Attachment 8: Lawrence-Allen Transportation Master Plan

planningAlliance
City of Toronto

Lawrence Allen Revitalization Project

Transportation Master Plan

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1 Introduction

In 2008, the City of Toronto, Toronto Community Housing Corporation (TCHC), and the Toronto District School Board (TDSB) each initiated complementary and co-ordinated studies to plan for the revitalization of the Lawrence Heights neighbourhood located in central Toronto. While the initial catalyst for these initiatives was TCHC's need to renew social housing stock, it created the opportunity and responsibility to comprehensively examine the Lawrence Heights neighbourhood, its relationship to adjacent neighbourhoods and their joint connection to the broader city. Within this context, the City's study explored how growth and change identified by the various land owners could be balanced with the broader city building objectives articulated by the Official Plan.

Over the next three years, the City engaged a multi-disciplinary consulting team to complete a comprehensive planning study for the larger Lawrence-Allen area. The study undertook an extensive and inclusive community engagement process with stakeholders from every part of the Study Area. It included: large and small community meetings and workshops, surveys and tours, phone calls, e-mails and face-to-face conversations.

The end result of this process is the **Lawrence Allen Secondary Plan** for the area that articulates a long-term vision and physical plan for the area as it changes over the next 20 years. It also provides implementation policy tools to establish a comprehensive planning framework for the Lawrence-Allen area.

This report is the Transportation Master Plan (TMP) which identifies required transportation infrastructure and policy direction to support the Secondary Plan. The TMP will discuss the following key transportation elements:

- Allen Road
- Public Streets
- Pedestrians and Bicycles
- Transit
- Auto Capacity and Neighbourhood Traffic Impacts
- Implementation
- Policy Direction for a Secondary Plan
- Environmental Assessment Schedule

This Lawrence Allen Transportation Master Plan report should be read in conjunction with the Lawrence Allen Secondary Plan, and other supporting implementation plans, such as the Infrastructure Master Plan, as well as background study reports prepared by the consulting team. All these reports can be found on the City's website.

2 Study Area and Focus Area

The Lawrence Allen Study Area is bounded by Lawrence Avenue West to the south, Highway 401 to the north, Bathurst Street to the east, and Dufferin Street to the west. The Study Area includes many lands that are not contemplated for redevelopment or expected to undergo significant physical changes, but is large enough to better understand the transportation impacts and requirements needed for Revitalization.

The Lawrence Allen Focus Area is a smaller area that includes lands on either side of the Allen Road Corridor that are owned by Toronto Community Housing Corporation, Toronto District School Board, RioCan (owns and manages Lawrence Square shopping center) and the City of Toronto. These lands are anticipated to undergo redevelopment or significant physical changes as a result of the Revitalization.

The Study Area and Focus Area are outlined in red and yellow, respectively, in Figure 1 below.

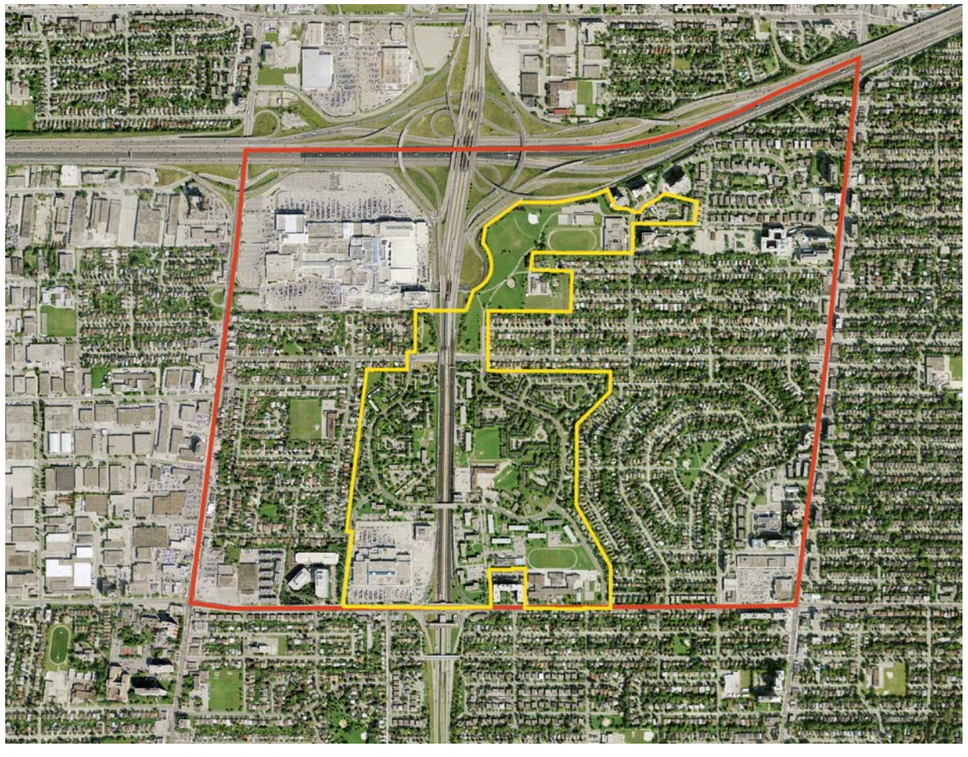


Figure 1: Lawrence-Allen Study Area and Focus Area

The Study Area is quite large -- 342 acres – and is mainly occupied by single-family detached homes and apartment buildings. Yorkdale Shopping Centre is in the northwest corner of the Study Area and the Baycrest Health Centre is a major institutional use in the northeast part of the Study Area. The Allen Road Corridor bisects the Study Area, providing both a significant piece of transportation infrastructure and an imposing physical barrier.

Two significant pieces of transportation infrastructure serve an area larger than the Study Area. First, bisecting the Study Area is the Allen Road, a 3.5 km expressway that runs north-south from Highway 401 to Eglinton Avenue West. The Yonge-University-Spadina TTC subway line runs along the centre median of Allen Road, with two subway stations in the Study Area: Lawrence West Station and Yorkdale Station. Second, Highway 401 is a major east-west expressway that provides connections between regional areas and destinations such as Pearson International Airport, the 905 regions, and Southeastern Ontario.

2.1 Environmental Assessment Process

The Ontario Environmental Assessment Act includes requirements related to new or expanded municipal infrastructure facilities. The Municipal Engineers Association Municipal Class Environmental Assessment document (dated October 2000 as amended in 2007) provides direction and requirements for the Municipal Class EA process, including Master Plans and integrating with the Planning Act. A description of the key elements of the Municipal Class EA process is shown in the box below and in Figure 2.

The Municipal Class Environmental Assessment Process

All projects that involve new or expanded municipal facilities in Ontario are normally carried out as Municipal Class Environmental Assessments (Class EA) under the Environmental Assessment Act. The Class EA process is a planning process that is applied to certain classes of public sector (and some private sector) projects, including road, sewer and water supply projects that have impacts on the environment. Key elements of the Class EA process are:

- Consultation with affected parties early in the process and throughout;
- Consideration of a range of reasonable alternatives;
- Consideration of the effects of each alternative;
- Consideration of the effects of each alternative on all aspects of the environment (natural, social, cultural, technical and economic/financial);
- Systematic evaluation of alternatives in terms of their advantages and disadvantages to determine their net effects on the environment; and
- Documentation of the planning process, to allow “traceability” of decision-making.

The Lawrence Allen Secondary Plan and Transportation Master Plan have been conducted following the integrated process described above and satisfy the first two phases of the Municipal Class Environmental Assessment process, which are:

- Phase 1: Identify existing problems or opportunities; and
- Phase 2: Identify alternative solutions to the problem.

Remaining future phases of the Municipal Class EA process will be completed separately for specific transportation infrastructure projects identified in section 13 –Implementation of this report.

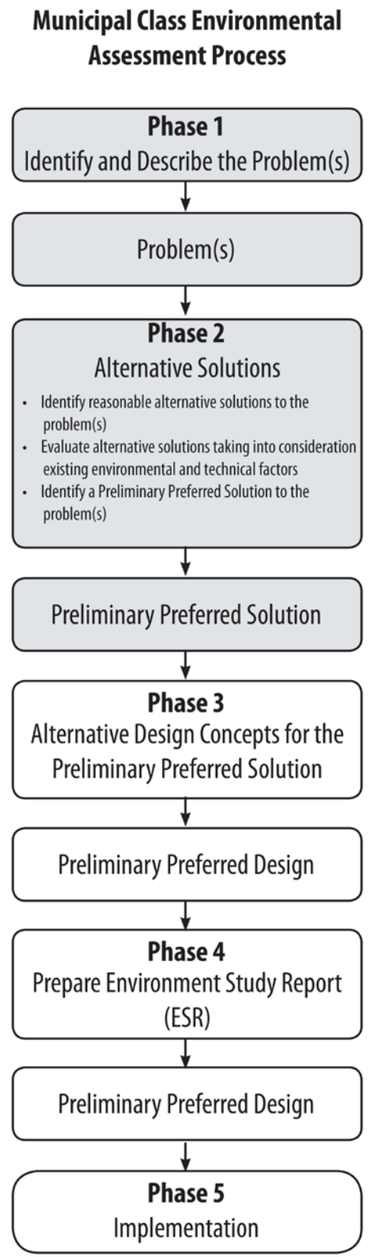


Figure 2: Municipal Class EA Process

3 Planning Policy Context

3.1 Provincial Policy Statement

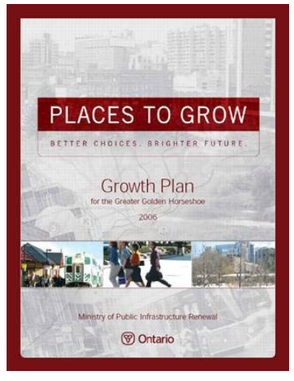
The Provincial Policy Statement (PPS) provides policy direction on land use and development matters of provincial interest, including the following key areas:

- The efficient use of land, infrastructure and public service facilities;
- Intensification of existing and planned development and infrastructure;
- Ensuring sufficient land availability for an appropriate range and mix of employment, residential, recreational and open space uses; and,
- Planning public streets, spaces and facilities to meet the needs of pedestrian and cycling movements.

3.2 Places to Grow: Growth Plan for the Greater Golden Horseshoe

The Provincial Growth Plan provides regional and local municipalities with a policy framework to manage growth in urban areas, including the following key areas:

- reduce automobile dependency through mixed-use, transit-supportive and pedestrian-friendly development;
- provide convenient access to intra- and inter-city transit and intensify urban areas particularly around major transit stations;
- provide for a range and mix of housing, including affordable housing, a diverse and compatible mix of land uses, and high quality public open spaces;
- ensure an adequate supply of lands for employment in support of a diversified economic base; and
- conserve cultural heritage and archaeological resources as intensification occurs.



3.3 Regional Transportation Plan: The Big Move

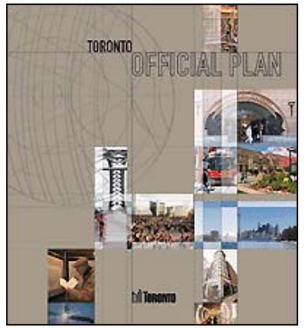
Metrolinx, the provincial transportation agency recently created a Regional Transportation Plan (RTP) for the Greater Toronto and Hamilton Area. The RTP contains several goals, including: providing improved transportation choices and convenience; promoting active and healthy lifestyles; reducing the transportation carbon footprint; and implementing multi-modal transportation integration. Some “Big Moves” were proposed which impact the Study Area:

- The Toronto-York Spadina Subway Extension north of the Study Area to Vaughan.
- A higher-order transit route along Eglinton Avenue just south of the Study Area.

3.4 The City of Toronto Official Plan

The Official Plan provides a long-term vision and framework for developing a successful and sustainable city over the next 30 years. The Official Plan outlines several transportation-related policies that establish a strong relationship between land-use and transportation. The Plan also speaks to improving conditions for pedestrians and non-auto transportation, making better use of existing transportation infrastructure, and creating compact centres and corridors supported by a comprehensive transit system where urban growth is focused. The Official Plan supports the implementation of the Provincial Growth Plan through policies that aim to:

- Accommodate growth through redevelopment and intensification;
- Ensure transit and pedestrian supportive development;
- Reduce automobile dependency;
- Establish a mix of land uses;
- Protect and preserve employment lands;
- Improve the City’s air quality;
- Protect and enhance key natural features;
- Promote the timely provision of community services;
- Provide affordable and special needs housing; and,
- Improve access for persons with disabilities.



3.5 Toronto Transit Expansion Plan

The City of Toronto, the TTC, and Metrolinx have proposed a series of new transit projects to improve transit in the City. These routes include:

- Eglinton-Scarborough Crosstown
- Sheppard East Subway
- Etobicoke Finch West Improved Bus Service

Of these 3 transit initiatives, the Eglinton Crosstown transit route will have the most impact on the Study Area, as it runs just south of the Study Area, and connects to both the Yonge and University-Spadina Subway lines.

3.6 City of Toronto Walking Strategy

The City of Toronto's Walking Strategy is a vision for a more liveable, prosperous and sustainable city. It is a plan to create high quality walking environments and foster a culture walking in all of Toronto's neighbourhoods. By bringing together the City's existing pedestrian policies and programs with exciting new initiatives, the Walking Strategy provides a framework for renewing and revitalizing our pedestrian realm. As more and more people walk, our city becomes a greener and healthier place to live, work and play. The Walking Strategy will help us to build our streets and public spaces so that they meet the full potential of our great city.

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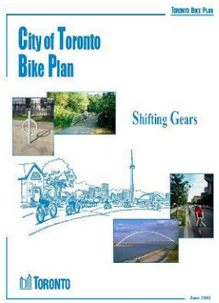
3.7 City of Toronto Pedestrian Charter

The City of Toronto's Pedestrian Charter sets out goals in support of developing an urban environment that encourages and supports walking as a safe, sustainable, and vital mode of transportation. Accessibility to local goods, services and community amenities is one of the key principles defined in the Charter. The goal of the Charter is to guide development of all policies and practices that affect pedestrians, and to identify features of the urban environment and infrastructure that will encourage and support walking.

3.8 City of Toronto Bike Plan

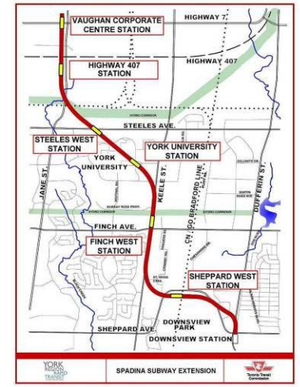
The City of Toronto Bike Plan is a 10-year plan that aims to significantly increase cycling as a viable travel mode, while also improving bike safety reducing bicycle collisions and injuries. The plan is based on six guiding principles: increasing bicycle parking, integrating cycling with transit, providing safety and education, creating bicycle friendly streets, building a 1,000 km bikeway network, and promoting cycling in the City.



3.9 Toronto-York Spadina Subway Extension

Just north of the Study Area, design is underway on the Toronto-York Spadina Subway Extension north from Downsview station. There are six new subways stations slated to open in 2015, with the line ending at the Vaughan Metropolitan Centre in the City of Vaughan.

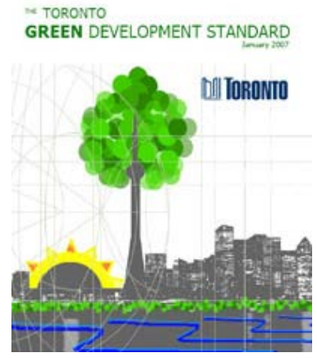
- Sheppard West station
- Finch West station
- York University station
- Steeles West station
- Highway 407 station
- Vaughan Metropolitan Centre station



3.10 City of Toronto Green Development Standard

The City has created standards to guide public and private development in a more sustainable manner. The goals include: improve air quality, water quality and energy efficiency; reduce greenhouse gas emissions; reduce solid waste and light pollution; and protect urban forest and wildlife habitat. The new standards are measurable and action-oriented and include transportation-specific provisions such as:

- Provide the minimum required number of parking spaces allowed under zoning laws, set a minimum number of bicycle parking spaces per unit, add reserved parking for carpools, and incorporate transit into any new development.
- Provide shade, better lighting and signage, integrate with existing pedestrian routes.



4 Public Consultation

The Lawrence-Allen Revitalization Study included an extensive community engagement program, carried out by the City of Toronto in coordination with Toronto Community Housing. An initial community engagement strategy for the Study was developed by LURA, planningAlliance and the City through interviews with key stakeholders. This strategy evolved over time; however, all community engagement activities and events were designed to encourage input from a broad range of community stakeholders.

The community engagement strategy addressed how to engage the entire Study Area, comprising multiple neighbourhoods with diverse populations and varied interests. Translation services in a variety of languages and childcare services were offered at each of the meetings. A range of engagement activities were offered, in both large and small meeting formats, in both afternoon and evening sessions. Community consultation events typically consisted of a combination of open house activities, where community members could review detailed study material and discuss issues one-on-one with City staff and consulting team members expert in a particular discipline; formal presentations followed by questions and answers; and facilitated small group discussions. In addition to their participation in these events, City staff shared community feedback with the consulting team when received through their other engagement activities. Smaller meeting formats often followed large meetings, in order to provide participants an opportunity to understand what was being proposed and then provide detailed feedback and comments.

Community response to engagement activities was very substantial, as hundreds of residents participated in a total of 27 events over the course of two years. The City and consulting team considered all input received during the community engagement process. Community feedback and comments on all aspects of the planning process was integral to the development of the recommended Plan for the Study Area.

4.1 Community Forums

Large-format community forums were held at key points throughout the two-year planning process. These forums had both open house and workshop formats, and sometimes included a formal presentation. The meetings provided the community with updated information about the progress of revitalization planning. They also provided opportunities for community members to interact directly with City staff and the consulting team to ask questions and provide feedback on all elements of the plan. These events were held in the community, at either Bathurst Heights Secondary School or the Lawrence Heights Community Recreation Centre. A Summary Report, that includes meeting materials and feedback received from community members at the open houses, is available from the City's website for each of the events listed below:

July 3, 2008 – Project Overview and Principles: The project team introduced the Lawrence-Allen Revitalization Project to the community and provided an overview of activities to date. This open house was designed to gather information and feedback from community members and hear their preliminary thoughts about revitalization. The project team presented draft revitalization principles and encouraged community members to attend future community workshops where these principles would be discussed further and elaborated. The Class Environmental Assessment process was also introduced at this meeting.

July 16, 2008 – Visioning Workshop: Following the open house on July 3, 2008, this large workshop focused on a discussion of principles for revitalization and redevelopment emerging from the process so far. Community members worked with the project team to articulate planning principles and establish directions for the ongoing revitalization and redevelopment processes.

October 16, 2008 – Community Forum and Open House: The project team provided information on how the City and TCHC were addressing specific topics, such as parks and open spaces; community facilities and schools; housing and mixed communities; transportation, the Allen Road and walkability; and sustainability and energy. The objective of the open house was to obtain feedback on the work completed to date and gather the community's input on how to move forward.

March 2 and 25, 2009 – Project Update and Open House: This open house focused on the building blocks of the plan, including parks, streets and buildings. The project team described the principles guiding the development of each building block and showed how the building blocks come together to make a plan. Arup, the City's transportation consultant for the study, also provided a presentation on transportation within the study area, with a particular focus on walkability and transit access.

June 10 and 11, 2009 – Option Plans Open House: The project team presented three option plans for the study area at this open house. Community members had an opportunity to provide direct feedback on each option as a whole, as well as the building blocks comprising each option.

February 25, 2010 – Community Open House, Emerging Preferred Plan: Each of the options presented in June 2009 were evaluated based on the planning principles developed with the community earlier in the planning process. This evaluation, along with the resulting Emerging Preferred Plan, was presented to the community at this open house. Similar to the previous open house in July 2009, community members were able to provide direct feedback on the Emerging Preferred Plan, in addition to each of the building blocks.

4.2 Workshops

In order to provide community members with additional opportunities to engage in the planning process, the City sponsored a series of smaller-format workshops in different locations throughout the Study Area. These workshops were designed to foster discussion between residents of the community as well as direct communication between the project team and community members. The meetings frequently involved discussion within small groups of community members, with each group led by a facilitator. Community feedback gathered at the workshops is incorporated in the Summary Reports for the open houses noted above. Workshops included:

September 8, 2008 – Community Advisory Group meeting: Flowing from the principles developed in July 2008, community members provided input into the preliminary themes, goals and objectives for the revitalization study.

October 6, 2008 – Community Advisory Group meeting: At this meeting, community members refined the themes, goals and objectives generated in September 2008 and provided feedback on the City's preliminary presentation and display materials for the October 16, 2008 open house.

February 23, 2009 – Community Advisory Group meeting: At this meeting, the project team shared information and gathered community input on two key areas: 1) transportation and Allen Road options; and 2) the building blocks of the plan (parks, streets and buildings).

June 16 and 18, 2009 – Community Workshop (Option Plans): The purpose of these workshops was to provide an opportunity for smaller-group discussions and community input on key elements of the Option Plans, including parks, buildings and streets.

March 1, 8, 10, 19 and 24, 2010 – Community Workshop (Emerging Preferred Plan): Similar to the June 2009 workshops, the purpose of these workshops was to provide an opportunity for smaller-group discussions and community input on key elements of the Emerging Preferred Plan, including parks, buildings and streets. The meeting held on March 19, 2010 was a Seniors' Workshop dedicated to gathering feedback from seniors in the community.

Many community members made a significant personal contribution to the planning process for the Study Area, participating in all community engagement activities over the course of nearly two years. All community members who attended these events provided valuable insights into the Study Area to the project team. The input gathered from community members at community forums and workshops contributed significantly to the development of the Recommended Plan for the Study Area.

4.3 Other Transportation Stakeholder Meetings

In addition to the general public meetings and workshops held, other transportation agencies and groups were consulted throughout the project.

These agencies included the Toronto Transit Commission (TTC), the Ministry of Transportation Ontario (MTO), and GO Transit/Metrolinx.

4.4 Additional Community Forums (2011)

City Council endorsed, in principle, the directions of the Revitalization Plan in July 2010. Council also directed that the City undertake additional public consultation. In the first half of 2011, the City Planning Division hosted three Community Forums on the Lawrence-Allen Revitalization Plan (LARP).

March 3, 2011: Buildings and Neighbourhood Design;

April 28, 2011: Transportation, Transit and Infrastructure

June 2, 2011: Parks, Community Facilities and Social Development.

Over 15,000 meeting invitations were distributed to the community, primarily to local residents by direct mail through Canada Post. The borders of this mail distribution are delineated by Highway 401 to the north, Glencairn Avenue to the south, Caledonia Road to the west and 120 metres east of Bathurst Street to the east. Additionally, a total of 850 invitations were sent by direct mail to attendees who had provided their contact information at past meetings. Another 500 invitations were sent electronically to the project email list. The meeting was also advertised on the project web site: http://www.toronto.ca/lawrenceallen.

Attendees at the Community Forum provided a great variety of comments on the Lawrence-Allen Revitalization Plan. There was no consensus in the community on the plan. Many individuals expressed strong support for the Revitalization Plan and urged that the plan be finalized and development should begin as soon as possible. Others expressed strong concern with the potential transportation and traffic impacts that they felt would result from the Revitalization Plan. A few participants suggested that the Revitalization Plan be stopped altogether.

The summary reports for each of these community forums are available on the City's project website.

5 Summary of Existing Conditions

5.1 Transportation

Several supporting reports were completed throughout the study process that documented the existing transportation conditions, issues and opportunities in the Lawrence Allen Study Area. These reports are all available on the City's project website: http://www.toronto.ca/lawrenceallen.

- Allen Road Technical Feasibility Study
- Existing Transportation Infrastructure Inventory
- Existing Traffic Conditions
- Existing Issues and Opportunities

These reports concluded that the transportation infrastructure and travel characteristics in the Study Area are highly auto-oriented and no longer achieve the short-term or long-term goals and objectives of Provincial and City transportation planning policies, which are primarily concerned with improving sustainable modes such as walking, cycling and transit use.

In general, there are high volumes of auto traffic throughout in the area, mainly due to the proximity to high-volume expressways like Highway 401 and the Allen Road, and due to regional auto trip generators, like the Yorkdale Shopping Centre. There are two TTC subway stations within the Study Area, but they are poorly located and poorly accessible for people walking or cycling, with low ridership compared to the other stations in the subway system. The pedestrian and cycling networks in the Study Area are poor or non-existent, with few convenient crossing opportunities at major intersections, especially at the Allen Road ramps at Lawrence Avenue West.

This section provides a summary of the existing transportation conditions as well as non-transportation conditions:

- Transportation
- Economic Environment
- Built Environment
- Social Environment
- Parks and Community Facilities
- Natural Environment
- Cultural Environment
- Sustainability / Municipal Services.

More detailed non-transportation existing conditions can be found in the pA report and in the Infrastructure Master Plan reports that accompany the Transportation Master Plan.

5.1.1 Allen Road

History

The Allen Road is a truncated segment of the planned Spadina Expressway that was intended to connect Highway 401 to downtown Toronto and form part of a network of “urban highways” throughout Toronto during the 1950’s and 1960’s. The concept of “urban highways” going through stable neighbourhoods received much opposition from residents south of Eglinton Avenue West in the 1970’s and the Allen Road was prevented from extending further south.

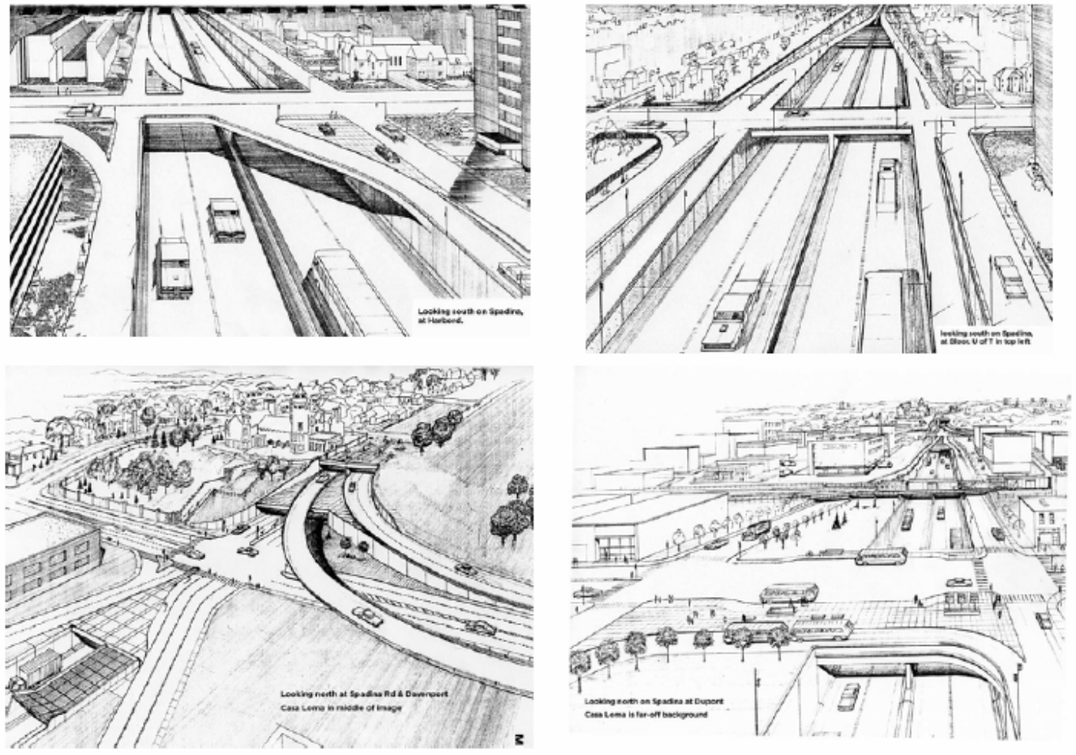


Figure 3: Old Renderings of Spadina Expressway Interchanges

Today, the Allen Road has eight traffic lanes between Highway 401 and Lawrence Avenue West, and four traffic lanes between Lawrence Avenue West and Eglinton Avenue West. There are vehicle ramp interchanges at Eglinton Avenue West, Lawrence Avenue West. Yorkdale Road, and Highway 401.

The TTC Spadina subway line runs along the centre median of the Allen Road with stations at Eglinton West, Glencairn, Lawrence West, and Yorkdale. Pedestrians and bicycles are not permitted access to the Allen Road, although there are informal paths running along certain portions.

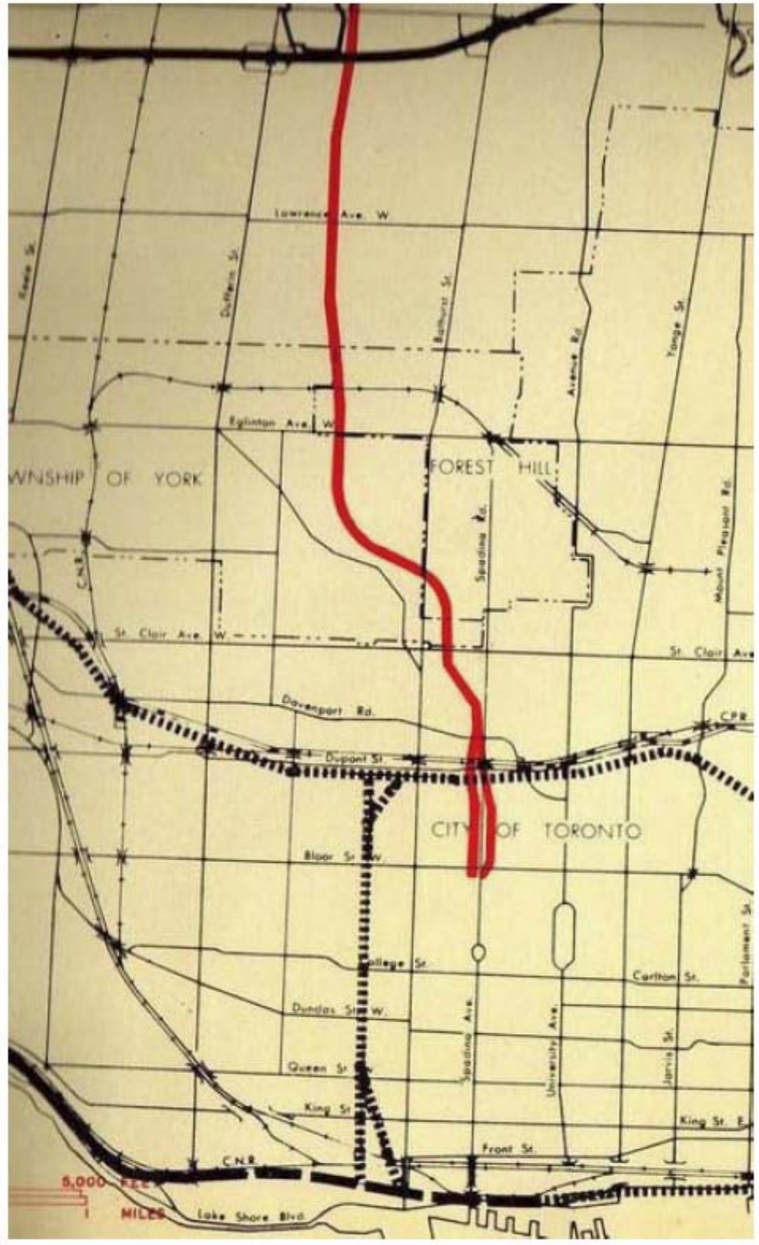


Figure 4: Spadina Expressway Plan

Allen Road Technical Feasibility Study (ARTFS)

It was essential to better understand how the Allen Road could be transformed to allow for more sustainable Revitalization and a better relationship with surrounding neighbourhoods. An Allen Road Technical Feasibility Study (ARTFS) was conducted to examine the Allen Road Corridor and potential ways it could be reconfigured to be better integrated with the surrounding neighbourhoods and to support more sustainable travel modes like walking, cycling, and transit. The ARTFS is preliminary in nature, as a full Individual Environmental Assessment Study will need to be undertaken in the future to examine the corridor more comprehensively. The complete Technical Feasibility Study report can be found on the City's website and included the development of:

- Key Issues and Opportunities
- Vision, Goals and Objectives
- Alternatives
- Evaluation of Alternatives
- Recommended Alternatives for Further Study

Key Issues

- **Grade and Elevation**: The grade of the Allen Road corridor and its relationship to the surrounding lands is a fundamental issue that affects many others. The difference in elevation along the corridor has impacted the configuration of major intersections and the number of crossing locations, has created a wide physical barrier, and has resulted in adjacent neighbourhoods turning their backs on the corridor.
- **Major Intersections and Subway Station Access**: The Allen Road intersections with Lawrence Avenue West and Eglinton Avenue West have been primarily designed as highway off-ramp interchanges with little care given to pedestrians, cyclists, or transit. It is incredibly challenging and often unsafe for people to access the subway station entrances, which are either isolated on or underneath bridges or located in the middle of busy intersections resulting from heavy traffic associated with Allen Road
- **Connectivity**: The Allen Road intersects with Highway 401 at one of the largest highway interchanges in the City, but it quickly becomes almost non-highway in operation to the north and south, where it is limited by its few highly congested access points and transition to lower capacity arterial streets. During rush hour periods, the intersections of the Allen Road with Lawrence Avenue West and with Eglinton Avenue West perform at poor Levels of Service and experience considerable vehicle queuing problems in all directions. In addition, the Allen Road does not provide a very continuous or lengthy travel route in the City and is essentially a short, disconnected highway segment that is a left-over remnant of a 50-year old, incomplete urban highway plan.
- **Crossing the Allen Road**: Between Highway 401 and Lawrence Avenue West, there are only three bridge or tunnel crossings available, due mainly to the differences in grades and the width of the Allen Road. There are seven bridge crossings between Lawrence Avenue West and Eglinton Avenue West, where the grades are more favourable and the width of the Allen Road is narrower.
- **Conditions Along the Allen Road**: Despite the presence of the Spadina Subway, the Allen Road is a transportation facility that is designed primarily for moving car traffic. It has an overly wide right-of-way and does not provide any pedestrian or cycling facilities along its length and does not encourage more sustainable modes of travel in the corridor. The Allen Road is 8 lanes wide between Highway 401 and Lawrence Avenue West, but decreases to a more arterial cross-section of 4 lanes wide between Lawrence Avenue West and Eglinton Avenue West.

