The Expressway to Boulevard Project

the Corridor magazine

Schematic plans by David Ferguson. Written by David Ferguson

Roads, Rules, Regulations and Regret

The History of Roads in Canada

Aside from the rivers and lakes, the original Canadian roads, any road development was negligible prior to the 19th century.

The first graded road in Canada was built in 1606 by Samuel de Champlain. It was a 16 km military road from Port-Royal to Digby Cape, Nova Scotia.

By 1734 Québec City and Montreal were linked by a road, and a carriage could be driven the 267 km in four-and-a-half days. Most early roads were built out of military necessity, including Toronto's Yonge Street, which stretched 60 km from York and Lake Simcoe.

In 1793 an Act of the first Parliament of Upper Canada placed all roads under the supervision of overseers, called "pathmasters", and early road development was accomplished by a system of "statutory labour," requiring settlers to maintain the road adjacent to their property. As road requirements developed beyond the capabilities of locals, toll roads were introduced.

Travel by road in early Canada was difficult and often hazardous. The roads were so bad that most people preferred to travel by horseback or by foot, rather than any type of carriage.

The stagecoach era began at the start of the 19th century and lasted more than 50 years. In 1805, the toll road and the turnpike trusts controlled the network of toll roads, and for more than a century, that included some who charged on penny to travellers on foot. In recent years, some provincial governments have revived the idea of tolls to help finance costly projects.

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Roads were deemed necessary to serve the boom towns that had sprung up as a result of the gold rush and the advent of the railway. The technology of the day allowed engineers to blast the sides of mountains, suspend bridges over gorges and hang them over precipices on timbered trestles.

The modern highway system dates from the introduction of the internal-combustion engine, about 20 years after Confederation. In 1898 John Moodie of Hamilton was the first person to bring a "horseless carriage" from the United States, and a mere six years later, a Ford assembly plant in Windsor, Ontario was built.

By 1907 there were 2,131 cars registered in Canada, and by the time of the First World War there were more than 50,000.

In an effort to improve roads and streets, from 1910 to 1915, a concrete highway from Toronto to Hamilton was bult by the government of Ontario.

Ottawa in the age of the auto.

Quebec created the first Department of Highways in 1914, and two years later, Ontario followed suit.

Throughout the 1920s cars became cheaper and their numbers quickly multiplied, increasing from 408,790 to nearly 1.62 million by the end of the decade.

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Cheongge Expressway Seoul, South Korea

Completed 2011

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By 1930 the annual outlay in Canada was $94 million, however road building in most provinces was dramatically reduced during the Great Depression and later, WWII, as men and materials were assigned to the war effort.

The few roads that had been built until now were almost completely destroyed by heavy wartime traffic.

The "Last Spike" of the Canadian Pacific Railway was driven in 1885, but it would be another 61 years before a motor vehicle drove across Canada. The first was from Cape Breton, NS to Victoria, BC in 1946 and took a full nine days. A mere four years later, work began on the Trans-Canada Highway.

Driving along the Rideau

Rapid Post-WWII Development

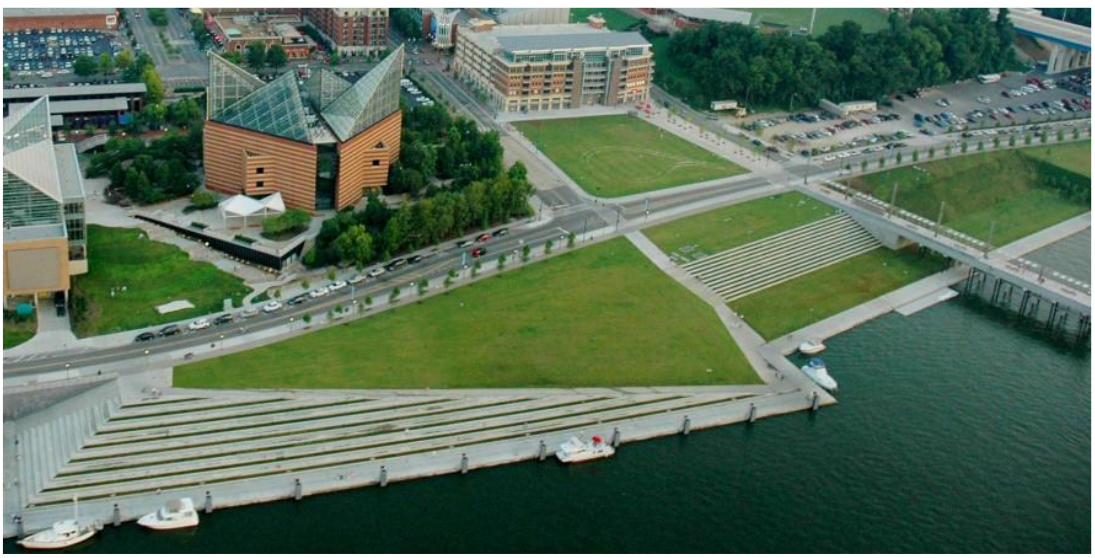
With increasing efficiency and improving technology, road building surged. Spending soared from $103.5 million in 1946 to $1.5 billion in 1966, and to $4.5 billion in 1986.

