

CHAPTER

1

Developing the TMP



Chapter 1.0 of the City of St. Catharines Transportation Master Plan (TMP) provides the background explaining why and how the TMP was developed. It sets the stage for the complete streets framework with the objective to enable a shift of travel behaviour to more sustainable modes.

Chapter 1.0 includes...

1.1

Context

Answers the questions why a Transportation Master Plan should be developed and how it was developed for St. Catharines.

1.2

Input & Interests

Provides an overview of the community engagement undertaken to inform the TMP recommendations and the key themes / input gathered.

1.3

Rationale

Identifies the existing policies and plans that the TMP is supported by and the strategic objectives it seeks to support.

1.1.

TMP Context

A TMP is a long term vision that defines and integrates transportation infrastructure requirements in strategic land-use and transportation decision making. A TMP provides the following:

- Guidance for City staff, stakeholders and decision makers.
- Supportive tools to help with the day-to-day coordination of transportation related issues and opportunities.
- The ability to leverage future community development trends including changing social and economic dynamics.

A TMP must align with the Strategic Plan and Official Plan and other long-term policies to achieve the desired objectives. While the TMP is intended to be a 20 to 30-year plan, it should be updated every five years, consistent with the Planning Act. This will allow the document to reflect the changes the City of St. Catharines will experience in the future.



“A long-range strategy to guide decision making, budgeting and communications related to all forms of transportation.”

What...

is a transportation master plan?

The TMP should reflect the characteristics of the community for which it is being developed. For the City of St. Catharines, the TMP has been designed to:

Provide a complete streets approach to transportation planning

Provide guidance for decision making

Suggest site specific improvements for complex areas

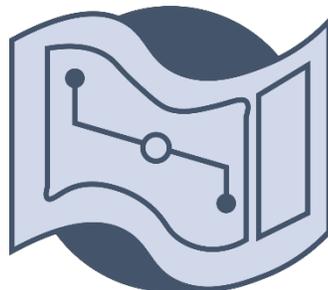
Identify active transportation priorities and future enhancements

Find strategic opportunities for transit improvements

Identify a phased approach to implementation and management

Establish buy-in from key stakeholders and interest groups

Provide supportive policies to shape the future



“A TMP is a blueprint and flexible tool for the design of transportation infrastructure to inform future policy and planning.”

1.1.1. Why Develop a TMP?

The City of St. Catharines TMP is intended to provide direction on future transportation investment and support community growth for the next two decades.

The plan provides a multi-modal and complete streets approach to planning, design and implementation of transportation infrastructure, supporting the City's strategic directions and policies. The TMP endeavors to assess transportation issues and objectives from a more holistic perspective, resulting in realistic and implementable processes, policies, programs and infrastructure solutions.

The TMP provides a foundation upon which decision-making will be made in the short (0 to 5 years), medium (6 to 10 years) and long-term (11+ years).

A typical transportation master plan should include...



Investments in infrastructure and service delivery toward a municipality's desired horizon year and ensure consistency with Regional and Provincial horizon years.



Coordination with other jurisdictions that provide connected transportation services to the municipality.



Input for future Development Charges (DC) for new developments or redevelopments occurring within the municipality.



The requirements to satisfy Phases 1 and 2 of the Municipal Class Environmental Assessment process (as amended) for proposed transportation projects, facilities, and services within the municipality.



