



Welcome

Public Information Centre #2

Louth Street and West St. Catharines Grade Separation Environmental Assessments

June 13, 2023

5:00-7:00 pm

Thank you for attending! Please sign in at the front table.

**MOVING
ROADS
FORWARD**

CONNECTING MORE PEOPLE TO MORE POSSIBILITIES

Niagara  Region

Why We Are Here

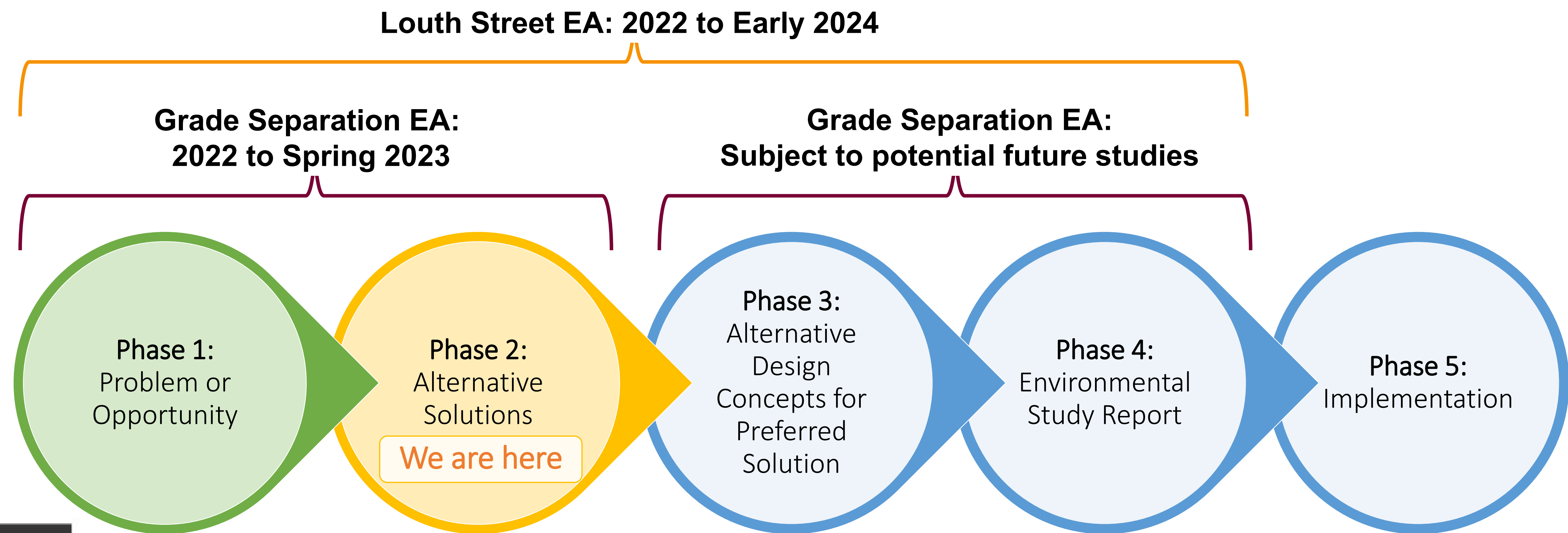
The purpose of this Public Information Centre (PIC) is to:

- Provide an update on both studies:
 - West St. Catharines Grade Separation Environmental Assessment (EA)
 - Louth Street EA
- Review the evaluation of alternative planning solutions, and recommended preliminary preferred planning solution, for both studies
- Provide an opportunity to speak with the Project Team and have your questions answered, and gather input on the preliminary preferred planning solutions
- Discuss the next steps of the studies

Environmental Assessment Process

Both the West St. Catharines Grade Separation EA and the Louth Street EA are being carried out as Schedule 'C' projects in accordance with the Municipal Class Environmental Assessment (MCEA) process, which is approved under the Ontario Environmental Assessment Act.

The MCEA planning process applies to routine projects that have predictable and readily managed environmental effects.



Study Area

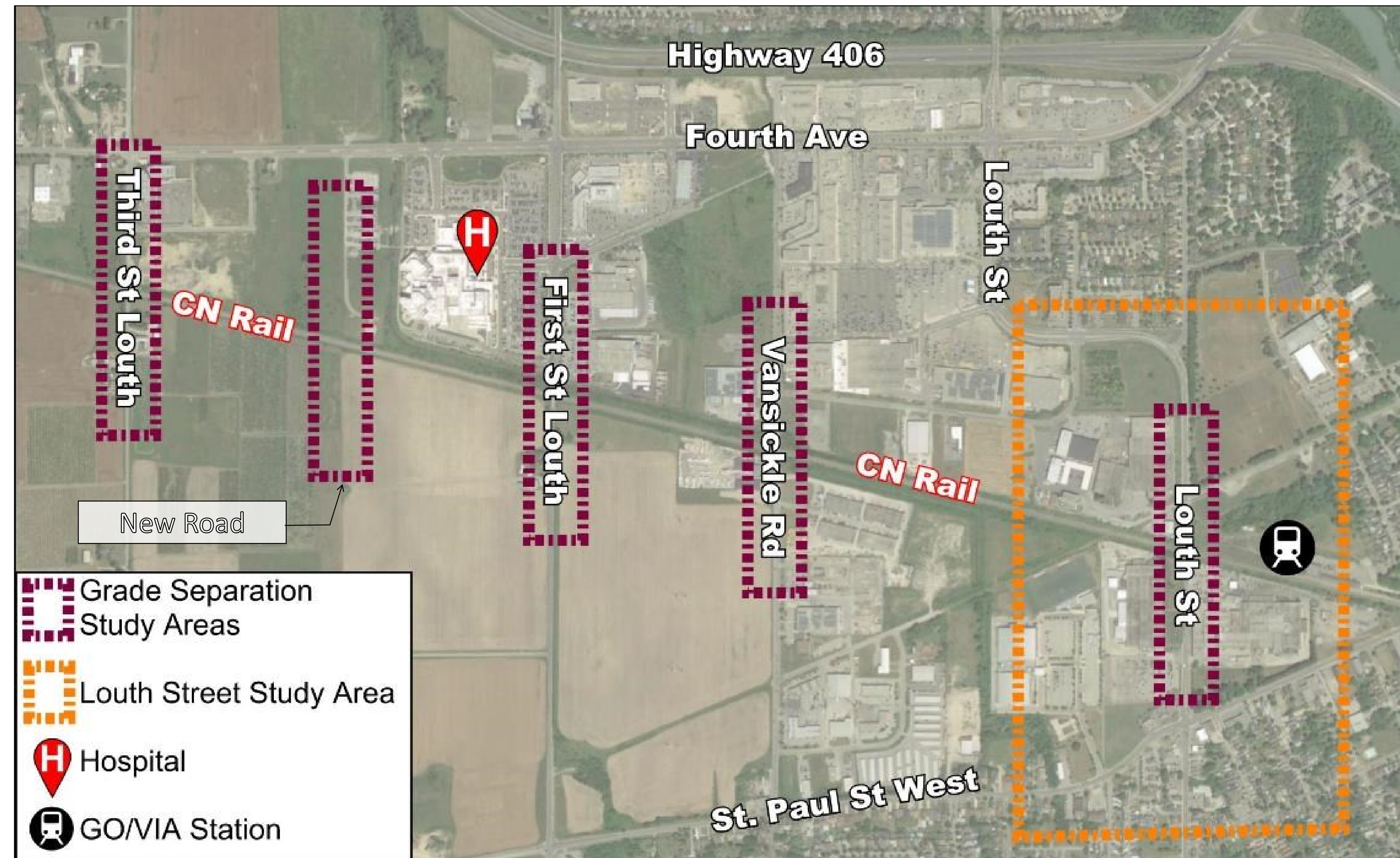
The study is split into two components which include:

1. West St. Catharines Grade Separation Schedule C EA (Phases 1 to 2)

Determining the need for additional north/south transportation capacity by way of a potential new roadway/railway grade separation in west St. Catharines.

2. Louth Street Schedule C EA (Phases 1 to 4)

Redesigning Louth Street from Benfield Drive to St. Paul Street West using a Complete Streets approach to balance the various needs of the corridor, while providing dedicated pedestrian and cyclist infrastructure that is safe, attractive and connected."



