

*Building Today for a **Better** Tomorrow*

Greater Sudbury  
**ROADS**

2011-2012 Report

 Greater | Grand  
**Sudbury**  
www.greatersudbury.ca

This document is the first annual update of the construction program for Greater Sudbury roadways, keeping residents and stakeholders informed of when and where roads will be improved.

The City of Greater Sudbury gratefully acknowledges the ongoing support of the Government of Canada and the Province of Ontario to achieve significant investments in municipal infrastructure.



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## Connecting a Community of Communities

The City of Greater Sudbury encompasses the largest area of any municipality in Ontario. Seven towns and cities which comprised the former Regional Municipality of Sudbury (Capreol, Nickel Centre, Onaping Falls, Rayside-Balfour, Sudbury, Valley East and Walden) as well as several unincorporated townships (Aylmer, Cleland, Dill, Dryden, Fraleck, Mackelcan, Parkin, Rathbun and Scadding) have been amalgamated within 3,227 square kilometres.

This widespread and geographically diverse service area is home to 160,274 residents who depend on reliable roads to travel the considerable distances separating communities. Laid end-to-end, the 3,560 lane kilometres which make up the City of Greater Sudbury's road network would be equivalent to a single lane highway covering the distance to the U.S.-Mexican border in El Paso, Texas.

The crucial role that roads play in supporting a strong municipality is understood by the City of Greater Sudbury. Greater Sudbury Council allocates funding through its capital envelopes to develop and maintain the necessary infrastructure that will promote economic growth and meet the social needs of residents. Each year, Council approves program priorities for the repair and expansion of Greater Sudbury's road network. Municipal staff delivers the construction program and maintains the network.

This document provides an annual update of the construction program for Greater Sudbury roadways, keeping residents and stakeholders informed of when and where roads will be improved.



## Planning for Our Future

Resident surveys have shown that maintenance of main roads is at the top of importance rankings for municipal services. Since the adoption of a long-term financial plan in 2002, Greater Sudbury Council has progressively increased investments to preserve our community's quality of life by combating aging infrastructure.

In recent years, financial partnerships with federal and provincial governments have significantly leveraged each dollar invested by the municipality, making possible a record number of infrastructure renewal projects. Since 2003, total capital spending on local roads has reached over \$320 million.

The following is a breakdown of road construction investments since 2003:

**2003 total spending \$10.6 million:**

City (\$10.6 million), Province (\$0), Federal (\$0)

**2004 total spending \$11.1 million:**

City (\$11.1 million), Province (\$0), Federal (\$0)

**2005 total spending \$18.4 million:**

City (\$18.4 million), Province (\$0), Federal (\$0)

**2006 total spending \$35 million:**

City (\$19.4 million), Province (\$12.1 million), Federal (\$3.6 million)

**2007 total spending \$32 million:**

City (\$21.8 million), Province (\$3.6 million), Federal (\$6.6 million)

**2008 total spending \$33.8 million:**

City (\$23.9 million), Province (\$5 million), Federal (\$4.9 million)

**2009 total spending \$32.8 million:**

City (\$27.2 million), Province (\$0), Federal (\$5.6 million)

**2010 total spending \$73.9 million:**

City (\$26.9 million), Province (\$24 million), Federal (\$23 million)

**2011 total spending \$38.6 million:**

City (\$30.5 million), Province (\$0), Federal (\$8.1 million)

**2012 total spending \$37 million:**

City (\$29 million), Province (\$0), Federal (\$8 million)

**TOTAL TO DATE: \$323.2 million**



## Record Investments Improve Greater Sudbury Infrastructure

Since 2006, cost-sharing partnerships with federal and provincial governments have achieved:

- Resurfacing or surface treatment of more than 360 lane kilometres, (including new asphalt in local subdivisions) to extend the life of municipal roads. A complete listing of road resurfacing and surface treatment projects is available online at [www.greatersudbury.ca](http://www.greatersudbury.ca)
- Replacement of municipal water mains and municipal sewer mains. A complete listing of water/wastewater projects that were carried out in conjunction with road construction is available online at [www.greatersudbury.ca](http://www.greatersudbury.ca)
- Repair or replacement of 56 bridges and large culverts (over \$100,000) under municipal jurisdiction. A complete listing of bridge and large culvert improvements and replacements is available online at the City of Greater Sudbury web site at [www.greatersudbury.ca](http://www.greatersudbury.ca)
- Rehabilitation of six concrete box culverts bridging Nolin and Junction Creeks in downtown Sudbury.
- Major rehabilitation, including widening or paved shoulders, intersection improvements, water/wastewater main repair or replacement, curb/sidewalk replacement and new asphalt on more than 165 lane kilometres throughout the city, including:
  - Municipal Road 80, serving close to 23,000 residents in Valley East and another 3,500 in Capreol, from Donaldson Crescent to M.R. 15 and from Frost to Glenn Street.
  - Three of the city's heaviest travelled arterial routes: Paris Street/Notre Dame Avenue, Lasalle Boulevard and Falconbridge Highway.
  - The eastern gateway to Greater Sudbury on the Kingsway, from Falconbridge Highway to the Southeast Bypass.
  - The heavily populated urban residential/commercial corridor of Regent Street, from Bouchard Street to Caswell Drive.
  - Bancroft Drive, from Levesque Street to Moonlight Avenue, to link with existing dedicated bicycle lanes.
  - Long Lake Road, to accommodate growing retail development from Ester Street to Harrison Drive.



## Prioritizing Road Renewal and Maintenance

In 2004, the City of Greater Sudbury adopted a set of criteria to prioritize road maintenance and reconstruction projects. This standardized formula enables Council to direct each year's capital spending envelop in a consistent and non-partisan manner.

Budgets are allocated on a percentage basis to various types of road projects:

Major roads	30%
Minor roads and sidewalks	20%
New roads/widening	20%
Bridge/culvert rehabilitation	15%
Storm water systems	5%
Engineering consulting services	5%
New and upgraded traffic signals	1%
Miscellaneous (street lights, crack sealing, contingencies)	4%

To determine the priority of projects, the following criteria are used to assess the first four categories (major roads, minor roads, new roads and bridges).

Road condition and cost benefit analysis	30 points
Safety concerns	25 points
Water/wastewater mains requiring repairs or replacement	20 points
Economic development potential	15 points
Reduction of traffic congestion	10 points

Significant weight is given to overall road conditions. It is much less expensive in the long run to maintain the surface and integrity of a roadway, than to let it go and have to completely replace it prematurely.



## Assessing Road Conditions

Every second year, the City inspects its roads for structural condition, ride smoothness, truck traffic and traffic volumes. Raw data is fed into a computerized Pavement Management System (PMS) which generates recommended rehabilitation strategies and costs.

## Multi-function pavement collection vehicle

In order to gather the raw data, the City regularly contracts the services of a multi-function pavement collection vehicle. Information about surface distress, roughness and rutting is collected through an electronic sensor box mounted to the front bumper of the vehicle.

