Core Area Plan
Mobility Technical Background Report

April 2025

National Capital Commission
Commission de la capitale nationale

Canada

CONTENTS

Executive Summary

Spanning across the Ottawa River, the core area is the centre of economic, cultural and political activities in the National Capital Region. It is a major destination for residents and visitors alike, and as the hub of the regional transportation network, including five of the six interprovincial bridges, it experiences high volumes of commuting and interprovincial truck trips that are either destined to the core area or passing through it. Heavy traffic volumes and extensive surface parking lots throughout the core area are two central challenges that currently hinder quality of life and visitor experiences. An increased focus on active and public transportation would contribute to the attractiveness, dynamism and image of the core area.

In addition, as part of the commitment to achieve net zero by 2050, federal, provincial and municipal plans outline bold targets aimed at accelerating the shift toward more sustainable modes of transportation. Major transit projects are currently planned on both sides of the river to achieve these goals, including O-Train extensions to the east and west, the Gatineau-Ottawa tram project, and an extension of the Rapibus corridor to the east. Furthermore, both cities and the NCC plan to expand their cycling networks.

This mobility report considers various transportation-related future interventions for the horizon year 2050 through the lens of nine long-term community planning goals. Scenarios include transit and active transportation improvements, as well as emerging trends such as micromobility, logistics management and mobility/parking prioritization that would yield positive outcomes for the core area.

Major infrastructure investments are also considered, such as additional interprovincial crossings or a downtown Ottawa traffic tunnel, as well as mobility innovations such as electric/autonomous vehicles and ride-hailing. While these future scenarios have the potential to improve mobility in the core area, they also require a combination of policy measures and incentives to ensure they contribute to the region's mobility planning goals.

Interprovincial transportation planning should therefore focus on enhancing connectivity and people-moving capacity across the Ottawa River while maintaining network efficiency, resiliency and safety. Capacity should be increased by repurposing vehicle lanes to high-order transit and/or active mobility.

Since the core area faces increasing pressures from regional travel demand originating outside its boundaries, actions also need to be implemented to create compact, multimodal neighbourhoods throughout the region in order to reduce car dependency. This includes more housing in the core area to allow more people to live, work and play locally to further minimize the region's transportation footprint.

To help achieve a successful mobility future for the core area, the following vision statement and policy directions are provided and further detailed in this report.

The Capital must provide a variety of safe and equitable transportation options ensuring an enjoyable mobility experience for residents and visitors, while seamlessly connecting the region.

1. **Pedestrian realm:** The core area must promote a safe, universally accessible, comfortable and high-quality public realm that encourages people to leisurely walk and linger.
2. **Active mobility network:** The core area must prioritize active transportation by consolidating sidewalks, bike lanes, pathways and intersections into a safe, inclusive and seamless network that facilitates access to and movement through the core.
3. **Public transit and shared mobility services:** The core area must support the development of integrated higher-order transit alongside efficient bus routes, shuttles, water taxis and shared mobility services to access destinations in and outside the core area.
4. **Regional connections and goods movement:** The core area must strive towards establishing an integrated and holistic transportation network that enables the movement of people, goods and services while alleviating truck volumes and associated impacts in the core area.
5. **Transportation demand management:** The core area must prioritize and promote the use of alternatives to private cars among residents, commuters and visitors.
6. **Parking and access:** The core area must consider solutions to accommodate the operational needs of federal agencies and institutions while aiming to reduce parking overall. This includes redesigning parking lots and service routes to repurpose urban spaces for more beneficial uses and improve public access to the waterfront.
7. **Multimodal information and wayfinding:** The core area aims to facilitate multimodal travel planning and provide standardized directional signage tailored to diverse users, including pedestrians and cyclists, to help them navigate safely and seamlessly.

1 Context

1.1 The Core Area

The core area is the heart of Canada's Capital. A small, yet critical component of a much larger urban and regional landscape, it covers an area of 12 km^2 of downtown Ottawa and Gatineau, spanning across the Ottawa River.

The core area is the focus of economic, cultural and government life in the National Capital Region. At its centre, Confederation Boulevard, the Capital's ceremonial and discovery route, is the location for the most important political and cultural institutions in Canada. The core concentrates most of the office accommodation for federal employees in the National Capital Region and is a major destination for residents and visitors alike.

As such, it is a key driver of regional travel demand and is also at the crossroads of the region's transportation network, with thousands of trips converging daily into and passing through the core.

1.2 The NCC's Role

The core area straddles two municipalities and two provinces. The City of Ottawa and Ville de Gatineau are each responsible for their municipal jurisdictions under their respective provincial planning frameworks and have separate transit systems.

The National Capital Commission (NCC)'s planning mandate for the National Capital Region includes interprovincial transportation planning and the facilitation of transportation projects. The NCC has led the Long-Term Integrated Crossings Plan and set up an interprovincial Transit Office to continue facilitating collaboration with government partners and stakeholders on projects such as the Gatineau-Ottawa tram and other future transportation initiatives.

In close collaboration with partners in the region, the NCC works to improve interprovincial transportation in accordance with its goal of building a Capital with a thriving urban core that efficiently moves people and goods, balancing the practical and the symbolic.

2 Existing Conditions

This section describes the existing conditions related to mobility in the core area, including current socioeconomic characteristics, transportation infrastructure and travel patterns.

2.1 Demographic and Socioeconomic Profile

As of 2021, the National Capital Region is the fourth largest metropolitan area in Canada, with the core area as its economic and cultural hub (see Figure 1). The core area has the largest concentration of jobs and is at the centre of a robust multimodal transportation network.

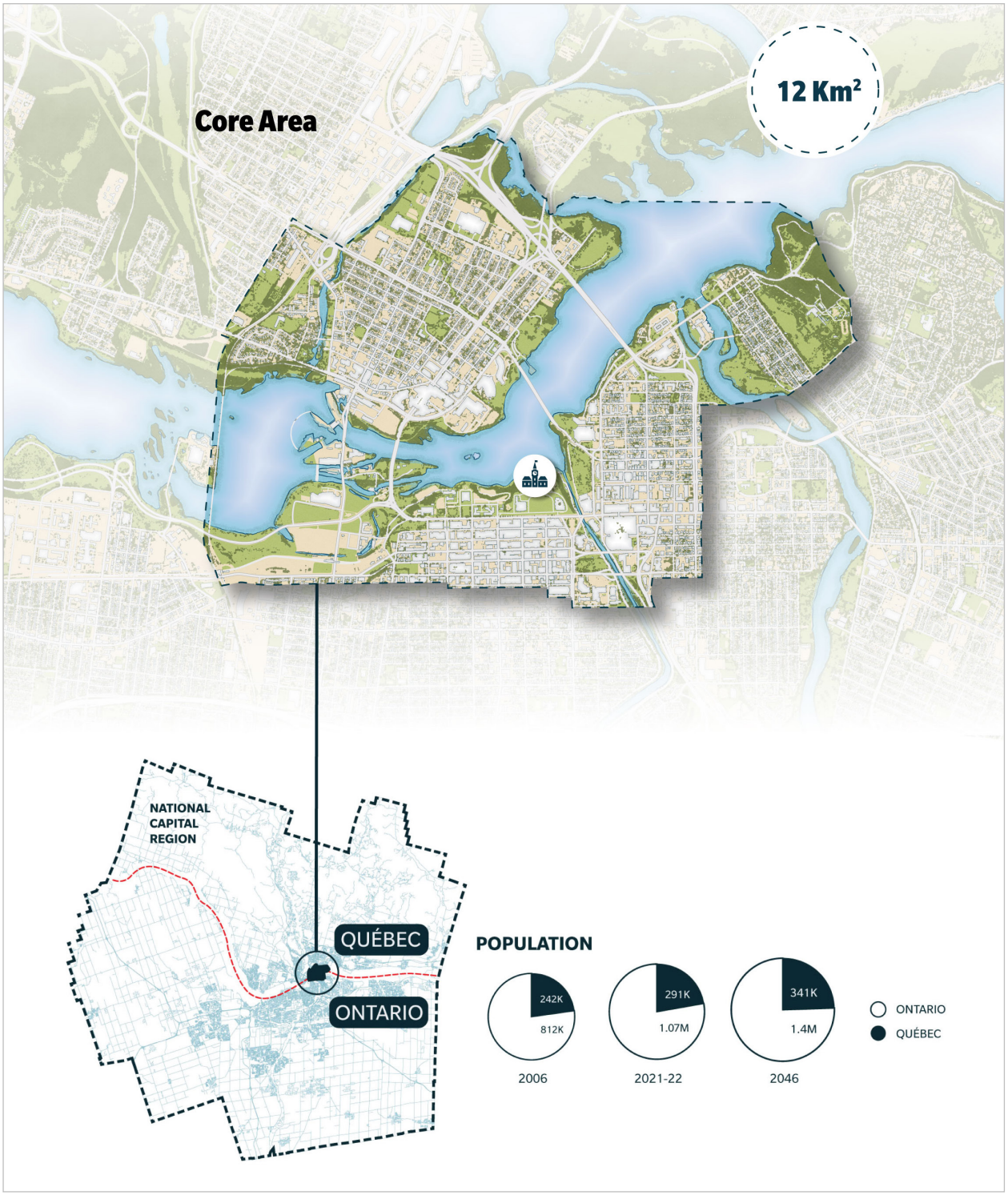


Figure 1 - The Core Area in its larger NCR context

Between 2011 and 2022, the core area experienced growth in population, households, jobs and vehicles.

While total population in the National Capital Region grew 10.6% to 1.37 million inhabitants over the period, the core area population increased by 12.6%, from 24,000 in 2011 to 28,000 inhabitants in 2022. The increase in downtown residents was more pronounced on the Quebec side of the core area (+22%) than on the Ontario side (+13%).

