

# Dundas Street Cycle Track Detailed Design

Cycling Advisory Committee Update  
Wednesday, December 18<sup>th</sup>, 2019  
John Zunic & Stephen Tam



## Project update agenda

1. Project Overview
2. Project History
3. Key Design Options
  - Design philosophy
  - Mid-block design
  - Intersection design
  - Transit integration
4. Project Timelines & Wrap-up

Image by Stephen Tam/WSP



## Project Overview

Complete detailed design of a separated bikeway on Dundas from Wellington to Adelaide and William from Dundas to Queens

- Approximately 1.4km of new separated bikeway
- Connects Dundas Place and downtown to the west
- Connects to a future separated bikeway on Queens and cycle track on Dundas through the Old East Village to the east



Credit: OpenStreetMaps

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## High level project goals and guiding principles



Build and refine on previous design concept and develop a practical and feasible design for 2020 installation



Provide facilities that emphasize conflict mitigation and that are attractive to users of all ages & abilities



Minimize impacts on on-street parking supply, traffic, transit and curbside operations



Create a vibrant streetscape and enhance the public realm



Coordinate and work collaboratively with key stakeholders such as community groups, advisory committees, LTC, advocates, etc.

Icons from noun project

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## Separated bikeway history in London

The Dundas Street Cycle Track Detailed Design assignment builds on momentum from previous London cycling plans and projects



Cycling Master Plan  
2016



Colborne  
2016-2018



King Street  
2018-2019

## Dundas cycle track project history

The Dundas Street Cycle Track Detailed Design project is a continuation of the planning and design study from the Downtown OEV East-west Bikeway Corridor Evaluation project undertaken by WSP



Corridor Evaluation  
May 2018 – Jan 2019



Conceptual Design  
Sept 2018 – Jan 2019



Council approval  
Mar 2019



WSP retained to complete detailed design of a cycle track on Dundas Street  
Oct 2019 – May 2020

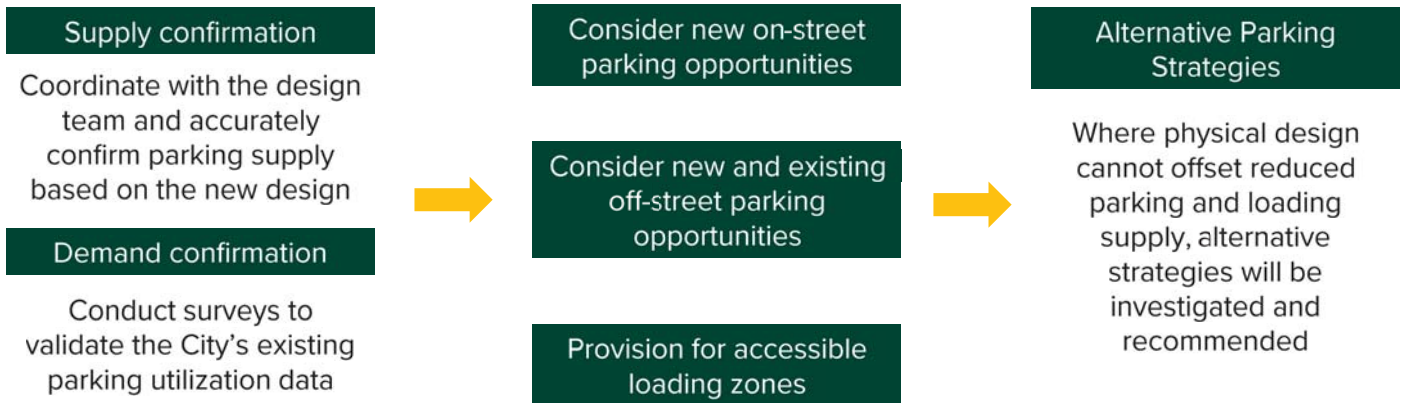


Cycle tracks to be integrated as part of OEV Streetscape improvement project  
2020-2022



## Parking supply and demand confirmation

From previous work in the City on cycling and transit projects, our team recognizes the importance of on-street parking in support of the diverse land uses and businesses along Dundas



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## Cycle track design philosophy

