



▶ Quarterly Service Performance Review 4th Quarter, FY23 (April- June 2023)

Engineering & Operations Committee
August 24, 2023





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

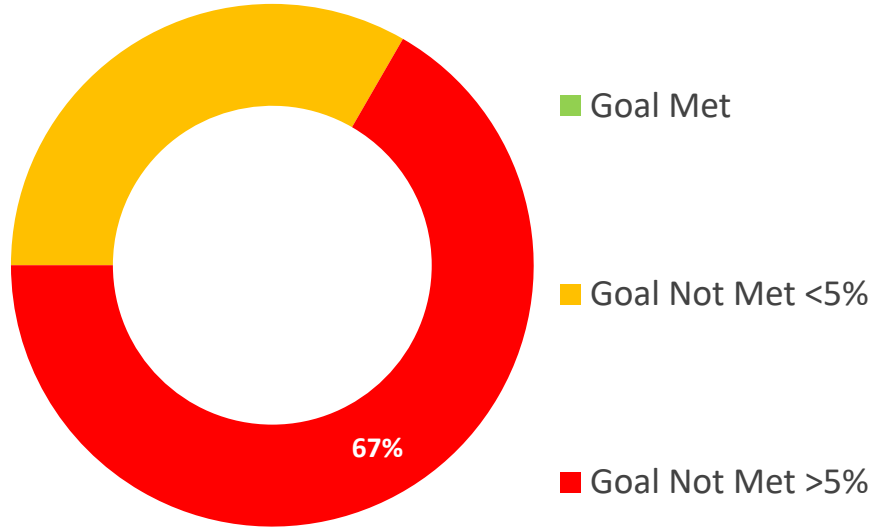
Safety

- 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

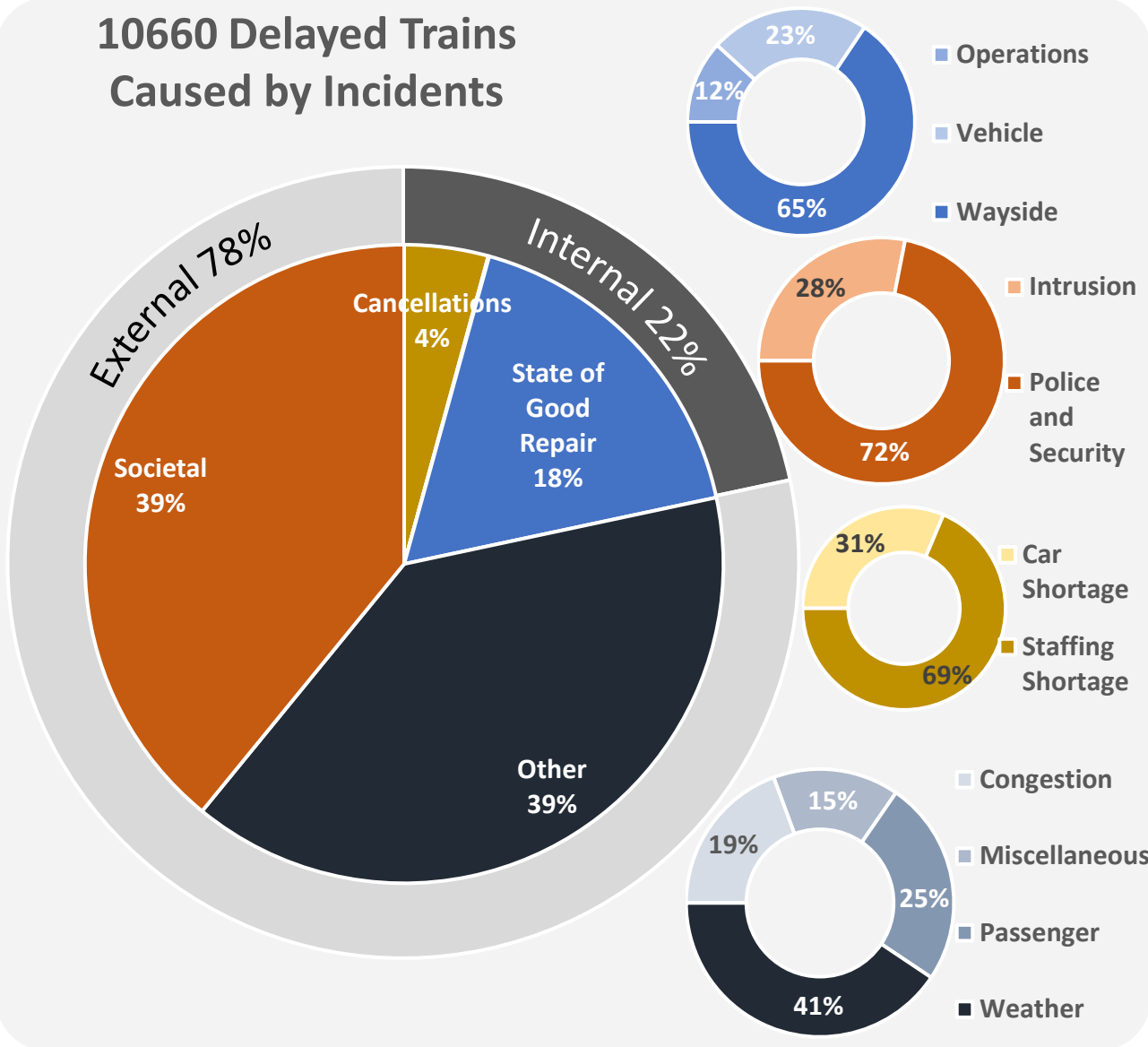


Metric	FY23 Q4	Goal	Change from FY23 Q3	
<i>All-Day</i>				
Weekday - Average Ridership	154,467	204,980	7.04%	▲
Trains On-Time - Daily	77.0%	91.0%	37.00%	▲
Customers On-Time - Daily	91.0%	94.0%	12.11%	▲
<i>Peak</i>				
Trains On-Time - Peak	77.2%		46.48%	▲
Customers On-Time - Peak	91.1%		22.69%	▲

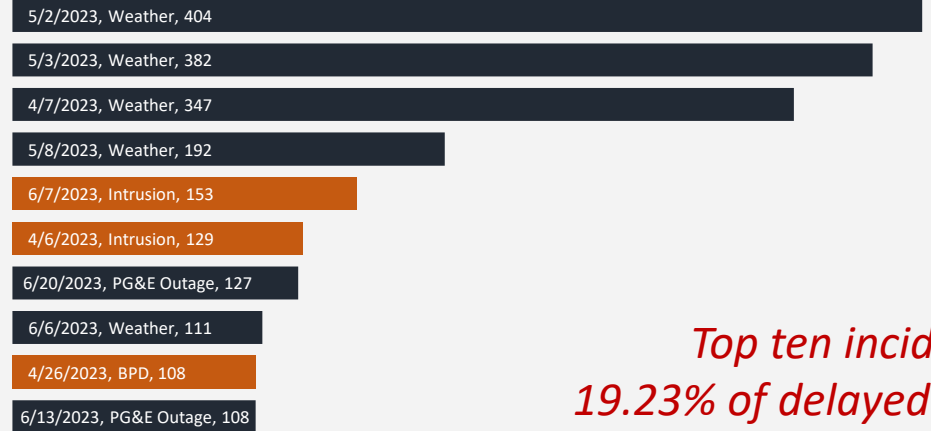
▼ Gray arrows represent change from the previous quarter for metrics which do not have an established goal

Service Delivery – Delay Incident Detail

10660 Delayed Trains Caused by Incidents

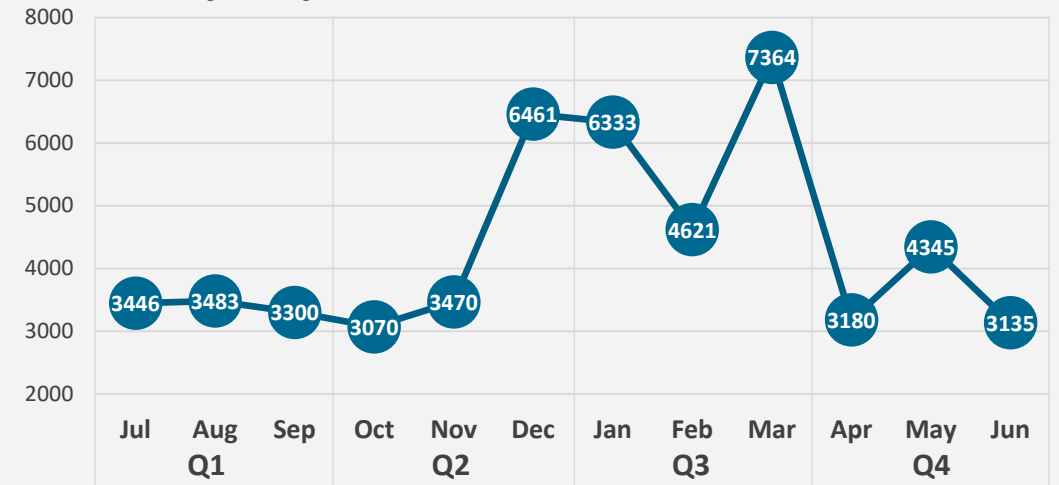


Trains Delayed - Top Ten Single Incidents



Top ten incidents = 19.23% of delayed trains

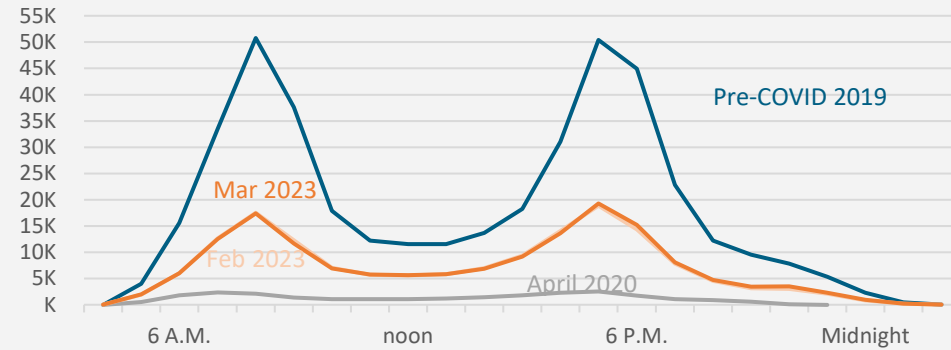
Trains Delayed by Month



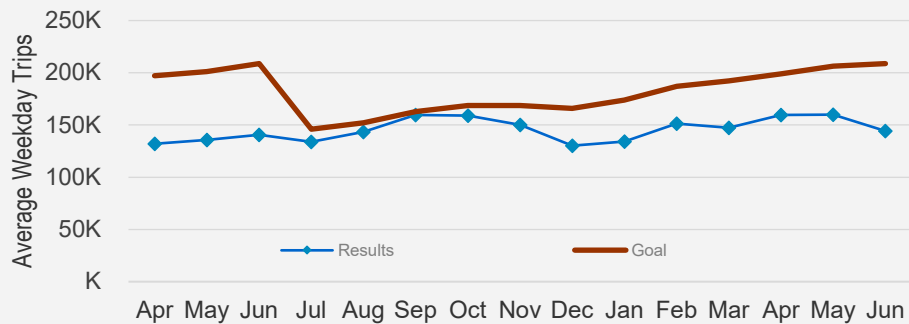
Capacity – Ridership

- Ridership below budgeted goal

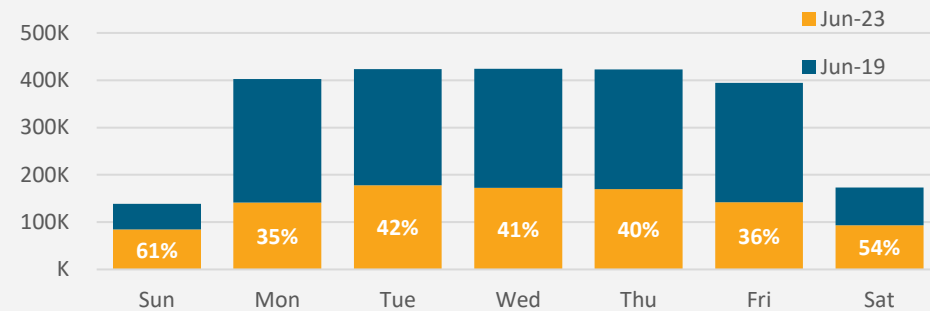
Weekday Hourly System Activity



Average Ridership - Weekday



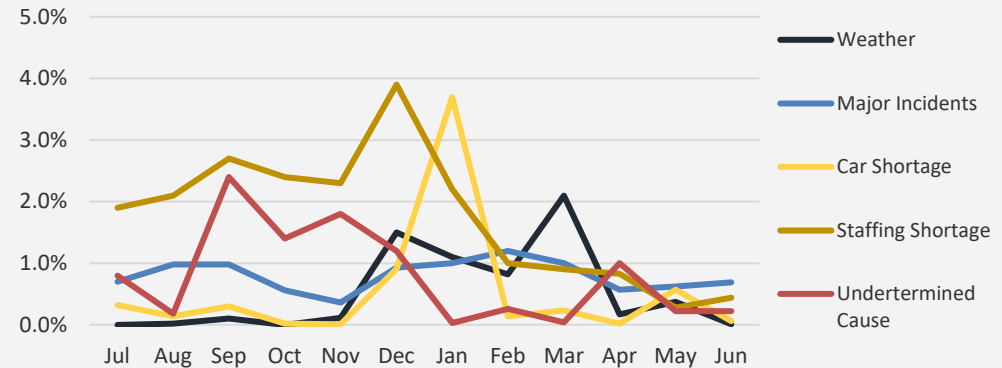
Comparison of June Ridership by Day of Week



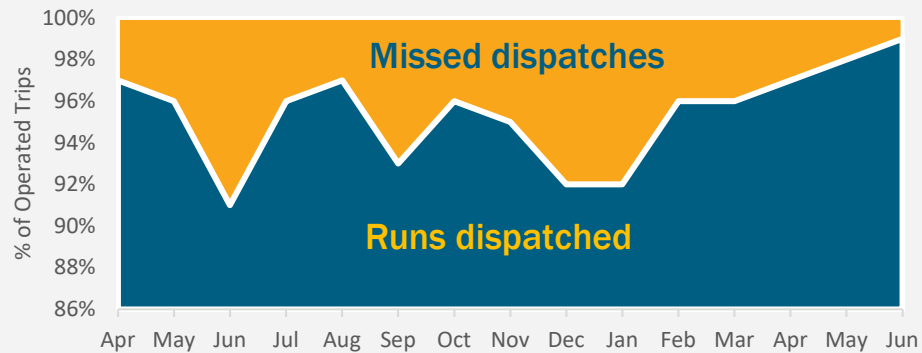
Capacity – Dispatches Operated

- 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

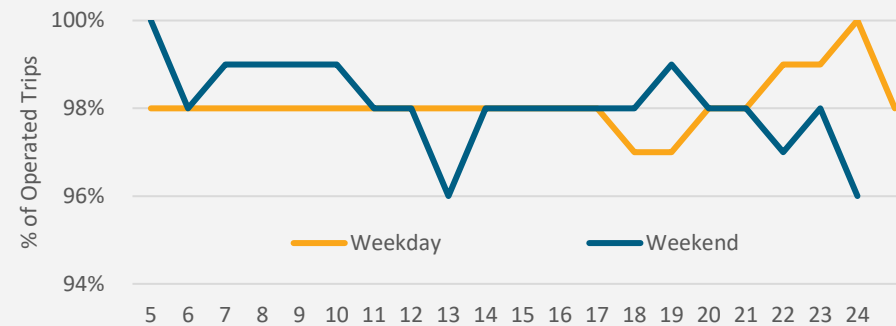
% of Scheduled Dispatches Missed by Cause