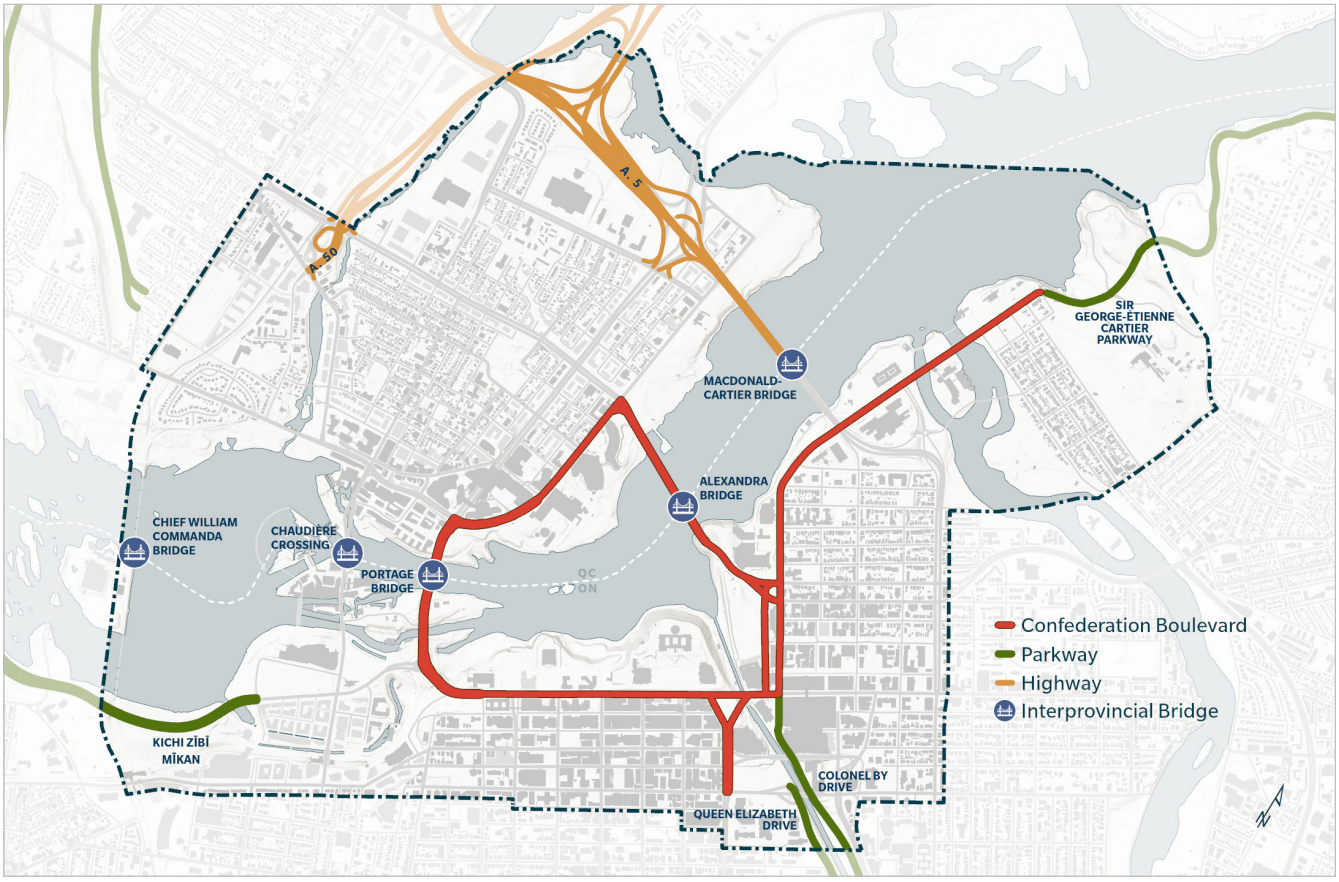
The number of households in the core area grew by 19%; however, there was a drop in average household sizes.

The number of privately owned vehicles in the core area increased faster than the population, from approximately 9,200 vehicles in 2011 to 11,400 in 2022 (+24%). While car ownership remained stable at 0.62 vehicles per household in the Ottawa core, there was an increase in the Gatineau core, from 0.69 to 0.78 vehicles per household.

Eighteen point five percent (18.5%) of the jobs available in the National Capital Region are located in the core area in 2022, a slight drop from 21% in 2011. Jobs grew faster in the Gatineau core (+7.5%) than in the Ottawa core (+5.6%).

Historically, across the National Capital Region, Ottawa has been a net importer of work trips, having more jobs than it has working residents. On the other hand, the Gatineau census metropolitan area (CMA) has been a net exporter of work trips, with more working residents than jobs. The Gatineau CMA's gap closed to 0.90 jobs per resident worker in 2022, from 0.74 jobs per resident worker in 2011. This was accompanied by a modest drop in the jobs per resident worker in Ottawa to 1.22, from 1.30 in 2011.

Figure 2 Bridges, highways and parkwaythe core area



2.2 Current Mobility Infrastructure

2.2.1 Roads and Bridges

Five of the six interprovincial bridges in the National Capital Region are located in the core area, including the Chief William Commanda Bridge, which reopened for active transportation in September 2022, the Chaudières Crossing, the Portage Bridge, the Alexandra Bridge, and the Macdonald-Cartier Bridge (see Figure 2). The Alexandra Bridge has reached the end of its service life and requires replacement. The process is under way, with construction anticipated to start in 2028.

While Ontario Highway 417 is located south of the core area, Quebec Autoroute 5 starts on the Macdonald-Cartier Bridge and Autoroute 50 connects at Montcalm Street.

The core area also features major arterial roads, including Laurier Street, Boulevard des Allumettières and Maisonneuve Boulevard in Gatineau, as well as King Edward Avenue, Wellington and Rideau streets, Albert and Slater streets, and Laurier Avenue in Ottawa.

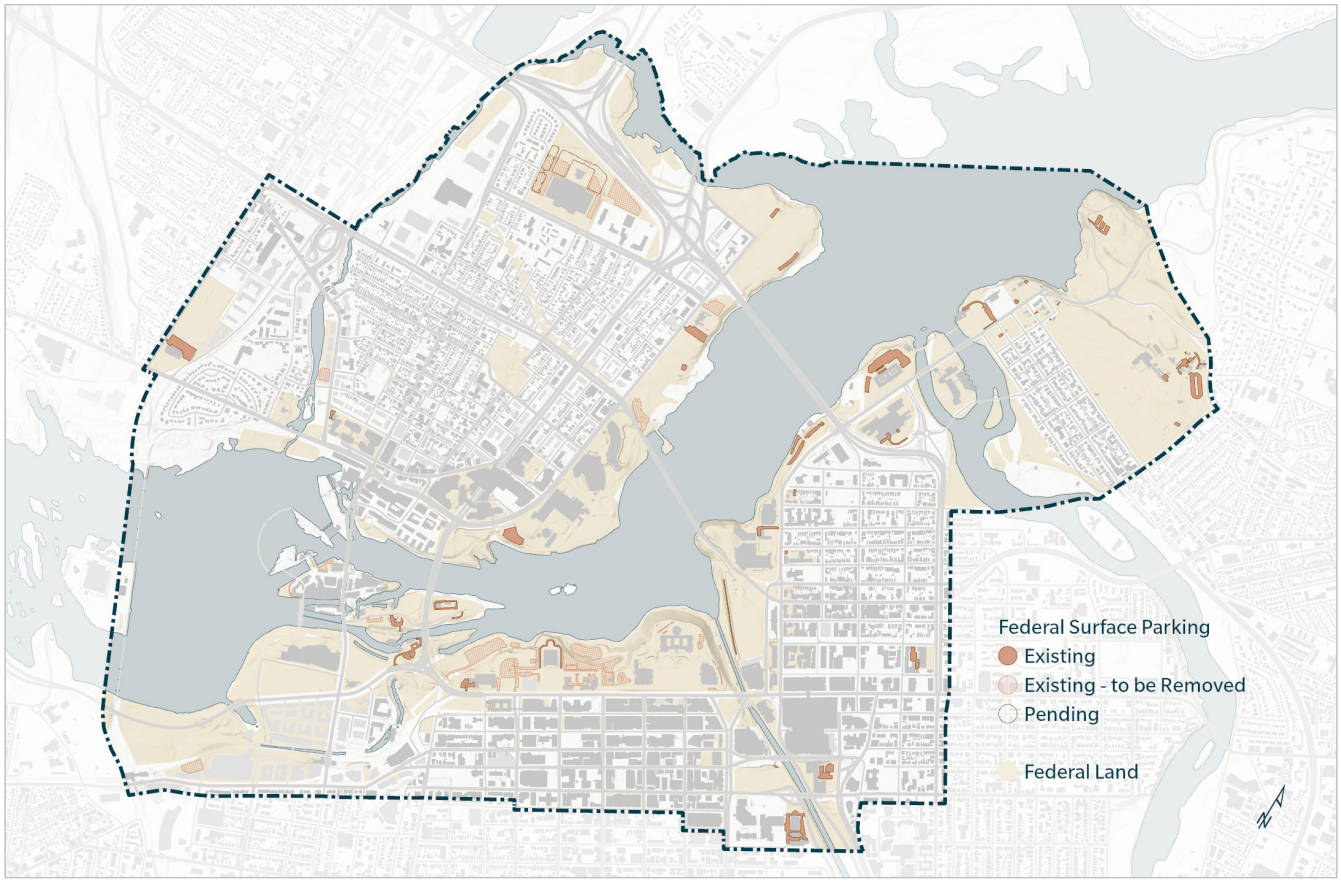
Confederation Boulevard is a key element of the core area. A ceremonial and discovery route, it has three key components. The linking ring is a loop that connects Ottawa and Gatineau formed by Wellington Street, the Portage Bridge, Laurier Street, the Alexandra Bridge, Mackenzie Avenue and Sussex Drive. Elgin Street provides a grand approach from Laurier Avenue to the National War Memorial, while Sussex Drive connects the Peacekeeping Monument to Rideau Hall.

2.2.2 Parking

includes extensive parking facilities. Not including street parking or lots reserved for employees or hotel guests, there are well over 20,000 parking spaces available in underground parking lots, parkades or surface lots in the core. An inventory completed in September 2024 includes more than 15,000 parking spots in Ottawa and over 6,000 in Gatineau.

In addition, there are several large parking facilities for federal employees, including 1,700 spots in the Laurier-Taché underground garage at Place du Portage and extensive surface parking in the Parliamentary and Judicial precincts.

