# O-Train Confederation Line Project Update



**Transportation Services Department** 

# Derailment Incident - May 3, 2019

- On Friday, May 3, during morning launch testing and practice exercises, a train derailment occurred at Belfast Yard due to an incorrect switch movement;
- One train, travelling at a low rate of speed, had one set of wheels shift off the track at a switch location, where trains move from one track to another;
- The yard switches are currently manually controlled unlike the main line switches that are controlled by Communication Base Train Control (CBTC); and,
- There were no injuries and only minor repairs were required to the switch mechanism.



# Safety Management System (SMS)

- The LRT System includes a robust Safety Management System (SMS);
- An event of this nature is taken very seriously;
- Safety is an iterative process and improving safety never ends; and,
- The SMS contains the following:
  - Safety is considered in everything we do;
  - Overarching goals to reduce harm, reduce damage or loss and reduce disruption; and,
  - Reporting and investigation protocols to identify what can be done to prevent a recurrence.

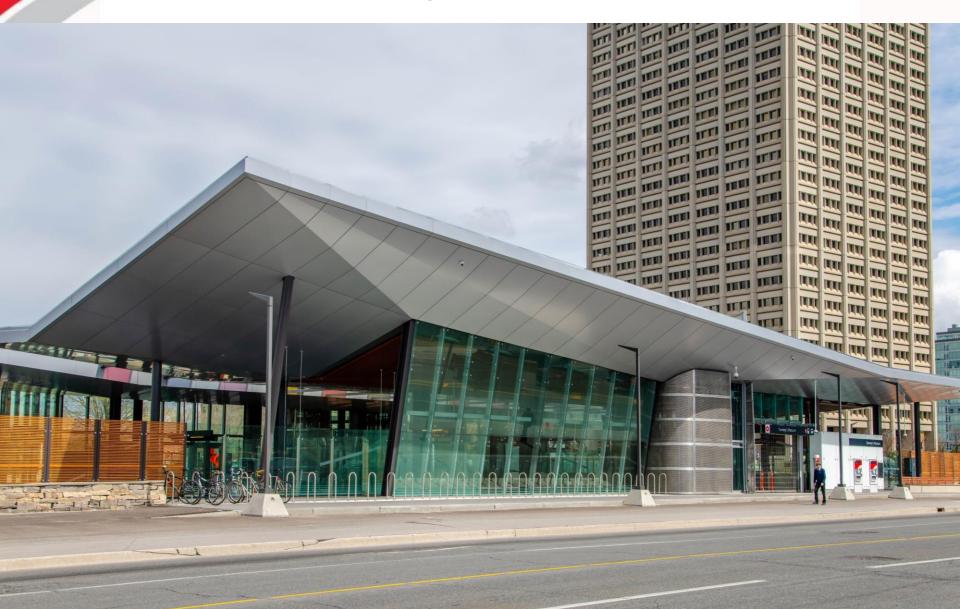
# Derailment Incident - May 3, 2019

- In accordance with the SMS, an investigation into the incident was initiated immediately and morning launch activities ceased;
- By 3:00 p.m. Transit Services returned to normal operations and train deployment activities re-commenced; and,
- A number of operational and procedural changes have been implemented.

# **Update On Stations**

All 13 stations have received occupancy permits and final cleanup of stations is underway.

