

Bradford west Gwillimbury



Traffic Mitigation Strategy

Public Information Centre #2

December 13, 2023

6:00pm to 8:00pm



Agenda

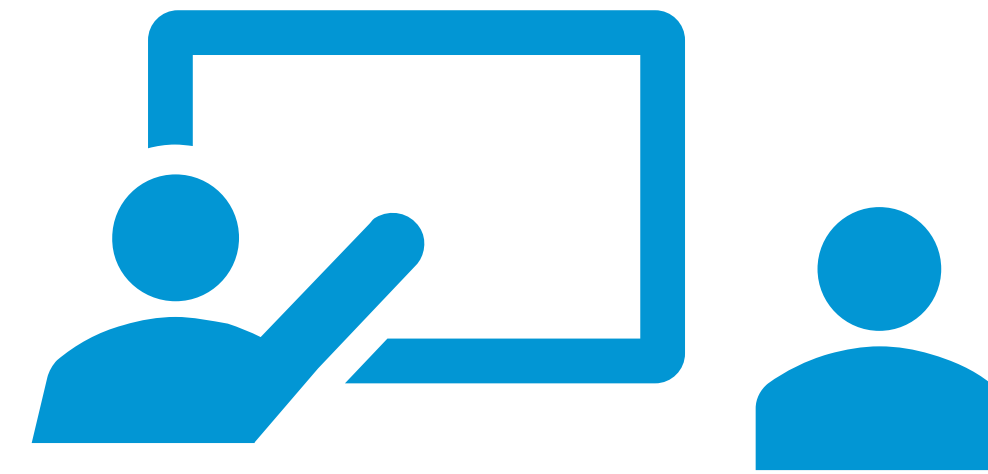
- 1 Intro and Presentation (6:00 PM)
- 2 Breakout Tables
 1. Breakout Table 1 (6:30 PM – 6:50 PM)
 2. Breakout Table 2 (6:50 PM – 7:10 PM)
 3. Breakout Table 3 (7:10 PM – 7:30 PM)
- 3 Overall Recap (7:35 PM)
- 4 Wrap-Up / Next Steps (7:50 PM)
- 5 Meeting adjourned (8:00 PM)

Welcome

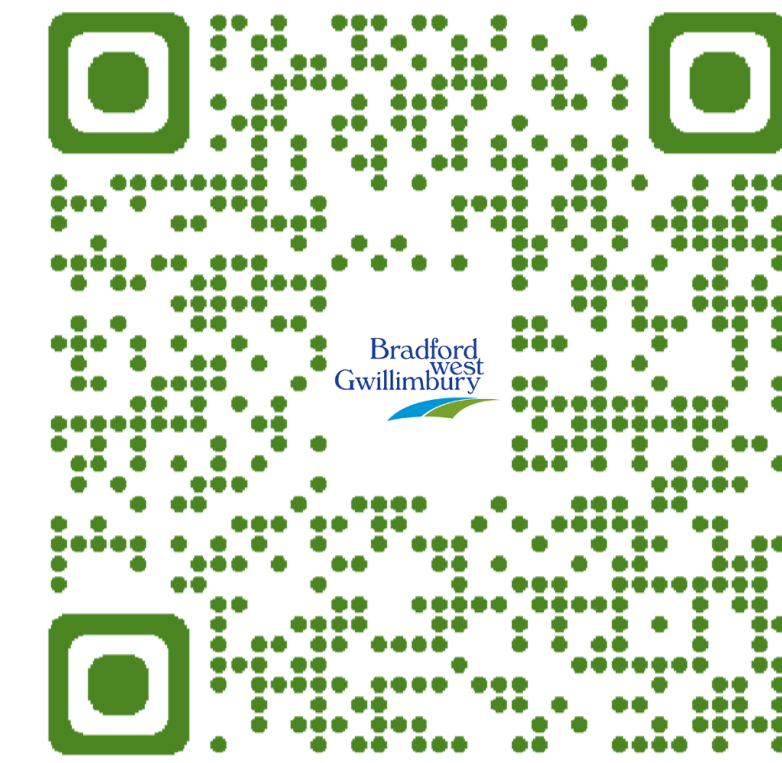
Thank you for attending PIC #2 for the BWG Traffic Mitigation Strategy project. There are many ways to provide feedback on today's PIC:



Provide comments during the **interactive breakout group discussions**



Discuss questions / comments with a **member of the project team**



Provide input online via the **project website** using the **QR code** or: www.townofbwg.com/tms

Land Acknowledgement

As visitors on this land, The Town of BWG acknowledges that the land on which we gather today is the traditional territory of the Anishinaabek Nation, which includes Ojibwe, Odawa and Pottawatomi Nation, collectively known as the Three Fires Confederacy. We recognize that the Huron-Wendat, Chippewa and Haudenosaunee Nations have walked on this territory over time.

In times of great change, we recognize more than ever the importance of honouring Indigenous history and culture and are committed to moving forward in the spirit of reconciliation, respect and good health with all First Nation, Métis and Inuit people.

Project Background

To address growing traffic safety concerns in Bradford West Gwillimbury (BWG), the Town is developing a **Traffic Mitigation Strategy**.

The Strategy will include developing:

- **Clear processes** for evaluating, prioritizing, and implementing traffic calming requests; and
- **A toolbox of traffic calming measures** to help address concerns on local, collector, and arterial roads - in both urban and rural areas - relating to **speeding, traffic volumes, collisions, parking, pedestrian movements, and all-way stop requests**.

The Strategy is being developed **for all roadways** across BWG and will include **context-specific approaches and tools** for addressing traffic issues in our community.

Project Background

A key priority is developing a clear **traffic management process** that is **consistent with other provincial and federal traffic management guidance** like Ontario Traffic Manual (OTM), Ontario Traffic Council (OTC), and Transportation Association of Canada (TAC).

The Town will also continue to use these documents for other transportation-related decisions through the Traffic Mitigation Strategy. Some of the key documents include:

Ontario Traffic Manual

- Book 5 Regulatory Signs – all-way stop requests
- Book 6 Warning Signs
- Book 11 Pavement, Hazard and Delineation Markings
- Book 12 Traffic Signals
- Book 15 Pedestrian Crossing Treatments
- Book 18 Cycling Facilities

Ontario Traffic Council

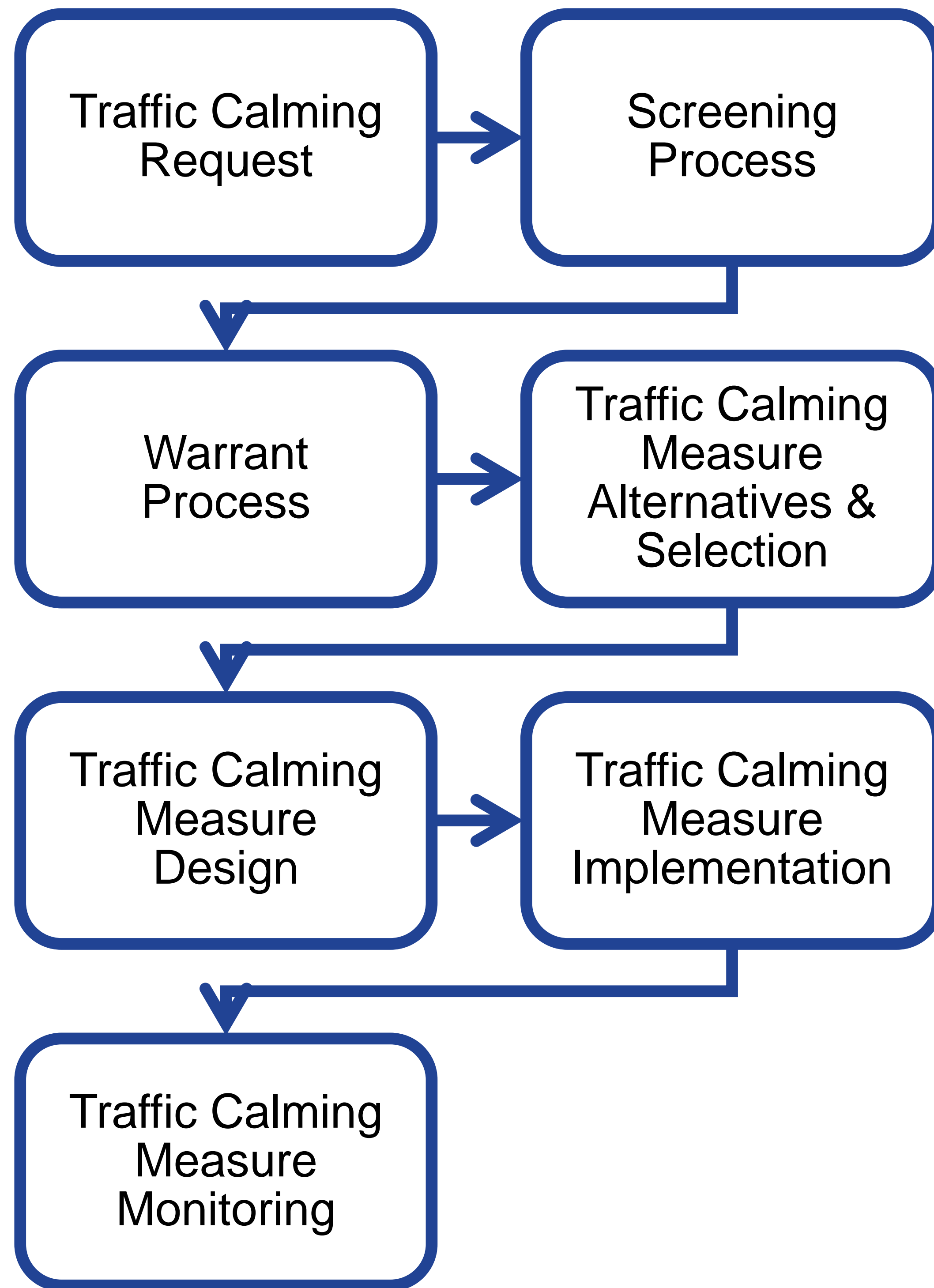
- Vision Zero
- Crossing Guard Guide
- Automated Speed Enforcement
- Restaurant Patio
- Protected Intersection

Transportation Association of Canada

- Canadian Guidelines for Establishing Posted Speed Limits
- Geometric Design Guide
- Canadian Guide to Traffic Calming

Project Strategy

Example Traffic Calming Process:



Example Traffic Calming Toolbox:

Measures	Potential Advantages			Potential Disadvantages			Road Classification				
	Speed Reduction	Volume Reduction	Conflict Reduction	Emergency Response	Active Transportation	Maintenance	Local	Collector	Rural		
									Hot Mix Asphalt	Surface Treatment	Gravel
Vertical Measures											
Raised Intersection	●	○	⊙	⊙	⊙	⊙	✓	✓	✗	✗	✗
Speed Cushion	●	⊙	●	⊙	⊙	⊙	✓	✓	✗	✗	✗
Speed Hump	●	⊙	●	●	⊙	⊙	✓	✓	✗	✗	✗
Horizontal Measures											
Chicane	●	●	●	⊙	⊙	⊙	✓	✓	✗	✗	✗
Curb Extension	⊙	○	○	○	⊙	⊙	✓	✓	✗	✗	✗
Curb Radius Reduction	⊙	○	○	○	⊙	⊙	✓	✓	✗	✗	✗
On-Street Parking	⊙	○	○	⊙	⊙	⊙	✓	✓	✗	✗	✗
Raised Median Island	⊙	○	⊙	○	○	⊙	✓	✓	✓	✓	✗
Traffic Circle	●	⊙	●	⊙	⊙	⊙	✓	✓	✓	✓	✗
Flexible Bollards	⊙	○	⊙	○	⊙	●	✓	✓	✗	✗	✗
Obstruction Measures											
Directional Closure	●	●	⊙	⊙	⊙	⊙	✓	✓	✗	✗	✗
Diverter	○	●	⊙	⊙	⊙	⊙	✓	✓	✗	✗	✗
Full Closure	○	●	●	●	⊙	⊙	✓	✓	✗	✗	✗
Regulatory Measures ¹											
C.S.Z.	●	⊙	⊙	○	○	○	✓	✓	✗	✗	✗
40 km/h Speed Limit Area	●	○	⊙	○	○	○	✓	✓	✗	✗	✗
Other											
Pavement Markings ²	●	○	○	○	○	⊙	✓	✓	✓	✓	✗
Radar Message Board	⊙	○	○	○	○	⊙	✓	✓	✓	✓	✓