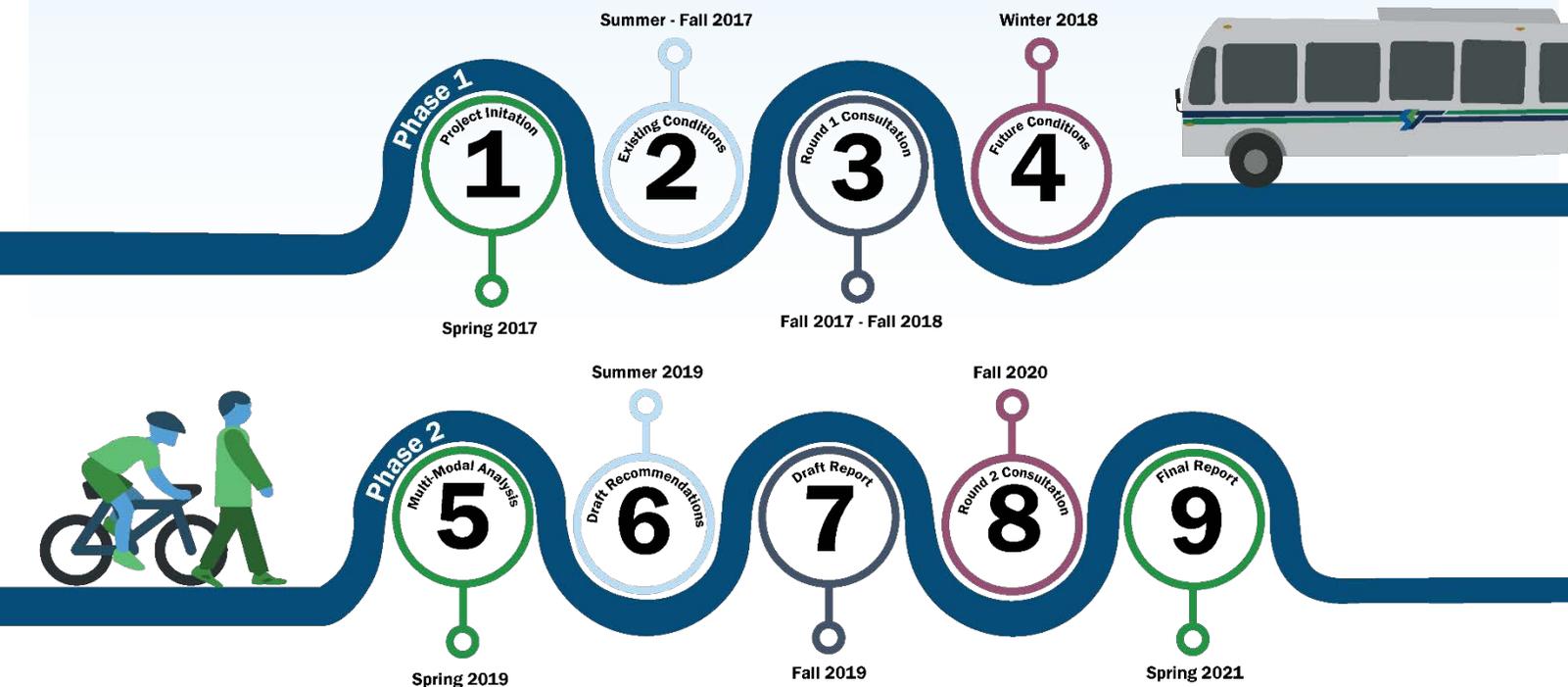
Compliance with Accessibility for Ontarians with Disabilities Act standards for both documentation and recommendations.

1.1.2. How was the Plan Developed?

The TMP was completed in two phases. Phase 1 identified and assessed the existing transportation conditions and engaged staff, agencies, key stakeholders and the public on the overall vision and direction of the plan. Phase 2 included an analysis, investigation and identification of potential infrastructure improvements, a complete streets approach and process to transportation planning, and decision making and policy improvements to guide St. Catharines into the next two decades.

Figure 1 illustrates the process that was used to prepare the St. Catharines TMP.

Figure 1. TMP timeline



Why does this matter?

The TMP was completed to fulfill the master plan requirements of Approach 1 of the Municipal Class Environmental Assessment (MCEA) process, which means that there have been at least two points of consultation / engagement with stakeholders and the public, that a vision statement has been prepared (Phase 1), and that alternatives have been assessed (Phase 2), and a preferred has been identified. By fulfilling these Phases, several proposed infrastructure projects will be considered “pre-approved” under the new MCEA requirements or would not be required to complete these steps again prior to Phases 3 through 5 of the process (as needed). As the projects move to implementation, additional detailed studies may be required, including archaeological heritage, drainage assessments, detailed design, and additional public consultation.