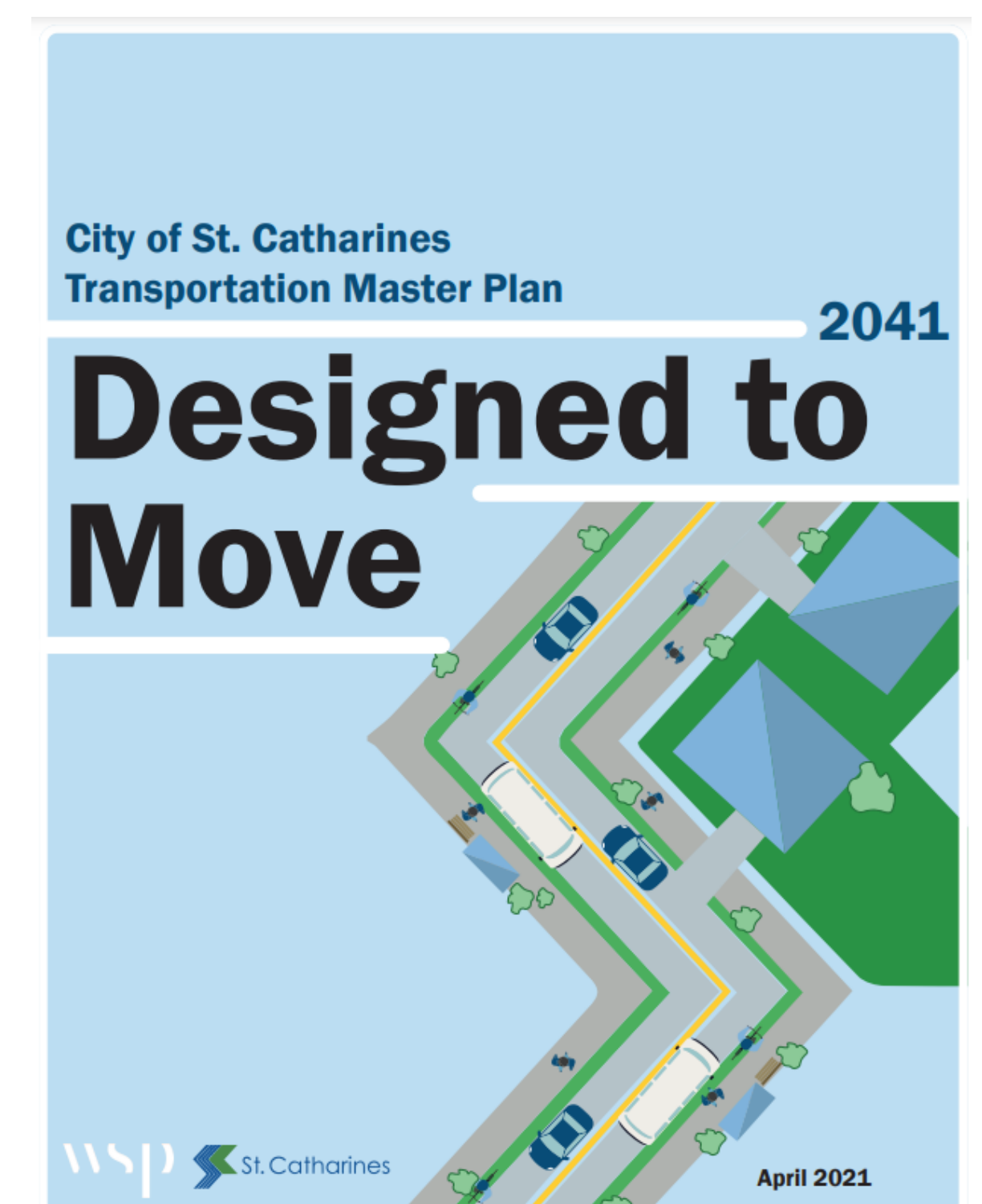
Study Background

Niagara Region, St. Catharines and Metrolinx have developed plans and studies to implement:

- A potential new roadway/railway grade separation in west St. Catharines
- Infrastructure improvements to provide safe and efficient access to the St. Catharines GO Station, including the rehabilitation of Louth Street
- GO service expansion to 11 trains per day travelling to/from St. Catharines GO Station, up from 6 trains per day currently

Relevant planning documents include:

- Niagara Region Transportation Master Plan
- St. Catharines Transportation Master Plan
- St. Catharines GO Transit Station Secondary Plan
- Niagara Falls Rail Expansion Initial Business Case



Current Projects in the Area



1. Louth Street (RR 72) EA
2. Ridley Road Reconstruction
3. VIA/GO Station Site Redevelopment
4. St. Paul Street West (RR81) CN Rail Bridge Replacement

Background Studies

The following background reviews were conducted as part of this EA Study:

- Traffic Analysis: Existing and future conditions
- Terrestrial field studies (vegetation, birds, Species at Risk)
- Aquatic field studies (fish habitat, Species at Risk)
- Stage 1 archaeological assessment
- Built heritage and cultural landscape assessment

Grade Separation: Problems and Opportunities

West St. Catharines Grade Separation EA

- The Ontario government recently increased the number of trains travelling to/from St. Catharines to 6 trains per day (3 daily roundtrips), and this could increase to 11 trains per day in the near future
- Access to the hospital by Emergency Medical Service (EMS) vehicles is currently affected by at-grade crossings (where the railway crosses the road)
- Building a new grade separation over the rail tracks would provide unimpeded access by EMS vehicles and improve the flow of non-EMS traffic

Potential Future Train Volumes

- **Total (CN+GO)**
 - 2023: 22 trains/day
 - 2031: 30 trains/day
- **CN**
 - 2023: 16 trains/day
 - 2031: 19 trains/day
- **GO**
 - 2023: 6 trains/day
 - 2031: 11 trains/day

Grade Separation: Alternative Solutions

Alternative 1
No Rail Grade Separation – Do Nothing

Do not provide a grade separated crossing. This alternative maintains existing transportation conditions.

Alternative 4
Louth Street Rail Grade Separation

Create a new overpass crossing adjacent to St. Catharines GO Station three blocks east of St. Catharines General Hospital, approximately 1.2 km south of 4th Avenue.

Alternative 2
First Street Louth Rail Grade Separation

Create a new overpass crossing immediately east of St. Catharines General Hospital, approximately 480 m south of 4th Avenue.

Alternative 5
Third Street Louth Rail Grade Separation

Create a new overpass crossing one block west of St. Catharines General Hospital, approximately 260 m south of 4th Avenue.

Alternative 3
Vansickle Road Rail Grade Separation

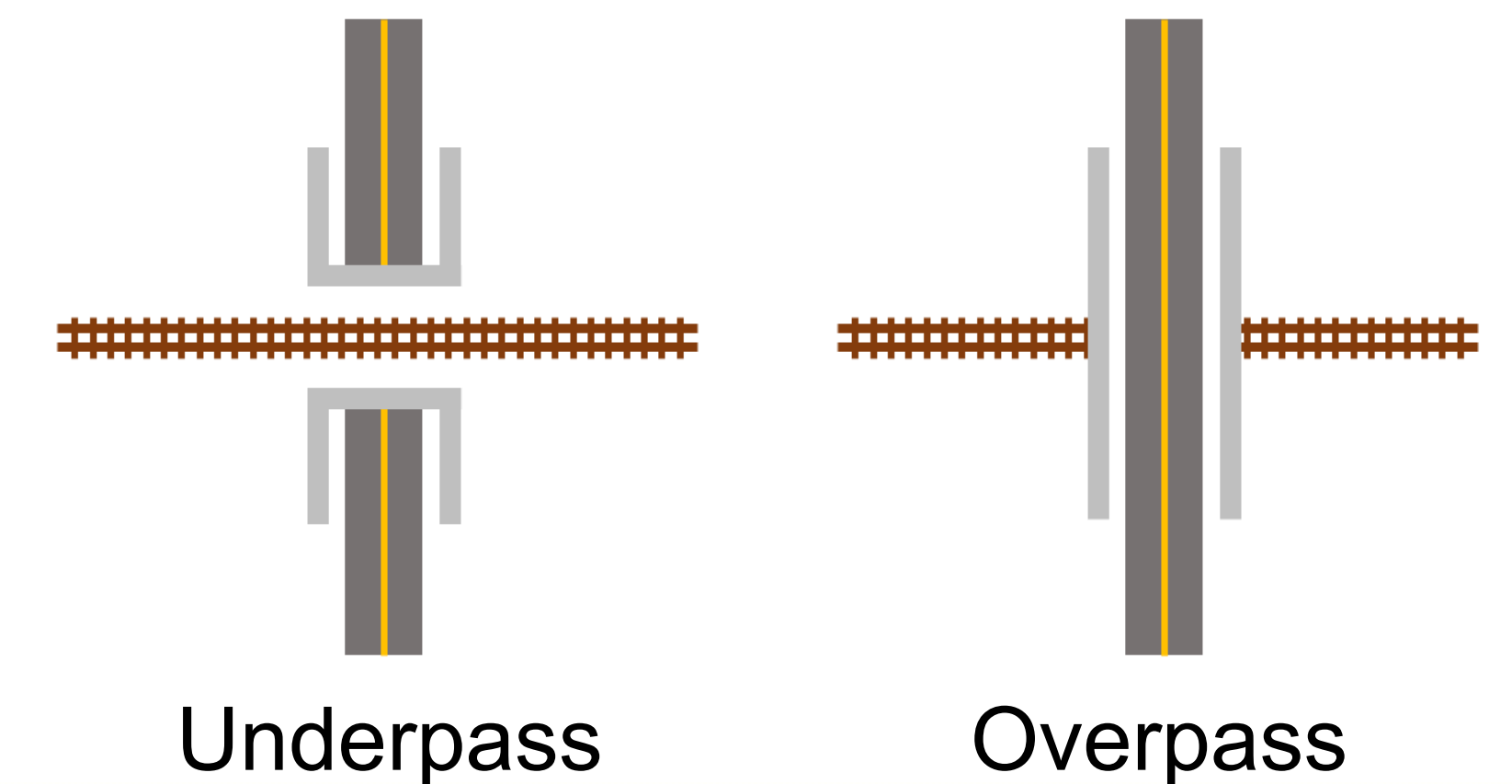
Create a new overpass crossing two blocks east of St. Catharines General Hospital, approximately 600 m south of 4th Avenue.