What We've Learned

- PIC #1 was held on Wednesday, September 27th, 2023
- Approximately 50 people attended, in addition to online feedback
- The following key themes were identified through the feedback received:



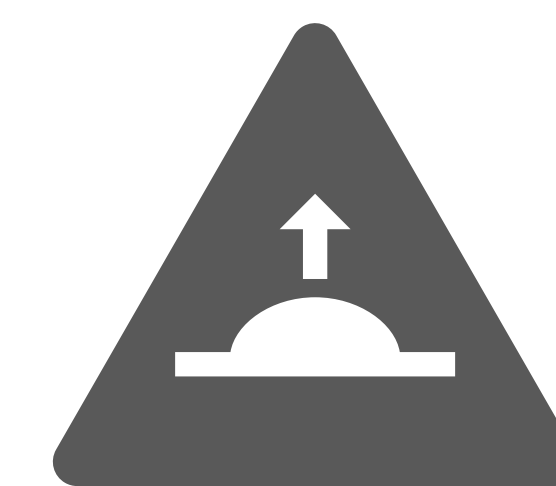
Safety should be prioritized to support vulnerable road users, especially at key locations like schools, senior residences, and parks



Residents would like to see **Traffic calming measures** and **mitigation strategies** implemented in a timely manner to address traffic concerns

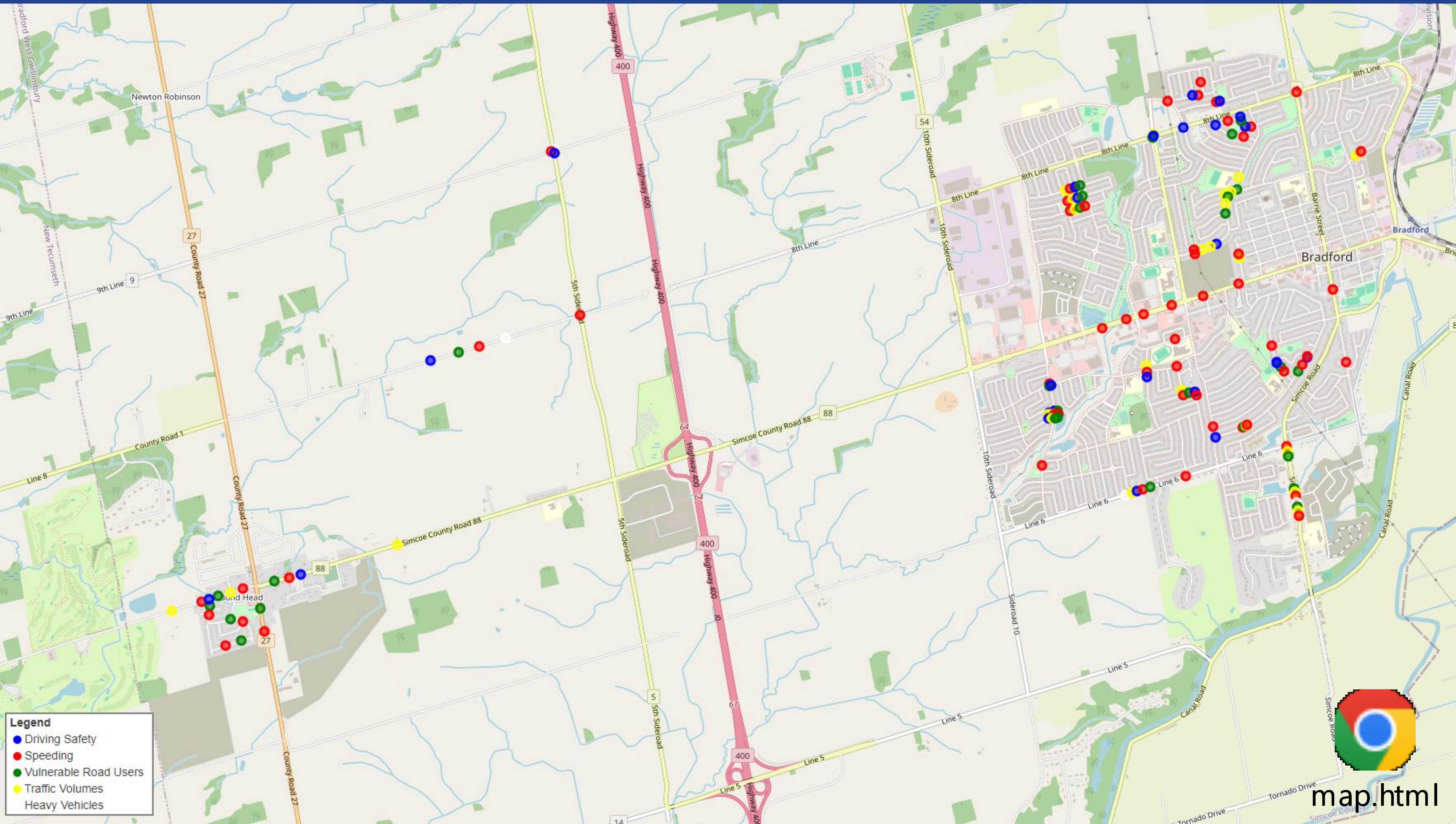


Speeding, traffic volumes, and aggressive / unsafe driving are a major concern throughout BWG

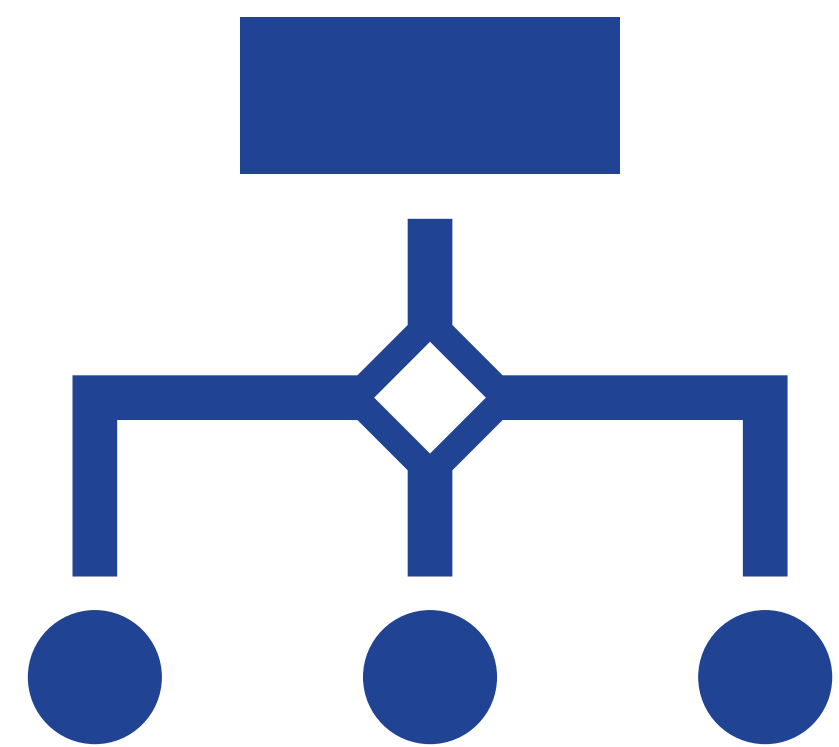


Speed bumps, automated speed enforcement, and stop signs were the most common measures noted. Others included pedestrian crossings, speed reduction, curb extensions, etc.

What We've Learned



Purpose of Today's PIC



During PIC #2 we want **you** to:

- Work through case studies using example tools to understand the traffic mitigation process
- Provide your feedback on the approach and inputs used to address traffic issues

Through this process, **we** hope to:

- Increase understanding about the traffic mitigation process, potential tools, and the prioritizing / costing process
- Incorporate your feedback in the development of potential traffic mitigation tools that may be effective in BWG, beyond the 'standard' tools

Today's Traffic Calming Process



Step 1: Pre-Screening

Pre-Screening Criteria

Is the road within BWG?

Are most people driving more than 10 km / hr over the posted speed limit?

Are average traffic volumes along the road at least 500 vehicles per day?

Is the road at least 100m in length?

Step 2: Warranting

Warranting / Ranking Criteria

Urban / Rural Local: 1 point each km/hr above speed limit

Urban Collector: 1 point for each km/hr above 10 km/hr above speed limit

Rural Collector: 1 point for every 1 km/hr above speed limit

Urban Local: 1 point for each 50 vehicles / day above 750 vehicles/day

Rural Local: 1 point for each 50 vehicles / day above 500 vehicles/day

Urban Collector: 1 point for each 100 vehicles / day above 2000 vehicles/day

Rural Collector: 1 point for each 75 vehicles / day above 500 vehicles / day

1 point for every 2 collisions that occur within a 50 m radius within the past three years. Pedestrian collisions = 2 points

1 point for any pedestrian generators (e.g., school, park, library, community centre, etc.)

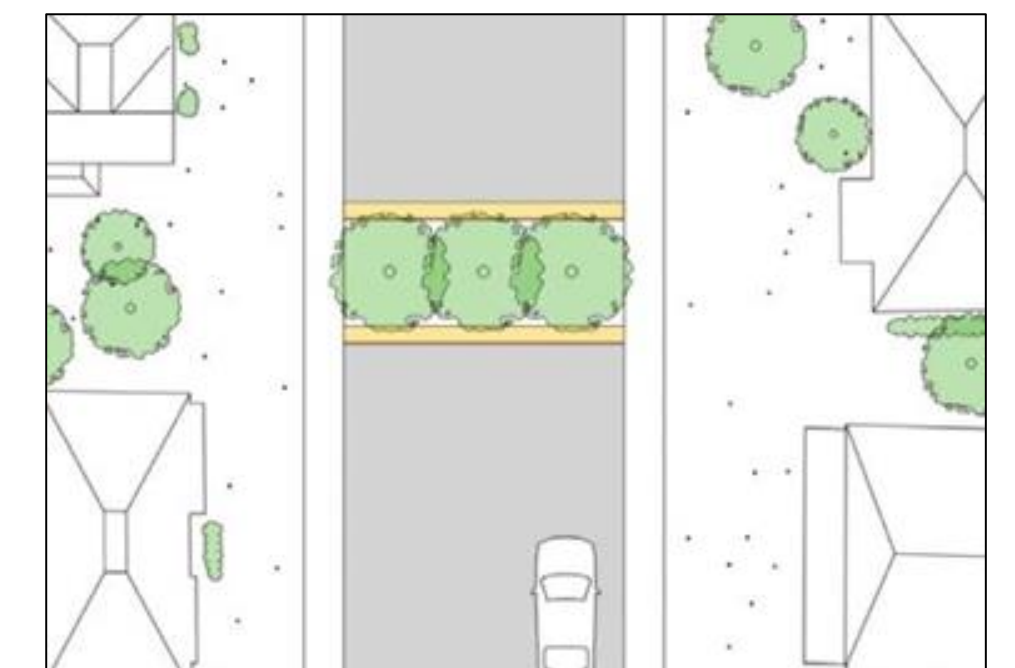
Step 3: Measure Selection

Flexible Bollards



Cost: Less than \$2,000

Full Closure



Cost: \$50,000 - \$100,000

Curb Extensions




Cost: \$50,000 - \$100,000

Note: This process has been simplified for the purpose of today's PIC. Additional criteria and measures will be included as part of the final Traffic Mitigation Strategy to be presented at PIC #3.

