

KINGSTON TRANSPORTATION SYSTEM 2001

CONTEXT – KINGSTON TODAY

The new City of Kingston came into being on January 1, 1998. Composed of the former Townships of Kingston and Pittsburgh and the City of Kingston, the new municipality now has a geographic land base of 528 square kilometres and a population of 116,325 (1999 estimate).

Other important facts:

- 78% of land base is rural accommodating 12% of the population
- open water covers 15% of the land base, wetlands, valleylands and other natural features are substantial and play a key determining role in development patterns
- Highway 401 has been the northern limit of urban development for some time with the greatest portion of greenfield growth occurring in the west end of the City
- population is projected to grow to 169,711 persons by 2026

Located halfway between Canada's two largest cities – Toronto and Montreal – and only two hours from Ottawa, the nation's capital, major transportation routes - Highway 401, railway lines and the St. Lawrence Seaway - have significantly affected the community's growth. Kingston has a busy airport, maintains a ferry service and a number of large bridges.

In the urban area, significant institutional, heritage, cultural and natural sites and features affect daily travel patterns. These same assets make Kingston a premiere tourist destination with its related travel demands.

The downtown area is a vibrant business area providing a range of goods and services to residents and tourists. Significant heritage assets and natural features make the area very attractive to businesses, shoppers and visitors but pose challenges for those planning transportation services.

In the rural area, agriculture remains a significant economic sector with 58% of former Pittsburgh Township lands and 35% of former Kingston Township lands still involved in active farming. Nonetheless, there has been a loss of agricultural lands to urban and non-farm uses. Large, linear natural areas make the rural areas an attractive place to live and play but also present constraints to development and servicing. Historic settlement areas such as hamlets found along the rural road system and seasonal residences in traditional cottage locations are found throughout the area. Non-farm residential development has increased substantially since the 1960s first on single lots and more recently in estate developments.

The community offers a very high quality of life and residents recognize the value of Kingston's many natural and man-made assets.

Servicing the municipality with water, sewer, natural gas, hydro, telecommunications and transportation is a challenge due to the factors presented above.

MULTI-MODAL MUNICIPAL SYSTEM

A. Road Network

The City of Kingston has 803 km of arterial, collector and local roads. With urban development primarily following an east-west pattern:

- there are a number of primary roads that run east-west linking the former municipalities
- these east-west roads are inter-connected by a number of shorter north-south roads
- primary demand patterns are east-west, but a reliance on Highway 401 for local trips has increased the demands on the north-south facilities connecting to the Highway 401.

Recently, the City inherited a number of provincial and county roads, including former Highways 2, 15 and 38 within the municipal boundaries. The Province (MTO) retained Highway 15 (Highway 401 to north boundary) and Highway 2 (Sydenham Rd to west boundary).

There is a desire to promote non-auto modes of travel but the road network will continue to expand to meet growing demands. Challenges include:

- past transportation planning studies have identified the need for an additional crossing of the Greater Cataraqui River, and established Elliott Avenue/Gore Road as the preferred location.
- crossing north-south waterways
- intensification and redevelopment of downtown area will place increasing demands on constrained road corridors
- growth north of Highway 401, and accommodating it on an under-developed road network.

B. Parking

Parking in the Downtown is provided through a combination of on-street spaces, lots and parking structures.

- ownership is divided between the City of Kingston and private operators, with the City owning the bulk of the supply
- on-street supply in the Downtown area is 1,311 spaces
- City-owned off-street supply in the Downtown is 1,835 spaces.
- there are competing needs between short term and long term demands, particularly in tourist season
- 1995 report titled *City of Kingston On-Street & Off-Street Parking Management Strategy* identified a capacity deficiency in both the short term and long term parking supply and further acknowledged that there was an additional, latent, unrealized demand
- no significant change is expected in the role of parking in the City of Kingston, but better coordination is required between parking and transit
- on-street spaces, intended for short term customer demand, are being used by employees of downtown businesses to park long term
- restructuring of hospitals may significantly affect parking in the Downtown including:
 - concentration of demands into Kingston General site
 - demands at Chown garage will be significantly reduced due to changes to operations of Hotel Dieu
- current zoning by-law does not require new commercial developments/redevelopments in the Downtown to provide parking
- off-street parking lots are located on prime development sites and may not be maintained in the parking supply in the long term.

There is a deficiency of parking around Queen's University.