Alternative 6
New Road Crossing for Rail Grade Separation

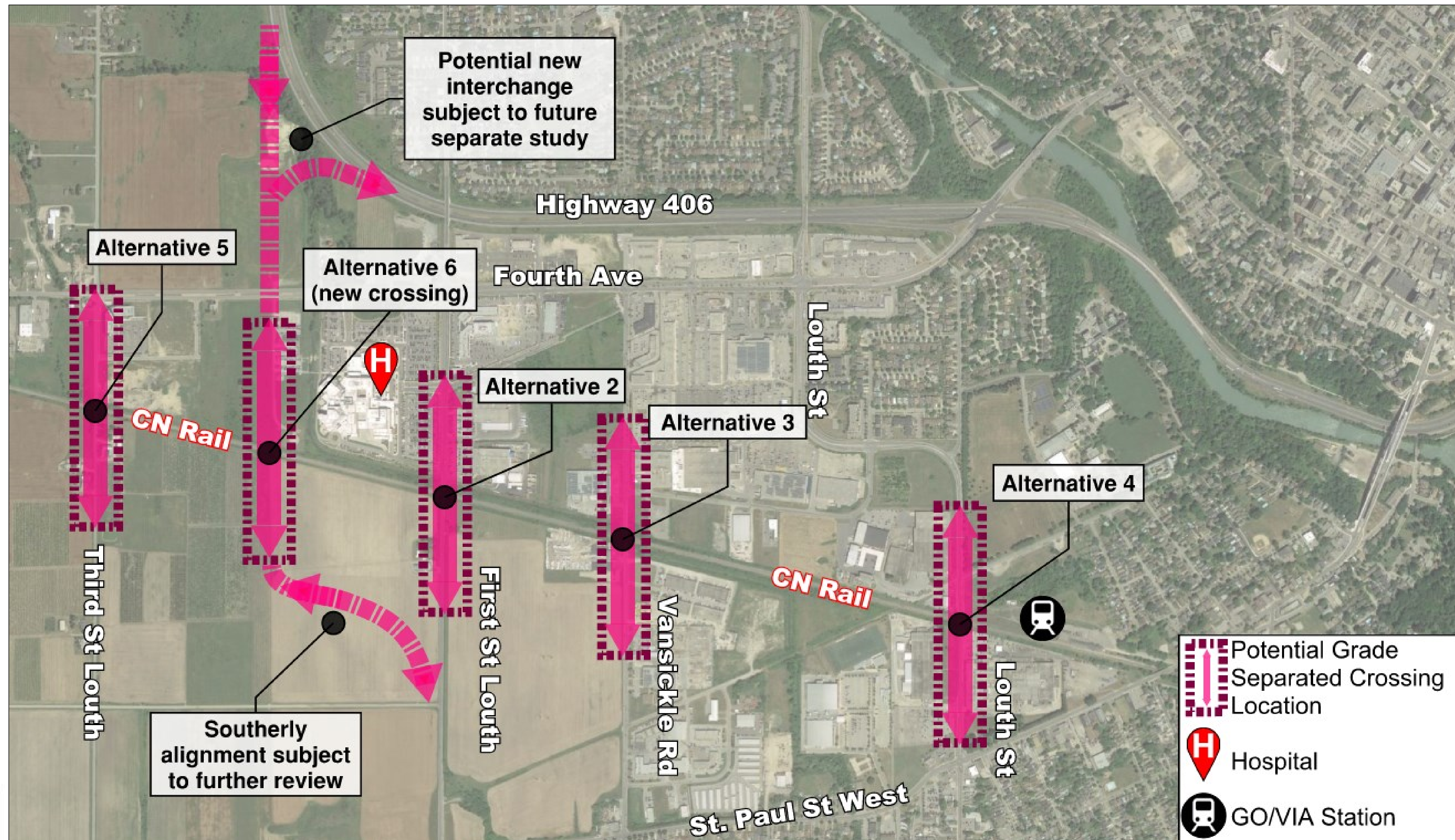
Create a new road/alignment west of St. Catharines General Hospital which crosses over the CN Rail corridor. Southerly alignment and future connection to Highway 406 in the north subject to further studies.

What is a grade separation?

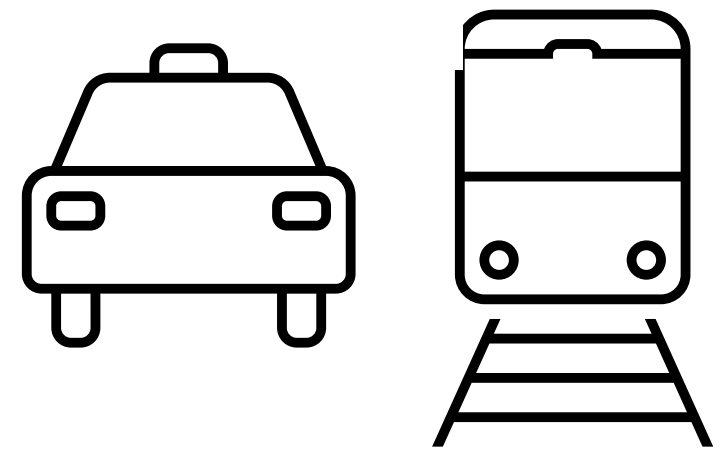
A grade separation is typically known as an underpass or an overpass. In this case, an underpass would have the road under the rail and an overpass would have the road over the rail.



Potential Crossing Locations

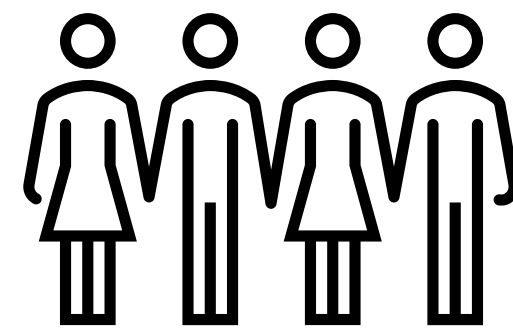


Grade Separation: Evaluation Criteria



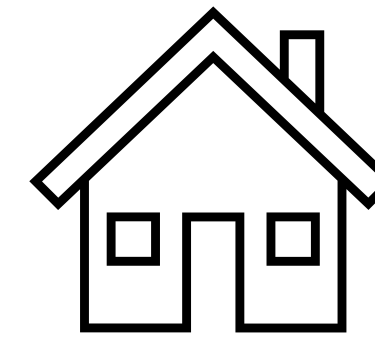
Traffic and Transportation

- Benefits to traffic patterns / delays
- North-south connectivity and network function
- Benefits to Emergency Medical Service



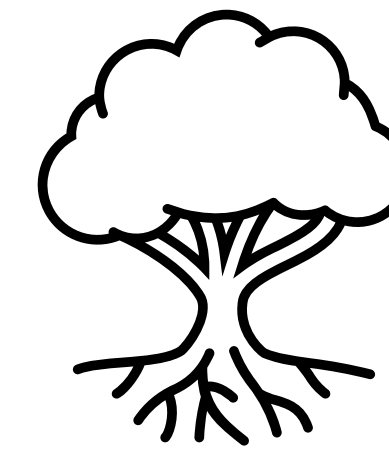
Socio-economic Environment

- Community and property impacts
- Access impacts
- Visual impacts
- Noise impacts



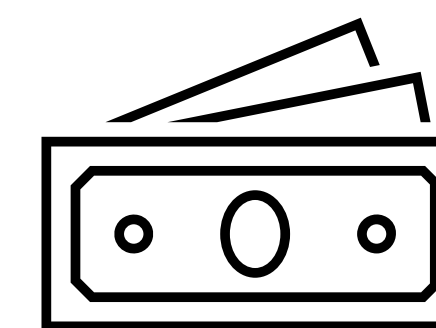
Cultural Environment

- Cultural heritage landscapes
- Built heritage resources
- Archaeology resources



Natural Environment

- Policy areas
- Watercourse and watershed impacts
- Wildlife and wildlife habitat impacts



Cost and Constructability

- Capital cost estimate
- Maintenance cost

Grade Separation: Alternative Solution Advantages and Disadvantages

	Key Advantages	Key Disadvantages
Alternative 1: Do Nothing	<ul style="list-style-type: none"> • No community and property impacts • No cultural heritage impacts • No natural heritage impacts • No capital and maintenance cost 	<ul style="list-style-type: none"> • Continued traffic delays
Alternative 2: First Street Louth	<ul style="list-style-type: none"> • Minimal potential cultural heritage impacts compared to other alternatives 	<ul style="list-style-type: none"> • Major access impacts • Potential impacts to watercourses
Alternative 3: Vansickle Road	<ul style="list-style-type: none"> • No visual or noise impacts to residences 	<ul style="list-style-type: none"> • Limited benefit to Emergency Medical Service response times
Alternative 4: Crossing at Louth Street	<ul style="list-style-type: none"> • No impacts to natural heritage policy areas, watercourses or wildlife 	<ul style="list-style-type: none"> • Major access impacts • Greatest potential impacts to built heritage resources
Alternative 5: Third Street Louth	<ul style="list-style-type: none"> • No impacts to natural heritage policy areas • Lowest capital and maintenance cost 	<ul style="list-style-type: none"> • Potential impacts to watercourses and wildlife
Alternative 6: New Road Crossing	<ul style="list-style-type: none"> • Large benefit to traffic patterns if connected to Highway 406 • Significant improvement to north-south connectivity if ramps to Highway 406 are provided • Minor access impacts compared to other alternatives • No visual or noise impacts to residences • No impacts to natural heritage policy areas 	<ul style="list-style-type: none"> • Greatest potential impacts to archaeological resources • Greatest capital and maintenance cost

Grade Separation: Alternative Solution Evaluation

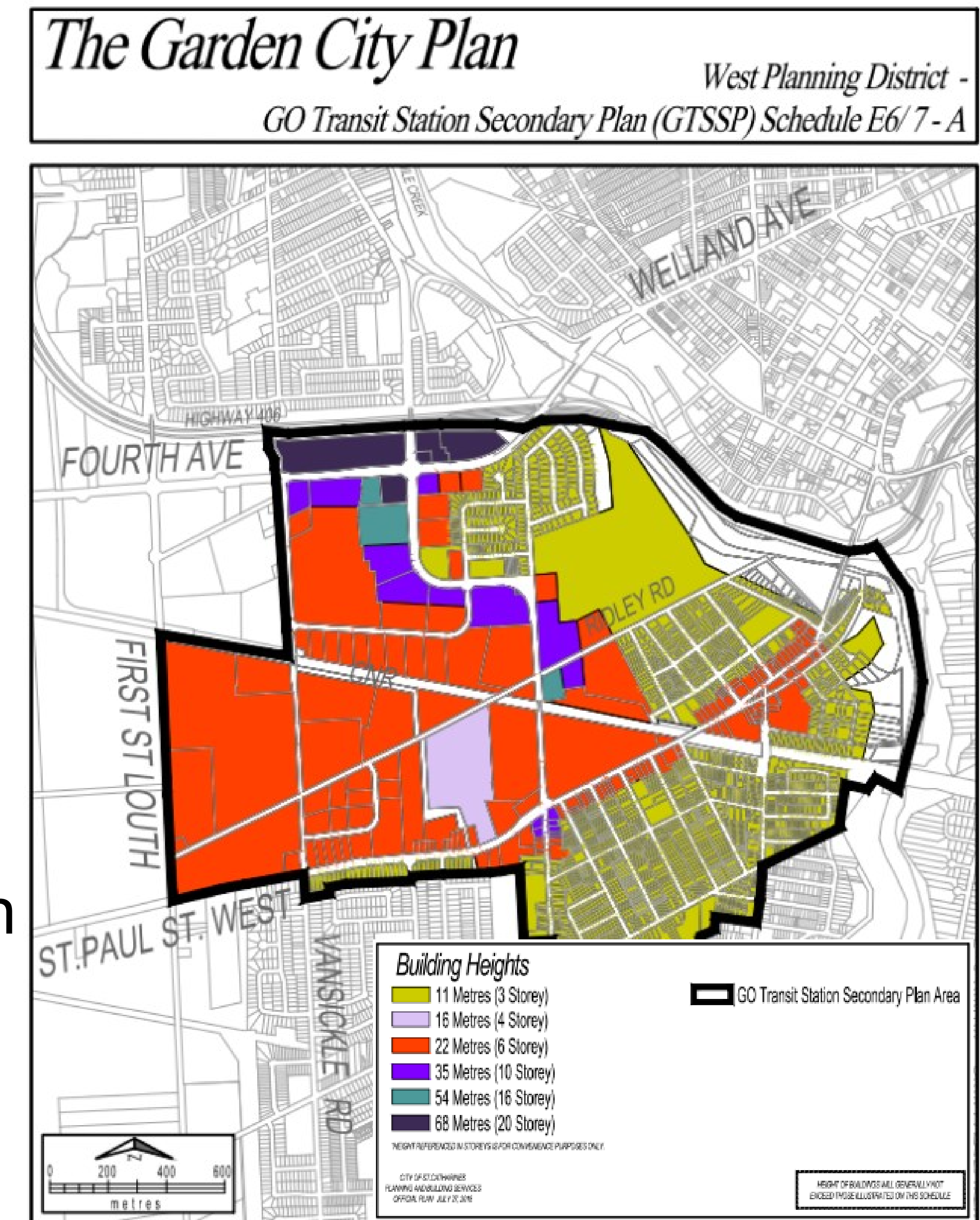
	Recommended					For Future Study
	Alternative 1: Do Nothing	Alternative 2: First Street Louth	Alternative 3: Vansickle Road	Alternative 4: Crossing at Louth Street	Alternative 5: Third Street Louth	Alternative 6: New Road Crossing
Transportation	○	◐	◑	◑	◑	●
Socio-Economics	●	○	◐	○	◐	◑
Cultural Environment	●	◑	◐	◑	◐	◐
Natural Environment	●	◑	◐	●	◑	◑
Cost & Constructability	●	◑	◑	◑	◐	○

