



EXECUTIVE SUMMARY

Introduction

This Transportation Study Report is an update to the 2005 study. It proposes a sustainable transportation network for pedestrians, cyclists and vehicles that accommodates projected demands for the City of Greater Sudbury to the year 2031.

For the purposes of the Environmental Assessment process, this Transportation Study Report (TSR) fulfils the requirements of a Transportation Master Plan (TMP). It covers Phases 1 and 2 of the Municipal Class EA process, which are:

- Phase 1 Identify the problem (deficiency) or opportunity; and
- Phase 2 Identify alternative solutions to address the problem or opportunity by considering the existing environment and establishing the preferred solution.

Three Public Information Centres (PICs) were conducted during the course of this study in order to obtain public feedback on existing conditions in Sudbury, future plans for the city and implementation of the Transportation Study Report.

This report highlights the proposed policy on "complete streets." 'Complete Streets' are accessible to all users, regardless of their chosen mode of transportation. The street network should be planned, designed, constructed and maintained to support transit, cyclists and pedestrians in addition to automobile and truck traffic. The elderly, adults, young and disabled should all be able to safely use the streets in a municipality. It is under the framework of "complete streets" that the analysis, supporting policies and recommendations have been developed.

Existing Transportation Conditions

The 2011 Census of Canada reported over 160,000 people and 67,000 households in Greater Sudbury, with an average household size of 2.4 persons. Historically, mining has played a major role in providing employment in Greater Sudbury. The sector continues to be an important source of jobs but has now been supplemented by service activities such as health care, education and public administration. Consultation was undertaken with industry representatives in January 2012 to understand current and projected truck flows associated with industry.

The main destinations for the travel flows out of the Sudbury city centre, in decreasing order of magnitude, are Nickel Centre, Valley East, Walden and Rayside-Balfour. The principal movements into the Sudbury city centre originate in Nickel Centre and Walden. Internal trips within the former City of Sudbury represent the majority of journeys in the Greater Sudbury area. Volumes associated with trips within Greater Sudbury but not starting or ending in the former City of Sudbury are relatively low. Please refer to **Section 3.2.2** for further details regarding these flows and how they relate to the road network.

Overall, desire lines within Greater Sudbury reflect that the former City of Sudbury constitutes the urban core of the municipality. Within that area, development has occurred along two major axes – north/south along Paris and Regent Streets, and east/west along the Kingsway and Lasalle Boulevard. Development of land use and the transportation network is constrained by the rugged topography, which includes rock outcrops.

Transit ridership data for the years 2003 through 2013 were examined to determine major transit passenger volumes in Greater Sudbury. Between 2003 and 2013, transit ridership has grown by 20%. The daily number of transit trips per capita increased by approximately 23%







between 2003 and the time of the last census in 2011. Over the same period, population in the City increased by only 3%. Transit ridership has increased significantly compared to population growth.

Traffic demand at multiple screenlines was determined using annual average daily traffic (AADT) and turning movement count data. During the a.m. and p.m. peak periods, all of the screenlines have an overall volume/capacity (v/c) ratio less than or around 0.8, which corresponds to the threshold of acceptable level of service. Individually, M.R. 24 westbound at Creighton and the southbound routes of Paris St at Walford Rd and Notre Dame Ave at Ste. Anne Road have a v/c ratio of 0.97 (LOS E). The Kingsway was observed to be operating at capacity at Barry Downe Road, with at least one approach failing with a Level of Service F in the a.m. and p.m. peak periods.

Thirteen intersections were identified by the City of Greater Sudbury as being areas of concern. Capacity analysis was undertaken to evaluate the existing traffic operations and to determine the existing levels of service during the a.m. and p.m. peak hours. **Table 1** summarizes the critical movements (in terms of volume / capacity ratio and / or queue lengths) and gives recommendations that will improve the operation of the intersection for those movements. Please refer to **Section 3.2.6** for more details.

