



# **O-Train Confederation Line Project Update**



# Key Milestones

1. Trains are running in test mode from Tunney's Pasture to Blair Stations;
2. Successfully completed the Tunney's Pasture to Blair Station Line Speed test:
  - Confirms end-to-end travel time is achievable;
  - Confirms station dwell times (doors open/close at stations);
  - Achieved top speed of 83 km/hr; and,
  - Full CBTC mode (Automatic Train Mode).
3. East end stations (uOttawa, Lees, Hurdman, Tremblay, St-Laurent, Cyrville, Blair) are all substantially complete; Occupancy Permit inspections are nearing completion;

# Key Milestones (*Cont'd*)

4. All fare gates and fare vending machines have been installed. Testing & Commissioning is underway;
5. SCADA software installed in Transit Operations Control Room with Testing & Commissioning underway;
6. RTG is planning to commence a system-wide Practice Plan in November. This will involve the system fleet running from Tunney's to Blair;
7. Successfully completed train handover testing for deploying trains from MSF to main line. This demonstrates train launching manoeuvres for morning service deployment.

# East Stations



# Blair Station



# Cyrville Station





# St-Laurent Station



# St-Laurent Station





# Tremblay Station



# Hurdman Station





# Hurdman Station





# Lees Station



# uOttawa Station





# uOttawa Station





# Fare Gates & Vending Machines



# Underground Stations

# Rideau Station





# Rideau Station



# Rideau Station



Rideau Street, Rideau Centre  
rue Rideau, Centre Rideau



Sussex Drive, Rideau Street  
promenade Sussex, rue Rideau





# Rideau Station





# Street Level Above Rideau Station



# Parliament Station





# Street Level Above Parliament Station





# Street Level Above Lyon Station



# Lyon Station





# Queen Street At Bank Street





# Queen Street Sidewalk Between Metcalfe & O'Connor Streets



# West Stations

# Pimisi Station





# Pimisi Station & Booth Street Cycle Lanes



# Bayview Station





# Bayview Station



# Tunney's Pasture Station



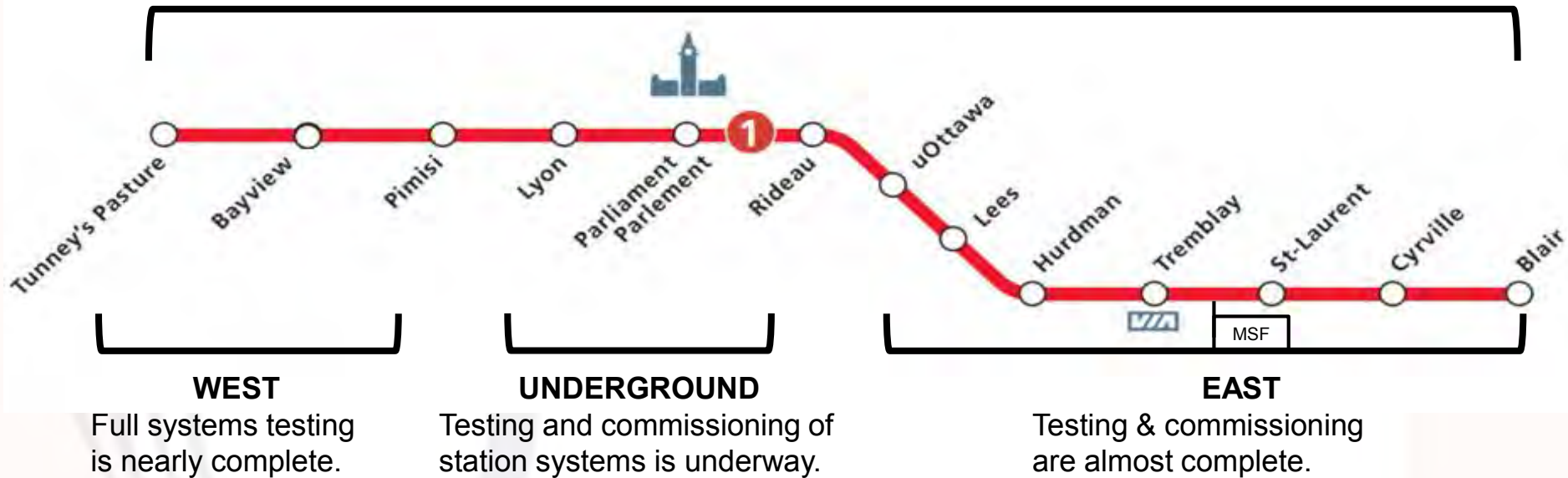


# Tunney's Pasture Station



# Testing & Commissioning

East to west, end-to-end CBTC testing with coupled trains has commenced.





