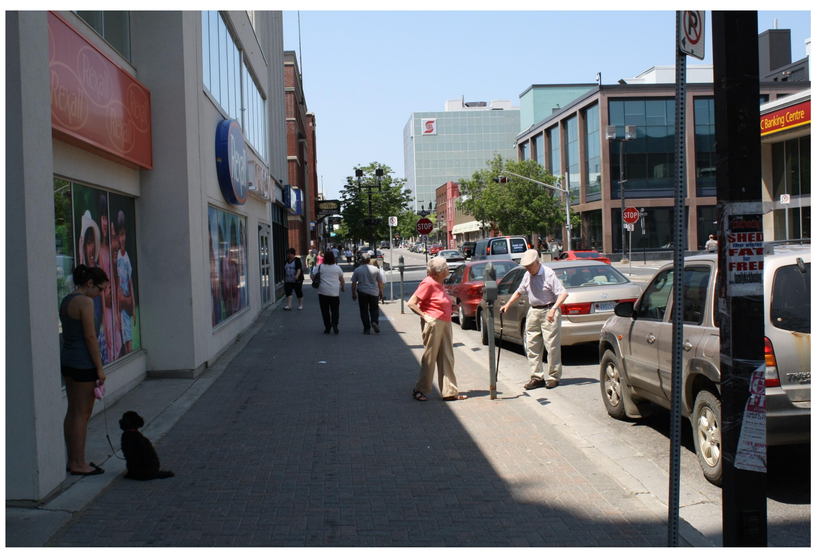
WELCOME TO THE

Public Information Centre 3

City of Greater Sudbury Transportation Study



June 24, 2015

MMM GROUP

Greater Grand Sudbury

Revisit. Review. Revise.
Revisitez. Réexaminez. Révisez.
Official Plan Review • Révision du Plan officiel

Presentation Outline

- Purpose and Process
- Transportation Policy Statements
- Active Transportation and Road Improvements
- Multi-modal Transportation Recommendations

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PURPOSE AND PROCESS

What is this project about?

Purpose

“Produce a Transportation Plan that defines a comprehensive, fully integrated and sustainable transportation network that accommodates projected transportation demands to the year 2031 for the City of Greater Sudbury”

Purpose

The **three** main principles, which are guiding the development of the future transportation network:

Healthy Communities
To create complete streets that are designed, constructed and maintained to support all users and all modes of transportation

Sustainability
To limit the vehicle kilometers travelled per year through integrated transportation and land use planning

Economic Vitality
To ensure that the transportation network supports mobility so that people and freight can access destinations with limited delay

What is a Transportation Master Plan?

What it is...

- Long Range Plan that Integrates Infrastructure Requirements for Existing and Future Land Uses
- Addresses All Modes of Transportation to the Year 2031
- Living Document that will be Updated Periodically
- An integrated system that functions as a whole
- Aligns with City's Official Plan & other Planning Initiatives

What it is not…

- Detailed Design for Transportation Improvements
- Authorization to Construct Major Transportation Improvements
- Study for Local Issues Such as Pot Holes or Street Repairs
- Individual projects to be selected or rejected in isolation of each other

What Process Was Used?
Master Plan Class Environmental Assessment Process

Phase 1: Problem or Opportunity

- Identify the problem or opportunity

Public & Stakeholder Consultation

Phase 2: Alternative Solutions

- Review Existing Environment
- Identify Alternative Solutions
- Established Preferred Solution

Public & Stakeholder Consultation

Transportation Study Report:

- Document analyses, consultation and final recommendations and make available for public review and commentary.

Opportunity Statement

- Create transportation choices to better support biking, walking and transit
- Implement short and long term improvement to mitigate congestion and create more direct routes
- Provide transportation network needed to support intensified land use in designated growth areas

Alternatives Assessed

- Alternative 1: “Do Nothing”
- Alternative 2: Auto-Focused
- Alternative 3: Sustainability-Focused

TRANSPORTATION POLICY STATEMENTS

Complete Street Policy

- Designed, constructed, operated and maintained for all modes of transportation and all types of users
- Safer for all users
- Supports livable communities
- Positive impacts on public health
- Economic benefits – people want to be there

Road Classifications Updates

Road Class	Transit Provision	Cycling Provision	Pedestrian Provision
Primary Arterial	Provisions recommended for each class of road and each mode of transportation		
Secondary Arterial			
Tertiary Arterial			
Collector			
Local			

