



McKenzie Interchange Project Spring 2016 Engagement

## **Appendix 2: Engagement Materials and Feedback Form**

April 2016

## Welcome to the McKenzie Interchange Project Open House!

### Purpose of the Open House

- To provide you with an update on how project designs have been revised based on input received in fall 2015
- To seek feedback regarding refined options

### We Want to Hear From You

Provide us with your feedback by:

- Completing a feedback form and leaving it with our team
- Filling out the online feedback form at [engage.gov.bc.ca/mckenzieinterchange](http://engage.gov.bc.ca/mckenzieinterchange) by March 18, 2016
- Sending an email to [mckenzieinterchange@gov.bc.ca](mailto:mckenzieinterchange@gov.bc.ca) by March 18, 2016



*Congestion on the Trans-Canada Highway*

The Province of B.C. and the Government of Canada are investing \$85 million in the McKenzie Interchange Project, a new interchange on the Trans-Canada Highway at the intersection with Admirals Road and McKenzie Avenue in Saanich.



## Project Need and Benefits

### The project is needed to improve safety, congestion and reliability

- The intersection has a collision rate almost three times the provincial average
- The number one bottleneck on Vancouver Island
- Unpredictable travel times affect transit service levels and commuters

### Project benefits will include:

- Reductions in frequency and severity of crashes
- Substantial travel time savings
- Improved transit facilities, including bus-on-shoulder lanes
- Improved travel time reliability
- Reductions in idling and fuel consumption, leading to significantly lower greenhouse gas emissions
- Improved cycling and pedestrian safety, by separating the Galloping Goose Trail from McKenzie Avenue



*Congestion on the Trans-Canada Highway*

For these reasons, the McKenzie Interchange Project was identified as a priority in B.C. on the Move, the Province of B.C.'s ten-year transportation plan.

## Current and Future Traffic Volumes

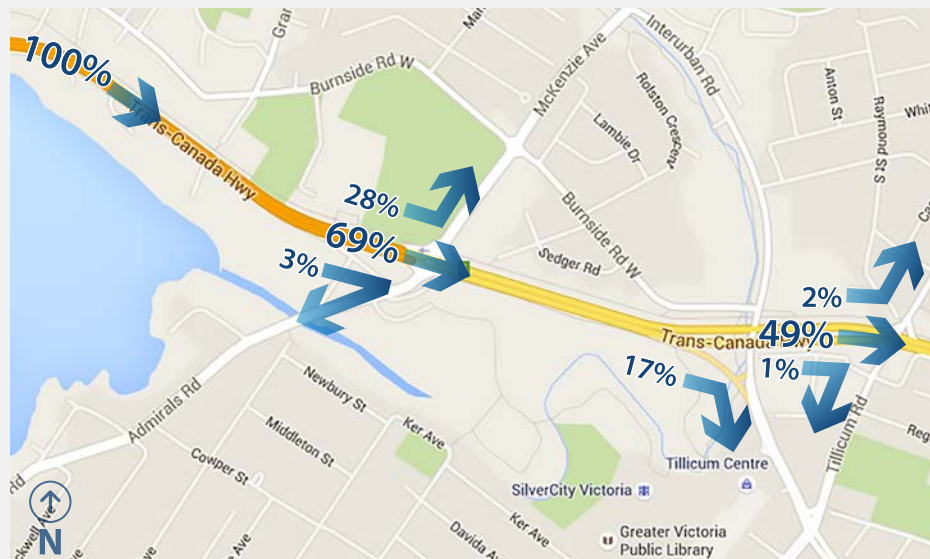
### Current Traffic Volumes (2015)

- West of McKenzie intersection, the Trans-Canada Highway carries an average of 80,000 vehicles per day
- Traffic volumes far exceed capacity

