



Report to: Development Services Committee

Meeting Date: May 25, 2020

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<b>SUBJECT:</b>	Yonge North Subway Extension Intensification Analysis
<b>PREPARED BY:</b>	John Yeh, MCIP, RPP, Manager, Strategy and Innovation (ext.7922)

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**RECOMMENDATION:**

1. That the report dated May 25, 2020 entitled “Yonge North Subway Extension Intensification Analysis” be received;
2. That this report be officially forwarded to Metrolinx for consideration and input to the initial business case for the Yonge North Subway Extension;
3. That Metrolinx be invited to Development Services Committee to present the development of their initial business case prior to presentation to their Board;
4. That upon approval of the initial Metrolinx business plan by their Board, Markham staff report to Development Services Committee on the scope of a Yonge Corridor Secondary Plan and appropriate funding;
5. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

**PURPOSE:**

This report provides an analysis of projected build-out population and employment densities for the planned subway stations of Steeles, Clark, Royal Orchard, Langstaff and Richmond Hill Centre for input to Metrolinx’s initial business case to plan and design the Yonge North Subway Extension.

**BACKGROUND:**

The Yonge North Subway Extension (YNSE) is an approximately 7.4km extension of the Toronto Transit Commission’s (TTC) Line 1 from Finch Station to Richmond Hill Centre. The YNSE is one of four rapid transit projects announced by the Province of Ontario in 2019 that will add transit connections from north Toronto into York Region including Markham, Vaughan, and Richmond Hill. These municipalities are expected to achieve a significant amount of population and employment growth by 2041 and beyond. The YNSE is intended to facilitate seamless transit connections to other areas of York Region along the Highway 7 corridor and with other GTA Regions along the planned Highway 407 Transitway.

Planning for the YNSE began over ten years ago with the completion of an environmental assessment in 2009 that proposed stations at Cummer Avenue, Steeles Avenue, Clark Avenue, Royal Orchard Boulevard, Langstaff Road, and Richmond Hill

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Centre. The Royal Orchard station was removed during the Conceptual Design Study in 2012 but subsequently added back in 2019 upon further review of development potential by the City of Markham. A business case was prepared by Metrolinx in 2013 to analyze the transportation, financial, environmental, economic development, and social benefits of the YNSE and various station scenarios to assist in planning, designing, and building the transit infrastructure.

Over the past 18 months, Metrolinx, York Region, York Region Rapid Transit Corporation, the City of Toronto and TTC have worked together to advance the preliminary Design and Engineering phase of the subway extension. An updated initial business case is being prepared by Metrolinx and is expected to be completed by early summer 2020 which could result in changes to the planning and design of the transit infrastructure.

An input to the updated initial business case will be an analysis of population and employment forecasts to determine if subway-level densities are achievable. The Growth Plan for the Greater Golden Horseshoe 2019 (Growth Plan) identifies a minimum density of 200 residents and jobs per hectare to support a subway. Since the first business case was prepared in 2013 there has been increasing development interest and applications along the Yonge Street corridor which drove the need for an updated analysis of development potential.

While Metrolinx will be preparing updated population and employment forecasts along the YNSE corridor, it's important that the City of Markham provide input to that process given staff knowledge and experience with existing studies, recent development activity, and growth going forward. Markham retained Sajecki Planning to assist the City prepare an analysis of development potential, population and employment forecasts, and densities to provide input to Metrolinx's initial business case.

The results of Sajecki Planning's analysis will also provide input to City-wide long-term forecasting for future planning purposes including a potential Secondary Plan exercise for the Yonge Street Corridor in Markham.

#### **OPTIONS/ DISCUSSION:**

An analysis was undertaken to identify development potential for the Yonge Street corridor between Steeles and Richmond Hill Centre and specifically for the proposed stations at Steeles, Clark, Royal Orchard, Langstaff, and Richmond Hill Station areas within a 500 metre and 800 metre radius which represents about a 7 to 10 minute walk.

Since Metrolinx is expected to complete the initial business case by early summer 2020, staff has already provided the preliminary analysis to Metrolinx staff for timely input. Staff has also met with York Region staff to ensure both municipalities forecasts are aligned. York Region has provided forecasts to Metrolinx at a broader level traffic zone geography.

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**Approach to Analysis Included As-Of-Right and Intensification Scenarios for Each Station Area Guided by Several Factors and Assumptions**

The as-of-right scenario consist of parcels at build-out that have existing land use designations and floor space indexes (FSI) from municipal official plans, secondary plans, recently approved development applications, and recent Local Planning Appeal Tribunal decisions. Population, employment, and densities were determined using a set of assumptions for gross floor area, net to gross floor area, ratio of residential to non-residential uses in a building, persons per unit, and employment density (see **Appendix 'A'** for methodology and assumptions).

The intensification scenarios at build-out consist of parcels and FSIs that reflect Markham's draft Yonge Steeles Corridor Study, Toronto's draft Yonge Street North Secondary Plan, recent development applications in Markham. As with Markham's analysis of the Royal Orchard station in 2019, recent development applications in Vaughan were not included in this analysis. **Appendix 'A'** contains the mapping and FSIs for each parcel within the identified intensification area for the as-of-right scenario and intensification scenario. The draft secondary plan from the City of Toronto and Markham's Yonge Steeles Corridor Study have not been approved by the respective Councils and may be subject to change while the City of Richmond Hill is currently preparing its draft secondary plan for Richmond Hill Centre and has not been included in the analysis.

