EXECUTIVE SUMMARY

Introduction

The Kingston Transportation Plan (KTMP) outlines the City’s strategic direction for the development of its transportation networks, programs and priorities. The KTMP is a critical policy document that will influence every trip taken by residents and visitors to Kingston over the next 25 years. Within the City’s boundaries, the KTMP policies will determine the convenience and attractiveness of the different travel modes as manifested by municipal investment priorities, system performance targets, and supporting programs and infrastructure.

Strategic Direction

The KTMP developed a strategic direction for the transportation system to guide the development of networks, policies and programs. The strategic direction built on the work undertaken through the Community Strategic Plan process, had regard for the Transportation Association of Canada (TAC) urban transportation principles and adhered to the stated preferences of the community. The strategic direction focuses on satisfying travel demand by making efficient use of the existing infrastructure and by providing the facilities and services to encourage walking, cycling and transit as priority modes, before providing road based solutions.

Existing and Future Conditions

Kingston has an extensive system of multi-modal transportation networks serving commuter, recreational and commercial goods movement travel demands. The network within the City is primarily centred on road rights-of-way (sidewalks, on-road cycling facilities, transit routes, and general travel lanes), supplemented by an expanding network of off-road, multi-use recreational trails and parking facilities. The intra-city network is supplemented by Provincial highways, a system of local ferries serving Howe and Wolfe Islands, intercity rail and bus stations and a regional airport.

In January 2002, during the afternoon commuter peak hour, 82% of trips were made by car, 11% by walking, 6% by transit (3% school bus and 3% public transit) and just over 1% by cycling. Over the next 25 years, Kingston is expected to grow by between 30% and 45%, based on population figures for the City of Kingston, and travel demands will increase concurrently.

The increase in travel demand will be accommodated through a focussed effort on the promotion of non-automobile modes, including walking, cycling and transit, by managing travel demand, by making the most efficient use of existing infrastructure and by expanding the road infrastructure. Public transit use is forecast to increase from the current 3% of PM commuter peak hour trips to 11%. Despite this substantial shift in the role of transit and other modes, there will still be increases in the number of trips taken by the automobile during the PM commuter peak hour and these too need to be accommodated.

The KTMP describes the network and program requirements to achieve the modal share targets assumed in the demand forecasting exercise and presents a number of policy statements to translate the City’s transportation goals into actions.
Managing Transportation Demand

Managing both the demand and existing supply of transportation infrastructure represents all of the actions that the City may take to complement major new infrastructure investments to achieve its transportation vision. The goal of Transportation Demand Management/Transportation System Management (TDM/TSM) strategies is to delay and possibly even eliminate the need for significant capital investments in new transportation infrastructure.

To assist with these objectives the City will create the position of TDM Coordinator, with the mandate to coordinate public and private sector TDM initiatives in the City of Kingston and prepare a Community TDM Action Plan. The City will also adopt a range of strategies to optimize the performance of the transportation system. The goals of Kingston’s TSM strategies will be to maximize the people-moving capabilities of network elements, reduce the costs of operation, and improve safety for all users.

Walking

The strategic direction for the KTMP emphasizes walking as an active, environmentally friendly preferred mode of travel in Kingston. As part of the TDM strategy there is a desire to increase the amount of walking overall and specifically to increase the share for walking trips in the PM commuter peak hour. The plan includes support for programs that promote walking, significant increases in the kilometres of on- and off-road pedestrian facilities across the City and designing, operating and maintaining barrier-free facilities to make walking more attractive.

Cycling

Cycling, like walking, is an active mode of travel that makes positive contributions to the traveler’s health and avoids negative impacts on the environment. The strategic direction for the KTMP emphasized cycling as part of City’s TDM strategy and there was an expressed desire to increase the modal share for cycling trips in the City overall and in the PM commuter peak hour. The plan includes programs that promote cycling (both recreational and utilitarian), significant increases in the kilometres of on and off-road cycling facilities across the City and design, operating and maintenance practices that make cycling more attractive.

Public Transit

One of the main objectives of the KTMP is to increase the percentage of PM commuter peak hour trips by transit to 11% (from the current 3%). This represents an aggressive but achievable target when supported by the full range of policies, programs and infrastructure recommended in this plan.

The transit strategy being adopted by the KTMP study aims to:

- Proactively increase existing transit use by providing full-service, accessible transit, comprising high-frequency peak period service and extended off-peak service, weekdays and weekends.
- Tailor service levels and route structures to reflect the different needs of urban and rural communities within the City by providing a mix of flexible and fixed routes, community bus routes, commuter and tourist shuttles, and local charters.
- Fully coordinate services with inter-city bus terminal, train station, ferry and airport passenger services.
- Provide a mix of fully accessible, attractive modern vehicles to meet market demands.
It is envisioned that over 20-25 years this strategy will lead to increased transit ridership as a result of growth and increased use of transit in the City. A substantial increase in ridership of this magnitude requires local transit that is convenient and attractive to potential riders, takes them where they want to go, when they want to go, and provides a total trip travel time that is competitive with the private automobile. In summary, it requires services that are tailored to the needs of the various local transit markets in Kingston.