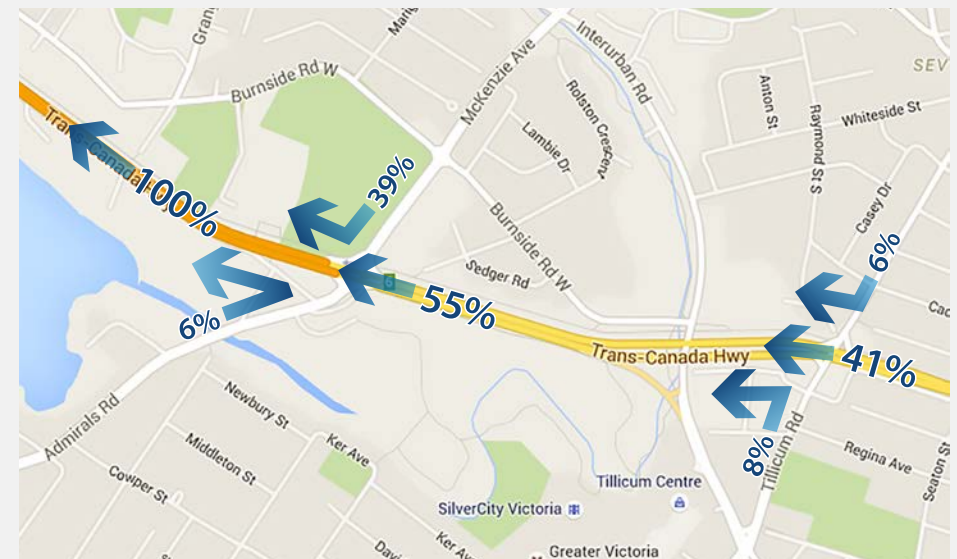
### Future Traffic Volumes (2038)

- West of McKenzie Interchange, the Trans-Canada Highway is forecasted to carry over 96,000 vehicles per day

### 2015 Traffic Volumes



Inbound traffic destinations (2015)



Outbound traffic origins (2015)

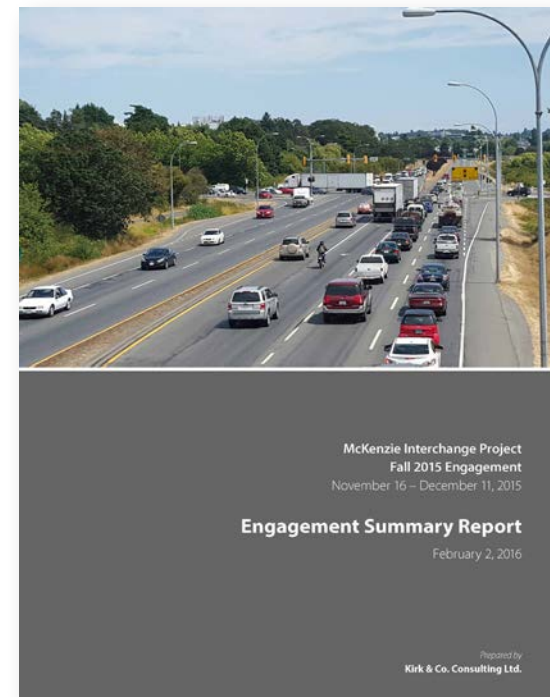
## Fall 2015 Public and Stakeholder Engagement

### Participation

- 610 people attended the open house on November 17, 2015
- 1,059 feedback forms (hardcopy and online)
- 139 email and phone submissions

### Summary of Key Feedback

- Provide an interchange that operates efficiently
- Address congestion at the McKenzie and Burnside intersection
- Ensure the project accounts for future forecasted traffic
- Improve safety at the intersection
- Ensure good pedestrian and cycling connections
- Ensure the project design accommodates and encourages transit use
- Protect Cuthbert Holmes Park and other environmental values
- Ensure solution incorporates current and future transit needs
- Address neighbourhood issues including short-cutting traffic
- Maintain traffic flow during construction



Take a copy of the Fall 2015 Engagement Summary Report or read online at [engage.gov.bc.ca/mckenzieinterchange](http://engage.gov.bc.ca/mckenzieinterchange)



## Interchange Design Options

### What did we hear in fall 2015?

- Provide an interchange that operates efficiently
- Strong support for Trans-Canada Highway going under McKenzie/Admirals
- Suggestions of alternative design options

### What are we doing?

- Two of the three design options presented in fall 2015 have been carried forward for further consideration
- Option 3 was eliminated due to concerns regarding noise, visual impacts, extended construction schedule and cost
- Alternative design options were considered against effectiveness of mitigating existing issues (safety, congestion, reliability) within the \$85 million budget and have not been carried forward

### Option 1: Diamond Interchange



### Option 2: Partial Cloverleaf



Options 1 and 2 have been refined based on additional technical work and engagement feedback.

In both options, the Trans-Canada Highway goes under McKenzie/Admirals.