Key Opportunities

- **Revitalization:** The Lawrence-Allen Revitalization Project itself is a major opportunity to enable change and transformation. Almost all the lands adjacent to the corridor between Highway 401 and Lawrence Avenue West are anticipated to undergo significant re-development. The Revitalization of these lands offers a rare chance to significantly change the fundamental role of the Allen Road in the City's transportation system and change its relationship with the neighbourhoods that surround it, unlocking re-development potential and improving the quality of life for people in the area.
- **New Connections:** Additional street connections to and from the Allen Road could be created between Highway 401 and Lawrence Avenue West to help provide alternative travel routes and to help alleviate traffic congestion at the busy intersections at Lawrence Avenue West and at Eglinton Avenue West.
- **New Crossings:** The lower grade of the Allen Road between Flemington Road and Lawrence Avenue West could allow for new pedestrian/cycling/vehicle bridge crossings over the corridor, improving connectivity between neighbourhoods on both sides of the Allen Road.
- **Wide Right-of-Way:** The Allen Road between Highway 401 and Lawrence Avenue West has a generous right-of-way width over 50m wide that is allocated mainly to car traffic and the TTC subway tracks. While it is unlikely that the space dedicated for the TTC tracks will change, the 8 traffic lanes are underutilized and could be redesigned to re-allocate space to other uses, such as providing a pedestrian and cycling multi-use trail, or additional lanes for vehicle queuing on the Allen Road off-ramps.
- **Underused Ramps:** The Allen Road ramps on the south side of Lawrence Avenue West are not well-used and have very low traffic volumes. These ramps could be removed, which could free up space at this key intersection for other uses, help simplify the intersection configuration, and improve conditions for pedestrians.
- **Lawrence / Allen:** If significant changes to the Allen Road are proposed, there is the opportunity to transform these intersections and the area around the subway station into a more integrated transportation hub which balances pedestrians, cyclists, and transit users with cars. Even if the Allen Road does not undergo a major transformation, there is the opportunity to make minor changes to improve significant safety improvements for pedestrians and cyclists and to provide more direct access to the subway stations. More pedestrian crossing locations could be added by simply painting lines at the intersections and removing channelized right turn lanes. Although, it must be noted that these improvements will most likely result in a reduction in car traffic capacity through these intersections.
- **Help Balance Transportation Modes:** The Allen Road is a significant piece of City transportation infrastructure that, currently, primarily serves auto vehicles and the Spadina Subway Line. The Lawrence-Allen Revitalization Project provides the opportunity to reconfigure the corridor from an auto-oriented focus to a more balanced transportation approach that provides infrastructure for encouraging sustainable modes of transportation, like walking, cycling, and transit.

Allen Road Vision, Goals and Objectives

An overall Vision and several key Goals and Objectives were developed for studying and evaluating potential Allen Road reconfigurations, based primarily on the existing issues and opportunities identified, as well as sound principles of city-building:

VISION

The Allen Road corridor will be transformed by redefining its use and purpose, beautifying it, and integrating it into the surrounding community. The Allen Road will become a more sustainable transportation corridor by re-balancing the auto-oriented right-of-way to improve transit, pedestrian, and cycling infrastructure along the corridor, and to help promote non-auto travel behaviour.

GOALS AND OBJECTIVES

Pedestrians and Cyclists: Provide direct and continuous pedestrian and cycling routes along the Allen Road corridor between the subway stations that are safe, convenient and interconnected with the surrounding pedestrian and cycling network.

Allen Road & Lawrence Avenue West: Improve the intersections of the Allen Road & Lawrence Avenue West and the area around the Lawrence West subway station to prioritize pedestrians, cyclists and transit and to improve potential development opportunity.

Relationship to Surrounding Neighbourhoods: Create a positive physical and social relationship between the Allen Road and its adjacent neighbourhoods to create an improved sense of Place.

Right-of-Way Property: Minimize the amount of additional property required for the Allen Road right-of-way from adjacent land owners.

Connectivity and Crossings: Improve existing connections and crossings and create additional pedestrian, bicycle, auto, and green connections to and across the Allen Road between Highway 401 and Lawrence Avenue West.

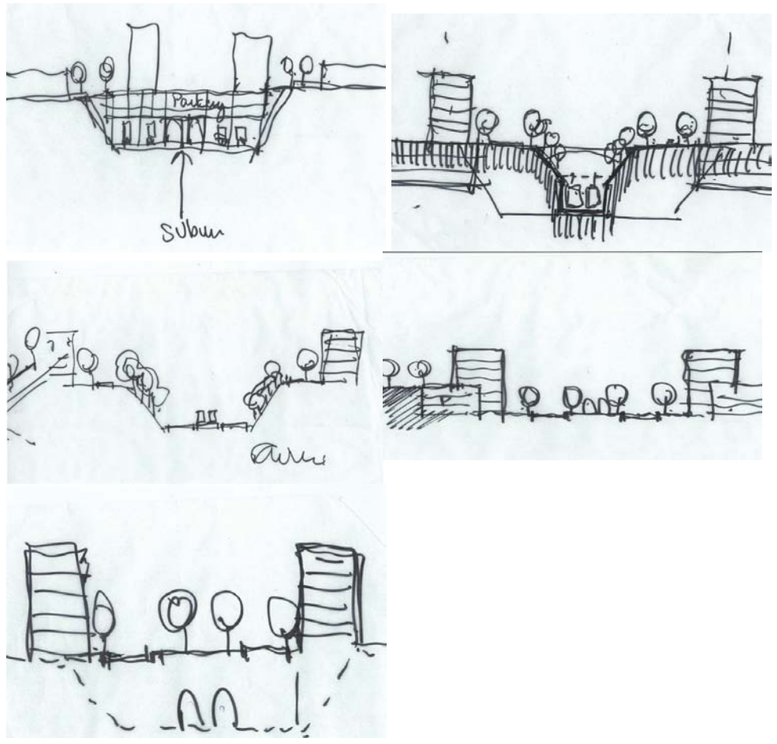
Natural Environment: Provide a positive impact on any vegetation, wildlife, wildlife habitat, wetlands, air quality, soils and groundwater that occur in the Allen Road corridor.

Auto Capacity: Provide sufficient auto capacity and accesses that are appropriate for the role of the Allen Road corridor as it evolves towards the vision of a more sustainable transportation corridor.

Auto Access to Development: Provide opportunities for auto traffic related to new and existing development in the study area to better access and use the auto capacity of the Allen Road.

Phasing and Implementation: Allow for a logical strategy for implementation and construction phasing of public and private infrastructure.

Cost: Minimize the financial cost of any proposed changes to the Allen Road.



Allen Road Alternatives

The Allen Road Technical Feasibility Study also explored possible alternative configurations for Allen Road to transform the current expressway condition into a more urban condition that is better integrated with the surrounding neighbourhoods and that would encourage walking, cycling, and transit use along the corridor.

Potential Allen Road alternative configurations were categorized into three key concepts:

- Keep the existing grade of Allen Road;
- Create a multi-grade Allen Road with both a raised and lowered area;
- Fill in Allen Road and raise its grade to create a fully at-grade boulevard.

Based on these concepts, the Technical Feasibility Study examined several possible variations for the Allen Road, compared and evaluated them, and selected the following three designs to be carried forward during the Revitalization Study.

- *Do Nothing Option* - Allen Road would remain as it is today, an urban highway, with no significant modifications or improvements.
- *Modified Ramps Option* - The grade of Allen Road would remain the same, but the existing on and off ramps would be reconfigured with potential new ramps added between Lawrence Avenue West and Highway 401.
- *At-Grade Grand Boulevard* - The trench of Allen Road would be filled in and raised to the grade of the surrounding lands to create a fully at-grade grand boulevard with sidewalks, trees, and active building frontages.

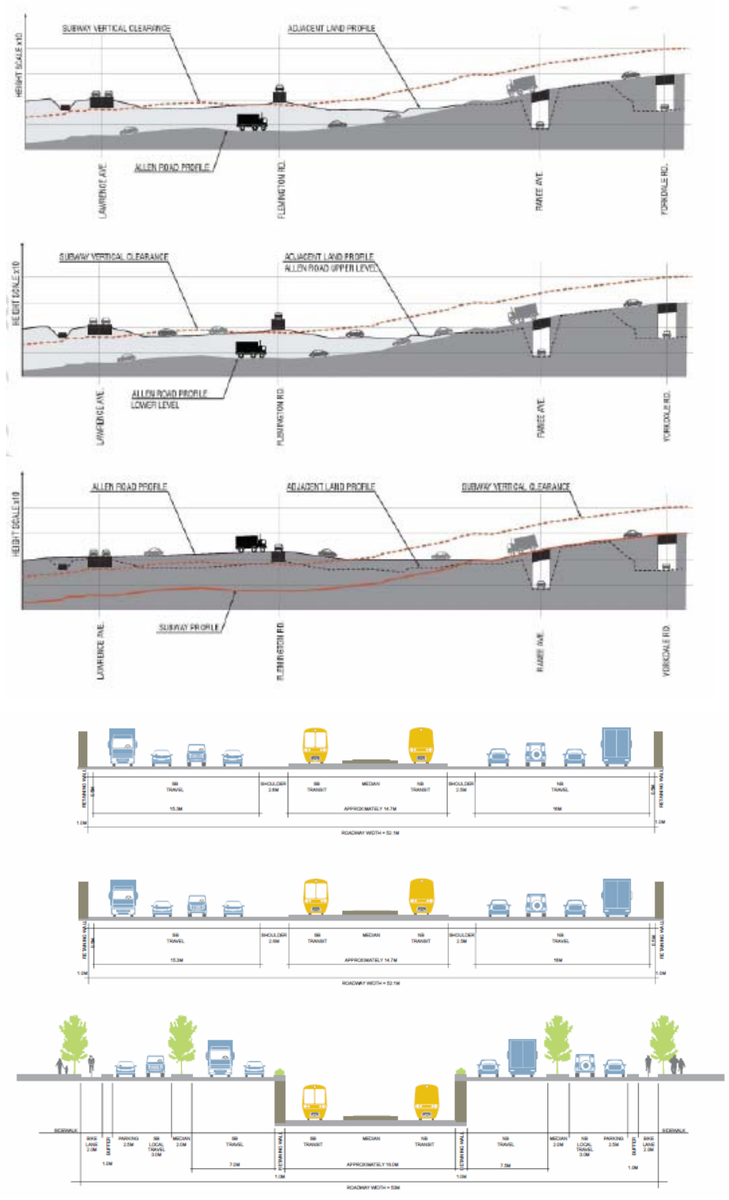


Figure 5: Allen Road, Alternative Configurations

Allen Road Individual Environmental Assessment

The Technical Feasibility Study also determined that due to the complexity and scale of the Allen Road corridor, an Individual Environment Assessment (IEA) study should be undertaken by the City to examine the corridor in more detail and to determine a preferred alternative configuration of the Allen Road for the future.

An **IEA** is a standardized planning process set out by the Ontario Environmental Assessment Act, to ensure that:

- The rationale for a project is clearly defined;
- All reasonable alternatives are investigated;
- A logical, traceable, and comprehensive analysis process is used to determine the recommended plan;
- All interested parties (individuals, businesses, government agencies) are consulted; and,
- The planning process is properly documented.

The first step in the IEA process is to create an **IEA Terms of Reference;** it is essentially a work plan for what is going to be studied during the environmental assessment. An IEA Terms of Reference must be approved by the Ontario Minister of the Environment before the IEA can begin. It includes:

- A IEA public consultation plan;
- The purpose of the study and/or undertaking;
- A description of and rationale for the study/undertaking;
- A description of and rationale for alternatives;
- A description of the environmental conditions;
- An identification of potential effects; and
- An approach for evaluation of alternatives.

The **Allen Road IEA** would study the Allen Road corridor between Eglinton Avenue West and just north of Wilson Avenue, as well as consider a larger area that might be affected by changes to Allen Road. The **Allen Road IEA** study would:

- Define the existing and future issues with the Allen Road.
- Identify opportunities where changes to Allen Road could yield benefits to users, the surrounding community, and the City as a whole.
- Develop and evaluate a full range of alternatives that could address the issues and opportunities in the corridor, including: interchange designs, road layout, cross sections, public realm / landscaping, TTC station access, bridges, pedestrian and cyclist facilities, operational changes, and more.

Development in the Study Area can proceed prior to the completion of the Individual Environmental Assessment, but should be compatible with the goals and objectives for the Allen Road Corridor identified earlier in this section.

5.1.2 Streets

The existing street network in the Study Area is not well-connected. The current design of the street network does not provide a balanced transportation approach – it needs to provide a clear street hierarchy and well-organized structure for the surrounding neighbourhoods. The street network also has many circuitous and indirect circulation routes for people walking, cycling, driving, or using surface transit.

Figure 6: Existing Street Network

Key Issues

- The Allen Road is a major physical barrier that limits east-west street connectivity across the Study Area.
- Highway 401 is a major physical barrier that limits north-south street connectivity to the north of the Study Area.
- The Major Streets (Bathurst, Dufferin, and Lawrence) are unpleasant for pedestrians and cyclists and have been designed with little to no transit-priority features or amenities.
- The neighbourhood Primary Streets (Varna, Flemington) are curvilinear with off-set intersections and indirect travel routes, which reduce circulation and way-finding for vehicles, transit, bicycles, and pedestrians.
- There is only one east-west Primary Street between Bathurst and Dufferin in the Study Area and no north-south Primary Streets between Lawrence Avenue West and Wilson Avenue, due to the Highway 401 barrier.
- The Primary Streets are not well-designed for pedestrians or cyclists, with few protected crossings and no bicycle lanes.
- Many Local Streets are winding and often do not have sidewalks.
- Resulting block lengths are often longer than 180-200m, which limits pedestrian and cyclist connectivity and create in poorly-sized parcels of land.

5.1.3 Auto Traffic

In general, there are levels of auto traffic congestion typically found in an urban environment along the major streets (Lawrence Avenue West, Dufferin Street, and Bathurst Street) in the Study Area during the weekday morning and afternoon rush hours.

Key Issues

Most Critical Intersections: Allen Road and Lawrence Avenue West

- The two intersections of the high-traffic Allen Road ramps at Lawrence Avenue West are arguably the two busiest intersections in the Study Area and both are heavily congested during the weekday morning and afternoon rush hours.
- These two intersections are also areas of significant pedestrian-vehicle conflict, due to high traffic volumes from the Allen Road and high pedestrian volumes from the Lawrence West subway station entrance.

Lawrence Avenue West Corridor

- There is significant traffic congestion and vehicle queuing issues around Lawrence Avenue West and the Allen Road where there are several closely-spaced signalized intersections and high traffic volumes.

Dufferin Street Corridor

- Lawrence Avenue West and Dufferin Street is very congested and operates at poor levels of service in both the rush hours.
- The Dufferin Street corridor is quite congested, mainly because of traffic related to Yorkdale Shopping Mall and the Highway 401 interchange.
- Traffic operations along Dufferin Street are negatively impacted by many off-set intersections and parking lot driveways.

Bathurst Street Corridor

- Lawrence Avenue West and Bathurst Street is very congested and operates at adequate levels of service in both the rush hours.
- The Bathurst Street corridor is less busy than others, mainly because there is no full interchange access at Highway 401.
- Traffic operations along Bathurst Street are negatively impacted by many off-set intersections and parking lot driveways.

Collector Streets

- Traffic congestion on Ranee Avenue can become busy at Dufferin Street and at Bathurst Street, and seems to be used as a short-cut route when the surrounding arterial streets become too congested.
- The other collector streets within the Lawrence Heights neighbourhood are not particularly busy and have low traffic volumes. However, access points at Lawrence Avenue West are busy because of overall traffic conditions on the Lawrence Avenue West corridor.

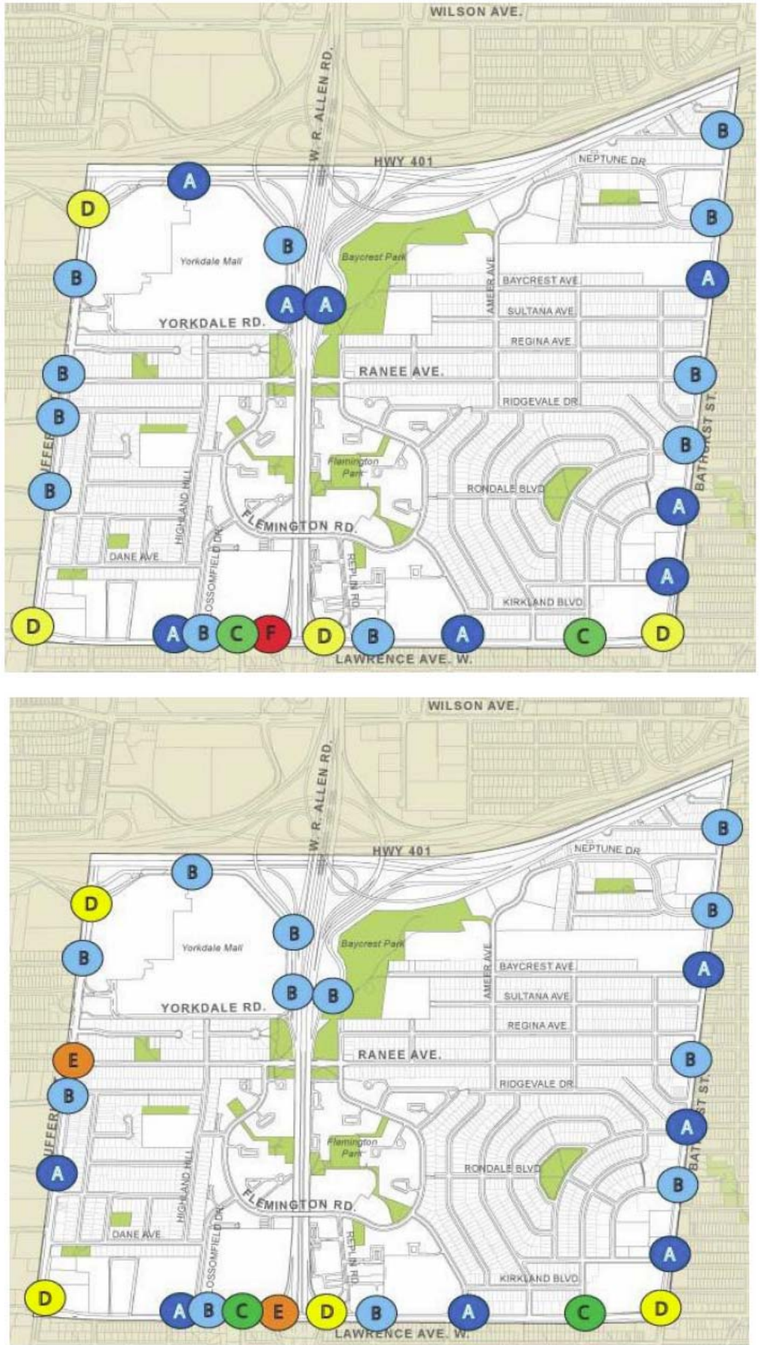


Figure 7: Existing Auto Traffic LOS Weekday AM and PM Peak

5.1.4 Transit

The TTC Spadina Subway is the backbone of higher order transit service in the Study Area, operating within a 15-metre corridor in the median of the Allen Road right-of-way. The two subway stations located within the Study Area are Lawrence West station and Yorkdale station.

Lawrence West subway station is located below Lawrence Avenue West in the Allen Road median, while Yorkdale Station is located between Yorkdale Road and Ranee Avenue, elevated from the surrounding lands in the Allen Road median.

Lawrence West station has bus terminal facilities that sits overtop the Allen Road with two driveways onto Lawrence Avenue West. The station serves approximately 19,000 passengers on a typical weekday, with 1,170 in the AM peak hour and 1,090 in the PM peak hour, ranking it as one of the least busy of all TTC subway stations.[1] There are two pedestrian entrances located on the north and south sides of Lawrence Avenue West, on the bridge that spans over the Allen Road.

Yorkdale station has a daily ridership of approximately 23,500 passengers per day, with 1,490 during the AM peak hour and 1,950 during the PM peak.[2] The Yorkdale Bus Terminal is immediately west of the subway station and serves GO Transit bus routes, York Region Transit bus routes, and one TTC bus route. There are approximately 1,150 parking spaces available to TTC commuters that are shared in the Yorkdale Shopping Centre parking lots.

Figure 8: Existing Transit Network

Pedestrian tunnel under Lawrence Avenue

Sidewalk outside Lawrence West Station

Ranee entrance to Yorkdale Station

Overhead walkway to Yorkdale Shopping Centre

Figure 9: Existing Subway Stations

There are several pedestrian entrances to the Yorkdale subway station. One of the busier entrances is an elevated pedestrian walkway connection to the Yorkdale Shopping Centre, northwest of the station along Yorkdale Road. Unfortunately, this walkway can only be accessed via stairs and does not provide good access for the mobility impaired.

There are also major city-wide surface bus routes along the arterial streets including Lawrence Avenue West, Dufferin Street, and Bathurst Street. Less busy bus routes operate within neighbourhoods on the Primary and Local streets. As a result, many residents live within 500m of some transit service. Inter-regional bus services, including GO Transit and York Region Transit (YRT) operate from the Yorkdale Bus Terminal in Yorkdale Shopping Centre.

[1] Subway Platform Usage Counts, Toronto Transit Commission, 2007.
[2] Ibid.

Key Transit Issues and Opportunities

Subway Station and Bus Terminal Design: Subway stations should be easily accessible for pedestrians and cyclists, with safe and convenient entrances that encourage ridership from the surrounding neighbourhoods. Surface transit routes should be well-integrated into the station design and offer seamless transfers from one transit mode to another. Subway and bus terminals should try to follow well-recognized Crime Prevention Through Environmental Design (CPTED[3]) guidelines to ensure passenger safety. The amount and quality of bicycle parking provided at subway stations should encourage the widespread integration of bicycles with transit use in the Study Area.

- **Bus Service and Routes:** There are well-used surface bus routes on Lawrence Avenue West, Bathurst Street, and Dufferin Street, but transit priority features are lacking, which affects service frequency and reliability. City-wide bus routes on the major arterial streets should provide frequent and reliable service and have transit-priority measures to make transit travel competitive with travel by car. Neighbourhood bus routes should offer good neighbourhood coverage and provide direct and convenient travel between important neighbourhood destinations and link with other transit routes and the subway.
- **Passenger Safety and Amenities:** The bus stops throughout the neighbourhood should be well-lit, weather protected, and provide passenger seating and bicycle parking. Subway stations and bus terminals should provide safe waiting areas and walking routes between transit services. Passenger areas should be active spaces facilities should be designed with a high-quality pedestrian environment with many interesting things for people to do.
- **Transit Supportive Development:** Many residents and employees in the Study Area are within 500m of a subway station or major bus route, but transit access is difficult because of poor walking and cycling conditions. Development around subway stations and along bus routes should provide sufficient density to generate transit ridership. A mix of land uses near subway stations will allow residents and visitors to take advantage of their proximity to high-capacity transit service. The amount of parking provided around subway stations and in the neighbourhoods should be minimized to encourage higher transit use.

3 CPTED is a pro-active crime prevention strategy utilized by planners, architects, police services, security professionals and everyday users of space. CPTED proposes that proper design and effective use of the built environment can lead to a reduction in the incidence and fear of crime and improve quality of life. Emphasis is placed on the physical environment, productive use of space, and behaviour of people to create environments that are absent of environmental cues that cause opportunities for crime to occur. The three main concepts of CPTED are Natural Surveillance, Natural Access Control, and Territorial Reinforcement. More information about CPTED can be found here: http://en.wikipedia.org/wiki/Crime_prevention_through_environmental_design

5.1.5 Pedestrians and Bicycles

In addition to the LARP existing conditions reports, the Transportation Services Division of the City of Toronto conducted a separate Walking and Cycling Study as part of a pilot program in the city's Priority Neighbourhoods. Many of the report highlights of the existing pedestrian conditions were also included in the LARP project work.

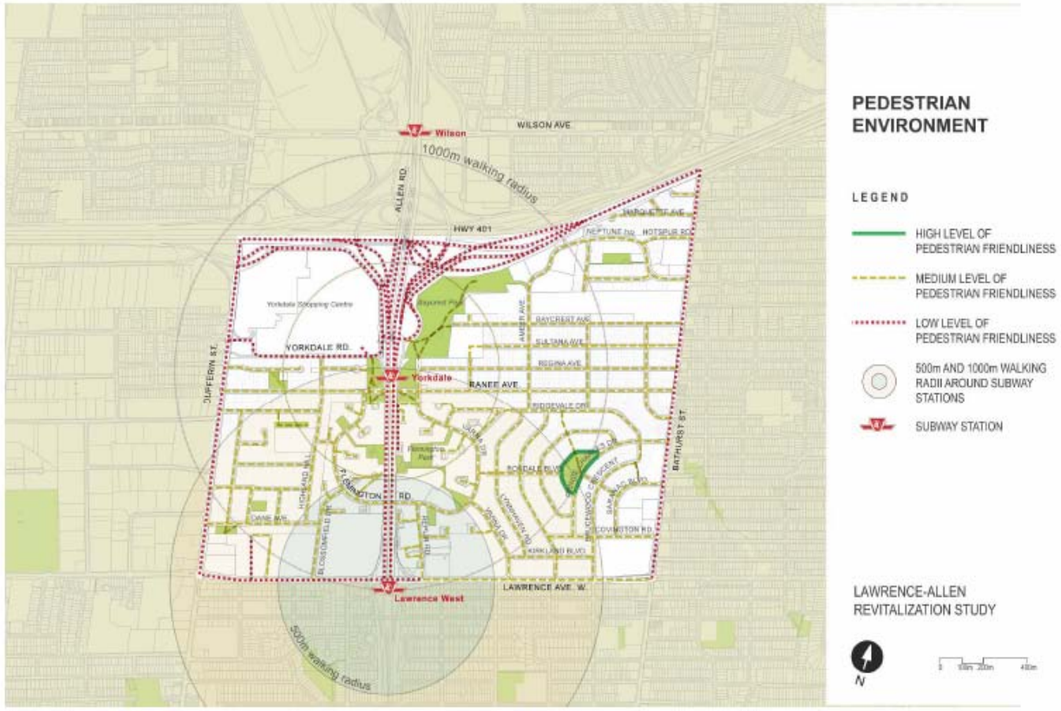


Figure 10: Existing Pedestrian Network

The key existing pedestrian and bicycle issues are summarized below.

Connectivity and Circulation

- The Allen Road is a significant physical and psychological barrier for pedestrians.
- Pedestrian travel routes do not provide convenient, safe and clear, legible connections between important neighbourhood destinations including homes, schools, parks, shopping areas, and community facilities.
- The street pattern of the Focus Area is characterized by indirect, curvilinear streets and cul-de-sacs, which discourages walking and increases travel time to local destinations.
- The street network in the surrounding neighbourhoods in Study Area is a somewhat more connected grid pattern; however, the block lengths are long and exceed 260m in many instances.
- The pedestrian connections between the Lawrence Manor and Lawrence Heights neighbourhoods are uninviting, not well-lit, and form barriers to pedestrian travel.
- There are several streets that do not have any sidewalks on either side.
- There should be a well-connected network of safe and convenient bicycle lanes and pathways between important neighbourhood destinations, which are also integrated with the City-wide cycling network.
- There are no bicycle lanes on any of the public streets, and only one signed bicycle route, located in the Lawrence Manor neighbourhood. As a result, there is limited connectivity to the larger City cycling network.
- The City of Toronto Bike Plan proposes a new signed bicycle route along Ranee Avenue, as well as along Ameer Avenue to Bathurst Street. The Bike Plan also proposes improving cycling conditions crossing (over and/or under) the 400-series highways within the City. This would apply to Highway 401, which is on the north edge of the Study Area.

Access to Transit

- Pedestrians do not have attractive, safe and convenient access to bus stops and subway stations.
- There are poor quality pedestrian routes to subway stations and the streets and areas around the subway stations exhibit low levels of pedestrian friendliness.
- There are no direct cycling routes to subway station entrances and major bus stops.
- There is a significant lack of cycling infrastructure throughout the Study Area and a lack of bike parking facilities at subway stations.
- A small number of bicycle parking rings are provided at the Lawrence West subway station, and appear to be well-used. No formal bicycle parking is provided at the Yorkdale subway station, but some bicycles were observed parked on the nearby park railing.

Intersection Safety and Design

- Key intersections of major streets, such as the Allen Road and Lawrence Avenue West, are quite hostile for pedestrians and cyclists because of high traffic volumes and speeds, poor intersection geometry, and a lack of safe crossing opportunities. Intersections should be designed to provide pedestrians with safe and protected crossing opportunities.
- There are few protected pedestrian crossing locations along primary streets or busy major streets, such as Lawrence Avenue West.
- Intersection crossings distances are often quite wide, forcing pedestrians to cross many lanes of auto traffic.