# Vehicles & CBTC

- Transition from single to double car train for end-to-end testing;
- Integration testing throughout the full alignment, end-to-end, is underway with multiple coupled trains;
- Multiple vehicles can operate under full control of the CBTC system end-to-end;
- Full commissioning of the CBTC system will continue for several weeks;

# Vehicles & CBTC *(Cont'd)*

- Practicing operational maneuvers such as train moving from MSF to main line; and,
- RTG is focusing on deployment of a full end-to-end system practice plan with full fleet count required for service.



# Operational Systems Testing

- Ongoing integration testing of the Supervisory Control and Data Acquisition (SCADA) system – the computer system used to gather maintenance and operations information from the stations;
- Classroom training of OC personnel for the SCADA system is underway;
- Full commissioning of the SCADA system is expected shortly, at which time in-field training of OC staff will begin; and,
- The Transit Operation Control Centre (TOCC) is now being used by OLRTC for system-wide testing of communications devices.

# Transit Operations Control Centre

- The Transit Operation Control Centre (TOCC) is a multi-modal integrated control centre;
- The TOCC oversees the transit system including O-Train Lines, bus operations, Para Transpo, and Special Constables; and,
- The TOCC, once integrated, will allow transit operations to function together in one room: Bus Supervisors/Controllers, Confederation Line Rail Controllers, Para Assignment Clerks, Communication Coordinators, Dispatchers, Special Constable Unit, Communications Officers and Fleet Maintenance Supervisors.



# Transit Operations Control Centre



# Operational Readiness



# Station Operational Testing

- Real-life simulations of peak period bus to rail operations are underway at the three major O-Train Line 1 transfer points: Tunney's Pasture, Hurdman and Blair Stations;
- These simulations are intended to validate/confirm bus movements through busy stations;
- Dozens of buses are used to simulate movement during peak periods at major transfer points;
- Simulations of normal operations, extended dwell times and obstructed platforms are being conducted;

# Station Operational Testing (*Cont'd*)

- The Hurdman Station test was completed on Sunday, October 28;
- Results from the test are being compiled and preliminary results indicate the simulation modelling is correct; and,
- Tests are planned for Tunney's Pasture and Blair Stations.



# Hurdman Station Operational Test



# Hurdman Station Operational Test



# Emergency Training Exercise

- Numerous exercises formed part of the T & C process;
- Emergency training exercise held in September at Lyon Station;
- Participants included OC Transpo, Ottawa Police, Paramedics, Fire and other City partners;
- Purpose to allow first responders to practice responding to emergencies in the tunnel; and,
- Ensures the City's highest standards of safety are maintained in advance of the system opening.



# Emergency Training Exercise (Cont'd)



# Emergency Training Exercise (Cont'd)





# Training





# Yard Movement Training Exercise



# Yard Movement Training Exercise





# Yard Movement Training Exercise





# Key Activities to Monitor

- RTG needs to complete details associated with the Practice Plan;
- This Practice Plan ensures that the system will operate as it was designed, i.e. end-to-end run times, speed, dwell times, CBTC, etc.;
- Safety assurance program monitoring leading to confirmation by safety auditor that safety requirements are met;
- Rideau, Parliament and west stations substantial completion;
- Coordination with Building Code Services related to all station occupancy permitting;

# Key Activities to Monitor *(Cont'd)*

- Full complement of vehicles operating in full CBTC mode along the entire alignment;
- End-to-end vehicle testing and systems verification (all systems); and,
- Full fleet/full system operational testing from Blair Station to Tunney's Pasture Station in full CBTC mode.

# Look Ahead

1. RTG successfully launches the Practice Plan;
2. Sign off by the Safety Auditor;
3. Substantial completion;
4. Trial running;
5. RSA;
6. Revenue Service (train is in service); and,
7. City costs.





**Questions?**