Scheduled Runs Dispatched from Origin

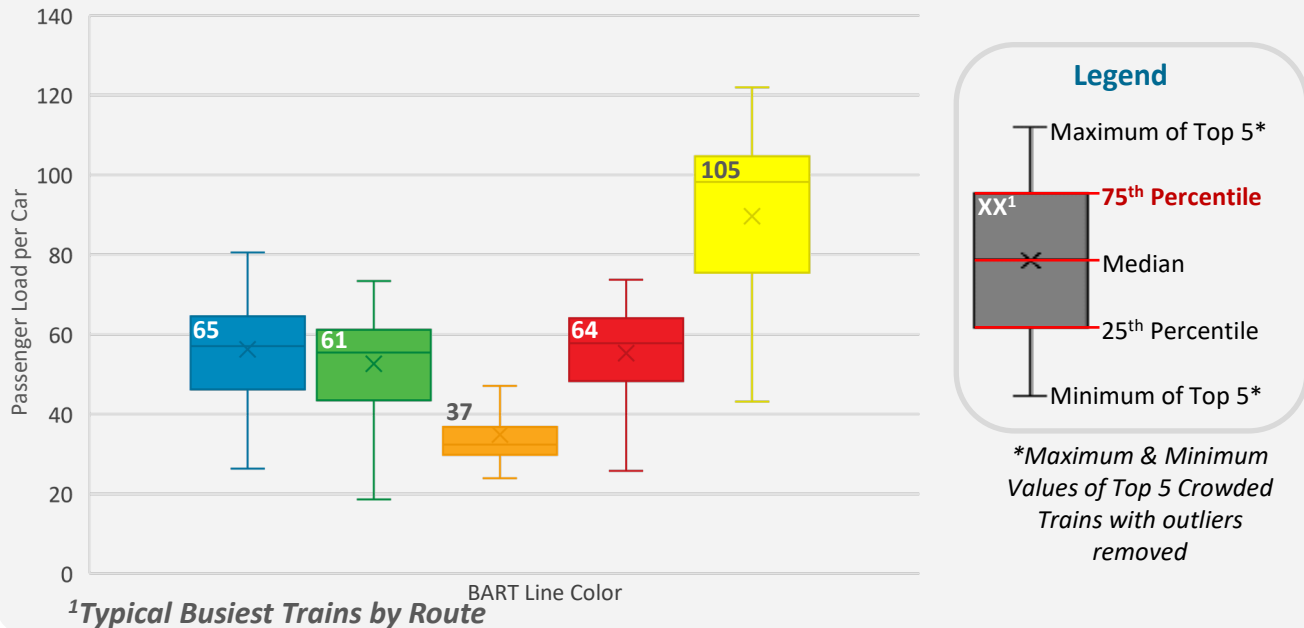


Hourly Scheduled Runs Dispatched from Origin

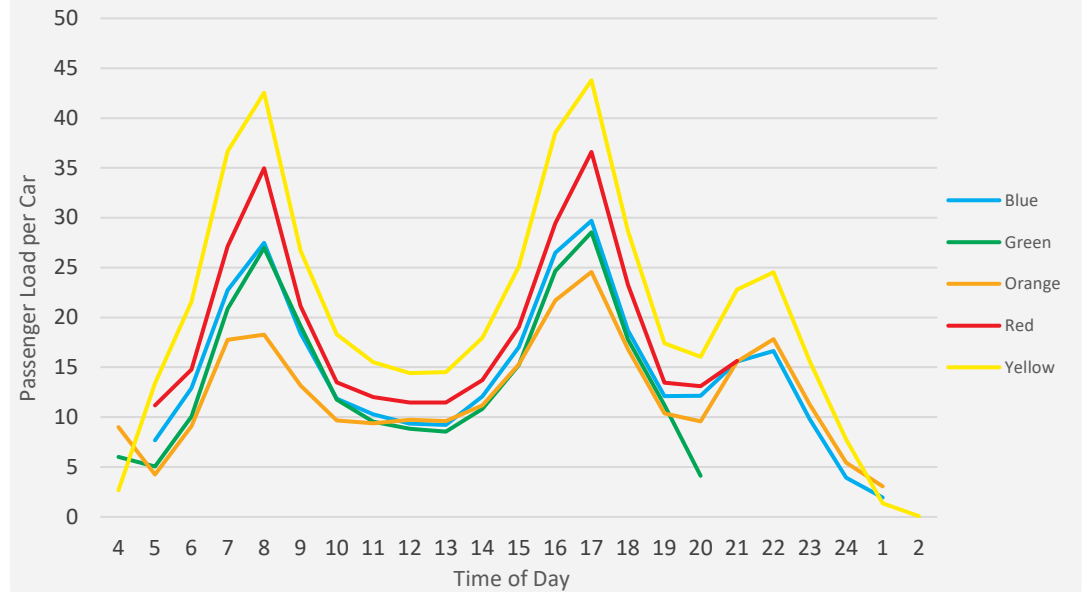


Capacity – Passenger Loading

Passenger Load per Car for Top 5 Crowded Weekday Trains

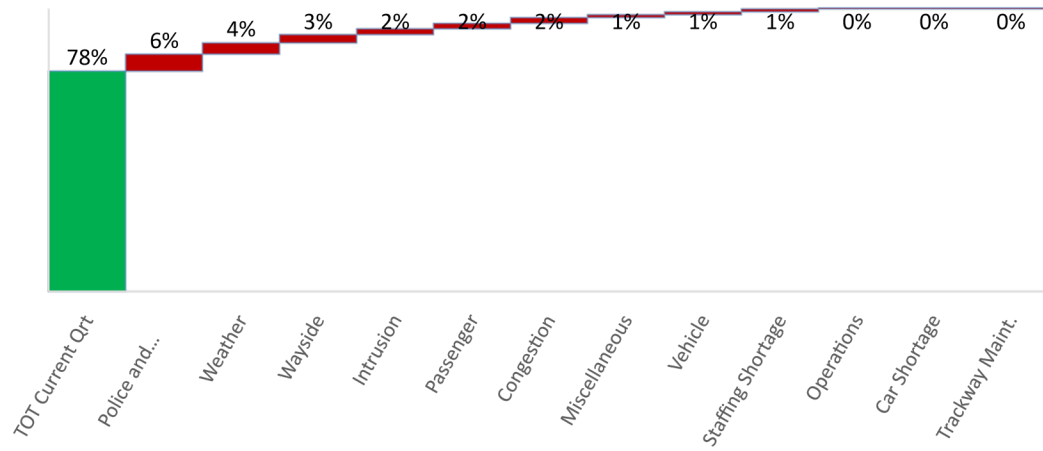


Average Hourly Weekday Passenger Load per Car by Line

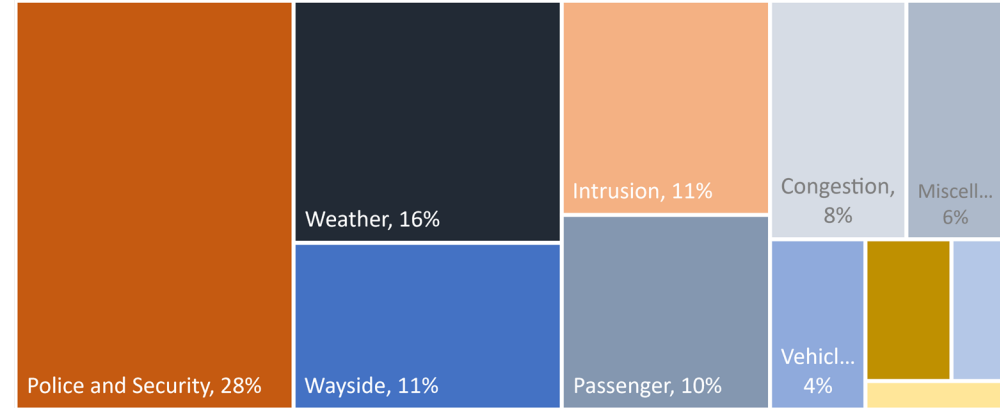


Punctuality – Trains On-Time

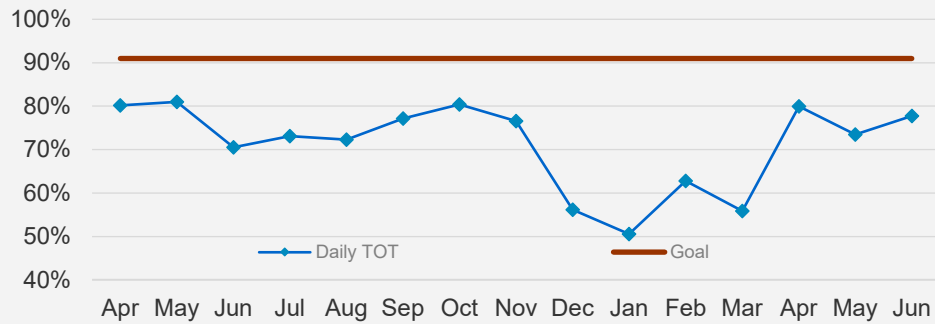
TOT - Daily



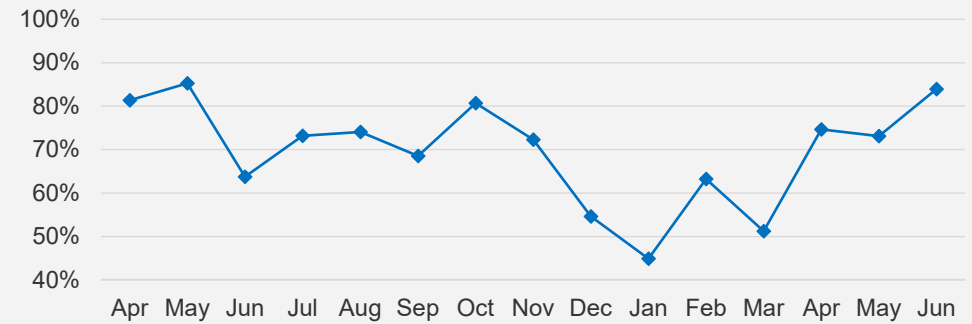
Estimate of Late Trains by Incident Cause (EOL)