Figure 11: Photos of Existing Pedestrian Environment

Quality of Pedestrian and Bicycle Environment

- The quality of the pedestrian and cycling facilities in the Study Area are generally poor.
- Pedestrian spaces should be designed for a variety of public activities and should encourage people to interact. There should be places for standing, walking, and sitting. Sidewalks should be protected from vehicular traffic, well-lit and sufficiently wide to accommodate a variety of functions.
- Pedestrian pathways, both formal and informal, are often not well-lit or well-maintained and appear unsafe at night.
- The pedestrian paths through Baycrest Park, which provide important access to the Yorkdale subway station and Yorkdale Shopping Centre, are isolated and not well-lit.
- In general, the retail shopping areas do not provide conveniently located bicycle parking, although several of the schools and community centers do provide some bicycle parking.
- Bicycle parking facilities should be provided at important neighbourhood destinations, such as shopping areas, schools, libraries. community centres, and subway stations.

Figure 12: Existing Cycling Environment

5.2 Land Use and Built Form

planningAlliance, lead consultant for the City, undertook a comprehensive review of the existing land use and built form conditions within the Study Area prior to the development of Option Plans.

Residential uses, in both single-family and multi-family forms, are predominant in the Lawrence-Allen Study Area, which comprises five distinct neighbourhoods held in both public and private ownership. The Focus Area includes the Lawrence Heights neighbourhood. Of the other four neighbourhoods in the Study Area, three are located east of Lawrence Heights and one is located west of Lawrence Heights. In the City of Toronto Official Plan, residential areas are generally designated Neighbourhoods or Apartment Neighbourhoods. Neighbourhoods areas are those which 'contain a full range of residential uses within lower scale buildings, as well as parks, schools, local institutions and small-scale stores and shops serving the needs of area residents.' These areas are considered stable and are expected to evolve slowly over time. Similarly, the Official Plan defines Apartment Neighbourhoods as stable residential areas in which a greater scale of built form is permitted than in Neighbourhoods.

Non-residential uses are located along the arterial streets that define the boundaries of the Study Area, including Dufferin Street, Bathurst Street, and parts of Lawrence Avenue West, These areas are generally designated Mixed Use Areas in the Official Plan. Mixed Use Areas may include a broad range of different uses that allow people to live, work, and shop in the same area. In the Study Area, Mixed Use Areas sometimes include apartment buildings and buildings with a mix of street-related commercial uses with residential uses above grade. In the Study Area, the Official Plan also identifies these areas as Avenues, reflecting their potential for intensification.

The Lawrence Heights neighbourhood includes a limited variety of low-rise housing types. Two-storey townhouses are the predominant housing type and are typically situated around internal courtyards. Detached and semi-detached houses are also present on the edges of the neighbourhood. Three- and four-storey apartment buildings are located along Allen Road in the north end of the neighbourhood and along Replin Road. A number of community uses, including Flemington Public School, Lawrence Heights Community Recreation Centre and Unison Community Health Services – Lawrence Heights Site are also included within the Lawrence Heights neighbourhood. Most of the Lawrence Heights neighbourhood is designated Neighbourhoods in the Official Plan. The area south of Flemington Road and west of Varna Drive comprises only apartment buildings and community uses and is designated Apartment Neighbourhoods. The Bathurst Heights Secondary School site is included in this Apartment Neighbourhoods area, as well as a 10-storey apartment building located at 650 Lawrence Avenue West. Also part of the neighbourhood is the Lawrence Square Shopping Centre, a shopping mall with office space on upper floors. The shopping mall building is surrounding by surface parking. The site is designated Mixed Use Areas.

West of Lawrence Heights, the neighbourhood consists primarily of single-family detached houses developed on a discontinuous grid of streets surrounding Lawrence Heights Middle School. These lands are generally designated Neighbourhoods, while property fronting onto Dufferin Street and Lawrence Avenue West are designated Mixed Use Areas. Most properties along Dufferin Street have shallow lot depths and have low-rise buildings that support small-scale retail or commercial operations. The adjacent portion of Lawrence Avenue West is also designated Mixed Use and identified as Avenues. It supports a mix of uses on large sites, including the proposed mixed-use Dufflaw development, the Liberty Walk residential townhouse development, and a CIBC office building.

The neighbourhood immediately to the east of Lawrence Heights is called Lawrence Manor. Like Lawrence Heights, it demonstrates the influence of Clarence Perry's Neighbourhood Unit concept, albeit differently expressed. Large parts of this neighbourhood consist of single-family detached homes, located on a pattern of concentric streets surrounding a local park. The south-eastern portion of the neighbourhood includes low-rise (typically three-storey walk-up), mid-rise and tall apartment buildings, with properties designated Apartment Neighbourhoods and Mixed Use Areas in the Official Plan. Low-rise apartment buildings front onto Lawrence Avenue West and are designated Apartment Neighbourhoods. Lawrence Plaza is a busy shopping plaza serving the area on the corner of Lawrence Avenue West and Bathurst Street and is designated Mixed Use Areas.

North of Lawrence Manor, between Ranee Avenue and Baycrest Centre for Geriatric Care, is a neighbourhood consisting of primarily single-family detached homes on a shopping mall, an office building, and a bus terminal for GO Transit. The development is surrounded by surface parking.

Figure 13: Existing Built Form

5.3 Servicing Infrastructure

MMM Group, the City's municipal infrastructure consultant, completed a detailed Existing Infrastructure Analysis for the Lawrence-Allen Study Area. This report is available from the City's website for the project.

Although the Study Area is fully serviced by watermains, sanitary sewers, and storm sewers, this existing infrastructure is aging. The revitalization of the Lawrence Heights neighbourhood will likely require upgrades to existing servicing or new servicing to accommodate redevelopment. An analysis of the existing municipal infrastructure confirmed the status of these systems, and aided in the development and evaluation of option plans.

Computer modeling demonstrates that the existing water distribution system within the Lawrence Heights neighbourhood is sufficiently sized to meet the existing peak hour and maximum day demands. These demands include the use of fire hydrants when required.

Sanitary design sheets prepared for the area show a number of existing sanitary sewers, both internal to and external to the Study Area, are theoretically over capacity under current conditions and will require upgrades to accommodate intensification.

An analysis of existing constraints on the storm sewer system was completed, identifying a number of sections of existing storm sewer with capacity constraints. Existing storm sewer systems in the study area were designed and constructed from the 1950s to the 1970s and do not meet today's more stringent design standards. It should be noted, however, that the operation of a storm sewer system under surcharged conditions in major storm events is a fairly common occurrence,

A review of overland flow routes within the Study Area identified two areas with overland flow constraints, one within the Focus Area and one outside the Focus Area. To accommodate the scale of growth proposed in the Study Area, innovative stormwater management facilities will be required in addition to upgrades of the existing storm sewer system. Revitalization offers an opportunity to rethink the role that public rights-of-way and parkland can play supporting sustainable infrastructure that manages and treats stormwater run-off on site, limiting downstream effects.

The Infrastructure Master Plan (IMP) for the Lawrence-Allen area will be used to coordinate upgrades and development to municipal infrastructure, ensuring it is appropriately phased and able to accommodate increased demand in the Study Area. The IMP can be found on the City's website.

5.4 Energy

Halsall Associates Ltd., the City's sustainable energy consultant, provided recommendations to increase energy efficiency through the redevelopment of the Lawrence Heights neighbourhood. Energy-saving measures for the Focus Area and the broader Study Area will be recommended in the Community Energy Plan, found in the Appendix of the pA report.

The City of Toronto has established a number of milestones related to energy in order to achieve goals related to the reduction of energy use and greenhouse gas emissions. Some of the milestones are with respect to natural gas consumption, electricity consumption, and carbon dioxide emissions. The existing building stock in Lawrence Heights is not energy efficient; replicating the current energy management in new development through the revitalization plan would result in energy demands and greenhouse gas emissions in great excess of the City's current targets.

Halsall's review of the existing conditions determined that with the exception of wind energy, there are a number of alternative energy sources and distribution methods that over the long term can reasonably be expected to be effective in the Study Area. Their review also produced a number of community design considerations to be taken into account in the development of option plans, including but not limited to the following:

- Maximizing the south facing façade of all buildings. Since west façades experience highly variable heat gains in the summer and minimal benefit in the winter, they should be avoided.
- In non-residential buildings, floor plates should allow for minimal distance to windows or skylights to provide for greater daylighting penetration into the space and reduce the need for artificial light. Effective incorporation of daylighting strategies can reduce this energy demand.
- Building height, orientation and placement should be considered to ensure that all buildings have access to the sun, and to reduce shadowing from taller buildings.
- Where possible, blocks and buildings should be oriented to within 15 degrees of geographical east/west, in order to maximize the potential for south facing facades.
- A large green space centrally located in the Focus Area, strategically placed to provide a connection to the community, could provide an opportunity for the development of a district energy system for the community (e.g. geothermal or thermal storage).

Developing a revitalization plan for the Lawrence-Allen area presents an opportunity to conduct a community energy planning exercise. Such an exercise can assist communities that are poised to grow in meeting the City's energy and GHG reduction targets, while increasing Toronto's supply of renewable energy generation. Toronto Community Housing's existing housing stock in Lawrence Heights is approximately 50 years old and in poor condition. A community energy plan will illustrate how revitalization of this housing stock is more cost- and energy-efficient over continued maintenance.

5.5 Socio-Economic Context

The City Planning Division completed an updated demographic profile of the Lawrence-Allen area in November 2008, using data from several sources including the Census of Canada and the Toronto Employment Survey.

In 2006, there were 17,505 residents living in the Study Area. Of these, over 3,500 are Toronto Community Housing tenants. There are about 6,700 total housing units, including 1,342 Toronto Community Housing RGI units.

The Study Area population grew by 8.1% or 1,305 persons between the 2001 and 2006 censuses, much faster than the City overall (0.9%). Most of the growth reflected the recent completion of the Shermount and Liberty Walk housing developments. As with much of Toronto, the area has a diverse mix of ethnic groups, religions, languages and nationalities including concentrations of Italian, Jamaican, African, Jewish, and Filipino residents, among others. The highest percentage of recent immigrants into the area between 2001 and 2006 censuses came from Southeast Asia, including the Philippines.

Across the Study Area, there is a high percentage of very young (0-14 years) and very old (80+ years). Some parts of the Study Area are notable for large family sizes (3 or more children) and seniors living alone. In the Lawrence Heights neighbourhood specifically, there are lower levels of income and employment, low levels of post-high school education, and a high percentage of lone parent families.

5.6 Parks and Community Facilities

Corban and Goode, the City's landscape architect for the study completed a detailed background and analysis of the Study Area's parkland and open spaces. A detailed inventory of existing parks and park programming can be found in the Appendix of the pA report.

The City of Toronto Municipal Code identifies that the Study Area is within a parkland acquisition priority area and that development within the Study Area is subject to the City's alternative parkland dedication rate. . In these areas, the by-law stipulates land will be conveyed by the developer at a rate of 0.4 hectares for each 300 dwelling units. This rate of conveyance is applicable to sites greater than 5 hectares in size up to a maximum of 20% of the development site.

The current parks system within the Study Area, and particularly within the Lawrence Heights neighbourhood, is ill-defined. In many places throughout the neighbourhood, City parkland and privately owned open spaces blur together. This lack of clarity around ownership has implications for park and open space operations and maintenance, as well as the comfort and safety of park users. The Focus Area does not include a clear hierarchy of park types and the area is generally underserved by public parkland. A lack of clearly delineated and well-designed parkland affects programming options, and many parks within the Study Area include limited or poorly maintained programmed spaces that require significant upgrades. Parks are not well connected to pedestrian pathways, sidewalks or other parks. In those cases where parks do provide connections – both Baycrest and Yorkdale Park provide connections to Yorkdale Shopping Centre and the Yorkdale Subway Station – these connections are perceived as unsafe by users.

The Study Area is served by Baycrest Park, a nine-hectare district park; however, due to its removed location, poor design, and lack of programming options that appeal to local residents, the park is underutilized and perceived as unsafe by many park users. As a district park, Baycrest Park includes a number of large-scale amenities such as a lit baseball diamond, soccer fields and a track associated with Sir Sandford Fleming Academy. Baycrest Arena is also located in the park.

Flemington Park runs through the Lawrence Heights neighbourhood. The park's approximately 3.5 hectares are distributed unevenly throughout the neighbourhood, resulting in an awkward park configuration that is difficult to program. The relationship of the park to surrounding built form results in remnant pieces of park that run between buildings. As these remnants do not enjoy regular surveillance by residents, they are perceived by many as unsafe. Although the shape of the park limits programming options, Flemington Park does include a number of program elements that are well-used by residents of the Lawrence Heights neighbourhood, including splash pads and the community-built Kaboom Playground.

In general, the size, configuration and location of parkland within the Focus Area contribute to a lack of programmed space, poor maintenance, and perception of parkland deficiency in the area. The broader Study Area includes a number of neighbourhood parks that provide program options to residents, such as play equipment, passive green space, shaded areas, benches, and pedestrian pathways. However, the northeast quadrant of the Study Area is currently underserved by neighbourhood parks. Rajah Park, the only park in this quadrant, has no meaningful street frontage and is in need of better maintenance. Prince Charles Park, located in the Lawrence Manor neighbourhood, is well-appointed with play equipment and shaded areas. It is surrounded by public streets, making it accessible and visually prominent. This park is enjoyed by many residents of the Study Area.

5.7 Natural Heritage

Dougan Associates, the City's natural heritage consultants for the study, completed detailed background work on the existing natural heritage systems in the Study Area.

The urban forest within the Study Area was assessed through an examination of aerial photography as well as site visits, in order to determine both natural heritage features in the area and potential linkages to features outside the area. No features or linkages were determined; therefore, the survey conducted during site visits focused on existing parks and streetscapes.

A tree canopy survey identified 60 species of tree that make up the Lawrence-Allen area urban forest. Of these 25 species, 42% are considered native to Southern Ontario while the remaining 35 species, 58%, are non-native.

Certain patterns within the canopy and the diameter class of individual trees enabled an analysis of canopy cover within the study area. The results of this analysis indicate that canopy cover across the Study Area as a whole is generally less than 50% and even as low as 0% in heavily urbanized areas; especially along Dufferin Street and the area around Yorkdale Shopping Centre. This means that although residential areas within the Lawrence- Allen Study Area are characterized by their 'green' look and feel, many non-residential areas do not meet the City's tree canopy targets of 30 to 40% canopy cover. The diameter class analysis shows the majority of the Study Area to be populated with immature trees in a diameter range of 15 to 30 cm. One notable exception can be seen in the Lawrence Manor neighbourhood east of Lawrence Heights where mature trees of greater than 30cm can be found. The Study Area also includes a fairly high percentage of non-native tree species.

Trees play a significant role in supporting the health, establishing the green character and contributing to the identity of residential neighbourhoods in the Study Area. Some existing mature trees will be removed during revitalization; however, revitalization also enables the City to identify new locations for planting native trees that will flourish over the long term, providing both aesthetic and environmental benefit to community members for years to come.

5.8 Archaeology and Cultural Heritage

Archaeological Services Inc., the City's archaeology consultants for the study, completed a Stage 1 Archaeological Resource Assessment for the Study Area. The consultants' full report can be found on the City's project website.

The former existence of historic watercourses in the area indicates that substantial portions of the Study Area exhibit potential for the presence of pre-contact or early contact period Aboriginal archaeological resources, depending upon the degree to which these lands have been altered by more recent uses. A review of aerial photography in the Study Area indicates that a majority of the study area was graded for construction from the late 1940s up until the construction of Allen Road in the late 1960s. This level of disturbance decreases the archaeological potential of the study area. While the majority (over 90%) of all areas of potential were found to be lacking any integrity during the field review, one area, consisting of the soccer pitch and grassed parkland south of the pitch in Baycrest Park were found to possibly exhibit archaeological integrity. This area should undergo a Stage 2 Archaeological Resource Assessment prior to any redevelopment.

E.R.A. Architects, the City's cultural heritage consultants for the study, completed a Heritage Impact Statement and Cultural Heritage Resource Assessment for the Study Area, focusing on the Lawrence Heights neighbourhood. The full report can be found in the Appendix of the pA report.

Lawrence Heights is a master-planned neighbourhood that was constructed in the late 1950s to provide affordable housing to low-income families. The development plan was informed by the 'Neighbourhood Unit' concept as proposed by Clarence Perry. Lawrence Heights is not listed or designated by the City of Toronto under the Ontario Heritage Act and there is also no provincial heritage recognition for the neighbourhood.

A review of the existing neighbourhood confirms that the cultural heritage value of Lawrence Heights is connected to the integration of American urban planner Clarence Perry's 'Neighbourhood Unit' planning principles in the overall configuration of the neighbourhood, and not to a particular architectural expression.

Defining elements of the 'Neighbourhood Unit' concept, as outlined below, should be retained as redevelopment of Lawrence Heights is undertaken in order to celebrate the neighbourhood's cultural heritage:

- A continuous system of parks and playgrounds;
- A central location for community facilities;
- A clear hierarchy of streets; and
- A clear prioritization of various modes of transportation.

While Neighbourhood Unit principles may be retained in the revitalized community, redevelopment will result in a shift in the visual appearance of the community over time. Revitalization provides an outlet for residents to interpret and celebrate the history of the community. Developing an interpretation approach is a community exercise that focuses on answering the questions what, how and where a community wishes to interpret cultural heritage; who the community wishes to communicate this interpretation with; and what resources are required to achieve the community's aim.

6 EA Problem / Opportunity Statement

The Municipal Class EA process requires the preparation of a Problem / Opportunity Statement to guide project development and confirm study need and justification.

A draft Problem / Opportunity Statement was developed and presented for discussion at the first public meeting. This statement was refined and finalized using input received from subsequent public meetings.

The final Problem/Opportunity Statement for the Transportation Master Plan reads as follows:

As part of the Lawrence Allen Revitalization Project, the City will examine the existing infrastructure and transportation facilities within the Study Area, which may not be appropriate to meet the needs of the community into the future.

Based on the goals of the Revitalization Plan for the Lawrence-Allen area, there is an opportunity for the City to improve these facilities by focusing on connections, transit, the Allen Road, servicing, stormwater, water and wastewater infrastructure and environmental sustainability in order to maximize opportunities to create a high quality city building initiative.

Transportation and land use decisions must be made in parallel to create a well-connected, cohesive neighbourhood where walking, cycling and transit use is encouraged. The Transportation Master Plan will provide improved connectivity for all modes of transportation in a manner that prioritizes pedestrians, cyclists and transit-users over drivers, accommodates residential and employment growth, and integrates the community with the wider City.

7 Vision, Goals and Objectives

After reviewing the existing conditions in the Study Area and with extensive consultation with the public and key stakeholders, a Project Vision was developed with series of Goals and Objectives to further guide the project process.

Transportation and Other Goals and Objectives of the LARP project and are summarized below in to the following categories:

- Transportation
- Economic Environment
- Built Environment
- Social Environment
- Parks and Community Facilities
- Natural Environment
- Cultural Environment
- Sustainability / Municipal Services
- Implementation

7.1 Project Vision

The vision for Lawrence-Allen Secondary Plan Area describes the area 20 years from now, upon complete implementation of the Secondary Plan:

The Lawrence-Allen community is a mixed-income, mixed-use community located in central Toronto's urbanizing suburbs. The community is at once distinct, celebrating the area's rich cultural diversity and sense of community, and fully integrated with the broader city.

The community showcases an innovative approach to revitalization, one that prioritizes the development of a complete community through coordinated public and private investment in housing, infrastructure and the public realm. Innovative building and municipal infrastructure technologies ensure the long-term sustainability of the community. As a complete, livable community, the Lawrence-Allen area offers residents of all ages and backgrounds a range of housing options – including revitalized social housing – as well as a range of employment, social and recreational options.

The Lawrence-Allen community is a beautiful and human-scaled place. New connections across Allen Road and to neighbouring communities provide safe, pedestrian-oriented links between neighbourhoods and to the community commons, where community services, facilities, schools, recreational programming and local retail come together in a park setting. A distributed system of neighbourhood parks offers all residents access to both passive and active recreational programming.

The community will have a balanced transportation system that offers a range of travel choices, including walking, cycling, transit, and the private automobile. A fine-grain mix of land uses around Lawrence West and Yorkdale subway stations enables transit-supportive densities, recognizing the unique potential of the community to support intensification around existing transit infrastructure. Access to transit is improved and many residents live within a five-minute walk of a subway station.

7.2 Goals and Objectives: Transportation

The plan will provide improved connections for all modes of transportation in a manner that balances pedestrians, cyclists, transit-users, and drivers, accommodates residential and employment growth, and integrates the community with the wider City. The plan will transform the Allen Road corridor by redefining its use and purpose, beautifying it, and integrating it more fully into the surrounding community.

Allen Road

The intersections of the Allen Road/Lawrence Avenue West are improved to prioritize pedestrians, cyclists and transit users.. The plan has flexibility to adapt to different options for Allen Road changes.

Public Streets: Connectivity and Circulation

The public street network has a legible hierarchy of street types which allow for improved connectivity and circulation for all users and is well-integrated with the surrounding public street network. There are new and improved physical connections to and across the Allen Road for pedestrians, bicycles, buses, and/or cars.

Transit-Supportive Development

Areas within 500m of subway stations contain higher-density, mixed-use buildings, with highest densities concentrated closer to the stations and reduced densities further away. Access to subway stations is significantly improved through direct pedestrian connections and a public street network that allows for direct and convenient bus surface transit routes.

Streets for People: Pedestrians and Bicycles

The plan provides safe and convenient travel routes between important places in the community. to encourage more walking and cycling. The pedestrian and cycling networks will link important places in the community and will integrate with the surrounding city-wide network, adjacent neighbourhoods, and the Allen Road. There will be an emphasis on enhanced streetscape design, including trees, benches, lighting and other high-quality pedestrian amenities.

Auto Capacity and Neighbourhood Traffic Impacts

Auto capacity will be sufficient to support existing and new development while managing traffic impacts on local neighbourhoods.

7.3 Goals and Objectives: Economic Environment

The Plan should provide a flexible framework for both short- and long-term investment to happen on both private and public lands within the Study Area.

Development Blocks (Building Scale)

The size and shape of each development block will support economically viable and appropriately scaled buildings for each block. Blocks will also provide appropriate configuration and sufficient space for servicing, access to sunlight, landscaped open space and tree planting.

Cost-Effectiveness

Financial costs of changes have been minimized. Energy system and infrastructure investment decisions are based on life cycle costs, which include both the initial capital expenditures and the cost of operations, maintenance, energy and disposal over time.

7.4 Goals and Objectives: Built Environment

The plan will facilitate the redevelopment of specific areas of the community in a manner that encourages the mixing of land uses, building types and tenures, accommodates residential and employment growth over time, and has regard for existing stable neighbourhoods. The plan will create an integrated community which will include all tenures, income levels, and mobility levels in mixed building forms.

Development Blocks (Location/Size/Layout)

The location, size, and shape of development blocks will provide sites for buildings that define the edges of streets, parks, and open spaces and provide overlook to ensure streets and parks which are comfortable to use and safe for residents and visitors.

Transition to Neighbouring Development, Tall Buildings and Population Density

There should be appropriate transitions between areas of different height, scale and intensity both within the focus area and between the focus area and neighbouring communities. Development blocks for taller buildings and higher density should be located close to TTC subway stations, along the Allen Road corridor, Major Streets, and Primary Streets to take advantage of proximity to transit service.

7.5 Goals and Objectives: Social Environment

The plan should support the development of a liveable neighbourhood – one with a high-quality of life – that is supported by an array of community institutions that foster community health and social networks. The plan should coordinate reinvestment in and development of important social infrastructure, including parks, schools, and community facilities.

Density

Anticipated growth in the plan area should be appropriate to its location and role within the broader City.

Mixed Housing and Mixed Use

The community should have a full range of housing in a mix of building types and densities (e.g. townhouses, mid-rise and tall buildings) and tenures (e.g. market, RGI, assisted, rental and ownership). The community should have a mix of residential, retail-commercial, and institutional uses to provide convenient services to the local community and contribute to the vibrancy of the neighbourhood.

Rental Replacement

The plan should provide development sites for the replacement of all rent-geared-to-income rental units within the focus area.

Tenant Assistance

Toronto Community Housing tenants should l receive an acceptable agreement for assistance and support through the revitalization process that meets or exceeds municipal and provincial guidelines.

Accessibility

The community should be planned to be physically accessible to people of different ages and abilities.

Affordable Rental Units

The plan should identify opportunities to increase the number of affordable rental units in the community.

7.6 Goals and Objectives: Parks and Community Facilities

The Plan should create a network of beautiful parks and public spaces that connects neighbourhoods in the community, provides opportunity for a variety of activities and experiences, and joins with the broader City wide network. The Plan should provide a full range of community facilities to serve existing and future residents, and ensure that facilities are distributed and connected throughout the community for more convenient access.

Parkland Area

The Plan should increase the total area of parkland in the Study Area to meet the requirements of the City of Toronto Alternate Rate of Parkland Dedication By-law. Where new development is proposed on existing parkland, the parkland should be replaced in the neighbourhood with a park of similar or larger size with comparable or superior utility.

Park Types, Locations and Distribution

The park system should serve existing and future residents by providing a range of park sizes and types distributed equitably throughout the community, including at least one district park, one community park and a variety of neighbourhood parks. New and existing parks should be connected to one another and integrated within the broader city via green streets and greenway connections. All new homes should be within a 5 to 10-minute walking distance of a park.

Community Facilities

The number, quality, and capacity of community facilities across the area have been increased and improved to serve existing and future residents. Major facilities are located on prominent, highly visible sites and create a central focal area for the neighbourhood. Other facilities are distributed equitably throughout the community.

Schools

Sites for TDSB and TCDSB elementary and secondary schools meet the existing and future need for schools. The plan allows for coordination of phasing between different land owners, including the school boards.

Recreational & Community Programming

The size and shape of parks should allow for a maximum range of programs, recreational facilities and community services. This includes active recreation (e.g. sports fields, sport courts, skatepark, gymnasium, pool) and passive spaces (e.g. trees, benches, community gardens, casual play areas, meeting rooms), as well as opportunities for arts, culture, food programs and economic development. Parks should accommodate sites for a community centre, swimming pool, and other facilities that co-locate well with parkland. In order to maximize their use, parks should be of adequate size and shape to be efficiently programmed.

7.7 Goals and Objectives: Natural Environment

The Plan should provide opportunities to restore and enhance natural heritage and ecosystems.

Tree Canopy and Natural Environment

The Plan should identify opportunities to significantly increase the existing tree canopy and natural vegetation in parks and along public streets throughout the Study Area. The plan should reduce impacts on existing natural heritage and ecosystems and identify locations where new natural vegetation and wildlife habitat could be incorporated into development.

7.8 Goals and Objectives: Cultural Environment

The Plan should respect existing resources and provides opportunities for community interpretation and celebration of the area's cultural heritage.

Aboriginal Peoples

In accordance with Phase 1 and 2 of the Municipal Class Environmental Assessment process, all Aboriginal Peoples potentially affected by redevelopment should have an opportunity to review and comment on option plans for the Study Area.

Cultural Heritage

The Plan should identify and protect listed or designated cultural heritage resources within the Study Area.

Archaeology

The Plan should identify and protect areas of high archaeological potential within the Study Area.

7.9 Goals and Objectives: Servicing Infrastructure

The Plan should include innovative, long-term and community-based strategies to manage energy, water, wastewater, stormwater and solid waste in a sustainable manner.

Green Community

Streets should be designed to be green and sustainable, improving the public realm, increasing the tree canopy and absorbing and reducing stormwater runoff. Sites and buildings should be designed in accordance with the Toronto Green Standard.

Stormwater Management

The Plan should identify opportunities to meet the City of Toronto Wet Weather Master Plan Guidelines for stormwater management. The Plan should also identify additional opportunities to treat stormwater within the Study Area, and treat external tributary stormwater from adjacent lands. The Plan should recommend a Stormwater Management Strategy that will implement treatment at the source.

Water and Wastewater

Water and wastewater systems should be implemented to meet the requirements of the Plan. Existing water and wastewater systems that are in conflict with the Plan should be decommissioned and removed. The Plan should allow for core trunk infrastructure to remain in place. The new water and wastewater systems should help to reduce constraints in the existing municipal systems.

Community Energy

The Plan should identify opportunities for clean local energy generation and ways to minimize energy use (e.g. solar access, solar orientation and District Energy supportive).

7.10 Goals and Objectives: Implementation

The Plan should follow a logical and flexible implementation strategy over the next 20 years that co-ordinates elements such as: transportation infrastructure, servicing infrastructure, parks, schools and community facilities, new development and minimizes impacts on existing surrounding neighbourhoods. Continued investment in public infrastructure and services should help create long-term value for all neighbourhoods in the community.

8 Discussion of Key Transportation Concepts

8.1 Public Streets: Connectivity and Circulation

Public streets are a fundamental organizing element of cities and neighbourhoods. Streets play a central role in determining a city's quality of life, whether considered from the point of view of mobility, economic activity, environmental health, social interaction, or simply the city's look and feel. Secondary Plans establish more detailed local development policies such as the public street structure to guide growth and change in a defined area of the City.

Street Hierarchy

City streets are often organized according into three main hierarchal types:

Major Streets (aka, Arterial Streets): Major Streets are usually the largest streets in an area, with wide rights-of-way that carry large volumes of vehicle, pedestrian, and bicycle traffic. There are also often busy city-wide surface transit routes for buses or streetcars. Major Streets usually have a higher density of buildings along them. Examples of Major Streets in the Lawrence Allen Study Area include Bathurst Street, Dufferin Street and Lawrence Avenue West.

Primary Streets (aka, Collector Streets): Primary Streets provide a transition between Major Streets and Local streets. They have more moderate right-of-way widths that accommodate a diverse range of elements, including vehicle lanes, bicycle lanes, sidewalks, street trees, on-street parking, and neighbourhood bus routes. Primary Streets offer direct and convenient travel routes between important neighbourhood destinations, like shopping areas, schools, parks, community centres, and transit services. Primary Streets usually have a moderate density of buildings along them to provide a transition between higher-density neighbourhoods and lower-density neighbourhoods. Examples of Primary Streets in the Lawrence Allen Study Area include Ranee Avenue, Varna Drive and Flemington Road.

Local Streets (aka, Secondary Streets): Local Streets are usually the smallest types of streets and have more narrow rights-of-way that carry small volumes of vehicle traffic. These streets have slow traffic speeds and possibly even traffic calming features, like speed humps. These streets should have generous street trees and sidewalks where people can enjoy a quiet stroll. These streets typically have low density buildings along them, like single-family homes or townhouses. Examples In the Lawrence-Allen area, existing primary streets include Stockton Street and Kirkland Road.

- **The Option Plan street networks should be comprised of a combination of street types to establish a clear hierarchy and legible street pattern.**
- **There should be a fine grain of streets to help break up large pieces of land into smaller development blocks and to provide direct and convenient walking and cycling routes.**

Street Right-of-Way Width

Street right-of-way width is also an important element that impacts street design and determines the amount of land remaining in a neighbourhood that can be used for buildings or open space.

The street right-of-way often contains many complex elements and must balance the conflicting spatial needs of several uses, such as; automobiles, pedestrians, bicycles, transit vehicles, utilities, emergency vehicles, trees, benches, lighting, stormwater management and servicing infrastructure.

In the Lawrence-Allen area, a priority has been placed on creating "green streets" which contribute to the environmental sustainability of the neighbourhood, create stronger pedestrian and cycling links to parks and key areas of interest, and enhance the public realm.

In order to better understand the public street right-of-way needs in the Study Area, some preliminary street cross-sections were developed for different types of new and existing streets. These ranges of cross sections were designed to accommodate several possible elements in the right-of-way.