Other than Alternative 1, Alternative 6 has the fewest property impacts and provides greatest transportation benefit. However, existing and future traffic volumes do not currently justify building a grade separation. Traffic will be monitored for further consideration of a new grade separation road (Alternative 6).

Louth Street: Problems and Opportunities




Louth Street EA

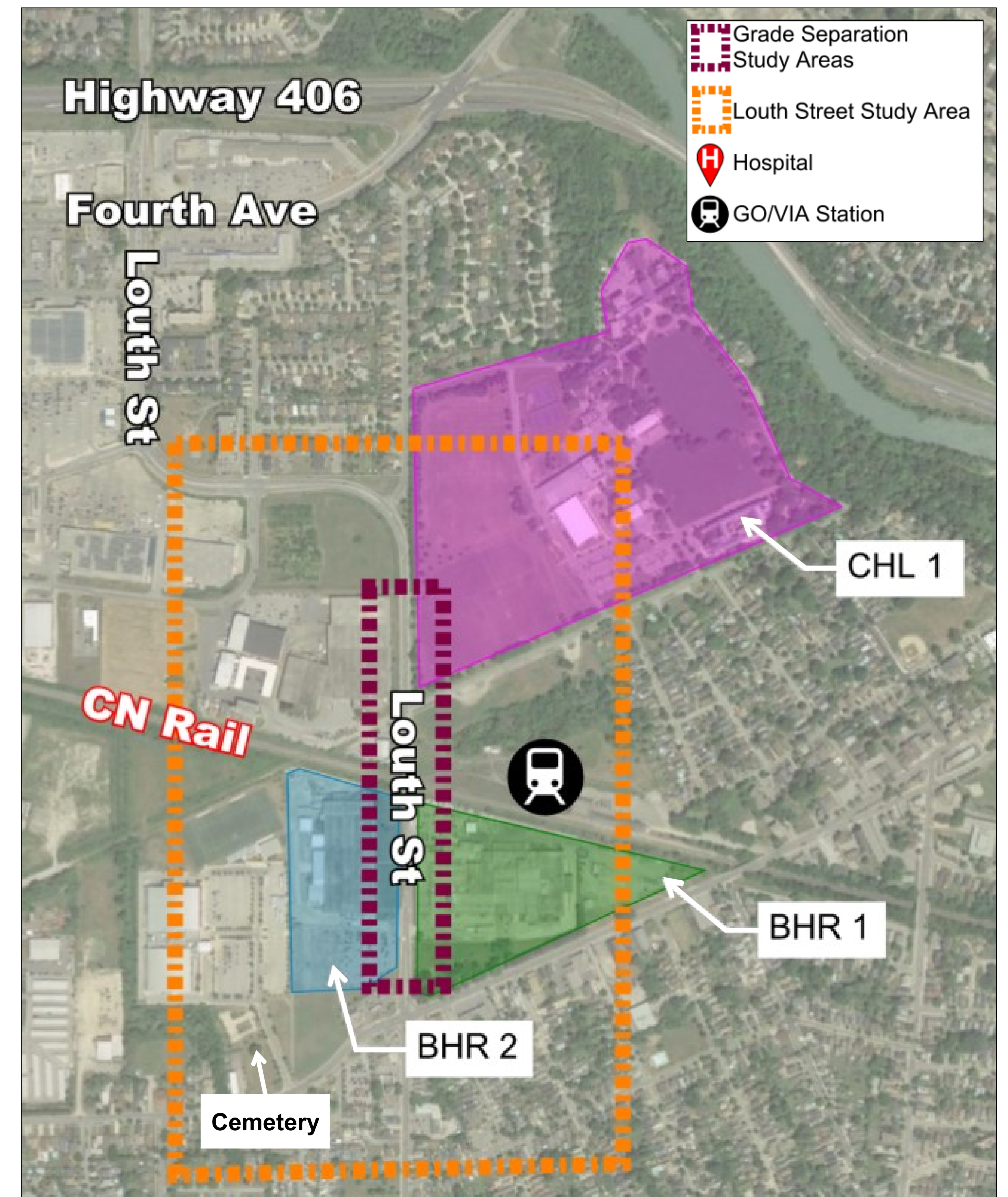
- Development is planned along Louth Street and the surrounding area, which will increase the volume of motor vehicles, cyclists and pedestrians
- Current two-lane road may be insufficient to handle future traffic volumes
- Opportunities:
 - Urbanize the corridor with curb and gutter, and upgrade pedestrian and cyclist facilities
 - Coordinate with the other ongoing projects in the area.
 - Redesign Louth Street using a Complete Streets approach to balance the various needs of the corridor
 - Provide dedicated pedestrian and cyclist infrastructure that is safe, attractive and connected



Louth Street: Cultural Environment

- Potential heritage resources within the study area include:
 - Industrial manufacturing plants on Louth Street
 - Ridley College
 - Haynes Family Cemetery
 - St. Catharines Train Station
- Parts of the study area exhibit archaeological potential and may require further study

	Potential Built Heritage Resource (BHR) for inclusion in Municipal Heritage Register
	Potential BHR for designation and listing by City
	Potential Cultural Heritage Landscape (CHL) for designation and listing by City



Louth Street: Natural Environment

- Louth Street is located in an entirely urban setting
- Vegetation consists of street trees, unused fields and shrubs along the railway
- Migratory birds may nest in trees and abandoned fields

10 Benfield Drive, looking north



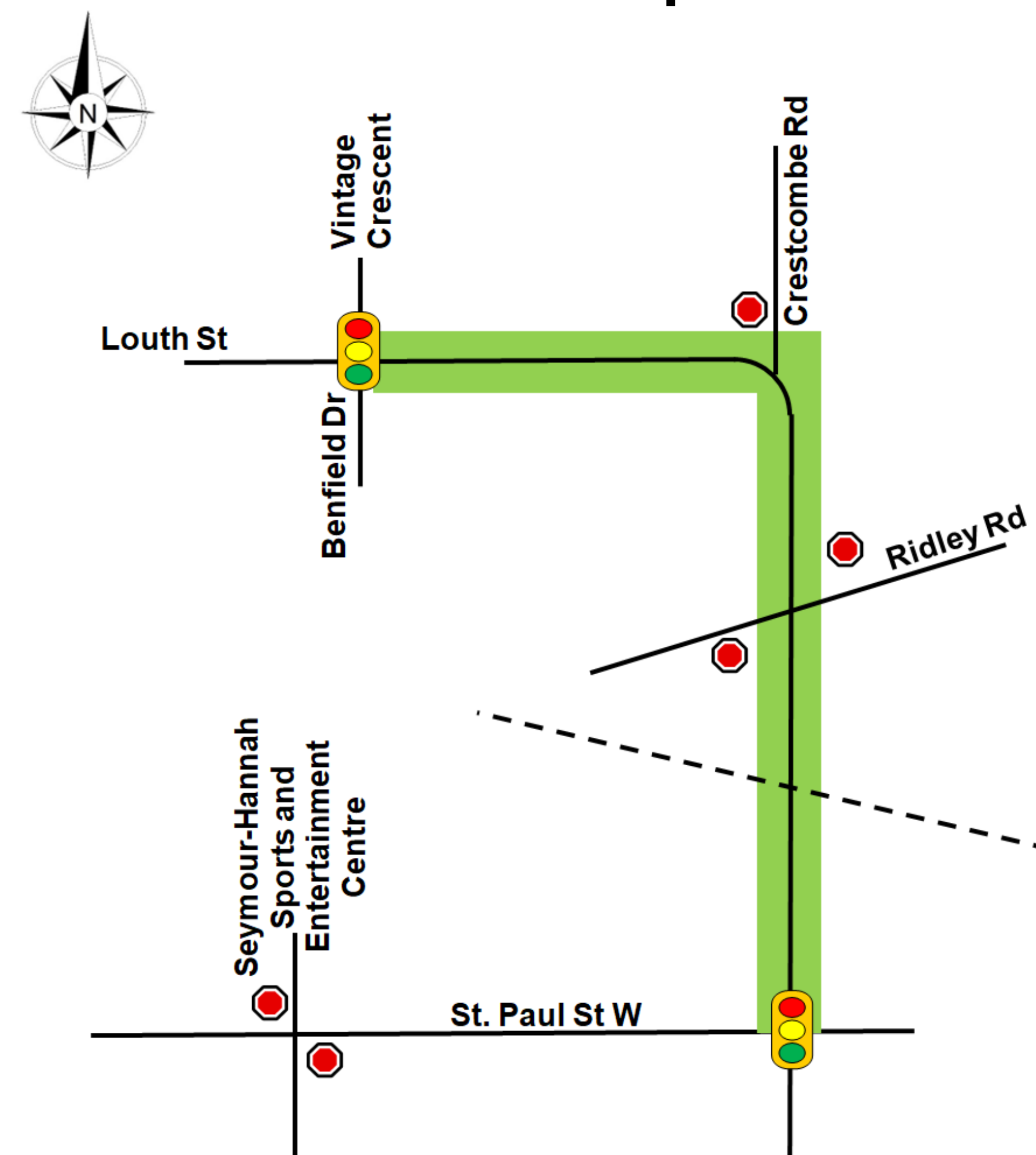
CN Rail Corridor at Louth Street, looking west



