

YONGE CORRIDOR

Land Use and Built Form Study Report

June 13, 2022

**URBAN
STRATEGIES
INC .**

EXECUTIVE SUMMARY

The Yonge Corridor Land Use and Built Form Study (the Study) anticipates the Yonge North Subway Extension (YNSE), which will extend Toronto Transit Commission's (TTC) Line 1 service north into Markham. The Study advances the technical work needed to confirm the transit-oriented community potential of the Steeles, Clark and Royal Orchard Station Areas. In addition, it is intended to inform the YNSE process and serve as input into the forthcoming Yonge Street Corridor Secondary Plan.

YONGE NORTH SUBWAY EXTENSION

In March 2021, Metrolinx released the initial business case that recommended advancing the design of the YNSE. The YNSE will extend TTC Line 1 service north from the existing terminus station at Finch and Yonge into Vaughan, Markham and Richmond Hill, transforming the Yonge Corridor and making it faster and more convenient for people to travel between Markham, the greater York Region, and Toronto by transit. The Province has confirmed plans for the YNSE which include three stations along the Yonge Corridor in Markham: Royal Orchard, Clark, and Steeles.

YONGE CORRIDOR: TODAY AND TOMORROW

Yonge Street is a diverse corridor with a range of uses and a varied built-form and character. The majority of the corridor is fronted by automobile-oriented commercial uses, with parking lots. Along the blocks immediately adjacent to Yonge Street, there is a mix of mid-rise apartment neighbourhoods and retail uses. Established low-rise residential uses make up most of the areas further to the east.

But while the existing context may be one of varied low-rise retail and residential uses, the emerging context is one of high-rise, mixed-use developments. In recent years, the section of the corridor north of Steeles and south of the CN rail corridor has been the focus of significant development interest in both Vaughan and Markham.

Regional and municipal policies have long anticipated this transformation: the corridor is identified as an important gateway and recognized for its potential to accommodate a diverse mix of uses at higher densities. The extension of the TTC Line 1 creates an imperative to realize the established vision of complete communities that take advantage of higher-order transit to deliver new housing, office-employment jobs, community services and amenities.

LAND USE AND BUILT FORM STUDY

The Study builds on previous work prepared for the City of Markham: translating two-dimensional density frameworks into three-dimensional demonstrations of how the character and quality of the Corridor's potential station areas may evolve in response to improved transit. The Study's primary objective was to test each station area's ability to support transit-oriented densities while accommodating a mix of residential, employment and community supportive uses.

The Study took an urban design approach to understand the Corridor's carrying capacity for density. First, it tested each station area's ability to accommodate a transit-oriented built-form while transitioning to established neighbourhoods. The built-form condition was then translated into high-level land use, population, and employment densities, using forecast assumptions provided by the City of Markham.

This report summarizes the findings of the Study. It demonstrates the potential for the Markham side of the Corridor to accommodate over 3,800 new jobs and 34,800 new residents, for a total of 38,600 new people and jobs. Accounting for the existing population and employment and the displacement impacts of the development illustrated, the concepts result in a total population of 45,900 and 7,000 jobs within the Study Area.

The results of the Study are preliminary and intended to serve as an input into the planning process for the Yonge Street Corridor Secondary Plan. Further study to address the imbalance in the ratio of people to jobs presented in this report is needed, as are additional studies that look to increase the size of parks and open spaces, and amount of community services and facilities delivered. This more detailed analysis will support the realization of complete communities along the corridor, and ensure that transit-investment are leveraged to their full potential.



Figure 1. Land Use and Built Form Study 3D Massing - Looking North from Yonge and Steeles

LOOKING TOWARDS THE SECONDARY PLAN

The Yonge Street Corridor Secondary Planning process will be an integrated and multi-disciplinary process designed to consider land use, transportation matters, market conditions, and servicing constraints and opportunities along the corridor. The preliminary findings and outputs generated during the Land Use and Built Form Study have identified a number of specific considerations for the secondary planning process, related to:

- Growing employment;
- Integrating parks and community facilities;
- Transportation Demand Management (TDM);
- The service employment lands between Doncaster and Glen Cameron;
- The Dudley Avenue and Inverlochy Boulevard 'neighbourhood seam';
- Thornhill Green York Housing Site;
- The Study Area extent and boundaries; and
- Encouraging municipal coordination.

The Study also included landowner and community engagement, during which the land use and built form concepts for each station area were shared with participants to gather feedback. Participants feedback informed the finalization of this Study, and should be considered as part of the subsequent secondary planning process. The secondary planning process will include more opportunities for thoughtful engagement and consultation.

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1.0 INTRODUCTION

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1.1. Yonge North Subway Extension

The Yonge North Subway Extension ("YNSE") will extend the Toronto Transit Commission (TTC) Line 1 service north from the existing terminus station at Finch and Yonge into Vaughan, Markham and Richmond Hill. The extension will transform the Yonge Corridor – making it faster and easier for people to travel between Markham, the greater York Region, and Toronto. Metrolinx and Infrastructure Ontario are currently working alongside municipal and regional partners to accelerate the project.

The initial business case proposed up to four stations along the 8-kilometre subway extension – Steeles, Bridge, High Tech, and one additional neighbourhood station at Cummer, Clark, or Royal Orchard. On July 16, 2021, the Ontario government, in partnership with the Government of Canada, announced Clark Station as the fourth neighbourhood station. On April 20, 2022, Royal Orchard was announced as an additional confirmed station.

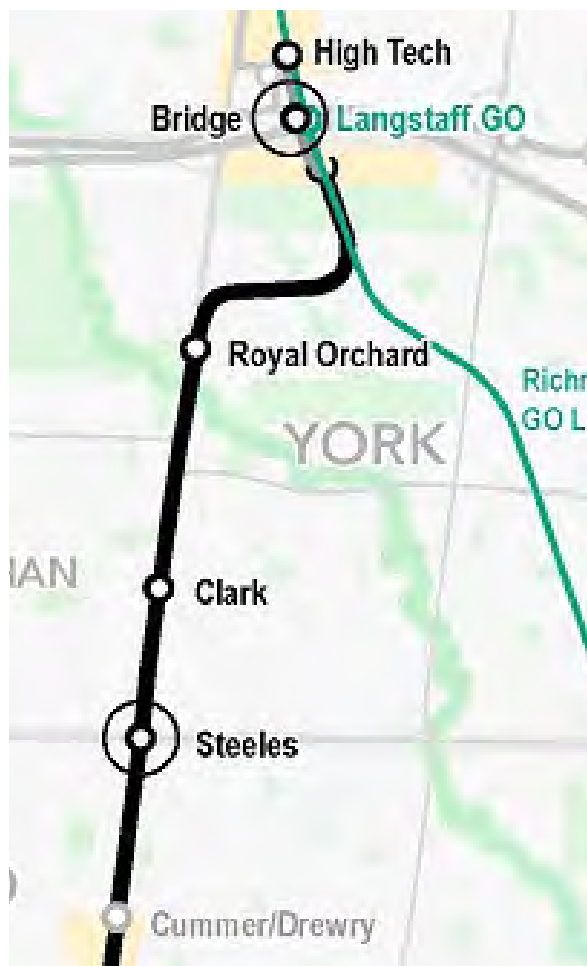


Figure 2. YNSE Preliminary Alignment (Source: Metrolinx)

1.2. Land Use and Built Form Study

On May 4, 2021, the City of Markham's Council endorsed the preparation of the YNSE Markham Three Station Area Study (the "Study"). The Study aims to advance the technical work needed to confirm the transit-oriented community potential of the Steeles, Clark and Royal Orchard Station areas. In addition, the Study is intended to serve as input into the forthcoming Yonge Street Corridor Secondary Plan.

The Study focuses on those areas of Markham contained within the regionally identified Major Transit Station Areas (see Figure 2 - Study Area). It builds on the Yonge North Subway Intensification Analysis undertaken by the City of Markham in 2020 to test ways that the incoming transit investment could be leveraged to support a broad range of City of Markham priorities, including creating mixed-use, complete communities supported by jobs, amenities, community facilities, and open spaces. The following summary report shares the results of the Study.

The land use and built form concepts presented are preliminary and intended to test a range of ideas and inform the more comprehensive Yonge Street Corridor Secondary Plan process and subsequent updates to the City of Markham Official Plan. The concepts and outcome summarized in this report are not intended as demonstrations of the City of Markham's desired outcome, but are to be used as tools to achieve desired outcomes through the subsequent Secondary Plan process.



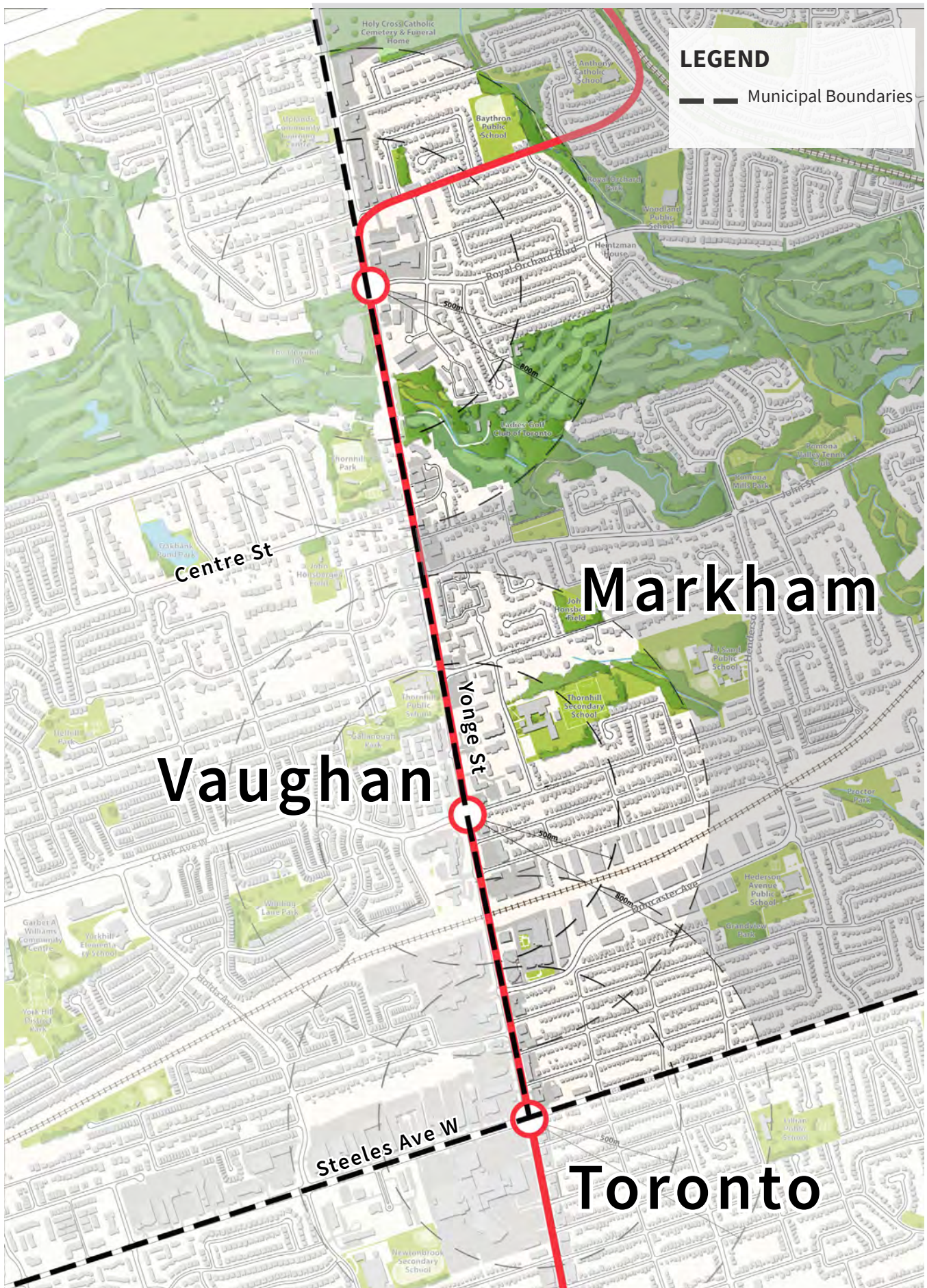


Figure 3. Study Area

2.0 DEVELOPMENT CONTEXT

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2.1. Policy Context

Ontario's planning system is policy-led. Municipal policy must conform to the direction established at the regional and provincial level. This section provides a general overview of the existing policy direction for areas with high levels of transit service.

PROVINCIAL POLICY

PROVINCIAL POLICY STATEMENT

The Provincial Policy Statement 2020 (PPS) came into effect on May 1, 2020. It provides policy direction on matters of Provincial interest related to land use planning and development to support the creation of strong, sustainable, resilient and complete communities.

The PPS encourages the development of liveable and complete communities supported by a diverse range of housing options, parks and open spaces, and essential infrastructure - including public transit - and public service facilities (1.4-1.6). The PPS also recognizes the importance of employment options and indicates that mixed-use communities should be supported by compatible employment.

To achieve the objective of healthy, liveable and safe communities, the PPS recognizes the importance of integrated land use and transportation planning and encourages intensification to optimize transit investment (1.1).

Key Takeaways:

Intensification is encouraged within the Study Area to optimize future transit investment. New development is expected to deliver a mix of uses, including new housing and jobs, and be supported by a diverse range of community amenities, parks and open space, and public facilities.

GROWTH PLAN FOR THE GREATER GOLDEN HORSESHOE

A Place to Grow: Growth Plan for the Greater Golden Horseshoe (the Growth Plan) came into effect on May 16, 2019. The Growth Plan directs how regional growth in the Greater Golden Horseshoe should be managed. Amendment 1 to the Growth Plan came into effect on August 28, 2020.

The Growth Plan supports the development of complete communities, which feature a mix of uses and a compact built form; deliver a vibrant public realm and access multi-modal transportation options. In addition, the Growth Plan states that sustainable development will be achieved by targeting strategic areas for growth - including those well-served by higher-order transit.

The Growth Plan establishes minimum density for areas well served by transit. It states that Major Transit Station Areas are to be identified and planned to achieve appropriate transit ridership levels. In particular, transit stations along priority subway corridors are to achieve a minimum density target of 200 residents and jobs per hectare.

Key Takeaways:

As a planned higher-order transit corridor, the Study Area is a target for growth. Major Transit Station Areas within the Study Area are to be planned to achieve transit-supportive densities of a minimum of 200 residents and jobs per hectare.

REGIONAL POLICY AND STUDIES

The City of Markham is part of the Regional Municipality of York and is subject to the following policy directions:

- The Region of York Official Plan
- Vision 2051 (York Region's Strategic Vision);
- Regional Comprehensive Review and Official Plan updates; and
- Regional Municipality of York Transportation Master Plan, 2016.