#### **Tunney's Pasture**



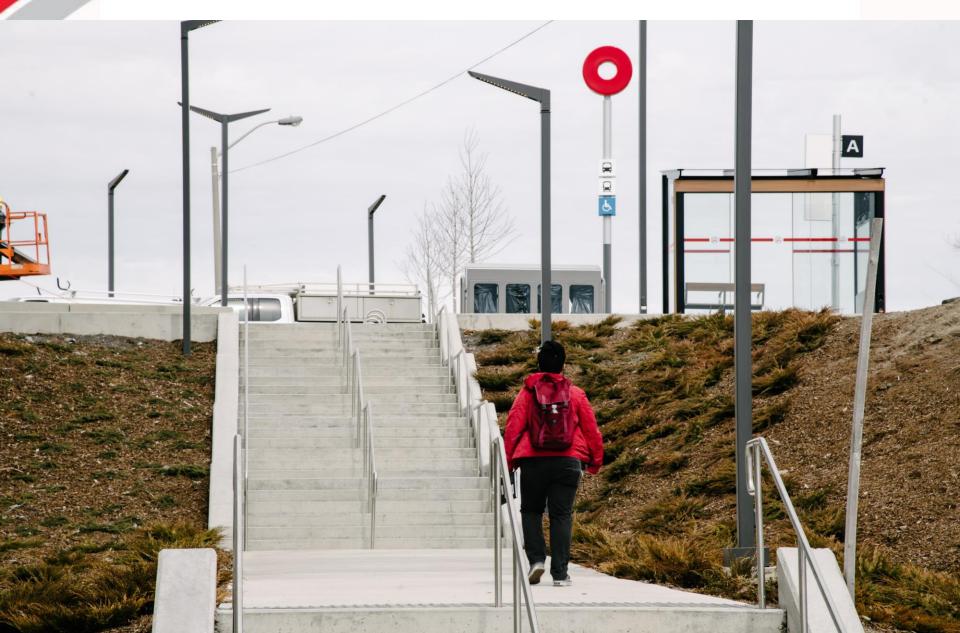
# **Tunney's Pasture**



# Bayview



# Bayview





## Pimisi