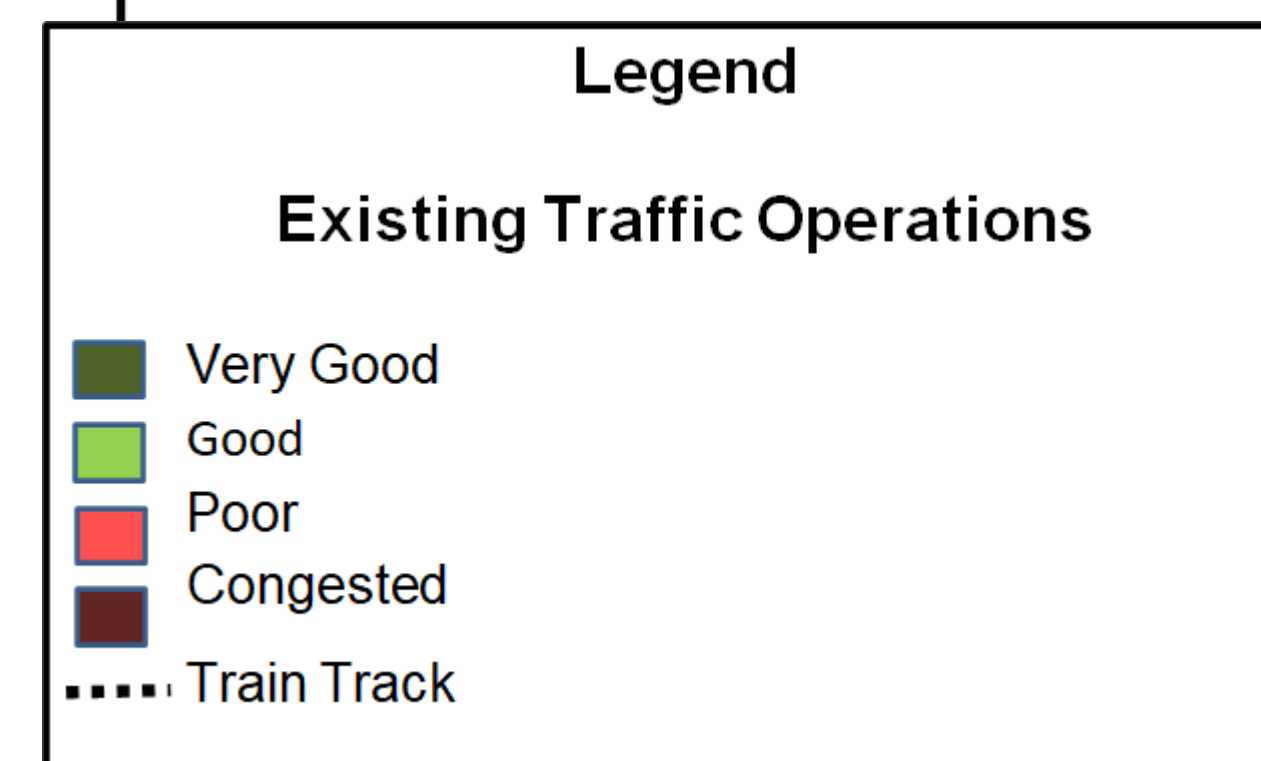
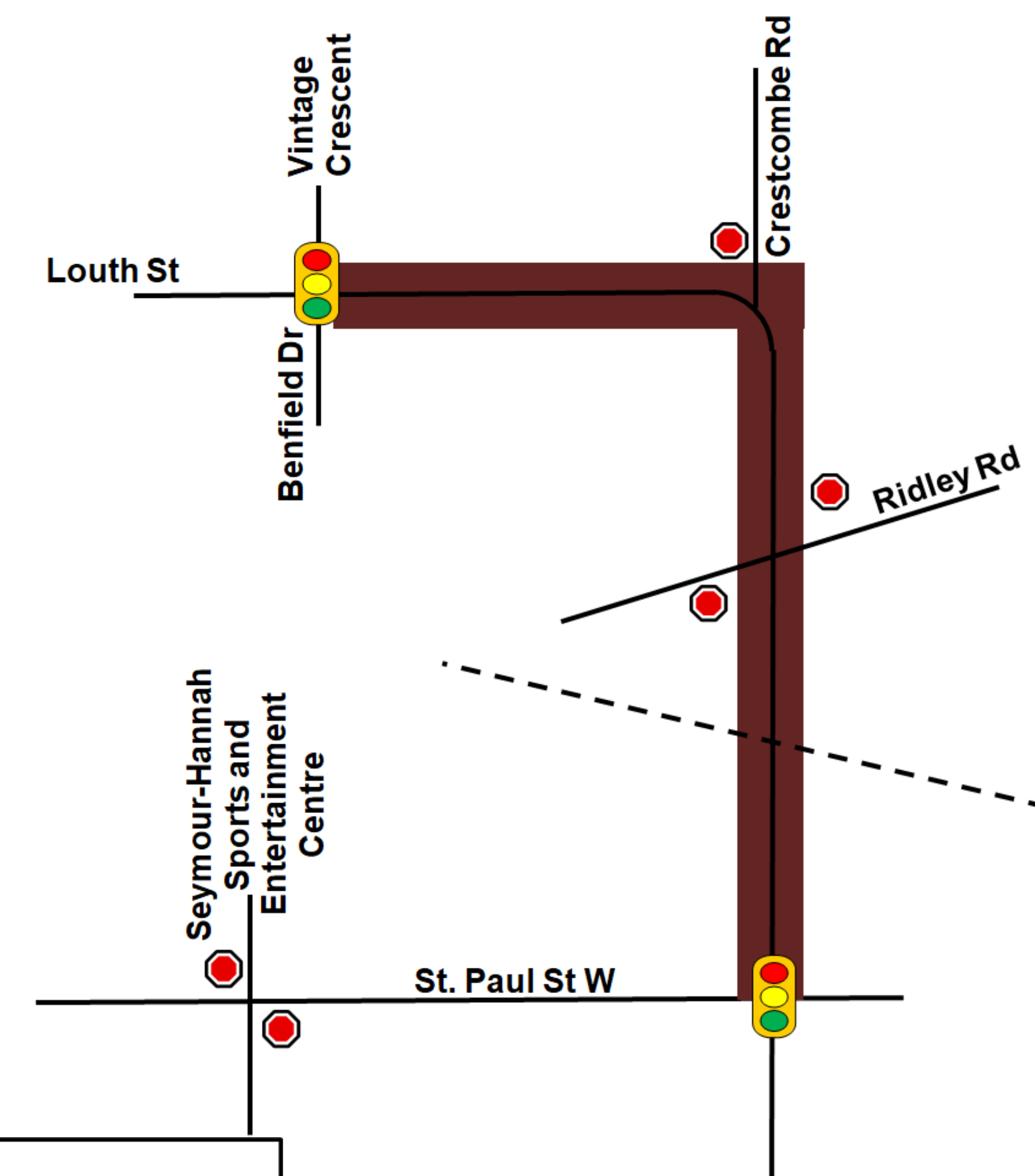
Louth Street: Existing and Future Traffic Conditions (2023)

- Currently, there is sufficient capacity on the Louth Street corridor to accommodate existing traffic demand
- However, as the area develops/intensifies and GO transit service expands, traffic congestion will worsen unless improvements are made

2023 Corridor Operations



2041 Corridor Operations



Louth Street: Alternative Solutions

Option 1 Do Nothing

- Travel Demand Management

Option 3 Three Lane Corridor with Improvements

- The same as option 2 plus:**
- One additional centre turning lane

Option 2 Two Lane Corridor with Improvements

- Urbanize roadway
- Intersection/operational improvements
- Enhanced active transportation facilities

Option 4 Four Lane Corridor with Improvements

- The same as option 2 plus:**
- Two additional through lanes

WHAT DO WE MEAN BY...