## Option 1: Diamond Interchange





## Option 1: Diamond Interchange





## Option 2: Partial Cloverleaf





## Option 2: Partial Cloverleaf





## Improvements on McKenzie Avenue at Burnside Road

### What did we hear in fall 2015?

- Concerns that the project did not adequately address congestion and queuing on McKenzie

### What are we doing?

- Proposing to add an **additional southbound lane on McKenzie** through the Burnside intersection, combined with a **dual right-turn lane to the Trans-Canada Highway westbound**
- These improvements would apply to either Option 1 or Option 2

### Combined, these improvements would:

- Significantly reduce southbound queues on McKenzie
- Improve merging onto the Trans-Canada Highway from McKenzie
- Reduce queues on Burnside
- Reduce short-cutting traffic on municipal roads by attracting vehicles to McKenzie and the Trans-Canada Highway



### What else did we consider?

- Westbound on-ramp to the Trans-Canada Highway from Burnside near Interurban
- Full and partial grade separation at McKenzie/Burnside
- Turning restrictions at McKenzie/Burnside

It was determined that the proposed additional southbound lane and dual right-turn lane would provide greater benefits to reducing congestion at a cost that fit within the \$85 million budget.

## Transit Facilities

### What did we hear in fall 2015?

- Facilitate and encourage transit use
- Accommodate possible future light rail transit (LRT)

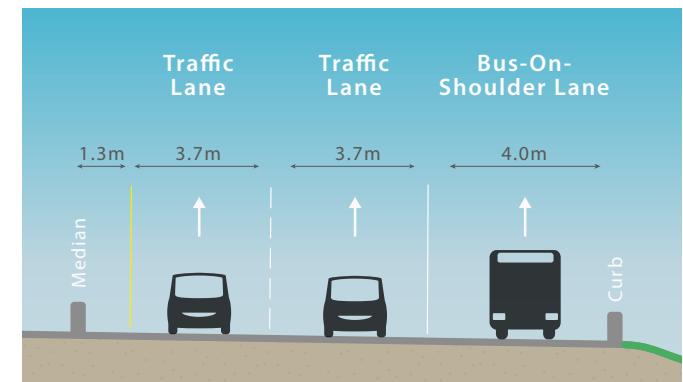
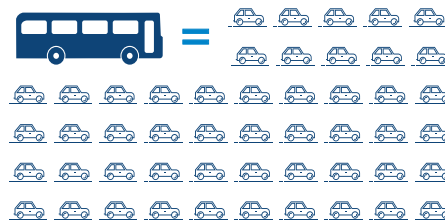
### What are we doing?

- Bus-on-shoulder lanes
- Transit stop locations, coordinated with cycling and pedestrian facilities
- Transit signal pre-emption
- Does not preclude a corridor for future LRT on the north side of the Trans-Canada Highway
- Alignment with BC Transit's *Victoria Transit Future Plan*

### Bus Rapid Transit

- The Trans-Canada Highway is identified as a future rapid transit corridor serving travel between the West Shore and downtown Victoria and the University of Victoria
- The project will support Bus Rapid Transit (BRT) facilities, as services are increased in the future
- Bus on shoulder lane and queue jumper priority lanes at ramp intersections will allow buses to bypass queues and provide more reliable service
- Attractive and fully accessible pedestrian connections to comfortable bus stops with shelters will be provided

Each full bus takes up to  
**50 cars** off the road





# McKenzie Interchange Project

## Spring 2016 Engagement

## Transit Facilities

Transit routing and stop locations would be similar for both Options 1 and 2, as shown below.



Transit stop locations, coordinated with cycling and pedestrian facilities



Rapid transit route



Option 1: Diamond Interchange



Option 2: Partial Cloverleaf

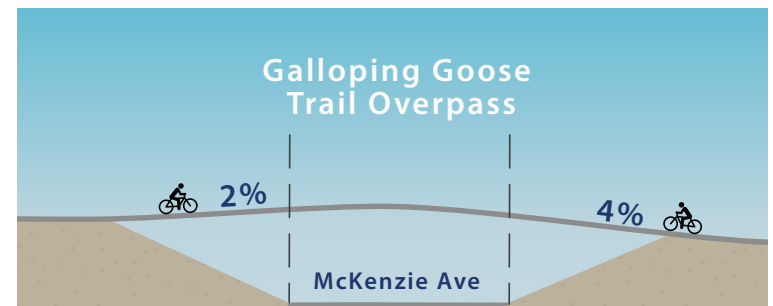
## Pedestrian and Cycling Facilities

### What did we hear in fall 2015?

- Provide safe and separated facilities
- Support for above-ground pathways (not tunnels)
- Gentle grades on pedestrian and cycling overpasses
- Ensure good pedestrian and cycling connections