Figure 3 – Federal surface parking in the core area



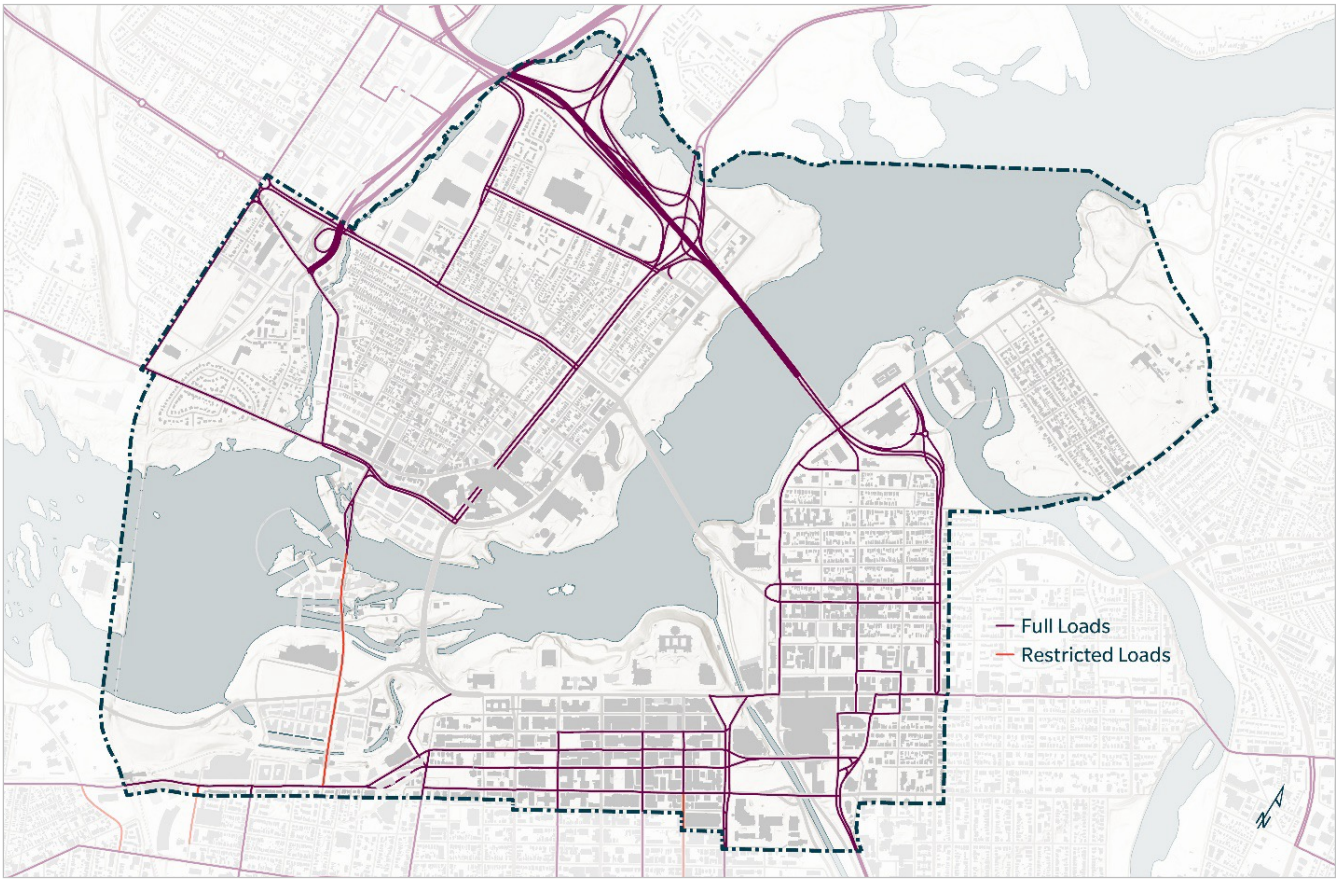
2.2.3 Truck Routes

Commercial vehicles play an important role in the economic activity of the region. Truck routes, shown in Figure 4, are the subset of the road network on which trucks are permitted to travel with or without partial restrictions.

Historically, two interprovincial crossings have been part of the truck route network: the Macdonald-Cartier Bridge and Chaudières Crossing.

Among the core area's truck routes, the King Edward-Rideau-Waller-Nicholas (KERWN) corridor is particularly noteworthy. The KERWN corridor is a municipal route in Ottawa passing through the National Capital core area and connecting Highway 417 on the Ottawa side to Autoroute 5 on the Gatineau side. Truck volume on the KERWN corridor is typically between two to four times that of many other arterial roads in the region. The volume of trucks on Highway 5

Figure 4 – Truck routes in the core area



is not generally considered a problem as the road was designed to accommodate high vehicle volumes and is separated from the adjacent communities. However, a similarly higher order roadway was never constructed in Ottawa, creating an environment where high volumes of truck traffic travel along King Edward Avenue and through the Ottawa core, a dense commercial and residential area with high levels of pedestrian and cyclist activity.

2.2.4 Public Transit

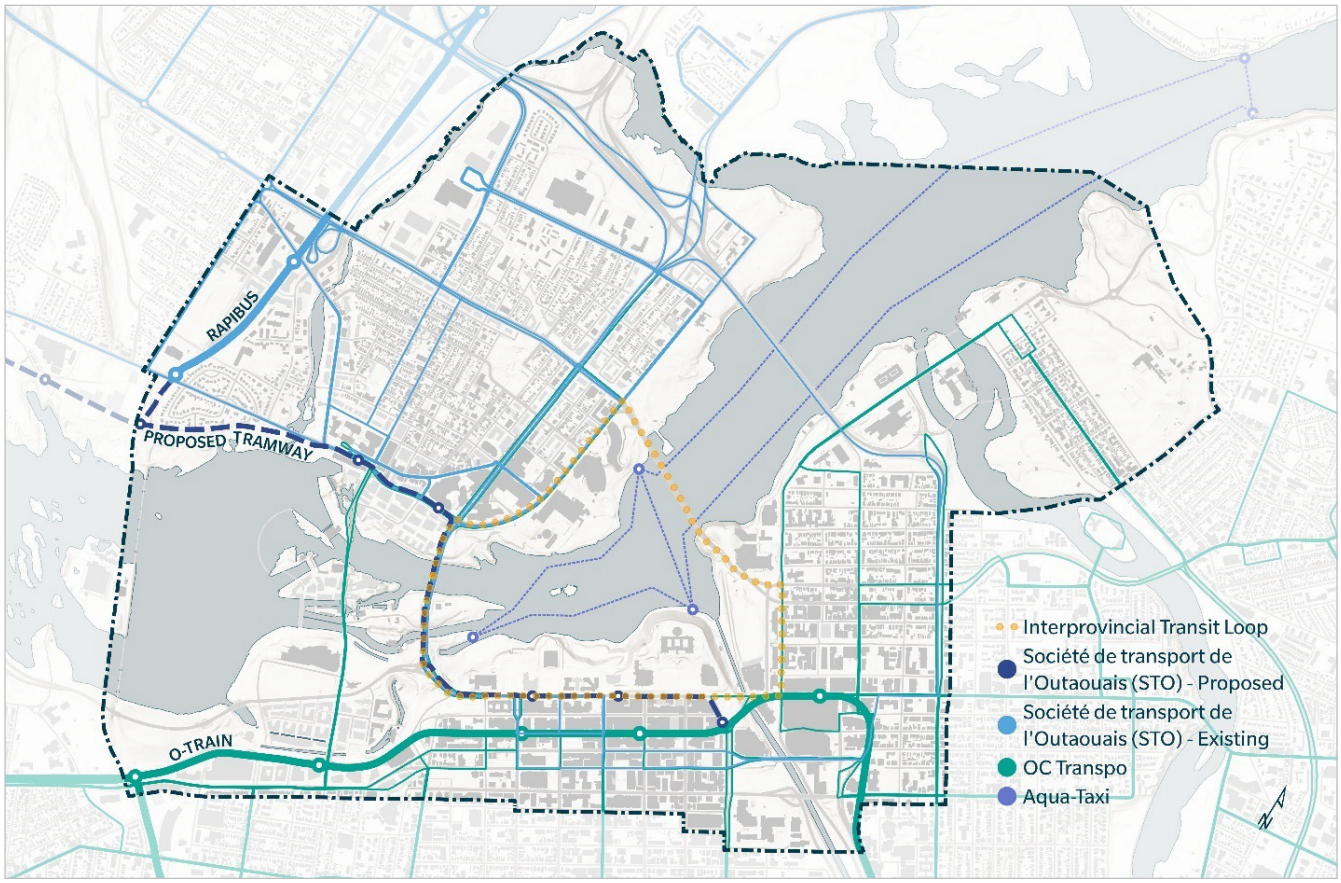
In the National Capital Region, public transit is used extensively to travel to the core area, especially at peak times. As such, transit infrastructure projects have been developed to accommodate large volumes of suburban commuter trips.

The Rapibus corridor, a bus rapid transit service linking the Gatineau sector (now extending to Lorrain Station) to downtown, opened in 2013. The corridor includes two stations in the core area: Montcalm and Taché-UQO stations. From there, buses run on dedicated bus lanes or in mixed traffic through the core area. Most STO routes use the Portage Bridge to and from Ottawa. Regular routes take Albert and Slater streets to the Mackenzie King Bridge, while peak routes run along two different loops between Lyon and Bank streets.

The O-Train Line 1 (Confederation Line) opened in September 2019 and features a 2.5-km tunnel running under Queen Street that includes three underground stations (Lyon, Parliament and Rideau). The core area also includes Pimisi Station at Lebreton Flats and Bayview Station, which connects Line 1 with the north-south Line 2, which reopened in 2025 and now extends south to Limebank Station and connects with Line 4 to the Ottawa Macdonald-Cartier International Airport.

STO and OC Transpo bus networks complement the Rapibus and O-Train systems. Major bus transit hubs in the core area include Terrasses de la Chaudière, Place d'Accueil, Parliament Station and the Rideau Centre.