Table 1: Summary of Intersection Analyses

	Existing Critical Movements			
Intersection	Movement (peak)	V/C Ratio	Percentile Queues 50 th (95 th)	Recommendations
Main Street (M.R. 15) / M.R. 80	NB-L (p.m.)	1.08	~53 (#121)	Optimize signal timings
Lasalle Boulevard / Barry Downe Road	EB-TT (p.m.)	0.89	91 (#135)	Optimize signal timings
The Kingsway / Barry Downe Road	WB-TT (a.m.)	0.93	~108 (#187)	Optimize signal timings
	SB-LL (p.m.)	0.86	53 (#85)	
	EB-LL (p.m.)	1.07	~127 (#180)	
The Kingsway / Silver Hills Drive	None	N/A	N/A	• N/A
The Kingsway / Bancroft Drive	EB-TT (p.m.)	0.90	173 (#282)	Optimize signal timings
Bancroft Drive / Second Avenue	None	N/A	N/A	N/A
Lloyd Street / Brady Street	None	N/A	N/A	N/A
Lloyd Street / Elm Street / Notre Dame Avenue / Paris Street	None	N/A	N/A	N/A
Paris Street / Brady Street	WB-LL (a.m.) WB-LL (p.m.)	1.04 0.93	~90 (#158) ~73 (#131)	Optimize signal timings
Douglas Street / Regent Street	WB-LTR (p.m.)	1.08	()	Introduce traffic signal control Provide exclusive EB/WB left turn lanes
Ramsey Lake Road / Paris Street	NBR (a.m.)	1.01	~142 (#216)	Optimize signal timings
	WB-R (p.m.)	1.07	~141 (#153)	
Regent Street / Paris Street (Four Corners)	None	N/A	N/A	N/A
M.R. 24 / M.R. 55	EB-L (a.m.)	0.91	31(#77)	Provide new northbound right turn lane

^{#: 95}th percentile volume exceeds capacity: queue may be longer. Queue shown is the maximum after two cycles.

^{~:} Volume exceeds capacity, queue is theoretically infinite. Queue shown is the maximum after two cycles.







Transportation Planning Context

A number of documents provide the context for the Transportation Study Report. These include:

- Provincial Policy Statement;
- Growth Plan for Northern Ontario;
- Official Plan;
- Growth Outlook to 2036;
- Synthesis / Land Use and Settlement Report;
- Sustainable Mobility Plan;
- Bicycling Technical Master Plan;
- Economic Development Strategic Plan for Greater Sudbury 2020;
- Downtown Sudbury: A Plan for the Future;
- · Pedestrian Crossing Policy Report; and
- Trails for Active Transportation.

These documents have been reviewed and considered in the development of this report. See **Sections 4** and **6.3** for more details.

Transportation Vision Statement, Principles, Objectives, and Process

The City's Official Plan casts a vision for Greater Sudbury as a modern and vibrant city that is healthy, sustainable and green. Greater Sudbury is open for business with the downtown core acting as the hub of this dynamic city. The vision for the Transportation Study Report is to support this city-wide vision through the development of a sustainable, multi-modal transportation system that provides mobility options to all residents and the necessary infrastructure to support economic activity and daily life.

There are three main principles guiding the development of the future transportation network:

- Healthy communities with on- and off-road networks that facilitate active transportation, such as cycling and walking, and that consist of 'Complete Streets' that are designed, constructed and maintained to support all users and all modes of transportation;
- **Sustainability** based on integrated transportation and land use planning that minimizes the use of private automobiles and, in particular, the number of single-occupant vehicle trips: and
- **Economic vitality** associated with reduced congestion on roads so that people and freight can access destinations with limited delay.

The objectives of this study are to develop a comprehensive plan that supports the transportation vision and principles through:

- Improvement of the existing road network;
- Enhancement and expansion of active transportation facilities; and
- Incorporation and development of additional transportation policies.

The purpose of the document is to present background information, policy changes and network improvements to be considered during the process of creating a new Official Plan. As part of the EA Master Plan process, the following problem/opportunity statement has been developed to encapsulate the Transportation Study Report:







Sudbury's current transportation system needs to be enhanced to address current deficiencies, and to accommodate growth in population, employment and commercial activity to the horizon of 2031. Developing a multi-modal system is a key component of that change; multi-modal mobility is also needed to address the directions set by the Province and by City Council, reflecting greater sustainability and intensification. Sustainability must encompass the goals of an active community, a healthy environment and economic vitality.

