

**2. ST. LAURENT BOULEVARD TRANSIT AND INTERSECTION  
IMPROVEMENTS ENVIRONMENTAL ASSESSMENT STUDY -  
RECOMMENDATIONS**

**ÉTUDE D'ÉVALUATION ENVIRONNEMENTALE SUR L'AMÉLIORATION DES  
INSTALLATIONS DE TRANSPORT EN COMMUN ET DES INTERSECTIONS  
SUR LE BOULEVARD SAINT-LAURENT - RECOMMANDATIONS**

**COMMITTEE RECOMMENDATIONS**

**That Council:**

- 1. Approve the functional design for the St. Laurent Boulevard Transit and Intersection Improvements Environmental Assessment Study, as described in this report and supporting documents; and**
- 2. Direct the General Manager of the Infrastructure Services Department to finalize the Environmental Study Report and proceed with its posting for the 30-day public review period in accordance with Schedule C of the Ontario Municipal Class Environmental Assessment Process.**

## RECOMMANDATIONS DU COMITÉ

### Que le Conseil :

1. **Approuve la conception fonctionnelle relative à l'Étude d'évaluation environnementale sur l'amélioration des installations de transport en commun et des intersections sur le boulevard Saint-Laurent, comme il est précisé dans le présent rapport et dans les documents d'accompagnement;**
2. **Demande au directeur général des Services d'infrastructure de finaliser le rapport d'étude environnementale et de le publier pour une période d'examen public de 30 jours, conformément à l'annexe C du processus d'évaluation environnementale municipale de portée générale de l'Ontario.**

## DOCUMENTATION / DOCUMENTATION

1. Acting Deputy City Manager, Planning and Infrastructure Portfolio report dated 30 March 2016 (ACS2016-PAI-INF-0002).

Rapport du Directeur municipal adjoint intérim, Portefeuille de l'Urbanisme et Infrastructure daté le 30 mars 2016 (ACS2016-PAI-INF-0002).

Report to  
Rapport au:

Transportation Committee  
Comité des transports  
6 April 2016 / 6 avril 2016

and Council  
et au Conseil  
13 April 2016 / 13 avril 2016

Submitted on March 30, 2016  
Soumis le 30 mars 2016

Submitted by  
Soumis par:

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Ward: ALTA VISTA (18)

File Number: ACS2016-PAI-INF-0002

**SUBJECT: St. Laurent Boulevard Transit and Intersection Improvements  
Environmental Assessment Study - Recommendations**

**OBJET: Étude d'évaluation environnementale sur l'amélioration des  
installations de transport en commun et des intersections sur le  
boulevard Saint-Laurent - Recommandations**

## **REPORT RECOMMENDATIONS**

**That Transportation Committee recommend Council:**

- 1. Approve the functional design for the St. Laurent Boulevard Transit and Intersection Improvements Environmental Assessment Study, as described in this report and supporting documents; and**
- 2. Direct the General Manager of the Infrastructure Services Department to finalize the Environmental Study Report and proceed with its posting for the 30-day public review period in accordance with Schedule C of the Ontario Municipal Class Environmental Assessment Process.**

## **RECOMMANDATIONS DU RAPPORT**

**Que le Comité des transports recommande au Conseil :**

- 1. D'approuver la conception fonctionnelle relative à l'Étude d'évaluation environnementale sur l'amélioration des installations de transport en commun et des intersections sur le boulevard Saint-Laurent, comme il est précisé dans le présent rapport et dans les documents d'accompagnement;**
- 2. De demander au directeur général des Services d'infrastructure de finaliser le rapport d'étude environnementale et de le publier pour une période d'examen public de 30 jours, conformément à l'annexe C du processus d'évaluation environnementale municipale de portée générale de l'Ontario.**

## **BACKGROUND**

The Official Plan (OP) prepares the City to better manage growth and change over the next 20 years. In conjunction with the OP, the Council approved 2013 Transportation Master Plan (TMP), includes a 2031 Network Concept designed to meet overall travel demand at the TMP mode share targets. As part of this network concept, the segment of St. Laurent Boulevard between Innes Road / Industrial Avenue and Smyth Road is identified as a Transit Priority Corridor. This segment forms part of a longer corridor linking Bayshore and St. Laurent Stations along Baseline Road, Heron Road, Walkley Road and St. Laurent Boulevard.

The TMP identified an at grade bus rapid transit (BRT), providing minimized transit trip delays and operating costs, while fostering increased ridership.

The 2013 Ottawa Cycling Plan (OCP) designates St. Laurent Boulevard as a spine route, where due to the volume and speed of traffic, separated cycling facilities are preferred and improvements should be pursued in tandem with construction projects.