REGIONAL MUNICIPALITY OF YORK OFFICIAL PLAN, 2019 OFFICE CONSOLIDATION

The York Region Official Plan was last updated and approved in 2010. This in-force Regional Official Plan forecasts population growth to 2031. It is intended to guide lower-tier municipalities towards sustainable growth: accommodating development while meeting the needs of existing residents and businesses. In addition, the Plan identifies transit stations as opportunities for increased density.

Within the Regional Official Plan, Yonge Street is identified as a Regional Corridor and a target for intensification. It is intended to function as a pedestrian-friendly main street, with transit-oriented built forms and densities (5.4.28). In addition, regional Corridors are to serve as access points for human services, including health, education, community and social services (3.3.3).

The Plan requires that secondary plans be prepared for areas along Regional Corridors to consider how future development will (5.4.6):

- be compact, mixed-use and transit-supportive;
- prioritize the public realm experience and encourage urban greening; and
- encourage active mobility, reduced parking requirement, and shared parking arrangements.

Key Takeaways:

Identified as a Regional Corridor, the Study Area is a target for intensification. Development should be compact, mixed-use, transit-supportive, and include a range of uses that accommodate places of commerce, entertainment, and culture. In addition, development should support a comfortable public realm experience that encourages active mobility, with strategies to minimize the reliance on single-occupancy vehicles.

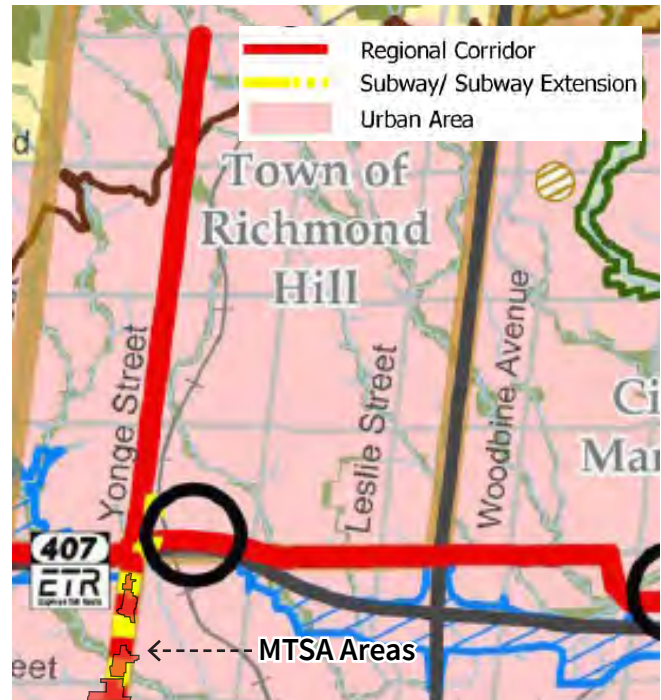


Figure 4. York Region Urban Structure

YORK REGION'S VISION 2051

Vision 2051 is York Region's strategic document that serves as a guide for creating strong, caring and safe communities within the region. While not specifically land use policy, it provides land use direction to encourage a more liveable region.

Vision 2051 generally encourages a compact built-form that minimizes the reliance on single-occupancy vehicles. In service of this broader objective, it identifies Regional Corridors as appropriate for intensification, employment uses, and institutional, cultural uses and facilities to create hubs of commerce, entertainment and culture. It also promotes a diverse mix of housing options by mix, range and tenure along Regional Corridors.

MUNICIPAL COMPREHENSIVE REVIEW PROCESS AND THE DRAFT YORK REGION OFFICIAL PLAN (NOT IN FORCE)

York Region is currently undertaking a Municipal Comprehensive Review to update its Official Plan to conform to Provincial policy direction, including the Growth Plan. On November 25 2021, York Region released its DRAFT Official Plan for consultation. This document is currently not in force but can be considered an indication of future policy direction and priorities.

The DRAFT Official Plan includes updated population and employment forecasts to be used as the basis for new development. Markham is expected to accommodate a 2051 population of 608,500 residents and 301,700 jobs: approximately 110,000 new residents and 45,000 new jobs.

The DRAFT Official Plan states that 50% of all residential development between 2021 and 2041 and 55% from 2041 to 2051 is to occur within the built-up areas - prioritizing subway stations as appropriate for high-density development. It confirms the role of Regional Corridors as the focus for most intensive development. It specifies minimum density targets for Major Transit Station Areas: Clark and Royal Orchard Subway Stations are to accommodate 250 people and jobs per hectare, and Steeles is to accommodate 300 people and jobs per hectare.

The DRAFT Official Plan also introduces land use systems and recognizes portions of the corridor along the Canadian National Rail corridor within the Study Area as Employment Area and Community Area. Community Areas are intended to be developed as complete communities with a range of housing options. Employment Areas are those protected from the encroachment of sensitive uses: residential uses, major retail, non-accessory institutional, and non-accessory retail are not permitted.

The DRAFT Official Plan is otherwise consistent with the current Regional Official Plan, but adds greater specificity. DRAFT Section 2.3 provides greater direction related to the development of complete, resilient and sustainable communities: developments are to include a minimum of 35% affordable housing within and 25% affordable housing outside Major Transit Station Areas. A minimum of 10,000 purpose-built rental units are to be delivered in Markham by 2051.

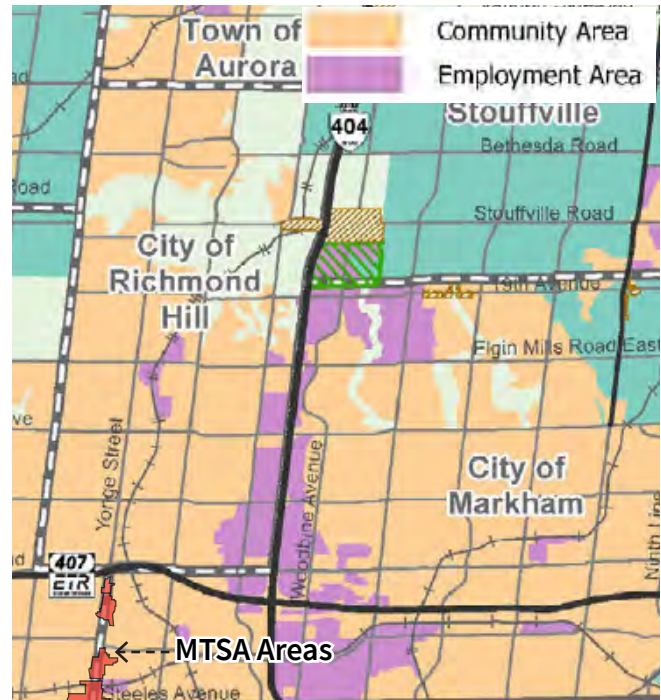


Figure 5. DRAFT York Region Urban Systems

Key Takeaways:

With three confirmed subway stations in Markham and the potential for one additional station, the Study Area is an appropriate location for high-density development. Clark and Royal Orchard are to achieve transit-supportive densities of 250 people and jobs per hectare, and Steeles to achieve densities of 300 people and jobs per hectare.

Developments within the Major Transit Station Areas portions of the Study Area are to include a minimum of 35% affordable housing to support development of a complete, resilient and sustainable community. Development within the remaining areas are to include a minimum of 25% affordable housing.

TRANSPORTATION RELATED POLICY DOCUMENTS AND STRATEGIC INITIATIVES.

The Regional Municipality of York is currently updating its Transportation Master Plan, which is the long-term strategic document that supports sustainable and responsible growth across the Region. The in-force Transportation Master Plan document has been reviewed alongside other relevant studies, and the findings are summarized below:

- The York Region Transportation Master Plan (2016) looks to maximize the use of transit corridors. It recognizes the importance of the Yonge North Subway Extension (YNSE) to achieve this priority.
- The DRAFT South Yonge Streetscape Master Plan (2011) is meant to guide streetscape design and treatment along the corridor and recognizes the importance of the YNSE.
- The Region's Transit-Oriented Development Guidelines are intended to advance the intended structure of Regional Centres linked by Regional Corridors. It encourages pedestrian connections, mixed-use and compact development, multi-modal connectivity, and limiting the impact and accessibility of parking.

Key Takeaways:

Development within the Study Area is expected to optimise the transit investment by achieving transit-supportive densities and multi-modal connectivity. Limiting parking in order to encourage sustainable travel patterns is one recommended strategy.

MUNICIPAL POLICY AND STUDIES

TOWN OF MARKHAM OFFICIAL PLAN, 1987

According to the 1987 Official Plan, the Study Area is currently designated Urban Residential and Commercial, with some industrial lands along the rail corridor (see Figure 6 below). Urban Residential areas are used primarily for housing, with limited allocations for uses that are complementary to or serve residential uses. Commercial lands are intended to accommodate a full range of business establishments, including shopping facilities, personal and service commercial facilities, offices and mixed use developments. Industrial lands are intended primarily for manufacturing, assembly, processing, warehousing, or storage, with associated commercial uses.

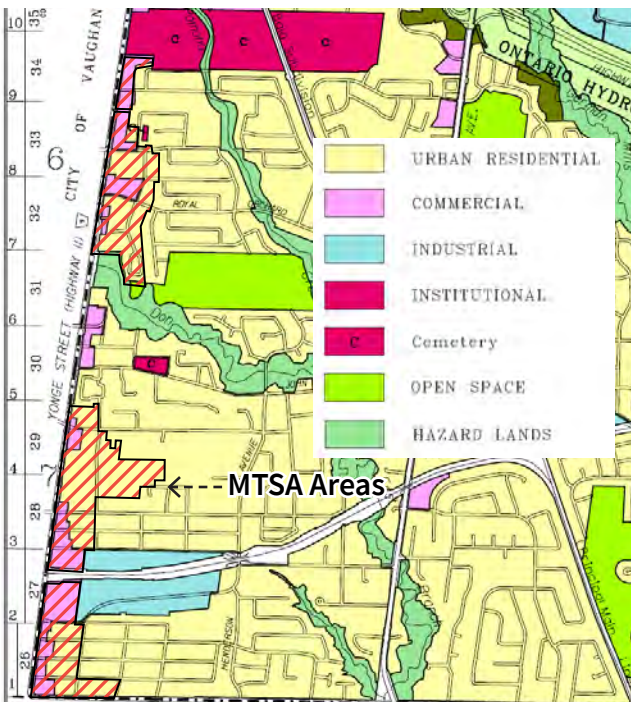


Figure 6. Markham Official Plan (1987) Land Use Designations

THORNHILL SECONDARY PLAN, 1987

The Thornhill Secondary Plan guides the development of those areas bounded by Yonge Street on the west, the Langstaff Gateway and the limits of the Parkway Belt West on the north, Highway 404 on the east and Steeles Avenue East and the Yonge Steeles Corridor on the south. The general objective for the district is to build on the diverse characteristics of the area.

The Secondary Plan identifies the Yonge Steeles Corridor as a key development area, intended to function as a Gateway Mobility Hub that integrates a balance and diversity of residential, retail, office and public uses at transit-supportive densities.



Figure 7. Thornhill Secondary Plan - Key Development Area

CITY OF MARKHAM OFFICIAL PLAN, 2014

Within the 2014 Official Plan, most of the Study Area is designated Mixed Use Mid Rise and Mixed Use High Rise. Portions of the Study Area that do not front onto Yonge Street are designated Residential Mid Rise and High Rise. As well, the Areas between Doncaster Avenue and Glen Cameron Road, adjacent to the CN Rail Corridor, are designated “Service Employment.” Along the natural systems, lands are designated, Greenway and Private Open Space.

The lands immediately adjacent to the proposed Station Areas are all identified as Intensification Areas and therefore recognized as a focus for high density and transit-oriented development.

Policy 9.18.8.3 within the Official Plan states that an updated Secondary Plan is needed for the Study Area. Until such time as one is approved, the 1987 Thornhill Secondary Plan applies.

Key Takeaways:

The 1987 Official Plan is the primary, in-force municipal policy document for the Study Area. However, several other policies and more current planning studies indicate Markham’s intention for the corridor.

Large parts of the Study area are identified as commercial and intended to accommodate a full range of uses. Portions of the rail corridor are identified as Industrial and therefore not currently intended for residential uses.

The Study Area is identified as a key Development Area and Intensification Area: expected to be a focus for high-density and transit-oriented development that includes a balance of residential, retail, office, and public uses.

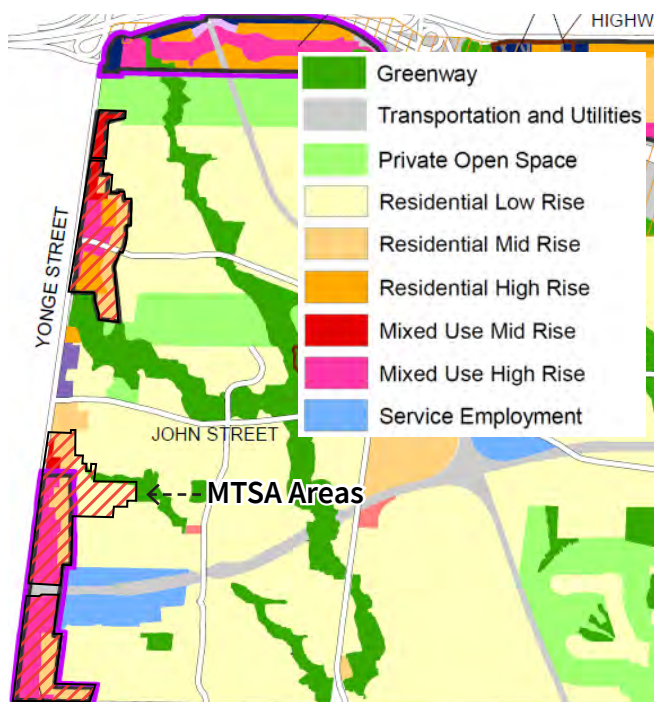


Figure 8. Markham Official Plan (2014) Land Use Designations

OTHER MUNICIPAL DOCUMENTS AND RELATED STUDIES

The City of Markham has conducted planning studies and prepared reports related to the redevelopment of the Study Area and the development of complete communities more broadly. These studies and reports were reviewed for context, and relevant findings are summarized below.

Yonge North Subway Initiative Intensification Analysis (2020)

In 2020 an assessment of the development potential of the Steeles, Clark, Royal Orchard, Langstaff and Richmond Hill Centre Station Areas was completed. This intensification analysis preceded the current Land Use and Built Form Study and was intended as a preliminary assessment of the station areas' ability to support subway-level densities.

Two scenarios: as-of-right and intensification, were tested for each station area. The analysis recommended changes to current density levels to achieve transit-supportive densities.