The cost-cutting efforts during the economic recession of the 1990s saw the first reduction in spending on roads and highways, falling from $6.09 billion in 1990 to $5.9 billion in 1992, and ultimately down to $5.7 billion in 1997.

After the war, Canada had 28,982 km of paved rural highways and 10,000 km of paved urban roads and streets. By the mid 60's, this total had risen to 148,987 km, and by the mid 80's the number catapulted to 841,411 km. By 1995 we approached 1 million kms of public roadway, and each kilometre left a deep imprint on

Riverfront Highway Chattanooga, TN

Completed 2005



Traffic Laws

Early traffic laws were almost laughable and in wither, included marking the road location with evergreen branches set in the snow.

Sleigh bells on harnesses were used to warn of approaching vehicles when visibility was poor.

Canada's two notable contributions to early road transportation were in 1920 when highway numbering was introduced in Manitoba. In 1930, an Ontario engineer conceived of dotted white lines down the centre of a road, and within three years that system was standard across North America.

UPDATE
Where are they now?

The Gardiner, Toronto

In January of 2016, city and WaterfrontToronto staff released three hybrid configurations-- but ultimately ended up endorsing the so-called Hybrid 3 option, which removes the Logan Ave. on- and off-ramps and adds two ramps in the Keating precinct.

The 2015-2016 council-approved budget has since allocated about $900 million be allocated for roadway repairs over the next decade. Rehabilitation activities on the Gardiner Expressway will consist of:

· Visual inspections and controlled chipping,

· Ground penetrating radar (GPR) and detailed condition survey,

· Bent repairs and temporary bracing,

· York Street to Jarvis Street rehabilitation contract,

· Jarvis Street to Don Roadway interim repairs'

