

Finch West Light Rail Transit (LRT) Project

Overview

The Finch West LRT is an 11-kilometre light rail transit line that will run along the surface of Finch Avenue from the new TTC Finch West Subway Station at Keele Street to Humber College. The new streetscapes being built will be accessible for drivers, transit riders, cyclists, and pedestrians.

It will provide rapid transit for the Jamestown, Rexdale and Black Creek neighbourhoods, providing vital connections between communities and supporting growth in Northwest Toronto.

Quick Facts

- 18 stops, including 16 surface stops, plus an underground interchange station at Finch West (connecting to the new Toronto-York-Spadina Subway Extension), and one below-grade terminal stop at Humber College.
- Early works to relocate all the natural gas pipelines along the Finch Ave. West to accommodate the construction of the Finch West LRT by Enbridge Gas began in December 2016 and was completed by April 2019.
- Major construction began in 2019, with work at the MSF and Highway 400 bridge to replace the overpass at Finch and Highway 400, using a rapid bridge replacement (RBR) technology.
- The Finch West LRT will operate in a dedicated lane in the centre of the roadway, separate from regular traffic.
- Each vehicle will use the PRESTO proof-of-payment system.
- Fully accessible trains and stops for wheelchairs and strollers.
- Estimated travel for entire length of line is 38 minutes.
- Trains will run every 5-7 minutes during peak hours and every 7-10 minutes during off-peak hours.
- Transit Connections: TTC, GO, Miway, Viva, and Züm transit services.
- Cost: The project will cost approximately \$2.5 billion, and is funded as part of the \$8.4 billion commitment by the Province of Ontario and \$333 million commitment by the Federal Government to transit expansion in Toronto.
- Once built, it will provide rapid transit to 46,000 passengers per weekday.
- Annual ridership estimate of 12 million passengers by 2031.
- The Finch West LRT maintenance and storage facility (MSF) is located at York Gate Boulevard, close to the Norfinch / Oakdale stop.

Timeline

2016: Request for Proposals (RFP) released to shortlisted companies to design, build, finance and maintain the Finch West LRT project.

2017: Alstom light rail vehicle (LRV) contract awarded to build 18 LRVs for the project.
Finch West Community Office opening (2540 Finch Ave. West).
Metrolinx and Infrastructure Ontario (IO) closed RFP with 3 proponents.

2018: Infrastructure Ontario (IO) and Metrolinx have awarded the Mosaic Transit Group to design, build, finance and maintain the Finch West Light Rail Transit (LRT).

2019: Construction commenced on the Finch West LRT

2023: Estimated project completion

FAQ's

General

1. What is the Finch West LRT project?

The Finch West LRT will provide 11 kilometres of new, dedicated light rail transit along Finch Avenue West between the new Finch West Subway Station on the Toronto-York Spadina Subway Extension at Keele Street and Humber College in Toronto's northwest corner.

The LRT line will have 18 stops along Finch Avenue, including one underground interchange at the Finch West Subway Station and a below-grade stop at Humber College, as well as a maintenance and storage facility (MSF) for light rail vehicles (LRVs).

The Finch West LRT will provide crucial connections to numerous local and regional transit systems, including the TTC, GO Transit, Mississauga Miway, York Viva, and Brampton Züm transit services.

2. What is the current status of the Finch West LRT project?

Major construction began in 2019 on the Finch West LRT at the Highway 400 overpass and MSF.

Prior to that, on May 7th, 2018, Infrastructure Ontario (IO) and Metrolinx awarded the Mosaic Transit Group (Mosaic) a contract to design, build, finance and maintain the Finch West LRT.

Prime team members of Mosaic Transit Group include:

- **Applicant Lead:** ACS Infrastructure Canada Inc., Aecon Concessions - a division of Aecon Construction Group Inc., CRH Canada Group Inc.
- **Construction:** Aecon Infrastructure and Management Inc., Dragados Canada Inc., Dufferin Construction Company - a division of CRH Canada Group Inc.
- **Design:** Arup Canada Inc., Dillon Consulting Limited, DPM Energy Inc., DTAH, Perkins + Will Canada Inc., Sener SES Canada Inc.
- **Maintenance:** ACS Infrastructure Canada Inc., Aecon O&M - a division of Aecon Construction Group Inc.
- **Financial Advisor:** RBC Dominion Securities Inc.

