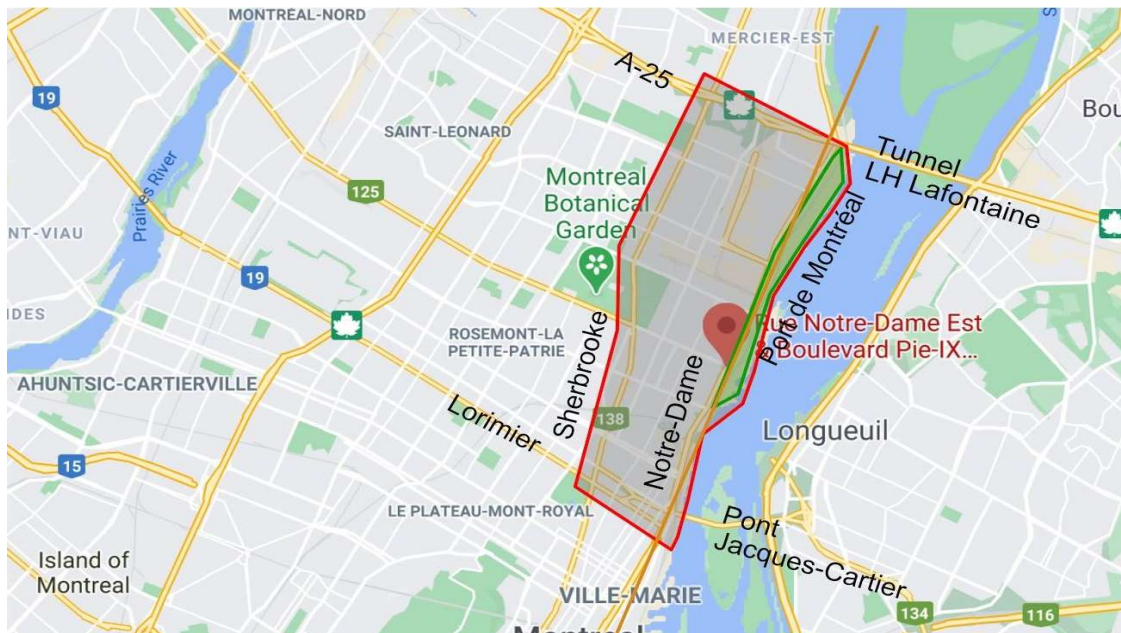


Montreal – Smart Mobility Challenge

Scope Area

The targeted area is as follows:



Context

This sector of the island is strategic for several reasons.

1. The Notre-Dame axis is an important transit axis for accessibility to downtown
2. The Sherbrooke axis is an important transit axis for accessibility to downtown
3. The Notre-Dame axis is an important transit axis for accessibility to the port of Montreal
4. At both ends of the sector there are 2 major bridges, the Louis-H Lafontaine tunnel and the Jacques-Cartier bridge
5. The Louis-H Lafontaine tunnel will be undergoing major work in the coming years
6. Hazardous materials are prohibited in the Louis-H Lafontaine tunnel
7. The sector is a sector with a strong residential environment
8. The sector has around 80 intersections with traffic lights connected to a centralized manager (Transcore)



Objectives

1. Provide a product , technology, or solution that can optimize the mobility of the sector in order to meet the next issues:
 - a. Improve port accessibility for trucking
 - b. Improve through traffic for downtown access
 - c. Improve travel within the quadrilateral
 - d. Improve safety for vulnerable users
 - e. Reduce noise for residents
 - f. Identify “use cases” for connected vehicles (V2X)
 - i. Ex: Local business delivery (grocery store)
 - ii. Avoid preemption for buses and emergency vehicles
2. The proposals may contain the following elements
 - a. Sensors and detectors of all kinds
 - b. Vehicle beacon system (travel time)
 - c. Identification of KPIs in order to validate the performance of the proposed solution
 - d. CV2X concepts
 - e. Data collection strategy
 - f. An integration component