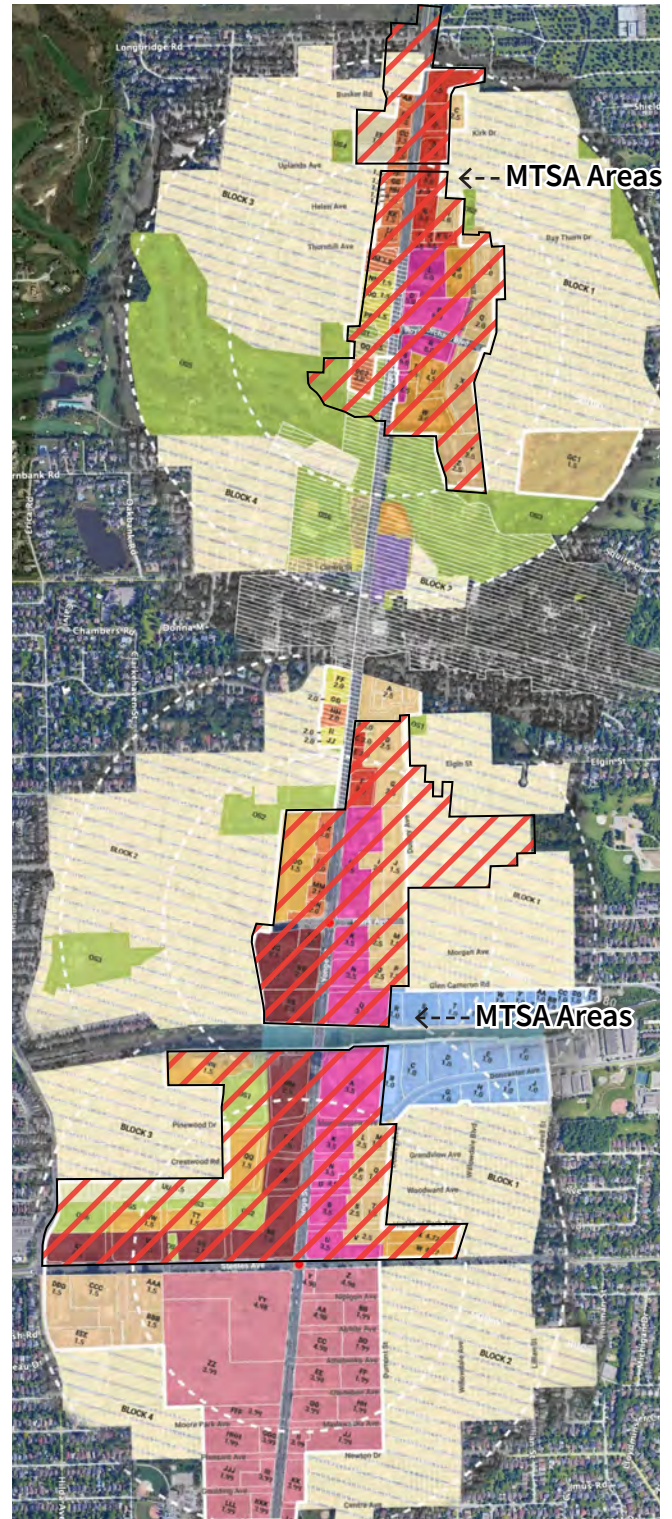


Figure 9. YNSI Intensification Analysis (2020)

Integrated Leisure Master Plan Update, 2019

The City of Markham's Integrated Leisure Master Plan guides the provision of parks, recreation, arts, culture and library services. The Plan estimates that as a result of forecasted development across the City, 190 hectares of additional parkland will be required. The Plan encourages the consolidation of parkland to deliver larger, central facilities that can accommodate a range of programs, services and recreational facilities. The Plan promotes improved service delivery, cost-effectiveness, and sustainability and recognizes that integrated service delivery models as necessary to address the recreation and service needs of the growing municipality.

Housing Choices: Affordable and Rental Housing Strategy (2021)

The City of Markham's Housing Choices strategy was approved in July 2021. The Strategy establishes a vision: To support the social and economic vitality of Markham through the facilitation and provision of a range of housing options for those that live and work in Markham through their lifetime in order to sustain a more complete community.

In service of this vision, the Housing Choices outlines three goals:

- Increase the supply of affordable rental housing, particularly for small and larger households with low incomes;
- Stimulate the development of ownership housings, particularly larger options for families, which are affordable to households with moderate incomes; and
- Expand the supply of purpose-built rental market units throughout Markham.

Housing Choices includes several priority items relevant to the study, including:

- Develop an Inclusionary Zoning By-Law for Major Transit Station Areas;
- Reduce residential parking requirements near transit;
- Use public lands for affordable housing;
- Reduce residential parking requirements for affordable housing projects; and
- Develop incentive packages for affordable/supportive housing.

Key Takeaways:

Previous work along the Study Area indicated that transit-supportive densities are achievable with increases to as-of-right permissions.

Development within the Study Area should, where possible, include opportunities for consolidated parkland and larger communities facilities.

Development within the Study Area should include opportunities for a range of housing options, including rental and affordable housing.

2.2. The Corridor Today

The existing conditions along both sides of the Yonge Corridor were analyzed to understand how the built form and land use concepts should relate to the specific character and attributes of the Study Area. The following section provides a summary of this analysis.

TRANSIT

Two municipal transit service agencies operate services along the Yonge Corridor: The Toronto Transit Commission (TTC) and the York Regional Transit (YRT).

EXISTING TRANSIT

TTC busses connect transit users from Yonge and Steeles to the Subway at Finch and into the TTC Subway. In addition, TTC busses provide service east and west along the City of Toronto's northern border.

Local YRT Bus Routes connect Yonge to neighbourhoods east and west, intersecting with Yonge at Steeles Avenue, Clark Avenue, and Royal Orchard Boulevard. These local connections create opportunities for future multi-modal transit hubs at the proposed stations.

Yonge Street and Steeles Avenue are also served by existing Viva rapid transit routes, which connect the Yonge Corridor to other important destinations in the region. The Viva Blue Line follows Yonge Street north from the Finch Subway Station to Newmarket Terminal. The Viva Pink Line follows Yonge Street north from the Finch Subway Station until Atkinson, before heading east along Highway 7 until the Unionville GO.

PROPOSED TRANSIT IMPROVEMENTS

The YNSE will extend the TTC Line 1 service north from Finch Station into Vaughan, Markham and Richmond Hill. The latest plans propose four stations along an extension of ~8 km. On July 16, Metrolinx announced that Clark Station will be included as the fourth station – alongside Steeles, Bridge, and High Tech.

Metrolinx's Regional Transportation Plan references the proposed Steeles Avenue Bus Rapid Transit/Light Rail Transit from Jane Street to McCowan Road. However, as of yet, this infrastructure project is unfunded.



Figure 10. Image of a TTC bus. (Source: dailyhive.com)



Figure 11. Image of a YRT bus. (Source: YRT)



Figure 12. Image of a TTC subway train. (Source: mobilesyrup.com)

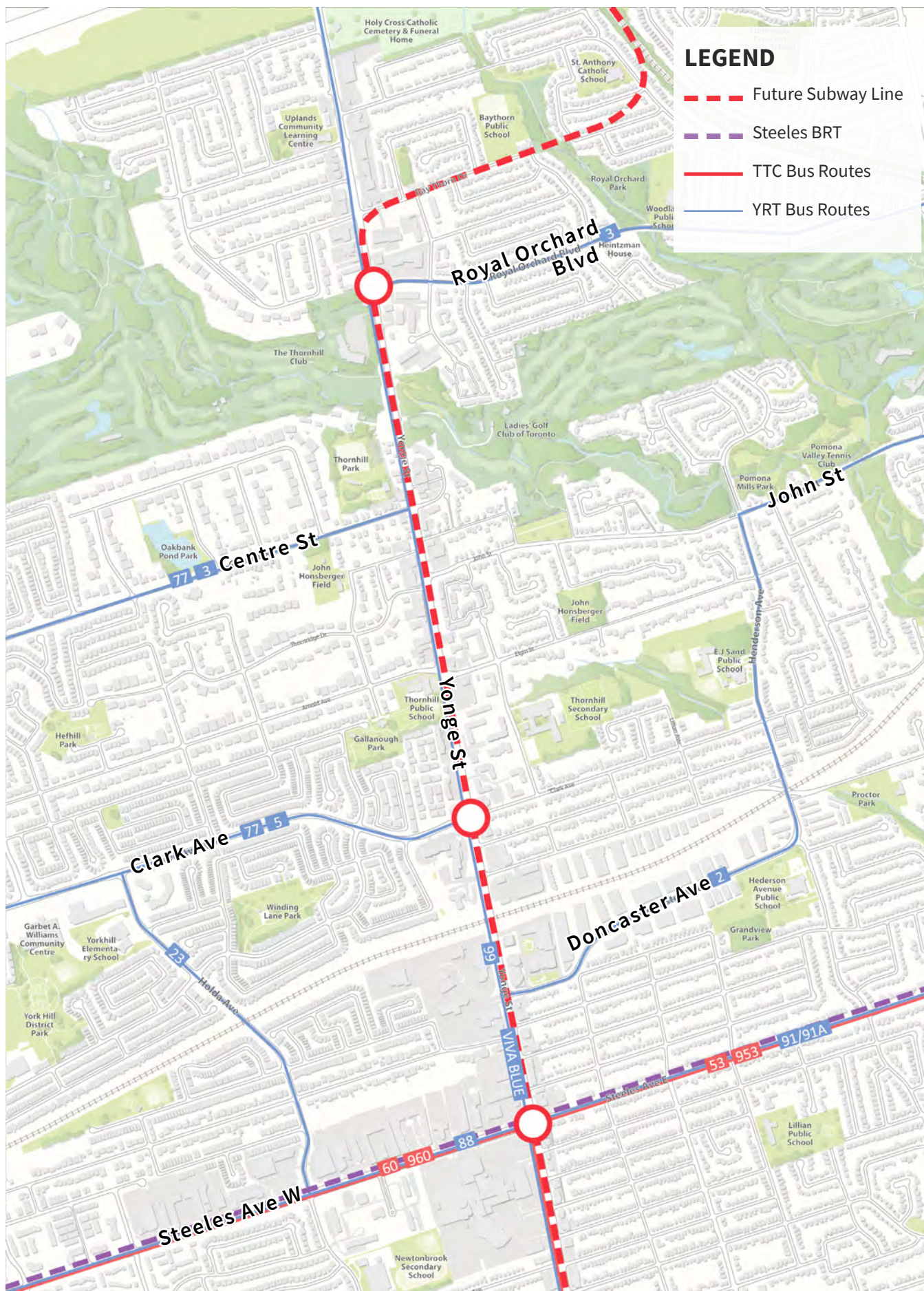


Figure 13. Proposed and Current Public Transit

ACTIVE MOBILITY

The Yonge Corridor within the Study Area is currently automobile-oriented.

The broad street features fast-moving traffic and limited crossing points, which detract from the pedestrian experience. The condition is exacerbated by frequent driveways and large surface parking lots, most notably along the southern half of the Study Area (see Figure 16).

East of Yonge, many of the neighbourhood streets do not include sidewalks (see Figure 17). Pedestrians, cyclists, and those with mobility impairments all share a common right-of-way.

There are no existing protected bike lanes in the Study Area. New protected bike lanes are proposed throughout Markham to create a system of east-west connections and a separated north-south bicycle corridor off of Yonge. Shared roadways are designated on John Street and Clark Avenue. The shared roadway along Clark Avenue extends west of Yonge into Vaughan, where recent infrastructure updates include a separated bike lane (see Figure 18).



Figure 14. Broad street with limited points of crossing. (Source: USI)



Figure 15. Neighbourhood street without sidewalk. (Source: USI)

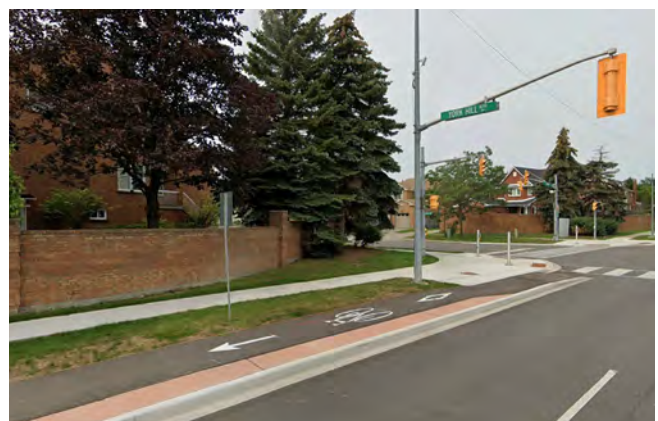


Figure 16. Bike lane along Clark Ave on Vaughan side. (Source: Google Street View)

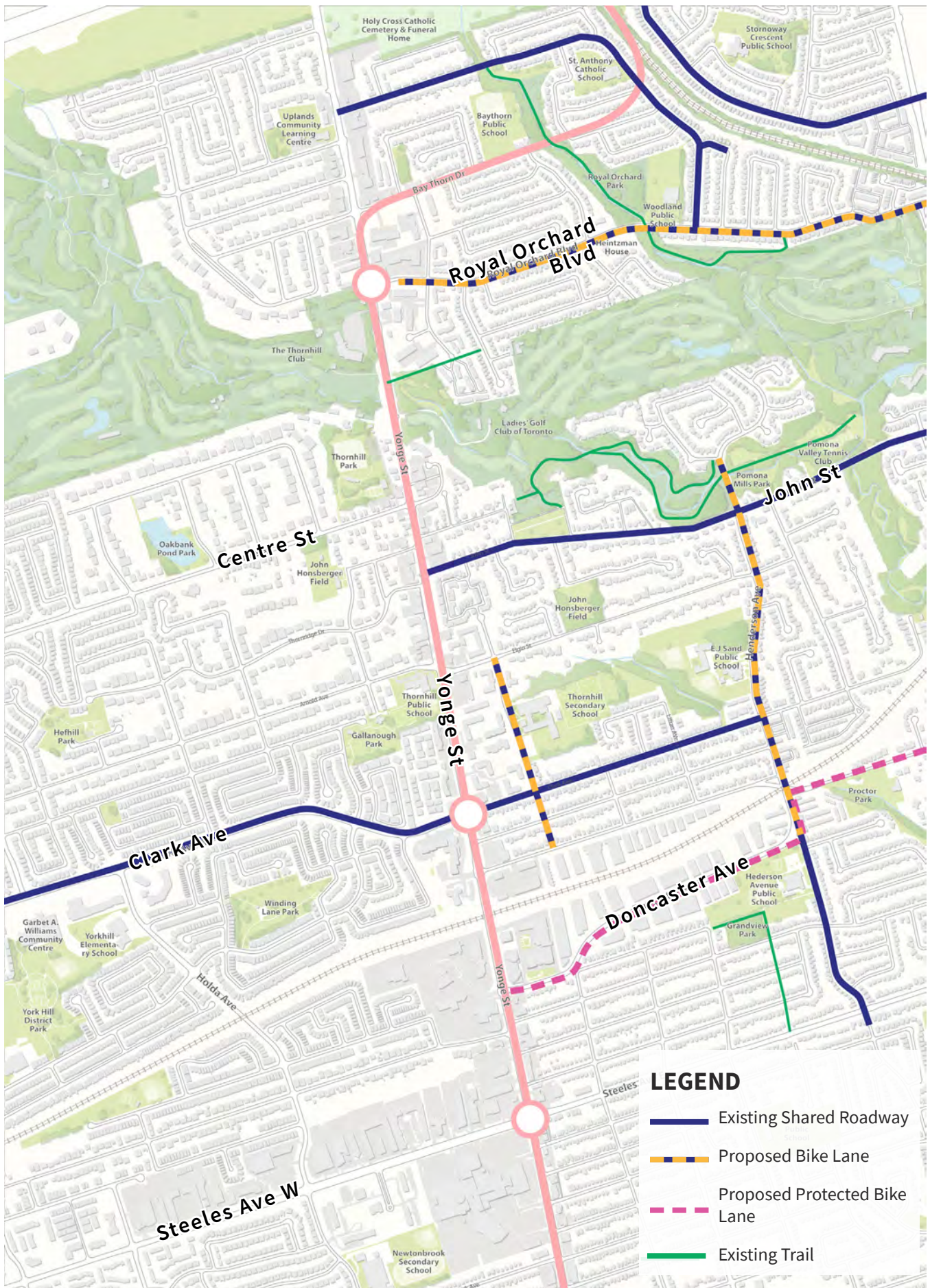


Figure 17. Active Transportation Facilities

PARKS, OPEN SPACES AND NATURAL SYSTEMS

A range of park and open space amenities are located throughout the study area within the neighbourhoods adjacent to Yonge Street.

