1. Introduction

Building a Liveable Ottawa 2031 has set out a process to guide the completion of a fiveyear update of the City's Official Plan, Transportation Master Plan, Infrastructure Master Plan, Cycling Plan and Pedestrian Plan. The process supports Council's vision of a sustainable, resilient and liveable Ottawa. It incorporates the City's goals for economic prosperity, environmental and social well-being, vibrant culture and identity. Transportation is essential to meet these goals because it both accommodates and helps shape growth.

The 2013 Transportation Master Plan (TMP) builds on the work of previous plans carried out in 2003 and 2008. It is the City's blueprint for planning, developing and operating its walking, cycling, transit and road networks over the next two decades. Key areas of focus for the current plan include integrating the concept of complete streets, updating modal share targets, advancing strategies to improve walking and cycling, and supporting transit-oriented development. The plan also identifies a number of modifications to road and transit infrastructure priorities to account for adjustments in growth patterns, emerging issues and strategic opportunities. More so than in previous plans, the current TMP places a strong emphasis on the concept of affordability, including prioritizing projects based on financial criteria and fiscal constraints.



Exhibit 1.1 The City of Ottawa

The TMP identifies transportation facilities and services that will meet the needs of residents and businesses, and support the development policies of the City's *Official Plan*. The actions and policies in the TMP will guide day-to-day transportation programs and provide a basis for future capital and operating budgets; they will remain flexible over time as Council's intentions and priorities evolve. The intention of the TMP is not to address all the details of Ottawa's highly complex transportation system; rather, where possible, it directs readers to supporting plans and strategies, such as the *Ottawa Pedestrian Plan* and *Ottawa Cycling Plan*, that provide additional information on specific functional or geographic areas.

1.1 What's Inside

Chapter 1: Introduction shows how this TMP supports the City's overall principles for growth management, presents a transportation vision for 2031, explains how this Plan should be interpreted and how it will be updated, and comments on the environmental assessment status of its various components.

Chapter 2: Transportation in Ottawa – Today and Tomorrow gives an overview of today's transportation system and the key trends and factors that influence it, then provides facts and figures on expected future changes in land use and demographics, travel behaviour and transportation system performance.

Chapter 3: Create a Supportive Built Environment addresses how the City will shape land use to support its transportation objectives through planning tools, development around rapid transit stations, and parking management.

Chapter 4: Maximize Walkability identifies the City's approach to expanding its pedestrian network in response to evolving travel patterns, thereby creating more supportive environments for walking, improving pedestrian safety and promoting walking.

Chapter 5: Develop a Great Cycling City discusses how the City will strengthen and expand its cycling facility network, make cycling a part of more multimodal trips, expand supportive parking facilities for bicycles, improve cyclist safety and promote cycling.

Chapter 6: Transform Ottawa's Transit System describes how the City will expand Ottawa's rapid transit and transit priority network and more tightly integrate stations into the urban fabric, in order to attract even higher levels of ridership.

Chapter 7: Provide Safe and Efficient Roads addresses the importance of complete streets, identifies how the road network will expand while making it safer and more efficient to move people and goods, and lastly describes ways that the City will work to reduce the impact of roads and traffic on neighbourhoods and the environment.

Chapter 8: Encourage Sustainable Mobility Choices describes how the City will work to help residents make more sustainable travel choices such as active transportation, transit and carpooling, through measures like incentives, promotion and management of public parking.

Chapter 9: Invest Responsibly identifies the affordability framework of this Plan, the overall implementation costs by mode and phase, the City's approach to reducing asset life cycle costs, and a framework for measuring performance.

Annex A: Infrastructure Projects lists the road, rapid transit and transit priority projects that the City requires to fully implement this Plan.

Annex B: Maps contains eleven maps identifying future transportation infrastructure needs for pedestrians, cycling, transit, and roads.

Annex C: Glossary defines key terms.