Figure 5 – Existing and proposed public transit networks in the core area



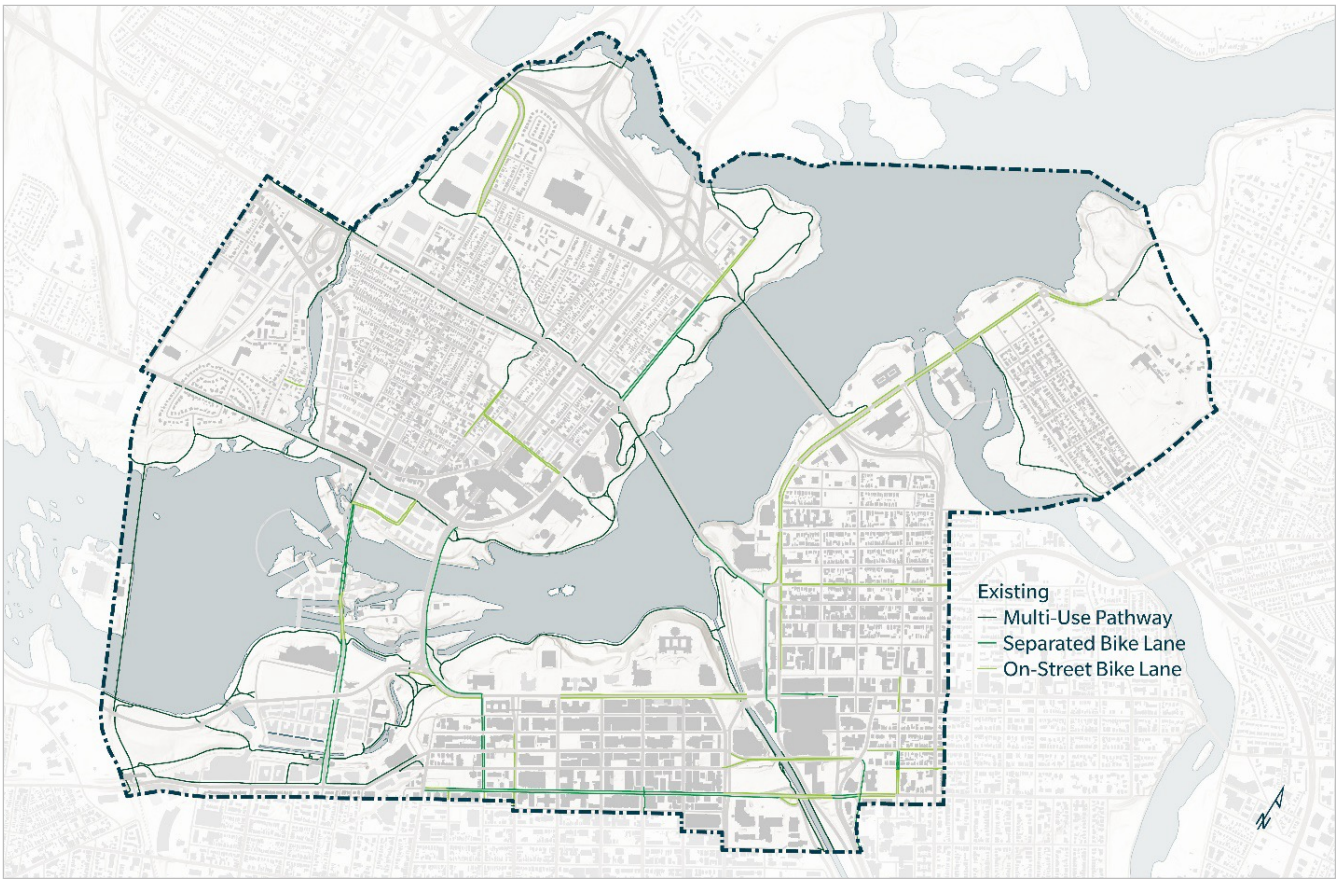
2.2.5 Active Transportation

The National Capital Region is known for the Capital Pathway, a network of off-road, multi-use pathways developed by the NCC over the past 50 years. The Voyageurs, Ruisseau de la Brasserie, de l'Île, Ottawa River and Rideau Canal pathways are used extensively in the core area for recreation and transportation.

The interprovincial bridges all accommodate active transportation, including a bidirectional bike lane on the Portage Bridge, a boardwalk for pedestrians and cyclists on the Alexandra Bridge, and sidewalks intended for active users on both sides of the Macdonald-Cartier Bridge. The Chaudières Crossing is being rehabilitated with continuous protected cycling lanes in both directions and a wider sidewalk. The Chief William Commanda Bridge reopened in September 2023 after being repurposed for active transportation.

Both the City of Ottawa and Ville de Gatineau have made significant investments in cycling infrastructure in recent years. There are a few separated bike lanes in the core area, including Laurier Avenue, Bay Street, O'Connor Street, Mackenzie Avenue in Ottawa, and a short section of Laurier Street in Gatineau. On-street bicycle lanes are also provided on several city streets, including Wellington Street and Sussex Drive (see Figure 6).

Figure 6 – Existing cycling network in the core area



2.3 Existing Travel Patterns

2.3.1 2022 Origin-Destination Survey

An origin-destination survey was conducted for the National Capital Region in the fall of 2022. By that time, the most severe of the pandemic-induced impacts on people's activity and the corresponding changes in travel behaviour had receded. However, some activity and travel behaviours remained in flux, notably the hybrid work environment, and have since evolved.

Trips to the core area in the morning peak period (6:30 am to 9 am) fell by 46%, from close to 97,000 trips in 2011 to 52,000 trips in 2022. The drop was sharper in the Gatineau core (-53%) than in the Ottawa core (-43%). Half of these trips were made by car in 2022, compared to 44% in 2011, while transit mode share declined by 15 points to 33%. Active trips grew by 8 percentage points to 17%.

Interprovincial trips through the core (trips that have origins and destinations outside of the core area but pass through the core using one of the interprovincial bridges) fell 19% to close to 24,000 trips in the morning peak period. Car use increased from 80% to 85% of trips, to the detriment of transit. Active travel is marginal for these types of trips and remained stable at 3%.

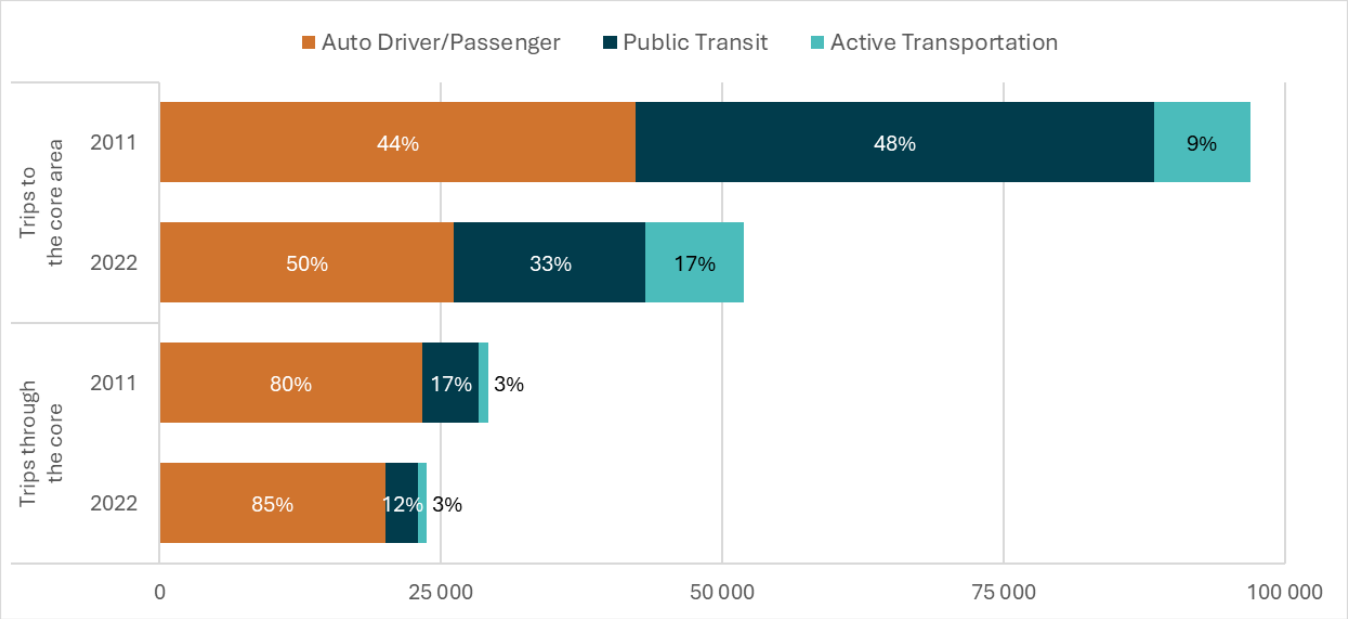


Figure 7 – Trips to and through the core in the morning peak period in 2011 and 2022

Trips within **the core** dropped from 7,300 to 5,300 trips in the morning peak period (-27%). They continued to be mostly by walking and cycling, with active transportation gaining mode share, from 59% in 2011 to 78% in 2022. While transit experienced a sharp decline from 19% to 6% of trips, in 2022, 84% of trips within the core were made using sustainable modes, up from 77% in 2011.

Trips from the core increased by 6% between 2011 and 2022 to 7,500 trips. Transit maintained its mode share at 25%, while walking and cycling grew from 10% to 17%.

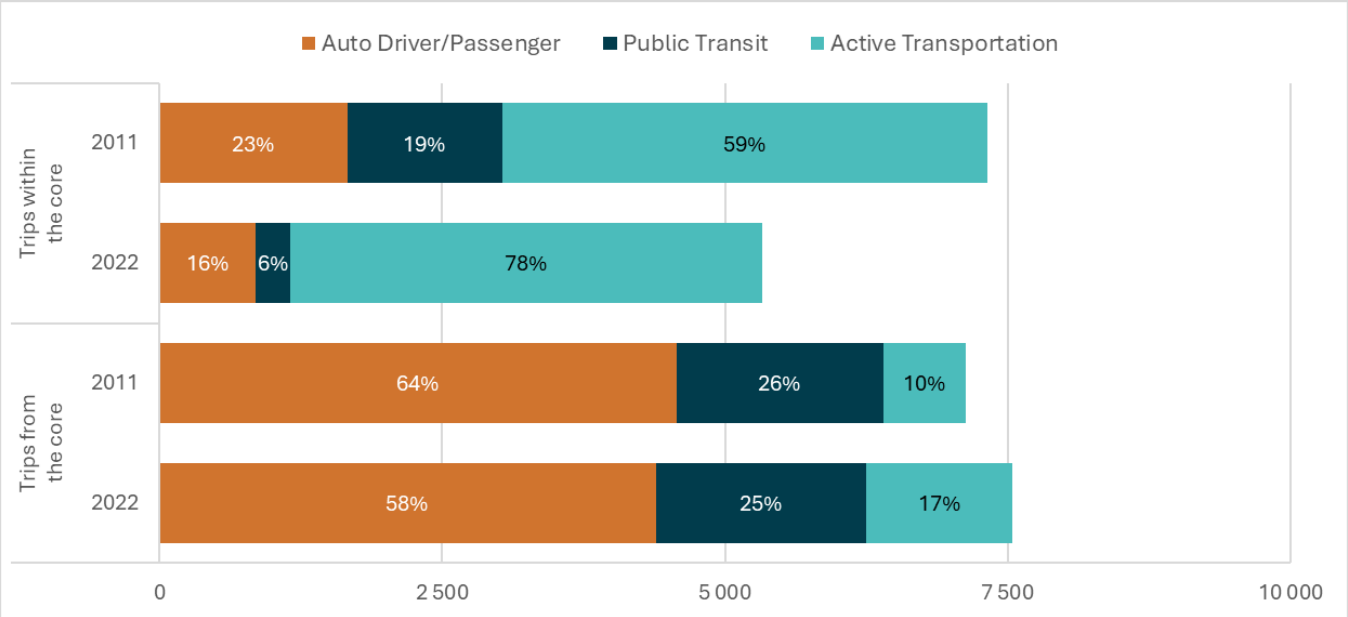


Figure 8 – Trips within and from the core in the morning peak period in 2011 and 2022

2.3.2 Recent Trends

In 2022, when the survey was conducted, observed travel patterns and behaviours were still evolving towards a new normal following the impacts of the COVID pandemic. For example, the federal government's mandate requiring employees to return to the office for two or three days a week wasn't fully implemented until the end of March 2023.