· Deck replacement at Strachan Avenue

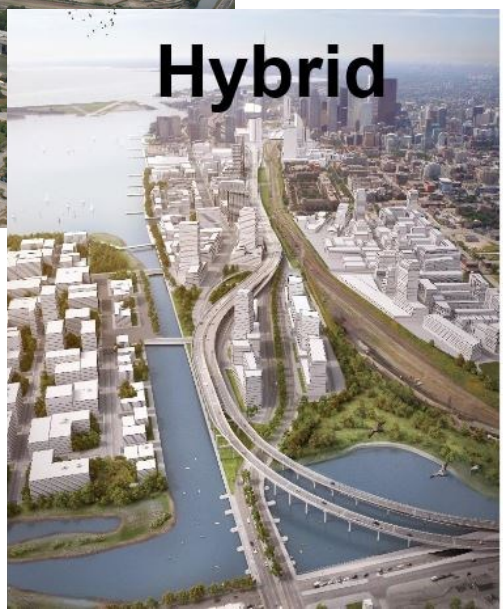
· Falling concrete incidents

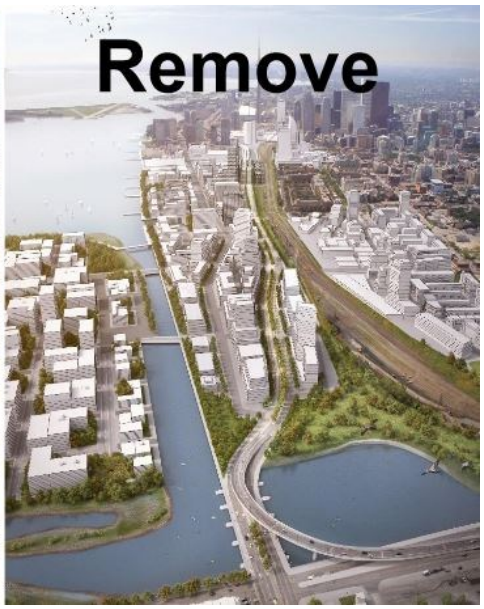
Additionally, Toronto's public works committee has recently recommended that the Toronto council support a plan to push the eastern section of the Gardiner Expressway farther north, despite a $1.052-billion price tag that's double the teardown option council rejected.

WaterfronToronto continues its fight to see the complete removal of the elevated expressway, although it is supporting the tentative plans to "improve".

The Gardiner Expressway Toronto, ON

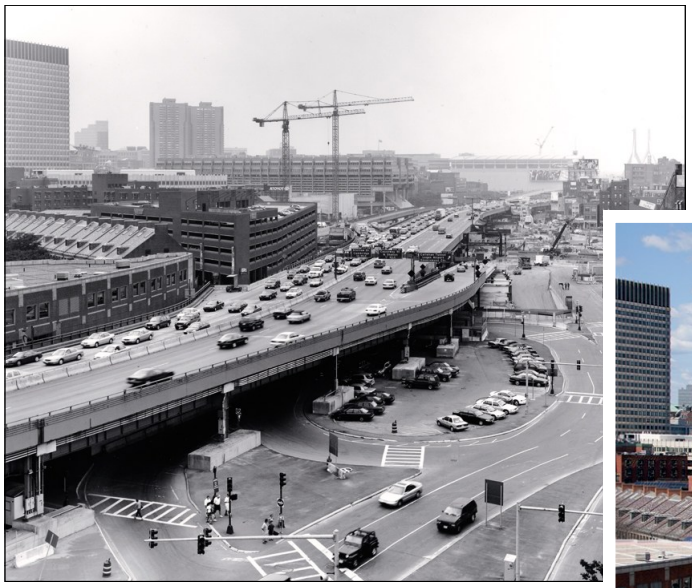
Est. completion 2028





The Pompidou Expressway Paris, France

Ongoing
Est. completion
June 2026



Central Artery Highway (AKA The Big Dig) Boston, Mass

Completed 2013

I-81, Syracuse, NY

Estimated Completion Date: October 2026

The Georgia and Dunsmuir Viaducts, Vancouver

Vancouver City Council abandoned the rest of the plan and only finished the two viaducts already under construction. Those viaducts still cut several historic neighborhoods in two and became physical and visual barriers in the heart of the city, even severing its Main Street.

Today, Vancouver is a shining example of a city that can function better without freeways cutting through its heart.

Over the years a development pattern referred to as "Vancouverism" or "The Vancouver Model" has taken shape which focuses on creating urban town centers, investing in transit and pedestrian facilities, and proactive plans for the inner city.

In 2011, Vancouver began a campaign called re:CONNECT that sought out alternate urban design ideas to replace the viaducts. Using phrases like, "creating a vibrant district," "rebalance movement modes," and "repair urban fabrics" the city proposed plans to reconfigure the road network at ground level, allowing space for more downtown residential development, park land and mixed -use development, while maintaining key transportation routes between the East Core area and the downtown.

In June of 2013, a feasibility study for the removal of the Georgia and Dunsmuir Viaducts was conducted and the 2015 conclusion supported removal of the viaducts, along with plans to construct a new park, Creekside Park. The False Creek area (site of the 1986 World's Fair) would be expanded significantly with the removal of the elevated freeways.

City after city, all around the world, are reevaluating their elevated freeways and many have made great strides to create a more beautiful and people-friendly environment.

The city of Seoul, South Korea turned their elevated monstrosity (see page 2) into a pedestrian and cyclist-first roadway, complete with a river running through it.

The noise pollution has been replaced by the sounds of theatre in the park, and by virtue of the water and vegetation, Seoul's notorious air pollution is barely noticeable by its population.

Where Does Ottawa Go From Here?