BREAKOUT TABLES DISCUSSION PACKAGE

Breakout Session Overview

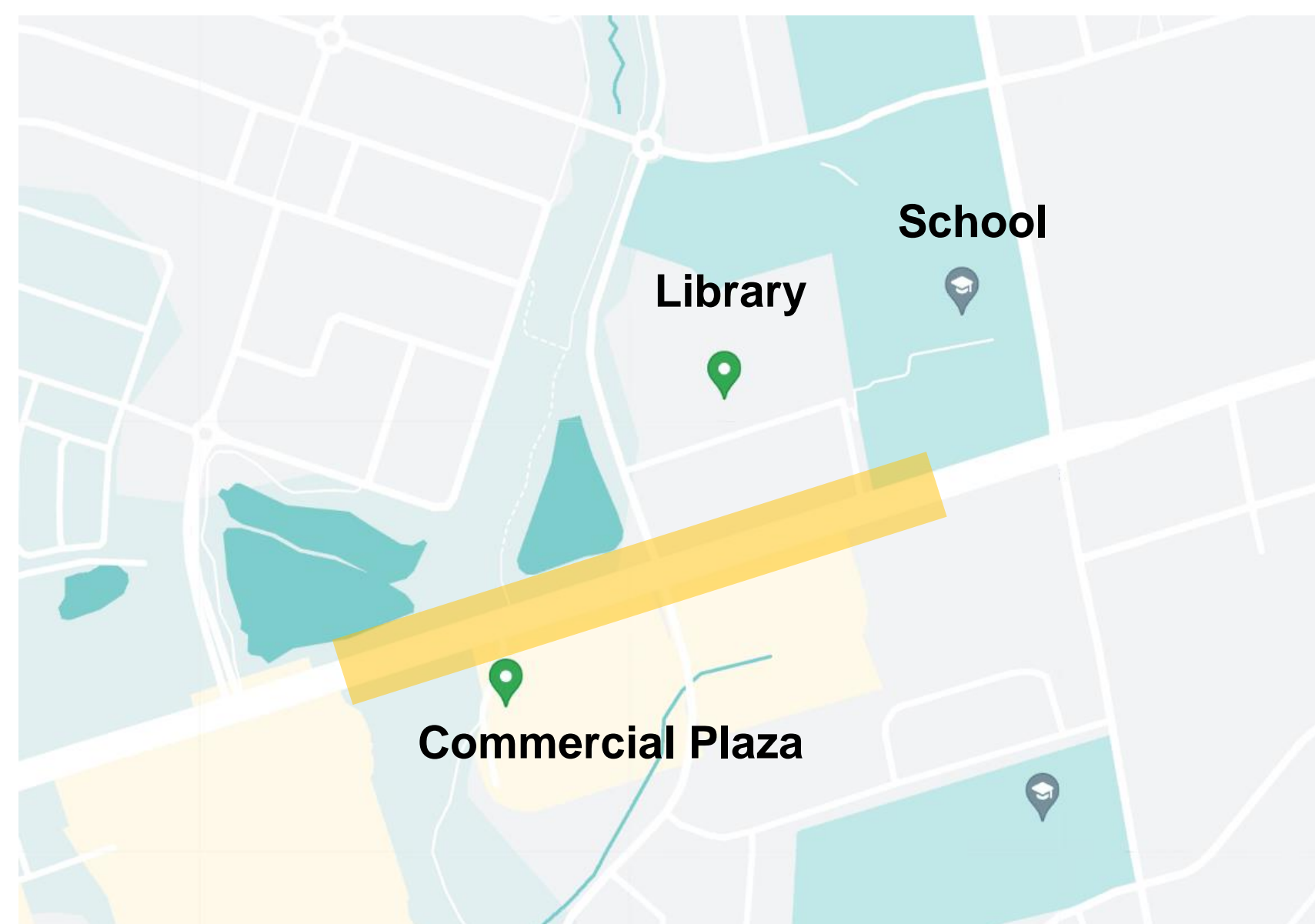
1. Divide into **3 breakout groups**
 2. Rotate through the **3 tables** with your group:
 - **Table 1:** Speeding
 - **Table 2:** Volumes
 - **Table 3:** Pedestrian Safety
 3. Work through the **case studies step-by-step** with your group (20 minutes per breakout table = 60 minutes)
 - Review the case studies (5 min)
 - Complete the pre-screening process (5 min)
 - Complete the warranting process (5 min)
 - Select a traffic calming measure (5 min)
 4. While working through the case studies, discuss the **guiding questions** with your group
-  Discuss the **guiding questions** with your group!
5. Overall **Recap** (all groups together)
 - Review the outcomes from each breakout group for each table (9 outcomes)
 - Prioritization discussion – what budget do we have available?
 - Select measures to implement
 - Group discussion

BREAKOUT TABLE 1: SPEEDING

Table 1: Speeding

Before proceeding to the pre-screening process, please review the case studies as a group.

#1: Holly Road



Traffic concern: Speeding and aggressive driving near school / library

Road type: urban collector, within BWG

Posted speed limit: 50 km/hr

Operating speed: 62 km/hr

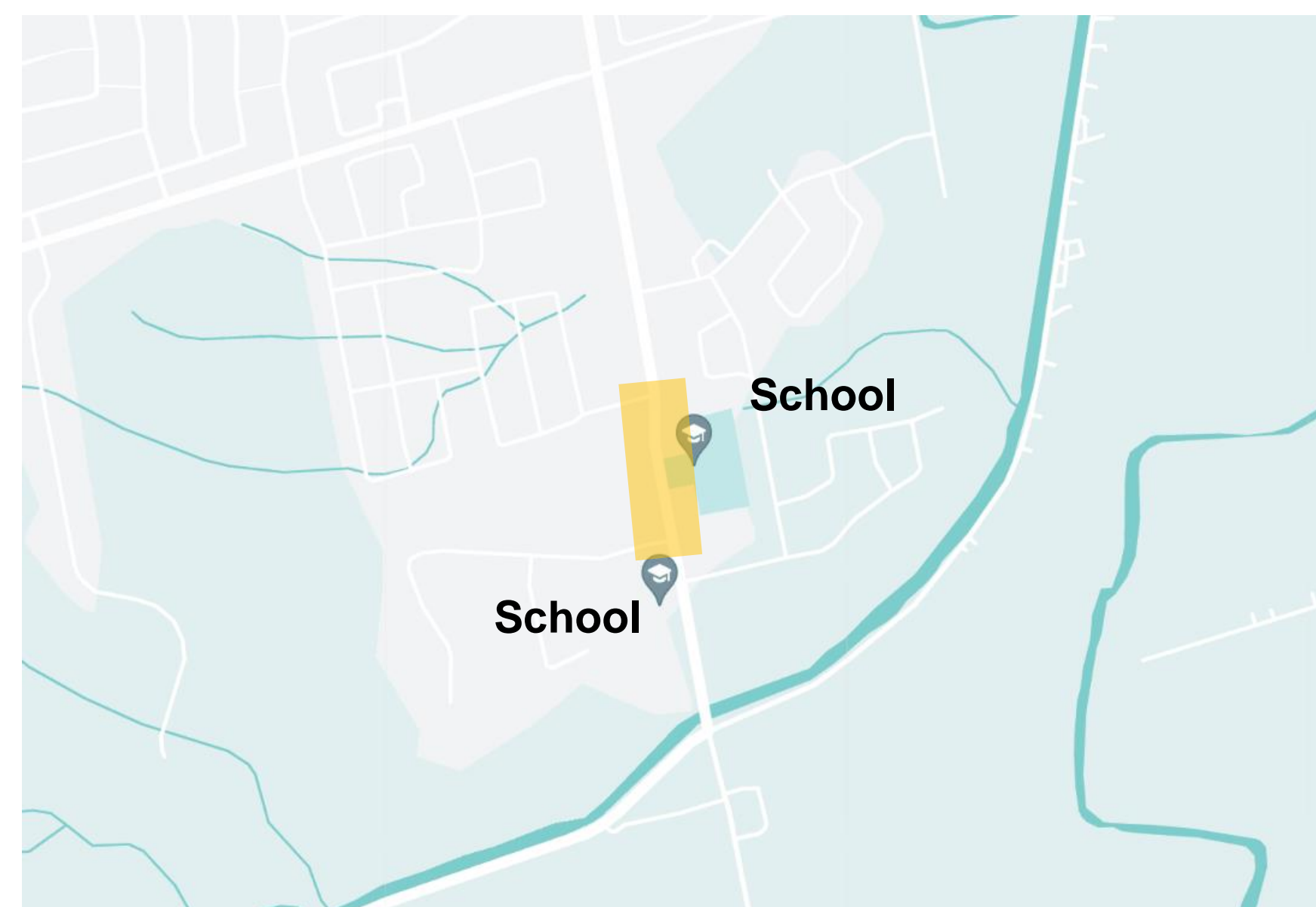
Traffic volumes: 2000 vehicles per day

Road segment: 500m

Collision history: none

Road planned for **reconstruction?** No

#2: Sam Street



Traffic concern: Speeding and aggressive driving near school and park

Road type: urban local, within BWG

Posted speed limit: 40 km/hr

Operating speed: 48 km/hr

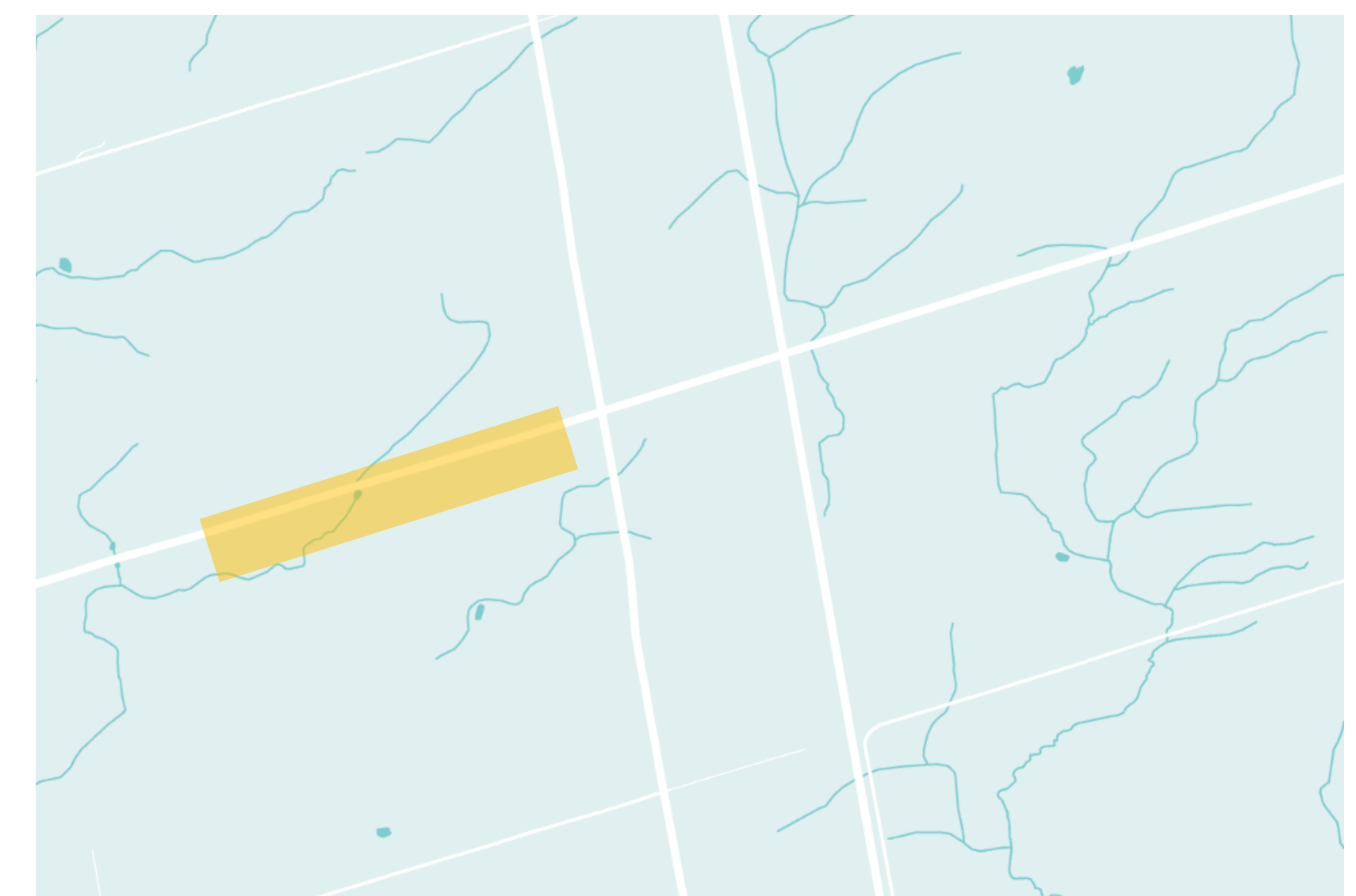
Traffic volumes: 400 vehicles per day

Road segment: 250m

Collision history: none

Road planned for **reconstruction?** No

#3: Lily Road



Traffic concern: Speeding along a rural road

Road type: rural collector, within BWG

Posted speed limit: 80 km/hr

Operating speed: 100 km/hr

Traffic volumes: 875 vehicles per day

Road segment: 400m

Collision history: 1 collision involving a pedestrian

Road planned for **reconstruction?** No

Table 1: Speeding

Step 1: Pre-screening process

- Review each criteria to determine if each case study passes / fails the criteria
- Based on the results, determine whether each case study can proceed to Step 2

Pre-Screening Criteria	#1: Holly Road		#2: Sam Street		#3: Lily Road	
	Yes	No	Yes	No	Yes	No
Is the road within BWG?	X		X		X	
Are most people driving more than 10 km/hr over the posted speed limit?	X			X	X	
Are average traffic volumes along the road at least 500 vehicles per day?	X			X	X	
Is the road at least 100m in length?	X		X		X	
Outcome:	PASS		FAIL		PASS	

 What are your thoughts on the pre-screening **criteria** used? How do you feel about the **outcome** of the pre-screening?