● Trains On-Time - Daily



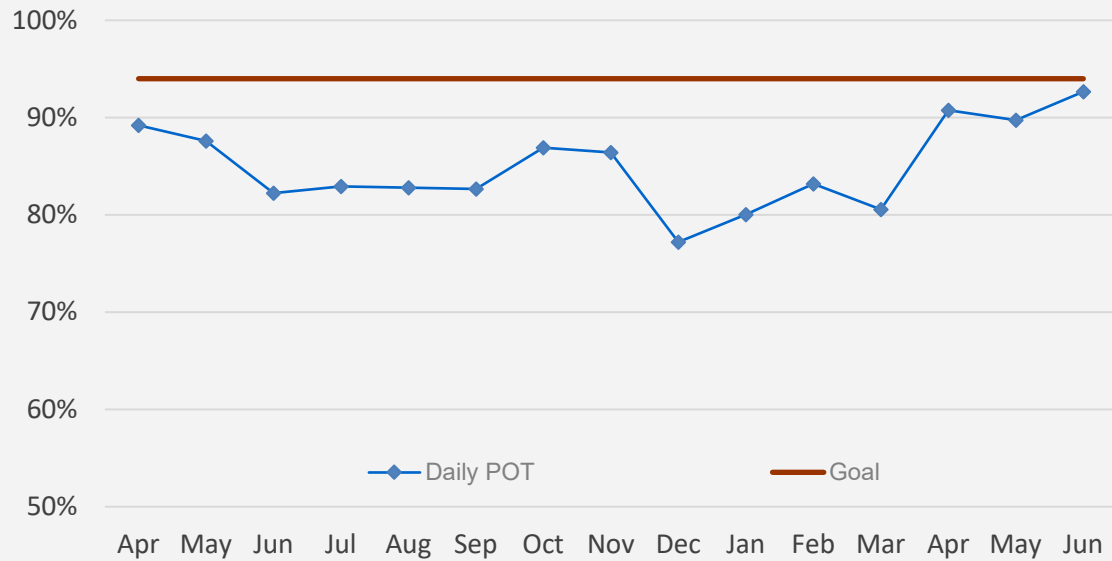
Trains On-Time - Peak



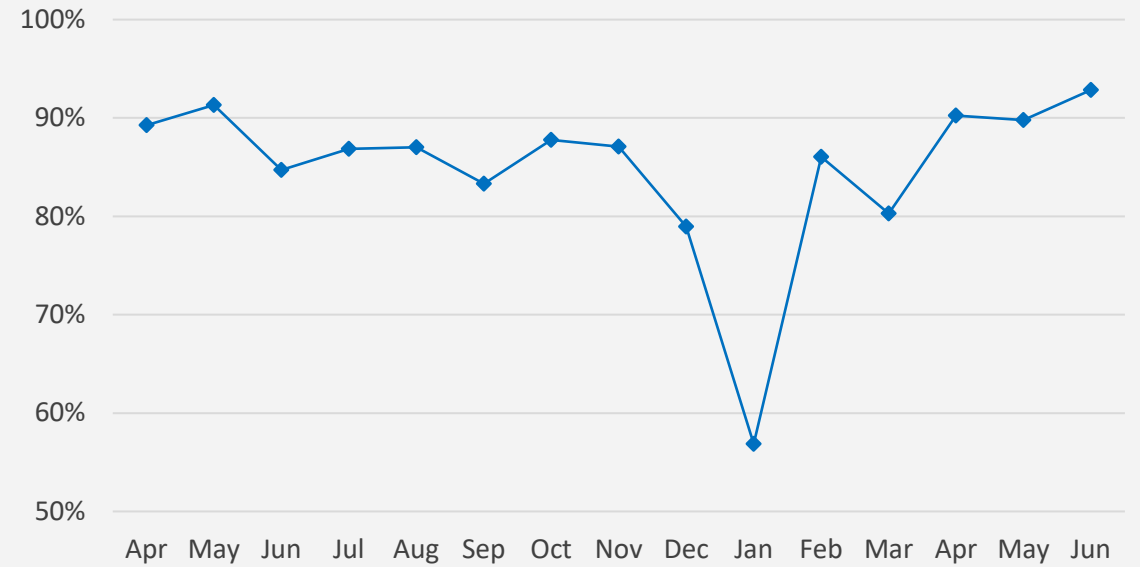
Punctuality – Customer On-Time



Customer On-Time - Daily



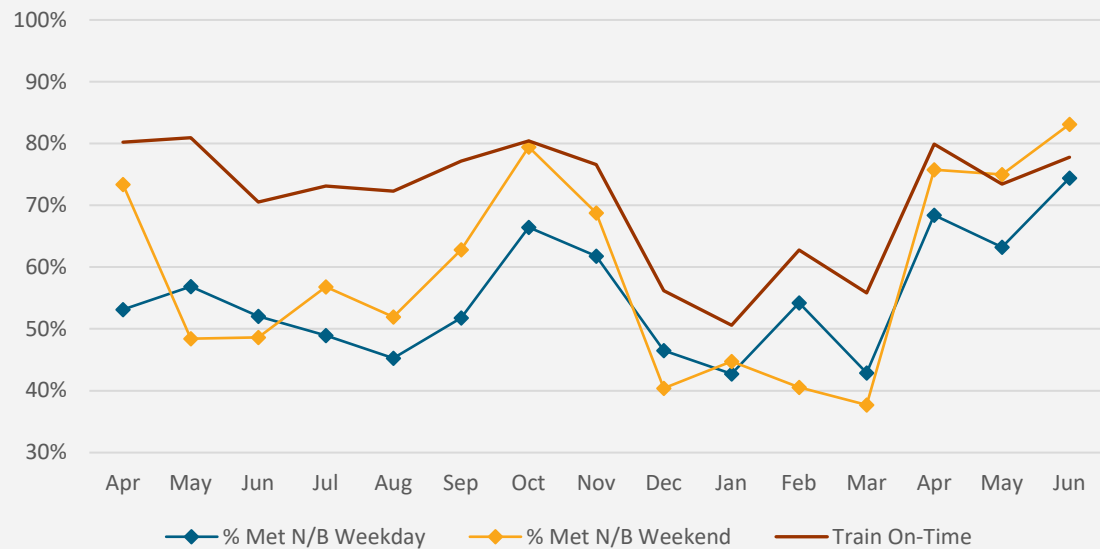
Customer On-Time - Peak



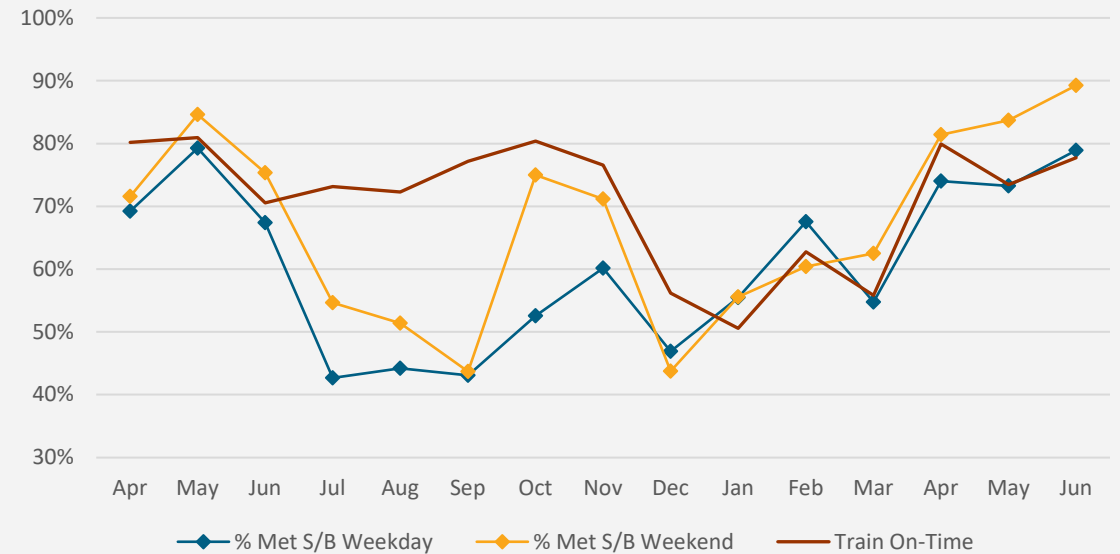
Punctuality – Timed Train Meets

- 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

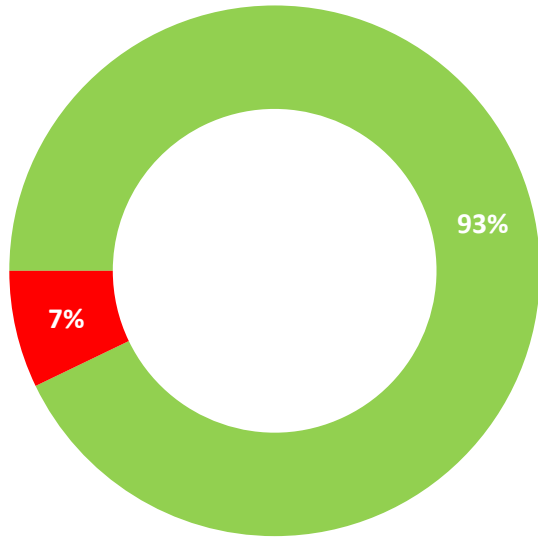
Northbound Meets at 19th Street



Southbound Meets at MacArthur



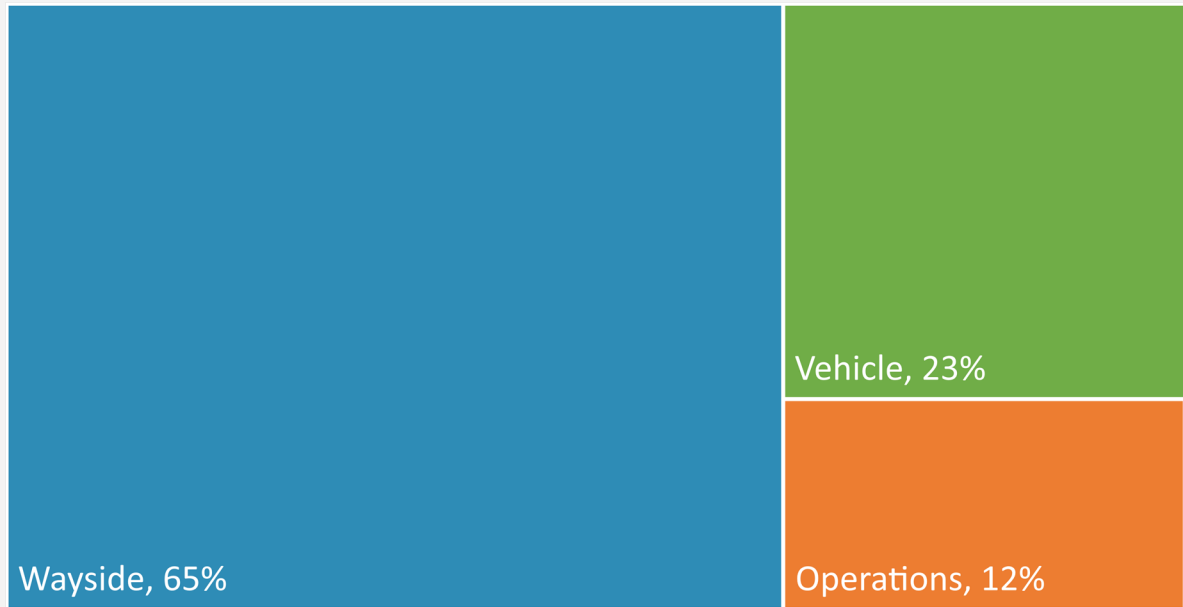
Summary – Railway Asset Availability



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

Metric	FY23 Q4	Goal	Change from FY23 Q3	
<i>Wayside Equipment</i>				
Track	0.11	0.30	(1000.00%)	▼
Traction Power	0.62	1.00	24.89%	▲
Wayside Train Control System	0.95	1.30	44.11%	▲
Computer Control System	0.30	0.30	(256.00%)	▼
Transportation	1.02	0.50	44.05%	▲
<i>Revenue Vehicle</i>				
Vehicle MTBSD - (Hours)	8844	6500	8.06%	▲
4 AM - Car Availability	696	629	6.74%	▲
DMU - MDBF (Miles)	31003	20000	(66.80%)	▼
<i>Station Equipment</i>				
Elevators in Service - Station	98.7%	98.0%	0.41%	▲
Elevators in Service - Garage	99.8%	97.0%	0.98%	▲
Escalators in Service - Street	95.6%	93.0%	4.19%	▲
Escalators in Service - Platform	97.2%	96.0%	0.65%	▲
Automatic Fare Collection - Gates	99.4%	98.0%	0.58%	▲
Automatic Fare Collection - Vendors	99.2%	95.0%	0.57%	▲

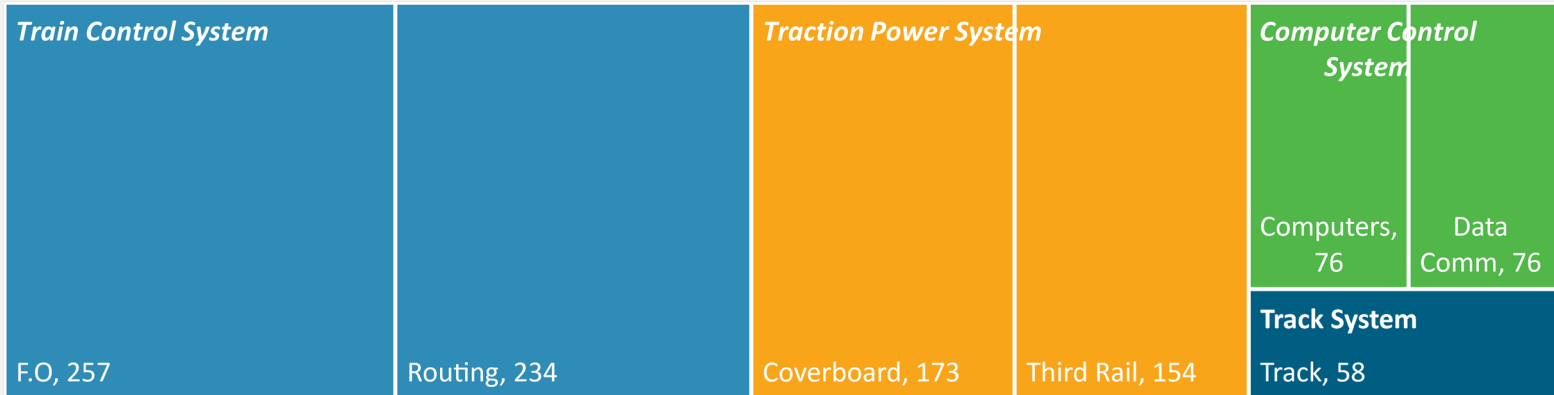
Breakdown of 1851 Trains Delayed due to Railway Asset Unavailability



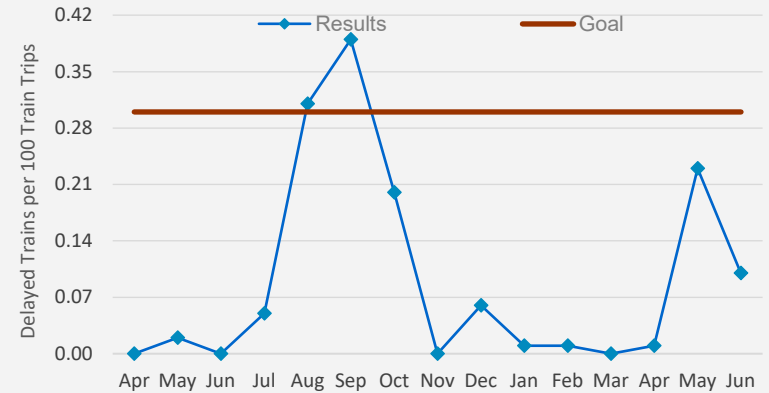
Wayside Equipment – Delayed Trains by System



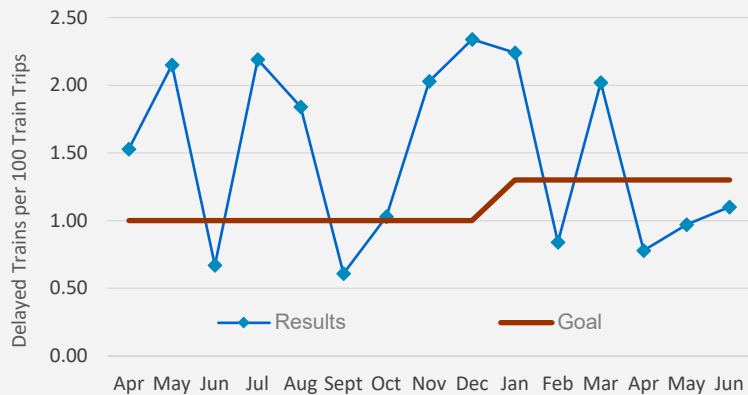
Breakdown of 1028 Delayed Trains Attributed to Wayside Equipment



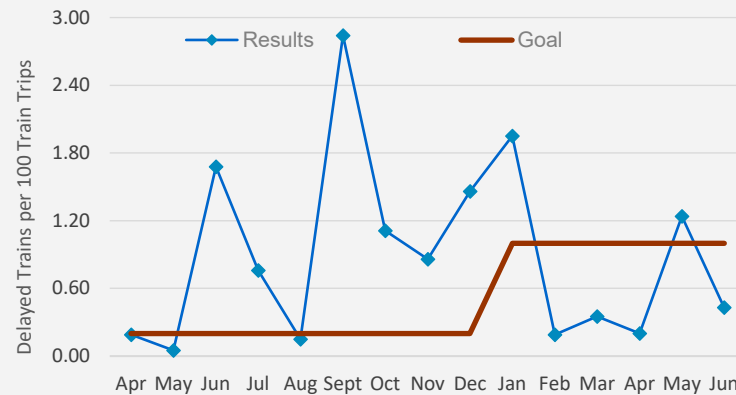
Track System



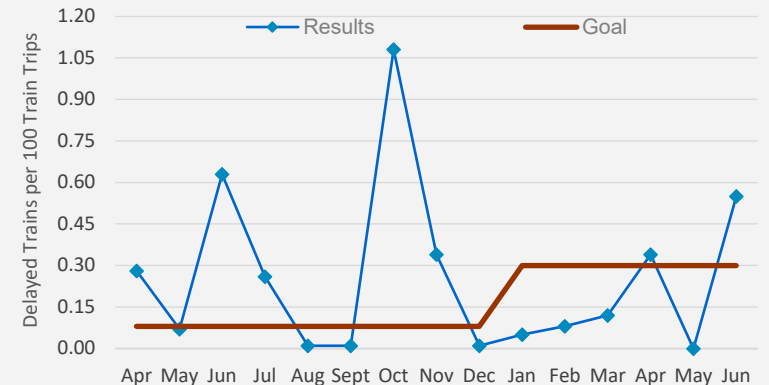
Wayside Train Control System



Traction Power System

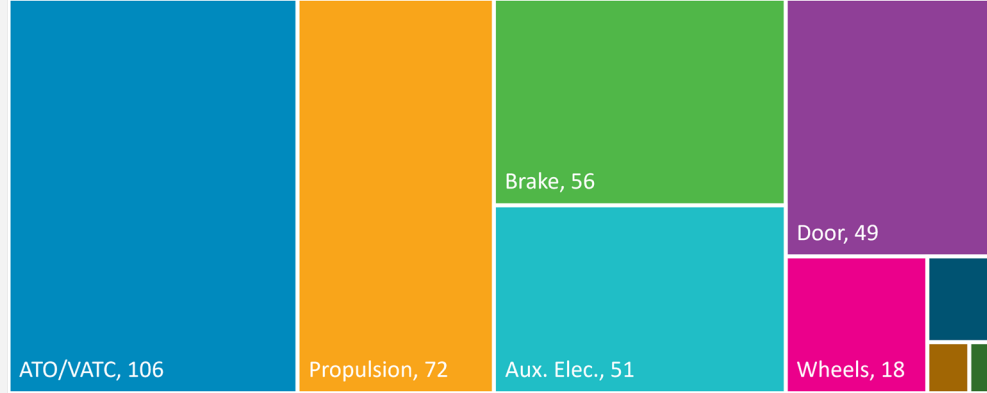


Wayside Computer Control System

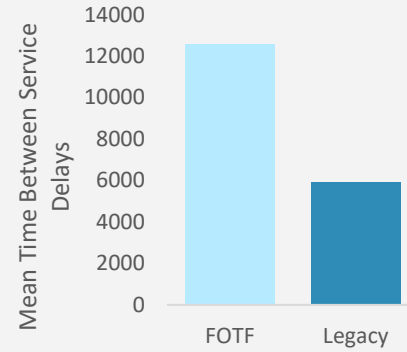


Revenue Fleet – Reliability

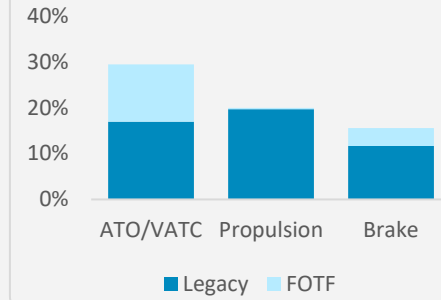
Breakdown of Delayed Trains by Vehicle System



