

ATTACHMENT 4

SHEPPARD SUBWAY EXTENSION - UPDATE

Metrolinx began work on the Initial Business Case (IBC) for the Sheppard Subway Extension project in 2023. The IBC examines options for extending rapid transit within the study area as shown in Figure 1, and considers at a high level the potential routes, alignments, station locations, and technologies.

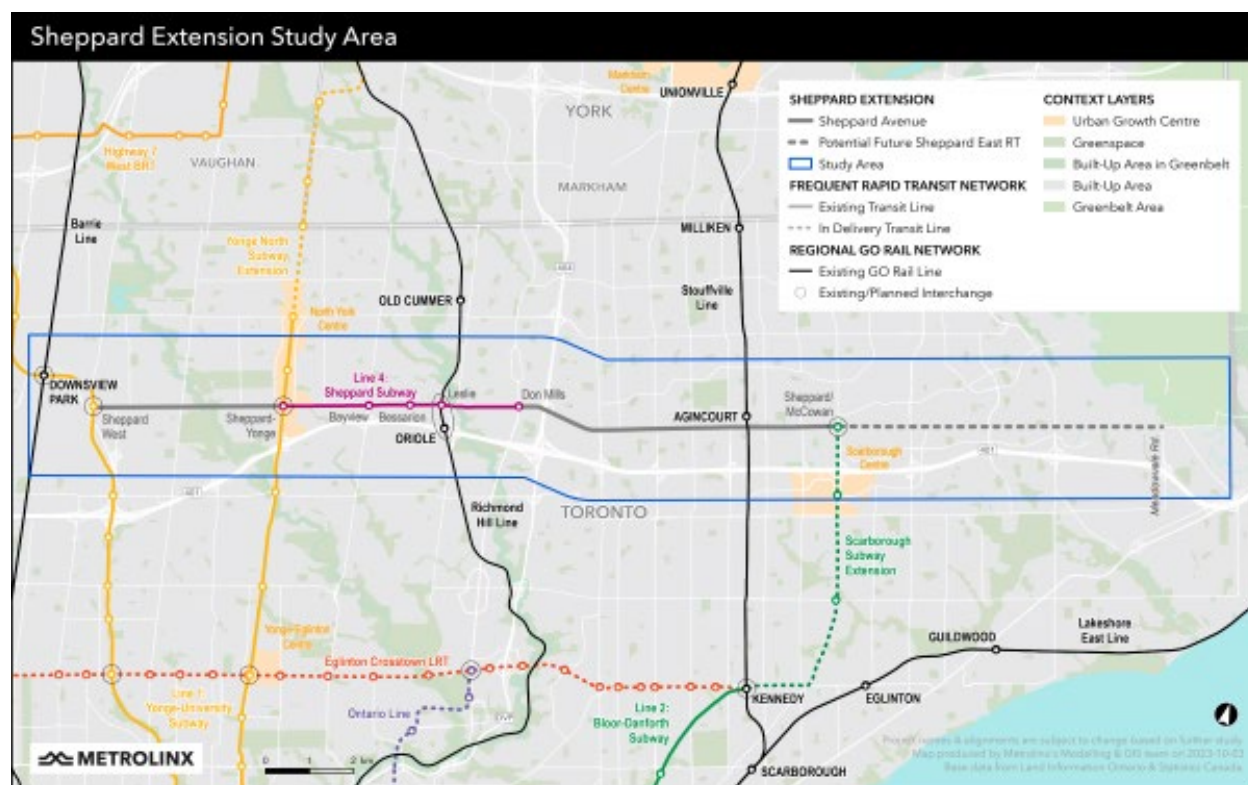


Figure 1: Map of Study Area for Sheppard Subway Extension (Source: Metrolinx)

Working with Metrolinx, the City Planning Division is leading the coordination effort of the City's core team, which includes Transit Expansion, Transportation Services and the TTC. A broader group of City Divisions are part of the Metrolinx Technical Advisory Committee and have been engaged on key activities throughout the study process. The City's core team has been participating in regular working group meetings as special stakeholders in the study to advance City interests along the Sheppard corridor. In particular, the City is interested in the Sheppard corridor between McCowan Road and Morningside Avenue because of the overlap with the planning for the Eglinton East Light Rail Transit (EELRT), one of the City's priority transit expansion projects. City staff are working with Metrolinx to coordinate the planning and design of both projects.