## Surface distress evaluation

The multi-function vehicle is equipped with a camera that captures images of small cracks in the pavement surface. Evaluations will produce a “surface distress index” from 0 to 100 – with 100 representing new pavement and 0 severely deteriorated pavement. This evaluation is a valuable diagnostic tool for roads engineers to pinpoint the origin and cause of pavement degradation.

## Riding comfort evaluation

The multi-function vehicle is also equipped with a device that measures deformations in the pavement that can affect the security and comfort of motorists. The unit of measurement is the International Roughness Index (IRI) – with 100 representing smooth pavement and 0 very bumpy pavement with a very poor riding comfort.

## Rutting evaluation

The multi-function vehicle uses a laser system to measure depth of ruts in the pavement. Ruts can affect drainage of a roadway and snow plowing operations. Collected data is analysed and assigned a level of severity ranging from none to severe.

## Summary and Results

Results of the roads survey are coupled with current and future estimated traffic volumes to determine priorities for repairs and upgrades.



## 2012 Highlights

The City of Greater Sudbury's long-term financial plan provides for five year planning of capital renewal projects. The capital budget for road and drainage improvements in 2012 is close to \$37 million, representing approximately 39 per cent of the total capital budget, excluding water/wastewater projects.

Of this total, over \$11.9 million has been allocated for road expansion and intersection improvements, including ongoing funding for the Maley Drive extension. An additional \$5.8 million has been budgeted for rehabilitation of existing arterial and collector roads; \$5.1 million has been set aside for resurfacing of residential roads and \$900,000 is budgeted for surface treatment of local and rural roads.

A total of \$3.9 million is available for repair and replacement of various bridges and culverts. Water and sanitary sewer main priority projects has been budgeted at approximately \$9.9 million.

Capital investments in road, drainage and water/wastewater infrastructure in 2012 have been made possible with \$8 million from the Federal Gas Tax Fund.

The following projects are among the highlights of the 2012 capital budget for roads and drainage improvements.

This listing may be modified through the construction season to accommodate variances.

### Major Construction Projects:

Municipal Road 4, Hwy 17W to C. Johnson Rd., Worthington: Supported by the Federal Gas Tax Fund.

Niemi Road, M.R. 24 to Santala Rd., Lively: Includes water main renewal and rehabilitation and sanitary sewer main renewal. Supported by the Federal Gas Tax Fund.

Third Avenue, Phillip St. to southern end, Lively: Includes partial water main renewal and sanitary sewer main renewal. Supported by the Federal Gas Tax Fund.

### Arterial/Collector Roads:

Brady Street, Douglas St. to CPR underpass, Sudbury: Supported by the Federal Gas Tax Fund.

Douglas Street, Brady St. to Ontario St., Sudbury: Includes water main rehabilitation. Supported by the Federal Gas Tax Fund.

Errington Avenue North, Hwy 144 to Main St., Chelmsford: Supported by the Federal Gas Tax Fund.

Garson-Coniston Road, O'Neil Dr. E to Paul St., Garson: Supported by the Federal Gas Tax Fund

M.R. 80, Dominion Dr. to Dustrisac Blvd., Val Thérèse

### Resurfacing on Local Roads:

Churchill Avenue, Falconbridge Hwy. to Gemmell St., Sudbury

Coleen Avenue, Ivan St. to Gravel Dr., Hanmer

Kent Street, Lorraine St. to O'Grady St., Sudbury

Lavoie Street, Drummond Ave. to Montrose Ave., Sudbury: Includes water main renewal between Mayfair Court and Montrose Ave. Supported by the Federal Gas Tax Fund.

Lincoln Crescent, Dennie St. to Hillcrest Ave., Capreol

Lorraine Street, Lasalle Blvd. to Kent St., Sudbury

Melbourne Street, Kelvin St. to Lansing Ave., Sudbury

New Cobden Road, Simmons Rd. to Hwy. 144, Dowling area

O'Grady Street, Lasalle Blvd. to Kent St., Sudbury

Old Falconbridge Road, south end to Maley Dr., Sudbury

St. Jean Street, Junction Ave. to Aldege St., Azilda

Torbay Road, Second Ave. S. to end, Sudbury

## 2012 Highlights

### Bridge/Culvert Repair and Replacement:

Creighton Road, Copper Cliff  
Fairbank Lake Road, Worthington  
Montpellier Road, Chelmsford  
Power Street, Copper Cliff

### New Traffic Signals:

Copper Street and  
Kelly Lake Road, Sudbury

### Surface Treatment on Local and Rural Roads:

Capreol Lake Road, Capreol: various  
Clark Road,  
Makada Lake area: 0.5 km  
Desmarais Road,  
Val Thérèse: 0.6 km  
Edgewater Road,  
Long Lake area: 1.1 km  
Fairbank Lake Road,  
Worthington: 1.0 km  
Labine Street,  
Azilda area: 0.5 km  
Lavallee Road,  
Chelmsford area: 0.3 km  
Montée Rouleau, Azilda area: 0.5 km  
Morgan Road, Dowling area:  
1.2 km (three locations)

North Shore Black Lake Road,  
Makada Lake area: 0.3 km

South Bay Road, Arlington Blvd.  
to east end

O'Neil Drive West, Garson area:  
0.9 km (three locations)

Scarlett Drive, Skead

Spanish River Road,  
Worthington (various)

St. Pothier Road, Whitefish area: 1.0 km

Vachon Street, Vermilion River area: 0.2 km

Vermilion Lake Road, various locations

West Bay Road,  
Wanapitei Lake area: 0.3 km

### Water/Wastewater Main Renewal and Replacement

Latimer Crescent, Loach's Rd.  
to Hunter St., Sudbury  
- Water and sanitary sewer main renewal  
- Supported by the Federal Gas Tax Fund

Loach's Road, Windle Dr.  
to Regent St., Sudbury  
- Water and sanitary sewer main renewal  
- Supported by the Federal Gas Tax Fund

Robinson Drive, Southview Dr.  
to Kelly Lake Rd., Sudbury  
- Water and sanitary sewer main renewal  
- Supported by the Federal Gas Tax Fund

Vine Avenue, Hawthorne Dr.  
to Gemmell St., Sudbury  
- Water main renewal and partial  
sanitary sewer main renewal/repairs  
- Supported by the Federal Gas Tax Fund

William Avenue, Hawthorne Dr.  
to Gemmell St., Sudbury  
- Water main renewal and partial  
sanitary sewer main renewal/repairs



## 2011 Highlights & Completed Construction

In 2011, the City of Greater Sudbury invested \$38.6 million in roads, culverts and bridges and an additional \$29.9 million in water/wastewater infrastructure. Some of the major projects in 2011 are highlighted on the following pages. A list of all road and underground infrastructure improvement projects has also been included for reference.

Capital investments in roads, water and wastewater infrastructure in 2011 have been made possible with \$10.07 million from the Federal Gas Tax Fund.



### Urbanization of Bancroft Drive, Sudbury (Levesque Street to Moonlight Avenue)

This busy section of Bancroft Drive will be renewed during the 2011-2012 construction seasons to adapt to increased traffic volume which averages close to one million vehicle trips each year.

