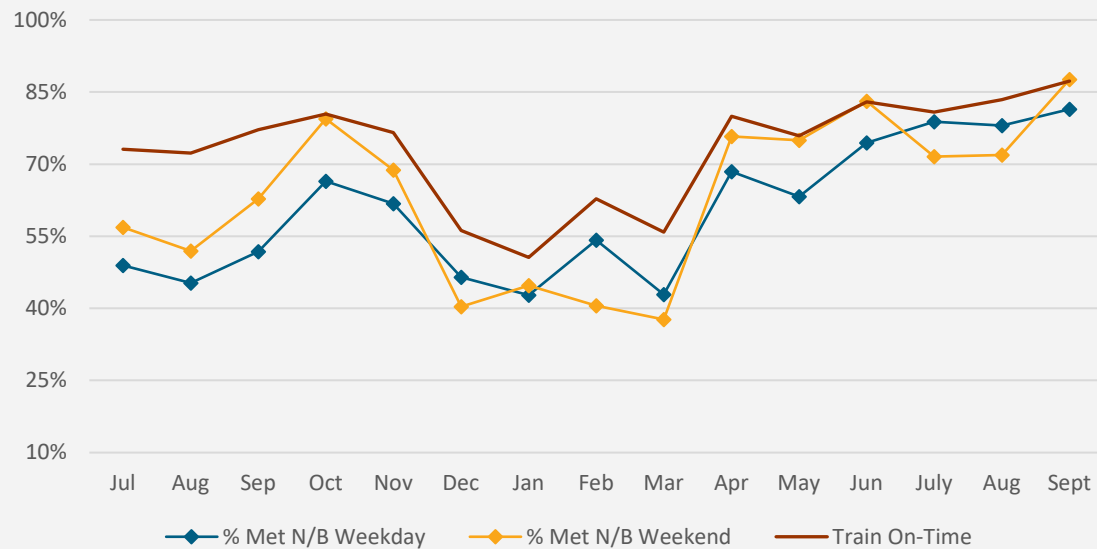
Southbound Meets at MacArthur
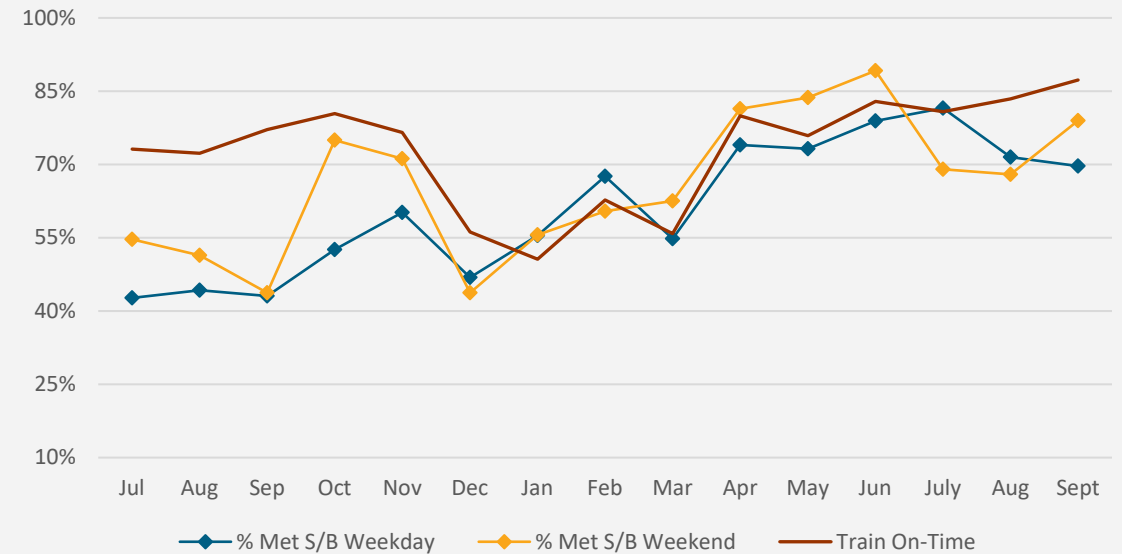
Summary – Railway Asset Availability

Metric	FY24 Q1	Goal	Change from FY23 Q4	
Wayside Equipment				
Track	0.87	0.30	(694.17%)	▼
Traction Power	1.13	1.00	(81.28%)	▼
Wayside Train Control System	1.21	1.30	(27.01%)	▼
Computer Control System	0.32	0.30	(8.98%)	▼
Transportation	0.57	0.50	43.79%	▲
Revenue Vehicle				
Vehicle MTBSD - (Hours)	12755	9600	44.22%	▲
4 AM - Car Availability	637	581	(8.47%)	▼
DMU - MDBF (Miles)	39420	28000	(57.79%)	▼
Station Equipment				
Elevators in Service - Station	98.7%	98.0%	0.05%	▲
Elevators in Service - Garage	99.7%	97.0%	(0.14%)	▼
Escalators in Service - Street	97.5%	93.0%	1.91%	▲
Escalators in Service - Platform	98.7%	96.0%	1.52%	▲
Automatic Fare Collection - Gates	99.3%	98.0%	(0.10%)	▼
Automatic Fare Collection - Vendors	99.0%	95.0%	(0.18%)	▼

71%

29%

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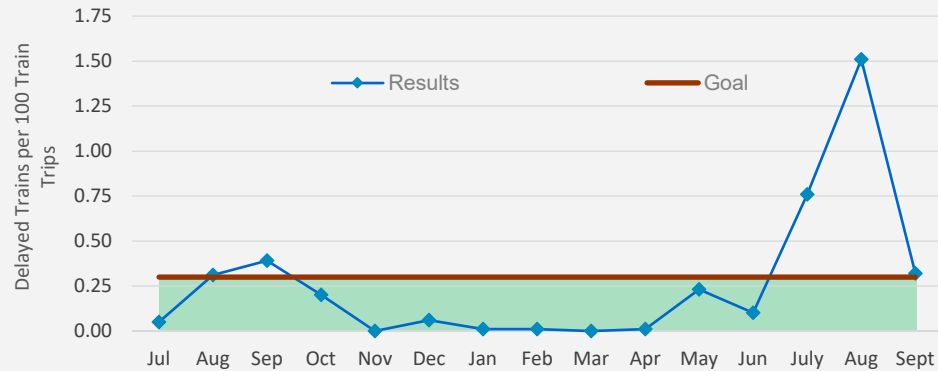- Goal Not Met <5%
- Goal Not Met >5%

Railway Asset Availability – Detail

- 1214 Train delays for the quarter
- Rail Inspection Vehicle identified defects that required slow orders.
- Rail Detector found rail defects that required slow orders.
- Train Control experienced two switch failures and a false occupancy.
- Communication ICS to FIP failure on July 8th.
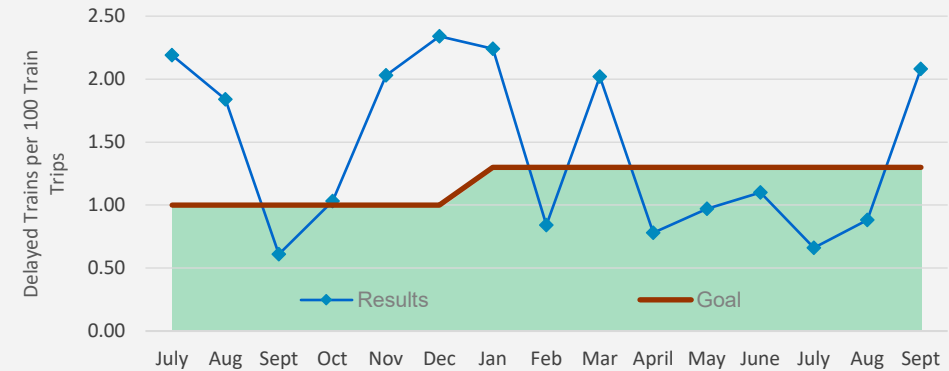- Traction Power lost 3rd rail power on July 10th.

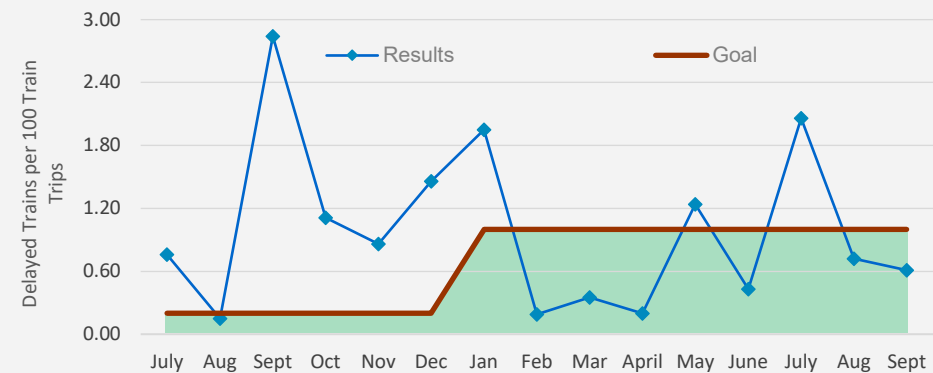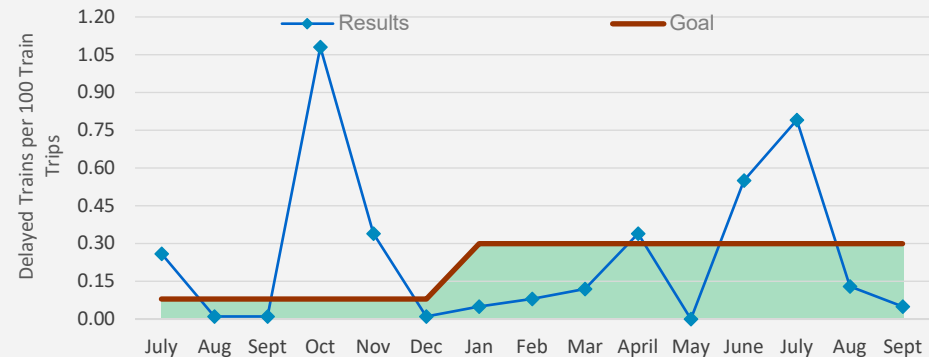# Wayside Equipment – Delayed Trains by System

Revenue Fleet – Reliability

Breakdown of Delayed Trains by Vehicle System
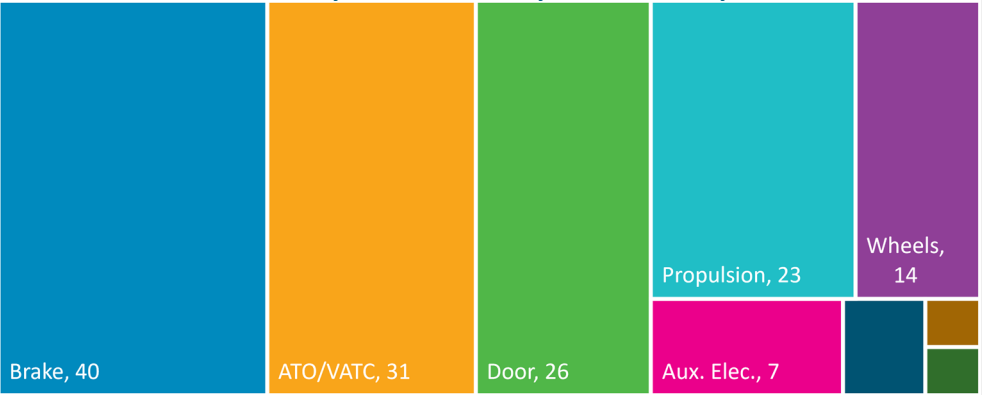
Brake, 40 | ATO/VATC, 31 | Door, 26 | Propulsion, 23 | Wheels, 14 | Aux. Elec., 7

Car Availability at 4 AM

Number of Cars — Results, Goal
(July, Aug, Sept, Oct, Nov, Dec, Jan, Feb, Mar, April, May, June, July, Aug, Sept)