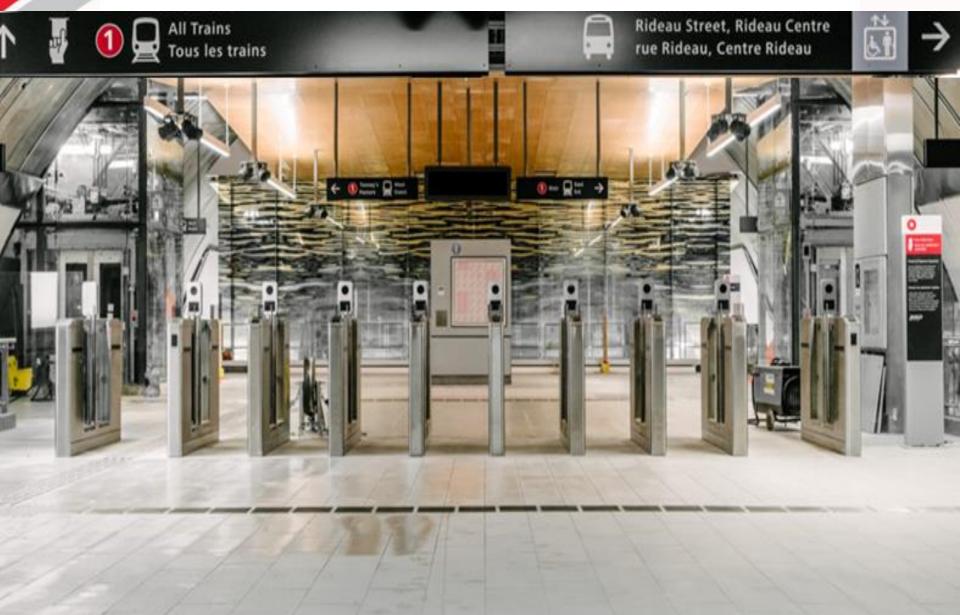
#### Parliament



### Parliament



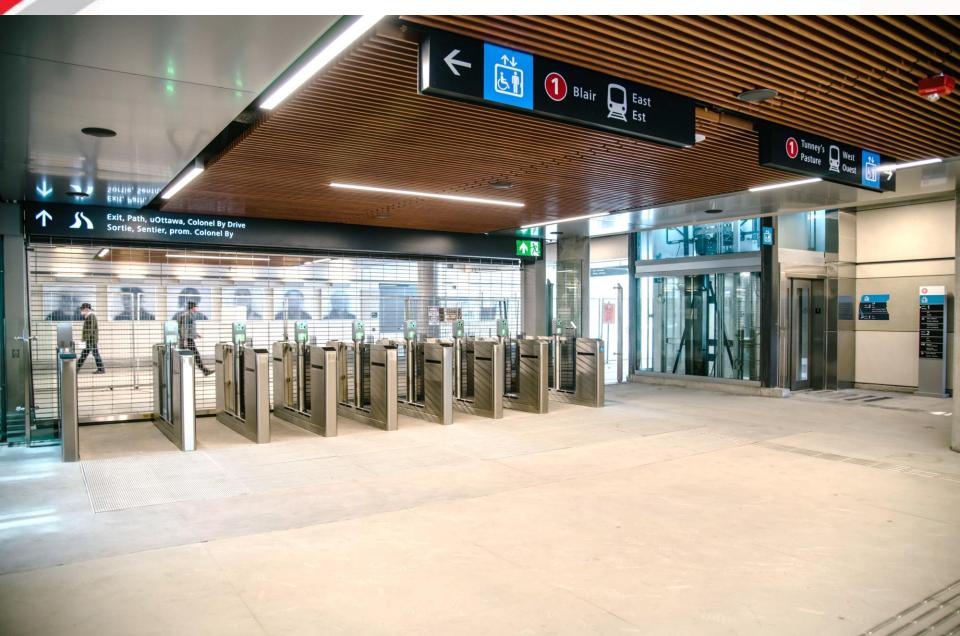
#### Rideau







