City of Thunder Bay
TRANSPORTATION MASTER PLAN

Background Report B:

NEEDS, OPPORTUNITIES, AND ALTERNATIVE STRATEGIES

April 2019

Table of Contents

1   Introduction

The Thunder Bay Transportation Master Plan (TMP) is a long range plan for transportation infrastructure and services to support changing local needs. The TMP incorporates the best practices of long range transportation planning while recognizing the unique context, needs, and opportunities of the City of Thunder Bay.

1.1   A Transportation Vision for 2038

The vision and objectives of the TMP have been shaped through consultation with the public and stakeholders under the guidance of the study Steering Committee, and review of previous plans and policies enacted by the City of Thunder Bay. The vision for transportation in Thunder Bay is presented below:

A VISION FOR 2038
In 2038, the City of Thunder Bay's transportation system will: *Why?* Support a healthy, vibrant and prosperous community   *What?* Offer integrated, seamless mobility to individuals, families and businesses   *How?* Be responsibly and accountably delivered

1.2   TMP Objectives and Principles

To support the transportation vision, a number of principles have been defined for each objective.

Support a healthy, vibrant and prosperous community	
Neighbourhood Connections	Residents will move easily within and between neighbourhoods to reach work, school, health care, recreation, and shopping.
Healthy Streets	Streets will encourage physical activity and enable people of all ages and abilities to interact.
Equity and Opportunity	Transportation challenges will not restrict access to opportunity for residents regardless of their age, income, ability or cultural background.
Environmental Protection	The impacts of transportation on air, climate, land and water will be reduced.
Economic Growth	The transportation system will support efficient goods movement, airport and port access, tourism, and the development and revitalization of downtowns, the waterfront and employment areas.

Offer integrated, seamless mobility to individuals and families	
Choice	Residents will enjoy an integrated range of choices for getting around, including active transportation, transit, carpooling and driving.
Efficiency	Buses, cars and trucks will move across the city without undue delay.
Competitiveness	Sustainable modes of travel will offer high degrees of convenience, reliability, speed and connectivity.
Safety	Travel will be made safer, especially for vulnerable road users, through changes to design, operations, maintenance, skills and attitudes.
Accessibility	Persons with disabilities will not face barriers to mobility.
Land Use Support	New developments will support a range of travel choices and effective transportation services.
Encouragement	Individuals will understand their travel options and enjoy incentives that motivate sustainable choices.

Be responsibly and accountably delivered	
Policy Alignment	The Transportation Master Plan will support and guide the City's Official Plan, Strategic Plan and Long-Term Financial Plan, and other plans of the City and its partners including those related to land use, environmental protection, asset management, social services, public health and economic development.
Fiscal Responsibility	The City will maximize its return on transportation investments, and use partnerships to leverage additional resources.
Prioritization of Investments	The City will take a pragmatic and transparent approach to investment decisions through the use of phasing, triggers and benchmarks.
Resilience	The City will upgrade its infrastructure and operations to prepare for more frequent and intense extreme weather events associated with climate change.
Performance Measurement	The City will track its progress toward transportation goals, to improve accountability and decision making.

2 Municipal Class EA Process

The Thunder Bay TMP follows the Municipal Class Environmental Assessment (EA) process for an integrated Master Plan as described in Section A.2.7 of the Municipal Engineers Association Municipal Class EA manual. The final TMP will represent the completion of Phase 1 and Phase 2 of the Municipal Class EA process.

2.1 Overview

The Provincial Environmental Assessment Act (EAA) establishes the basis for environmental assessments (EA) undertaken in Ontario. The EAA identifies two planning and approval processes: Individual EAs and Class EAs.

Class EAs allow specific classes of undertakings to follow a planning and decision-making process that is different and less burdensome than that of an Individual EA. Once approved by the Ministry of the Environment, Conservation and Parks, and given that all other approvals have been obtained, projects under a Class EA obtain approval under the EAA and can proceed with implementation. The Class EA process is a more streamlined process since the effects on the environment of those undertakings covered in the Class EA are generally common or well understood.

The Municipal Class EA allows municipal projects covered in the Class EA to be carried out using a pre-approved process. The Municipal Class EA presents the process for approval, consultation requirements, and additional directions to conduct the Municipal Class EAs for municipal road, water and wastewater, and transit infrastructure projects.

