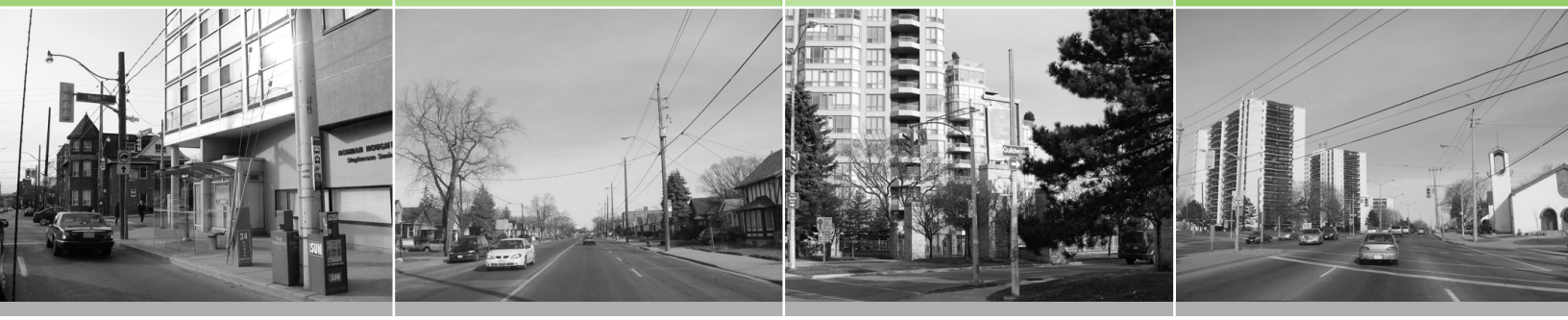


KINGSTON ROAD

TRANSIT IMPROVEMENTS

EnvironmentalAssessment: Terms Of Reference

TORONTO

DRAFT - May 2007

Table of Contents

Figures

Supporting Documents

Official Plan Background Reports Listing

Supplemental Description of Transportation Facilities

Travel Demand Analysis

Tables
Table SD-1: Existing & Future Conditions - Data Sources
Table SD-2: Preliminary Evaluation Criteria for Assessing Alternatives
Table SD-3: Potential Environmental Effects

Public Consultation Plan and Communication Strategy

Terms of Reference Consultation Record

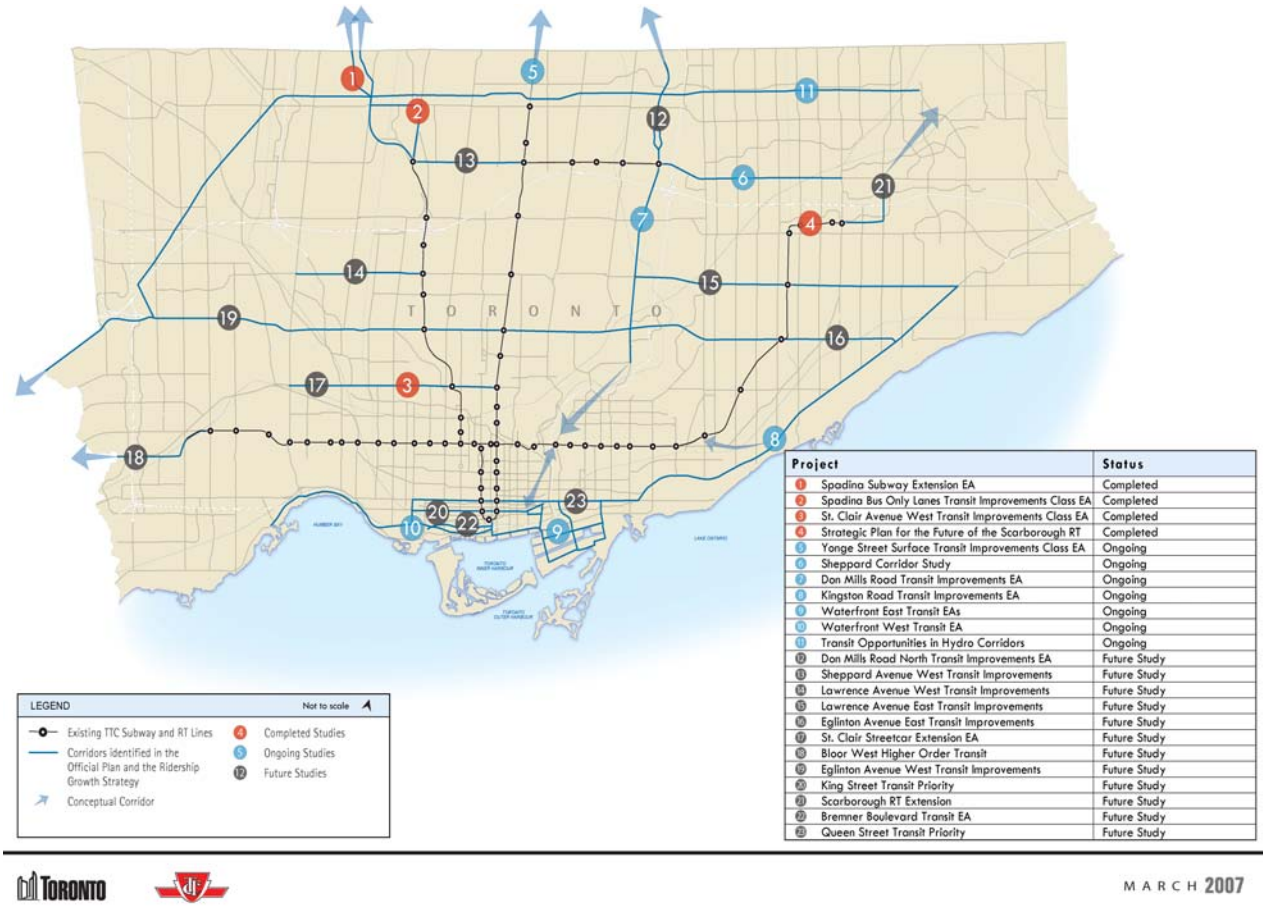
Preliminary Study Schedule

1. INTRODUCTION

The City of Toronto is proceeding with individual Environmental Assessment (EA) to identify transit improvements needed in the Kingston Road Corridor to support existing and future transportation demands. The EA will identify a preferred approach to providing reliable/ efficient transit service along the corridor, serving the communities along it. The study will also look for opportunities to integrate with both existing and future transit services in the area.

Various projects are being undertaken to improve the connectivity of the transit network/system across the entire City (see Figure 1). The aim is to form a continuous transit network linking various parts of the City together. This improved network will provide links and connections to other TTC routes and GO Transit's regional system. An integral component of this EA will be the integration of services and a direct connection to the downtown core. The EA study will need to investigate connection options to major routes such as the Bloor-Danforth subway (located north of Kingston Road), the existing Queen Street St service (Route 502/503 streetcars), and future service along Eglinton Avenue East.

Figure 1: City/TTC Transit Studies



1.1 Purpose of the Terms of Reference

This Terms of Reference (ToR) sets out the requirements for preparation of an individual EA study investigating proposed transit service improvements in the Kingston Road between Victoria Park Avenue and Eglinton Avenue East, in accordance with the Environmental Assessment Act (EAA).

This ToR is being prepared in accordance with section 6(2)(c) of the EAA. The EA study will be prepared in accordance with section 6.1(3) and those requirements for the preparation of the EA as set out in this ToR. Defining how the EA is to be prepared (that is, including more or less of the generic requirements outlined in subsection 6.1(2)) is commonly known as "focussing". The elements of an EA prepared under subsection 6.1(3) should not differ drastically from the generic elements outlined in subsection 6.1(2). Any differences will be included in the ToR. The EA components as set forward in this ToR will build upon previous planning work, including public consultation and examination of alternatives, already completed as part of the development and approval of the City of Toronto Official Plan.

Once approved by the Minister of the Environment, this ToR will provide the framework for preparing the EA and how to consult during the development of the EA. To satisfy the information requirements set out in section 6.1 of the EAA, the ToR sets out what is to be included in the EA. This information includes:

- A description of the purpose of the undertaking;
- A description of and a statement of the rationale for the undertaking, and alternative methods for carrying out the undertaking;
- A description of the existing environment potentially affected by the undertaking;
- A description of the effects that will be caused or that might reasonably be caused to the environment;
- A description of the actions necessary or that may reasonably be expected to be necessary to prevent, change, mitigate or remedy the effects upon, or the expected effects upon the environment;
- An evaluation of the advantages and disadvantages to the environment;
- A description of the consultation process undertaken during the EA preparation; and
- A description of other approval requirements including Canadian Environmental Assessment Act (CEAA) requirements, if applicable.

It should be noted that during the preparation of this ToR, City of Toronto and TTC staff have been participating in the development of a new chapter to the Municipal Engineers Association Municipal Class EA document to allow municipalities the opportunity to expedite the planning of municipal transit projects. The new chapter is expected to be approved for use by the City and TTC within the next year. Once this new process is in place, transition provisions are expected to be in place such that transit EAs that are already under way at the time of approval of the Class EA will be able to elect to proceed in accordance with the requirements of the new Class EA process. Subject to the transitions provisions approved by the Ministry of the Environment (MOE) for the Transit Class EA, the City and TTC intend to elect to follow this new Class EA process for this EA project, rather than continue with this Individual EA under Part II of the EA Act.

1.2 Purpose of the Undertaking

In general, the purpose of this EA is to assess transit improvement options in the Kingston Road corridor between Victoria Park Avenue and Eglinton Avenue East.

The overall purpose of the undertaking that is the subject of this EA will be to provide the most appropriate, cost effective transit improvements (physical facilities and/or service improvements) to serve long-term residential and employment growth along the Kingston Road corridor and provide integration with existing streetcar service along Kingston Road as well as other existing or planned transit services including the TTC Bloor-Danforth subway and GO Transit, while minimizing impacts on the environment.

At a broad planning level, the purpose of the undertaking can be summarized by the following objectives:

- To respond to current and anticipated pressures in travel demand and growing automobile dependency by providing more reliable, higher capacity, accessible, integrated and convenient public transit services, with minimal adverse impact on the natural and social environment; and
- To be consistent with municipal and provincial policy objectives for more livable, compact, economically viable, pedestrian and cycling oriented communities by providing improved, high quality public transit service.

In a more focused context, the objectives of the undertaking are also:

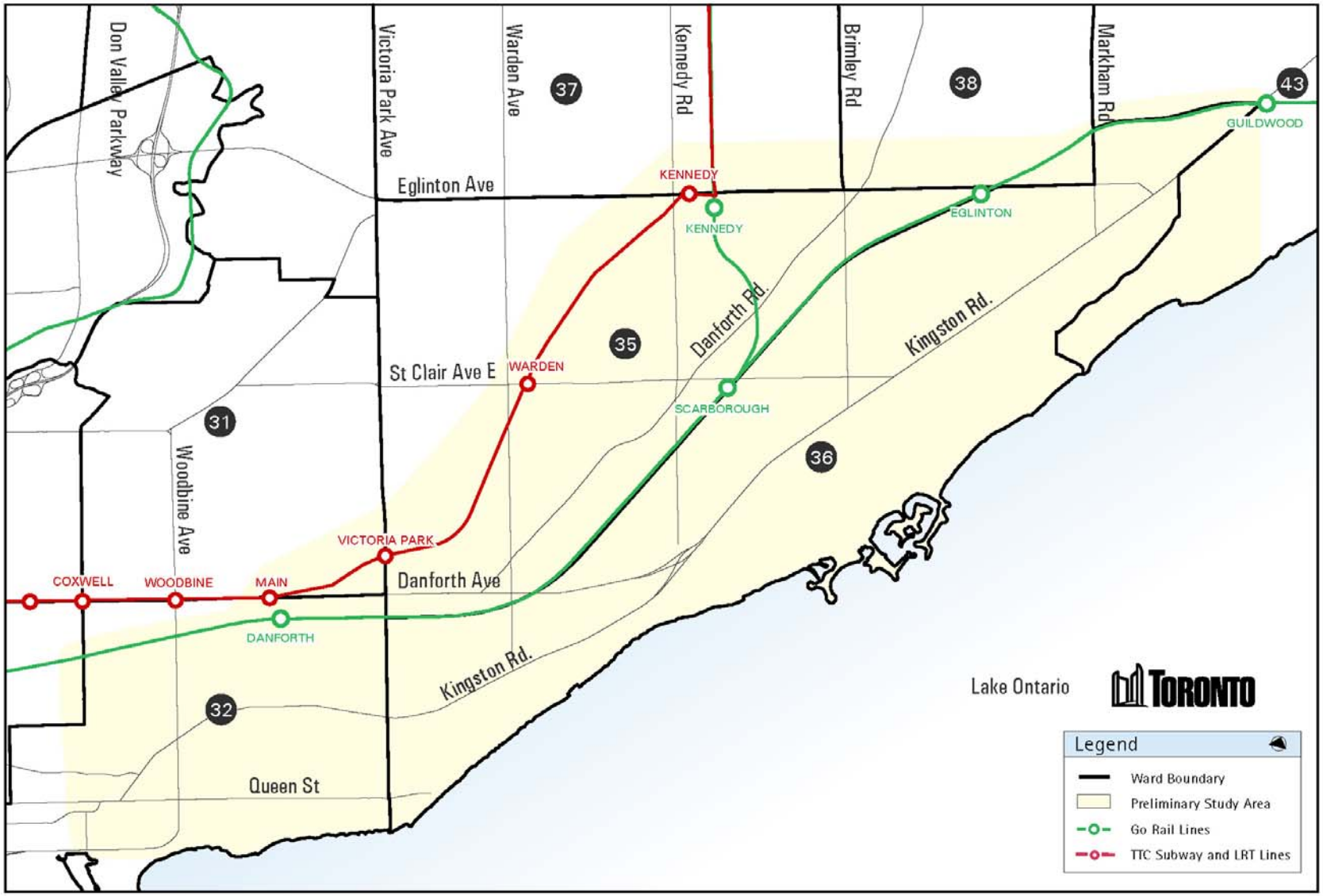
- To provide transit service improvements, service connections and service integration opportunities in the Kingston Road corridor which address existing and projected travel needs to/from and within study area;
- To increase the modal share of trips within and through the corridor made by transit by improving transit capacity and access, service reliability, and improving service integration opportunities with other transit services and,
- To identify opportunities to improve the pedestrian environment, cycling facilities, and multi-modal connections in the corridor.

1.3 Study Area

The preliminary study area, shown in Figure 2, represents the area most likely to be potentially affected (positively or negatively) by the various alternatives (routes and/or service alignments) identified during the course of the EA study. The preliminary study area has been determined based on the following considerations:

- Review of potential locations of concern as identified during the ToR process for this EA study;
- General area within which corridor and alignment/configuration alternatives can be developed within the geographic corridor without direct effects on, or displacement of existing physical, natural or other environmental features/conditions; and
- Anticipated environmental effects, both positive and negative.