A Request for Qualifications (RFQ) was issued in September 2015, followed by the release of the Request for Proposals (RFP) to design, build, finance and maintain (DBFM) the Finch West LRT in February 2016.

The RFP closed on December 13, 2017, and IO and Metrolinx evaluated 3 proposals including the Mosaic Transit Group, Humber Valley Transit Partners (HVTP) and FACT Partners.

In May 2017, the Government of Ontario announced that Alstom Canada would deliver the light rail vehicles for the Finch West LRT.

The Environmental Assessment (EA) for the Finch West LRT was completed in 2010. A separate EA for the Finch West Maintenance and Storage Facility (MSF) was completed in the fall of 2015 and a vacant property on Finch Avenue West between Norfinch Drive and Yorkgate Boulevard was identified as a location for the MSF. Construction began on the MSF in spring 2019.

3. Who is funding the project?

The Finch West LRT represents a \$2.5 billion investment by the Government of Ontario to expand and improve transit in the City of Toronto.

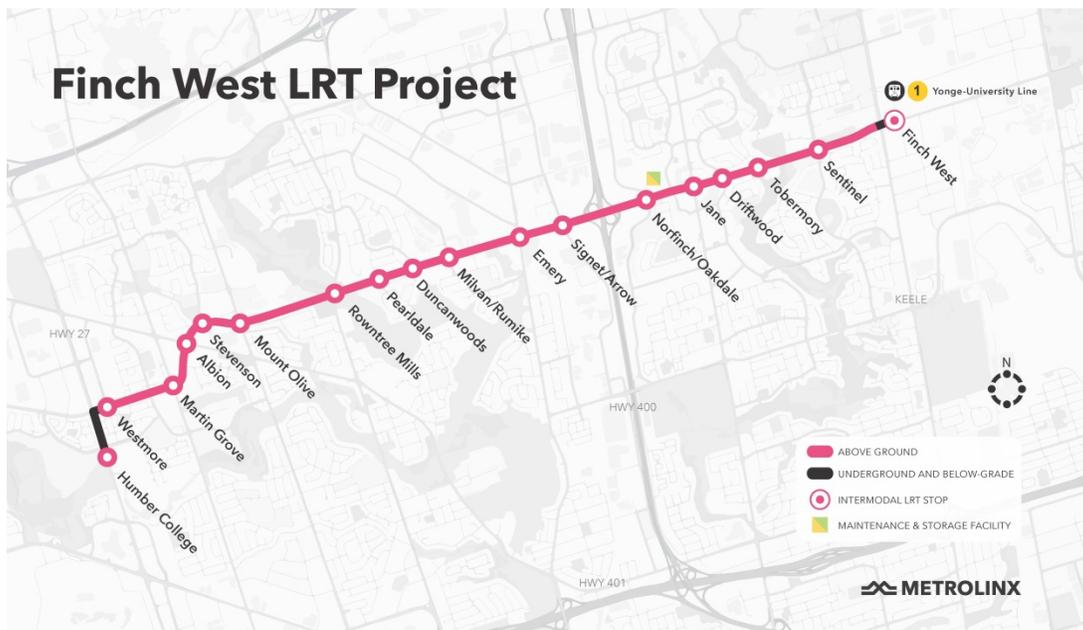
In June 2017, the Government of Canada announced up to \$333 million in federal funding for the Finch West LRT under the Building Canada Fund-Major Infrastructure Component.

4. How much will it cost to build the Finch West LRT?

The estimated capital cost of the project is \$2.5 billion.

5. Where will the Finch West LRT stop?

Please refer to latest map below for the 18 stops along the Finch West LRT route.



6. Why are there so many stops?

Toronto City Planning provided inputs in determining the number of stops and their locations based on overall city planning and connectivity. The locations and spacing of stops are based on estimates of passenger demand and connections with existing TTC north/south routes. When stops are too far apart, it becomes more difficult for passengers to access when located in-between, which reduces overall system usage.

7. Will the Finch West LRT be separated from traffic?

Yes, except at intersections.

8. Why is an LRT needed across Finch?

The Finch West LRT will provide convenient, fast, reliable transit for people travelling along this corridor.

Finch Avenue West, located in the Northwest part of the City of Toronto, is one of the most heavily used surface transit corridors in the Greater Toronto and Hamilton Area. Current conditions make travel times slow for existing local transit users.