1.2.

Input & Interests

For any master planning exercise, consultation and engagement is a key component. It allows those developing the plan to draw upon a wide range of local expertise, experience and knowledge in charting a path forward. The integration of staff, decision maker, resident and stakeholder group interests and values help to ensure that the master plan reflects the needs and desires of those the plan is designed to serve.

Six core principles informed the consultation and engagement program used to develop the St. Catharines TMP - as shown to the right. The public engagement process was developed with an appreciation for these principles.

During the TMP's development, multiple audiences were engaged and feedback was incorporated into technical milestones, elements of the process and ultimately the report. A summary of Phases 1 and 2, including the engagement tactics, milestones and high-level outcomes is included on the following pages.

Engagement needs to be...

Accessible for people of all ages and abilities where possible by providing easy to understand information in different engagement formats. **1.**

Innovative and appropriate to the City in the way options and alternatives are effectively presented. **2.**

Adaptive and flexible to allow for additional opportunities or requests as needed. **3.**

Meaningful in the way information is exchanged and input is gathered by facilitating dialogue that helps understand the who, what, when, where, why and how. **4.**

Communicated with sufficient information to build a foundational understanding for the background, process and outcomes of the project. **5.**

Complementary to other municipal planning initiatives and consultation opportunities. **6.**

Who was engaged?

-  **Residents and Students:** this audience represents the individuals who live, work and play within the City of St. Catharines.
-  **Stakeholders and Technical Agencies:** this group included the City’s Advisory Committees and technical agencies such as MTO, Niagara Region, and surrounding municipalities.
-  **City Staff and Council:** this group is involved in the day-to-day planning, implementation, decision making, operation and management of the TMP.

How were they engaged?

 **In-person:** Technical Advisory Committee Workshops; Public Workshops and “Pop-Ups”; Stakeholder Workshops; St. Catharines Transit Commission; City Staff

 **Online:** Online engagement platform
Round 1: MetroQuest
Round 2: EngageSTC

 **Outreach:** Promotional tools; social media; the project website; and informal presentations

When were they engaged?

Round 1

 2017
Nov 6
First-round Technical Advisory Committee Meeting and Public Workshop

 2018
May 24
Active Transportation Advisory (now Transportation Advisory) Committee Meeting

 2018
Sept 5
Brock University Student “Pop-up” Consultation

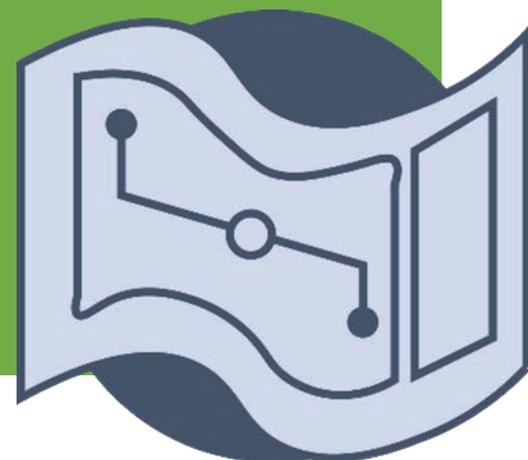
Round 2

 2020
Nov 18
Technical Advisory Committee Meeting

 2020
Nov 24
Council Training Workshop

 2020
Dec 3
Public Presentation

 2020
Dec 7
Transportation Advisory Committee Meeting



The hundreds of comments received from the various internal and external stakeholders have been summarized into four overarching themes. These four themes were initially raised in the first round of consultation but were echoed during the second round as well, indicating that these are common or frequent challenges in the transportation network.

What we heard



1

Extend Transit Network & Access Times

Extend the reach of transit services in St. Catharines, connecting to rural areas and regional services. Common requests included additional downtown routes, between municipality services, and connections to Toronto. We also heard comments to improve the frequency of transit, specifically during peak period, evening, and weekend travel periods. Common requests included improving service in key destinations such as the Pen Centre and Fairview Mall areas.

