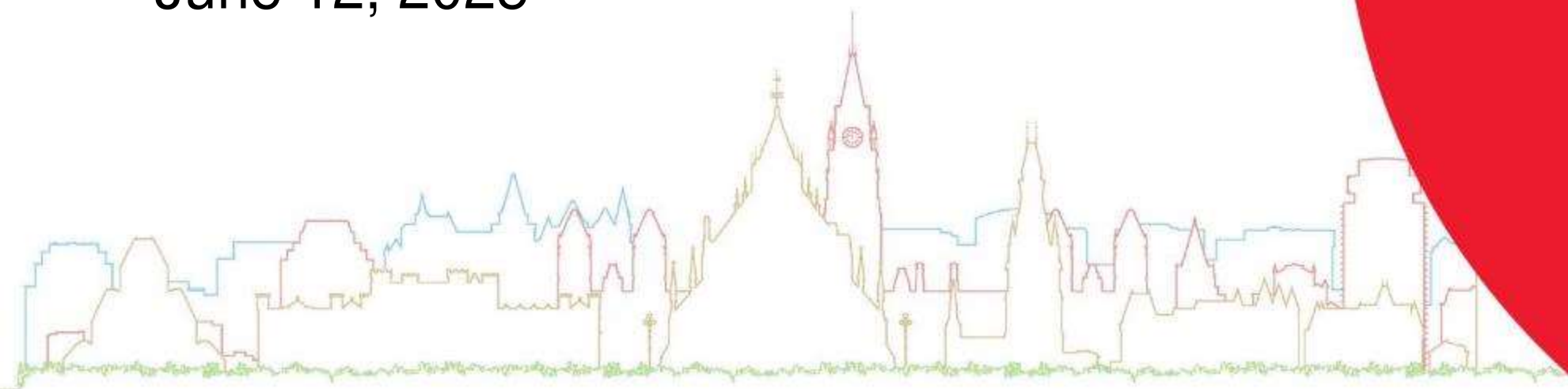
OC Transpo Update

Para Transpo, Rail and Bus

Transit Committee

June 12, 2025



GM updates

New Ways to Bus implemented

- Biggest service change in OC Transpo history
- Marks an important step in our goal of achieving 99.5% service delivery
- Staff continue to monitor service closely; update on overall system performance in September

KPIs on our website

- Service-related KPIs now live on octranspo.com and updated monthly
- In line with our commitment to transparency

Employee Recognition Month

- Activities and events planned throughout June
- Employee festival for all staff and family

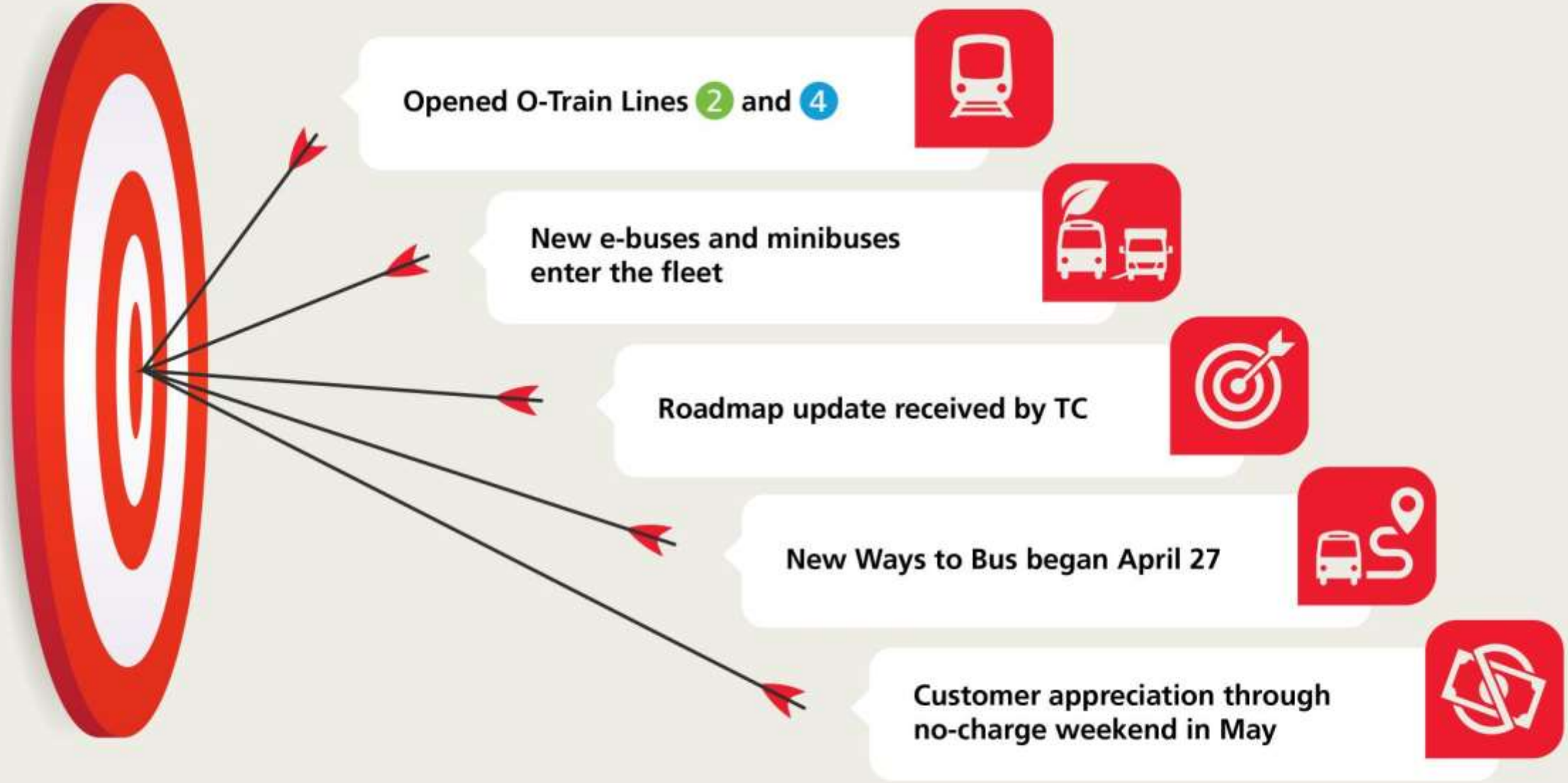
Doors Open at Trim Station

- Doors were open at Trim Station last weekend
- Residents got a sneak peek at a station on the O-Train Line 1 east extension

Doors Open at Trim Station

No-charge weekend

Achievements | Q1-Q2 2025



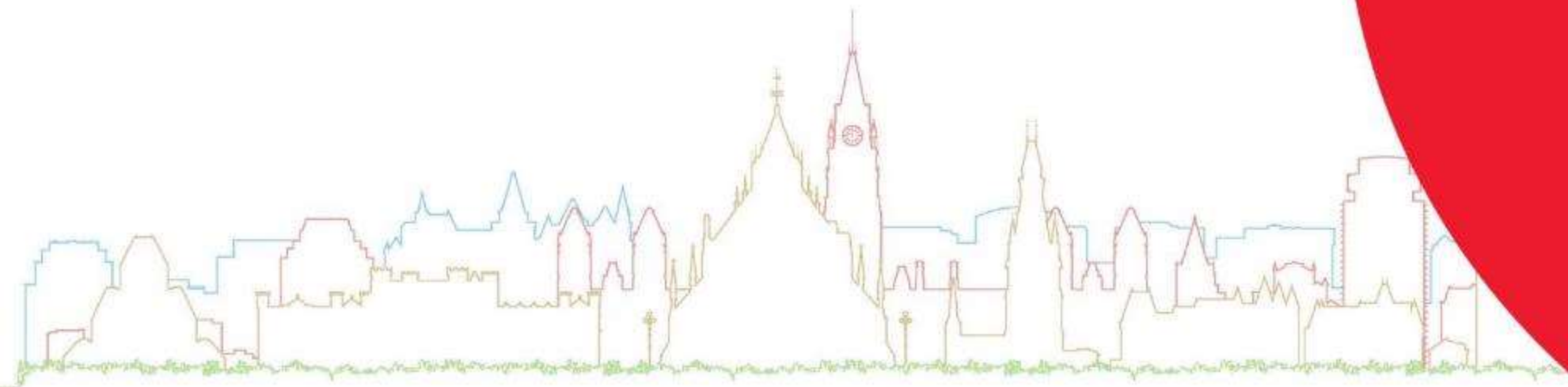
- Opened O-Train Lines 2 and 4
- New e-buses and minibuses enter the fleet
- Roadmap update received by TC
- New Ways to Bus began April 27
- Customer appreciation through no-charge weekend in May

The road ahead | Q3-Q4 2025

- Stage 2 O-Train East – technical briefing
- O-Train Line 1 – status update
- Summer service and special events
- Transportation Master Plan and Transit Long-Range Financial Plan
- Facility construction and conversion for new bus fleet
- Budget 2026

June 2025

O-Train Line 1 updates and special event preparations



Station cleanliness

Last spring, OC Transpo enhanced oversight of station cleanliness. Oversight observations are now performed through:

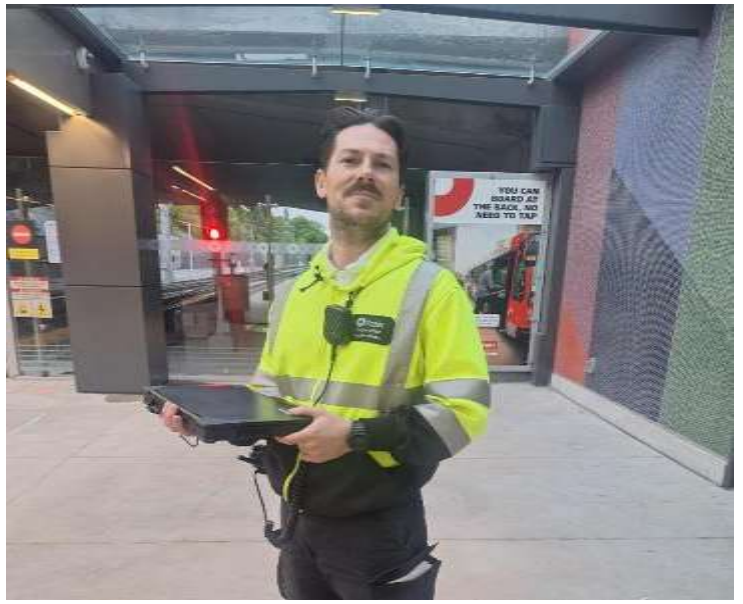
- Review of CCTV cameras
- In-person station assessments

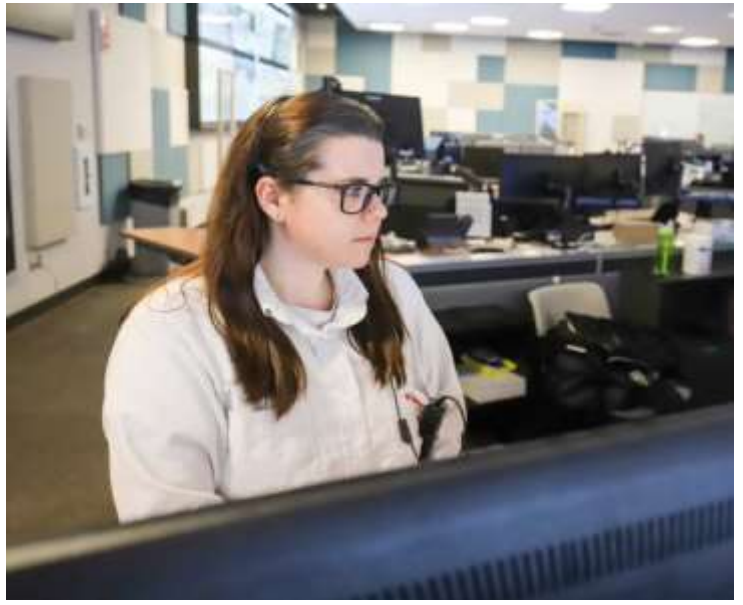
Station monitoring

- OC Transpo employees circulate throughout the system regularly to report issues
- Work orders are generated immediately
- Procedures are adjusted to address repetitive issues

Work order follow-up

- OC Transpo verifies response and rectification times to ensure contractual compliance

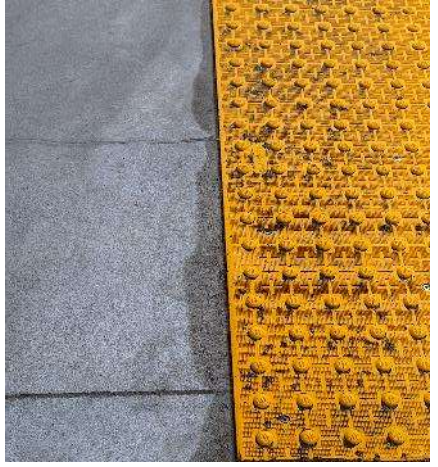




Station cleanliness

Areas of focus:

- Platform cleanliness
- Escalators
  - New equipment has greatly improved treads
  - Plan to improve landing plates in development
- Common touch points
  - Ticket vending machines
  - Door handles
  - Elevator buttons
  - Fare gates



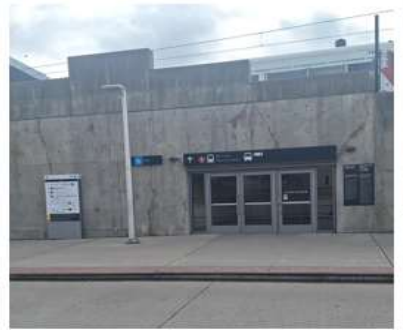
Station cleanliness

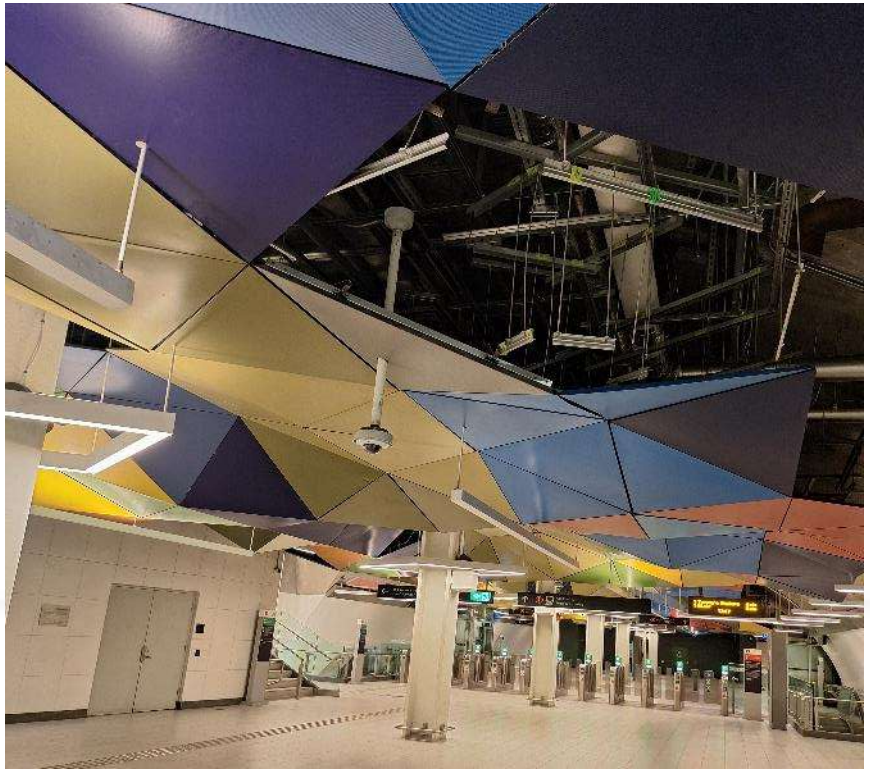
Seasonal cleaning

- Leveraging planned maintenance
- Pressure washing glazing
- Stainless steel treatment
- Coordinated to coincide with other City and ByWard Market District Authority
- Seasonal equipment for cobweb removal that was successfully used last year will be deployed again in the fall

Leak remediation

- Parliament artwork restoration
- Leaks affecting public pathways
- Continuous monitoring within tunnels



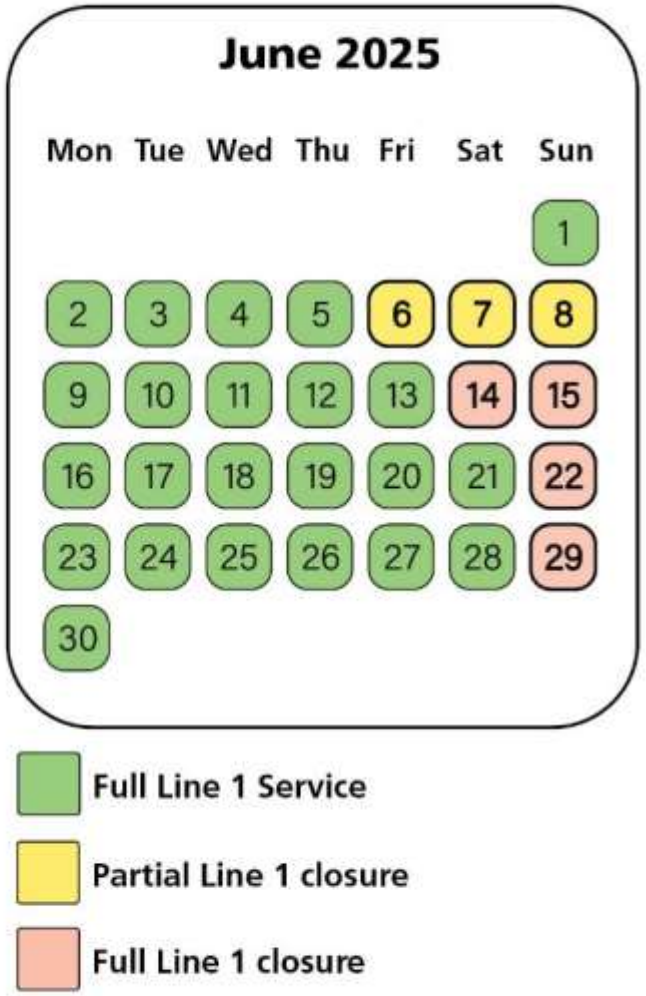


O-Train Line 1 maintenance program

- In accordance with the Project Agreement, the RTG maintenance program is currently underway for O-Train Line 1
- In collaboration with RTG, service impacts reduced from 14 days to six
- In developing the plan, current bus fleet challenges were considered
- We are also leveraging this opportunity to complete Stage 2 work wherever possible
- Additional service adjustments will be required to complete testing activities later this summer

