

Business Case Decision Making

Why would you decide Option 3 is better when it causes huge disruption, is more difficult to build and deliver and is longer and when cost is not an issue?

Through our analysis, we found that Option 1 could be delivered with up to three stations at Steeles, Richmond Hill Centre, and Langstaff within the \$5.6 billion announced funding envelope. Option 2 could also accommodate up to three stations in roughly the same areas.

The refined Option 3 alignment has the benefit of allowing for a fourth station, since it minimizes the amount of costly tunneling required for the project. Metrolinx is working with municipal partners to evaluate and determine the best location for the fourth station as planning work continues.

This approach will help us bring better rapid transit service to the many people who will live in the Richmond Hill Centre and Langstaff Gateway areas in the coming years, since they are designated as urban growth centres. The existing rail line runs right through the centre of them, so building stations that will make it easier for people to get to existing regional bus and GO train services in that area will mean faster, more convenient transit and less traffic congestion as communities grow.

The precise alignment of the Yonge North Subway Extension will evolve as planning work continues. We expect to have more detailed information in the coming months as further design work is refined and we move forward with environmental assessments, but our goal will be to minimize impacts to communities as much as possible as we deliver major transit benefits to them.

When the original six station alignment was decided was funding not already committed?

When Metrolinx assumed responsibility for the Yonge North Subway Extension in 2019, the only funding allotted to the previously envisioned project was roughly \$91 million for preliminary design and engineering work.

What are the specific business case frameworks you are referring to, that makes Option 3 the best?

The Metrolinx business case framework is used across all major projects being planned, designed and built by Metrolinx to make sure we have a thorough understanding of the potential benefits and challenges associated with the project. Input from municipal and regional planners informed the development of the business case analysis for the Yonge North Subway Extension. The insight we gathered from our partners helped us thoroughly understand the growth planned in each community served by the extension, and how that development will affect transit needs in the future. The Initial Business Case and supplementary analysis are [available here](#).

Running the route along the existing CN railway corridor in the northern end of the route allows us to build a fourth station within the \$5.6 billion funding envelope because it minimizes the amount of tunneling needed. With the other completely underground options, only three stations could be built. This approach will also help us bring better rapid transit service to the many people who will live in the

Richmond Hill Centre and Langstaff Gateway areas in the coming years, since they are designated as urban growth centres and the existing CN rail line runs through the centre of them.

Tunneling

Wouldn't it be better to tunnel deep under the cemetery instead?

We considered a route for the extension that tunneled under Holy Cross Cemetery but we did not include it in our detailed analysis because early investigations showed that the depth the tunnels would have been needed to be built at below Pomona Mills Creek would not have allowed the route to reach the surface at Bridge Station, which fills the gap in the regional transit network by connecting the subway with the GO and Viva bus rapid transit networks, unlocking more travel opportunities across the region.

This approach will also help us bring better rapid transit service to the many people who will live in the Richmond Hill Centre and Langstaff Gateway areas in the coming years, since they are designated as urban growth centres. The existing rail line runs right through the centre of them, so building stations that will make it easier for people to get to existing regional bus and GO train services in that area will mean faster, more convenient transit and less traffic congestion as communities grow.

Please clarify section of tracks will run at-grade north of Royal Orchard?

As a part of our plan, the subway tracks will emerge at the surface at the proposed subway tunnel portal within the CN railway corridor. The line then travels north within the existing rail corridor under the Highway 7 and Highway 407 overpasses on its approach to the Richmond Hill Centre area.

Funding

Have property and commercial developers committed to assist with funding or any other kind of financing if you divert the alignment as set out in Option 3?

We are open to considering partnerships that could add benefits to the project. The provincial government will also be exploring development opportunities that could support the project through the [Transit-Oriented Communities](#) program as part of the planning process. Any decisions we make on alignment and station locations are in the interest of improving the customer experience, increasing access to transit, maximizing ridership, achieving travel time savings, and creating better access to jobs. These criteria are balanced by cost and other community considerations.

Stations

Why not build Bridge Station underground if Options 1 and 2 angle towards where Bridge Station is slated to be?

The benefit of Bridge Station as it is proposed in Option 3 is that it brings together as many as six existing and future regional transit services in a location that is easier for the buses that run along those routes to access than where the transit hub is located in Option 1 and Option 2. Having stations above

ground cuts down on travel time by avoiding lengthy descents into underground tunnels and will make it transferring from the subway to a GO train, GO bus, or local bus faster and easier.

The refined Option 3 proposal will help us bring better rapid transit service to the many people who will live in the Richmond Hill Centre and Langstaff Gateway areas in the coming years. This route allows us to achieve the benefits of the project at a lower cost. This means we are able to build a fourth station within the \$5.6 billion funding envelope because it minimizes the amount of tunneling needed. With Options 1 and 2, only three stations could be built.

How many passengers per peak hour are expected at both Bridge and High Tech Stations?