Municipal projects are categorized under the Municipal Class EA process according to their environmental significance and potential impacts to the environment. The four schedule classifications are A, A+, B and C with the main difference between Schedules the degree to which a project may adversely affect the existing environment. Schedule A covers projects with lesser impacts while Schedule C covers projects with significant impacts.

The requirements for each Schedule vary and are comprised of a combination of the five phases that make up the Municipal Class EA process. For a Schedule A project, which has less impact, only the first and last phases are required whereas a Schedule C project, which has the potential for the most impact, requires that all five phases of the process are completed.

The phases and Schedules of the Class EA process are summarized below:

PHASES	BASIC DESCRIPTION	SCHEDULE			
		A	A+	B	C
Phase 1: Problem or Opportunity	Identify and describe the problem(s) and/or opportunity(ies).	✓	✓	✓	✓
Phase 2: Alternative Solutions	Identify, evaluate and select alternative solutions to the problem, prepare a general inventory of the environment, and consultation.			✓	✓
Phase 3: Alternative Design Concepts for the Preferred Solution	Identify, evaluate and select alternative designs for the preferred solution, identify potential impacts of the designs on the environment, and consultation.				✓
Phase 4: Environmental Study Report	Complete the Environmental Study Report (ESR), file to the public record for 30 days, and respond to any Part II Order requests.				✓
Phase 5: Implementation	Implement preferred design.	✓	✓	✓	✓

A group of related projects or an overall system that share some common elements can be combined into one study – a Master Plan – that allows for the need and justification of individual projects to be assessed within a broader scope and context, which is discussed in the following section.

2.2 Master Plan Approach

A Master Plan is a long range plan that provides a framework and direction for infrastructure needs across a broad area that can range from a local urban area to an entire region. A Master Plan can also present the vision, goals and supporting policies on which these infrastructure needs are based.

A Master Plan can be integrated with the Class EA process such that the Master Plan fulfils Phases 1 and 2 of the Municipal Class EA process for the individual projects within it. As noted in the Municipal Class EA document, there are a variety of approaches to conducting Master Plans:

- Approach #1

  - Preparation of Master Plan document at conclusion of Phase 1 and 2

  - Master Plan at a broad level of assessment thereby requiring more detailed investigations at the project-specific level to fulfil Class EA documentation requirements for Schedule B and C projects

- Approach #2

  - Preparation of Master Plan document at conclusion of Phase 1 and 2

  - Level of investigation, consultation and documentation are sufficient to fulfil requirements for Schedule B projects.

  - Each Schedule C project would have to fulfil Phases 3 and 4 in a subsequent EA study prior to filing an ESR.

- Approach #3

  - Preparation of Master Plan document at conclusion of Phase 4

  - Would likely result in extensive documentation if the Master Plan includes numerous Schedule C projects.

- Approach #4 – Integration with Planning Act

  - Integrate with preparation of a new official plan, for example

  - Best suited where interdependent decisions regarding servicing and land use are being made

A key step in the process is consultation with the public and stakeholders. It is vital to the study that city residents and stakeholders are made aware of the TMP planning process – and of the proposed recommendations – because it is at this point that transportation projects recommended for future development obtain official status under the Class EA process. At a minimum, TMPs following the Municipal Class EA process must hold at least two Public Information Centres to engage area residents and stakeholders.

2.3 Thunder Bay TMP Approach

The Thunder Bay TMP is being conducted following Approach #2 for Master Plans. The TMP identifies and describes any problems or opportunities within the existing transportation network (Phase 1), identifies and evaluates alternative solutions, then recommends and justifies preferred solutions (Phase 2). The approach involves preparation of the Master Plan document at the conclusion of Phases 1 and 2 of the Municipal Class EA process where the level of detail is sufficient to fulfil the requirements for Schedule B projects and provides the basis for further investigation for specific Schedule C projects (Phases 3 and 4).

3 Needs and Opportunities

There are a number of driving forces behind the need for an updated multi-modal Transportation Master Plan for the City of Thunder Bay. Each of these driving forces is described below along with the associated needs and opportunities to be addressed by the TMP.

3.1 Existing Transportation System Performance

The performance of Thunder Bay's existing transportation system varies greatly depending on the mode of travel one chooses. The extensive road network provides a relatively easy driving experience which makes it fast and efficient to move between most areas of the City at almost any time of the day. However, there are specific localized congestion points and intersections with comparatively poor levels of service that will need to be addressed. Further, as stated in the City's Asset Management Plan (2016), Thunder Bay's road infrastructure is aging, challenging the City's financial resources to maintain and operate the system.