Line 1 maintenance service impacts

Date	Time	Line 1 and R1 Service
June 6	After 9 pm	uOttawa ⟷ Blair Tunney's Pasture ⟷ Hurdman
June 7	After 10 pm	Tunney's Pasture ⟷ uOttawa
June 8	After 7 pm	Rideau ⟷ Blair
June 12	**O-Train Line 1 operating normally**	
June 14-15	All day	No train service
June 22	8 am to 12 pm	Tunney's Pasture ⟷ Blair
June 29	8 am to 12 pm	Tunney's Pasture ⟷ Blair



Line 1 maintenance work

- Work includes a combination of regular maintenance and lifecycle activities as well as work to support continued improvements to the reliability and sustainability of the system
- Key work includes:
  - Localized rail replacement at specific locations
  - Ongoing upgrades to the supporting wires (parafils) of the overhead catenary system
  - Adjustments to track electrical grounding near Tunney's Pasture Station
  - Line 1 train control server upgrades
  - Traction Power Sub Station maintenance work
- Additional work is anticipated later in the summer and the fall

Special event preparations

- Preparations are well underway to provide supplemental service for many special events this summer, including:
  - Ottawa Redblacks
  - Escapade Music Festival (June 20-22)
  - Canada Day service
  - Bluesfest (July 10-20)
- This is the first year incorporating Lines 2 & 4 into our preparation planning

Special event preparation in the TOCC

- Coordinated planning with our City partners, including OPS, Traffic Management, Public Works
- Internal OC Transpo preparation working groups
- TOCC Command & Control Plan
- Activation of the Service Command Centre

Performance indicators

Employee Occurrences

286

Previous Year: 273 (+4.8%)

%Change in number of reported Occurrences from previous year

Automated Red Light Infractions

15

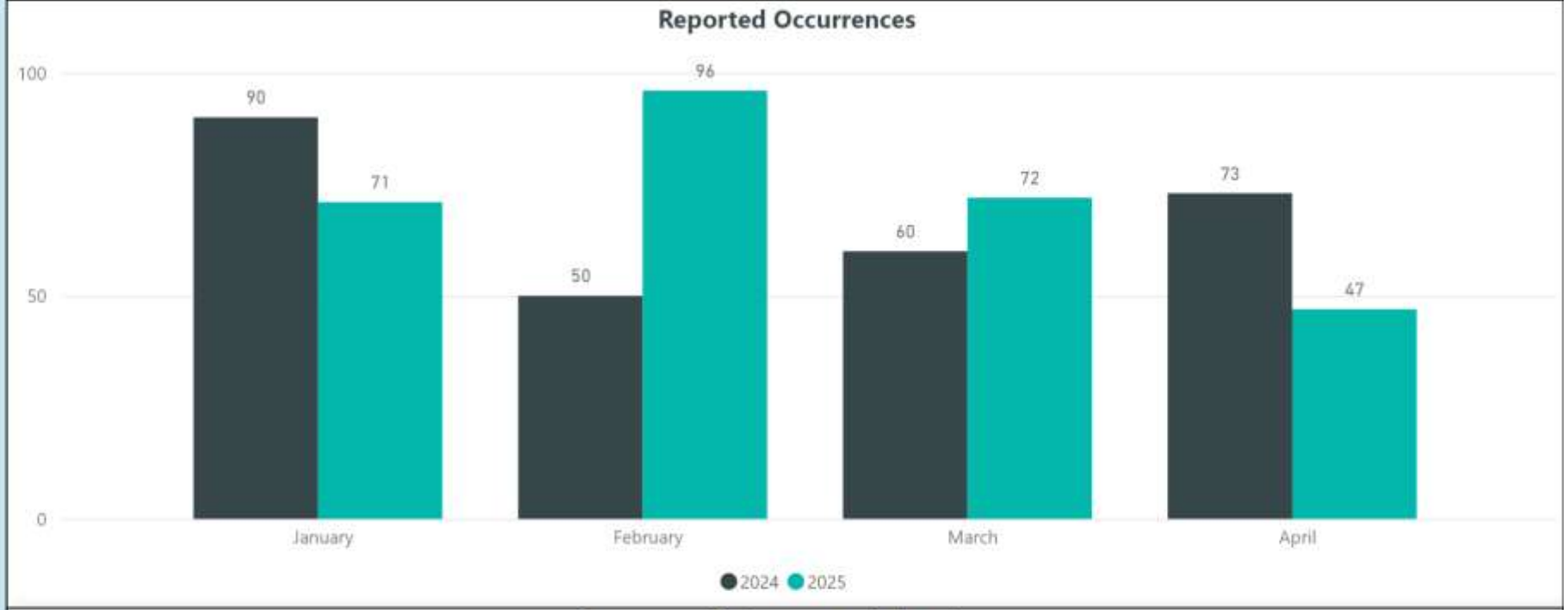
Previous Year: 15 (+0%)

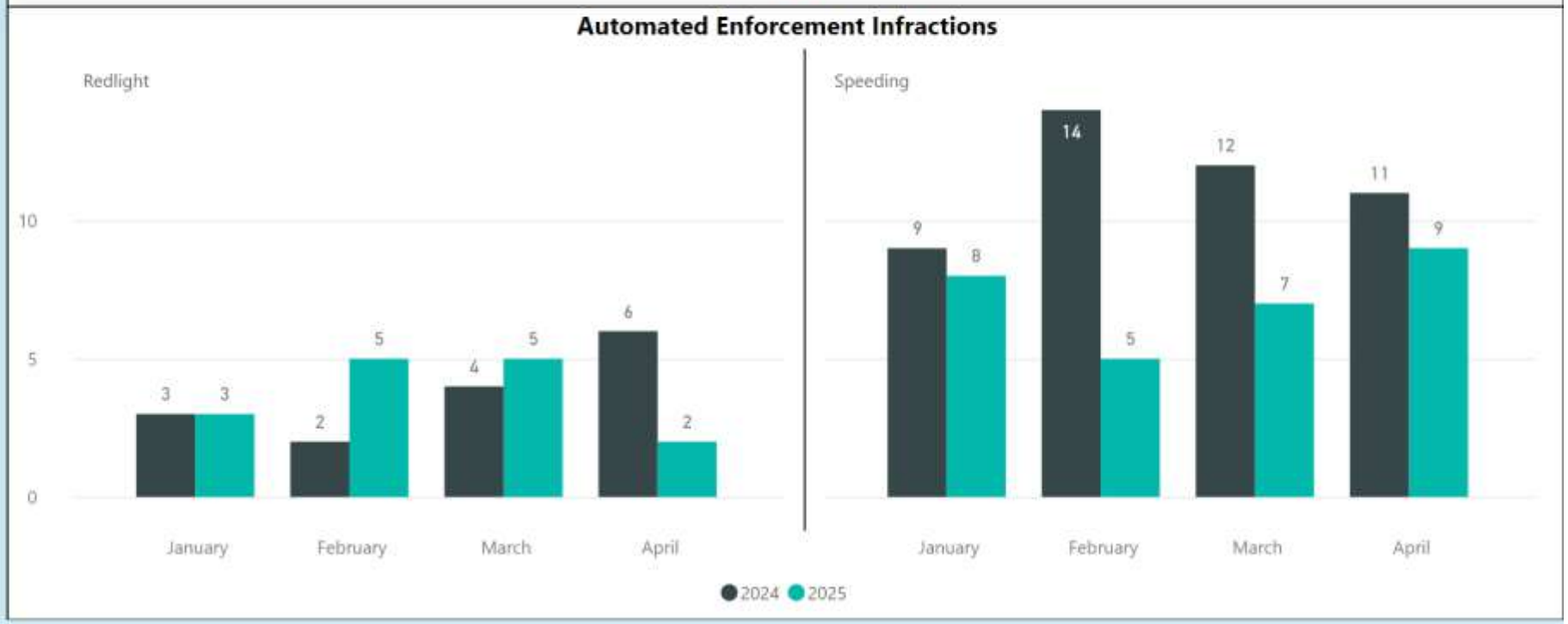
Automated Speed Enforcement Infractions

29

Previous Year: 46 (-37%)

%Change in number of Infractions from previous year





Customer Injury Rate

Year to Date

0.96

SMS Target: 1.036

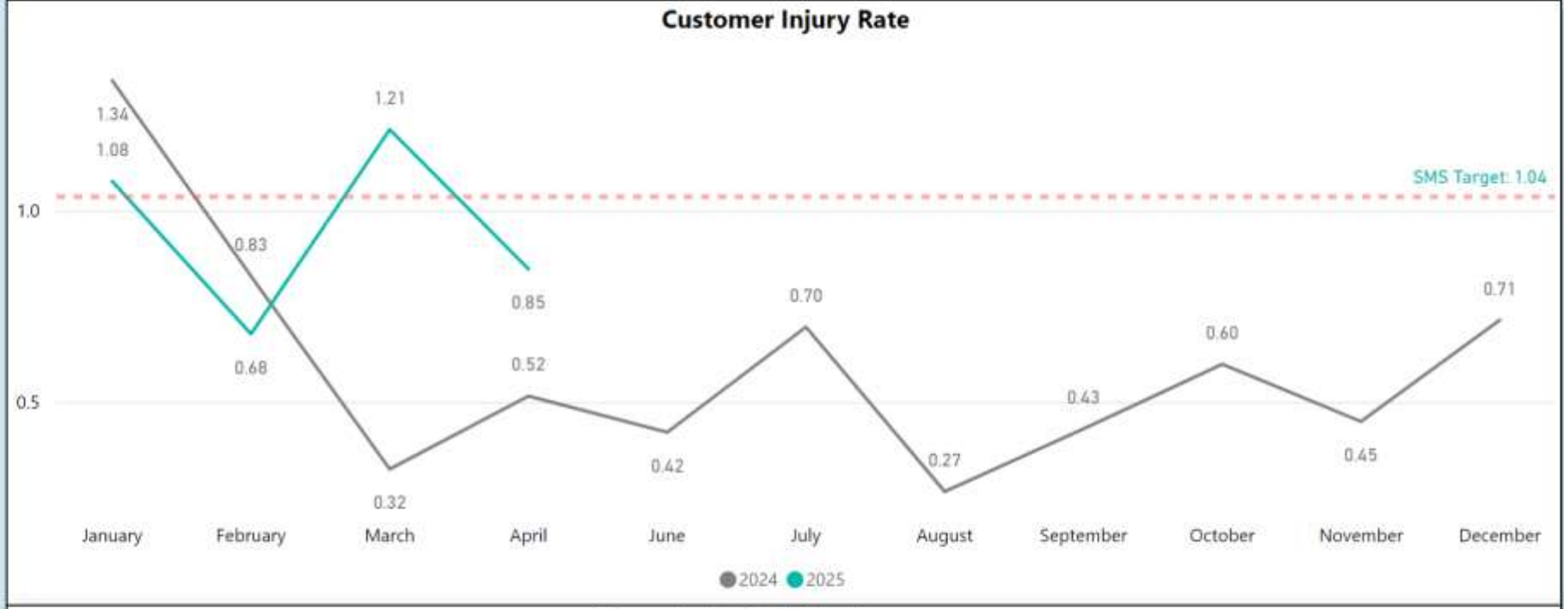
Customer injuries per 1M passenger trips