### What are we doing?

- Galloping Goose Trail is going over McKenzie Avenue
- Gradual grades will not exceed 4%
- Moved the existing Trans-Canada Highway overpass closer to McKenzie to provide safer and more convenient access
- With the provision of a separate pedestrian overpass, sidewalks will not be provided on the vehicle overpass
- Shoulders throughout project area may be used by cyclists
- Ongoing discussions with stakeholders around details of future paths and structures
  - Grades
  - Widths
  - Alignment
  - Connections with municipal roads
  - Intersections





## Pedestrian and Cycling Facilities

Pedestrian and cycling facilities would be similar for both Options 1 and 2, as shown below.



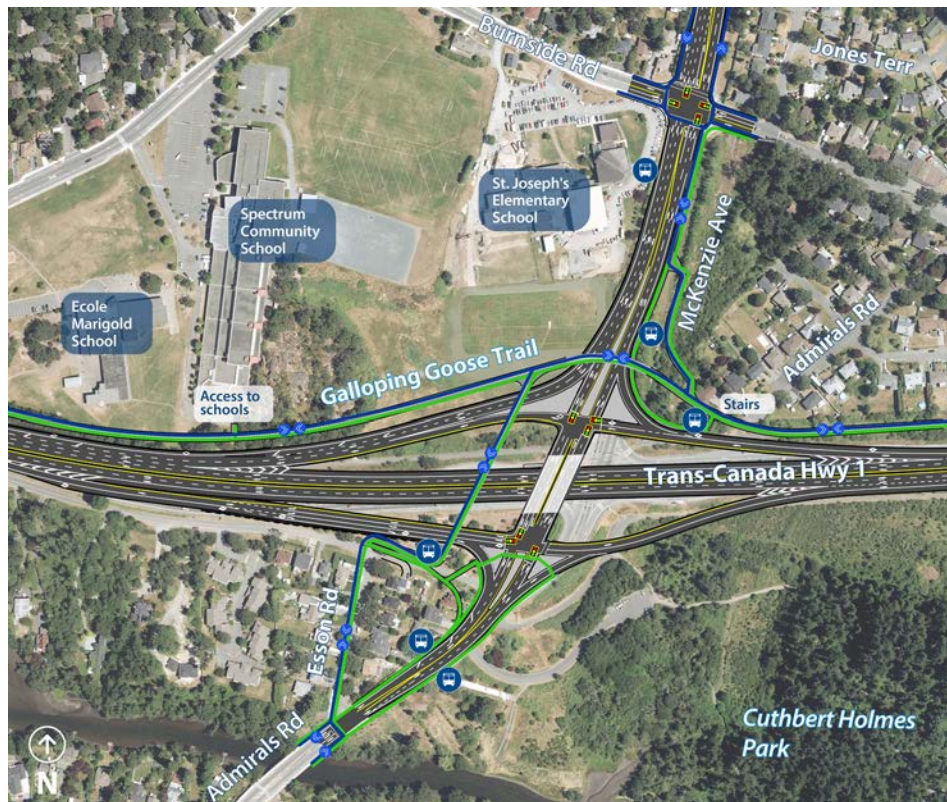
Transit stop locations



Cycling routes



Pedestrian routes



Option 1: Diamond Interchange



Option 2: Partial Cloverleaf