Figure 2: Preliminary Study Area



City Planning, Transportation Planning - March 2007

The preliminary boundaries of this study area are flexible, and will be influenced in part by the inventory of natural environmental, ecosystems, and heritage features. Data and mapping will be obtained during the EA study from the appropriate government agencies, including the City of Toronto, Toronto and Region Conservation Authority (TRCA), Ministry of the Environment (MOE), Ministry of Natural Resources (MNR) and Ministry of Culture.

Early in the EA study process the identified boundaries will be evaluated and refined (if necessary). During the EA study, it may be necessary to modify the defined study area if significant environmental effects are determined to extend outside the study area limits. Any revisions will take place in consultation with the public, affected parties and relevant government agencies.

1.4 Proponent and Project Team

The City of Toronto and TTC are co-proponents for this Study. The City Planning Division, specifically the Transportation Planning section (Metro Hall office) will be responsible for the day-to-day project management activities, assisted by TTC (Service Planning Department) staff. City Transportation Services Division (Infrastructure Planning and Traffic Operations sections), Transportation Planning (District Offices), and Public Consultation and Community Outreach staff will also form part of the Project Team providing support on study direction and management. A multi-disciplinary consulting team will be retained to assist in carrying out the study. The consulting team will be responsible for much of the data collection, technical analysis, and development and evaluation of alternatives. Section 6.1 of this ToR provides more detail on the Project Team and the Technical Advisor Committee established for this study.

1.5 Background

Kingston Road is situated in the southeast end of Toronto and functions as a direct 'route' to downtown Toronto from Highway 401 at the eastern boundary of the City. Kingston Road (continuing as Eastern Avenue south of Queen Street) is the only continuous route connecting the eastern boundary of the city to the downtown.

Kingston Road developed along the shores of Lake Ontario linking many small communities and settlements in the eastern part of the province and was comprised of a series of trails and stage coach routes during the early settlement of the province.

Kingston Road, the former Kings Highway No. 2, is one of the earliest roads established in the former Township of Scarborough to form a land link between Toronto and the previous capital of Upper Canada at Kingston. The current road alignment was laid out in 1837 as a 20 m right-of-way. In 1875, a street railway was built along the south side of the road to haul sand and gravel into the City from quarry pits east of Woodbine Avenue. In 1893, the railway was taken over by the Toronto and Scarboro Electric Railway Light and Power Company, which established the passenger-carrying Radial Line from Queen Street first to Blantyre Avenue and eventually in 1906 to the village of West Hill.

The TTC was created in 1920 and took over the Radial Line, operating it until the 1930's. The increasing use and popularity of the motor car put the Radial Line out of business, with the final section between Birchmount Road and Eglinton Avenue closing in 1936. As the line was abandoned, the Provincial Highway Department removed the tracks and widened Kingston

Road to 4 lanes with a grassy median, east of Birchmount Road. However, the old streetcar line was remembered in some of the stop numbers, such as the Stop 20 Plaza at Fenwood Heights.

Kingston Road was the main highway from downtown Toronto to Montreal. Between the 1940s and 1960s, Highway 401 was constructed making Highway 2 redundant for the most part. However, the growth along the corridor within the boundaries of the City (and formerly Scarborough) retained this route, which has developed as the major transportation and development corridor that exists today.

2. PLANNING AND POLICY CONTEXT

Within the City of Toronto and the entire GTA, road congestion is perceived as a significant issue that adversely affects mobility, land use and development, economic conditions, safety, public health, and various other characteristics of the social and natural environment.

Various projects are being undertaken to improve the connectivity of the transit network/system across the City of Toronto and GTA. Together, greater continuity in the transit network is gradually being developed. The improved network will provide links and connections to both local transit (TTC) routes as well as regional systems of other GTA transit operators including GO Transit. Integration of different transit services will be an important element of this study. Thus, in considering alternatives for increasing passenger carrying capacity and reducing congestion (in relative terms) in the corridor as well as the Greater Toronto Region, there is the need for a coordinated transportation planning approach among responsible agencies in defining solutions which incorporate common policies and priorities.

2.1 Provincial Policies and Plans

At the provincial level, key policies/plans providing context for this EA include the Provincial Policy Statement (PPS), the Places to Grow Act (2005) and the associated regional "Growth Plan for the Greater Golden Horseshoe" (2006). The Province has committed to implementing policies and pursuing initiatives to address transportation deficiencies associated with growth and urban sprawl in the GGH. The Growth Plan directs that "transit will be the first priority for transportation infrastructure planning and major transportation investments" and that transit infrastructure will be used to shape growth and support the Growth Plan's implementation. The Growth Plan is rooted in the principles of "sustainability" and envisages increasing intensification of the existing built-up area, with a focus on transit-supportive urban "growth centres".

2.1.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development. The PPS provides clear policy direction for land use planning across Ontario. It promotes strong communities, a clean and healthy environment and a strong economy.

Outlined below are key policies as they relate to this study:

- 1.6.6.1 - Transportation, transit and infrastructure facilities are to be planned to meet current and projected needs

- 1.7.1 d) - Long-term economic prosperity should be supported by providing for an efficient, cost-effective, reliable multi-modal transportation system that is integrated with adjacent systems
- 1.8.1 b) - Public transit and other alternative modes of transportation are to be supported to improve energy efficiency and air quality

The PPS represents a strong statement of the province's interest in land use planning and development. However, it does not provide specific direction on growth management issues affecting the Greater Toronto Area or the Greater Golden Horseshoe (GGH). These broader issues are addressed through the Places to Grow Act and the Growth Plan for the GGH. The City of Toronto's new Official Plan supports and complements many of the policies contained in the PPS.

More regarding the PPS document may be viewed at: www.mah.gov.on.ca/Asset1421.aspx.

2.1.2 Places to Grow Act / Growth Plan for the GGH

The Growth Plan for the greater Golden Horseshoe (GGH)guides a wide range of issues – transportation, infrastructure planning, land-use planning, urban form, housing, natural heritage and resource protection – in the interest of promoting economic prosperity. The Growth Plan identifies a series of "growth centres", within the City of Toronto and in the vicinity of the study area for this EA that will be focal points for accommodating new housing and employment through initiatives that offer attractive new living options within easy access to community services and other amenities. These centres will require the need for, and support improved public transit services in the surrounding area.

The Growth Plan sets out policies for infrastructure development and renewal, including policies governing transportation infrastructure. Some of the objectives of the Growth Plan, affecting the provision of transportation services and facilities include:

- Reducing development pressures on agricultural lands and natural areas by directing more growth to existing urban areas;
- Ensuring that new development is planned creating communities that offer more choices in housing, transportation services including improved public transit, community services and other amenities that are closer to where people live;
- Establishing an integrated transportation network;
- Reducing car dependency, thereby contributing to improved air quality;
- Providing connectivity among transportation modes for moving people;
- Promoting transit investment;
- Encouraging the most financially and environmentally appropriate modes/technologies for trip-making; and
- Providing for the safety of system users.

Further detail regarding the Growth Plan for the GGH and its policies affecting transportation planning and facilities is available at: www.pir.gov.on.ca/English/growth/ggh_docs.htm

2.2 City of Toronto Official Plan

The new City of Toronto Official Plan (the Plan) was approved by the Minister of Municipal Affairs and Housing in October 2002 and became in effect (with the exception of two housing policies) by Order of the Ontario Municipal Board (OMB) on July 6, 2006. The Official Plan process municipalities was an intensive and comprehensive planning program, which included the updating and amalgamation of seven OPs of the former Metropolitan Toronto and its individual. The development of the new Plan extended over a period of approximately 3 years, including extensive public and government consultation. An additional 4 years was needed before approval by the Minister and OMB was received.

Transportation related policies and objectives form a significant element of the Plan, and provide the basis or support for many other policies in other areas of the Plan, which together form the road map, direction, and vision for future change and growth in the City.

The Plan represents the defined planning process and framework document which has identified the preferred planning alternative for this undertaking (public transit improvements). The Plan assumes no expansion of the major road system, and reinforces public transit as the principal means of supporting new growth and achieving land use objectives for more compact, diversified, urban form.

The Plan builds on a number of background reports (Refer to Supporting Documents) for listing and descriptions) presenting a transportation vision that supports sustainable development and growth. Some of the main attributes of the vision include:

- Integrated land use and urban design promoting fewer and shorter trips;
- Public transit service that is more competitive with the private automobile;
- Improved transit accessibility for the disabled and seniors;
- Traffic engineering and street design that encourages walking and cycling; and
- Reduced air pollution and emissions from transportation.

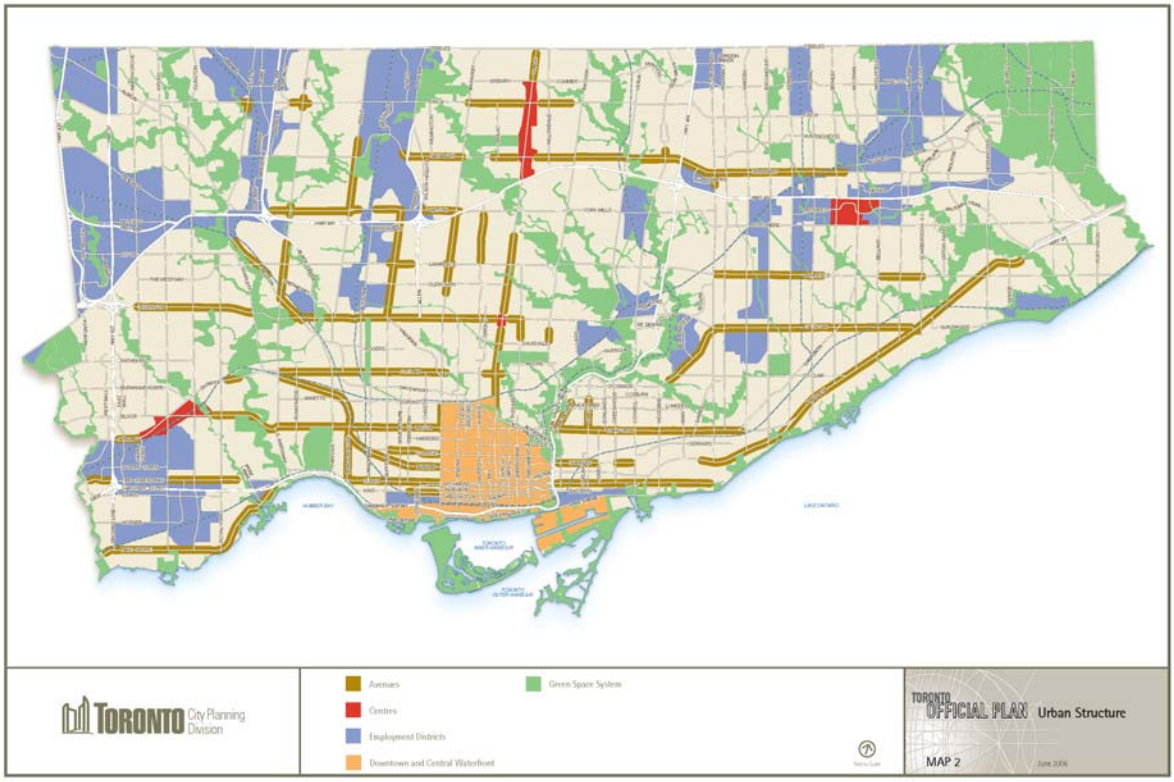
The Plan provides policy tools that support improved transit accessibility in poorly serviced areas and increasing the connectivity of the transit system so that transit becomes more competitive with the private automobile for a wider variety of trip purposes. Improving the attractiveness of public transportation in ways that are cost effective, affordable, and consistent with sustainable urban growth management practices.

The Plan forecasts a 15% to 20% growth in population and employment in the City between now and 2031. This projected growth is too large to be accommodated by the existing road system alone. Thus, the Plan stresses the need for land-use intensification and mixed use development in ways that reduce the overall need for travel and dependence on the private automobile while increasing trips using alternative means of transportation such as public transit, walking, and cycling, in conjunction with various transportation demand management measures.

The Avenues, Centres, Downtown, Central Waterfront and Employment Districts identified in Figure 3, are areas planned to accommodate most of the growth in population and employment in Toronto in the next twenty to thirty years (the life of the OP). This forecasted growth, if not managed in a sustainable manner will place a strain on the existing transportation infrastructure.

These areas of growth identified in the OP are expected to generate a substantial number of new transit riders.

Figure 3: Toronto Official Plan Map 2 - Urban Structure



These areas of growth identified in the OP are expected to generate a substantial number of new transit riders.

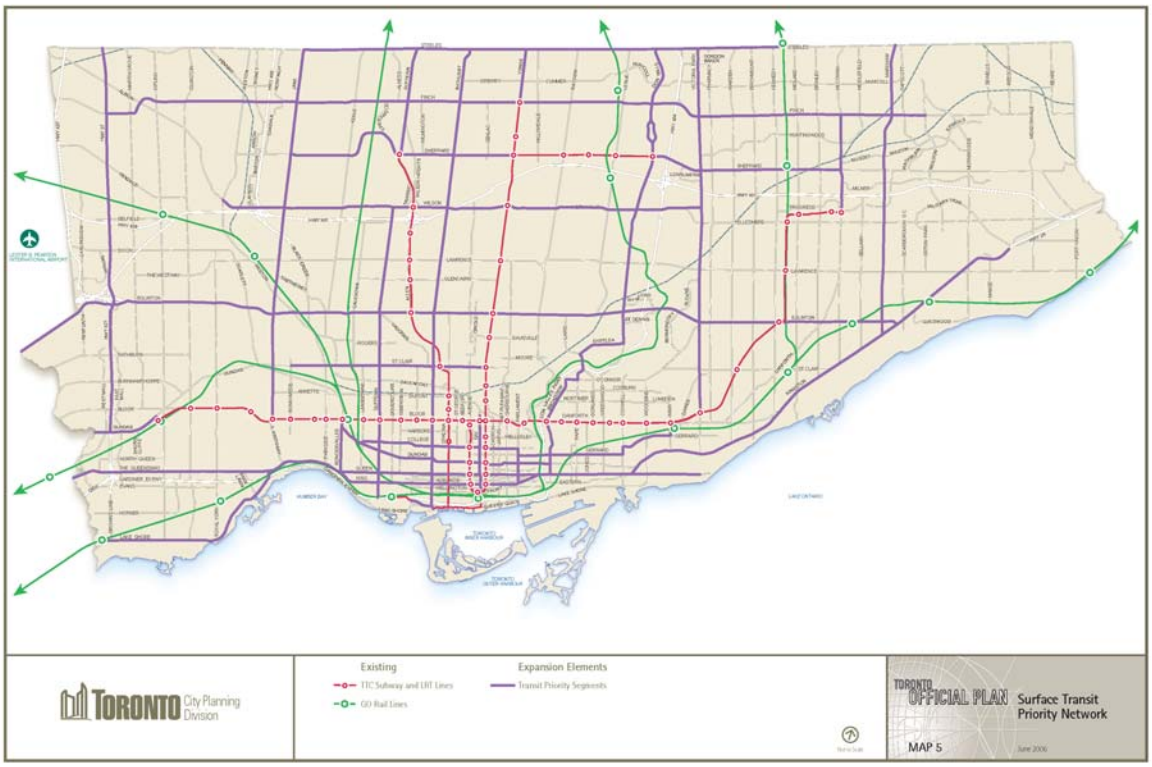
The issue of accommodating future transit ridership within the City's transportation network is reinforced in the Plan through the designation of many of the Avenues and a number of other roadways as Higher Order Transit Corridors (Figure 4) and/or Surface Transit Priority Segments (Figure 5). Significantly improving transit services on these roadways or corridors will assist the City in achieving its Official Plan vision and attract a substantial number of new riders to the TTC system and other transit systems operating within, and connecting to, the City. It also identifies the need to protect for incremental expansion of the transit system as demand justifies and funding becomes available

Situated primarily along major arterial roads, Higher Order Transit Corridors would achieve improved speed, reliability and capacity. Incorporating similar specific features, "Surface Transit Priority Segments", also identified in the Plan, would see greater priority for transit vehicles at signalized intersections and other priority measures introduced on selected transit routes such as reserved transit lanes and/or on-street parking restrictions.