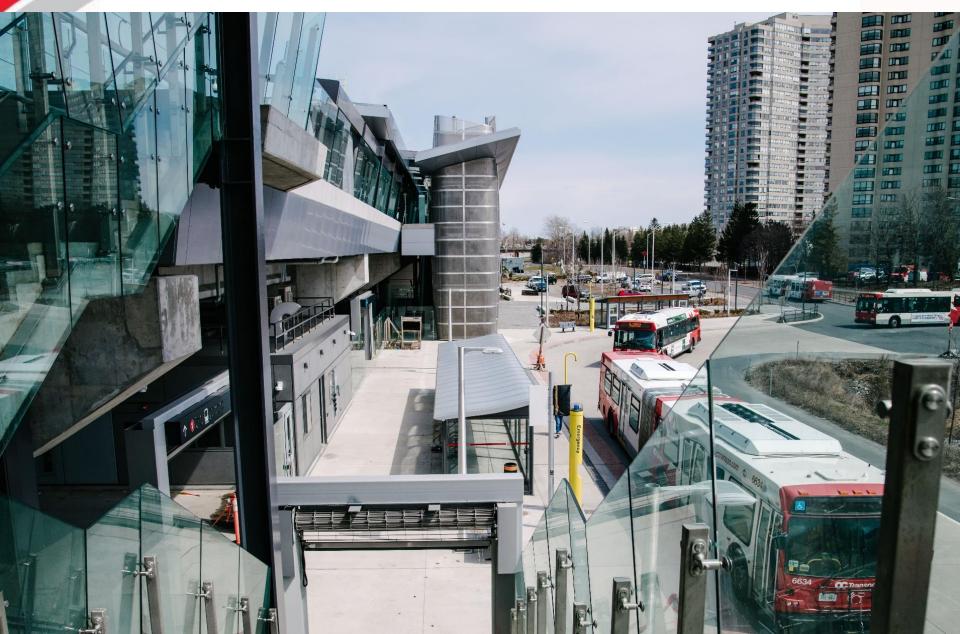
#### uOttawa



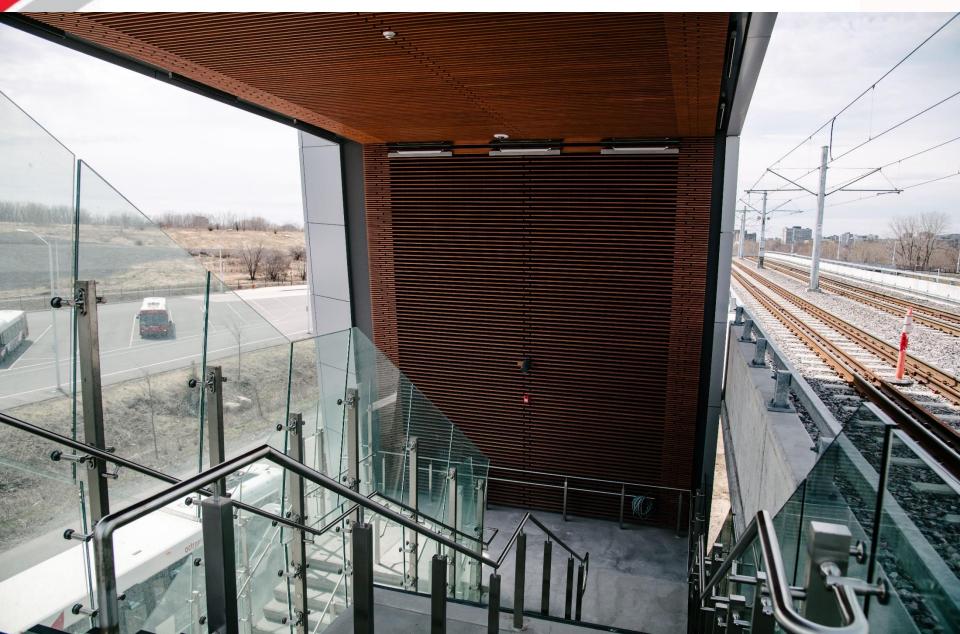




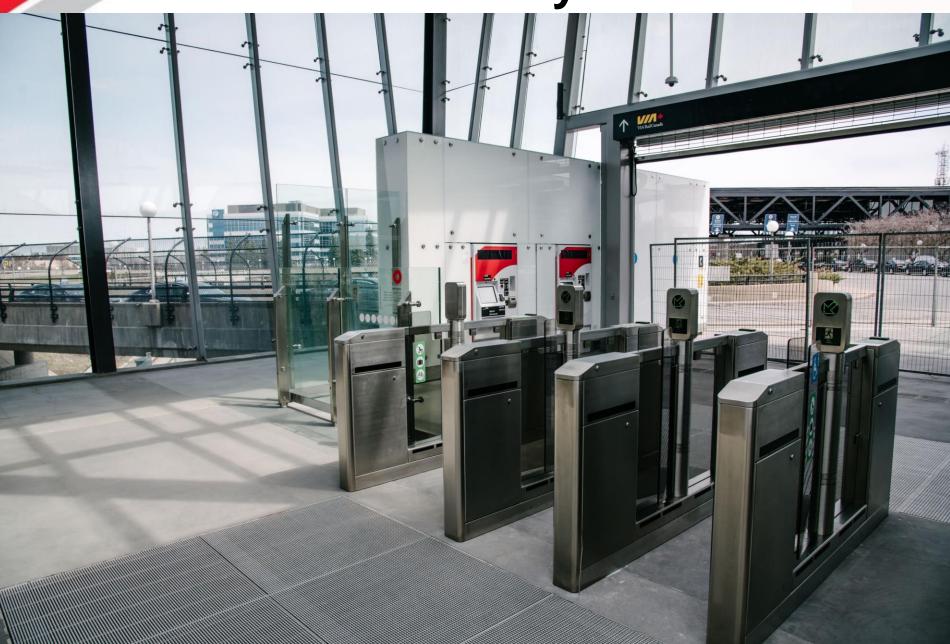