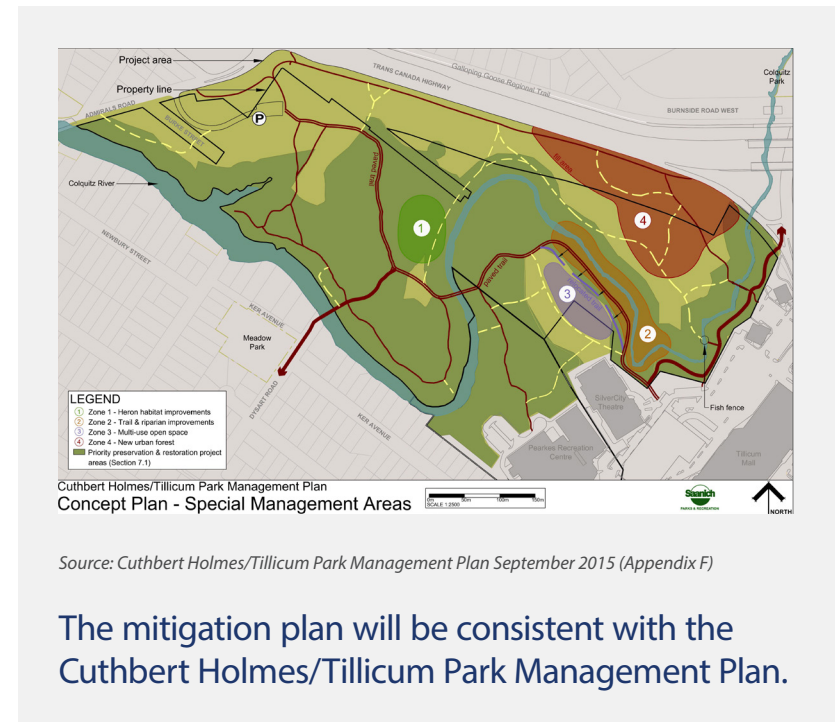
## Managing Impacts to Cuthbert Holmes Park

### What did we hear in fall 2015?

- Minimize impacts to Cuthbert Holmes Park, Colquitz Creek and other environmental values in the project area

### What are we doing?

- There would be no net loss of park area in either Option 1 or 2
- Engaging with the District of Saanich and other stakeholders as we develop a comprehensive mitigation plan
- The plan will be consistent with the District of Saanich's approved Cuthbert Holmes/Tillicum Park Management Plan and will include:
  - Reinstating park trails
  - Managing invasive plants within the project area
  - Improving storm water quality
  - Developing a Landscape Management Plan
  - Re-establishing vehicle access and parking





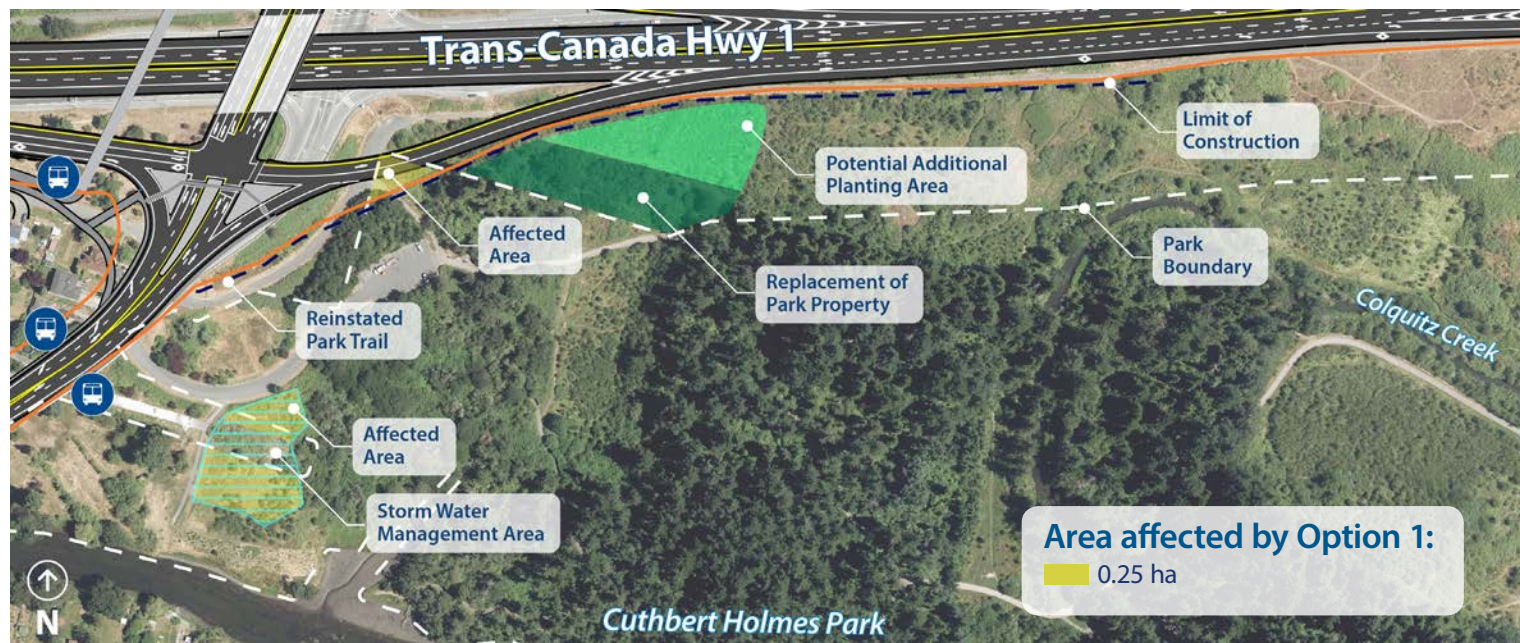
## Managing Impacts to Cuthbert Holmes Park – Option 1