While driving is relatively easy in Thunder Bay, users of alternative travel modes face challenges from incomplete and disconnected networks, inefficient route options, and/or safety concerns.

Thunder Bay Transit provides coverage to the vast majority of the City, including limited service to some of the outlying hamlet areas and to Fort William First Nation. However, the service frequencies are low on some routes and, in order

to provide coverage to most areas of the City, routes may be indirect resulting in long travel times for riders. As it exists today, transit is not competitive with automobile travel for most trips, with less than 5% of trips to work made by transit.[1]

Cycling in Thunder Bay is highlighted by a high quality set of multi-use trails and a growing number of on-street cycling facilities, however, the network is incomplete with major gaps. These gaps pose a safety concern for existing and potential riders as they may require riders to share the road with cars, including on major streets that are wide, have fast-moving traffic, and are uncomfortable for most cyclists. An important missing link is the lack of a continuous route connecting the north and south cores. Intersection treatments and roadway crossings are also an area of concern for cyclists.

There are also discontinuities in the pedestrian network where sidewalks are missing or only present on one side of the street. The City's Local Improvement Act, which requires property owners to contribute to infill sidewalk construction, is an additional barrier to completing the sidewalk network. Limited crossing opportunities of 4- and 5-lane corridors, such as Memorial Avenue, River Street, James Street, and Arthur Street, present safety concerns for pedestrians and also discourage walking as a convenient mode of travel. Distances between controlled intersections of 1 km are common, and can be as high as 1.75 km.

NEEDS AND OPPORTUNITIES
• Address localized congestion
• Improve the attractiveness of transit as an alternative to driving
• Provide a safe north-south cycling route
• Fill in gaps in the cycling network
• Upgrade cycling facilities
• Implement pedestrian crossovers at strategic locations
• Improve pedestrian facilities

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[1] 2011 National Household Survey Journey to Work data

3.2   Changing Demographics

The population of Thunder Bay is projected to remain relatively stable through 2038, however, the make-up of the population will continue to change. Thunder Bay, like many municipalities in Ontario and the rest of Canada, is faced with an aging population.

The 2016 Census indicates that the median age in the City of Thunder Bay is 44.5 years, compared to 41.3 years in the rest of Ontario. The median age is also increasing – in the 2001 Census the median age in the City was 39.2 years.

Over the last 15 years, the over-50 population in the Thunder Bay Census Metropolitan Area (CMA) has grown by 33% while the under-50 population has shrunk by 18%.

The aging population will impact Thunder Bay in a number of ways. A higher proportion of the population will be unable to drive or require assistance to get from place to place. Accessible design of the transportation system is required to accommodate the increasing mobility challenge for residents.

The decreasing number of younger adults will not be able to fill the labour force needs as the baby boomer generation retires. Attracting new population growth is needed to support the City's economic vitality.

Finally, increasing demand for City services, including community support services, health care, and transportation services will increase pressure on the City's financial resources.

NEEDS AND OPPORTUNITIES
• Improve universal accessibility of the transportation network
• Prepare for growing demand of older adults for alternative modes of travel
• Improve the cost-effectiveness of the transportation network

3.3   Attracting and retaining tomorrow's workforce

Preferences are changing as new generations are more likely to seek out cities with a higher quality of urban amenities. Tomorrow's work force increasingly values multi-modal transportation and a more compact built form. By building the type of city that the next generation wants to live in, Thunder Bay can attract young skilled workers and retain those who are trained at the local university and college.

Thunder Bay will need to attract and maintain employees to fill the jobs left vacant by the increasing number of older adults aging out of the workforce. Through the TMP, Thunder Bay has the opportunity to re-focus its transportation network into an increasingly multi-modal system. Increasing the attractiveness of alternative modes of transportation and reducing the reliance on the private

automobile will help to increase the appeal of the City to employers and employees.

A robust multi-modal transportation system is a major factor in achieving the City's economic development goals.

NEEDS AND OPPORTUNITIES
• Increase the attractiveness of alternative modes
• Implement complete bicycle and sidewalk networks
• Adopt a Complete Streets policy

Amazon.com Inc. is currently searching for a location for its second headquarters and its recent request for proposals[2] (RFP) provide an indication of the type of city that is attractive to major employers and the types of employees they want.

