



# Wonderland Road Improvements

## Class Environmental Assessment Study

Transportation Advisory Committee Presentation

Purpose of this meeting:

To introduce the project and solicit participation from committee members throughout the EA process





# PROBLEM AND OPPORTUNITY STATEMENT

Recognizing the important role Wonderland Road has in the City of London as a key north-south transportation corridor, the 2030 Transportation Master Plan identified the need to widen Wonderland Road from four to six lanes, from Sarnia Road to Southdale Road as a strategic improvement. The City initiated a Schedule C Municipal Class Environmental Assessment (EA) (2000, as amended) to confirm the need for the widening and to identify the opportunity for additional improvements along the corridor. The outcome of the study will provide the basis for implementing an optimized corridor that addresses multi-model transportation needs, servicing, urban design and accessibility.





# STUDY AREA



Wonderland Road is a critical north-south corridor in the City, with a variety of neighbourhoods, businesses and other uses along the road.

- Study area extends from Sarnia Road to Southdale Road West (approx. 7 km)
- Wonderland Road connects to Highway 402 and Highway 401 south of the project limits
- Wonderland Road was recently designated as Highway 4 through London, (between Highway 401 and Sunningdale Road)
- Project will be designed to integrate with the design completed as part of the 2015 Wonderland Road South Class EA which extended from Highway 402 to Southdale Road West.



# STUDY PROCESS

The study is following the requirements of a Schedule 'C' Municipal Class Environmental Assessment (EA) (2000, as amended) process and will build on the recommendations of the London Plan, Transportation Master Plan, Cycling Master Plan and other relevant studies.



## Notice of Study Commencement

- May 2017



## Pop-up Events

- July 2017 at Westmount Mall & Springbank Gardens Community Centre



## Corridor Walk

- Team members delivered project information cards to businesses along Wonderland Road Aug, 2017



## Pop-up Event

- Sept. 2017 at Western University

## Phase 1

### Problem/ Opportunity

- Identify problems/ opportunities to be addressed in the planning and design process
- Confirm the need for improvements
- Prepare a "Problem Statement"



## Phase 2

### Alternative Solutions

- Document existing and future conditions
- Develop alternative solutions
- Consult with review agencies and the public



## Public Information Centre #1

- January 2019



## Public Information Centre #2

- Mid to late 2019

## Phase 3

### Design Options for Preferred Solution

- Identify design options for the preferred solution
- Evaluate design options and select a preferred design
- Impact assessment of the preferred design



