



O-Train Confederation Line Project Update



Elements Being Monitored That Are Critical To Revenue Service Availability

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

1. Fleet Availability



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Major Progress

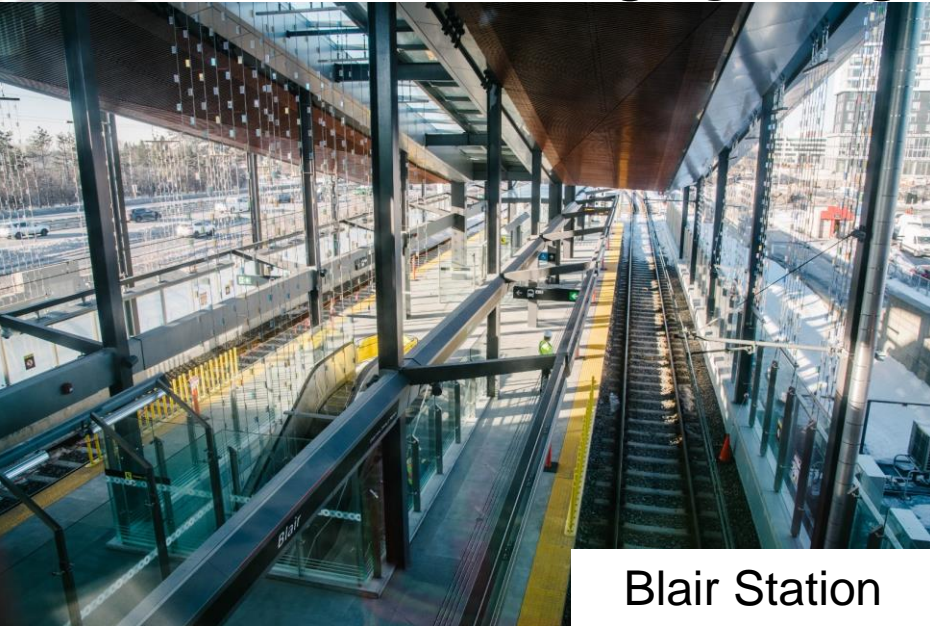
- All 34 vehicles have been through testing and commissioning on the system;
- All 34 vehicles are built and are going through final acceptance, troubleshooting and testing;
- 20 trains operating simultaneously in various configurations (single and double) has been achieved on numerous occasions
- Peak service will require 30 vehicles (15 double car trains); and,
- Up to 4 spare vehicles will be on standby or in maintenance.

Train Movement Across The Alignment



2. Station Occupancies

9 of 13 Stations



Blair Station



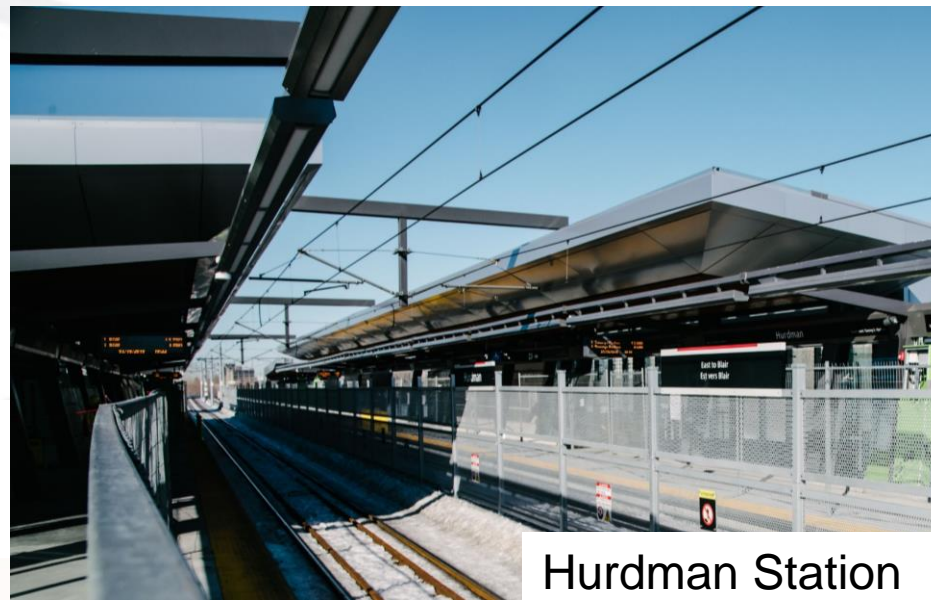
Cyrville Station



Tremblay Station

2. Station Occupancies (Cont'd)

9 of 13 Stations



2. Station Occupancies (Cont'd)

9 of 13 Stations



Bayview Station



Pimisi Station



Tunney's Pasture Station

3. Tunnel Ventilation System (TVS)

Trending Well

- Final smoke test was successfully completed at Belfast Maintenance and Storage Facility Connector Tunnel;
- Status: Clean up of final installation items, test reports and engineering safety approvals are underway.