Amazon's RFP seeks to gather as much information as possible about potential cities' transportation networks, specifically asking about all transit options, including cycling and pedestrian access to the proposed sites. Their ideal location would "foster a sense of place and be pedestrian-friendly." In short, Amazon prefers a multi-modal city that has the potential to attract and retain an educated, skilled workforce.

3.4 Changing urban structure

Although the City is projected to have a stable population through 2038, the structure of the urban fabric is also changing. Over the past decades the average household size has been decreasing and this trend is expected to continue. Even with a stable population, an increase in the number of households is expected.

The City's 2018 Official Plan (OP) identifies locations where this growth is to be directed. New growth areas are generally located west of the existing urban area, north of Highway 11/17.

It is also expected that infill development will take place within the already built up areas. The OP strives for 20% of all new dwelling units to be built through intensification of the existing built up areas.

This changing urban structure will impact the transportation network in two distinct ways. Growth on the edges will increase demand for travel into the

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[2] https://images-na.ssl-images-amazon.com/images/G/01/Anything/test/images/usa/RFP_3._V516043504_.pdf

employment areas, while growth within the built-up areas will increase densities and increase demand for transit and active transportation, as well as increase the viability of those modes.

NEEDS AND OPPORTUNITIES
• Improve multimodal access to new developments
• Support intensification in built up areas with efficient transportation networks

3.5 Optimizing Existing Infrastructure

The City has a well-established road network, built up throughout the preceding decades. Travel demand modelling suggests that the existing network has the capacity to handle the existing and projected demand through 2038 without significant road widening or new road construction.

The increasing cost of maintaining aging infrastructure is a growing concern for the City as its population remains stable. In some cases, infrastructure has been overbuilt, where predictions of growth and increased demand have not materialized. The increasing maintenance burden presents two options: a) increased taxes or b) deferred maintenance and deteriorating conditions.

Through the TMP, actions and projects are being identified in order to maximize the efficiency of what already exists and to right-size the transportation network for the existing and projected demands. Right-sizing transportation infrastructure can help reduce the maintenance and operating burden, enabling the City to keep its maintenance backlog to a minimum while keeping taxes stable.

NEEDS AND OPPORTUNITIES
• Identify locations where road diets may be appropriate
• Implement Complete Streets policy
• Create an implementation plan with focus on full life-cycle costing
• Identify priority locations where roundabouts could improve performance compared to a traditional signalized intersection.
• Increase efficiency of road network through upgrades to traffic signal system and coordinated signal timing.

3.6

3.7 Aligning with Thunder Bay's plans and policies

The TMP's vision and objectives are in line with those of previous planning and policy work, including the proposed Official Plan (2018). The TMP is also heavily informed by the direction in Becoming Our Best, the 2015-2018 Corporate Strategic Plan, the Asset Management Plan for the City of Thunder Bay, and other important Thunder Bay studies.

The Corporate Strategic Plan commits the City to becoming increasingly healthy, vibrant, connected, and strong. The Plan specifically identifies the need for the development of a Transportation Master Plan with the emphasis on creating an integrated and seamless transportation system which recognizes all mobility choices. The Strategic Plan aims to increase transit ridership, expand the quality of the pedestrian environment, and reduce single occupancy vehicle trips.

Through the Corporate Strategic Plan, the City also aims to become fiscally sustainable, a goal shared with the Transportation Master Plan's stated objectives, which is supported by a focus on multi-modal transportation and making more efficient use of existing infrastructure.

The City's 2016 Asset Management Plan presented the financial sustainability of the road network by examining the replacement costs of the City's full inventory of paved roads. The estimated annual pavement funding required to maintain the road network in its current state is $13 million[3] whereas the current average annual funding is $8.4 million (2015 to 2019). The recognition that an increase in funding is needed to properly maintain the current road network over the entire lifecycle is an important driver in the TMP to strategically prioritize projects based on need and impact.

Similar to roads, the Asset Management Plan identified a shortfall in annual funding to replace sidewalks at the end of their useful life. The estimated cost to replace the sidewalk network life is $4.6 million[4] per year, but the average funding has been $1.6 million per year in the five years previous (2011-2015).

The Asset Management Plan did not present sustainable funding levels for the City's trail network.