Problem and Opportunity Statement

In November 2023, Metrolinx held its first round of public consultations on this project to seek input on how a rapid transit project could support and improve the community in

and around the study area, to shape the problem and opportunity statement. Members of the public were engaged on topics related to communities and development, travel options, as well as transit service. Below is a summary of public feedback received by Metrolinx:

- Transit improvements should focus on speed, convenience, and reliability;
- Connection and integration with other transit lines would be valuable, such as Scarborough Subway Extension and Line 1 Yonge-University;
- Challenges with buses and multiple transfers to move along Sheppard, with opportunity for one seat ride (where a passenger can travel in the same vehicle for a longer distance without the need to transfer to other transit vehicles);
- Opportunity for infrastructure to support the growing community;
- Provide weather protection;
- Offer safe, accessible and affordable transit during peak and off-peak times;
- Consider connections for walking, cycling, and cars;
- Reduce emissions; and
- Concerns about underserved communities, future construction impacts, and project timelines (whether and when the extension will be built).

Based on public feedback received and further input by City staff, Metrolinx developed the problem and opportunity statement, summarized in Figure 2.

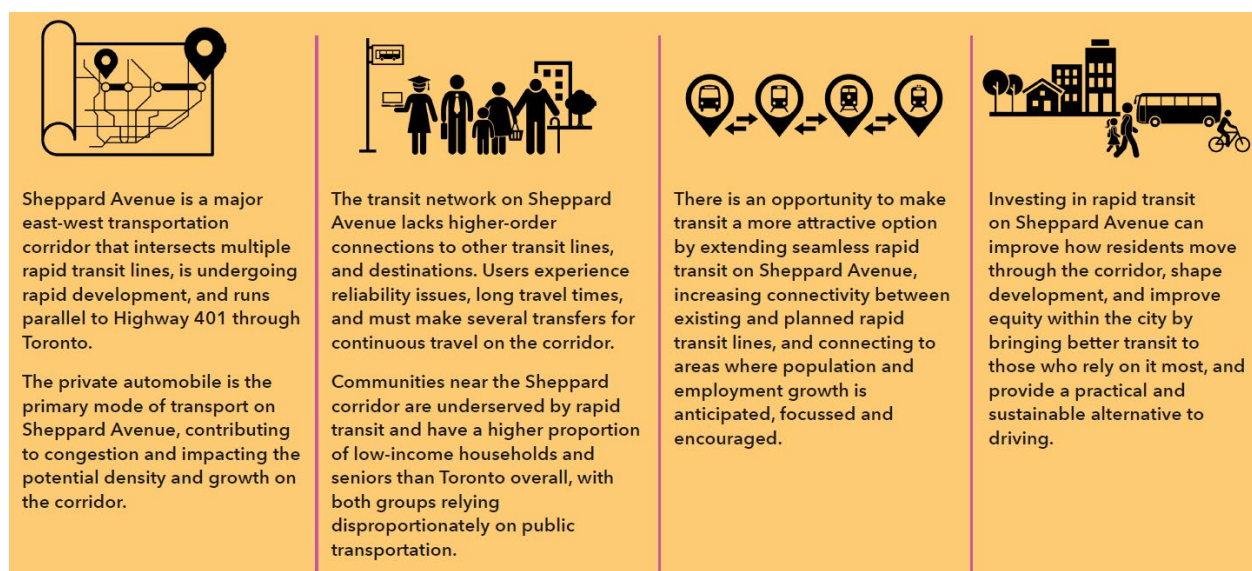


Figure 2: Metrolinx's Problem and Opportunity Statement (Source: Metrolinx)

Options Development

To respond to the problem and opportunity statement, Metrolinx developed a long list of options, grouped by key characteristics (alignment, terminus, comparable technology), and screened based on key objectives and other considerations to produce a short list of four high-level concepts. Figure 3 summarizes these four concepts based on geographical extents, while Figure 4 to Figure 7 provide additional details on these concepts.