Table 1: Speeding

Step 2: Warranting / Ranking Process

- Review each criteria to determine how many points each case study earns
- Based on the results, determine whether each case study can proceed to Step 3

Warranting / Ranking Criteria	#1: Holly Road Points	#3: Lily Road Points
Urban / Rural Local: 1 point each km / hr above speed limit Urban Collector: 1 point for each km / hr above 10 km / hr above speed limit Rural Collector: 1 point for every 1 km / hr above speed limit	2	20
Urban Local: 1 point for each 50 vehicles / day above 750 vehicles/day Rural Local: 1 point for each 50 vehicles / day above 500 vehicles/day Urban Collector: 1 point for each 100 vehicles / day above 2000 vehicles/day Rural Collector: 1 point for each 75 vehicles / day above 500 vehicles / day	0	5
1 point for every 2 collisions that occur within a 50m radius within the past three years. Each pedestrian collision worth 2 points	0	2
1 point for any pedestrian generators (e.g., school, park, library, community centre, etc.)	3	0
Points:	5 = FAIL	27 = PASS

*In order to proceed, the total points must be **greater or equal to 25**.*



What are your thoughts on what warranting are **criteria** used?
 What are your thoughts on how the warranting process is **scored**?
 How do you feel about the **outcome** of the warranting process?

Table 1: Speeding

Step 3: Traffic Calming Measure Selection

Based on the list of potential traffic measures below, select a preferred measure to recommend

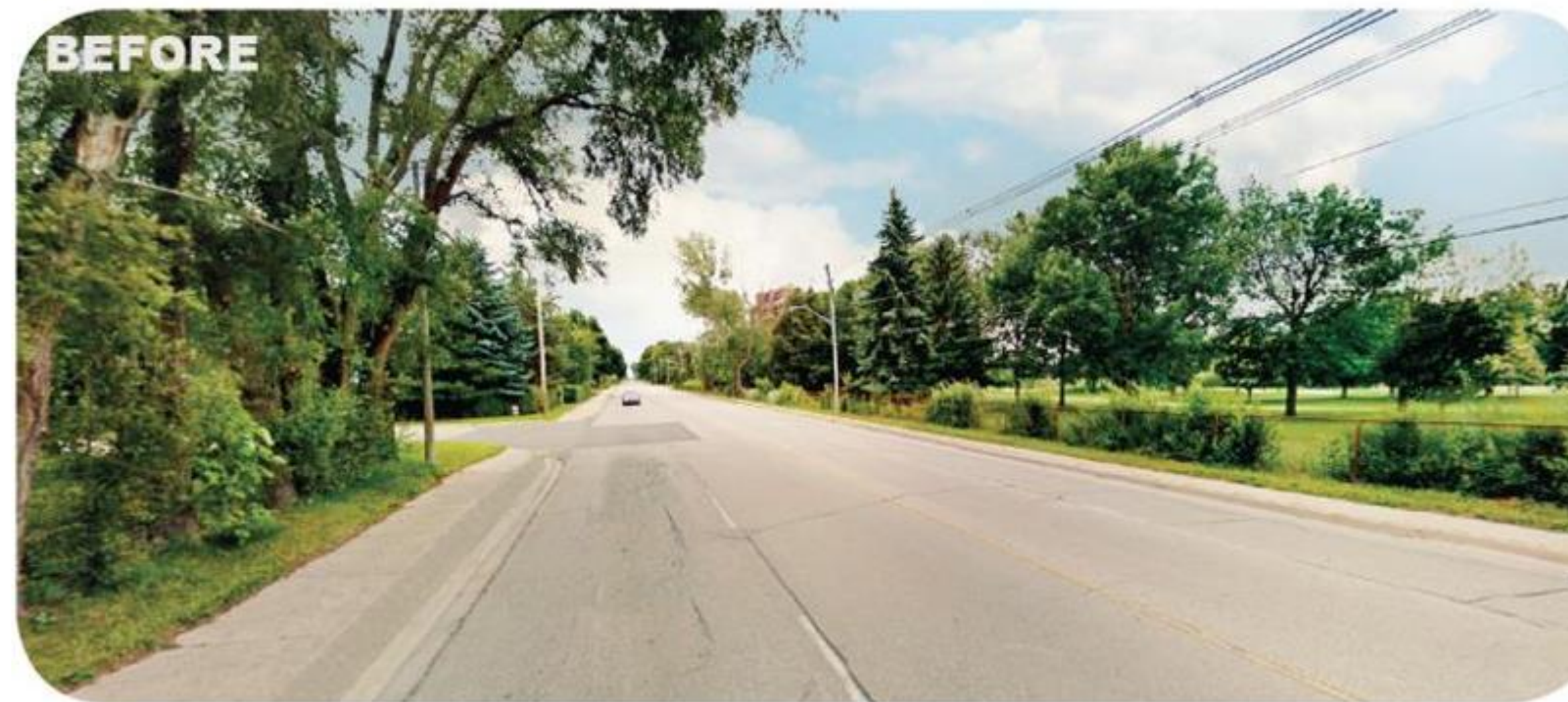
Flexible Bollards



Posts placed in the centre of a roadway to narrow the travel lanes and encourage slower speeds

Cost: Less than \$2,000

Road Diet



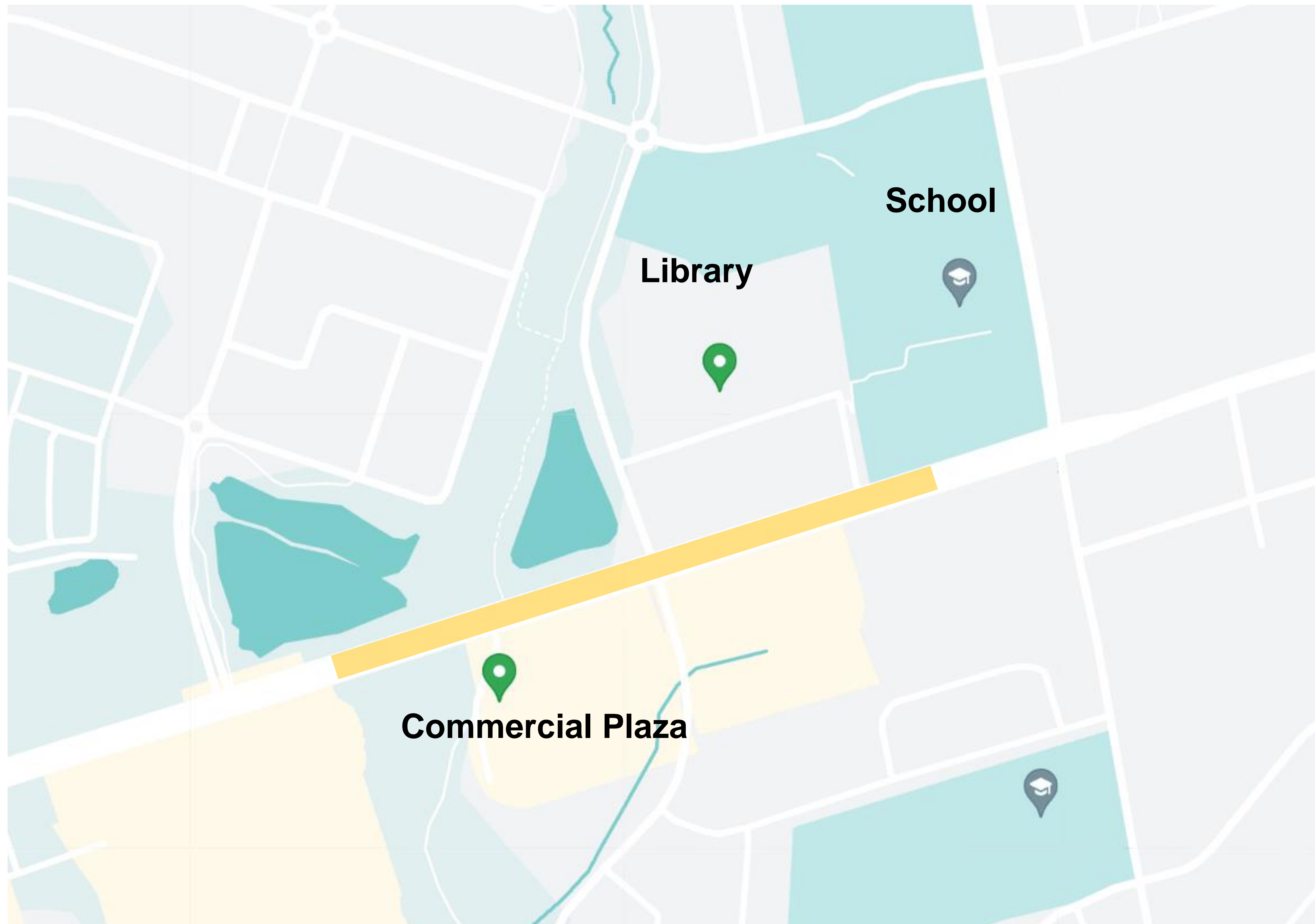
Reconfiguring the roadway to accommodate all users and reduce speeding

Cost: \$1,000 - \$5,000



How do you feel about the potential traffic calming measures?
Do you **like / dislike** any of these tools?
Are there tools you think should have **been considered or not considered**?