Jane Jacobs, the Canadian American author of *The Death and Life of Great American Cities,* and noted theorist, and activist who influenced urban studies, opined: "Large-scale highways, parks, and big buildings can all divide communities, discouraging street life and sucking the life out of cities".

Although it's easy to appreciate the aesthetic value of the *Expressway to Boulevard* movement, there remains the question of how best to transport people and goods through the city, efficiently and quickly.

The Border Vacuum

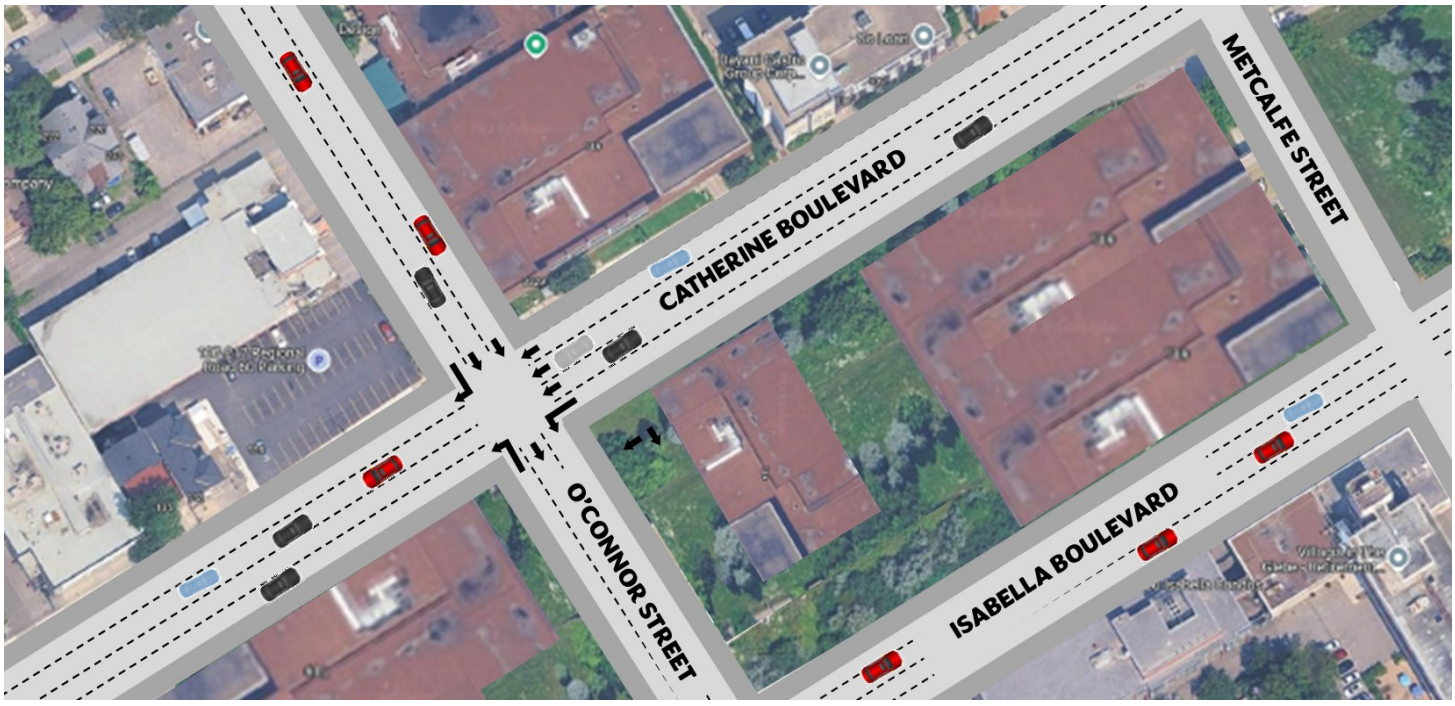
The Queensway wastes the prime real estate it sits upon. It also wastes the "border vacuum", the areas adjacent to the Queensway which, lacking development can become riddled with blight. Lees Avenue, Catherine Street, Isabella, and Raymond Street and many others have essentially become and off ramps for the Queensway. With traffic across them restricted, border vacuums limit economic growth. Vehicle speed and traffic is dangerous to pedestrians and cyclists, and noise and dirt pollution is a deterrent to residents.

