Protected
Cycling
Network
Study:
College
Avenue
Corridor

Accessibility Advisory Committee (AAC) February 22, 2023

Presented by:

Andrew Miller, Project Engineer, City of Guelph

#### Agenda

- 1. Define: protected cycling facility
- 2. Brief review of AAC engagement to date
- 3. Review and present the concept design for the College Avenue corridor (two types of protected cycling facilities: protected bike lanes and cycle tracks)
- 4. Review design process stakeholders
- 5. Gather AAC feedback on:
  - Recommended stakeholders to engage
  - Potential accessibility-related barriers of the protected bus stop concept and the protected intersection concept

# What is a 'Protected Cycling' facility?

Protected Cycling facilities create a dedicated space within the right-of-way for people to cycle, that is physically separated from vehicle traffic.

## Protected Cycling Network Study: AAC Engagement to date (1 of 2)

• <u>February 2022:</u> Introduced the Cycling Network Study Project, and presented 3 types of protected bike infrastructure (cycle tracks, multi-use paths and protected bike lanes) to the AAC

#### We heard:

- Motion: The AAC recommend that multi-use paths in the proposed locations are a concern and not recommended because of the mix of speed with people who use mobility devices or pedestrians with disabilities. In these locations divided, protected bike lanes of 2.5 m wide that allow for adult tricycles and sidewalks are recommended.
  - As well visibility triangle for the driveways should be included in the design
  - Tactile Warning Safety Indicators (TWSIs) need to be used for intersections of cyclists and people
  - Parking near these new bike lanes

## Protected Cycling Network Study: AAC Engagement to date (2 of 2)

 July 2022: Presented the findings and conceptual preliminary preferred alternatives to the AAC

#### We heard:

- There is a need for preventative measures to protect pedestrians who are blind or have low vision.
- The AAC liked the design of curbs that would separate pedestrians and cyclists and asked for curb cuts to be included periodically mid-block as travelling the road is a concern for people with disabilities.
  - Staff advised that driveways can act as periodic mid-block breaks in the curb separating pedestrians and cyclists.



Protected bike lanes



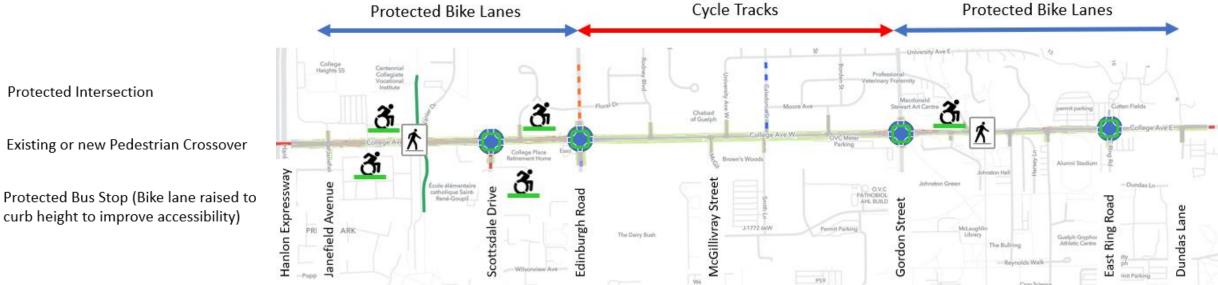
Cycle tracks

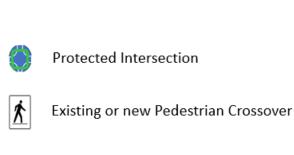
**Review of Protected Bike Lanes and Cycle Tracks** 

#### **College Avenue Overview**

- 2.75km from Janefield Avenue to Dundas Lane
- Protected intersections at: Scottsdale Drive, Edinburgh Road, Gordon Street and East Ring Road.
- Two pedestrian crossovers at:
  - Vanier Driver near Centennial Collegiate Vocational Institute, and;
  - MacDonald Street near Johnston Hall

- Five protected bus stop locations: four locations west of Edinburgh Road and one location east of Gordon Street.
- Protected bike lanes along College Avenue
- The section between Edinburgh Road and Gordon Street will have in-boulevard cycle tracks instead





#### **Design Process Stakeholders**

As we develop the design during 2023 we will be seeking advice and input from:

- City of Ottawa leading Ontario municipality in protected intersection design
- WSP engineering consultant with specific expertise in cycling infrastructure, also developing Guelph's Complete Streets Design Guidelines
- CNIB Foundation advise on how people who are blind or have low vision will navigate protected intersections and transit stop
- AAC- Staff will return to present to the AAC in Summer 2023 when the design reaches 60% stage

#### **Protected Bus Stop Concept**

- Protected Bike Lane raised through bus stop to allow level boarding of passengers
- Tactile plates indicate the edge of the bus stop at the protected bike lane
- Ladder bar pavement markings indicate approximate location where passengers will cross the bike lane
- Shark teeth and "yield to pedestrian" signage direct cyclists to yield when a bus is stopped

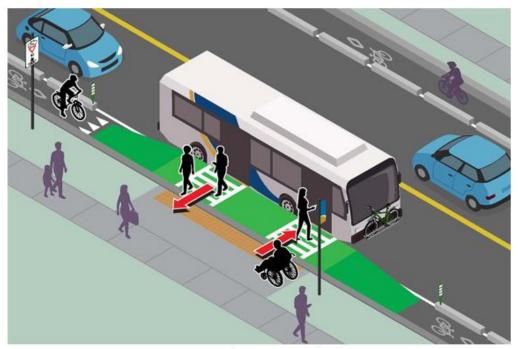


Image source: Speers Road Protected Bike Lane, City of Oakville

#### **Protected Intersection Concept**

- 1. Corner refuge island
- 2. Forward Bicycle queuing areas
- 3. Setback of bicycle and pedestrian crossings
- 4. Pedestrian refuge islands
- 5. Bicycle-friendly signal phasing
- 6. Cycle track crosswalk
- 7. Tactile walking surface indicators at cycle track crosswalk
- 8. Shark tooth pavement markings to alert cyclists to yield to pedestrians



Image source: British Columbia Active Transportation Design Guide (2019)

#### **AAC Feedback: Stakeholders**

Are there any additional stakeholders, community groups, etc. that you recommend that staff seek advice and input from regarding this project?

#### **AAC Feedback**

What is your feedback on:

- Potential accessibility-related barriers of the:
  - protected bus stop concept, and
  - protected intersection concept

# Thank you!

Feel free to contact me with any additional questions or comment.

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We will come back to share the 60% designs with you in the summer of 2023.