Table 1: Speeding

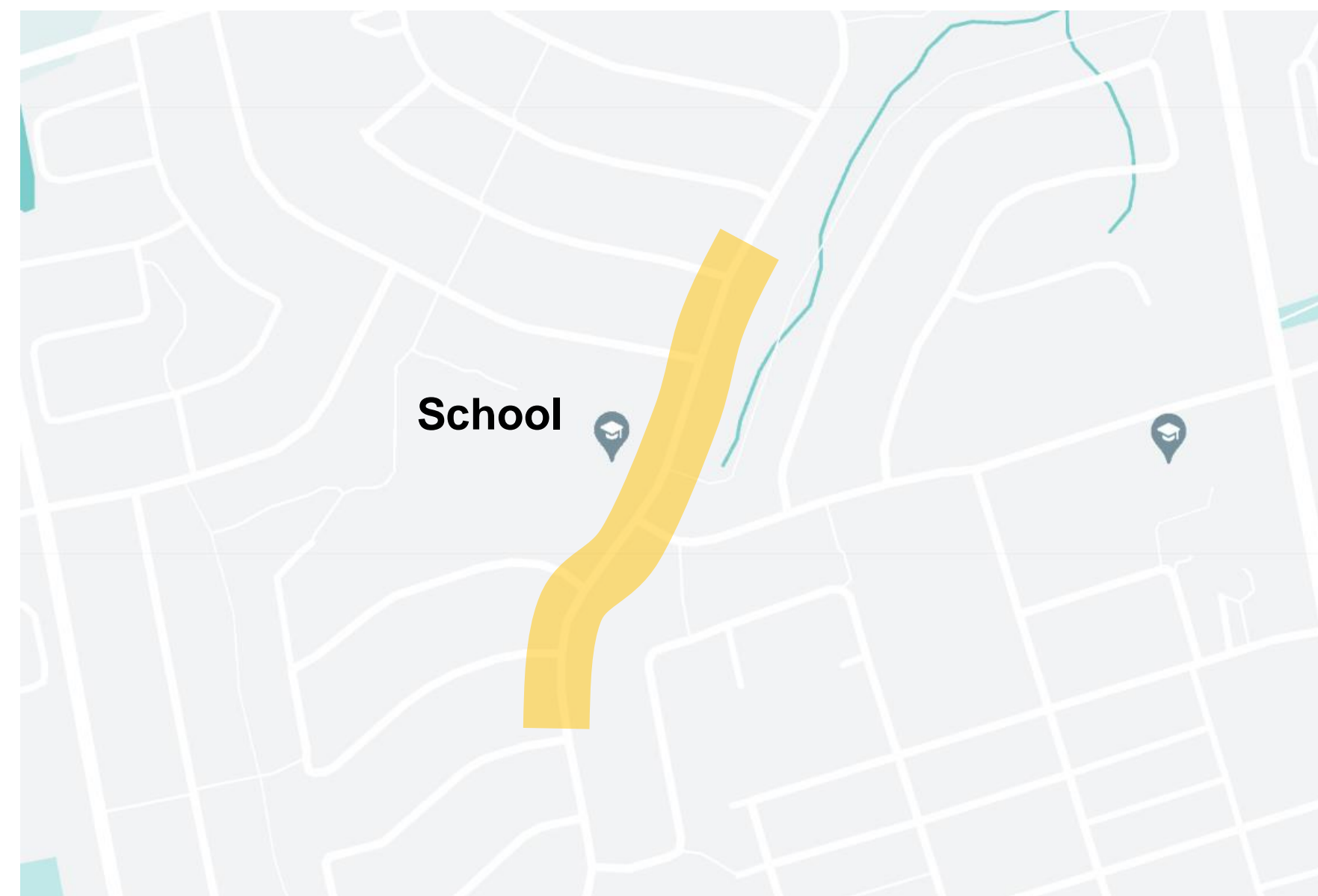


BREAKOUT TABLE 2: VOLUMES

Table 2: Volumes

Before proceeding to the pre-screening process, please review the case studies as a group.

#1: Norman Road



Traffic concern: Significant traffic volumes near school

Road type: Urban local, within BWG

Posted speed limit: 40 km/hr

Operating speed: 55 km/hr

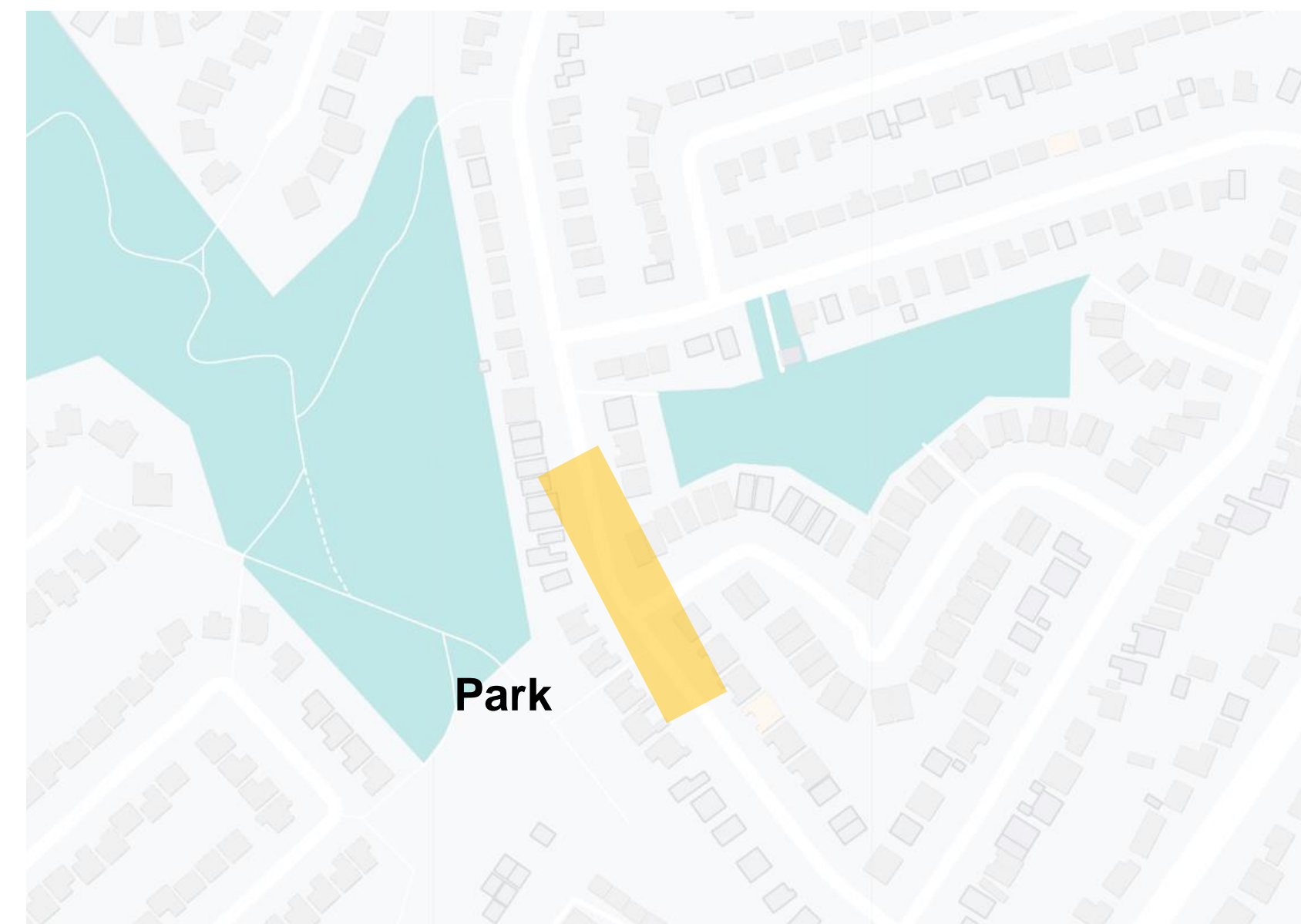
Traffic volumes: 1200 vehicles per day

Segment length: 500m

Collision history: 1 serious collision involving pedestrians

Road planned for **reconstruction?** Yes

#2: Casper Street



Traffic concern: Significant traffic volumes near access to park and neighbourhood streets

Road type: Urban local, within BWG

Posted speed limit: 50 km/hr

Operating speed: 61 km/hr

Traffic volumes: 600 vehicles per day

Segment length: 300m

Collision history: None

Road planned for **reconstruction?** No

#3: Sydney Street



Traffic concern: Significant traffic volumes through small rural community

Road type: Rural collector, **not** within BWG

Posted speed limit: 60 km/hr

Operating speed: 65 km/hr

Traffic volumes: 700 vehicles per day

Segment length: 500m

Collision history: None

Road planned for **reconstruction?** No

Table 2: Volumes

Step 1: Pre-screening process (5 min)

- Review each criteria to determine if each case study passes / fails the criteria
- Based on the results, determine whether each case study can proceed to Step 2

Pre-Screening Criteria	#1: Norman Road		#2: Casper Street		#3: Sydney Street	
	Yes	No	Yes	No	Yes	No
Is the road within BWG?	X		X			X
Are most people driving more than 10 km / hr over the posted speed limit?	X		X			X
Are average traffic volumes along the road at least 500 vehicles per day?	X		X		X	
Is the road at least 100m in length?	X		X		X	
Outcome:	PASS		PASS		FAIL	


 What are your thoughts on the pre-screening **criteria** used? How do you feel about the **outcome** of the pre-screening?

Table 2: Volumes

Step 2: Warranting / Ranking Process

- Review each criteria to determine how many points each case study earns
- Based on the results, determine whether each case study can proceed to Step 3

Warranting / Ranking Criteria	#1: Norman Road	#2: Casper Street
	Points	Points
Urban / Rural Local: 1 point each km / hr above speed limit Urban Collector: 1 point for each km / hr above 10 km/hr above speed limit Rural Collector: 1 point for every 1 km / hr above speed limit	15	11
Urban Local: 1 point for each 50 vehicles / day above 750 vehicles / day Rural Local: 1 point for each 50 vehicles / day above 500 vehicles / day Urban Collector: 1 point for each 100 vehicles / day above 2000 vehicles / day Rural Collector: 1 point for each 75 vehicles / day above 500 vehicles / day	9	0
1 point for every 2 collisions that occur within a 50m radius within the past three years. Each pedestrian collision worth 2 points	2	0
1 point for any pedestrian generators (e.g., school, park, library, community centre, etc.)	1	1
Points:	27 = PASS	12 = FAIL

In order to proceed, the total points must be **greater or equal to 25**.



What are your thoughts on what warranting are **criteria** used?
 What are your thoughts on how the warranting process is **scored**?
 How do you feel about the **outcome** of the warranting process?

Table 2: Volumes

Step 3: Traffic Calming Measure Selection

Based on the list of potential traffic measures below, select a preferred measure to recommend

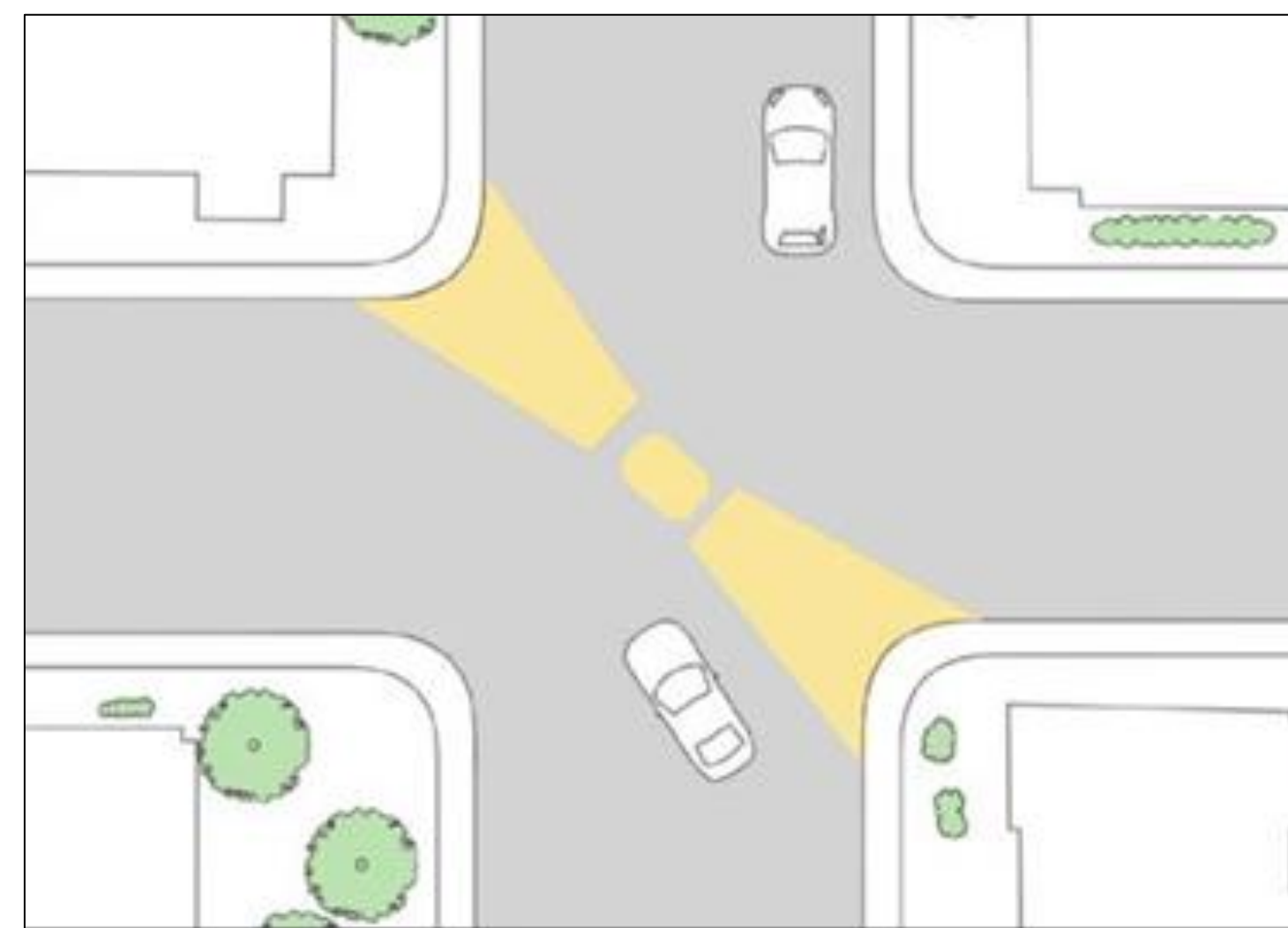
Community Safety Zone



A designated roadway segment where a community has identified road safety as a concern. This tool can be used in combination with automated speed enforcement (ASE) which uses a camera and speed measurement device to help enforce the speed limit.