To a large extent, Ottawa already has alternatives, most of which are currently blocked to commercial traffic. The National Capital Commission provides us with parkways from east to west along the Ottawa River and shorter routes from north to south and seems determined to build an east end bridge to Quebec across Kettle Island.

There was once, and apparently will be again, a discussion of a ring road around Ottawa's central core.

But most importantly, there is the multi-billion-dollar investment in the OTrain and the Confederation Line that moves people through downtown more effectively than any vehicle can. From most neighbourhoods, people are able to walk, drive, bus or cycle to any one of the new stations.

SEE "WHERE DO WE GO FROM HERE?", PAGE 8



The schematic above shows how the roadways could work in a Queensway-less city core. The entire span of the former expressway is developed with a mix of residential, commercial and retail spaces, as well as parklands. All new building will have inground parking. Catherine and Isabella Streets (and by default, Raymond Street and Chamberlain Ave) become Boulevards. They are widened to no more than four lanes each and are appropriately landscaped.

WHERE DO WE GO FROM HERE?

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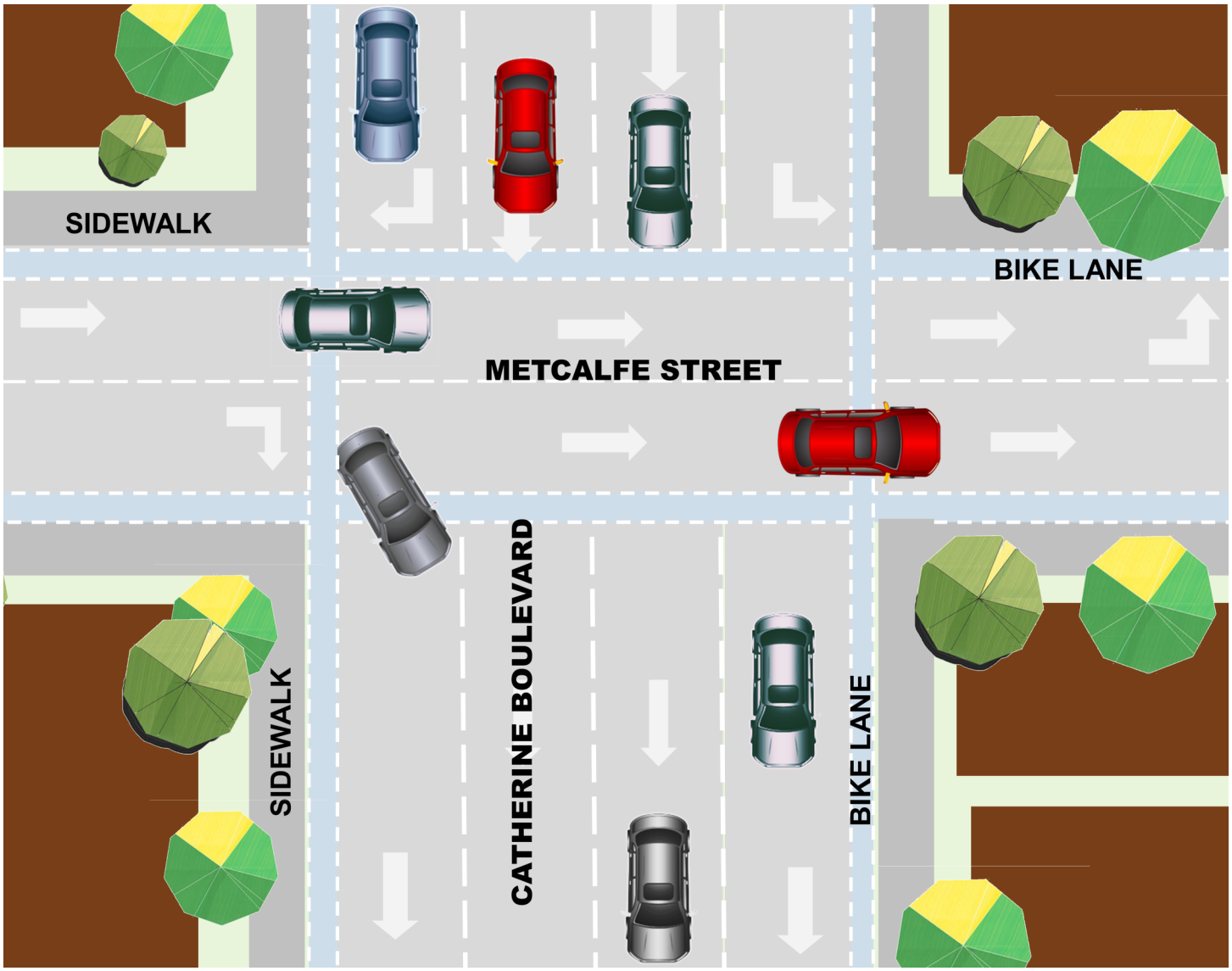
The fact remains, during peak hours, the Queensway is not the most efficient way to move vehicles across the city, and widening had been proven to be the wrong route.