1.2 Key Themes for 2013 Update

Early in the *Building a Liveable Ottawa 2031* planning process, the City consulted with residents and key stakeholders about a number of critical issues, and about possible policy directions. Each of the following transportation-related issues led this Plan to contain significant differences from the 2008 TMP:

- Affordability This update will focus on the need to limit growth in automobile use, the use of peak period (rather than peak hour) road capacity to plan future infrastructure, the prioritization of capital projects, the use of best practices in establishing capital project estimates, and limiting future investments to those that are reasonably affordable for the City to fund
- Safe and efficient transportation infrastructure The Plan puts emphasis on road safety for all users, transportation system management tools that maximize peoplemoving rather than vehicle-moving capacity to make better use of transportation infrastructure, and parking management
- Sustainable transportation The 2013 TMP proposes new targets for travel behaviour (e.g. mode shares), and suggests incentives for changing to sustainable modes, and discusses user-pay approaches
- Complete streets The Plan pursues an integrated approach that provides safety, comfort and convenience for all road users throughout the day and not only during the peak hours
- Active transportation This update focuses on future goals and objectives, principles for facility safety and attractiveness, measuring levels of service, sidewalk requirements, and considerations around different types of cycling facilities
- Public transit The plan refines the rapid transit and transit priority networks, and defines operational performance measures for rapid transit and transit priority corridors
- Transit-oriented development This update outlines the benefits of growth near rapid transit stations, and discusses strategies to encourage and guide transitoriented development

1.3 Building a Liveable Ottawa 2031

Building a Liveable Ottawa 2031 is the process that the City has followed to complete a five-year update of its Official Plan, Transportation Master Plan, Infrastructure Master Plan, Ottawa Cycling Plan and Ottawa Pedestrian Plan. The process supports Council's vision of a sustainable, resilient and liveable Ottawa, as expressed through a number of goals in the City's Strategic Plan. These goals guide planning and decision-making so that they take into account their long-term impacts on Ottawa's economic prosperity, environment, and social well-being, culture and identity. Exhibit 1.2 identifies some ways in which this Plan directly supports those sustainability goals.

Exhibit 1.2 TMP Support for the Sustainability Goals of the City's Strategic Plan					
Sustainability Goal	TMP Directions				
Health and Quality of Life	fe				
All residents enjoy a high quality of life and contribute to community well-being	Maximizing transportation options for residents of all ages and abilities Maximizing access to community services and facilities by walking, cycling and transit Managing traffic volumes and speeds in residential neighbourhoods Improving road safety				
Economic Prosperity					
Economic prosperity supports local people, community well-being, and ecological health	 Supporting a vibrant downtown by preserving transportation access with a focus on walking, cycling and transit Helping businesses and institutions remain accessible to clients and patrons, including those from outside Ottawa Helping employers remain competitive by improving travel choices for commuters Linking community cores and employment areas with rapid transit Managing public parking to support local businesses Enabling the efficient movement of goods and services Reducing public and private costs by promoting efficient modes of transportation 				

Exhibit 1.2 TMP Support for the Sustainability Goals of the City's Strategic Plan					
Sustainability Goal TMP Directions					
Culture and Identity					
Cultural vitality and diversity contribute to the City's strong identity	 Acknowledging the different transportation needs of urban and rural areas Providing a range of travel options to suit different cultures and lifestyles 				
Biodiversity and Ecosystem Health					
Ecosystems are healthy, protected and support biodiversity	Reducing impacts of transportation on air, water and land				
Governance and Decisi	on-Making				
Decision-making is open, informed and inclusive	 Monitoring progress toward transportation objectives Consulting with stakeholders in the implementation of projects and programs Preserving flexibility in actions and policies to reflect changes in Council's intentions and priorities 				
Climate Change	5				
The region adapts to a changing climate	Maintaining guidelines for infrastructure design and operation that reflect best practices				
Energy					
Energy is used efficiently and supplied from green, renewable sources	 Maximizing the use of more energy-efficient modes (walking, cycling, public transit and carpooling) Converting the core rapid transit network to electric propulsion 				
Connectivity and Mobili	ity				
Walking, cycling and transit are residents' first choices for transportation	 Providing comprehensive, high-quality facilities and services for walking, cycling and public transit Using transportation demand management and supply management to make travel by walking, cycling and transit more attractive Promoting active transportation as a component of healthy lifestyles 				
Materials and Solid Was	ste				
Waste is reduced towards zero	 Asset management strategies to minimize life cycle costs will reduce waste from construction, operation and renewal 				

Exhibit 1.2 TMP Support for the Sustainability Goals of the City's <i>Strategic Plan</i>					
Sustainability Goal	TMP Directions				
Water and Wastewater					
Water resources are cherished, conserved and protected	 Recognizing the importance of water resources when planning infrastructure 				
Housing					
Housing options are green, healthy and meet the needs of the whole community	 Maximizing travel choice in a range of neighbourhoods to support housing choice and aging in place 				
Food and Agriculture					
The local food system is sustainable and provides residents with healthy and affordable food	 Acknowledging the link between sustainable transportation and other components of a sustainable lifestyle 				

1.4 Transportation Vision

Ottawa's 2008 Transportation Master Plan included a transportation vision that expressed how a future transportation system would benefit residents. That vision has been maintained in this TMP with a few minor modifications (see Exhibit 1.3). The transportation vision continues to recognize that transportation is a means to an end namely, the protection and improvement of quality of life for residents. It is intended to be a lasting expression of critical directions and outcomes—what the City wishes to achieve through transportation, and why. The remainder of the Transportation Master Plan details the when, where and how of specific projects or services that are intended to lead toward the vision.