Key opportunities in Sudbury related to these needs include:

- Creating transportation choices to better support biking, walking, and transit;
- Implementing short-term solutions for intersections and corridors of traffic congestion;
- In the longer term, creating a transportation network which offers more direct routings;
 and
- Providing the transportation network needed to support intensified land use in designated growth areas.

This statement was reviewed with attendees of the first Public Information Centre.

Active Transportation: Cycling and Walking

Municipalities across Ontario are implementing initiatives to encourage active transportation (AT) as a viable alternative to the private automobile for short-distance trips and as a method of promoting a more active and healthy lifestyle. Active transportation brings health and fitness, mobility, environmental, economic and tourism benefits.

One of the key inputs into development of the recommended AT route network for the City of Greater Sudbury was a set of network planning guiding principles. These state that active transportation facilities should be visible, connected, integrated, attractive, varied, accessible, sustainable, context sensitive and cost effective. These principles were developed by the study team and reviewed with the public and key stakeholders. They guided the initial stages of the route selection process.

By adopting the Transportation Study Report and its active transportation mandate, the City of Greater Sudbury has the opportunity to create an environment that is supportive of all modes of transportation including walking and cycling. Infrastructure such as sidewalks, trails, bike lanes, benches and sign treatments all contribute to an improved active transportation system, but these alone will not produce a fully supportive system for the City. It is recommended that programs be put in place to support active transportation. These should focus on education, encouragement, enforcement, partnerships and support features. Please refer to **Section 5.4** for details.

Future Transportation Needs

The following steps were undertaken to determine future transportation needs and the preferred transportation alternative to address these needs:

- Forecasting population and employment for the ultimate horizon year (2031);
- Identifying strategic alternative road networks for testing;
- Producing a list of projects for each alternative;
- Running each alternative in the transportation model;
- Comparing system metric outputs computed by the model to evaluate the performance of the network for each alternative, such as: volume to capacity ratio; vehicle kilometres traveled; vehicle hours traveled, emissions and cost;







- Reviewing each alternative in light of the Transportation Principles: healthy communities, sustainability and economic vitality; and
- Select the preferred strategic alternative.

Transportation Planning Alternatives

As part of Phase 1 of the Municipal Class EA process, a transportation master plan must determine problems or deficiencies and then identify and test alternative solutions to address them. In Phase 2, the alternatives are evaluated and a preferred alternative selected.

In this case, three alternatives were considered:

- 'Do Nothing': existing transportation network + projects under construction;
- 'Auto Focused' approach: 'Do Nothing' + transportation projects that are primarily aimed at increasing roadway capacity for private motor vehicles, such as road widening or new road construction; and
- 'Sustainability Focused' approach: 'Do Nothing' + transportation projects that also promote other modes, such as transit, sustainability, active transportation and infill development.

In the 'Do Nothing' alternative, the main destinations for the travel flows out of the Sudbury city centre, in decreasing order of magnitude, are Nickel Centre, Valley East, Walden and Rayside-Balfour. As per the existing conditions analysis, the principal movements into the Sudbury city centre originate in Nickel Centre and Walden. Internal trips within the former City of Sudbury represent the vast majority of journeys in the Greater Sudbury area. Volumes associated with trips within Greater Sudbury but not starting or ending in the former City of Sudbury are relatively low. For significant flows, the greatest change in traffic volume relative to the existing conditions is approximately 10%, with the exception of the inbound movement from Walden into the Sudbury city centre which is expected to increase by around 30% due to forecast increases in employment along and to the north of the M.R. 55 corridor west of M.R. 24. Please refer to **Section 8.1** for further details regarding these flows and how they relate to the road network.