C. Public Transit

The public transit system in the City of Kingston is operated by Kingston Transit and is the responsibility of the City of Kingston. Until the end of 1997, all public transit received substantial provincial subsidies for operating and capital costs. As part of the downloading of provincial responsibilities, the City is now responsible for 100 % of the costs of transit service.

Kingston Transit has a fleet of approximately 33 buses, including 8 low-floor, accessible vehicles, and operates 15 routes. Service is provided Monday to Saturday, with limited Sunday service and no service on statutory holidays. Bus stops are marked with colour coded signs, and bus shelters are provided at various stops.

The majority of routes operate in the former City of Kingston, with routes radiating outward from the downtown core. These routes experience the highest rate of ridership. Approximately 42% of transit trips are work related, 23% are shopping trips, 19% are for entertainment/social purposes and 16% are education/medical trips. Key destinations for transit riders include Kingston Centre, Cataraqui Town Centre, Gardiners Town Centre, St. Lawrence College, Queen's University and the VIA Rail station.

Annual ridership on Kingston Transit is approximately 2,500,000 passengers a year. The profile of transit riders is approximately: Adult - 34%; Student (6-18) - 10%; Senior - 7%; and College and University - 49%.

The transit system is augmented by the Kingston Access Bus, which provides service to mobility challenged residents in Central Kingston and the urban areas of the former Kingston Township. Residents who meet the eligibility criteria (unable to board conventional transit or walk 175 metres, due to a physical mobility impairment) may register for the service. Approximately 84% of registered passengers are confined to wheelchairs. Service is demand responsive.

As of January 1, 2000, the City assumed full responsibility for the cost of non-emergency ambulance services. Non-emergency medical services operated under Kingston Area Patient Shuttle. It is a medical transportation brokerage service, administered by Kingston Access Bus, that transports patients between medical facilities using existing community resources such as stretcher vans, specialized transit buses, accessible taxis and regular taxis, where those patients do not require an ambulance.

Student transportation is the responsibility of the Tri-Board Transportation Authority.

Recent studies examining transit in the Kingston area have included:

- "New" City of Kingston: Mobility Plan (1997) that looked at all aspects of mobility in Kingston as part of examining administrative frameworks, mobility dependant markets, desired service levels, the operating practices of the providers, and the pricing and cost structure of the mobility services to be funded by the new city.
- Kingston Community Strategic Plan (2000) that includes a transit strategy that stabilizes the service, markets the service to current and potential clients, and builds the service as demand grows.
- The Township of Kingston's Focus 2020 Planning Study (1993). The study determined that there is potential in the former Kingston Township to develop a rapid transit system along a loop comprised of Bath Road, Gardiners Road, and Highway 2, converging at the Kingston Shopping Centre. The proposed loop could encompass several commercial/industrial areas and the most densely developed subdivisions in the former Kingston Township.

D. Cycling/Walking (and In-Line Skating)

The majority of streets within the old City of Kingston have sidewalks but few roads have sidewalks in the former Townships. Also:

- there are few or no on-road cycling facilities exist
- the former Township of Pittsburgh began developing a linked pathway system within the Rideau Community
- the old City of Kingston invested significant effort in developing the Waterfront Pathway system to provide programmed access to the City's waterfront
- the existing pathway system links the Little Cataraqui Marsh, the urban waterfront, and the Great Cataraqui Marsh
- pathway demands are primarily recreational and, therefore, are not measured
- there are concentrated areas of pedestrian and cycling demand, including the Downtown core and waterfront, Queen's University, St. Lawrence College, where these modes provide the primary commuter mode of travel.

There is a desire to increase the role of these modes for commuter transportation in Kingston. Current challenges and opportunities are:

- Kingston would like to increase its profile as a destination for tourists interested in recreational pursuits. This would increase demand for further development of recreational pathways including connections with the Trans-Canada Trail
- need to provide a complete network for cycling/walking to serve the commuter demand within the Downtown
- there are limited linear corridors within the City to provide access to new areas and/or to simply add to the number of kilometers in the system
- in-line skating is not permitted on major streets, which represent the major travel corridors
- there are limited/no connections to the residential development in the west
- there are limited cycling connections to the downtown.