Cost: \$75 - \$200 per sign

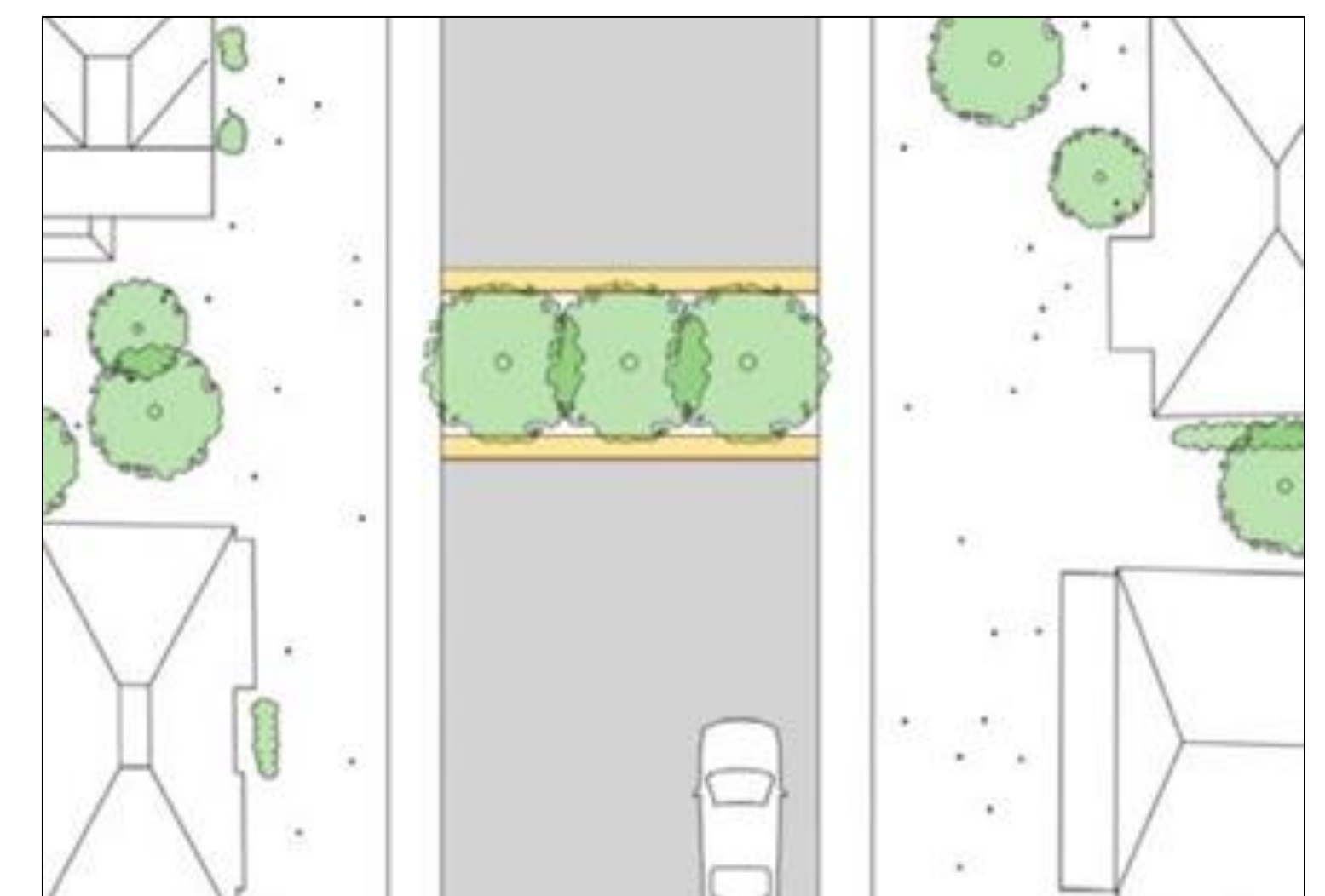
Diverters



A barrier across the width of a road to prevent vehicles from driving down a road

Cost: \$50,000 - \$100,000

Full Closure



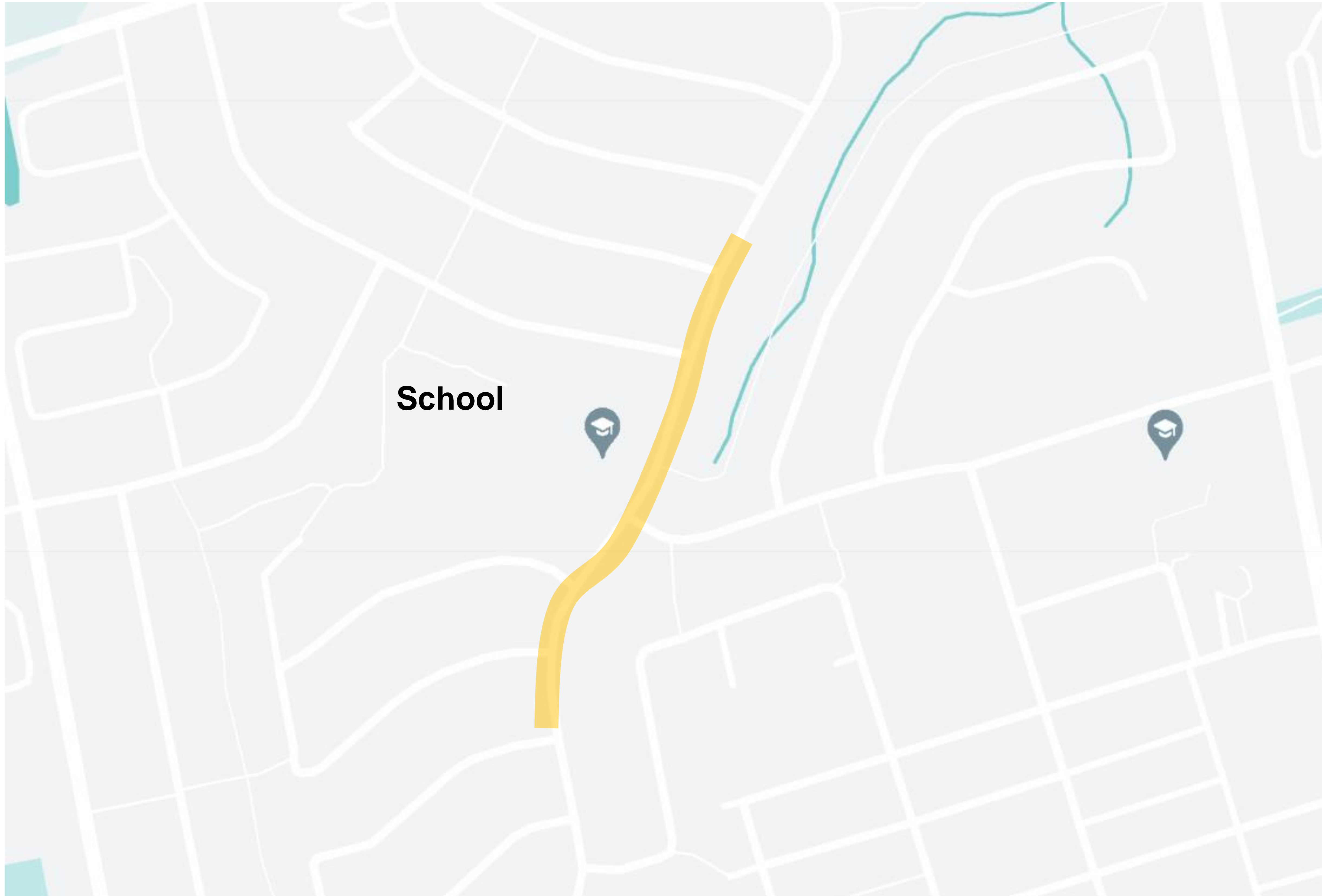
A barrier across the width of a road to prevent vehicles from driving down a road

Cost: \$50,000 - \$100,000



How do you feel about the potential traffic calming measures?
Do you **like / dislike** any of these tools?
Are there tools you think should have **been considered or not considered**?

Table 2: Volumes

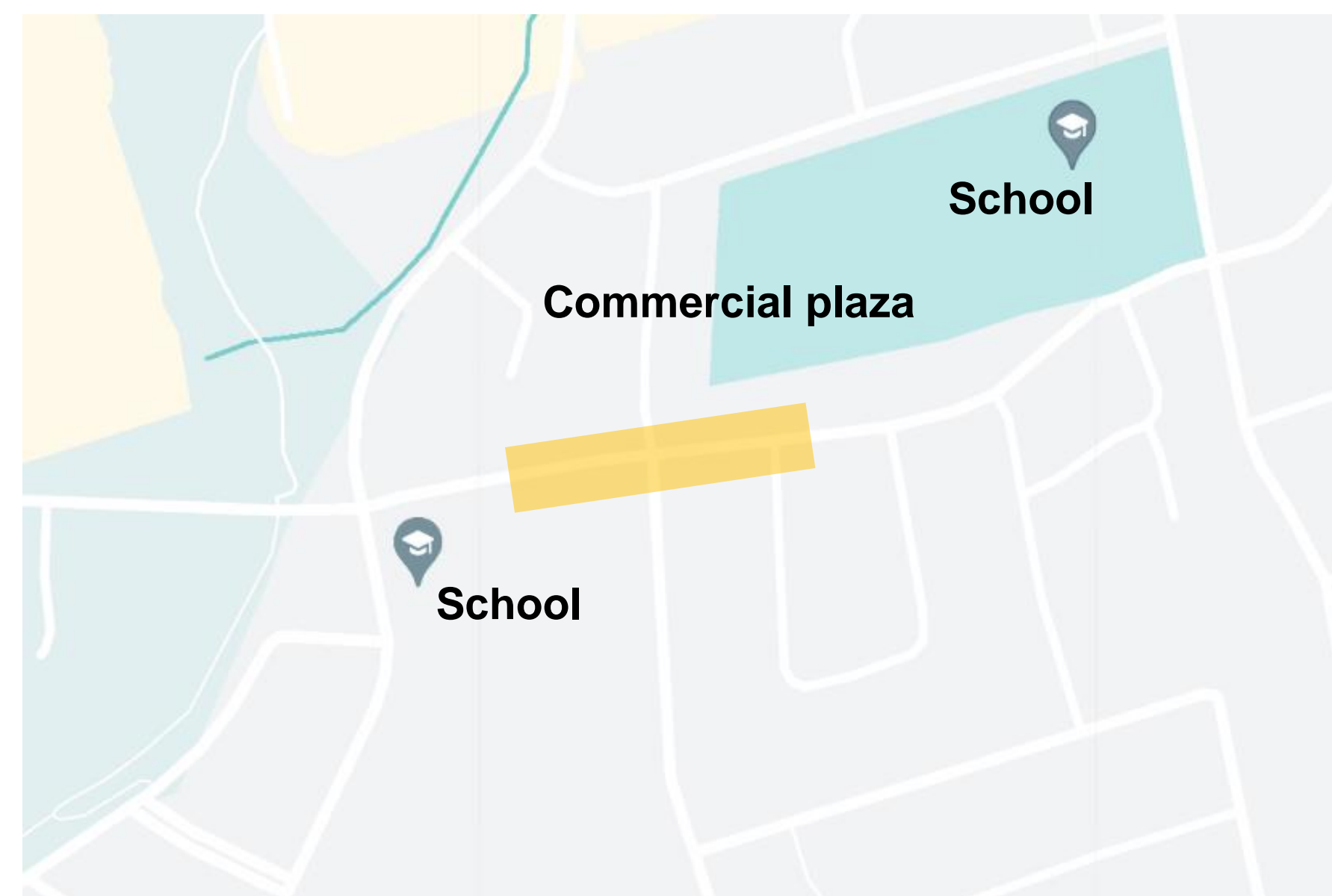


BREAKOUT TABLE 3: PEDESTRIAN SAFETY

Table 3: Pedestrian Safety

Before proceeding to the pre-screening process, please review the case studies as a group.