Rural to Urban Road Conversion

Conversion criteria:

- Land use and associated pedestrian trips
- High traffic volumes, since these can pose a safety concern for pedestrians
- Bus routes
- Nearby existing sidewalks and curbs
- Related infrastructure works

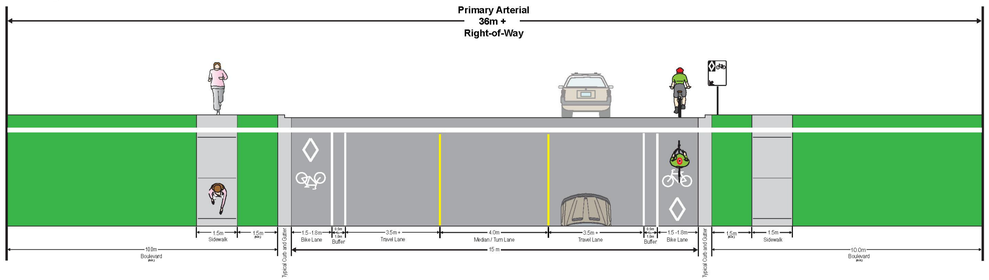
Sidewalk Priority Policy

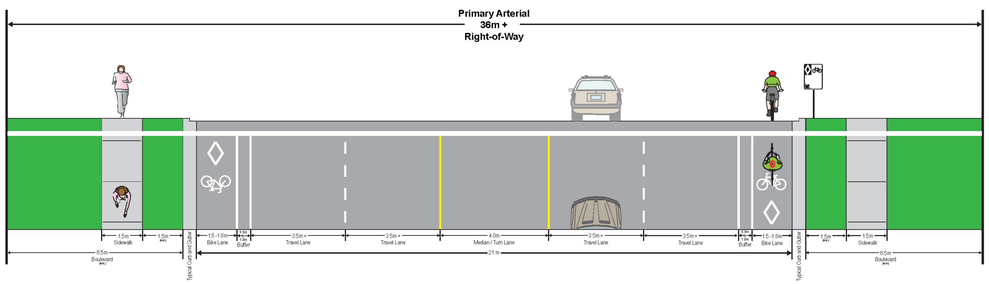
- Adapted from Canadian best practices
- Points are awarded based on specified criteria for each area:
  - Highest priority is given to those areas with the largest total score

Criteria	Description	Points Given
Road Type	Arterial Collector Local	10 5 1
Pedestrian Generators	Within 500m of hospital, library, place of work, arena, etc.	7
Commercial Land Use	Downtown Commercial Area	10 7
Transit	Along Transit Route	5
School Proximity	< 0.5km 0.5km to 1.4km 1.5km to 2.0km	6 3 1
Road Width	Number of Lanes	1-6
Existing Pathways	None Informal Path Trail (within 500m)	10 7 5
Public Concerns	Number of formal requests received	1-7

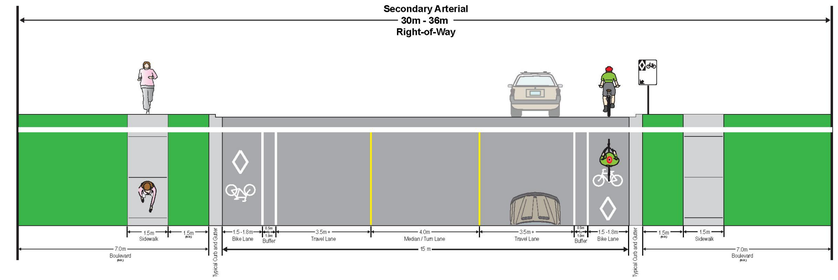
Typical Cross Sections

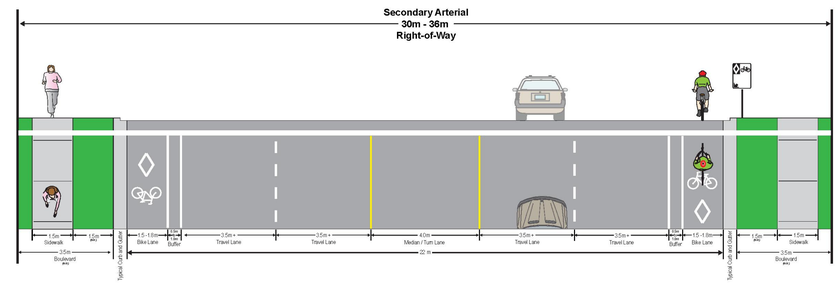
Primary Arterial - Traffic Volumes < 15,000 per day