Currently, public servants in the core public administration who are eligible for a hybrid work arrangement are required to work on-site a minimum of three days a week, with executives working on-site a minimum of four days a week.

Preliminary data for September 2024 show a significant increase in transit ridership since 2022. OC Transpo expects ridership to reach around 78% of pre-pandemic levels. The next origin-destination survey for the National Capital Region is planned for 2026 and should further inform the evolution of these trends.

2.3.3 Truck Mobility Data

According to the June 2024 Interprovincial Truck Mobility Data Collection report, there are approximately 3,500 interprovincial truck trips in the National Capital Region on a typical weekday, which represents 2% of all *interprovincial* vehicle traffic.

Eighty-five percent (85%) of interprovincial truck trips were observed between 6 am and 6 pm.

Only **6% of interprovincial truck trips are travelling through the region. The majority (65%) are local trips to the National Capital Region.**

However, 67% of trucks observed on the KERWN corridor did not have origins or destinations in the immediate area. Most of the local truck trips were smaller, single-unit trucks, while 87% of articulated trucks continued through the corridor without stopping.

2.4 What We Heard

As part of the Core Area Plan update, the NCC conducted engagement activities from June to December 2023, including public workshops, pop-up kiosks, and a public survey hosted on PlaceSpeak.

Participants expressed concerns about the car-centric4 nature of the core area as practically and environmentally unsustainable. Many noted that truck traffic poses challenges for residents and discourages visitors from moving through the core area. Participants widely agreed on the need to reduce personal vehicle traffic in the core area by repurposing road space for people rather than cars. Participants often suggested creating car-free zones that prioritize walkable, accessible and pedestrian-focused mobility.

However, participants understood that this could be challenging given the region's historical and cultural prioritization of cars; a perceived lack of coordination between key interprovincial agencies; and issues with regional public transit systems in their current state. Participants largely agreed that a shift toward sustainable mobility is needed, primarily through the prioritization of public transit, as well as active modes of transportation such as walking and cycling.

In addition, stakeholders and members of the public were invited to comment on the NCC's 2023–2026 Accessibility Plan through an online survey and a series of virtual meetings. Participants identified a generally acceptable level of physical accessibility for pathway infrastructure in the core area but emphasized a need for clearer and more visible wayfinding signage. Improved lighting and larger sidewalks would also improve mobility and connectivity. Some people **identified multi-use pathways and other infrastructure that can present barriers for people with disabilities.**

The summary report published in March 2024 is available on the NCC's website.

3 Future Conditions in the Core Area

3.1 Strategic Framework

This section reviews relevant federal, provincial and municipal policy and planning documents that are relevant to mobility in the core area.

3.1.1 Federal and NCC Plans

Federal Government

The Government of Canada is committed to achieving net-zero emissions by 2050, with an interim target of reducing GHG emissions by 40% below 2005 levels by 2030.

The 2030 Emissions Reduction Plan indicates that Canada's transportation sector is the second-largest contributor to overall GHG emissions. According to data from the most recent National Inventory Report (2021), transportation accounted for 25% of total emissions in Canada. Currently, **the majority** 5 of emissions come from light-duty passenger vehicles (e.g. cars, SUVs, and pickup trucks) and freight (e.g. heavy-duty) vehicles.

The 2022 to 2026 **Federal Sustainable Development Strategy** sets the target that by 2030, 22% of commuters use public transit or active transportation, up from 19% in 2016.

In addition, the **Greening Government Strategy** commits to achieving net-zero operations by 2050. The commitments encompass all Government of Canada operations, including mobility (i.e. fleets, business travel and commuting). The strategy states that the government encourages employees to use low-carbon forms of transportation to reduce emissions from employee commuting and is tracking these emissions. It will also prioritize zero-emissions options for all new vehicle and mobile equipment purchases where suitable options are available and considering operational feasibility. Starting in 2025, 100% of new light-duty fleet vehicle purchases will be zero-emission vehicles (ZEVs), with the objective that the government's light-duty fleet comprises 100% ZEVs by 2030. By 2030, at least 40% of new commercial medium- and heavy-duty vehicle purchases will be ZEVs.

National Capital Commission

The NCC's 2017 **Plan for Canada's Capital** defines an overarching vision and strategic planning direction for the entire Capital Region over a 50-year time horizon.

As part of the goal to create a "thriving and connected Capital," the Plan for Canada's Capital indicates that the NCC will actively encourage transportation policies leading toward environmental sustainability, and that transportation investments by the NCC over the next decades should support placemaking, in addition to enhancing the experience of the Capital. Federal involvement in regional transportation should then concentrate on investing in assets that serve as a foundation for a distinctive and attractive sustainable mobility network.

The Plan for Canada's Capital recognizes that improved interprovincial connectivity remains an important aspect of the federal contribution to regional mobility, and that the existing interprovincial crossings are vital to the region's economic vitality and growth. It recognizes that the seamless integration of the interprovincial crossings with the adjoining municipal and provincial transportation networks is essential for a prosperous and sustainable region.

The Plan for Canada's Capital identifies a series of 17 major milestone projects that are to be implemented by federal agencies between 2017 and 2067. Milestone 6 calls for a reimagined Wellington Street in order to improve the pedestrian realm, security and access to public transit; provide for separated cycling facilities; and maintain Confederation Boulevard's prime ceremonial and symbolic function. Milestone 17 speaks to the need to continue the development of multimodal and interprovincial connections and better transit integration.

In addition, the NCC's **Sustainable Development Strategy 2023–2027** lists the following actions:

- Support the improvement of infrastructure for sustainable transportation in the National Capital Region through the development of transportation plans and guidelines.
- Improve opportunities for year-round active mobility in the National Capital Region, including, for example, access to:
  - streets closed to motor vehicle traffic for active mobility;
  - groomed ski and snowshoe trails;
  - stairways, bicycle lanes and pathways that are maintained year-round; and
  - bicycle rentals (including e-bikes).

3.1.2 Provincial Plans

Ontario Government

In April 2022, the Ontario Ministry of Transportation released **Connecting the East: a draft transportation plan for eastern Ontario**. The plan is organized around five goals to improve transportation in eastern Ontario and includes more than 50 actions that are aimed to "connect local communities, fight gridlock, keep roads safe and reliable, and add more public transit and active transportation."

Major projects for the City of Ottawa include widening Highway 417, exploring the potential for a ring road and collaborating with municipal and federal stakeholders on the potential for an additional interprovincial crossing.

Government of Quebec

In 2018, Quebec's *Ministère des Transports et de la Mobilité durable* adopted the ***Politique de mobilité durable – 2030*** (sustainable mobility policy). It defines 10 targets organized around three key directions corresponding to the social, environmental and economic spheres of sustainable development. The first two key directions and their associated targets are most relevant and presented below:

- Mobility to serve the public:
  - 70% of Quebec's population has access to at least four sustainable mobility services;
  - 20% reduction in the average travel time between home and work;
  - 25% reduction in the number of fatal accidents and those involving serious injuries.
- Mobility with a smaller carbon footprint:
  - 20% reduction in solo car trips throughout Quebec;
  - 40% reduction in petroleum consumption in the transportation sector below the 2013 level;
  - 37.5% reduction in GHG emissions in the transportation sector below the 1990 level.

3.1.3 Municipal Plans

City of Ottawa

The City of Ottawa's New Official Plan, approved in 2022, has proposed five broad policy directions as the foundation to becoming the most liveable mid-sized city in North America over the next century. The second "Big Policy Move" states that "by 2046, the majority of trips in the city will be made by sustainable transportation," such as walking, cycling, transit or carpooling. It is closely linked with the first Big Policy Move, which calls for a majority of new dwellings to be achieved through intensification by 2046.

Ottawa's Climate Change Master Plan established greenhouse gas (GHG) reduction targets of 100% by 2050 for the city as a whole and 100% by 2040 for the municipal corporation. Given that the transportation sector contributes to 44% of Ottawa's overall GHG emissions, action is needed to encourage the use of more sustainable modes of travel and vehicles if these targets are to be achieved.

Ottawa's new Transportation Master Plan (TMP) has adopted the following vision: "In 2046, Ottawa's transportation network will be flexible, dependable, safe and efficient in meeting the evolving needs of residents and businesses across the city, while enabling the City to meet its climate change goals. The network will provide travel options for people regardless of their income, identity, or ability."

The TMP indicated that "in 2016, 74% of trips in Ottawa over a 24-hour period were made by automobile, while only 26% were made by walking, cycling and transit. Even with a significant shift to electric vehicles (EV), trips by car will need to drop to 58% of the daily total by 2030 to achieve GHG reduction targets based on modeling developed through the City's Energy Evolution Strategy."

In addition, the NCC has actively participated in the Ottawa Board of Trade's "**A Living Capital: Downtown Ottawa Action Agenda**" and the objectives of that plan to increase downtown Ottawa's population by at least 40,000 residents, downtown's employment base by at least 50,000 jobs, and invest at least $500 million in various public realm and other revitalization efforts, are congruent with the NCC's ongoing and emerging objectives as part of the Core Area Plan.

Ville de Gatineau

Increasing the share of trips by sustainable modes of transportation has also been a longstanding objective for the Ville de Gatineau. The 2013 *Plan de déplacements durables* included the following targets for the morning peak period: increasing walking trips from 8% in 2011 to 11% by 2031, cycling trips from 2% to 4%, and transit trips from 18% to 24%. Car trips would decrease from 72% to 61% of total trips.

Sustainable mobility played a key role in the 2009 *Plan particulier d'urbanisme (PPU) du centre-ville*. Its vision was to create a safe, pleasant living environment where pedestrians and cyclists have access to points of interest, parks and numerous services. Its first policy direction related to sustainable transportation and aimed to improve accessibility and trips in the downtown area, especially for pedestrians, cyclists and public transit users. A revised PPU will be adopted in 2025.

In its more recent Plan climat, adopted in 2021, the Ville de Gatineau aims to be carbon neutral by 2050, with interim 2030 targets to reduce community GHG emissions by 35% and corporate GHG emissions by 50%. As the transportation sector accounted for 44% of emissions in 2015, the shift to sustainable modes is key to achieving these targets.