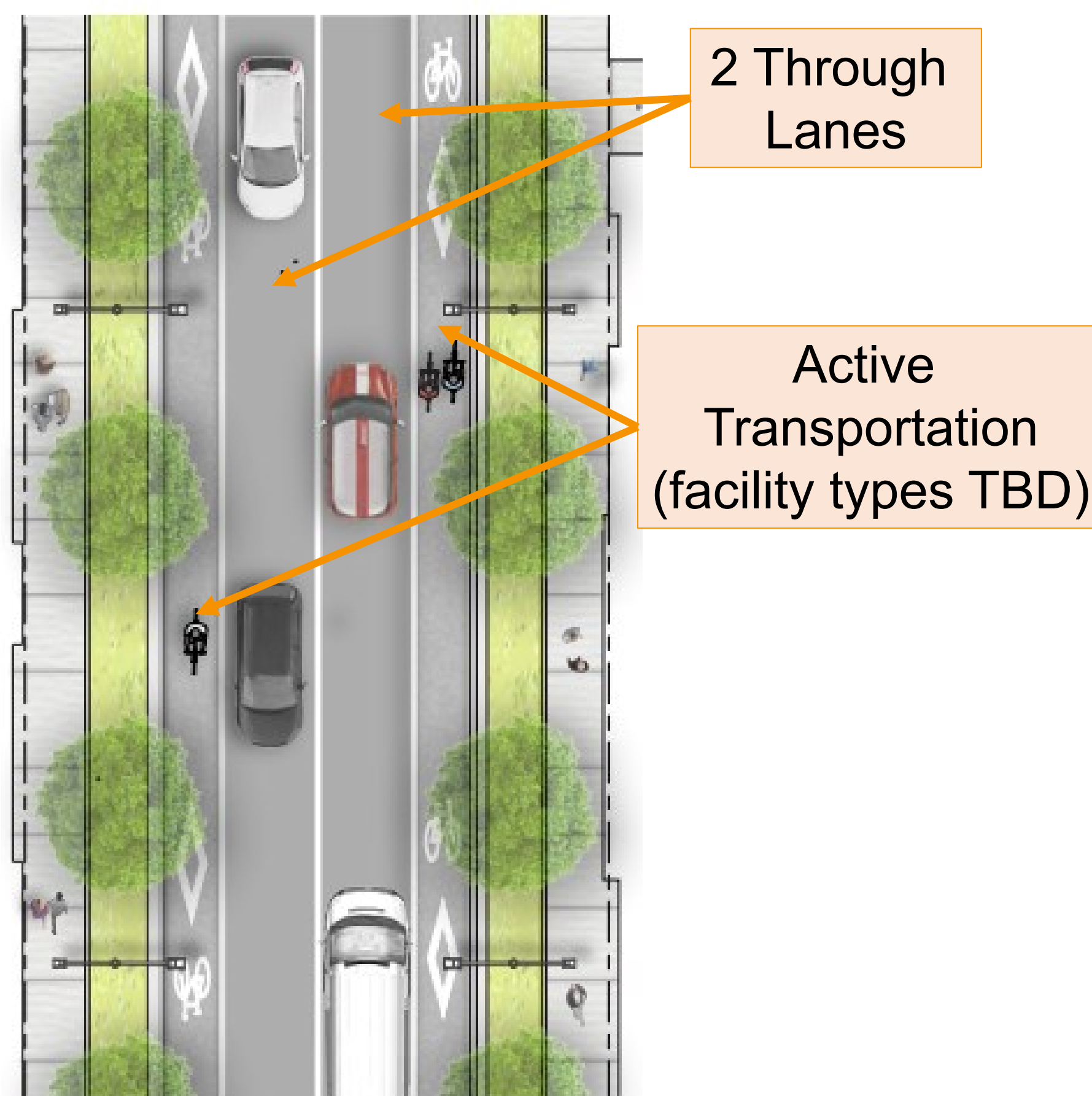
- **Travel Demand Management:** Strategies to make travel more efficient, such as carpooling, flexible work hours, telecommuting and encouraging travel by sustainable modes (i.e., walking, cycling, transit)
- **Urbanize roadway:** Install and/or improve the curb, gutter and storm sewer along the roadway
- **Intersection/operational improvements:** Install and/or improve traffic signals, turning lanes, and/or pedestrian crossovers

Louth Street: Alternative Solutions

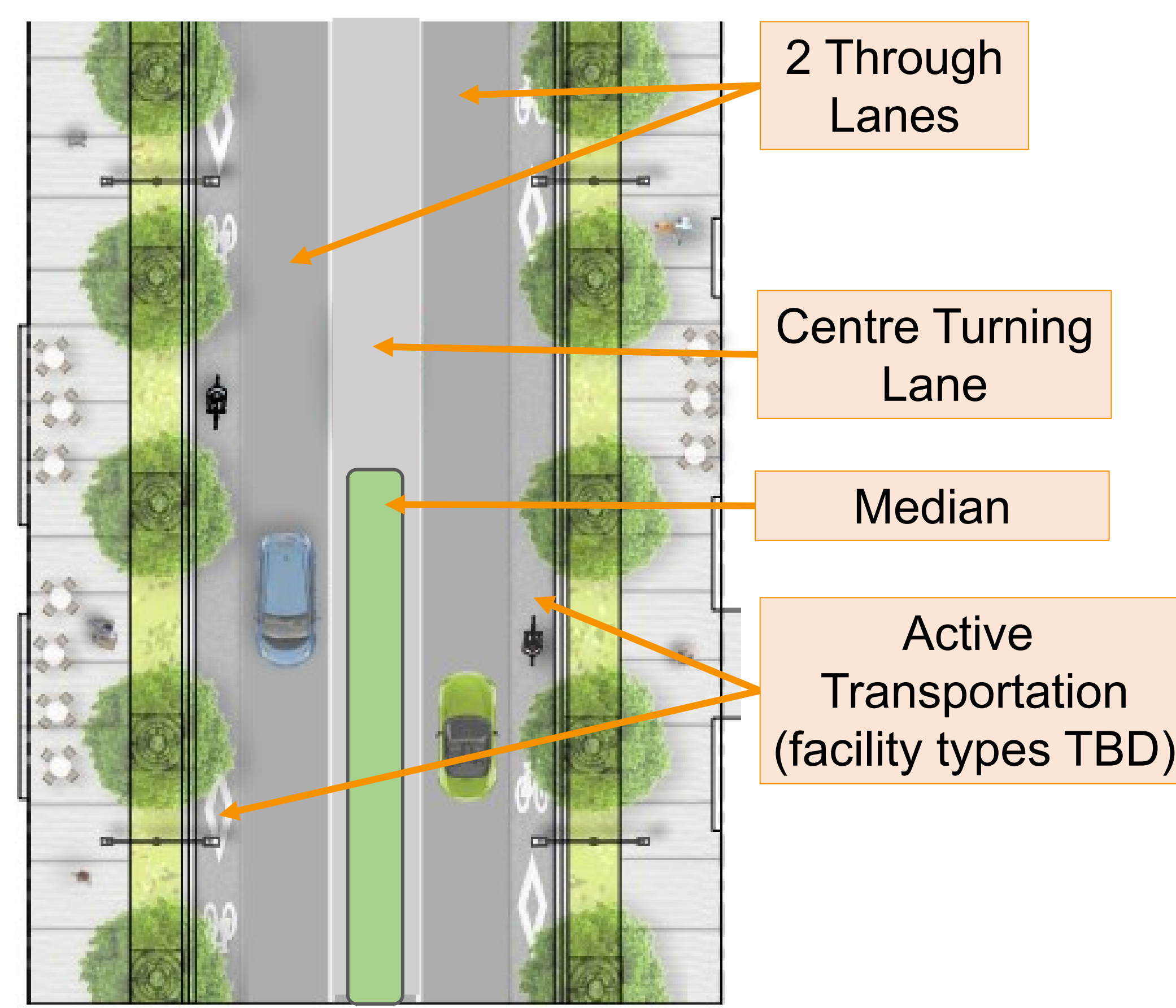
Conceptual Options for Visual Purposes Only

- Design alternatives will be developed in accordance with the Region's Complete Streets Design Manual
- The design and location of active transportation facilities will be determined during the next phase of the project