There were also parcels identified that were not part of a draft secondary plan and some parcels were categorized as Transitioning. These transitioning parcels are expected to intensify or redevelop to result in additional increases in FSIs:

- Existing low density developments that have higher zoning permission
- Large properties that have intensification capacity

Constrained parcels were also identified as having intensification potential but are not expected to change because the existing use is not expected to change (e.g. parks/open spaces, schools, etc). Stable parcels were the final type of parcels identified as those that are unlikely to change because they are low density residential areas, cemeteries, etc).

**Analysis of the Proposed Station Areas Indicates Population, Employment, and Density Projections Support a Subway for the Intensification Scenario**

The analysis below in Table 1 for the as-of-right scenario of each station comfortably exceeds the minimum Growth Plan target of 200 people and jobs / hectare for a subway at a radius of 500 metres from the station.

As a result of applying assumptions to increase FSIs from various draft plans and studies, recent development applications in Markham, and transitioning properties that are expected to intensify or redevelop, the intensification scenario densities at each station in Table 2 below have increased at the 500 metre radius (continues to meet the Growth Plan target) and 800 metre radius (almost all stations meet the Growth Plan target).

The first option for Clark excludes the lands south of the rail corridor since the rail corridor bridge could be a barrier for pedestrian access from the south side to the station

further north and the close proximity of the Steeles station could result in transit users using the Steeles station. The calculated density at a radius of 800 metres from Clark is 190 people and jobs per hectare is a conservative estimate since there are some constrained parcels identified including existing mid-rise apartments. It is expected the density can exceed the Growth Plan target as development interest and activity occurs in the future. Also, while Royal Orchard's density at an 800 metre radius is 180 people and jobs / hectare, the density is expected to surpass the Growth Plan density target due to recent development applications in the area and a recently approved application in Vaughan that exceeds the permitted FSI.

**Table 1 - As-Of-Right Scenario**

Station	500 Metre Radius from Station			800 Metre Radius from Station		
	Population Estimate	Jobs Estimate	Density (people & jobs/hectare)	Population Estimate	Jobs Estimate	Density (people & jobs/hectare)
<b>Steeles</b>	16,000	3,000	340	23,100	4,900	200
<b>Clark</b>	10,300	1,700	240	14,500	2,500	170
<b>Royal Orchard</b>	9,500	1,000	230	12,600	1,400	125
<b>Langstaff</b>	9,400	4,100	545	16,500	6,500	290
<b>Richmond Hill Centre*</b>	15,000	16,500	450			

\* Boundary is from "Richmond Hill Regional Centre Design & Land Use Study Final Recommendation Report" (January 2010, Urban Strategies)

**Table 2 - Intensification Scenario**

Station	500 Metre Radius from Station			800 Metre Radius from Station		
	Population Estimate	Jobs Estimate	Density (people & jobs/hectare)	Population Estimate	Jobs Estimate	Density (people & jobs/hectare)
<b>Steeles</b>	32,500	5,000	670	43,000	8,500	365
<b>Clark (Option 1*)</b>	10,900	2,600	275	15,600	2,900	190
<b>Clark (Option 2**)</b>	12,300	2,700	280	22,900	5,100	230
<b>Royal Orchard</b>	13,500	1,500	320	19,000	2,000	180
<b>Langstaff</b>	10,000	4,000	580	17,800	6,700	310
<b>Richmond Hill Centre***</b>						

\*Excludes lands south of the rail corridor

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\*\*\*Richmond Hill Centre secondary plan update is currently in progress as an intensification scenario is not included

**NEXT STEPS:**

As noted earlier in this report, staff has provided the results of this study for input to Metrolinx's initial business case since it is expected to be completed by early summer 2020. Metrolinx will be consulting with the public in fall 2020 on the initial business case and then determine if there changes to the planning and design of the transit infrastructure.

The population and employment forecasts and densities identified for the Yonge Street Corridor between Steeles Avenue and Richmond Hill Centre supports the six stations subway extension. If Metrolinx's initial business case concludes that the subway expansion is to proceed to preliminary design, staff suggest that a secondary plan be prepared for Markham's Yonge Street Corridor. A funding request to undertake supporting studies for the Secondary Plan would occur through the Council pre-approval process in fall 2020 to advance the secondary plan in a more timely manner.

**FINANCIAL CONSIDERATIONS**

Not applicable

**HUMAN RESOURCES CONSIDERATIONS**

Not applicable

**ALIGNMENT WITH STRATEGIC PRIORITIES:**

The Yonge North Subway Extension Intensification Analysis supports efforts to manage growth and advocate for higher order transit including the Yonge North Subway Extension which are key elements of the Safe, Sustainable, and Complete Community strategic priority.

**BUSINESS UNITS CONSULTED AND AFFECTED:**

Planning and Urban Design and Engineering departments were consulted in the preparation of this staff report

**RECOMMENDED BY:**

Arvin Prasad, MCIP, RPP  
Commissioner Development Services

**ATTACHMENTS:**

Appendix 'A' – Yonge North Subway Extension Intensification Study