



NATIONAL CAPITAL COMMISSION
COMMISSION DE LA CAPITALE NATIONALE

Société de transport de l'Outaouais (STO) public transit system linking Gatineau's West End to Ottawa – Scenarios under review

Board of Directors
June 25, 2020

Presentation

1. STO Study Background
2. Scenarios in Gatineau
3. Crossing of the Ottawa River
4. Scenarios in Ottawa to Integrate with the OCTranspo OTrain
5. Summary and Next Steps



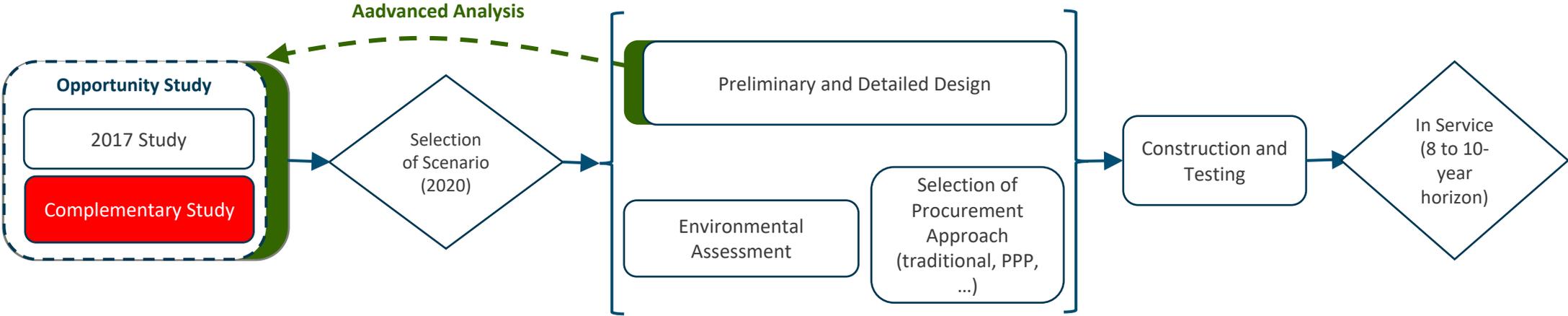
Project Main Phases

Current phase:

Opportunity Study

Next Phases:

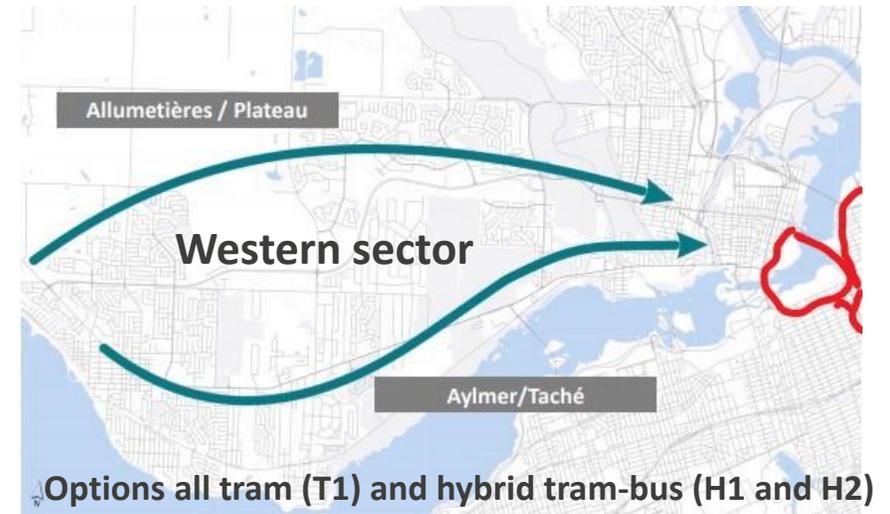
The remainder of the Project includes the following:



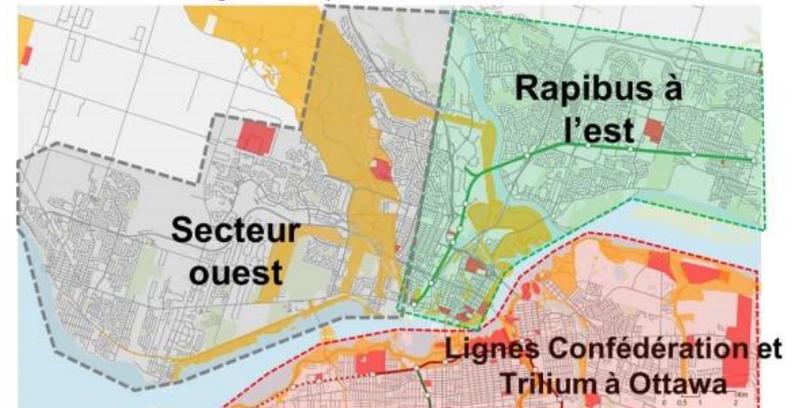
STO Public Transit System Linking Gatineau's West End to Ottawa

Construction in 10 years

- Population growth
- Increased congestion
- Demand for an efficient public transit system
- Western sector: Increased ridership demand by 57% to 81% (2031)



Couverture de la région métropolitaine en réseaux structurants :



Capital Planning Framework

- Plan for Canada's Capital - 2017 - 2067
- Gatineau Park Plan (2005)
- Capital Core Area Sector Plan (2005)
- Sustainable Development Strategy (2018-2023)
- Interprovincial Transit Strategy (2013)
- Confederation Boulevard Guidelines (2011)

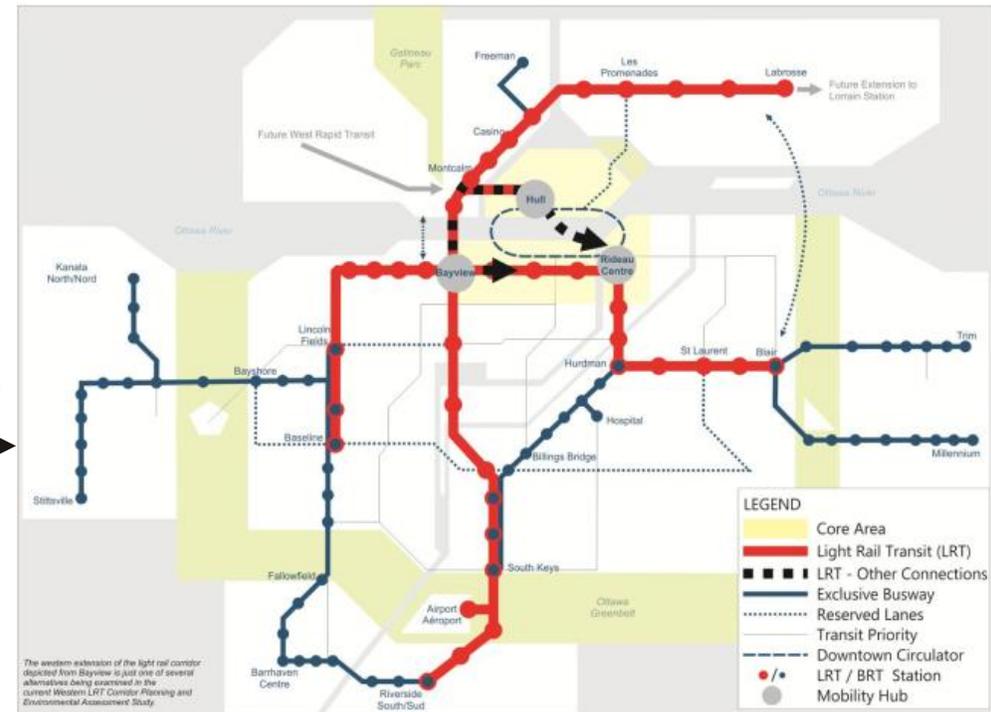


Integrated Transit Strategy (NCC)