# Hurdman



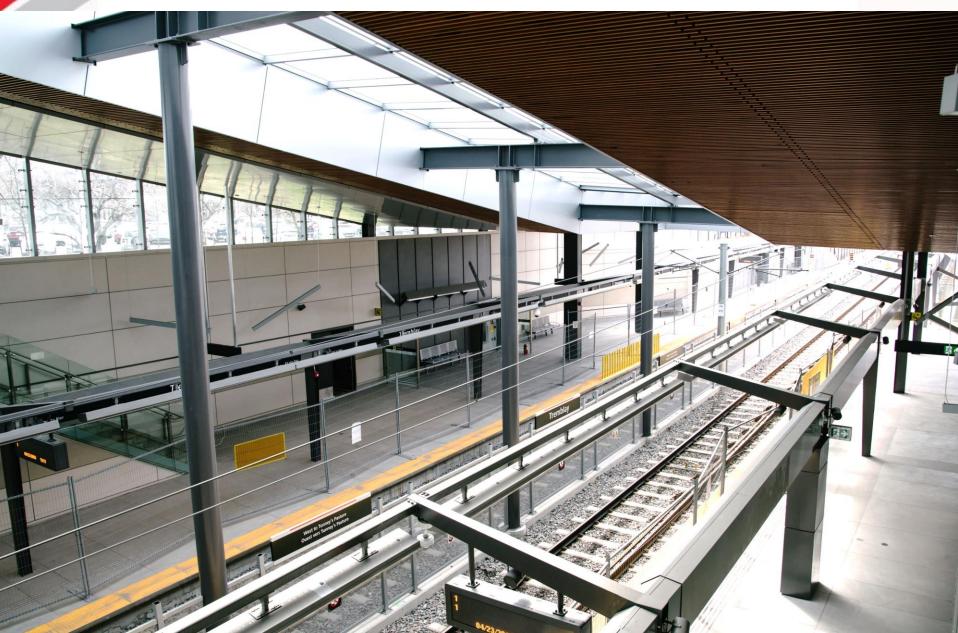
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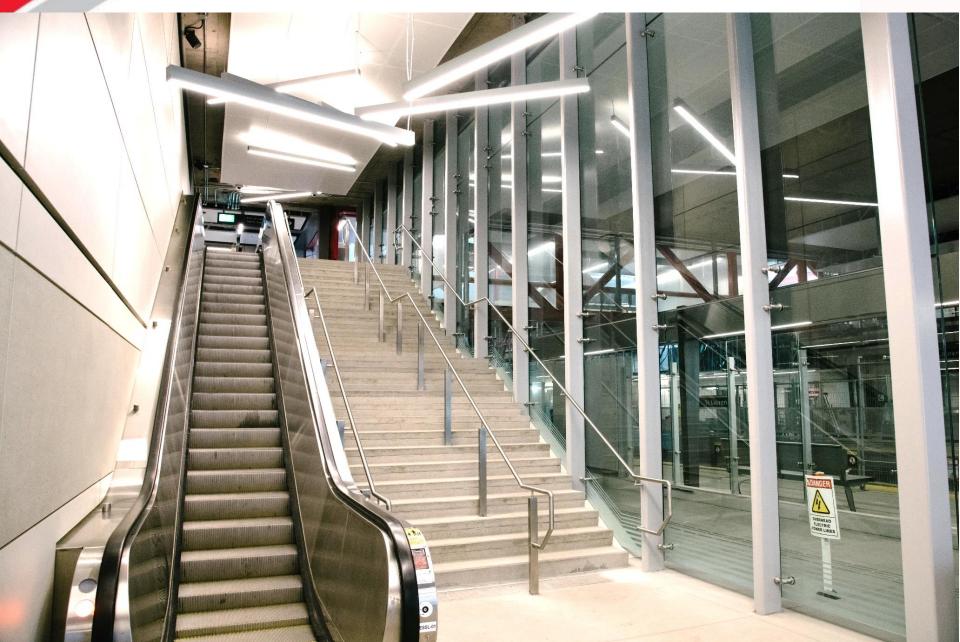
# Tremblay