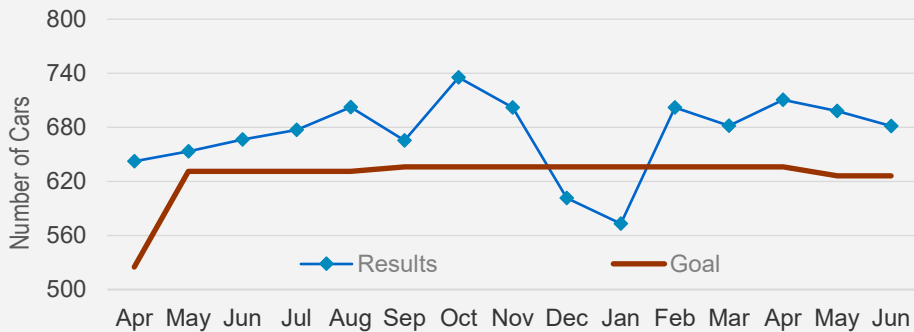
Fleet Type



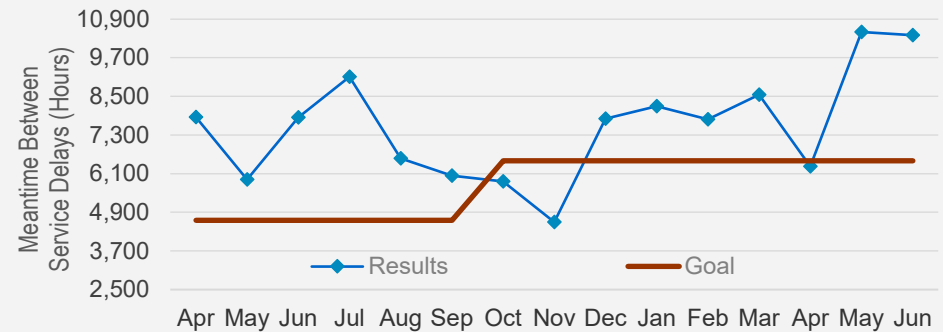
Worst Three Systems For Delays



Car Availability at 4 AM



Mean Time Between Service Delays



320

LEGACY

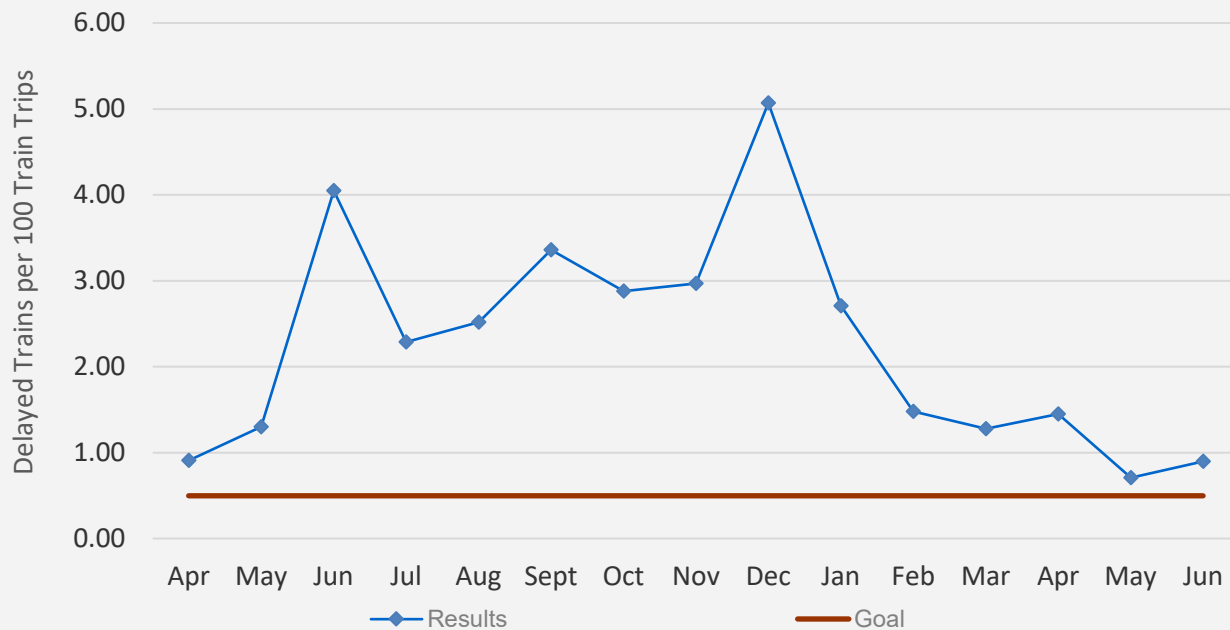
FOTF

536

Car count as of 06/30/2023

- Train delays due to staff shortages have declined significantly as recruitment of Train Operators continues
- Recruiting of Train Operators, Rail Controllers, and Foreworkers remains the highest priority for Operations

● Operations



Outlook – Transportation Staffing

- Train Operators
 - On pace to reach full-staffing in late 2023
 - Three classes underway – on-going into Fall
- Station Agents
 - Will reach full-staffing as current classes graduate
 - Continued but slowing pace of recruiting
- Rail Controllers
 - Five Rail Controllers in training during this quarter
- Foreworkers
 - Hiring is a priority for 2023/2024
 - Twenty Foreworkers in training