#1: Martin Ave. and Stan St.



Traffic concern: Dangerous intersection for vulnerable road users

Road type: urban local, within BWG

Posted speed limit: 50 km/hr

Operating speed: 68 km/hr

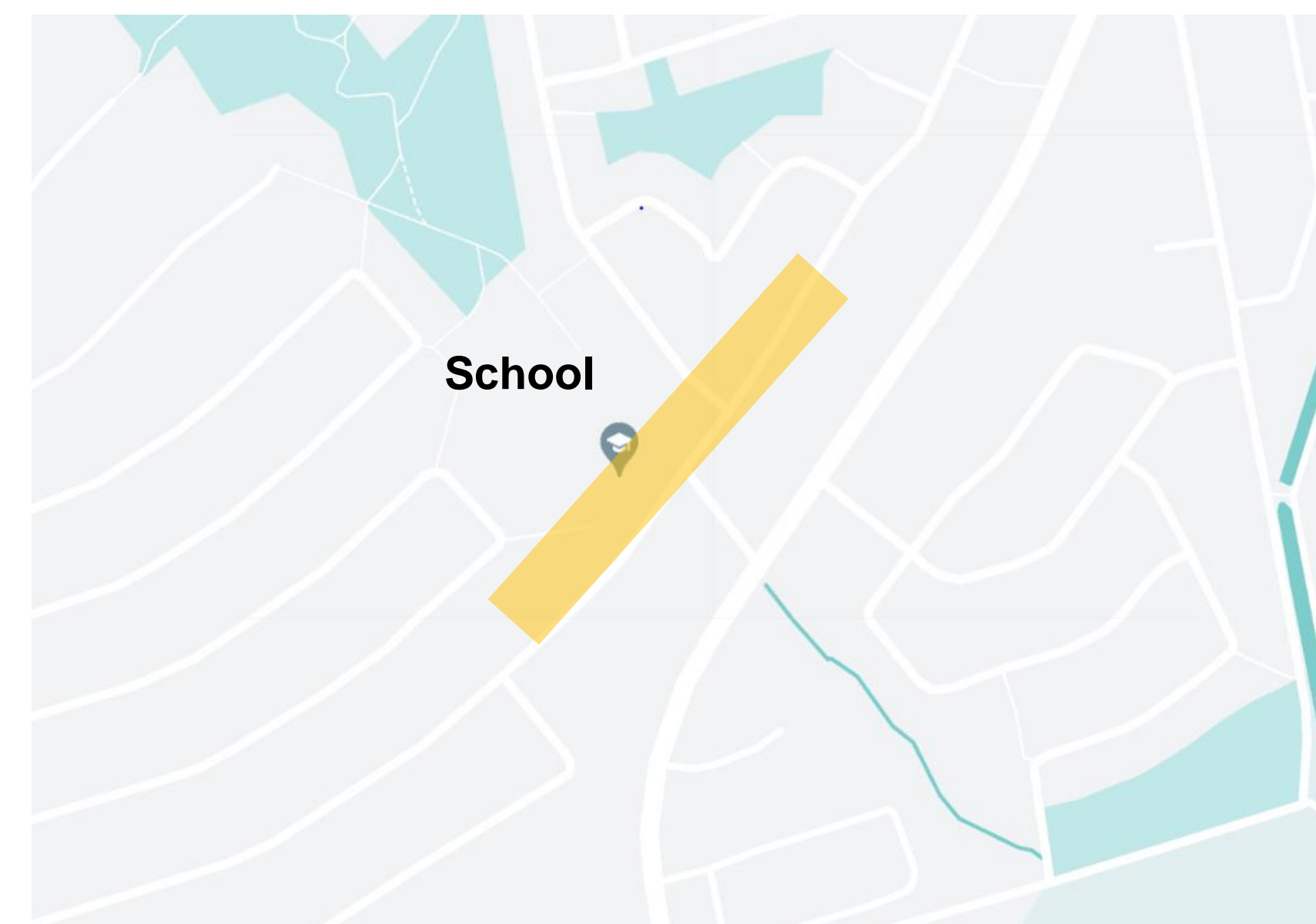
Traffic volumes: 900 vehicles per day

Road length: 300m

Collision history: 3 serious collisions involving pedestrians / cyclists

Road planned for **reconstruction?** No

#2: Marsden Street



Traffic concern: Aggressive driving near school and difficulty crossing

Road type: urban local, within BWG

Posted speed limit: 40 km/hr

Operating speed: 51 km/hr

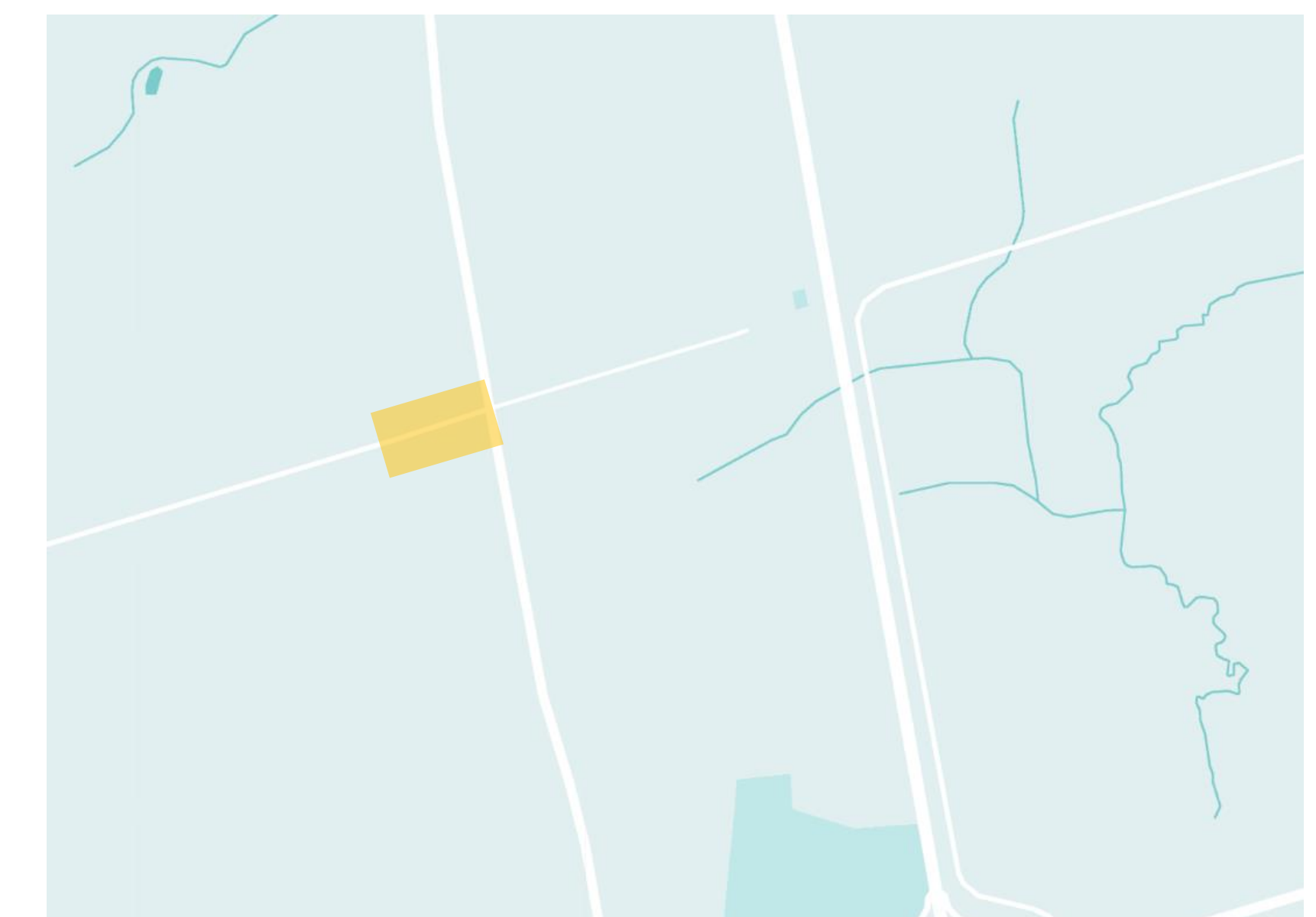
Traffic volumes: 500 vehicles per day

Road length: 450m

Collision history: None

Road planned for **reconstruction?** No

#3: Landry Road



Traffic concern: Dangerous segment for cyclists due to speeding and aggressive driving

Road type: rural collector, within BWG

Posted speed limit: 80 km/hr

Operating speed: 89 km/hr

Traffic volumes: 400 vehicles per day

Road length: 70m

Collision history: None

Road planned for **reconstruction?** No

Table 3: Pedestrian Safety

Step 1: Pre-screening process

- Review each criteria to determine if each case study passes / fails the criteria
- Based on the results, determine whether each case study can proceed to Step 2

Pre-Screening Criteria	#1: Martin Ave and Stan St		#2: Marsden Street		#3: Landry Road	
	Yes	No	Yes	No	Yes	No
Is the road within BWG?	X		X		X	
Are most people driving more than 10 km / hr over the posted speed limit?	X		X			X
Are average traffic volumes along the road at least 500 vehicles per day?	X		X			X
Is the road at least 100m in length?	X		X			X
Outcome:	PASS		PASS		FAIL	



What are your thoughts on the pre-screening **criteria** used? How do you feel about the **outcome** of the pre-screening?

Table 3: Pedestrian Safety

Step 2: Warranting / Ranking Process

- Review each criteria to determine how many points each case study earns
- Based on the results, determine whether each case study can proceed to Step 3

Warranting / Ranking Criteria	#1: Martin / Stan	#2: Marsden Street
	Points	Points
Urban/Rural Local: 1 point each km / hr above speed limit Urban Collector: 1 point for each km/hr above 10 km/hr above speed limit Rural Collector: 1 point for every 1 km / hr above speed limit	18	11
Urban Local: 1 point for each 50 vehicles/day above 750 vehicles/day Rural Local: 1 point for each 50 vehicles/day above 500 vehicles/day Urban Collector: 1 point for each 100 vehicles/day above 2000 vehicles/day Rural Collector: 1 point for each 75 vehicles/day above 500 vehicles/day	3	0
1 point for every 2 collisions that occur within a 50m radius within the past three years. Each pedestrian collision worth 2 points	6	0
1 point for any pedestrian generators (e.g., school, park, library, community centre, etc.)	3	1
Points:	30 = PASS	12 = FAIL

In order to proceed, the total points must be **greater or equal to 25**.



What are your thoughts on what warranting are **criteria** used?
 What are your thoughts on how the warranting process is **scored**?
 How do you feel about the **outcome** of the warranting process?