- Existing Major Streets: Range from 27 to 30 metres
- Existing Primary Streets: Range from 20 to 27 metres
- New Primary Streets: Range from 23 to 27 metres
- New Local Streets: Range from 18.5 to 20 metres

In addition, minimum right-of-way widths were also assigned at the current pedestrian and bicycle connections at Kirkland (20m), Rondale (20m), and Ridgevale (20m), and Replin Road (20m).

- **Based on preliminary cross-section concepts, streets and connections in the Option Plans should explore streets within the ranges of right-of-way widths listed.**

Street Pattern

There are many different street patterns in cities; from the classic grid patterns of ancient Greek and Roman cities, to more recent auto-oriented suburban superblocks of indirect streets and cul-de-sacs. The street pattern not only creates key physical characteristics of a neighbourhood, such as the frequency of intersections and size of development blocks, but it also influences how people experience their neighbourhood, such as choosing travel routes and the perception of safety. The street pattern can also help better organize auto traffic, support transit service, and encourage walking and cycling as more viable travel options.

The street pattern of the larger Study Area is not expected to change much, but three general street pattern concepts were explored for the Focus Area, where significant change was expected:

Curvilinear | Grid | Modified Grid

Figure 14: Examples of street patterns

Curvilinear Pattern

A curvilinear street pattern concept would retain much of the suburban curvilinear character of the existing street pattern. Parts of existing Primary Streets in the Focus Area (ie, Flemington Road and Varna Drive) could be reused.

Grid Pattern

A grid street pattern concept would consist of a more traditional urban condition with rectilinear streets that would create regular block sizes and frequent intersection spacing. A grid pattern would require an almost complete replacement of the existing street system in the Focus Area.

Modified Grid Pattern

A modified grid pattern would consist of a mix of the grid and curvilinear concepts, keeping some of the existing curvilinear street pattern in the Focus Area while introducing some new grid street patterns.

The Option Plan should;

- **Explore variations of curvilinear, grid, and modified grid street patterns in the Focus Area that recognize, and are integrated with, the existing street pattern in the surrounding Study Area.**
- **Design to achieve short, walkable block lengths with a maximum length of 200m.**
- **Provide for signalized intersection spacing of approximately 200m to provide frequent opportunities for protected pedestrian and bicycle crossings.**
- **Cognizant that the exact location, alignment, and design of each Primary Street will be refined through remaining phases of the Environmental Assessment process.**
- **Recognize that the exact layout and pattern of Local streets is flexible and can be determined in more detail in the future as individual Phases of development come forward for review and approval.**

Street Connectivity

Another important aspect of the street network is its ability to provide good connectivity and circulation for all users: auto, transit, pedestrians, and bicycles.

Several strategies could potentially improve street connectivity between the Focus Area and the surrounding Study Area, connectivity within the entire Study Area, and/or connectivity with neighbourhoods outside the Study Area to the north, south, east and west.

Varna Drive Extension

A new street could extend Varna Drive north of Ranee Avenue around the western edge of Baycrest Park and connect to Neptune Drive, creating improved connectivity to and from Bathurst Street. This new street would require a reconfiguration of the existing Allen Road/Hwy 401/Yorkdale Road ramp and a more detailed examination of available space between Sir Sandford Fleming Secondary School and the apartment building at 150 Neptune Drive.

Varna Drive Re-Alignment at Lawrence Avenue West

Varna Drive could be shifted to the west to align with Englemount Drive at Lawrence Avenue West and eliminate the existing undesirable off-set signalized intersection condition.

Marlee Avenue Extension

As part of a redevelopment of Lawrence Square Mall, Marlee Avenue could be extended north of Lawrence Avenue West to Ranee Avenue.

- **The Option Plans should explore and evaluate combinations of these possible new public streets to improve connectivity for all users.**

Neighbourhood Connections

There are several existing pedestrian and bicycle connections whose design and function should be explored in the Option Plans.

Replin Road Connection

The existing pedestrian and bicycle connection from Replin Road to Lawrence Avenue West could be improved to create a neighbourhood gateway feature. It was determined that this connection could not be replaced with a full public street due to its proximity to the Allen Road ramp intersection.

Lawrence Manor Neighbourhood Connections

The existing pedestrian and bicycle connections at Ridgevale Drive, Rondale Boulevard, and Kirkland Boulevard could be improved or replaced with full public streets.

Yorkdale Shopping Centre Connections

The existing pedestrian and bicycle connections to Yorkdale Shopping Centre could be improved or replaced entirely with full public street connections.

- **The Option Plans should explore and evaluate combinations of possible improved neighbourhood connections.**

8.2 Transit-Supportive Development

Development that is transit-supportive follows a well-established framework of transportation planning principles designed to maximize access to transit facilities and encourage transit ridership. Typically, it is characterized by some or all of the following elements:

- Development is compact and located within a 5 to 10-minute walking distance (approximately 500m) of transit stations and surface transit routes;
- Higher densities are concentrated closer to the transit stations with progressively lower densities radiating outwards;
- Minimum development densities are established and auto-oriented development uses and services are restricted;
- Development is a mix of uses, with places for all income levels to live, work, learn, and play within neighbourhoods;
- Neighbourhoods are designed for walking and cycling with direct, convenient, and attractive connections to transit facilities;
- The public street network has good connectivity and is designed to reduce impacts of vehicle traffic.
- Developments provide reduced amounts of parking with low maximum parking standards;
- The transit station and its surrounding area is human-scaled with a vibrant public realm; and
- The transit station is a neighbourhood place and a focal point for development, for the uses and activities around it, and for the supporting networks of local transit, walking, and bicycle routes that connect it to its catchment area.

Reliable and frequent transit service can offer connectivity and mobility, but the mix and intensity of land uses around the transit service is also essential to enable transit use a viable travel option. Land use patterns and development designed primarily for cars creates barriers to developing an efficient high-capacity transit system. The very scale of automobile infrastructure, with its wide arterial highways, roads and associated parking lots, frustrates movement by local bus, by bike or by foot. A dispersed, separated, single-use, low density urban structure cannot provide the concentration, connectivity and encouragement of demand that will offer the convenience, service levels and transit ridership to present compelling alternatives to the use of the car for those who have a choice.

It is important to note that the two subway stations in the Lawrence Allen Study Area do not have the same context. Lawrence West station is located on a major street and has a bus terminal that offers connectivity to several major city-wide surface transit routes. Yorkdale station is somewhat more isolated within the neighbourhood and is not located on a major street. There are few bus routes that intersect with the station and it offers little connectivity to other transit services. There are also challenges to providing higher density buildings around the station because of the proximity to the surrounding existing low-rise neighbourhoods.

- **The Option Plans should generally follow the principles of transit-supportive development.**
- **The Option Plans should locate new development around the two TTC subway stations and along TTC bus routes: higher density around Lawrence West station and medium density around Yorkdale station.**
- **The Option Plans should create clear direct travel routes to the subway stations and bus routes for pedestrians and bicycles.**
- **The Option Plans should provide opportunities for buildings comprised of a mix of land uses.**

Figure 15: Possible subway station entrance improvements

Figure 16: Rendering showing possible new station entrances on Ranee Avenue

8.3 Streets for People: Pedestrians and Bicycles

Streets in the Lawrence-Allen area have historically been designed primarily to move cars and do not provide a pleasant area for people to walk, bicycle, or simply sit and rest. The quality of the pedestrian environment along the public streets discourages walking as a viable means of travel. Many Local Streets do not have sidewalks and there are very few protected crossing locations for pedestrians along the Major and Primary Streets in the area. This is especially prevalent at the Allen Road ramp and Lawrence Avenue West intersections where pedestrian crossings have been eliminated entirely at some intersections in favour of increasing car traffic movement to and from Allen Road.

The Option Plans should explore a number of pedestrian and cycling topics, centred around the following areas:

Connectivity and Circulation

- Pedestrian travel routes should be clear and direct, with legible connections between important neighbourhood destinations including homes, schools, parks, shopping areas, and community facilities.
- There should be a well-connected network of safe and convenient bicycle lanes and pathways between important neighbourhood destinations, which are integrated with the City-wide cycling network.
- Major Streets and Primary Streets should be designed to have on-street bicycle lanes.
- A major walking and cycling facility should be explored to be located along the Allen Road corridor.
- A fine grained network of local walking routes should be provided within the neighbourhood.
- There should be the opportunity for a pedestrian way-finding signage system to help direct people to destinations in the area.

Access to Transit

- The Option Plans should provide safe and convenient access for pedestrians and cyclists to bus stops and subway stations.
- Ample bicycle parking facilities should be provided at subway station entrances.

Safety and Intersection Design

- The street network should present opportunities to design intersections to provide pedestrians with safe and protected crossing opportunities.
- The design and operation of key intersections in the Study Area should be examined to improve crossing conditions for pedestrians by adding pavement markings, improving signal timing, reducing crossing distances, and constructing curb extensions.
- Design and operation of key intersections should include clear, dedicated bicycle crossings.

Quality of Pedestrian and Bicycle Environment

- Pedestrian spaces should be designed for a variety of public activities and encourage social interaction, with places for standing, walking, and sitting.
- Sidewalks should be protected from vehicular traffic, well-lit, and sufficiently wide.
- Streets should be designed to reduce traffic speeds with narrow lanes, on-street parking, and other high-quality, innovative traffic-calming elements, such as shared streets.
- Bicycle facilities should be designed to accommodate a variety of cyclists: including recreational users, commuters, seniors, children, and adults.

Bicycle Parking

- Short-term and long-term bicycle parking facilities should be provided at important neighbourhood destinations, such as shopping areas, schools, libraries, community centres, and subway stations. Bicycle parking should also be a requirement in new development.

8.4 Traffic Capacity and Neighbourhood Traffic Impacts

While the Transportation Vision for the Lawrence-Allen Secondary Plan is to re-balance travel modes and reduce auto-dependency, it is expected that some portion of travel will still be made by car.

The Major Streets bounding the Lawrence-Allen Revitalization Study Area experience traffic congestion in the morning and afternoon peak hours and there is little practical opportunity to provide significant new auto capacity. Residents have expressed concern over existing traffic issues in the area, including traffic congestion on major travel routes and traffic infiltration in neighbourhoods.

However, existing traffic conditions in Lawrence-Allen must be considered in a context of future transportation initiatives that affect the area, such as the Toronto York Spadina Subway Extension and Transportation City. Long-term travel patterns in the area are expected to change over time. A 20-year perspective on revitalization considers that future investment and development patterns in Lawrence-Allen will improve the function of the transportation system.

- **The evaluation of the Option Plans should include a comprehensive traffic analysis of the proposed development levels to determine whether there is sufficient auto capacity to support existing and new development. The traffic analysis should not rely on new or existing Local streets to provide auto capacity to accommodate new development.**
- **The Option Plans should explore methods to manage traffic impacts on local neighbourhoods in a balanced way that considers other city-building objectives. Innovative street designs should be explored that include, planted medians, speed humps, and chicanes ('bump-outs'). A further exploration of traffic calming measures is not appropriate at this stage.**

8.5 Implementation

It is important to have a logical and flexible phasing strategy for transportation infrastructure to co-ordinate with other key pieces of infrastructure to maximize efficiency of city resources and minimize impacts on the surrounding neighbourhoods as changes develop over time.

The Option Plan should:

- **Be cognizant of a public and private investment structure that creates and captures value for the public sector, and through these city-building initiatives, creates value for the surrounding communities in the form of streets, open spaces, facilities, and catalysts for private development.**
- **Design new neighbourhoods as cohesive "units", where the public streets are created in conjuncture with servicing, buildings, parks, and other community services.**
- **Attempt to create public streets that can be phased in complete segments to maintain a fully functional and connected public street network.**
- **Be flexible enough to deal with other possible City initiatives, such as the Allen Road EA or TTC Subway Station Modernization projects.**
- **Recognize that the certain transportation infrastructure improvements may be required to complete remaining phases of the Municipal Class EA process, or as Individual EA's.**

9 Option Plans

Using the Goals and Objectives for the project as a foundation, four transportation Option Plans were developed and evaluated in co-ordination with a proposed re-development plan.

- Do Nothing Option
- Option A – Modified Grid Streets, Distributer Parks
- Option B – Curvilinear Streets, Central Park
- Option C – Curvilinear Streets, Central Park

It should be noted that specific modifications to Allen Road were not included in the Options, as they have not yet been fully explored through the formal Individual EA process. Instead, each Option was developed and evaluated in terms of its flexibility to accommodate *potential* future changes to the Allen road corridor. For example, provision of a multi-use pedestrian and bicycle Greenway along one or both sides of Allen Road allows flexibility for possible future changes while minimizing the impact to new development in the vicinity of the corridor.

The following sections describe each Option and their key features.

9.1 Elements Common to Options A, B, and C

There are a number of other elements that Option Plans A, B, and C have in common, which include:

- Approximately 10,500 residential units in the Focus Area, which includes replacement of the existing 1,208 social housing units and an additional 9,300 new residential units.
- At least 20 ha of total parkland in the Focus Area. The specific amount of total parkland differs between the plans. Baycrest Park is maintained as a District Park in its current location, with certain changes to its configuration.
- Replacement of existing Primary Streets in the Focus Area, notably Flemington Road and Varna Drive, with a new network of Primary Streets. A new Primary Street is created along the western and northern edges of Baycrest Park, connecting Ranee Avenue with Neptune Drive. Blossomfield Drive is maintained in all plans as a Primary Street connection to Lawrence Avenue West. The routes and pattern of the Primary Streets differs across the Option Plans.
- Investigation of several new or improved neighbourhood street connections. These include two new Local Street connections to Yorkdale Shopping Centre; a new public street connection from Replin Road to Lawrence Avenue West; and improved pedestrian and cycling connections on Ridgevale Drive, Rondale Boulevard, and Kirkland Boulevard.
- The same number of school sites and community facilities in the Focus Area, although the locations of these vary across the Option Plans. A new secondary school on the Bathurst Heights site, potentially integrated into a mixed use development, and a school yard located on the northern portion of the site.
- A generalized typology of development blocks that comprises low-rise buildings, mid-rise buildings, and tall buildings; the arrangement of these different scales of development varies across the Option Plans.
- A 50-metre wide zone of built-form transition to adjacent low-rise neighbourhoods. Within this zone, heights are limited to low-rise development.
- In addition to the blocks which border the existing low-rise residential neighbourhoods, all plans include a concentration of low-rise blocks in the north-east of the Focus Area. The configuration of this area differs between the plans.
- Mid-rise blocks are limited primarily to the Lawrence Square Mall site and the blocks around the Yorkdale Subway station at the Ranee Avenue and Allen Road intersection. Plan A also has one mid-rise block in the north-west of the Focus Area.
- There is a concentration of blocks for tall buildings south of Flemington Road, within 500 metres of the Lawrence Avenue West subway station. The number and characteristics of these blocks differs in all plans.
- Development on the Lawrence Square site which replaces existing retail floor area and includes new residential development and parkland. Tall, mid-rise, and low-rise building forms are arranged around a Neighbourhood Park. The specific configuration of the streets, blocks and park land differs between the plans.

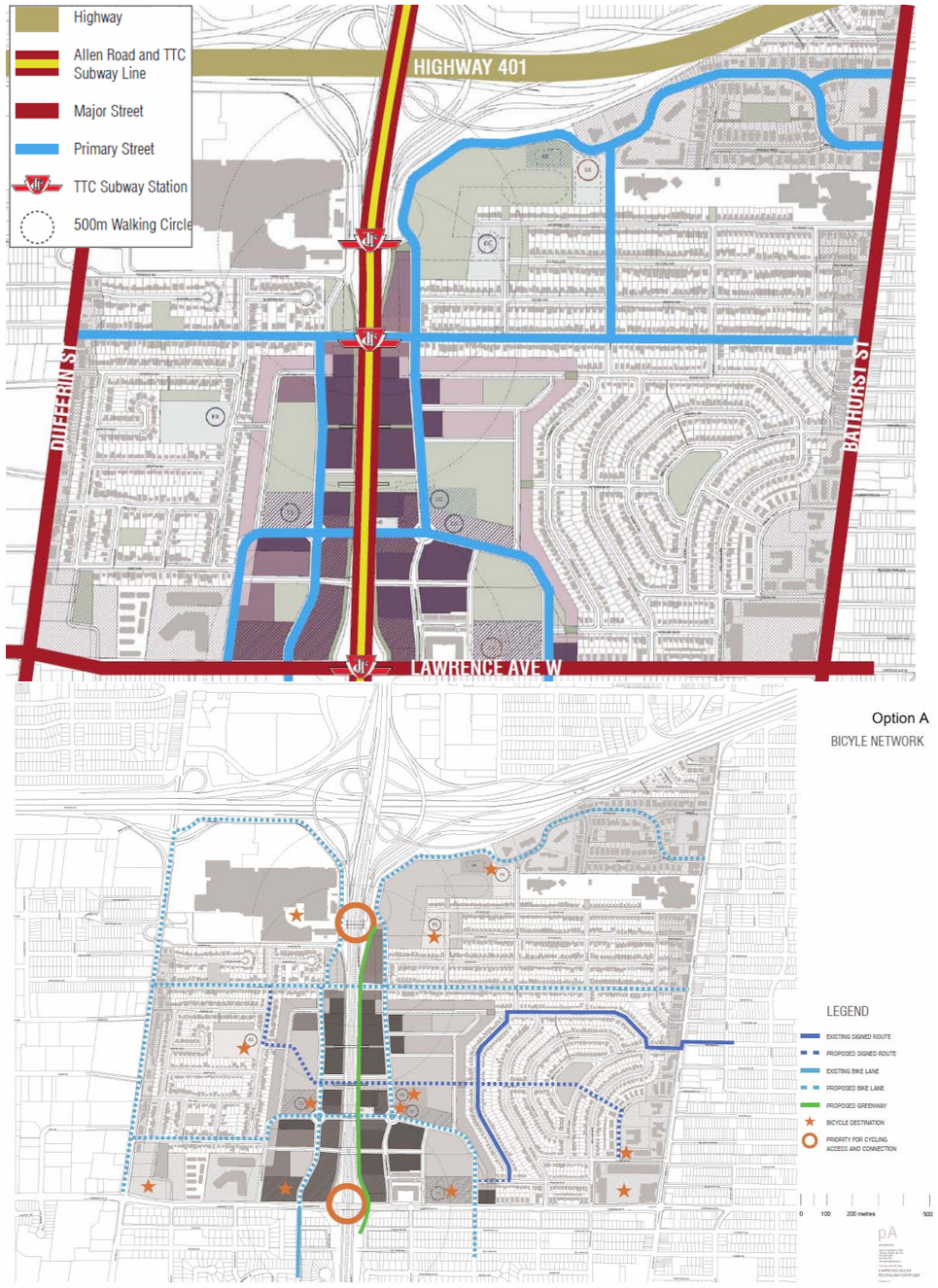
9.2 Do Nothing Option

Figure 17: Do Nothing Option

The Do Nothing Option is comprised of the unchanged existing transportation system in the Study Area which consists of the following key elements:

- The Major Streets and Highways in the Study Area remain unchanged: Highway 401, Allen Road, Lawrence Avenue West, Dufferin Street and Bathurst Street.
- The Primary Streets in the Study Area consist of Yorkdale Road, Ranee Avenue, Ameer Avenue, Neptune Drive, and the circuitous Primary Streets internal to the Focus Area: Varna Drive; Flemington Road; and Blossomfield Drive.
- There are no new Secondary (Local) Streets provided within the Study Area or Focus Area.
- There are the four existing public street crossings of the Allen Road corridor, the significant physical barrier dividing the Study Area: Lawrence Avenue West (bridge); Flemington Road (bridge); Ranee Avenue (underpass); and Yorkdale Road (underpass).
- The TTC subway stations and city-wide bus routes along the Major Streets in the Study Area remain unchanged, as do the more local TTC bus routes that circulate around the Primary Streets.
- Many streets in the Study Area have no sidewalks, or sidewalks on only one side of the street and there are no bicycle lanes on any streets in the Study Area, only one signed bicycle route.

9.3 Option A



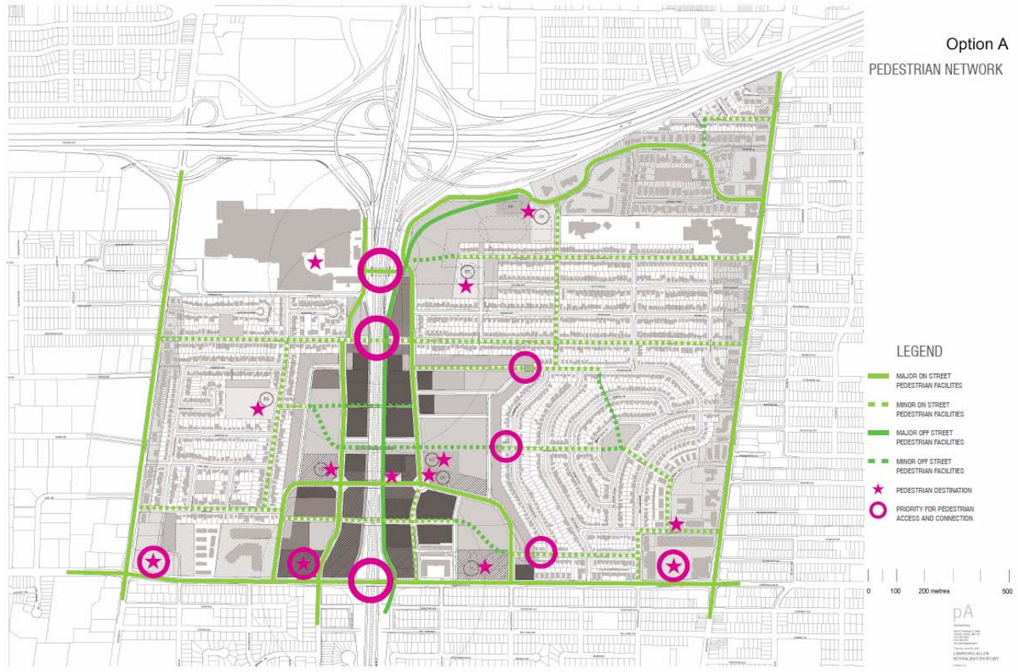
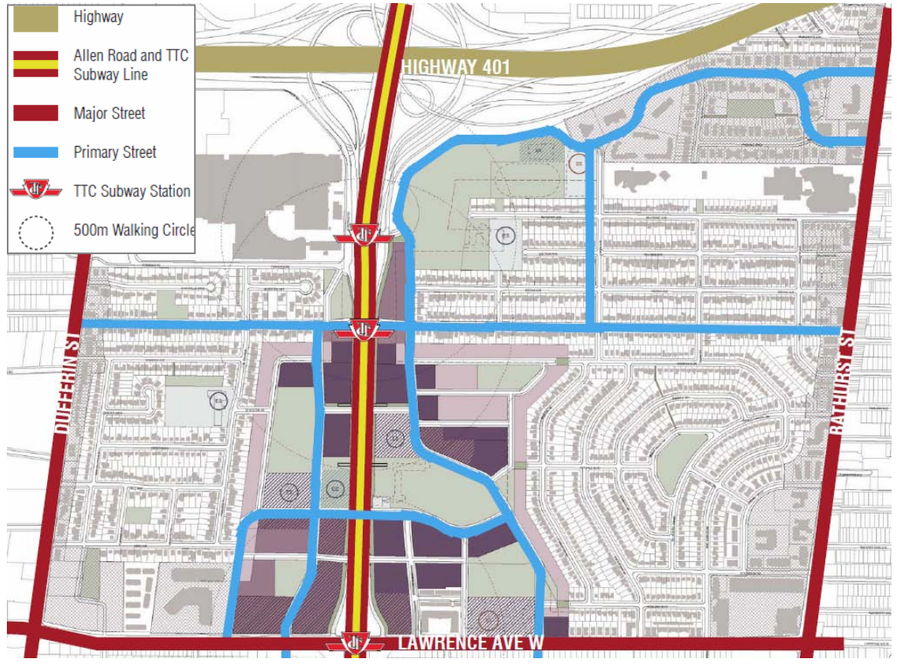


Figure 18: Option A – Proposed Street, Pedestrian, and Bicycle Plans

- Allen Road remains unchanged.
- The Primary streets east and west of Allen Road intersect with Flemington Road on either side of the existing bridge.
- Varna Drive is realigned with Englemount at Lawrence Avenue West.
- Marlee Avenue is extended north to Ranee,
- Varna Drive is extended north around Baycrest Park to Neptune Drive.
- Allen Road/Hwy 401 Ramp is re-configured.
- Local streets are realigned to create a more traditional grid layout,
- Two new east-west pedestrian and cyclist bridges are proposed over Allen Road.
- One new east-west vehicle bridge is proposed over Allen Road between Flemington and Lawrence.
- New north-south multi-use pedestrian and bicycle greenways along both sides of Allen Road.
- Improved pedestrian and bicycle connections to Lawrence Manor.
- Bicycle lanes are on all proposed Primary Streets.

9.4 Option B



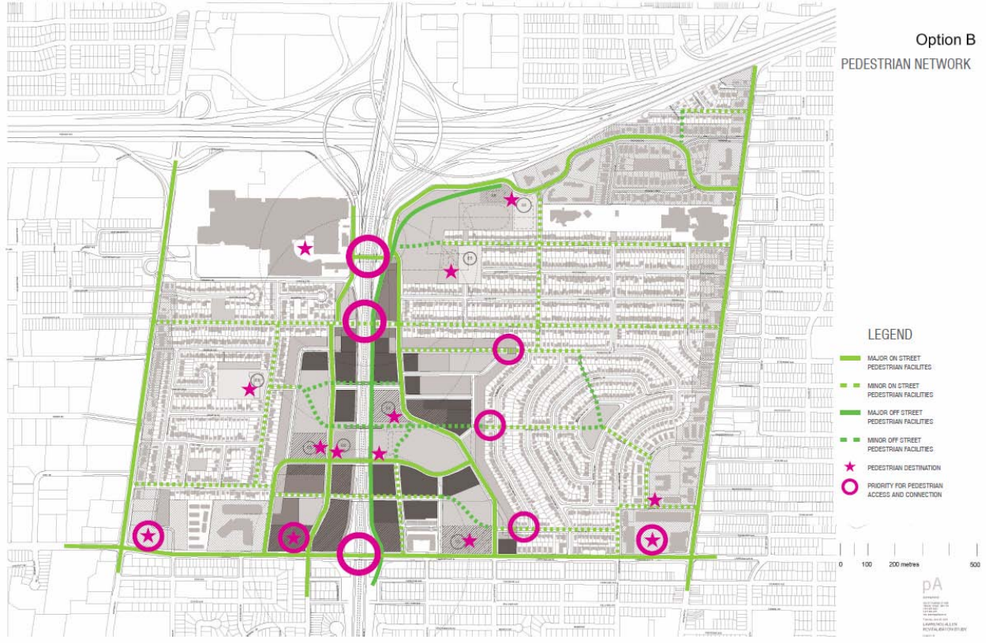
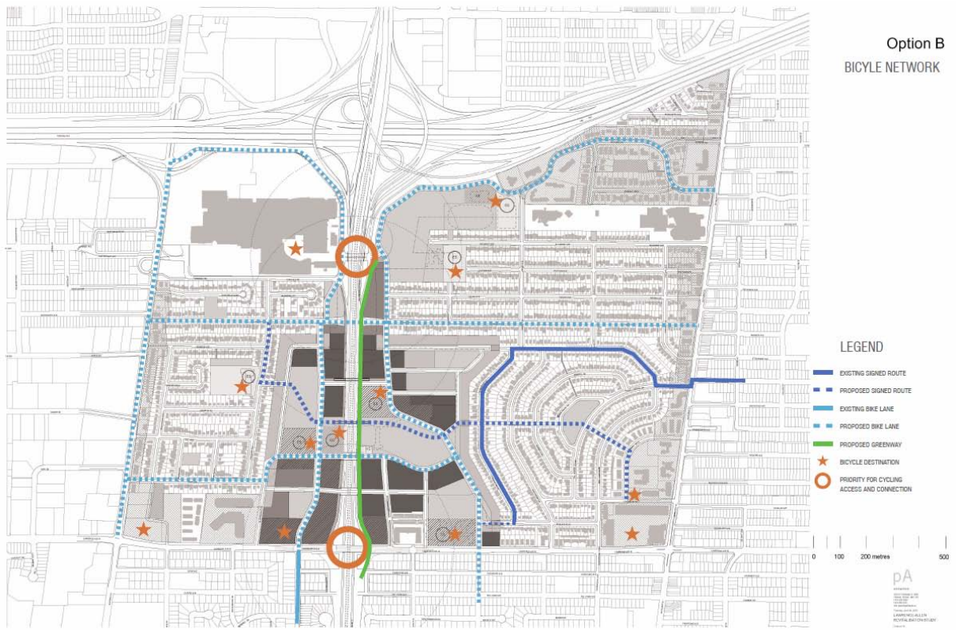
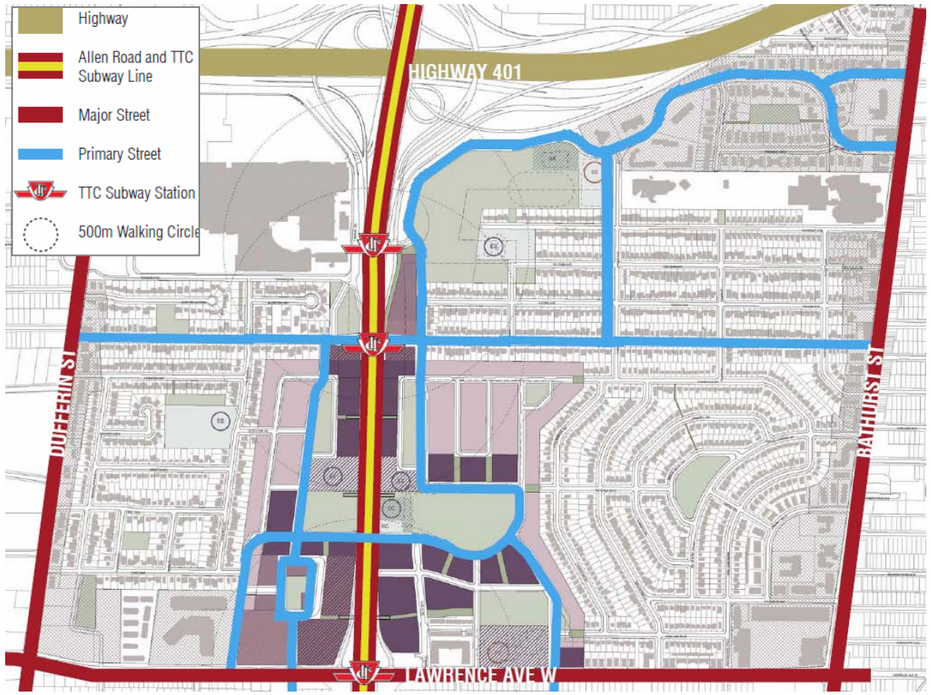


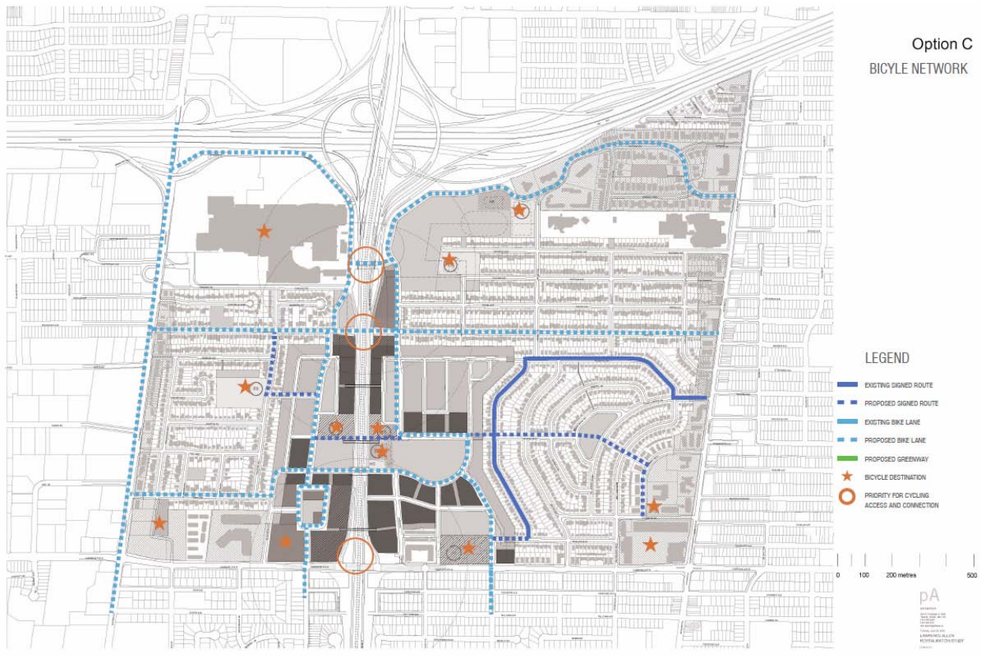
Figure 19: Option B – Proposed Street, Pedestrian, and Bicycle Plans



- Allen Road remains unchanged.
- Varna Drive is realigned with Englemount at Lawrence Avenue West.
- Varna Drive on east side of Allen Road is realigned around the large central park.
- Marlee Avenue is extended north to Ranee,
- Varna Drive is extended north around Baycrest Park to Neptune Drive.
- Allen Road/Hwy 401 Ramp is re-aligned.
- Local streets are realigned to create a more traditional grid layout,
- Two new east-west pedestrian and cyclist bridges are proposed over Allen Road.
- One new east-west vehicle bridge proposed over Allen Road between Lawrence and Flemington.
- New north-south multi-use pedestrian and bicycle greenways along both sides of Allen Road.
- Improved pedestrian and bicycle connections to Lawrence Manor.
- Bicycle lanes are on all proposed Primary Streets.