## Publish ESR for 30-Day Public Review

- Late 2019

## Phase 4

### Environmental Study Report (ESR)

- Document the decision-making process for public and agency review



## Construction Start

- Potentially 2023 subject to council approval and permitting

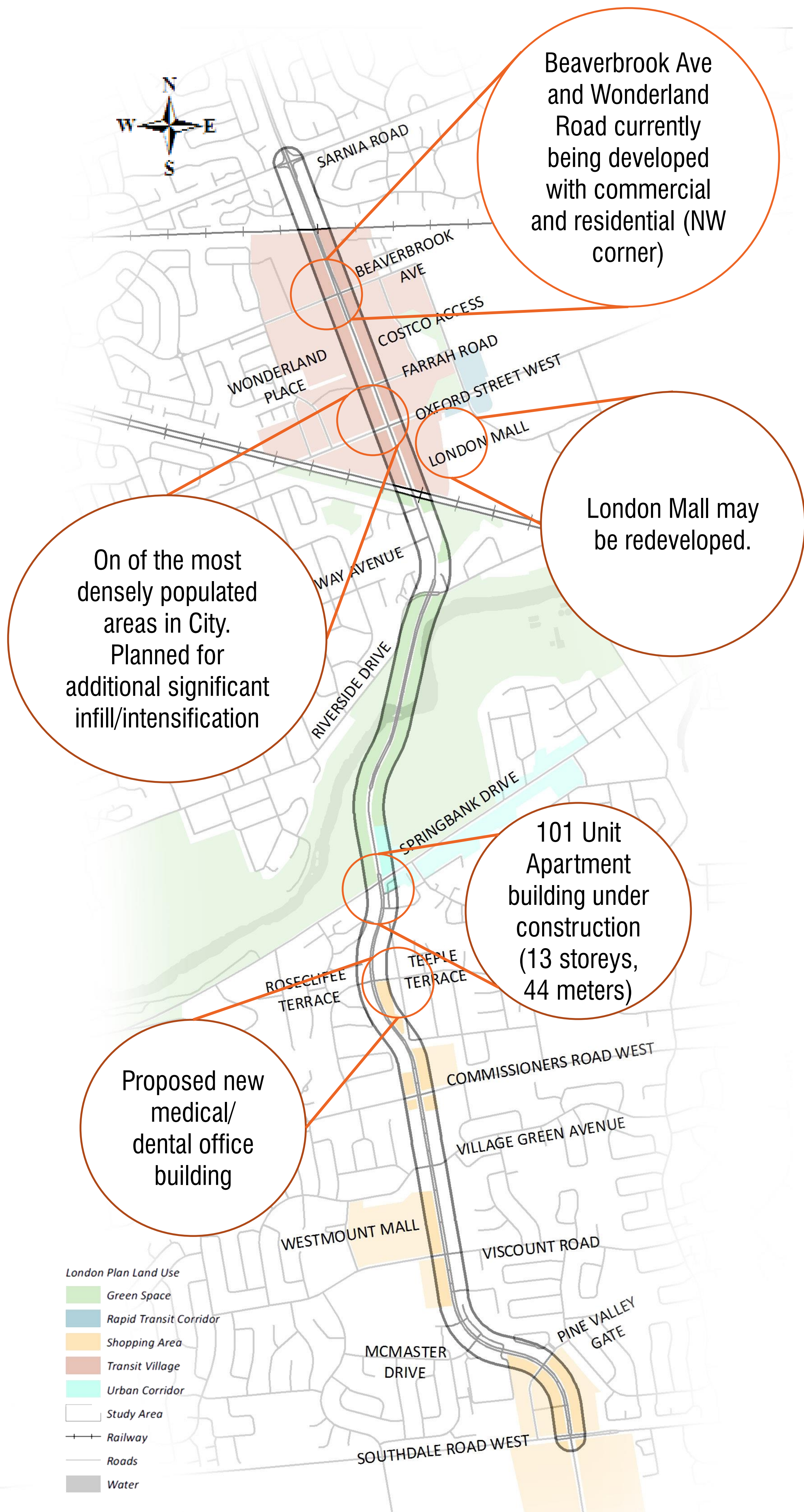
## Phase 5

### Implementation

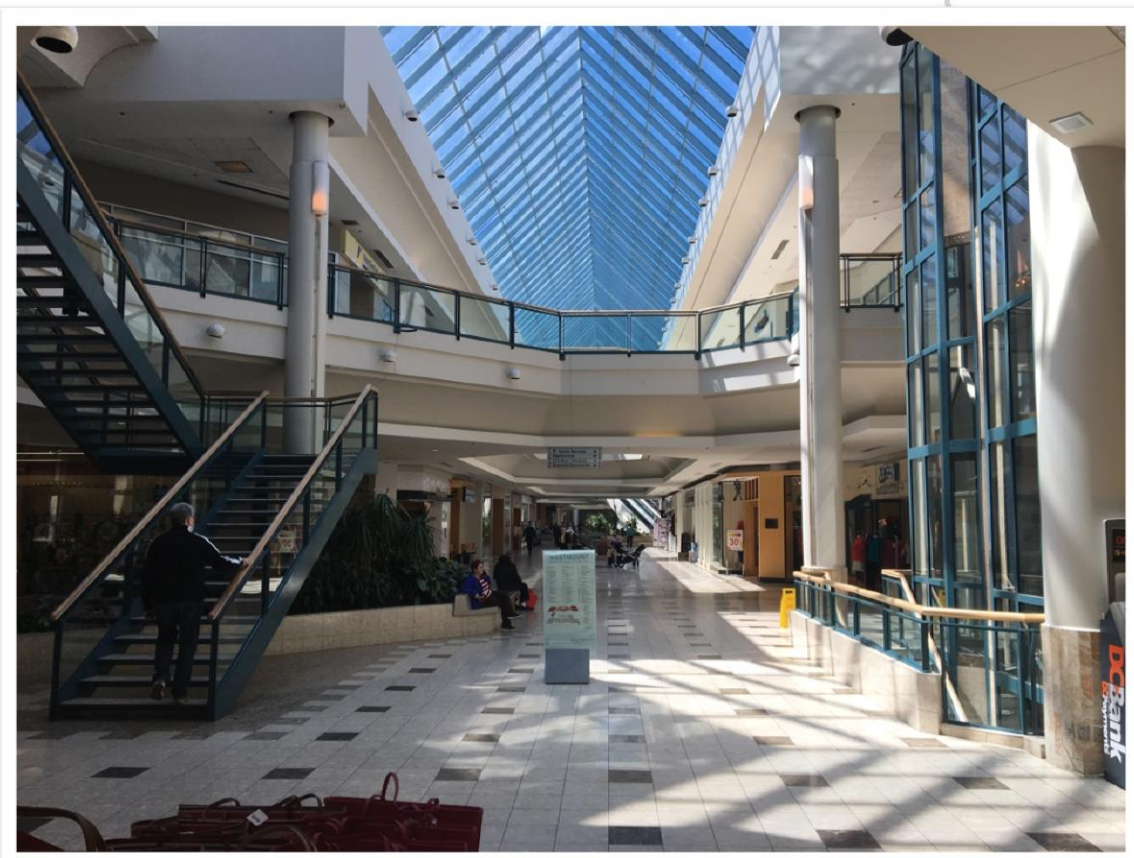
- Design and construction Phase
- Project must be designed and constructed as outlined in the ESR