The project will widen the existing roadway to accommodate dedicated bicycle lanes, designed for the exclusive use of cyclists. In Greater Sudbury, dedicated bicycle lanes are located on Howey Drive, Bellevue Avenue and Bancroft Drive. Once the urbanization of Bancroft Drive is complete in 2012, dedicated bike lanes will extend to Moonlight Avenue, a total return trip of close to 14 km.

Also included in this \$3.8 million capital project are new curbs and sidewalks, replacement of an aging water main with larger capacity municipal services, and spot repairs to sanitary and storm sewer systems.

The project will be completed over two construction seasons: between Levesque Street and Estelle Street in 2011 and from Estelle Street to Moonlight Avenue in 2012.

The urbanization of Bancroft Drive is supported by the Federal Gas Tax Fund.

## 2011 Highlights & Completed Construction

### **Beech Street, Sudbury** (Elgin Street to Durham Street)

Much of downtown Sudbury sits on a former flood plain dominated by Nolin and Junction Creeks. Over the years, these waterways were harnessed by a series of underground bridges which have virtually eliminated annual spring floods.

Rehabilitation of underground bridges, concrete structures that span underground water courses through downtown Sudbury, has been ongoing since 2006 with the financial support of the federal and provincial governments.

In 2011, the Beech Street bridge underwent a \$0.95 million rehabilitation, consisting of excavation, concrete removal, installation of a new bridge deck, backfill and asphalt replacement. Coinciding with this work was the repair and replacement of water and sanitary sewer mains where required. Water main valves were also repaired and replaced where necessary.

Rehabilitation of the Beech Street bridge was supported by the Federal Gas Tax Fund.



## 2011 Highlights & Completed Construction



### **Regent Street, Sudbury**

(Hwy 17 SE Bypass to Loach's Road)

Regent Street south carries an average of close to six million vehicle trips each year, serving as the main connecting route between Sudbury and Highway 69 South to Toronto.

During the 2011 construction season, this section of Regent Street was rehabilitated with new culverts and new surface asphalt under a \$2 million contract.

In keeping with the City of Greater Sudbury's commitment to encourage cycling as a sustainable mode of transportation, the contract for asphalt resurfacing was extended to include paved shoulders for use of cyclists and pedestrians.

This project was supported by the Federal Gas Tax Fund.

## 2011 Highlights & Completed Construction

### **Levesque Street, Sudbury** (Kingsway to Bancroft Drive)

The award of a \$2.4 million contract for major improvements on Levesque Street coincided with the urbanization of Bancroft Drive.

Construction on Levesque Street, from Bancroft Drive to the Kingsway, includes replacement of water and sanitary sewer mains with larger capacity, repairs to the storm sewer system and rebuilding of the road, curbs and sidewalks.

A new sidewalk will also be constructed on Rheel Street, from Levesque to the playground entrance on Eugene Street. Work is expected to be complete by July, 2012.

This project is supported by the Federal Gas Tax Fund.



## 2011 Highlights & Completed Construction

### Road Resurfacing

The following municipal roads were resurfaced during the 2011 construction season. Road paving is prioritized based on numerous criteria, including: road condition and cost benefit analysis, safety, condition of water/wastewater mains, economic development potential and traffic congestion. Severity and extent of these criteria are taken into consideration when allocating the annual budget.

#### **Beech Street**

(Frood Rd. to Elgin St., Sudbury)

#### **Bruyere Street**

(Elizabeth St. to Pine St., Chelmsford)

#### **Champlain Street**

(two year project)  
(Notre Dame St. W. to St. Agnes St., Azilda)

#### **Clairmont Street**

(Raymond St. to end, Sudbury)

#### **Elizabeth Street, Sudbury**

#### **Fairview Avenue**

(Lloyd St. to Pearl St., Sudbury)

#### **Hazel Street**

(Elizabeth St. to end, Chelmsford)

#### **Horobin Street**

(Amley St. to southern end, Sudbury)

#### **Jessie Street**

(Hillcrest Dr. to Patricia St., Lively)

#### **Jones Street**

(Garson-Coniston Road to end, Garson)

#### **Kelvin Street**

(Melbourne St. to Lansing Ave., Sudbury)

#### **Laura Avenue**

(Polvi Ave. to Jessie St., Lively)

#### **Morin Street**

(Vaillancourt Cres. to Mona Ave., Chelmsford)

#### **M.R. 24 & 6th Avenue, Lively**

(new traffic signals and intersection improvements)

#### **Muriel Crescent**

(Armstrong St. to end, Sudbury)

#### **Percy Avenue**

(Main St. to 0.4 km north of Flake St., Val Caron)

#### **Picard Street**

(Bellevue Ave. to Downing St., Sudbury)

#### **Pine Street**

(Hazel St. to Bruyere St., Chelmsford)

#### **Polvi Avenue**

(Hillcrest Dr. to Laura Ave., Lively)

#### **Robert Street** (Garson area)

#### **Roy Avenue**

(St. Jacques St. to Spruce St., Hanmer)

#### **Vaillancourt Crescent**

(Errington Ave. to Mona Ave., Chelmsford)

### Downing Street, Sudbury

This road was rehabilitated following a water main replacement and sanitary sewer repairs.

This project was supported by the Federal Gas Tax Fund.

### Municipal Road 8, Onaping

(Highway 144 to the bridge)

Rehabilitation of this road included new asphalt, paved shoulders for cyclists and curb replacement.

This project was supported by the Federal Gas Tax Fund.

### Radar Road, Capreol

(Hydro Road to 5.5 km east)

This section of Radar Road was rehabilitated with new asphalt and paved shoulders for cyclists. For improved safety, a turn lane was constructed at Guenette Drive.

This project was supported by the Federal Gas Tax Fund

## 2011 Highlights & Completed Construction

### Surface Treatment

The following municipal roads were scheduled for surface treatment during the 2011 construction season. Surface treatment is applied to provide a long-lasting economical surface for granular base roads with light to medium traffic volume and to prevent entry of surface water into old pavement that has been weathered or cracked.

Brousseau Street,  
Vermilion Lake area: 0.3 km

Capreol Lake Road,  
Capreol: 0.5 km

Carriere Street, Azilda: 1.1 km

Charles Street,  
Vermilion Lake area: 0.1 km

Croatia Road,  
Broder Township: 0.5 km

Dominion Dr. W., Val Thérèse

Dryden Road East, Dryden Township:  
1.6 km in two locations

Dupuis Drive, Hanmer area: 0.4 km

Fairbank Lake Road:  
1 km in two locations

Gravel Street,  
Vermilion Lake area: 0.2 km

Guenette Drive, Hanmer: 0.4 km

Horseshoe Lake Road,  
Dill Township: 0.8 km

Moxam Landing Road,  
Walden area: 1.3 km

Noront Road, Lively area

Park Road, Trill Township: 0.5 km

Seguin Street,  
Rayside Township: 1 km

St. Pothier Road,  
Denison Township: 1 km



## 2011 Highlights & Completed Construction

### Bridges & Culverts

#### Desmarais Rd. Bridge, Val Thérèse

The second and last phase of a major rehabilitation of the Desmarais Road Bridge, in the Hanmer-Val Thérèse area, was completed in 2011.