Notably, a prominent natural feature, a branch of the Don River, weaves across the northern half of the Study Area, between John Street to the south and Royal Orchard to the north. This large ravine features significant topographic changes. While smaller neighbourhood parks connect to the ravine, it is essentially a private open space occupied by two Golf Clubs: the Thornhill Club and the Ladies' Golf Club of Toronto.

A number of smaller neighbourhood parks are distributed across the Study Area, providing residents with convenient access to recreational space. In addition, school grounds offer additional access to open and recreation space and are important neighbourhood amenities.



Figure 18. Ladies' Golf Club. (Source: Google Street View)



Figure 19. Royal Orchard Park. (Source: Google Street View)



Figure 20. Winding Lane Park. (Source: Google Street View)



Figure 21. Parks, Open Space and Natural Systems

COMMUNITY SERVICES AND FACILITIES

The Study Area falls within York Region District School Board's Markham Thornhill Planning Area and is served by a variety of community services and facilities.

The School Board operates several elementary schools and a secondary school in the general Study Area: Henderson Avenue Public School, E.J. Sand Public School, Thornhill Secondary School, Baythorn Public School, Woodland Public School, and Stornoway Crescent Public School. The Thornhill Secondary School and Baythorn Public School are the only schools within the Major Transit Station Areas on the Markham side.

The York Region District School Board's 2018-2022 Capital Strategy indicates that elementary schools within the Markham Thornhill Planning Area are operating at a utilization rate of 98%, with a total capacity of 2,958 students. Utilization is expected to fall to 92% by 2022. In the long-term, growth within the Langstaff Gateway is expected to increase demand for elementary schools.

The York Region District School Board's 2018-2022 Capital Strategy indicates that secondary schools within the Markham Thornhill Planning Area are operating at 86% capacity. Enrollment is expected to hold steady over the short and long term.

St. Anthony Elementary School is the closest York Catholic District School to the Study Area, operating just east of the Royal Orchard Station Area. The closest Conseil scolaire Viamonde facilities are École élémentaire Paul-Demers in Toronto and École secondaire Norval-Morriseau in Richmond Hill.

In addition to school facilities, the Thornhill Village Library is located at John Street and Yonge Street. The closest Community Recreation Centre on the Markham side is the Thornhill Community Centre.



Figure 22. Thornhill Public School. (Source: Google Street View)



Figure 23. Thornhill Secondary School. (Source: Google Street View)



Figure 24. Thornhill Village Library. (Source: Google Street View)

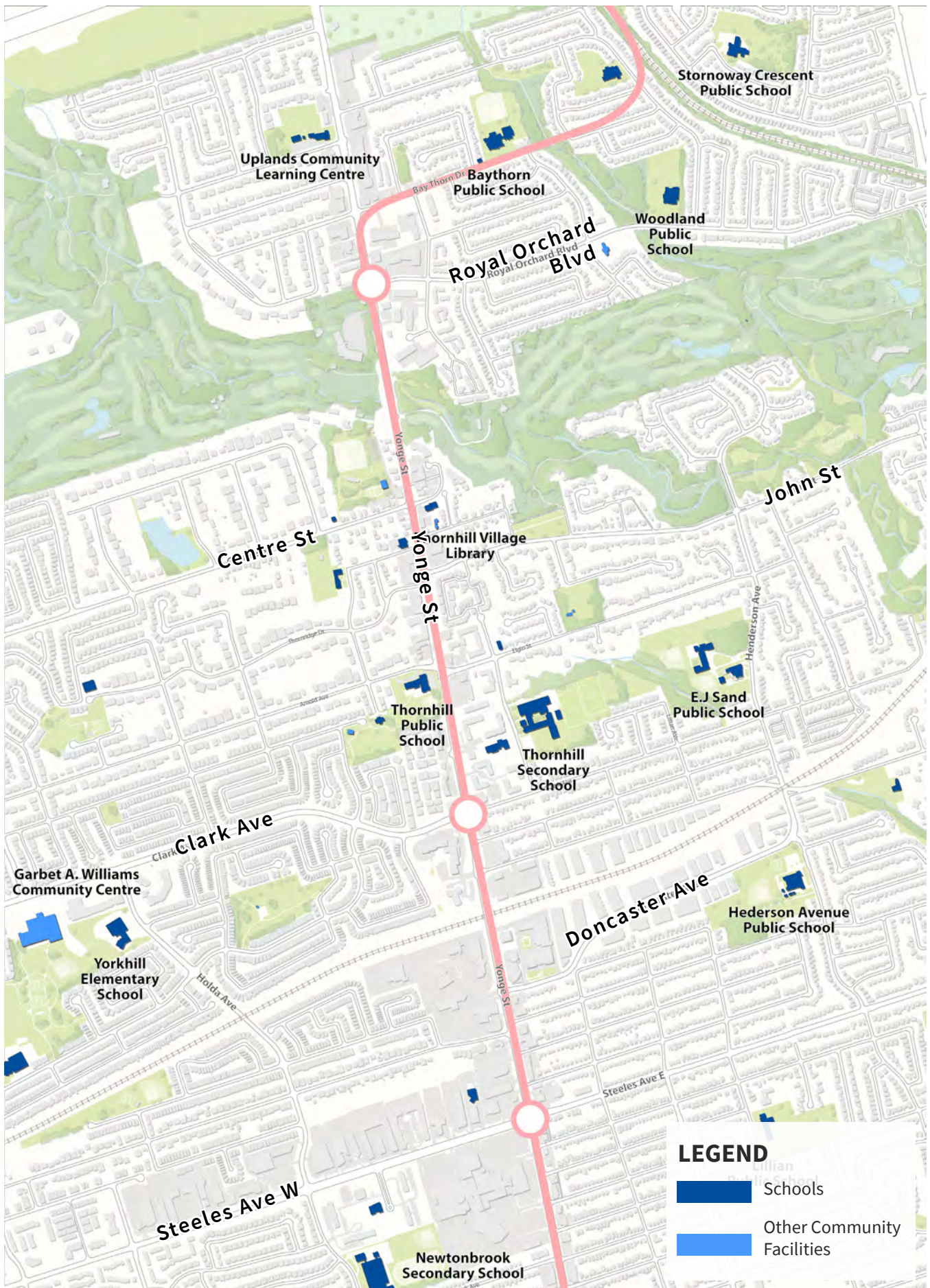


Figure 25. Schools and Community Facilities

EXISTING BUILT-FORM CHARACTER

Yonge Street is a diverse corridor with a range of uses and a varied built-form and character. The majority of the corridor is fronted by automobile-oriented commercial services, with parking lots to support the retail. Some development has taken place, primarily at major intersections. However, areas east of Yonge Street remain predominantly low-rise and residential in character.

ROYAL ORCHARD STATION AREA

North of Royal Orchard Avenue, Yonge Street is lined by several retail shopping plazas. The intersection of Royal Orchard Avenue and Yonge Street features a larger pad-retail plaza with a grocery store. The area is interspersed with several mid-century “tower in a park” style apartment buildings. A York Housing townhouse development sits adjacent to the grocery store and extends south across the full extent of the Major Transit Station Area.

THORNHILL HERITAGE CONSERVATION AREA

Though not the focus of the built form testing, the Thornhill Heritage Conservation District intersects with Yonge Street at John Street. There is a concentration of heritage properties at this intersection and contemporary low-rise townhouses and mid-rise developments.

CLARK STATION AREA

The Clark Station Area features a diverse mix of uses. The northwest and southeast corners of the Yonge Street and Clark Avenue intersection include mid-rise and high-rise residential developments. South of Clark Avenue along Yonge Street is a series of retail plazas and pad-retail development. The Service Employment designated areas north of the rail corridor and south of Glen Cameron Road are primarily used for service employment and retail uses.

STEELES STATION AREA

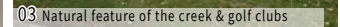
Around the Steeles Station Area, Yonge Street is fronted by a variety of small-scale and larger pad retail. In addition, there has been some mixed-use intensification along the corridor, notably the World on Yonge development at Doncaster Avenue and Yonge (see Figure 30). Behind the World on Yonge, along the rail corridor north of Doncaster Avenue, is a Service Employment designated area primarily used for commercial retail.



01 Small scale retail plaza

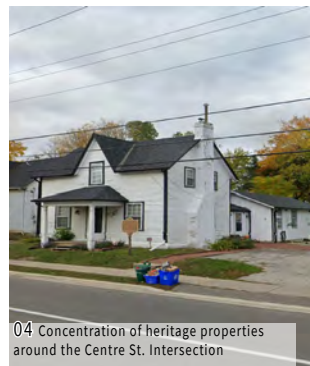


02 Established mid-century apartment buildings



03 Natural feature of the creek & golf clubs

Royal Orchard Station Area. (Source: Google Street View)



04 Concentration of heritage properties around the Centre St. Intersection



05 Established townhouse development



06 Recent mix use mid-rise development

Thornhill Heritage Conservation District. (Source: Google Street View)



07 Established residential apartment buildings at Clark and Yonge



08 Service Employment uses along Glen Cameron



09 Strip mall retail condition on the south east side of the Clark Intersection

Clark Station Area. (Source: Google Street View)



10 New residential & office of the World on Yonge recent development



11 Doncaster Ave consist mostly of large pad retail with employment and retail uses



12 This stretch of Yonge St. contains diverse retail

Steeles Station Area. (Source: Google Street View)

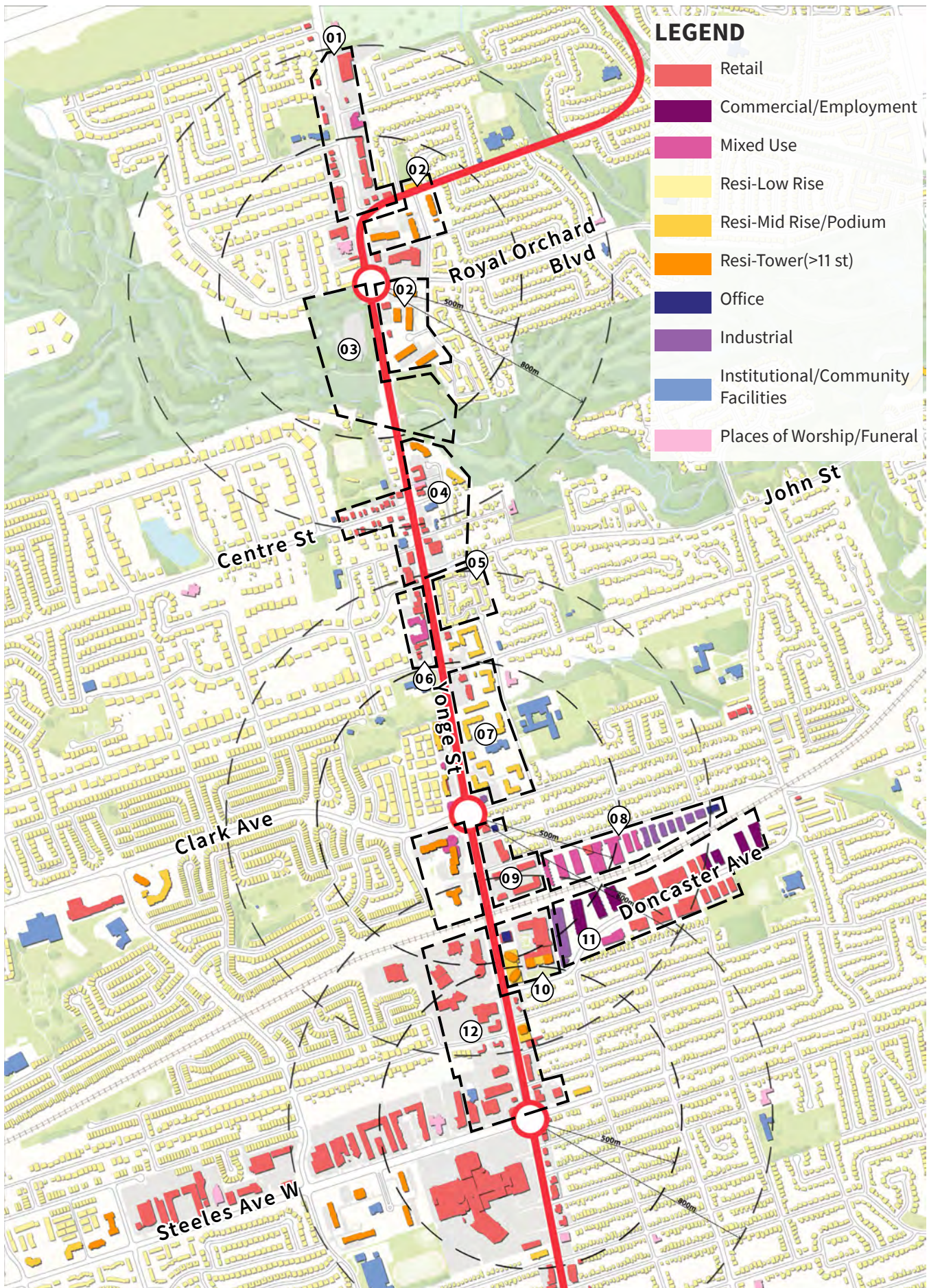


Figure 26. Existing Built Form and and Land Use Characteristics

2.3. The Emerging Context

In recent years, the Yonge Corridor, particularly those portions north of Steeles and south of the rail corridor, has experienced significant development activity. While the existing context may be varied, the emerging context is one of high-rise mixed-use developments. This pattern has been occurring east of Yonge in Markham, west of Yonge in Vaughan, and south of Steeles in Toronto.