Mean Time Between Service Delays

Meantime Between Service Delays (Hours) — Results, Goal
(July, Aug, Sept, Oct, Nov, Dec, Jan, Feb, Mar, April, May, June, July, Aug, Sept)
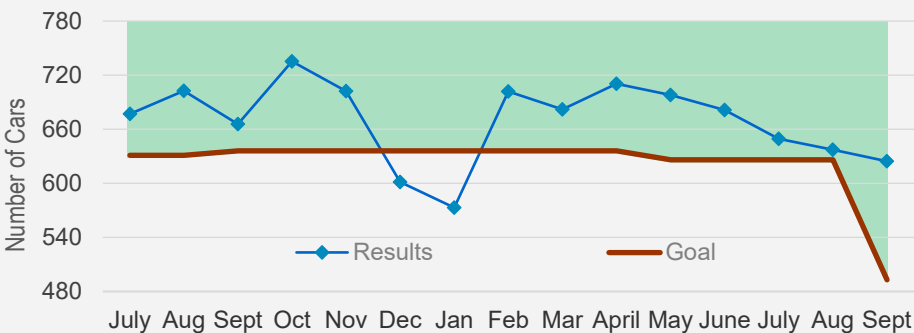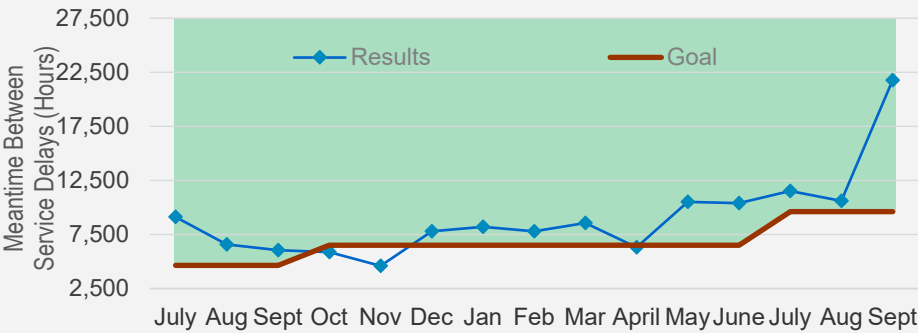
FOTF LEGACY
197
596
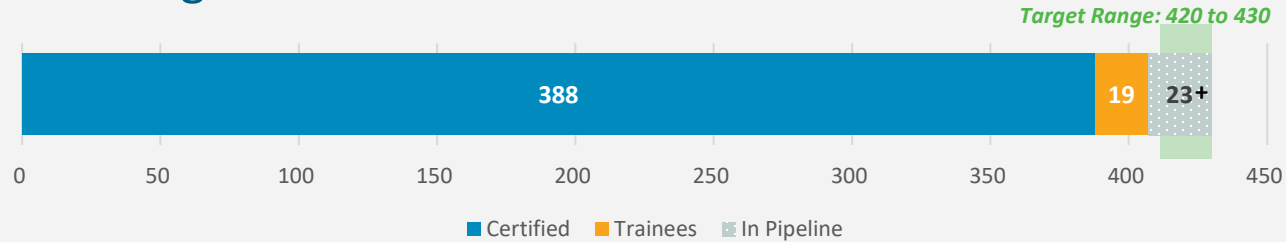*Car count as of 09/30/2023*
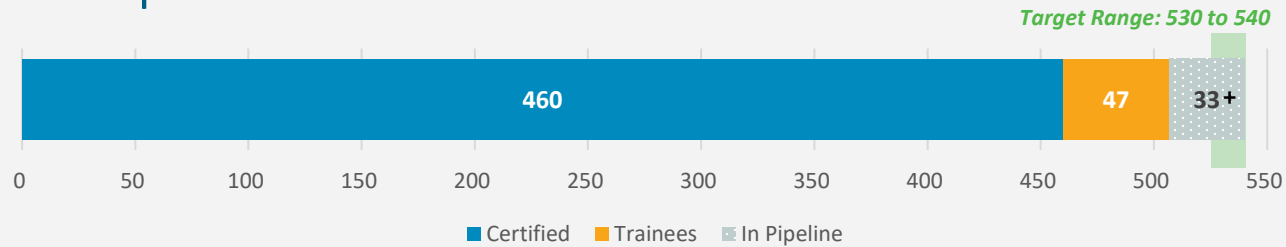
Operations - Transportation
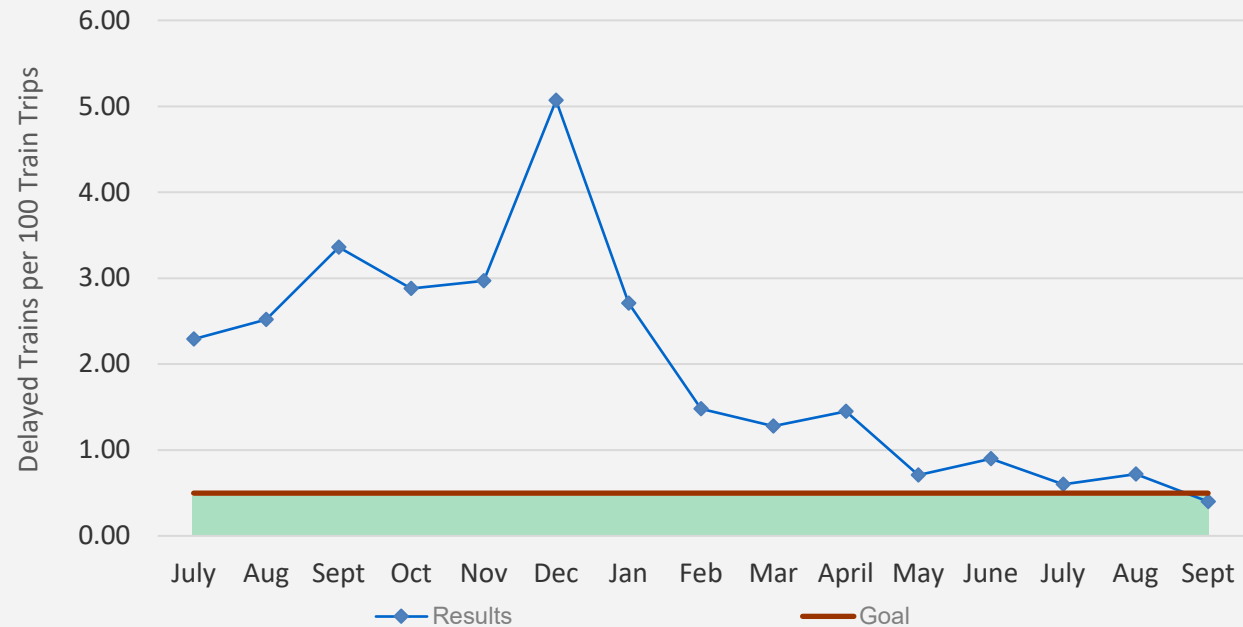
Operations

- Train delays due to staff shortages were nearly eliminated this quarter.

- Continued hiring of Train Operators is driving delays down.

- 78 train delays due to staffing shortage for the quarter.
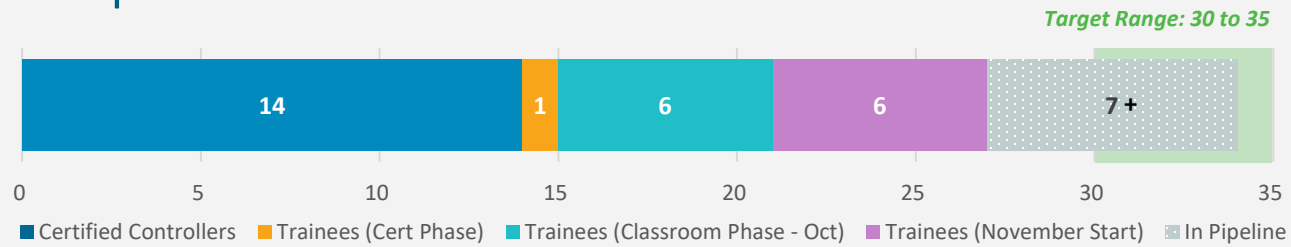
Hiring Metrics - Priority Positions

Station Agent

Target Range: 420 to 430

388	19	23+

0 — 50 — 100 — 150 — 200 — 250 — 300 — 350 — 400 — 450

■ Certified ■ Trainees ▦ In Pipeline

Train Operator

Target Range: 530 to 540

460	47	33+

0 — 50 — 100 — 150 — 200 — 250 — 300 — 350 — 400 — 450 — 500 — 550

■ Certified ■ Trainees ▦ In Pipeline

Rail Operations Controller

Target Range: 30 to 35

14	1	6	6	7+

0 — 5 — 10 — 15 — 20 — 25 — 30 — 35

■ Certified Controllers ■ Trainees (Cert Phase) ■ Trainees (Classroom Phase - Oct) ■ Trainees (November Start) ▦ In Pipeline
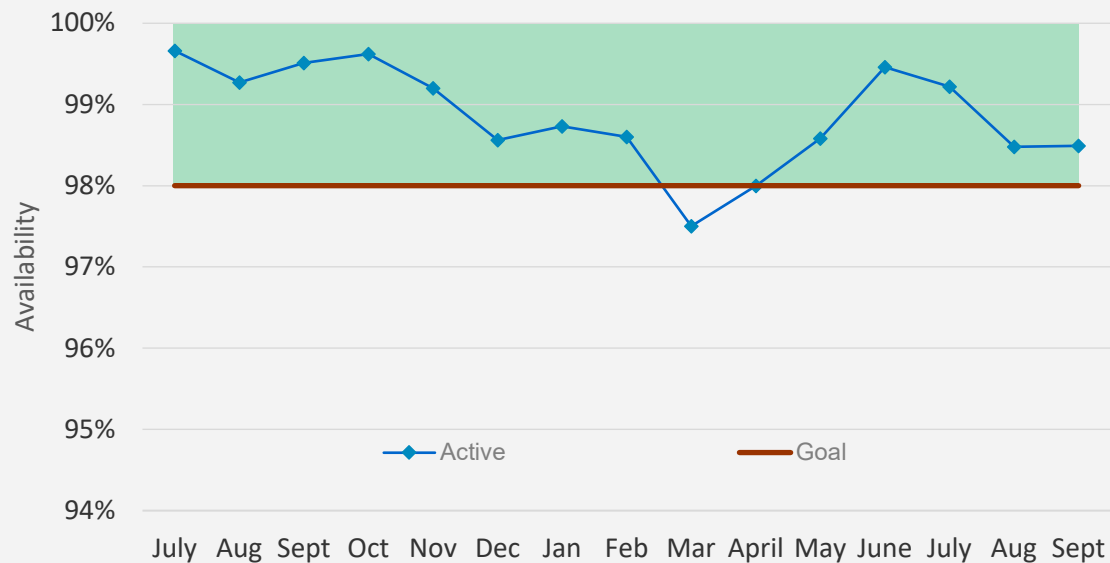
Station Equipment – Elevator Availability