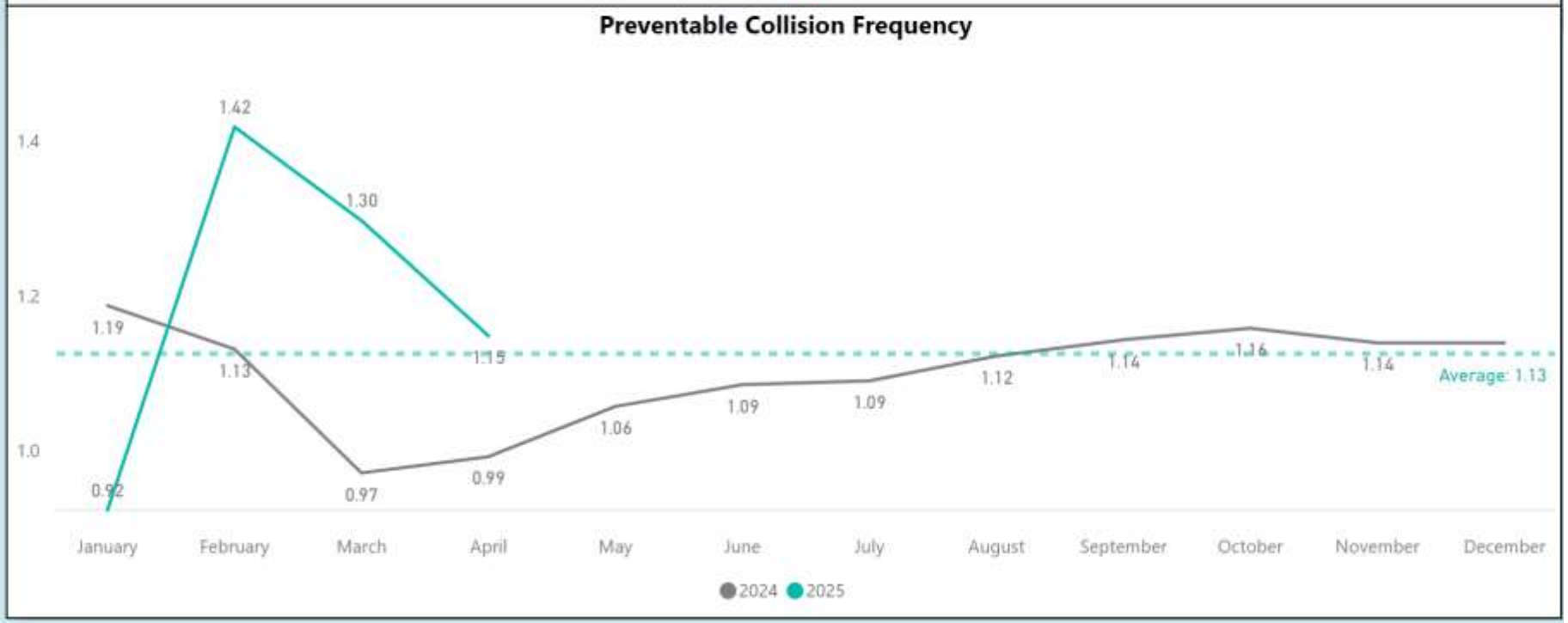
Preventable Collision Frequency

1.15

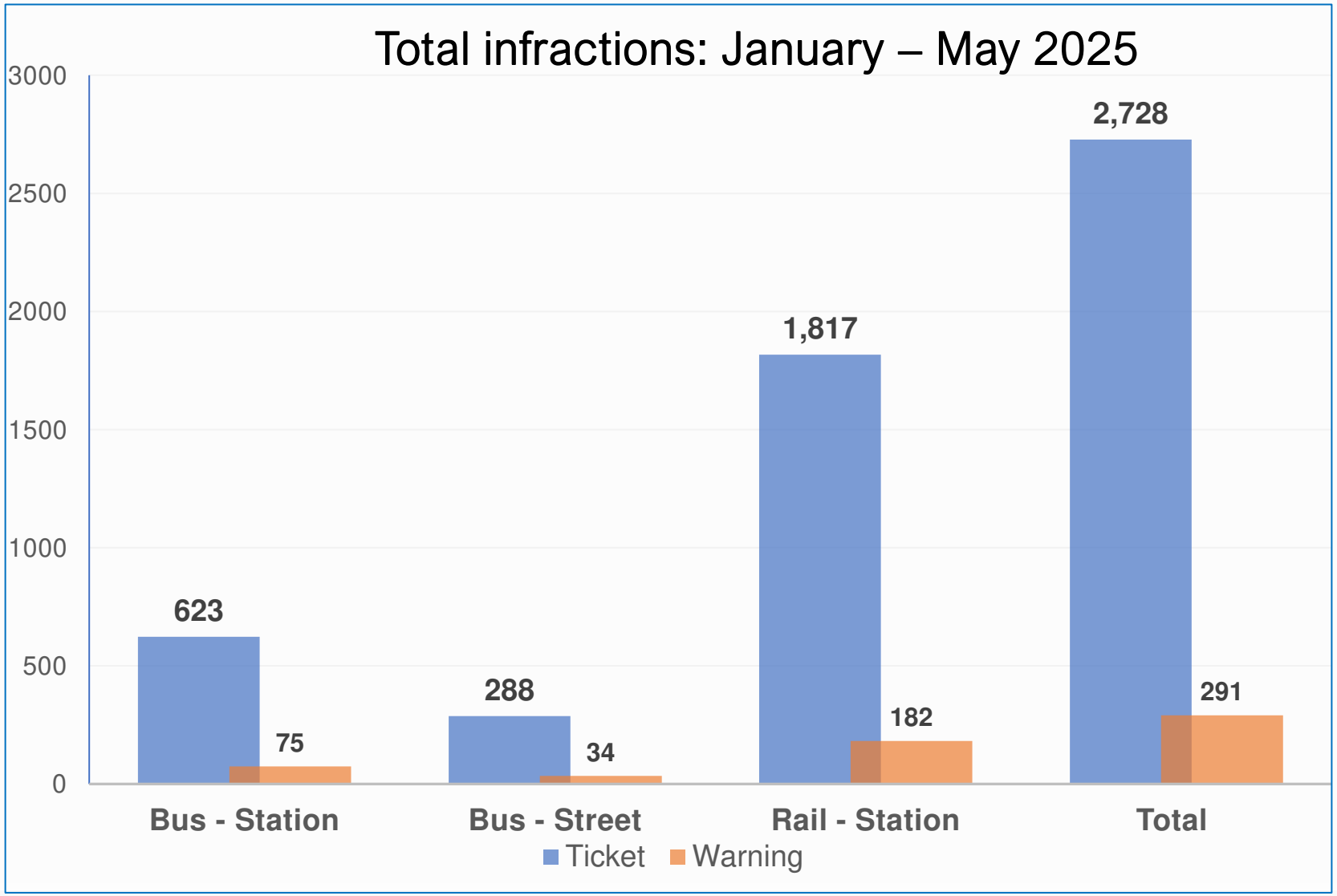
SMS Target: 0.69

Number of preventable collisions per 100,000 Km Driven

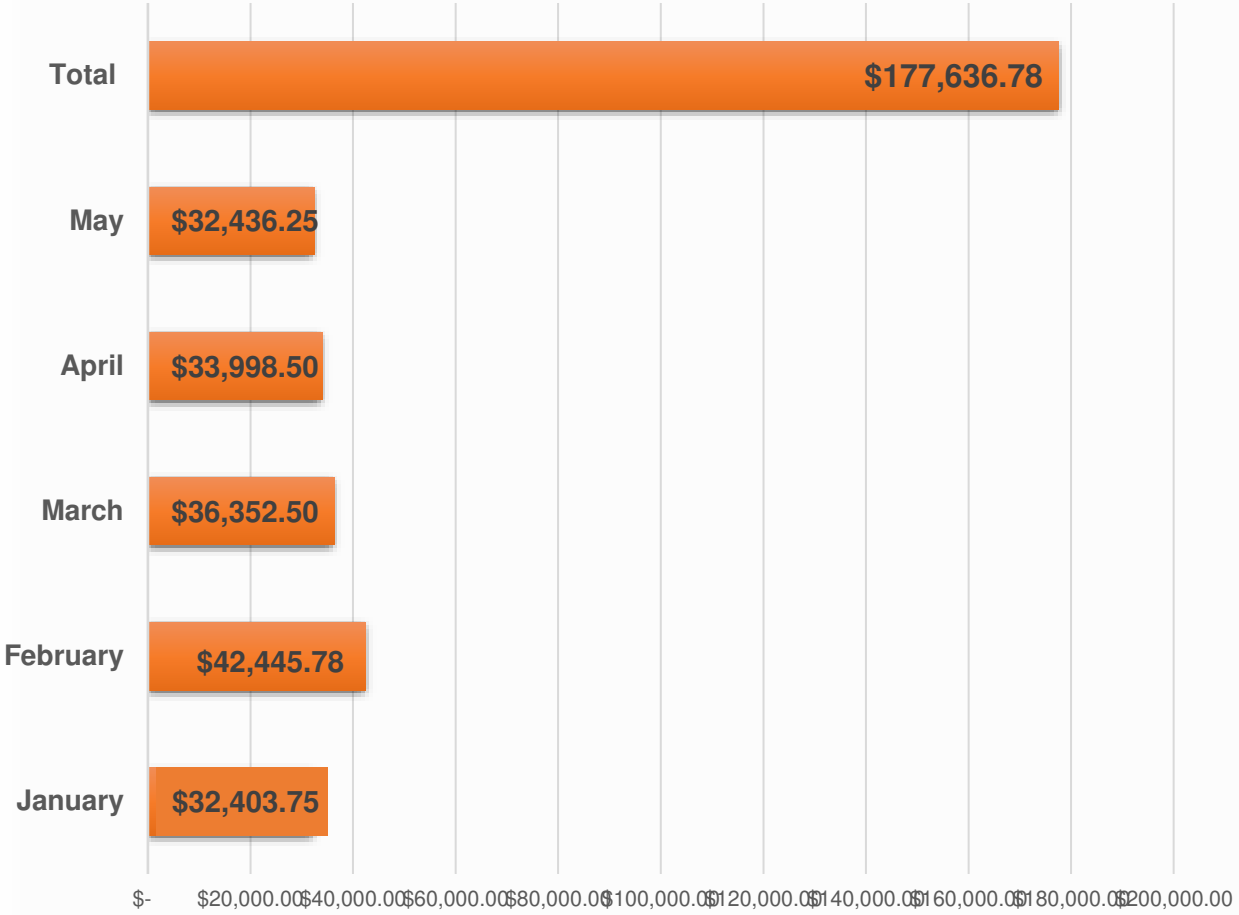




Fare compliance by the numbers

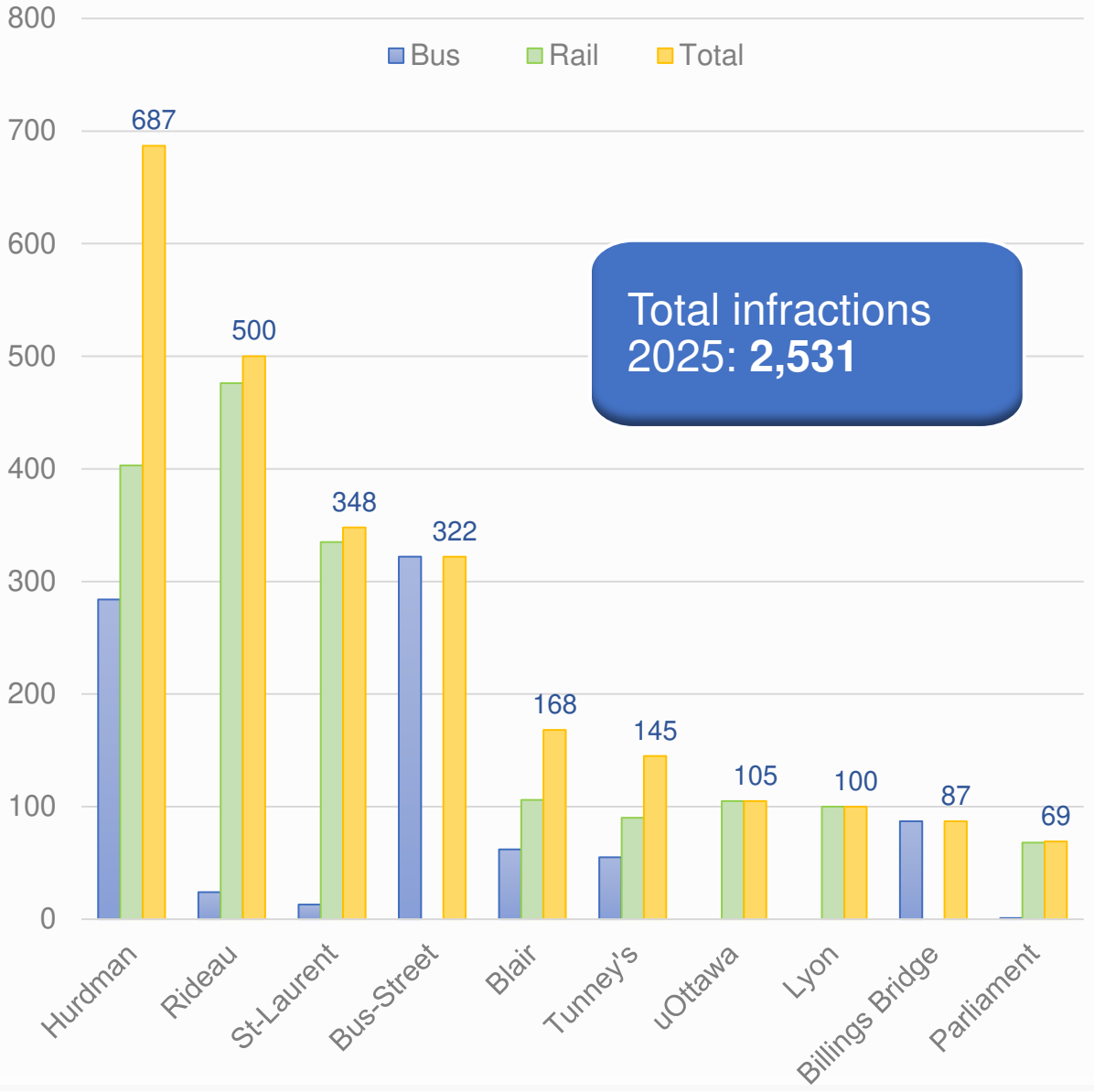


Fare enforcement revenue (paid)



Total revenue 2025:
$177,636.78

Top 10 fare enforcement locations



Total infractions
2025: **2,531**

Bus and O-Train ridership

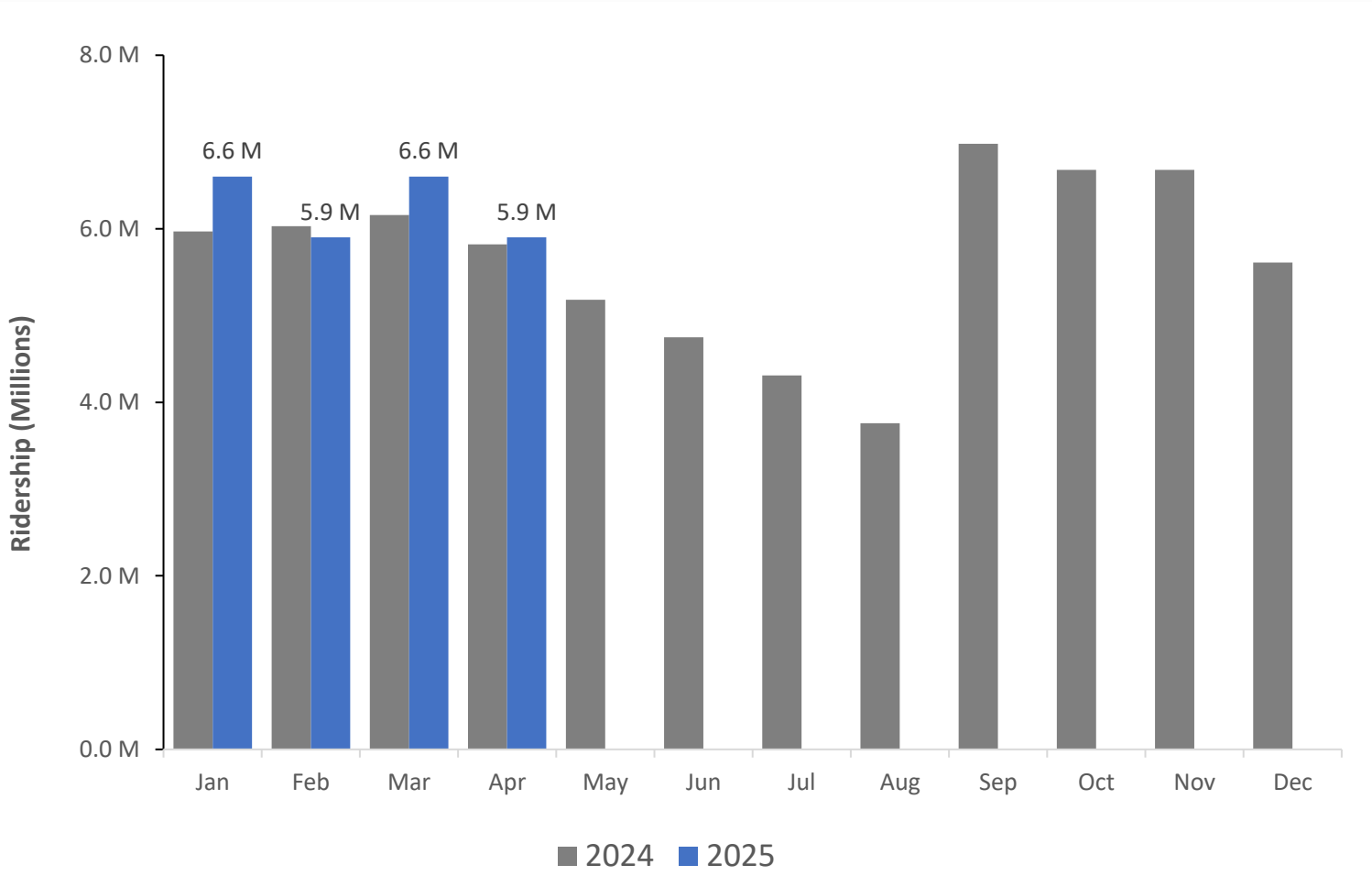
OC Transpo

12-month total ridership

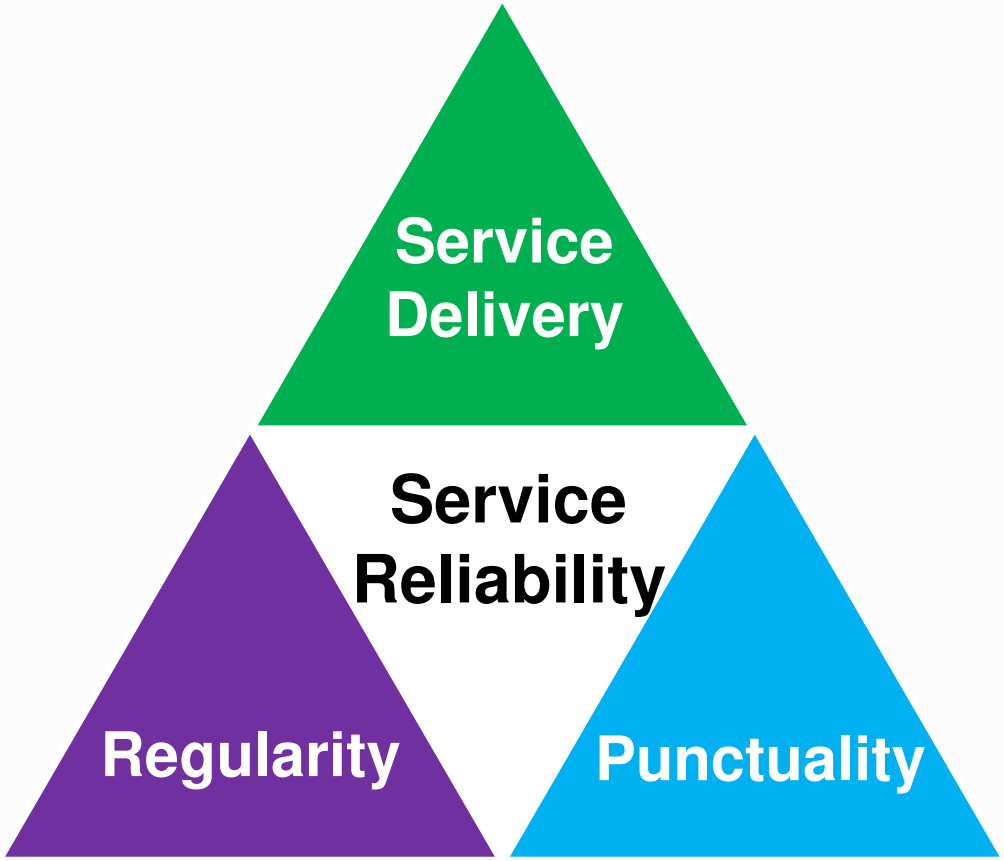
69.0 M

0.1% lower than previous month

5% higher than previous year



Service reliability



Service Delivery

Degree to which planned trips are delivered
Target 99.5%

Regularity

For frequent routes, measures whether trips are evenly spaced
target 85%

Punctuality

For less frequent routes, measures whether the trips arrive at the stop no more than 1 minute early or 5 minutes late
target 85%