Kingston Road is identified as an Avenue, Higher Order Transit Corridor and a Surface Transit Priority segment, making it a key corridor for transit improvements. Further descriptions of these elements are provided below, followed by a description of one of the Plan's key implementation tools for achieving the growth forecasts of the Plan, Land Use Designations, and how it affects the need for public transit improvements such as this proposed undertaking.

Figure 4: Toronto Official Plan Map 4 - Higher Order Transit Corridors

Figure 5: Toronto Official Plan Map 5 - Surface Transit Priority Network



2.2.1 Avenues

Avenues are important corridors along major streets where reurbanization is anticipated and encouraged to create new housing and job opportunities, while improving the pedestrian and cycling environment, the look of the street, shopping opportunities and transit service for residents. Reurbanization along the Avenues is to take place while protecting the surrounding stable neighbourhood by ensuring that new development respects and reinforces the general physical character of established neighbourhoods.

The growth and redevelopment of the Avenues should be supported by high quality transit services, including priority measures for buses and streetcars, combined with urban design and traffic engineering practices that promote a street that is safe, comfortable and attractive for pedestrian and cyclists. To facilitate and shape growth along the Avenues, the City will engage local residents, businesses, the TTC and other local stakeholders and will set out: streetscape improvements; transportation improvements such as transit priority measures, improved connections to rapid transit stations, bikeways and walkways.

In the next two-to-three decades, substantial redevelopment is anticipated in redevelopment opportunities and along the Avenues (as directed by the Official Plan). The projected growth within the Study Area over the next 25 years (2031) is 23,900 residents and 9,700 jobs, with potential to increase beyond these levels depending on availability of services including transportation services.

2.2.2 Higher Order Transit Corridors & Transit Priority Segments

In a mature city like Toronto, the emphasis has to be on using the available road space more efficiently to move people instead of vehicles and on assessing how the demand for vehicle travel can be reduced. Reducing car dependency means being creative and flexible about how we manage urban growth and move people.

Higher order transit options encompass a range of possible technologies including subway, LRT (Light Rail Transit), and busways. These higher order transit options tend to involve large capital expenditures and have a greater range of potential environmental effects than improvements to other typical feeder surface transit routes. In contrast, surface transit priority introduces significant economies of scale for heavily used surface transit routes inasmuch as increased capacity and higher average speeds can be achieved without the need for additional vehicles. In view of limited funding resources, improvements in on-street transit performance may be the single most effective way of increasing transit competitiveness without the need for major capital investment. Transit priority includes the consideration of:

- Expansion of traffic signal priority for transit vehicles at intersections,
- HOV lanes for faster and more reliable surface transit, and
- Partial or fully exclusive transit lanes transit lanes (including the elimination of on-street parking where necessary), and

Surface transit priority measures can only be achieved at some ‘cost’ to other road users. That cost can be associated with turning prohibitions at intersections or the elimination of on-street parking, to name a few.

Even where transit service is convenient in terms of walking distances, for surface buses and streetcars, travel times remain one of the most serious competitive disadvantages relative to the private automobile. Effective implementation of surface transit priority measures means that:

- Travel times by transit are reduced,
- Frequency of service can be increased without any increase in either the number of vehicles or drivers, and
- Increased speed and frequency of service attracts additional users, or alternatively, fewer vehicles and drivers are required to provide the same level of service.

Better transit service as a result of priority measures should add incentive for new residents to locate near transit service, thereby encouraging growth and development along these corridors and Avenues, which is consistent with the objectives and policies of the Official Plan.

2.2.3 Land Use Designations

The Official Plan land use designations (refer to Figure 6) within the study area consist of:

- Mixed Use Areas;
- Apartment Neighbourhoods;
- Neighbourhoods;
- Employment Areas;
- Natural Areas;
- Parks; and
- Other Open Space Areas.

These land use designations are defined in detail in the Official Plan.

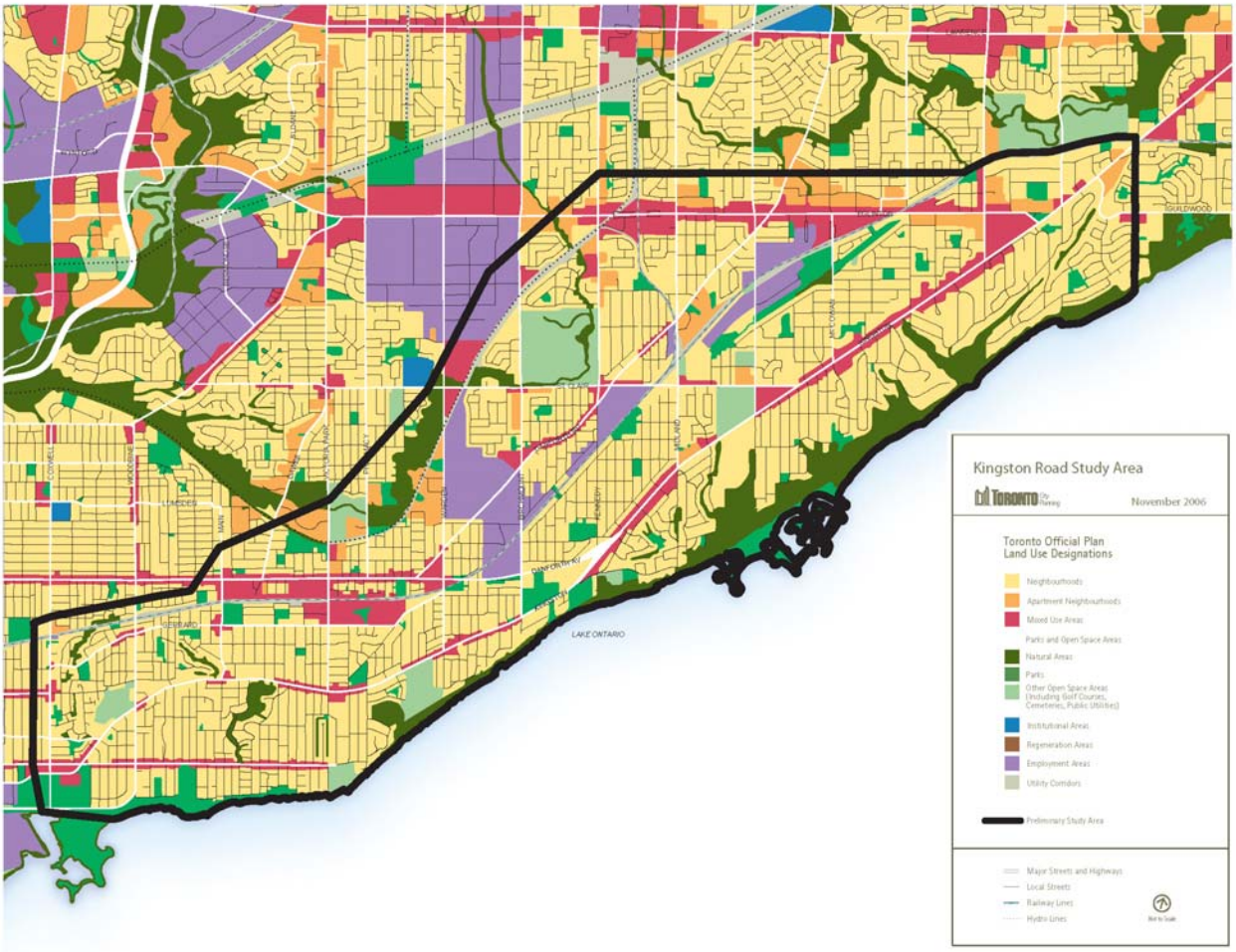
Land use designations are among the Official Plan's key implementation tools for achieving the growth forecasts over the next 25 years. The Official Plan designates more than 70% of the land adjacent to Kingston Road, between Queen Street and Eglinton Avenue, as a "Mixed Use Area". Mixed Use Areas are made up of a broad range of commercial, residential and institutional uses, as well as parks and open spaces. The mixed use areas are intended to absorb, over time, a large portion of Toronto's expected population growth, and will vary in scale and intensity of development to reflect the context of their surroundings and transportation infrastructure. Mixed Use Areas enable Torontonians to live, work, and shop in the same area, or even the same building. Giving people an opportunity to depend less on their cars, and create districts along transit routes that are animated and attractive. Much of the new development along Avenues, such as Kingston Road, will have a residential emphasis.

The Official Plan contains a number of approved policies to guide the development of Mixed Use Areas, including:

- The creation of a balance of uses that reduces automobile dependence and meets the needs of the community;
- The provision of new jobs and homes on underutilized lands;
- The location and massing of buildings to frame streets, minimize shadow impacts and provide areas of transition toward lower scale Neighbourhoods; and
- The provision of an attractive, safe and comfortable pedestrian environment.

Apartment Neighbourhoods and Neighbourhood are stable areas of the city where significant growth is generally not anticipated. Natural Areas, Park and Open Space Areas will be maintained primarily in a natural state and will provide opportunities for public parks and recreation opportunities.

Figure 6: Toronto Official Plan Land Use Designations



More detailed information regarding Official Plan policies and background reports are available at: www.toronto.ca/torontoplan/reports.htm

2.3 Other City of Toronto Policies and Plans

2.3.1 The City of Toronto Bike Plan - "Shifting Gears"

The City of Toronto Bike Plan "Shifting Gears" identifies Kingston Road, north of St Clair Avenue, as a future bike lane facility (S43). In addition, some of the roads that intersect with Kingston Road throughout the study area are also identified as a future bike lane facility: Scarborough Golf Club Road, Bellamy Avenue, Brimley Road, Birchmount Road.

More information is available at: www.toronto.ca/cycling/bikeplan/index.htm

2.3.2 Toronto Pedestrian Charter

In the Fall of 2002 Toronto's Pedestrian Charter was unveiled. The Charter sets out six principles necessary to ensure that walking is a safe and convenient mode of urban travel. The six principles are:

- Accessibility
- Equity
- Health and Well-being
- Environmental Sustainability
- Personal and Community Safety
- Community Cohesion and Vitality

Through the Charter, the City intends to:

- outline what pedestrians have a right to expect from the City in terms of meeting their travel needs;
- establish principles to guide the development of all policies and practices that affect pedestrians; and
- identify the features of an urban environment and infrastructure that will encourage and support walking.

The Charter serves as a reminder to decision-makers, both in the City and in the community at large, that walking should be valued as the most sustainable of all forms of travel, and that it has enormous social, environmental and economic benefits for the city.

A full copy of the Pedestrian Charter plus additional information is available at:
www.toronto.ca/pedestrian/

2.4 TTC Policies and Plans

2.4.1 TTC Ridership Growth Strategy

In 2003, TTC issued its Ridership Growth Strategy to fulfill the City of Toronto Official Plan's vision for future transit services. The Strategy involves a comprehensive, staged approach to service improvements, fare initiatives and the implementation of new facilities to accommodate and increase ridership over the next 10 years. The Strategy also supports the main thrust of The Plan's reurbanization policies and concludes that more trips could be diverted to public transit given a commitment to implement policies that support efficient transit operations and transit-oriented development. The TTC strategy, in particular, stresses the necessity of implementing surface rapid transit on those "higher order" transit corridors identified in The Plan. These include surface rapid transit routes and additional transit signal priority measures on several routes that fall within the study area, including Kingston Road.

Additional details about the TTC Ridership Growth Strategy are available at:
www.toronto.ca/ttc/ridership_growth_strategy.htm

2.4.2 Building a Transit City

In 2005, TTC presented an updated vision for new or expanded transit priority and surface rapid transit across the City intended to substantially improve services and increase transit reliability and capacity. The vision is entitled Building a Transit City. It is based on the need to link land use and transportation planning policies to accommodate the City's future trip growth in a way that reduces auto-dependency, and makes public transit and alternative modes more attractive alternatives. The three main identified mechanisms for meeting the vision are:

1. Improved Transportation Infrastructure
2. Sustainable Transportation Practices
3. Supportive Land Use Planning

Building a Transit City incorporates transportation policies and proposed transit network elements of the City of Toronto Official Plan, including its Higher Order Transit Corridors and Surface Transit Priority Network. As a result, several OP higher order or transit priority corridors are also included as priority elements in Building a Transit City's Proposed Surface Rapid Transit Corridors and its Possible Future Surface Right-of-Ways (ROWs) and Network.

The Kingston Road corridor between Coxwell Avenue and Eglinton Avenue is included in the Possible Future ROWs and Network. A Building a Transit City summary presentation is available at: www.toronto.ca/ttc/schedules/service_reports.htm#servicereports

3. THE UNDERTAKING

3.1 Preliminary Description of the Undertaking

This EA will examine the requirements and impacts associated with providing transit service improvements in the Kingston Road corridor from Victoria Park Avenue to Eglinton Avenue, including integration with other transit services such as the TTC Bloor-Danforth subway and GO Transit. The undertaking represents an opportunity to develop a cost-effective surface transit alternative serving trips to/from the residential and employment areas within the Kingston Road corridor and surrounding areas. The intent of the undertaking is to provide continuous service to the downtown core and areas in between.