The TMP supports the objectives of the Multi-Year Accessibility Plan, the Age Friendly City Services Action Plan, the EarthCare Sustainability Plan, and the Climate Adaptation Strategy. These plans all aim to make the City more accessible for alternative modes of transportation, which is a key focus of the TMP.

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[3] Corporate Report No. R 5/2018.
[4] Asset Management Plan for the City of Thunder Bay (2016)

NEEDS AND OPPORTUNITIES
• Continue to advance the objectives of previous plans and policies

4   Transportation Strategy

4.1   Alternative Strategies

Four alternative strategies were contemplated to guide the Transportation Master Plan. They cover a broad spectrum of possibilities available to Thunder Bay.

Alternative 1: Do Nothing

Maintain the status quo, do not expand the transportation network beyond what is already funded and committed. No major infrastructure investment is assumed.

In this strategy, the only projects that may be considered are the Balmoral Street reconstruction and multi-use path, the Junot Avenue widening, the Balmoral Street/Harbour Expressway intersection modifications, and the right turn lane addition to the Memorial Avenue/Harbour Expressway intersection. No other projects would be planned beyond these committed items. The focus of this alternative would be on maintaining the existing infrastructure.

Alternative 2: Road-focused

Proactively expand existing roads and build new roads in order to improve the movement of vehicles, with minimal investment in other modes.

This strategy would focus on upgrading the road network for peak-hour conditions. Decision-making and road design standards would be applied in isolation of other modes of transportation.

Potential projects under this strategy would be advancing the construction of the Northwest Arterial, a Carrick Street/Vickers Road realignment and new crossing of the Neebing-McIntyre Floodway, and widening existing roads or constructing new roads in anticipation of increasing travel demand.

The emphasis would be on improving the flow of traffic with the goal of increasing capacity and level of service for vehicular travel.

Alternative 3: Active Transportation- and Transit-focused

Proactively expand and connect existing cycling, trails, and sidewalk networks and improve transit, with minimal investment in roads.

This strategy would place a priority on active transportation and transit, reassigning roadway space to create dedicated space for walking, cycling and transit infrastructure. Potential projects could include a dense network of protected cycling lanes including protected intersections and a network of express buses in dedicated bus or high-occupancy lanes.

The emphasis of this strategy would be to rapidly grow the mode shares of transit and active transportation, which would reduce the reliance on the single-occupancy vehicle, through road diets or other means.

Alternative 4: Sustainability-focused

Strategically invest in road, transit, and active transportation networks in a financially and environmentally sustainable manner.

This strategy would focus on managing and maintaining existing assets in a more sustainable manner. The travel needs of motorists, transit riders, cyclists and pedestrians would be considered in an integrated manner. New infrastructure projects would be prioritized by a decision-making framework that also considers economic returns and life-cycle costs.

This strategy would not design for peak-hour conditions, but recognize that travel demand can be spread out over a longer peak period, or shifted to other modes with the right encouragement.

The network would have its performance measured using the multimodal level of service tool with a focus on implementing Complete Streets that prioritize the appropriate modes in the appropriate places, while still serving the basic needs of all roadway users.

4.2   Evaluation of Alternatives

Criteria

The four alternative strategies were evaluated based on the following criteria:

- How well the strategy aligns with the stated TMP vision, objectives, and principles as discussed in Section 1.

- The estimated environmental impacts of the strategy. These criteria describe the potential impacts to climate change mitigation / adaptation, the natural environment, and the socio-economic / cultural environment.

Evaluation

Each alternative strategy was evaluated based on the above criteria and assigned a rating of 'not acceptable', 'acceptable', 'good', or 'preferred'. The evaluation is presented in Exhibit 4.1.