The LRT will provide service that is faster and more frequent and reliable than existing bus service by travelling in dedicated lanes with signal priority at intersections.

The Finch West LRT will play an important role in bringing rapid transit to underserved communities, such as Jamestown and Jane/Finch.

The LRT project will provide a seamless connection to the TTC's subway system at the new Finch West Station on the Toronto-York-Spadina Subway Extension (TYSSE), and additional connections to GO Transit bus services and Mississauga and Brampton local bus services at Humber College.

9. Were other modes of transit considered before deciding on the LRT?

Yes, other alternatives were considered during planning.

10. What is the width of the right of way?

The street right of way is a 36 metre mid-block and wider at intersections. The roadway will be widened in varying amounts to fit the LRT guideway, traffic lanes and the new boulevard infrastructure (cycle track + sidewalk + soft landscaping) includes a small street furniture zone which may be the soft landscaping. The LRT guideway itself is approximately 8 metres wide between stops.

11. What is the size of the MSF?

The MSF site is about 100,000 square metres. The building itself will be about 10,000 square metres.

Construction

12. When will construction begin? When will the LRT be operational?

Construction began in 2019 on the Finch West LRT and activities are currently underway at the Finch West LRT portal and stop, the MSF site, Highway 400 bridge and Humber College stop. Estimated completion of the LRT is 2023.

13. Will construction be happening all at the same time along the route?

Construction work will occur at various points along the 11 kilometre route simultaneously, including at the Keele intersection, maintenance and storage facility (MSF) site (Yorkgate), Highway 400 and Hwy 27/Humber College area. Work within the MSF started in late 2019

14. Will there be any grade separations? If so, which stops?

Yes, there will be three stops with grade separations. They include:

- Hwy 27/Finch West
- Hwy 27/Humber College Blvd (this grade separation was added due to very high traffic usage in this area)
- Keele/Finch West, where the LRT goes into the underground LRT station

15. Will a noise wall be constructed along the Finch corridor?

A noise and vibration assessment was done along the corridor. Based on the results, the appropriate measures to mitigate noise and vibration levels will be included in the design.

16. Will the LRT line increase traffic during the construction and after?

As with any large project, some vehicle and pedestrian traffic may be affected during various stages of construction. Efforts will be made to minimize the effects of construction, such as providing commuters with advance notification of closures.

Metrolinx and Mosaic Transit Group will have a team of community relations staff to communicate regularly with communities, businesses and stakeholders about traffic impacts and to identify issues early and to mitigate construction impacts.

When complete, the LRT line will move transit into a dedicated lane and help significantly manage congestion along the busy Finch West corridor.

17. Won't building the LRT line take lane space away from cars?

The LRT will run on dedicated lanes in the centre of the roadway.

There will be no lane reductions along Finch Avenue West with the introduction of LRT. Most of the corridor can accommodate the LRT while maintaining two lanes of through traffic in either direction. Where needed, widening of the Finch roadway will occur to maintain the existing traffic lanes.

18. Is it true that trucks will have no space/right-of-way along Finch West once the LRT line is built? Currently it shows that cars can fit, but what about trucks?

The current conditions of access for large trucks will be maintained. Lane widths will remain the same for larger vehicles.

19. Do you think construction will affect businesses around the project area and will there be some sort of compensation for them?

Based on experiences with other projects, strategies have been developed to communicate with the local community regarding construction activities and to help local retail and commercial establishments remain open for business.

20. Will there be a retaining wall between traffic and bikes?

No. Bike lanes will be elevated from the road which will provide a buffer from adjacent traffic. The section of the alignment between Weston Road and Norfinch Drive will consist of a Multi-Use Path (MUP), which is fully separated from traffic.

21. How wide will the bike lanes be?

Generally, 2.1 metres. The MUP will be 3.5 metres of shared-use space.

Between Weston Road and Norfinch Drive, the MUP will be on the south side only.

22. When will road widening work start between Weston and Islington?

It is anticipated that work will start in this area in Fall 2020 and will continue for up to two years.

Comparison: Finch West LRT vs Current Bus Route 36A

23. Will the Finch West LRT be faster than the current 36A bus route?

The LRT will be faster due to semi-exclusive right of way, transit signal priority (TSP) and Automatic Train Supervision (ATS) related functions such as automatic schedule and headway regulations.

24. What is the length of an Alstom train and how many passengers will a LRV be able to carry compared to a bus? How many wheel chairs can one train take? How long will the platform be, and will there be exits on both sides?