The proposed undertaking will consist of three main components:

- Transit vehicle technology;
- Routing options (including Terminal connection options) and ;
- Physical configuration options;

When assessing planning alternatives, the undertaking could consist of one or more physical configurations. Configurations may include mixed traffic lanes with transit priority at intersections, or exclusive/reserved transit lanes and associated facilities.

A more detailed description of the proposed undertaking and the rationale for it will be included in the EA once alternatives have been considered and evaluated.

3.2 Rationale for the Undertaking

3.2.1 Opportunities

The Kingston Road Transit Improvements undertaking represents an opportunity to develop a cost-effective surface transit alternative serving trips to/from the residential and employment areas within the Kingston Road corridor and surrounding areas. This includes providing improved connections with other current and potential TTC and GO Transit services.

Although Kingston Road provides a direct driving 'route' to downtown Toronto there is no direct public transit access to downtown Toronto. Kingston Road is served by several TTC bus routes, requiring passengers to transfer services to travel continuously along the corridor. If a direct and reliable service is provided to Downtown, the proposed undertaking will provide and alternative to those currently using the Bloor-Danforth subway and to a lesser extent, the Yonge subway to Downtown. The Kingston Road Transit Improvements EA will examine a continuous transit service along Kingston Road to better serve these users. Another important travel pattern to be considered will be trips solely made within the corridor.

The proposed undertaking also represents an opportunity to provide an East-West alternative to the Bloor-Danforth subway line which may help to offload the number of passengers using the line, and transferring to the Yonge-University-Spadina line, thereby freeing up capacity on those services.

Kingston Road is identified as an important corridor where reurbanization is anticipated and encouraged. Reurbanization is expected to create new housing and job opportunities in the study area, while improving the pedestrian and cycling environment, street appearance, and retail/commercial and other business opportunities. Two significant commercial strip areas are located along Kingston Road including Cliffside Village (between Danforth Avenue and Midland Avenue), and Birch Cliff commercial area (between Victoria Park Avenue and Birchmount Road).

These two commercial areas extend for more than three kilometres through the study area. Both Cliffside Village and Birch Cliff areas have active programs and studies, supported by the City and local groups, to support revitalization and reurbanization along Kingston Road. The ongoing studies of these two areas are addressing a number of issues directly related to this EA including development potential, economic development, urban design/streetscaping, transportation needs, connections to local communities, public spaces and amenities, and infrastructure investment.

The Kingston Road Revitalization Study, for the Birch Cliff area, is providing opportunities for public involvement through open houses and charettes and will provide direction to Council on policy issues and opportunities. The study is expected to be completed by the fall of 2007. Studies done for the Cliffside area have been completed and the City is working with local groups to discuss implementation strategies.

3.2.2 Travel Demand

As part of the analysis to establish the rationale for the undertaking, which will be fully defined during the EA study, an assessment of existing and potential peak period travel demand and needs in the study area was completed as part of the Terms of Reference process for this EA. The travel demand analysis uses the most recently available transportation survey data for the various road and transit facilities and services in the corridor.

There are approximately 30,000 transit trips originating in the project study area during the a.m. peak period (6:00 a.m. to 9:00 a.m.) during a typical weekday. The majority of these trips are destined to the downtown core (38%). Overall, approximately one-third (29%) of all trips from the study area are made by using public transit.

The City of Toronto's regional GTA Travel Demand Model has been used to generate preliminary travel forecasts for the year 2021. The GTA Model incorporates GTA-wide road and transit networks and other detailed data inputs such as land use, development, population/employment, demographic, economic, and other data affecting trip characteristics, in order to identify the number and type of trips to, from and within the study area, and across major cordons or defined screenlines.

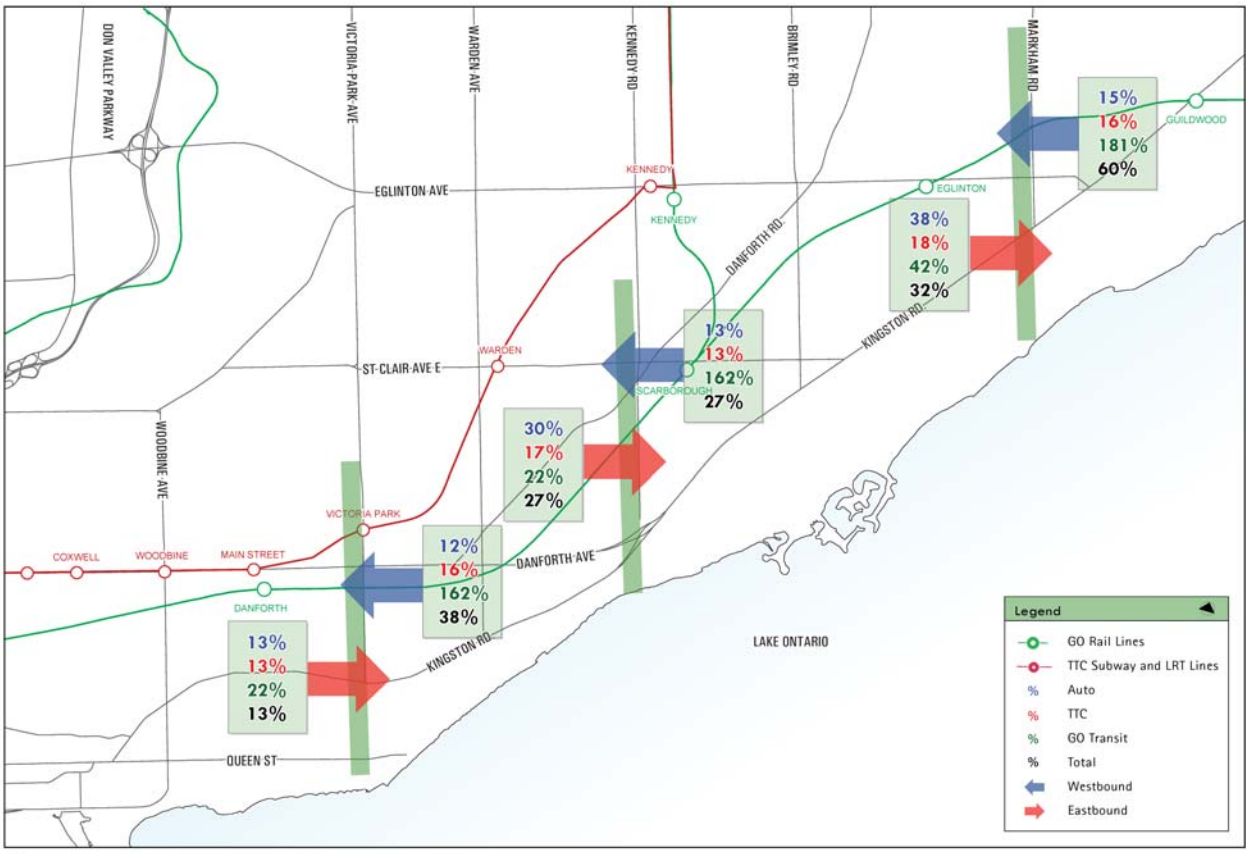
Two of the primary data inputs which provide an indication of changes and magnitude of trips in a particular area are population and employment. Population and employment projections inform long range planning and infrastructure investment by indicating the scope and scale of change. For planning purposes, the City has projected population and employment for 2006, 2011, 2021 and 2031.

Based on current projections, the population in the study area is expected to increase roughly by 11% or 21,300 people between 2001 and 2021. The City of Toronto as a whole is projected to grow by 377,000 people or 15.0% over that same time period. Employment within the study area is expected to increase by 18% between 2001 and 2021 resulting in 8,600 additional jobs in the area. Employment in the entire City of Toronto is anticipated to grow by 300,300 jobs from 2001 to 2021, a 21% increase. These projections were used as inputs to the GTA Model.

Figure 7 shows the model results for AM peak period travel growth (2001 – 2021) by mode. Transit trips, excluding GO trips, are expect to increase by 13% to 18% in the AM peak period in the peak direction. This growth in transit trips does not take into account any improvements to transit service along Kingston Road. Auto trips are expected to increase between 27% and 60% in the AM peak direction (westbound).

GO Transit is currently implementing an expansion of rail services on its Lakeshore East line including constructing a new, third track on the main rail line from Danforth GO Station to Scarborough GO Station. It includes related station improvements and twinning of existing bridge crossings to accommodate the new track. In addition, GO is upgrading the existing parallel service track to make it suitable for regular train traffic. This service track runs from Cherry St. in downtown Toronto (just east of Union Station) to Danforth GO Station. The additional track will allow for more capacity and train service on the Lakeshore East line, and will be assumed to be in place when updating the travel demand analysis in the corridor and study area during the EA.

Figure 7: Future Travel Growth by Mode - 2001 to 2021



Note:
- Assuming no changes to the transit services along Kingston Road
- Growth is based on increases in Person trips

The increase in travel demands forecasted for 2021 in the Kingston Road corridor cannot be met by a continuation of current travel trends, nor exclusively by currently planned public transit service improvements (e.g. by TTC and GO Transit). The projected increase in travel demand will contribute to longer travel times and further congestion in the corridor if current travel patterns remain the same and significant transit and traffic operations improvements are not implemented. Due to the physical, environmental and fiscal constraints of increasing capacity of the existing road system, greater transit usage and increased vehicle occupancy is required.

Improvements to transit service along Kingston Road are expected to divert some of the auto trips to transit by improving travel time and reliability to make it more competitive to automobiles. A more detailed summary of the travel demand analysis is available in the Supporting Documents.

4. DESCRIPTION OF THE ENVIRONMENT AND POTENTIAL EFFECTS

4.1 Existing Features

The EA will provide a detailed description of the existing built, natural, social, and cultural environments, and the expected or planned changes to these conditions. This Section provides a brief overview of the feature with in the corridor.

Toronto's grid of major streets has provided the City with the opportunity to develop a comprehensive network of bus and streetcar lines, which are key to meeting the goals of reducing the city's reliance on the automobile for mobility and growth.

For much of its length, Kingston Road runs roughly parallel to the shore of Lake Ontario and forms many oblique crossings with the north-south and east-west grid of arterial and local roads. In this way it is similar to nearby Danforth Road, another major arterial road in the study area.

Kingston Road provides a direct 'route' to downtown Toronto from communities in the southeast and east sections of the City, as well as Durham region. It is a six lane arterial road in a 36 m right of way east of Birchmount Road. It includes a raised centre concrete traffic median with street lighting. In some locations the median has landscaping or decorative features such as tree planters and flag poles. Generally, the commercial buildings along Kingston Road are set back from the street and parking is provided in the space between buildings. The residential uses are higher density and have service roads or other limited access points.

West of Birchmount Road, the character of Kingston Road is very different. The right-of-way is only 20 m wide and buildings are generally close to the street. There are four travel lanes available. On-street parking is common along the commercial strips, and some sections have laneways behind the fronting properties.

Physical conditions of the roadways vary within the study area. Several roads are identified as requiring rehabilitation within the next 5 years. The highest need for improvement is situated on a section of Kingston Road approximately 2.5km in length between Victoria Park Avenue and Birchmount Road. Due to the deterioration of the surface pavement and roadway subsurface, a total reconstruction of the full roadway structure is required sometime before 2012. The need for road reconstruction provides an opportunity to investigate modifications to the road cross-section, including provisions to permit improved transit operations, and enhance the overall appearance of the street.

A number of the major bus and streetcar routes in Toronto are reaching their practical limit in terms of reliability, capacity and ability to attract new riders along growth corridors as a result of operating on facilities shared with other traffic (mixed traffic). As congestion increases, it is expected that these problems will persist and worsen on more and more of the major surface routes in the TTC system.

There is no continuous transit service along Kingston Road through the study area. Streetcar service is provided on Kingston Road by the 502 Downtowner and 503 Kingston routes, which

end at the Bingham Loop (north of Kingston Road off of Victoria Park Avenue). Along Kingston Road, east of Victoria Park Avenue, service is provided by four primary bus routes:

- 12 Kingston Rd;
- 102 Markham Rd;
- 69 Warden South; and
- 9 Bellamy.

The Bloor-Danforth subway is situated to the north. Stations at Main Street, Victoria Park Avenue, Warden Avenue and Kennedy Road (at Eglinton Avenue) serve the study area. Apart from Main Street, these stations serve many feeder bus routes.

GO Transit operates rail service within two corridors within or near the study area: The Stouffville GO line (serving Markham, Stouffville and north eastern Scarborough with a stop at Kennedy subway station and the Lakeshore East GO line serving Durham Region and south and east Scarborough. The Lakeshore East GO line has stops at the Danforth, Scarborough, Eglinton GO Stations, which are all located within the study area. This line serves passengers predominantly for longer distance trips from Durham to Union Station. GO Transit is currently constructing a continuous third mainline track on the south side of its corridor between Scarborough Station and Union Station and related station and structure improvements.

The needs and potential to provide connections to the GO Stations within the study area will be assessed as part of the EA study.

Several significant commercial strip areas are located along Kingston Road including Cliffside Village (between Danforth Avenue and Midland Avenue), and Birch Cliff commercial area (between Victoria Park Avenue and Birchmount Road). While neither of these commercial areas is governed by a Business Improvement Area (BIA), there are organized business and residents groups that have formed to support ongoing revitalization programs and studies.

These two commercial areas extend for more than three kilometres through the study area and provide important local commercial functions for communities north and south of Kingston Road. Both Cliffside Village and Birch Cliff areas have active programs and studies, supported by the City and local groups, to support revitalization and reurbanization along Kingston Road. The ongoing studies of these two areas are addressing a number of issues directly related to this EA including development potential, economic development, urban design/streetscaping, transportation needs, connections to local communities, public spaces and amenities, and infrastructure investment.

The study area includes a diverse mix of residential communities containing both low density residential uses with lower scale buildings, medium density uses with townhomes and higher density apartments. These communities are served by numerous neighbourhood and regional-scale parks, schools, and places of worship.

Buffers Park, Eastern waterfront beaches and other smaller waterfront parks are the most prominent natural environmental feature in the study area. The Bellamy Ravine Creek is the most prominent watercourse draining into Lake Ontario from the study area.

Figure 6 illustrates the land use identified in the Official Plan.

During the EA study, a more detailed description of the environment will be provided. A listing of the key types of data to be collected during the study and the potential primary sources for the data is provided in Table SD-1 (See Supporting Documents). In addition, supplementary description of the Transportation Facilities is also provided in the Supporting Documents.

4.2 Potential Effects

The EA will examine the potential effects of the alternatives and the undertaking on all components of the environment. Potential effects can be positive or negative, direct or indirect. In general, the identification of potential environmental effects will include an inventory or profile of existing conditions as described in the preceding Section, a description of the expected effects of each alternative, an evaluation of advantages and disadvantages, and identification of the actions necessary to change, mitigate or remedy any negative effects. These will all be identified in the EA.