Induced demand is the phenomenon whereby an increase in supply results in an increase in consumption. In other words, adding more lanes results in more vehicles using those lanes. You're no further ahead. The easier, more convenient route encourages more people to use the highway for their commutes, as well as prompting former public transportation users and off-peak drivers to change their habits, thereby increasing overall demand.

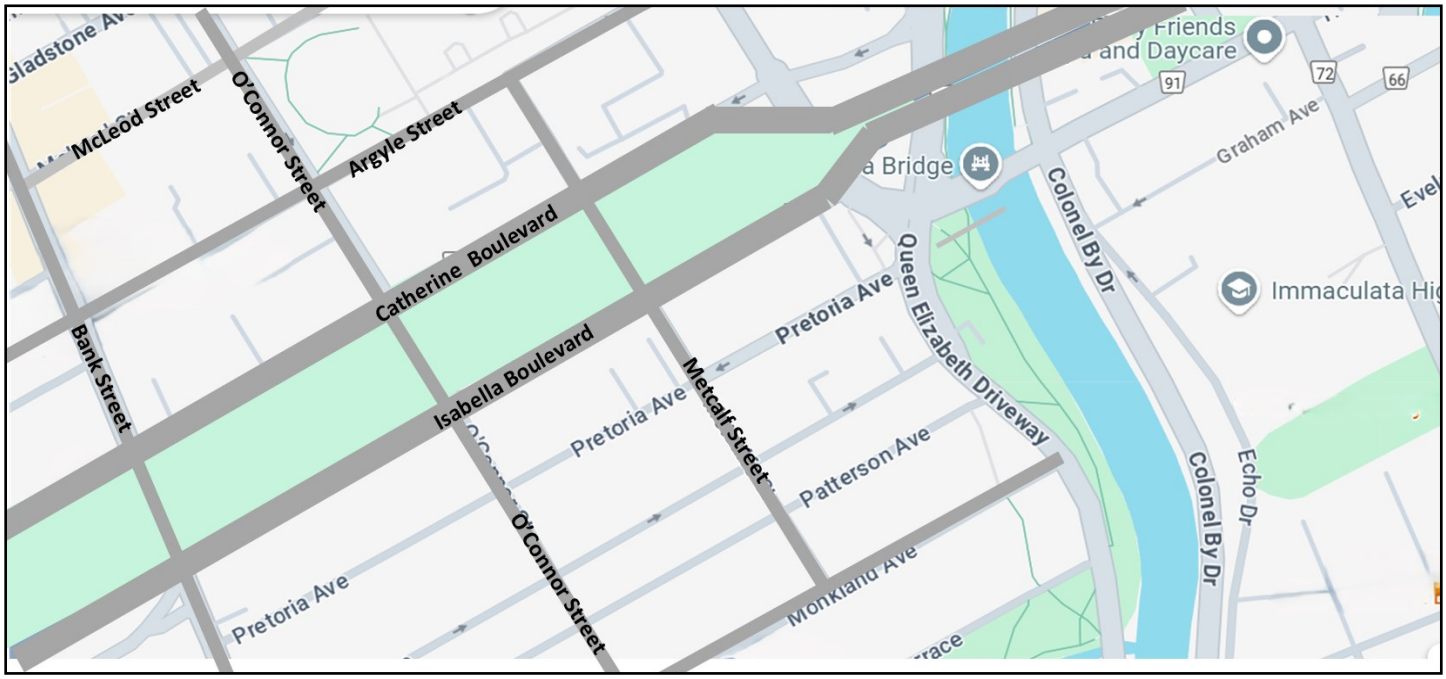
The trouble with that argument is, there remains a high demand for fast east-west and south-north routes to and through downtown. The answer is out there, but it is not the Queensway.