An estimated 7,400 people will use Bridge Station in the morning peak hour. High Tech Station is predicted to attract between 3,000 to 5,000 riders over the same period. These estimates will be updated as we complete more planning and design work for the project.

Property Impacts

How much financial compensation should homeowners with the subway passing beneath their homes expect?

We understand that you want those details and we will reach out to impacted property owners as soon as possible. If Metrolinx confirms that your property is needed to support construction or operation of the project, we will contact you directly.

Our preferred approach is to have direct negotiations with owners, with the goal of reaching amicable agreements.

Fair market value represents the value of the property, including the property below their homes that we may need for the subway, based on the market conditions at that time. A third-party appraisal will be completed to estimate the fair market value.

Property owners may also complete their own appraisal to determine or confirm the fair market value. In some cases, other kinds of third-party experts may be asked to help determine fair market value for a property, such as environmental consultants.

Metrolinx strives to communicate with property owners early and often so that there is ample time to work through solutions. We will know more about precise environmental and community impacts as the project moves through further design stages, which are currently underway.

Parking

What is the plan for commuter parking at High Tech, Bridge, or Steeles Station?

The next stage in planning for the Yonge North Subway Extension includes the release of the Preliminary Design Business Case (PDBC), which will further refine the project's design, alignment, and benefits. Parking will be evaluated in more depth through the PDBC.

The Yonge North Subway Extension has been designed to support vibrant urban development along the alignment that creates faster, easier connections to rapid transit so that people can get out from behind the wheel. Those connections include local transit routes, TTC bus service, York Region local and VIVA express bus service, Richmond Hill GO service, Highway 407 GO bus service, access with PRESTO (which automatically applies transfers and gives the user the lowest cost of a ride), as well as active transportation like walking and cycling.

Procurement and Timelines

Is rolling stock included in the procurement?

The new subway trains required to provide service on the extension have been accounted for within the \$5.6 billion funding envelope. We will work with the TTC to procure new trains.

What is the timeline for procurement and construction?

The planned date to begin the main construction on the project is late 2023. We will have more information about construction timelines as we progress through the next phase of planning and design, but we remain committed to an in-service date of 2029-2030, after the Ontario Line is in service.

CN

Has the CN given you the rights to tunnel under their tracks?

We have had numerous positive discussions with CN about our plans for the Yonge North Subway Extension as planning and design for the project continues. Metrolinx has a longstanding relationship with CN – we share rail corridor throughout our existing GO network and have done so for years. We're confident we will be able to effectively work together to move this important project forward.

Is the subway tunneling under the CN tracks or running above ground? If above ground, will it be on the east or west side of the CN tracks going into Bridge?

The current plans for the project recommend placing the northern section of the Yonge North Subway Extension at the surface, instead of tunneling all the way to Richmond Hill. The tracks will head north beneath Yonge Street from Finch Station before they curve away from Yonge and align with the CN Railway corridor. The subway will rise to emerge at the surface south of Highway 407 as it continues through the Richmond Hill Centre area. We'll be adding dedicated subway tracks to the west of the CN tracks within the existing railway corridor and looking at ways to keep the footprint of the project as small as possible as we build new infrastructure.

Noise and Vibration

Airborne noise is a common issue with at grade subway operations, what measures and controls will be taken to eliminate noise impacts?

Metrolinx is committed to addressing any noise and vibration due to construction and operation of the extension. Our aim is to ensure no appreciable difference between existing and future noise and vibration levels in your community.

We're going to be using solutions for the project that are proven to work. A big benefit is that they'll be based on modern and up-to-date industry standards, which have significantly improved since the first subway lines in the GTA were built many decades ago.

The detailed studies we're doing right now will help us make sure we put all the right noise and vibration solutions in place so neighbourhoods along the extension stay sought-after places to live in.

We're looking at a wide array of proven noise and vibration solutions we could put in place for the project, like noise walls that block sounds, high-grade rail fasteners that keep all the parts tightly together, and rubber dampers that attach to the rails to absorb vibrations that cause noise.

We will have more detailed information about the solutions we'll be putting in place as we refine designs and conduct and consult on environmental assessments.

What is the allowable limit for noise?

Our goal is to ensure that there are no appreciable differences to the levels of noise you experience today compared to when the extension is up and running. Metrolinx uses provincial guidelines for the assessment of noise.

The provincial limits for airborne noise are based on the lower of either the existing levels of ambient sound in a given area, or a set of minimum sound level criteria. For areas along the surface-level segment of the route, the goal is not to exceed the existing ambient sound levels by 5 dB or more.

When it comes to minimizing noise caused by trains traveling through the tunnels, the guideline limit Metrolinx aims to come in under is 35 dBA (a unit of measurement that best reflects how sound is perceived by the human ear) for ground-borne noise. In other words, roughly the same level of sound you could expect in a library. If noise and vibration levels are expected to exceed those guidelines, we put additional solutions in place to bring them back down below those limits.