Note: The developments described below are within Markham. The information is based on publicly available development applications.

RECENT DEVELOPMENT

The most notable recent development on the Markham side of Yonge Street is the World on Yonge: a mixed-use development located north of Steeles at Doncaster Avenue. The development, completed in 2014, contains a mix of residential, hotel, office and commercial retail across five buildings that vary in height between 18 and 31 storeys.

PROPOSED DEVELOPMENT IN MARKHAM

There are two development applications recently submitted for sites along the corridor in Markham, primarily focused on larger parcels at or near proposed/potential transit stations. Several additional applications are in pre-consultation stages.

The proposal at 10 Royal Orchard includes two scenarios: a no-subway proposal and a subway proposal. The subway proposal anticipates 1668 units, with building heights ranging from 27 to 50 storeys.

The proposal at 30-60 Steeles features two residential buildings of 27 and 6 storeys.

EMERGING CONTEXT IN VAUGHAN AND TORONTO

On the Vaughan side of Yonge, there have been several development proposals looking to increase the density beyond those anticipated in the 2010 Yonge-Steeles Secondary Plan (currently under appeal).

On the Toronto side of Steeles, the owners of Centrepont Mall have been advancing plans for a significant 22 building, mixed-use development with buildings ranging between 3 and 50 storeys in height.



Figure 27. World on Yonge. (Source: Urban Toronto)



Figure 28. Rendering of 10 Royal Orchard, Early Massing. (Source: City Of Markham)



Figure 29. Rendering of 30-60 Steeles. (Source: City Of Markham)

2.4. Summary of Background Review

The following summarizes the key findings from the review of provincial, regional and municipal policy, the existing conditions, and the emerging context. These findings have influenced the development of the land use and built form concepts presented in the report.

- Provincial and regional policy supports intensification along Yonge Street within the Study Area.
- Provincial and regional policy supports transit-supportive development at subway stations, including those within the Study Area.
- Regional and municipal policy encourage investments within the Study Area that result in an increased number of people and jobs.
- Provincial, regional, and municipal policy acknowledges a need to plan for additional parks, open spaces and community services to address growth.
- The Study Area is automobile-focused. However, there is the potential for improved active mobility and pedestrian connectivity by integrating the existing sidewalk network with open space and natural systems that pass through the Study Area.
- Local and regional bus transit services integrate well with proposed stations, creating opportunities for mobility hubs. In addition, the potential for Bus Rapid Transit (BRT) or Light Rail Transit (LRT) along Steeles may contribute to making this an important regional hub.
- There are a limited number of large-scale soft sites readily available for redevelopment within the Study Area: the majority of the larger sites on the Markham side are already subject to advancing proposals, have been redeveloped, or are incumbered by existing mid-century apartment buildings. High density development along the corridor will likely require site consolidation strategies, or innovative redevelopment of apartment lots.
- Established neighbourhoods east of Yonge Street will shape the location and height of new high-density development to ensure an appropriate transition to the existing low-rise built-form.
- The built form and site typology varies significantly across the Study Area: while some larger parcels may accommodate significant intensification around a new street and block network, the majority are shallower retail parcels or neighbourhood lots that may require site consolidation.
- There may be opportunities to increase density with careful planning by developing portions of the open spaces surrounding older "towers in the park" style apartments within the Study Area.

3.0 **PROCESS AND PRINCIPLES**

3.0 PROCESS AND PRINCIPLES

3.1. Process and Engagement

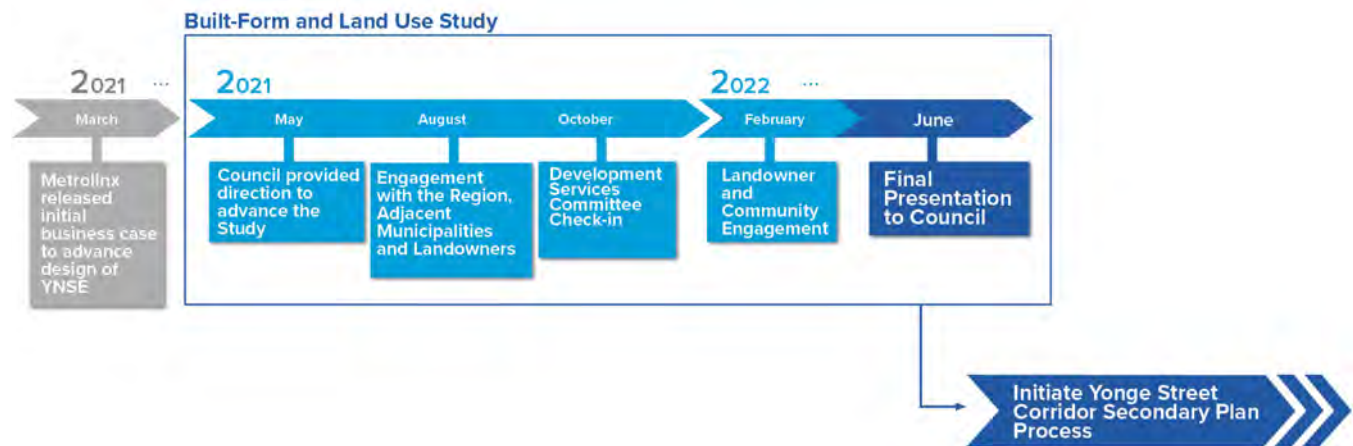


Figure 30. Process Map

PROJECT LAUNCH AND EXISTING CONDITIONS ANALYSIS

In March 2021, Metrolinx released the initial business case that recommended advancing the design of the YNSE. To better understand the corridor's redevelopment potential and build on the Intensification Analysis prepared in 2020, Markham Council provided direction to advance the Yonge Corridor Land Use and Built Form Study in May 2021.

The Yonge Corridor Land Use and Built Form Study was launched in June 2021. The process began by developing a base model of the existing conditions, identifying the current land uses along the corridor and the locations of important community amenities. Then, redevelopment proposals at various stages of the approvals process within Markham, Vaughan and Toronto were modeled to reflect the emerging context.

ENGAGEMENT WITH MUNICIPALITIES AND MAJOR LANDOWNERS

In August 2021, the study team hosted a series of stakeholder workshops with Staff members from the City of Markham, the City of Vaughan, the City of Toronto, the Region of York, and landowners with interests along the corridor. During these workshops and meetings, the team presented the initial findings from the existing conditions analysis. The purpose of these initial meetings was to familiarize Municipal partners and major landowners with the project scope and to gather additional technical information that could be used to help shape the built form and density concepts.

Feedback from the meetings informed a series of built form and land use principles intended to guide the massing exercise (see Section 3.2 below).

The development potential along the corridor was tested by:

- identifying underdeveloped parcels or areas with the potential for lot consolidation within each of the station areas;
- assessing the carrying capacity of the identified sites from an urban design perspective (see Appendix A for more information on the built form assumptions); and
- developing draft built form and land use concepts.

On October 25, 2021, the "Yonge Corridor Land Use and Built Form Study - Interim Report" and "Interim Findings Presentation" were received by the City of Markham Development Services Committee (DSC). DSC approved the release of the "Interim Report" and "Interim Findings Presentation" for public consultation and feedback.

On February 16, 2022, Urban Strategies and the City of Markham Project Team hosted a Landowner Engagement Session. On February 17, 2022, a similar session was hosted for community members. These sessions were hosted digitally and supported using an interactive whiteboard, which allowed for feedback to be captured in real-time (see Appendix B for captures of the feedback).

Following landowner and community engagement, this Final Report was drafted to provide an overview of the process to date, summarize key study findings, and ultimately serve as input into the broader Yonge Street Corridor Secondary Plan process.



Figure 31. October 2021 Interim Findings Presentation Cover.



Figure 32. Capture from Landowner Engagement Miro Board.



Figure 33. Capture from Community Meeting Miro Board.

3.2. Built Form and Land Use Principles

THE CONCEPTUAL MASSING FOR THE THREE STATION AREAS WAS INFORMED BY THE FOLLOWING BUILT FORM AND LAND USE PRINCIPLES. THE PRINCIPLES WERE DEVELOPED IN CONSULTATION WITH MUNICIPAL STAFF AND AREA STAKEHOLDERS.



Figure 34. Concepts include commercial, employment and community uses alongside residential development.

1. Support complete communities by coordinating a mix of residential and employment uses, including enhanced public amenities and services for existing and future residents.

- Seek opportunities to deliver employment by integrating new office into mixed-use podiums at stations. Note: Future market analysis is required to understand the potential for additional office employment uses, the form they might take and the incentives required to grow the share of office uses.
- Identify opportunities to advance a variety of policy priorities, including:
 - accommodating new community facilities (community centres, libraries, schools).
 - Providing new consolidated parks and open spaces.
 - Identifying opportunities to include affordable and seniors housing.








Figure 35. Area of change is east of Yonge and generally west of Dudley-Inverlochy.









2. Incorporate a clear area of change with a "neighbourhood seam" along the Dudley-Inverlochy corridor, to define low-rise neighbourhoods and integrate new development.

- Focus development east of Yonge and west of Dudley-Inverlochy.
- Introduce a "neighbourhood seam" as an alternative transportation corridor to Yonge Street - one that supports active transportation and stitches together open spaces and community facilities for the benefit of existing and future residents.
- Design the "neighbourhood seam" to limit traffic impacts on existing neighbourhood streets.

Context

	Existing
	Proposed (Markham)
	Proposed (Vaughan)
	Under Appeal (Vaughan)
	CoT Planning Study (Toronto)

Land Use and Built Form Study

	High/Mid-Rise Res.		Office
	Low-Rise Res.		Parks
	Community		Pops
Boundary			
	MTSA area		Developable Area

Massing and development along the future subway will be influenced by the final subway design. Concept land use and built form massing incorporates public information known as of December 1, 2021.



Figure 36. Potential to include a laneway network at Royal Orchard, to service and support thoughtful intensification.

3. Deliver a more fine-grained street network that improves connectivity for all modes and users.

- Include a Yonge Street laneway network at Royal Orchard.
- Include a new north-south street at Steeles to support access to development and limit neighbourhood vehicular infiltration.
- Incorporate mid-block connections to increase the porosity of larger sites.



Figure 37. Concepts respond to proposals in Toronto and Vaughan.

4. Respond to the existing and emerging context.

- Acknowledge and respond to development taking place on the Vaughan, Toronto and Markham side of the Yonge Corridor.
- Plan for a more significant amount of jobs. The introduction of a new subway along the Yonge Street corridor in Markham reinforces the importance of the corridor as a place for both people and jobs. The conceptual massing integrated new office uses into mixed-use podiums at the stations. Future planning processes will consider how to best accommodate and incentivize more office employment uses along the corridor.
- Locate the highest intensity of development along Yonge – with height peaks at transit stations.
- Provide height transitions to established neighbourhoods.

4.0 STATION AREA STUDY FINDINGS

4.0 STATION AREA STUDY FINDINGS

Royal Orchard Station Area Conceptual Massing

A re-urbanized local centre focused on the Inverlochy and Royal Orchard crossroads, with new development lining Yonge.

The built form and land use testing for the proposed Royal Orchard Station Area demonstrates the potential to transform the area into a walkable, mixed-use centre organized along a string of locally serving open space. Redevelopment is focused along the Yonge Street corridor in the form of high-rise and mid-rise development. The neighbourhood-sensitive redevelopment of the Housing York site reinforces a neighbourhood seam along Inverlochy while additional infill opportunities have been integrated within and amongst the legacy apartment buildings. Office employment has been integrated into the mixed-use podium of the development at the station, but additional opportunities to deliver employment will be considered at the Secondary Planning stage. See pages 36 and 37 for a detailed summary.



Context

- Existing
- Proposed (Markham)
- Proposed (Vaughan)
- Under Appeal (Vaughan)
- CoT Planning Study (Toronto)

Three Station Area Study

High/Mid-Rise Res.	Office
Low-Rise Res.	Retail
Community	Park

Boundary

- York Region MTSA Boundary
- Angular Plane

Note: Massing and development along the future subway will be influenced by final subway design. Concept land use and built form massing incorporates public information known as of December 2021.

Figure 38. Royal Orchard Station Built-Form and Land Use 3-D Concept

4.1. Royal Orchard



DEVELOPMENT SUMMARY

The land use and built form concept presented adds approximately 700 new jobs and 9,100 new residents to the station area. This results in an estimated population of 13,100 and 1,100 jobs within the Study Area. For additional information regarding the assumptions which inform population and employment estimates, see Appendix A.

Note: This concept includes an alternative development massing at 10 Royal Orchard to the current OPA application. The illustrated concept integrates office and community uses into the mixed-use podium - to better align with the built-form and land use principles (see Section 3.2). Revisions to the submitted application are advancing along a separate and concurrent process.

ROYAL ORCHARD STATION AREA SUMMARY	
Study Outputs	
Units	~ 4,600
Population	~ 9,100
Jobs*	~ 700
Office	~ 200
Retail	~ 400
Institutional	~100
TOTAL	~ 9,800 People and jobs
Developable Area	~ 7.5 ha
New Parks	~ 0.9 ha
Total Population and Jobs	
Population	~ 13,100
Jobs	~ 1,100
TOTAL	~ 14,200 People + Jobs

AREAS FOR FUTURE STUDY

The existing Housing York Site is a potential redevelopment opportunity. The testing of the site illustrates how redevelopment of the site could accommodate a range of building types and support the development of a neighbourhood seam along Inverlochy.

Absent a more detailed market assessment, the strategy for accommodating jobs within the station area was to integrate office within the podiums of larger sites

adjacent to the station. The testing demonstrated that this approach resulted in a large imbalance in the ratio of people to jobs. Therefore, the Secondary Plan process should include a market assessment and recommendations to increase the number of jobs and support a more complete community within the station area.

ENGAGEMENT SUMMARY

Below is a summary of the key themes related to the Royal Orchard Station Area raised by landowners and community members. These themes will influence the scope and process for developing the Yonge Street Corridor Secondary Plan.