Sections 5.3 and Table SD-2 (See Supporting Documents) further describe the process to be followed and specific factors to be applied in identifying the potential positive and negative effects of the various alternatives.

A preliminary list of potential environmental effects to be considered during the evaluation of alternatives is included as Table SD-3 (See Supporting Documents). These are provided for reference purposes only, and will be refined during the EA. Actual determination of environmental effects and the actions necessary to address any negative effects will occur during the EA.

5. ENVIRONMENTAL ASSESSMENT WORK PLAN

The preliminary study schedule, provided in the Supporting Documents to this ToR, outlines the timelines for both the ToR and Environmental Assessment stages of the study. Given the nature and complexity of such studies, it is not intended to present every detail of all activities to be completed during the EA. The dates shown are approximate and are subject to change during the course of the study.

5.1 Description of Existing and Future Conditions

The purpose of this initial activity in the work plan is to establish the baseline conditions for the identification and evaluation of alternatives. The EA will provide details on existing conditions related to the built, natural, social, and cultural environments, and the expected or planned changes to these conditions. In addition, this baseline data will be used to predict the potential environmental effects of the undertaking.

A listing of the key types of data to be collected during the study and the potential primary sources for the data is provided in Table SD-1 (See Supporting Documents). Any planned/approved changes to these conditions (to occur within the timeframe of the EA) will be reviewed for inclusion in the existing conditions inventory.

Background information related to natural environment and natural heritage features within the study area will be collected from agencies such as the City of Toronto Forestry and Natural Environment Management section, the Toronto Region Conservation Authority (TRCA), Ministry

of Natural Resources, Ministry of the Environment, Ministry of Culture and other available secondary sources.

The EA Report will include any supporting technical studies, surveys and environmental inventories to assist in providing a detailed description of the environment. Existing studies or reports may be used to supplement the information provided in the EA. In addition to the existing conditions described Section 4.1, the following sections outline the types of information that will be examined in greater detail during the EA. This is not intended to be an exhaustive list but it will provide a starting point for the study and analysis.

5.1.1 Transportation Facilities and Service

- Roadway network and traffic volumes (existing and forecast);
- Traffic operational data (e.g. collisions, signal systems);
- Transit network, services and volumes (existing and forecast);
- Travel market analysis (e.g. Transportation Tomorrow Survey (TTS) data);
- Railway network;
- Key emergency response routes; and
- Pedestrian and cycling network, including volumes where available.

To assist in identifying future travel needs, the City will develop updated long range travel demand forecasts for the 2021 planning horizon utilizing its regional GTA Travel Demand Model and TTC's Madituc transit forecasting model. Assessment of both existing and future demand (under existing and future networks), will be done using land use forecasts for the GTA and observed travel characteristics TTS (2001 – most recent data available). Travel demand analysis done during the preparation of other recent or ongoing City and TTC transportation project studies will also be used.

Travel demand forecasts will incorporate work completed for related ongoing transportation planning studies or projects, and assume implementation or partial implementation of planned transportation network improvements by 2021 including the GO Transit 10 Year Plan, GO Transit BRT, York Region Rapid Transit Plan/VIVA implementation and connections with TTC subways, TTC-TWRC Waterfront East and West Transit Improvements, Spadina Subway Extension, Yonge Street Surface Transit Improvements, and the Scarborough RT Strategic Replacement study.

5.1.2 Natural Environment

The following information will be identified and mapped (where appropriate) to assist in the evaluation of alternatives and potential effects:

- ESAs, ANSIs, Wetlands, Regional Storm Floodplains, hydro-geological conditions, watercourses, valley corridors, erosion prone areas;
- Terrestrial features and individual species (including significant woodlands and rare vegetation communities);
- Species at risk, significant wildlife habitat for endangered and threatened species;
- Existing drainage patterns in the vicinity of stations and valleys;
- Known contaminated sites and unknown sites with a high potential to be contaminated;

- Storm water management features; and
- Natural heritage features and system linkages.

5.1.3 Social-Cultural Environment

- Description of land use in the study area, and in the vicinity of routing options and stop/station locations;
- Development characteristics and patterns in the study area;
- Inventory of community services;
- Business characteristics and access considerations along the corridor;
- Inventory of cultural/heritage features or uses in the vicinity of the corridor, including cultural landscapes and places of sacred and secular value;
- Areas of potential and known archaeological features and aboriginal significance;
- Ambient noise (representative information in areas of potential high effects); and
- Quality of pedestrian environment.

5.1.4 Planning and Policy Context

- Development activity, characteristics and patterns in the study area;
- Area Studies, Secondary Plans, Neighbourhood Plans, and Revitalization Plan;
- Approved policy/programs and guidelines of the City of Toronto, Province and other relevant government agencies; and
- Relevant objectives regarding transportation investment, priorities and implementation.

5.2 Description of and Rationale for the Alternatives

5.2.1 Alternatives to The Undertaking (Planning Alternatives)

Alternatives to the undertaking (planning alternatives) are functionally different ways of approaching and dealing with a problem or opportunity. The previous planning work completed as part of the development of the City's Official Plan evaluated a number of planning alternatives for addressing the transportation needs in the City including the Kingston Road corridor. Higher order transit service on Kingston Road was identified as the recommended transportation planning alternative to address these needs. As part of this EA, this transit planning alternative will be confirmed after completion of the travel needs assessment to occur during the first phase of the study.

The Official Plan also recommends several other transit-related policies and initiatives such as various Transportation Demand Management (TDM) measures and GO Transit inter-regional service improvements to reduce demand and dependency on the private automobile and to support increased transit usage. All are recommended for inclusion within the transportation vision for the City and are considered complementary initiatives to higher order transit or surface transit priority improvements on Kingston Road. The Official Plan identifies all the transit initiatives recommended by the Plan as required in order to address forecast travel demand in the corridor and City.

Among these initiatives, the Official Plan recognizes the important role of expanded, higher frequency GO Rail service in providing transit capacity in the corridor. As described in Section 4.1, improvements to the GO Lakeshore East rail corridor are already being pursued by GO Transit. The primary travel needs to be served by these improvements are trips between Durham Region (and points further east) and Downtown Toronto accommodating travel demands, needs and markets beyond those being identified for the Kingston Road Transit improvements study area and corridor. Given that expanded rail service is committed and now in the process of being implemented by GO Transit, detailed analysis will not be carried out during the EA and GO Lakeshore East rail improvements are not considered as planning alternatives (alternatives to the undertaking), but rather as complementary improvements. The improvements for the GO Lakeshore East corridor will be assumed to be in place when updating the travel demand forecasts.

In conjunction with the Official Plan policies regarding transit improvements and expansion as the key means of achieving the transportation vision for the City, additional planning alternatives (alternatives to the undertaking) will not be identified for this EA (other than a Do Nothing alternative).

5.2.2 Alternative Methods of Carrying out the Undertaking (Design Alternatives)

Alternative methods of carrying out the undertaking (design alternatives) are essentially different ways to accommodate the undertaking within a chosen corridor. A combination of design options will be considered during the EA including options identified during the course of the study by the Project Team and by the TAC, public or stakeholder groups.

For this EA, the design alternatives will include three principal components:

- Vehicle Technology
- Routing Options (including Terminal/Transfer Options) and,
- Physical Configuration

Due to the integral relationship between routes and technology, the EA will evaluate these options together as the first step in the development of design alternatives. Based on the results of that evaluation, physical configuration options will be developed as the second step.

5.2.2.1 Vehicle Technology Options

Vehicle technology generally refers to the type of transit vehicle, along with any required operating infrastructure. Technologies to be considered for this project will include both bus-based and surface rail-based technology. Several factors affect choice of vehicle technology for any given transit service, including physical and operational feasibility, ridership potential and environmental considerations. General operational configuration(s) for new transit infrastructure or services may also vary depending on the transit technology it serves. Infrastructure requirements will be evaluated considering potential staging of transit vehicle technology in the various route sections of the corridor (e.g. changing from bus-based to rail-based technology). Figure 8 illustrates the capacity range of various transit technologies and in its associated operating configurations (e.g. mixed traffic, exclusive right-of-way) to achieve those capacities.

The EA will not include consideration of subway technology in the corridor. Initial projected travel demand estimates for transit improvements in the corridor do not reflect the need for subway service, and its high capital costs compared to anticipated ridership levels make it extremely cost-prohibitive. Instead, it is proposed that the following technology (and operational configuration) options be further considered and evaluated during the EA phase:

1. Conventional bus - operating on existing roads;
2. Streetcar/light rail - operating on existing roads;
3. Conventional or new bus/bus rapid transit - operating in a dedicated right-of-way (full or partial route; primarily at-grade); and
4. Streetcar/light rail - operating on a dedicated right-of-way (full or partial route; primarily at-grade).

Other alternative technologies identified during the EA study may also be included for evaluation. It is possible that more than one of these technology options will be carried forward as part of the development of physical configuration options.

Figure 8: Capacity Ranges for Various Transit Technologies

5.2.2.2 Routing and Service Options

For the purposes of this study, routing options refer to the general location of a transit service within the study area. Potential routing and service options to be evaluated include:

Route 1

1 - Continuous service along Kingston Road, integration with existing service on Kingston Road west of Victoria Park Avenue

1a - Continuous service along Kingston Road, intergration with Bloor-Danforth Subway at Victoria Park Station

1b - Continuous service along Kingston Road, intergration with Bloor-Danforth Subway at Main Station

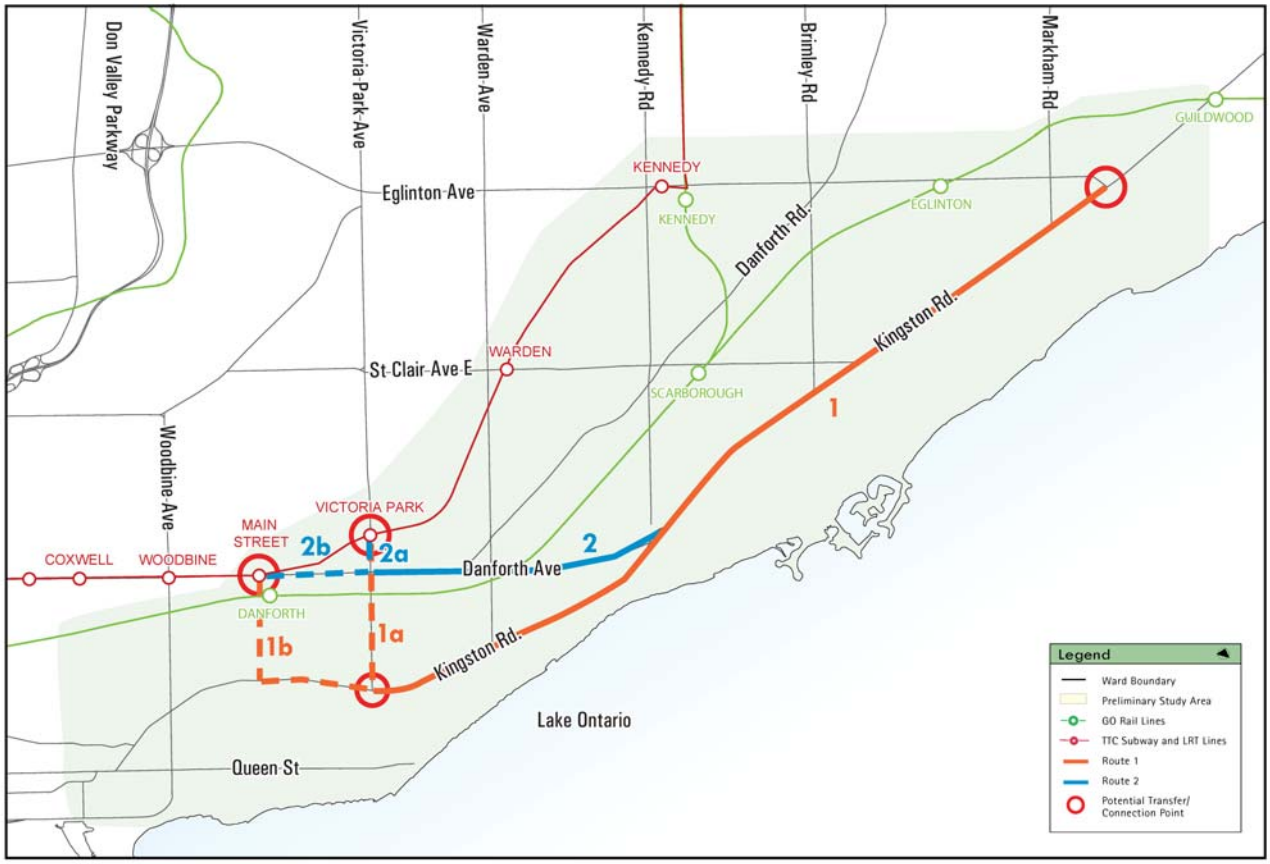
Route 2

2 - Continuous service along Kingston Road with service along Danforth Avenue west of Kennedy Road

2a - Continuous service along Kingston Road with service along Danforth Avenue west of Kennedy Road, integration with Bloor-Danforth Subway at Victoria Park Station

2b - Continuous service along Kingston Road with service along Danforth Avenue west of Kennedy Road, integration with Bloor-Danforth Subway at Main Street Station

Figure 9: Routing and Service Options



The project team will also consider any reasonable alternatives identified by stakeholders, technical agencies, or the public. Any alternatives that address the objectives of the undertaking (Section 1.2), and are consistent with the plans and policies identified in Section 2 of this ToR, will be considered by the Project Team.

5.2.2.3 Terminal/Transfer Options

There are four principal locations in the corridor that will be reviewed during the EA as possible terminal locations or major transfer points for proposed transit improvements.

Bingham Loop

The Bingham Loop (north of Kingston Road off of Victoria Park Avenue) is the termination point of two streetcar services; 502 Downtowner and 503 Kingston. It is also serves as a transfer point for two bus services (22 Coxwell and 12 Kingston). This loop is located just off of Kingston Road in the midst of a residential neighbourhood. The Loop contains a single streetcar platform and a single bus platform. This EA will examine the role of this loop as it relates to proposed transit improvements in the Kingston Road corridor.

Victoria Park Station

The existing Victoria Park subway station is located along Victoria Park Avenue north of Danforth Avenue at Denton Avenue. The station includes an elevated bus terminal, commuter parking and elevated pedestrian connections to nearby residential developments. This station is currently the subject of a redevelopment study since the infrastructure (both surface and below grade) must be completely reconstructed and modernized.

This station is currently the terminal location of a number of bus services that serve Kingston Road. This station is one of two subway stations that could serve as a terminal/transfer point for new transit services in the Kingston Road corridor. The redevelopment of the station provides an opportunity to assess needs to support this EA.