Exhibit 1.3 Transportation Vision

In 2031, Ottawa's transportation system will enhance our quality of life by supporting social, environmental and economic sustainability in an accountable and responsive manner.

Element	Principles
Elements 1 to 6: S	Support for social, environmental and economic sustainability
1. Reduce automobile	 Give priority to public transit in accommodating future travel demand
dependence	 Make walking and cycling more attractive than driving for short trips
	 Motivate sustainable travel choices through education, promotion, incentives and disincentives
	 Encourage shorter trips and travel alternatives like telework
2. Meet mobility	Provide an integrated system of multimodal facilities and services
needs	Aim to provide an acceptable level of service for each mode
	 Balance mobility and accessibility needs in higher and lower
	density areas
	 Balance the needs of public transit customers, pedestrians,
	cyclists and motor vehicle users when resolving conflicts
	 Provide barrier-free transportation facilities and services
3. Integrate	 Build communities that are accessible by active transportation
transportation	 Provide rapid transit and other quality transit services to
and land use	community cores and employment areas
	Foster transit-oriented development in transit nodes and corridors
	 Support intensification where transit, walking and cycling can be made most attractive
	 Foster a vibrant downtown by improving transit, walking and cycling access
	Recognize the distinct transportation needs of rural communities
4. Protect public health and	 Give priority to safety and security when planning, designing and operating transportation systems
safety	 Promote safe walking, cycling and driving through education,
	engineering and enforcement
	 Support active and healthy living by promoting walking, cycling and transit for daily travel
	Minimize the community impacts of truck and automobile traffic
	Minimize air pollution from transportation sources
5. Protect the	Minimize the need for new infrastructure through transportation
environment	demand management programs
	 Minimize transportation energy use, greenhouse gas emissions
	and other impacts on air, water and land
	 Maximize greening within transportation rights of way

Exhibit 1.3 Transportation Vision

In 2031, Ottawa's transportation system will enhance our quality of life by supporting social, environmental and economic sustainability in an accountable and responsive manner.

and responsive m	
Element	Principles
6. Enhance the economy	 Maximize access to businesses and institutions by employees, clients and visitors Support efficient freight movement to, from and within the City Respect Council's taxation targets
Elements 7 to 12:	Accountability and responsiveness
7. Deliver cost- effective services	 Make the best possible use of existing facilities before adding new infrastructure Integrate the consideration of life cycle capital and operating costs into decision-making processes Support appropriate roles for the private sector in delivering infrastructure and services
8. Measure performance	 Identify transportation performance objectives and indicators Regularly measure and evaluate performance Integrate performance evaluation results by adapting transportation plans and strategies
9. Protect the public interest	 Encourage public input and informed decision making by reporting on transportation activities and results and providing opportunities for dialogue Consult with the public when planning budgets, programs and projects
10. Provide adequate and equitable funding	 Seek and/or establish funding sources that are stable and predictable
11. Cooperate with other governments	 Liaise with provincial and federal governments to align plans and policies, and to attract financial, legislative and regulatory assistance Work with the National Capital Commission, Ontario Ministry of Transportation, Ministère des transports du Québec, City of Gatineau and other adjacent municipalities to develop balanced solutions
12. Lead by example	 Minimize energy use and environmental impacts of City transportation facilities, fleets, operations and services Foster walking, cycling and transit use by employees and visitors to City facilities Forge constructive partnerships with the private sector, institutions and community organizations

Exhibit 1.4 summarizes how Chapters 3 through 9 of this Plan (i.e. those that identify guiding policies and future actions) support the 12 elements of the transportation vision, as expressed the previous exhibit.