2

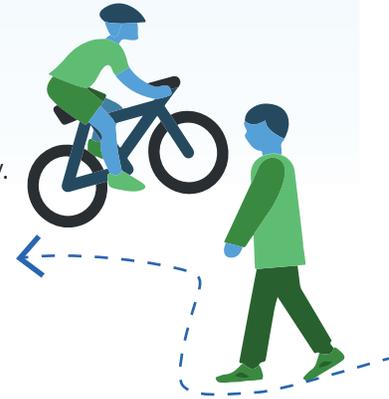
Promote Cyclist Safety

Balance the needs of cyclists and motorists on roadways. Ensuring that cyclists are provided designated routes (both on- and off-road) is a key priority to enhance safety.

3

Improve Pedestrian Connectivity

Improve pedestrian connectivity to key destinations by both sidewalks and multi-use trails— including the downtown core and other local amenities.



4

Improve vehicular congestion

Reduce congestion on roads during peak travel periods, particularly in key destinations. Intersection improvements and synchronizing traffic lights were suggested as strategic interventions.



1.3.

Rationale

The need for comprehensive transportation planning is supported by the policies and programs which have been developed and adopted within the planning policy hierarchy by each level of government, but also from the strategic objectives of the municipality as identified by Council.

The Strategic Plan for St. Catharines identifies four pillars - environmental, social, economic, and cultural community sustainability, which are the foundation for achieving the Strategic Plan vision. Framing transportation planning under the lens of these pillars of sustainability is important from the wider vision achievement perspective and to ensure alignment across policies and plans at the City level.

OUR VISION FOR THE FUTURE IS:

for St. Catharines to be the most dynamic, innovative, sustainable, and livable city in North America.

St. Catharines Strategic Plan 2015-2025

The following sections identify the policies that support and inform this TMP and the sustainability indicators (guided by the Strategic Plan) which were the foundation upon which the existing transportation conditions were assessed and recommendations were developed.

1.3.1. Policy Foundations

The City's existing policies and directives provide a foundation to plan for a more balanced, multi-modal transportation system in St. Catharines. The TMP has been developed to encourage a more sustainable distribution of travel modes, emphasizing active mobility and public transit, while continuing to provide facilities for the efficient car travel that many residents will continue to require.

The benefits of producing a TMP that aligns with Provincial, Regional and local policy directions lie in the support the City is likely to receive from their higher-order government partners. By working in parallel with the planning and transportation initiatives being undertaken by Niagara Region and the Province of Ontario, St. Catharines keeps itself open to opportunities related to funding support, service improvements and other complementary future projects. It also establishes a basis for positive and mutually-supportive relationships among all levels of government working towards common goals related to improved mobility, sustainability and growth management.

1.3.2. Emerging Policy Guidance

The role of transportation in creating a more sustainable environment in response to significant climate change is of critical importance and is an area of emerging policy guidance.

Multi-modal planning and behaviour shifts are now becoming a necessity as opposed to a “nice to have”. In response, Niagara Region and others have moved forward with the development and adoption of a complete streets framework.

// A complete street is a public right-of-way where the transportation facilities and adjacent land-uses are planned, designed and constructed to accommodate users of all ages and abilities including all modes.

Niagara Region Complete Street Policy Handbook



What are Complete Streets?

- Complete streets are designed to be safe, convenient and comfortable for every user, regardless of transportation mode, physical ability or age.
- A well designed street will promote activity, livability and connectivity and result in a network of transportation infrastructure and services that enables people to travel seamlessly on any given mode of transportation.
- While it is not appropriate or feasible to accommodate every mode on every street (for instance, public transit is not designed to service every local road), the complete streets mentality ensures that there is a network of transportation infrastructure that supports a full range of mobility options.
- Context sensitive and multi-modal considerations are applied when implementing the network.
- Typical complete street design elements and considerations include: pedestrian improvements, cycling improvements, transit improvements, wayfinding, placemaking, and / or traffic calming.