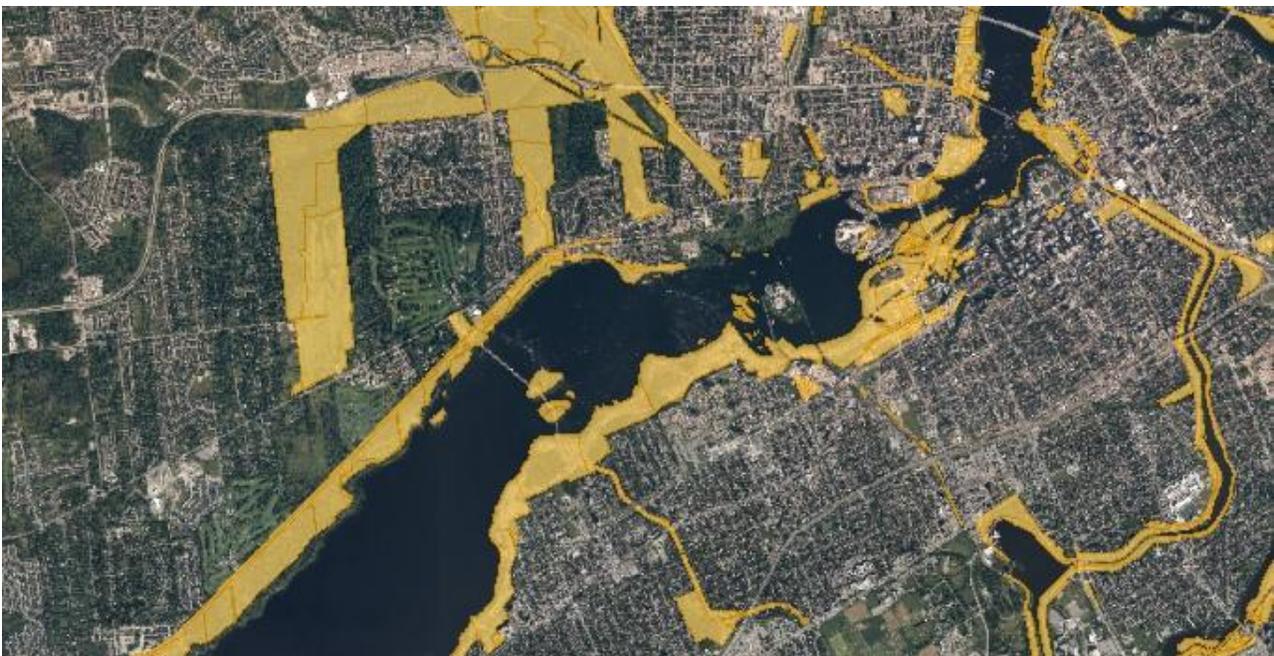
- Interprovincial, continuous, accessible, integrated and easy to use
- Modern and sustainable for the long term
- Partnership between organizations

INTEGRATED
TRANSIT
STRATEGY

- Two cities
- Two provinces
- Two transit organizations
- Federal strategic role (NCC)