Station Equipment – Elevator Availability

Station Elevator

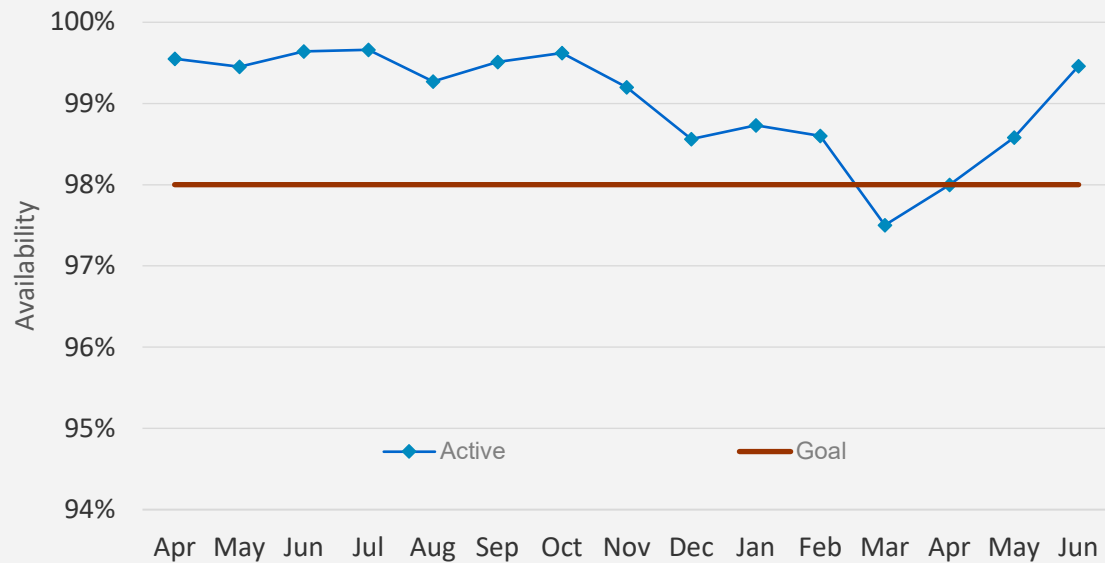
- Goal met

Garage Elevator

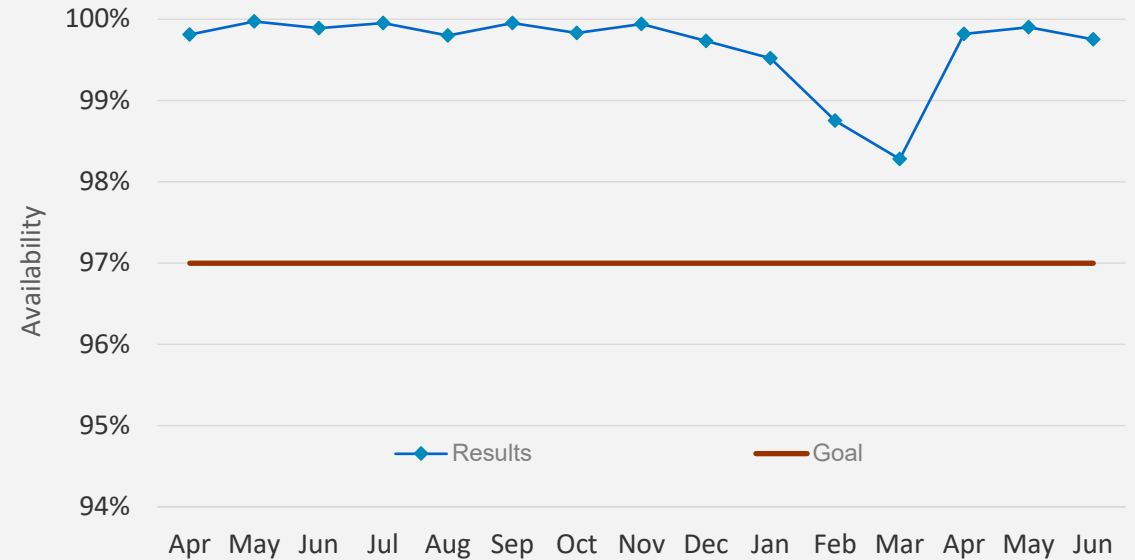
- Goal met



Station Elevator



Garage Elevator

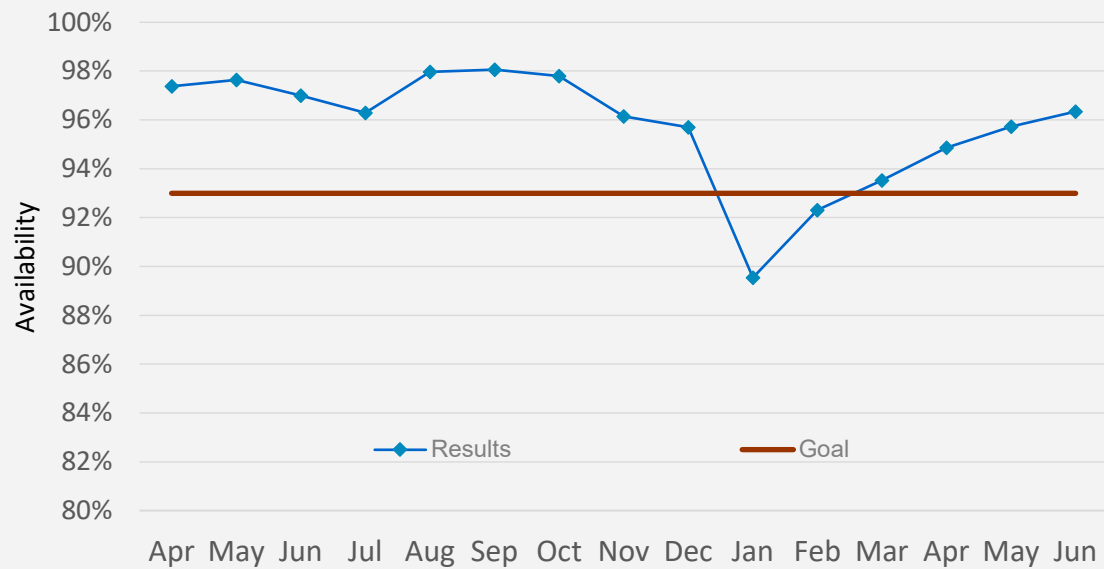


*E-line Elevator and Escalator are included

Street Escalator

- Goal met

Street Escalator

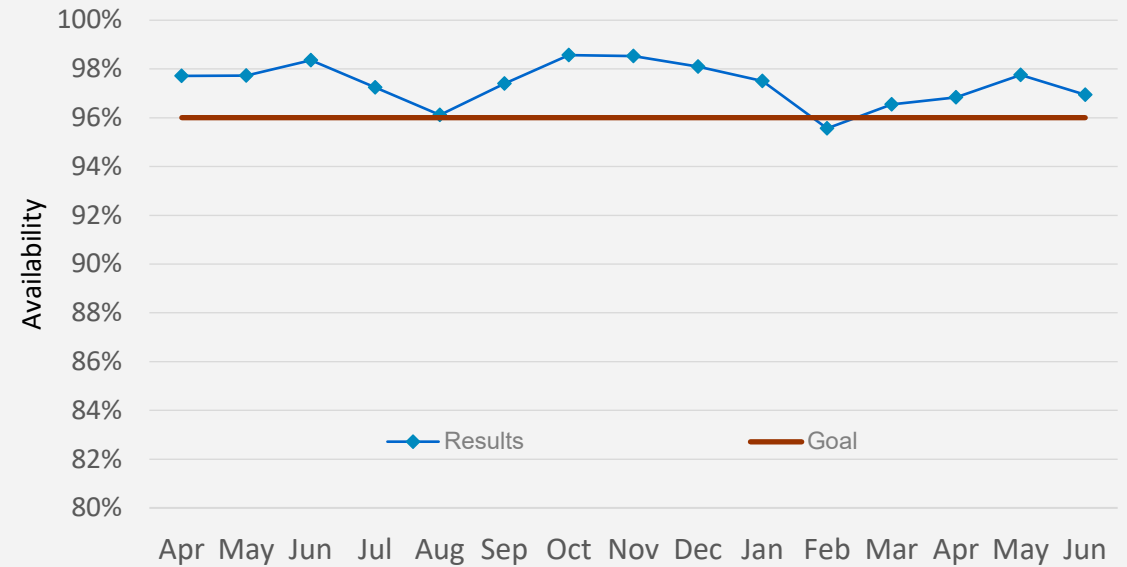


Platform Escalator

- Goal met



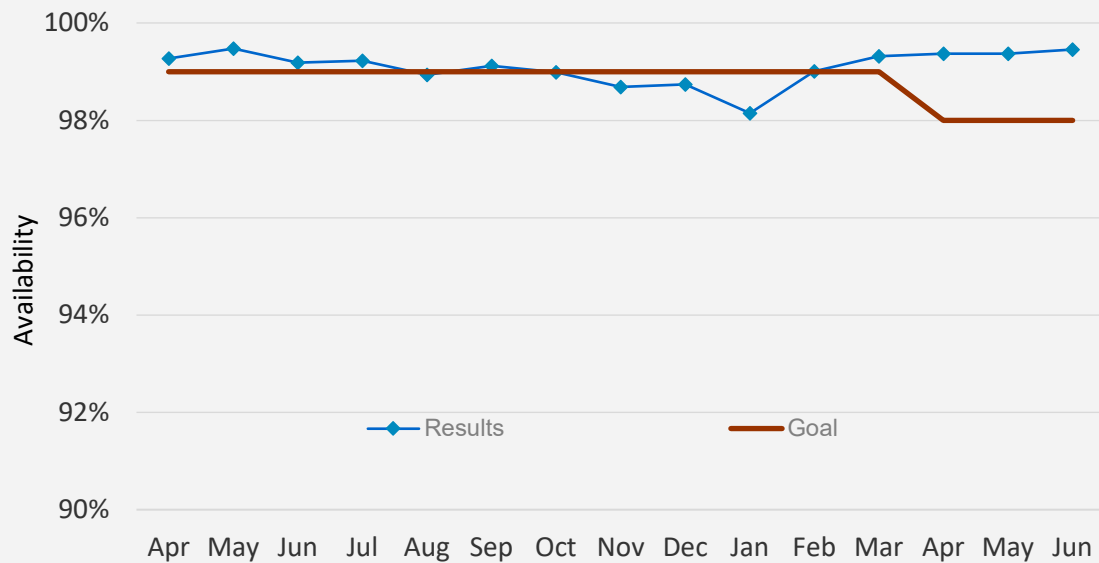
Platform Escalator



Gate Availability

- Goal met

Gate Availability

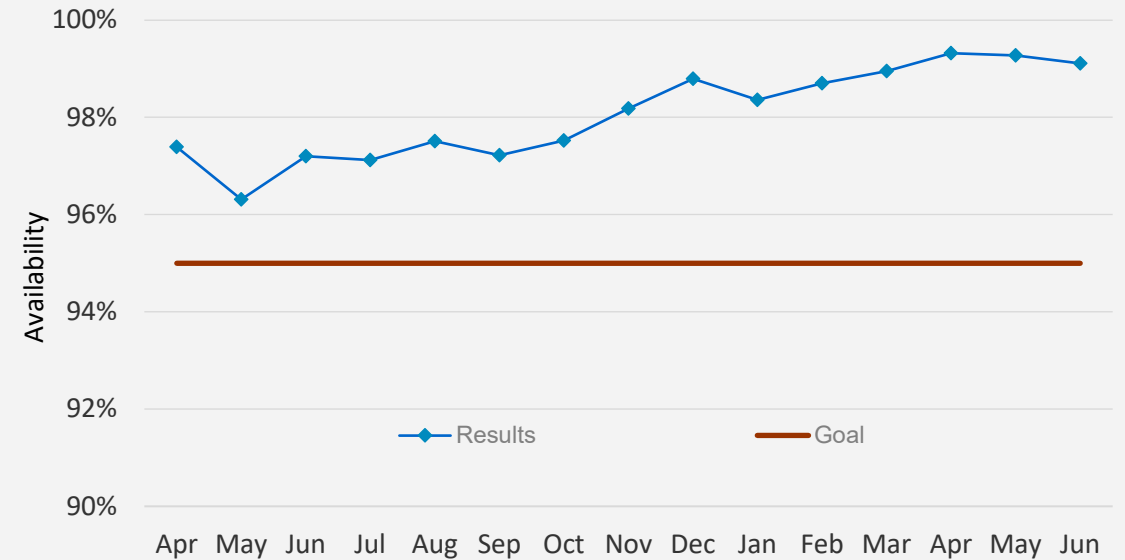


Vendor Availability

- Goal met



Vendor Availability



Summary – Customer Experience

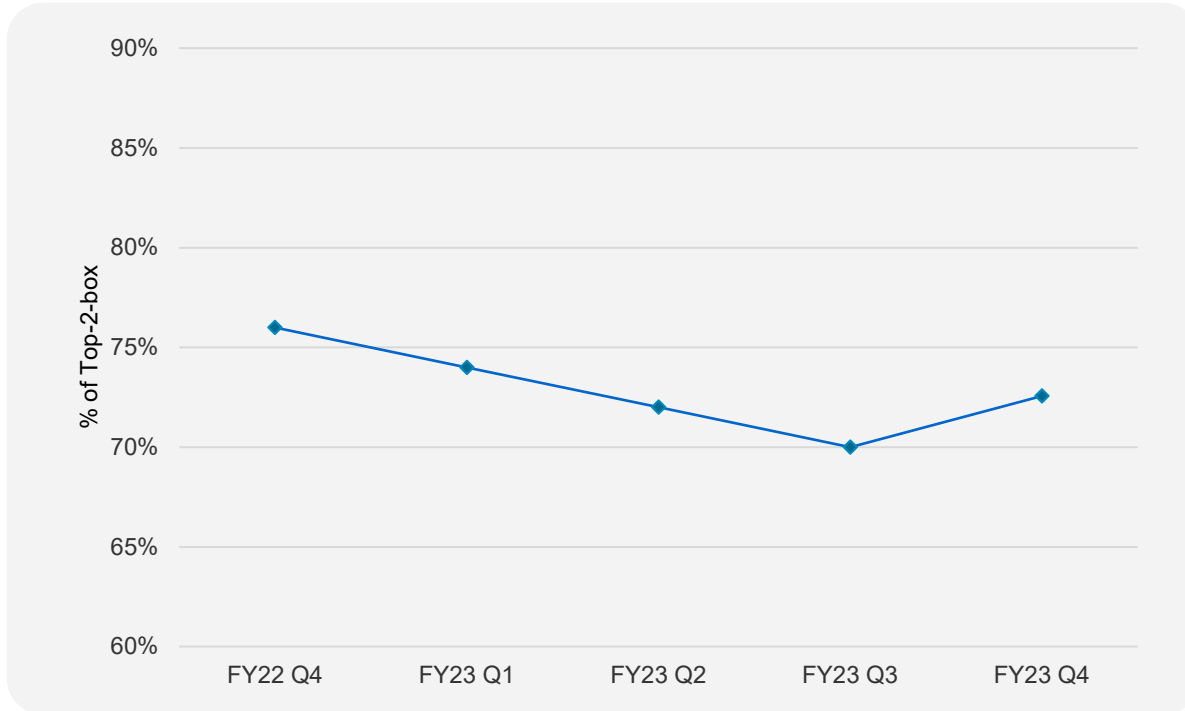


Metric	FY23 Q4	Goal	Change from FY23 Q3
<i>Customer Experience</i>			
Overall Customer Satisfaction	73%		-
Station Agent Customer Service	3.9		-
Complaints per 100,000 Passenger Trips	23.1		1.12% ▲
<i>Train Environment</i>			
Train Temperature	4.1		-
Train Interior Cleanliness	3.7		-
<i>Station Environment</i>			
Environment Outside Stations	3.5		-
Environment Inside Stations	3.5		-
<i>Code of Conduct</i>			
Gender Based Harassment	9%		10%
Fare Evasion	25.1%		8.39%

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

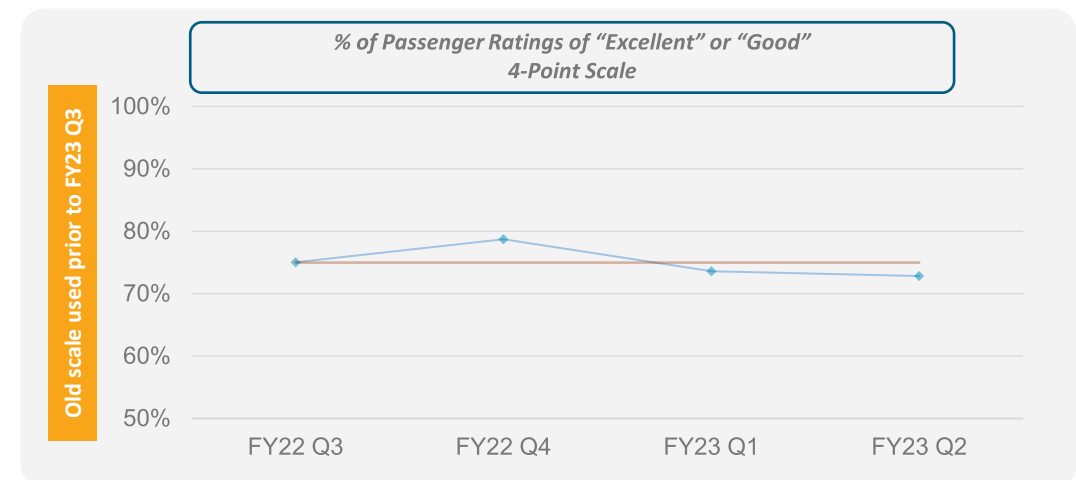
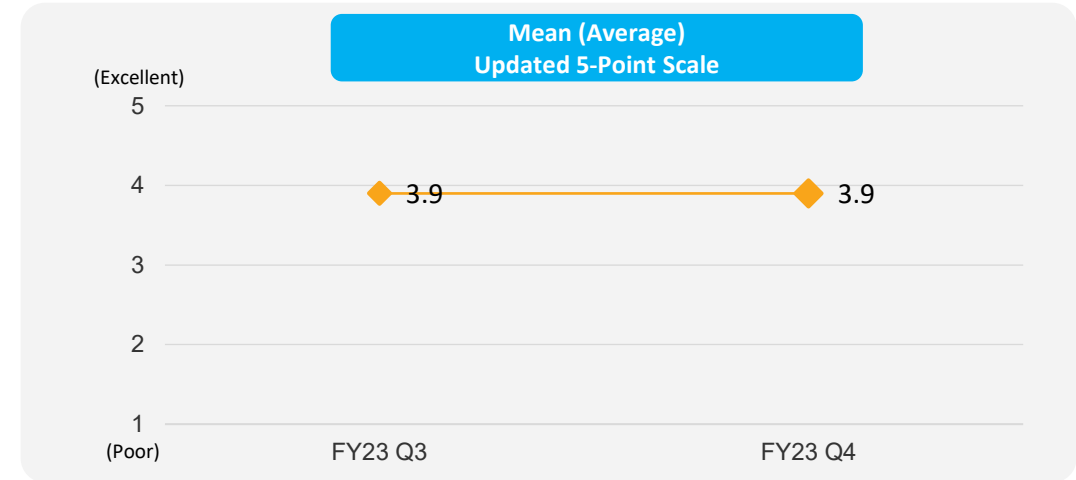
Overall Customer Satisfaction

Overall, how satisfied are you with the services provided by BART?



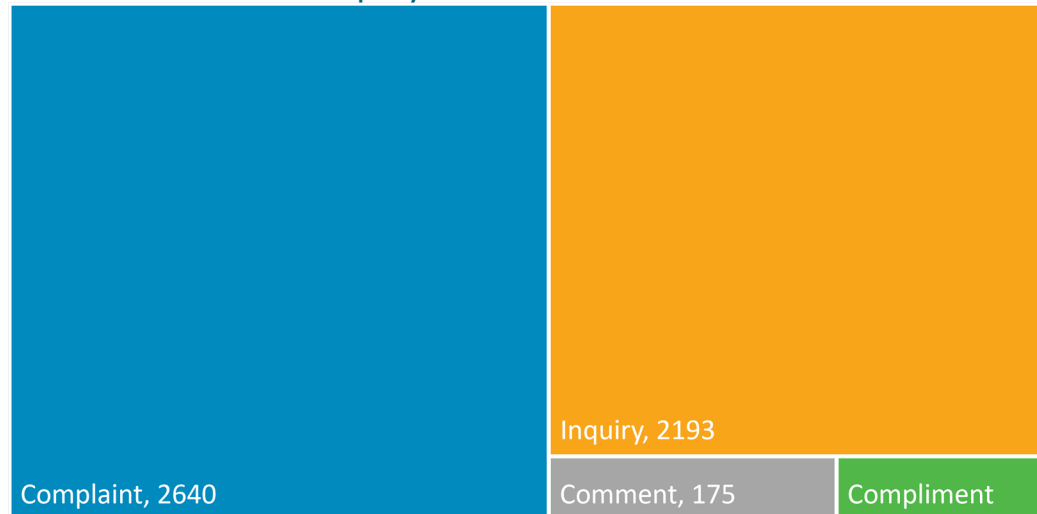
Station Agent Customer Service

Customer service from Station Agent (if used today)