Based on the TMP, OCP and the traffic analysis, the functional design for the St. Laurent Boulevard Transit and Intersection Improvements Environmental Assessment (EA) study, as outlined in this report and attached documents, provides a recommended plan for transit and intersection improvements on St. Laurent Boulevard from north of Innes Road / Industrial Avenue to south of Smyth Road. The recommended plan will be implemented to address safety, congestion and operation issues.

The EA study was carried out in accordance with the Municipal Class EA Process (Schedule C). The study area is depicted in Figure 1.

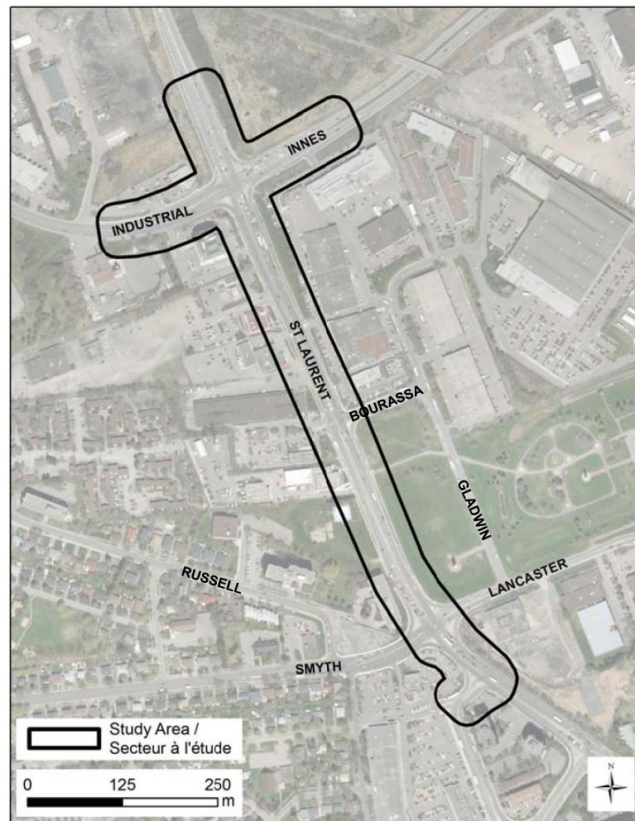


Figure 1: Study Area

## **DISCUSSION**

### **Project Need**

As set out in the OP and TMP, the need for St. Laurent Boulevard transit and intersection improvements is driven by the anticipated 30% growth in the City's population between 2006 and 2031, with the direction to develop a transportation system emphasising non-automobile modes. To minimize overall travel delay and infrastructure costs, the TMP establishes a target morning peak period transit modal share of 26% by 2031. It also establishes guidelines, programs and investments designed to make transit use more competitive with automobile use. Notably, it includes recommendations to support the development of Complete Streets, which incorporate the physical elements allowing a street to offer safety, comfort and mobility for all users, regardless of their age, ability, or mode of transportation.

The intersection of St. Laurent Boulevard / Innes Road / Industrial Avenue was identified as a high collision location in 2004, and a Safety Improvement Program (SIP) study was completed for this location in 2007. The SIP study made several recommendations to address the collision patterns at the intersection, including:

- Widen the southbound and westbound approaches to provide double left-turn lanes and remove the split phasing.
- Add high friction asphalt in the northbound and southbound directions.

Since 2007, the collision pattern has continued and as SIP routinely coordinates with construction projects, this is an ideal time to make improvements.

A need for capacity improvements had previously been identified at this intersection, which currently operates at Level of Service (LOS) F in the morning and afternoon peak hours.

### **Recommended Plan**

The recommended plan along the segment of St. Laurent Boulevard from north of Innes Road / Industrial Avenue to south of Smyth Road includes an exclusive bus transit lane in each direction, with a raised cycle track in each direction between the bus lane and the sidewalk, as shown in Figure 2.



**Figure 2- Transit Lanes with raised Cycling Track.**

### Highlights

An overview of the recommended plan is shown in Document 1, Figures 1 and 2. It consists of the following elements:

- The construction of an exclusive bus lane and raised cycle track in each direction along St. Laurent Boulevard between Innes Road / Industrial Avenue and Smyth Road;
- Intersection modifications at the Innes Road / Industrial Avenue / St. Laurent Boulevard intersection;
- Replacement of traffic signal plant and street lighting throughout the study area; and,
- Minor modifications to the entrance to Elmvale Terminal, south of Smyth Road, to improve traffic operations at the intersection.

By complementing the evolving commercial, industrial and mainstreet uses, the recommended plan, with an exclusive bus lane and a dedicated raised cycling track along an arterial roadway, will improve:

- transit operations by providing reliable service, encouraging ridership and lower operational costs;
- traffic operations by removing transit from mixed traffic, congestion will be reduced; and,
- safety.