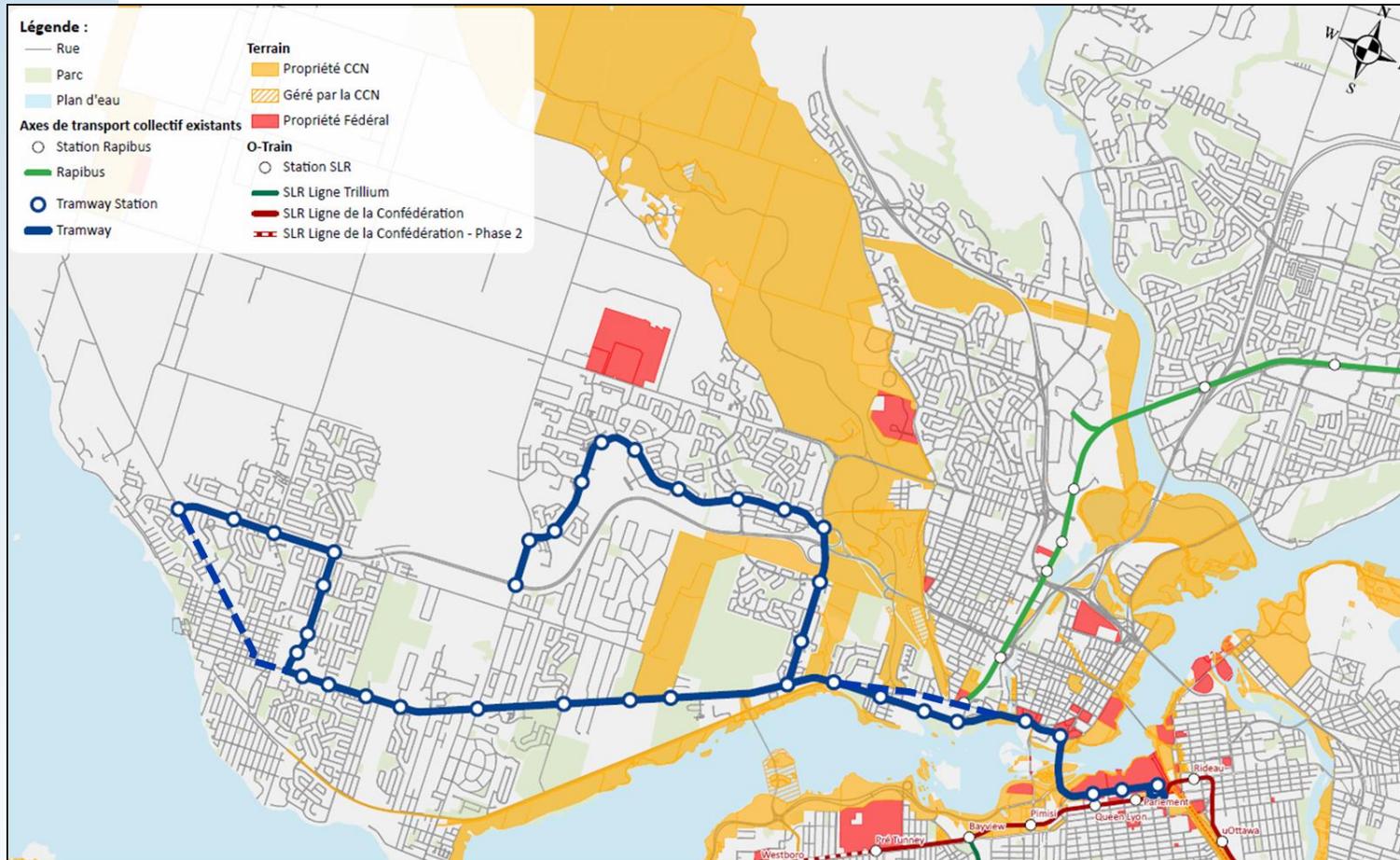


2 - Scenarios in Gatineau



3 Scenarios Carried Forward for Assessment

1. All tram

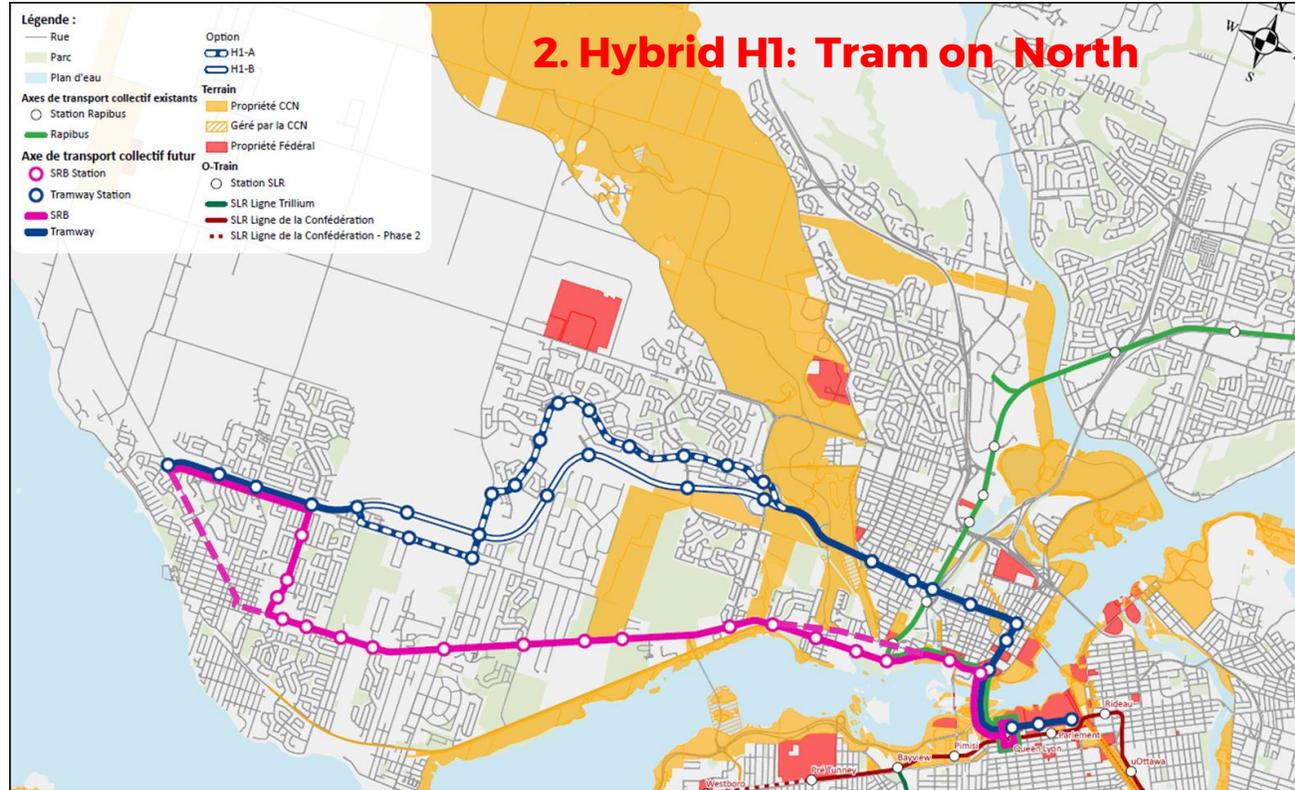


Strasbourg, France

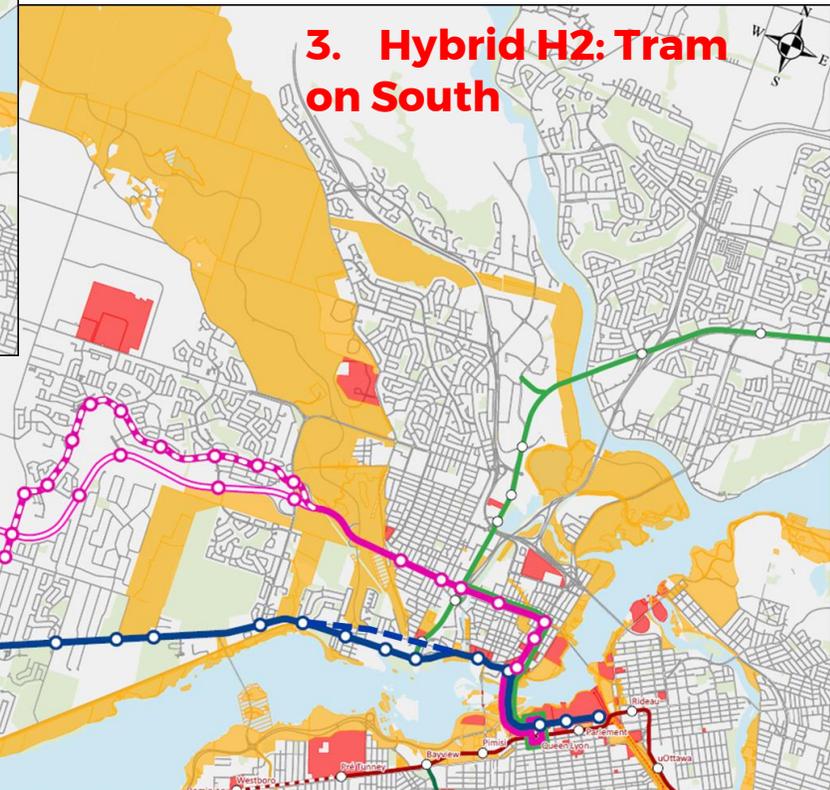


Bordeaux, France

3 Scenarios Carried Forward for Assessment

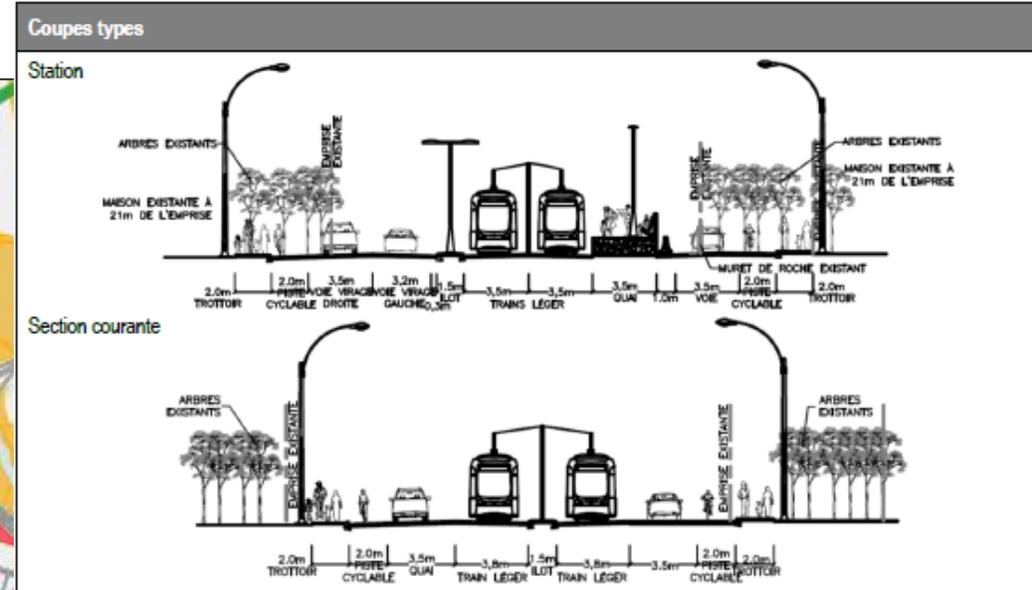
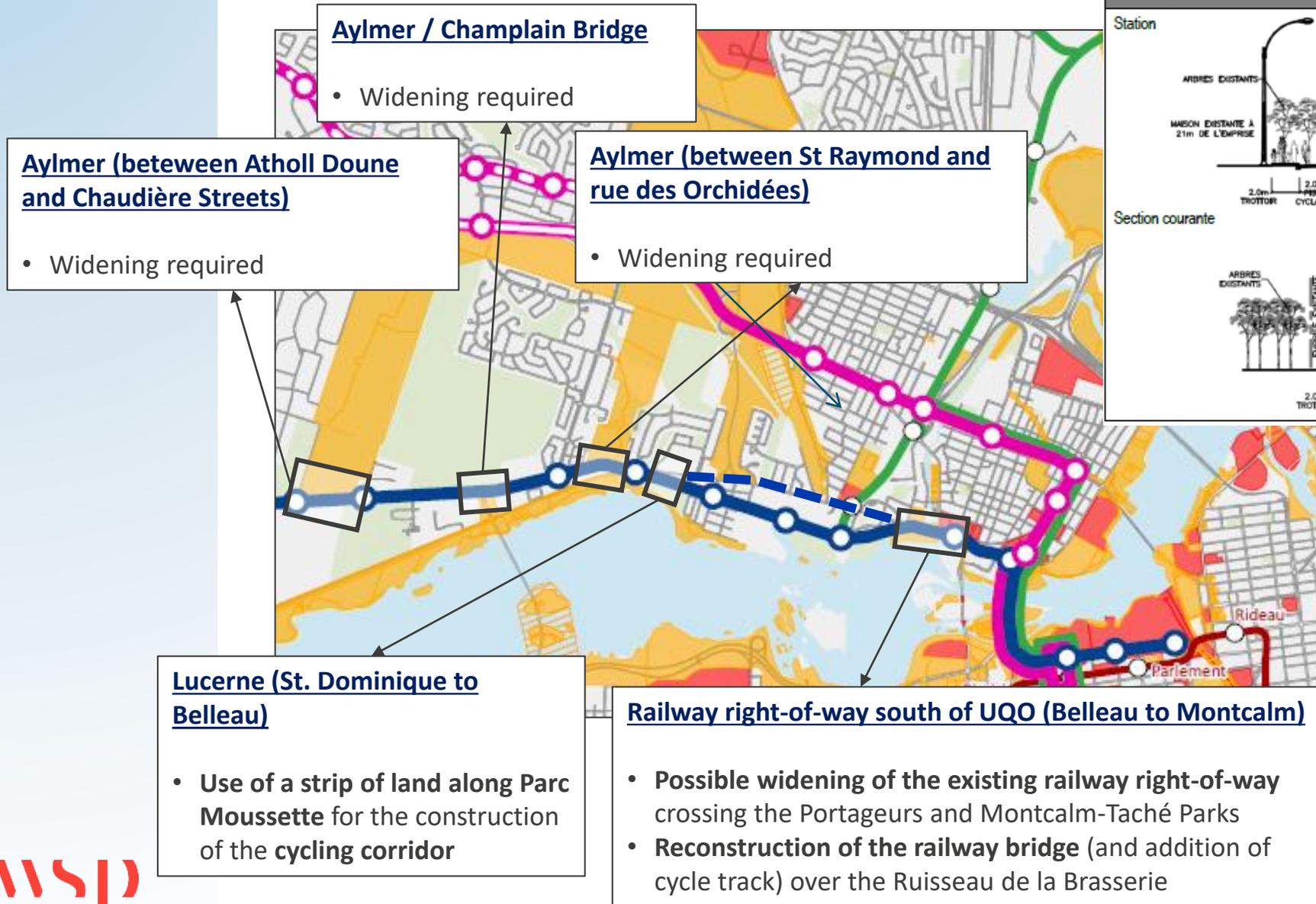