Exhibit 1.4 TMP Chapters: Support for the Transportation Vision							
	Strength of Support Major Minor						
Transportation Vision Elements		Chapter 4: Maximize Walkability	Chapter 5: Develop a Great Cycling City	Chapter 6: Transform Ottawa's Transit System	Chapter 7: Provide Safe and Efficient Roads	Chapter 8: Encourage Sustainable Mobility Choices	Chapter 9: Invest Responsibly
Support for social, environmental and economic sustainability							
1. Reduce automobile dependence		●	●	•	•	•	•
2. Meet mobility needs		۲	\bullet	•	●	•	•
Integrate transportation and land use	•	•	•	•	●	•	•
4. Protect public health and safety	•	۲	•	•	•	•	•
5. Protect the environment		•	•	•	•	•	•
6. Enhance the economy		•	•	•	•		•
Accountability and responsiveness							
7. Deliver cost-effective services	•	٠	•	•	●	•	●
8. Measure performance		•	•	•	•	•	•
9. Protect the public interest		٠	•	•	•	•	•
10. Provide adequate and equitable funding		•	•	•	•	•	•
11. Cooperate with other governments		•	•	•	•		•
12. Lead by example		•	•	•	•	•	•

1.5 Interpreting and Updating this Plan

This Plan represents Council's stated intentions, and will guide day-to-day transportation decisions. It will come to life through mechanisms such as:

- Development charge by-law studies and updates, and annual budgets that identify priorities and resources for a range of transportation programs
- Strategies and action plans for individual transportation programs that detail undertakings, timeframes and resource needs
- Environmental assessment processes to obtain provincial or federal consent for projects like rapid transit systems, major roads and bridges
- Community design plans and transit-oriented development plans for areas designated in the Official Plan
- · Guidelines such as those for design specifications or operational procedures

As time passes, changes in the assumptions behind this Plan's policies and actions such as the pace, location or magnitude of residential, commercial and institutional development—may require adjustments to the plan and its elements, including the nature and timing of transportation facilities and services. It is important to note that the phasing of infrastructure projects recommended in this Plan is structured by time horizons; however, it is population and employment levels and traveller preferences that determine transportation needs, rather than the simple passage of time. The indicated time horizon must therefore be viewed as approximate and subject to change. Other possible external factors that could influence implementation include changes to the City of Gatineau's land use or transportation systems, changes to provincial or federal transportation facilities, ongoing technological advances, changes in travel behaviour, or changes in national or international circumstances.

The City will update this Plan when it undertakes a review of the *Official Plan*, an event required by the Province within five years of an *Official Plan* or comprehensive amendment coming into effect. In the intervening period, Council decisions on transportation issues will effectively amend, override or elaborate some of the TMP's intentions. For this reason, readers must consider this Plan in conjunction with the record of subsequent Council decisions, in order to fully grasp current City transportation policy at any given point in time.

1.6 Environmental Assessment

Environmental assessment (EA) legislation requires the City to identify and mitigate the impacts of transportation construction projects on all aspects of the environment. All projects identified in the TMP are subject to various EA legislation and processes:

- Ontario Environmental Assessment Act, 1990
- Ontario Regulation 231/08 Transit Project Assessment Process, 2008
- Municipal Engineers Association Municipal Class Environmental Assessment, October 2000 (Class EA) as amended in 2007, 2011 and 2013
- Canadian Environmental Assessment Act, 2012 (CEAA)
- National Capital Commission (NCC) Framework for the Harmonization of EAs, which applies to projects affecting Commission lands and fulfills the requirements of both CEAA and the NCC's Environmental Assessment Policy

Provincial legislation requires roadway modification projects to follow the Class EA process. All major road projects remain subject to a requirement to complete a Class EA or Individual EA if one has not yet been completed. Transit infrastructure is subject to the provisions of O.Reg. 231/08 and, if not considered exempt under this regulation, must follow the Transit Project Assessment Process. A transit project may proceed under the Class EA if the City chooses to use this process and provides required notification to the Ontario Ministry of the Environment. However, any project involving federal land is subject to the requirements of the CEAA.

The update of the TMP has followed the Municipal Class EA Master Plan process thereby fulfilling the requirements of Phases I and II of this EA process for roads, which includes the identification of problems and opportunities, and the selection of preferred solutions. Annex A includes a description of the EA status of the identified road and rapid transit infrastructure projects. The TMP and its background technical reports will become supporting documents for future EA work. Projects that have not completed the EA process will require additional work including public and stakeholder consultation before design and construction can proceed. As discussed in Section 7.7, future EA processes will make reference to a study undertaken jointly by the City and NCC on the cumulative effects of transportation infrastructure on the Greenbelt.