9.5 Option C





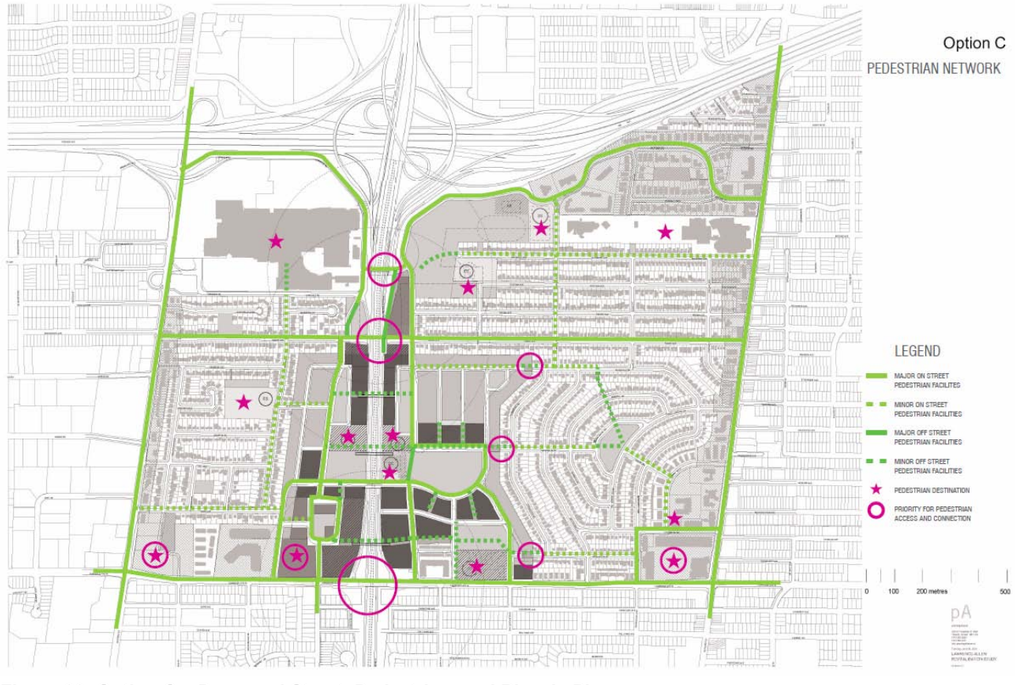


Figure 20: Option C – Proposed Street, Pedestrian, and Bicycle Plans

- Varna and Flemington on the east side of Allen Road bend around a large central park before bending west and north to Ranee.
- Varna Drive is realigned with Englemount at Lawrence Avenue West.
- Marlee Avenue is extended north to Ranee, but divides around a small park just south of Flemington,
- Varna Drive is extended north of Ranee around Baycrest Park to Neptune Drive.
- Allen Road/Hwy 401 Ramp is re-aligned.
- Local streets are realigned to create a more traditional grid layout with additional mmultiple smaller greenway connections throughout the neighbourhood
- Two new east-west pedestrian and cyclist bridges are proposed over Allen Road.
- One new east-west vehicle bridge proposed over Allen Road between Lawrence and Flemington.
- New north-south multi-use pedestrian and bicycle greenways along both sides of Allen Road.
- Improved pedestrian and bicycle connections to Lawrence Manor.
- Bicycle lanes are on all proposed Primary Streets.
- A large central park is in the middle of the area with smaller linear parks along Varna and Flemington near Ranee.

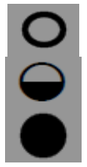
10 Evaluation of the Options

10.1 Evaluation Criteria

A set of criteria were derived against which to evaluate the Option Plans and considered the following categories of objectives:

- Transportation
- Economic Environment
- Built Environment
- Social Environment
- Parks and Community Facilities
- Natural Environment
- Cultural Environment
- Sustainability / Municipal Servicing
- Implementation

Each Option Plan was evaluated against these criteria to understand the environmental impacts of each Option and how well the LARP project objectives were met. A three-tiered rating system was used as follows:



Poorly meets evaluation criteria.

Partially meets evaluation criteria.

Better meets evaluation criteria.

The following sections summarize each of the evaluation criteria used in more detail. The transportation criteria and evaluation are discussed in more detail, while the non-transportation criteria and evaluation are discussed in more detail in the Appendix.

Transportation Evaluation Criteria

A. Allen Road

- The relationship of buildings in the neighbourhoods surrounding the Allen Road should be improved to provide an active use along the corridor.
- There are new and improved physical connections to and across the Allen Road for pedestrians, bicycles, buses, and/or cars.
- There should be improved north-south pedestrian and bicycle routes along the Allen Road corridor.
- The intersections of the Allen Road/Lawrence Avenue West are improved to prioritize pedestrians, cyclists and transit users and to improve the area's development potential.
- The plan has flexibility to adapt to different options for Allen Road changes pending a possible future Environmental Assessment.

B. Transit Supportive Development

Development that is transit-supportive follows a well-established framework of transportation planning principles designed to maximize access to transit facilities and encourage transit ridership. Typically, it is characterized by some or all of the following elements:

- Development is compact and located within a 5 to 10-minute walking distance (approximately 500m) of transit stations and surface transit routes;
- Higher densities are concentrated closer to the transit stations with progressively lower densities radiating outwards;
- Minimum development densities are established and auto-oriented development uses and services are restricted;
- Development is a mix of uses, with places for all income levels to live, work, learn, and play within neighbourhoods;
- Neighbourhoods are designed for walking and cycling with direct, convenient, and attractive walking and bicycle connections to transit facilities;
- The public street network has good connectivity and is designed to reduce impacts of vehicle traffic.
- Developments provide reduced amounts of parking with low maximum parking standards;
- The transit station and its surrounding area is human-scaled with a vibrant public realm; and
- The transit station is a neighbourhood place and a focal point for development, for the uses and activities around it, and for the supporting networks of local transit, walking, and bicycle routes that connect it to its catchment area.

C. Public Streets: Connectivity and Circulation

- The public street network is a fundamental organizing element in the study area with a legible hierarchy of street types.
- The public street network should provide improved connectivity and circulation for all users.
- The public street network should be well-integrated with the surrounding existing public street network.
- There is a fine grain of public streets to create shorter, walkable blocks, increase permeability, and reduce travel distances.
- There are new and improved physical connections to and across the Allen Road for pedestrians, bicycles, buses, and/or cars.
- There is a clear hierarchy and legible street pattern made up primary streets that offer direct and convenient travel distances; such as shopping areas, schools, parks, shopping centres and transit services; and 'minor' or *local* streets whose main function is to provide local access to properties.

D. Streets for People – Walking and Cycling

Streets should be designed primarily for people. Elements of designing streets for people include:

- The plan provides safe and convenient travel routes between important places in the community to encourage more walking and cycling.
- Integrate the pedestrian and cycling networks with the transit systems, surrounding city-wide network, important places in the community, adjacent neighbourhoods, and Allen Road
- There is availability within the road ROW for dedicated on-street bicycle lanes, and provisions for trees, benches, lighting and other high-quality pedestrian amenities, in addition to plentiful and secure bicycle parking as the design develops.

E. Auto Capacity and Neighbourhood Traffic Impacts

- Auto capacity will be sufficient to support existing and new development while managing traffic impacts on local neighbourhoods. Some portion of travel will still be made by car, and this capacity is provided in a balanced way with other modes. A more rigorous and quantitative traffic analysis is undertaken to test, analyze and refine the transportation network in the Emerging Preferred Plan.

Economic Evaluation Criteria

A. Development Blocks: Building Scale

The size and shape of development blocks should support economically viable and appropriately scaled buildings. Blocks should also provide appropriate configuration and sufficient space for servicing, access to sunlight, landscaped open space and tree planting.

B. Cost-Effectiveness

Financial costs of changes should be minimized. Energy system and infrastructure investment decisions should also be based on life cycle costs, which include both the initial capital expenditures and the cost of yearly operation, maintenance, energy and disposal over time.

Built Environment Criteria

A. Development Blocks: Location, Size, and Layout

The location, size, and shape of development blocks should provide sites for buildings that define the edges of streets, parks, and open spaces and provide overlook to ensure streets and parks are comfortable to use and safe for residents and visitors.

B. Transition to Neighbouring Development

There should be appropriate transitions between areas of different height, scale and intensity both within the Focus Area and between the Focus Area and neighbouring communities.

C. Tall Buildings and Population Density

Development blocks for taller buildings and higher populations should be located near TTC subway stations, and along larger-scale streets, like Highways, Major Streets and Primary Streets. These locations take advantage of transit and transportation infrastructure.

Social Environment Criteria

A. Density

Density in the Study Area should be appropriate to its location and role within the broader City.

B. Mixed Housing and Mixed Use

There should be a full range and mix of building types and densities (e.g. townhouses, mid-rise and tall buildings) and tenures (e.g. market, RGI, assisted, rental and ownership). There should also be a mix of land uses (residential, retail-commercial, and institutional) to provide opportunities for people to live, work, shop, and learn within the area.

C. Rental Replacement

There should be development sites provided for the replacement of all rent-geared-to-income rental units within the Focus Area.

D. Tenant Assistance

Toronto Community Housing tenants should receive an acceptable agreement for assistance and support through the revitalization process that meets or exceeds municipal and provincial guidelines.

E. Accessibility

The community will be planned to be physically accessible to people of different ages and abilities.

F.Affordable Rental Units

The plan should identify opportunities to increase the number of affordable rental units in the Study Area.

Parks and Community Facilities

A. Parkland Area

The plan increases the total area of parkland in the community to meet the requirements of the City of Toronto Alternate Rate of Parkland Dedication By-law. Where new development is proposed on existing parkland, the park will be replaced in the neighbourhood with a park of comparable or superior greenspace utility.

B. Park Types, Locations and Distribution

The park system serves existing and future residents by providing a range of park sizes and types distributed equitably throughout the community in visible and accessible locations. The range of park types includes at least one District Park, one Community Park, and a variety of Neighbourhood Parks. The range could also include parkettes and multi-use trails. New and existing parks are connected to the community and to the broader city via green streets and trail connections.

C. Community Facilities

The number, quality, and capacity of community facilities across the area have been increased and improved to serve existing and future residents. Major facilities are located on prominent, highly visible sites. Facilities are distributed equitably throughout the neighbourhood and are easily accessible by roads, transit, and pedestrian and cycling routes. The community centre is located within or adjacent to a district park or community park large enough to support active community uses.

D. Schools

Sites for TDSB and TCDSB elementary and secondary schools are of an appropriate size to meet the existing and future need for schools.

E. Recreational & Community Programming

The size and shape of parks should allow for a maximum range of programs, recreational facilities and community services, including both active and passive recreation, as well as opportunities for arts, culture, food programs and economic development. Parks should accommodate sites for a community centre, swimming pool, and other facilities that co-locate well with parkland. In order to maximize their use, parks should be of adequate size and shape to be efficiently programmed.

Natural Environment Criteria

A. Tree Canopy

The plan identifies opportunities to significantly increase the existing tree canopy and natural vegetation in parks and along public streets throughout the community.

B. Natural Environment

The plan reduces impacts on existing natural heritage and ecosystems and identifies locations where new natural vegetation and wildlife habitat should be incorporated into development.

C. Air Quality

The plan mitigates or avoids significant air quality impacts.

D. Noise

The plan mitigates or avoids significant noise impacts.

Cultural Environment

A. Aboriginal Peoples

In accordance with Phase 1 and 2 of the Municipal Class Environmental Assessment process, all Aboriginal Peoples potentially affected by redevelopment will have an opportunity to review and comment on option plans for the study area.

B. Cultural Heritage

The plan identifies and protects listed or designated cultural heritage resources within the plan area.

C. Archaeology

The plan identifies and protects areas of high archaeological potential within the plan area.

Sustainable Servicing

A. Green Community

Both primary and local streets are green and sustainable, improving the public realm, increasing the tree canopy and absorbing and reducing stormwater runoff. Sites and buildings will be designed in accordance with the Toronto Green Standard

B. Stormwater Management

The plan identifies opportunities to meet the City of Toronto Wet Weather Master Plan Guidelines for stormwater management. The plan also identifies additional opportunities to treat stormwater within the plan area, and treat external tributary stormwater from adjacent lands. The Plan recommends a stormwater management strategy that will implement treatment at the source.

C. Water and Wastewater

Water and wastewater systems will be implemented to meet the requirements of the proposed development plan. Existing water and wastewater systems that are in conflict with the plan will be decommissioned and removed. The plan allows for core trunk infrastructure to remain in place. The new water and wastewater systems will help to reduce constraints in the existing municipal systems.

D. Community Energy

The plan identifies opportunities for clean local energy generation and ways to minimize energy use (e.g. solar access, solar orientation and District Energy supportive).

E. Utilities

Implementation

A. Phasing Strategy

The plan has a logical and flexible implementation strategy that coordinates elements such as: transportation infrastructure, servicing, schools, parks, development and community facilities and minimizes impacts on existing surrounding neighbourhoods over time.

10.2 Evaluation Summary

This section summarizes the evaluation of the Option Plans. The more detailed evaluation can be found in the Appendix to this document.

Evaluation: Transportation

	Do Nothing	Option A	Option B	Option C
(A) Allen Road				

Do Nothing

- Generally, Allen Road corridor remains unchanged with no significant improvements.
- Poor intersection geometry, high traffic volumes and lack of protected crossing opportunities at the Lawrence Avenue West/Allen road intersections creates a poor environment for all transportation users: auto vehicles, transit vehicles, pedestrians and bicycles.
- Development not encouraged along Allen Road corridor due to the lack of public streets to access land parcels adjacent to the corridor.
- No new crossings of the Allen Road.

Option A and B

- Proposed multi-use greenways along each side of the Allen Road provide improved north-south pedestrian and bicycle routes and connections along the corridor.
- Three new proposed crossings of the Allen Road corridor.
- Development is located along the corridor to provide an improved relationship with active uses.
- Have flexibility with the surrounding streets and blocks to allow for potential future changes to the Allen Road corridor and the ramp intersections at Lawrence and Allen Road.

Option C

- No pedestrian or bicycle facilities proposed along the Allen Road corridor.
- Three new proposed crossings of the Allen Road corridor.
- Development is located along the corridor to provide an improved relationship with active uses.
- Have flexibility with the surrounding streets and blocks to allow for potential future changes to the Allen Road corridor and the ramp intersections at Lawrence and Allen Road.

	Do Nothing	Option A	Option B	Option C
(B) Transit-Supportive Development				

Do Nothing

- Existing development around the subway stations is generally not transit-supportive, like lower-density residential uses and auto-oriented retail uses with large amounts of surface parking.
- Pedestrian environment around the transit stations and surrounding development lacks a vibrant, high-quality public realm.
- Existing circuitous and disjointed street network is not supportive of surface transit routes and do not provide direct walking or biking routes to the subway stations.

Option A

- New retail and mixed-use, medium and higher density development is generally located near the two subway stations, with lower density uses outside a 500m radius.
- Grid-like road network improves transit operations. Some park land within 500m (5 minutes walking distance to the stations) which could be better served with TOD development such as retail, or high density residential.
- New Primary streets parallel to Allen Road help enable higher density development along the corridor.

Option B

- New retail and mixed-use, medium and higher density development is generally located near the two subway stations, however some portions of higher density development lies outside the desired 500m walking distance.
- Street grid improved but slightly more circuitous for bus operations along north/south road to the east of Allen Road.
- Some park land within 500m (5 minutes walking distance to the stations) which could be better served with TOD development such as retail, or high density residential.

Option C

- New retail and mixed-use, medium and higher density development is generally located near the two subway stations, however some portions of higher density development lies outside the desired 500m walking distance.
- Revised street grid improves station access. Circuitous routes for buses along north/south road to the east of Allen Road.
- Contains least amount of park land within 500m (5 minutes walking distance to the stations) of the three options which improves the TOD potential of this alternative.

	Do Nothing	Option A	Option B	Option C
(C) Public Streets: Connectivity and Circulation				

Do Nothing

- Block lengths are long in many areas (longer than 250m), and the curvilinear and indirect street network discourages walking.

Predominantly curvilinear neighbourhood Primary Streets, including Varna Drive and Flemington Road, characterized by off-set intersections and indirect travel routes, which reduce ease of circulation and wayfinding for all modes.

Option A

- Direct and legible Primary Street network on both sides of Allen Road.
- One new public street crossing the Allen Road improves east-west connectivity and circulation.
- No new public street connection at Rondale, Kirkland, or Ridgevale reduces connectivity and circulation between the two neighbourhoods.
- Two new public street connections to Yorkdale Shopping Centre improve connectivity and circulation, but have significant traffic impacts that require further study.
- New public street connection at Replin Road and Lawrence Avenue West improves connectivity and circulation with Lawrence Avenue West, but is not recommended due to its close proximity to the busy signalized intersection at Lawrence and Allen Road ramp.

Option B

- Less direct Primary Street on east side of Allen Road reduces legibility.
- One new public street crossing the Allen Road improves east-west connectivity and circulation.
- No new public street connection at Rondale, Kirkland, or Ridgevale reduces connectivity and circulation between the two neighbourhoods.
- Two new public street connections to Yorkdale Shopping Centre improve connectivity and circulation, but have significant traffic impacts that require further study.
- New public street connection at Replin Road and Lawrence Avenue West improves connectivity and circulation with Lawrence Avenue West, but is not recommended due to its close proximity to the busy signalized intersection at Lawrence and Allen Road ramp.

Option C

- Indirect Primary Streets on east and west sides of Allen Road reduces legibility.
- No new public streets crossing the Allen Road reduce east-west connectivity and circulation.
- No new public street connection at Rondale, Kirkland, or Ridgevale reduces connectivity and circulation between the two neighbourhoods.
- Two new public street connections to Yorkdale Shopping Centre improve connectivity and circulation, but have significant traffic impacts that require further study.
- New public street connection at Replin Road and Lawrence Avenue West improves connectivity and circulation with Lawrence Avenue West, but is not recommended due to its close proximity to the busy signalized intersection at Lawrence and Allen Road ramp.

(D) Streets for People: Pedestrians and Bicycles	Do Nothing	Option A	Option B	Option C
				

Do Nothing

- No improvements to pedestrian and bicycle infrastructure.

Option A

- Strong north-south pedestrian and bicycle route along Greenways on each side of the Allen Road.
- Two new pedestrian and bicycle crossings of the Allen Road corridor and one new public street crossing improves east-west movement for people walking and cycling.
- Improved pedestrian and bicycle connections at Kirkland, Ridgevale and Rondale improve east-west movement for people walking and cycling.
- Frequent protected intersection crossings for pedestrians and bicycles along Major Streets and Primary Streets.
- Pedestrian Routes are well-integrated with the parks system and the surrounding pedestrian and bicycle network outside the Study Area.
- Fine grain of streets and short block lengths creates good permeability for people walking and cycling.
- On-street bicycle lanes on all Primary Streets.

Option B

- Strong north-south pedestrian and bicycle route along Greenways on each side of the Allen Road.
- Two new pedestrian and bicycle crossings of the Allen Road corridor and one new public street crossing improves east-west movement for people walking and cycling.
- Improved pedestrian and bicycle connections at Kirkland, RIdgevale and Rondale improve east-west movement for people walking and cycling.
- Frequent protected intersection crossings for pedestrians and bicycles along Major Streets and Primary Streets.
- Pedestrian Routes are well-integrated with the parks system and the surrounding pedestrian and bicycle network outside the Study Area.
- Fine grain of streets and short block lengths creates good permeability for people walking and cycling, but more indirect north-south route on east side of Allen Road since route must go through the park instead of along public street..
- On-street bicycle lanes on all Primary Streets.

Option C

- No strong north-south pedestrian and bicycle route along the Allen Road.
- Three new pedestrian and bicycle crossings of the Allen Road corridor improves east-west movement for people walking and cycling.
- Improved pedestrian and bicycle connections at Kirkland, RIdgevale and Rondale improve east-west movement for people walking and cycling.
- Few protected intersection crossings for pedestrians and bicycles along Major Streets and Primary Streets.
- Pedestrian Routes are not well-integrated with the parks system and the surrounding pedestrian and bicycle network outside the Study Area.

- Fine grain of streets and short block lengths creates good permeability for people walking and cycling, however, legibility and direct routes are less clear since people must navigate between public streets and numerous off-street mid-block connections.
- Primary Streets do not provide direct and legible walking or bicycle routes.
- No bicycle lanes on Primary Streets.

(E) Auto Capacity and Neighbourhood Traffic Impacts	Do Nothing	Option A	Option B	Option C
				

Do Nothing

- The existing street network within the study area does not adequately provide auto capacity for proposed new levels of development.
- The existing transportation system in the Study Area does not enable a positive shift in travel behaviour from auto use to more sustainable uses of walking, cycling, and taking transit.

Option A, B, and C

- Preliminary traffic analysis work indicates that there are significant auto capacity constraints with each of the Options with the proposed levels of development.
- **Lower density of development is recommended and further testing and analysis is required.**

Option C

- The street network in Option C has the highest likelihood of potential negative neighbourhood traffic infiltration, due to its indirect and illegible Primary Streets.

Evaluation: Economic Environment

(A) Development Blocks: Building Scale	Do Nothing	Option A	Option B	Option C
				

(B) Cost-Effectiveness	Do Nothing	Option A	Option B	Option C
				

Evaluation: Built Environment

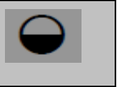
(A) Development Blocks: Location, Size, and Layout	Do Nothing	Option A	Option B	Option C
				

(B) Transition to Neighbouring Development	Do Nothing	Option A	Option B	Option C
				

(C) Tall Buildings and Population Density	Do Nothing	Option A	Option B	Option C
				

Evaluation: Social Environment

(A) Density	Do Nothing	Option A	Option B	Option C
				

(B) Mixed Housing and Mixed Use	Do Nothing	Option A	Option B	Option C
				

(C) Rental Replacement	Do Nothing	Option A	Option B	Option C
				

(D) Tenant Assistance	Do Nothing	Option A	Option B	Option C
				

	Do Nothing	Option A	Option B	Option C
(E) Accessibility				

	Do Nothing	Option A	Option B	Option C
(F) Affordable Rental Units				

Evaluation: Parks and Community Facilities

	Do Nothing	Option A	Option B	Option C
(A) Parkland Area				

	Do Nothing	Option A	Option B	Option C
(B) Park Types, Locations, and Distribution				

	Do Nothing	Option A	Option B	Option C
(C) Community Facilities				

	Do Nothing	Option A	Option B	Option C
(D) Schools				

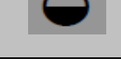
	Do Nothing	Option A	Option B	Option C
(E) Recreational and Community Programming				

Evaluation: Natural Environment

	Do Nothing	Option A	Option B	Option C
(A) Tree Canopy				

	Do Nothing	Option A	Option B	Option C
(B) Natural Environment				

	Do Nothing	Option A	Option B	Option C
(C) Air Quality				

	Do Nothing	Option A	Option B	Option C
(D) Noise				

Evaluation: Cultural Environment

	Do Nothing	Option A	Option B	Option C
(A) Aboriginal Peoples				

	Do Nothing	Option A	Option B	Option C
(B) Cultural Heritage				

	Do Nothing	Option A	Option B	Option C
(C) Archaeology				

Evaluation: Sustainability / Municipal Servicing

	Do Nothing	Option A	Option B	Option C
(A) Green Community				

	Do Nothing	Option A	Option B	Option C
(B) Stormwater Management				

	Do Nothing	Option A	Option B	Option C
(C) Water and Waste Water				

	Do Nothing	Option A	Option B	Option C
(D) Community Energy				

	Do Nothing	Option A	Option B	Option C
(E) Utilities				

Evaluation: Implementation

	Do Nothing	Option A	Option B	Option C
(A) Phasing Strategy				

11 Emerging Preferred Plan

After comparing and evaluating the four Option Plans, a number of preferred and non-preferred elements in each Option were identified. The preferred elements were combined to create an Emerging Preferred Plan, which is illustrated in Figures 21, 22, and 23.

The Emerging Preferred Plan was developed as an interim step prior to reaching the final Recommended Plan. This step in the process enabled the planning team to better incorporate community feedback on the Option Plans by separating the elements of each Option Plan that community members liked best from those they did not prefer.

In developing an Emerging Preferred Plan, the City, Toronto Community Housing and the consulting team were able to balance the most successful elements emerging from the evaluation of Option Plans and blend them into a single Plan that was carried forward for further testing and evaluation.

Figure 21: Emerging Preferred Plan – Proposed Street Plan

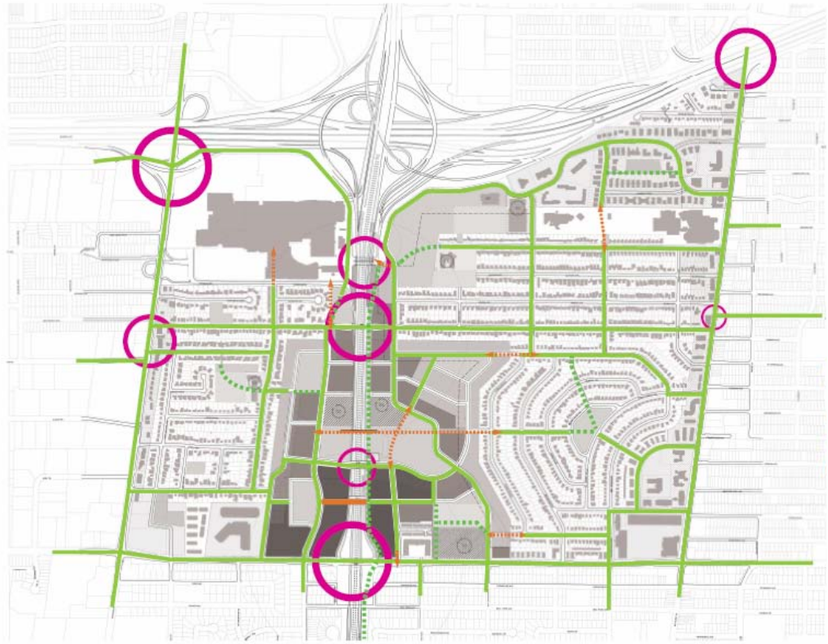


Figure 22: Emerging Preferred Plan – Proposed Pedestrian Plan

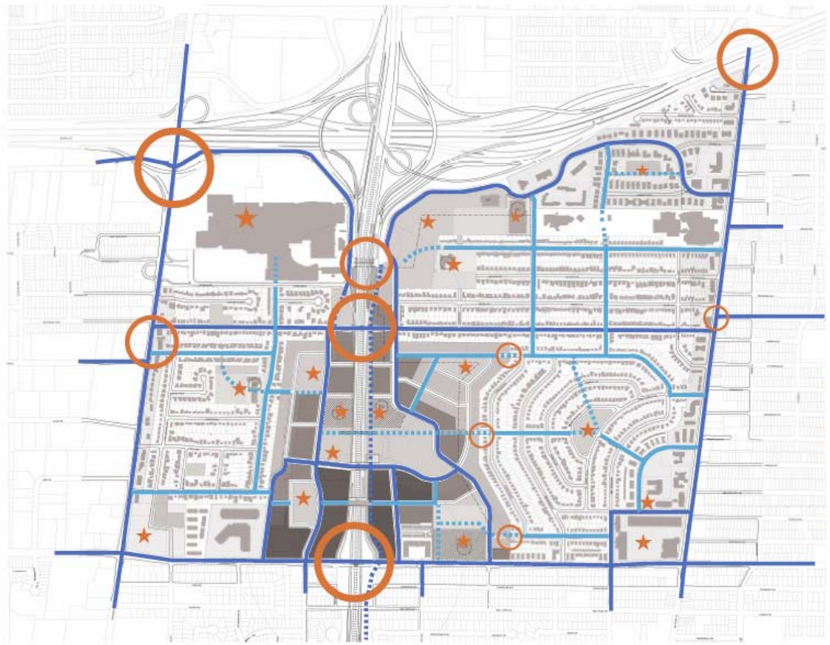


Figure 23: Emerging Preferred Plan – Proposed Bicycle Plan

Key Features of the Emerging Preferred Plan

The Community Park

The central location of the Community Park in the Emerging Preferred Plan results, in part, from a strong community preference to reconnect the Lawrence Heights neighbourhood with a park spanning the Allen Road corridor. An evaluation of the centrally-located Community Parks shown in Options B and C confirmed the viability of this park configuration in terms of its ability to provide an adequate amount of parkland and functional programming options.

The Emerging Preferred Plan provides increased parkland on the west side of Allen Road over both Options B and C in order to ensure both sides of the Lawrence Heights neighbourhood have equitable access to the Community Park. It also includes a community centre on the west side, in a visible location that is accessible by transit. Surrounded by Primary Streets, the Community Park also supports midrise and taller buildings, directly adjacent to this important public amenity. Most importantly, the central location of the Community Park reflects its role as the focal point and main organizing element of the Community Commons.

Neighbourhood Parks

While there was a strong preference for a centrally-located Community Park among community members, in discussions about the Option Plans, an equally strong preference for an equitably distributed network of Neighbourhood Parks emerged. The evaluation of Option Plans indicated that a distributed network of parks (as shown in Option A) could satisfy criteria for increased parkland, functional programming, and parkland accessibility. A distributed network of Neighbourhood Parks cannot, on its own, provide the focal point required for the development of a successful Community Commons. However, in the Emerging Preferred Plan, Neighbourhood Parks are linked to the Community Commons by pedestrian and cyclist pathways and green streets, enhances the accessibility and use of the Commons by providing safe and direct connections from all surrounding neighbourhoods. Importantly, Neighbourhood Parks both provide neighbourhood-scale focal points in the four neighbourhoods surrounding the Community Commons and they are configured to accommodate recreational facilities and programs.