Eugene, USA

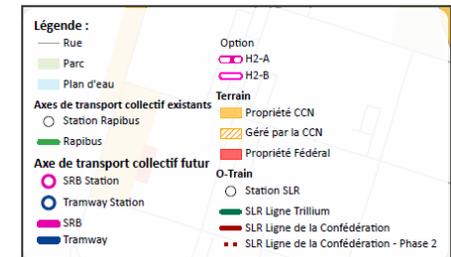


Gatineau, Canada

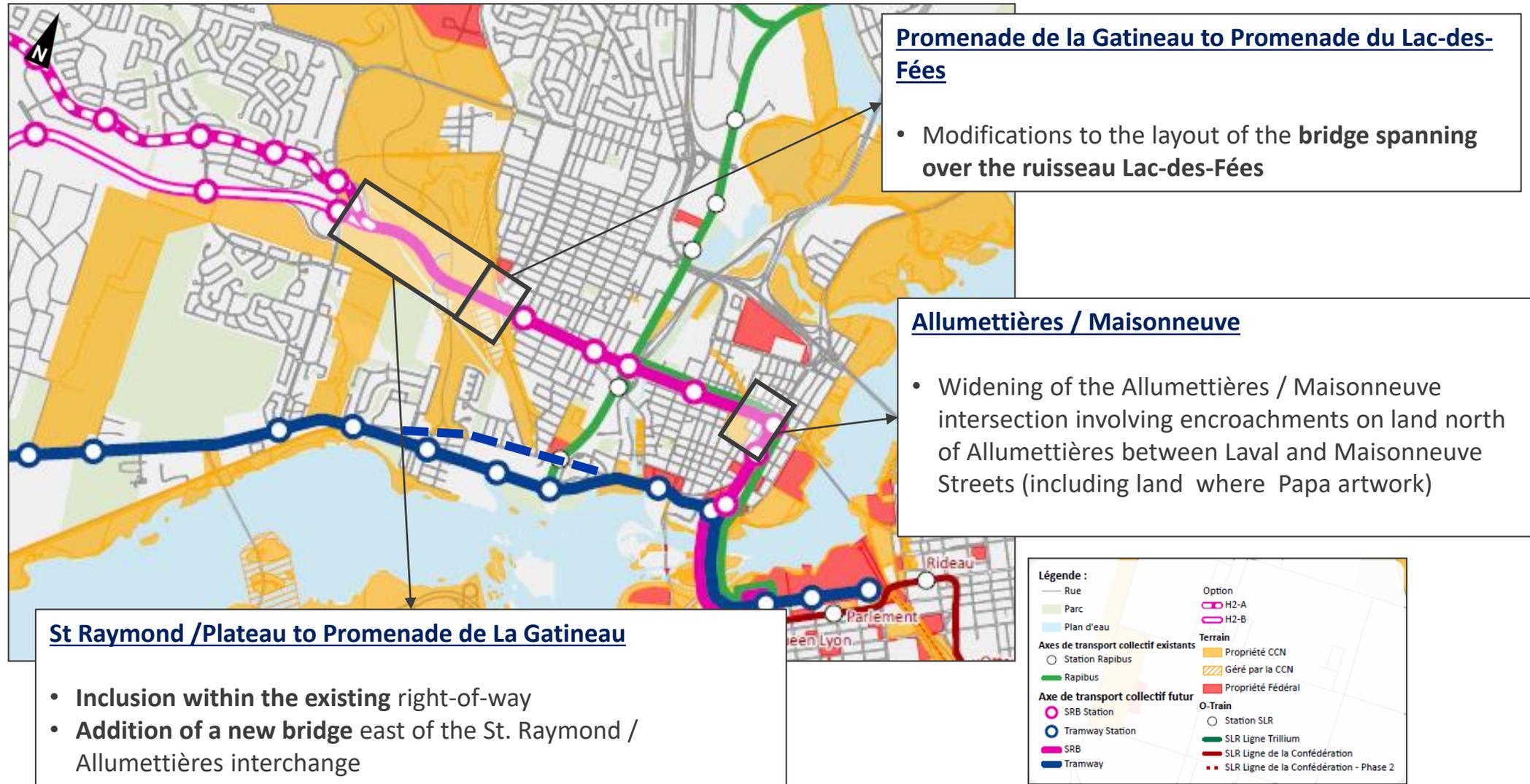
Main Impacts on NCC and Federal Lands - All Scenarios



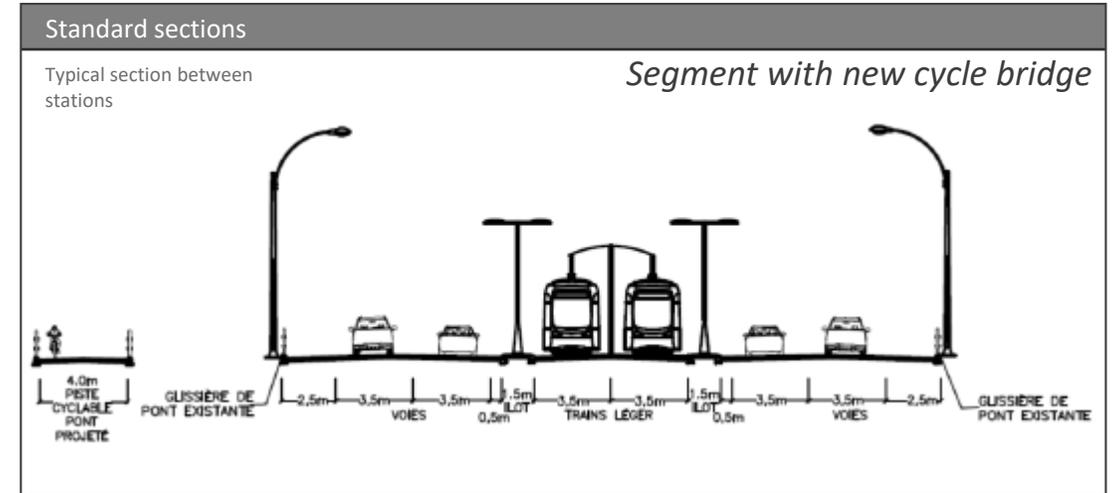
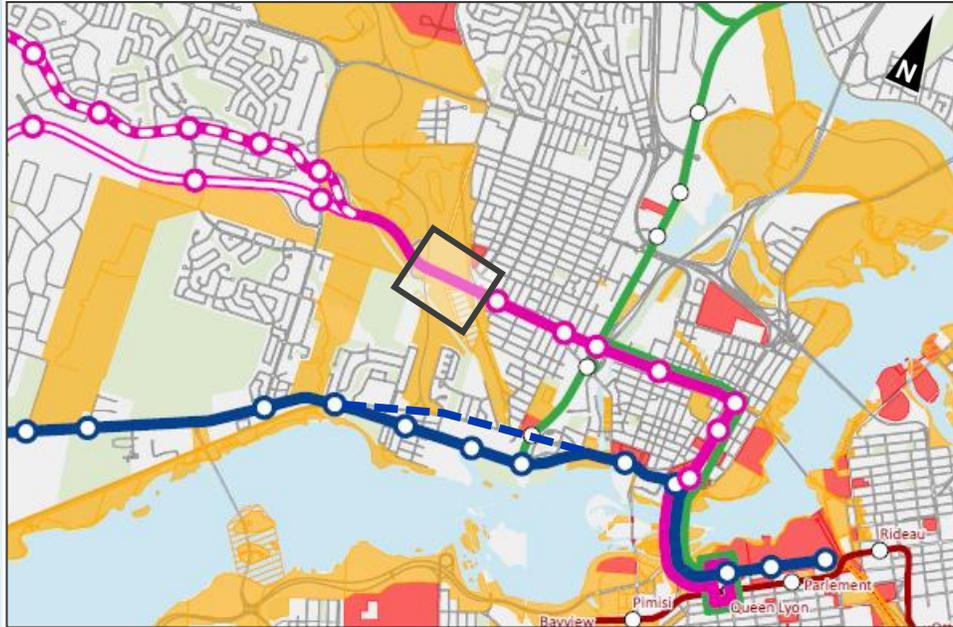
Typical width:
 19.8 – 27.6 m (between stations)
 24,8 – 28,9m (at stations)



Main Impacts on NCC and Federal Lands - Hybrid Scenarios



Main implications on CCN and Federal grounds - Examples



Typical width without recreational pathway: 29.5m)

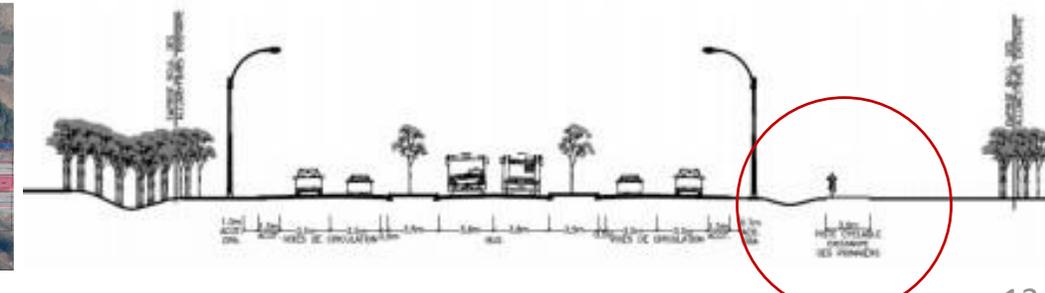
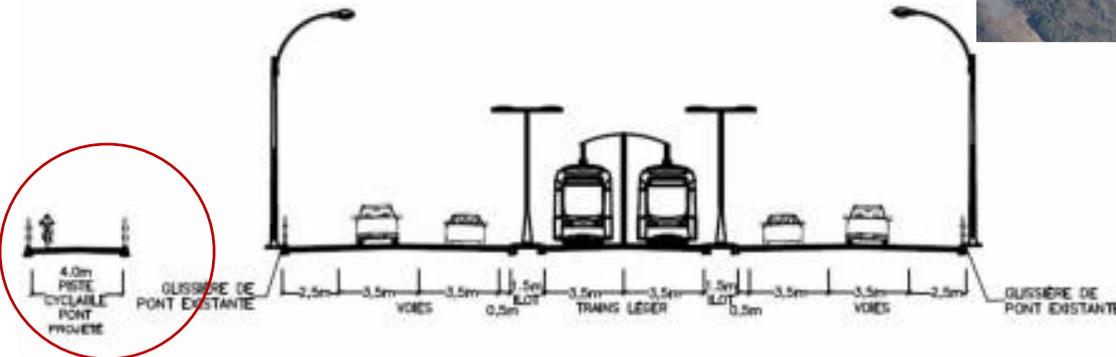
Gatineau Parkway to Lac-des-Fées Parkway