3.2 Planned Infrastructure Improvements

Significant rapid transit infrastructure and service improvements are planned by 2050, including new rapid transit infrastructure across the Ottawa River. The planned transit projects will also extend to suburban locations on both sides of the river. Similarly, planned improvements in the active transportation (cycling and pedestrian) network in both Ottawa and Gatineau by 2050 will improve connectivity across the river and increase the attractiveness for shorter-distance interprovincial trips.

Key changes to the transportation network within the 2050 planning horizon for the National Capital Region are assumed to include the following:

- Improvements in Gatineau to 5.2 2051 included in the Ville de Gatineau's ***Schéma d'aménagement et de développement révisé (SADR)***, 2015;
- The Gatineau cycling network included in the ***Plan directeur du réseau cyclable***;
- Improvements to the Ottawa road and transit network based on the City of Ottawa **Transportation Master Plan**, 2013;
- A Gatineau-Ottawa Tram (TramGO) that connects West Gatineau and the STO Rapibus terminus with downtown Ottawa
- A federal transit service operating on Confederation Boulevard, the Interprovincial Transit Loop, that connects federal institutions and landmarks within the core area
- A new interprovincial multimodal bridge in the Montée Paiement - Aviation Parkway corridor.

4 Future Mobility Alternatives and Evaluations

The rapidly evolving mobility landscape presents both challenges and opportunities for the core area. **As we look to the future, transportation solutions must align with long-term planning goals. This section presents a** comprehensive **evaluation framework, which is then used to assess various mobility interventions.**

4.1 Evaluation Framework

Mobility initiatives need to consider various community impacts and long-term planning goals. The comprehensive evaluation framework below incorporates both quantitative and qualitative information to understand impacts on users, communities and businesses alike. Table 1 describes nine factors and how they are applied.

Table 1 – Evaluation Framework

Criteria	Travel Speeds and Time Costs	Movement of Goods and Services	User Savings and Affordability	Public Infrastructure and Congestion Costs
Definition	This factor includes changes in travel speeds (measured door-to-door) and changes in travel time unit costs (considering whether a mode allows people to be more productive while travelling). It leads to improved quality of life and productivity.	This factor considers the impacts of the transportation, distribution and delivery of goods and services, with economic benefits ranging from reduced operational costs (and associated fuel use and emissions) to improved supply chain reliability.	This factor refers to the overall financial costs of transportation for households. It considers whether significant savings can be provided, allowing for more disposable income to be allocated to other needs.	Public infrastructure costs consider all costs of public facilities, transit services, and government-owned or mandated parking facilities. Congestion costs reflect the amount of road space required per passenger-kilometer, and therefore the amount of congestion each traveller imposes on other road users. This can also include delays that wider roads and increased vehicle traffic may impose on active modes.
Application	Interventions that aim to improve transit efficiency and reliability, reduce wait times, or create safe and direct routes for active transportation are rated positively. So are interventions that reduce travel time costs by increasing comfort (e.g. cycling and transit improvements) and allowing travellers to be more productive during their trips (e.g. public transit, autonomous vehicles). On the other hand, new roads or bridges generate induced demand and may not increase travel speeds, except for active and transit users who may benefit from shorter routes. Electric and autonomous vehicles may increase total vehicle travel and increase congestion.	Interventions that generate a modal shift towards sustainable modes are considered to have a positive impact on the movement of goods and services by freeing road space for these uses. As for interventions that may increase personal car trips, their impact will be dependent on implementation (e.g. TDM measures).	Active and public transportation improvements as well as car and bike share can provide large user savings, especially if they allow households to own fewer or no cars. Electric and autonomous vehicles are likely to provide few affordability benefits unless they are shared. Road infrastructure projects are not likely to yield any cost savings, especially for low-income users.	Public transit projects may require expensive infrastructure investments but are usually cheaper than accommodating the same number of peopl**e travelling** by car on roads and in parking facilities. Active transportation requires little space per person. Road projects, ridehailing, and autonomous vehicles may increase total vehicle travel unless they are accompanied by TDM measures and other restrictions.

Table 1 – Evaluation Framework

Criteria	Congestion in the Core Area	Social Equity Impacts	Public Health and Safety	Resource Conservation and Emissions Reduction	Strategic Planning Goals
Definition	Congestion costs reflect the amount of road space required per passenger-kilometre, and therefore the amount of congestion each traveller imposes on other road users in the core area. This can also include delays that wider roads and increased vehicle traffic may impose on active modes.	This factor refers to the impact on the mobility of vulnerable populations, including people with disabilities and/or lower-income individuals. A more equitable transportation system increases economic and social participation.	This factor includes impacts on the amount of physical activity that people engage in, noise and air pollution emitted, and changes in safety risks, ultimately affecting healthcare expenditures and public wellbeing.	This factor refers to impacts on the consumption of energy and other resources based on lifecycle impacts, environmental impacts, as well as GHG emissions, which affect long-term economic resilience.	This factor refers to long-term community goals, including modal shift and more compact development patterns (see section 3.1.2), which reduce infrastructure costs and increase sustainability.
Application	A vehicle lane moves 600 to 1,600 people per hour, while transit corridors can move over 4,000-10,000 people per hour. Active transportation requires limited space per person, with a two-way protected bikeway moving up to 7,500 people per hour. Road projects, ride-hailing, and autonomous vehicles may increase total vehicle travel and congestion in the core area, unless they are accompanied by TDM measures and other restrictions.	Active transportation and public transit improvements are considered to improve social equity impacts by increasing the mobility of people who are too young, too old, not able to drive or to afford a vehicle. The impact of road projects will depend on whether they improve conditions for alternative modes or increase traffic impacts in surrounding neighbourhoods, which may already be vulnerable.	Interventions that increase physical activity and fitness, reduce crash risks and pollution, and/or improve access to healthcare services are rated positively. Interventions that increase vehicle volumes and speeds may increase noise, pollution and crashes.	Interventions that reduce or optimize resources, improve resilience or have limited environmental impacts (e.g. heat island effect) and reduce GHG emissions are rated positively. Infrastructure projects involve significant embodied carbon but can have a net positive impact if they generate large reductions in emissions over their lifecycle. Some mobility innovations will have a positive or negative impacts depending on whether they are shared or individually owned.	Interventions that reduce car ownership and use and help create more compact and multimodal neighbourhoods contribute to strategic planning goals. Interventions that encourage sprawl are considered detrimental to community goals.

4.2 Assessment of Future Interventions and Innovations

Based on the evaluation framework described in the previous section, the following three categories of interventions are detailed in this section:

- Major infrastructure investments
- Minor interventions and service improvements
- Mobility innovations

4.2.1 Major Infrastructure Investments

Planned infrastructure projects are detailed in section 3.2 above. We are also assessing other major investments that are currently being discussed and would affect the core area.

O-Train Extensions

The O-Train is Ottawa's light rail rapid transit system. The system currently consists of three lines: Line 1, running east to west, Line 2, running north to south between Bayview and Limebank stations, and Line 4, running between South Keys and Airport stations. The Stage 2 Light Rail Transit project has already extended Line 2 farther south and opened Line 4 to the Macdonald-Cartier International Airport. It will also extend Line 1 farther east to Trim and west to Algonquin and create Line 3 to extend service west to Moodie Station. These extensions will bring 77% of residents within 5 km of rail rapid transit. Construction is due to wrap up on Line 1 and Line 3 by 2027-28. The Stage 3 plan involves extending light-rail transit infrastructure into some of Ottawa's fastest growing communities: Kanata, Stittsville and Barrhaven.

By increasing the mode share of transit for trips to the core area, the O-Train extensions are expected to yield multiple benefits, including improved mobility and affordability, better public health, a smaller carbon footprint, and encourage the development of 15-minute neighbourhoods across the city.

Gatineau-Ottawa Tram (TramGO)

Studies conducted by the Société de transport de l'Outaouais (STO) concluded that mobility requirements for the west end of Gatineau would best be served by a tram system with two branches: Vanier, Plateau and Saint-Raymond in the north, and Boulevard des Allumettières, Wilfrid-Lavigne Boulevard, and Aylmer Road in the south. The two branches will then run along Alexandre-Taché Boulevard, Lucerne Boulevard and Laurier Street, and cross the Ottawa River on the Portage Bridge. The NCC has recommended the tram then run along Wellington Street to terminate on Elgin Street.

The tram would improve the reliability of transit, increase travel speeds and reduce time costs and overall travel costs. It would improve mobility and access for people who cannot drive. Although it would require major infrastructure investments and significant resources, it would accommodate large numbers of people (300 riders per vehicle), reducing the amount of road space required per passenger-kilometre, as well as GHG emissions. Moreover, the tram would alleviate concerns about public health and safety. The tram would reduce the number of STO buses in the core area. In addition, it would promote the attainment of strategic planning goals by contributing to the development of more compact and multimodal neighbourhoods.

Rapibus Extension

The STO is planning an extension of its Rapibus bus rapid transit system. The corridor has recently been extended to Lorrain Station, but could be further extended first to the Gatineau airport and eventually to Buckingham.

While this project would not involve changes in the core area, it would bring about many of the same benefits detailed above, by densifying neighbourhoods around transit stations and providing a better alternative to the private car in the east end of Gatineau. As such, it has the potential to reduce traffic congestion and pollution in the core area.

Interprovincial Transit Loop

The 2013 Interprovincial Transit Strategy identified a transit loop serving the downtown areas of Gatineau and Ottawa along Confederation Boulevard, including workplaces, the Parliamentary and Judicial precincts, museums and other visitor attractions. While the interprovincial transit loop (IPTL) would complement the STO tram, a stand-alone system (i.e. using smaller, non-rail vehicles) would facilitate its implementation.

The IPTL would encourage off-peak transit use by workers, visitors and residents travelling between city cores and improve transit connectivity and performance. As such, it would contribute to a variety of community goals, including improving attractivity, accessibility, and public health in the core area.

Additional Interprovincial Crossings

There have been multiple studies looking at building a new crossing in the east of the region, between Ottawa and Gatineau. All of these studies concluded that we need a new bridge to improve interprovincial transportation, and an evaluation of potential corridors was undertaken. In December 2024, through its Fall Economic Statement, the Government of Canada authorized further studies on the Montée Paiement - Aviation Parkway corridor. This corridor would address regional growth and reduce truck traffic in the core area. It would also provide complementary routes for public transit and active transportation.

Other vehicular or pedestrian crossings could also be considered in the future.