The Alstom LRT vehicle is 48 metres in length. The vehicles can carry up to 336 passengers (120 seats + a capacity of 216 people standing). That's three-times more riders than the buses. They will provide faster, more reliable transit on lanes that will be separated from regular traffic.

There will indeed be four (4) zones for wheelchairs, but there will not be a dedicated space for strollers. However, there are flip-seat zones that will allow for stroller placement with a parent seated beside the stroller. There will be no fasteners for bicycles.

The platforms, as proposed, will generally be 52 metres in length, excluding the entry/exit ramps which will vary. The platforms will have one exit on the side towards the crosswalk.

25. How many passengers will the LRV carry per direction per hour during the peak period in 2031?

According to the City of Toronto and TTC, it is estimated that the Finch West LRV will carry approximately 2250 passengers per direction per hour during the peak period by 2031; the capacity of the Finch West LRT is up to 6,300 passengers per hour per direction.

26. Do you have any renderings available for the project? Where can I see them?

Yes, renderings are available of the underground Finch West station, below-grade Humber College stop, MSF site as well as of Martingrove and Sentinel at-grade stops. The renderings can be found on our official Instagram account @FinchWestLRT. Please note that these renderings are concept drawings and are subject to change.

Operation

27. Who is delivering the Finch West LRT project?

The project is being delivered by Metrolinx, on behalf of the Province of Ontario, with Infrastructure Ontario as the procurement lead.

28. Who will operate the Finch West LRT?

In accordance with the 2012 Master Agreement between Metrolinx, the City of Toronto, and the TTC, the TTC will operate the Finch West LRT line on behalf of Metrolinx. Details about the standards and procedures will be confirmed through a future operating agreement between Metrolinx and the TTC.

29. What will be the cost to take the Finch West LRT?

The Finch West LRT will use TTC fare structure and payment methods.

30. Will there be TSP on the Finch West LRT?

Traffic Signal Priority (TSP) function will be implemented for all 24 intersections along the Finch West Light Rail Transit guideway. Direct Signaling and Train Control System interface to traffic controllers will be implemented for the TSP function. There will be 3 different types of signals at each signalized intersection: pedestrian signals, traffic signals for road vehicles and transit signals. In general, light rail vehicles will follow the transit signals specifically for Finch West LRT vehicles.

Community Benefits

31. Will there be any community benefits built into the procurement for the Finch West LRT?

Metrolinx recognizes that its infrastructure investments should also provide benefits for the communities in which it works including local employment, training, apprenticeships, and local supplier and social procurement opportunities, where possible.

Metrolinx has committed to include a Community Benefits Framework in partnership with the Toronto Community Benefits Network (TCBN) for the Toronto Transit Projects, beginning with the Eglinton Crosstown Light Rail Transit (LRT) line.

Metrolinx is committed to working with community groups, agencies and other stakeholders to build its community benefits program with consideration to the interests and needs of their respective communities.

Building on the progress of the Eglinton Crosstown LRT, community benefit requirements have been included in the request for proposals (RFP) for the Finch West LRT project.

Engagement with BIAs, community groups and other key stakeholders is ongoing.

32. How many direct jobs will the LRT project create?

At the peak of construction, Mosaic estimates that approximately 1000 trades, professional, administrative and technical workers will be on the project and that 85 per cent of the labour will come from the Greater Toronto and Hamilton Area (GTHA).

In addition, Metrolinx is committed to include a Community Benefits Program for the Finch West LRT project, which will provide economic and social benefits to these communities, which include employment and training opportunities, apprenticeships, and local supplier and social enterprise opportunities, where possible.

Future Expansion

33. Are there plans to extend the LRT to the other Finch subway station along Yonge Street? The EA posted on your website mentions this extension.

The extension to Yonge Street is not funded at this point, however, it is included in the EPR (March 2010).

34. Will there be an LRT stop at Islington and Steeles in the future?

No, bus connections north-south on Islington will connect to the LRT at Finch.

35. Will the Finch West LRT route be extended to Pearson airport at any point in the future?

An airport extension is likely but no funding has been allocated yet and will require City inputs/agreements, including alignment and station/stop locations and interfaces with other transit providers such as GO lines and Bus routes.

36. Why is the Finch LRT not continuing another stop to Woodbine?

While we don't have plans to extend service to Woodbine Racetrack and mall at this time, we will be looking into it as a potential stop along a future extension to the airport.