- Modifications to the layout of the bridge over the ruisseau du Lac-des-Fées :
 - integration of the integrated corridor within the existing width
 - addition of a footbridge for a parallel recreational pathway

Gatineau Park (des Allumettières Boulevard)

Gatineau Park Plan Objectives:

- Prioritize access through sustainable transportation modes
- Protect the Park's environment and avoid fragmentation
- Concentrate new regional infrastructure within existing roads



3 – Crossing the Ottawa River



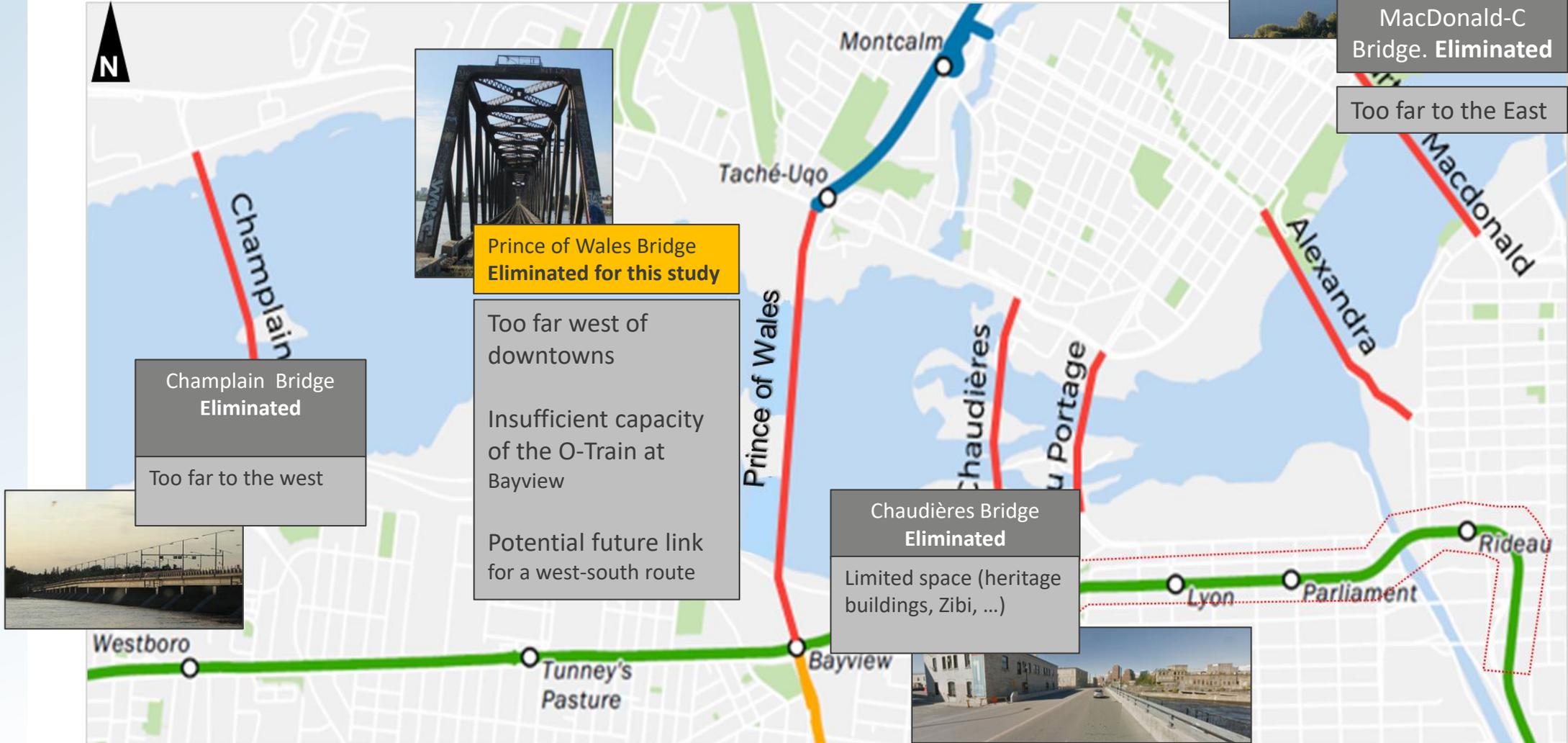
Analysis of Current Crossings

Legend:

-  Rapibus
-  O-Train (Confederation Line)
-  Underground portion
-  O-Train (Trillium Line)

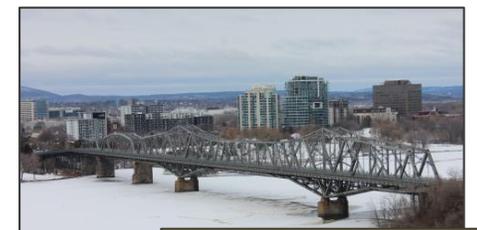


Macdonald-C Bridge. Eliminated
Too far to the East



Analysis of Current Crossings

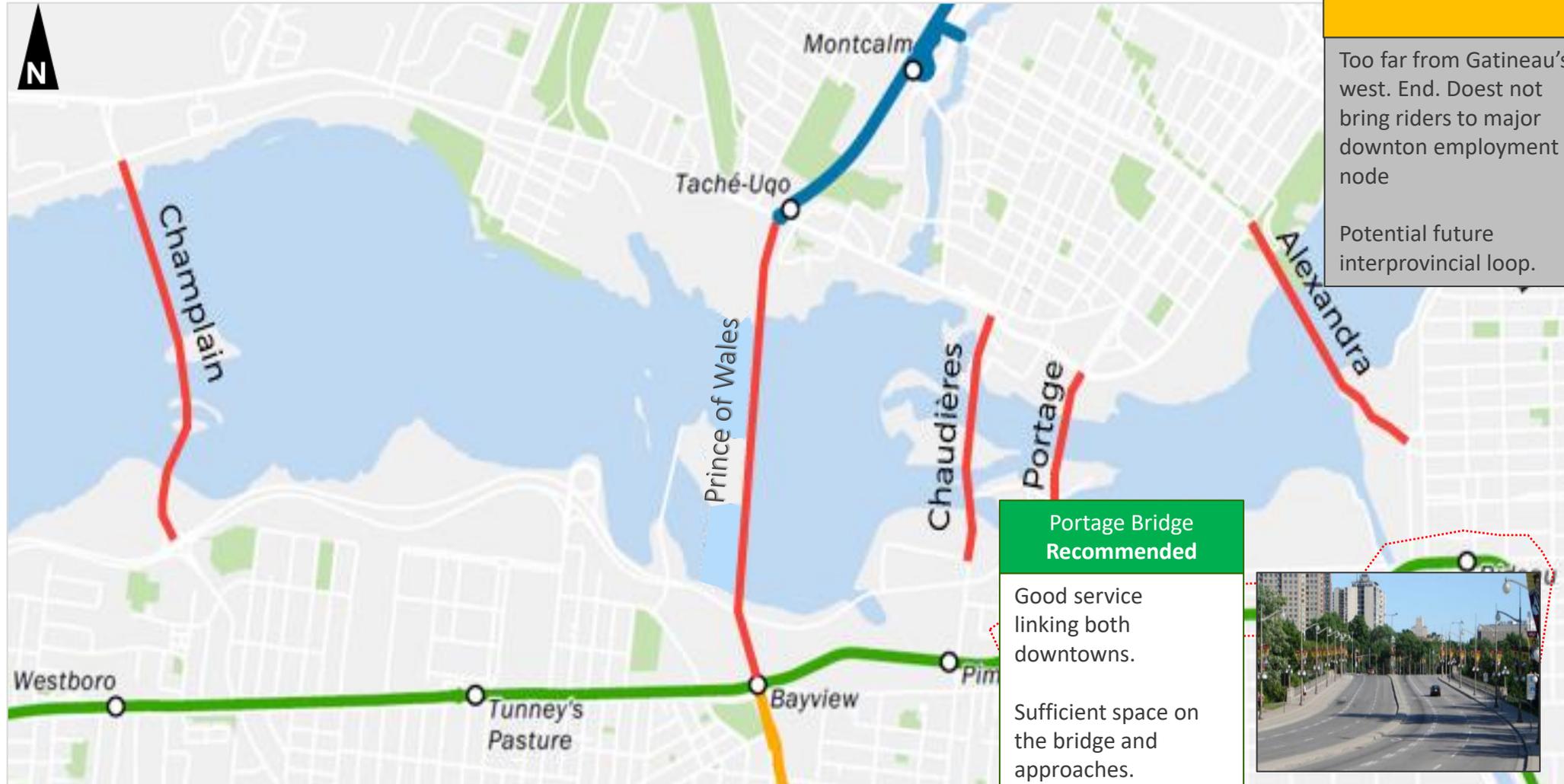
- Legend:
- █ Rapibus
 - █ O-Train (Confederation Line)
 - Underground portion
 - █ O-Train (Trillium Line)



**Alexandra Bridge
Eliminated for this study**

Too far from Gatineau's west. End. Does not bring riders to major downtown employment node

Potential future interprovincial loop.