Station Elevator

- Goal met

Garage Elevator

- Goal met

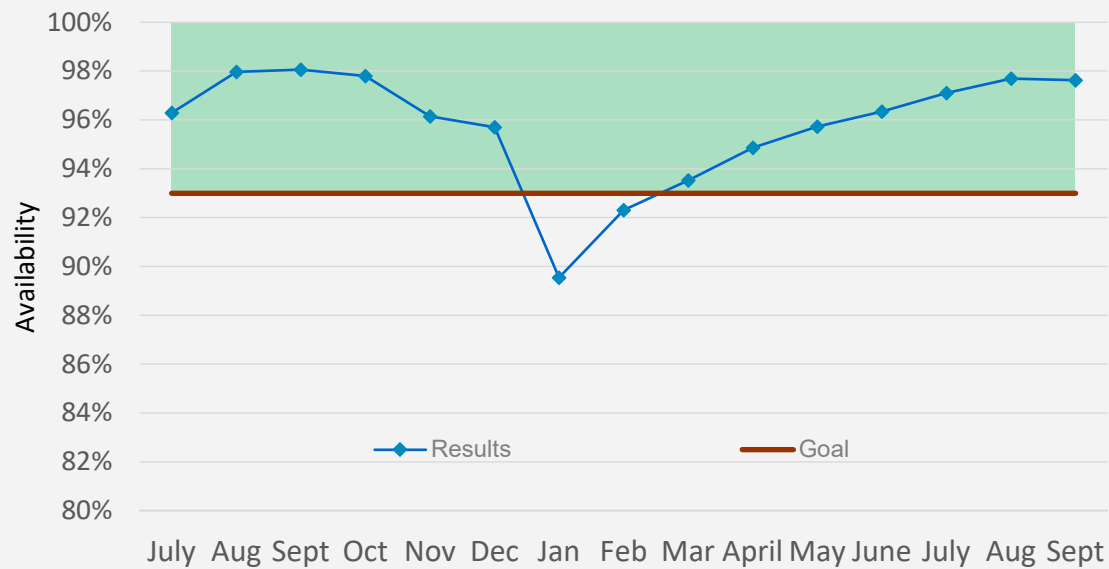*E-line Elevator and Escalator are included
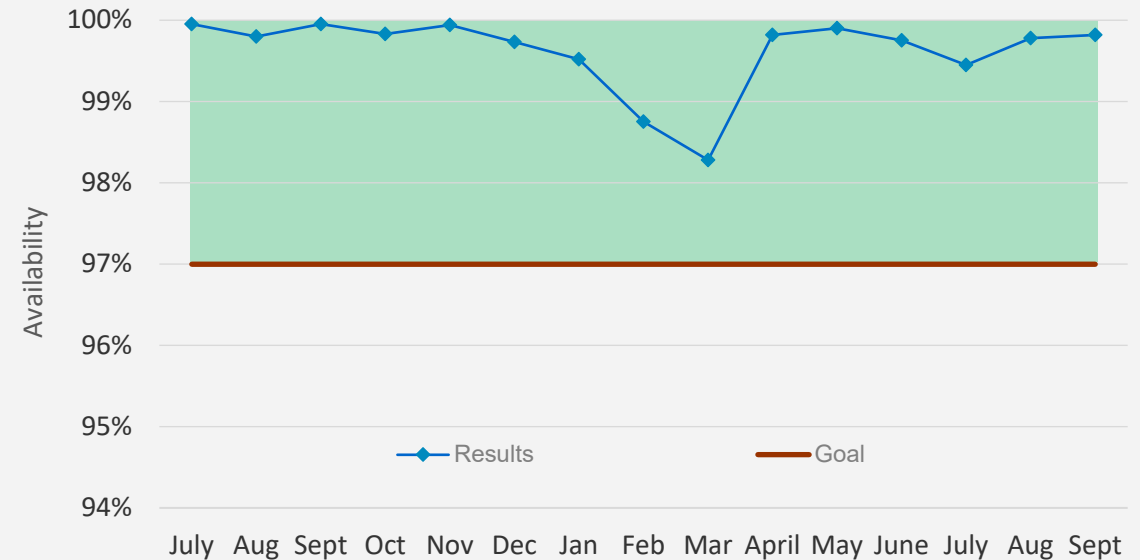
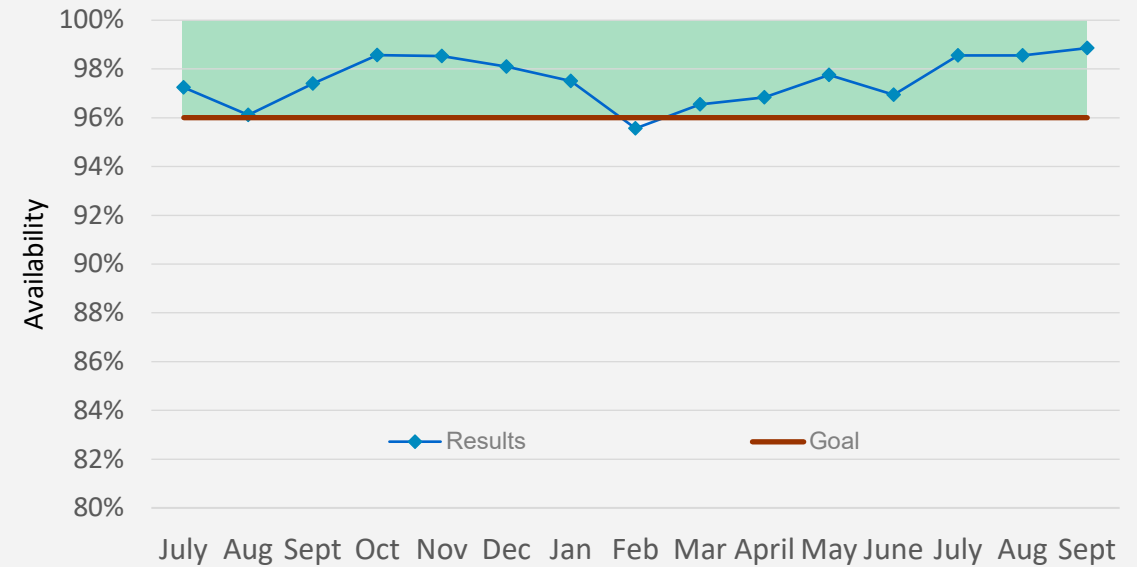# Station Equipment – Escalator Availability

Street Escalator

- Goal met

Platform Escalator

- Goal met
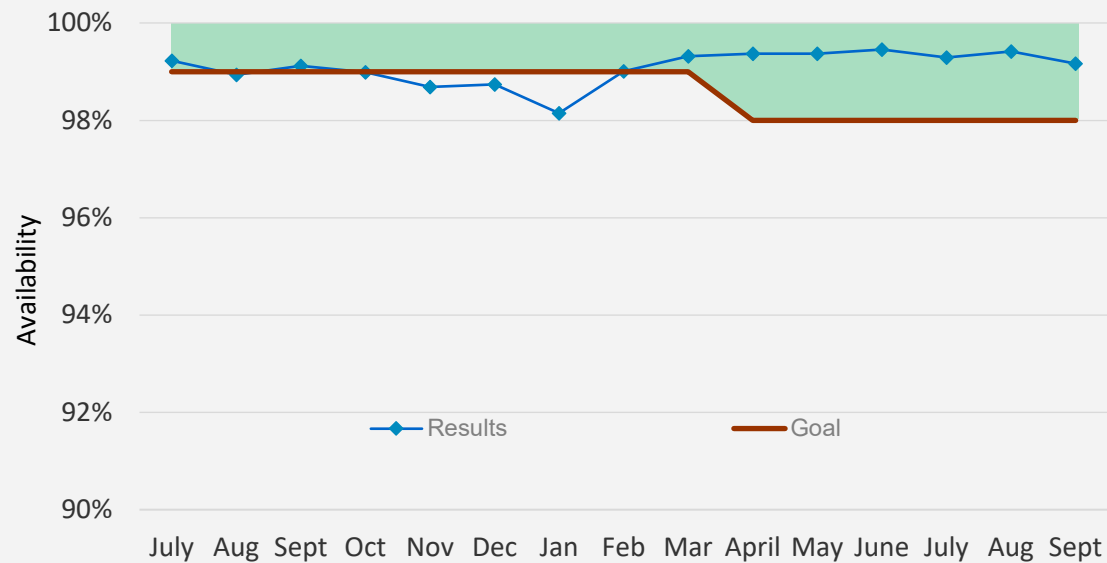
Station Equipment – Automated Fare Collection
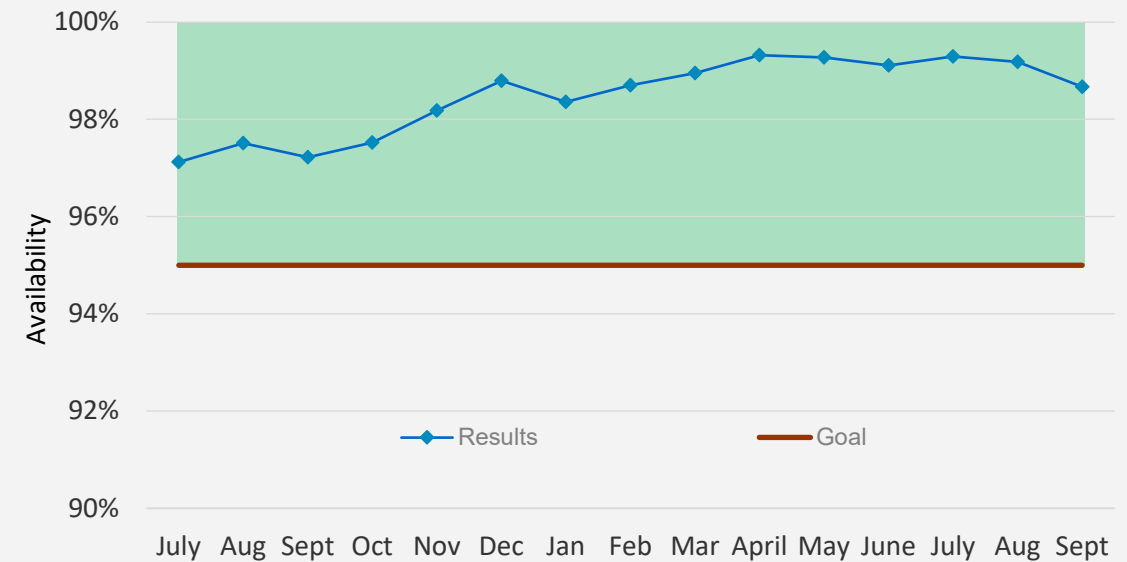

Gate Availability

- Goal met

Vendor Availability

- Goal met

Summary – Customer Experience

As a reminder, goals for Customer Experience are not being reported because BART has redesigned the PES surveys and rating criteria. Goals will be re-established after one year of new data is available.

Metric	FY24 Q1	Goal	Change from FY23 Q4	
Customer Experience				
Overall Customer Satisfaction	75%		-	
Station Agent Customer Service	4.5		15%	
Complaints per 100,000 Passenger Trips	28.69	5.1	(34.06%)	▲
Train Environment				
Train Temperature	4.14		0.97%	
Train Interior Cleanliness	3.63		(2.94%)	
Station Environment				
Environment Outside Stations	3.50		0.98%	
Environment Inside Stations	3.50		(0.38%)	
Code of Conduct				
Gender Based Harassment	8%		(11.11%)	
Fare Evasion	24%		(4.31%)	

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

Customer Service – Experience

- Overall Customer Satisfaction 74%

- Up 1% from last quarter

- Station Agent Customer Service is 4.5
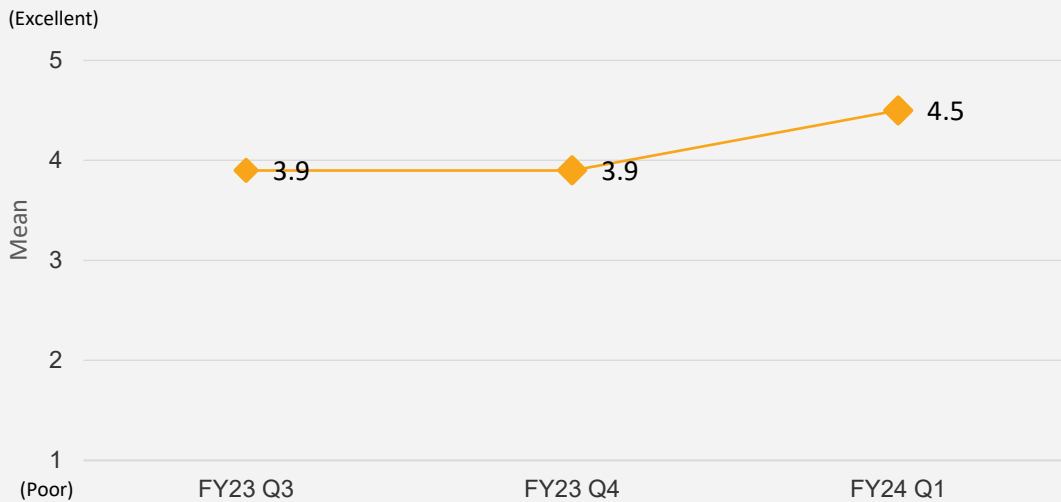- Up 0.6 on the 5-point scale