Urban Secondary or Tertiary Arterial





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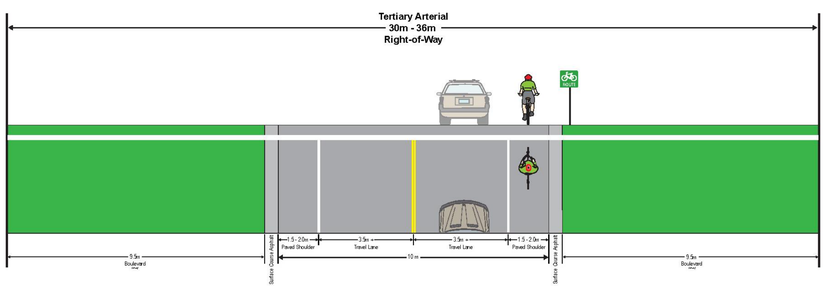
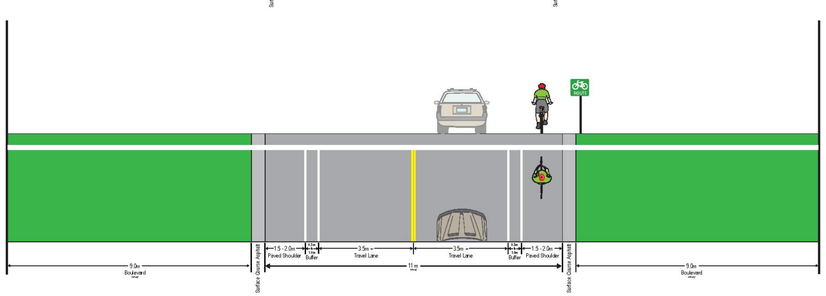
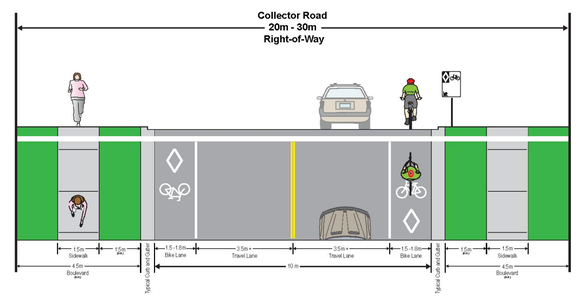
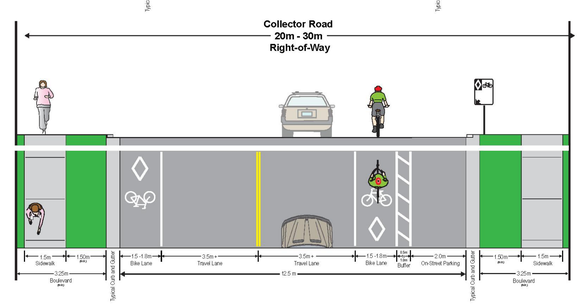




Collector Road

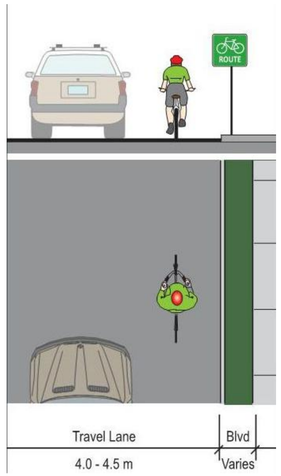


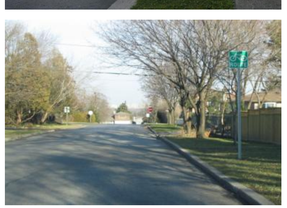


ACTIVE TRANSPORTATION AND ROAD IMPROVEMENTS

Proposed Active Transportation Facility Types

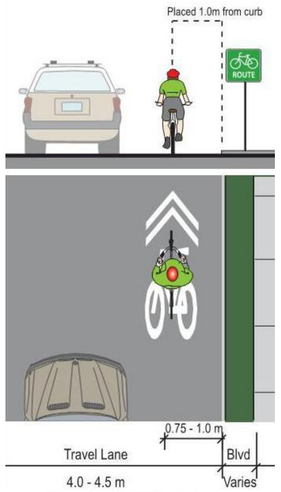
Signed Only Bicycle Route

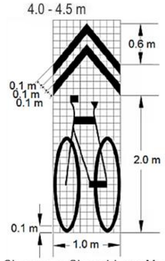




- Bicycles and motor vehicles share the travel lane, no physical space created for bicycles
- No pavement markings for bicycles
- Supplemented by Bicycle Route signs
- Typical for urban residential streets where motor vehicle traffic volumes and speeds are low, and rural roads where traffic volumes are low
- Pedestrians use the sidewalks in urban areas , and may use the road shoulder in rural areas