COMMUNITY FEEDBACK

- Interest in seeing larger, consolidated parks that support a variety of recreational programs and passive enjoyment.
- Concern regarding the level of intensification and height shown and interest in ensuring that new development is compatible with established neighbourhood character.
- Consider including more significant levels of office near the proposed Royal Orchard station site.
- Interest in better understanding the impact of development on traffic, parking, and accessibility for existing neighbourhood residents.
- Consider how development can contribute to a pleasant experience for active transportation users.

LANDOWNER FEEDBACK

- Consider expanding the area of change to provide a more respectful transition to established neighbourhoods and accommodate additional open space amenities.
- Evaluate the feasibility of office employment at Royal Orchard: consider policies that incentivize office development.
- Evaluate the feasibility of the proposed laneway network east of Yonge, as this will require coordination with landowners.

4.0 STATION AREA STUDY FINDINGS

Royal Orchard Station Area Conceptual Massing

A re-urbanized local centre focused on the Inverlochy and Royal Orchard crossroads, with new development lining Yonge.

The built form and land use testing for the proposed Royal Orchard Station Area demonstrates the potential to transform the area into a walkable, mixed-use centre organized along a string of locally serving open space. Redevelopment is focused along the Yonge Street corridor in the form of high-rise and mid-rise development. The neighbourhood-sensitive redevelopment of the Housing York site reinforces a neighbourhood seam along Inverlochy while additional infill opportunities have been integrated within and amongst the legacy apartment buildings. Office employment has been integrated into the mixed-use podium of the development at the station, but additional opportunities to deliver employment will be considered at the Secondary Planning stage. See pages 36 and 37 for a detailed summary.



Figure 38. Royal Orchard Station Built-Form and Land Use 3-D Concept

4.2. Clark

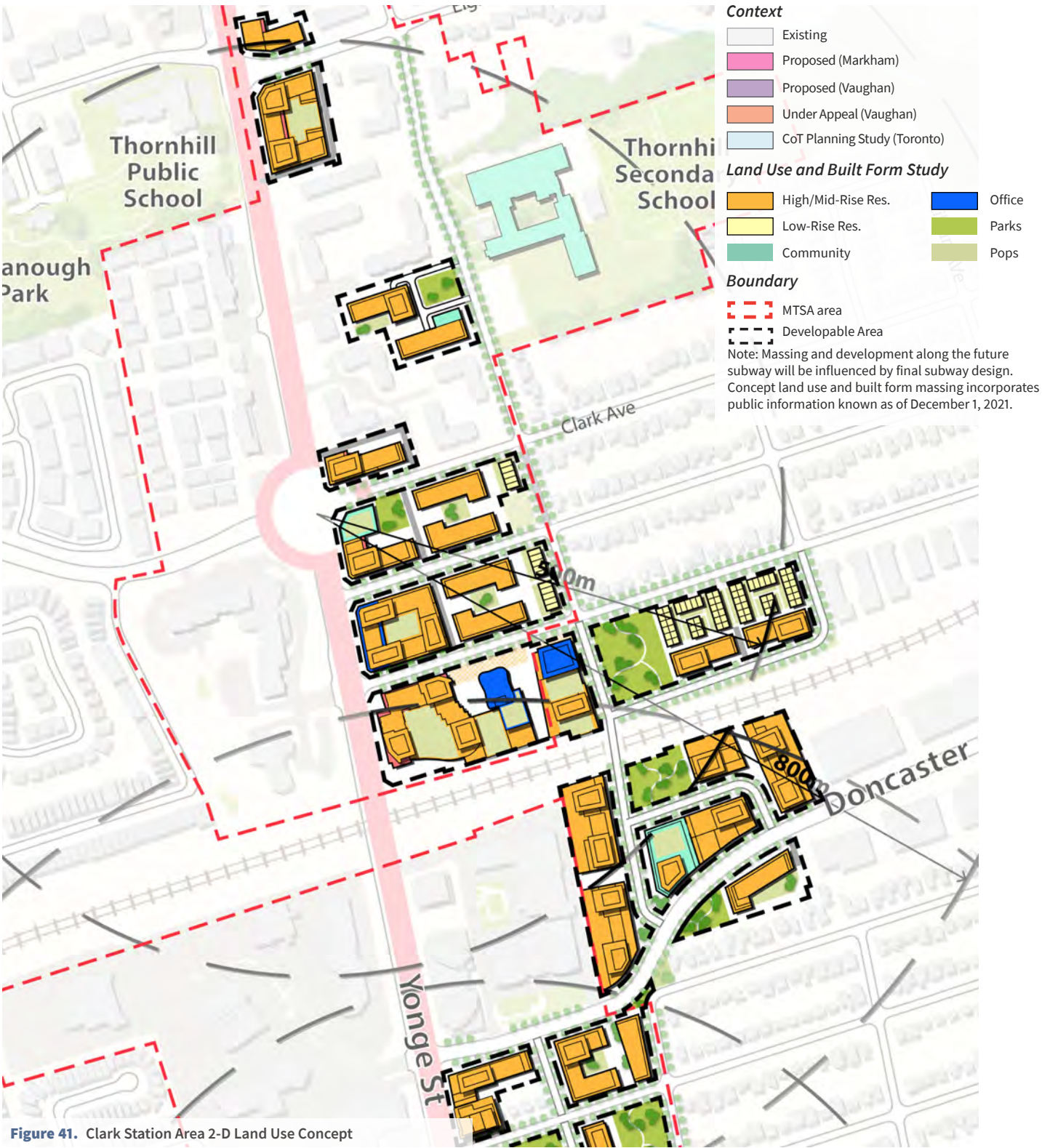


Figure 41. Clark Station Area 2-D Land Use Concept

DEVELOPMENT SUMMARY

The land use and built form concept presented adds approximately 1,600 new jobs and 9,900 new residents to the station area. This results in an estimated population of 13,600 people and 2,500 jobs within the Study Area (see Appendix A for the assumptions which inform population and employment estimates).

CLARK STATION AREA SUMMARY	
Study Outputs	
Units	~ 4,900
Population	~ 9,900
Jobs*	~ 1,600
Office	~ 1,200
Retail	~ 300
Institutional	~100
TOTAL	~ 11,500 People and jobs
Developable Area	~ 9.3 ha
New Parks	~ 1.0 ha
Total Population and Jobs	
Population	~ 13,600
Jobs	~ 2,500
TOTAL	~ 16,100 People + Jobs

AREAS FOR FUTURE STUDY

This Land Use and Built Form concept demonstrates redevelopment of the service employment lands adjacent to the rail corridor, within 500 - 800 metres of the station (aligning the area of change with Willowdale Boulevard). This area has the potential to advance multiple policy priorities, delivering new employment, parks, community facilities, retail and housing - including affordable and seniors housing. This redevelopment is consistent with the contemplated Dudley Avenue rail crossing. Further study would be required to demonstrate the feasibility of this road connection and the appropriateness of the employment land use conversion, which can only be implemented through a regional Municipal Comprehensive Review.

The strategy for accommodating jobs within the station area was to leverage the redevelopment of the service employment lands for new office uses and to integrate office within the podiums of larger sites adjacent to the

station. The result was a roughly 4:1 ratio of people to jobs. The Secondary Plan process should include a market assessment, recommendations on the appropriate ratio of people to jobs, and strategies to achieve the right mix.

ENGAGEMENT SUMMARY

Below is a summary of the key themes related to the Clark Station Area raised by landowners and community members. These themes will influence the scope and process for developing the Yonge Street Corridor Secondary Plan.

COMMUNITY FEEDBACK

- Concern regarding the level of intensification and height shown.
- Consider how new development can bring businesses, attractions and retail to Yonge Street and limit displacement: the World on Yonge displaced existing amenities but has not attracted new community-serving uses.
- Need to preserve opportunities for existing businesses and jobs along Glen Cameron: concern that as these uses are displaced, it will result in greater automobile dependency.
- Consider opportunities to reinforce the character and quality of Glen Cameron: the cluster of employment uses is unique in the City and region.
- Ensure that development contributes to the sense of place, with "remarkable," "beautiful," and different architecture.
- Create tree-lined "boulevard streets" that are comfortable to walk along and include additional park space.

LANDOWNER FEEDBACK

- Expand the area of change to align with Willowdale Boulevard for the full extent of the Station Area: opportunities to accommodate greater residential intensification, more community uses, and consolidated parkland.
- The 45° angular plane may be too prescriptive. Consider alternatives that can contribute towards a variety of policy directives: balance the need to leverage transit investment with the need to respect established neighbourhoods.

4.0 STATION AREA STUDY FINDINGS

Royal Orchard Station Area
Conceptual Massing

A re-urbanized local centre focused on the Inverlochy and Royal Orchard crossroads, with new development lining Yonge.

The built form and land use testing for the proposed Royal Orchard Station Area demonstrates the potential to transform the area into a walkable, mixed-use centre organized along a string of locally serving open space. Redevelopment is focused along the Yonge Street corridor in the form of high-rise and mid-rise development. The neighbourhood-sensitive redevelopment of the Housing York site reinforces a neighbourhood seam along Inverlochy while additional infill opportunities have been integrated within and amongst the legacy apartment buildings. Office employment has been integrated into the mixed-use podium of the development at the station, but additional opportunities to deliver employment will be considered at the Secondary Planning stage. See pages 36 and 37 for a detailed summary.



Figure 38. Royal Orchard Station Built-Form and Land Use 3-D Concept

4.3. Steeles



Figure 43. Steeles Station Area 2-D Land Use Concept

DEVELOPMENT SUMMARY

The land use and built form concept presented adds approximately 1,500 new jobs and 15,800 new residents to the Station Area. This results in an estimated population of 19,200 and 3,400 jobs within the Study Area (see Appendix A for additional information).

Note: This concept includes the massing for the application to amend the Official Plan at 36-60 Steeles. This proposal aligns with the established built form and land use principles, but the submitted application is advancing along a separate and concurrent process.

STEELES STATION AREA SUMMARY	
Study Outputs	
Units	~ 7,900
Population	~ 15,800
Jobs*	~ 1,500
Office	~ 1,100
Retail	~ 300
Institutional	~100
TOTAL	~ 17,300 People and jobs
Developable Area	~ 10.1 ha
New Parks	~ 1.2 ha
Total Population and Jobs	
Population	~ 19,200
Jobs	~ 3,400
TOTAL	~ 22,600 People + Jobs

AREAS FOR FUTURE STUDY

To better serve the level of intensification shown at Steeles Station, and to improve the porosity and mobility experience for all users, this study contemplates a new north-south street east of Yonge. It also includes a rail crossing at Dudley. These infrastructure investments require additional study, coordinated through the Secondary Plan process.

Absent a more detailed market assessment, the strategy for accommodating jobs within the station area was to integrate office within the podiums of larger sites adjacent to the station. The testing demonstrated that this approach resulted in a large imbalance in the ratio of people to jobs. Therefore, the Secondary Plan process should include a market assessment and

recommendations to increase the number of jobs and support a more complete community within the area.

ENGAGEMENT SUMMARY

Included below is a summary of the key themes related to the Steeles Station Area raised by landowners and community members. These themes will influence the scope and process for developing the Yonge Street Corridor Secondary Plan.

COMMUNITY FEEDBACK

- There is support for the Dudley Avenue overpass, but it needs to be considered as more than a mobility connection: it is a way to connect two communities and support cohesion.
- New development should be paired with a greater increase in community facilities: references made to the North York civic centre and the inclusion of a cinema, a theatre, a community centre, a library and a fitness centre.
- Expressed concern that proposed population growth would exceed the capacity at local hospitals: Consider how development can support access to health services and support aging in place.
- The policy should protect the quality of existing neighbourhoods and minimize negative impacts on existing residents.
- Concern that work is not being coordinated with adjacent municipalities (Toronto, Vaughan): land use, density and technical assumptions need to be coordinated across all four quadrants of the Yonge-Steeles intersection.
- Consider how development can anticipate, respond to, and mitigate the impacts of climate change.

LANDOWNER FEEDBACK

- Given the level of development proposed in Vaughan and Toronto, consider alternatives to the 45° angular plane that allows for a built-form consistent with this emerging context.
- Align the area of change more consistently with a 500-metre radius around the Steeles-Yonge station location.
- Study the extent of office employment included at Steeles Station Area and policies that may be required to support the development of office.

5.0 CONCLUSION

5.0 CONCLUSION

5.1. Development Summary

LAND USE AND BUILT FORM STUDY OUTPUTS	
Units	~ 17,400
Population	~ 34,800
Jobs*	~ 3,800
Office	~ 2,500
Retail	~ 1,000
Institutional	~300
TOTAL	~ 38,600 People and Jobs
Developable Area	~ 26.9 ha
New Parks	~ 3.1 ha
TOTAL POPULATION AND JOBS AT FULL BUILD OUT	
Population	~ 45,900
Jobs	~ 7,000
TOTAL	~ 52,900 People + Jobs

The built form and land use concepts demonstrate the potential for 3,800 new jobs and 34,800 new residents on the Markham side of the Yonge Corridor, for a total of 38,600 new people and jobs. Accounting for the existing population and employment and the displacement impacts of development, the concepts result in a total population of 45,900 and 7,000 jobs within the study area.

The land use and built form study identifies 26.9 hectares of potential development area along the corridor. By applying a coordinated approach to new development that consolidates open spaces, the concepts demonstrate the potential for over 3 hectares of new open spaces (greater than 10%) and new community facilities within each station area. As noted throughout, opportunities to support additional employment and neighbourhood serving amenities will be identified through the Secondary Plan process.



Figure 44. Corridor Looking North

5.2. Engagement Feedback and Secondary Plan Considerations

In February 2022, the City of Markham Project Team hosted engagement with community members and major landowners. The purpose of this engagement was to share the work completed to date, gather preliminary feedback, and identify considerations to be included as part of the upcoming Yonge Street Corridor Secondary Plan process.

Key points of consideration and concern specific to the station area land use and built form concepts are summarized in Section 4. Outlined below are key considerations for the Yonge Street Corridor Secondary Planning process as a whole. Each topic is paired with potential considerations for the scope of the Yonge Street Corridor Secondary Plan.

NEIGHBOURHOOD FIT

Community members were concerned about the level of density and heights illustrated and the potential impact on neighbourhood character. Landowners suggested that additional transit-supportive density may be accommodated alongside respectful transitions to established neighbourhoods by increasing the size of the area of change and/or applying alternative built-form principles (e.g. alternatives to the 45° angular plane).

RECOMMENDATIONS FOR THE SECONDARY PLAN PROCESS:

- Include additional built-form and land use testing.
- Include opportunities to engage the community on how best to manage change and integrate with established neighbourhoods (alternative built-form principles and the benefits of a broader study area may be evaluated).

JOBS AND SERVICES

Community members were concerned about the impact of development on existing jobs, community amenities and services. Landowners suggested that significant office employment may not be marketable and requested further study of the potential for office at transit stations.