E. Air Travel

All air travel operates through Kingston (Norman Rogers) Airport, owned and operated by the City of Kingston. The airport is located in the southeast quadrant of the City of Kingston, on a small peninsula surrounded by Collins Bay and Lake Ontario. The 276 hectare airport:

- has two main runways, with the principal runway having 1,524 metres of asphalt surface
- daily commercial flights are available to Toronto
- provides for delivery of freight, five days per week
-
- serves as a center for commercial flights – 78,700 passengers flew in and out of Kingston in 2000
- a flight training facility operates at the airport and the number of flights have continually increased over the period of the airport's existence
- serves as a MEDEVAC facility, transferring patients to/from local health care facilities.

A new \$1.8 million airport terminal was opened in 1995 and no significant changes are expected. The 1997 Airport Master Plan identified the desire to increase regional air service, but recognized that this is a market-driven demand and would need to be supported by local economic and/or industrial growth. The location of the airport constrains its ability to expand, as it is bounded by residential development, the Lemoine Point Conservation Area, Collins Bay and Lake Ontario

F. Ferry Service

Commuter vehicle and passenger ferry service is provided from the former Downtown Kingston to Wolfe Island and from the former Township of Pittsburgh to Howe Island. Two cable ferries serve Howe Island, connecting to either end of the island (i.e., the east end and the west end), but primary service is provided by the westerly ferry with service offered 24 hours/day.

- the westerly Howe Island ferry is owned by MTO and operated by the Frontenac Management Board and has a capacity for nine cars and accommodates 186,000 trips/year
- the easterly ferry is owned and operated by the Frontenac Islands Township, has a capacity for 3 cars and accommodated 45,200 trips between March 1996 and March 1997
- the Wolfe Island ferry operates year round and is considered to be part of the provincial highway system. The Wolfe Island ferry has a capacity of 55 vehicles and a passenger capacity of 400 passengers. It accommodates 350,000 vehicles/year and an additional 200,000 pedestrians/year. MTO owns and operates this ferry service, the docks and associated facilities.
- Wolfe Island has a second ferry service on the south side of the island that connects to Cape Vincent, New York.

Continued provincial funding for ferry services is uncertain and studies have been completed to consider the merits of replacing the ferries with fixed links (i.e., bridges) The decision regarding ferry service vs. bridge connections to the islands will include an evaluation of the trade-offs between operating expenses and capital investment.

OTHER TRANSPORTATION LINKAGES

A. Rail

VIA Rail provides regular passenger service to Montreal, Ottawa, and Toronto and the line is in the main corridor from Windsor to Quebec. The local train station is located on Counter Street and:

- regular freight activity occurs on the line and sidings are provided to the former Township of Kingston's Industrial Park, the Norcom/CDT site and the Dupont site
- 1995 passenger demand – 261,500 people
- 1996 passenger demand – 273,500 people
- approximately 85 passenger and freight trains use the line daily.

No significant changes are expected in the future. High speed rail service from Windsor to Quebec has been considered in the past, which would affect the rail service to/through Kingston, but no imminent concepts exist.

The location of the station (Counter Street) is not ideal for connectivity to the Downtown. The inter-city rail should be better coordinated with the inter-city bus facilities.

B. Highways

The primary highway connection to Kingston is Highway 401, which links Toronto to Montreal

- Highway 401 is a four lane, divided, access-controlled freeway facility with local interchanges at Joyceville Road, Highway 15, Montreal Road, Division Street, Sir John A. MacDonald Boulevard, Sydenham Road, Highway 38/Gardiner's Road
- MTO has recently completed an EA/Preliminary Design Study for the widening of Highway 401 to 6 lanes between the Highway 38 interchange (west) to the Highway 15 interchange (east)
- Highway 401 will continue to be a key local crossing of the Great Cataraqui River and inter-city demands will compete with local traffic for capacity.

Other inter-city highway facilities include:

- Highway 15 (connects to Smiths Falls);
- Highway 2 (connects to Gananoque/Brockville in the east and Napanee/Belleville in the west); and
- Highway 38 (connects to Sharbot Lake/Highway 7).

C. Inter-City Buses

Kingston is served by inter-city bus routes to large metropolitan areas such as Ottawa, Montreal, Toronto. The table provides information on annual bus passenger traffic (arrivals and departures) through Kingston.