Table 3: Pedestrian Safety

Step 3: Traffic Calming Measure Selection

Based on the list of potential traffic measures below, select a preferred measure to recommend

Raised Intersection



An intersection at a higher level than the roadway to discourage speeding and delineate the pedestrian crossing area

Cost: \$50,000 - \$100,000

Curb Extensions



Provide a narrowing effect to reduce crossing distances and vehicular travel speeds through physical extensions of the curb and sidewalk

Cost: \$50,000 - \$100,000

Pavement Markings



Use paint markings to signal changes in speed and pedestrian presence to drivers

Cost: \$1,000 - \$5,000


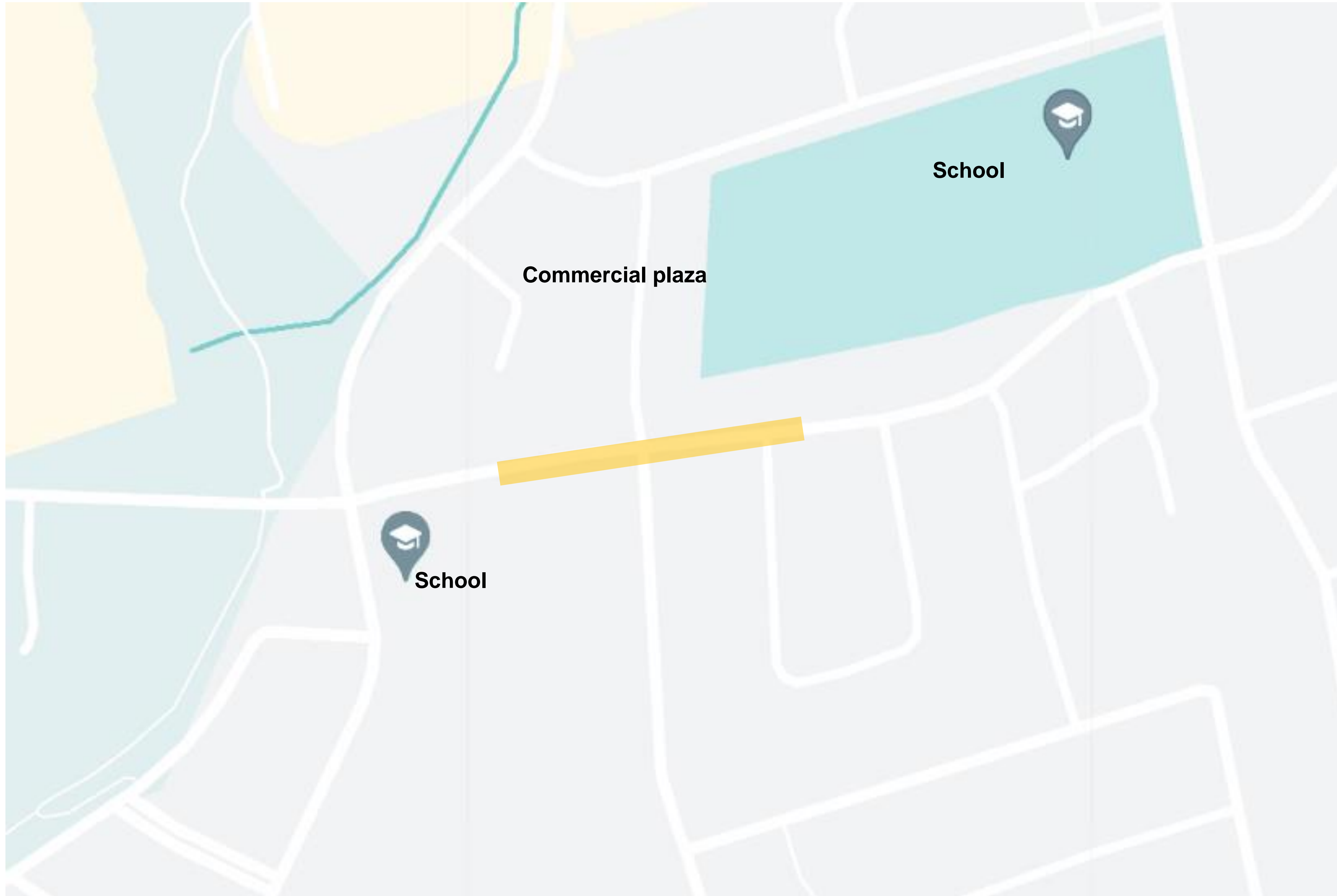
 How do you feel about the potential traffic calming measures? Do you **like / dislike** any of these tools? Are there tools you think should have **been considered or not considered**?

Table 3: Pedestrian Safety



BREAKOUT TABLE SUMMARY

Recap Summary

Table	Final case study	Recommended Measure	Cost
Table 1: Speeding			
Table 2: Volumes			
Table 3: Pedestrian Safety			

Recap Summary

Table 1: Speeding

Group	Final case study	Recommended Measure	Cost
1			
2			
3			

Table 2: Volumes

Group	Final case study	Recommended Measure	Cost
1			
2			
3			

Table 3: Pedestrian Safety

Group	Final case study	Recommended Measure	Cost
1			
2			
3			

Recap – Discussion

Final Step of the Process:

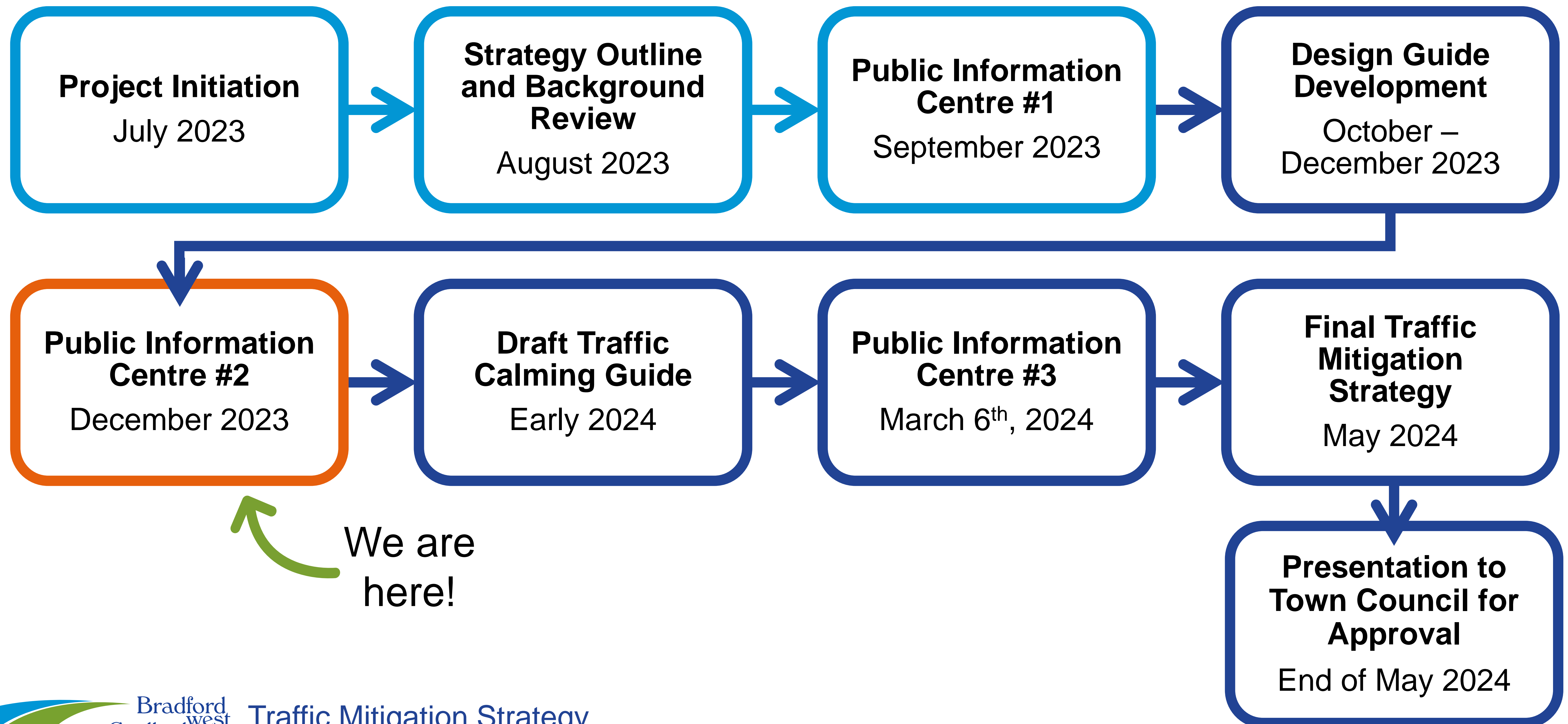
- Available budget: **\$35,000**
- How should the City **prioritize** the recommended traffic calming tools within the available budget? Consider:
 - **Cost:** Can the measure be accommodated within the given budget?
 - **Performance:** Does the measure achieve the desired traffic calming outcome?
 - **Efficiency:** Are any of the roads being examined planned for future reconstruction? Can the recommended tools be integrated into that project?

Discussion Questions:

- What did you think of the **process flow**?
- Do you think the outcomes will **effectively address the problem** at hand?
- Would you have done **anything differently**?
- Is there **anything you would want changed** from the screening/warranting tools?

Project Timeline & Next Steps

Following today's PIC we will review feedback from the public and stakeholders to inform the continued development of BWG's Traffic Mitigation Strategy



Provide your Feedback

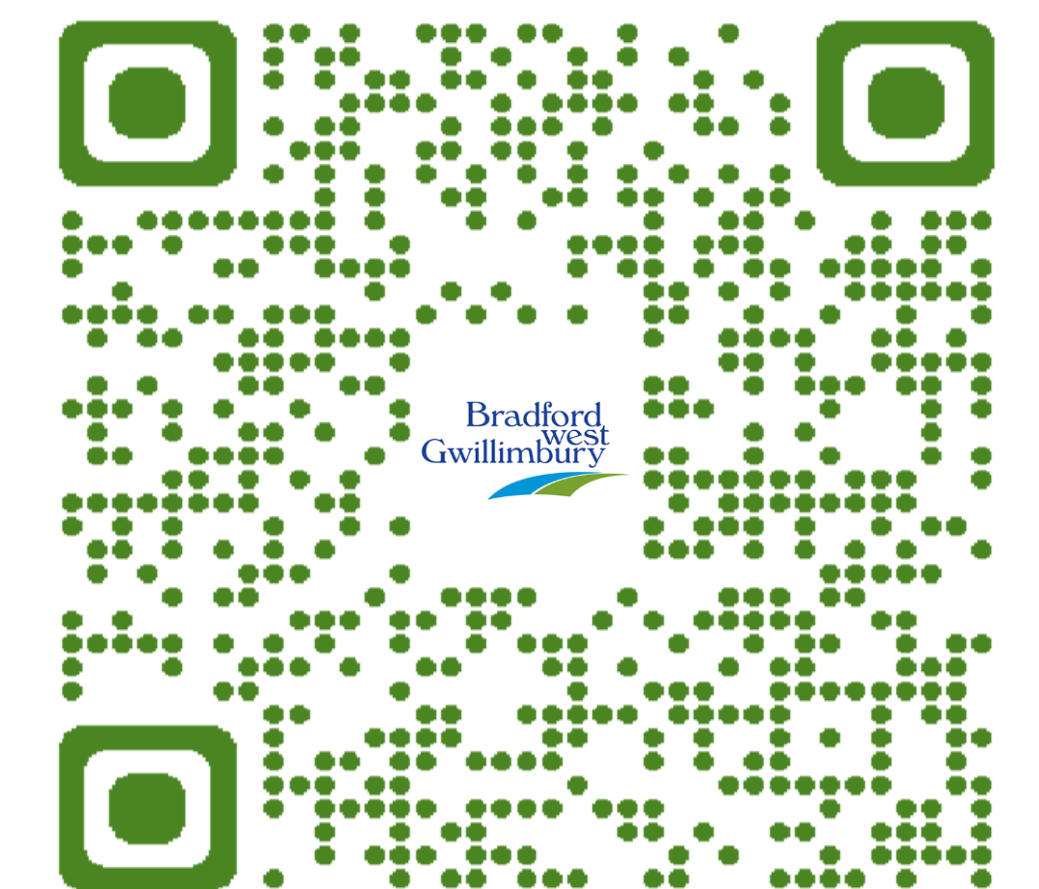
To submit questions or comments on this study, please visit the project website at: www.townofbwg.com/tms or contact the project team via:

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Thank you for attending today's PIC!

References

Placeholder