The Community Commons

The Emerging Preferred Plan includes a vibrant central public space in the ‘heart’ of the community along Flemington Road, called the Community Commons, The concept of a Community Commons emerged through extensive consultation with the community who wanted a central public space that could provide opportunities for recreation, high-quality community facilities, and convenient neighbourhood retail. Community members also wanted a central gathering place in the neighbourhood to provide a setting for social interaction that would strengthen community cohesiveness and identity. The co-location of community facilities also meets several planning objectives by optimizing available land, encouraging a mix of uses, providing high-quality community facilities and services in easily accessible locations; and enhancing the quality of parkland.

The Greenway

A key objective of the plan is to enhance neighbourhood connectivity. The Greenway included along both sides of Allen Road in the Emerging Preferred Plan contributes to the overall connectivity of the area. In particular, the Greenway provides a direct north-south connection between Yorkdale and Lawrence West subway stations along Allen Road, and connections to the parks, community facilities and schools located within the Community Commons. The east Greenway, which will be included in the City’s total parkland dedication for the Focus Area, will provide a safe option for pedestrians and cyclists to move along Allen Road, animating the space between taller buildings along the corridor and the road itself.

Community Facilities and Schools

The Emerging Preferred Plan provides a full range of community facilities to serve existing and future residents, and distributes these facilities throughout the community for more convenient access. In doing so, it addresses community input regarding the need for high quality, central and accessible facilities. A community centre and two schools are located within the Commons. School sites address the needs of both the Toronto District School Board and the Toronto Catholic District School Board. The Emerging Preferred Plan also provides for a new aquatic centre, either in the Commons, as an addition to the existing Baycrest Arena, or within a redeveloped Bathurst Heights school.

Primary Streets

The Emerging Preferred Plan includes a direct network of Primary Streets that can accommodate the movement of all modes of transportation through the community. Community members expressed a preference for a street network that would provide convenient routes to and through the community, particularly for surface transit, but emphasized the need to limit vehicular traffic through their neighbourhoods. The Primary Street network shown in the Emerging Preferred Plan is closest to that shown in Option B, and has the ability to provide both traffic calming and wayfinding functions. To ensure efficient surface transportation routes, appropriate block configurations and locations for mid-rise and taller buildings, and vehicular traffic management, the Primary Street network shown in the Emerging Preferred Plan retains its curvilinear character in some areas (e.g. Flemington Road around the Community Park), and is grid-like in others (e.g. west of Allen Road).

Density

The Emerging Preferred Plan significantly reduces the total number of units proposed for the Focus Area over the Option Plans. This is the result of extensive testing of the options, including a traffic c impact assessment, as well as strong and consistent community input regarding a desire for reduced unit counts and density. While each of the Option Plans can accommodate up to 10,500 units, the Emerging Preferred Plan proposed 7,500 units within the Focus Area. In some cases, density was reduced on a block-by-block basis in the Emerging Preferred Plan in order to provide adequate transition from mid-rise and taller buildings to low-rise building types. As well, the Emerging Preferred Plan balanced the objective of encouraging transit-supportive development around Yorkdale and Lawrence West subway stations with the need to ensure that the character of development around subway stations is compatible with the existing context.

Mid-rise and base building heights

Review of the building massing proposed in the Option Plans also identified that the heights of mid-rise buildings and the bases of tall buildings, as modeled in the Option Plans, required refinement to ensure good sunlight, sky view, and proportion to the streets. The Emerging Preferred Plan limits the heights of these buildings to the width of the facing street, regardless of the front setback, resulting in mid-rise buildings ranging in height from 6 to 8 storeys. Base buildings of tall buildings would be defined by the same height limits.

Transitions

The Emerging Preferred Plan confirms the built form principles employed in the development of Option Plans. Appropriate transition between existing low-rise neighbourhoods and new townhouse development within the Focus Area is regulated by a 75 metre transition zone.

Additional Traffic Analysis

Based on the traffic analysis undertaken on the four Option Plans, none could provide sufficient traffic capacity for the levels of development density proposed.

Further traffic analysis testing was completed using the Emerging Preferred Plan and reduced levels of density. The detailed results of this additional analysis are outlined in the *Traffic Assessment for Emerging Preferred Plan* report and can be found on the City's project website. Key conclusions are as follows:

- The Emerging Preferred Plan can reasonably accommodate a proposed development scenario of up to 5,500 new market residential units built out gradually over the next 20 years, and that additional development to achieve an upper limit of 6,300 new residential units will require continuous monitoring and further study as development proceeds over time.
- The ability of the area to accommodate this increased density relies heavily on the plans and policies of the future Secondary Plan and infrastructure improvements identified in the supporting Transportation Master Plan that will recognize that:
  - Significant improvements and investments are required to the transportation infrastructure in the area (improved public street network, improved pedestrian and bicycle facilities, and better access to transit) to encourage a significant shift in travel patterns in the area from primarily auto-oriented travel use towards increased transit, walking and cycling use.
  - Even with significant improvements and investments in transportation infrastructure, it is expected that many key streets and intersections in the Study Area will continue to experience congested traffic conditions during the Weekday Morning and Afternoon Peak Hours.
  - Additional traffic analysis will be performed as each development phase occurs over time, to better understand any changing travel patterns in the area or increases in background traffic, and to ensure that the transportation system is able to accommodate the proposed development phase.
  - The Lawrence Avenue West and Allen Road Ramp intersections are currently the primary areas of traffic congestion and that there will be a more robust traffic study undertaken to analyze potential changes to the Allen Road as part of the future recommended Allen Road Individual Environmental Assessment Study.
  - The impacts of auto traffic are just one component of a transportation system and that auto impacts cannot be “solved”, but are instead managed in an effective and balanced way that also considers other city-building objectives.
  - Local streets have not been relied upon to provide auto capacity to accommodate this proposed new development.
- There are several other future transit initiatives underway in this area of the City, such as the Toronto-York Spadina Subway Extension (TYSSE), Eglinton Crosstown, and the potential for future surface transit improvements along the surrounding Avenues in the Study Area, which will all help change the long-term travel patterns in the area over time. The Toronto Transit Commission (TTC) is also undertaking Station Modernization Studies for the Lawrence West and Yorkdale subway stations to improve pedestrian and bicycle access and encourage additional ridership.

12 Recommended Transportation Master Plan

The Recommended Transportation Master Plan presents a framework that provides more balanced transportation system in the Study Area.

The TMP consists of recommended plans and policy directions in the following key transportation-related components:

- Allen Road
- streets
- pedestrians
- bicycles
- transit
- preliminary street designs
- policy recommendations to support the Secondary Plan
- EA Schedule

These elements are discussed in more detail in the following sections.

General Policy Directions

- **The Secondary Plan should support the broad vision, goals, and objectives of the Transportation Master Plan (TMP), which is to re-balance the transportation system for all modes of travel, including walking, cycling, transit use, and car use.**
- **The Secondary Plan should include policies that identify specific transportation infrastructure improvements required to support existing and future development in the Study Area.**
- **The Secondary Plan should provide a flexible short and long-term implementation framework to ensure required transportation infrastructure is provided as development proceeds over time.**
- **The Secondary Plan should respect that future Municipal Class EA phases will be required to be undertaken for specific pieces of transportation infrastructure.**
- **All improvements to the transportation system in the Secondary Plan Area should be developed as integral extensions to the City's existing and planned transportation systems.**

12.1 Allen Road

The Allen Road corridor will be transformed by redefining its use and purpose, beautifying it, and integrating it into the surrounding community. The Allen Road will become a more sustainable transportation corridor by re-balancing the auto-oriented right-of-way to improve transit, pedestrian, and cycling infrastructure along the corridor, and to help promote non-auto travel behaviour.

The Recommended Transportation Master Plan begins to set out a framework to address some of the existing issues with the Allen Road corridor and to enable its future transformation into a better public space that has a more positive relationship with the surrounding community. Transformation of the Allen Road is a long-term change that is expected to happen over a number of years as revitalization occurs gradually over time. The recommended TMP has the flexibility to allow for future improvements and investments to the corridor, which may be implemented upon completion of an Individual Environmental Assessment.

Until an EA can be undertaken, it is recommended that the boundary limits of the Allen Road right-of-way remain at its existing widths, which vary between approximately 50m to 150m at the ramp intersections at Lawrence Avenue West.

However, there may be some possible short-term improvements that may be able to be undertaken to improve the corridor.

The Recommended TMP initiates these investments by incorporating Greenways as part of the park system, a 10-metre wide linear park on the east side of Allen Road that will provide a landscaped pedestrian and cyclist route north-south through the neighbourhood alongside Allen Road. The Greenway formalizes an informal route that currently exists and will provide a positive interface between the highway and adjacent residential development. On the west side of Allen Road, there is potential for a similar pedestrian and cycling route to be secured as publicly accessible open space on private land.

Some other potential improvements could occur at the Lawrence West and Allen Road Ramp intersections. For example, the channelized right turn lanes from the Allen Road off-ramp could be removed and replaced with more standard right turn lanes. This would help improve pedestrian safety and reduce vehicles speeds, although a reduction in traffic capacity should be considered. There would also be the potential to provide signalized crosswalks on standardized intersection approaches, and some extra land could be freed for other uses as well.

Another possible improvement could be to remove the Allen Road ramps on the south side of Lawrence Avenue West. They are not heavily used and could be removed with little impact to vehicle traffic flow and would help improve traffic signal operations and pedestrian access to the subway station entrance. This new land could be used for any number of purposes: TTC station and bus terminal improvements, possible buildings, or a bicycle parking facility. It is recommended that this be considered as part of a future Allen Road EA.

Policy Directions

- **The City should initiate an Individual Environmental Assessment for the Allen Road corridor, using the Allen Road Technical Feasibility Study as a starting basis.**
- **The Secondary Plan should maintain the existing Allen Road right-of-way widths unchanged until the outcome of the EA Study.**
- **The Secondary Plan should incorporate a 10m Greenway along public lands on the east side of the Allen Road corridor and explore achieving a Greenway on the west side of the Allen Road, on private lands.**
- **The City should explore potential short-term improvements that may be able to occur without a full EA, such as at the ramps at Lawrence Avenue West..**
- **Development in the Secondary Plan Area can still occur prior to the completion of any Allen Road EA Study, but should be consistent with the goals and objectives developed for the Allen Road corridor.**

12.2 Streets

The public street network should have a legible hierarchy of street types to provide direct and convenient routes for all users (pedestrians, cyclists, buses, and cars) and that is well-integrated with the surrounding public street network. There should also be new and improved pedestrian, bicycle, auto, or green connections to and across the Allen Road.

The Transportation Master Plan contains a Recommended Streets Plan in Figure 25 that presents a new public street network for the Study Area with a legible hierarchy of street types that provides improved connectivity and circulation for all users and that is well-integrated with the surrounding existing public street network.

New public streets can be divided into functional segments that ensure a flexible phasing strategy over time. New public streets and associated minimum right-of-way widths are as follows:

Primary Streets

Marlee from Lawrence to Flemington	[new link, 27m]
Marlee from Flemington to Ranee	[new link, 27m]
Blossomfield from Lawrence to Marlee	[existing link, modified ROW, 27m]
Flemington between Marlee and Varna	[existing link, modified ROW, 27m]
Varna from Lawrence to Flemington	[new link, 27m]
Varna from Flemington to Ranee	[new link, 27m]
Varna from Ranee to Neptune	[new link, 27m]

Local Streets

New local streets	[18.5m to 20m]

Public Lanes

New public lanes	[6m]

Policy Directions

- **The Secondary Plan should adopt the Recommended Streets Plan and associated right-of-way widths outlined in this TMP.**
- **The Secondary Plan should include policies regarding ppublic streets to they are designed as vital public spaces with distinct identities and will act as lively urban connections as well as allowing traffic flow. The spatial needs of motorists in the public right-of-way should be balanced with efficient transit service and high-quality amenities for pedestrians and cyclists.**
- **The exact location, alignment, and design of each new Primary Street will be refined through remaining phases of the Environmental Assessment process.**
- **The Secondary Plan should contain policies to create a fine grain of Local Streets to create useable development blocks and a permeable walking environment within the Secondary Plan Area. The exact layout and pattern of Local Streets is flexible and will be determined in more detail as individual Phases of development come forward for review and approval.**
- **The connections at Kirkland, Rondale, and Ridgevale will be improved for pedestrians and bicycles, and a public right-of-way width of 20m will be secured.**
- **The connection at Replin Road and Lawrence Avenue West will be improved for pedestrians and bicycles, and a minimum public right-of-way of 20m will be secured.**
- **There will be no new auto connections between Yorkdale Shopping Centre and the surrounding neighbourhoods.**

Figure 24: Existing Street Network

Figure 25: Recommended Street Network

12.3 Transit

There should be several complete neighbourhoods with higher-density, mixed-use buildings located within convenient walking and cycling distance to subway stations and bus routes, with lower-density buildings located further away. Access to subway stations should be improved for people walking and cycling.

The Recommended Transit Plan is illustrated in Figure 27. The Lawrence West and Yorkdale subway stations form the backbone of the transit system, while the bus routes along Major Streets in the Study Area (Lawrence Avenue West, Bathurst Street, and Dufferin Street) support the higher-order subway service, as do the local bus routes along the proposed new, more direct Primary Streets.

The proposed new pedestrian and cycling network also helps support the transit system in the Master Plan by improving access routes to the subway stations and surface transit routes. Routes are direct and convenient and provide a variety of routes to and from subway station entrances and bus stops.

The Plan also locates the majority of proposed new development within 500m of a subway station, to further encourage transit use.

Subway Stations

Access needs to be improved at Lawrence West and Yorkdale subway stations in order to take advantage of the investment in transit infrastructure and to address the existing issues outlined earlier in this TMP.

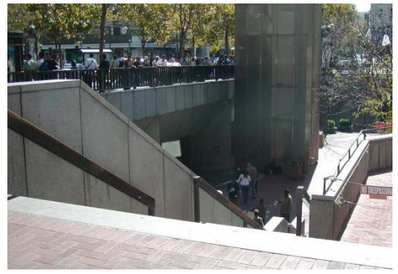
For example, at Yorkdale station, the poorly lit underpasses and narrow sidewalks near the entrances need to be improved to help improve accessibility to transit. Connections between the Yorkdale Shopping Centre also need to be improved. At Lawrence West station, the busy ramp intersections need pedestrian improvements and opportunities exist to relocate or redesign the bus terminal to improve bus operations.

Bus Transit

The Recommended Street Plan will improve bus operations by providing more direct routes to key destinations in and outside the Study Area, like schools, community centres, and shopping areas.

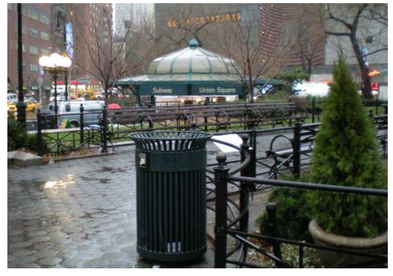
Buses connect residents, employees, and visitors from the surrounding area to the site itself. Buses also complement the street-level pedestrian and cyclist system by providing additional site circulation that “extends the feet” and fills the demand for movement without relying on a private vehicle. Bus service is proposed on all primary streets and some local streets where service exists today. Key features of high quality bus service are:

- High frequency service
- Transit priority
- Dedicated lanes
- Connectivity
- Clean fuel vehicles that integrate with pedestrians and non-motorized transport
- Clear and intuitive wayfinding
- Bus stop amenities including wide sidewalks providing access to the stop, seating, lighting, covered shelters, wayfinding, etc.



Below grade subway access opening up to plaza

Covered bus shelter with seating, wayfinding



Subway station within pedestrian plaza and park

Real-time transit information at bus stops

Figure 26: Examples of Transit Amenities

Policy Directions

- **The Secondary Plan should adopt features of the Recommended Transit Plan.**
- **The Secondary Plan should include policies to locate density close to transit and encourage a mix of land uses that are well-integrated with transit facilities.**
- **The Secondary Plan should encourage lower parking standards in new developments.**
- **Subway station studies should be undertaken to explore in more detail potential improvements to the Lawrence West and Yorkdale subway stations to improve access for transit riders.**
- **Bus routes and service frequency should be re-evaluated as new Primary Streets are implemented over time.**
- **Bus stops should be designed to provide seating, protection from the elements and provide transit route maps and other wayfinding elements. At key bus stops, real-time information should be considered to provide passengers with accurate bus arrival times and to allow waiting passengers to make informed travel decisions.**

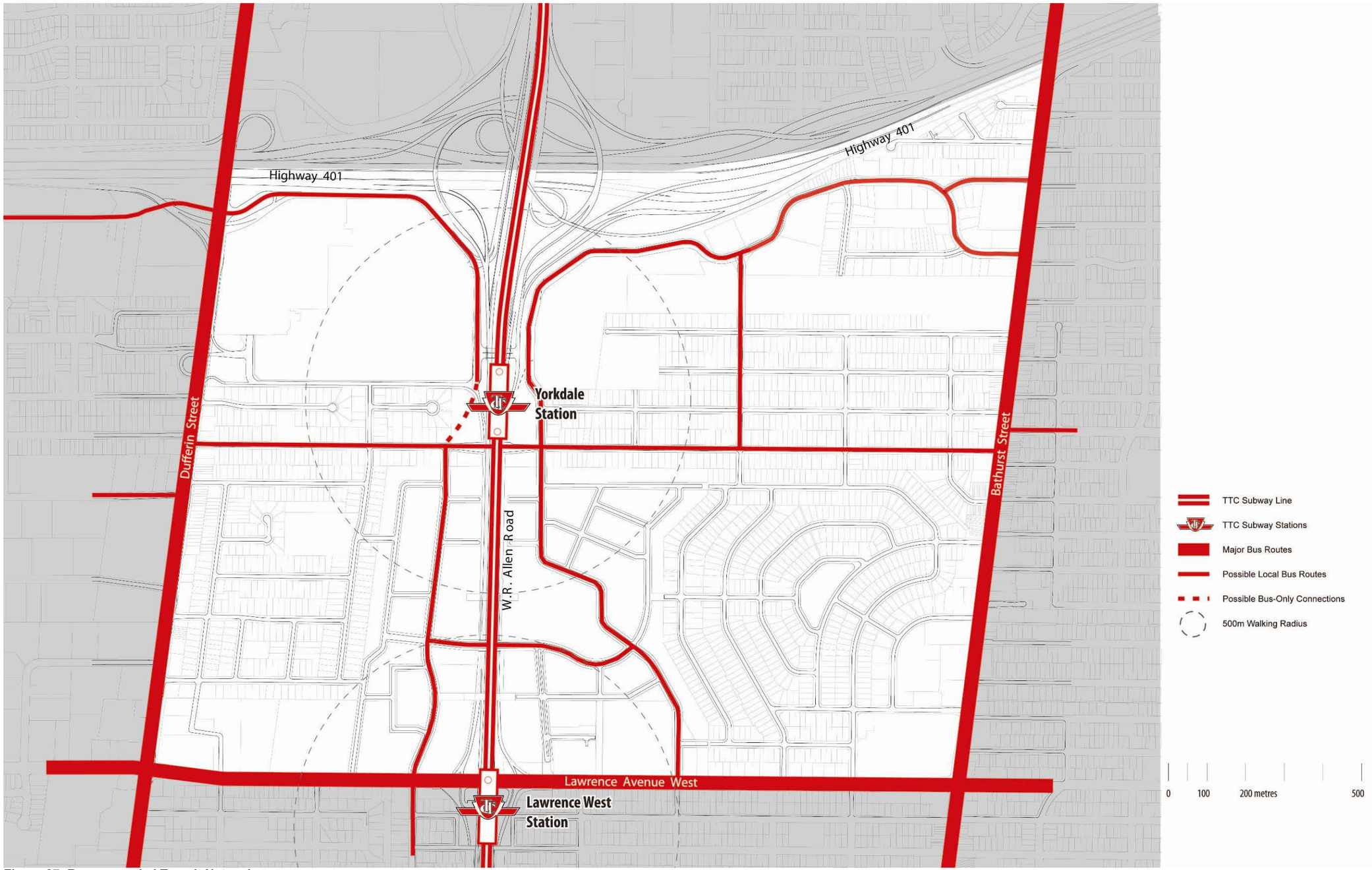


Figure 27: Recommended Transit Network

12.4 Pedestrians and Bicycles

Public streets and other important public spaces should be designed primarily for people to travel safely walk and bicycle, with wide sidewalks, bicycle lanes, trees, and comfortable places to sit. Streets should be designed to slow down traffic speeds with narrow lanes, on-street parking, and other high-quality traffic-calming elements.

Pedestrian and bicycle infrastructure improvements in the Study Area will generally be consistent with the following principles:

- Provide connected networks of direct walking and cycling routes for people to travel easily between important destinations in the Study Area that are integrated with the surrounding existing and planned City walking and cycling networks.
- Provide direct, convenient, and attractive pedestrian and bicycle routes to subway stations and bus routes in the transit system in the Study Area that are integrated with the streets and open space networks.
- All public and private spaces will be designed to be barrier-free and universally accessible for people of all ages and abilities.
- The safety of pedestrians and bicycles at intersections will take precedence over all other modes of transportation.
- Spaces for pedestrians and bicycles will have a high-quality design and excellent amenities at important neighbourhood destinations.

The recommended pedestrian network is shown in Figure 31 and provides a well-connected network of pedestrian-oriented travel routes between important pedestrian destinations and places throughout the Study Area. It is comprised of different types of **Pedestrian Routes** and **Pedestrian Priority Areas**.

Pedestrian Routes

Major On-Street Routes: These are important pedestrian travel routes along the Major Streets and Primary Streets in the Study Area. These routes have wider sidewalks with generous tree canopies and provide the most direct travel routes throughout the Study Area. Many important places are along these routes, including community parks, shopping areas, community centers, schools, subway stations and bus stops.

Major Off-Street Routes: These are important pedestrian travel routes through parks that connect with the Major On-Street Routes. They also include the pedestrian and bicycle multi-use Greenway trail along the Allen Road.

Minor On-Street Routes: These are key pedestrian travel routes on Local Streets that help provide a finer grain of walking routes within the neighbourhood. Minor routes are also travel routes between adjacent neighbourhoods

Minor Off-Street Routes: These are routes through the smaller parks within the Study Area that help provide a fine grain of travel paths. They often are located through school yards, neighbourhood parks, and mid-block connections.

Wide, active sidewalks with lighting, landscaping

Wide, well-lit pedestrian underpass

Unique pedestrian bridge

Well-lit pedestrian tunnel with public art

Figure 28: Examples of Pedestrian Routes

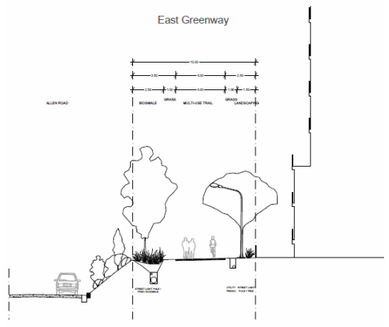


Figure 289: Possible Greenway cross-sections

Pedestrian Priority Areas

Pedestrian Priority Areas: These are places where increased pedestrian activity is expected and where pedestrian infrastructure improvements will be required over time. Possible improvements could include:

- Wide and well-lit sidewalks/paths
- Street furniture for pedestrians
- Clearly striped crosswalks
- Curb bulbs and pedestrian countdown signals
- Traffic calming measures
- Additional seating areas
- Improved intersection crossings with reduced distances
- High-quality paving materials
- Wayfinding signage

Wide and well-lit sidewalks/paths

Pedestrian countdown signals, landscaping

Wide station undercrossing with landscaping

Fixed directional signs for pedestrians

Figure 29: Examples of pedestrian amenities

Bicycle Routes

The Proposed Bicycle Plan is comprised of a comprehensive network of on-street and off-street Bicycle Routes and Bicycle Priority Areas and is shown in Figure 322.

Major On-Street Routes: These are bicycle lanes on all Major Streets and Primary Streets in the Study Area. They allow for safe and convenient bicycle travel between important neighbourhood destinations, especially ones where it is likely that people will cycle to, like schools, parks, and community centers.

Major Off-Street Routes: These are key routes through larger parks that connect with the major on-street routes. This also includes the Greenway along the Allen Road.

Minor On-Street Routes: These are neighbourhood travel routes and are just signed routes with no bicycle lanes.

Minor Off-Street Routes: These are routes through smaller parks and school yards and open space that may also be signed routes.

In general, on-street bicycle lanes are proposed on all new Primary Streets along with a continuous cycling network of signed routes on some Local Streets where low vehicular traffic is anticipated. In addition to on-street bicycle lanes and signed routes, the bike network is extended by off-street paths, including the new green crossing over Allen Road for pedestrians and cyclists and the continuous north-south greenway along both the east and west side of Allen Road, between Yorkdale Station and Lawrence Avenue West, improving connectivity to both TTC stations and the proposed high density development along the corridor. These shared use bicycle and pedestrian paths will have lighting and a considerable landscaped buffer from Allen Road. Adjacent to Varna Drive, north of Regina Avenue, a new off-street path is proposed along the northern edge of Baycrest Park, connecting to Neptune Drive.

The proposed bicycle network connects to both existing and proposed bicycle routes in the regional network. The on-street bicycle lane on Ranee Avenue connects to a proposed shared roadway on Bentworth Avenue to the west, and an existing shared roadway on Ridgevale Drive (via Ameer Avenue) to Fairlawn Avenue to the east. Dedicated lanes on Varna Drive and Lawrence Avenue West will link to the existing shared roadway on Englemount Avenue to the south, just east of the Lawrence Avenue West / Allen Road station.

Cycling is a zero-carbon emissions mode with little negative impact on the environment. It achieves further environmental benefit by reducing traffic congestion- shifting trips from cars to bicycles. Reducing the available space for vehicles by adding bicycle lanes and widening sidewalks encourages a shift to less congested modes. Cycling is an important alternative to automobile travel. A comprehensive and well-connected bicycle network of on-street bicycle lanes and dedicated paths that connect to existing facilities encourages biking as a viable transportation mode. Bicycle lanes should ideally be separated from traffic through a physical barrier or landscaping, creating safe and dedicated spaces for bicycles, pedestrians and vehicles.

Bicycle Priority Areas

Bicycle Priority Areas are places where increased bicycle activity and higher demand for bicycle parking are expected and where bicycle infrastructure improvements will be required over time. Possible improvements could include:

- short-term and long-term bicycle parking facilities
- public bicycles or public bicycle-share stations
- bicycle boxes at intersections
- other innovative bicycle-related infrastructure.

Secure and plentiful bike parking should be located at TTC stations, Yorkdale Shopping Center, Lawrence Square Mall, schools, and other key destinations. Provisions for bicycle parking should be coordinated with TTC and major land owners to encourage biking as a viable means of transportation. A bicycle sharing system with locations at these major destinations may also encourage biking for those who do not own a bicycle. At the time of writing this report, TTC had announced their financial and time commitment to study access improvements to both the Yorkdale and Lawrence West TTC stations. It is recommended that this study will incorporate secured bike parking located around Lawrence Avenue West Station and both entrances to Yorkdale Station, and an improved Ranee Avenue underpass and sidewalks approaching the entrances to Yorkdale Station.

Covered bicycle parking with cycling map


Dedicated on-street bicycle lane and bicycle box

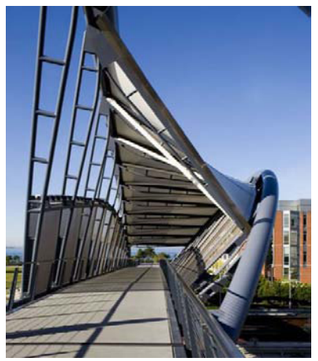

Unique pediestrian/bicycle crossing

Figure 30: Examples of Bicycle Amenities

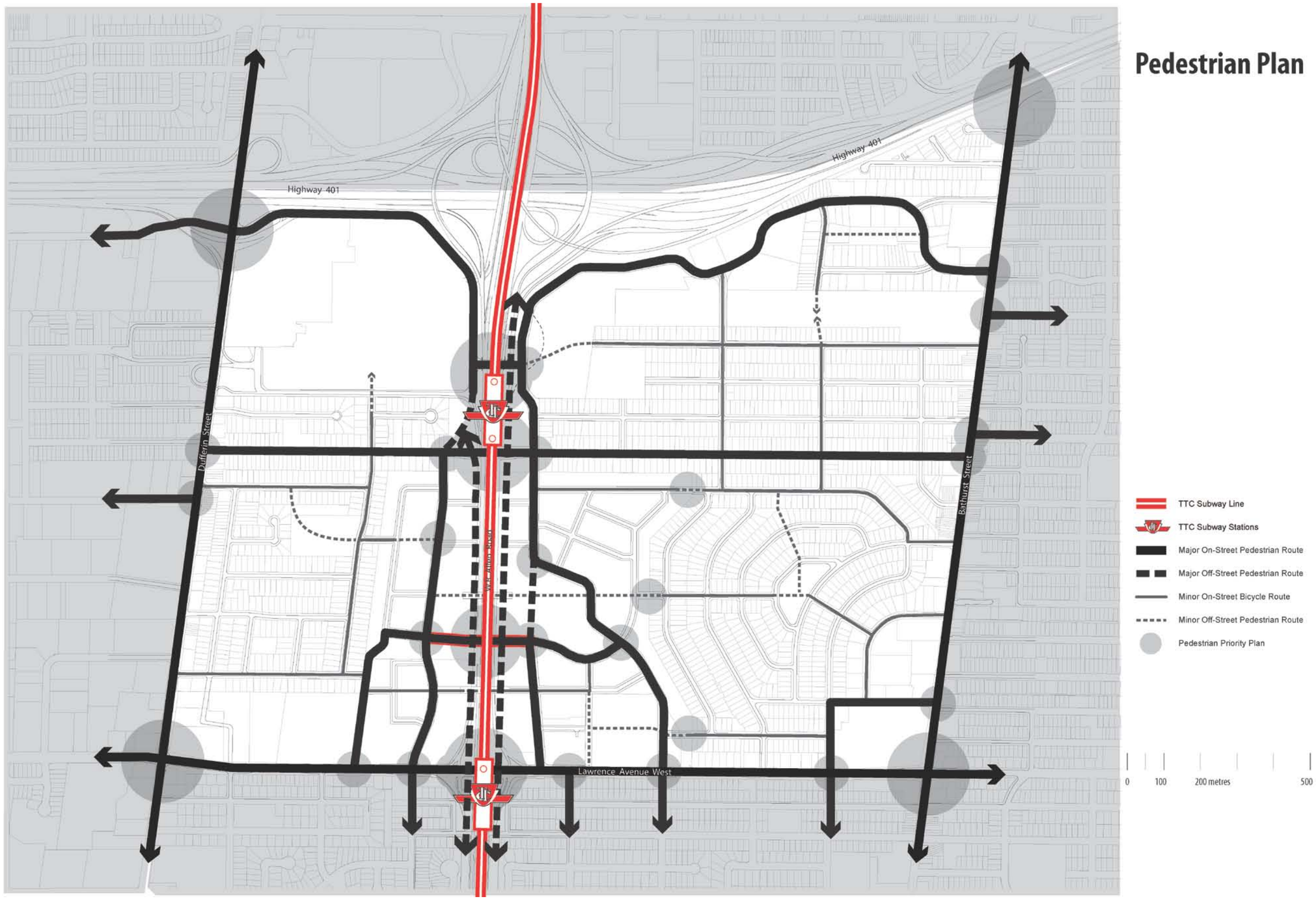


Figure 311: Recommended Pedestrian Network

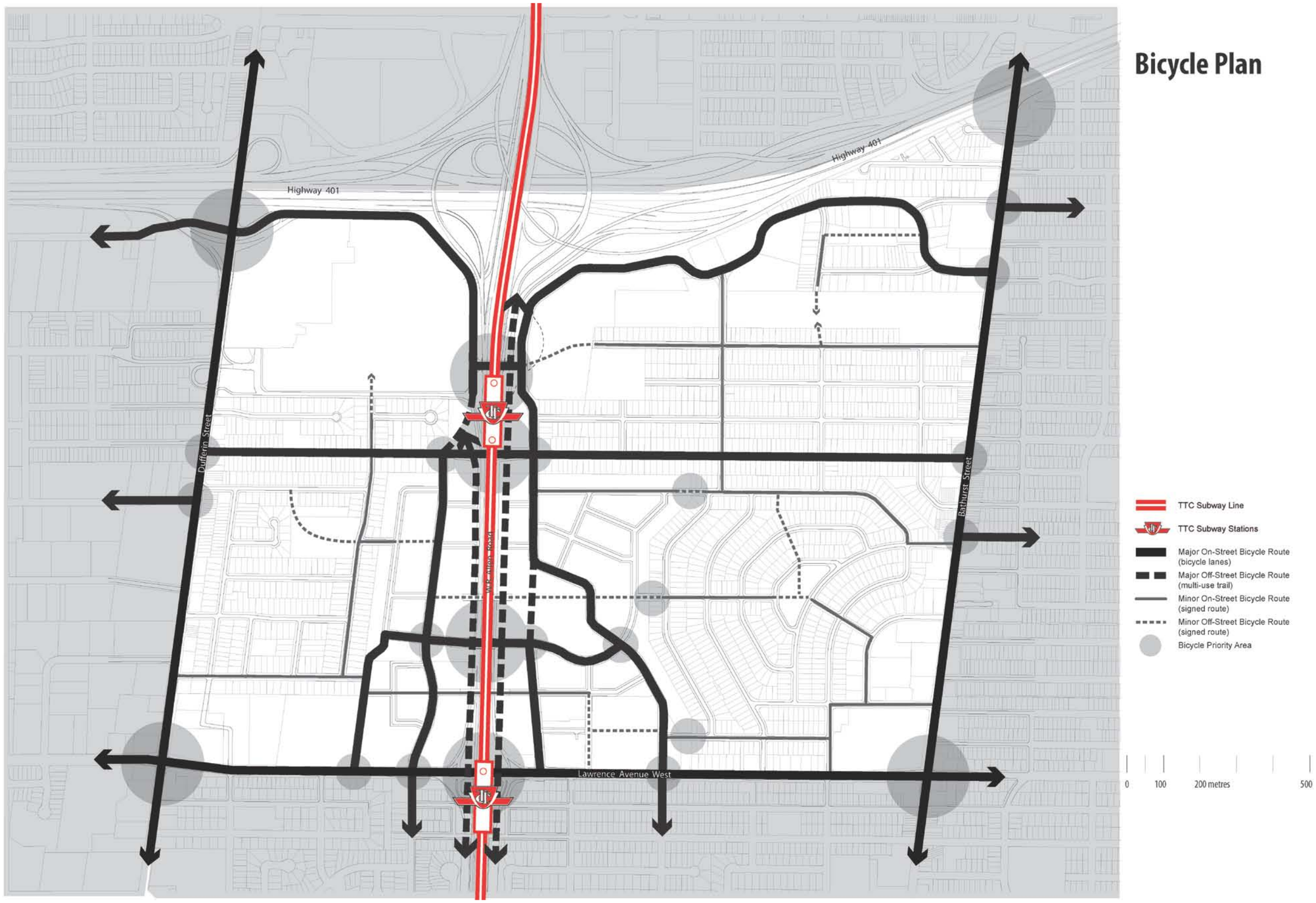


Figure 322: Recommended Bicycle Network

12.5 Auto Capacity and Neighbourhood Traffic Impacts

Significant new development should rely on rebalancing travel patterns away from auto use and increasing walking, cycling, and transit use. Sufficient auto capacity will be provided to support existing and new development while managing traffic impacts on local neighbourhoods

Transportation Impact Studies

As development proceeds over time, required transportation infrastructure will be identified and implemented in a manner which is functionally integrated with the existing transportation system and co-ordinated with required municipal servicing to the satisfaction of the City.