Main Street Station

The Main Street station is located off of Main Street just north of Danforth Avenue. This station serves walk-in transit users, TTC bus services (primarily north and east of the station) and is the terminal point for the 506 Carlton Streetcar service. This station has the potential to serve as a terminal/transfer location to support new transit services in the Kingston Road corridor. The benefits of its proximity to the Danforth GO station will be assessed during the EA.

Eglinton Avenue/Kingston Road

The Kingston/Eglinton intersection is a major transfer/terminal point for existing bus services in the Study Area, particularly those services travelling along Eglinton Avenue.

Within the study area, Eglinton Avenue currently has High Occupancy Vehicle lanes that provide some priority for transit vehicles operating along this route. However, it is expected that TTC will pursue a study of surface rapid transit on Eglinton Avenue (and possibly on Kingston Road east of Eglinton Avenue to Guildwood GO Station) in the near future. This study will examine the demand for services on Eglinton Avenue connecting to Kingston Road as well as the need for and configuration of transfer/terminal facilities at this major intersection.

To ensure that specific options for future transit improvements along Kingston Road east of Eglinton Avenue are not precluded as part of the future EA, the ability to protect and provide

future integration with services further east of Eglinton Avenue will be among the key evaluation criteria to be used in the assessment of the design alternatives for this EA for transit. In addition, the need to provide integration with future transit services along Eglinton Avenue will be assessed and identified as part of the evaluation process.

5.2.2.4 Physical Configuration Options

Physical configuration options refer to the specific location of the transit facility or operation within the selected corridors, and the road right-of-way features in the context of the selected technology. There is a wide range of specific elements comprising the physical configuration of a facility or service including, but not limited to.

- Route alignment (e.g., horizontal and vertical location on or off a roadway; directional routing);
- Specific location within the roadway where transit facility or operation occurs (e.g. curb lane, median lane, in mixed traffic, dedicated, etc.);
- Roadway design (e.g., lane widths, bike lanes, sidewalks, etc);
- Transit facility design (e.g., platform and stop locations and features, etc.);
- Traffic control (e.g. signalization, form of signal priority);
- Service design (e.g. express, all-stops, etc);
- Connections to other transit routes/services; and
- Streetscaping and urban design elements (e.g, sidewalk layout; plantings and landscaping; other public realm features)

Improvements to pedestrian and cycling access and safety will be reviewed as part of all options evaluated. These improvements may include bike lanes on Kingston Road, Danforth Avenue, Victoria Park Avenue or other major study area roadways as indicated in the Toronto Bike Plan (2001), and/or may include bike friendly street design elements as outlined in the Toronto Bike Plan (2001) on all other affected streets.

Alternative configurations may include passenger stops potentially expanded in size and function than current transit stops in the corridor. At these locations, modifications to the roadway or intersection configuration may be necessary to accommodate passenger platforms and other facilities, including pedestrian and cycling elements, as required. The study will examine options for new or relocated stop locations along the route.

5.3 Assessment and Evaluation of Design Alternatives

5.3.1 Evaluation Approach

The evaluation of the various design alternatives will involve both a screening process (for routing and technology options) and more detailed evaluation process (for the short-listed route/technology options and the physical configuration options).

The development of the design alternatives will include two main components. The first component will focus on the assessment and evaluation a preferred route(s) and vehicle technology. The second step will involve the assessment and evaluation of physical configuration options and selection of a preferred design concept (which will include all three elements: route, vehicle technology and physical configuration).

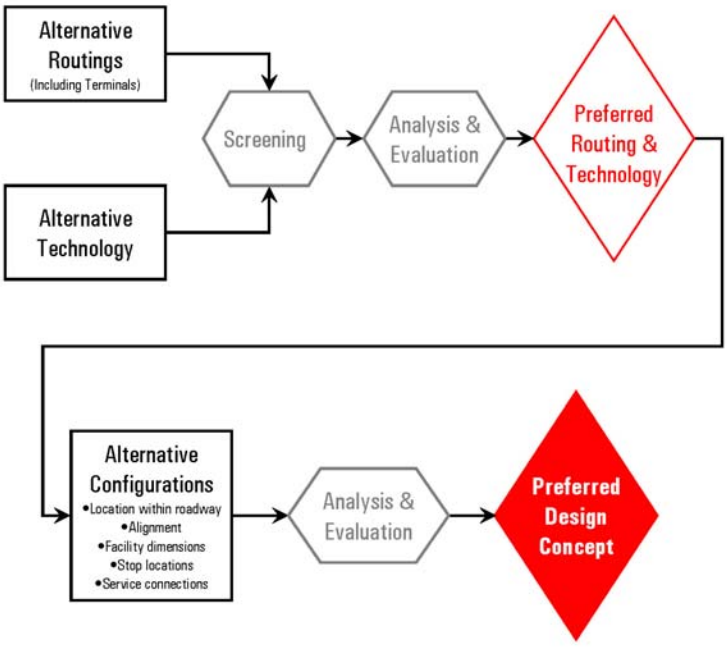
Due to the potential large number of alternative route and technology combinations to be assessed, an initial screening process will be used to narrow a long list of options down to a smaller number for more detailed examination and use in the development of physical configuration options. Screening may result in deletion of options or consolidation of two or more options where appropriate. The screening step will focus on identifying only those various options and combinations that address the primary purpose and objectives of the project: providing frequent, fast, higher capacity and reliable transit service in the Kingston Road corridor, thereby increasing the potential for a higher share of trips made by transit; how well the alternatives may be integrated within the area transit network; and the feasibility and estimated costs to implement the alternatives

The development of the design alternatives will include two main components. The first component will focus on the assessment and evaluation a preferred route(s) and vehicle technology. The second step will involve the assessment and evaluation of physical configuration options and selection of a preferred design concept (which will include all three elements: route, vehicle technology and physical configuration).

Due to the potential large number of alternative route and technology combinations to be assessed, an initial screening process will be used to narrow a long list of options down to a smaller number for more detailed examination and use in the development of physical configuration options. Screening may result in deletion of options or consolidation of two or more options where appropriate. The screening step will focus on identifying only those various options and combinations that address the primary purpose and objectives of the project: providing frequent, fast, higher capacity and reliable transit service in the Kingston Road corridor, thereby increasing the potential for a higher share of trips made by transit; how well the alternatives may be integrated within the area transit network; and the feasibility and estimated costs to implement the alternatives.

Figure 10 illustrates the basic evaluation framework to be followed.

Figure 10: Alternatives Evaluation Process



The development of the design alternatives will include two main components. The first component will focus on the assessment and evaluation a preferred route(s) and vehicle technology. The second step will involve the assessment and evaluation of physical configuration options and selection of a preferred design concept (which will include all three elements: route, vehicle technology and physical configuration).

The screening acts as a simple "fatal flaw" assessment, whereby a smaller set of options are identified. These options will be carried forward to the next step of the evaluation process where they will go through a more rigorous comparative evaluation and become the basis for developing physical configuration options. The advantages and disadvantages of the various options will be compared based on a comprehensive range of evaluation criteria that address all facets of the environment. Net impacts will be identified. These net impacts refer to the effects on the environment that remain after standard mitigation measures have been applied to reduce the extent of the impact.

A preliminary list of evaluation criteria and indicators/measures for assessing design alternatives has been developed by the Project Team in consultation with agencies, stakeholders and the public during the ToR process and shown in Table SD-2 (See Supporting Documents).. The Project Team will refine this list during the EA study bases on the comments and input received from technical/government agencies, stakeholders, and the general public. The criteria to be used may not necessarily include or be limited to those identified on the preliminary list.

The method used to predict environmental effects and evaluate advantages and disadvantages should clearly identify the relative differences among alternatives and the decision process behind the selection of a Preferred Alternative. For this EA study, the evaluation method to be used, sometimes referred to as the Reasoned Argument method, will identify the key differences between the various alternatives and the reasons why an alternative is preferred over another. The evaluation criteria and measures will be defined in terms of quantifiable or measurable attributes wherever possible. Alternatives can then be compared in terms of these measures. For example, number of persons carried per segment of roadway is a measure for the criteria, effect on person-carrying capacity. Some measures however, may only be assessed qualitatively.

The evaluation framework will be based on a phased sequence of decision-making in which the design alternatives are assessed at an increasing level of detail as they become more focused. In general, the assessment of environmental effects will use the inventory of existing conditions as a baseline to assess the effects of each alternative, the types of impacts and potential measures to mitigate the impacts. Appropriate technical analysis will also be undertaken to identify the potential effects, significance of the effects, and net effects (effects after mitigation) associated with each of the criteria. The relative significance of the impacts assists in providing a clear rationale for the selection of a preferred design concept.

As part of the evaluation, a relative importance or weighting of the advantages/ disadvantages and criteria may also be determined. Stakeholders and the general public will assist in identifying the relative importance of the various evaluation criteria, which will then be applied to the overall assessment of a particular alternative.

The decision-making process will be clearly documented to support a traceable process and to ensure that it is understandable. Opportunities for stakeholder input into this process will be available, and are outlined further in Section 6.2.

5.3.2 Key Issues During the Assessment of Design Alternatives

Some of the key issues or considerations to be completed as part of the assessment of alternatives are listed below. These are not intended to represent a complete task list. The analysis for all categories will build upon preliminary work completed during the ToR process and incorporate relevant updated information from ongoing studies or initiatives.

1. Transportation Modelling

In addition to updating the existing and projected future travel demand conditions in the study area, and assist in the assessment of alternatives, the Project Team will utilize the City's regional GTA Travel Demand forecasting model (GTA Model) and TTC MADITUC transit analysis model to assist in evaluating the effects of different transit design alternatives in the corridor and study area. This work will be supplemented where appropriate with microsimulation analysis. This microsimulation analysis is intended to provide detailed snapshots of expected auto and transit operations for one or more design alternatives, under different roadway and/or transit facility design and operational scenarios associated with the new transit service (e.g., providing transit priority or exclusive/reserved transit lanes). Microsimulation analysis incorporates detailed operational conditions as inputs including traffic, pedestrian and cycling volumes and patterns, vehicle mixes, traffic signal timings, transit signal priority, and on-street stopping and parking conditions/ restrictions.

For analysis at intersections, the microsimulation analysis may be combined with conventional traffic analysis methods (i.e. using software such as CCG, HCS, or Synchro) to further define the effects of changes in road capacity, and traffic level of service, (e.g., delays, queues).

2. Urban Design / Area Revitalization

Due to the prominent road right-of-way features, land use mix, and business/commercial characteristics of the corridor, and proximity to large waterfront open space/park uses, incorporating urban design improvements and public art will be a significant consideration for this project. Specific issues to be considered are streetscape appearance, sidewalk layout and features, landscaping, and other public realm features that help identify and distinguish the various communities along the corridor. Two specific areas of the corridor that are the subject of ongoing work by City staff in conjunction with community residents and businesses are Cliffside Village and Birch Cliff.

The Cliffside Village Revitalization Committee (CVRC) is made up of business owners and residents whose goal is to improve Cliffside Village to make it a meeting place for all to enjoy. Cliffside Village is located along Kingston Road between Brimley Road and Birchmount Avenue. CVRC, along with the City's Economic Development division, has completed several studies to support the economic development and revitalization of the area. The most recent study, Metamorphosis: New Directions for Cliffside Village – 5-Year Strategic Business Action Plan (March 2004), provides some important input for this EA study regarding economic development, community vision, accessibility, built form, streetscape and transportation issues. CVRC has expressed a strong desire to participate in the EA process and to build on the work that this group has already done for this section of Kingston Road.

The City of Toronto is undertaking a revitalization study of Kingston Road through the Birch Cliff Community. The focus of the study is on the properties that front on the north and south sides

of Kingston Road through Birch Cliff extending about 3 kilometres from Victoria Park Avenue to east of Birchmount Road. The study will provide a strategy for the revitalization and reurbanization of Kingston Road in the context of the policies and directions of the Official Plan. Some key elements of the study will provide important input to this EA, such as key development sites/area and potential density, public open spaces/special sites (such as Birchmount Park, Rosetta McClain Gardens, Taylor Memorial Library), connections to/from local communities, off-street improvements, connections to Lake Ontario, parking needs, and urban design and streetscape opportunities.

More information about the Kingston Road Revitalization Study is available on the City of Toronto website at: www.toronto.ca/planning/kingston.htm

3. Socio-Economic Effects

An assessment of general socio-economic effects (and possible mitigation) will be prepared and included in the EA Study. The specific criteria in this category are wide-ranging and include effects on land use, community services, redevelopment opportunities, urban design, noise, and community and business access.

Potential noise and vibration impacts (both during and after construction) are also a major consideration in areas where new infrastructure is likely to affect residential and recreational areas, as well as other noise and/or vibration sensitive land uses, such as schools, health care centres, places of worship, and buildings with sensitive testing equipment. To establish baseline conditions, noise monitoring data will be collected in areas having potential for significant impact (where a major change in the type or volume of traffic is expected). For areas where data is not available, monitoring will be undertaken to determine the typical ambient (existing) noise levels. Appropriate noise criteria for the baseline assessment and assessment of alternatives will be confirmed with Ministry of the Environment Noise Unit staff.

Analysis of residential and business impacts will focus on potential changes in areas along the alternative corridors. The analysis will include examining the effects on site and neighbourhood accessibility by auto, transit, pedestrian and bicycle modes, vehicle parking, local traffic volumes/patterns, urban design, loading/unloading locations, visibility and attractiveness (due to changes in streetscape/sidewalks) and community connectivity.

The assessment will also discuss the relationship among enhanced transit services and development potential and community revitalization, referencing current examples of other locations locally, in Canada, and abroad as appropriate.

4. Natural Environment, Parks and Open Space

The existing conditions in the study area related to natural environment will be identified as part of the EA Study. Field investigations will be conducted as required to supplement available background information and the identification of environmental features and relevant mapping of environmental constraints and deficiencies will be presented.

Following the analysis of existing conditions, the potential environmental effects resulting from the various alternatives will be evaluated and compared. This includes any effects on the natural features such as: Bluffers Park, Toronto Hunt Club, Resthaven Memorial Gardens, Bellamy Ravine Creek, other Environmentally Significant/Sensitive Areas (ESAs), wetlands, Areas of Natural and Sensitive Interests (ANSIs), parkland and other open space areas

identified in the corridor. The compatibility of alternative design concepts with applicable environmental policies and by-laws, such as the natural environment and heritage system policies of the Toronto Official Plan and Toronto Ravine Protection By-Law, will be among the key considerations in the assessment of the design concepts.