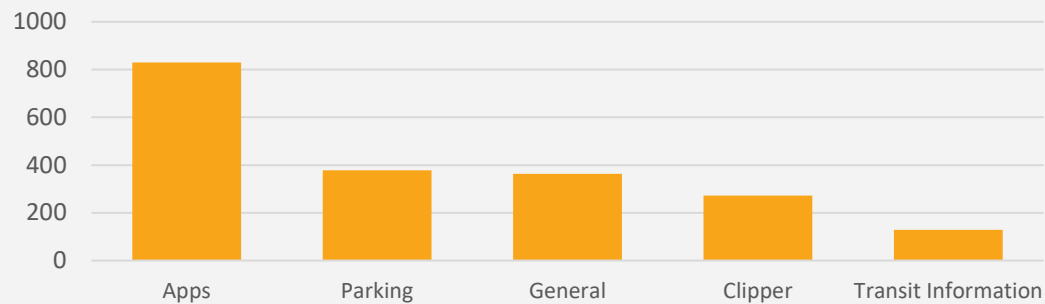


Customer Service – Cases by Type

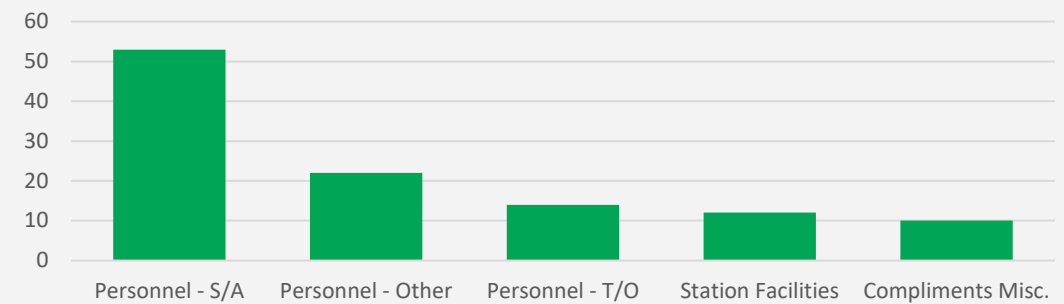
Breakdown of 5144 Inquiry Cases



Inquiry Cases – FY23 Q4



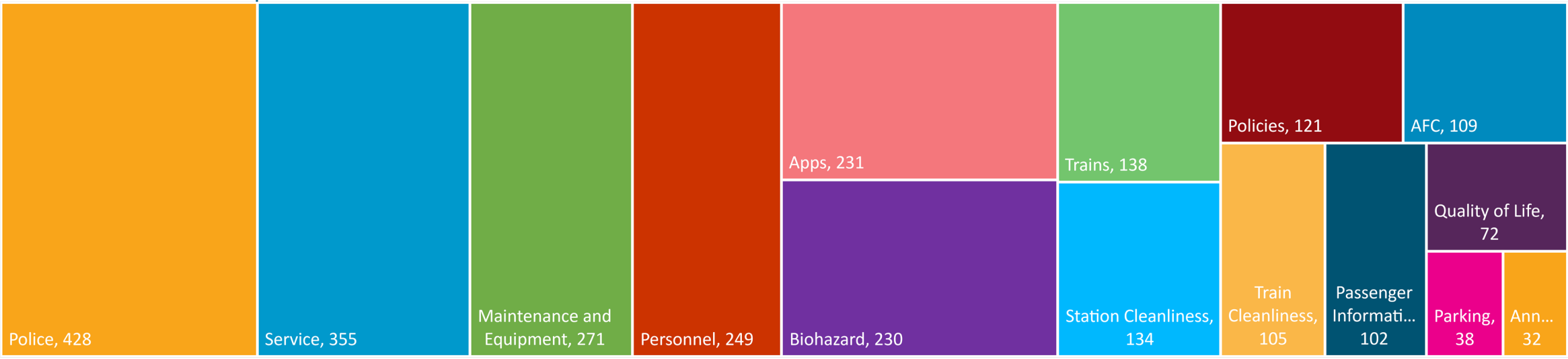
Compliment Cases – FY23 Q4



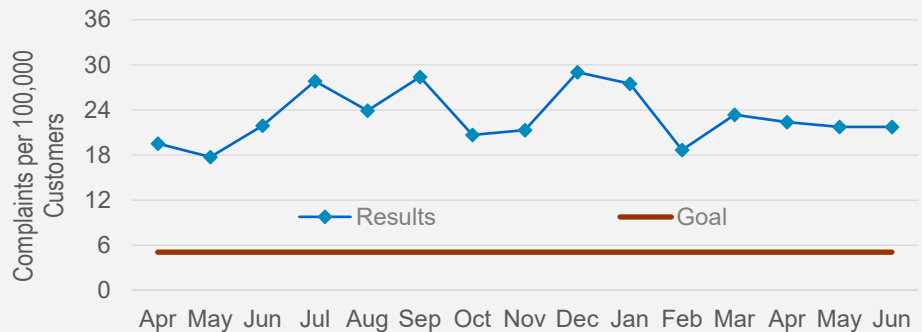
Customer Service – Complaint Cases



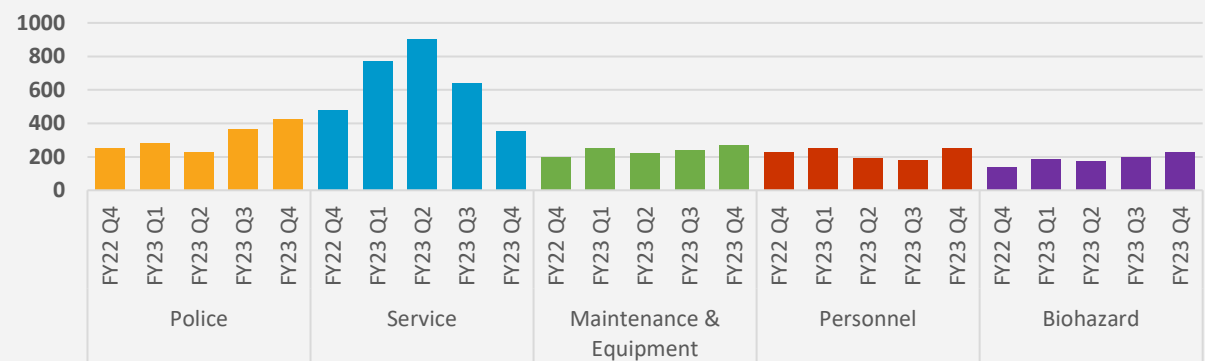
Breakdown of 2615 Complaint Cases



Customer Complaints

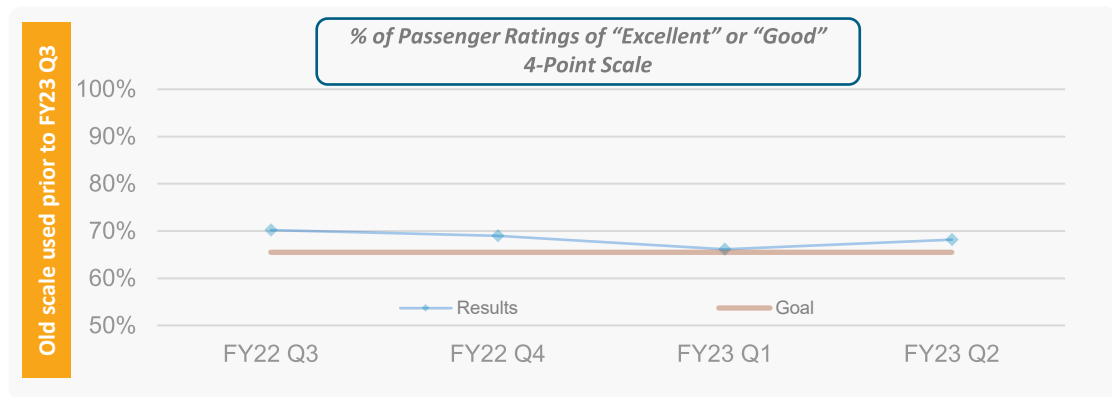
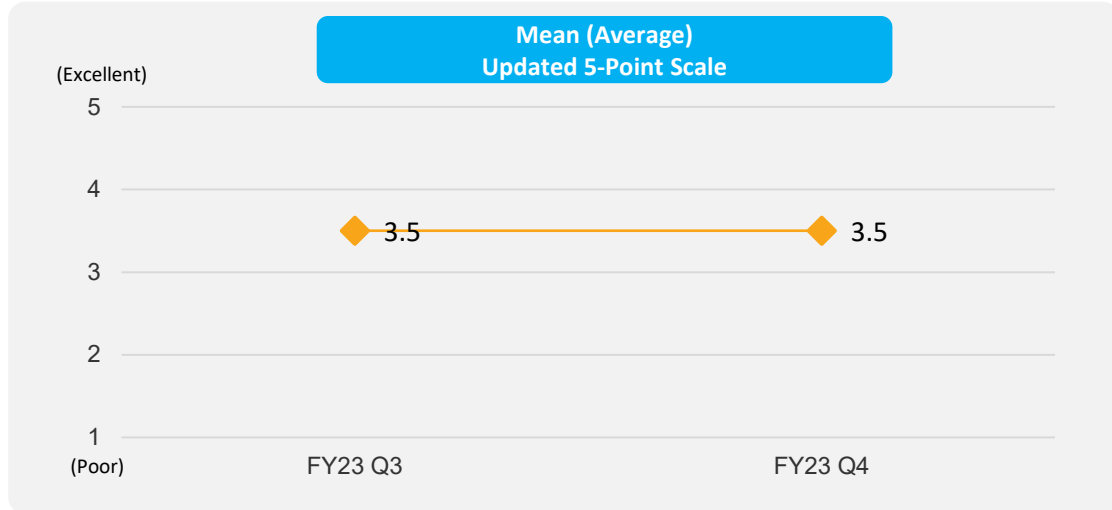


FY23 Q4 Trending Customer Complaints



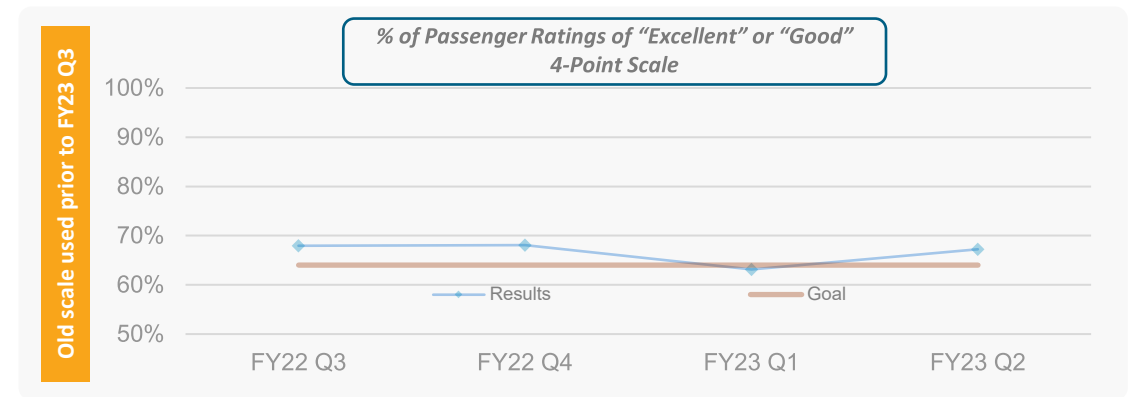
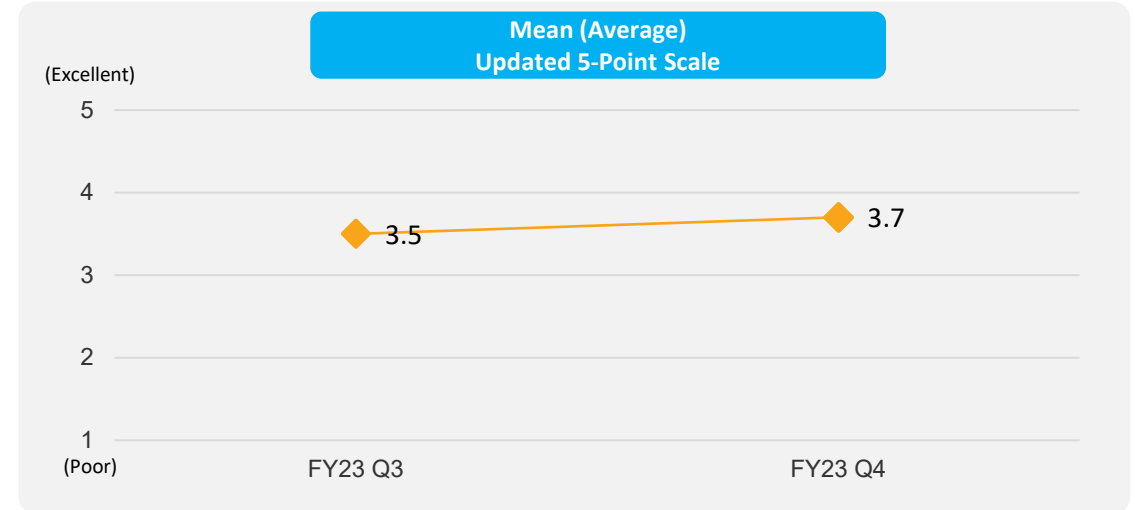
Environment Outside Station

- 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%).



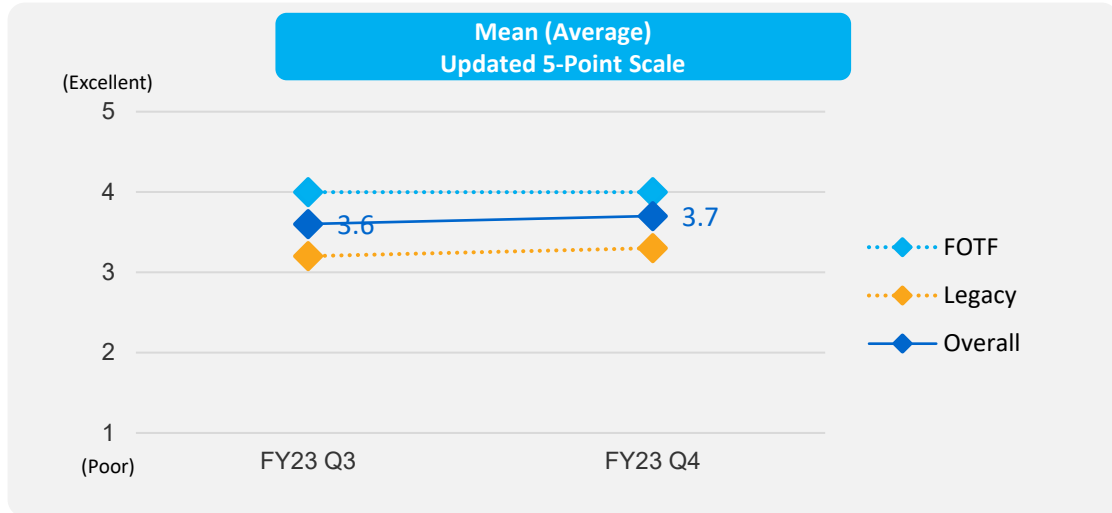
Environment Inside Station

- 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%).

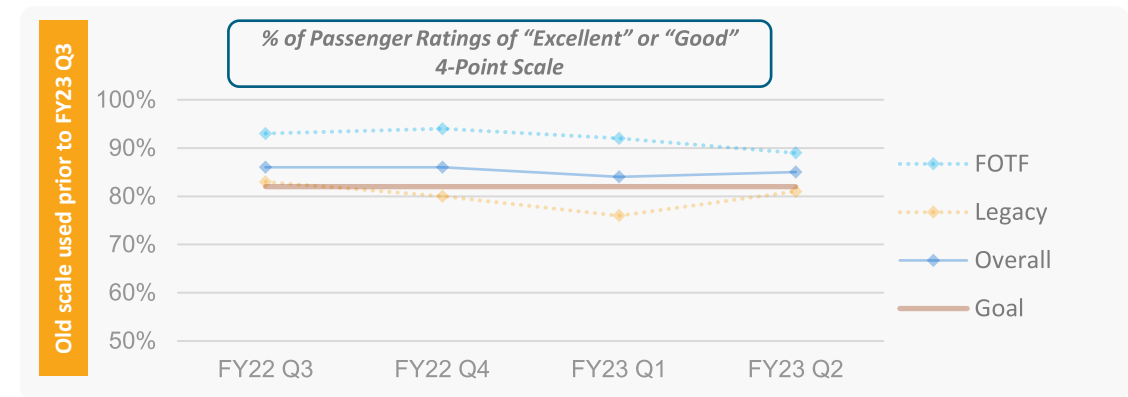
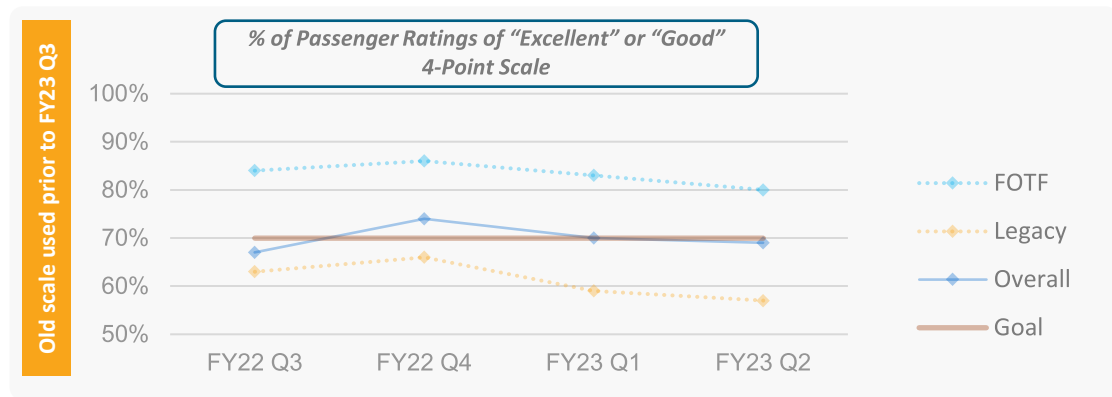
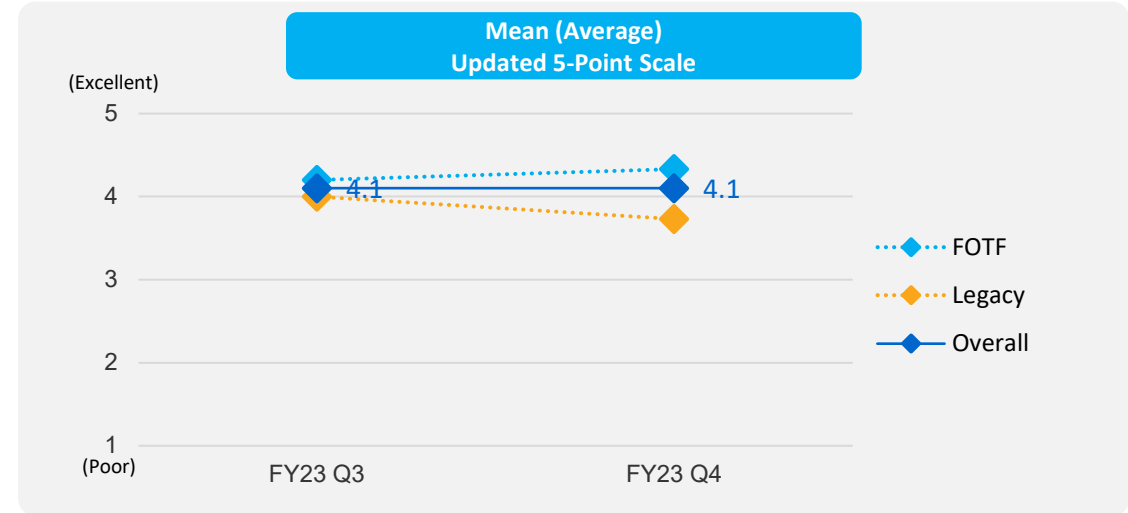


Customer Rating – Interior Cleanliness

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



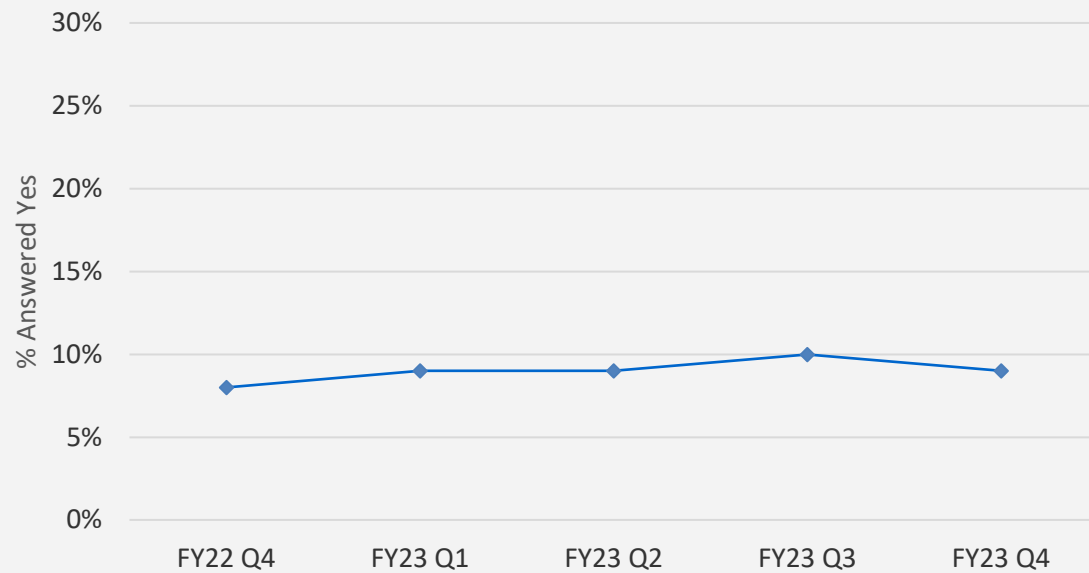
Customer Rating - Temperature



Gender Based Harassment

Have you experienced gender-based sexual harassment at BART in the last six months?