Kingston Bus Passenger Traffic

	1995*	1996
January	12,632	8,596
February	11,949	7,284
March	13,783	7,755
April	12,142	8,478
May	12,925	5,366
June	12,058	5,463
July	7,979	5,981
August	8,543	7,133
September	7,557	8,001
October	8,019	7,233
November	6,767	9,963
December	8,641	7,673
Total	122,995	88,928
Daily Average	337	244

Note: *Voyageur sold part of its route to Greyhound, July 1994

Source: Greater Kingston Community Profile

Bus service to Kingston and points outside of Kingston, is provided by Trentway-Wagar Incorporated, Voyageur Colonial and Franklin Coach. Trentway-Wagar operates 25 daily departures, with connections to Toronto, Montreal, Ottawa, Peterborough & Cornwall. Voyageur operates 4 daily departures and arrivals to Ottawa. Franklin Coach operates monthly trips to Prince Edward County. There is no significant peak season for bus travelers. Historically, the least busy months have been May, June and July.

Trentway-Wagar also offers charter coaches with drivers for group excursions. Each year, many visitors arrive in Kingston by chartered bus. These buses often drop visitors off in the City's downtown area and waterfront hotels.

D. Waterways

The Greater Kingston Public Port includes LaSalle Wharf and Crawford Wharf. There is no commodity traffic but significant commercial cruise and tour boat traffic is accommodated. Of 80 Great Lakes ports, Kingston's is ranked 22nd.

Recreational boating is accommodated by two municipal marinas (Confederation Basin and Portsmouth Olympic Harbour) and a number of privately owned marinas.

ENVIRONMENTAL CONSIDERATIONS

The St. Lawrence Seaway and the Rideau Canal are large, nationally significant water courses. Glenvale Creek, Collins Creek, Little Cataraqui Creek, The Greater Cataraqui River, Butternut Creek and others are generally running parallel to each other on a northeast to southwest axis consistent with the dominating geological formations of the area – Frontenac Axis, limestone plain and precambrian bedrock. Glacial activity and post-glacial deposit of fine till materials and heavier aggregates are evident throughout the municipality.

A substantial amount of open space, in the form of wetlands, parks, conservation areas and grounds associated with major institutions, exists. Public owners of lands include: the City of Kingston, Cataraqui Region Conservation Authority, Parks Canada, educational, health, military and correctional agencies. See map for some of the significant features.

Linear features such as trails and valleylands also are substantial and the Cataraqui Region Conservation Authority is a major landholder in this category. See map for these features.

FINANCIAL CONSIDERATIONS

A. Capital Planning

Capital expenditures by the municipality involve the purchase or major repair of assets, which are permanent in nature, and which provide longer term benefits. Major capital projects are identified through the Official Plan(s), augmented by various special studies and master plans.

The City of Kingston prepares an annual capital budget and a nine year expenditure plan as the financial framework for infrastructure planning.

- The capital budget for the current year, which contains detailed information on sources of funding, is approved by Council and provides the authority for works to be undertaken in that year.
- the City uses an “envelop” approach to preparing the Capital Budget, in that each “activity” within a service division is allocated an amount of tax funding for that year. Staff then identify a list of priority projects within that total amount. For instance, the engineering

- category contains five general roads-related “activities”: reconstruction/overlay; sidewalks/pararamps; traffic signals general; street lighting; and bridges and culverts.
- Sources of capital funding for road, transit and related services include: current year taxes, reserve funds, debentures, development charges (discussed below) and miscellaneous sources.

B. Development Charges

Development charges are levied on new residential, commercial and institutional development at the time of building permit issuance to assist in funding the City’s growth-related capital costs. Kingston’s development charge bylaw was passed in September, 1999 based on the legislative provisions of the *Development Charges Act, 1997*. The charge is calculated based on projected eligible growth-related capital costs documented in a background study.

- with the exception of sanitary sewer and water charges, the development charges are uniformly levied on all City development
- costs relating to the following services are included in the bylaw: protection, roads and bridges, parks and recreation, library, studies, sanitary sewerage.
- the capital budget identifies the projected annual level of development charge revenue available to fund eligible growth related works for each eligible service.

Although the City’s development charge bylaw expires in September, 2004, the City may amend or replace it at any time. It is anticipated that the Council will consider such action when the Transportation Master Plan is completed.