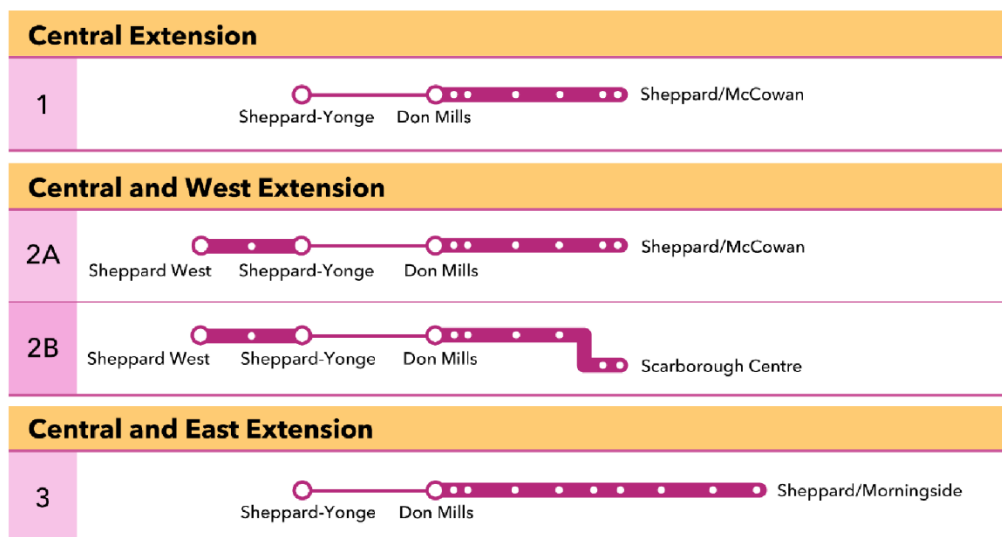


Figure 3: Summary of the four concepts created based on geographical extents (Source: Metrolinx)

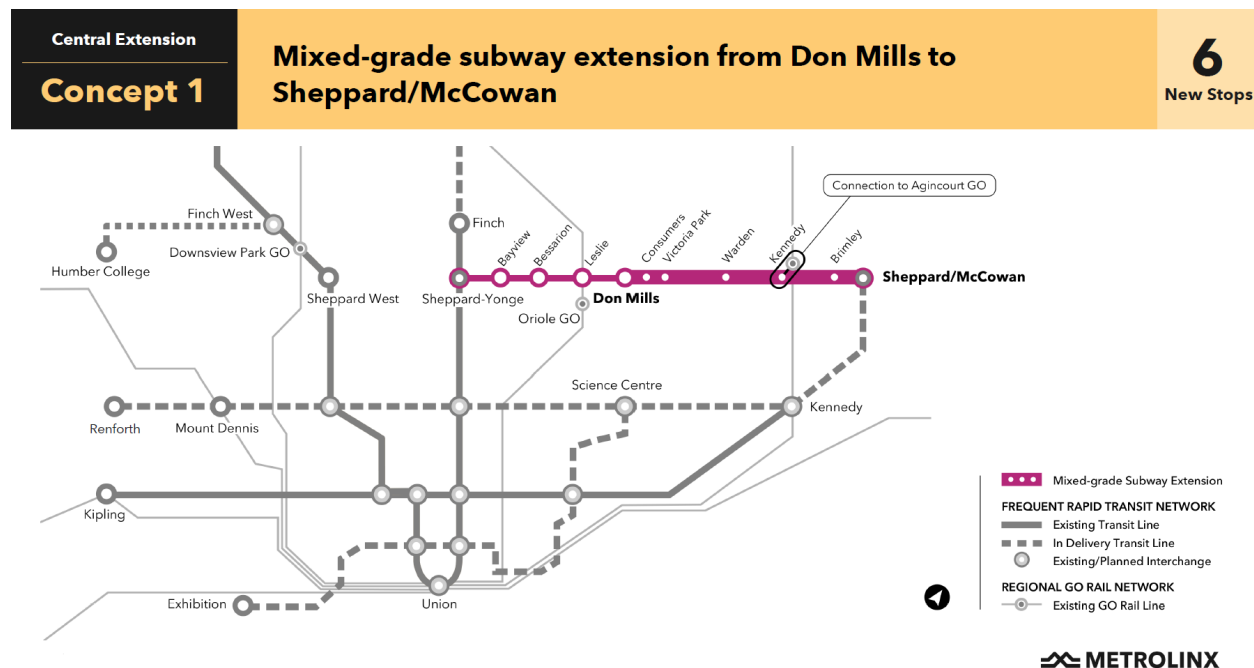


Figure 4: Map of Concept 1 (Source: Metrolinx)