This 'Auto Focused' alternative includes projects identified in Schedule 6 of the Official Plan and the 2005 Transportation Study Report. The candidate proposals involve widening some existing roads to ease congestion on the following corridor sections:

- Notre Dame Avenue (M.R. 80) from Main Street to Kathleen Street;
- Maley Drive from Barry Downe Road to Falconbridge Highway;
- Falconbridge Highway from Maley Drive to Garson Coniston Road;
- Second Avenue from Donna Drive to Scarlett Road:
- Barry Downe Road from Westmount Avenue to the Kingsway;
- The Kingsway east of Lloyd Street;
- Howey Drive from Elgin Street to Bancroft Drive;
- Ramsey Lake Road from Health Sciences North Road to South Bay Road;
- Maley Drive from Lasalle Boulevard to M.R. 35; and
- M.R. 35 from M.R. 15 to Notre Dame Street East.

Some new roads are proposed for construction. Silver Hills Drive (from Bancroft Drive to Marcus Drive), Remington Road (from its current terminus to Gateway Drive), Montrose Avenue extension (north extension to Maley Drive extension and south extension to Hawthorne Drive and Notre Dame Avenue) and Martilla Drive (current terminus to Paris Street) are development-driven. City-driven projects include the creation of new bypasses as well as shorter links to offer more direct routings:





- Maley Drive extension from Lasalle Boulevard to Barry Downe Road;
- Ste. Anne Road extension to College Street;
- Larch Street extension between Elgin Street and Lorne Street;
- Garson connection proposed between Falconbridge Highway and Maley East Bypass;
- Big Nickel Drive connections to Southview Drive;
- Barry Downe Extension from Maley Drive to Main Street and Bodson Drive;
- South Bay Road Extension; and
- Maley East Bypass.

It is recommended that Environmental Assessments be conducted to determine the optimal corridor for the South Bay Road extension and the Maley East Bypass. In the latter case, the final alignment is to be determined in conjunction with the Ministry of Transportation of Ontario (MTO).

The modelling analysis indicates that these improvements will encourage residents to drive greater distances. This negates some of the capacity increases arising from the proposed projects and relocates capacity 'pinch points' to other parts of the network where physical constraints prevent the widening or construction of road links. Please refer to **Section 8.2** for the detailed network capacity analysis.

The third 'Sustainability Focused' alternative is a refinement of the 'Auto Focused' alternative that concentrates on improvements that can enhance the sustainability of the City's transportation network. To determine which projects to include in the 'Sustainability Focused' alternative, the candidate road improvements were considered individually through a Multiple Account Evaluation. This assessed whether the projects:

- Enhance network connectivity, by increasing the number of routing options available such that the average distance travelled between given points in the network is reduced;
- Relieve congestion and thus improve the relative ease of travel through the network and access to truck and commuter corridors;
- Have minimal impact on environmentally-sensitive areas or involve road construction on land that is designated for development; and
- Are cost effective relative to alternative options.

The aforementioned Accounts reflect the Project Principles. Following the evaluation, all projects in the 'Auto Focused' alternative were included, except for:

- South Bay Road extension;
- Garson connection proposed between Falconbridge Highway and Maley East Bypass;
- Big Nickel Drive connections to Southview Drive; and
- Barry Downe Extension from Maley Drive to Main Street and Bodson Drive.

By limiting the extent of new road projects and reallocating resources to create a balanced multimodal system, the 'Sustainability Focused' alternative aims to provide the most beneficial solution to the Problem Statement and its related opportunities. It is also the alternative that most closely resembles the recommended option from the 2005 Transportation Study Report, which is to improve the transportation system through the betterment of both the road network and increased use of transit systems, ridesharing, bicycling and walking. Please refer to **Section 8.3** for the analysis of the road network performance, and to **Section 9** for details of the recommended active transportation network that will cater to biking and walking.







In addition to the network analysis, the evaluation of each alternative considered system metrics related to network performance, as shown in **Table 42** in **Section 8.5.2**. Relevant Project and Transportation Principles are identified.

While the 'Do Nothing' alternative shows fewer daily vehicle kilometres travelled (VKT) per capita than the 'Auto Focused' or 'Sustainability Focused' alternatives, the daily vehicle hours travelled (VHT) is much higher. This shows that in the absence of new road projects, congestion will increase and people will spend more time in traffic.