### DESIGN CYCLIST

Interested but Concerned  
**51-56% of potential users**

Somewhat Confident  
**5-9%**

Fearless Confident  
**4-7%**

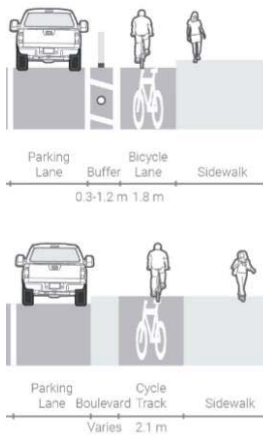


Lower stress tolerance

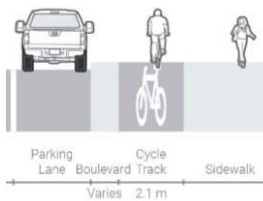
Higher stress tolerance

# Preliminary separation types for consideration

## Precast concrete curb and bollards



## Fully raised cycle track



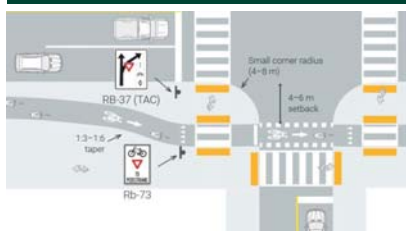
London Colborne separated bikeway by Stephen Tam/WSP, Ottawa Main Street Cycle Track by James Schofield/WSP

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# Intersection design is context specific

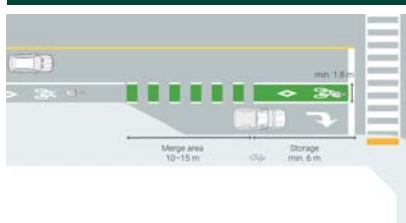
## Setback Crossing



## Adjacent Crossing



## Middle Bicycle Lane



## Shared Crossing


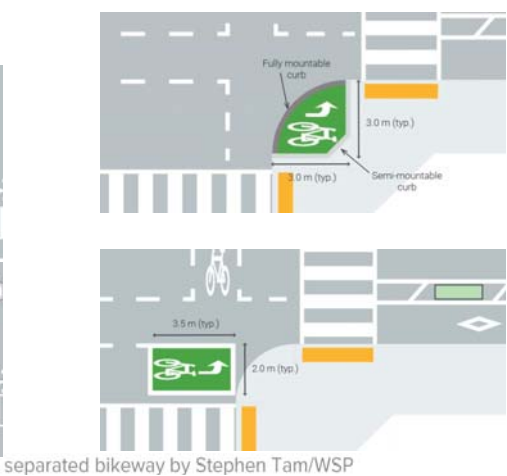



Important for all ages and abilities facility design

Context specific: Each design will consider the intersection's unique characteristics such as current traffic volumes, potential cyclist movements, existing phasing, geometry, etc.


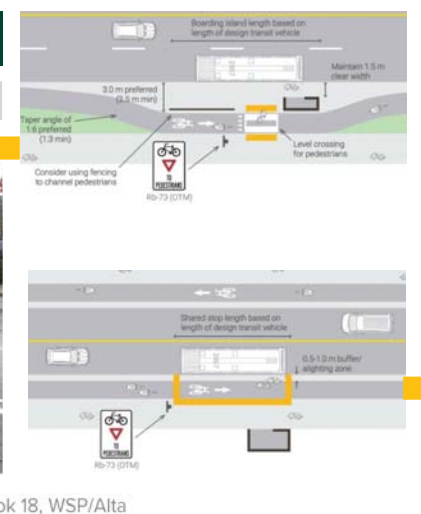

# Supporting cycling turning movements

Key intersections such as Colborne/Dundas and William/Dundas will need to facilitate cyclists turning movements at cross-streets

<p><b>Protected intersection</b></p> <p>Conceptual design included a protected intersection at Colborne</p> 	<p><b>Two-stage queue box</b></p> 	<p><b>Bike box</b></p> 
<p>Draft OTM Book 18, WSP/Alta, London Colborne separated bikeway by Stephen Tam/WSP</p>		<p>12/18/2019 11</p>