Mitigation measures will be identified for the various environmental components investigated (e.g. terrestrial, hydrological/ aquatic, vegetation communities, wildlife and designated natural areas). A "net gain" principle will be adopted whereby appropriate environmental mitigation measures will be identified to offset the negative impacts of any construction in the Don Valley. Opportunities for enhancements to the environment in the immediate vicinity of construction will also be identified, and included as part of the preferred design concept, wherever practical.

5. Cultural Environment

The EA study will document all known cultural resources, including potential and know archeological sites, heritage sites and landscape features, as well a the presence of any aboriginal/First Nations land claims, treaty rights or related issues. As necessary, field surveys will be performed and secondary source investigations, such as previous cultural heritage reports prepared for areas directly affected by the alternatives, will be obtained. Information will also be sought from the Ministry of Culture, Ontario Secretariat for Aboriginal Affairs, and Indian and Native Affairs Canada. All work will be completed by a qualified cultural/heritage specialist. The focus of the investigations will be on existing conditions and potential impacts of the preferred alternative, once a preferred corridor and configuration have been identified.

The evaluation of design alternatives will focus on the relative differences in potential effects on cultural/heritage resources including potential mitigation. Consultation with qualified staff will be a key component of the assessment.

5.4 Preferred Design Concept

Following analysis and evaluation of the design alternatives, including public, stakeholder and agency review, a preferred design concept, including the location and conceptual design will be selected. Subsequently, the preferred design concept will be further refined to ensure that all of the issues and concerns raised through public, agency and stakeholder consultation and study process are addressed. The preferred design concept will be developed in sufficient detail to identify key physical elements and potential environmental effects that will be caused or might reasonably be expected to be caused, and the mitigation or compensation measures to reduce the negative effects.

5.4.1 Confirm Environmental Effects

During this stage, further refinements to the preferred design concept will occur, permitting a more detailed assessment of environmental effects associated with the specific concept, including the environment that will be affected or may reasonably be affected, the potential and mitigation measures to minimize, manage, prevent and/or minimize any adverse effects. The environmental effects of the project can be classified under one or more of three categories:

1. Overall Impacts – Immediate potential impacts resulting from the approval of the project;

2. Construction Impacts – Short-term potential impacts resulting from construction activities; and
3. Operational Impacts – Long-term effects arising from the daily operation of the project.

The elements of the environment that may reasonably be affected and the potential effects of the undertaking will be confirmed. A preliminary list of potential environmental effects is included in Table SD-3 (See Supporting Documents). Findings from other studies and TTC's experience during the design, construction and operation of recent transit projects will assist in defining the potential effects to be evaluated. The list will be based on the evaluation of the "alternative methods" of carrying out the undertaking (e.g., physical configuration, alignment, technology, and stop/station options and locations).

The EA will reference how the preferred design concept complies or is consistent with existing provincial legislation. Relevant MOE guidelines include but are not limited to:

- MOE's Stormwater Management Planning and Design Manual (2003);
- Guidelines for Evaluating Construction Activities on Water Resources (Guideline B-6); and,
- Land Use Compatibility (Guideline D-1)

Applicable legislation and guidelines will also be considered when identifying evaluation criteria to be used in assessing alternatives.

5.4.2 Confirm and Refine Mitigation Measures

As part of the selection and development of the preferred design concept, mitigation measures will be examined in more detail and refined to reduce or eliminate anticipated environmental effects that have been identified. Opportunities to avoid or minimize impacts will be integrated wherever possible. Appropriate technical mitigation measures will be developed according to the specific type of environmental feature being affected, and extent of any potential effects.

Mitigation measures will be developed in consultation with appropriate agency staff and stakeholders and in the context of relevant MOE, TRCA and other applicable government agency technical guidelines. Mitigation measures may also include recommendations for a monitoring program.

Categories of mitigation measures may include:

- Avoidance measures (e.g., relocation of construction components);
- Attenuation features (e.g., noise);
- Protection/preservation measures (e.g., water quality, tree protection); and
- Special design enhancements and/or construction considerations (e.g., staging/time constraints for disruptive works).

Specific technical assessments completed during the alternatives evaluation stage, including air, noise, water quality, geotechnical and socio-cultural assessments will be used to assist in assessing the type and extent of mitigation required for the preferred design concept. A few of the key typical environmental effects which may require mitigation, and the general approach to addressing these effects during the EA are briefly described below.

As referenced earlier, a key objective in the mitigation of natural environmental effects will be to try and establish an environmental "net gain" for any areas which may be disturbed by the proposed works whereby appropriate environmental mitigation measures offset the negative impacts of any construction in the vicinity of watercourses, valleys or other significant natural environment features, and stewardship opportunities or enhancements to the natural environment in the immediate vicinity of construction are also assessed and included as part of the preferred design concept, wherever practical.

Air Quality

Air quality monitoring data and meteorology data from MOE monitoring stations and other secondary sources will be used to determine the ambient air quality. The potential for changes in air quality due to operation of the preferred design concept will be assessed, taking into account future changes in ambient air quality with and without the undertaking. If specific air quality data on existing conditions is unavailable, an independent air quality model considering existing and future vehicle flows will be developed to quantify any impacts and net effects. This data will be used to supplement MOE data. The modeling and monitoring program will be developed in compliance with MOE criteria and guidelines including *Air Quality Issues for Class EA Road Improvements Projects*.

A protocol for predicting air quality dispersion effects will be utilized from existing sources or developed in consultation with MOE. It is expected that this will include a comparison of specific emissions to provincial criteria to assess the potential for adverse effects.

Water Quality and Quantity

The construction of the proposed undertaking and related infrastructure could result in changes to storm water drainage flows, water quality and quantity in surrounding watercourses, and affect management, treatment and discharge requirements.

The EA will outline an approach for water quality and quantity testing/monitoring before, during and after the construction of the preferred design concept. An approach to stormwater management will be prepared during the EA. This will address the impacts on storm water quality and quantity associated with the preferred undertaking within the project limits. It will take into account existing background information (e.g. sub-watershed information, wetland information, existing drainage conditions and future drainage conditions). A variety of stormwater management control options to maintain, and potentially enhance, existing water quality and quantity within the project limits will be assessed. Impacts from the potential use of road salt during the winter season will also be considered and appropriate mitigation measures will be identified. A more detailed stormwater management plan will be prepared during the detailed design of the project in the context of the latest MOE guidelines and criteria for planning, design and monitoring of construction activities affecting water resources. If affected, potential impacts on groundwater will be identified by the EA if and where the preferred design concept requires subsurface excavation and dewatering during construction. As part of the preliminary review of the design alternatives for this undertaking, no impacts to groundwater have been identified. Any impacts will be confirmed during the evaluation of design options and when a preferred undertaking and design have been identified.

It is recognized that any impacts of the preferred undertaking on watercourses may result in necessary approvals and permits from various government agencies.

Recommendations related to water quality treatment and management, including locations for storm water management ponds will also have due regard for the City's recently adopted Wet Weather Flow Master Plan.

Noise/Vibration

The potential noise and vibration effects of the preferred design concept will be assessed. Noise and vibration prediction modeling will comply with MOE modeling procedures. In cases where data is incomplete or unavailable, the assessment of future effects may utilize data available from other studies, addressing similar transit technology options.

The limits of the noise sensitive areas will be confirmed during the EA study, after completion of the land use inventory. The significance of noise and vibration effects will be assessed based on acceptable levels of human response to sound and vibration exposure. The evaluation of impacts will take into account the changes in future noise and vibration levels due to increases in transit vehicular traffic, and the mix of traffic, with and without the proposed undertaking.

The significance of noise and vibration levels and its effects will be estimated using some or all of the following:

- Current guidelines and criteria used by MOE, Canada Mortgage and Housing Corporation (CMHC), and/or other relevant government agencies (including other jurisdictions);
- Procedures used in other transit environmental assessment studies,
- Noise and vibration specifications for vehicles of different transit technology
- Vibration propagation efficiencies; and,
- Available data from other transit systems with similar transit technologies.

The EA document will identify the potential for any significant noise emissions from construction equipments which are not consistent with the limits set out in the Ministry Publications NPC-115 and the *Noise Control Guideline for Class Environmental Assessment of Undertakings.*

In addition, the EA will identify any significant potential long term impacts (e.g. vibration) which effect cultural heritage as a result of the operation of the preferred undertaking.

Socio-Economic and Cultural

A broad assessment of potential socio-economic considerations of the preferred design concept both during and after construction on existing land use, development, cultural heritage, business and community shall be prepared including proposed mitigation measures.

For any mitigation measures, detours, access roads, staging areas, storage areas, drainage facilities, stormwater management facilities, or other facilities that may be required for this project, a baseline archaeological assessment will be conducted and mitigation of impacts prior to any soil disturbance or alteration.

Regulation 153/04 "Records of Site Condition", and whether there is a need to include, and make specific reference to, risk management measures for potential contaminated lands as part of mitigation measures.

5.4.3 Other Approvals & Commitments for Design

It is recognized that prior to implementation of the preferred design concept, a number of approvals and permits must be obtained after submission and approval of the EA Report. Typically, many of these approvals require details related to design and construction staging confirmed during the detailed design phase of the project, and thus, not available at the time of EA approval. Formal application for those necessary approvals will be made at the appropriate time in the implementation phase. However, consultation with approval agencies during the EA stage is critical in order to ensure the feasibility and acceptance of the EA's preferred design concept and mitigation measures. Where modifications to the design are necessary, staff can thereby provide appropriate direction in advance of formal applications being made. Prior consultation will also assist in reducing the amount of time necessary for the approving agency to process and approve the necessary approval or permit.

The following are examples of approvals/permits that may be required as part of this undertaking. The items on this list must be confirmed, either during the EA or detailed design stages.

- DFO approvals, Navigable Waterways authorization, Railway Relocation and Crossings Act approvals;
- TRCA approvals ("Fill, Construction, Alteration to Waterways" permit and DFO authorization);
- MTO - work within right-of-way or within a permit control area;
- MOE Permit to Take Water;
- Sewage and water approvals, under the Ontario Water Resources Act;
- MNR approvals under the Lakes and Rivers Improvements Act and Public Lands Act (may trigger MNR EA obligations) ;
- Environmental Protection Act approvals for wastes generated at stations and maintenance facilities;
- City of Toronto, urban forestry ravine protection clearance, permits and/or approval;
- Ontario/Federal approvals related to cultural, archeological, aboriginal/first nations resources, and related land claim/treaty agreements
- Municipal Noise bylaw amendments/exemptions if required during construction;
- Municipal building permits, if required

6. PUBLIC CONSULTATION PROGRAM

6.1 Study Organization

The City of Toronto and the TTC are co-proponents for this Study. The City Planning Division, specifically the Transportation Planning section will be responsible for the day-to-day project management activities, assisted by the TTC (Service Planning Department) staff. A multi-disciplinary consulting team will be retained to assist in carrying out the study. The consulting team will be responsible for much of the data collection, technical analysis, development and evaluation of alternatives. A Technical Advisory Committee will also be established early in the study process.

6.1.1 Project Team

Staff from the City of Toronto and the TTC will comprise the core group of the Project Team, managing the daily activities. Once the study is underway, staff from the selected professional consultant or consulting team will also form part of the Project Team. The project team will have representatives from the following divisions and sections:

- City of Toronto
  - City Planning, Transportation Planning
  - Transportation Services: Traffic Operations, Infrastructure Planning
  - Public Consultation & Community Outreach
- Toronto Transit Commission
  - Service Planning

6.1.2 Technical Advisory Committee

In addition to the Project Team, a Technical Advisory Committee (TAC) will be established early in the study process. Participating technical agencies will be actively involved in all aspects of the EA study including problem/opportunity definition, rationale, developing and assessing alternatives, establishing an evaluation methodology and criteria, and determining mitigating measures.

The following agencies will be invited to provide input regarding specific study components related to their area of expertise:

- City Planning,
  - Community Planning (Toronto & East York, Scarborough Districts)
  - Urban Design
  - Heritage Toronto
- Transportation Services
  - Traffic Operations (Toronto & East York, Scarborough Districts)
  - Traffic Management Centre
- Technical Services
  - District Engineering Services
  - Design and Construction
- Toronto Parking Authority
- Economic Development
- Parks Forestry & Recreation
- Toronto and Region Conservation Authority (TRCA)
- GO Transit

6.1.3 Other Agencies and Stakeholders

A broader list of agencies affected, or with a prospective interest in the study will be contacted during the Terms of Reference stage and upon the study commencement to provide input and comments on the study process and findings. The proposed list of agencies includes the following (excluding Project Team and TAC agencies):

Federal Departments

- Canadian Environmental Assessment Agency (CEAA)
- Transport Canada
- Fisheries and Oceans Canada
- Environment Canada
- Health Canada
- Public Works and Government Service
- Indian and Native Affairs Canada

Provincial Ministries & Agencies

- Ministry of Natural Resources
- Ministry of Municipal Affairs
- Ministry of Public Infrastructure Renewal
- Ministry of Culture
- Ministry of Tourism and Recreation
- Ministry of Education
- Ministry of Health
- Greater Toronto Transportation Authority
- Ontario Realty Corporation
- Ontario Secretariat of Aboriginal Affairs (and individual First Nations groups)

Other Public Agencies

- Toronto District School Board
- Toronto Catholic District School Board
- Railways
- Canadian National

Utilities

- Toronto Hydro
- Bell Canada
- Enbridge Gas
- Rogers Cable Systems
- Shaw Communications
- Hydro One Networks

Other agencies and stakeholders, such as ratepayers, additional government agencies, and First Nations groups, that provide input or express interest in the study will be contacted or consulted throughout the study. It is expected that additional stakeholders and agencies affected by or having an interest in this study will be added to this list as the study progresses.

6.2 Public Consultation Plan

Public consultation will be an integral component of this study. A comprehensive Public Consultation Plan and Communication Strategy has been developed for the EA study. The plan will build on and incorporate the consultation program conducted as part of the ToR process. The Public Consultation Plan and Communication Strategy is provided in the Supporting Documentation.

The Consultation Plan was developed based on the following goals identified for the Stages of the project:

Stage 1: Terms of Reference Stage

- Inform the general public and stakeholders of the proposed ToR and the Environmental Assessment process;
- Receive feedback from the public and stakeholders on their preferences for being kept informed and involved with the EA process; and
- Obtain public and stakeholder input on the Draft ToR, including any recommendations or refinements.

Stage 2: Environmental Assessment Stage

- Fulfill public consultation requirements of the Environmental Assessment Act;
- Offer flexible and appropriate consultation mechanisms that meet the needs of the different stakeholder groups;
- Encourage meaningful and timely public involvement during each phase of the study through the use of appropriate public consultation activities, and
- Ensure opportunities for the public and stakeholders to voice concerns, questions and comments through a variety of methods.