In the 'Sustainability Focused' alternative, the number of vehicle kilometres traveled and the vehicle hours traveled (both in per capita and absolute terms) is lower than for the 'Auto Focused' alternative, indicating that residents are commuting over shorter distances on average and are more likely to stay within their home area. They also are spending less time on the road. Although the absolute number of vehicle kilometers travelled is higher in the 'Sustainability Focused' alternative than in the 'Do Nothing' alternative, the total vehicle hours for the 'Sustainability Focused' alternative is lower than the 'Do Nothing' alternative.

Congested lane kilometres is greatest in the 'Sustainability Focused' alternative, however, the percentage of lane kilometres that is congested, 4.5%, is a very small percent of the overall road network.

The Sustainability Focused alternative balances road investments and achieves reasonable average travel times in the p.m. peak hour. This alternative exhibits the lowest number of vehicle hours traveled per capita of the three alternatives and exhibits fewer vehicle kilometres traveled and vehicle hours traveled than the Auto Focused alternative. Implementation of the Sustainability Focused alternative would be expected to result in the best overall network performance.

The 'Sustainability Focused' alternative was selected as the preferred transportation alternative. This is based on both the System Metrics Evaluation outlined in **Section 8.5.2** and the link-based network performance analysis in **Section 8.5.3**. When combined with the Active Transportation strategies detailed in **Section 9**, this alternative provides the best opportunity for satisfying the Problem Statement identified in **Section 5.4**.

There are multiple road projects recommended for construction by the year 2031, some of which have generated considerable public debate. These include Maley Drive, the South Bay Road extension, Municipal Road 80 and the Montrose Avenue extension. Each of these road projects is discussed in **Section 8.7** in order to present the pertinent issues and to better explain the rationale for the recommended action.

Even with the implementation of the projects in the recommended 'Sustainability Focused' alternative, some links are predicted to operate with a volume-to-capacity ratio over 0.8. This is generally due to the topographical constraints associated with Greater Sudbury's rugged terrain, which limits the number of available and potential entry points into the Sudbury city centre.

There are two ways to reduce volume/capacity ratios: if increasing capacity is not feasible, this may be achieved by reducing traffic volumes. Encouraging active transportation, as outlined in **Section 9**, will have an effect. However, it is not anticipated that the numbers of drivers transferring to cycling and walking modes will be sufficient on its own. Consequently, it is recommended that a Transit Master Plan be undertaken to build upon this Transportation Study Report and to investigate opportunities and quantify the potential benefits of improved public transit for the transportation network as a whole.







Cycling and Pedestrian Master Plan

One of the primary objectives of the City of Greater Sudbury Cycling and Pedestrian Master Plan is to develop a continuous and integrated cycling and pedestrian network of safe recreational and utilitarian routes. It builds upon, connects and supports existing and planned local regional routes and facilities such as the Rainbow Routes and Trans Canada Trail.

The recommended cycling and pedestrian network for the City of Greater Sudbury is illustrated in **Figure 67** through **Figure 71** in **Section 9**. It features multiple facility types, including bike lanes, cycle tracks, signed bike routes (with paved shoulders in rural areas and some urban areas) and multi-use trails. **Figure 72** through **Figure 76** illustrate the recommended cycling and pedestrian network by implementation phase. These phases, and their general durations, were identified as 'short term' (up to 5 years), 'medium term' (5-10 years) and 'long term' (11-15 or more years).

Policies to Support the Preferred Transportation Alternative

A number of policies have been developed as part of the Transportation Study Report to help facilitate the development of a more interconnected, multi-modal transportation network in the city. These policies support the preferred transportation alternative and include:

- Complete Streets:
- Road Classifications:
- · Appropriate Implementation of Urban Cross Sections; and
- Sidewalk Priority.

Recommendations in the context of the planned road and active transportation improvements have been made for public transportation, Greater Sudbury Airport, rail, roundabouts, transportation demand management and pedestrian safety. The policies and recommendations are described in more detail in **Section 10**.