Even though any additional crossing would most likely be located outside of the core area, it could positively or negatively impact traffic levels in the core area. Any vehicular crossing could impact land use and travel patterns and generate more traffic by providing residents other routes into downtown. However, it could also ease traffic in the core area by providing a more direct route between the peripheries of Gatineau and Ottawa, thereby reducing the number of interprovincial trips through the core area.

A new crossing should be designed and accompanied by policy measures to enhance connectivity for transit and active transportation, reduce travel distances, and mitigate traffic impacts in the core areain order to advance strategic planning goals.

Downtown Ottawa Tunnel

Truck traffic on the King Edward-Rideau-Waller-Nicholas (KERWN) corridor remains an ongoing issue. The corridor is the major truck route connecting the highway networks in Ontario and Quebec. In 2016, a feasibility study on a tunnel connecting the Macdonald-Cartier Bridge to Highway 417 was conducted. It was estimated that approximately 25,000 cars and 1,700 articulated heavy trucks per day would use this infrastructure. This represents two thirds of the total number of trucks in the corridor.

Building the tunnel would require significant resources and energy. However, it could significantly improve public health and safety in the core area, especially along King Edward Avenue. It could also contribute to other community goals if it was accompanied by other measures to reduce overall traffic volumes in the core area (e.g. lane reallocations, mobility pricing, etc.).

Highways to Boulevards / Lane Reallocation

Gatineau's 2009 *PPU du centre-ville* recommended consolidating the Carrière/de la Brasserie sector, south of Montclair Boulevard, and improving the quality and accessibility of the area. It suggested the transformation of Highway 50 into an urban boulevard "to enhance the shorelines and encourage the emergence of a recreation and tourism hub in continuity with the casino facilities." This idea has gained public support over the past few years.

Additional vehicle lanes reductions have been considered for King Edward Avenue in Ottawa and Maisonneuve Boulevard in Gatineau.

By making active transportation safer and more appealing, lane reallocations can improve public health and social equity, reduce GHG emissions, and contribute to strategic planning goals. Lane reallocations don't necessarily increase congestion; if road space is repurposed for cycling and/or transit, the overall capacity of the corridor will be increased.

4.2.2 Minor Interventions and Servic e Improvements

Additional minor interventions and service improvements to improve mobility in the core area include:

Transit Priority Measures

Transit priority measures are treatments that aim to reduce delays for buses on congested streets and can usually be implemented quickly. They include dedicated bus lanes or high-occupancy vehicle (HOV) lanes, transit signal priority and queue jumps. They are especially useful along high-demand transportation corridors, such as those in the core area. Key transit priority corridors in the core area include Alexandre-Taché Boulevard, Laurier Street, Montcalm Street, Queen Street, Bank Street, Rideau Street and Elgin Street.

Transit priority measures reduce travel times and increase service reliability. They enable transit agencies to provide more frequency with the same resources. Consequently, they make transit more competitive and increase ridership. They help provide better transportation options to all, especially people who cannot drive or afford a car, making mobility more affordable and equitable. By generating a modal shift from private cars to public transit, they can decrease congestion, facilitate the movement of goods and services, and reduce GHG emissions from transportation. Transit corridors can impact land use, encouraging housing development and creating more compact and mixed neighbourhoods.

More Frequent Bus Service

Studies have demonstrated that bus services with the same frequency and reliability as rail services generate similar ridership. Investments in public transit operations, especially bus services, are therefore as important as investments in rail infrastructure.

As detailed above, increased bus service will drive a shift to transit and may alleviate traffic volumes in the core area. Improved service also generates community benefits in terms of travel speeds (by reducing wait times), affordability, equity, reduced congestion and emissions, and improved goods movement.

Active Transportation Infrastructure

Active transportation (AT) infrastructure enhances safety for active trips. Examples include sidewalks, cycle tracks, protected intersections and raised crosswalks.

Compared to other types of infrastructure, active transportation improvements require relatively low investment but deliver substantial community benefits. Improvements in walking and cycling trip safety, comfort and reductions in trip length, active transportation infrastructure improves travel speeds and reduces time costs. It encourages a shift away from private cars towards walking and cycling, especially where travel distances are short such as in the core area, making mobility more affordable, equitable and sustainable. By promoting more active lifestyles and reducing sedentary behaviours, active transportation infrastructure improves public health outcomes; it also decreases the frequency and severity of crashes, thereby reducing healthcare costs.

Key future active transportation projects in the core area include the Rideau Canal-to-Rideau River pathway, protected bike lanes along Confederation Boulevard, the Preston Street footbridge, and cycle tracks on the Chaudières Crossing

Bike Share

A bike share system makes bicycles and/or electric bicycles available to the inhabitants of a city, so that they can rent a bike for short or longer distances. Most programs in large cities use docked bikes with stations strategically distributed throughout the city. Bike share works best in downtowns and other dense, mixed-use, neighbourhoods where it supplements other modes of travel.

A successful bike share system delivers multiple returns on investments. It provides residents with a safe and affordable option, improves public health, and reduces GHG emissions. It maximizes returns on investment in transit, expanding the stations' catchment areas, making travel times more competitive, and increasing ridership. Bike share is space-efficient, reducing congestion costs and freeing road space for the movement of goods and services. There is growing interest among agencies and the community in bringing bike share back to Ottawa-Gatineau in the short term.

High-Speed Rail

Connecting the core area with high-speed intercity rail has enormous potential to boost the vitality and economic prosperity of the core area and the National Capital Region, in addition to numerous other benefits such as reduced road congestion, road safety gains, lower emissions and alignment with long-term strategic planning goals. Opportunities to repurpose the former downtown rail station as the future Ottawa-Gatineau high-speed rail station should be considered in the early scoping of this important future project.

4.2.3 Mobility Innovations

This forward-looking report assesses the following eight mobility innovations to understand their potential impacts and provide policy directions to guide their implementation and maximize their benefits. Each of these may individually or in combination be suited to specific demographics or people in certain age groups. In totality, the availability of a wide range of options aims at providing several choices in the urban mobility market to suit all circumstances and preferences.

Electric Vehicles

Electric vehicles (EVs) are vehicles that can be powered by an electric motor that draws electricity from a battery. They include battery-electric and plug-in hybrid electric vehicles, although we will concentrate on the first category.

All-electric vehicles reduce noise and air pollution, which can alleviate the negative impacts of traffic in congested areas such as the core. However, their batteries add significant weight, which increases particulate pollution. Because of their low operating costs, EVs reduce the marginal cost of driving. Without policies to support mode shift, they may increase total vehicle travel and congestion and may further contribute to low density land-use patterns through the National Capital Region.

Autonomous Vehicles

Autonomous vehicles (AVs) or self-driving vehicles are vehicles that can operate without a human driver (level 5 – full automation). There are various possible ownership or operation models for AVs: they could be owned or shared, either as individual or shared transportation, which would drastically change their impacts on community goals.

AVs allow occupants to rest or work while travelling. As they will reduce the time cost of travel, they may increase vehicle travel, including empty vehicle-kilometres travelled, especially if they are privately owned and used.[1] For example, people travelling to the core area might want to avoid paying for parking and have their vehicle return home after dropping them off, creating traffic in both directions at peak times. In areas with a lot of people travelling on foot or on bicycles, they might not perform well or require sufficient technological advancement to ensure the unfettered safe use of public space, including the ability by pedestrians to access streets at any location and at all times.

1 Morteza Taiebat, Samuel Stolper, Ming Xu (2019). "Forecasting the Impact of Connected and Automated Vehicles on Energy Use: A Microeconomic Study of Induced Travel and Energy Rebound." Applied Energy, 247. https://doi.org/10.1016/j.apenergy.2019.03.174.

Micromobility

Micromobility are light, low-speed motorized modes such as e-bikes, e-scooters, and motorized skateboards.

Studies suggest that e-bikes increase the frequency and duration of cycling compared to conventional bikes, and are primarily used for transportation.[2] They substitute around half of private car trips, which could represent a significant potential of modal shift for people travelling to the core area. People who buy an e-bike cycle more and for a significantly higher percentage of their trips.[3] Micromobility requires a lot less space for parking than cars, freeing areas for other uses; however, they also require appropriate separation from pedestrians and are currently not permitted on federal pathways in the National Capital Region.

Carsharing

Carsharing is a membership-based car rental service primarily designed for short time/distance trips as an extension of the transportation network. Vehicles are typically located in downtowns and densely populated neighbourhoods.

Carsharing can be a viable and cheaper alternative to car ownership, especially for core area residents who have access to many transportation options, reducing transportation costs and lifecycle impacts. Each carshare vehicle can replace up to a dozen personal vehicles. Because carsharing makes the cost of driving mostly variable rather than fixed, members typically reduce their annual mileage by 40% to 60%,[4] turning to other modes for many of their trips. As such, carsharing helps reduce traffic congestion and infrastructure costs, facilitates goods movement, and improves public health and safety. By reducing vehicle travel, carsharing services also contribute to strategic planning goals. Carsharing is currently mostly used by middle-class households but could be oriented toward disadvantaged groups to help achieve social equity goals.

Ride-hailing

Ride-hailing companies, such as Uber and Lyft, use smartphone apps to provide personal mobility services. They have been competing with conventional taxis and driving service improvements, with taxi companies adopting similar technologies. Many ride-hailing companies are currently unprofitable, which raises doubt about the sustainability of their business model.

Although they are usually more expensive than public transit, ride-hailing services are often faster and more convenient. On the flipside, past studies suggest that, with current policies, ride-hailing tends to increase vehicle travel overall, as many passengers would otherwise have walked, biked, or taken public transit.[5] Consequently, it tends to increase traffic congestion, especially in downtowns, as well as infrastructure costs and healthcare expenditures. To optimize its impact on community and planning goals, ride-hailing should be subject to policies and incentives that encourage shared travel and prioritize active transportation and public transit.

2 Jessica E. Bourne, Ashley R. Cooper, Paul Kelly, Fiona J. Kinnear, Clare England, Sam Leary, Angie Page (2020). "The impact of e-cycling on travel behaviour: A scoping review." Journal of Transport & Health, 19. https://doi.org/10.1016/j.jth.2020.100910.

3 Aslak Fyhri +and Hanne Beate Sundfør (2020). "Do people who buy e-bikes cycle more?" Transportation Research Part D, 86. https://doi.org/10.1016/j.trd.2020.102422.

4 T. Donna Chen and Kara M. Kockelman (2016). "Carsharing's life-cycle impacts on energy use and greenhouse gas emissions." Transportation Research Part D, 47, pp. 276-284. https://doi.org/10.1016/j.trd.2016.05.012.