An innovative transit system responsive to the needs of Kingston communities was developed in this study (Figure E-1) and includes:

- The introduction of new services over time on strategic corridors, and taking the initial steps to support future higher frequency transit service in higher density areas of the city.

- Responding to transit opportunities in planned centres of employment and residential development throughout the city where emerging travel patterns represent new opportunities for transit to meet the needs (i.e., fixed route).

- The introduction of additional services (i.e., flexible routes) and possible infrastructure solutions, such as transit priority lanes and intersection treatments (where warranted), to give higher priority to transit, make transit more attractive, and build ridership to the levels projected in 20 to 25 years.

- The development of a range of marketing/educational initiatives targeted at increasing transit usage.

- Supporting land use patterns that promote transit use and giving high priority to the needs for transit services when reviewing and processing development applications under the Planning Act (a “transit first” approach).

- The introduction of inter-modal transfer locations, supporting both inter-city and tourist markets.

**Roads**

Roads and road rights-of-way are the most important element of the transportation system. They contain elements of the networks for all modes of travel and balancing these needs within the right-of-way is one of the critical factors in achieving the strategic direction of the KTMP. Ensuring consistent decisions regarding the design, operation and maintenance of the various elements within the right-of-way will determine the future success of the plan. In addition, it is essential to protect adequate right-of-way width to accommodate the required elements.

The strategic direction for the KTMP emphasizes the need to reduce the demand for automobile travel and to optimize the existing roadway network while meeting the infrastructure needs of all modes. The KTMP supports:

- Programs that promote all alternatives to automobile use, measures that pro-actively optimize the road network and the allocation of roadway rights-of-way, and minimize the impact of increased congestion on Kingston residents;

- Strategic expansion of the road network to ensure minimum Level of Service standards are met, and allocation of some roadway space to priority elements for non-auto modes; and

- Design, operating and maintenance practices that strategically manage roadway rehabilitation and reconstruction to extend the useful life of roadway investments as much as possible.
The recommended network expansions identified through this KTMP are illustrated on Figure E-2. These additions to the network have been planned on the basis of utilizing 90% of the available capacity during the PM commuter peak hour. This service target must, however, be balanced against the performance measures of competing modes and traffic safety.

The KTMP has looked at the need for and location of additional capacity across the Cataraqui River. There is a need for one additional lane of capacity in each direction to satisfy the 2026 PM commuter peak hour traffic demand. This important facility is required as early as practical to support the preferred Urban Growth Strategy. The recommended location, which is subject to review and comment by stakeholders and the general public, is generally along a Gore/Elliott alignment. Prior to construction of any facility, a Municipal Class EA will be required that completes and documents Phases 1 to 4 of the Municipal Class EA process. In addition, the study requirements under the Canadian Environmental Assessment Act will need to be met.

Proper design, operation and maintenance of the City’s road infrastructure will ensure a safe and efficient driving environment and supportive environments for other modes of travel. It also ensures that the huge investment in infrastructure is maintained in a cost-effective manner. The following are some additional recommendations of the KTMP.

- Prepare Area Traffic Management (ATM) Guidelines to provide direction to staff and the community regarding the determination of need for ATM measures (including traffic calming measures, enforcement, TDM), conditions under which various ATM measures will be considered, and the process by which implementation priority will be determined.

- Develop, maintain and apply Right-of-Way Design Guidelines for all classes of urban and rural roads under the City’s jurisdiction. Secure rights-of-way for all roads in accordance with the Rights-of-Way Design Guidelines and the Official Plan, consistent with the roadway classification.

- Consider the needs of and impacts on travelers by all modes when modifying the design or operation of the roadway system. Consider pedestrian and cyclist safety in all intersection design and operational decisions. Consider transit priority measures and passenger amenities in design and operational decisions.

- Identify and develop a goods movement network that maintains adequate access to industrial and commercial areas while minimizing the impact on residential neighbourhoods. The network will respect the hierarchy of roads, focusing routes on freeways and arterial roads such as Montreal Street, Division Street, Sir John A. Macdonald Boulevard, Gardiners Road, Princess Street, Bath Road, Highway 2 and other key linkages to serve the City.

- Implement a Safety Improvement Program to identify and mitigate locations on the road network with unacceptably high collision rates and to promote education and enforcement.

- Develop and implement an Asset Management strategy to manage the City’s infrastructure assets in order to preserve the integrity of the infrastructure by optimizing the investment in maintenance and rehabilitation, and to establish targets to measure its success.
Parking

Kingston’s parking system is a critical component of the City’s transportation network. Parking supply and day-to-day parking controls determine parking availability. Strategic management of parking availability will assist the City to achieve some of the KTMP objectives.

Among other initiatives, the City will develop and maintain parking plans for parking precincts in the Central Business District. This will balance supply, demand and price in a way that supports the objectives of the KTMP, including the goal of fiscal self-sufficiency, and the need for a vibrant and prosperous downtown. This will include the continued use of centralized parking lots within a reasonable walking distance of multiple destinations.