Overall, how satisfied are you with the services provided by BART?
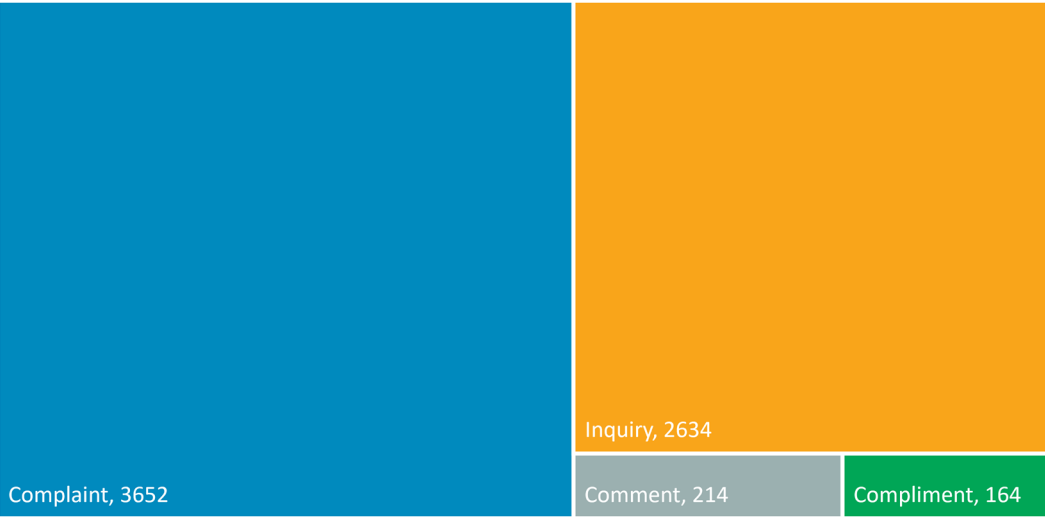
Overall Customer Satisfaction
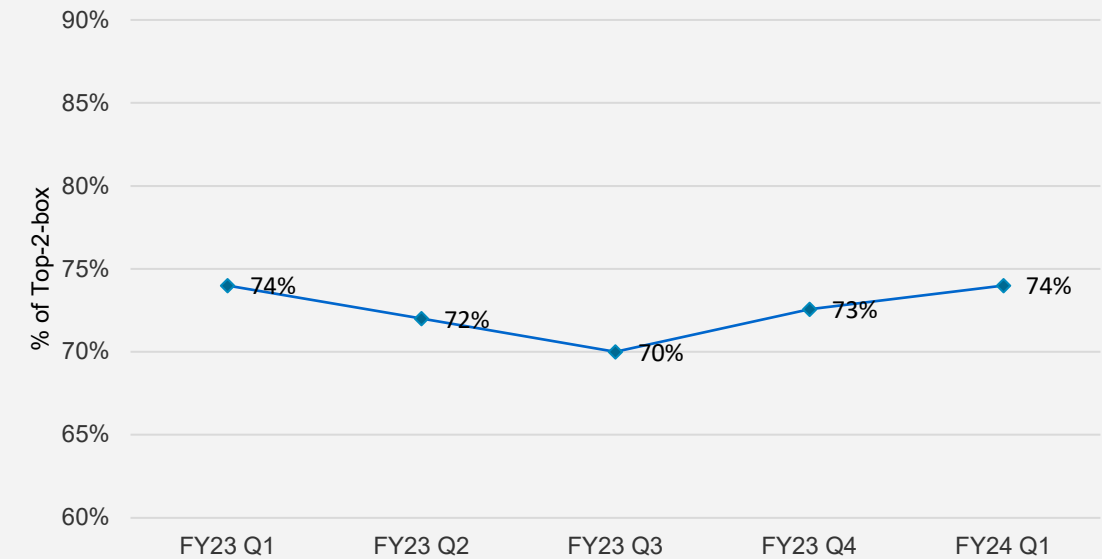
Customer service from Station Agent (if used today)
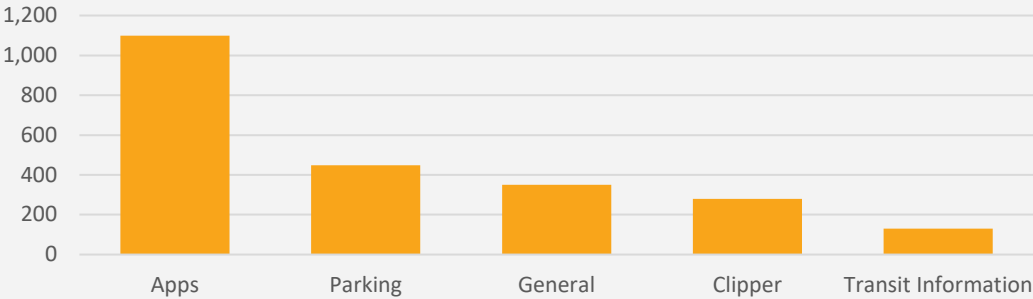
Station Agent Customer Service
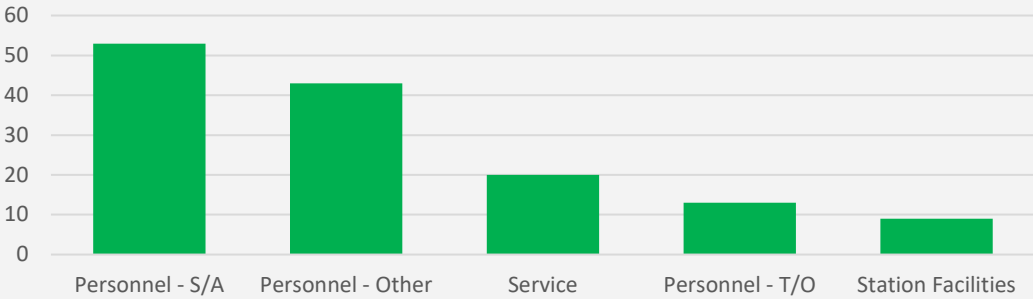
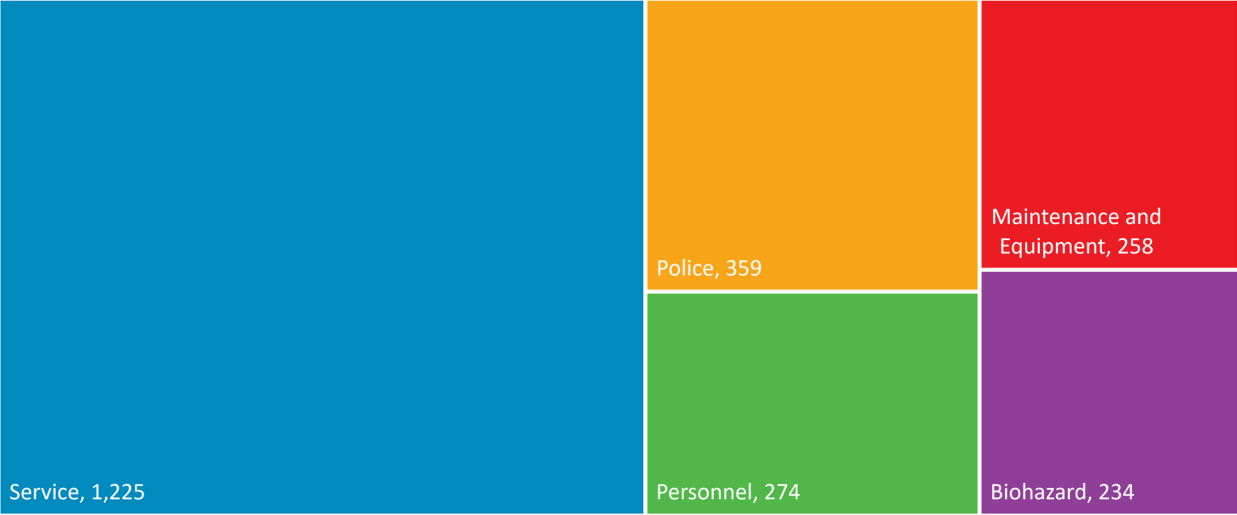# Customer Service – Cases by Type

Breakdown of 6664 Inquiry Cases

Complaint, 3652

Inquiry, 2634

Comment, 214

Compliment, 164

Inquiry Cases – FY24 Q1

(Apps, Parking, General, Clipper, Transit Information)

Compliment Cases – FY24 Q1

(Personnel - S/A, Personnel - Other, Service, Personnel - T/O, Station Facilities)

Customer Service – Complaint Cases

Breakdown of Top Five Complaint Categories of 3652 Complaints

- Service, 1,225
- Police, 359
- Personnel, 274
- Maintenance and Equipment, 258
- Biohazard, 234

● Customer Complaints

Complaints per 100,000 Customers

Legend: Results, Goal

X-axis: July Aug Sept Oct Nov Dec Jan Feb Mar April May June July Aug Sept
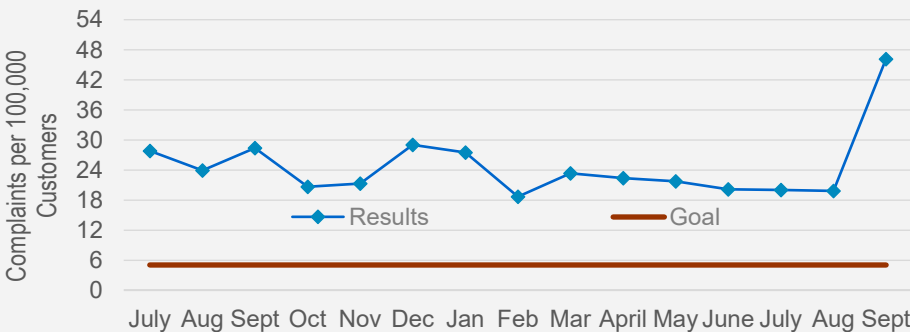
FY24 Q1 Trending Customer Complaints

X-axis categories:
Service: FY23 Q1, FY23 Q2, FY23 Q3, FY23 Q4, FY24 Q1
Police: FY23 Q1, FY23 Q2, FY23 Q3, FY23 Q4, FY24 Q1
Personnel: FY23 Q1, FY23 Q2, FY23 Q3, FY23 Q4, FY24 Q1
Maint & Equip: FY23 Q1, FY23 Q2, FY23 Q3, FY23 Q4, FY24 Q1
Biohazard: FY23 Q1, FY23 Q2, FY23 Q3, FY23 Q4, FY24 Q1
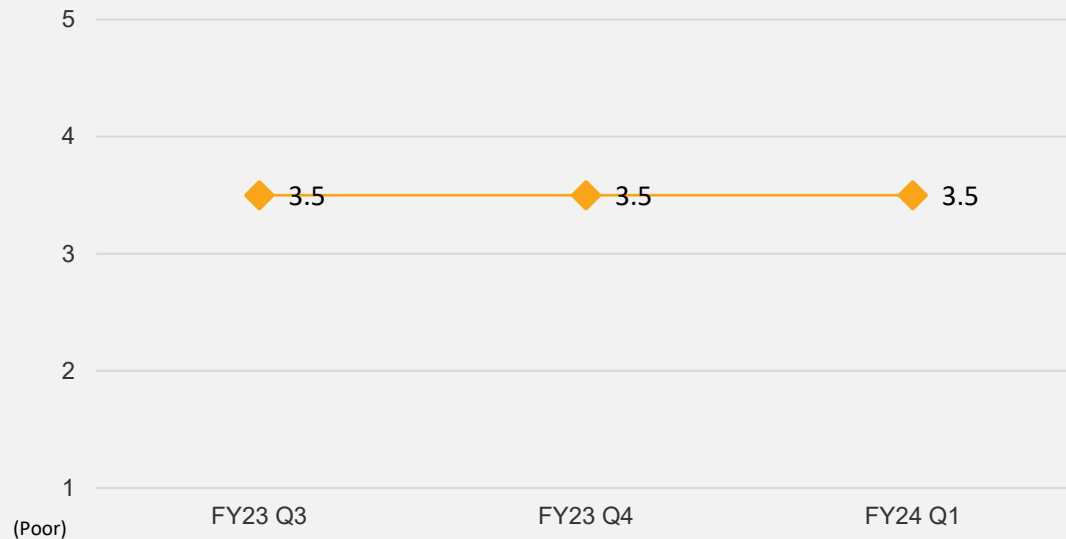
Environment – Stations
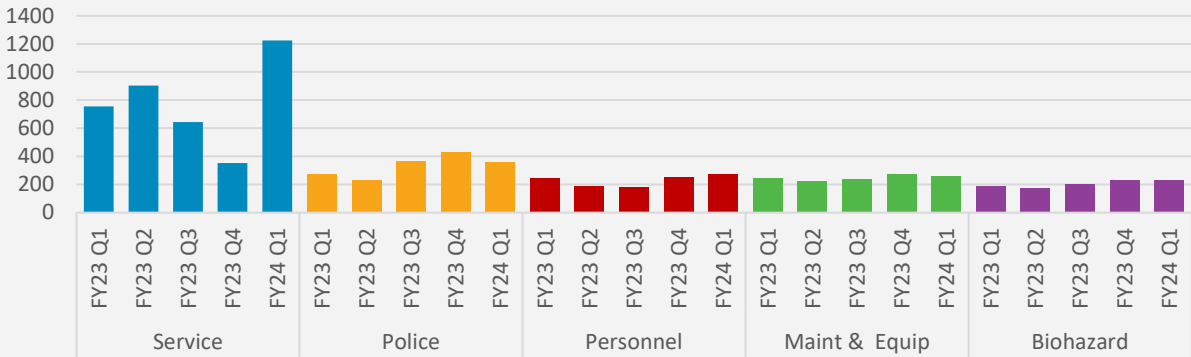
Environment Outside Station