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Niagara Region already has been advancing the concept of complete streets on the Regional road network and has produced guiding documents that can be applied to the City streets in St. Catharines. Niagara Region's multi-level policy approach to implementing complete streets was adopted in 2012 followed by the Niagara Region Complete Streets Model Policy Handbook and Design Guidelines document released in 2013. Each level of complete streets policy planning within Niagara Region influences the local municipalities in different ways.

The following image illustrates how the Niagara Region's complete streets policy papers have influenced the development of the complete streets approach in the St. Catharines TMP and how the Regional documents add to the existing policies which are currently woven into the City's Official Plan and the Downtown Urban Design Guidelines.



2012 discussion paper defines complete streets and how they may function in the Region. Best practices explored within this paper have been considered and used within St. Catharines.

The overarching visioning document guiding complete streets in Niagara Region. This document has helped guide the complete streets approach in St. Catharines.

The document sets out contextual complete streets guidance for the Region and addresses the concerns with model policies which could be adopted by area municipalities including St. Catharines.

The Transportation Master Plan provides additional guidance beyond the complete streets documents and introduces a framework of complete streets throughout the Region.

The guidelines outline road typologies for Regional Roads. Though not directly transferrable to St. Catharines streets, they have informed design guidelines and improvements at the City level.

The Niagara Region Complete Streets Model Policy Handbook includes examples of model policies that could be adopted by the local municipalities including some examples from St. Catharines. The following is an overview of these context-specific considerations and how they have been incorporated into the existing municipal policy structure, specifically the City's Official Plan.

Niagara Region

1

Many roads do not appropriately reflect current active transportation and transit needs.

2

Connections should be provided between the different transportation networks.

3

New development should include transportation facilities for additional modes such as bicycles and transit.

4

The streets should include more local culture.

5

Streetscaping is visually appealing, however it is difficult to maintain from an operational standpoint.

City of St. Catharines

This Plan recognizes that to achieve a healthy, age-friendly, and livable community, the transportation system will need to reduce reliance on the automobile in favour of more sustainable forms of transportation, such as walking, cycling, and transit.

In support of an integrated bicycle network, priority should be given to the development of bicycle facilities to facilitate linkages and connections between the local and Regional bicycle network.

Where feasible, major public and private development projects will be required to incorporate public spaces, bicycle facilities and sidewalks to support connections to the City's pedestrian, bike and transit network.

The City shall encourage other public and private sector owners and developers to include public art as a component of their developments, particularly those developments that include space that will encourage active transportation and attract significant pedestrian traffic.

The City shall consider various traffic calming and transportation demand management measures to reduce the negative impacts of vehicular traffic.

1.3.3. Planning Trends

It is paramount to consider the planning trends which could affect the long-term success or applicability of the master plan. Future ready is the “practice” of establishing processes, practices and policies that provide guidance on how to address future socio-demographic, cultural and environmental trends. One of the key goals of the St. Catharines TMP is to provide the foundations and tools to allow City staff to actively plan for the anticipated “future” of the City.

St. Catharines’ Future Ready planning can be categorized into two main themes: resiliency and sustainability – consistent with the City’s Strategic Plan. This will be the foundation of the policies, recommendations, initiatives and programs identified in the TMP. It will ensure that the planning will be capable of addressing any changes in transportation conditions. Connectivity is a key theme integrated into sustainability and resiliency. With well-connected routes, the walkability typically is enhanced as it is more convenient to utilize active transportation as a means to travel. Overall, the City’s urban structure is strengthened by providing a variety in both the route options and the mode of travel.

Sustainable considerations encompass the environmental, social and economic sustainability of recommendations. Sustainability and resiliency considerations will be factored into a recommendation along with a consideration if there is an emerging trend which could have a future impact.

Figure 2 illustrates the anticipated relationship between Future Ready and the key trends that need to be addressed and the desired outcomes. Potential indicators are identified that will quantify the success of the recommendation.