Transportation Study Report Implementation

Based on the analysis of the three transportation planning strategies, the 'Sustainability Focused' alternative is preferred. The implementation of the projects will be phased over the following general horizons:

- Short term: generally within the next 5 years;
- Medium term: generally within 6 10 years; and
- Long term: generally within 11 15 or more years.

There also are a number of roads that are considered to be development-driven in that the roads are not needed unless development occurs. These roads have been included in the transportation model and are assumed to be constructed by the year 2031.

The recommended phasing of short, medium, long term and development-driven road improvements is outlined in **Table 48** through **Table 51** in **Section 0**. It is also displayed in **Figure 82** for the overall city and **Figure 83** through **Figure 86** for specific communities within the city.







Recommendations

The recommendations of the Transportation Study Report have been summarized and grouped into the following categories:

- Road improvements;
- Supporting active transportation;
- · Active transportation implementation; and
- Transportation policies.

The recommendations will be incorporated into the ongoing Official Plan Review. The existing Official Plan language has been updated based on Transportation Study Report recommendations. Changes to the transportation chapter of the Official Plan have been included in **Appendix M**.

Road Improvements

Short Term (generally the next five years)

Construction for:

- Maley Drive extension and widening
- Ramsey Lake Road widening (pending results of Environmental Assessment)
- M.R. 35 widening
- Notre Dame Avenue (M.R. 80) widening
- The Kingsway widening
- Second Avenue widening

Intersection improvements for:

Signalize the intersection of Douglas Street at Regent Street

Medium Term (generally the next six to ten years)

- Maley Drive widening
- Barry Downe Road widening
- Howey Drive widening
- Larch Street extension

Monitor traffic volumes at the following intersections:

- Lloyd Street/Elm Street at Notre Dame Avenue/Paris Street
- Paris Street at Brady Street

Long Term (generally 11 or more years)

- Falconbridge Highway widening
- Maley Drive East By-pass construction
- Ste. Anne Road extension







<u>Development-driven Roads (generally by 2031)</u>

- Montrose Avenue North extension
- Montrose Avenue South extension
- Silver Hills Drive road construction
- Remington Road extension
- Martilla Drive extension
- John Street extension

Supporting Active Transportation

- The City should consider utilizing educational programming and materials to promote and inform people of the benefits of active transportation as it relates to community health and fitness, transportation, environment and sustainability, economy and tourism.
- Develop and distribute newsletters and educational materials to promote and educate the public on active transportation opportunities, recommendations for routes and destinations and updates on available routes.
- The City should consider the implementation of educational programs on walking and cycling and partner with interested other agencies, not-for-profit organizations and school boards.
- The City should explore community-based social marketing as a means of encouraging people to adopt more sustainable transportation habits, including walking and cycling.
 Tools such as those outlined in **Table 29** can be used to develop a community-based social marketing program.
- The City and local organizations should develop a comprehensive approach to encouraging students and employees to walk or cycle to school or work and combine these modes with public transit for longer distance trips.
- The City should explore partnerships with local public and private organizations and integrate end-of-trip facilities into active transportation and trail promotional strategies and initiatives.
- The City should further promote active transportation and multimodal activities through the production of Active Transportation maps that also include transit information. City staff should work with local cycling and hiking groups and update the maps at least every five years, in coordination with updates to the TSR, to ensure new routes and connections are shown.
- Consider transportation operational measures in the future as part of the transportation system management to support safe and convenient AT movement and trail use. These measures may include:
 - Exempting cyclists from turn prohibitions at intersections, such as 'No Right Turn on Red';
 - Installing bicycle detection at intersections such that traffic signals recognize and react to cyclists on sideroads, particularly where motorized traffic is infrequent; and
 - Enforcing speed limits on roadways where observed speeds exceed acceptable levels.
- Enforcement activities from the Greater Sudbury Police should focus on issues related to the misuse of bicycle and pedestrian facilities, particularly sidewalk obstruction and the inappropriate use of trails.
- The City should work with the Greater Sudbury Police in the development and delivery of cycling and walking-related safety programs.