#### Arthur Street, Sudbury

The second and last phase of a challenging culvert and water main replacement program at Junction Creek was completed in 2011.



## 2011 Highlights & Completed Construction

### Water/Wastewater Infrastructure



Like other communities across Canada, the City of Greater Sudbury is dealing with the challenge of maintaining and renewing aging water/wastewater infrastructure. The average water main in Greater Sudbury, for example, is close to 45 years old versus the 33 year provincial median average.

The municipality is looking ahead. In 2011, a capital investment of \$29.9 million was dedicated to the preservation and renewal of water/wastewater systems and facilities.

The following municipal roads were impacted by water main and/or sanitary sewer main upgrades, repairs or replacements during the 2011 construction season.

#### **Birch Lane, Garson**

- Water main replacement

#### **Champlain Street** (two year project) (Notre Dame St. W. to St. Agnes St., Azilda)

- Water main replacement

#### **Downing Street and Picard Street,** Sudbury

- Water main replacement and sanitary sewer repairs. This project was supported by the Federal Gas Tax Fund.

#### **Maley Drive, Sudbury**

- (east of Lansing Avenue)
- Water main rehabilitation under the Junction Creek tributary

#### **Maple Street easement, Sudbury**

- Combined sewer separation

#### **Ramsey Lake Road, Sudbury**

- (approximately 420 metres east from boat launch access road)
- New water main to connect two sections for a looped system to reduce the risk of water interruptions

#### **Ramsey View Court, Sudbury**

- (Centennial Drive to Walford Road)
- Sanitary sewer main replacement

#### **Winchester Avenue, Sudbury**

- (Two year project: Hyland Drive to Wembley Drive and Riverside Drive to dead end)

Hyland Dr. to Wembley Dr.: Water main replacement, repairs to a section of sanitary sewer main, replacement of road surface and construction of curbs to connect with existing curbs at Hyland and Wembley.

Riverside Dr. to dead end: Water main replacement, sanitary sewer main replacement and replacement of road surface.

#### **Sellwood Avenue, Capreol**

- (Dennie Street to Stull Street)

Lowering and replacement of the water main on Sellwood Avenue to correct water interruptions which have occurred in past winters as a result of frozen municipal water services. The sanitary sewer main was also replaced. Surface asphalt will be completed in 2012.

## 2009-2010 Highlights & Completed Construction

The years 2009 to 2010 hold the record for capital investments in Greater Sudbury roads – \$106.7 million for road widening and resurfacing, bridge repairs, culvert replacement, storm water management, traffic signals, streetlights and sidewalks.

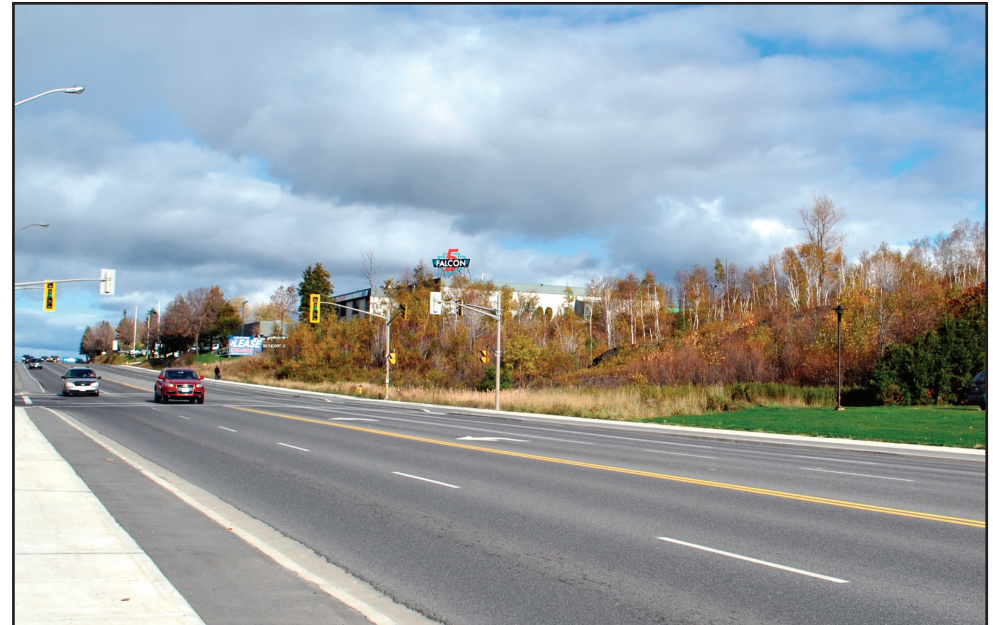
Partnerships with the federal and provincial governments under the Infrastructure Stimulus Fund leveraged \$2 for every dollar invested by the municipality – bringing to fruition the \$41.2 million rehabilitation of Paris Street, Lasalle Boulevard and Falconbridge Highway.

Additional transfer payments of \$11.2 million from Investing in Ontario and \$15.6 million from the Federal Gas Tax Fund from 2009-10 gave the municipality the means to achieve record capital spending on the local road systems without sacrificing budget for crucial daily maintenance.

A capital investment of \$23 million was dedicated to water and wastewater systems in 2010, including \$1.85 million for projects that were carried out in tandem with road reconstruction to rehabilitate underground systems.

A capital investment of \$25 million was dedicated to water and wastewater systems in 2009, including \$2.6 million for projects that were carried out in tandem with road reconstruction.

### Infrastructure Stimulus Fund at Work in Greater Sudbury



#### Falconbridge Highway between the Kingsway and Skead Road

Total \$15.4 million / 37 lane kilometres  
4 million – 10 million vehicles annually

Falconbridge Highway (M.R. 86) is a major north-south arterial route in Greater Sudbury, connecting the Greater Sudbury Airport, residents and businesses in the communities of Skead, Falconbridge and Garson, with core business and retail areas in the city.

Construction in 2009-2010 restored the riding quality of the pavement and improved road drainage, curbs and

sidewalks. Road widening was completed between Cedargreen Drive and Metcalfe Avenue for a centre turn lane to enhance safety at adjacent subdivisions.

New sidewalks were constructed in areas where no sidewalks previously existed, between Extencicare Falconbridge and Auger Avenue on the west side and from Frobisher Street to Hudson Street on the east side.

Falconbridge Highway is also the terminus of Maley Drive. Road rehabilitation in 2009-2010 included widening for a major turn lane at the Maley Drive intersection.

## 2009-2010 Highlights & Completed Construction

### Infrastructure Stimulus Fund at Work in Greater Sudbury

#### Paris Street/Notre Dame Avenue between York and Kathleen Streets

Total \$11.5 million / 16 lane kilometres  
8 million – 13 million vehicles annually

Paris Street-Notre Dame Avenue (M.R. 80) is a major north-south arterial route, in Sudbury, carrying traffic through the downtown core to the South End.