Tunnel Ventilation System Smoke Testing



Controlled, hot smoke test



Ottawa Fire Services (OFS)
personnel

Tunnel Ventilation System

Smoke Testing (Cont'd)



Smoke ventilation path

4. Train Control System

Trending well

- All 34 vehicles have fully functioning and tested THALES train control system;
- Testing is underway, including regression testing on the final software version;
- Thales has safety certified the onboard train control equipment for 29 of 34 vehicles as of March 27;
- The remaining 5 vehicles will form part of the system load testing and will be certified shortly; and,
- Status: End-to-end performance testing continues.

5. Control Centre/Control System Testing

Trending well

- Commissioning of the communication systems is ongoing at the Transit Operation Control Centre (TOCC);
- Daily vehicle movements for training, testing and commissioning activities are now managed through the TOCC;
- Final software modifications are planned to provide remaining functionality such as building management systems; and,
- As testing and commissioning is finalized, handover of all control from RTG to OC Transpo is planned.

Transit Operations Control Centre



Transit Operations Control Centre



6. Power System Testing

Trending well

- Requires multiple vehicles, traveling the length of the system;
- The goal is to demonstrate the electrical network can handle power draws from multiple vehicles accelerating at the same time on different parts of the network; and,
- Status: Testing will continue as part of the transition to the Practice Plan when 15 double car trains are in use on the line.



7. System Assurance

Progressing well

- System assurance is tracking well.
- Team from independent safety auditor completed a field walk-through of the system; and,
- Independent safety auditor is working closely with RTG to review and assess all safety documentation.

8. Practice Plan Running

- Using the entire fleet of 34 vehicles, various system testing and commissioning of trains and train configurations have been used;
- Status: 17 single and 2 coupled vehicles were running between Tunney's Pasture and Blair Station the week of March 11, increased to 20 trains the week of March 18;
- Running a test with 20 individual vehicles on the system on March 14, 2019 was a major milestone;
- The operation from Tunney's Pasture to Blair Station demonstrated the correct operation of the train control system for a high frequency of trains;
- Following testing during the week of March 25, a transition toward 15 double car trains on the system is planned; and,
- The trains will operate on a schedule that mirrors peak service levels during revenue service.

9. Winter Operations

- RTM / RTG is enhancing its capabilities and operational approach; and,
- RTM has revised their winter plan and added equipment.

Bus Operational Test – Tunney's Pasture

- On Sunday, March 31, an exercise was conducted at Tunney's Pasture bus loop to simulate post-operating bus volumes;
- Morning and afternoon peak periods were tested under several conditions;
- Overall no major issues. The exercise identified minor adjustments such as:
 - Bus stop adjustments; and,
 - Signal plan amendments.



Ready For Rail

- Transit Commission received a detailed report and presentation on the Ready For Rail campaign;
- The final phase of the campaign, focused on providing information to customers and generating excitement about the Confederation Line, has been launched;
- Council has received information on each of the 10 Ready for Rail themes:
 - Newsletter articles;
 - Key messages;
 - Sample Tweets and Facebook posts;
 - Graphics; and,
 - Videos.
- The Ready for Rail website is the central location for customer information: octranspo.com/ready4rail

Handover Requirements

In order to achieve RSA and handover to the City, RTG is required to demonstrate compliance with a series of deliverables including but not limited to the following:

- All systems assurance (safety) documentation;
- All project construction and site work completed;
- All testing and commissioning completed including a Trial Running performance test for 12 consecutive days;
- Compliance with all safety requirements as approved by the City's Safety Auditor;
- Operational readiness on all fronts including maintenance; and,
- RTG is working with the City assessing possible RSA dates.

Next Steps Toward Revenue Service Availability

- Continue to monitor all critical elements;
- Continue OC Transpo's Operational Readiness Program;
- Planning for RSA – schedules, workforce adjustment, route changes, booking logistics, etc.;
- Continue to provide oversight of RTG;
- Ready for Rail campaign; and,
- Review RTG's proposed RSA when details become available.

Project Agreement - Negotiations

- City continues to work through negotiations with RTG using the project agreement;
- No payments have been issued to RTG; and,
- City continues to track all incremental costs and, using the project agreement, the City will deduct costs that it is entitled to deduct from future payments to RTG and seek to recover the City's expenses to the extent possible.



Questions?