- 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%).
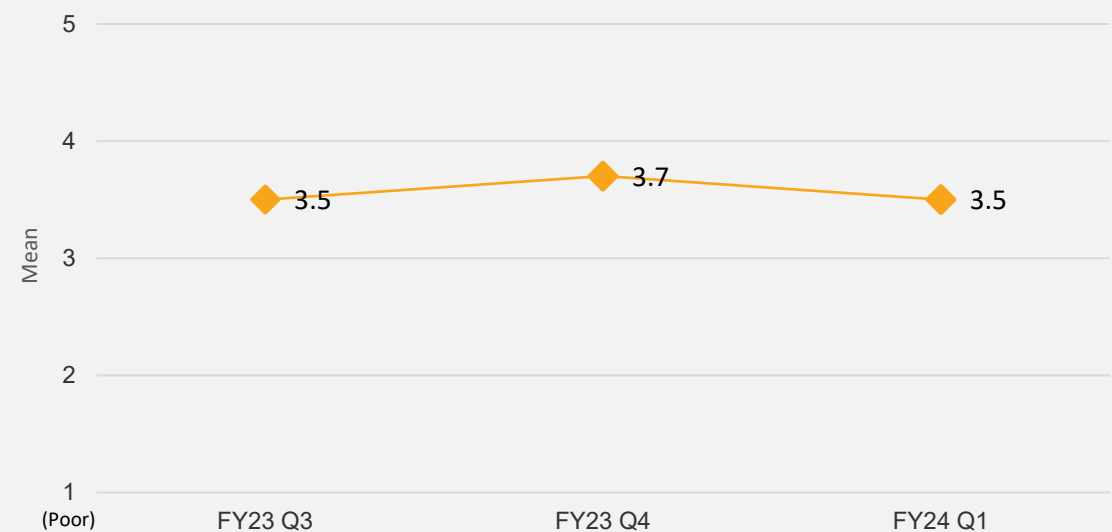
Environment Inside Station

- 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%).
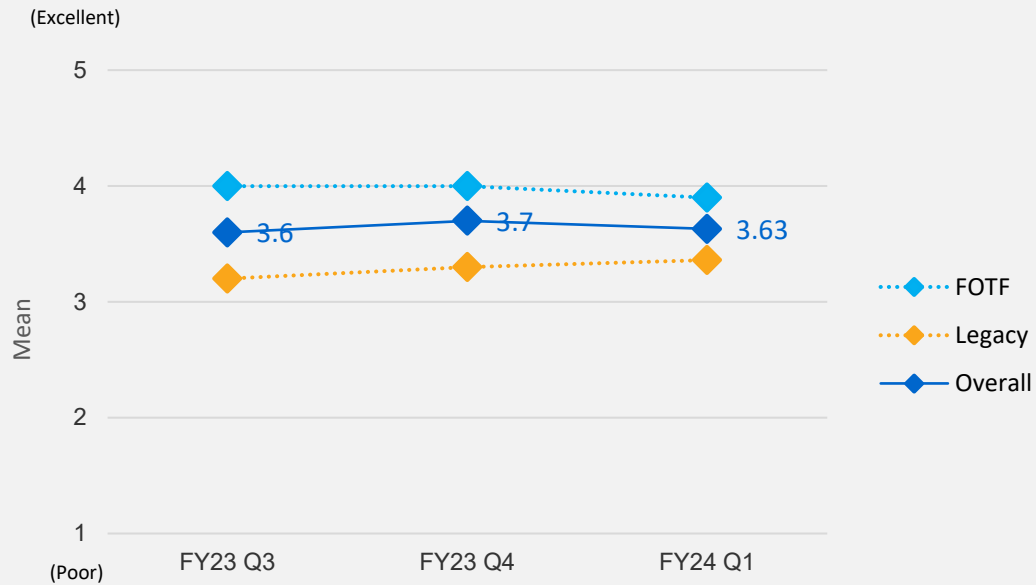

Environment Outside Station

(Excellent)

	FY23 Q3	FY23 Q4	FY24 Q1
	3.5	3.5	3.5

(Poor)

Environment Inside Station

(Excellent)

Mean

	FY23 Q3	FY23 Q4	FY24 Q1
	3.5	3.7	3.5

(Poor)

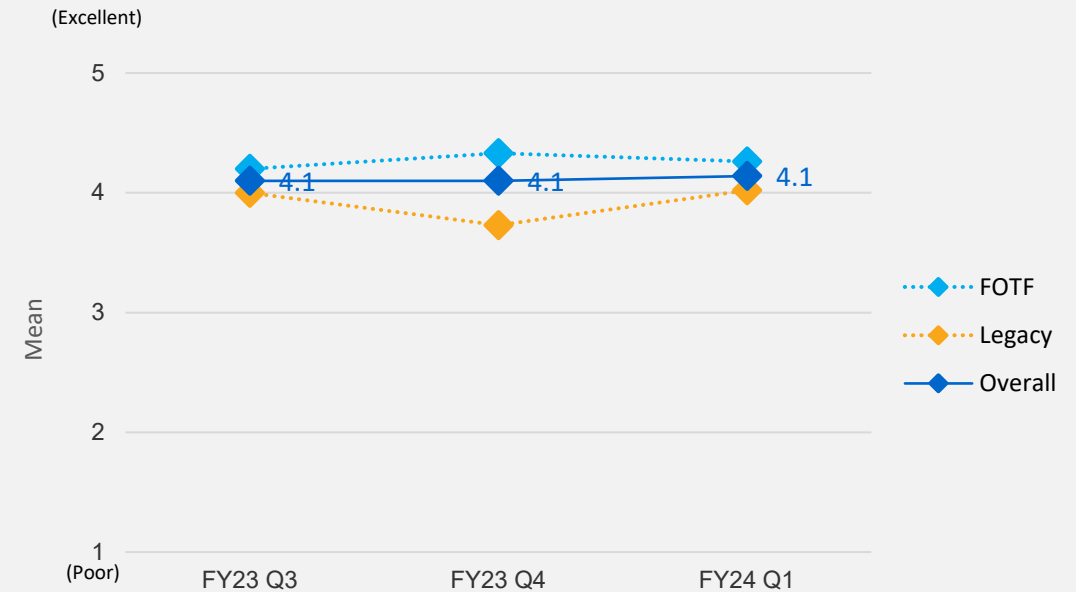# Environment – Trains

Customer Rating – Interior Cleanliness

- This is a composite score which incorporates the appearance of the train interior (60%), and the appearance of any graffiti on the train (40%).

Customer Rating - Temperature

Environment – Code of Conduct

Gender Based Harassment

Fare Evasion

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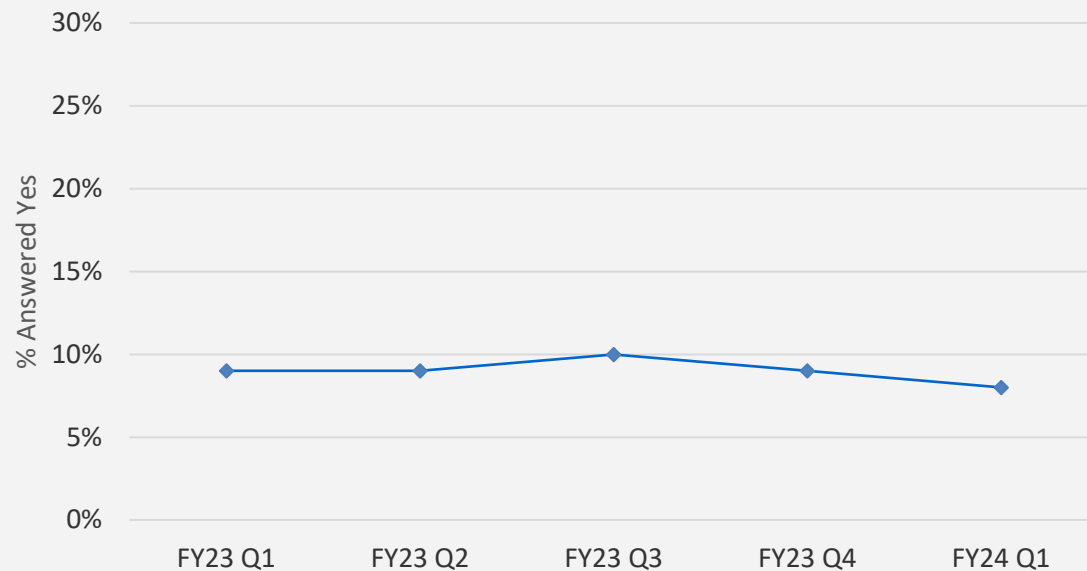
Did you see anyone enter or exit the Station without paying their fare today?

Gender Based Harassment

Fare Evasion
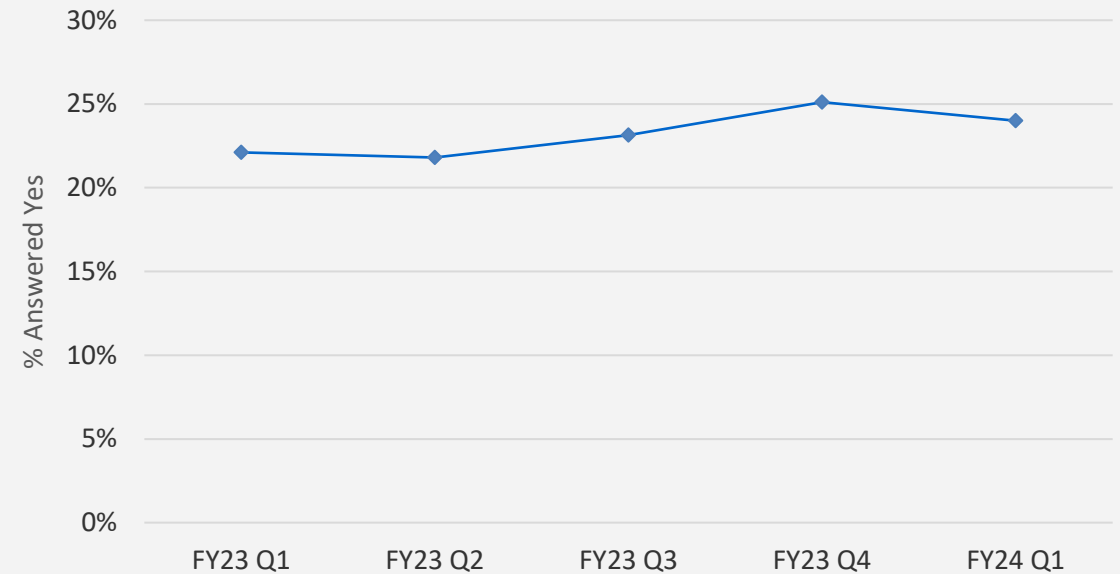
Summary – Safety and Security