Construction in 2009-2010 restored the riding quality of the pavement and improved road drainage, curbs and sidewalks. Cost efficiencies were achieved by combining replacement of storm sewer, water main infrastructure, traffic signals and streetlights with road construction.

The 2010 construction season completed the rehabilitation of Paris Street started in 2009, from Walford Road – connecting Paris and Regent Streets – to Notre Dame Avenue.

#### Lasalle Boulevard between Notre Dame Avenue and Falconbridge Highway

Total 14.3 million / 22 lane kilometres  
6 million – 13 million vehicles annually

Lasalle Boulevard (M.R. 71) is a major east-west corridor in Greater Sudbury, providing primary access to two community colleges, a burgeoning retail industry and densely populated residential areas in New Sudbury.

Construction in 2009-2010 restored the riding quality of the pavement and improved road drainage, curbs and sidewalks. Cost efficiencies were achieved by combining replacement of sanitary sewer and water main infrastructure, as well as traffic signals, with road construction.

The city's Lasalle-Barry Downe Road intersection, with an annual average daily traffic volume of 46,500, was rehabilitated as part of the project. Traffic flow has also improved at the busy Lasalle-Notre Dame Avenue intersection (50,250 AADT) with the construction of an additional eastbound right-turn lane.



## 2010 Highlights & Completed Construction



**Kathleen Street, Sudbury**  
(Frood Road to Notre Dame Avenue)

Resurfacing from Frood Road to the CP Rail crossing and east from MacKenzie Street. This project was supported by Investing in Ontario.

**Elm Street Bridge, Sudbury**

Rehabilitation of an underground bridge deck spanning Junction Creek at Lloyd Street in Sudbury. This project was supported by Investing in Ontario.



**Regent Street, Sudbury**  
(Bouchard Street to Caswell Drive)

Construction of a continuous centre turn lane, installation of a trunk water main, rehabilitation of a sanitary sewer main, new curbs and sidewalks, and provision for shared bicycle lanes. This project was supported by Investing in Ontario.



**Municipal Road 80, Hanmer**  
(Frost Avenue to Glenn Street)

Expansion from two to five lanes, upgrades to underground utilities and construction of a new sidewalk on the south side. This project was supported by the Federal Gas Tax Fund.

## 2009 Highlights & Completed Construction

### **Phase One Rehabilitation of Paris Street** (Walford Road to York Street)

The Paris Street corridor between York Street and Walford Road underwent total reconstruction in 2009 with support from the Building Canada Gas Tax Fund.

The section of Paris Street between Walford Road and York Street carries an annual daily average of 30,000 vehicle trips, serving Laurentian University, Health Sciences North and Science North, as well as numerous residential, business and institutional properties.

Improvements during the 2009 construction season included a turn lane for the new regional hospital, new storm sewers, sidewalks, curbs and asphalt.

In addition, the east end of Centennial Drive (leading to the Sudbury & District Health Unit and Health Sciences North) was reconstructed to incorporate exclusive left and right turn lanes. This portion of the road construction project was funded under a cost sharing agreement between the Sudbury Regional Hospital and the City of Greater Sudbury.

### **Municipal Road 55, Sudbury**

#### **2008: Magill Street to 0.9 km easterly 2009: 1 km east from Hwy 17 Bypass interchange**

This was the second year of a major resurfacing program on an arterial route carrying an estimated 5 million to 6 million vehicle trips annually from the western region of Greater Sudbury. This project was supported by the Building Canada Gas Tax Fund.

### **Maki Avenue and Madison Avenue, Sudbury**

Two residential roads in Sudbury benefited from extensive rehabilitation during the 2009 construction season. Maki Avenue, in the South End, underwent replacement of approximately 280 metres of water main, sanitary sewer repairs and road resurfacing. Work on Madison Avenue, between Lansing Avenue and Manhattan Court in New Sudbury, included a new water main and storm sewer, new curbs and sidewalks, as well as road reconstruction.



## 2008 Highlights & Completed Construction

Greater Sudbury Council approved an overall \$33.8 million capital investment in the municipality's road network during the 2008 construction season. This figure included \$4.1 million announced by the Province of Ontario under its Municipal Road and Bridge Infrastructure Investment program, as well as \$4.9 million from the Government of Canada and another \$0.93 million previously announced by the Province.

Every two years, the City of Greater Sudbury conducts a thorough inspection of municipal bridges and culverts. In 2008, the city invested \$100,000 to inspect 103 bridges and 71 large culverts (over 3 metres in diameter). Approximately \$2 million was set aside in the 2008 capital budget for large culvert repairs and replacements.

### Larch Street and Minto Street, Sudbury

The 2008 construction season completed restoration of two Junction Creek concrete box culverts, including creation of an egress at the Larch Street box culvert to provide fast access to the creek for emergency personnel. The restoration of concrete box culverts on Larch Street and Minto Street was supported by the Building Canada Gas Tax Fund.

### Durham Street, Sudbury

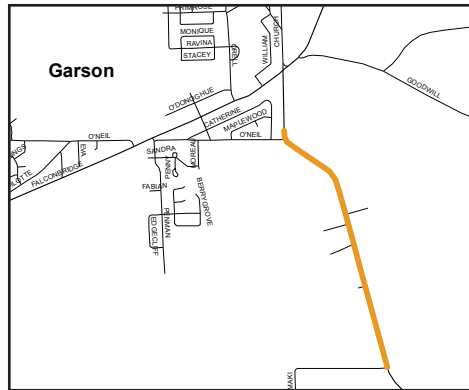
Repairs to a Nolin Creek concrete box culvert, between Beech Street and Jesuit Lane, were made possible with the assistance of the Building Canada Gas Tax Fund.

### Long Lake Road, Sudbury

A major culvert replacement near Birch Hill Road, was made possible through a cost sharing agreement with the Canada-Ontario Municipal Rural Infrastructure Fund (COMRIF).

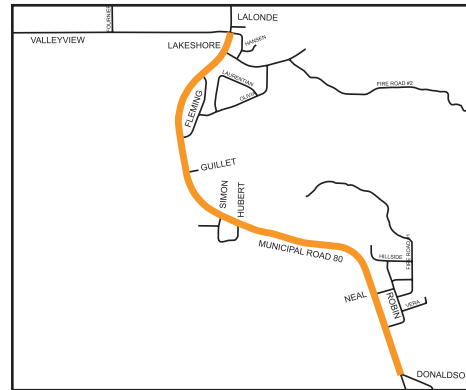


## 2008 Highlights & Completed Construction



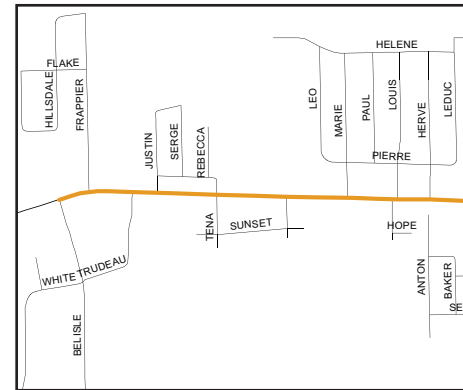
**Garson-Coniston Road, Sudbury**  
(Falconbridge Highway easterly to Maki Road)

The first year of a two phase project to improve traffic flow and safety with a road widening to incorporate a centre turn lane. Garson-Coniston Road carries more than one million vehicle trips annually, connecting the communities of Skead, Falconbridge, Garson and Coniston with Highway 17 East and Sudbury. The route also serves motorists travelling to the Greater Sudbury Airport. Phase 2 is scheduled for the 2012 construction season.