Signed Only Bicycle Route with Sharrows

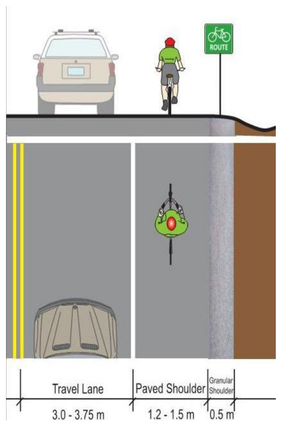


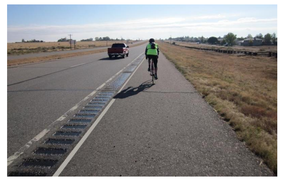


Sharrow or Shared Lane Marking
Credit: TAC, 2012 (modified)

- Similar characteristics to the Signed Route on a regular width lane and/or the signed route on a wide lane, bicycles and motor vehicles share the travel lane
- Good solution for urban / main street areas where on-street parking cannot be removed to implement bicycle lanes and motor vehicle traffic is moving slowly
- The 'Sharrow' or Shared Use Lane marking/symbol on the road surface indicates to motorists that cyclists are using the same space as motorists
- Placement of the Sharrow symbol indicates to cyclists where they should be traveling on the road (e.g. approximately 1.0m from the curb where there is no on-street parking)
- Pedestrians use the sidewalks in urban areas

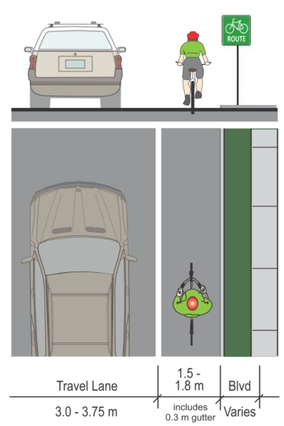
Rural Paved Shoulder





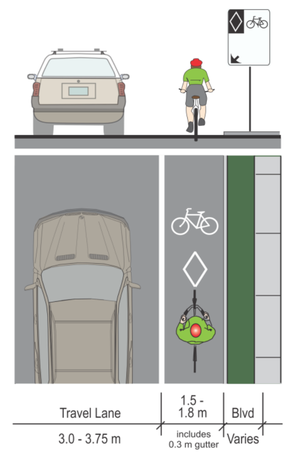
- Cyclists travel on the paved asphalt shoulder beyond the white 'Edge Line'
- Typical on a rural cross-section road (no curbs) where motor vehicle traffic volumes and speeds are higher
- Although not a designated space the paved shoulder provides a convenient location for cyclists to travel
- Other benefits include a reduction in the amount of maintenance required on the gravel shoulders; extending the service life of the road as heavy vehicles are travelling further away from road edge, and reducing run -off- the -road motor vehicle accidents
- Width of shoulder should be increased where motor vehicle traffic volumes are higher. May include a painted buffer
- Supplement with Bicycle Route Signs and/or Share the Road Signs
- Pedestrians may use the paved shoulder or remaining gravel shoulder

Urban Paved Shoulder



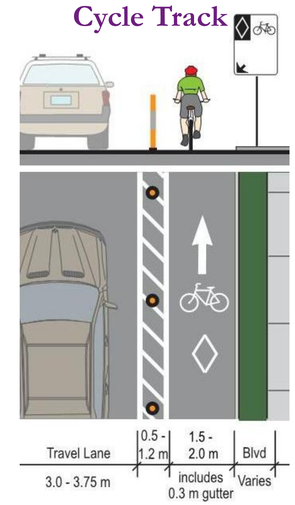
- Signed Only Route with a white 'Edge Line'. Cyclists may travel on the paved asphalt shoulder
- Although not a designated space the paved shoulder provides a convenient location for cyclists to travel
- Typical on an urban cross-section road (with curbs) where there is demand for on-street parking
- Urban paved shoulders are not an alternative to bicycle lanes but may be used on roadways where there is a strong, site specific justification for not implementing conventional bicycle lanes.
- Dimensions should be the same as those for bicycle lanes to allow for future upgrades.