Bus service reliability

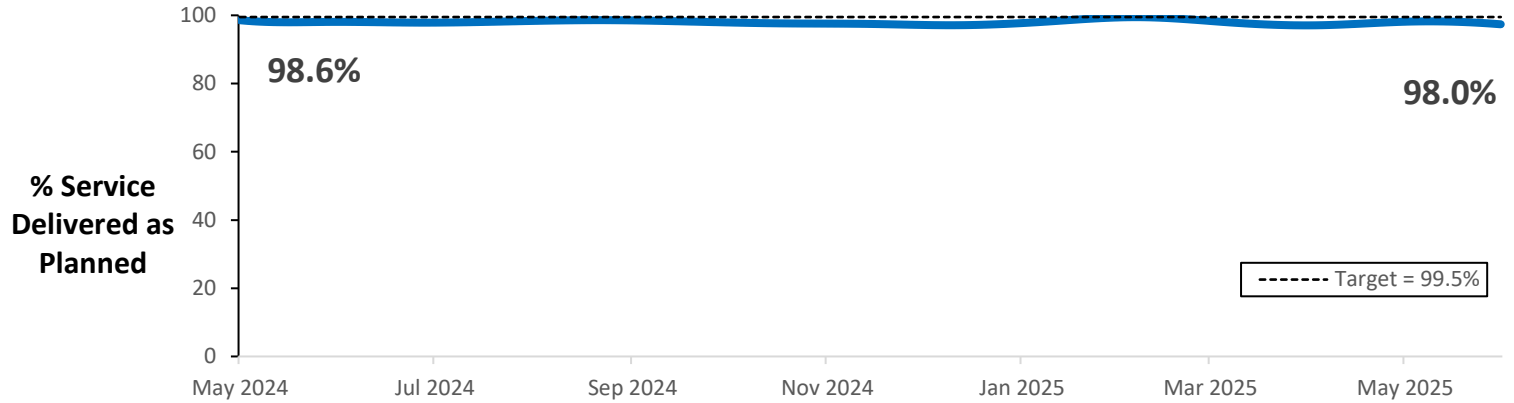
% of service delivered vs. planned

12-month average service delivery

97.9%

1.6% lower than target

Same as previous month



On-time performance

12-month average
Regularity for frequent routes

81%

4% lower than target

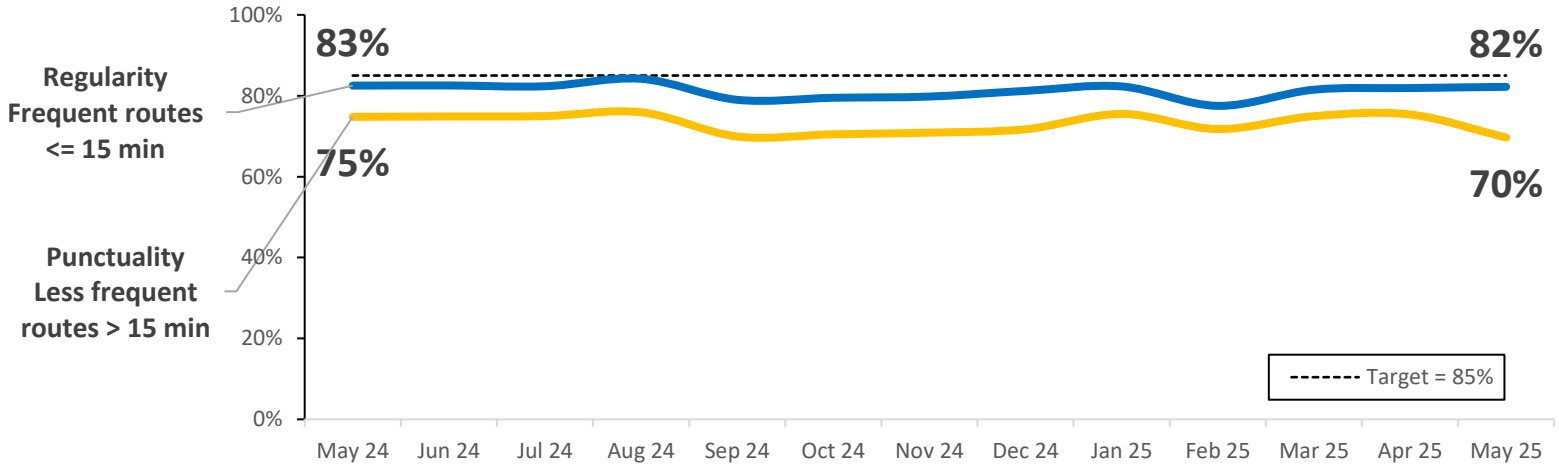
Same as previous month

12-month average
Punctuality for less frequent routes

73%

12% lower than target

Same as previous month

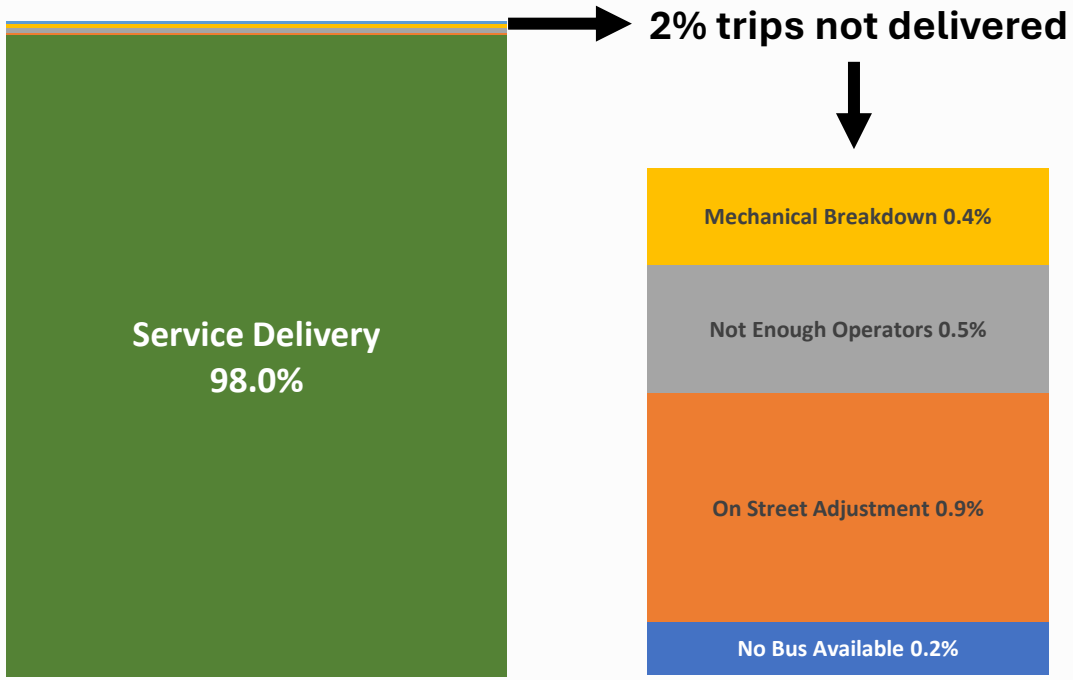


9% of trips arrived more than 1 minute **early**, on less frequent routes

18% of trips arrived more than 5 minutes **late**, on less frequent routes

Bus service reliability

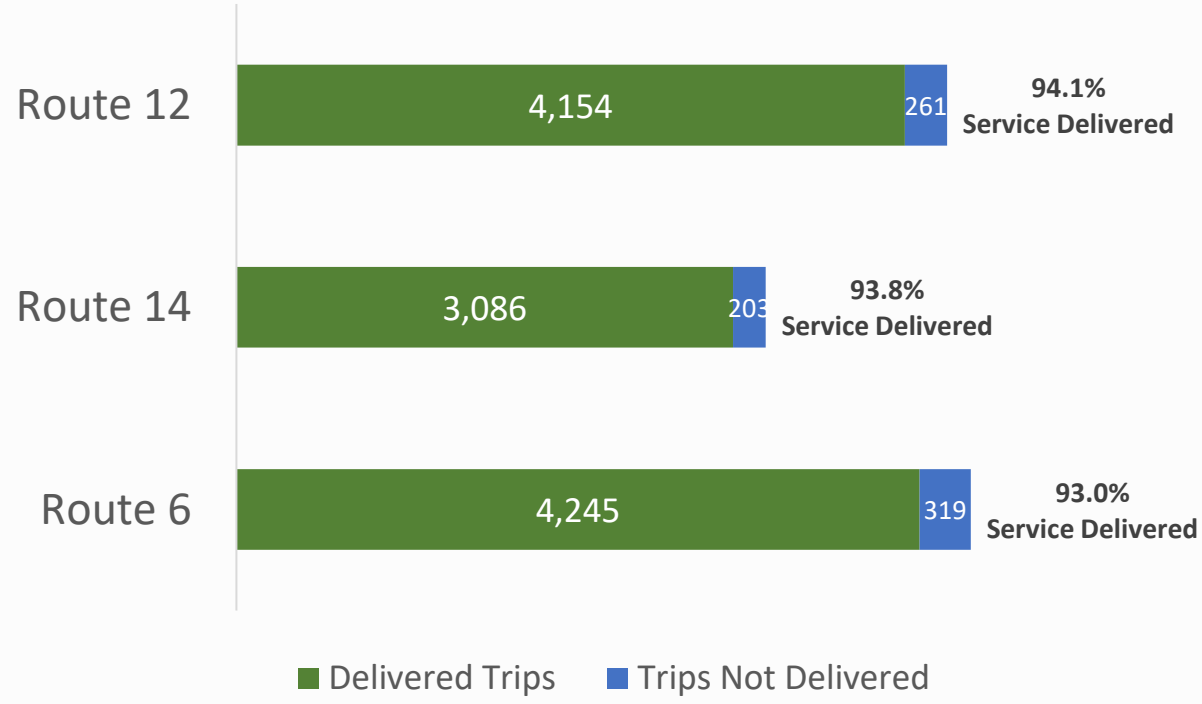
% of service delivered vs. planned details



May 2025

Reasons why trips were not delivered, as percentages of all scheduled trips

Routes with most trips not delivered



O-Train service reliability

O-Train

12-month average service delivery
Line 1

98.9%

0.6% lower than target
Same as previous month

May 2025 average service delivery
Line 1

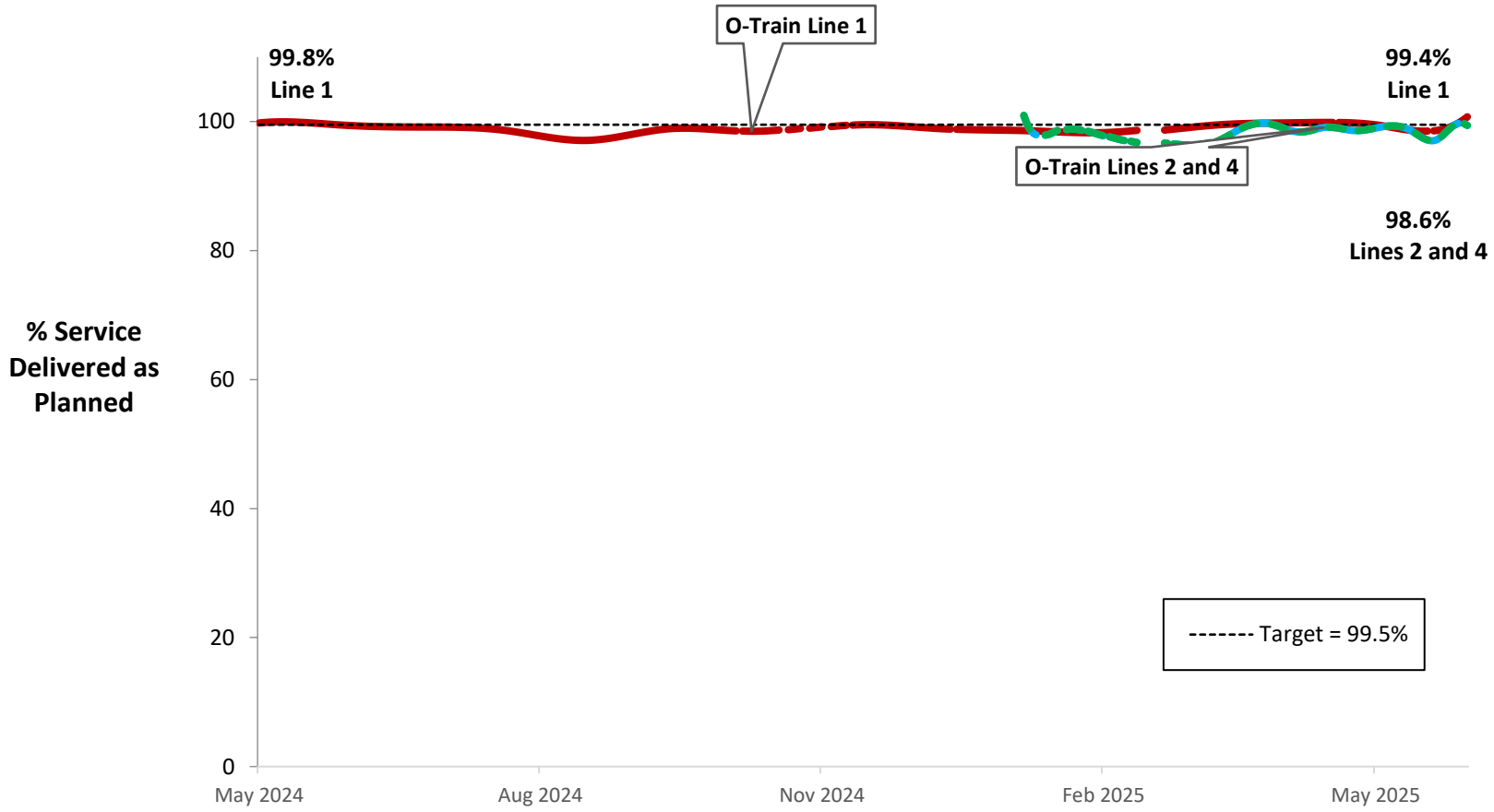
99.4%

0.1% lower than target

May 2025 average service delivery
Lines 2 and 4

98.6%

0.9% lower than target



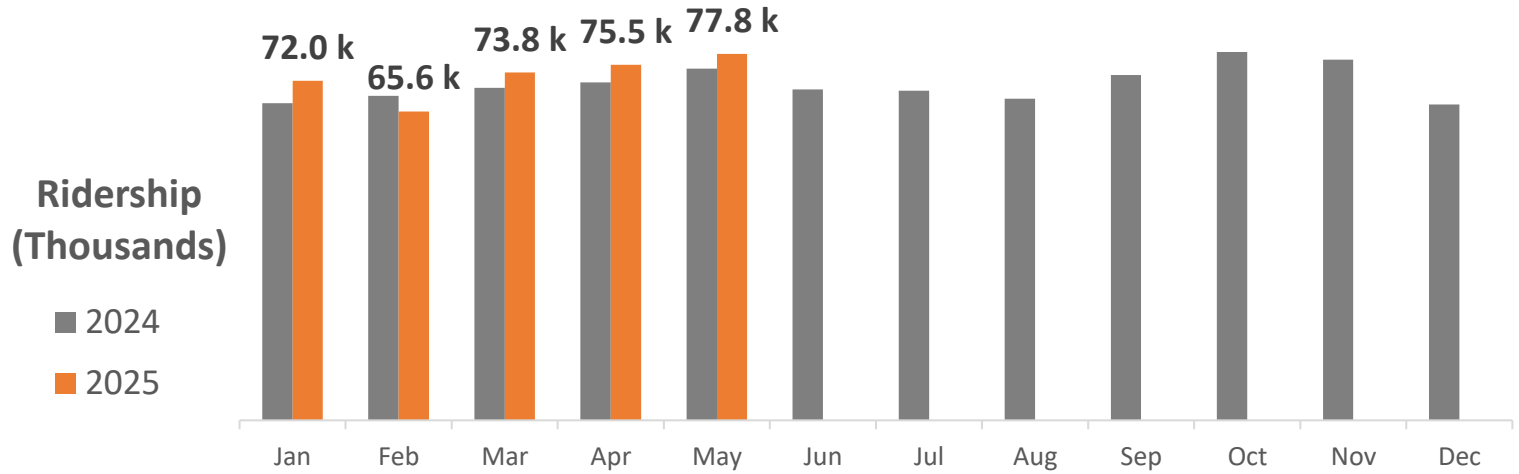
Para Transpo

12-month total ridership

868.2k

0.4% higher than previous month

8% higher than previous year

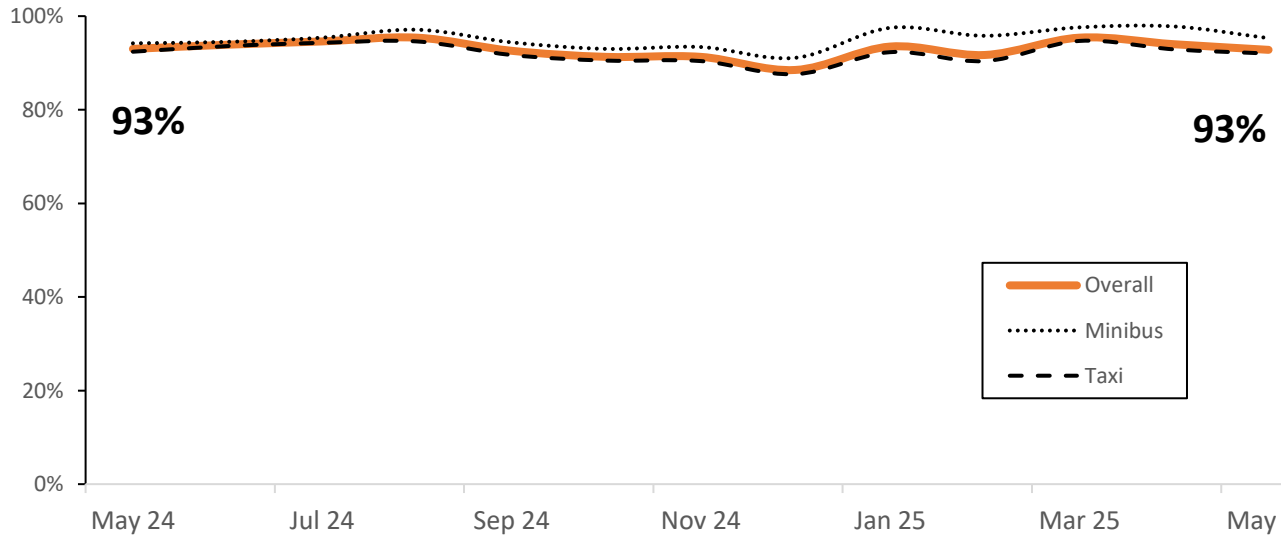


12-month average On-time performance*

93%

Same as previous month

% of customers picked-up during 30 minute window



***% of customers picked-up during 30-minute window**

Customer Pulse

Customers who use Transit App's 'Go' function are periodically asked to complete short surveys during their trip. This survey instrument is called 'Rate my ride' and OC Transpo customers typically submit 200,000+ responses per month. Customers are asked: "How was your trip" and presented with the options of 'Great, Good, Neutral, Not Great and Nightmare' as responses. Customers who say their trip was 'Great' or 'Good' are categorized as 'happy feeling' customers.