**Municipal Road 80, McCrea Heights**  
(Valleyview Road to Donaldson Crescent)

The first year of a three year contract to improve traffic flow and safety on Municipal Road 80 began with road widening to five lanes, to incorporate a centre turn lane from Valleyview Road to Donaldson Crescent. This section of M.R. 80 has an approximate 20,000 annual average daily traffic volume, connecting Sudbury with McCrae Heights, Guilletville, Blezard Valley, Val Caron, Val Thérèse, Hanmer and Capreol. The contract installed concrete sidewalks, streetlights and storm sewers. A sharp curve just north of Neal Street in the McCrae Heights area was also realigned to improve traffic safety.



**Main Street, Val Caron**  
(M.R. 80 to Belisle Drive)

The first year of a three year contract to improve traffic flow and safety on Main Street in Val Caron began with road widening to five lanes, to incorporate a centre turn lane from M.R. 80 to Belisle Drive. This traffic artery connects close to 6,000 residents of Val Caron and an additional 7,500 residents of Val Thérèse with the local education, health and business district. The contract also installed concrete sidewalks, streetlights and storm sewers.

## 2007 Highlights & Completed Construction

Greater Sudbury Council continued to increase investments in local roads in 2007. A total of \$32 million was dedicated to the preservation and enhancement of the road network, including federal and provincial investments through the Canada-Ontario Municipal Rural Infrastructure Fund (COMRIF) and the Federal Gas Tax Fund.

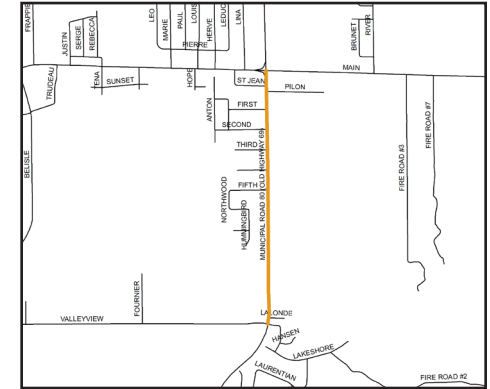
Capital spending included \$14.7 million for major road improvements, \$4.5 million for replacement of large culverts and \$12.8 million for various projects, including road resurfacing, small culvert replacements and new pedestrian traffic signals. An additional \$10 million was dedicated to upgrade and repair water mains and wastewater systems in various locations throughout the community.



### **Lasalle Boulevard, Sudbury** (Crescent Park Road to Notre Dame Avenue)

The first step to alleviate traffic congestion at the busiest intersection in Greater Sudbury (50,250 Annual Average Daily Traffic Volume) was the widening of the western section of Lasalle Boulevard.

Following extensive public consultation, this section of Lasalle Boulevard was widened to accommodate a centre turn lane for safer access to area homes and businesses. At the same time, adjacent residential streets were closed with the construction of a cul-de-sac to replace uncontrolled access to a major thoroughfare. Nearby Lorraine Street was extended to join with a signalized intersection adjacent to Macdonald-Cartier secondary school. Economies were achieved by combining road construction with installation of a larger capacity trunk water main and related services, as well as new storm sewer systems, curbs and sidewalks.



### **Municipal Road 80, Val Caron** (Valleyview Road to Main Street)

The first step to improve traffic flow and safety on Municipal Road 80 began in 2007 with road widening to five lanes, to incorporate a centre turn lane between Valleyview Road and Main Street, Val Caron.

This project was supported under a cost sharing agreement through the Canada-Ontario Municipal Road Infrastructure Fund (COMRIF).

### **Marcel Street, Sudbury** (Bouchard Street to Martindale Road)

Major road reconstruction, water main replacements, sanitary sewer improvements and final paving were completed over two years during the 2007 and 2008 construction seasons.

## 2006 Highlights & Completed Construction



The year marked the largest road construction program since the amalgamation of the City of Greater Sudbury. More than 100 road, bridge and water main improvement projects with a combined value of \$35 million began during the 2006 construction season. Record spending was made possible by the Canada-Ontario Municipal Rural Infrastructure Fund (COMRIF), the Federal Gas Tax Fund and one-time Special Provincial Funding.

### **Five Lane Expansion of the Kingsway** (Falconbridge Highway to Southeast Bypass)

The eastern entrance to the City of Greater Sudbury was widened during the 2006-08 construction seasons to accommodate four lanes, plus a centre turn lane.

This section of the Kingsway, from Falconbridge Highway to the Southeast Bypass, has been identified as vital to continued expansion of national retailers, serving markets throughout Northeastern Ontario.

In addition to road widening, the project updated the municipal storm sewer and provided a municipal water main, sidewalks and streetlights to permit future development of an adjacent industrial area.

This project was supported by the Canada-Ontario Municipal Rural Infrastructure Fund (COMRIF).

## 2006 Highlights & Completed Construction



### **Lasalle Boulevard, Sudbury**

(Barry Downe Road to Attlee Avenue)

Road widening to incorporate centre turn lane and resurfacing.

### **Municipal Road 55, Lively**

(Fielding Road to 800 metres west)

Resurfacing.

### **Long Lake Road, Sudbury**

(Ester Street to Harrison Drive)

A major retail development in the city's south end and construction of the Long Lake Road interchange at the Southwest Bypass by the Ontario Ministry of Transportation necessitated the widening of a section of Long Lake Road to four lanes.

This two year project included a realignment of Countryside Drive to intersect new traffic signals at Harrison Drive and installation of a new water main.

### **Cross Street, Sudbury**

Road reconstruction, including new curbs and sidewalks.

The following projects were supported by the Canada-Ontario Municipal Rural Infrastructure Fund (COMRIF):

### **College Street Box Culvert, Sudbury**

Rehabilitation of an underground bridge spanning Nolin Creek.

### **Elgin Street Box Culvert, Sudbury**

Rehabilitation of an underground bridge spanning Junction Creek.

### **Falconbridge Highway, Sudbury** (Lasalle Boulevard to Old Falconbridge Road)

Road widening and resurfacing to incorporate a centre turn lane, intersection improvements at Lasalle Boulevard, installation of storm sewer and water main, curb and sidewalk construction.

### **Garson-Coniston Road**

Installation of a new culvert at Coniston Creek.