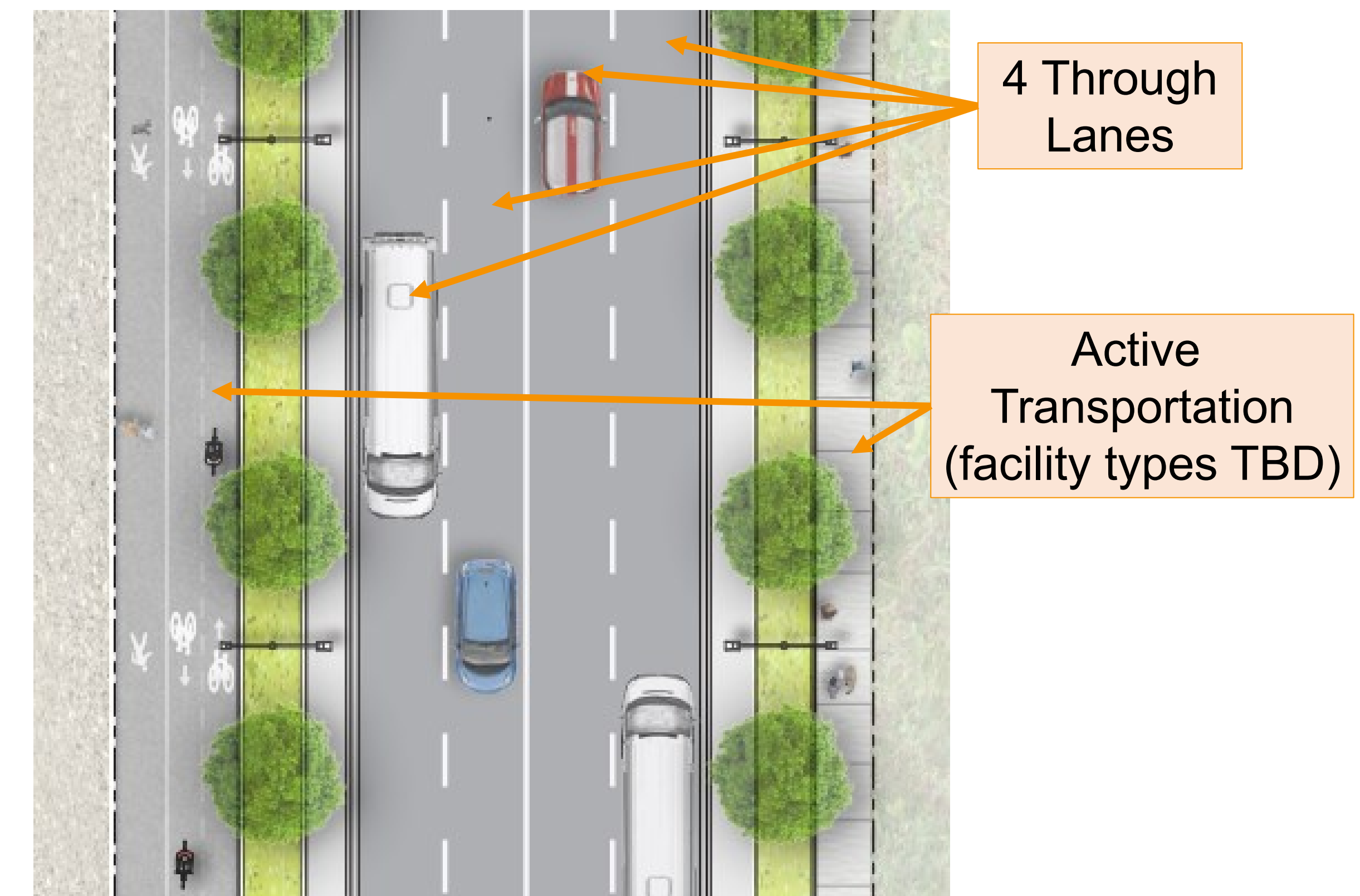
Option 2



Option 3

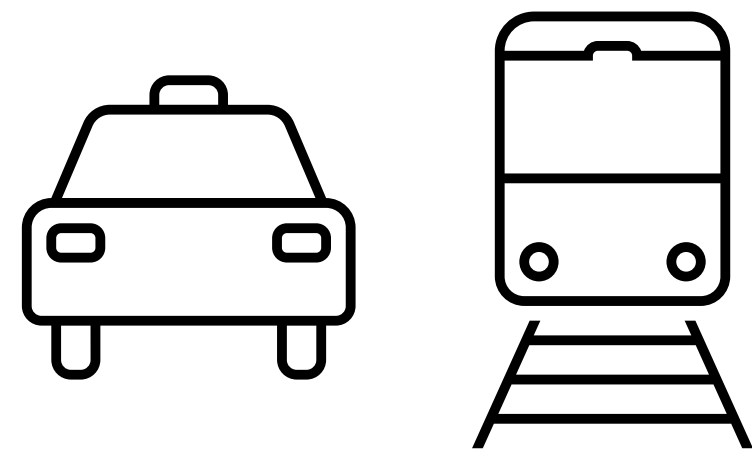


Option 4



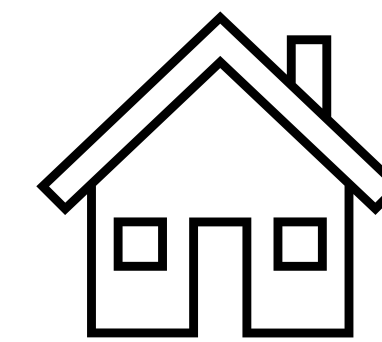
Images derived from Niagara Region Transportation Master Plan –
Niagara Region Complete Streets Design Guidelines (IBI, June 2017)

Louth Street: Evaluation Criteria



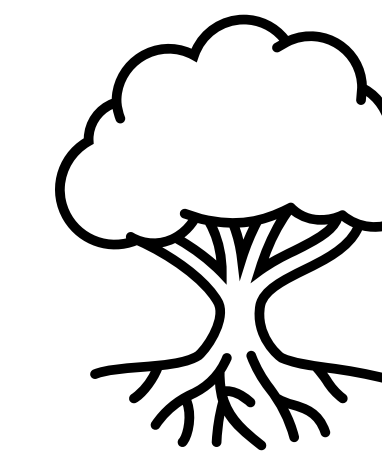
Traffic and Transportation

- Accommodation of complete street
- Improvement of current and future traffic operations
- Safety for all users



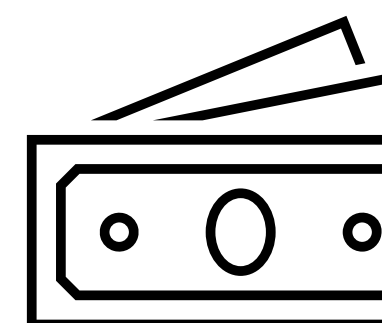
Cultural Environment

- Cultural heritage landscapes
- Built heritage resources
- Archaeology resources



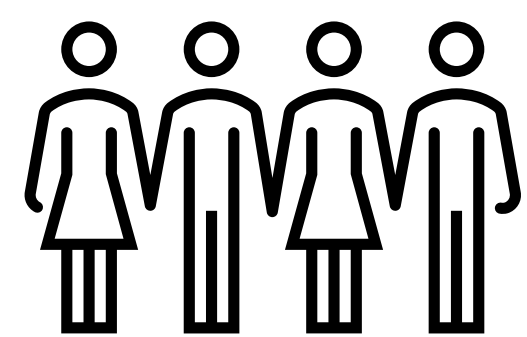
Natural Environment

- Aquatic species and habitat impacts
- Terrestrial species and habitat impacts
- Climate change considerations



Cost and Constructability

- Construction complexity
- Capital cost estimate
- Maintenance cost



Socio-economic Environment

- Community and property impacts
- Access impacts
- Visual impacts
- Noise impacts
- Health and transportation equity

Louth Street: Alternative Solution Advantages and Disadvantages

Alternative	Key Advantages	Key Disadvantages
Alternative 1: Do Nothing	<ul style="list-style-type: none"> • No impact to properties • Lowest capital and maintenance cost 	<ul style="list-style-type: none"> • Heavy future traffic congestion expected • No opportunity to implement Complete Streets principles, or improve traffic operations or safety • Unable to improve transportation equity
Alternative 2: Two Lane Corridor with Improvements	<ul style="list-style-type: none"> • Least potential impacts to properties and access, and to increase noise levels compared to Alternatives 3 and 4 • Able to improve transportation equity by improving crossings for pedestrians and cyclists 	<ul style="list-style-type: none"> • Significant future traffic congestion expected
Alternative 3: Three Lane Corridor with Improvements	<ul style="list-style-type: none"> • Limits future traffic congestion to appropriate level • Greatest potential to implement Complete Streets principles, and improve traffic operations and safety • Provides greatest opportunity for streetscaping along the corridor and within the median • Able to improve transportation equity by widening the corridor for pedestrians and cyclists 	<ul style="list-style-type: none"> • Potential to impact properties and access, and create noise disturbance • Potential to impact street trees • Moderate capital and maintenance cost
Alternative 4: Four Lane Corridor with Improvements	<ul style="list-style-type: none"> • Greatly limits future traffic congestion 	<ul style="list-style-type: none"> • Safety concerns associated with truck turns and active transportation at access points • Greatest potential to impact properties and access, and create noise disturbance • Potential to impact street trees • Greatest capital and maintenance cost

Louth Street: Alternative Solution Evaluation

	Option 1: Do Nothing	Option 2: Two Lane Corridor with Improvements	Recommended Option 3: Three Lane Corridor with Improvements	Option 4: Four Lane Corridor with Improvements
Transportation	○	◐	●	◑
Socio- Economics	◑	●	◑	◑
Cultural Environment	●	●	◑	◑
Natural Environment	◐	●	◑	◑
Cost & Constructability	●	◐	◑	○

Option 3 is recommended to be carried forward because it improves future traffic operations, provides the opportunity to improve active transportation facilities and does not pose safety concerns or access movement conflicts (unlike Option 4). These benefits make up for the limited potential impacts on properties, cultural resources and natural environment.

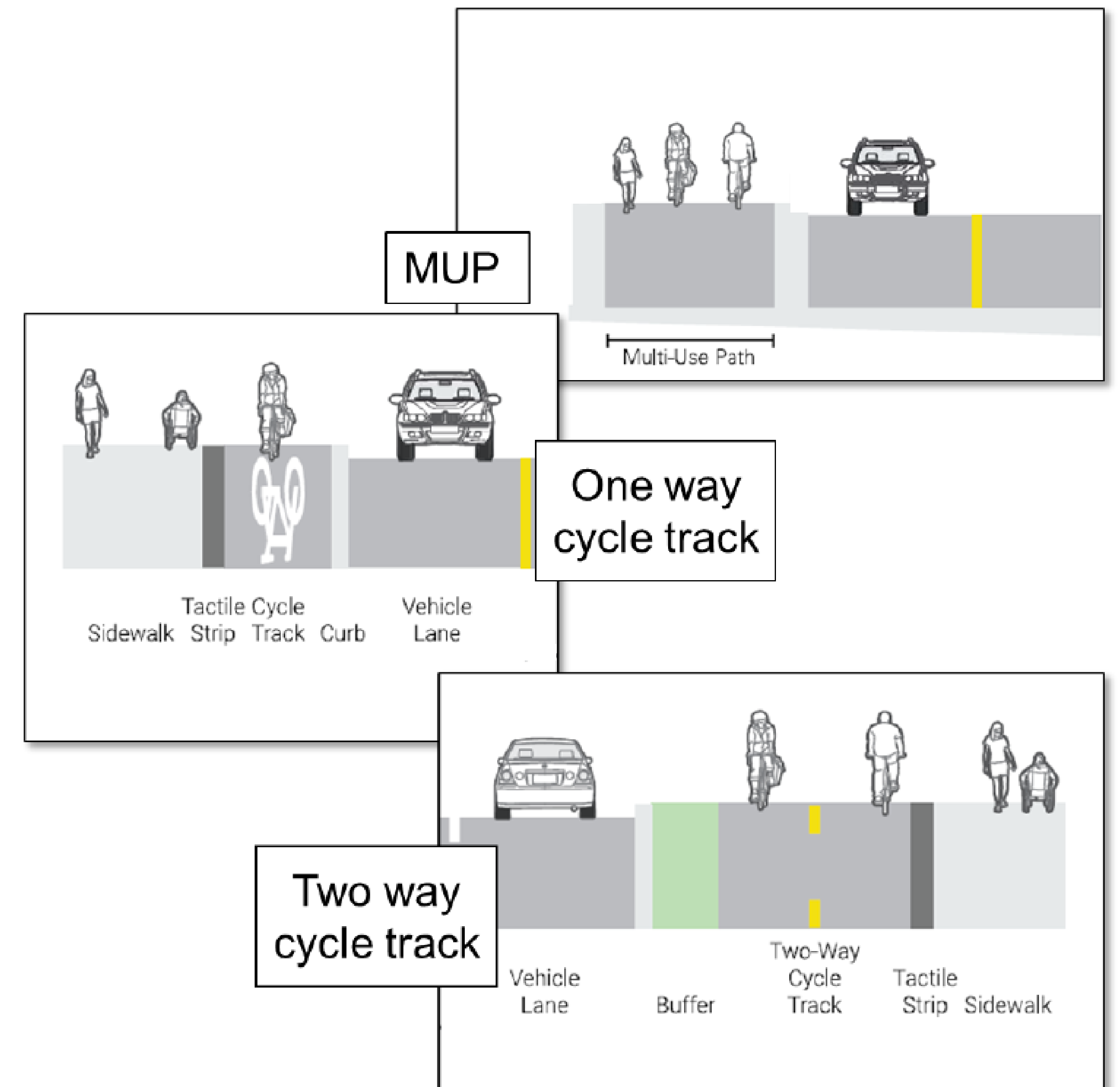
Legend: ● - Most Preferred ◑ - More Preferred ◐ - Moderately Preferred ◑ - Less Preferred ○ - Least Preferred