One element to assist in this process is a Transportation Impact Study that must be submitted, which:

- identifies required transit, vehicular, pedestrian, and cycling infrastructure improvements and opportunities consistent with the Lawrence Allen Transportation Master Plan and other applicable City policies, guidelines and requirements;
- assesses the impacts of the District on the transportation system and demonstrates that development traffic will not significantly reduce the level of service of the public street network by providing a **Traffic Certification,** where a qualified transportation consultant must attest that:
    - The proposed development can be accommodated by the existing and planned transportation infrastructure in the Secondary Plan Area, taking into account all existing and approved development in the Secondary Plan Area.
    - The proposed development will provide sufficient parking for residents and visitors, but does not provide parking at a level that discourages the achievement of a balanced transportation system.
    - The physical layout of development sites minimizes driveway curb cuts, arranges parking and loading areas at the rear of buildings, and provides clear and direct pedestrian circulation routes. In addition, rear public lanes or shared private driveways are use instead of direct driveway access from the street.
- identifies transportation improvements or mitigating measures to address transportation impacts;
- demonstrates that the proposed development parking supply rates are transit-supportive and conforms with the policies of this Secondary Plan; and
- identifies measures to assist in reducing vehicular trips.

Transportation Monitoring Program

Also, as part of the Transportation Impact Studies, a transportation monitoring program should also be developed and undertaken with area stakeholders to monitor the development levels and associated travel patterns and characteristics. The monitoring program should include the following elements:

- traffic volumes on public streets and at key intersections, based on periodic traffic counts in the area;
- travel characteristics of employees, residents and visitors, including vehicle occupancy, modal split, trip distribution and peak hours of travel;
- evaluation of traffic volumes and transit ridership in the context of available capacity;
- parking availability, location and the impacts of pricing policies;
- evaluation of existing, planned and proposed development; and
- traffic infiltration in residential areas.

The findings of the transportation monitoring program should form the basis of future comprehensive transportation analyses, will inform the periodic reviews of the Secondary Plan, and may be considered in the review of individual development applications and the development of local neighbourhood traffic management plans.

12.6 Preliminary Street Designs

Major Streets

Major Streets are not expected to change much as a direct result of this Master Plan. Growth and change expected on Major Streets will be dealt with through detailed Avenue Studies, as required by the City's Official Plan, which will examine land use implications and possible modifications to the public street right-of-way cross-section.

Primary Streets

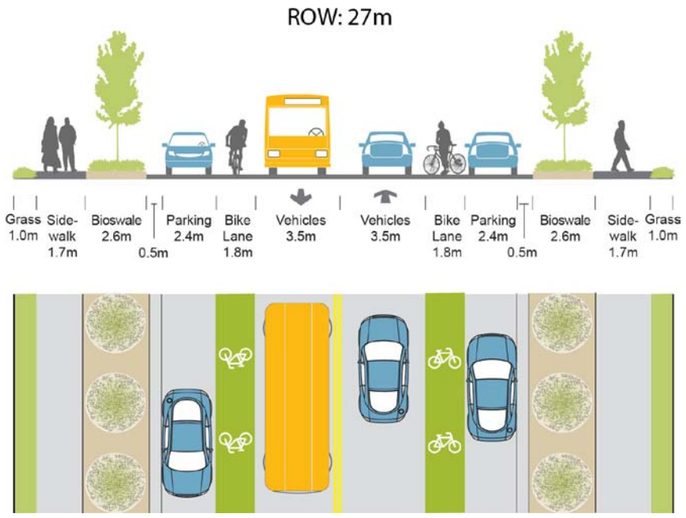


Figure 333: Preliminary Cross Sections for Primary Streets

Local Streets

Local streets have the narrowest right-of-way width and carry small volumes of vehicle traffic. Two vehicular travel lanes, one in each direction, are shared with bicycles given the low-speed nature of the streets. On-street parking is provided on one side of the street. Additional features of these streets include generous street trees on both sides of the street.

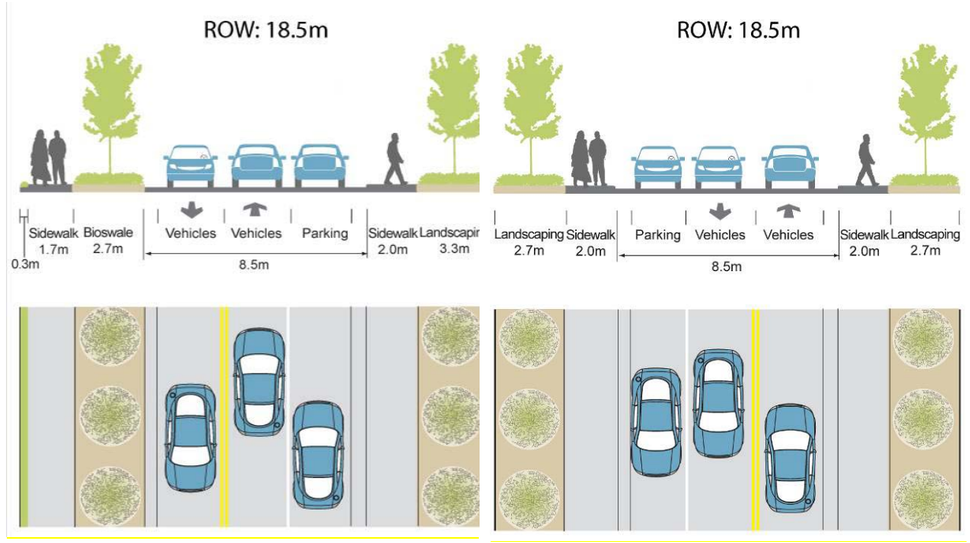


Figure 344: Preliminary Designs for Local Streets

12.7 Other General Policy Recommendations for Secondary Plan

1. Public streets should be designed as vital public spaces with distinct identities to act as lively urban connections as well as allowing traffic flow.
2. The spatial needs of motorists should be balanced with efficient transit service and high-quality amenities for pedestrians and cyclists.
3. The Recommended Street Plan is required to provide the Secondary Plan Area and surrounding communities with connectivity, circulation and a legible hierarchy of street types to support existing and new development.
4. Primary Streets should have minimum right-of-way widths as outlined in this TMP.
5. The exact location, alignment, and design of each Primary Street should be refined through remaining phases of the Environmental Assessment process.
6. A fine grain of Local Streets will create useable development blocks and a permeable walking environment within the Secondary Plan Area.
7. The exact layout and pattern of Local Streets is flexible and will be determined in more detail as individual Phases of development come forward for review and approval.
8. Local Streets will have a minimum right-of-way width of 18.5 metres.
9. The connections at Kirkland, Rondale, and Ridgevale will be improved for pedestrians and bicycles, and a public right-of-way width of 20m will be secured.
10. The connection at Replin Road and Lawrence Avenue West will be improved for pedestrians and bicycles, and a minimum public right-of-way of 20m will be secured.
11. There will be no new auto connections between Yorkdale Shopping Centre and the surrounding neighbourhoods without appropriate future study and public consultation.

13 Implementation

13.1 Public Street Phasing

New Primary Street Segments

The new Primary Streets identified that are required in this Transportation Master Plan should be implemented in a logical way that retains a fully functional street network at all times.

It is recommended that the Primary Streets be divided into functional segments that ensure a flexible phasing strategy over time. Blossomfiled and Flemington are existing streets that will be replaced or modified with new ROW widths. The recommended Primary Street segments are as follows:

a) Marlee from Lawrence to Flemington

b) Marlee from Flemington to Ranee

c) Blossomfield from Lawrence to Marlee

d) Flemington between Marlee and Varna

e) Varna from Lawrence to Flemington

f) Varna from Flemington to Ranee

g) Varna from Ranee to Neptune

These segments are shown in Figure 35.

Signalized Intersections

There are several intersection locations identified that would be appropriate for signalization, both for auto and transit vehicle safety and organization, and to provide for pedestrian and bicycle crossing opportunities. The following locations have been identified and are shown in Figure 36.

a) Varna and Lawrence (relocation of existing signal)

b) Varna and Ranee

c) Marlee and Ranee

d) Marlee and Flemington

e) Varna and Flemington

f) Varna and Neptune

The implementation of new signals should be co-ordinated as development proceeds over time. Additional locations could be identified and monitored over time.

Local Streets

Local streets illustrated in this TMP are conceptual only and could change over time. The Local Streets should be determined in more detail and should integrate well with the surrounding existing street network in place at the time development proceeds.

Figure 35: New Primary Street Segments

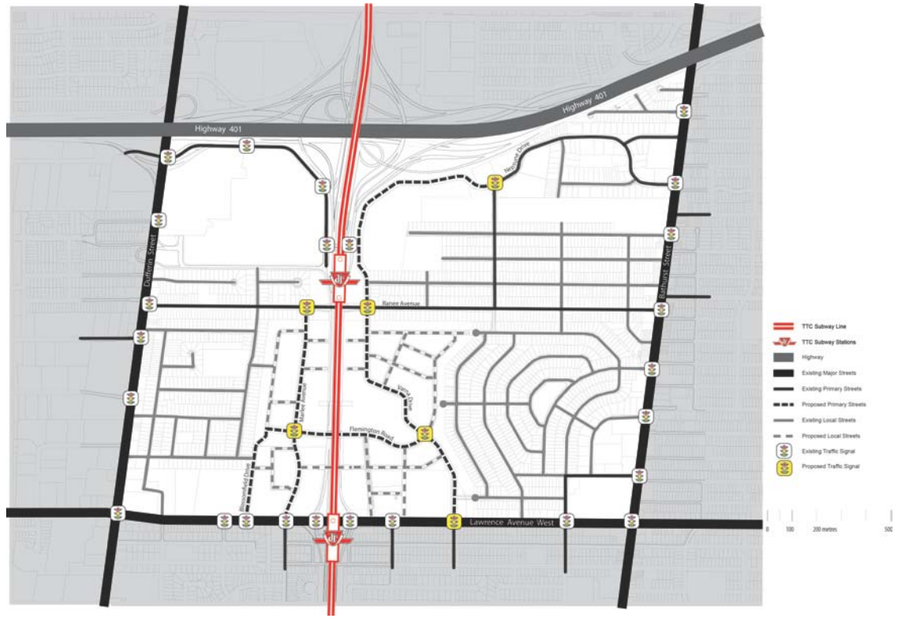


Figure 36: Possible New Signalized Intersections

13.2 Transportation Infrastructure EA Schedule

Projects are classified in terms of Schedules 'A', 'B' or 'C', depending on their potential environmental impacts and costs. Each schedule has an increasing level of potential environmental effects. Projects with an EA Schedule higher than 'C' must complete the remaining phases of the Municipal Class EA process.

Any transportation infrastructure required to support a particular Development Phase is required to complete any remaining phases of the Municipal Class Environmental Assessment (EA) process prior to approval of the associated Development Phase.

The schedules are explained below:

Schedule A – projects are limited in scale, have minimal adverse environmental effects and include a number of municipal maintenance and operational activities. These projects are pre-approved and may proceed to implementation without following the full Class EA planning process.

Schedule A+ - Schedule A+ was introduced as part of the 2007 amendments. Schedule A+ projects are pre-approved; however, the public is to be advised prior to project implementation.

Schedule B – projects have the potential for some adverse environmental effects. The municipality is required to undertake a screening process involving mandatory contact with directly affected public and relevant review agencies to ensure that they are aware of the project and that their concerns are addressed. If there are no outstanding concerns, then the municipality may proceed to implementation.

Schedule C – projects have the potential for significant environmental effects and must proceed under the full planning and documentation procedures specified in the Class EA document (Phases One to Four). Schedule 'C' projects require that an Environmental Study Report (ESR) be prepared and submitted for review by the public and review agencies. If there are no outstanding concerns, then the municipality may proceed to implementation.

Table 1: Cost Estimates and EA Schedule for Transportation Elements

	Description	Cost ($)	EA Schedule
Allen Road			
1	Allen Road Short-term improvements		
	a) Yorkdale- Allen Road Intersection (Various lane re-configurations at Yorkdale Road at the Allen Road overpass	500,000	A
	b) Ranee Ave Underpass (Improvements to the streetscape of the Ranee Avenue underpass)	500,000	A
	c) Lawrence-Allen Road Intersection (The removal of vehicular channelization features and reconfiguration of the on and off-ramps for Allen Road at Lawrence Avenue West)	1,350,000	A
2	Allen Road Individual EA		Individual
3	Greenway, East side of Allen Road		C
4	Pedestrian Bridge Across Allen Road (North of Flemington Road)	19,500,000	C
5	Pedestrian Bridge Across Allen Road (South of Flemington Road)	19,500,000	C
Primary Street Segments			
6	Extension of Varna Drive north to Neptune Drive	4,900,000	C
7	Relocation of the existing Highway 401 on-ramp from Yorkdale Road	12,000,000	C
8	Realignment of Varna Drive from Ranee Ave to Flemington Road		Plan of Subdivision
9	Extension of Varna Drive from Flemington Road south to Lawrence Ave, including the realignment of intersection with Englemount Ave		Plan of Subdivision
10	Extension of Marlee Ave through RioCan lands to Flemington		Plan of Subdivision
11	Realignment of Flemington Road south to Blossomfield Drive		Plan of Subdivision
Proposed Traffic Signal Locations			
12	Relocation of existing traffic signal at Varna Drive/Lawrence Ave	300,000	A
13	New signals at the Ranee Ave/Varna Drive intersection	300,000	A
14	New signals at the Ranee Ave/Marlee Ave intersection	300,000	A
15	New signals at the Marlee Ave/Flemington Road intersection	300,000	A
16	New signals at the Varna Drive/Flemington Road intersection	300,000	A
17	New signals at the Varna Drive/Neptune intersection	300,000	A
Bike Lanes on Existing Streets			
18	All of Ranee Ave, from Bathurst St to Dufferin St	50,000	B
19	Yorkdale Road, from Dufferin St to Ranee Ave	25,000	B
20	Neptune Drive, from Ameer Ave to Bathurst St	25,000	B

If a Primary Street is achieved through the Plan of Subdivision, then the EA requirement is satisfied.

The EA schedule is subject to amendment based on a more detailed review of the scope at the time of implementation.

Table 1 is extracted from MMM Group's Lawrence Allen Revitalization Study - Infrastructure Master Plan. The document and details can be found online at http://www.toronto.ca/planning/lawrence_allen.htm

Appendix A

Options Evaluation Summary

Evaluation: Transportation

(A) Allen Road	Do Nothing	Option A	Option B	Option C
				

Do Nothing

- Generally, Allen Road corridor remains unchanged with no significant improvements.
- Poor intersection geometry, high traffic volumes and lack of protected crossing opportunities at the Lawrence Avenue West/Allen road intersections creates a poor environment for all transportation users: auto vehicles, transit vehicles, pedestrians and bicycles.
- Development not encouraged along Allen Road corridor due to the lack of public streets to access land parcels adjacent to the corridor.
- No new crossings of the Allen Road.

Option A and B

- Proposed multi-use greenways along each side of the Allen Road provide improved north-south pedestrian and bicycle routes and connections along the corridor.
- Three new proposed crossings of the Allen Road corridor.
- Development is located along the corridor to provide an improved relationship with active uses.
- Have flexibility with the surrounding streets and blocks to allow for potential future changes to the Allen Road corridor and the ramp intersections at Lawrence and Allen Road.

Option C

- No pedestrian or bicycle facilities proposed along the Allen Road corridor.
- Three new proposed crossings of the Allen Road corridor.
- Development is located along the corridor to provide an improved relationship with active uses.
- Have flexibility with the surrounding streets and blocks to allow for potential future changes to the Allen Road corridor and the ramp intersections at Lawrence and Allen Road.

(B) Transit-Supportive Development	Do Nothing	Option A	Option B	Option C
				

Do Nothing

- Existing development around the subway stations is generally not transit-supportive, like lower-density residential uses and auto-oriented retail uses with large amounts of surface parking.
- Pedestrian environment around the transit stations and surrounding development lacks a vibrant, high-quality public realm.
- Existing circuitous and disjointed street network is not supportive of surface transit routes and do not provide direct walking or biking routes to the subway stations.

Option A

- New retail and mixed-use, medium and higher density development is generally located near the two subway stations, with lower density uses outside a 500m radius.
- Grid-like road network improves transit operations. Some park land within 500m (5 minutes walking distance to the stations) which could be better served with TOD development such as retail, or high density residential.
- New Primary streets parallel to Allen Road help enable higher density development along the corridor.

Option B

- New retail and mixed-use, medium and higher density development is generally located near the two subway stations, however some portions of higher density development lies outside the desired 500m walking distance.
- Street grid improved but slightly more circuitous for bus operations along north/south road to the east of Allen Road.
- Some park land within 500m (5 minutes walking distance to the stations) which could be better served with TOD development such as retail, or high density residential.

Option C

- New retail and mixed-use, medium and higher density development is generally located near the two subway stations, however some portions of higher density development lies outside the desired 500m walking distance.
- Revised street grid improves station access. Circuitous routes for buses along north/south road to the east of Allen Road.
- Contains least amount of park land within 500m (5 minutes walking distance to the stations) of the three options which improves the TOD potential of this alternative.

(C) Public Streets: Connectivity and Circulation	Do Nothing	Option A	Option B	Option C
				

Do Nothing

- Block lengths are long in many areas (longer than 250m), and the curvilinear and indirect street network discourages walking.

Predominantly curvilinear neighbourhood Primary Streets, including Varna Drive and Flemington Road, characterized by off-set intersections and indirect travel routes, which reduce ease of circulation and wayfinding for all modes.

Option A

- Direct and legible Primary Street network on both sides of Allen Road.
- One new public street crossing the Allen Road improves east-west connectivity and circulation.
- No new public street connection at Rondale, Kirkland, or Ridgevale reduces connectivity and circulation between the two neighbourhoods.
- Two new public street connections to Yorkdale Shopping Centre improve connectivity and circulation, but have significant traffic impacts that require further study.
- New public street connection at Replin Road and Lawrence Avenue West improves connectivity and circulation with Lawrence Avenue West, but is not recommended due to its close proximity to the busy signalized intersection at Lawrence and Allen Road ramp.

Option B

- Less direct Primary Street on east side of Allen Road reduces legibility.
- One new public street crossing the Allen Road improves east-west connectivity and circulation.
- No new public street connection at Rondale, Kirkland, or Ridgevale reduces connectivity and circulation between the two neighbourhoods.
- Two new public street connections to Yorkdale Shopping Centre improve connectivity and circulation, but have significant traffic impacts that require further study.
- New public street connection at Replin Road and Lawrence Avenue West improves connectivity and circulation with Lawrence Avenue West, but is not recommended due to its close proximity to the busy signalized intersection at Lawrence and Allen Road ramp.

Option C

- Indirect Primary Streets on east and west sides of Allen Road reduces legibility.
- No new public streets crossing the Allen Road reduce east-west connectivity and circulation.
- No new public street connection at Rondale, Kirkland, or Ridgevale reduces connectivity and circulation between the two neighbourhoods.
- Two new public street connections to Yorkdale Shopping Centre improve connectivity and circulation, but have significant traffic impacts that require further study.
- New public street connection at Replin Road and Lawrence Avenue West improves connectivity and circulation with Lawrence Avenue West, but is not recommended due to its close proximity to the busy signalized intersection at Lawrence and Allen Road ramp.

	Do Nothing	Option A	Option B	Option C
(D) **Streets for People:** **Pedestrians and Bicycles**				

Do Nothing

- No improvements to pedestrian and bicycle infrastructure.

Option A

- Strong north-south pedestrian and bicycle route along Greenways on each side of the Allen Road.
- Two new pedestrian and bicycle crossings of the Allen Road corridor and one new public street crossing improves east-west movement for people walking and cycling.
- Improved pedestrian and bicycle connections at Kirkland, Ridgevale and Rondale improve east-west movement for people walking and cycling.
- Frequent protected intersection crossings for pedestrians and bicycles along Major Streets and Primary Streets.
- Pedestrian Routes are well-integrated with the parks system and the surrounding pedestrian and bicycle network outside the Study Area.
- Fine grain of streets and short block lengths creates good permeability for people walking and cycling.
- On-street bicycle lanes on all Primary Streets.

Option B

- Strong north-south pedestrian and bicycle route along Greenways on each side of the Allen Road.
- Two new pedestrian and bicycle crossings of the Allen Road corridor and one new public street crossing improves east-west movement for people walking and cycling.
- Improved pedestrian and bicycle connections at Kirkland, RIdgevale and Rondale improve east-west movement for people walking and cycling.
- Frequent protected intersection crossings for pedestrians and bicycles along Major Streets and Primary Streets.
- Pedestrian Routes are well-integrated with the parks system and the surrounding pedestrian and bicycle network outside the Study Area.
- Fine grain of streets and short block lengths creates good permeability for people walking and cycling, but more indirect north-south route on east side of Allen Road since route must go through the park instead of along public street..
- On-street bicycle lanes on all Primary Streets.

Option C

- No strong north-south pedestrian and bicycle route along the Allen Road.
- Three new pedestrian and bicycle crossings of the Allen Road corridor improves east-west movement for people walking and cycling.
- Improved pedestrian and bicycle connections at Kirkland, RIdgevale and Rondale improve east-west movement for people walking and cycling.
- Few protected intersection crossings for pedestrians and bicycles along Major Streets and Primary Streets.
- Pedestrian Routes are not well-integrated with the parks system and the surrounding pedestrian and bicycle network outside the Study Area.

- Fine grain of streets and short block lengths creates good permeability for people walking and cycling, however, legibility and direct routes are less clear since people must navigate between public streets and numerous off-street mid-block connections.
- Primary Streets do not provide direct and legible walking or bicycle routes.
- No bicycle lanes on Primary Streets.

(E) Auto Capacity and Neighbourhood Traffic Impacts	Do Nothing	Option A	Option B	Option C
				

Do Nothing

- The existing street network within the study area does not adequately provide auto capacity for proposed new levels of development.
- The existing transportation system in the Study Area does not enable a positive shift in travel behaviour from auto use to more sustainable uses of walking, cycling, and taking transit.

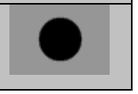
Option A, B, and C

- Preliminary traffic analysis work indicates that there are significant auto capacity constraints with each of the Options with the proposed levels of development.
- **Lower density of development is recommended and further testing and analysis is required.**

Option C

- The street network in Option C has the highest likelihood of potential negative neighbourhood traffic infiltration, due to its indirect and illegible Primary Streets.

Evaluation: Economic Environment

(A) Development Blocks: Building Scale	Do Nothing	Option A	Option B	Option C
				

(B) Cost-Effectiveness	Do Nothing	Option A	Option B	Option C
				

Evaluation: Built Environment

(A) Development Blocks: Location, Size, and Layout	Do Nothing	Option A	Option B	Option C
				

(B) Transition to Neighbouring Development	Do Nothing	Option A	Option B	Option C
				

(C) Tall Buildings and Population Density	Do Nothing	Option A	Option B	Option C
				

Evaluation: Social Environment

(A) Density	Do Nothing	Option A	Option B	Option C
				

(B) Mixed Housing and Mixed Use	Do Nothing	Option A	Option B	Option C
				

(C) Rental Replacement	Do Nothing	Option A	Option B	Option C
				

(D) Tenant Assistance	Do Nothing	Option A	Option B	Option C
				

	Do Nothing	Option A	Option B	Option C
(E) Accessibility				

	Do Nothing	Option A	Option B	Option C
(F) Affordable Rental Units				

Evaluation: Parks and Community Facilities

	Do Nothing	Option A	Option B	Option C
(A) Parkland Area				

	Do Nothing	Option A	Option B	Option C
(B) Park Types, Locations, and Distribution				

	Do Nothing	Option A	Option B	Option C
(C) Community Facilities				

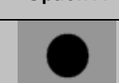
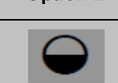
	Do Nothing	Option A	Option B	Option C
(D) Schools				

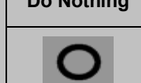
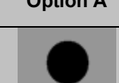
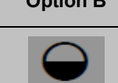
	Do Nothing	Option A	Option B	Option C
(E) Recreational and Community Programming				

Evaluation: Natural Environment

	Do Nothing	Option A	Option B	Option C
(A) Tree Canopy				

	Do Nothing	Option A	Option B	Option C
(B) Natural Environment				

	Do Nothing	Option A	Option B	Option C
(C) Air Quality				

	Do Nothing	Option A	Option B	Option C
(D) Noise				

Evaluation: Cultural Environment

	Do Nothing	Option A	Option B	Option C
(A) Aboriginal Peoples				

	Do Nothing	Option A	Option B	Option C
(B) Cultural Heritage				

	Do Nothing	Option A	Option B	Option C
(C) Archaeology				

Evaluation: Sustainability / Municipal Servicing

(A) Green Community	Do Nothing	Option A	Option B	Option C
				

(B) Stormwater Management	Do Nothing	Option A	Option B	Option C
				

(C) Water and Waste Water	Do Nothing	Option A	Option B	Option C
				

(D) Community Energy	Do Nothing	Option A	Option B	Option C
				

(E) Utilities	Do Nothing	Option A	Option B	Option C
				

Evaluation: Implementation

(A) Phasing Strategy	Do Nothing	Option A	Option B	Option C
				

DETAILED EVALUATION OF OPTIONS

Economic Environment

Development Blocks – Building Scale

The size and shape of each development block will support economically viable and appropriately scaled buildings for each block. Blocks will also provide appropriate configuration and sufficient space for servicing, access to sunlight, landscaped open space and tree planting.

Do Nothing	Option A	Option B	Option C
O	●	●	●

The size and shape of development blocks in Option Plans A, B and C support buildings which account for the city's urban design guidelines for tall buildings, mid-rise buildings and townhouses on the relevant development blocks. They also allow for landscaped open space in the centre of those development blocks which are identified for tall and mid-rise buildings.

The Do Nothing plan does not include development blocks which can support economically viable and appropriately scaled buildings.

Cost-Effectiveness

Financial costs of changes have been minimized. Energy system and infrastructure investment decisions are based on life cycle costs, which include both the initial capital expenditures and the cost of operations, maintenance, energy and disposal over time.

Do Nothing	Option A	Option B	Option C
◒	◒	●	●

Options which retain more of the existing infrastructure will typically be less costly. While Option Plans A, B and C all replace a large portion of the infrastructure, Option A is most transformational limiting opportunities to reuse existing infrastructure. Options B and C retain some existing infrastructure, providing a greater opportunity for cost savings.

A life cycle cost analysis of the preferred plan will support cost-effective implementation.

While the Do Nothing option maintains the existing infrastructure, this carries a cost as well, over the long term. The cost of operations, maintenance, energy and disposal will increase over time, as existing infrastructure continues to age.

Built Environment

Development Blocks - Location, Size, and Layout

The location, size, and shape of development blocks will provide sites for buildings that define the edges of streets, parks, and open spaces and provide overlook to ensure streets and parks which are comfortable to use and safe for residents and visitors.

Do Nothing	Option A	Option B	Option C
○	◒	●	◒

Primary Streets

In all three Option Plans, development blocks along the east-west Primary Street will support a consistent mid-rise streetwall. On Option A, the street wall defines both sides of the street, while in Option B and C, the north side is defined by the community park.

Option A will support a coherent urban form along the Primary Street that extends Marlee Avenue, street. In Option B, the form is more fragmented. In particular, it is disrupted by the off-set relationship between large scale park spaces on either side. Option C is disrupted somewhat by the shift in building scale on the development blocks north of Lawrence Square but generally is more coherent than Option B.