## Looking to Our Future

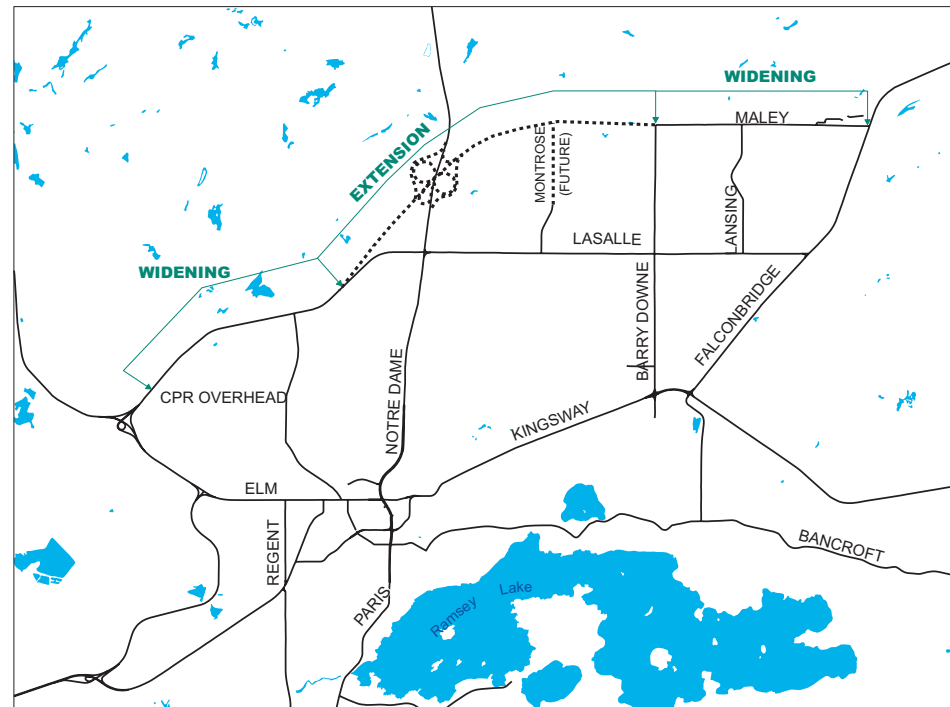
### Maley Drive Extension Remains a Priority of Council

The Maley Drive Extension is a \$115 million, Class EA completed, road construction and rehabilitation project that would see a new east-west arterial road built north of Lasalle Boulevard, connecting Municipal Road 35 to Falconbridge Highway.

The Maley Drive Extension is identified as a priority in the City of Greater Sudbury Official Plan, is consistent with the 2005 Provincial Policy Statement and is included in the City's 10 Year Capital Plan.

Since 1992, the City has invested \$3.4 million to keep the Maley Drive Extension in a construction-ready state. Successive councils have reaffirmed the importance of this project, including the current Mayor and Council at their most recent priority session to determine goals for the next four years.

The 2012 to 2016 Capital budget includes an allocation of \$2.6 million per year for the Maley Drive project. Until 2014, the funds will be expended on completion of the engineering, property acquisitions, and utility relocations. This allocation of \$2.6 million would closely approximate the annual debt repayments for one-third of the total project costs, should the Federal and Provincial governments approve two-thirds capital funding.



Funding applications have been submitted to the federal Building Canada Fund and to the provincial Building Together Fund. Mayor and Council are lobbying both levels of government for support.

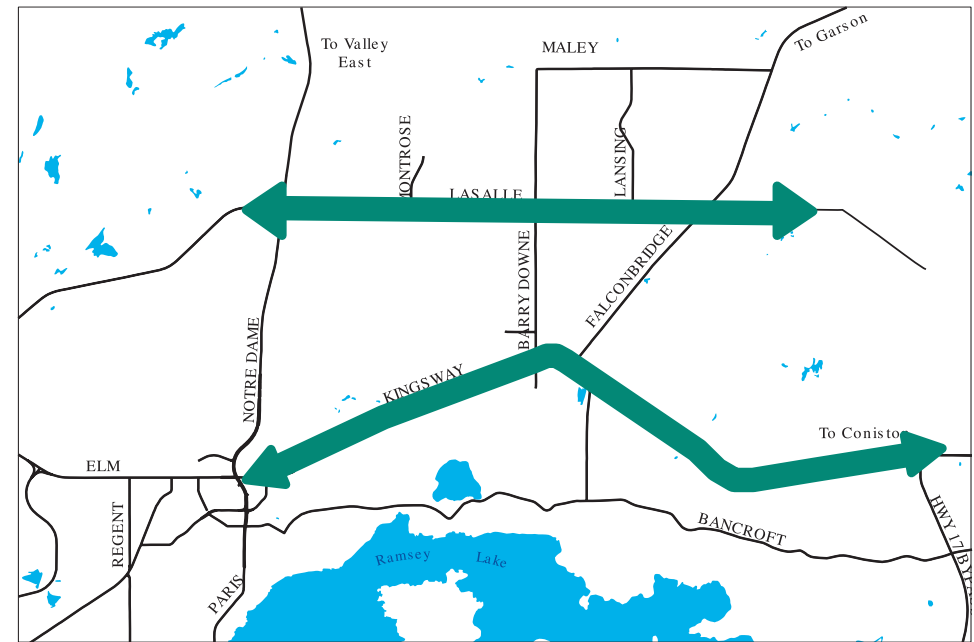
## Looking to Our Future

### Sustainable Infrastructure Development: Maley Drive Extension

The City of Greater Sudbury is showing a \$500 million infrastructure deficit. Renewal and replacement projects comprise approximately 70 per cent of this deficit. New infrastructure to fuel growth and development comprises the remaining 30 per cent, as well as other initiatives to enhance our community's quality of place.

The Maley Drive Extension will assist in closing the 30 per cent shortfall and will partially address the remaining 70 per cent by enabling the municipality to shift resources currently concentrated on two arterial routes.

The Kingsway and Lasalle Boulevard are currently the only major east-west corridors in the City of Greater Sudbury. In 2007, the Kingsway carried up to 45,000 and Lasalle Boulevard carried up to 36,000 average annual daily trips. By comparison, portions of major highways leading out of the City of Greater Sudbury carry between 6,000 and 8,000 average annual daily trips.