| Goal Met |
| Goal Not Met <5% |
| Goal Not Met >5% |
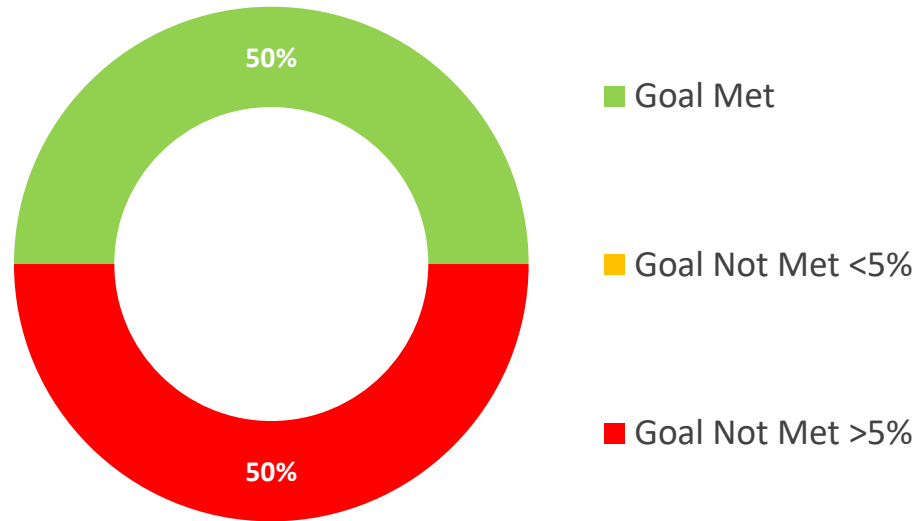
Metric	FY24 Q1	Goal	Change from FY23 Q4	
Safety				
Vehicle Incidents/Million Patrons	0.24	0.6	42.85%	▲
Unscheduled Door Openings/Million Car Miles	0.24	0.2	46.66%	▲
Rule Violations Summary/Million Car Miles	0.14	0.25	48.14%	▲
Station Incidents/Million Patrons	0.94	2	33.33%	▲
OSHA-Recordable Injuries/Illnesses/Per OSHA	14.69	12	(14.67%)	▼
Lost Time Injuries/Illnesses/Per OSHA	8.44	6.5	(8.06%)	▼
Security				
Police Response Time per Emergency Incident	4.39	5	(10.85%)	▼
Bike Thefts	50	50	(66.66%)	▼
Auto Thefts/1,000 Parking Spaces	4.24	2	(3.63%)	▼
Auto Burglaries/1,000 Parking Spaces	4.60	3.5	(6.48%)	▼
BART Police Presence	17.3%	12%	89.92%	▲
Crimes Against Persons/Million Riders	7.86	2	14.15%	▲

Safety – Passenger

Station Incidents

Breakdown of 12 Station Incidents

- Escalator, 4
- Other, 3
- Stairs, 2
- Elevator, 1
- Platform, 1
- Trackway, 1
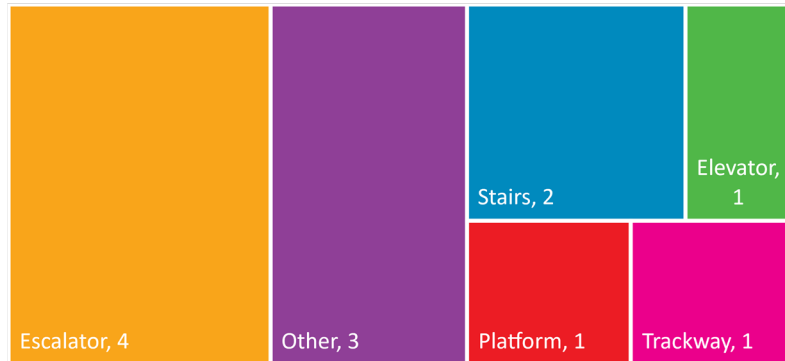
● Station Incidents

Vehicle Incidents

Breakdown of 3 Vehicle Incidents

- On-Board, 2
- Struck by Door, 1

● Vehicle Incidents

Safety – Employee
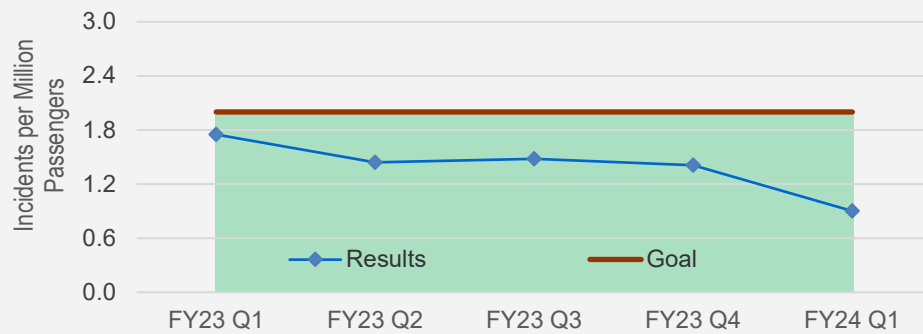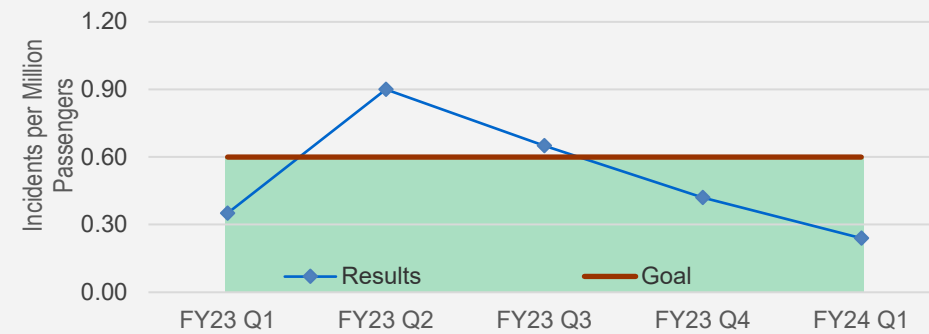
Lost Time due to Injuries

Breakdown of 81 Lost Time Cases

Trauma, 33 | Other, 15 | Contusion, 13 | Strain, 12 | Sprain, 8

● **Lost Time due to Injuries**
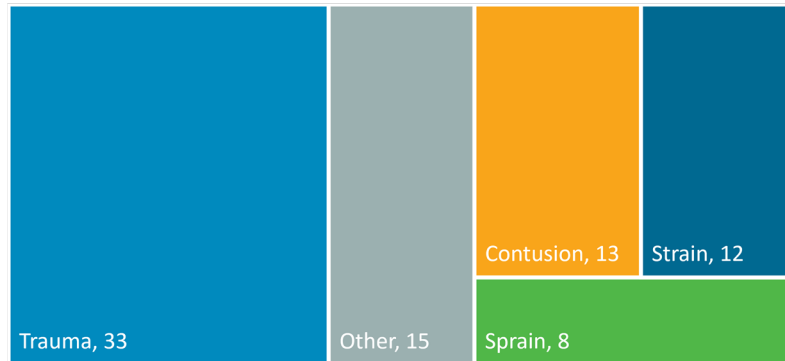
OSHA Recordable Injuries

Breakdown of 141 Recordable Injuries

Trauma, 48 | Other, 34 | Contusion, 25 | Strain, 22 | Sprain, 12
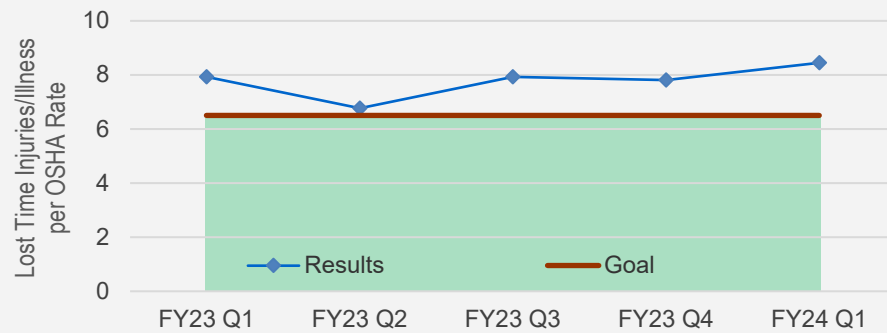
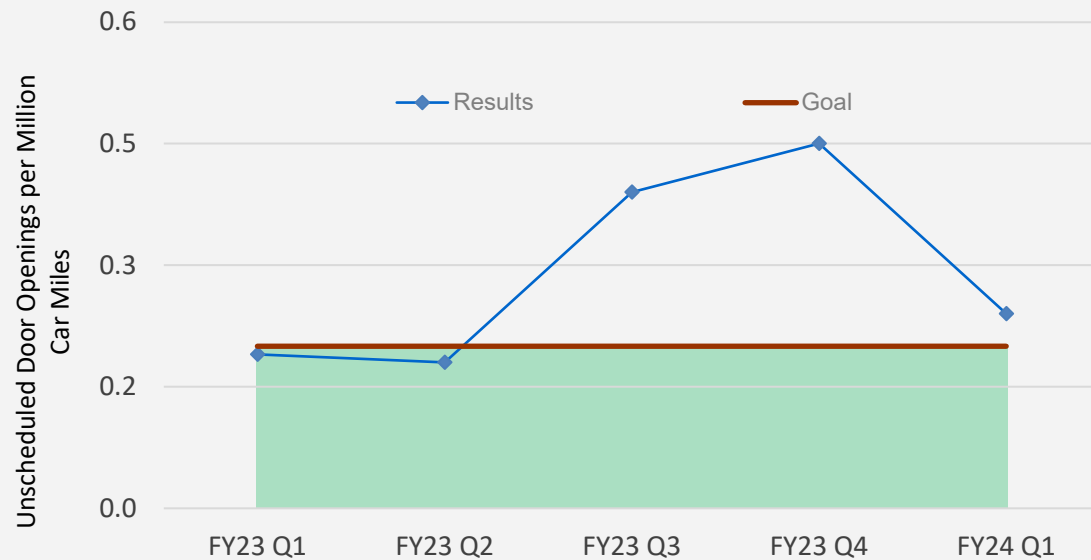● **OSHA Recordable Injuries**
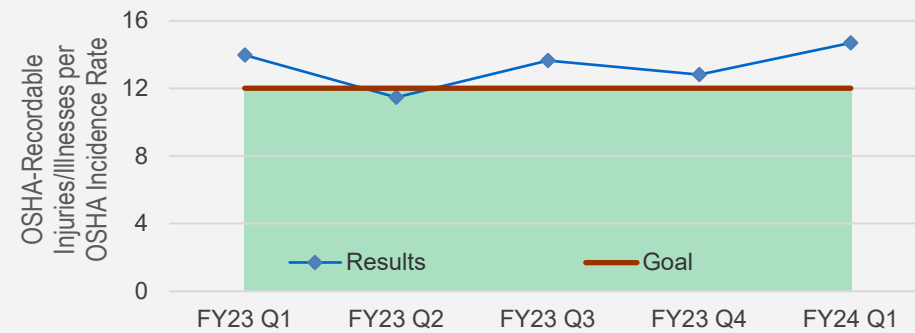
Safety – Procedure Violations