RESILIENCE & SUSTAINABILITY

What does *future ready* mean for St. Catharines...

Figure 2. St. Catharines' future ready considerations

Future Ready is the understanding that planning is a fundamentally dynamic exercise. Creating solutions for today is simple; our challenge is to understand how we can prepare for tomorrow.

Key Trends for St. Catharines show how transportation planning could be affected by society, economy, and technology, and the natural and built environment.

-  **Environmental trends** such as increased importance in addressing **climate change, urban storm water management, and air quality.**
-  **Built-Environment trends** such as increased importance in addressing **the shift to more urban residents, suburban sprawl, and green vs. grey space.**
-  **Social trends** such as increased importance to addressing **demographic shifts (ageing population), equity, and accessibility.**
-  **Economic trends** such as **the shared and gig economy, telecommuting and rising cost of living.**
-  **Technological trends** such as **automated and electric vehicles, smart cities and Intelligent Transportation Systems (ITS).**

St. Catharines should have the following **considerations** for how transportation planning could be affected by society, economy, and technology, and the natural and built environment.

Climate Change is defined as a significant long-term change in patterns of weather in a region. The effects are often attributed to increased CO2 in the atmosphere and pollution. **Transportation, through emissions, is a major contributor to CO2. In addition to impacts on climate, emissions also impact air quality. How can transportation be planned to reduce its emissions footprint?**

Beyond emissions, transportation infrastructure also covers our cities in impermeable surfaces such as concrete, and asphalt. The resulting run-off can affect water quality. **As we develop and retrofit roads, how can we design for reduced urban run-off?**

More and more residents are moving into urban cores. It is expected that by 2050, 68% of the world's population will live in a city. This density will shift how we accommodate different modes within our urban cores. **How can St. Catharines support a healthy modal split within its downtown?**

Despite increasing densities within the urban core, many of our communities are still built around suburban sprawl, communities which are often dependant on the single-occupant car use. **How can we rethink transportation options to include suburban residents sustainably?**

Our communities are a mix of different landscapes within the public realm, including hard-scaped (grey) and soft-scaped (green) areas. The interplay between these two built-forms can impact our quality of life. **How can transportation be planned to support a healthy balance of green and grey area?**

Our population is getting older. In St. Catharines the median age is 45, which is 3 years older than the 2016 census median age. As our demographics shift, **how can infrastructure be planned to be inclusive?**

Further to just older adults, equity is fundamental to resilient planning. Each person should feel represented and capable within their community, and planning for inclusive mobility can help to support community-equity through removing barriers and supporting accessibility for all.

Our economy is shifting to supported shared-mobility options (car-share and bike-share) and be gig-based through on-demand ridesharing services such as Uber and Lyft. Along with telecommuting and flex office space, these shifts are making transportation more flexible. **How can we maximise the potential of these trends to shift transportation positively?**

The cost of living is increasing and influencing travel modes. This economic shift affects equity and accessibility of different transportation modes.

New developments in technology have influenced a shift in travel options. Smart Cities technology, Intelligent Transportation Systems (ITS), new automated and electric vehicles are framed as solutions to some of the aforementioned environmental and social trends but are also going to influence how transportation infrastructure is planned and operated.

Desired Outcomes of a Future Ready St. Catharines will be primarily seen through a Sustainable, Resilient and, fundamentally Healthy City, with the foresight to attain the following:

-  **Physical Health**
-  **Mental and Emotional Health**
-  **Community Health**
-  **Economic Health**
-  **Environmental Health**

Achieving Future Readiness will require a constant pulse check on the indicators and effects on the desired outcomes. Adaptability to a constantly changing landscape is fundamental when planning under a future-ready mindset. Readiness is not a goal but an on-going challenge.

Throughout the TMP as Future Ready considerations are identified, they will be illustrated with a "Callouts" labeled FR (future ready) and refer to any considerations which could impact the sustainability or resiliency of the St. Catharines TMP.