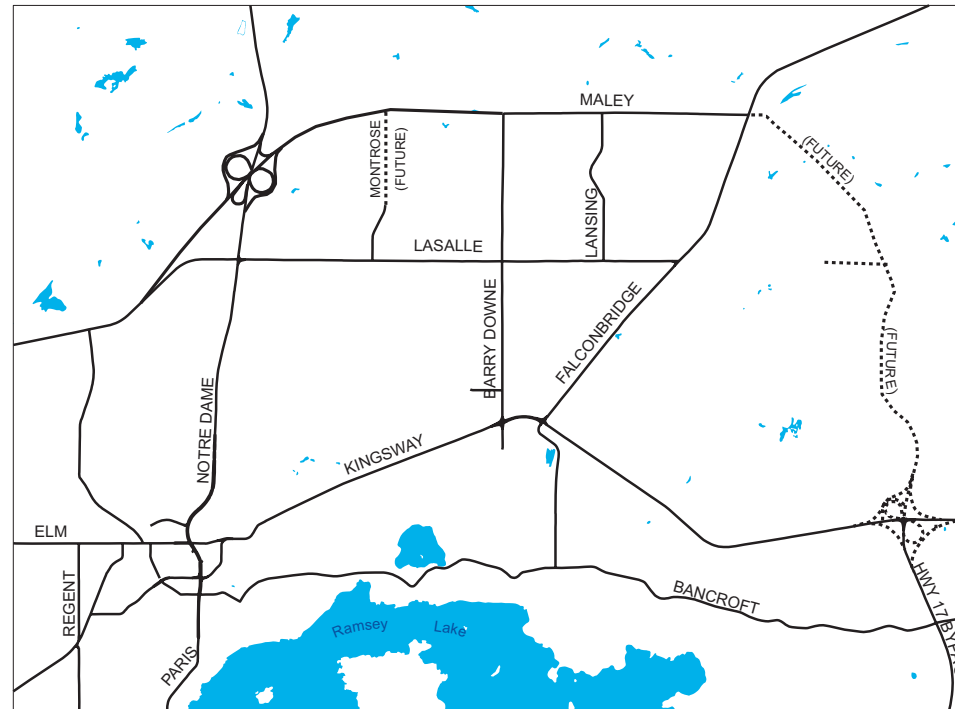
The Maley Drive Extension would significantly reduce traffic volume by an estimated 2,000 to 4,000 vehicles per day on the Kingsway and approximately 10,000 vehicles per day on Lasalle Boulevard.

The Kingsway and Lasalle Boulevard corridors are also the main transportation routes for heavy truck traffic serving local mines. Creation of an alternate route would reduce heavy truck traffic on major arterial routes by an estimated 1,000 to 1,500 vehicles per day for improved safety on shared roads and reduced stress on pavement surfaces.

## Looking to Our Future

Finding a solution to congestion on the Kingsway and Lasalle Boulevard is key to ensuring the efficient movement of people, goods, services and materials. Unlocking this congestion is also key to realizing parts of the community's vision, as expressed in the new Official Plan for socio-economic progress:

- Completion of an arterial road grid for the New Sudbury area by connecting Montrose Avenue with Maley Drive to provide more efficient traffic movement and public transit routing, particularly for lands which are ready for development north of Lasalle Boulevard and Montrose Avenue.
- Alleviation of congestion on the Kingsway and Lasalle Boulevard to permit re-urbanization of both corridors from auto-oriented, low-density commercial uses to pedestrian-oriented mixed-use buildings.
- Acceleration of a long-term plan to establish a perimeter highway-arterial road system around the former City of Sudbury through extension of Maley Drive southeast of its terminus at Falconbridge Road to connect with Highway 17 East, the Southeast Bypass and the Southwest Bypass. This plan would complement investments made in provincial infrastructure in and around the City of Greater Sudbury through ReNew Ontario, in particular the four-laning of Highway 69 South.



## Cycling: Part of a Healthy Community



Greater Sudbury Council approved an investment in the 2011 municipal budget that encourages cycling as a sustainable mode of transportation.

Over the past four years, the city has constructed paved shoulders and wide curb lanes to accommodate cyclists where road conditions and budget have allowed. This investment provides opportunity to introduce new signs, lane markings and paved shoulders for cyclists.

### New bike lanes:

- shared bike lanes on Regent Street, from Bouchard St. to Caswell Dr.
- paved shoulders on Regent Street, from the Southeast Bypass to Loach's Rd.
- paved shoulders on Municipal Road 8, from Hwy 144 to the bridge in Onaping
- paved shoulders on Radar Road, from Hydro Rd. to 5.5 km east
- paved shoulders on the north side of Municipal Road 80, from Frost Ave. to Glenn St.
- dedicated bike lanes on Bancroft Drive, from Levesque St. to Moonlight Ave.

### Bicycle route



This sign reminds motorists of the presence of bicycles and alerts cyclists that a paved shoulder is legal to use as a cycling route.

## Cycling: Part of a Healthy Community



### Share the road

This sign indicates the start of a shared lane, used by both vehicles and bicycles. Watch for pavement markings on the curb lane. Cycling routes are down the centre of the pavement markings.

### What is a shared lane?

- A shared lane is a lane shared by both vehicles and bicycles in areas with a speed limit of 60 km/hr or less.
- It's used on roads where dedicated bike lanes are not possible because the roadway is of insufficient width or where on-street parking must be maintained.
- A shared lane is wider than a standard vehicle curb lane.
- Shared lanes provide visual cues for motorists and cyclists, allowing both to safely travel in the same lane.
- Bike symbols and directional arrows, known as "sharrows", are painted a minimum of 0.75 metres from the curb to remind cyclists where they should ride when sharing a lane and to remind motorists to share the road.
- Greater Sudbury's first shared bike lane is on Regent Street, between Bouchard St. and Caswell Drive. Both motorists and cyclists are asked to use extra care and caution until everyone becomes familiar with the rules for shared lanes.

### What are the rules for shared lanes?

#### **Cyclists:**

- Keep to the centre of the bike symbol and directional arrow pavement markings.
- Travel in the same direction as traffic.
- Obey all traffic signs and signals.
- Watch for car doors opening where on-street parking is permitted.

#### **Motorists:**

- Bicycles are considered vehicles under the Highway Traffic Act and should be treated as any other vehicle on the road. Slow down and pass cyclists with care.
- If traffic is heavy, be patient and wait for a suitable time to pass cyclists.
- When cyclists are not present, motorists may use shared lanes as a normal traffic lane.

## Cycling: Part of a Healthy Community



### Dedicated bike lane

This sign indicates the start of a bike lane reserved for the exclusive use of cyclists. Motorists are not permitted to stop, pass or park in a dedicated bike lane.

### What is a dedicated bike lane?

- A dedicated lane is designed for the exclusive use of cyclists. In Greater Sudbury, dedicated bicycle lanes are located on Howey Drive, Bellevue Avenue and Bancroft Drive. In 2012, dedicated bike lanes will be extended on Bancroft Drive, from Levesque Street to Moonlight Avenue.
- Pavement markings for dedicated bike lanes consist of a white diamond symbol and a bicycle stencil.
- Cyclists using dedicated lanes must yield to Greater Sudbury Transit, travel in the same direction as traffic and obey the rules of the road.

### How are paved shoulders used?

- Paved shoulders are not reserved for cyclists, as the shoulder is also intended for pedestrians and disabled vehicles.



### Rack and Roll

- Greater Sudbury Transit riders can transport bicycles on the following routes at no additional charge: Route 101 Howey/Moonlight, Route 182 Ramsey View/Algonquin, Route 301 Lasalle/Madison, Route 501 Regent/University, Route 701 Lively, Route 702 Azilda/Chelmsford and Route 703 Val Caron/Hanmer/Capreol. Buses travelling these routes are equipped with a bicycle rack on the front. For more information, please contact Greater Sudbury Transit at 705-675-3333.