RECOMMENDATIONS FOR THE SECONDARY PLAN:

- Include a market assessment and strategies to support growth in retail and employment.
- Investigate policies and evaluate ways to limit displacement of local businesses.
- Explore alternative land use mixes.

TRAFFIC AND MOBILITY

Community members expressed concern that increased intensification would result in added congestion, neighbourhood infiltration, and impact pedestrian safety and accessibility. Landowners suggested that future work consider Transportation Demand Management (TDM) strategies to reduce the demand for parking.

RECOMMENDATIONS FOR THE SECONDARY PLAN PROCESS:

- Include a comprehensive transportation study that identifies impacts and required changes to existing mobility networks that result from intensification.
- Identify ways to limit infiltration by delivering new pedestrian and cycling infrastructure and improving connections to transit.
- Consider and evaluate the use of a diverse suite of TDM strategies.

PARKS AND COMMUNITY FACILITIES

Community members prioritized the development of larger, consolidated, softscaped open spaces and indicated a need for additional community facilities and amenities (e.g. libraries, cultural facilities, community centres). Community members also indicated that development should contribute to livability by supporting aging in place - specifically noting the capacity constraints at existing health care facilities and the need for the coordinated delivery of health services.

RECOMMENDATIONS FOR THE SECONDARY PLAN PROCESS:

- Include opportunities to engage the community on parkland and community service priorities.
- Include opportunities to engage with provincial and agency partners that contribute to social infrastructure and provide essential services.
- Develop a parkland acquisition strategy to support the delivery of consolidated open spaces.
- Include a community service and facilities needs assessment to identify gaps and opportunities for new community facilities.

BROADER DEVELOPMENT CONTEXT

Participants requested that future work consider the impact of development in Vaughan and Toronto alongside the emerging context in Markham. Landowners also asked that future land use and built form concepts advance concurrently with technical assessments related to servicing, parkland and community facility provision, market testing for employment, and transportation planning.

RECOMMENDATIONS FOR THE SECONDARY PLAN PROCESS:

- Model and study the implications of the latest development in the City of Vaughan and Toronto to ensure future decision-making is supported by a complete understanding of the corridor.
- Assess development from multiple perspectives, including built form, mobility, servicing, community facility requirements, and office and retail market analysis.
- Align the timing of the upcoming Yonge Corridor Secondary Plan process with the YNSE Project to ensure development is coordinated and phased appropriately.

DUDLEY AND THE NEIGHBOURHOOD SEAM

Participants were generally supportive of the 'neighbourhood seam' concept:

- the consolidation of green space and community amenities along Dudley-Inverlochy for the length of the corridor;
- an alternative to Yonge street that prioritizes pedestrian and cyclist comfort; and
- a buffer and transition area between development and established neighbourhoods.

Participants were also supportive of the extension of Dudley Avenue across the CN Rail Corridor between Glen Cameron and Doncaster, as it would result in better connectivity between neighbourhoods, encourage multi-modal travel, and reinforce a sense of place.

RECOMMENDATIONS FOR THE SECONDARY PLAN:

- Explore opportunities to reinforce the "neighbourhood seam" vision.
- Consider ways that the "neighbourhood seam" can support the integration of development with established neighbourhoods and help to manage neighbourhood infiltration.
- Explore the alignment and impacts of the rail crossing from a transportation engineering perspective.

5.3. Areas for Future Study and Next Steps

The following are considerations meant to inform the scoping of the Yonge Street Corridor Secondary Planning process.

Parks and community facilities

Consider including a community facilities strategy to understand community needs and gaps in existing services. The plan should include a consolidated parkland strategy to identify opportunities to deliver larger flexible open spaces that serve existing and future residents/employees.

Transportation Demand Management (TDM)

Consider including a dedicated TDM strategy to minimize the need for parking and prioritize more sustainable modes of transportation such as walking, cycling and transit.

The service employment lands between Doncaster and Glen Cameron

Consider assessing the appropriateness and potential opportunities associated with the redevelopment of the service employment lands closest to the subway. The assessment should explore and factor in the potential of the lands to advance a range of public policy and community-identified priorities, including delivering sustainable employment opportunities, affordable housing, senior housing, community service facilities, and consolidated parkland.

Growing employment

Pairing economic opportunities and jobs with residential development is essential to creating complete communities. Introducing transit to the corridor is an important first step to supporting employment intensification. While the Land Use and Built Form Study tested the potential for growing new jobs within the station area by integrating offices within the podiums of development close to the stations, the testing demonstrated that this approach resulted in a significant imbalance in the ratio of people to jobs along the corridor. The best mix of people and jobs demonstrated through the testing was within the Clark Station area where redevelopment of the service employment lands was used to create space for a cluster of office uses.

Further study to address the imbalance in the ratio of people to jobs presented in this report is needed to support the realization of a complete community. It is recommended that the City of Markham prepare a market assessment to understand the potential for the corridor to attract and retain employment uses, including office. The assessment should explore the range of potential incentives that may encourage new office employment and outline an implementation strategy to ensure the corridor continues to support a diverse mix of jobs and services.

The Dudley Avenue and Inverlochy Boulevard ‘neighbourhood seam’

Consider the development of a ‘neighbourhood seam’ along the Dudley Avenue and Inverlochy Boulevard corridors. The study should assess the feasibility of the concept from a variety of perspectives, including:

- transportation to improve the corridor as a focus for north-south active mobility and reduce vehicular infiltration into the neighbourhoods;
- urban design to support the development of a green street that stitches together new and existing neighbourhoods; and
- parks and community facilities to understand the potential for the ‘neighbourhood seam’ to accommodate new community amenities.

Thornhill Green York Housing Site

The Thornhill Green site has been identified as a potential redevelopment opportunity (see Royal Orchard Station Summary details). Future work should be coordinated with York Housing to determine how these transit-adjacent lands can be leveraged to offer replacement housing for existing residents, increase amenities for the local neighbourhood and support regional/local objectives.

Study Area

It may be appropriate to expand the study area and potential area of change to better address the broader range of community, landowner, and municipal priorities along the corridor, including the appropriate use of transit-adjacent lands. Adjustments to the study area and areas of change should consider opportunities to:

- support intensification and a greater mix of uses in proximity to transit,
- increase the delivery of consolidated parkland and community services/amenities, and
- enhance the integration of new development with existing neighbourhoods.

Municipal coordination

Explore opportunities to coordinate the secondary plan with the City of Vaughan and Toronto to ensure that the secondary plan accounts for the broader changes occurring along the Yonge Street corridor. This could include:

- Ensuring that the latest developments are factored into the transportation and community service-related assessments;
- Coordinating with adjacent municipalities to align development, public realm, and mobility strategies; and
- Incorporating participation of the neighbouring municipalities as part of the secondary planning exercise.

NEXT STEPS

This report is intended to be an input into the development of the scope for the Yonge Street Corridor Secondary Plan.



APPENDIX A

MASSING

ASSUMPTIONS

APPENDIX A: MASSING ASSUMPTIONS

BUILT FORM ASSUMPTIONS

A series of common built-form and massing assumptions were applied across the entire corridor to develop and test the transit-oriented community potential of the three station areas. These assumptions were based on common policies and guidelines existing within Markham and other precedent and comparable municipalities.

- Locate the tallest towers at transit stations and in areas that are furthest from established neighbourhoods.
- Height peaks informed by the proposed developments in the emerging context.
- Conform to a 45-degree angular plane from the low rise neighbourhoods to support transition in scale.
- Mid-rise heights vary in response to context, while responding to the angular plane.
- Tower Form Guidelines:
 - Podiums generally between 4 – 8 storeys;
 - 750-800 square metres tower floor plates above the podium; and
 - 25-30 metre minimum tower separation distances.

INTENSIFICATION ANALYSIS ASSUMPTIONS

In order to estimate the level of residential and employment intensification associated with the land use and built form concepts, a number of assumptions were made regarding the current status of the corridor and the future development. These assumptions are listed below.

Note: during the Yonge Street Corridor Secondary Plan process, further study of these assumptions may result in greater levels of employment and residential intensification.

EXISTING USES IDENTIFIED AS POTENTIAL REDEVELOPMENT OPPORTUNITIES

- Current population and employment numbers are pulled from the Yonge North Subway Intensification Analysis (2020).
- Population and workforce displacement were estimated by counting the number of homes, retail spaces, and workplaces identified as redevelopment opportunities, and applying the following assumptions:
 - Population per residential units (PPU) - 3.2
 - Retail employment density - 40 square metres per employee
 - Industrial employment density - 80 square metres per employee

INTENSIFICATION ASSUMPTIONS

- A Gross to Net ratio of 0.85 is applied to all development to estimate useable space.
- Average residential unit size: 80 square metres (860 square feet), net
- Employment and Residential Densities (Source - City of Markham DC Background Study, Hemson 2018):
 - Population per residential unit (PPU) - 2
 - Office employment density - 25 square metres per employee
 - Retail employment density - 40 square metres per employee
 - Institutional employment density - 67 Square metres per employee

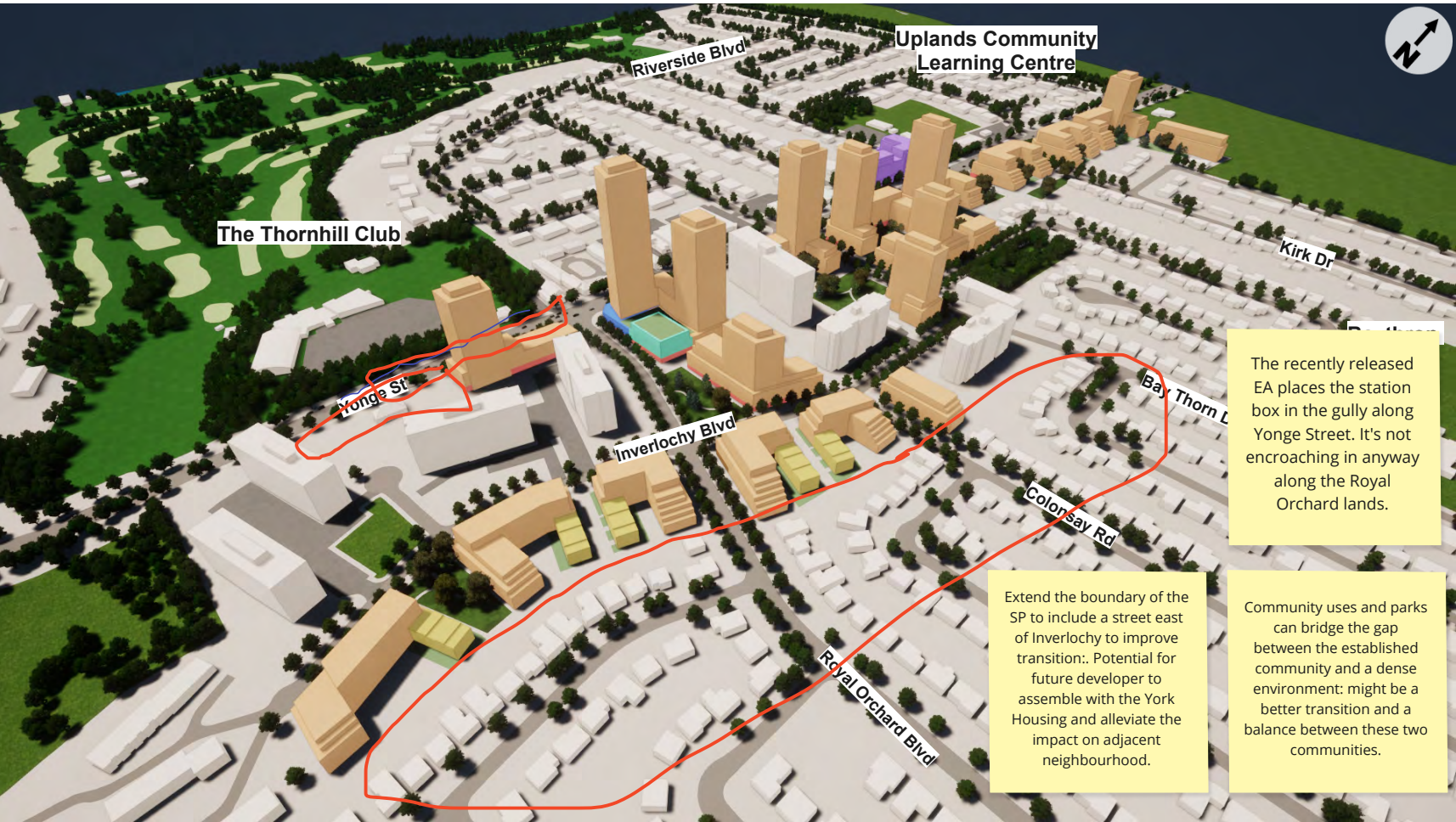
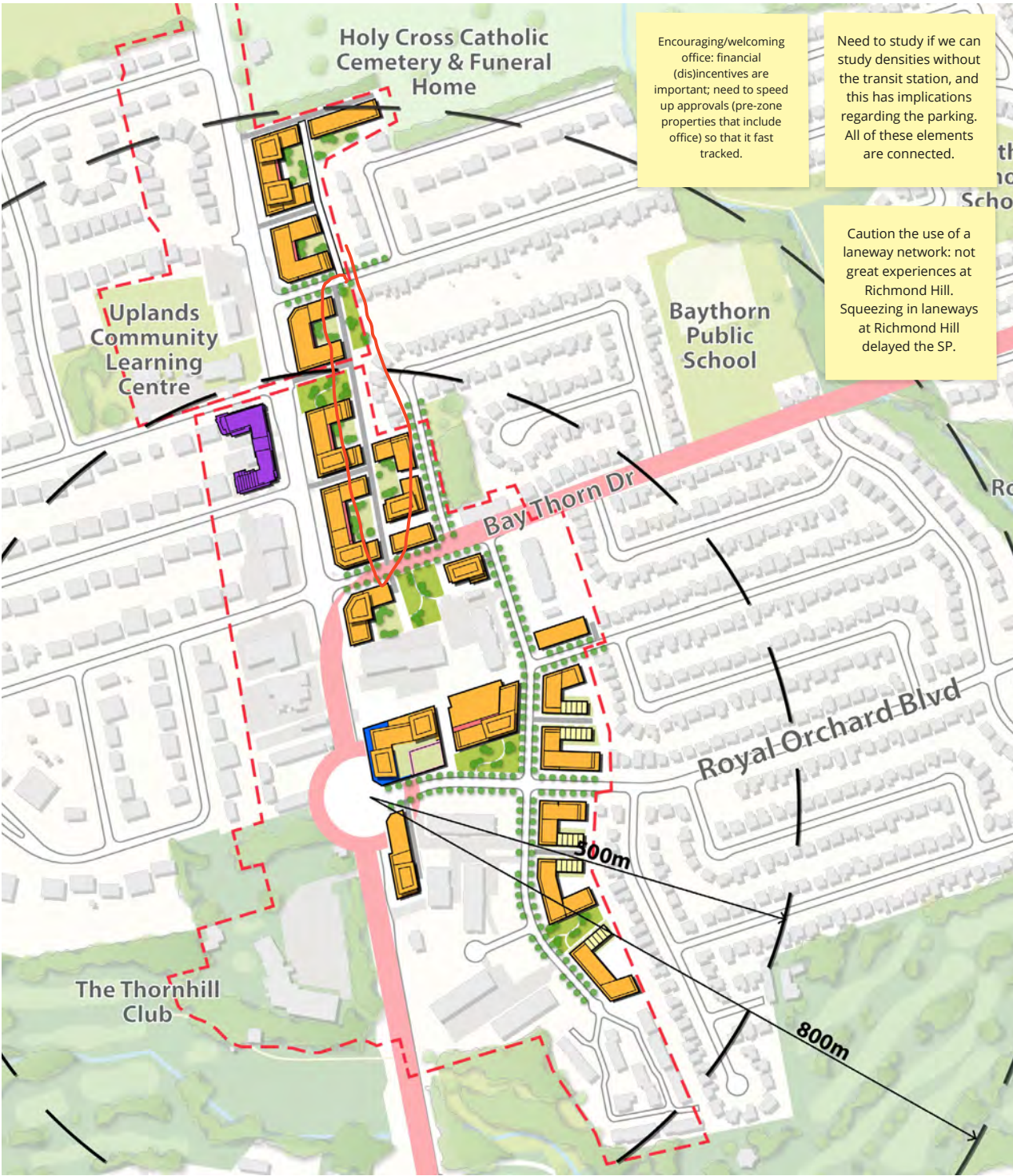
APPENDIX B

ENGAGEMENT

FEEDBACK

APPENDIX B: MIRO CAPTURES

Royal Orchard Station
Study Area



Discussion Questions

1. What do you think of the land use and massing concepts that have been shared?
2. Are there specific areas along the corridor or additional considerations that may require further exploration?
3. What additional opportunities should be explored to ensure new development integrates with and contributes to the liveability of existing neighbourhoods?