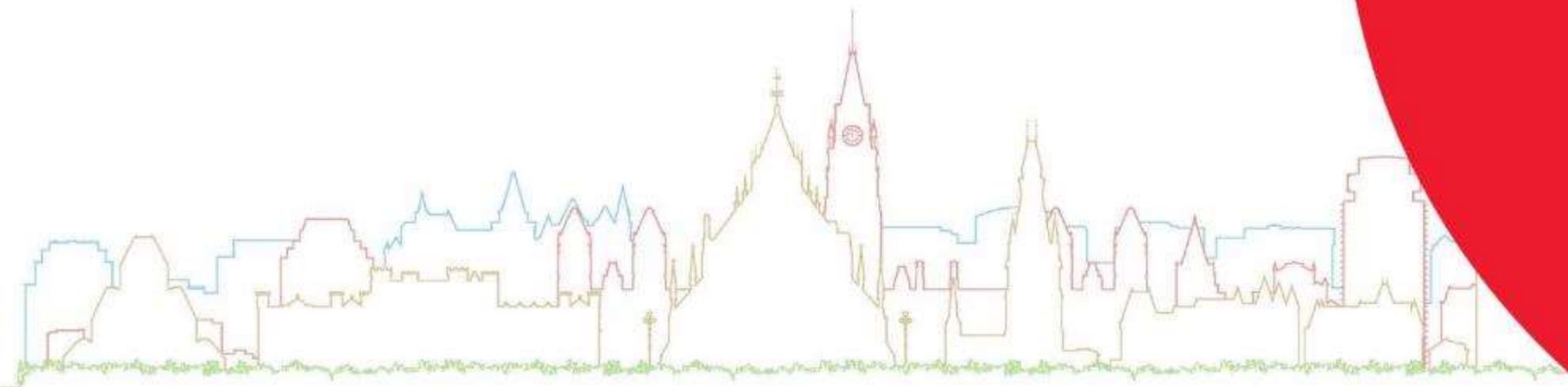
12-month average happy feeling customers

90%

Customer Pulse weekly

Service reliability update

Corridor review example: Route 11



Presentation overview

- Service reliability objectives and scope
- Corridor review example: Route 11
- Service Reliability performance measures
- Understanding travel time variability
- Challenges and mitigation strategies
- Transit Priority toolkit examples
- Potential opportunities for the Route 11 corridor

Service reliability objectives

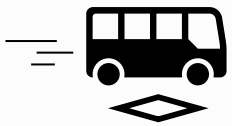
Within the overarching objective of advancing the City's Transportation Master Plan and the development of the Transit Priority network, OC Transpo's Service Reliability objectives include:

- Minimizing trip cancellations
- Enhancing transit priority and improving travel speeds
- Reducing delays and travel time variability, and improving on-time performance
- Increasing operational efficiency
- Prioritizing investments to maximize customer benefits within limited resources
- Enhancing performance monitoring to support decision making

Provision of reliable and attractive service for customers and consistent and satisfactory work for operators is our first consideration and priority guiding our work.

Service reliability scope

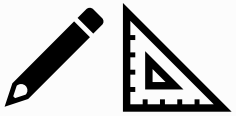
The service reliability team works to improve the transit customer experience and transit operational efficiency through:



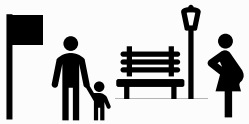
Implementation of Transit Priority Measures

Bus Stop Accessibility Upgrades

Performance Analysis and Corridor Studies



Design Development and Project Integration

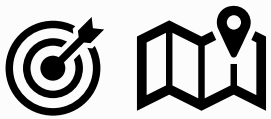


Customer Amenity Improvements

On-Street Testing and Operational Adjustments

Guidelines Support and Policy Development

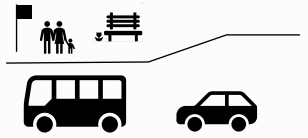
Projects are advanced through ongoing collaboration with colleagues throughout OC Transpo and across City departments. Opportunities for service reliability and customer experience improvements are reviewed and integrated as part of:



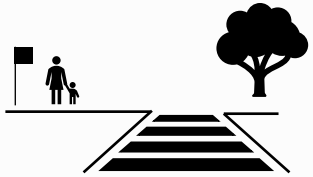
Strategic Planning Projects

Integrated Road and Utility Renewal Projects

Active Transportation Projects



Traffic Calming Projects



Road Safety Projects

O-Train Stage 2 Expansion Projects

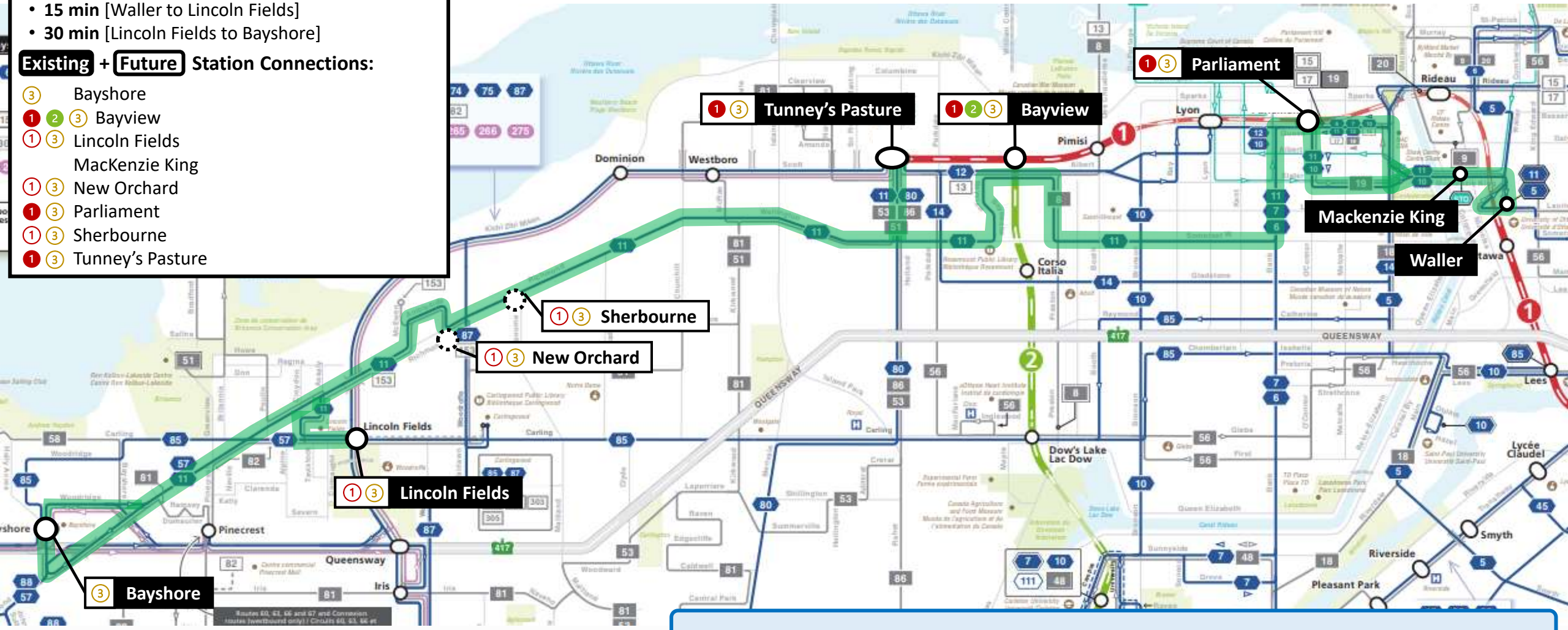
Corridor review example: Route 11

Frequent Route with peak period headways of:

- **15 min** [Waller to Lincoln Fields]
- **30 min** [Lincoln Fields to Bayshore]

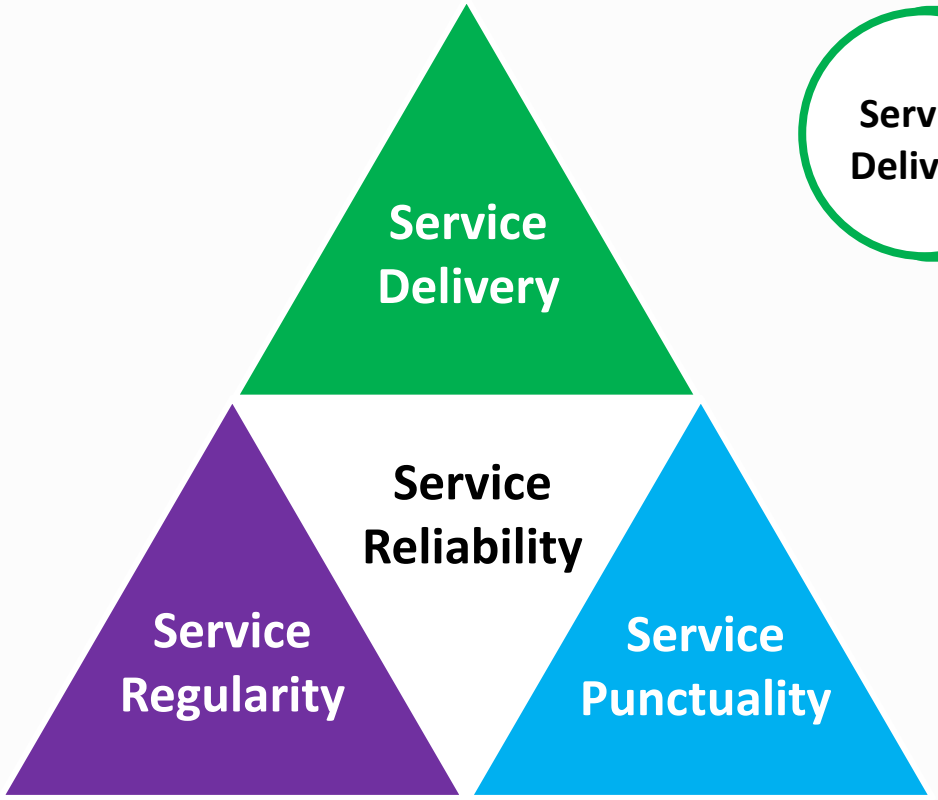
Existing + **Future** **Station Connections:**

- ③ Bayshore
- ① ② ③ Bayview
- ① ③ Lincoln Fields
- MacKenzie King
- ① ③ New Orchard
- ① ③ Parliament
- ① ③ Sherbourne
- ① ③ Tunney's Pasture



Customer travel patterns and ridership on Route 11 are anticipated to change significantly following the opening of the O-Train Stage 2 West Extension with new rail connections at Bayshore, Lincoln Fields, New Orchard, and Sherbourne.

Service reliability performance measures



Service Delivery

A measure reflecting the proportion of in-service hours delivered relative to the number of scheduled hours.

Service Punctuality

A measure of the on-time performance for a given route pattern indicating how often a bus operates on time, early, or late.

Service Regularity

For frequent services - a measure of how often headways between consecutive buses of the same route and direction fall within an acceptable window (scheduled headway + 40%).

These measures are used together to evaluate performance and to understand reliability.
They can be applied to the full route or to specific segments and time periods to diagnose where/when reliability challenges exist.

Regularity provides a more appropriate measure of reliability for high-frequency routes,
while **punctuality can be used as a diagnostic tool** to identify operational challenges and locations of delay accumulation.

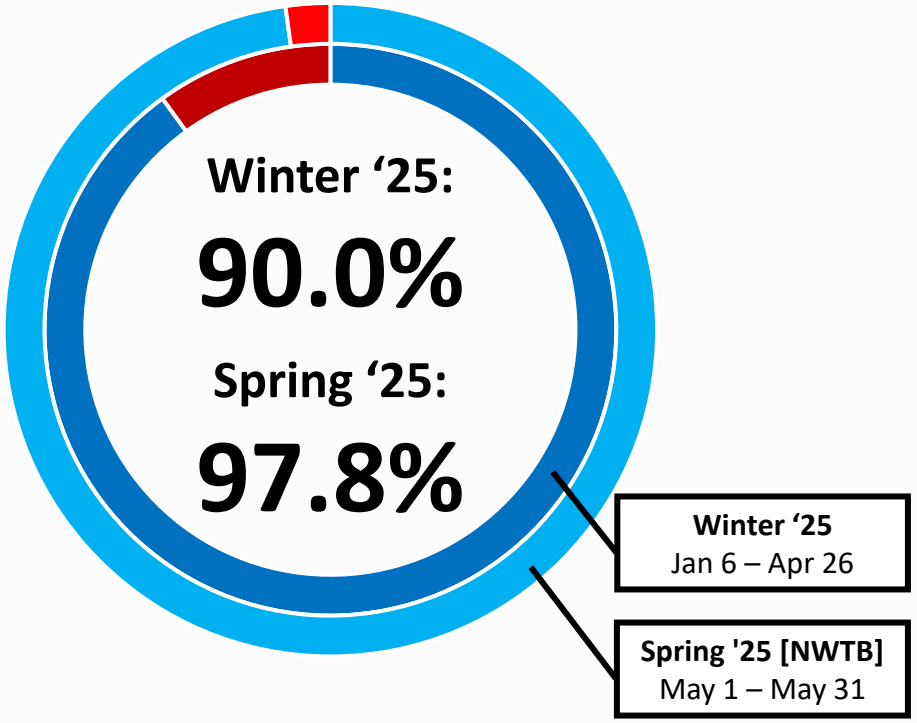
Route 11: Weekday performance summary

Service delivery rate

% % Revenue-Service Hours delivered

% % Revenue-Service Hours not delivered

Target: 99.5%

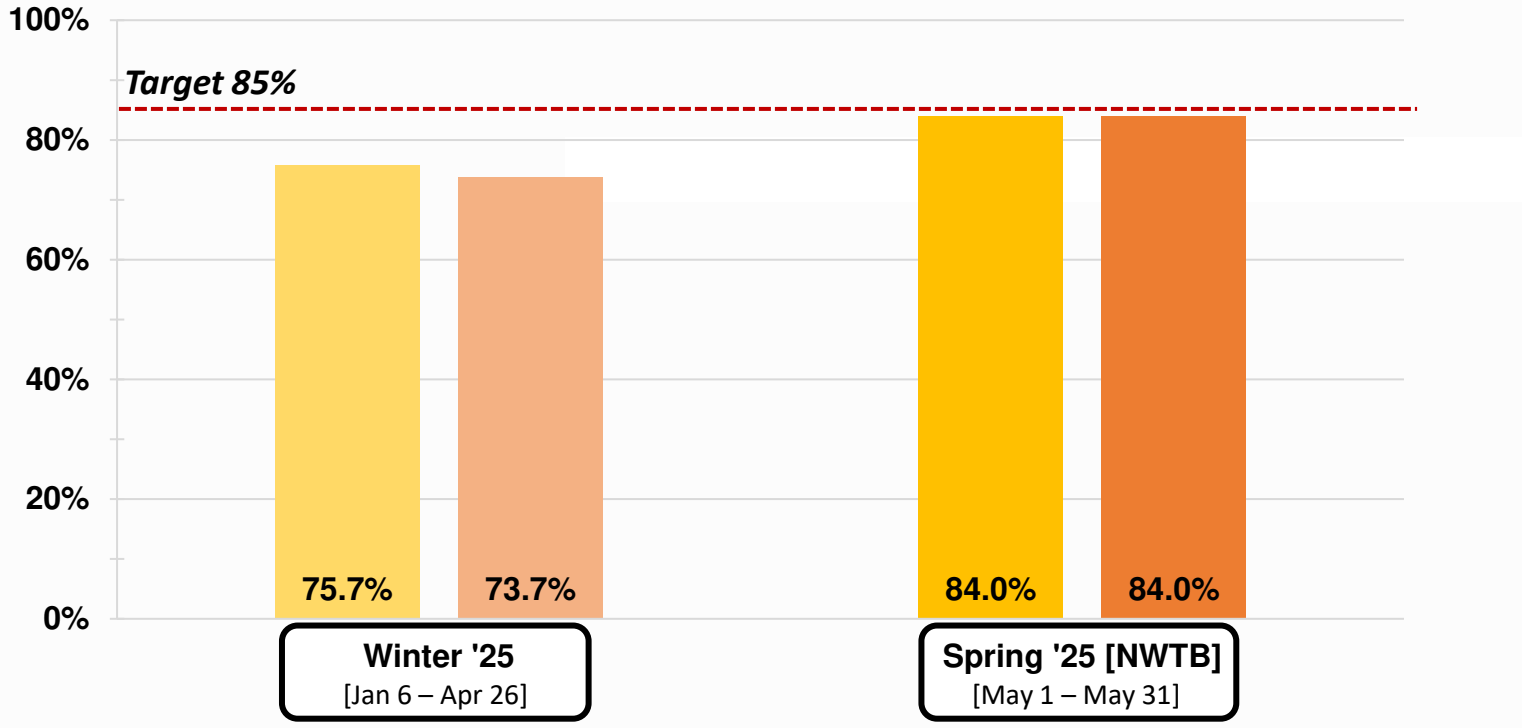


Service regularity rate

% Eastbound

% Westbound

Service regularity measures how often headways **between consecutive buses** of the same route and direction fall **within an acceptable window** (scheduled headway + 40%).