# Integration with transit and LTC

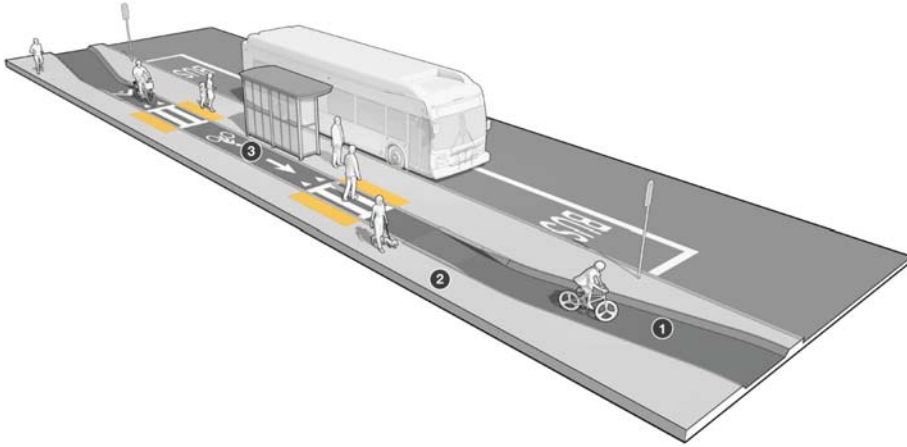
Dundas is a major transit route through London today and into the future. With an anticipated increased sustainable mode share in London, it is important to leverage good design to manage cyclist interactions

<p><b>Island bus stop</b></p> <p>Preferred configuration in conceptual design</p> 		<p><b>Shared bus stop</b></p> <p>Typically used in constrained locations</p> 
<p>London King Street &amp; Toronto Roncesvalles from OTM Book 18, WSP/Alta</p>		<p>12/18/2019 12</p>



# Raised cycle track bus stop design

Based on conversations with LTC regarding operating experience on King Street, raising the cycle track on approach to the bus stop may help reduce cyclist speed and reinforce yielding behaviour.

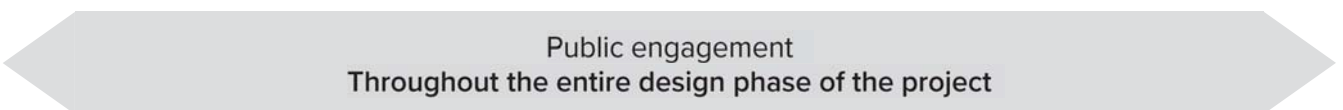
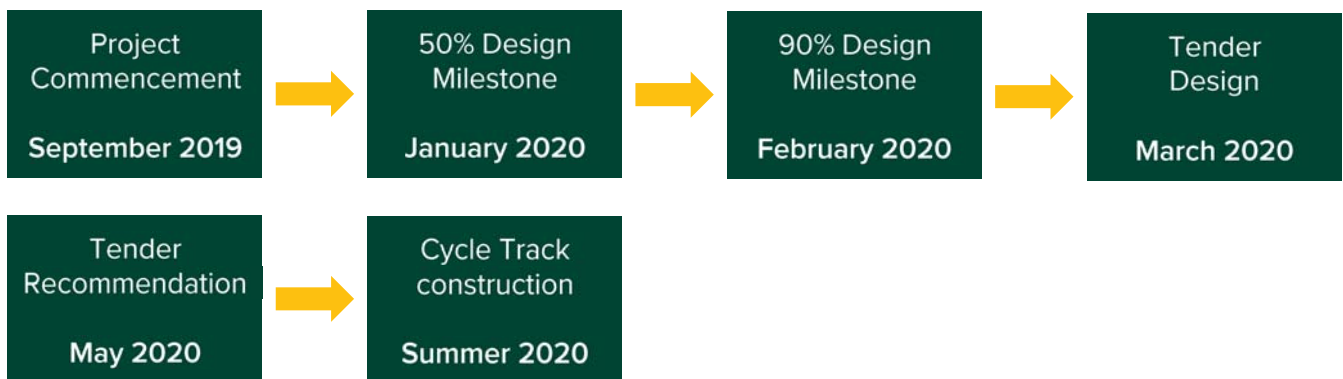


MassDOT Separated Bike Lane Guide Chapter 5, Twitter: Will Norman/Tfi, James Schofield/WSP

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# Project timeframe



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## We're asking for your input

Our team is currently evaluating these design options with City staff in preparation for the 50% design. We are requesting the Cycling Advisory Committee's feedback throughout the design process.

- Are there lessons learned you would like to share from Colborne, King Street or other London cycling projects?
- Are there specific sections of Dundas or William that may present significant technical challenges?
- Are there other reference designs outside London that could be considered?
- Are there other project issues the team should be aware about?

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## Thank you!

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