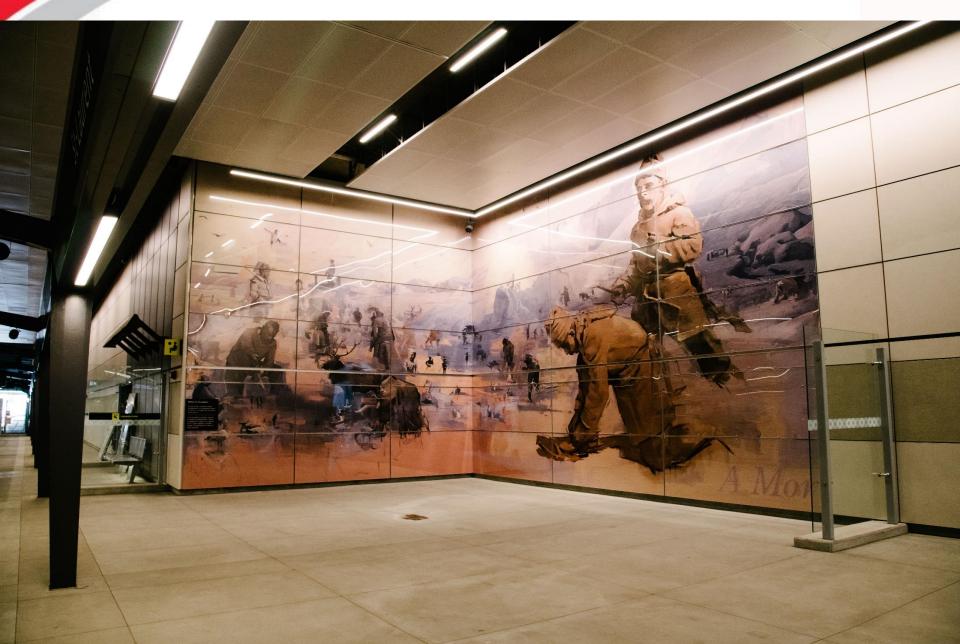
# **Tremblay**



#### **St-Laurent**



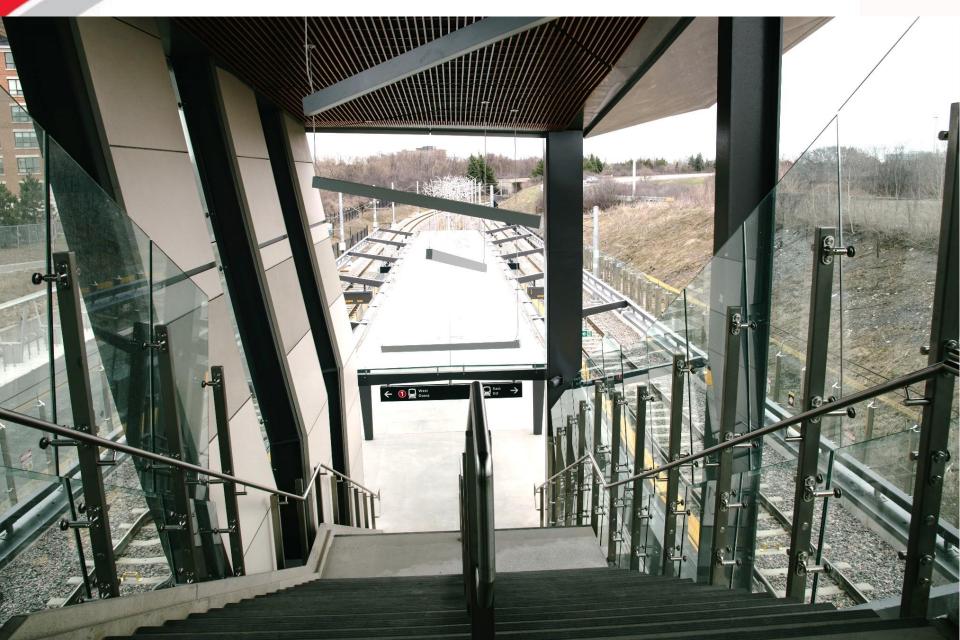
#### **St-Laurent**



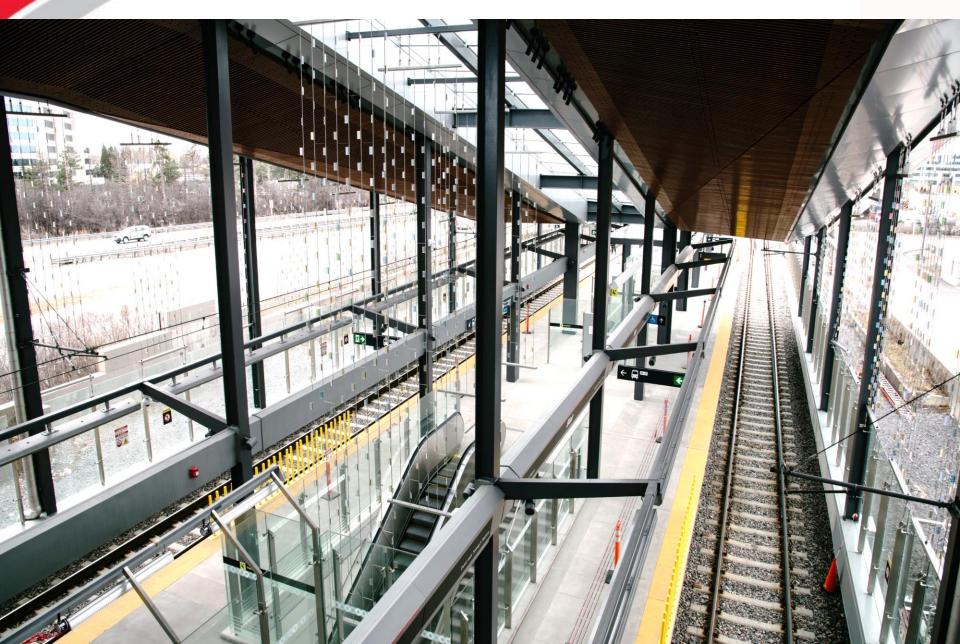
# Cyrville



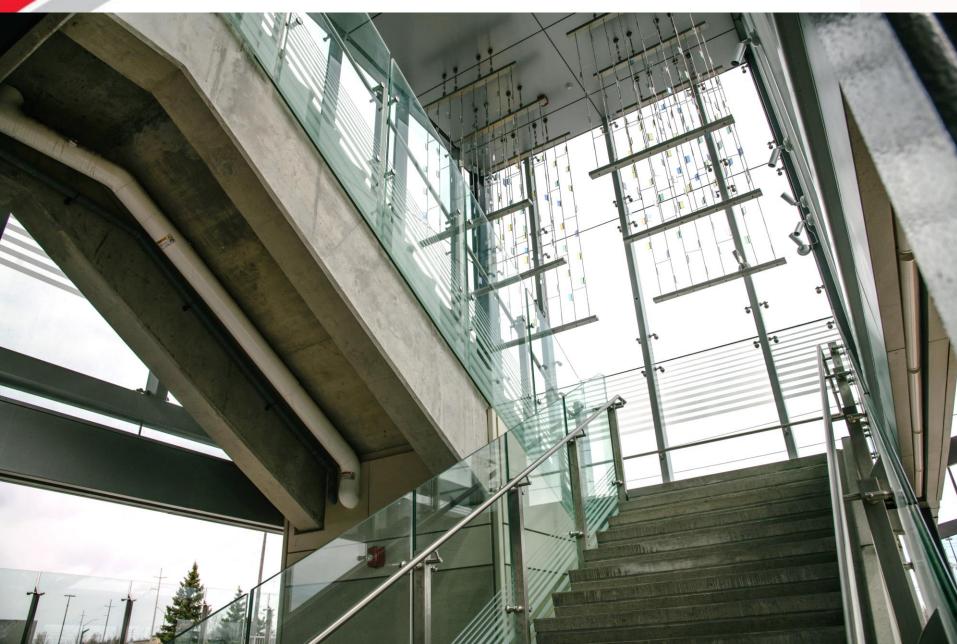
# Cyrville



#### Blair



#### Blair



# **Project Status**

- RTG has submitted their Substantial Completion notice and relevant paperwork;
- City is reviewing as per the process spelled out in the Project Agreement;
- Followed by an assessment by the Independent Certifier;
- RTG continues to advise that the system will be handed over to the City in Q2 2019;
- Final close out and completion work continues; and,