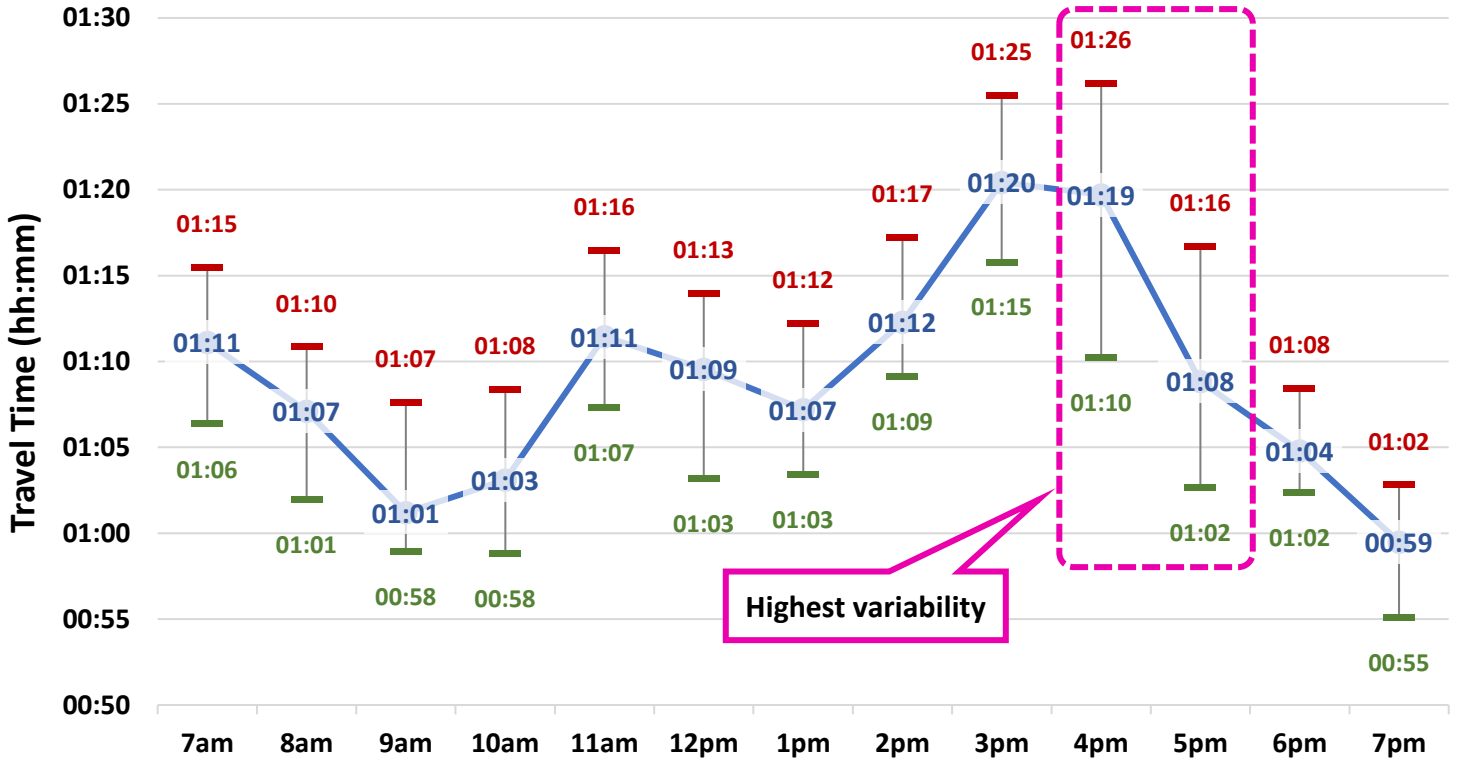
In customer-experience terms, the "acceptable window" for frequent service scheduled at a 15-minute headway would be up to 21 minutes between trips (scheduled headway + 40%).

Travel time variability explained

Travel time variability refers to the fluctuations in the time required to complete a run on a transit route for a given direction, time of day, and segment of the route. **Factors contributing to travel time variability include:**

- Traffic Congestion
- Adverse Weather Conditions
- Planned + Emergency Construction Activities
- Major Events
- Level of Transit Priority
- Traffic Signal Operations
- Customer Activity
- Planned + Unplanned Demonstrations

Travel time variability plot [Route 11: Weekdays – Westbound; Fall 2024 data]



For a given route, direction, and time period:

- **80th percentile** represent the trips most impacted by traffic congestion
- **Median data** represents the average travel time for all trips
- **20th percentile** represents trips with fewer delays

A wider spread between the 20th and 80th percentile travel times indicates service reliability challenges.

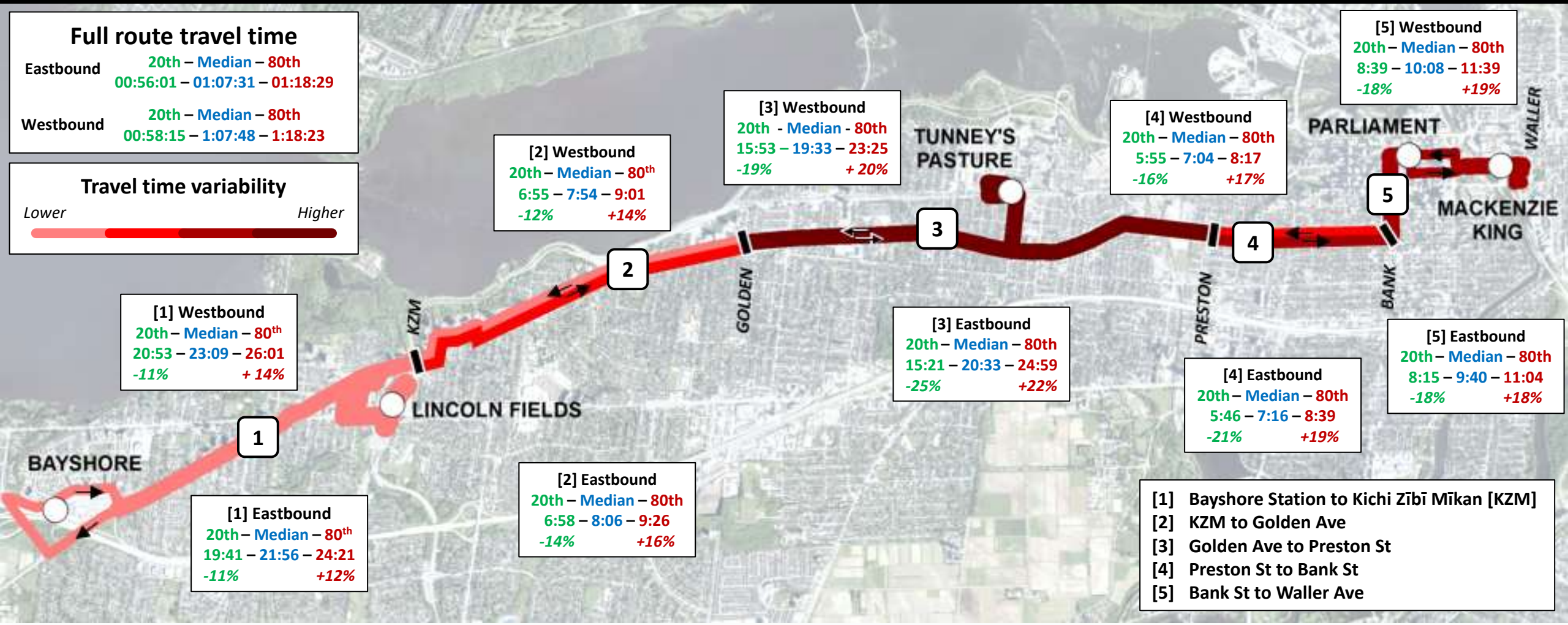
However, this **also highlights the potential for savings** that can be achieved by mitigating the impacts of congestion and bottlenecks through implementation of **Transit Priority Measures** (funding required). Investment in Transit Priority Measures allows transit to operate closer to the 20th percentile travel times, and include benefits to both:

Customers
faster travel times, improved on-time performance, increased confidence in the system

Operations
reduced operating costs and more efficient use of resources (e.g. fewer buses to deliver same level of service)

Detailed service reliability review

Travel time variability by route section [Fall 2024; weekday data]



Note: Routing was adjusted to service Bayview Station as part of New Ways to Bus. Fall 2024 data presented for Travel Time Variability analysis.

80th percentile represents the trips most impacted by traffic congestion
Median data represents the average travel time for all trips
20th percentile represents the trips with fewer delays

Challenges and mitigation strategies

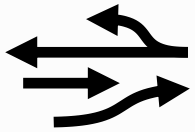
Challenges

Scheduled runtimes had become out of sync with observed travel times during some time periods, negatively impacting the customer experience

Significant and changing construction conditions, including impacts associated with O-Train Stage 2

Increasing delays due to growing traffic congestion

Queuing and delays through intersections



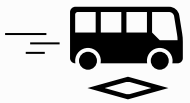
Delays associated with merging in and out of traffic to service customers at bus stops

Balancing trade-offs across modes within limited rights-of-way

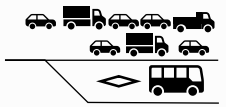
Mitigation strategies

Continue to monitor performance following New Ways to Bus and to adjust runtimes at the next available opportunity

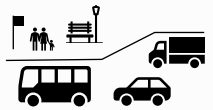
Work collaboratively to minimize construction impacts, prioritize transit, and adapt schedules where possible



Advance transit priority projects and reallocate road space to reduce travel time variability and runtimes



Optimize traffic signals and introduce transit queue jumps



Invest in bus bulb curb extensions to minimize delays, improve the customer experience and public realm

Further refine bus routings as the transportation network, land use, and travel patterns continue to evolve

OC Transpo

Note: *Service reliability is also impacted by out-of-scope factors for the team, including bus fleet and operator availability*

Transit Priority toolkit examples

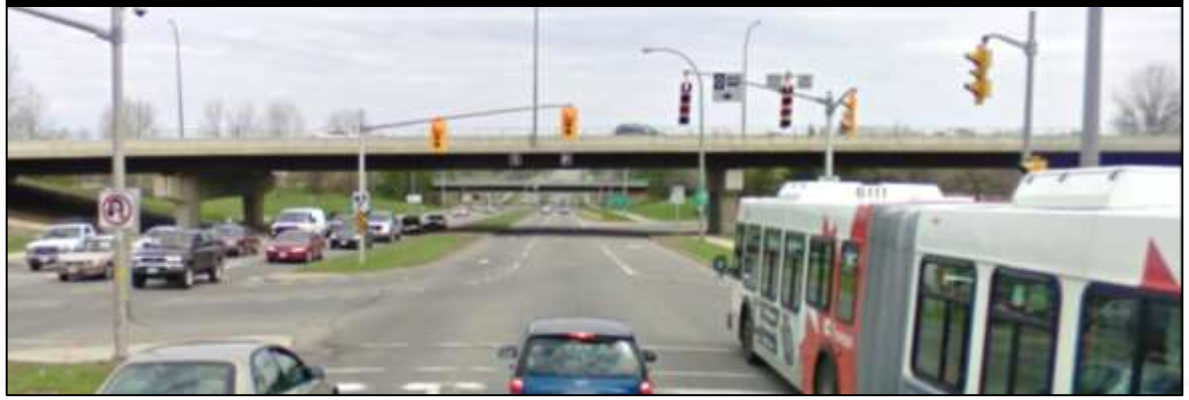
Curbside bus lanes

Bank St Northbound in Old Ottawa South

Rideau-Montreal bus lane hrs expansion

Queue jumps

Heron / Bronson (Transit Signal Priority)



Bus bulbs

Somerset / Bayswater with Bus Bulb

Bus stop placement & consolidation

Innes Road BBS

Bus bay fill-ins on Heron / Kaladar

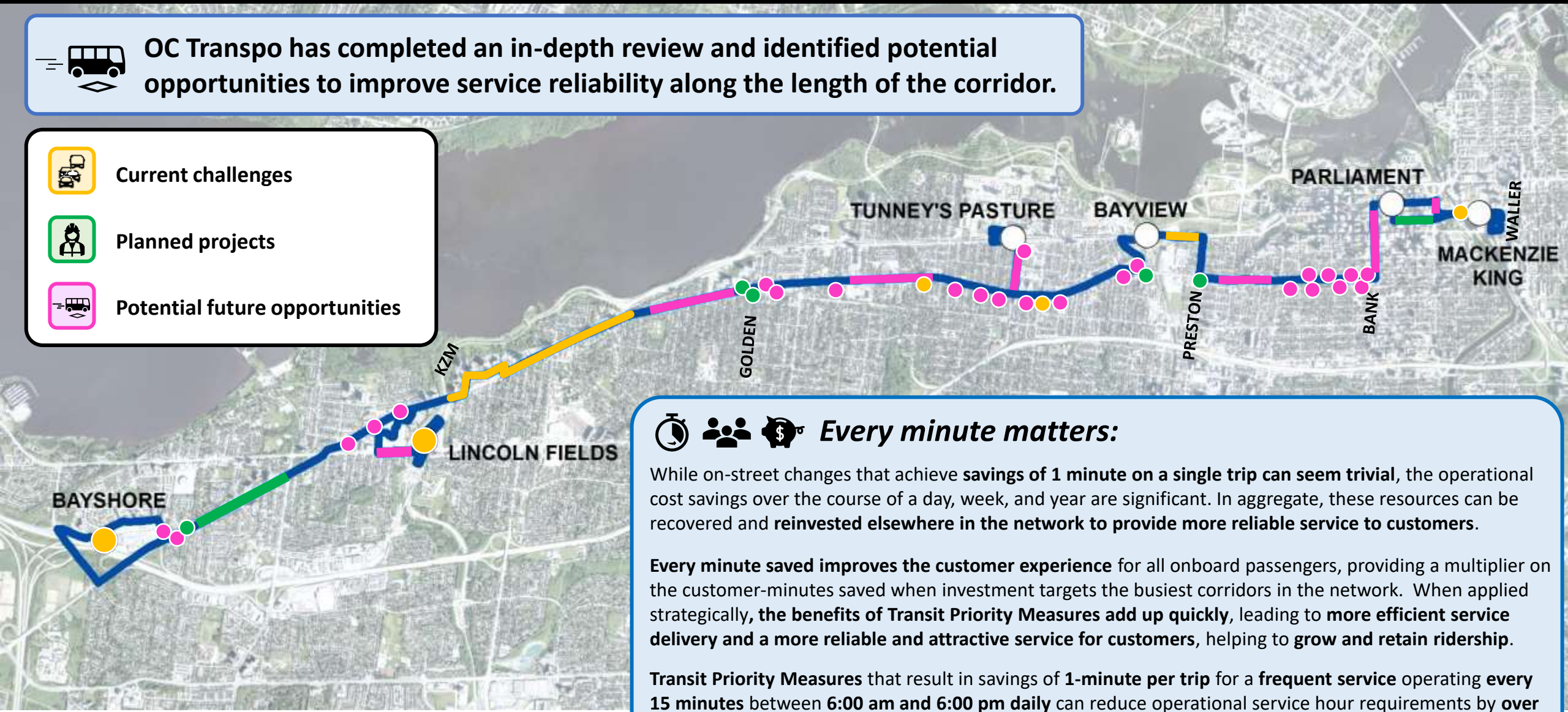
BEFORE: Operational delays associated with bus bay stops

AFTER: Bus bay fill-ins integrated with Active Transportation project

Service reliability improvement opportunities

OC Transpo has completed an in-depth review and identified potential opportunities to improve service reliability along the length of the corridor.

- Current challenges
- Planned projects
- Potential future opportunities



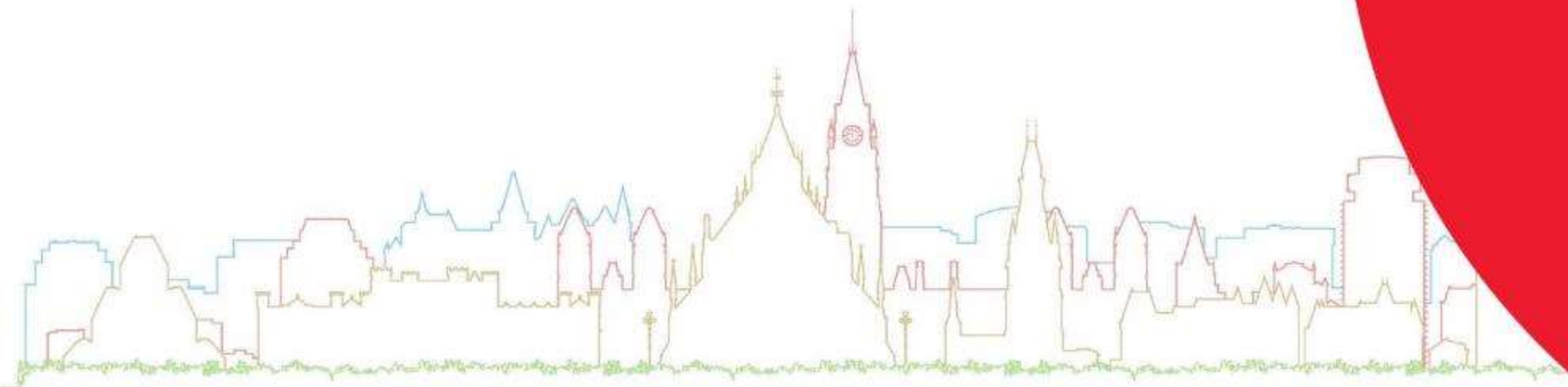
Every minute matters:

While on-street changes that achieve **savings of 1 minute on a single trip can seem trivial**, the operational cost savings over the course of a day, week, and year are significant. In aggregate, these resources can be recovered and **reinvested elsewhere in the network to provide more reliable service to customers**.