The recommended plan will provide a key link from the southeast area of the City to light rail transit (LRT) following the opening of the Confederation Line in 2018 at St-Laurent Station.

The Innes Road / Industrial Avenue / St. Laurent Boulevard intersection has been identified under the Network Modification Program. The Network Modification Program strives to maximize the efficient operation of the transportation network through geometric modification at congested intersections. This intersection will be widened to accommodate an additional left turn lane on each approach. The new turn lanes at the easterly and westerly approaches, designed to accommodate truck traffic, will improve the capacity and efficiency of the intersection. The southbound transit-only lane on St. Laurent Boulevard will begin adjacent to the westbound channelized right turn lane, immediately north of the intersection. The northbound transit-only lane will extend through the intersection and merge with general traffic approximately 100 metres to the north.

On the south side of the intersection, minor traffic island modification and painted cross-rides parallel to the pedestrian crosswalk will accommodate a multi-use pathway crossing of St. Laurent Boulevard between the existing pathway along Innes Road and a future pathway extending west along Industrial Avenue. At the eastbound approach, a smart channel and protected bike box (Document 1, Figure 3) will be added to improve the visibility and safety of cyclists proceeding across the channelized right turn lanes.

Between the Innes Road / Industrial Avenue intersection and Smyth Road, existing wide curb lanes and turning lanes will be removed to accommodate an exclusive 3.5 metre bus lane as the rightmost lane in each direction. These lanes will be identified by pavement markings and signage. Next to the bus lanes, a 2.0 metre raised cycle track will be constructed in each direction, and the existing sidewalks will be reconstructed to a width of 2.0 metres. A 1.5 metre concrete median and two 3.5 metre travel lanes in each direction will be maintained along this segment (Document 1, Figure 4).

Between the Innes Road / Industrial Avenue intersection and Bourassa Street, the cycle tracks will be buffered from the roadway by the existing hydro poles (Document 1, Figure 5). Between Bourassa Street and Smyth Road, the existing hydro poles will be relocated between the cycle track and the sidewalk. At intersections, major business entrances, and other high-conflict areas, painted cross-rides will be provided to improve the visibility of the cycle track and its users (Document 1, Figure 6).



Street lighting and traffic signals at the Innes Road / Industrial Avenue, Bourassa Street and Smyth Road intersections will be fully replaced and updated.

At the entrance to Elmvale Terminal, the existing islands will be modified to improve the visibility and function of the existing left-turn lane for general traffic.

### **Property Impacts**

The recommended plan requires approximately 100 m<sup>2</sup> of private property outside of existing right-of-way, at the southeast corner of Innes Road and St. Laurent Boulevard, up to 3.5 metres past the current property line.

The property acquisition will not impede the commencement of the project, but is required to complete the project.

### **Costs**

The cost estimate to design and construct the recommended plan is \$9 million, divided into \$6.05 million for stage one and \$3 million for stage two in 2016 dollars. This Class B estimate is in accordance with the Council approved Project Delivery Review and Cost Estimating system.

Operational costs, including maintenance, sweeping, snow plowing and additional snow removal requirements, are in addition to the capital costs outlined above.

### **Implementation**

Once approved, the EA covers the complete recommended plan, both stage one and stage two and is effective for a period of 10 years. A staged implementation is recommended for the St. Laurent Boulevard Transit and Intersection Improvements and is an efficient and affordable approach to project delivery. It supports the delivery of services by considering the current needs outlined by the OP, TMP and traffic analysis, allowing for further examination and assessment.

The first stage, with an estimated cost of \$6 million in 2016 dollars, is scheduled to start construction in summer 2016. A comprehensive schedule will be developed during the detailed design stage of the project. Stage one will consist of the following:

- Relocation of utilities;
- Reconstruction of the Innes Road / Industrial Avenue / St. Laurent Boulevard intersection;

- Construction of northbound and southbound bus lanes between Innes Road / Industrial Avenue and Bourassa Street;
- Construction of a southbound-only bus lane from Bourassa Street to north of Smyth Road, which will become the southbound right-turn lane onto Smyth Road;
- Removal of the northbound bus bay on the east side of Lancaster Road;
- Modifications to the Elmvale Terminal entrance as proposed;
- Implementation of cycling tracks within the above noted project areas; and,
- Implementation of street lighting within the project area.

Funding for this project has been reserved in the following programs: Transit Priority (TP), Safety Improvement Program (SIP), and Network Modification Program (NMP).