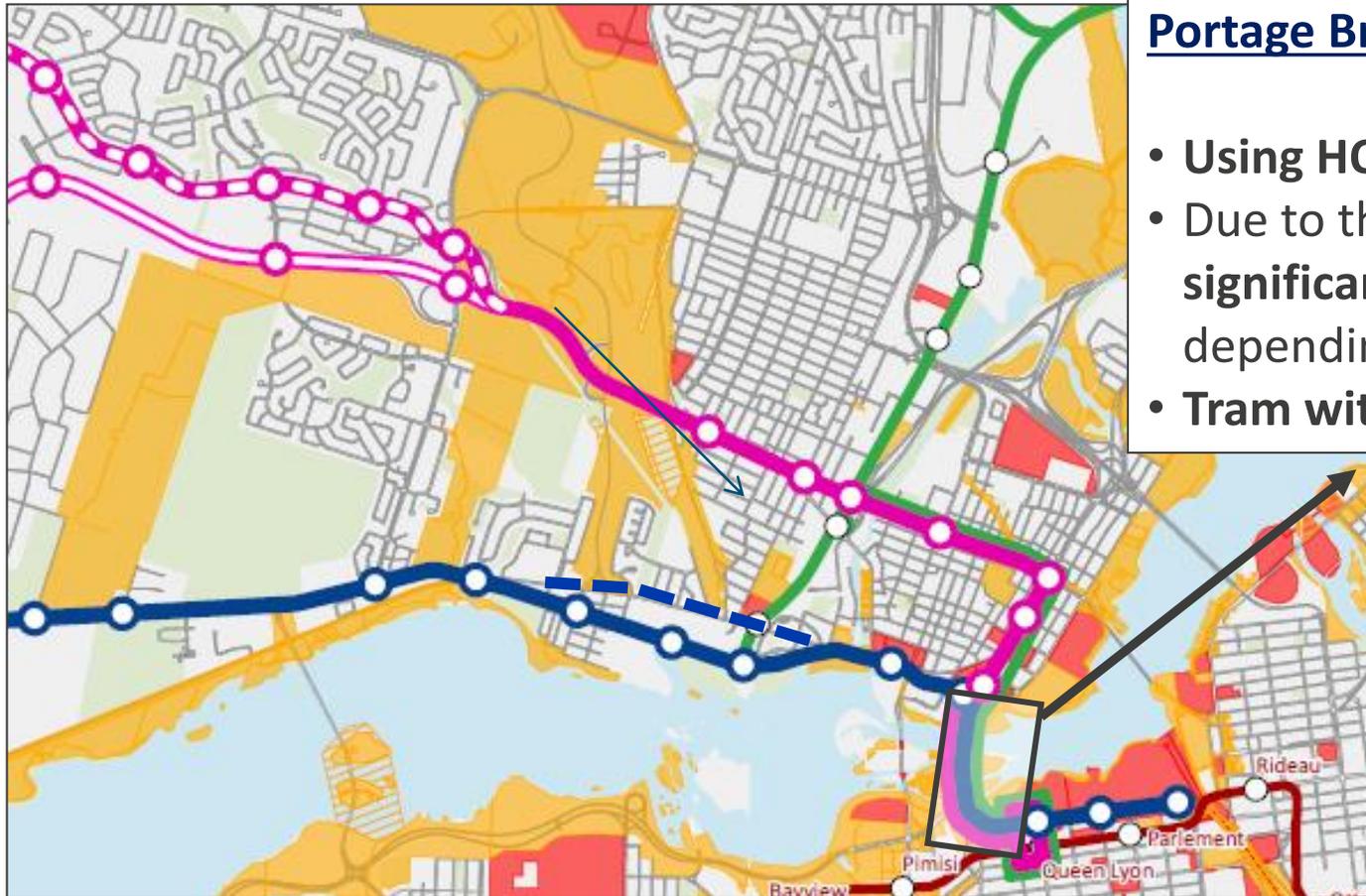
**Portage Bridge
Recommended**

Good service linking both downtowns.

Sufficient space on the bridge and approaches.

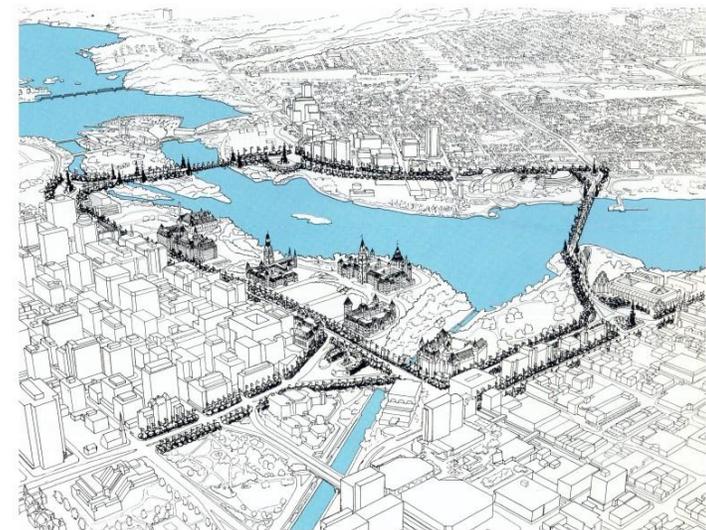


Crossing the Ottawa River



Portage Bridge

- Using HOV lanes
- Due to the tramway's structural loads, **more or less significant reconstruction** (different possibilities depending on the insertion of the corridor).
- **Tram without catenary** (on batteries) on Portage



4 – Scenarios in Ottawa to integrate with O-Train

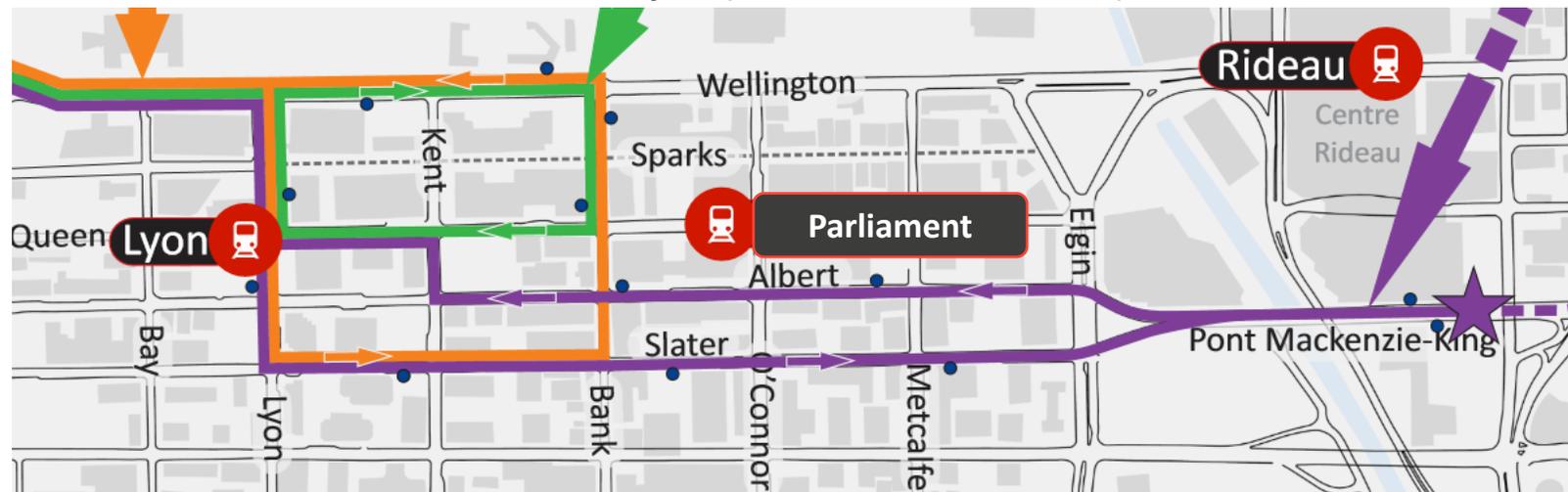


Highlights of Options

Tram component from Gatineau, crossing the Portage Bridge



Buses crossing via Portage and MacDonald-Cartier, with combined use of three loops (in mixed traffic)



Options for Tram Component

Two options:

- **Surface** integration on **Wellington Street**
- **Tunnel** integration **under Sparks Street**

The Study will assess:

- Feasibility of options
- Alignment
- Station locations

Options for Tram Component

At-grade on Wellington Street

The design of the tram on Wellington Street would be done in line with the **needs, functionality and aesthetics of Confederation Boulevard**, including its character as a **prestigious ceremonial route** and its **symbolic role of national interest** (minimal infrastructure, tram on battery,...)

https://fr.wikipedia.org/wiki/Tramway_de_Bordeaux#/media/File:Frankreich_2007.10.25_112329.jpg



Surface Integration on Wellington Street

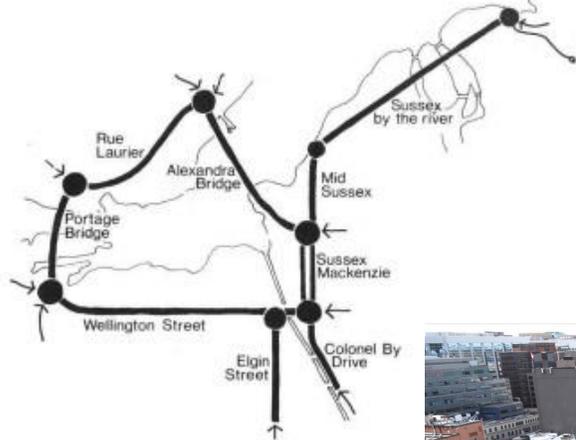


Terrain	
Yellow	Propriété CCN
Orange	Géré par la CCN
Red	Propriété Fédéral

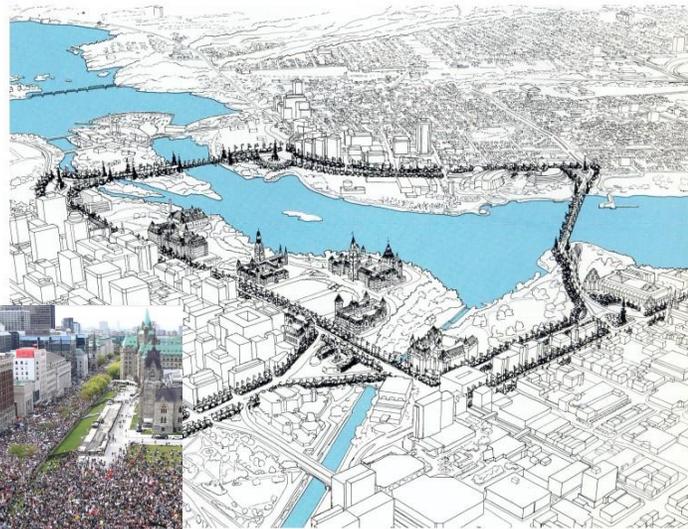
Source: <https://www.lasmainedespyrenees.fr/2020/02/13/le-tram-livre-le-dernier-des-100-tramways-de-bordeaux/>

Confederation Boulevard Context

- Ceremonial Route established in 1983
- “Capital/public space” versus “municipal/transportation” functions
- Wellington Street as Canada’s “main street”
- STO’s proposal must take into consideration the Boulevard’s values and design principles

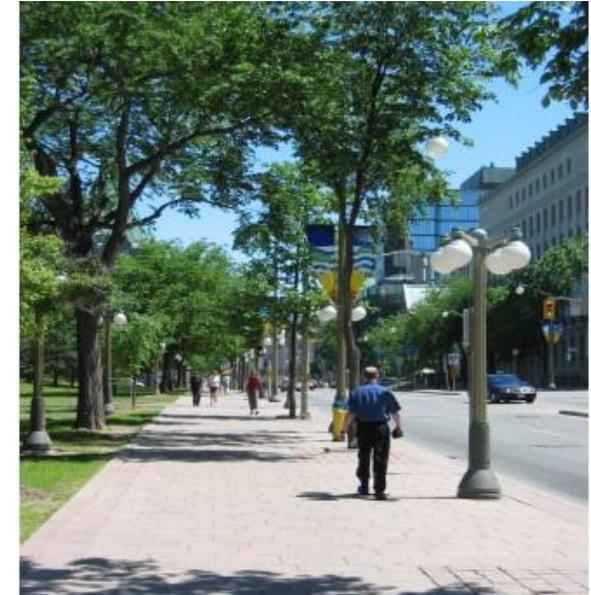
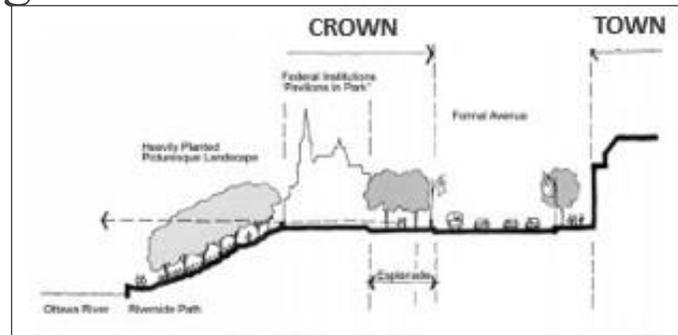
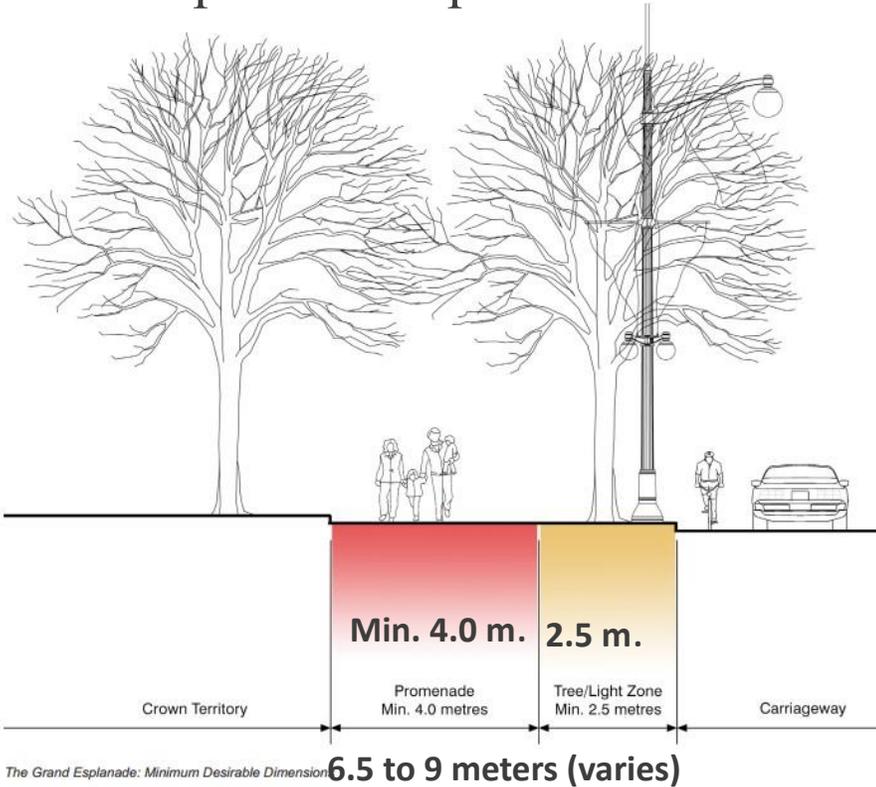


Éléments des parcours d'honneur : liens et carrefours



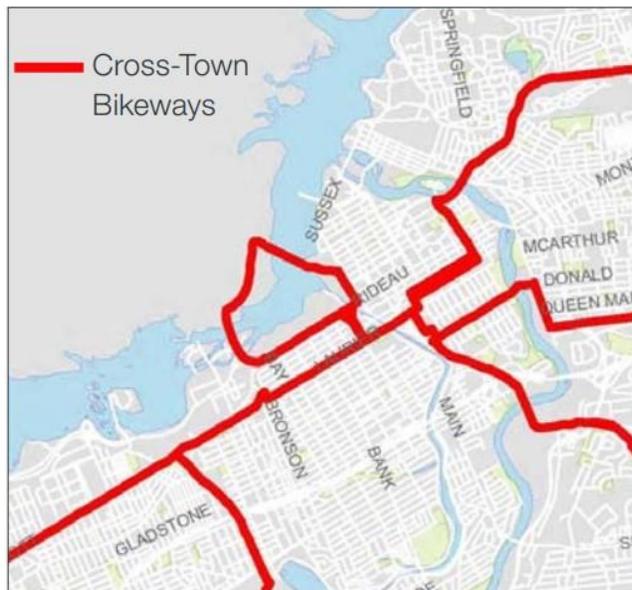
Grand Pedestrian Esplanade – Crown Side

- Prioritize pedestrians and quality of streetscape environment
- Promotes a discovery experience
- Grand pedestrian promenade encircling the Crown side



Active Mobility...for a Sustainable Balance

- Segregated bidirectional cycle track
- Loop circling Confederation Boulevard
- Partnership with City of Ottawa & Gatineau