Innes Road, Industrial Blvd, Hunt Club, Richmond Road can be connected to form a long stretch of the east to west corridor.

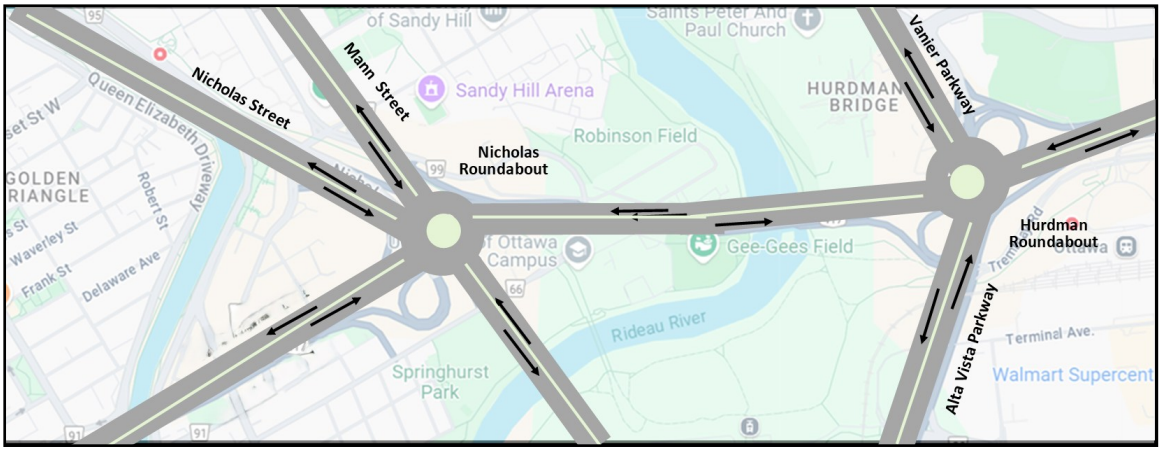
North to south is a bit more challenging, but the Aviation Parkway, Vanier/Riverside Drive Parkways, Bronson Street and the 416 can all be considered efficient north-south routes. Should the NCC decide to go ahead with it's Kettle Island Bridge, then it stands to reason that another Quebec link be built in the west end.



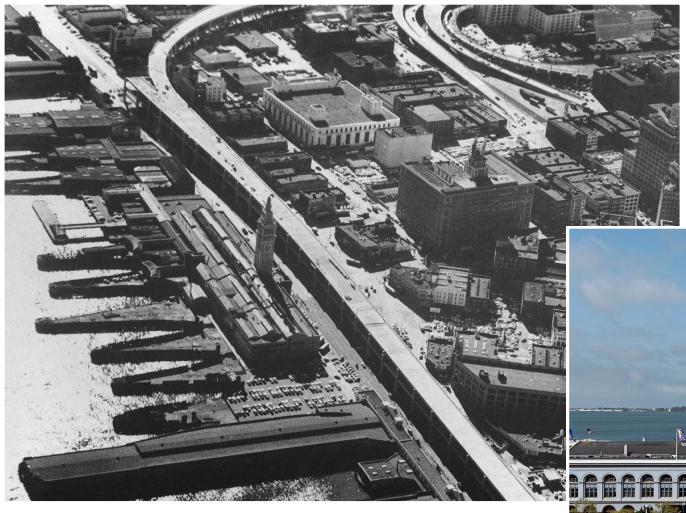
The schematic above offers a more detailed look at the "Boulevard" arrangement.



Above shows how the expressway might cross from Overbrook into Sandy Hill. The green area represents the space currently taken by the Queensway.



At left, the possibility of using traffic circles, or roundabouts, as a means of traffic calming and slowing in preparation for the trip through the downtown core.



Embarcadero Freeway San Francisco, CA

Completed 2002

Manzanares River Bank
Madrid, Spain

Completed 2011

Inner Loop
Rochester, NY