C. Operating Budget

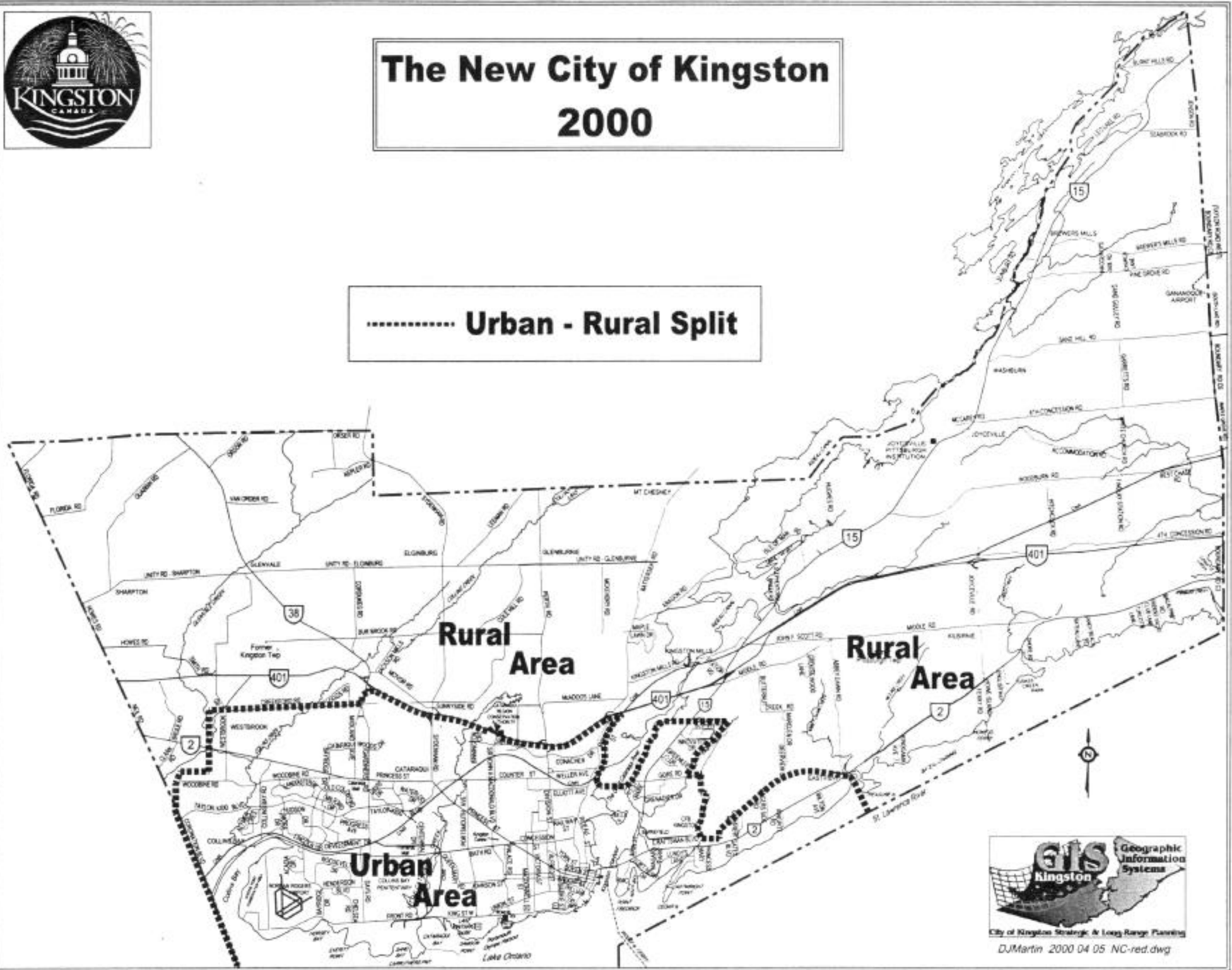
City Council approves an Operating Budget annually to finance the provision of the City’s core services. The Operating Budget cost components include: salaries and administration, purchase of goods and services, community grants, principal and interest on long term debt, and allocation to reserves and reserve funds. The final two categories are the primary linkage between the capital and operating budgets.

- funding sources for the Operating Budget include property taxes, payments in lieu of taxes (mainly from Federal and Provincial governments), Provincial subsidies, fees and service charges, and miscellaneous revenues.
- annual City tax rates are calculated based on net costs (total costs, net of all non-tax sources of revenue) and the (adjusted) property assessment base.



The New City of Kingston 2000

..... Urban - Rural Split



City of Kingston Strategic & Long Range Planning
DJMartin 2000 04 05 NC-red.dwg