Bicycle Lane



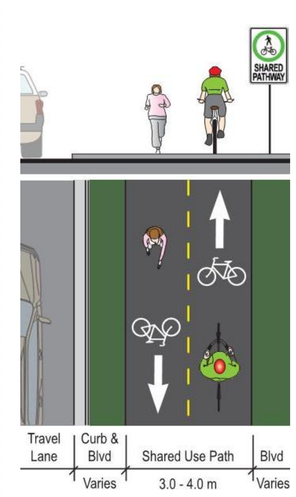
- Cyclists travel in a dedicated space in the traveled portion of the road and motor vehicles are not permitted to park or stand in the bike lane
- Typical on an urban cross-section road where motor vehicle traffic volume and speeds are higher than typical threshold values for shared space routes
- One way facility on each side of the road
- Width of bicycle lane should be increased (to a maximum of 2.0m) where motor vehicle traffic volumes, percentages of trucks and commercial vehicles and motor vehicle speeds are higher
- Alternatively a buffer zone can be introduced between the motor vehicle lane and the bicycle lane to further increase the space/separation between the cyclist and motor vehicles
- Pedestrians use sidewalks in urban areas (sidewalks would be installed at least on one side of the road along designated AT routes where none currently exists in the urban area)

Separated/Buffered Bicycle Lane/ Cycle Track



- Cyclists travel in a dedicated and separated space in the traveled portion of the road
- Separation may be created by different methods including a rolled curb, bollards, a median, a row of on-street parking or landscape treatments
- Can be used on an urban cross-section road where cycling demand is high (e.g. to create a cross-City priority cycling route)
- Facility may be one-way one each side of the road or two-way on one side of the road, one-way facilities on each side of the road have fewer operational issues at intersections
- Maintenance and operations (e.g. winter snow clearing and snow storage) need to be carefully considered in the design of the cycle track
- Pedestrians use sidewalks

In-Boulevard Multi-use Trail



- On an urban cross-section road, a two-way multi-use trail for pedestrians and cyclists above the curb, can include the multi-use path on one side and a sidewalk on the other side
- On a rural cross-section road, a two-way multi-use trail for pedestrians and cyclists that is within the road right-of-way but set back from the edge of the road shoulder
- Surface may be compacted granular (e.g. limestone screening) or hard surface (e.g. asphalt)
- A yellow centre line may be used on busier asphalt surface trails to help delineate travel lanes
- A good facility choice where there is high cycling demand and a large proportion of the users are youth or seniors with a low to moderate level of experience, and where there are few intersections/conflict points per kilometer but not a good choice where lot frontages are narrow with many intersections per kilometer

Off-Road Multi-use Trail

- A multi-use trail that is outside of the road right-of-way through a park, public open space corridor, along a utility corridor or other linear facility such as an abandoned railway line
- Surface may be compacted granular (e.g. limestone screening) or hard surface (e.g. asphalt)
- Surface may vary, may be granular in rural areas and asphalt in urban areas to accommodate a wider range of users
- Accommodates the widest range of skill/experience levels

SHARED FACILITIES → **DEDICATED FACILITIES** → **SEPARATED FACILITIES**

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Figure 67
Greater Sudbury Transportation Study
Recommended 2031
Cycling and Pedestrian Network