Unscheduled Door Openings

- 5 Unscheduled Door Openings in FY24 Q1
    - All 5 due to Passenger Action
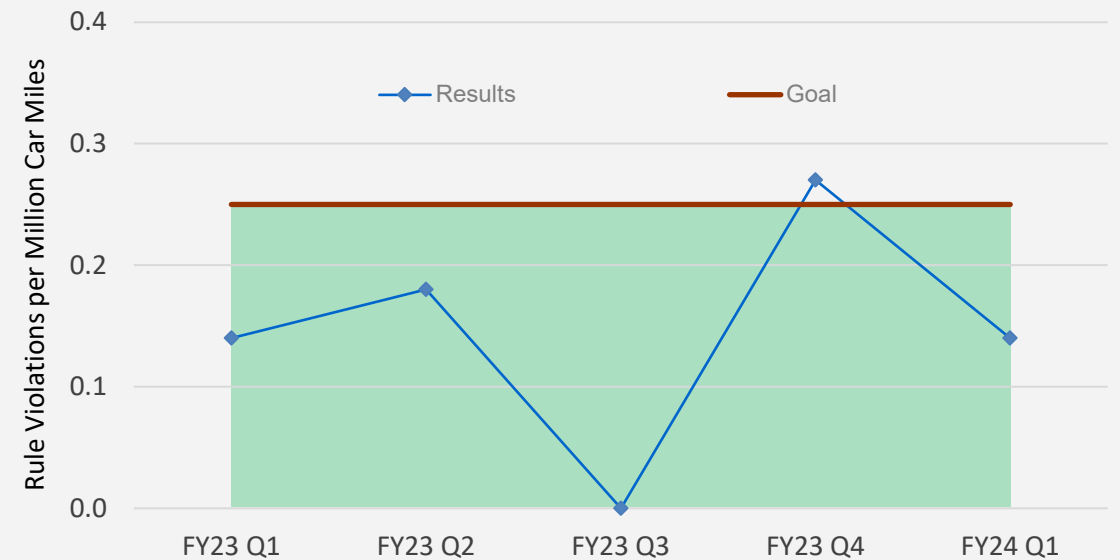   - 5 less than previous quarter

Rule Violations

- 3 Rule Violations in FY24 Q1
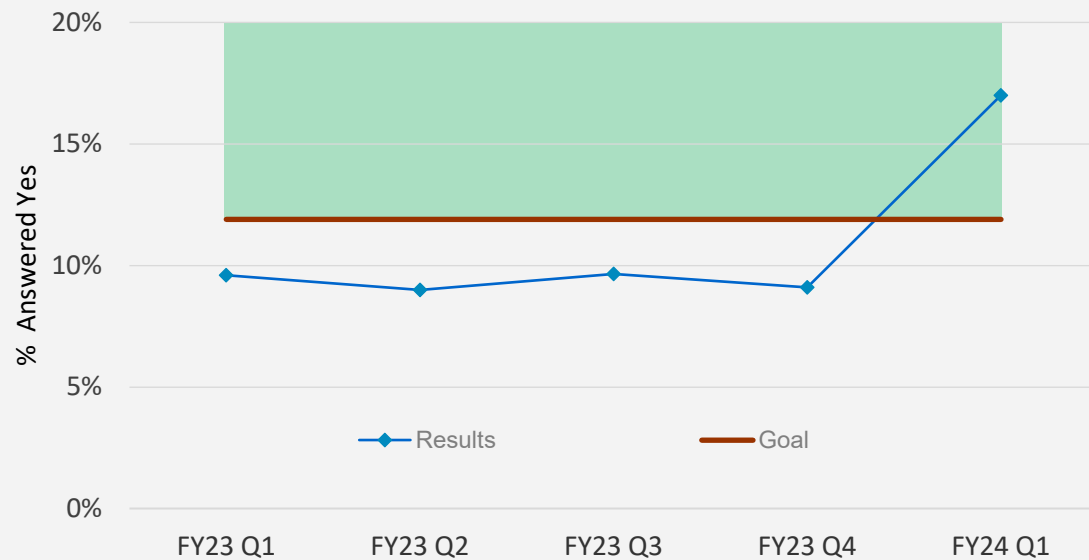- Zero rule violations in July

Security – Police Coverage

Police Presence

- Continued uniformed visibility, daytime and nighttime staffing at Civic Center

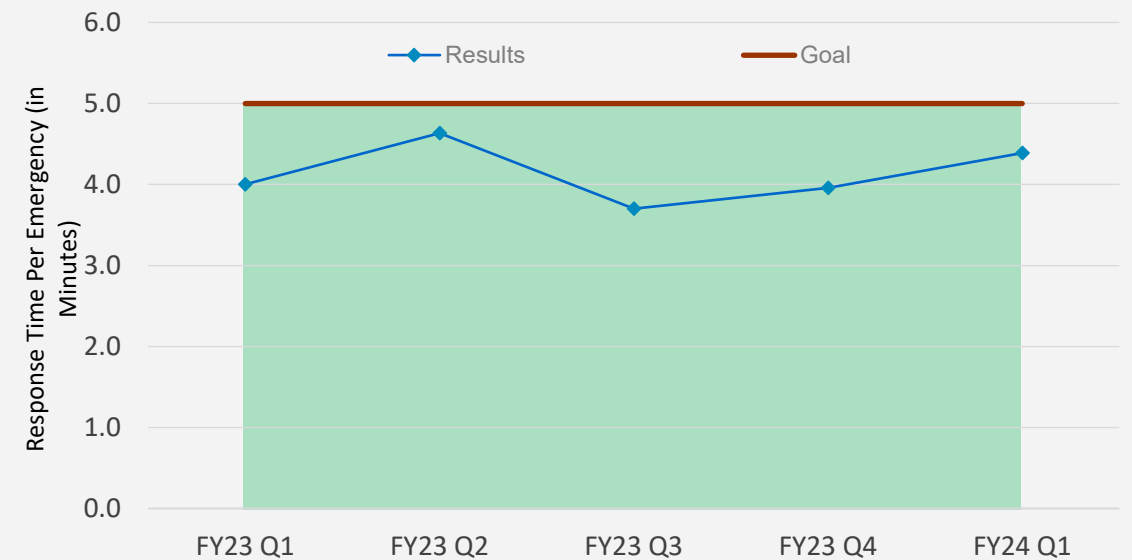## Police Response Time

- Goal met

BART Police Presence

Did you see BART Police in the station today?
Did you see BART Police outside the station today?
Did you see BART Police on this train?

BART Police Response Time
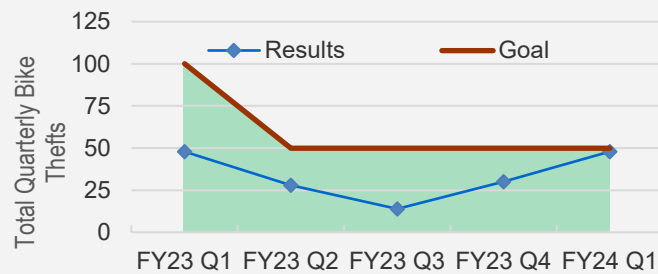
Crime – Theft and Burglary
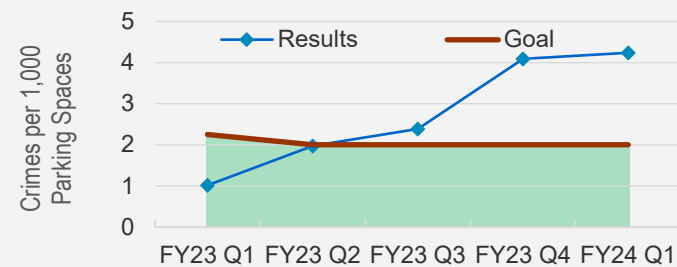
Bike Theft

- Goal met

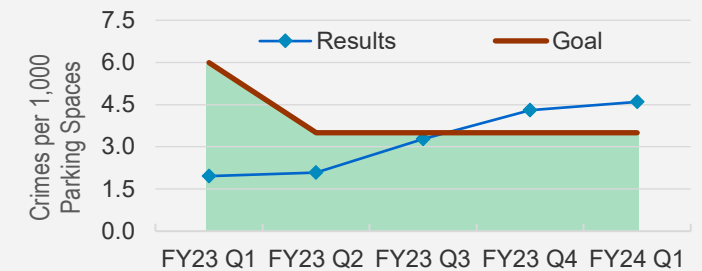## Auto Theft

- Goal not met

Auto Burglary

- Goal not met

🟢 **Bike Theft**

Total Quarterly Bike Thefts (y-axis: 0, 25, 50, 75, 100, 125)

x-axis: FY23 Q1, FY23 Q2, FY23 Q3, FY23 Q4, FY24 Q1

Legend: Results, Goal

🔴 **Auto Theft**

Crimes per 1,000 Parking Spaces (y-axis: 0, 1, 2, 3, 4, 5)

x-axis: FY23 Q1, FY23 Q2, FY23 Q3, FY23 Q4, FY24 Q1

Legend: Results, Goal

🔴 **Auto Burglary**

Crimes per 1,000 Parking Spaces (y-axis: 0.0, 1.5, 3.0, 4.5, 6.0, 7.5)

x-axis: FY23 Q1, FY23 Q2, FY23 Q3, FY23 Q4, FY24 Q1

Legend: Results, Goal
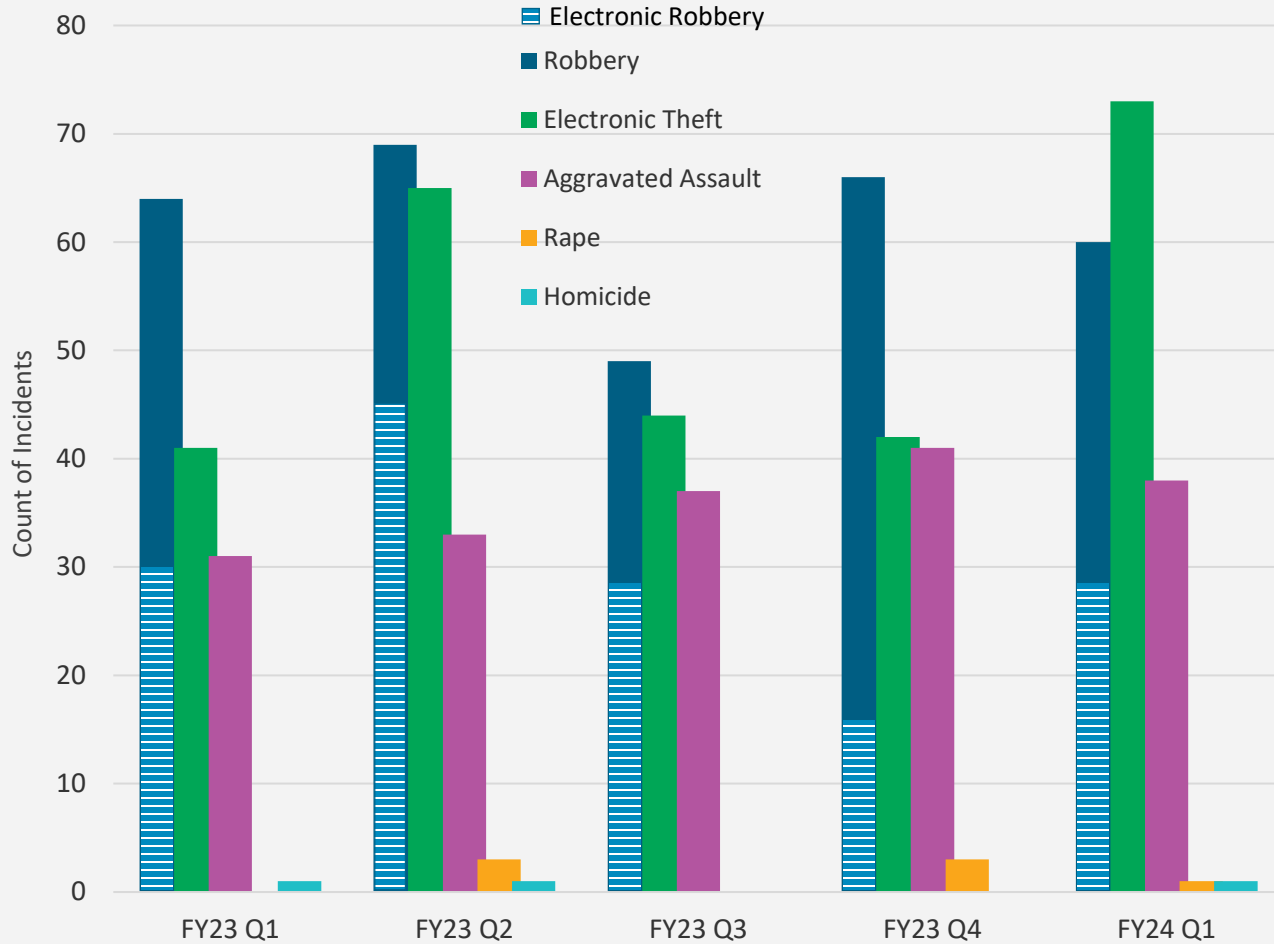
Crime – Against Persons
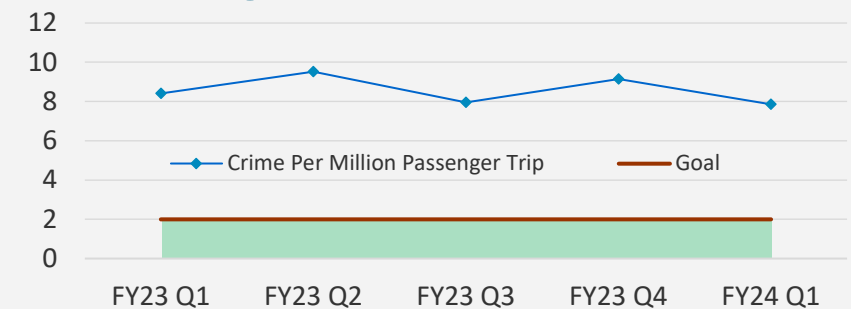
BART Watch App