Changes made to the green capital development are not referenced, and the application isn't shown in the massing.	Other proposed and active developments are not shown at all.	Prefer a retail focus at royal orchard (replacing super market and existing retail) to a community centre / office.	Green Capital site is an not appropriate location for an office, instead should focus north and at Steeles.	Locating community centre further east towards Inverlochy is preferred, where it can better serve the existing community.	Neighbourhood transition is an important consideration	Prefer to see community uses along Dudley-Inverlochy, similar to how the seam is being approached at Royal Orchard.
If add these additional lands it might create a greater buffer (park buffer, transition to heights).	There's a little bit of a disconnect between the heights at Yonge and the low-rise established neighbourhood.	Need to manage the neighbourhood destabilization impact: strong policies related to land assembly.	Secondary Plan process should include a stage during which the appropriate area of change is identified.	Laneway studies don't work without landowner buy-in	Coordinate study with what's taking place in Vaughan.	No hard and fast rule about angular plane
Technical work will have to advance at the SP stage.	Be clear about the assumptions (built-form, angular plane, etc)	This type of density would require caps on parking supply.				

Figure 45. Royal Orchard Station Discussion Outcomes - Landowner Session February 2022

APPENDIX B: MIRO CAPTURES

Clark Station Study Area



Discussion Questions

- 1. What do you think of the land use and massing concepts that have been shared?
- 2. Are there specific areas along the corridor or additional considerations that may require further exploration?
- 3. What additional opportunities should be explored to ensure new development integrates with and contributes to the liveability of existing neighbourhoods?

Consider Willowdale as the border of this area of change: Need to look at the transportation infrastructure and the potential connections.	willowdale: connection across rail / defining the area of change	Talk about wanting to build a complete community: but there are opportunities here to pick up sites for other community uses	there are already low-rise west of dudley, so extending is more of the same.
Angular plane: too restrictive. Are there options for different types of angular planes.	Shadowing on singular family home garden needs to be considered alongside the billions of dollars of investments.	There are going to be tall buildings here, and there will be shadowing, and need to recognize that.	Might want to consider larger, consolidated park spaces: might need to expand the study area to achieve these larger consolidated spaces

Figure 46. Clark Station Discussion Outcomes - Landowner Session February 2022

APPENDIX B: MIRO CAPTURES

Steeles Station Study Area



Discussion Questions

- 1. What do you think of the land use and massing concepts that have been shared?
- 2. Are there specific areas along the corridor or additional considerations that may require further exploration?
- 3. What additional opportunities should be explored to ensure new development integrates with and contributes to the liveability of existing neighbourhoods?

Need to balance angular plane rigidity and the billions of dollars of investments	Advancing discussions at least acknowledge the piercing the angular plane. Consider the actual time of the shadow, and the impacts on a limited number of policies.	Is there a way to acknowledge that in some instances the piercing of the angular plane might be acceptable.	Consider a ring road to limit permeability to adjacent neighbourhood, but the reality is that there are going to be people finding their way through to Yonge.	Office uses need to be subject to further study: Consider what land use balance Vaughan lands on as an input.
Concern that tying all of the station areas together may cause delays.	Include incentives for employment uses: Don't count the density towards maximum.	Echo the comment regarding the area of change. Look at the ring regarding the 500 m. These areas should all be included in the area of study - not necessarily saying the whole thing should be intensified	Consider the other benefits of expanding the study area: improve transition, allow for larger parks and more thoughtful amenities.	Take a comprehensive look at the area and consider how best to transition to the neighbourhood. Need to look at a larger area to consider this impact.

Figure 47. Steeles Station Discussion Outcomes - Landowner Session February 2022

APPENDIX B: MIRO CAPTURES

Royal Orchard Station
Study Area



Figure 48. Royal Orchard Station Discussion Outcomes - Community Meeting February 2022



Discussion Questions

- 1. What do you like about the concept shared for the Royal Orchard Station Area?
- 2. What opportunities are there for improvement?
- 3. How can new development benefit the neighbourhood at Royal Orchard?
- 4. What do you think are the most important issues for the Secondary Plan to consider for the Royal Orchard area?

Concerned: nothing that we like about the concept

APPENDIX B: MIRO CAPTURES

Clark Station Study Area



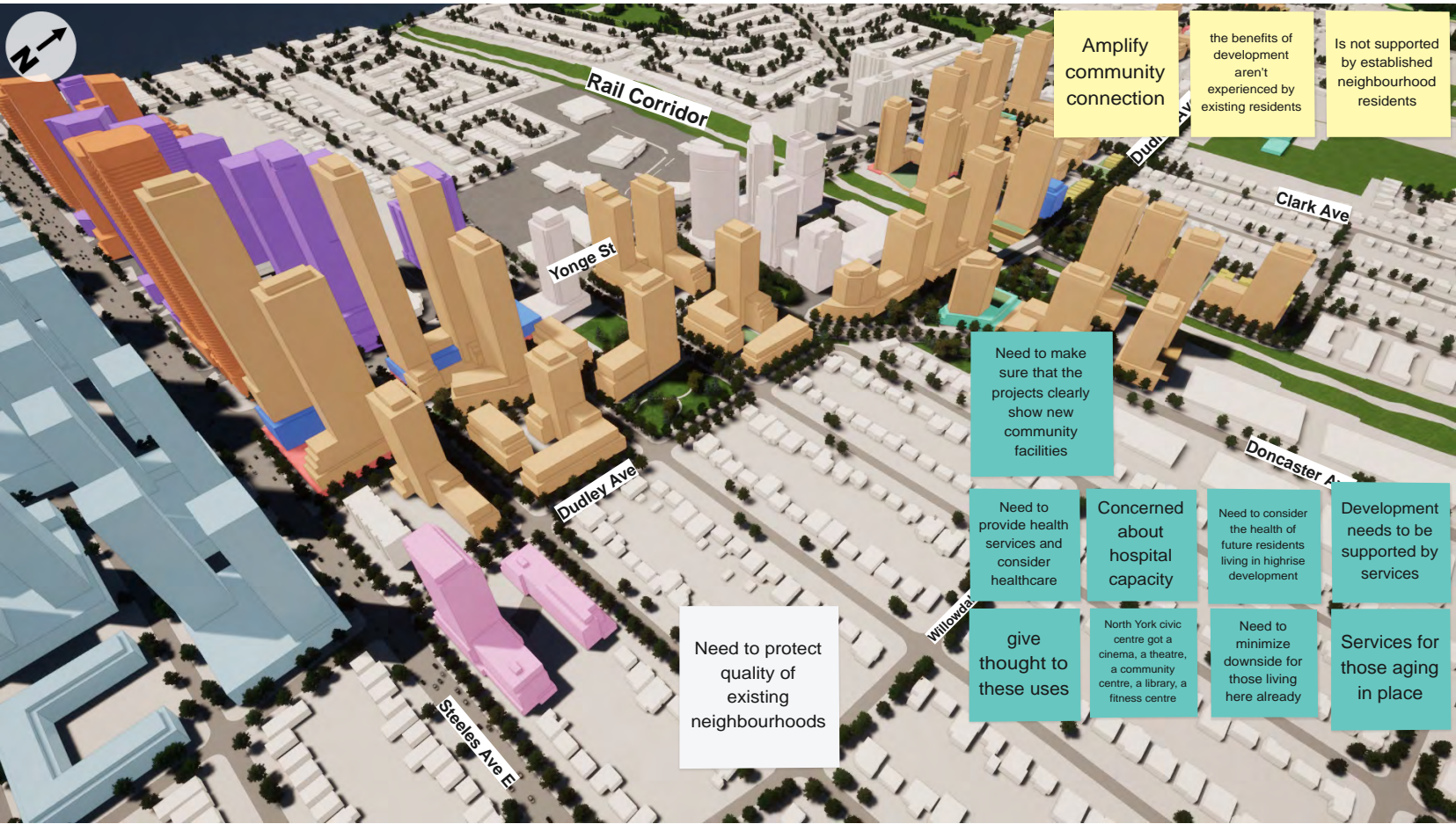
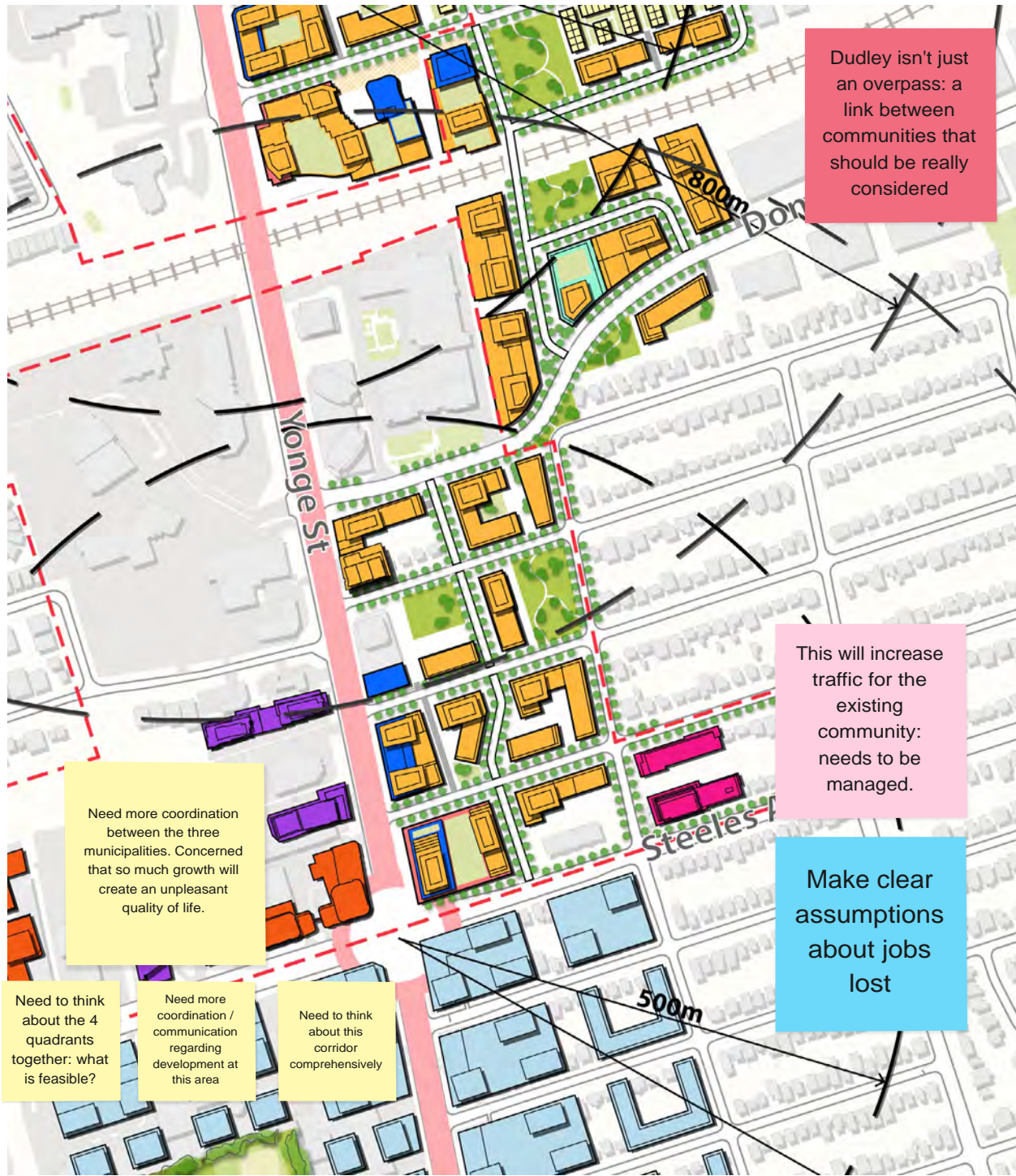
Discussion Questions

1. What do you like about the concept shared for the Clark Station Area?
2. What opportunities are there for improvement?
3. If the redevelopment of the area along the rail corridor is investigated, what needs to be considered?
4. How can new development benefit the neighbourhood at Clark?
5. What do you think are the most important issues for the Secondary Plan to consider for the Clark Station

What is the position of markham towards lot consolidation and development and change in established neighbourhoods?

APPENDIX B: MIRO CAPTURES

Steeles Station Study Area



Discussion Questions

1. What do you like about the concept shared for the Steeles Station Area?
2. What opportunities are there for improvement?
3. What do you think of the Dudley 'neighbourhood seam' concept and what would be required to make it successful?
4. How can new development benefit the neighbourhood at Steeles?
5. What do you think are the most important issues for the Secondary Plan to consider for the Steeles area?

Figure 50. Clark Station Discussion Outcomes - Community Meeting February 2022

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