5 Schaller (2018). "The New Automobility: Lyft, Uber and the Future of American Cities." http://www.schallerconsult.com/rideservices/automobility.htm

Mobility as a Service (MaaS) / Fare Integration

Mobility as a Service (MaaS) is a platform or app that lets people easily plan, book and pay for trips across a variety of transportation services, including public transit, bikeshare, microtransit, ride-hailing and more. MaaS promises to reduce pollution and congestion by promoting shared transportation options and reducing the need to own a car. Despite these claims, there is still no evidence that MaaS is driving mode shift anywhere, as technology is no substitute for frequent transit services and safe cycling infrastructure.

However, in the context of the National Capital Region, a more basic fare integration between both transit systems could yield many benefits by making interprovincial trips through the core area more seamless. While monthly passes allow for illimited trips on both STO and OC Transpo networks, single trips are more complex and often require the purchase and charging of two different smart cards. Since hybrid work arrangements mean that many workers don't make enough trips to make a monthly pass cost-effective, a more integrated fare system would make interprovincial transit trips more attractive.

Logistics Management

Freight transport generates a significant part of vehicle travel and pollution. New technologies and services can increase freight delivery efficiency, reducing total vehicle kilometres travelled and encouraging use of resource-efficient modes, such as shifts from truck to rail, from diesel to electric trucks, and from larger to smaller delivery vehicles, including e-cargo bikes. More specifically, urban consolidation centres located on the outskirts of the city can consolidate deliveries from various companies into fewer vehicles destined to different neighbourhoods. Microhubs (also called mini-hubs) are smaller facilities located in the city where deliveries are transferred to cargo bikes or small electric vehicles for the last mile of the trip.

These initiatives would prove very effective in the core area, where they could significantly reduce traffic, especially from heavy vehicles, and reduce crashes and pollution.

Mobility/Parking Prioritization

Mobility prioritization uses new technologies and services, including innovative travel information, responsive road and parking fees, and commuter incentives to favour higher-value trips and more efficient modes over less valuable or efficient options. It is a type of transportation demand management (TDM).

Mobility/parking prioritization complements other active transportation and transit to encourage a shift away from private cars. As such, it can reduce congestion and pollution in the core area and improve health and equity outcomes. By increasing the speed and reliability of higher-value trips, mobility and parking prioritization can improve travel times for motorists, transit riders and active users alike, as well as facilitate goods movement.

5 Policy Recommendations

The Core Area Plan outlines six themes that provide guidance related to fulfilling the plan's vision. The vision for the Mobility and Access theme is the following:

The Capital must provide a variety of safe and equitable transportation options ensuring an enjoyable mobility experience for residents and visitors, while seamlessly connecting the region.

Mobility and Access directions and policies that support the vision are organized around the following elements.

5.1 Pedestrian Realm

Enhancing the pedestrian realm is crucial for fostering an inviting and vibrant urban experience in the core area, especially along Confederation Boulevard. The core area must promote a safe, universally accessible, comfortable and high-quality public realm that encourages people to walk, roll and linger.

- Prioritize the comfort, safety and enjoyment of pedestrians and ensure that walkways and sidewalks are universally accessible, well maintained and free of obstructions.
- Create people-first streets that are safe and attractive, with clear and frequent at-grade pedestrian crossings.
- Consider establishing car-free zones in strategic locations and/or restricting vehicle access at certain times (such as national celebrations), to enhance the pedestrian and visitor experience.

5.2 Active Mobility Network

The core is a compact, walkable and connected area that is best navigated and experienced at slow speeds. The core area must prioritize active transportation by consolidating sidewalks, bike lanes, pathways and intersections into a safe, inclusive and seamless network that facilitates access to and movement through the core.

1. Implement universal accessibility features to offer barrier-free journeys throughout the core area, including accessible pedestrian signals, tactile surfaces, rest areas, and accessible signage and wayfinding.

2. Complete and consolidate the Capital Pathway network along Confederation Boulevard, shorelines and parklands, with secondary routes to detour flood-prone areas and maintain continuous access through all seasons.

3. Enhance safety and integration for cyclists by implementing protected bike lanes, cross-rides and improved intersection designs that prioritize safe interactions between cyclists and vehicles, without impeding or encumbering pedestrian spaces.

4. Accommodate e-mobility and micromobility devices (e.g. e-bikes, e-scooters) by establishing clear guidelines, designated areas, and ensuring they do not compromise pedestrian safety or accessibility.

5. Support urban fabric repair initiatives that consolidate the continuity of active building frontages along key sidewalk corridors, and across districts separated by urban gaps, to make walking more instinctive.

6. Support enforcement of parking prohibitions on sidewalks, bike lanes and other public realm locations where motor vehicles are not allowed.

5.3 Public Transit and Shared Mobility Services

Public transit is the backbone of a livable city, moving people in an efficient, affordable and sustainable way. The core area must support the development of integrated, higher-order transit alongside efficient bus routes, shuttles, water taxis and shared mobility services to access destinations in and outside the core area.

1. Promote an integrated and efficient higher-order interprovincial transit network with enhanced service to capital destinations, seamless fare integration, harmonized signage, and real-time information to improve orientation and enhance the visitor experience.

2. Pursue the development of an interprovincial transit loop between downtown Ottawa and downtown Gatineau, including the potential to reconfigure Wellington Street into a pedestrian corridor with rail-based transit, active transportation facilities and an enhanced public realm.

3. Expand options to help residents and visitors access Gatineau Park and other attractions and destinations in and outside the core area, including shuttles and water taxis.

4. Encourage transit priority measures such as high-occupancy vehicle lanes and transit signal priority, including on interprovincial bridges.

5. Support regional bikeshare and carshare systems to complement public transit and reduce the need for private car ownership.

5.4 Regional Connections and Goods Movement

With its five interprovincial bridges and major road connections, the core area serves as a central hub for regional transportation. This concentration of interprovincial bridges generates significant car and truck traffic that moves through the core area without stopping. The high volume of interprovincial trucks using downtown streets, primarily in Ottawa, to connect between the Quebec and Ontario provincial highway networks, has raised concerns about noise, pollution and safety impacts on surrounding neighbourhoods. The core area must strive towards establishing an integrated and holistic transportation network that enables the movement of people, goods and services while alleviating truck volumes and associated impacts in the core area.

1. Increase people-moving capacity on interprovincial crossings and their approaches by repurposing vehicle lanes to public transit and/or active mobility, to reduce traffic in the core area.

2. Seek opportunities to re-route long-haul regional truck traffic and cut-through car traffic away from the downtown core.

3. With regional transportation partners, pursue modifications to Rideau Street and King Edward Avenue once a suitable, safe, and efficient alternative truck route is implemented.

4. Support mitigation strategies to minimize the impacts of truck movements on surrounding communities.

5. Support the development of urban logistics solutions, such as mini hubs, to reduce the number of heavy vehicles driving through the core area.

5.5 Transportation Demand Management

Given the core area's density and urban character, effective transportation demand management strategies are essential to mitigate congestion, reduce emissions, and enhance overall mobility and quality of life. The core area must prioritize and promote the use of alternatives to private cars among residents, commuters and visitors.

1. Encourage federal employers to implement incentive programs to increase the adoption of sustainable transportation choices by employees (such as the provision of transit passes, parking cash-out programs, carpool programs, guaranteed ride home programs, the provision of electric vehicles and bicycles for business travel, as well as secure bike parking and changing facilities).

2. Encourage major destinations, events and festivals to actively promote alternative modes by highlighting public transit and active transportation, providing shuttle options or incentives for car-free visitors.

3. Support the study of potential programs to incentivize public and active **transportation and** disincentivize driving in the core area.

4. Encourage the collection and sharing of mobility data with partners, academia and the public to support regional transportation planning and encourage the development of innovative solutions.

5.6 Parking and Access

Some surface parking lots and access routes occupy valuable urban space, especially when they are located on prime riverfront lands. The core area must consider solutions to accommodate the operational needs of federal agencies and institutions while aiming to reduce parking overall. This includes redesigning parking lots and service routes to repurpose urban spaces for more beneficial uses and improve public access to the waterfront.

1. Reduce surface parking and prioritize the conversion of prime riverfront parking areas into public spaces. Provide parking for major institutions in underground garages.

2. Create well-designed woonerfs and shared spaces to minimize the impacts of service routes, laneways and loading facilities, especially through public parks and around public institutions.

3. Support the development of a curbside management strategy that prioritizes drop-offs, deliveries, and short-term parking to optimize space utilization, including accessible and tour bus parking spaces to support tourism and visitor experience.

5.7 Multimodal Information and Wayfinding

Accessible information and effective wayfinding are essential for promoting sustainable mobility and ensuring residents and visitors have a pleasant experience when travelling to and around the core. The core area aims to facilitate multimodal travel planning and provide standardized directional signage tailored to diverse users, including pedestrians and cyclists, to help them navigate safely and seamlessly.

1. Design and install consistent and accessible directional signage adapted to different users, including cyclists and pedestrians, and clarify directional signage at key decision points and junctions (such as bridges and major intersections).
2. Promote multimodal trip planning tools to help residents and visitors plan trips to and around the core area and take advantage of sustainable transportation modes.
3. Leverage digital solutions to provide universally accessible real-time information and personalized navigation assistance for residents and visitors.

6 Conclusion

The core area is a major destination for residents and visitors alike. It is the hub of the regional transportation network with five of the six interprovincial bridges in the National Capital Region. As a result, it currently experiences high volumes of commuting and interprovincial truck trips that are destined to the core area or passing through it. Heavy traffic volumes and extensive surface parking lots throughout the core area are two central challenges that currently hinder quality of life and visitor experiences.

This mobility report considers various transportation-related future interventions for the horizon year 2050 through the lens of several long-term community planning goals. Scenarios include transit and active transportation improvements and emerging trends such as micromobility, logistics management and mobility/parking prioritization that would yield positive outcomes for the core area.

Additional measures have been considered, such as additional interprovincial crossings or a downtown Ottawa traffic tunnel, as well as such as electric/autonomous vehicles and ride-hailing. While these future scenarios have the potential to improve mobility in the core area, they also require a combination of policy measures and incentives to ensure congestion does not increase.

Seven key directions and related policies have been provided as they relate to improving long-term mobility and access in the core area towards the horizon year of 2050. Many of these directions and policies focus on enhancing connectivity across the Ottawa River while reducing traffic in the core area. In general, capacity should be increased by repurposing vehicle lanes to transit and/or active mobility.

Since the core area faces increasing pressures from regional travel demand originating outside its boundaries, actions also need to be implemented to create compact, multimodal neighbourhoods throughout the region to reduce car dependency. This includes more housing in the core area to allow more people to live, work and play locally to further minimize the region's transportation footprint.

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