The three Options differ substantially with respect to the way development blocks define the edges of the remaining Primary Street located east of Allen Road. Option A provides the most consistent and coherent streetwall. In Option B, a consistent street wall is also achieved. However, the definition of the street is weakened by the parkette opposite the east end of the community park – this remnant open space undermines the consistency of the urban form. In Option C, the abrupt change in the alignment of the street in combination with the variation of built form along the Primary Street route emphasize the individual segments of the route rather than the coherence of the large scale public space central to the plan.

District Park

Development blocks address Baycrest Park the same way in all three Option Plans. All show a mid-rise development block at the south-west corner of the park, which improves the enclosure of this edge of the park and provides some overlook.

Community Park

In Option A, the development block adjacent to the southern edge of the community park detracts from the visibility and prominence within the community. The blocks create a functional relationship to the park for an elementary school, but lose the advantages of having streets surround all edges of the park.

In Options B and C, the north and south edges of the park are potentially framed by a mid-rise streetwall (i.e. the base buildings of tall buildings). In Option B, the parkette across from the park's east end causes the large community park to "bleed" without clear definition or enclosure by built form. Also problematic, the configuration of the development block to north would likely block the important view between the Community Park and the existing Prince Charles Park to the east.

Both Options B and C are challenged by the relationship of the park to the Allen Road corridor, where its edge is neither defined by development nor by a pedestrian accessible street. In Option B however, the greenway can help to establish a street-like pedestrian edge condition in relation to the larger open space network.

Neighbourhood Parks

In Options A, B and C, townhouses surround the Neighbourhood Park in the northeast, providing enclosure of the park at an appropriate scale. This park is most successfully defined in Option C, where all sides are faced with streets; however, the park is smaller in this option than in the other two.

West of Allen Road, the Neighbourhood Park in Option A has edges clearly framed by appropriately scaled building blocks. It lacks street frontage on two edges of the park. Option B is similar to A, although its off-set relationship to the Community Park may require resolution through the parks' landscape design.

In Option C, the scale of buildings on the development blocks adjacent to the narrow linear parks may result in parks that are perceived as private lawns or forecourts for apartment buildings rather than public parks.

On the Lawrence Square site, the Neighbourhood Park is best defined by the four streets surrounding it in Option C. This configuration sacrifices a direct route for the Primary Street, but creates the most public and successful park edges.

In the Do Nothing Option, there is a general failure to differentiate between public, private and semi-private space. Public and private open spaces are ill-defined, as is the relationship between buildings, streets and parks. The location and organization of current buildings on lots does not provide overlook for streets and parks, creating hidden or 'dead' spaces that are perceived as unsafe.

Transition to Neighbouring Development

There are appropriate transitions between areas of different height, scale and intensity both within the focus area and between the focus area and neighbouring communities.

Do Nothing	Option A	Option B	Option C
◒	●	◒	◒

All options provide low-rise development blocks beside existing residential neighbourhoods where low-rise, detached building lots border the Focus Area. This forms a "transition zone" 50 metres wide where the height of new development is limited to 12 metres. Option C conforms to these guidelines in most areas, but building heights is greater than 12 metres on the development blocks at the corner of Ranee Avenue and Allen Road.

Beyond the 50 metre zone, Option A provides the greatest separation distance between taller buildings and existing low-rise neighbourhoods by focusing the greatest intensity of development along Allen Road. In Options B and C, tall buildings surround the Community Park, which limits the distance separation between existing low-rise neighbourhoods and taller buildings.

In all three options – and particularly in Options B and C - the evaluation process identified the need for a more gradual transition of scale within the Focus Area between the low-rise buildings in the transition zone and the tall buildings closer to Allen Road. A greater use of mid-rise blocks along primary streets would be appropriate to improve this transition. The size of the transition zone could also be increased in appropriate parts of the Focus Area.

The existing residential development at 650 Lawrence Avenue West includes townhouses on the northern part of the site. This site is designated Apartment Neighbourhood in the Official Plan and a wide transition zone would not be appropriate around it. However, built-form transition should be provided in some form and the Option Plans do not address this.

The Do Nothing Option would maintain the primarily low-rise character of the current neighbourhood, with a lack of differences in height, scale and intensity. While this low-rise height and scale is similar to that of nearby buildings in the adjacent neighbourhoods, the physical layout of the street, blocks and buildings maintain them as separate and distinct units, with clear borders between them rather than a smooth transition from one area to another.

Tall Buildings and Population Density

Development blocks for taller buildings and higher populations are located in and around TTC subway stations, along major streets such as Lawrence Avenue and Allen Road, and on primary streets. These locations will take advantage of transit and transportation infrastructure.

Do Nothing	Option A	Option B	Option C
◒	●	◒	◒

In Plans A, B and C, most development blocks for taller buildings and higher populations are located along the Allen Road corridor, on Lawrence Avenue West, and on proposed Primary Streets within the Focus Area.

With three exceptions, Option A locates its tall building development blocks within a 5 - 10 minute walking distance radius of TTC subway stations. Options B and C place more buildings outside this radius, on the outer frontages of the proposed primary roads. In all three of these options, linear parks and townhouse blocks comprise a significant portion of the development near the Yorkdale subway station entrance.

The Do Nothing option does not include taller buildings. While the majority of the community is within close walking distance of the subway stations, the size and character of the community (e.g. lower-density residential uses and auto-oriented retail with large amounts of surface parking) is generally not transit-supportive.

Social Environment

Density

Anticipated growth in the plan area is appropriate to its location and role within the broader City.

Do Nothing	Option A	Option B	Option C
○	○	○	○

Options A, B and C all based on the same assumptions respecting the number of residential units. The total unit count in all three Option Plans is 10,500 units on lands owned by TCHC, RioCan and TDSB. This reflects the total number of units proposed by these landowners.

Many characteristics of the Focus Are present growth opportunities. However, the number of units proposed in the Option Plans appears excessive. A review of other areas of Toronto considering urban structure, residential development, planned character, transportation infrastructure did not find a comparable area to the proposed Option Plans with a similar level of density. City Planning staff did not feel that 10, 500 units are supportable in the present context.

In addition to growth in the Focus Area, the three Option Plans identify areas where incremental growth could be expected over time through the result of site-specific development applications. In particular, these areas include those parts of Bathurst Street, Dufferin Street and Lawrence Avenue West which are designated as Avenues. Growth on the Avenues is consistent with city-wide policies.

The potential for Incremental Growth is also shown in the Apartment Neighbourhood at the northeast of the Study Area. However, changes in areas with this land use designation are intended to reinforce the existing character of the area. The Recommended plan should therefore treat this area differently from the Avenues.

Under the Do Nothing option, the physical structure of the Lawrence Heights neighbourhood limits opportunities for incremental renewal through the introduction of new built forms. Although, the planning framework and zoning by-laws regulating development provide for some incremental intensification over time, they do not facilitate the local growth opportunities present in the Study Area.

Mixed Housing and Mixed Use

The community has a full range of housing in a mix of building types and densities (e.g. townhouses, mid-rise and tall buildings) and tenures (e.g. market, RGI, assisted, rental and ownership). The community has a mix of residential, retail-commercial, and institutional uses to provide convenient services to the local community and contribute to the vibrancy of the neighbourhood.

Do Nothing	Option A	Option B	Option C
○	●	●	◒

Option Plans A, B, and C provide opportunities for a full range of housing. Replacement of TCHC social housing will ensure a mix of market housing and social housing. Aside from social housing replacement units, the plans do not prescribe tenures or affordability levels for new housing.

All three Option Plans provide development blocks for a generalized typology of buildings – low-rise, mid-rise, and tall buildings. Each building type will be refined through detailed design as part of the development review process. All three Option Plans have relatively few development blocks specified for mid-rise buildings. all include a full range of housing and mix of building types and densities.

All three Option Plans provide for non-residential uses by:

- Identifying sites for schools and major community facilities
- Planning for replacement of existing retail and commercial space on the Lawrence Square site; and
- Anticipating non-residential uses on the ground floors of mid-rise and tall buildings in the Focus Area.

In all three Option Plans, the addition of residential development to the current retail, office and community uses at the Lawrence Square mall site further strengthens the mixed use character of this area. Improved integration of the site with the broader community enhances the accessibility of these uses, and improves the potential for supporting uses along the related section on Flemington Road.

The primary distinction between the Option Plans is with respect to planning for non-residential uses on ground floors of mid-rise and tall buildings. Along the main east-west primary street – Flemington Road – the three options have differing advantages. Option A supports retail/commercial through a 'double loaded' street wall, with buildings on both the north and south sides. Options B and C, however, benefit from a more visible and accessible core area anchored by the central park and associated facilities. These plans also have a longer street wall on the south side on Flemington.

Clusters of tall buildings and mid-rise buildings around Lawrence West and Yorkdale TTC stations respectively allow for the convenient location of services/amenities around transit stations in all plans. Improved connections to the Yorkdale Mall further support the potential of the area around the Yorkdale subway station. Support for mixed-uses around the Yorkdale station is not as strong in Plan C, however, due to the presence of linear parks, low-rise housing and single loaded primary streets.

The Do Nothing option includes mostly low-rise buildings within a limited mix of building types. The only residential tenure within the focus area is the existing Toronto Community Housing RGI units. The focus area does not include any neighbourhood-serving retail. There are schools and community facilities in the area, but they are inadequate to support the local population. Retail and office uses do in the focus area at the Lawrence Square Mall and in the study area at Yorkdale Mall and along the Avenues. There are currently access issues to these locations for Focus Area residents.

Rental Replacement

The plan provides development sites for the replacement of all rent-geared-to-income rental units within the focus area.

Do Nothing	Option A	Option B	Option C
●	●	●	●

Plans A, B and C all provide development sites to replace all existing RGI units within the focus area with units of similar size and type. The Do Nothing option would not tear down existing units.

Tenant Assistance

Toronto Community Housing tenants will receive an acceptable agreement for assistance and support through the revitalization process that meets or exceeds municipal and provincial guidelines.

Do Nothing	Option A	Option B	Option C
●	●	●	●

Under all plans, an acceptable tenant agreement and support through the revitalization process would be required by City policy. Agreements will meet or exceed municipal and provincial guidelines.

Accessibility

The community will be planned to be physically accessible to people of different ages and abilities.

Do Nothing	Option A	Option B	Option C
○	●	●	◒

All options will support the development of physically accessible residential buildings for people of different ages and abilities under current Building Code and site planning standards.

Options A and B have stronger pedestrian and cycling networks than Option C, including more legible and direct street network and stronger north-south routes, highlighted by the Allen Road greenway.

The Do Nothing option would maintain current issues of accessibility. These include:

- Buildings within the Lawrence Heights neighbourhood generally do not have elevators and accessible design elements. They are also not directly accessible from the street due to deep setbacks.
- A majority of streets within the study area either do not include sidewalks, or include a sidewalk on only one side of the street.
- Pedestrian and cyclist access to parkland is limited due to parkland deficiency and inequitable distribution.
- Pedestrian and cyclist access to TTC stations is discontinuous and unsafe in some places.

Affordable Rental Units

The plan identifies opportunities to increase the number of affordable rental units in the community..

Do Nothing	Option A	Option B	Option C
N/A	N/A	N/A	N/A

Options A, B and C can all accommodate an increase in the number of affordable rental units. Specific opportunities to provide affordable units in the community would depend on funding from government programs.

No change in the number of affordable rental units will be realized by the Do Nothing option. Parks And Community Facilities

Parkland Area

The plan increases the total area of parkland in the community to meet the requirements of the City of Toronto Alternate Rate of Parkland Dedication By-law. Where new development is proposed on existing parkland, the park will be replaced in the neighbourhood with a park of comparable or superior greenspace utility.

Do Nothing	Option A	Option B	Option C
○	●	●	○

A minimum of 20 Hectares of parkland is required in the Focus Area based on the requirement for maintenance or replacement of existing parkland as well as conveyance of new parkland in accordance with City's Alternative Parkland Dedication Rate

While Options A and B have more parkland than Option C, all three increase the amount of parkland in the Focus Area over the required minimum of 20 Hectares and therefore meet the requirements for parkland area. South of Ranee Avenue, the amount of parkland in each plan is more than double the existing condition.

Where parkland is replaced, new parkland must be of comparable or superior greenspace utility. This standard is also achieved, as all three Option Plans consolidate parkland parcels into more useful greenspace. This is particularly the case with the Community Park, which will have superior utility to the existing Flemington Park.

The Do Nothing Option would not increase the parkland, maintaining the existing 14.5 Ha. There would be no requirement for parkland replacement.

Park Types, Locations and Distribution

The park system serves existing and future residents by providing a range of park sizes and types distributed equitably throughout the community in visible and accessible locations. The range of park types includes at least one district park, one community park, and a variety of neighbourhood parks. The range could also include parkettes and multi-use trails. New and existing parks are connected to the community and to the broader city via green streets and trail connections.

Do Nothing	Option A	Option B	Option C
○	●	●	◒

Option Plans A, B and C all provide a conventional range of park types including District, Community and Neighbourhood Parks as well as small parkettes. Options A and B, include a pedestrian and bicycle multi-use trail along both sides of Allen Road, which is called a "greenway".

District Park

Option Plans A, B and C all maintain the physical presence of the District Park (Baycrest Park) as a green anchor. The introduction of a primary street around its perimeter improves access and circulation for pedestrians, cyclists, transit users and drivers. Access is also improved in all plans through the implementation of a greenway along the Allen Road. This creates a more successful park destination with clear and direct connections to the Focus Area and city-wide open space system.

Community Park

In Options B and C, the Community Park is central to the overall Focus Area. Flemington Road, and a new pedestrian bridge create two physical connections to the west side of Allen Road. In these plans, the Community Park is revealed immediately upon entering the community from the north and south. Location of a Neighbourhood Park directly opposite the Community Park, on the west side of Allen Road, extends the presence of and provides access to the Community Park and related facilities. Together, these parks create a highly visible, central green anchor on both sides of Allen Road. This is particularly true of Option C. One issue, particularly in Option B, is that the view corridor between the Community Park and the existing Prince Charles Park to the east is blocked.

The Community Park in Option A is not immediately revealed upon entering the community from the north and south. It is also less visible and accessible to residents on the west side of Allen Road. The visual connection to the east is stronger however due to the direct view corridor between the Community Park and the existing Prince Charles Park. Overall however, this option is less successful as a highly visible, centrally located green anchor.

Neighbourhood Parks

Option Plans A, B and C each include a variety of Neighbourhood Parks. The parks are well linked to one another by connector parks, local streets, mid-block pedestrian walkways, and pedestrian bridges over Allen Road. Connections to other City parks, open space and bicycle networks are made by pedestrian walkways and local streets.
These parks also have substantial street frontage and are highly visible focal points for four neighbourhoods within the Focus Area.

Option C provides a more limited range of park types. Neighbourhood Park sizes are more linear, smaller in area, and less well-proportioned to accommodate recreational programming than Options A and B. The size and position of parks in the northeast and northwest of the focus area are not adequate to serve as focal points within these areas. These parks, however, are supportive of unstructured activity and have maximum street frontage in most cases.

Parkettes

All three plans include some parkettes under one hectare in size. In Options A and C, these parkettes serve as effective connectors to larger parks.

Greenway:

Options A and B include a greenway along both sides of Allen Road while Option C does not. The greenway contributes to connectivity between park spaces. Until the EA for the Allen Road corridor is completed, land for the greenway should be assumed to be conveyed from adjacent development blocks and not the existing Allen Road right-of-way.

Community Facilities

The number, quality, and capacity of community facilities across the area have been increased and improved to serve existing and future residents. Major facilities are located on prominent, highly visible sites. Facilities are distributed equitably throughout the neighbourhood and are easily accessible by roads, transit, and pedestrian and cycling routes. The community centre is located within or adjacent to a district park or community park large enough to support active community uses.

Do Nothing	Option A	Option B	Option C
○	◒	●	◒

Each of the options includes the same range of community facilities. These facilities include:

- Maintenance of existing Baycrest Arena and Unison Health and Community Services site
- A New Community Centre as a stand-alone building (potentially co-located with an aquatic centre) within the Community Park or Neighbourhood Park
- Space for a new aquatic centre (integrated with the new community center, or located in Baycrest Park or Bathurst Heights Secondary School)
- Four elementary or middle schools, two secondary schools
    - Maintenance or replacement of one secondary school and one elementary school in Baycrest Park
    - Maintenance of Lawrence Heights Middle School
    - Redevelopment of Bathurst Heights School site
    - Replacement of Flemington Elementary School in ground floor of residential building on East side of Allen Road, adjacent to parkland

- Establishment of new Elementary School in ground floor of residential building on west side of Allen Road adjacent to parkland

The main difference between Options A, B and C is the location of the new Community Recreation Centre, and the two elementary schools. In Options A and B, all three facilities are located on the corners of major or primary streets, allowing for high visibility and accessibility. In Option C, the facilities are located on major or primary streets, but not always on corners. In Options A, the community centre is located in the community park on the east side of Allen Road. It therefore requires a greater travel distance for residents on the other side of Allen Road. Options B and C both place the Community Centre in a more central location, abutting Allen Road. The centre is also connected to both transit stations direct via the proposed greenway along Allen, which may improve accessibility.

Under the Do Nothing plan, the existing facilities would be maintained. These facilities have been identified as inadequate to meet current community needs.

Schools

Sites for TDSB and TCDSB elementary and secondary schools are of an appropriate size to meet the existing and future need for schools.

Do Nothing	Option A	Option B	Option C
○	●	●	●

The number of schools in Option Plans A, B and C are the same, and meet the needs articulated by the TDSB and TCDSB.

The Do Nothing option would limit the redevelopment potential of Bathurst Heights and would not provide for an additional school site as requested by the TCDSB. It would therefore not satisfy the school site requirements articulated by the two school boards.

Recreational & Community Programming

The size and shape of parks should allow for a maximum range of programs, recreational facilities and community services, including both active and passive recreation, as well as opportunities for arts, culture, food programs and economic development. Parks should accommodate sites for a community centre, swimming pool, and other facilities that co-locate well with parkland. In order to maximize their use, parks should be of adequate size and shape to be efficiently programmed.

Do Nothing	Option A	Option B	Option C
○	●	●	◒

District Park: Option Plans A, B and C all maintain Baycrest Park as a District Park of about 9 hectares. Each present alternative relationship between Baycrest Park and the Baycrest Elementary School. The Do Nothing Option would leave this school sites in their existing condition. The TDSB has not made a determination regarding development on this site at this time. The preferred plan will therefore maintain the school sites in Baycrest Park as the existing condition.

Community Park: Option Plans A, B and C each include a Community Park of approximately four hectares to accommodate a range of programs and recreational facilities. While Option A is the most square, the size and shape of all three is
adequate to allow appropriate space for circulation, open green space and landscaping in addition to active facilities. The range of programming opportunities in Options B and C may be more limited in areas impacted by the adjacent Allen Road. In Option B, these impacts may be mitigated through the use of the greenway to establish a street-like pedestrian edge to the park. Specific impacts will be examined as part of the Allen Road Individual EA,

The placement of the Community Recreation Centre within the park in Options A and C reduces the program area to the minimal amount required to support the recreational needs of the park.

Neighbourhood Park: In Options A and B, the largest neighbourhood park is 2.7 hectares. In both plans, this park is surrounded by buildings on the west side of Allen Road. In Option C, the largest neighbourhood park is 1.5 hectares and abuts the Allen road.

In Options A and B, the Neighbourhood Parks are generally square or rectangular and are well-proportioned for programming. In Option C, Neighbourhood Park sizes are smaller in area overall, and the two linear parks and not well-proportioned to accommodate recreational programming to the same degree as Options A and B, but can be used as travel routes for pedestrians and cyclists and are supportive of unstructured activity.

Parkettes:

Options A, B and C all have small parkettes which do not substantially contribute to the recreational programming in the area, but are supportive of unstructured activity. In Options B, placing a parkette adjacent to the Bathurst Heights school yard enhances the utility of this space. In Option A, the utility of a neighbourhood park space is similarly enhanced.

Greenway: The greenway in Options A and B enhances support for pedestrian and cycling activity.

The park configuration in the Do Nothing Plan does not adequately support the required range of recreational activities.

Natural Environment

Tree Canopy

The plan identifies opportunities to significantly increase the existing tree canopy and natural vegetation in parks and along public streets throughout the community.

Do Nothing	Option A	Option B	Option C
●	●	●	◒

There are two issues regarding tree canopy and natural vegetation; the number of existing trees and plants that are retained, and the ability to accommodate new ones.

Generally, a plan which preserves the greatest amount of existing infrastructure would allow for the greatest retention of existing trees. Option Plans A, B and C all replace significant amounts of existing infrastructure, with Options B and C maintaining more than Option A. The Do Nothing option is most successful in this area as it maintains all of the existing infrastructure.

Option Plans A, B and C, however, all have significant opportunities to accommodate new trees and vegetation and to meet the city-wide target of 30-40% tree canopy. Each employ the same street right-of-way street widths to allow for tree planting, and development blocks in all cases would all be subject to the same requirements under the Toronto Green Standard. The primary difference between the three is the size and shape of parks and the connected nature of the open space system. Options A and B both have parks which can accommodate a greater range of programming elements, including tree planting. Complemented by the greenway, these park systems also have stronger north-south and east-west integration with the broader open space system than Option C, which primarily has an east-west focus.

While the Do Nothing Option does include a significant amount of open space, existing issues with the design and configuration of streets, blocks and parks would limit some opportunities for new trees.

Natural Environment

The plan reduces impacts on existing natural heritage and ecosystems and identifies locations where new natural vegetation and wildlife habitat should be incorporated into development.

Do Nothing	Option A	Option B	Option C
◒	●	●	◒

The ability to accommodate natural vegetation and wildlife habitat is determined by the configuration and design of streets, parks and open spaces. Generally, a more connected system creates a healthier habitat for plants and animals.

Option Plans A, B and C all improve the east-west integration of open space system, and the design of streets would be similar in all plans. However, the presence of the greenway in Plans A and B create stronger north-south linkages, and the size and shape of parks allow for better design options, making these plans better in this regard.

The existing condition reflected in the Do Nothing plan includes a significant amount of public and private open space, however the park system is disjointed and has weak connections to the surrounding open space system.

Air Quality

The plan mitigates or avoids significant air quality impacts.

Do Nothing	Option A	Option B	Option C
○	●	◒	◒

All option plans are subject to Official Plan policy objectives and requirements regarding air quality impacts in new development.

The presence of tall and mid-rise buildings along the Allen Road corridor may assist in mitigating air quality impact from Allen on the broader community. While all plans place a number of buildings along the corridor, Option A provides for the most buildings in this area. A more detailed analysis of air quality impacts related to the Allen Road and the most appropriate method of dealing with these impacts will be examined as part of the Individual Environmental Assessment for the Allen Road.

The Do Nothing option would not provide new opportunities to mitigate air quality impacts on the community.

Noise

The plan mitigates or avoids significant noise impacts.

Do Nothing	Option A	Option B	Option C
○	●	◒	◒

All option plans are subject to Official Plan policy objectives and requirements regarding noise impacts in new development.

The presence of tall and mid-rise buildings along the Allen Road corridor may assist in mitigating the impact of noise from Allen on the broader community. While all plans place a number of buildings along the corridor, Option A provides for the most buildings in this area. A more detailed analysis of noise impacts related to the Allen Road and the most appropriate method of dealing with these impacts will be examined as part of the Individual Environmental Assessment for the Allen Road.

The Do Nothing option would not provide new opportunities to mitigate noise impacts on the community.

Cultural Environment

Aboriginal Peoples

In accordance with Phase 1 and 2 of the Municipal Class Environmental Assessment process, all Aboriginal Peoples potentially affected by redevelopment will have an opportunity to review and comment on option plans for the study area.

Do Nothing	Option A	Option B	Option C
N/A	N/A	N/A	N/A

A letter was sent to Aboriginal groups potentially affected by the redevelopment advising them that option plans have been developed for the study area, including details on how to receive more information about the study..

Cultural Heritage

The plan identifies and protects listed or designated cultural heritage resources within the plan area.

Do Nothing	Option A	Option B	Option C
●	○	○	◒

Option plans A, B and C all reflect the four development principles outlined in the Heritage Impact Statement and Cultural Heritage Resource Assessment completed for the study. All three plans maintain, and provide an opportunity to enhance a significant entrance to the Lawrence Heights neighbourhood along Replin Road. Option C maintains the greatest amount of the existing form of the neighbourhood, but, like the other two options, the majority of the area's current street and block pattern is replaced.

Future study and community engagement is required to determine appropriate interpretation of cultural heritage resources in the community.

The Do Nothing Option maintains the existing structure of the area and therefore the potential to interpret and celebrate existing cultural heritage resources.

Archaeology

The plan identifies and protects areas of high archaeological potential within the plan area.

Do Nothing	Option A	Option B	Option C
N/A	N/A	N/A	N/A

A Stage 1 archaeological assessment has been completed for the Lawrence-Allen Study Area which identified and area of Baycrest Park that may have archaeological potential, located just east of the Allen Road/Highway 401 on-ramp. Option Plans A, B and C would each pose the same level of disruption to this area of the park through redevelopment. All options are therefore subject to a Stage 2 Archaeological Assessment prior to any modifications to this area.

The do nothing option does not identify or protect areas of archaeological potential; however, minimal ongoing development/redevelopment within the plan area would have limited to no impact on archaeological potential.

Sustainability / Municipal Services

Green Community

Both primary and local streets are green and sustainable, improving the public realm, increasing the tree canopy and absorbing and reducing stormwater runoff. Sites and buildings will be designed in accordance with the Toronto Green Standard

Do Nothing	Option A	Option B	Option C
◒	●	●	◒

Opportunities for green and sustainable streets are primarily created by establish right-of-way (ROW) widths that can accommodate a variety of sustainable elements (e.g. trees, grass and shrubs, bioswales and other stormwater and surface runoff filtration measures). The ROW widths for primary and local streets are the same in Options A, B and C. The primary differences between the three plans are relayed to the size and configuration of park land. Both Options A and B perform well in this regard, as they include a greenway as well as large parcels of parkland serving all parts of the Focus area. The Transportation Master Plan should include preliminary ROW cross-sections to establish design intent to achieve green streets.

Options A, B and C all provide equal opportunity for buildings to be designed in accordance with the Toronto Green Standard.

The Do Nothing option would maintain existing Focus Area buildings, which were developed in the 1950's to lower environmental sustainability standards, and would not facilitate the development of green streets. Under this option, however, the neighbourhood would maintain a large amount of permeable surfaces on both public and private land.

Stormwater Management

The plan identifies opportunities to meet the City of Toronto Wet Weather Master Plan Guidelines for stormwater management. The plan also identifies additional opportunities to treat stormwater within the plan area, and treat external tributary stormwater from adjacent lands. The Plan recommends a stormwater management strategy that will implement treatment at the source.

Do Nothing	Option A	Option B	Option C
○	●	●	◒

Guidelines within the Wet Weather Flow Master Plan (WWFMP) would apply equally to the streets and development blocks in Option Plans A, B and C. The implementation of any of the three Option Plans would utilize the same source control and treatment technologies.

Both Options A and B, include a greenway as well as large parcels of parkland serving all parts of the Focus area. These pervious surfaces allow stormwater to be absorbed into the ground where it falls. The Recommended Plan will be supported by an Infrastructure Master Plan that addresses stormwater management facilities in the public realm and adherence the WWFMP guidelines by private development.

The do nothing option does not provide opportunities to meet WWMP Guidelines or provide capability for treating storm water on site.

Water and Wastewater

Water and wastewater systems will be implemented to meet the requirements of the proposed development plan. Existing water and wastewater systems that are in conflict with the plan will be decommissioned and removed. The plan allows for core trunk infrastructure to remain in place. The new water and wastewater systems will help to reduce constraints in the existing municipal systems.

Do Nothing	Option A	Option B	Option C
○	○	◒	●

The upgrading of infrastructure through any of Options A, B and C would reduce the constraints of the existing infrastructure. An Infrastructure Master Plan will determine upgrades to support the implementation of a preferred plan.

The Option Plans differ, however, in the amount of core trunk infrastructure which could remain in place. Option A requires the most significant replacement of existing trunk infrastructure – about 45% of existing trunk infrastructure could be maintained in this option. Option B maintained 60%, while Option C could maintain the most core infrastructure – about 75%.

The do nothing option maintains the core infrastructure, but does not reduce constraints on the existing system.

Community Energy

The plan identifies opportunities for clean local energy generation and ways to minimize energy use (e.g. solar access, solar orientation and District Energy supportive).

Do Nothing	Option A	Option B	Option C
○	◒	●	●

Options A, B and C would all provide similar opportunities for energy efficient buildings which are compliant with the Toronto Green Standard and other project priorities. The Do Nothing plan would maintain existing buildings constructed at a time when energy efficiency and environmental sustainability received less consideration than today.

Park spaces present an opportunity for energy generation, by using them as borefield installation for Ground Source Heat Pump applications. To be efficient, such park locations should be surrounded by a high building and resident density and a mix of uses to balance energy use across different times of day. The centralized park system in Options B and C are better in this regard. All three of these plans have similar opportunities for on-site power generation through Ground Source Heat Pumps, Solar Thermal Hot Water and Solar Photo Voltaic systems. The current mix of land uses and building types within the study area do not support the development of a clean local energy generation system, such as district energy. There are some opportunities for retrofitting existing buildings for on-site generation, but these are limited as well.

Maximizing solar access has implications for the orientation of development blocks and the buildings that sit on them. Generally, long east-west exposures should be limited as they contribute to unavoidable heat gains in the summer and minimal benefit in the winter. Tall buildings along Allen Road have long east-west exposures and are therefore an issue, particularly in Option A. Buildings surrounding the parks in Options B and C are better oriented.

Ideally, buildings are oriented within 15º of geographical east/west to maximize passive solar potential for south facades. The current orientation of Varna Drive in the north-east of the focus area creates the possibility of some blocks oriented in this way in the Do Nothing plan. Some of the existing buildings themselves are also currently oriented to the 15º standard. Aside from this, the option plans maintain the typical block orientation of the broader study area street grid. In all cases, implementation of plans should include sun-shade studies of building orientation to evaluate and optimize solar access.

Utilities

Do Nothing	Option A	Option B	Option C
N/A	N/A	N/A	N/A

Assessment of necessary utility upgrades will be completed as part of the development review process, in consultation with utility providers, during the implementation of a preferred plan. Generally, a plan that most closely maintains the existing road networks will have the least impact on existing utility infrastructure.

I**mplementation**

Phasing Strategy

The plan has a logical and flexible implementation strategy that coordinates elements such as: transportation infrastructure, servicing, schools, parks, development and community facilities and minimizes impacts on existing surrounding neighbourhoods over time.

Do Nothing	Option A	Option B	Option C
●	○	◒	◒

A preferred plan will require a phasing plan which reflects how development will be implemented over time.

All Option Plans maintain Blossomfield as a Primary Street access into the Focus Area. As a result, none of the plans rely on redevelopment of Lawrence Square to create Primary Street access to the west side of the Focus Area.

The Community Park location in Option B, and to a lesser extent Option C, relative to the existing Flemington Public School buildings, provides flexible possibilities respecting the timing of construction of a new elementary school and land exchanges necessary to precede the park, school, and residential development. Option A would require the school to be replaced in advance of implementation of many elements in the central part of the Focus Area.

With respect to infrastructure requirements, Options B and C can potentially maintain more existing trunk water infrastructure within the Focus Area, which would contribute to phasing options. However, all Option Plans would require downstream infrastructure improvements outside of the Focus Area prior to significant development.

The Do Nothing option presents no phasing challenges.