Key elements of the proposed Consultation Plan include:

- Public Information Centres (PICs) and focused workshops held at strategic stages of the study;
- Published Notices (Study Commencement, Public Information Centres, and Study Completion as a minimum);
- A project specific website www.toronto.ca/involved/projects/kingston_road_ea, Email address:kingstonroadea@toronto.ca, and 24-hour comment line 416-392-6178;
- Project Newsletters distributed to stakeholders and individuals on the mailing list at key stages in the study;
- Individual meetings with agencies, stakeholders and the general public as required.

Details of the consultation activities undertaken during the ToR stage, including a summary of comments is provided in the Consultation Record (See Supporting Document). The Final Consultation Record will include the following:

- Describe the consultation activities which took place (include notification that was given about the activity);

- Identify all persons consulted during the terms of reference preparation (personal names not required);
- Identify how Aboriginal consultation was carried out;
- Clearly and accurately state the issues and concerns raised during the consultation activities;
- Describe how concerns were considered and address in the development of the ToR;
- Material prepared (handouts) for consultation activities;
- Include minutes of any meetings held with interested persons; and
- Include copies of written comments received from interested persons.

6.2.1 Public Information Centres

The Public Information Centres (PICs) are an important part of the Consultation Plan. They serve as a means of providing two-way communication between the public and project team members. The public often provides valuable insight on local conditions, issues and specific concerns regarding the neighbourhood.

The format for the PICs will depend on the nature of the information being presented and the input/feedback being sought. It is currently proposed that two sets of PICs will take place during the EA study. The purpose of the first set of PICs will be to present details and receive public input on the:

- Project objectives and rationale;
- Alternatives;
- The evaluation of the various planning alternatives; and
- The identification of the preferred Planning Alternative(s)
- Design Alternatives evaluation categories, criteria, and measures

The Second set of PICs will present details on the:

- Design Alternatives;
- Evaluation of the Design Alternatives;
- Identify preferred Design Alternative;
- Identified environmental impacts and mitigations measure for the preferred Design;
- Proposed mitigation measures and future commitments;
- Conceptual design images; and
- Next steps in the approval process.

Comments received during the PICs will be used to assist the project team with the analysis, evaluation, and refinement of the various alternatives. If necessary follow-up meetings with specific stakeholders maybe held to get further clarification or resolve any outstanding issues and concerns.

6.2.2 Focused Workshops

Focused workshops will be held prior to the PICs to provide the public (residents, business owners, and other stake holders) with the opportunity to discuss specific issues and concerns

with members of the project team in greater detail. The workshops may be focused around, but not limited to such topics as:

- road user needs;
- pedestrian and cycling;
- urban design/streetscaping; and
- business interests
- parks and heritage

6.3 CONSULTATION DURING THE TERMS OF REFERENCE

A complete description of the consultation completed during the Terms of Reference, including a summary of comments is provided in the ToR Consultation Record (See Supporting Documents).

6.3.1 First Nations Consultation

The 1991 Statement of Political Relationship with First Nations of Ontario confirmed the right of First Nations in Canada to have an inherent right to self-government. While the study areas are urbanized and disturbed, they encompass lands related to the Don River (Taylor Massey Creek) and Lake Ontario. The Don River and associated tributaries and ravines functioned as major portage and transportation routes up until the late 18th century. The Lake Ontario shoreline functioned as a source of fishing, area of aboriginal occupation and transportation routes. In addition, the study area may have been an area of traditional use of land and resources.

One First Nation (Mississaugas of the New Credit First Nation) and one organization representing the interests of several different First Nations (Association of the Iroquois and Allied Indians) have been identified as potentially affected or having an interest in this study. The Ontario Ministry of the Attorney General and Indian and Northern Affairs Canada (INAC) will also consulted with respect to potential land claims related to study area lands.

The City/TTC will continue to consult with these groups during EA process and will develop a First Nations Consultant Plan as part of the first phase of the EA.

The First Nations Consultation Plan will identify how discussions with First Nations will occur during the EA. Discussions will focus on issues such as traditional use of land and resources, land claim, and cultural heritage. The Consultation Plan will allow consultation activities to be adjusted during the EA to meet particular needs of specific First Nations as those needs are made apparent. As a minimum, each First Nation will be kept notified of study progress at each major stage milestone in the study process, corresponding with other government agency/stakeholder notifications. A meeting between the EA study team and First Nations will occur if requested or appropriate to discuss and resolve any outstanding issues.

7. COORDINATION WITH OTHER EA PROCESSES

7.1 Federal EA/Canadian Environmental Assessment Act (CEAA)

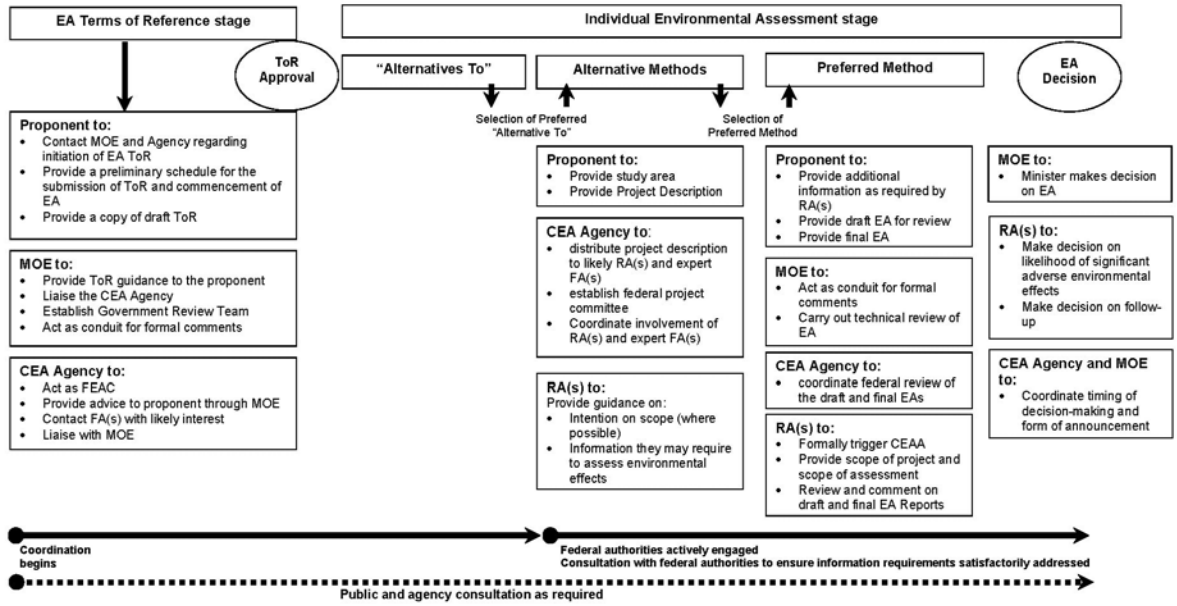
The proposed undertaking is subject to the requirements of the Ontario Environmental Assessment Act. The requirements of the Canadian Environmental Assessment Act (CEAA)

may also apply. The Act is not another approval, but another environmental assessment process. The Canadian Environmental Assessment Agency administers the CEAA. Approval under the CEAA will be required for this EA study if it is determined that a federal authority:

- Is the proponent;
- Makes or authorizes payment or any other form of financial assistance to the proponent;
- Sells, leases or otherwise disposes of lands; or
- Issues a permit, or license or other form of approval pursuant to a statutory or regulatory provision referred to in the Law List Regulations.

These conditions are referred to as “triggers”. At the time of writing this ToR, no triggers had been confirmed. The EA Project Team will consult with federal agencies during the EA process to determine if CEAA applies to the undertaking. To assist in this regard, a project description will be circulated to federal authorities to determine if there is a trigger under CEAA. If a federal EA trigger occurs, City/TTC staff intend to work in a coordinated way with provincial and federal governments, both governments having formally agreed to coordinate their respective EA processes pursuant to the Canada-Ontario Agreement on EA Cooperation (November 2004). City/TTC staff will be guided by the federal/provincial coordination process chart outlined in. This proposed approach is designed to address the information requirements of both federal and provincial environmental assessment Acts.

Figure 11: Federal/Provincial Coordination Process for Individual EAs/Screenings - Key Steps



Source: Advice to Proponents at the Terms of Reference Stage for a Coordinated Federal/Provincial EA Process - Canadian Environmental Assessment Agency (May 2004)

The preparation of a project description is an important initial step in the federal EA process. This initiates a process whereby federal departments can evaluate their interests and potential participation in the project. The City of Toronto/TTC is committed to a timely preparation of the project description upon identification of the transit alternative and/or alternative method of carrying out the undertaking (preferred design concept) to ensure effective and efficient coordination of the provincial and federal EA process.

It is recognized by both the Canadian Environmental Assessment Agency (on behalf of the federal authorities), and the City of Toronto/TTC, that ongoing dialogue on the information requirements is required throughout the EA process as more is learned about the specifics of the undertaking. As such, the City/TTC will provide additional or more detailed information as the EA process proceeds. The intent is to produce a single EA body of documentation to meet all of the information needs of both levels of government. To the extent practical, federal/provincial information requirements regarding potential factors to be assessed in the context of this study have been integrated.

In the event CEAA is triggered, the EA will include consideration of both Cumulative Effects and the significance of the residual environmental effects (after taking into account mitigation measures to prevent of lessen the predicted), either project specific or cumulative. A cumulative effects assessment and determination of the significance of any predicted residual effects will be completed, in consultation with CEAA and Environment Canada, as appropriate.

7.2 Ontario Realty Corporation (ORC) Class EA

The ORC Class Environmental Assessment (ORC Class EA) applies to a range of realty and planning activities that may be triggered as part of environmental assessment (EA) undertakings. The range of activities includes but is not limited to leasing or letting, planning approvals, selling, demolition and property maintenance/repair, all of which could be triggered if an EA undertaking involves land takings or work on ORC managed lands.

Impacts to ORC lands have not been identified for this undertaking, but will be confirmed during the EA study process. If a trigger is confirmed, ORC and the MOE EA & Approvals Branch will be contacted as early as possible by the Project Team to discuss coordination of EA processes, requirements and documentation to avoid duplication and expedite approval.

7.3 New Class EA Process For Transit Projects

In the fall of 2004, the Honourable Leona Dombrowsky, then-Minister of the Environment, appointed an advisory panel to provide expert advice and guidance on improvements to Ontario's Environmental Assessment process in several areas, including ways to conduct EA studies of municipal transit projects in a manner that is not so time-consuming and costly.

The advisory panel recommended that the existing Municipal Class Environmental Assessment process, which applies to municipal roads, water, and wastewater, be amended to also include transit projects.

In the fall of 2005, a sub-committee was formed for this purpose, led by the Ontario Municipal Engineers Association. The sub-committee considered the two options available to create a Class EA for transit projects:

1. Develop a new, stand-alone Class EA document pertaining solely to the municipal transit class of projects – that is, a new 'parent' class EA for transit only.
2. Amend the Municipal Engineers Association's existing parent class EA document so that it applies to municipal transit, in addition to roads, water, and wastewater projects.

The sub-committee confirmed that the best approach would be to amend the Municipal Class EA process because of the similarity between certain transit and roads projects - for example, widening a road to create a new traffic lane versus widening a road to create a new transit lane - and because the process to amend an existing parent class document is much simpler than creating a completely new parent class EA for transit.

The City of Toronto has been participating in the process for development of this new chapter. the new Class EA process for transit will be created by adding a new "chapter" titled "Part D – Transit Projects", as well as amending the Project Schedules in Appendix 1 to include transit projects in the Ontario Municipal Engineers Association's Municipal Class EA (MEA Class EA) document that already governs three separate classes of projects - municipal roads, water, and wastewater;

The new chapter is expected to be approved for use by the City and TTC within the next year. Once this new process is in place, transition provisions are expected to be such that transit EAs that are already under way at the time of approval of the Class EA will be able to elect to proceed in accordance with the requirements of the new Class EA process. Subject to the transitions provisions approved by the Ministry of the Environment (MOE) for the Transit Class EA, the City and TTC intend to elect to follow this new Class EA process for this EA project, rather than continue with this Individual EA under Part II of the EA Act.

8. CITY COUNCIL CONSIDERATION

Upon completion of the Environmental Assessment study, a draft EA Report detailing the study process, findings, preferred design concept, recommendations and the public consultation process will be submitted with an accompanying Staff Report to the Planning & Growth Management Committee for endorsement (submission to the Toronto Transit Commission will also occur concurrently or at its own meeting). With appropriate amendments from the Committee and the Toronto Transit Commission, the EA and Staff Report, including any amendments, are then forwarded to City Council for its approval. The Committees or City Council have the ability to amend, add or delete recommendations of the Staff Report, and may commit staff to complete additional or specific design and public consultation, during the detailed design or construction stages of the project.

During the EA Study, in addition to Public Information Centres, interim findings will be presented to study area and Committee Councillors via staff briefings.

9. DOCUMENTATION

Upon completion of the EA study, an EA Report will be prepared and submitted in accordance with the Ontario EA requirements. The report will document the EA activities described throughout this ToR as well as the results of public and agency consultation activities.

The preparation of the EA report will involve the followings steps:

1. Prepare the draft EA Report in accordance with the requirements outlined in this Terms of Reference;
2. Provide a draft EA to government review agencies;

3. Develop a final draft EA Report, based on review by TAC, key agencies and stakeholders;
4. Submit the final draft EA Report to Toronto City Council and Toronto Transit Commission for approval;
5. Submit the EA Report, including Council amendments if necessary, to MOE for approval;
6. Notify agencies and stakeholders that the EA Report has been submitted; and
7. Post a public "Notice of Submission of the EA Report" (mail circulation to all study participants, newspaper and website notices, etc.).

10. MONITORING

In order to ensure compliance with the commitments identified in the EA report, a monitoring program will be developed for the construction and initial operational stages of the project. The monitoring program will be developed as part of the EA study in consultation with the community and government review agencies. The framework for the monitoring strategy may include, but not be limited to, the following elements:

- Compliance monitoring and effects monitoring;
- A plan for implementation of mitigation and contingency measures;
- Long-term post construction monitoring and contingency measures and agreed upon triggers for employing contingency plans;
- Provisions for monitoring water quality and quantity, air quality, and soils;
- Provisions to ensure compliance with EA commitments (e.g. an independent environmental inspector, compliance committee, contract specifications) to ensure that all environmental standards and commitments for both construction and operation work are met; and
- Details on monitoring and reporting relationships.

Baseline information on existing environmental conditions is a critical part of the monitoring strategy and will therefore be emphasized in the EA.

The EA will describe how the proponent will achieve compliance (e.g. technical agencies approval and satisfy public interest) and how the compliance will be reported. The proponent or its contractor will be required to obtain all permits from regulatory agencies (e.g. MOE, TRCA, MNR, DFO, Transport Canada) prior to construction and will ensure compliance with all permits and conditions throughout the work.