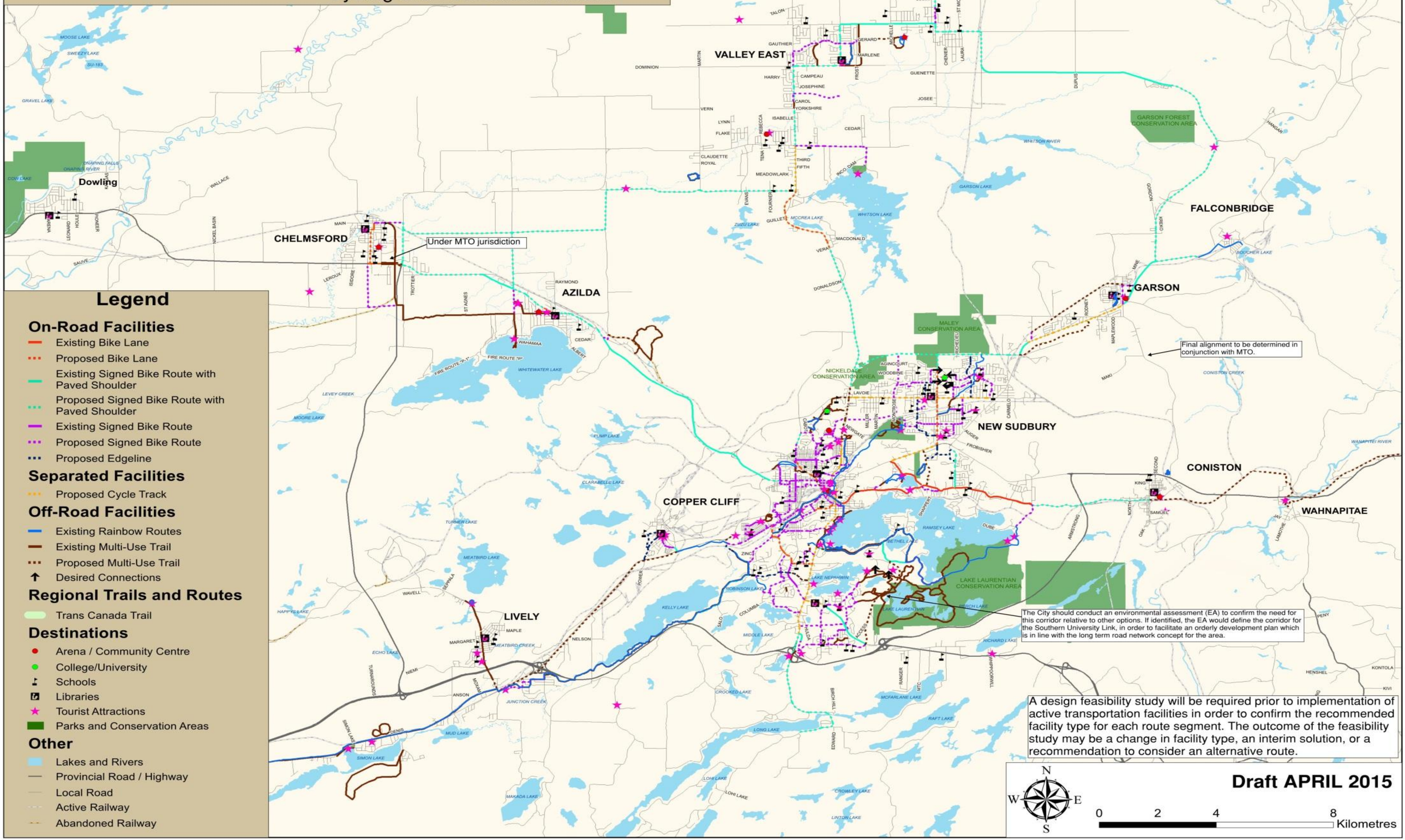
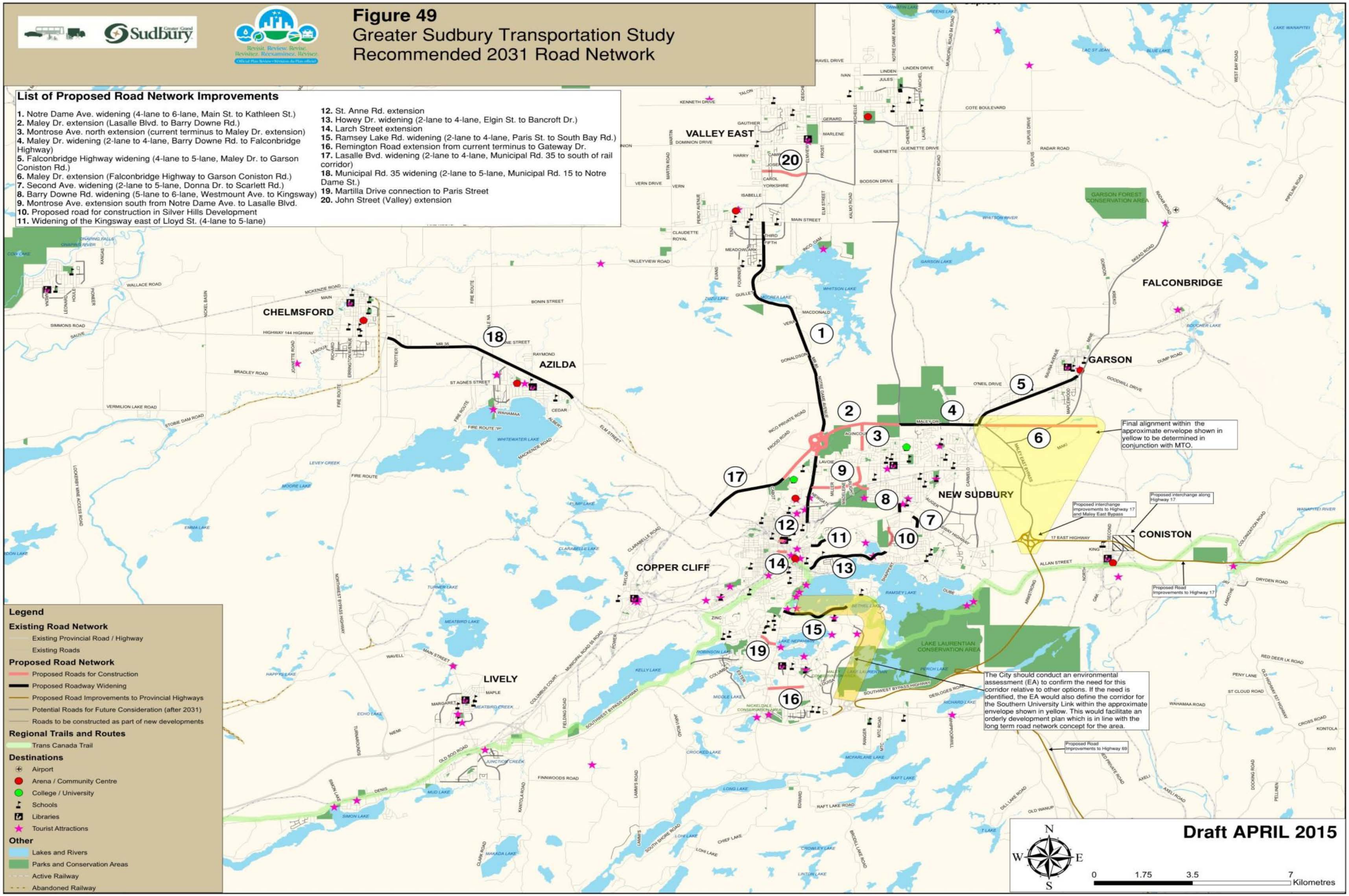