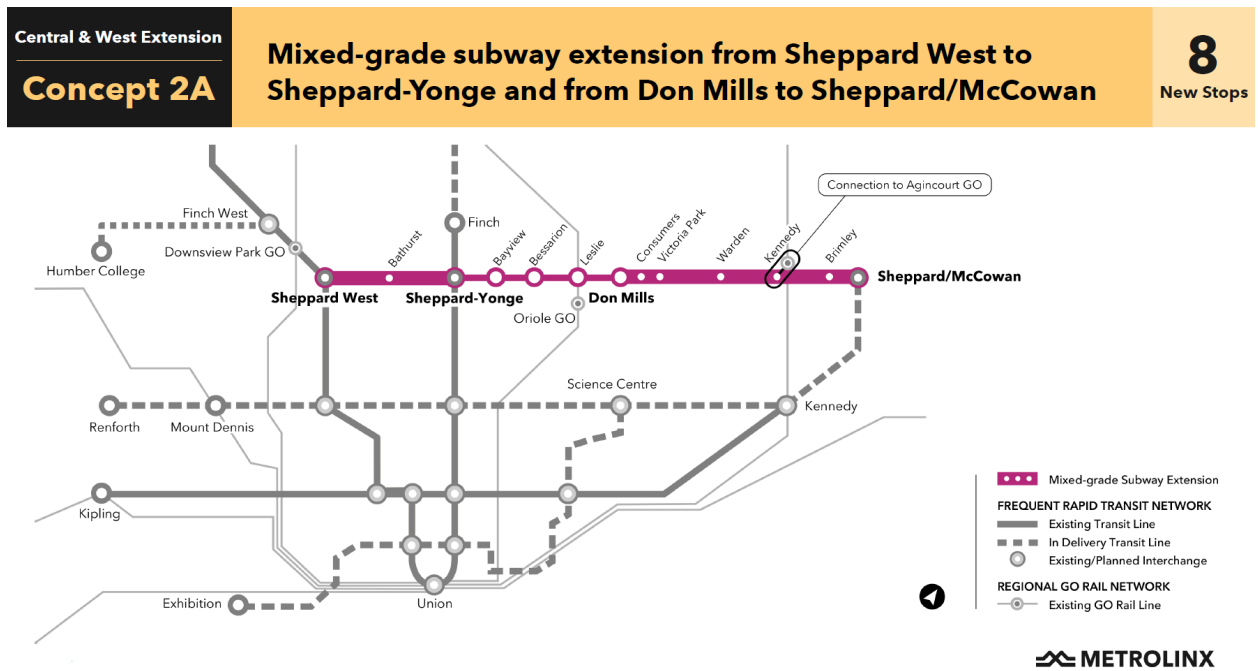


Figure 5: Map of Concept 2A (Source: Metrolinx)