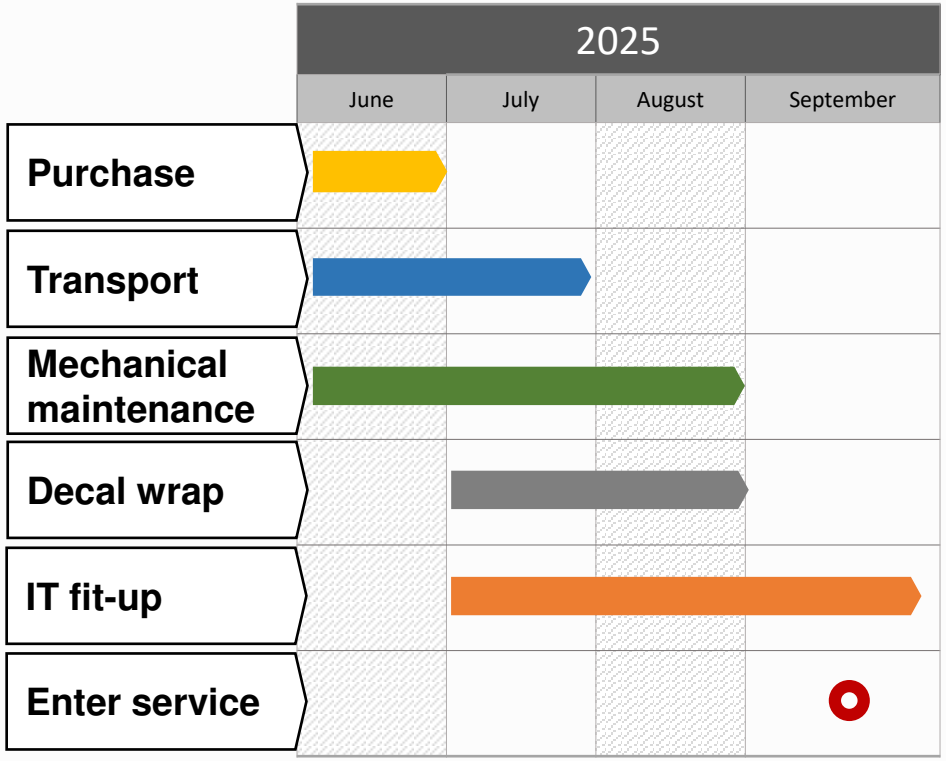
Every minute saved improves the customer experience for all onboard passengers, providing a multiplier on the customer-minutes saved when investment targets the busiest corridors in the network. When applied strategically**, the benefits of Transit Priority Measures add up quickly**, leading to **more efficient service delivery and a more reliable and attractive service for customers**, helping to **grow and retain ridership**.

Transit Priority Measures that result in savings of **1-minute per trip** for a **frequent service** operating **every 15 minutes** between **6:00 am and 6:00 pm daily** can reduce operational service hour requirements by **over 290 hours annually**, equivalent to **over $40,000 in annual operational cost savings**.

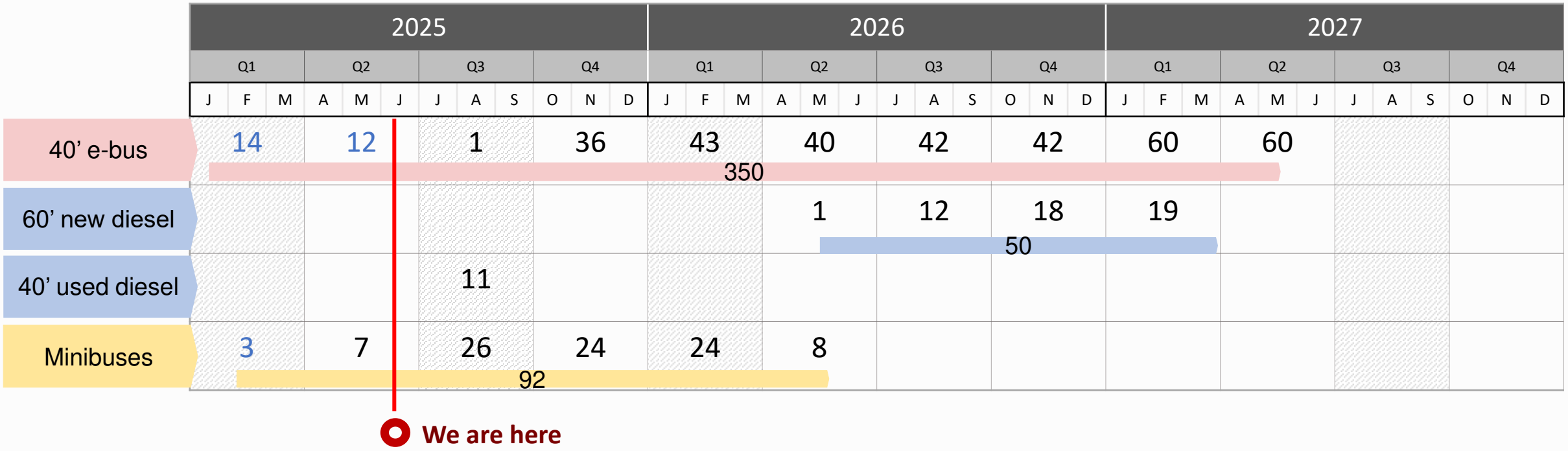
Bus fleet and e-bus infrastructure update



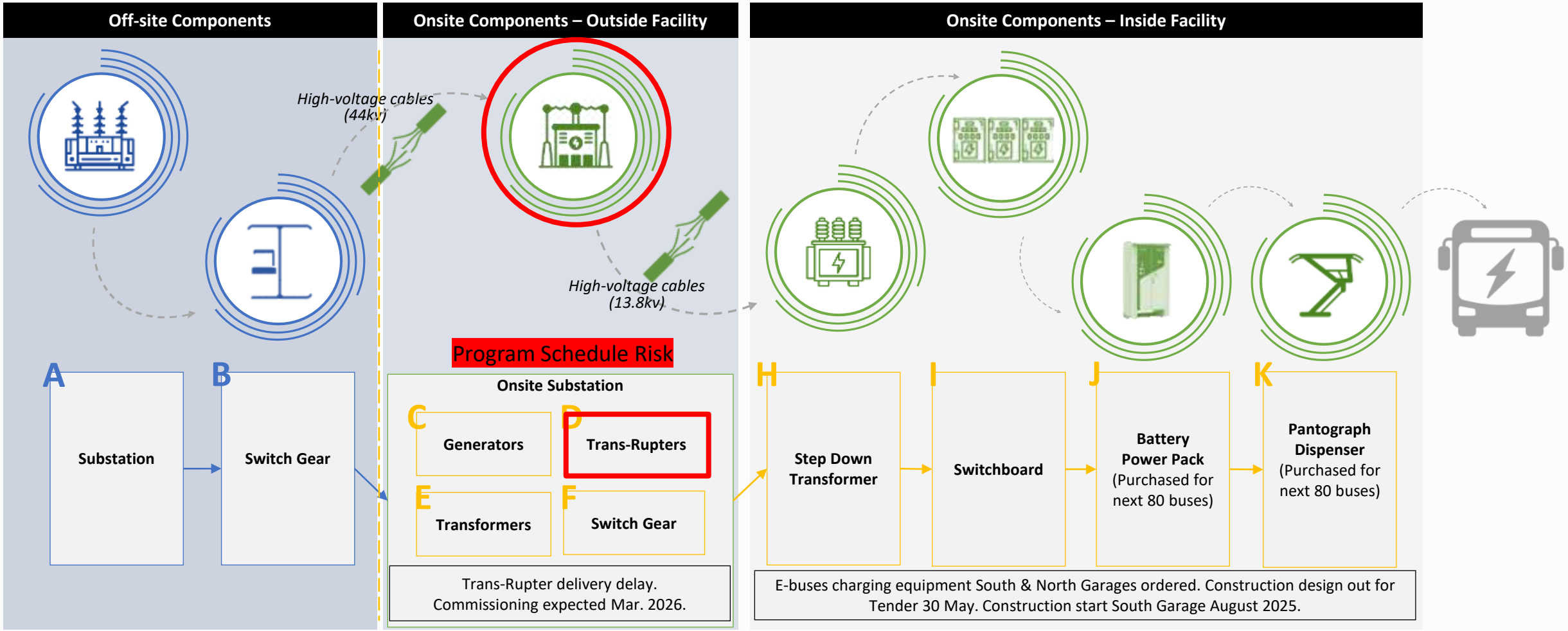
Used bus procurement project



Bus fleet delivery schedule



Charging and electrical infrastructure update



Hydro Ottawa Asset City Asset

Delay to electrical infrastructure work

Project update

- Envari/Hydro Ottawa is facing challenges with delivery time on substation's Trans-Rupter
- The Trans-Rupter is a critical component required to connect the hydro supply to the upcoming onsite substation
- This delays the commissioning of the substation from November 2025 to April 2026

Issues

- Upcoming delivery of 80 e-buses will be required to charge from the 30 chargers currently in service (110 buses to 30 chargers)

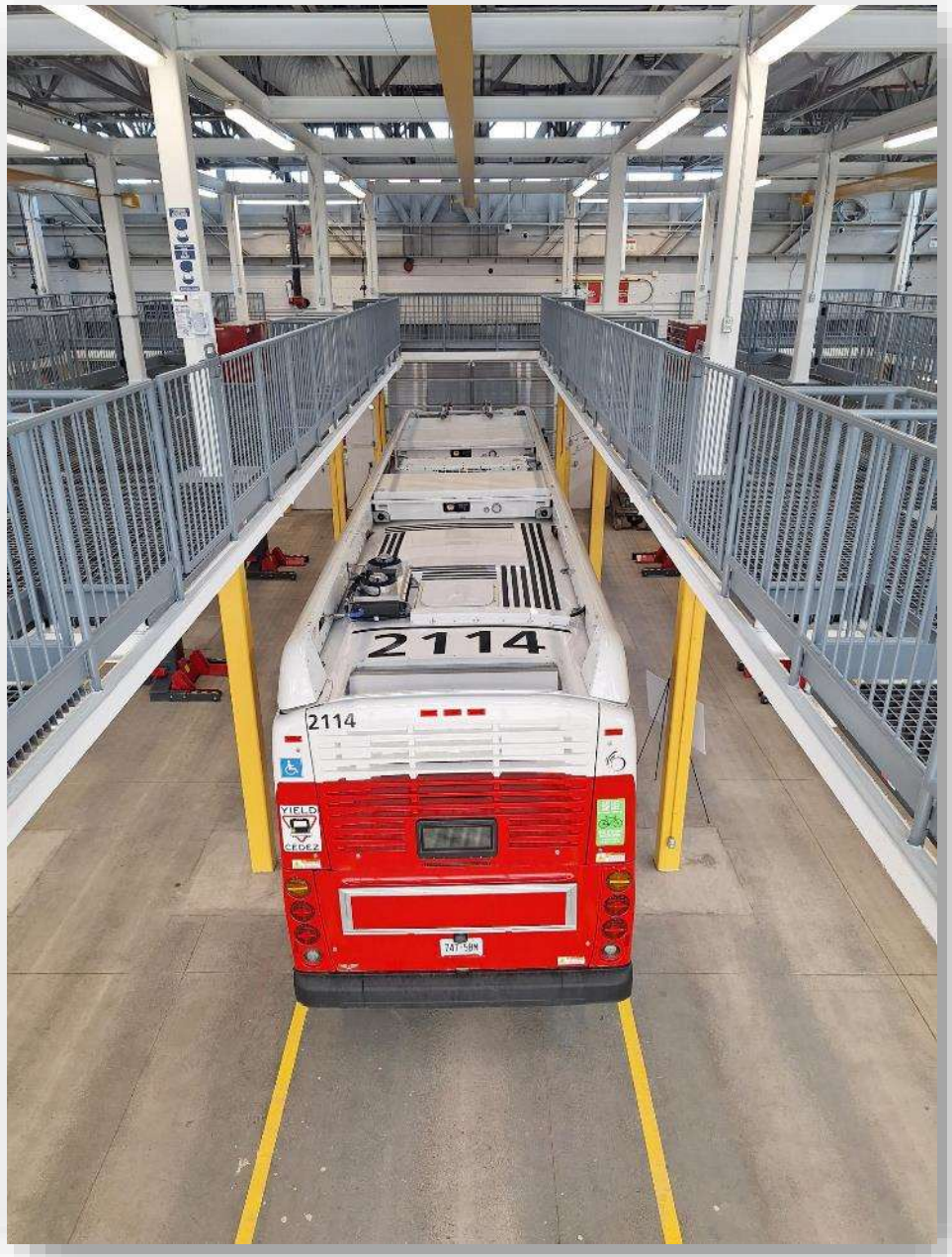
Possible interim solutions

- Temporary use of alternate for Trans-Rupter within substation
- Temporary use of mobile substation
- Temporary supply from Hydro Ottawa direct to South Garage
- Staff resources to cycle 110 buses through the 30 chargers throughout the day

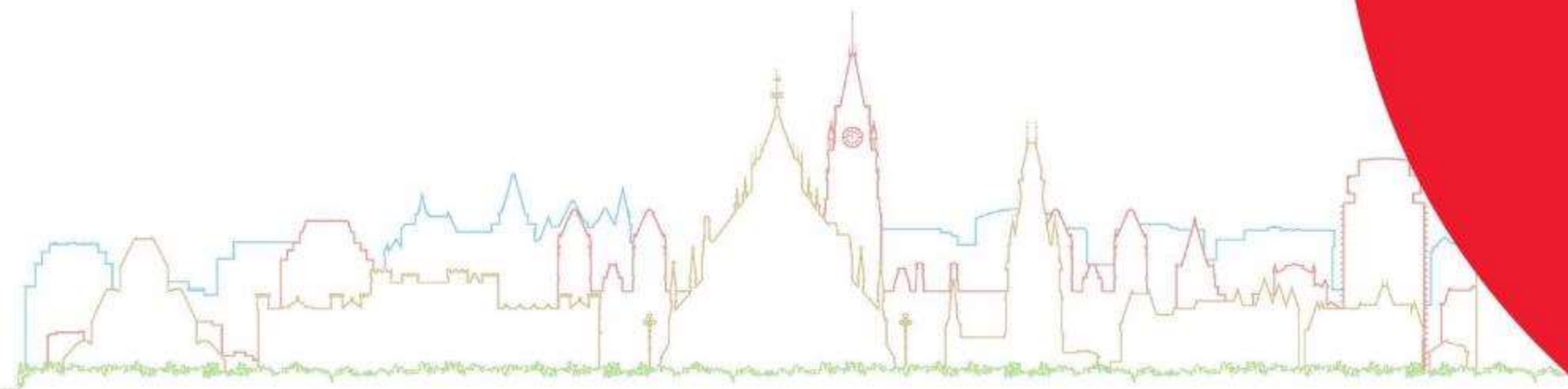
E-bus training update

E-bus training programs

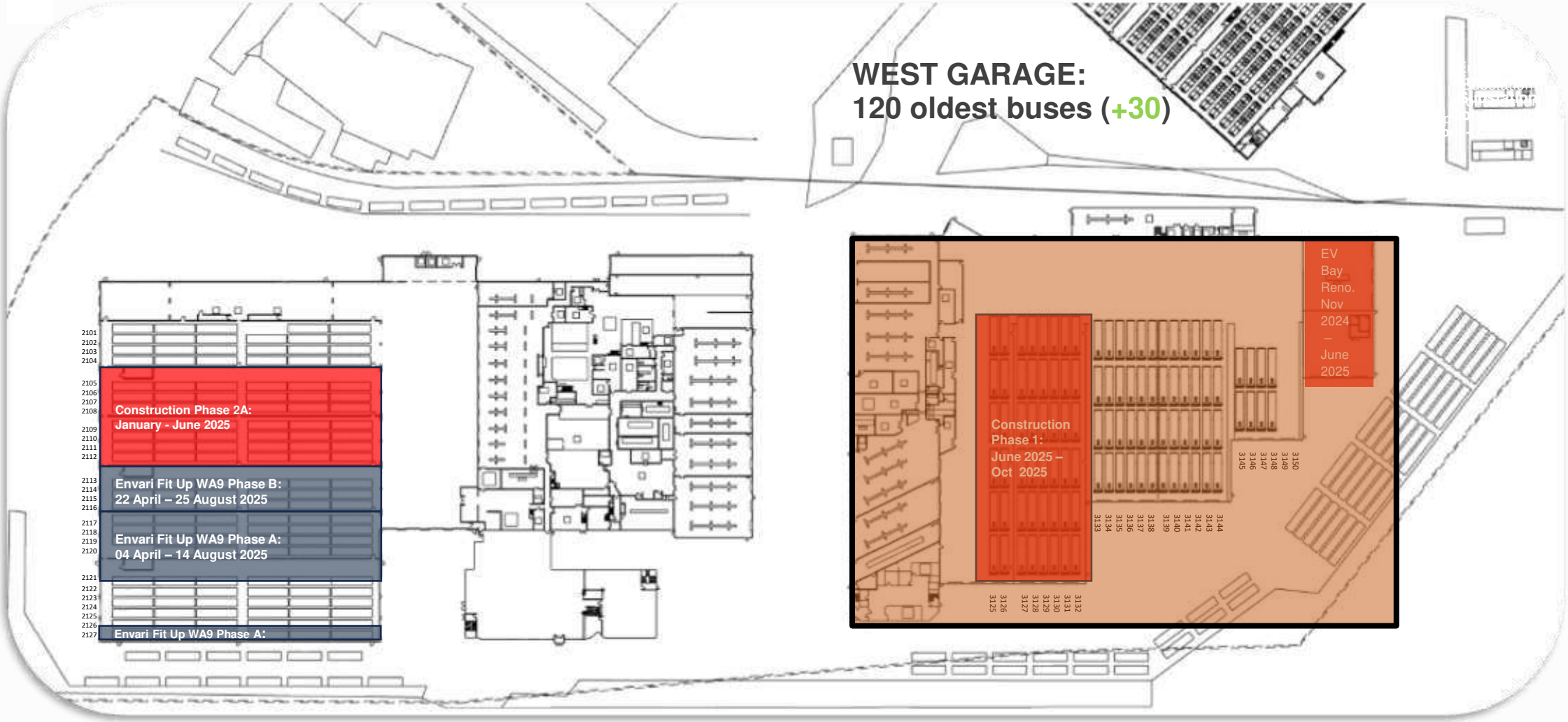
- Training for garage staff will ramp up in the coming months as we prepare for the next batch of e-bus deliveries
- Staff working on e-buses must receive comprehensive training on best practices to eliminate and mitigate risks associated when working with high voltage equipment
- This mandatory training requires staff to be temporarily removed from regular operations to participate. Mitigation plans will be put in place to limit disruptions to service