There are future plans to expand the Finch West LRT to Woodbine and Pearson International Airport as part of the Draft 2041 RTP (Regional Transportation Plan) but this hasn't been funded yet.

37. Are there any plans for the Finch West LRT to connect to the future GO line at Weston and Finch?

It is not in the existing scope of work to connect the Finch West LRT to a future GO line at Weston.

Feedback

38. Why did you open a community office?

The community office is a first point of contact for those living along the corridor, on-the-ground, and in the neighbourhoods directly affected by the project. The office allows staff to provide information needed to the public about the project directly, in addition to other community outreach initiatives. This also makes the community relations team more accessible to those in the communities they serve.

LRT Extension

39. Are there plans or preliminary studies/designs for an extension east of Finch West Station towards Finch Station on Line 1?

Although the 2010 Environmental Assessment (EA) for the Finch West LRT Project includes plans for an extension to Finch Station, at this time, this extension is unfunded.

40. Why an LRT instead of a subway? What if expansion is needed?

An LRT was chosen for Finch Ave. W. due to the lower density across the corridor. The Finch West LRT currently has plans for expansion as noted in the 2010 Environmental Assessment (EA), but at this time, the extension is unfunded.

41. Pearson Transit Hub - Will the line extend from Humber College through Woodbine Racetrack to the new transit hub at the airport?

Metrolinx and the Greater Toronto Airports Authority (GTAA) have a partnership to work together to explore ways improve rapid transit access to Canada's largest airport, which includes possible rapid transit lines, like the Finch West LRT, to the planned Regional Transit Centre at Toronto Pearson Airport.

Although the 2010 Environmental Assessment (EA) for the Finch West LRT Project includes plans for an extension from Humber College to Woodbine and Pearson Airport, at this time, the extension is unfunded.

Project work specific to planning the Regional Transit Centre falls with the GTAA. We recommend that you contact the GTAA directly at transit@gtaa.com in regards to planning timelines

LRT Route/Design/Stops/Stations/Wayfinding

42. Is there going to be a bridge over Hwy. 400?

Yes, there will be a bridge over Highway 400. Right now, the construction crew is working on replacing the MTO Highway 400 bridge. Rehabilitation of the Highway 400 bridge structure is included in the Finch West Light Rail Transit (LRT) project. To save time and reduce traffic impact, crews are using an innovative engineering process called 'rapid bridge replacement' (RBR) to replace the Highway 400 bridge. They have been building the new bridge next to the highway and will be replacing it over the course of two separate weekends later this spring.

43. Did the original subway station design consider the LRT? Or is the station built in 2017 being rebuilt?

Yes, the original TTC subway station design considered the Finch West LRT design. The LRT station is currently being designed on the southeast corner of Finch Ave. W. and Keele St. using a cut and cover method. There will be a connection to address smooth interchange between the LRT and Subway.

44. What will the station at Humber College look like?

Please take a look at the Humber College stop rendering below. Passengers will enter through one of two entrance buildings located on the plaza before transitioning to the platform.

The platform design shares many of the same elements and characteristics of the other stops along the alignment. This consistent approach to design will enhance the customer experience. The platform has several canopies that will provide weather protection but will also allow natural light to create a quiet sanctuary for both arriving and departing passengers.

Please note - the final design is still under development and there may be some minor variances to what is shown in the supplied image.



Frequency/Speed/Reliability of Train

45. What will be the frequency of the train on and off-peak?

A total of 15 Light Rail Vehicles (LRV) will be operating during both morning and afternoon peak hours, with 5 minutes in between trains (also known as "5- minute headway"). During off-peak hours, there will be 7 to 10 minutes between trains, with 8 to 10 trains in operation.

46. What is the total travel time and average speed of the Line?

The average end-to-end travel time is approx. 33 to 34 minutes, with average travel speed of approx. 20 to 21 KM/H.

47. How reliable will the LRT service be? Are there any other provisions being made to ensure reliability of service apart from ROW separation? Additionally, are any other provisions being made for any future increases in capacity? Will the LRT be able the support frequencies higher than 7 minutes in future?

The right of way is not only separated from traffic, it is raised above the ground, in order to limit lane crossing by cars. The system is being designed so that it can be expanded in the future from 18 vehicles to 26. For example, the MSF yard is being made large enough to accommodate these additional 8 vehicles. The maximum headway (minimum time between vehicles) during rush hour is currently set at 5 minutes.