- The City should develop partnerships with outside agencies, volunteer groups, individuals as well as regional representatives to promote and educate residents on active transportation use throughout the City.
- The City and its respective partners should make the development of support facilities such as bicycle parking, showers and change rooms, rest areas, washrooms and waste receptacles a priority during the planning and implementation of active transportation facilities.

Active Transportation Implementation

Short Term (Generally the next five years)

- The City of Greater Sudbury should adopt the AT network implementation plan and use it to guide the implementation of the network over time.
- The City of Greater Sudbury should take the lead in establishing an Inter-Municipal Active Transportation Working Group including but not limited to staff representatives from the City, Sudbury District Public Health Unit and other key agencies as determined.
- The City of Greater Sudbury should continue to work with representatives from local advocacy groups, citizens-at-large, local businesses and other key groups as determined to further active transportation goals and objectives.
- The City of Greater Sudbury should coordinate the AT network implementation with the City's Roads and Transportation Services Department as well as the Community and Strategic Planning Department and other departments.
- The City of Greater Sudbury should explore the development of the role of an Active Transportation coordinator who would be responsible for the "championing" of AT related issues, initiatives and programming throughout the City. This role could be a new fulltime position at the City.
 - The Active Transportation Coordinator would be responsible for the implementation of the AT network and would provide updates on the progress of the study when necessary to stakeholders and interest groups.
- The AT Plan should be reviewed and given consideration when road improvements and other capital infrastructure projects are programmed.
- As part of demonstrating leadership, the City should provide bicycle parking facilities at public buildings under their ownership.
- The City, in partnership with local partners should investigate the potential to develop a bicycle parking program whereby bicycle racks would be installed in locations where there is a demonstrated need for bicycle parking facilities.
- The City should adopt the proposed network phasing strategy as the guide for implementing the AT network.
- In addition to capital funding, the City of Greater Sudbury should explore other outside partnerships, cost-sharing and funding opportunities for the implementation of the AT Network.

Medium Term (generally the next six to ten years)

 The City of Greater Sudbury should recognize that future refinement of the proposed AT network will be required. This is consistent with a goal of ensuring that the plan is flexible and can respond to changes and new opportunities.







Long Term (generally 11 or more years)

 As an interim solution in advance of future road improvements to install cycle tracks, the City of Greater Sudbury should modify current by-laws to continue to restrict cycling on sidewalks for adults but not prohibiting cycling on paved portions of boulevards where it is safe to do so.

Transportation Policies

Transportation policy recommendations are summarized in this section and described in more detail in **Section 10**. Transportation policies include:

- Complete Streets;
- Road classifications;
- Rural to urban conversion;
- Sidewalks;
- Public transportation;
- Greater Sudbury Airport;
- Rail;
- Roundabouts;
- Transportation demand management; and
- Pedestrian safety.

Complete Streets Policy

 Implement a "Complete Streets" policy so that the transportation network is designed, constructed, operated and maintained for all transportation users and all modes of transportation.

Road Classifications

- Revise the road classifications to include direction on transit, cycling and pedestrian provision, as detailed in **Section 10.2.1**.
- Adopt revised road cross sections as detailed in Section 10.2.2.

Rural to Urban Conversion

Adopt the rural to urban conversion criteria outlined in Section 10.3.

Sidewalk Policy

• Finalize a Sidewalk Policy as detailed in **Section 10.4**.

Public Transportation

• Develop a Transit Master Plan to leverage the road and active transportation plans recommended in the Transportation Study Report.







Greater Sudbury Airport

• Implement road improvements that will improve travel time and access to Greater Sudbury Airport.

Rail

• Should the rail companies consider the relocation of rail lines or rail yards, the City should work with them throughout the relocation process.

Roundabouts

 Develop roundabouts guidelines that could be used to help determine the appropriateness of installing roundabouts at new intersections in the city, or at existing intersections where the method of traffic control is being reconsidered.

Transportation Demand Management

• Prepare a Transportation Demand Management Plan

Pedestrian Safety

- Finalize Sidewalk Priority Policy.
- Identify intersections with a history of vehicle / pedestrian conflict.
- Study and implement appropriate measures to improve pedestrian safety.