# EXISTING CONDITIONS: LAND USE AND TRANSIT



- Wonderland Road is changing and will continue to evolve through the implementation of the London Plan, Rapid Transit and other City policies.
- London Plan identifies opportunity for intensification and redevelopment
- Integration of active transportation and transit along Wonderland Road is encouraged
- Existing land uses within corridor include:
  - Green Space
  - Shopping Area
  - Transit Village
  - Urban Corridor
- **London Transit Commission** identified the following opportunities to improve transit along the corridor:
  - Traffic Signal Priority
  - Enhanced Urban Design at Transit Stops
  - Limited use of Bus Bays only
  - Additional Pedestrian Crossings





# TRANSPORTATION ANALYSIS

- Wonderland Road has four lanes through the corridor
- Posted speed limit of 50 km/h from Viscount Road to Commissioners Road and 60km/h elsewhere
- Left- and right-turn lanes at major intersection
- 200 metres of a shared centre turn lane between Thornwood Drive and Riverside Drive, and a 350-metre shared centre turn lane between Guy Lombardo Bridge and Springbank Drive
- **Based on the analysis completed, 6 lanes is recommended**

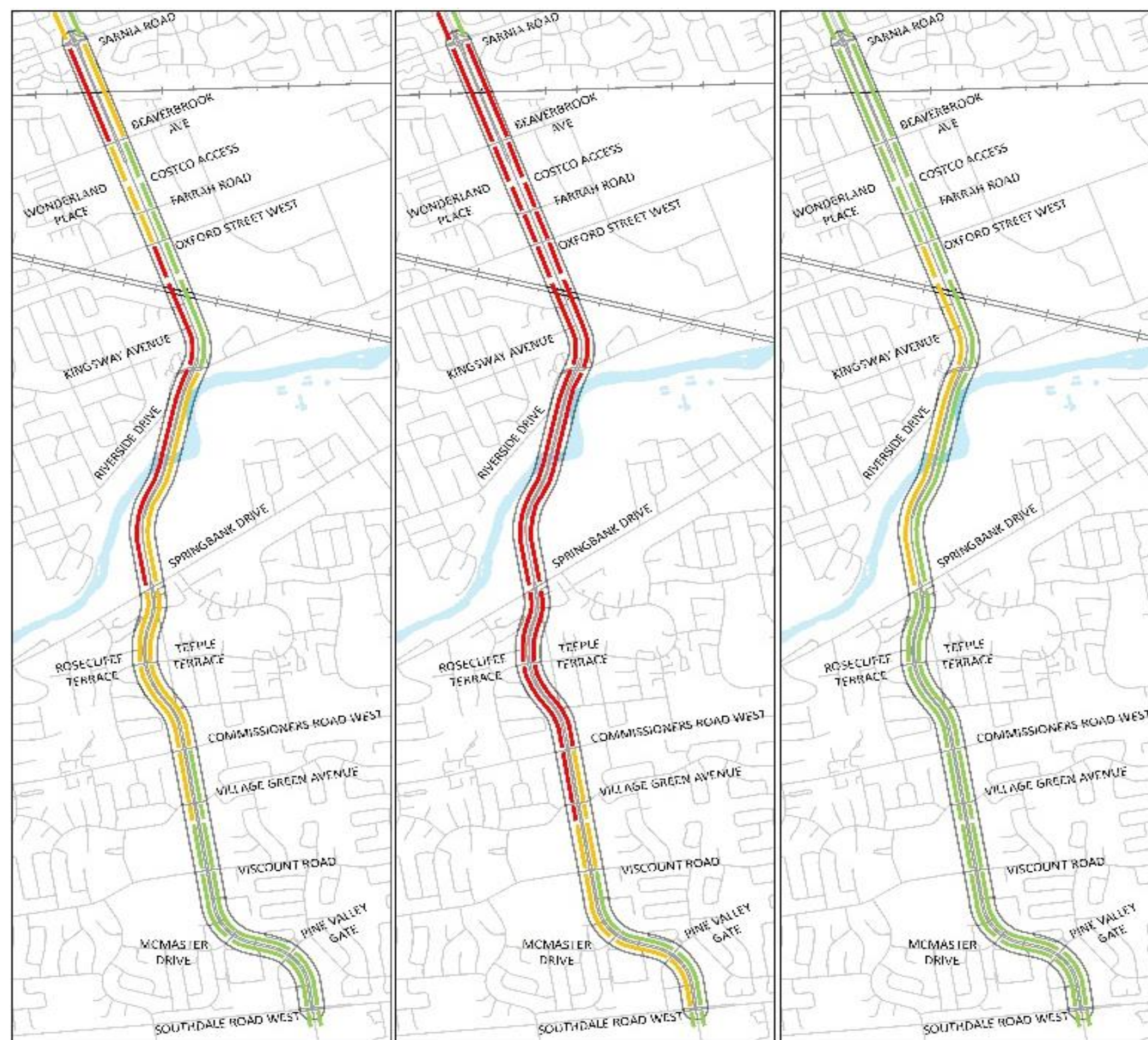
## WONDERLAND ROAD CORRIDOR PERFORMANCE

### MORNING

2017 - Four Lanes

2034 - Four Lanes

2034 - Six Lanes



### AFTERNOON

2017 - Four Lanes

2034 - Four Lanes

2034 - Six Lanes

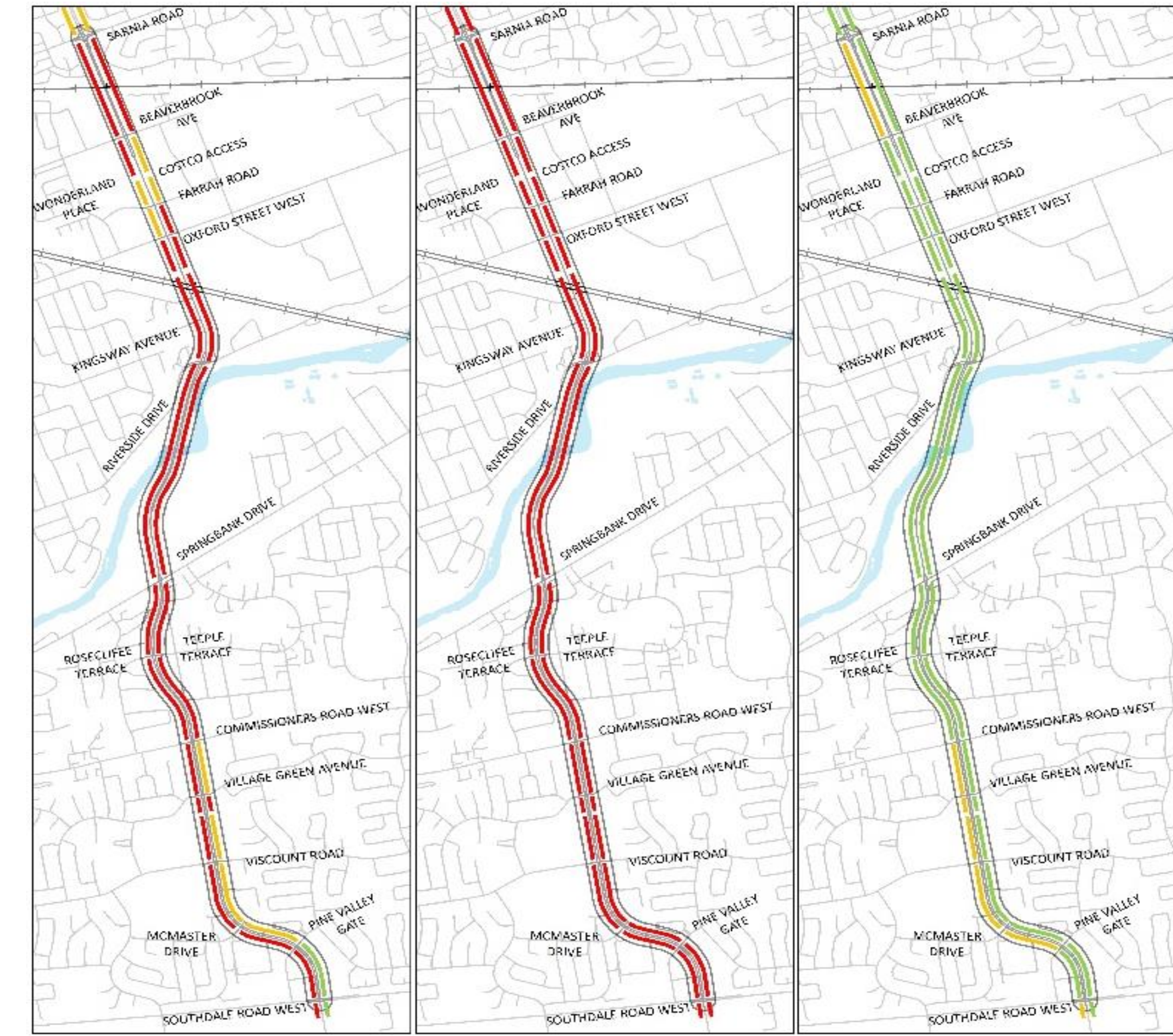


### SATURDAY

2017 - Four Lanes

2034 - Four Lanes

2034 - Six Lanes



#### Legend









##### Link Performance

- Typically good performance
- Occasional issues
- Typically poor performance

- Study Area
- Railway
- Roads
- Water



# WHAT APPROACHES ARE BEING CONSIDERED TO IMPROVE THE CORRIDOR?

Possible Planning Solutions	Description	Key Considerations	Does it Address the Problems and Opportunities