- Testing and commissioning continues.

# Substantial Completion Project Agreement Requirement

- Substantial Completion signifies that the project has advanced to the point where construction and testing is effectively complete;
- Applies to fixed components (stations, rail, etc.) and vehicles; and,
- There can be no restrictions that materially impairs the City's use of the system.

# Substantial Completion Project Agreement Requirement (Cont'd)

This includes:

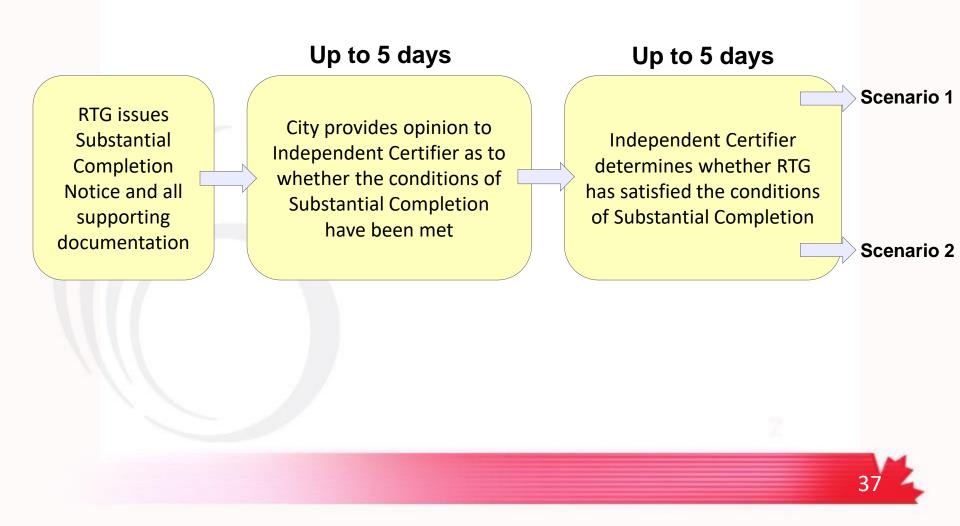
- Public and City use of the system;
- Maintenance services by RTM; and,
- Safety or traffic flow in any relevant aspect.