LRV

48. LRV Selection - Will Line 6 be utilizing Alstom LRV vehicles? How many LRVs will be procured for Line 6?

Yes, 18 Alstom vehicles will be used for the Finch West LRT.

49. What will the seat upholstery look like the in the new LRVs? If we're keeping the moquette's we seen already, will the new LRV have priority seating at all?

The seat fabric on the Alstom LRV mock-up is the same as will be in the production vehicles and will look similar to what was featured in the Alstom LRV renderings. The LRV will also have 4 mobility aid locations per Vehicle as well as a number of priority seats.

50. What is the difference between the LRT trains and the Toronto Rocket subways?

In both LRT and subway systems, actual speed is determined by spacing between stops and the dwell time at stops. The Finch West LRT will run above and below ground, and is grade separated from regular traffic. The wide LRT platforms are accessed via accessible signalized intersections/crosswalks and there is a physical barrier between the platform and adjacent road lane. There is also a big cost difference between subways and light rail transit. LRTs are much more cost effective to build than a subway. You can read more about LRT facts

here: http://www.metrolinx.com/en/projectsandprograms/transitexpansionprojects/toronto_lrt_facts.aspx

51. Will there be any videos of the trains coming in the future? Which manufacture of the vehicles will they be?

Yes, there will be videos of the Light Rail Vehicles (LRVs) coming in the future. You can also read our blog [here](#) -highlighting the LRV mock up at summer festivals last year. The LRVs will be manufactured by Alstom Canada at the Alstom plant located in Brampton, Ontario.

General

52. Will the LRT have Wi-Fi?

The LRT will have Wi-Fi at Humber College Stop and Finch West Station. Due to running above ground, it will give riders access to cellular service and their personal services.

53. Are the Finch West LRT trains and its station's environment-friendly?

The Finch LRT trains and its stations are environmentally-friendly. They will operate using electric power throughout the alignment and produce zero emissions.

54. Free transfers between the LRT and TTC subway? Will riders be able to transfer between the Finch West LRT and the Line 1 subway (and vice versa) with a transfer (without paying a separate fare) or will a double fare be needed?

Yes, riders will be able to transfer to the Finch West LRT and the Line 1 subway service and vice versa free of charge without paying an additional fare.

Bike Infrastructure

55. Are there plans for separated or raised bike lanes along Finch?

Yes, there will be bike lanes along the route. These bike lanes will be elevated from the road (similar to the bike lanes used on Sherbourne Street). This will provide a buffer from adjacent traffic. Bike lanes will be 2.1 metres, while the Multi Use Path (MUP) will be 3.5 metres of shared space. The MUP will be on the south side of Finch Ave. West between Weston Road and Norfinch Drive.

Finch West Station Design

56. What will the connection between the two lines at the Finch West Station look like? Will there be a pedestrian tunnel connecting the concourses?

That's right, the concourse level of the Finch West LRT station is connected to the main entrance to the TTC station via a pedestrian tunnel. The design is currently under development and will be made available once finalized.

57. Will there be secondary entrance to the LRT station that doesn't require you to go down and then back up again?

Finch West LRT station will have two entrances - one from the main entrance building and another one from the existing TTC station connected via the pedestrian tunnel. Due to the space limitations and unique station design, there will still be a need to go up to the platform level from the concourse; however an elevator, stairs and escalator will be provided for passenger convenience.

Tree Replanting

58. When will the trees along the corridor be re-planted?

Following construction completion of the Finch West LRT line, Mosaic will consult with the City to refine the tree replacement and compensation strategy. The replacement ratio of public trees is 1:1 and for private trees 3:1. Where possible, Mosaic will replant trees close to the location of the removed trees. However, the replanting area may change depending on the need and available space. We will liaise with the City to determine new locations of replacement trees. A tree maintenance period will be put in place to monitor newly planted trees. New trees will be planted in compliance with the City of Toronto's Tree Replacement Policy.

Contact Info

Phone: 416-202-6500

Email: torontowest@metrolinx.com

Website: metrolinx.com/finchwest

Social Media: @FinchWestLRT

Community Office Address: 2540 Finch Ave.
West

Office Hours: Monday, Wednesday & Friday
from 9-5 / Tuesdays & Thursdays by
appointment