Do Nothing 	No capital improvements. Continue operation and maintenance of the four-lane roadway	Not consistent with City's long-term transportation planning network or The London Plan	
Address traffic signal timing 	Revise traffic signal timing at intersections along the corridor to improve traffic flow	<p>Traffic signal synchronization is like a web: if you change the timing in one direction, it will affect all the intersections surrounding it, causing a ripple effect</p> <p>Traffic signal timings are regularly reviewed along Wonderland Road and across the City. Modifications were made in 2018. There are limitations to signal optimization alone, including roadway capacity constraints.</p>	Yes – provides some improvement along the corridor 
Transportation Demand Management (TDM) 	Reduce periods of peak traffic demands by shifting the timing of travel and increasing alternative modes of travel (transit, cycling, walking)	TDM policies included in the City's Transportation Master Plan are being implemented throughout the City	Implementation ongoing through other City programs 
Increase Capacity 	Widen Wonderland Road from 4 to 6 through lanes throughout the corridor	<p>Consistent with City's long-term transportation planning network</p> <p>Analysis completed shows the majority of the corridor is forecasted to meet or exceed capacity by 2034 if not widened</p>	Consistent with the Transportation Master Plan and addresses Problems/ Opportunities 

Based on the results of the analysis the recommendations include:

- Continue to monitor traffic signal synchronization and optimize as required. This will be completed while the planning and design for 6 lanes is underway and could involve the reconstruction of intersections only.
- Widen Wonderland Road to six lanes through the corridor. The widening would be completed in phases, starting as early as 2023, subject to Council approval.