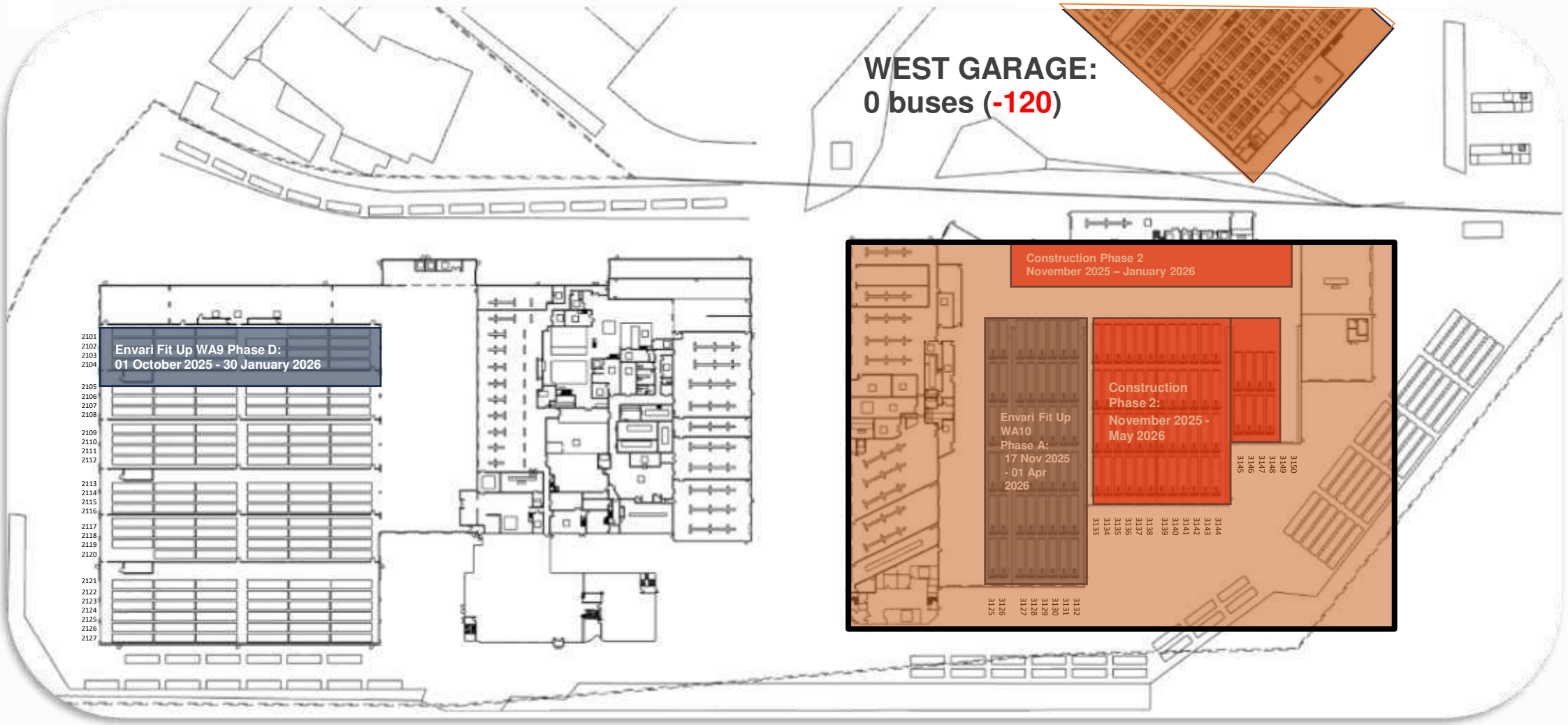
Bus movements and Bus Maintenance Action Plan



June 2025 – north garage partially closes



December 2025 – west garage construction begins



SOUTH GARAGE: 176 buses (+24)

NORTH GARAGE: 0 buses (-20)

New facility – 170 Colonnade

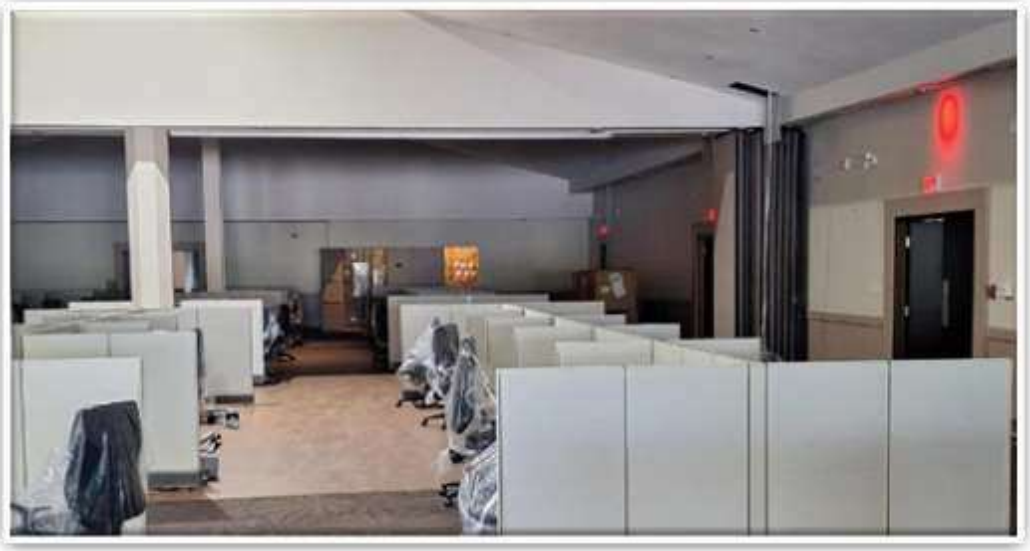
New facility

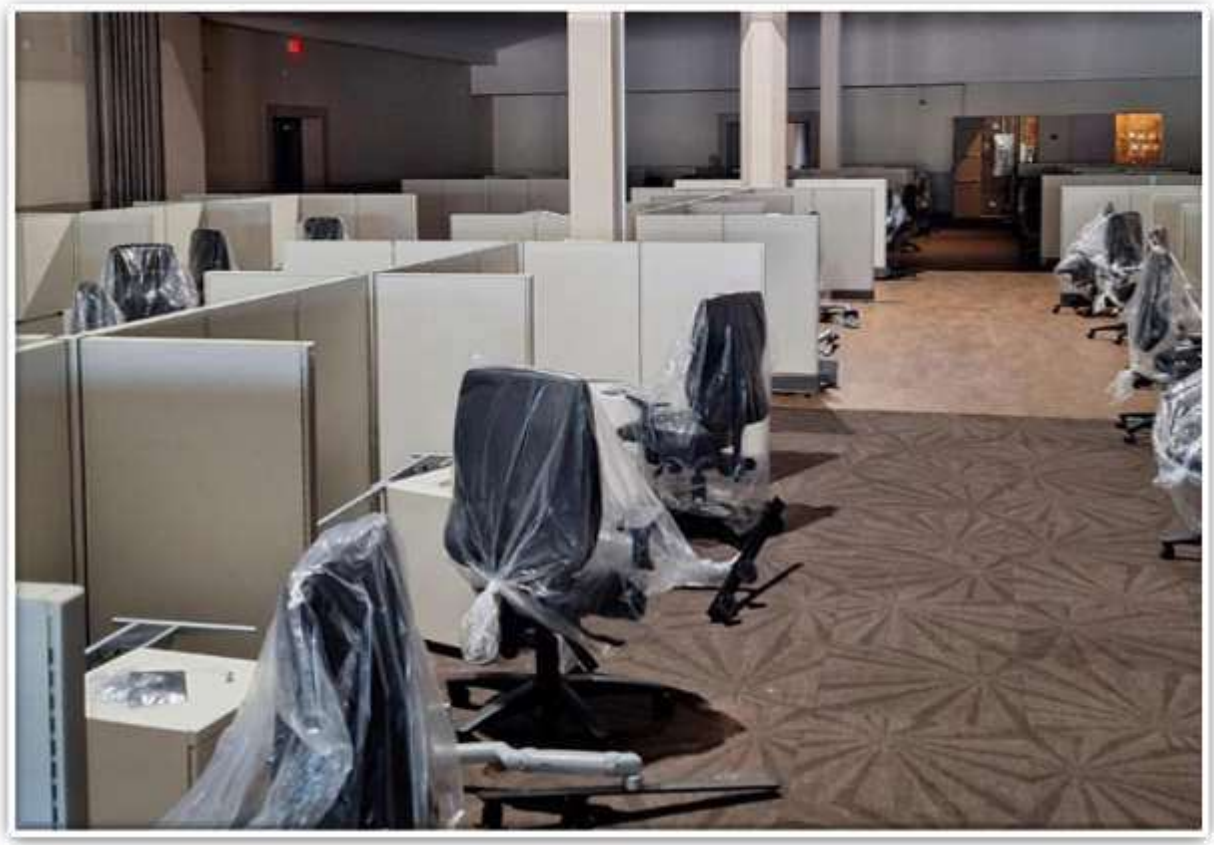
- Council approved the purchase as part of the 2023 budget
- Interior renovations now underway

Purpose

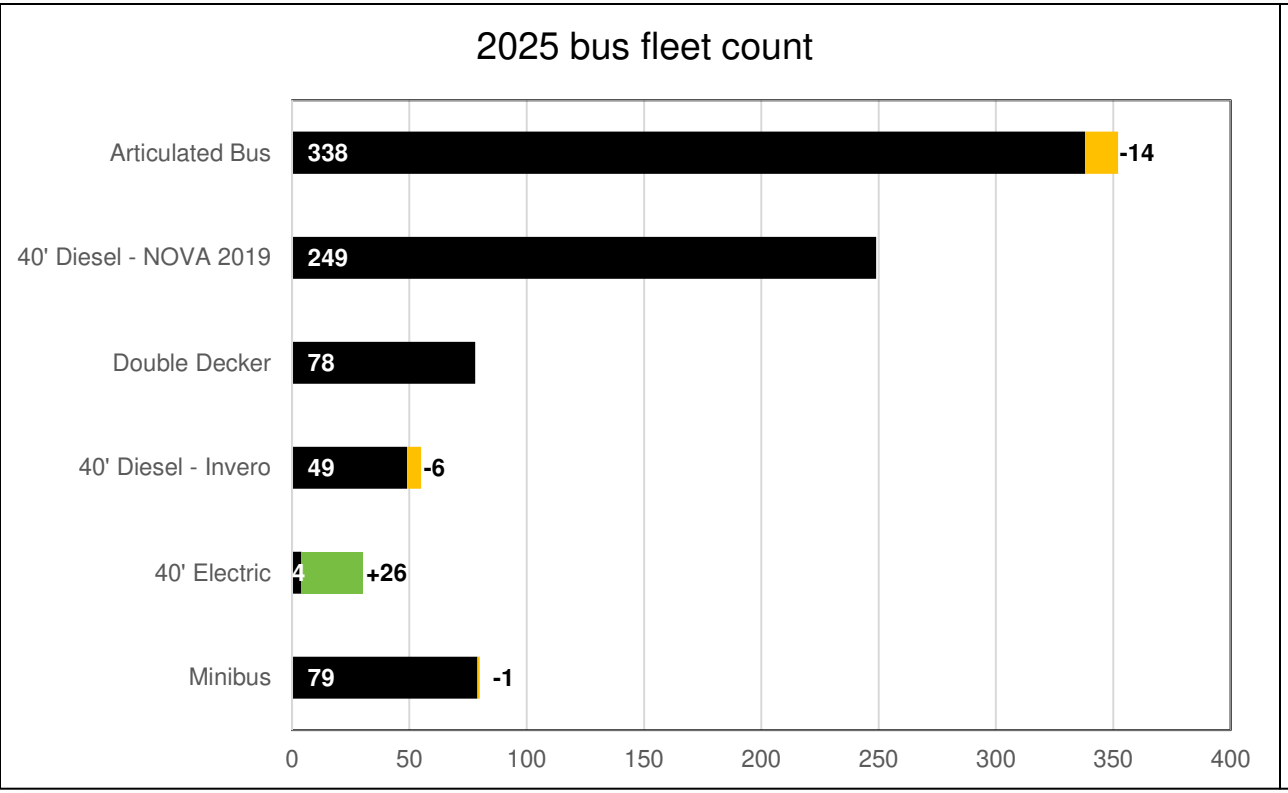
- Future Para Transpo minibus garage
- All minibuses will be parked in 170 Colonnade lot as part of June 2025 bus movements
- Future back-up TOCC
- Interim and future office space

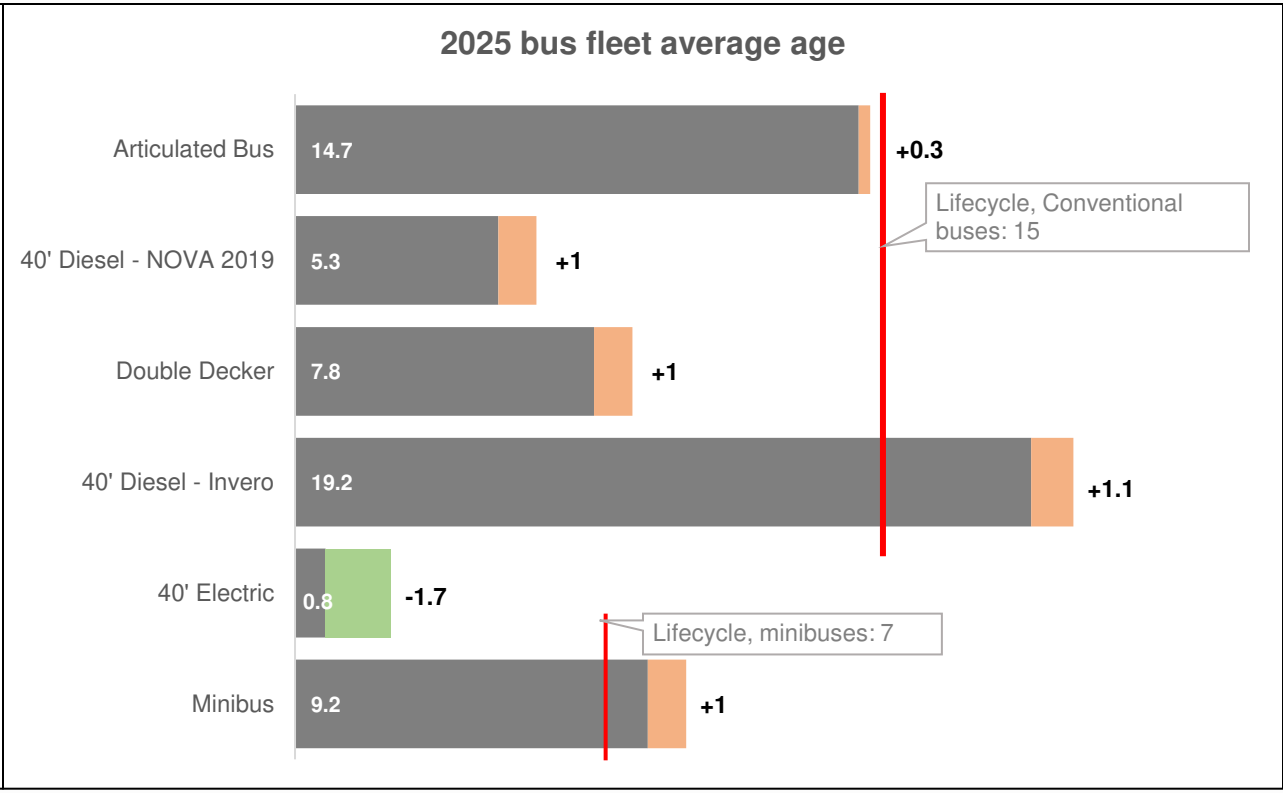
Interior of 170 Colonnade





Bus Maintenance Action Plan update





Bus maintenance – summer work

Summer maintenance requirements

- Summer service requirement for buses drops from 540 to 459, however bus requirement increases for special events – Bluesfest, Canada Day, festivals, sporting events
- Every summer, we experience a maintenance backlog as resources are committed to long-term structural repairs on the fleet

Future planning

- Transit Engineering is developing refurbishment programs for the double-decker fleet in 2026-27 and the 40-foot Nova fleet
- These mid-life refurbishment programs increase short-term workload but reduce operational spending and mechanic workload as these fleets age
- Partnered with recruitment agency to search for 310T mechanics

Upcoming technology improvements

Improvements to M5 garage software

- New shop planning module built into the software, replacing Excel
- M5 on mobile tablets for mechanics
- Improved small asset tagging, capital asset planning, and inventory management module
- Additional analytics & custom reports for garage supervisors connected to Power BI
- To be complete in Q3-Q4 2026

Yard Management System

- Replacing end of life system from 2004
- Improved tuning to OC Transpo garage layouts and business processes
- Enable connections to E-buses and assigning based on battery range and state-of-charge
- Testing to begin in Q1 2026

Questions?