The estimated cost to implement the second stage is \$3 million in 2016 dollars. Stage two will commence when warranted by traffic conditions and will include:

- Reconstruction of the Bourassa Street / St. Laurent Boulevard intersection;
- Reconstruction of the Smyth / Lancaster / St. Laurent Boulevard intersection; and,
- Construction of northbound bus lanes and raised cycle track from Lancaster Road to Bourassa Street.

Funding for stage two will be sought through the regular budget process as required.

## **RURAL IMPLICATIONS**

There are no rural implications with this report.

## **CONSULTATION**

A comprehensive consultation plan was undertaken to ensure that all concerns and issues were identified and given appropriate consideration.

The following consultation activities were undertaken as part of this project:

- Formal public notification;
- A project website;
- Consultation with City of Ottawa and utility technical staff;
- A Public Open House (POH);
- Meetings with Councillor's office and community stakeholders; and

- Consultation with Aboriginal communities.

A summary of public comments received during the study is included in Document 1.

### **COMMENTS BY THE WARD COUNCILLOR(S)**

Councillor Cloutier fully supports the scope and design of this project. The addition of transit lanes, raised cycle track, and improved pedestrian infrastructure will serve many, particularly upon the opening of the Confederation Line, without creating substantial impacts for motorists. Given that this stretch of St. Laurent Blvd has significant daily volumes, mitigating construction impacts for daily commuters and businesses, as well as during Ottawa 2017 celebrations should be high priority.

### **LEGAL IMPLICATIONS**

There are no legal impediments to implementing the recommendations as outlined in this report.

### **RISK MANAGEMENT IMPLICATIONS**

There are risk implications. These risks have been identified and explained in the report and are being managed by the appropriate staff.

### **ASSET MANAGEMENT IMPLICATIONS**

The recommendations documented in this report are consistent with the City's Comprehensive Asset Management (CAM) Program (City of Ottawa Comprehensive Asset Management Program) objectives.

The recommended approach, of linking opportunities along with a staged implementation for the St. Laurent Boulevard Transit and Intersection Improvements, is an efficient and affordable approach to project delivery which supports a forward looking approach to meet future challenges, including changing demographics and populations, legislative and environmental factors.

## FINANCIAL IMPLICATIONS

The estimated cost to design and construct stage 1 of the recommended plan is \$6.05 million. Funds are available as follows:

	<b>Account</b>	<b>Funding</b>
	906514 Transit Priority Corridor 2012	\$100,000
	907823 Transit Priority Road & Signals	\$4,172,000
<b>Transit Priority Total</b>		<b>\$4,272,000</b>
	906334 2012 Safety Improvement	\$330,000
	906782 2013 Safety Improvement	\$273,000
	907272 2014 Safety Improvement	\$125,000
<b>Safety Improvement</b>		<b>\$728,000</b>
	906942 2013 Network Modification	\$393,000
	907451 2014 Network Modification	\$499,000
	907878 2015 Network Modification	\$158,000
<b>Network Modification</b>		<b>\$1,050,000</b>
<b>Grand Total</b>		<b>\$6,050,000</b>

To facilitate financial management and reporting, funds will be consolidated into one account. A new account, St. Laurent Transit and Intersection Improvements, will be created under Transit Services. Funding, per the above table, will be transferred into the new account.

The estimated cost to implement the second stage is \$3 million, in 2016 dollars. Funding for stage two will be sought through the regular budget process, as required.

Operating costs, including maintenance, sweeping, snow plowing and additional snow removal requirements, are in addition to the capital costs outlined above.

## ACCESSIBILITY IMPACTS

The design and construction of the St. Laurent Boulevard Transit and Intersection Improvements will be designed to meet the accessibility goals set by Council.

## **ENVIRONMENTAL IMPLICATIONS**

The EA study analyzed the project's effects on the social, cultural, physical and natural environments within the study area and has developed appropriate mitigation measures which conform to City and Provincial environmental policies, standards, regulations and legislation. Additionally, where appropriate, mitigation measures will be prescribed in the construction contracts and specifications.

## **TERM OF COUNCIL PRIORITIES**

The work outlined in this report is supportive of the following Term of Council Priorities:

- TM1 – Ensure sustainable transit services
- TM3 - Provide infrastructure to support mobility choices
- TM4 – Provide alternative mobility choices
- GP3 – Make sustainable choices

## **SUPPORTING DOCUMENTATION**

Document 1: St. Laurent Transit and Intersection Improvements – Environmental Study Report

## **DISPOSITION**

Following Transportation Committee and Council approval of the functional design, the Infrastructure Services Department will finalize the Environmental Study Report and make it available for the 30-day public review period in accordance with the Municipal Class Environmental Assessment Process (Schedule C). Following this, staff will proceed with the staged implementation of the project.