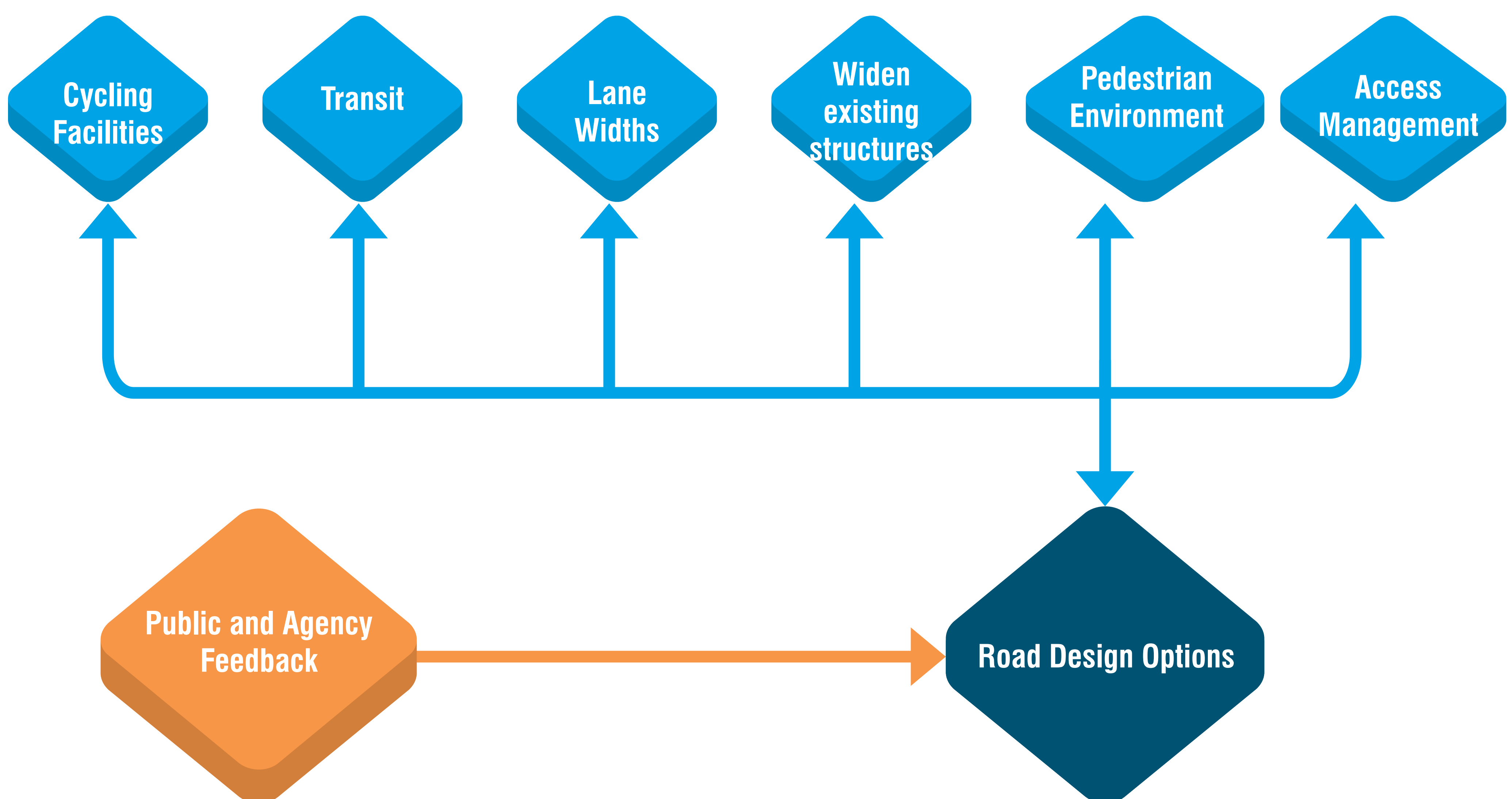


# WHAT OPTIONS ARE BEING DEVELOPED?

Wonderland Road is intended to be built to a high standard of streetscape and urban design throughout the corridor.