The City should promote short-term parking over long-term employee parking, which simultaneously helps the needs of the tourism industry by providing for visitor parking and encourages non-auto modes of travel. These initiatives can be further supported by:

- providing a system of Park n’ Ride lots at strategic locations in and around the City connected by high frequency shuttle express services;
- providing an increased supply of bicycle parking and secure bicycle parking; and
- preparing a tour bus parking and tourist shuttle strategy for the waterfront area.

In terms of assisting with implementation this parking strategy should:

- be coordinated with the Parking Advisory Committee; and
- give consideration to having the Parking Services Department manage City bicycle parking, particularly as supply of secure bicycle facilities increases.

Intercity Transportation

Intercity transportation connects Kingston to the rest of the province, country and beyond and it has important economic linkages. The integration of the intercity and intra-city transportation is an important component of the overall KTMP. This is highlighted by the provision of high quality transit to serve bus and rail stations, as well as the airport and ferry docks. These contribute to form the essential connections to and from the City of Kingston.

In addition to the above, the City will:

- Support the federal government high-speed rail initiative in the Windsor to Quebec City corridor that provides this service to and through the City of Kingston via the Counter Street train station.

- Support the continued viability of the Norman Rogers Airport by revising and updating the 1997 Draft Airport Master Plan and by allowing new specialized business uses, which need the locational advantages of the airport facility. The objective is to support the continued expansion of regional air service, as supported by market demand, and to make the airport financially self-sufficient.

- Support the ongoing dialogue with the Ministry of Transportation, the County of Frontenac and Frontenac Islands Township as it relates to the Wolfe Island Ferry and the Howe Island Ferry and the desire for additional capacity.
• Support the continued viability of the City’s waterways and related marinas with policies and programs that enhance their integration into the intra-city transportation network for walking, cycling, transit and roads.

**Financial Capability and Implementation Plan**

All of the City of Kingston’s infrastructure assets are continuously deteriorating and eventually will require major rehabilitation and/or replacement. The challenge for Kingston is to minimize the life-cycle costs of the assets while maintaining the expected quality and level of service. Financial assessment of current spending on existing infrastructure highlights a significant funding gap and an unfunded backlog of capital projects that are required today. When the network improvements associated with the KTMP (to accommodate the expected growth) are added, the related lifecycle costing of this new infrastructure and the additional improvements resulting from policy initiatives (e.g. improved walking and cycling facilities) the capital-funding gap is even bigger.

Existing expenditures of $12.1 million/year (average over the last three years) are far short of what is required for replacing the existing infrastructure, which is $23.3 million/year. When the full recommendations of the KTMP are factored in as well as the related lifecycle costs, the annual amount increases to $31.9 million/year. This is an $19.9 million per year shortfall.

Current sources of capital funding for road, transit and related services include: current year taxes; reserve funds; debentures; development charges; grants where obtainable; and miscellaneous sources. At current rates these revenue sources will be inadequate to fund the required transportation costs.

In order to reduce the reliance on property taxes, new and innovative funding sources must be pursued. Those sources with the greatest potential require federal support (e.g. infrastructure funds) and/or provincial support or legislative changes (e.g. fuel tax, tolls, vehicle registration fees). Strategies for innovative funding for transportation improvements focus around two central approaches: user-pay and public-private partnerships.

The KTMP has identified a number of infrastructure improvements, polices and programs that require implementation over the life of the plan. The key variables are the location, timing and extent of development. Since these have a way of evolving over time, the need to continuously monitor and update the plan is essential.

The KTMP has been developed based on the preferred growth alternative from the Urban Growth Strategy (a parallel study). Growth Alternative 2 (sometimes referred to as Alternative 1 plus 2) was selected as the best overall option to guide future land use based on a comprehensive approach of considering the costs and impacts of all services, not just roads.

**Monitoring**

To ensure the success of the plan, the City of Kingston must remain aware of its progress toward key objectives, so that it can add, modify, or delete priorities as needed. The KTMP must retain some measure of flexibility and be adaptable to changes in travel behaviour and other conditions. This can be best accomplished through ongoing monitoring of relevant conditions and periodic updates to the Travel Demand Model and master plan.

Ongoing monitoring would also be necessary in determining the effectiveness of the initiatives identified in the plan in meeting the adopted strategic direction. Ideally the performance measures can be tied to
broader municipal management measures such as, the Municipal Performance Measurement Program (MPMP).

Monitoring needs to focus on all aspects of transportation including:

- transit demand and performance (including individual route performance, system performance and periodic (i.e., 5-year) comprehensive transit service reviews);
- traffic flow or volume data;
- the travel demand model and related Kingston Household Travel Survey; and
- continued implementation of other related city initiatives, such as the Cycling and Pathways Study, and the Accessibility Plan.

The need to update the KTMP in the future should be undertaken in conjunction with future updates to the City’s Official Plan, typically at five-year intervals. Future transportation system improvements would be based on need, and the timing of their implementation would be determined through the monitoring of the transportation system performance, land development, modelling results, and fiscal constraints.
Figure E-2
Year 2026
Network Improvements
Recommended Transportation

LEGEND

- New Projects
- Existing Project

Lake Ontario

Map showing transportation network improvements for 2026.