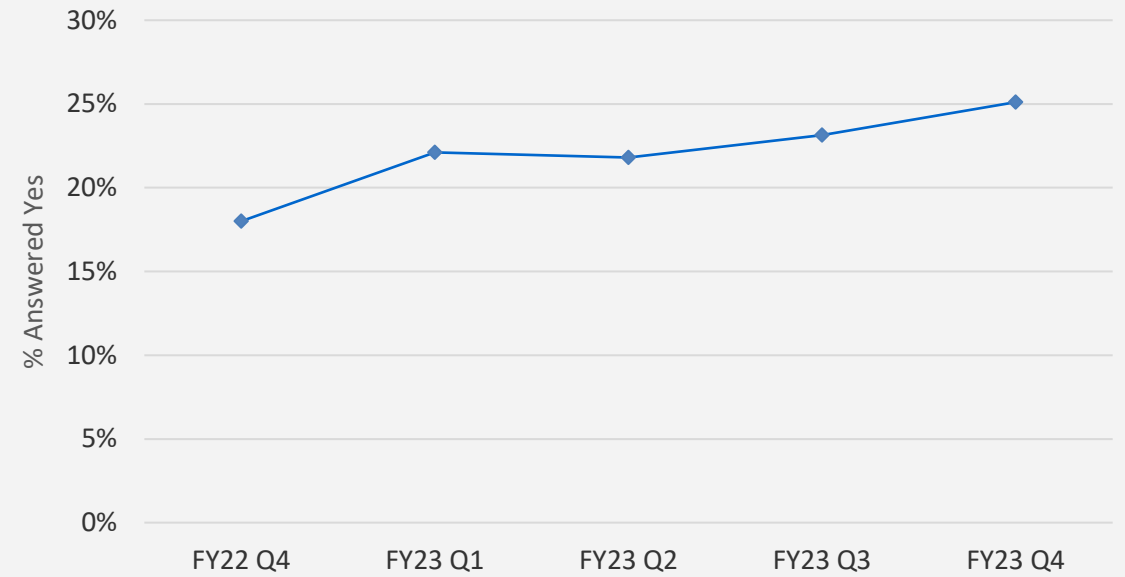
Gender Based Harassment



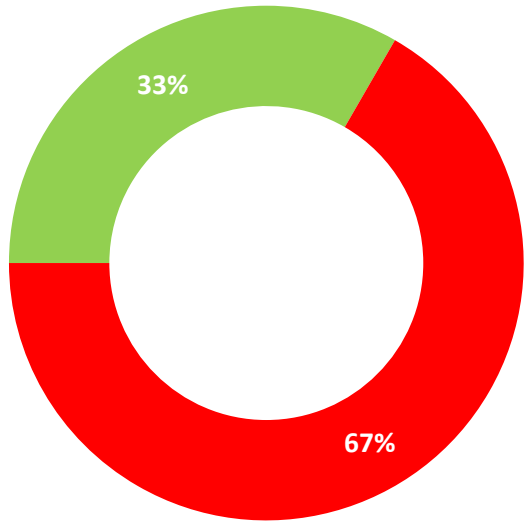
Fare Evasion

Did you see anyone enter or exit the Station without paying their fare today?

Fare Evasion



Summary – Safety and Security



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

Metric	FY23 Q4	Goal	Change from FY23 Q3	
<i>Safety</i>				
Vehicle Incidents/Million Patrons	0.42	0.6	35.38%	▲
Unscheduled Door Openings/Million Car Miles	0.45	0.2	(2.27%)	▼
Rule Violations Summary/Million Car Miles	0.27	0.25		▼
Station Incidents/Million Patrons	1.41	2	4.72%	▲
OSHA-Recordable Injuries/Illnesses/Per OSHA	12.81	12	6.15%	▲
Lost Time Injuries/Illnesses/Per OSHA	7.81	6.5	1.38%	▲
<i>Security</i>				
Police Response Time per Emergency Incident	3.96	5	(7.02%)	▼
Bike Thefts	30	50	(114.28%)	▼
Auto Thefts/1,000 Parking Spaces	4.09	2	(71.30%)	▼
Auto Burglaries/1,000 Parking Spaces	4.32	3.5	(31.64%)	▼
BART Police Presence	9.1%	12%	(5.69%)	▼
Crimes Against Persons/Million Riders	9.15	2	(14.97%)	▼

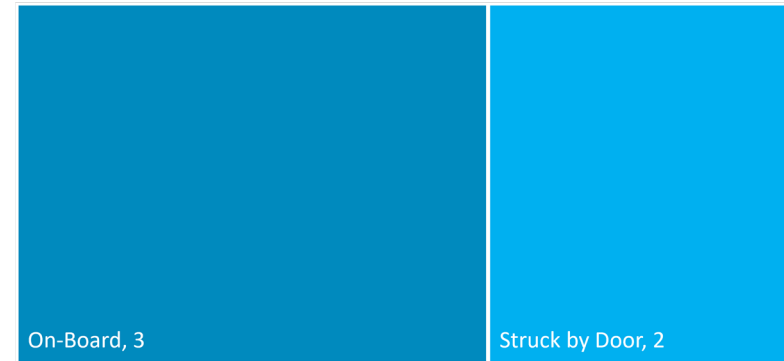
Station Incidents

Breakdown of 17 Station Incidents

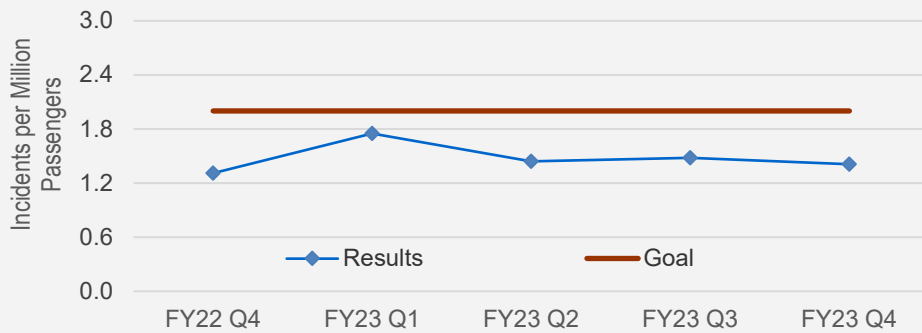


Vehicle Incidents

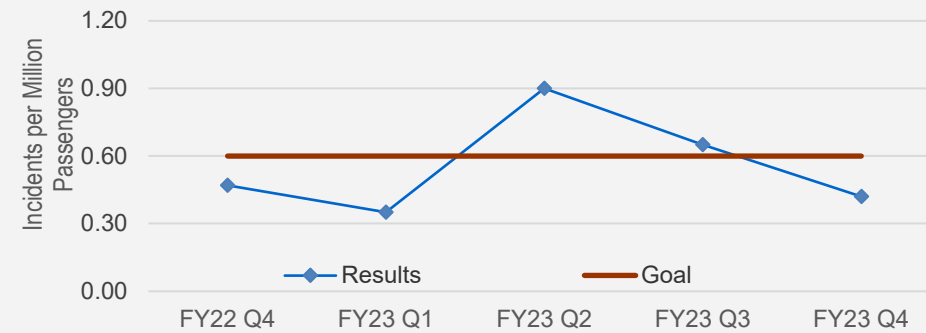
Breakdown of 5 Vehicle Incidents



Station Incidents

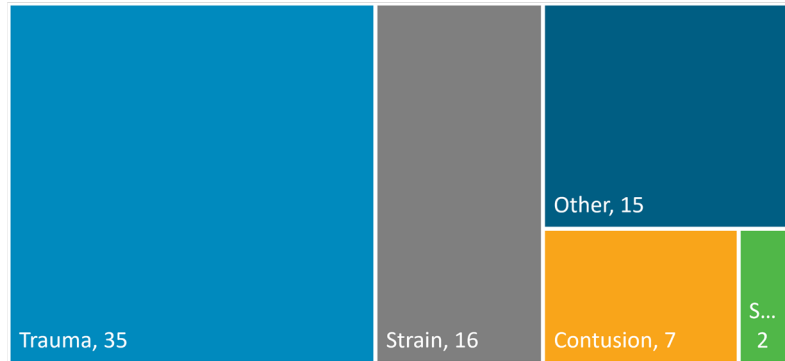


Vehicle Incidents



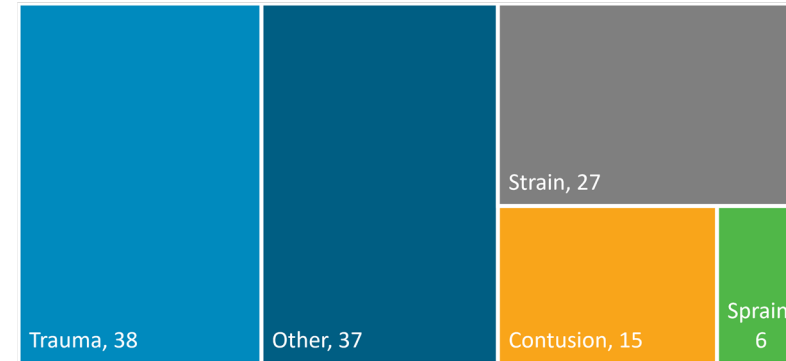
Lost Time due to Injuries

Breakdown of 75 Lost Time Cases

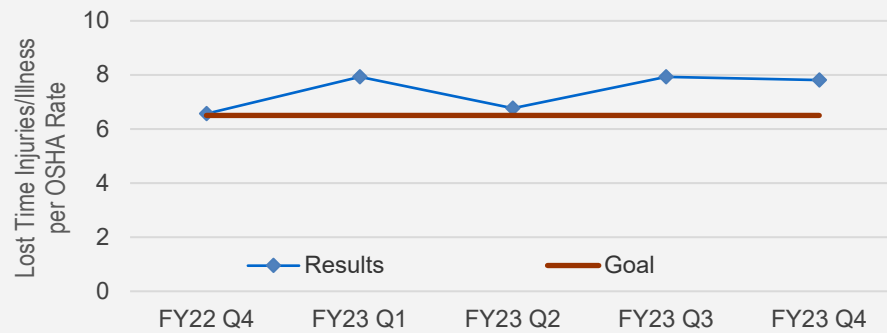


OSHA Recordable Injuries

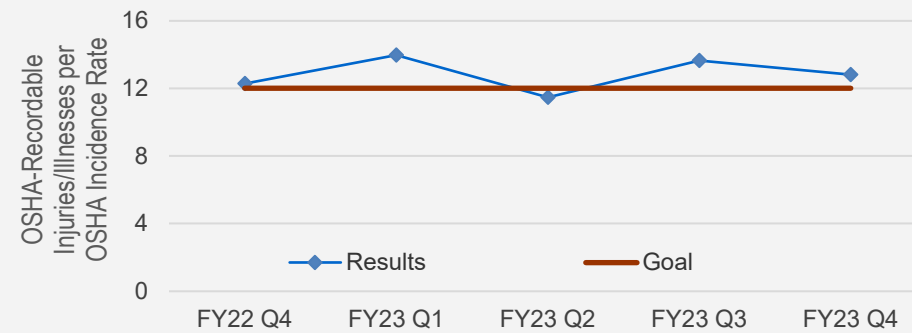
Breakdown of Recordable Injuries



Lost Time due to Injuries



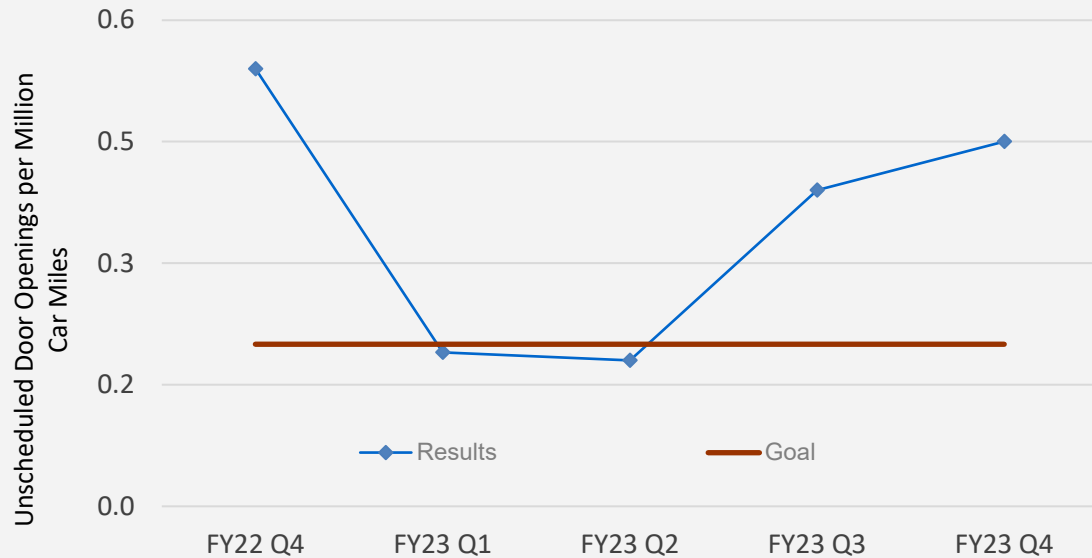
OSHA Recordable Injuries



Unscheduled Door Openings

- 10 Unscheduled Door Openings in FY23 Q4
 - 8 due to Passenger Action
 - 1 Human Error by Train Operator
 - 1 Equipment Failure