Breakdown of 4458 BART Watch Reports

Code of Conduct, 3178
Wellness, 502
Possible Crime, 425
Security, 353

Total BART Watch & Text Counts by Month

BART Watch App: Jan 1185, Feb 1282, Mar 1679, Apr 1513, May 1751, Jun 1690, Jul 1409, Aug 1648, Sep 1678

Text Messages: Jan 692, Feb 645, Mar 927, Apr 954, May 1106, Jun 1088, Jul 1122, Aug 1156, Sep 1216

FY23 Q3   FY23 Q4   FY24 Q1
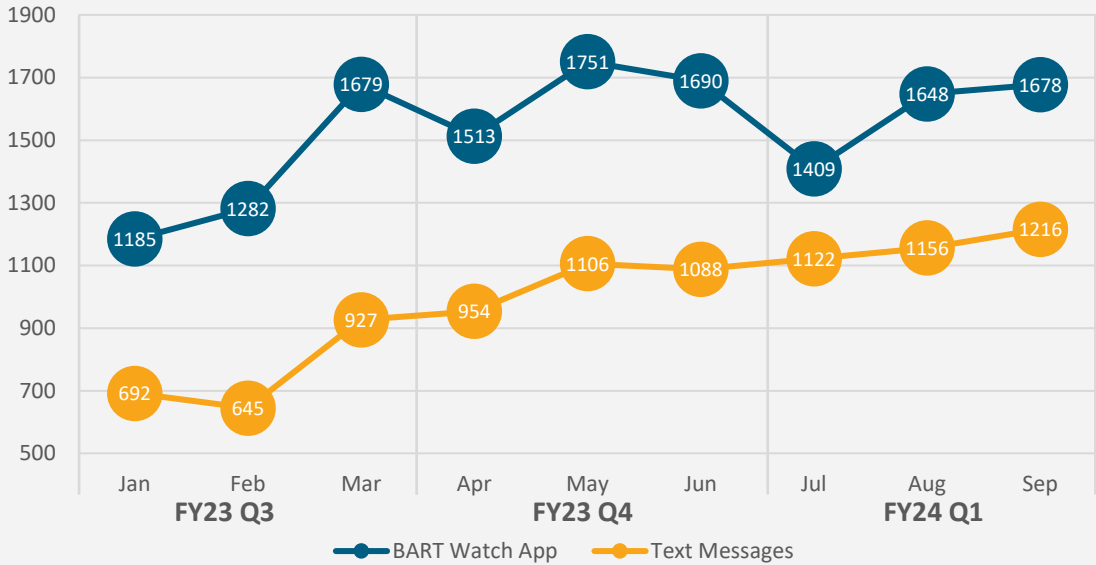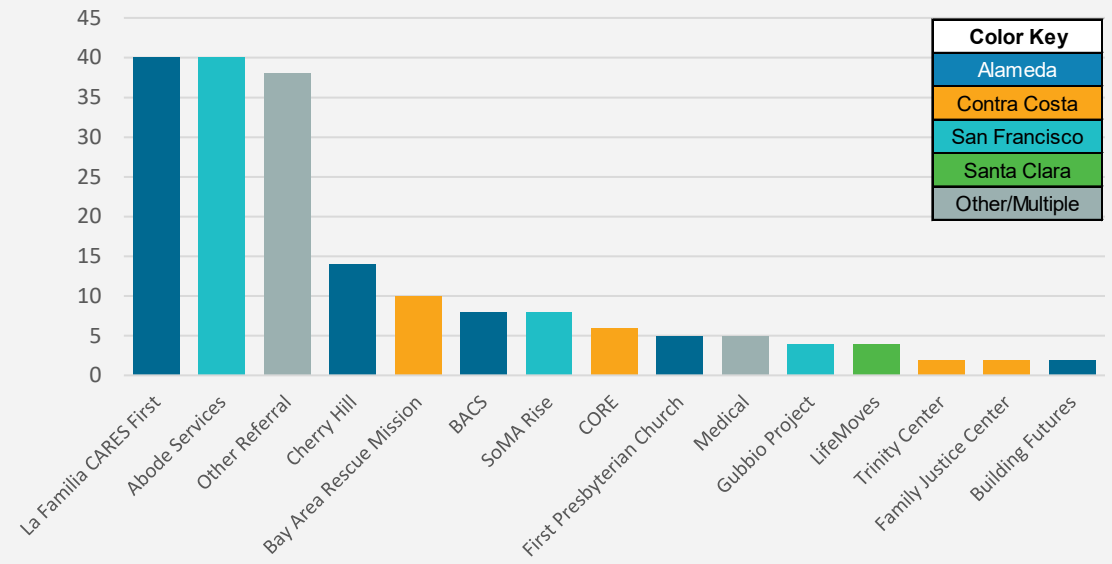
Progressive Policing Contacts and Outcomes

- 50 Narcan incidents total; 5 of which were administered by CIS

Summary of Contacts (9,003)
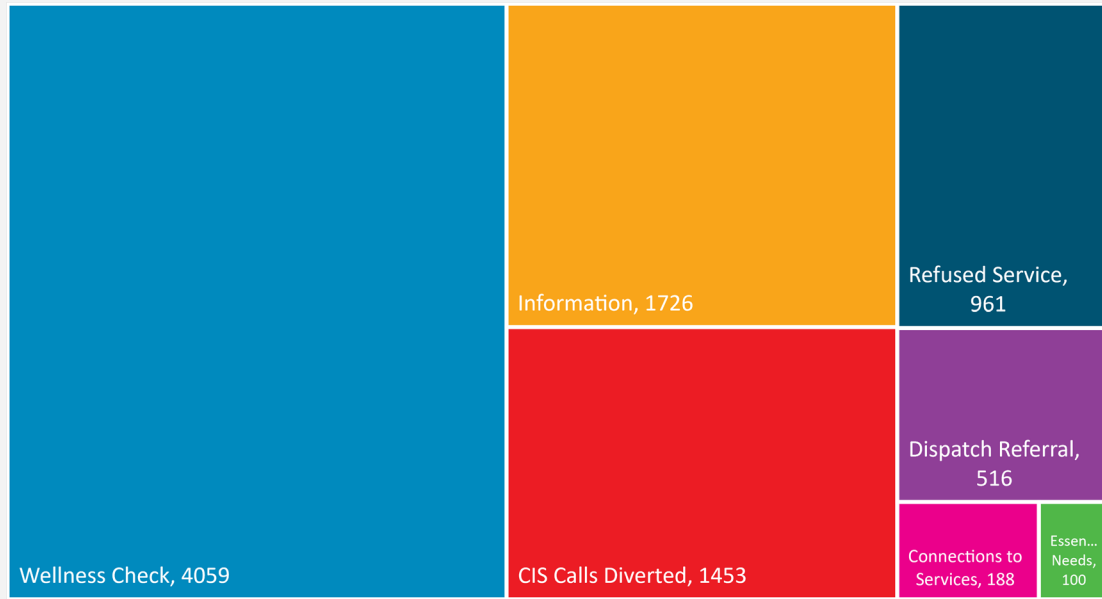
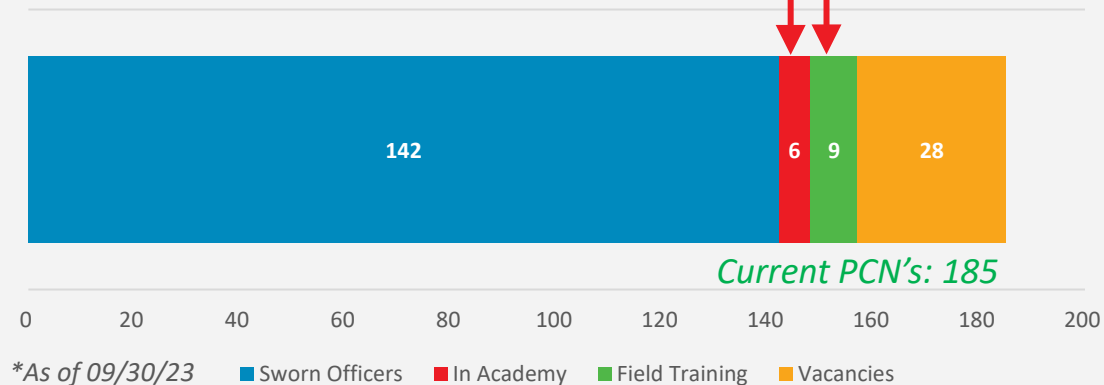Connections to Services by Partner (188)

Police Hiring Metrics

Police Hiring Pipeline – FY24 Q1

Stage	Count
Applications Received	837
Applicants Attended Testing	244
Applicants Interviewed	146
Passed Interview	92
Passed Background Check	9
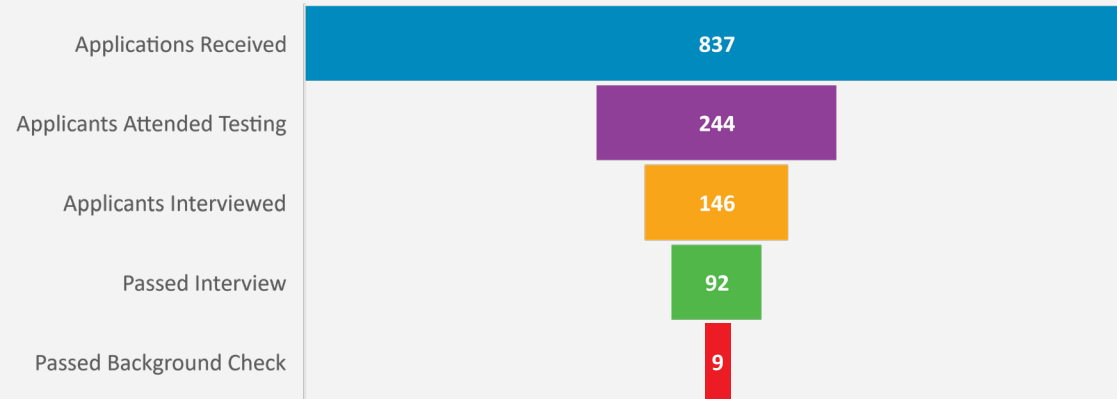
Police Headcount Tracking

142 | 6 | 9 | 28

Current PCN's: 185

0   20   40   60   80   100   120   140   160   180   200

As of 09/30/23   ■ Sworn Officers   ■ In Academy   ■ Field Training   ■ Vacancies

- Recruitment campaign launch from Aug – Oct highlighting 22% salary increase.
- Hosted two recruitment open houses
  - Next one scheduled on November 18th
- "Join BART PD" website launched in July
  - 80K views to date
- Increase in number of applicants interviewed
  - FY23 Q4: 57
  - FY24 Q1: 146

Questions?