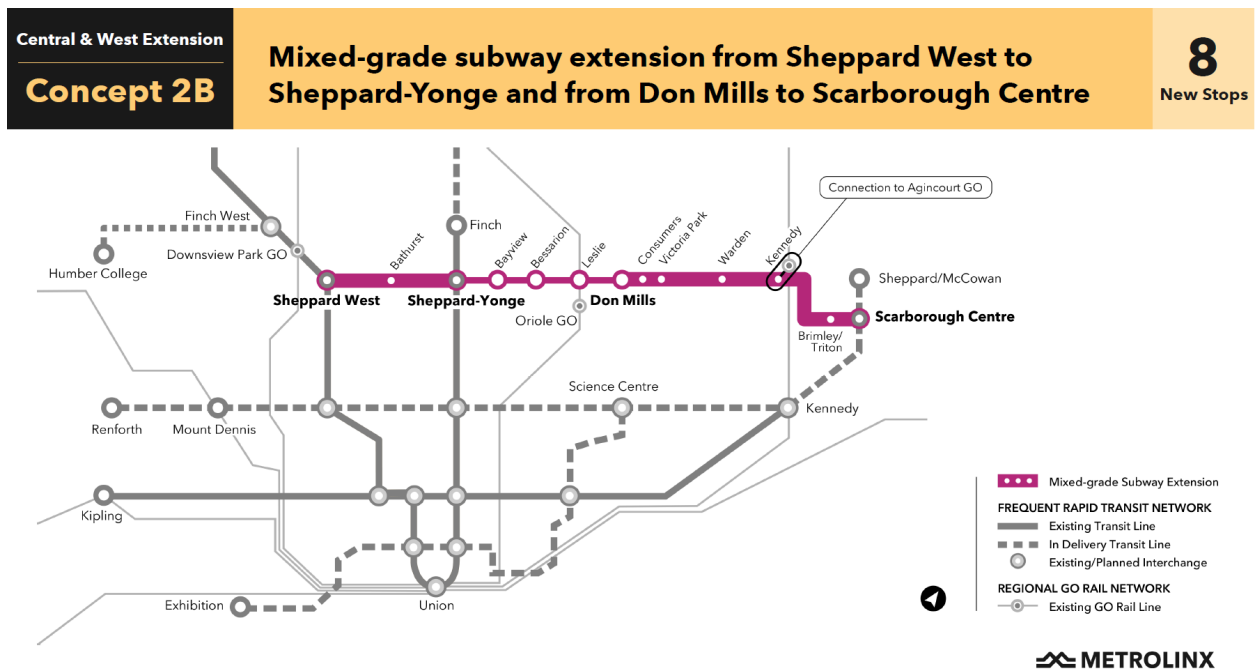


Figure 6: Map of Concept 2B (Source: Metrolinx)

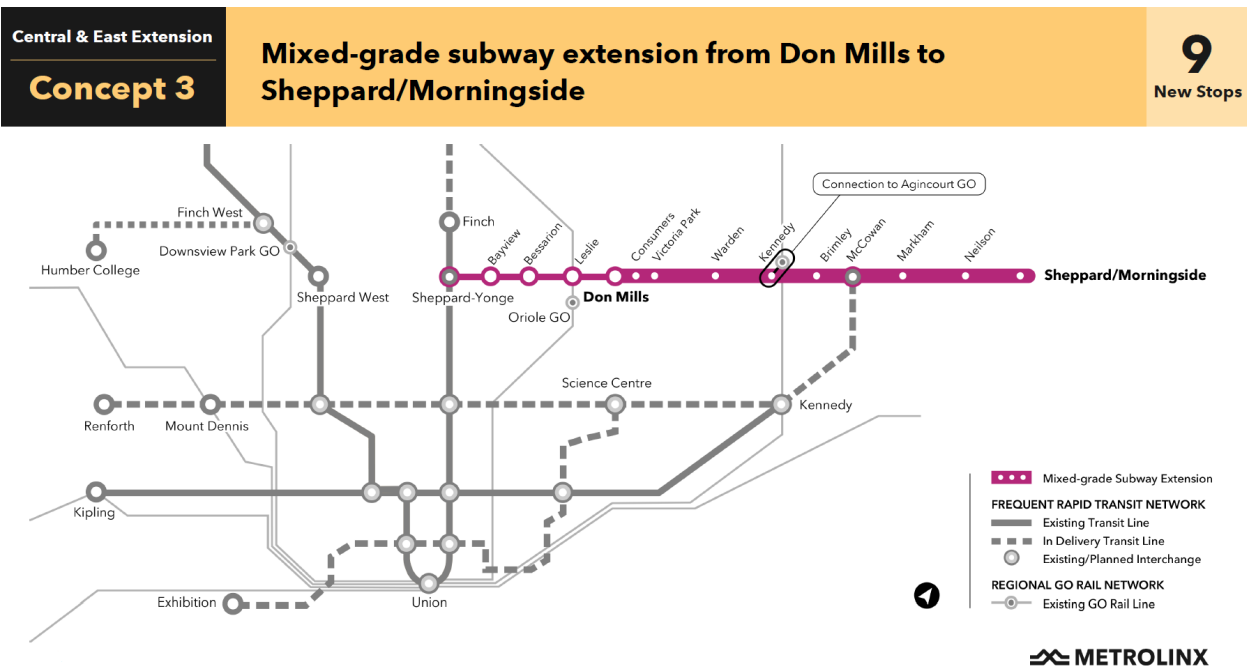


Figure 7: Map of Concept 3 (Source: Metrolinx)

In June 2024, Metrolinx held its second round of public consultations to seek feedback on the four proposed concepts. The concepts presented are early, high-level, and need fine-tuning. Members of the public were presented these options and given the opportunity to provide feedback related to their preferred concept, stop locations, number of stops, connection to other transit lines, and phasing. Below is a summary of some general feedback that was received:

- Support for transit investments in both west and east directions from Line 4;
- Support for more stops and connections to existing and planned higher order transit lines and bus routes; and
- Key factors to consider when planning a trip includes the time a trip takes, number of transfers required, and time to wait for the next transit vehicle.