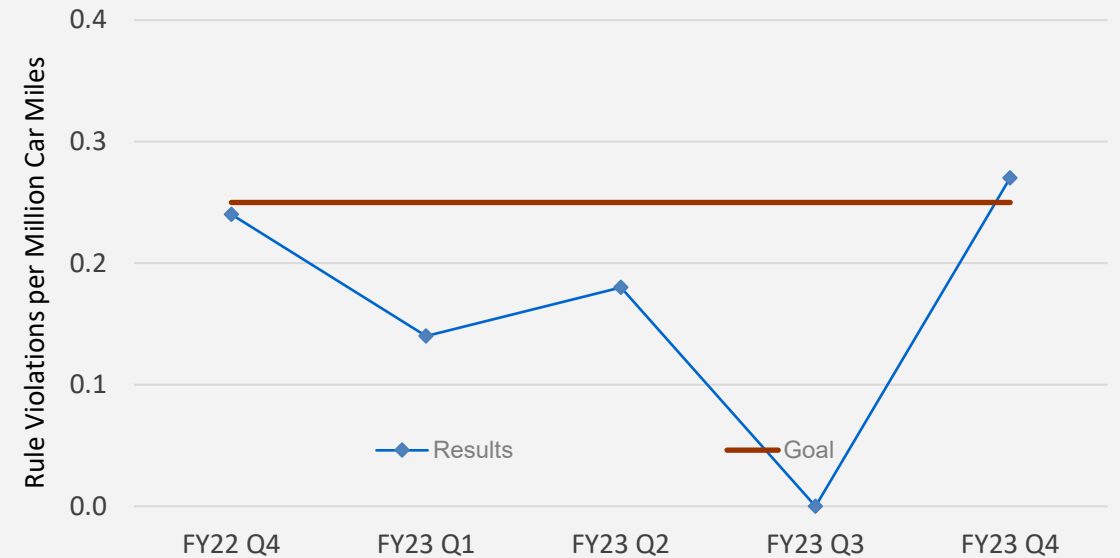
Unscheduled Door Openings



Rule Violations

- 6 Rule Violations for FY23 Q4

Rule Violations

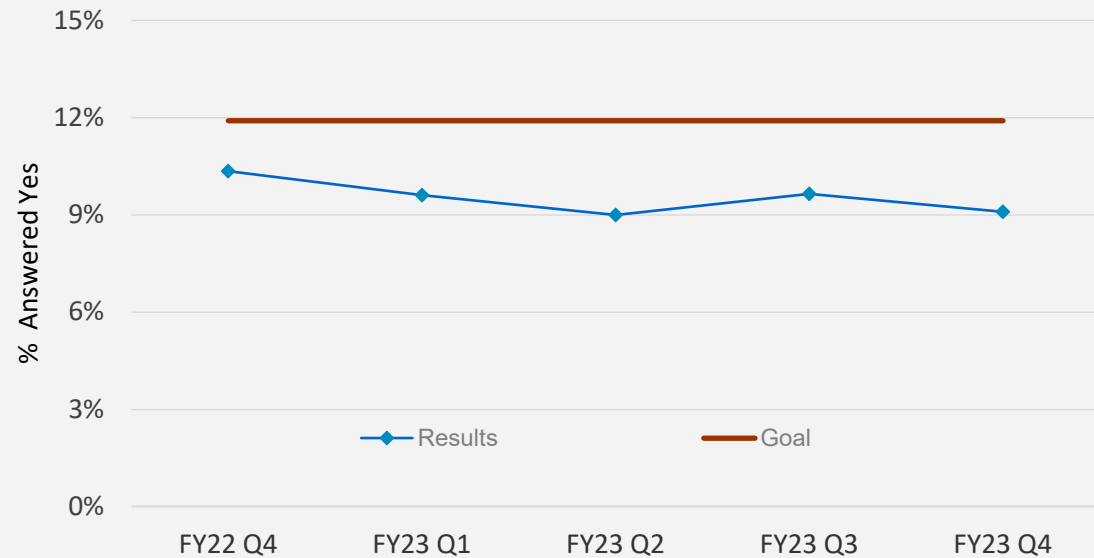


Police Presence

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

BART Police Presence

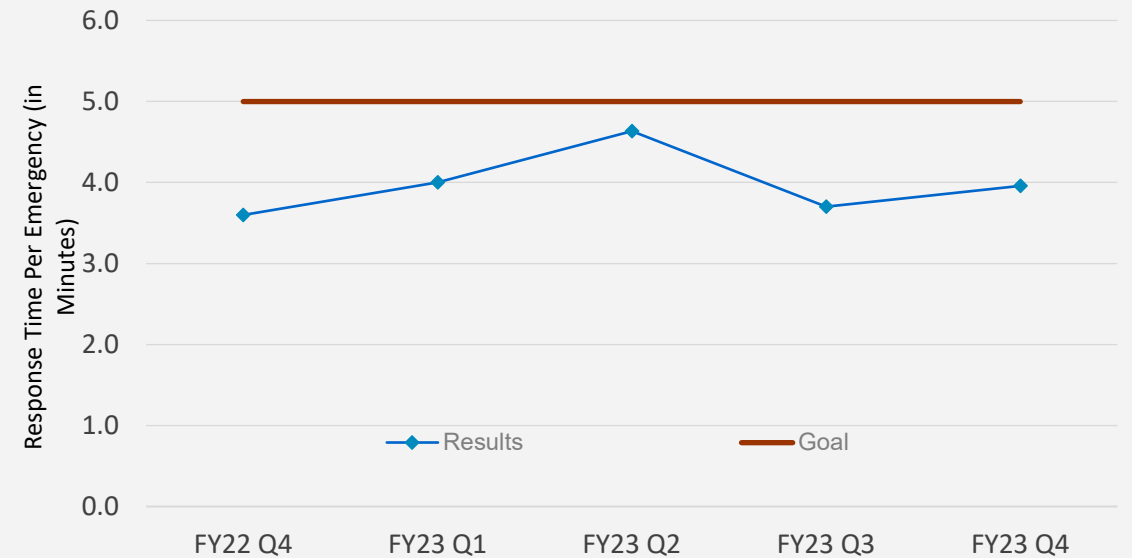
Did you see BART Police in the station today?
 Did you see BART Police outside the station today?
 Did you see BART Police on this train?



Police Response Time

- Goal met

BART Police Response Time



Bike Theft

- Goal met

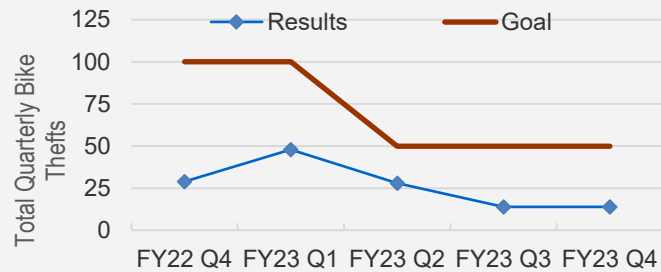
Auto Theft

- Goal not met

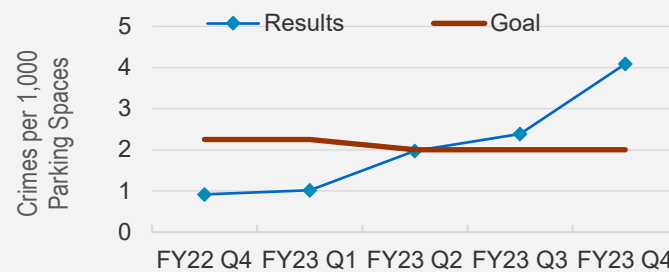
Auto Burglary

- Goal not met

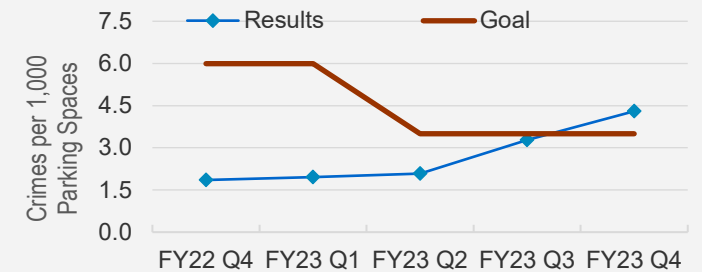
Bike Theft



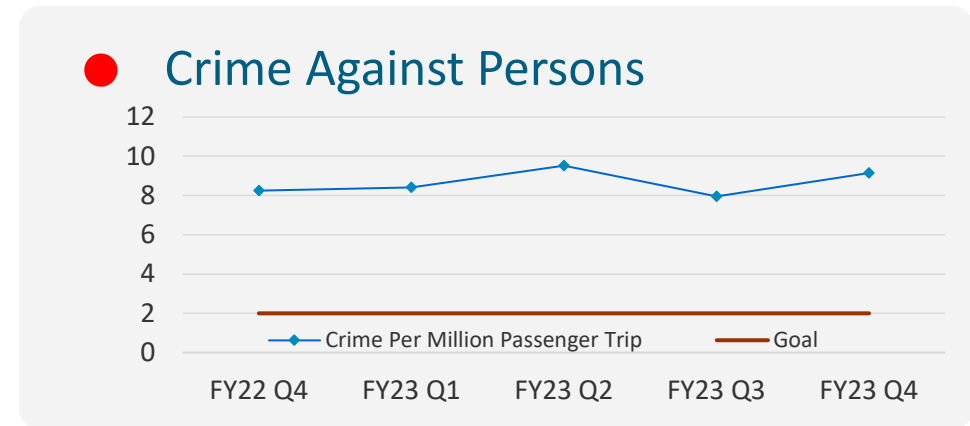
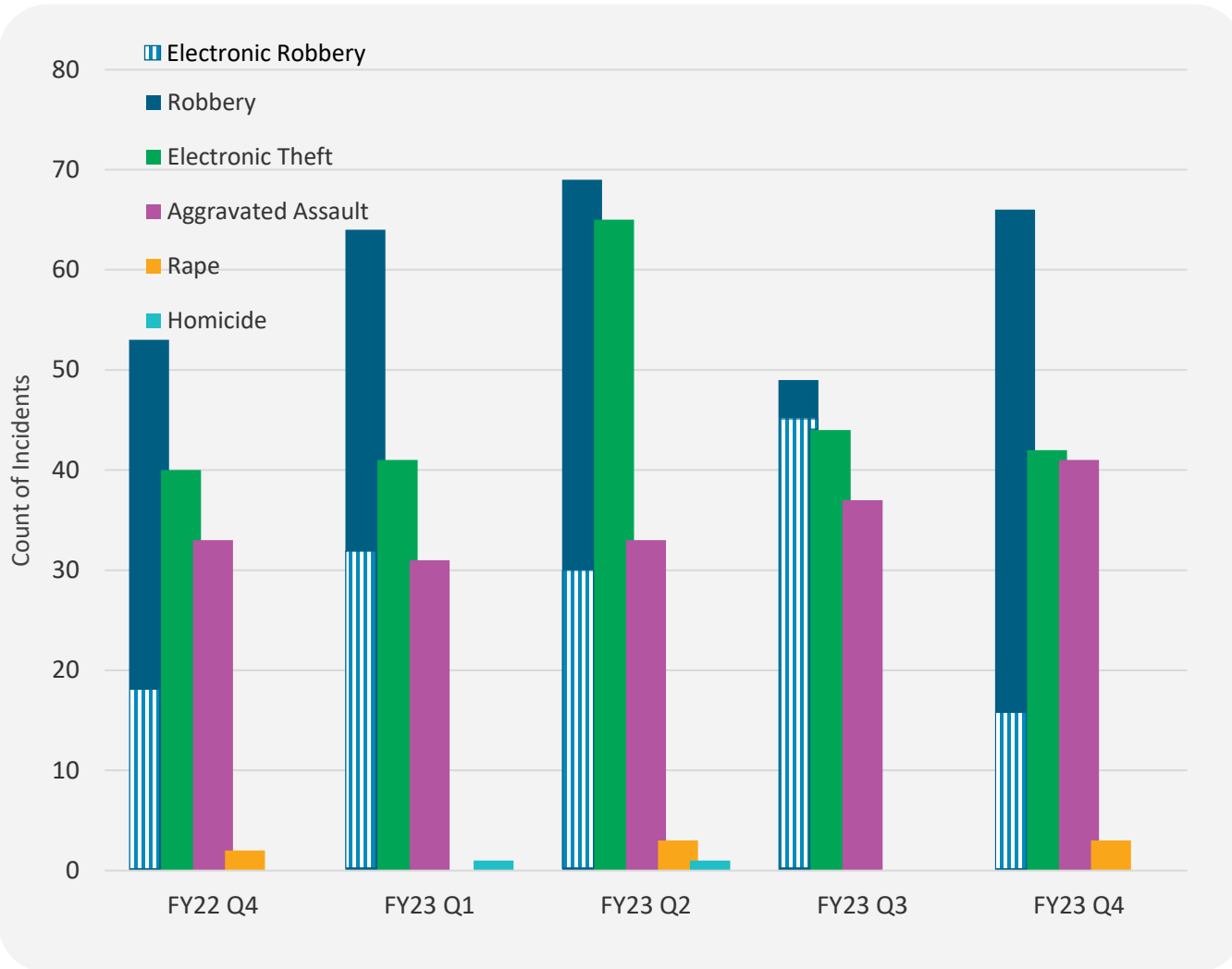
Auto Theft



Auto Burglary



Crime – Against Persons



Progressive Policing Data – July 2023

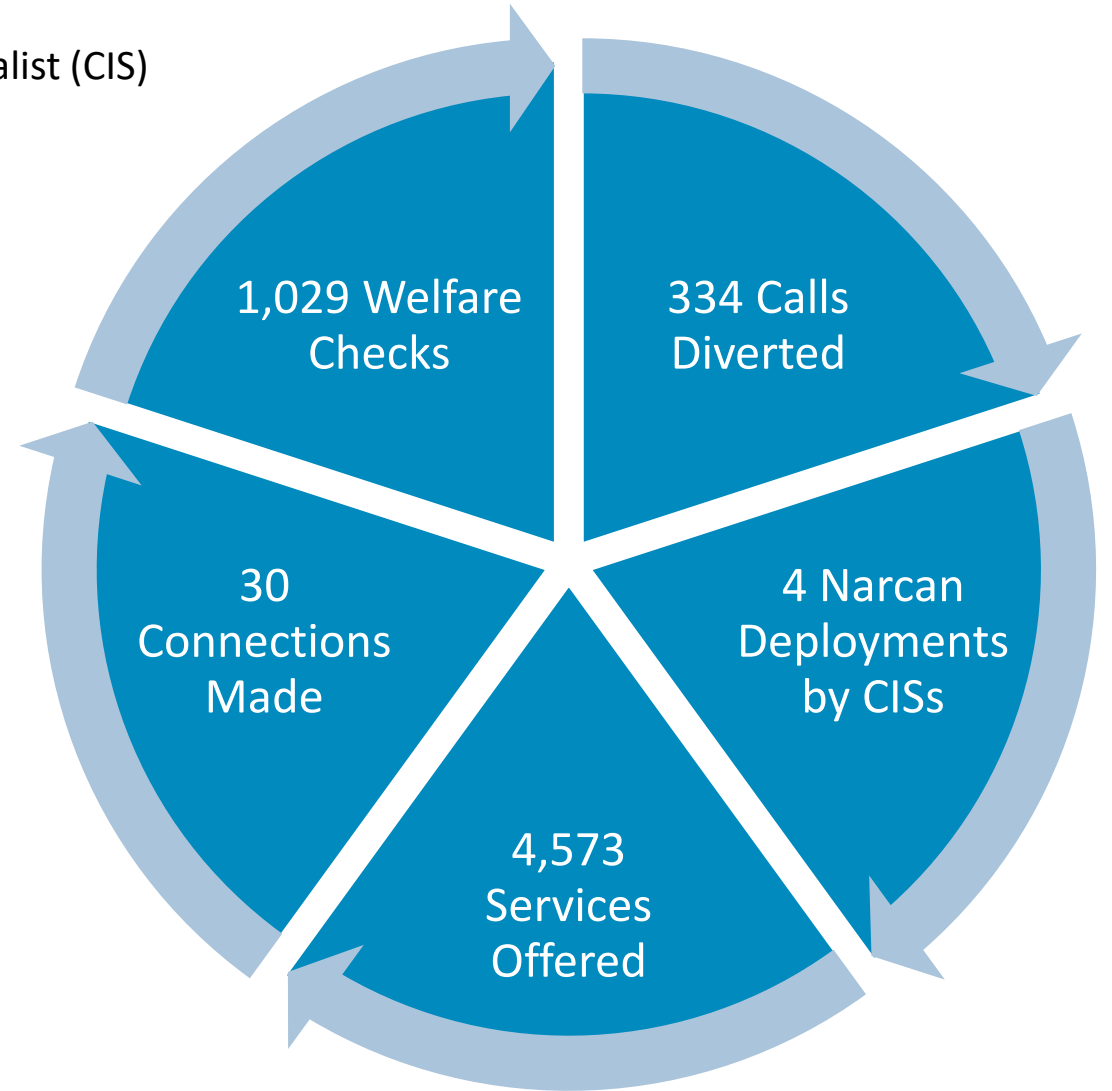
Progressive Policing Contacts are recorded by Crisis Intervention Specialist (CIS)
Staff based on their daily interactions

Bitfocus Application

- *Software went live on July 1st*
- *Real-time field data instead of manual reports*

Additional Data Points

- *310 Refused services*
- *452 Informational resources provided*



Questions?