Exhibit 4.1 Alternative strategies evaluation

		DO NOTHING	ROAD-FOCUSED	AT- AND TRANSIT-FOCUSED	SUSTAINABILITY-FOCUSED
TMP OBJECTIVES	*The transportation system will:* Support a healthy, vibrant and prosperous community	Does not strengthen neighbourhood connections, improve equity, or enhance opportunities for residents. Does not support the development of healthy streets.	Potential to strengthen neighbourhood connections and enhance opportunity. Does not address equity for residents without access to a vehicle. Does not support healthy streets, or environmental principles. Supports economic growth and goods movement.	Addresses equity and opportunity for all residents. Strengthens neighbourhood connections, promotes healthy streets, and could support revitalization of key areas. Limits potential impacts on the environment.	Addresses equity and opportunity for all residents. Strengthens neighbourhood connections, promotes healthy streets, and could support revitalization of key areas. Could have moderate impacts on the environment. Supports economic growth.
		Not preferred	Acceptable	Preferred	Preferred
	The transportation system will: Offer integrated, seamless mobility to individuals and families	Does not improve choice, efficiency, safety, or accessibility. May increase competitiveness of sustainable modes, if only because vehicular traffic worsens by comparison.	Does not improve choice, safety, or competition and encouragement of sustainable modes. Improves efficiency of buses, cars, and trucks on the road network.	Significantly improves transportation choice and competitiveness of sustainable modes. Increased cycling, walking, and transit usage promotes improved overall safety and accessibility.	Balances all modes to provide a range of mode choice, improves competitiveness of sustainable modes, safety outcomes, and accessibility. Limited improvements to efficiency for vehicular traffic.
		Not preferred	Acceptable	Good	Preferred
	The transportation system will: Be responsibly and accountably delivered	Does not align with stated policy goals or improve the City's resilience. Promotes fiscal responsibility by focusing on maintenance rather than network expansion.	Road projects likely to be most costly to construct and maintain. Does not align with City's stated policy goals. New infrastructure would be built to higher standards of resilience.	Addresses stated policy goals of supporting healthy communities and active lifestyles. AT and transit projects could have lower construction costs. Re-assignment of existing infrastructure for use by sustainable modes.	Aligns with stated policy goals. Balances all modes while prioritizing projects with high return on investment with awareness of full life-cycle costs. Higher focus on maintaining and operating the City's existing infrastructure.
		Acceptable	Not preferred	Good	Preferred
ENVIRONMENTAL IMPACTS	Climate change mitigation / adaptation	Maintains status quo, does not help mitigate nor adapt to climate change.	Encourages travel by single-occupancy vehicles which has negative impacts on mitigating climate change.	May have significant positive impacts on mitigating climate change.	May have positive impacts on mitigating climate change.
		Not preferred	Not preferred	Preferred	Good
	Natural Environment	Maintains status quo which does not improve existing transportation network's negative impacts on the natural environment.	Likely negative impacts to wildlife habitats and ecosystems, ground water, and surface water where the road network is expanded.	Likely negative impacts to wildlife habitats and ecosystems, ground water, and surface water where the network is expanded.	Limited impacts to wildlife habitats, ecosystems, and ground and surface water.
		Acceptable	Not preferred	Preferred	Preferred
	Socio-Economic and Cultural Environment	Not likely to have significant impacts on property, cultural or built heritage, and little impact on noise and air pollution. Does not align with planning objectives.	Likely to result in an increase in noise and air pollution. May have impacts to property and cultural or built heritage where road network is expanded. Does not align with planning objectives.	May have impacts to property to cultural or built heritage where network is expanded May have positive impacts to air quality. Partially aligns with planning objectives.	May have impacts to property, cultural or built heritage where network is expanded. May have minor positive impacts to noise and air pollution. Aligns with planning objectives.
		Acceptable	Acceptable	Good	Good
					Preferred alternative

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5 Recommendation

It is recommended that the TMP pursue a **Sustainability-focused** strategy. In order to achieve this, the TMP will be seeking to implement a more balanced transportation network, where all modes are seen as viable.

This strategy will allow the TMP to attempt to address and balance the following:

NEEDS AND OPPORTUNITIES
• Address localized congestion
• Improve the attractiveness of transit as an alternative to driving
• Provide a safe north-south cycling route
• Fill in gaps in the cycling network
• Upgrade cycling facilities
• Implement pedestrian crossovers at strategic locations
• Improve pedestrian facilities
• Improve universal accessibility of the transportation network
• Utilize transportation as a catalyst for economic growth
• Prepare for growing demand of older adults for alternative modes of travel
• Improve the cost-effectiveness of the transportation network
• Increase the attractiveness of alternative modes
• Implement complete bicycle and sidewalk networks
• Adopt a Complete Streets policy
• Improve multimodal access to new developments
• Support intensification in built up areas with efficient transportation networks
• Identify locations where road diets may be appropriate
• Create an implementation plan with focus on full life-cycle costing
• Identify priority locations where roundabouts could improve performance compared to a traditional signalized intersection.
• Increase efficiency of road network through upgrades to traffic signal system and coordinated signal timing.
• Continue to advance the objectives of previous plans and policies