Figure 49
Greater Sudbury Transportation Study
Recommended 2031 Road Network



MULTI-MODAL RECOMMENDATIONS

Multi-modal Transportation Recommendations

- Active Transportation
  - Implement active transportation projects as shown in the Transportation Study Report
- Roads
  - Implement road projects as shown in the Transportation Study Report

Multi-modal Transportation Recommendations

- Transit
  - Prepare a Transit Master Plan that builds upon the Transportation Study Report
- Greater Sudbury Airport
  - Implement road improvements that will improve travel time and access to the airport

Multi-modal Transportation Recommendations

- Rail
  - If in the future the rail companies consider the relocation of rail lines or rail yards, the City should work with them throughout the relocation process
- Roundabouts
  - Develop a roundabouts policy statement

THANK YOU FOR ATTENDING

Please take a moment to fill out the comment sheet and provide us with your feedback

More information on the project can be found on the City's website:

www.greatersudbury.ca > Living in Greater Sudbury > Official Plan > Roads > Traffic and Transportation > Draft Transportation Master Plan

If you have any other questions please contact:

David Shelsted
Director of Roads and Transportation
City of Greater Sudbury
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, ON P3A 5P3
Tel: 705-674-4455 ext. 3688
Fax: 705-560-6109
Email: david.shelsted@greatersudbury.ca

Jim Gough
Manager, Transportation Planning
MMM Group Limited
100 Commerce Valley Drive W
Thornhill, ON L3T 0A1
Tel: 905-882-7283
Fax: 905-882-0055
Email: goughj@mmm.ca

Brett Sears
Project Manager
MMM Group Limited
100 Commerce Valley Drive W
Thornhill, ON L3T 0A1
Tel: 905-882-4211 ext. 6573
Fax: 905-882-0055
Email: searsb@mmm.ca

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