## **Substantial Completion**

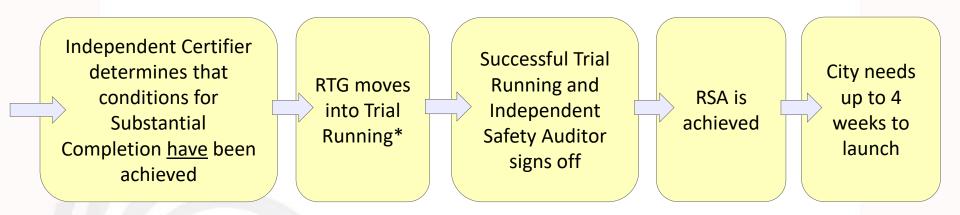
Continued focus on critical elements:

- Safety;
- Vehicles;
- Critical operating system both operating and customer facing;
- Stations; and,
- Maintenance readiness.

### Substantial Completion Review Process



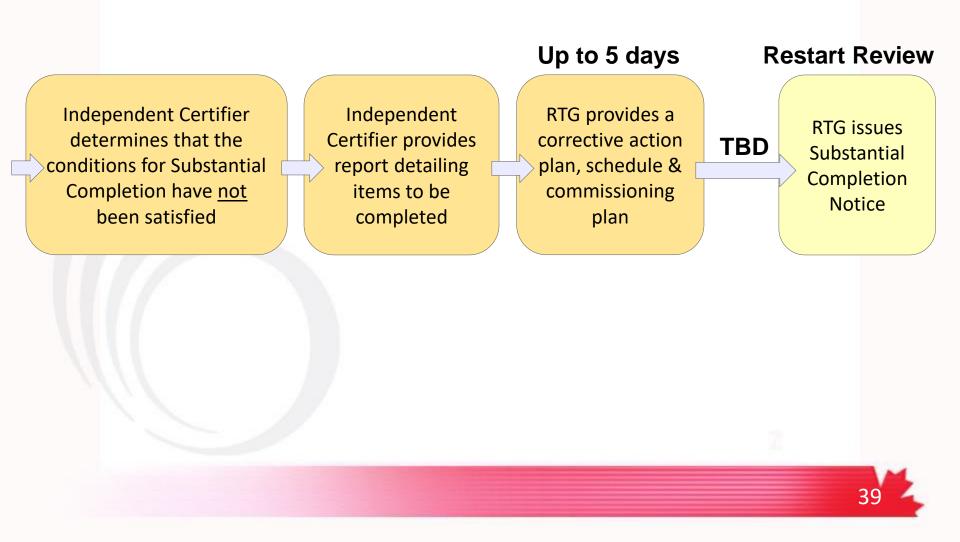
# Scenario 1



#### \*Trial Running:

- 12 consecutive days of normal service schedule
- Exercise and validate the operating schedules and operational performance requirements;
- Exercise and confirm the operating reliability of the system and subsystems; and,
- Verify and demonstrate vehicle availability and reliability.

# Scenario 2



# Elements Being Monitored That Are Critical To Revenue Service Availability

- 1. Fleet availability for service requirements;
- 2. Station occupancy for all stations;
- 3. Tunnel Ventilation System (TVS) tests;
- 4. Testing of the train control system;
- 5. Final testing of control systems for transit operations;
- 6. Final tests of the power system to the alignment and trains;
- RTG's system assurance sign-off is to be provided on all documents required by the City's Safety Auditor;
- End-to-End Practice Plan Running to demonstrate system capability; and,
- 9. Winter Operations.

#### **Status of 9 Critical Elements**

- RTG has made significant progress on all elements, however, to achieve Substantial Completion, outstanding work of varying degree remains; and,
- Full vehicle fleet reliability and completion of outstanding works required to ensure consistent reliable service.

# **City Preparation**

- Conducting operational training, drills and exercises;
- Ongoing bus/rail planning and service changes; and,
- Ready for Rail campaign continues.



#### **Questions?**