Outstanding Items to Address

Based on community input and feedback by City staff, Metrolinx will refine these concepts and explore trade-offs on various characteristics and scenarios highlighted below.

Location and number of stations

Metrolinx has so far only proposed a list of intersecting roads where stations will be located for ridership forecast modelling and options evaluation purposes in the IBC. Exact station locations as well as potential additional stations will be considered and evaluated as the project progresses.

Vertical elevation of the alignment

Metrolinx is evaluating different vertical elevation options (utilizing tunnels, as well as surface running and elevated segments, or a combination of these approaches) which will have varying costs and community impacts. Thus far, Metrolinx only described the technology as a mixed-grade subway that will run fully separated from general traffic. Further details will be discussed and considered as the project progresses.

Horizontal extent of the proposed alignments

The cost of the project will also be influenced by the horizontal extent of the line. While all four concepts show a central segment extending east from Don Mills station to McCowan/Scarborough Centre, only two of the concepts show the west segment extension between Sheppard-Yonge and Sheppard West stations. During public consultations, Metrolinx asked the community to provide feedback on which option was preferred, as well as which direction of the extension should be built first.

City staff expressed concern that limited information was presented at this stage regarding the potential trade-offs of costs and benefits. It is anticipated that Metrolinx will conduct a more thorough analysis to further assess the different options. Securing extensions both west (Sheppard-Yonge to Sheppard West stations) and east (Don Mills to McCowan/Scarborough Centre) of Line 4 is expected to provide greater benefits by providing a one-seat east-west higher order transit connection along Sheppard Avenue, which in City staff's opinion better addresses the problem and opportunity statement.

Extent of the east extension and overlap with the EELRT

One of the options developed by Metrolinx overlaps with the Council approved EELRT alignment between McCowan Road and Morningside Avenue. Metrolinx's intent is to assess the need for grade-separated transit in this part of the Sheppard corridor, and its potential impacts (including costs, construction impacts and public realm quality) and benefits (including a one-seat ride east of McCowan). However, should this option be selected, it would have significant impacts to the business case assumptions, planning, and operations of the EELRT project.

Identifying a suitable location for the Maintenance and Storage Facility (MSF)

Another key issue that has an impact on the EELRT project is the location of the MSF required to service the Sheppard Subway Extension. Land use, community, and economic impacts are some of the issues that will need to be evaluated before a site is selected by Metrolinx. To date, Metrolinx has not decided on the MSF site for the Sheppard Subway Extension but has suspended the property transaction of the Conlins Yard for the City's EELRT project pending further analysis.

Alignment Options Evaluation framework

In order to conduct the IBC options evaluation, City staff are working with Metrolinx to identify appropriate criteria and performance measures, following [Metrolinx's Business](#)

[Case Guidance](#), as well as the City's [Rapid Transit Evaluation Framework](#). Equity-related considerations are expected to play an important role in informing the preferred alignment. In addition, City staff will continue to advocate for community and land use considerations to ensure that these interests are included in Metrolinx's evaluation process, particularly on choosing the optimal alignment, station, and MSF locations.

Next Steps

City staff will continue to work with Metrolinx as the IBC is anticipated to be completed in 2025. Key to the City's involvement is to find solutions to advance both the Sheppard Subway Extension and the EELRT as complementary higher order transit projects. Metrolinx's IBC will evaluate the alignment options under a comprehensive multi-criteria framework to inform the selection of a preferred alignment during the next stages of the project process. The recommendations will be presented to the Province by Metrolinx for review and approval. There is currently no timeline or funding committed to by the Province beyond the completion of this phase of the IBC work.

If the Province moves forward with the Preliminary Design Business Case (PDBC) and Transit and Rail Project Assessment Process (TRPAP) for the Sheppard Subway Extension, there is flexibility for a hybrid of these alignment concepts to be considered and developed further. Future processes will confirm the number of stations, station locations, horizontal route, vertical elevations, fleet technology, service plan, and maintenance and service requirements, among other matters. Staff will report back to City Council on the Sheppard Subway Extension as the project advances.