Louth Street: Design Considerations for the Next Phase of the Study



Louth Street: Considerations for the Next Phase of Study – Active Transportation

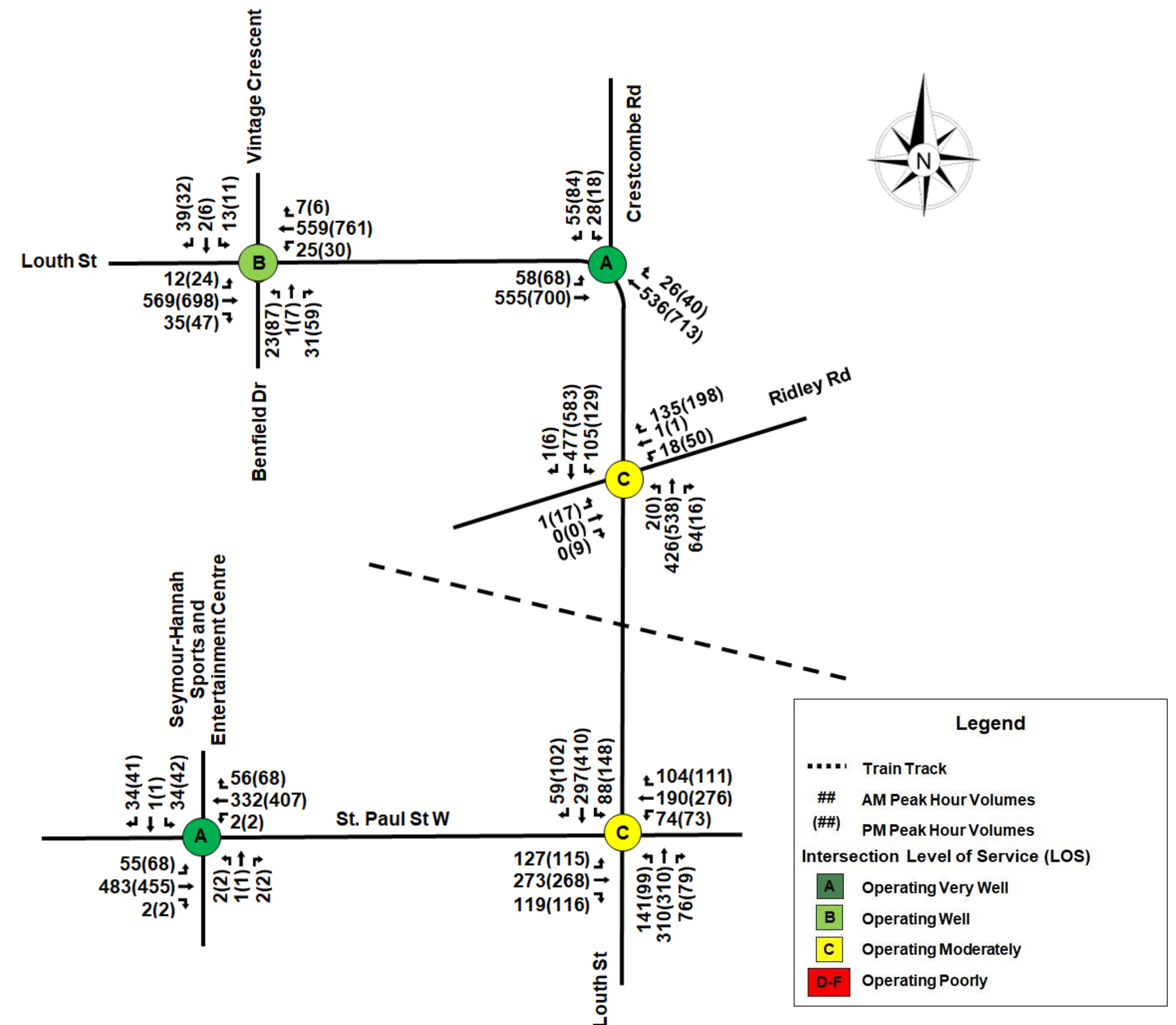
- Alternative design concepts will be developed for Louth Street, comprising of active transportation facility types (e.g., multi-use path (MUP), cycle tracks and sidewalks)
- Alternative design concepts will be evaluated based on a range of criteria, including considerations to mitigate property impacts and limitations to constructability



Louth Street: Considerations for the Next Phase of Study

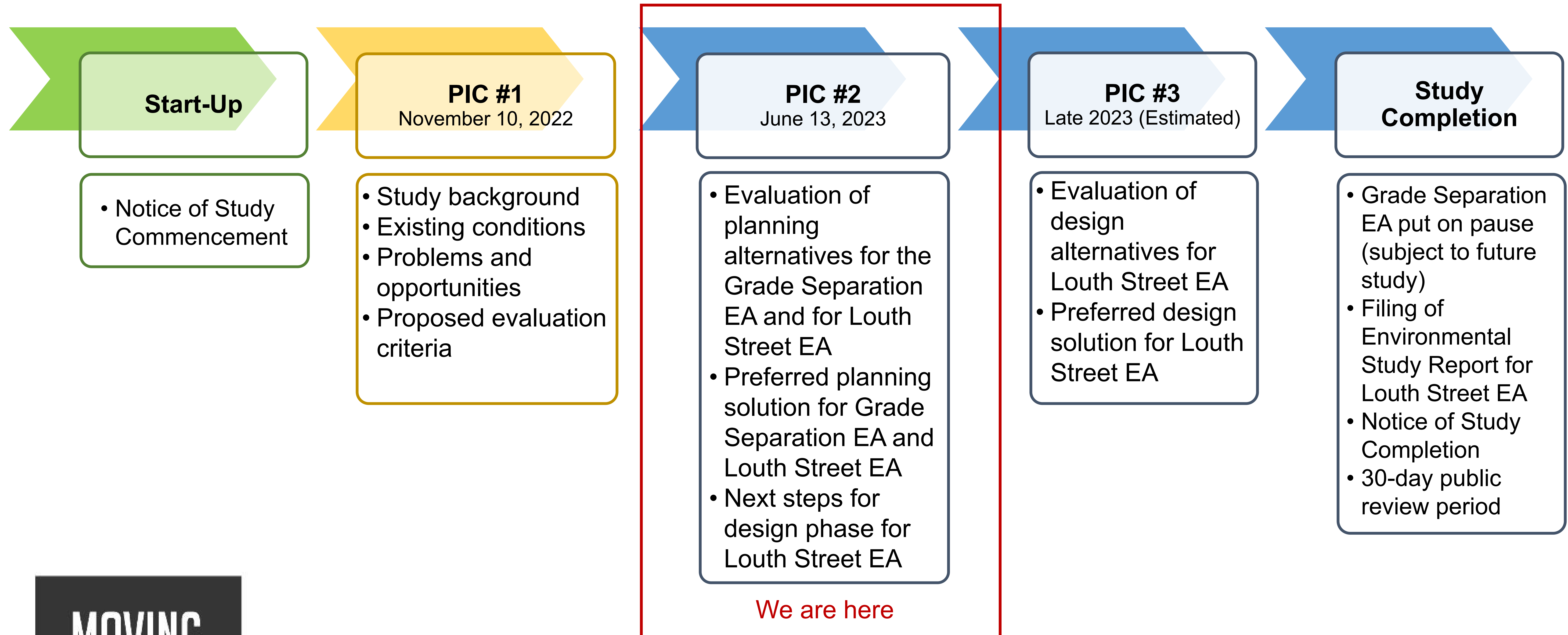
- Intersection performance within the study area is currently operating at a level of service (LOS) of C or better
- Traffic analysis will be reviewed for estimated traffic volume projections up to the year 2041 for impacts
- Alternative design concepts will include:
 - Intersection improvements (e.g., traffic controls and signals, turning lanes)
 - Operational and safety improvements (e.g., reduced lane widths, sections of centre curb median, access improvements/restrictions)

2023 Intersection Performance



Study Schedule

Louth Street EA & West St. Catharines Grade Separation EA



Getting Involved and Next Steps



Review display boards on the project web page: niagararegion.ca/projects/louth-street/



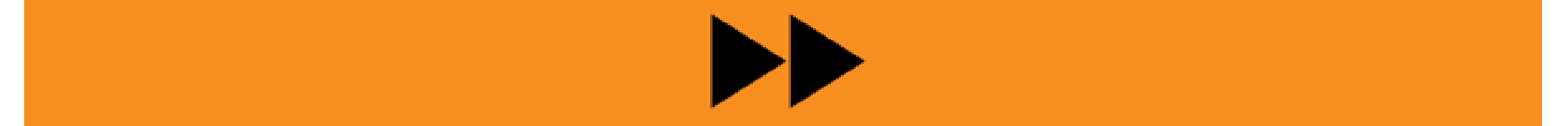
Complete the comment form to submit any questions, comments or suggestions (also available on the project webpage).



If not on the contact list already, request to be added to the Study Contact List to receive Study notices for future points of consultation.



Attend future Public Information Centre #3 (anticipated in late 2023).



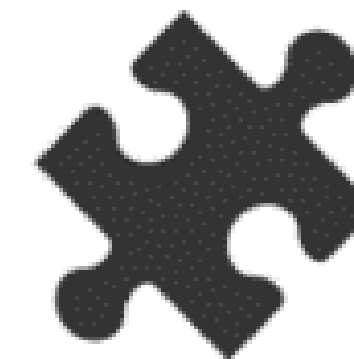
Following this PIC, the Study Team will complete the following:



Develop a PIC Summary to document results of this PIC.



Review comments received and adjust the study recommendations as appropriate.



Develop and evaluate alternative design concepts to identify a preliminary preferred design for Louth Street.



Host PIC #3 to present the preliminary preferred design alternative.

Thank You For Attending

Your Feedback is Important to Us

Your comments will be reviewed and considered, as the Study progresses.

To submit questions/comments/suggestions after this PIC, please fill out a comment sheet (also available on the project webpage).

Project Contact Information

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Niagara Region

Project Manager

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Project Webpage



niagararegion.ca/projects/louth-street/