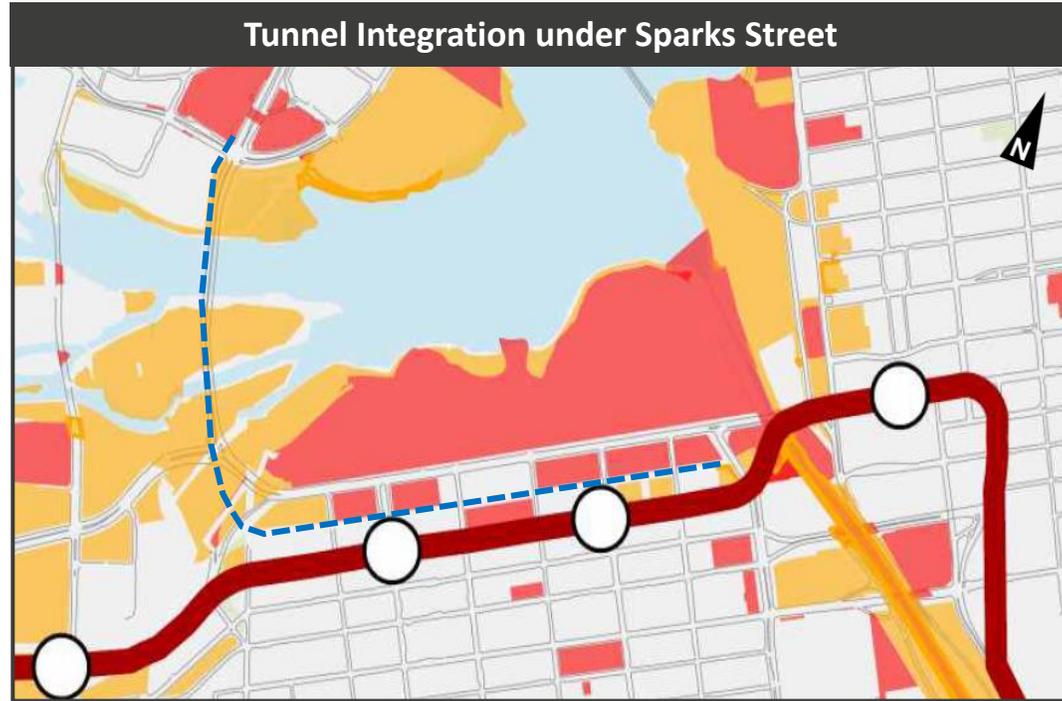


Ottawa cycling plan, 2013



Options for Tram Component

Tunnel Integration under Sparks Street



Previous Plans and Visions



Concept Plan Portage/Wellington 2008



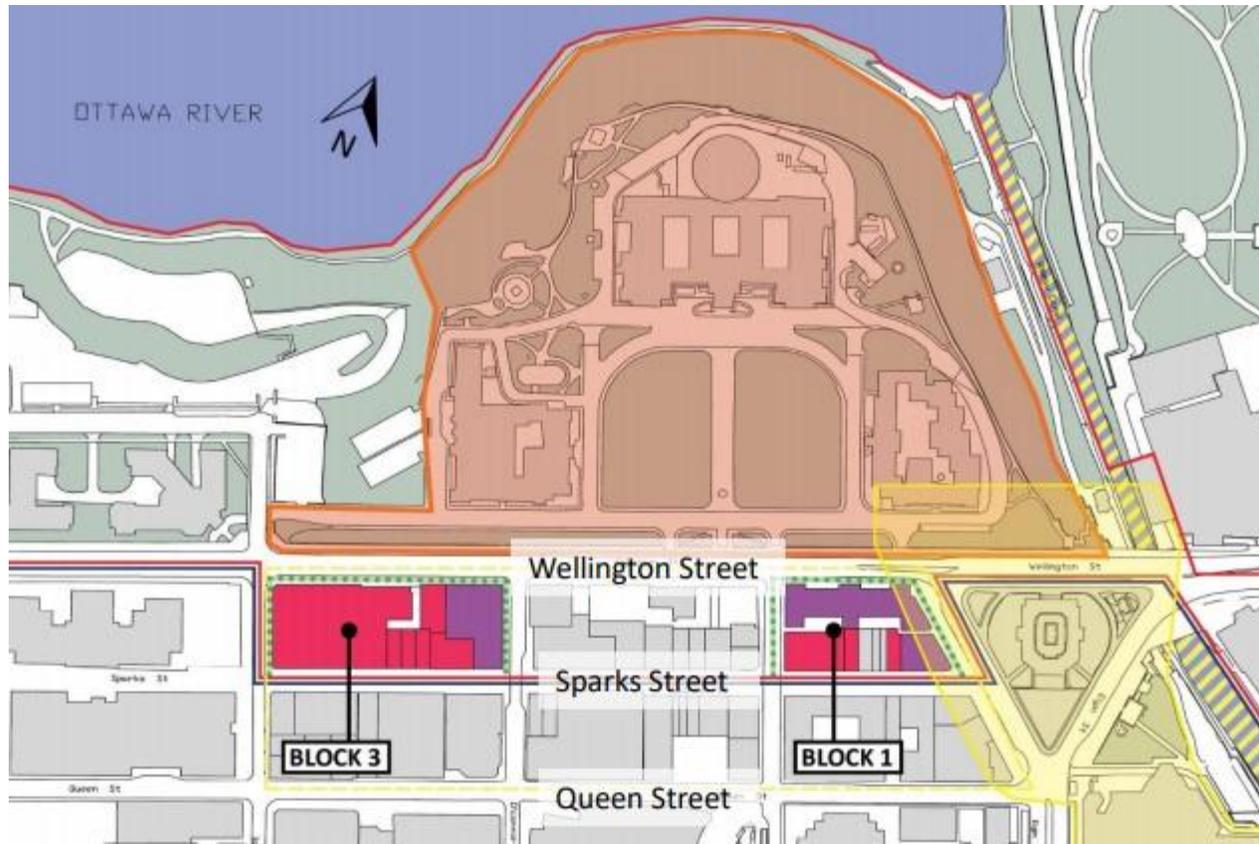
Concept Plan Confederation Square 1985



Cycling lanes, Wellington Street 2019

Other Federal Initiatives

Other federal initiatives along Wellington Street:



- Long term Vision Plan– LTVP (PSPC)
- New building on Block 2 (PSPC)
- Security measures on Block 1 and 3 (PSPC)



Options: Pros and Cons

TRAM AT GRADE ON WELLINGTON

PROS

- Ground level stations make it easier to access
- Easier to construct
- Potential extension to Alexandra Bridge

CONS

- Several uses competing for space, requiring compromises:
 - north esplanade
 - partial widening of the south sidewalk
 - Bidirectional cycling lanes
 - vehicular traffic lanes
- Security concerns : Parliamentary Precinct and at stations
- Disruptions due to demonstrations and events on Wellington Street
- Disruption to traffic and transit during construction
- Significant increase in the number of pedestrians crossing Wellington to reach the stations

TRAM IN TUNNEL UNDER SPARKS

PROS

- Light impact on traffic and at-grade amenities
- More direct connections with the O-Train
- Weather protected environment for transferring passengers
- Less vulnerable to service interruptions from external events such as demonstrations

CONS

- Higher cost than at-grade option
- Complex and lengthier construction with higher risks
- Significant underground constraints (utilities and foundations)
- Portal will impact the green pen space west of Commissioner Street
- Potential security concerns of adjacent federal institutions

5 – Summary of considerations for the Capital

ACPDR Comments	Responses
Integration of the two transit systems and coordination with other transportation projects	Staff recommendation
Visual unity of transits systems, including logos and colours	To be considered at later phases of the project
Pedestrian space and active modes should be enhanced and integrated in the Tram network on Confederation Boulevard, without sacrificing the landscape and urban furniture	Staff recommendation
Integrate the long term plan for Parliamentary Precinct	Staff recommendation
Take into consideration future changes to mobility following the pandemic	To be considered at later phases of the project
Undertake public consultations in Gatineau and Ottawa	Consultations are held in June 2020 in Gatineau and Ottawa
Public realm and user experience: At-grade tram is more difficult for persons with mobility issues Use retractable bollards to ensure safety of entrances to Parliament	To be considered at later phases of the project

Summary of Capital Interests

- Minimize Impacts on **Gatineau Park** and sensitive ecosystems
- Maintain streetscape character of **Confederation Boulevard** and make it more pedestrian friendly
- Prioritize public transit and reduce vehicular lanes on Wellington Street
- Minimize impacts on federal lands Wellington and on Parliamentary precinct's operations
- Minimize loss of mature trees
- Ensure the planned segregated bidirectional cycling lanes are taken into consideration
- Consider opportunities for re-imagining certain sections of Wellington as public spaces
- Take into consideration security requirements for federal buildings
- Find solutions for tour buses along Wellington Street
- Ensure that the **tunnel option** is evaluated fairly for its numerous advantages despite higher costs

Next steps

- Continue the assessment of scenarios in Ottawa
- June 2020: Public consultations
- August 2020: Presentation to NCC Advisory Committee on Planning, Design and Realty
- Approvals by Cities of Gatineau and Ottawa
- October 2020: NCC Approval in principle of alignment on federal lands
- Autumn 2020: Continue evaluation of scenarios
- End 2020: Study completed with final recommendation on alignment and transit mode