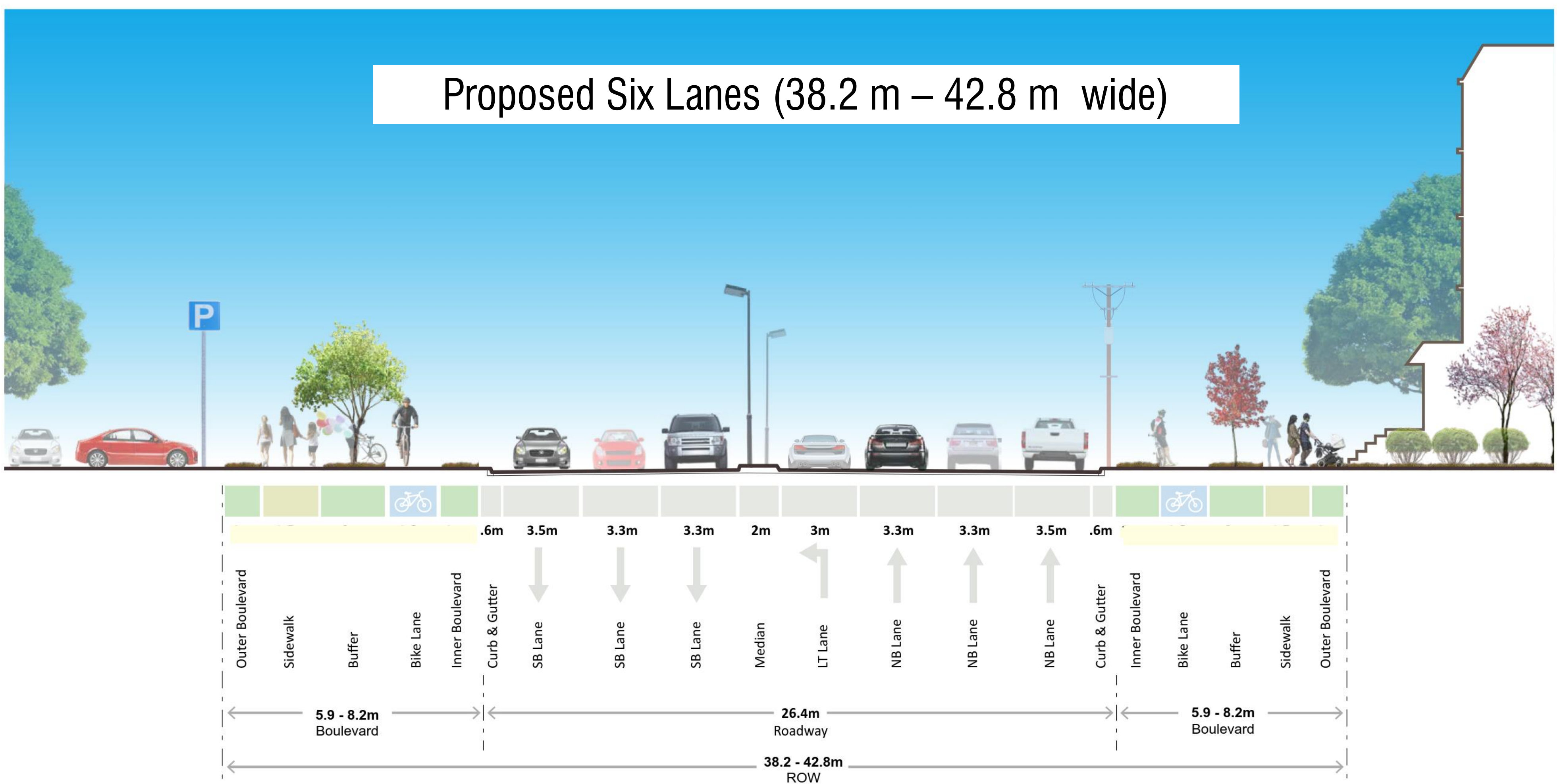
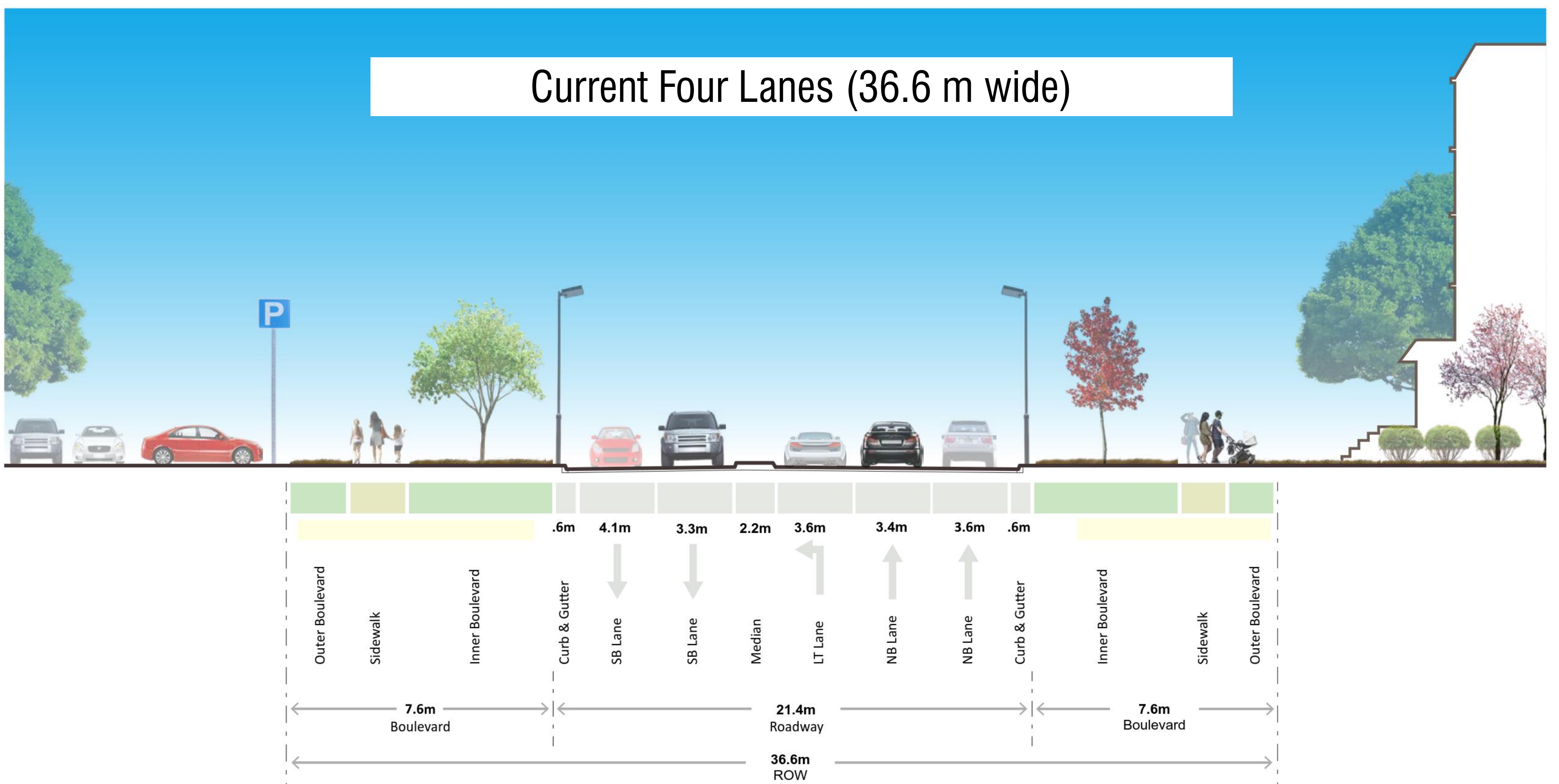
Over the next several months, the study team will develop and evaluate designs for six-laning the corridor. The options will be developed and analyzed based on:

- What is the optimal width of the roadway elements within the corridor (lane widths, cycling facilities, pedestrian amenities, utility requirements, trees, noise barriers, etc.)?
- How should the road be widened – widen to the east, widen to the west, widen symmetrically along both sides?
- What intersection improvements are required, including timing of traffic signals?
- How should existing drainage issues along the corridor be addressed?
- What unique elements should be planned for the main street section (CNR structure to Beaverbrook Ave.) to support the pedestrian-oriented area?





# WHAT WOULD SIX-LANES ON WONDERLAND LOOK LIKE? SOUTHDALE ROAD TO COMMISSIONERS ROAD



- In-boulevard bike lanes recommended throughout corridor.



Artistic depiction of six-lanes – Looking North from Southdale Road



# GUY LOMBARDO BRIDGE

## ALTERNATIVES

- Constructed in 1977
- Five-span steel box girder bridge
- Terry Fox Parkway (pedestrian pathway part of the Thames Valley Parkway) passes under the bridge, along the south bank of the Thames River
- Currently has four lanes of traffic, sidewalks and multi use pathway
- Aesthetics of the bridge are important
- Woodland Cemetery to the southeast

Alternatives to accommodate the widening are being developed and include:

- Maintain existing bridge:
  - Traffic, cyclists, pedestrians on existing bridge
  - Requires shared cycling lanes across the bridge
- Modify existing bridge and construct one new pedestrian bridge (one side):
  - Traffic on existing bridge
  - Northbound cyclists and pedestrians on existing bridge
  - Southbound cyclists and pedestrians on new bridge
- Maintain existing bridge and construct two new pedestrian bridges (one on each side):
  - Traffic on existing bridge
  - Cyclists and pedestrians on two new bridges





# RAIL BRIDGE ALTERNATIVES

## CN Rail Bridge

- Constructed in 1957
- Three-span bridge deck-plate-girder bridge, carrying two lines of track
- Existing piers near the roadway limit ability to widen road
- Developed area with limited property for construction



Alternatives to accommodate the widening are being developed and include:

- Maintain existing bridge and modify embankments
- Replace bridge



## CP Rail Bridge

- Constructed in 1987
- Three-span bridge concrete bridge, over a single line of track

Alternatives to accommodate the widening are being developed and include:

- Maintain existing structure with reduced lanes
- Widen structure to one side only
- Widen structure on both sides



# Next Steps

1

Review comments provided at and following this event

2

Develop design options along the corridor

3

Evaluate options and select a recommended design

4

Public Information Centre #2 (anticipate spring 2019)

5

Environmental Study Report available for 30-day public review period

## THANK YOU



The input of TAC is important to the outcome of this project. Please provide comments, attend PICs and ask questions throughout the study!



## Key Contacts

**Jason Johnson, P. Eng.**

Project Manager

Dillon Consulting Limited

518.438.1288 x 1222

WonderlandRoad@Dillon.ca

**Ted Koza, P.Eng.**

Transportation Design

Engineer

City of London

519.661.CITY (2489) x 5806

[Getinvolved.london.ca](http://Getinvolved.london.ca)