### Mitigation measures:

- Replacement of affected park property with Ministry of Transportation and Infrastructure right-of-way and replanting: 0.25 ha
- Storm water management and treatment
- Reinstatement of trails



*Park trail adjacent to Trans-Canada Highway would be reinstated*





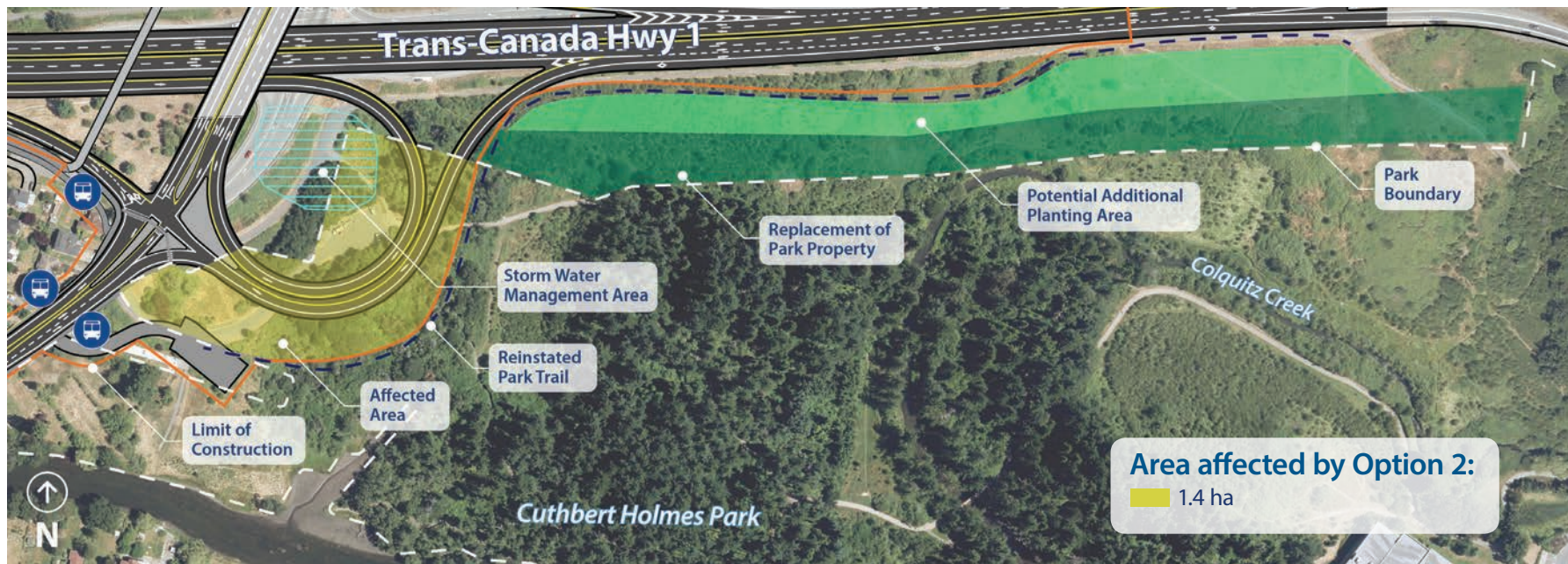
## Managing Impacts to Cuthbert Holmes Park – Option 2

### Mitigation measures:

- Replacement of affected park property with Ministry of Transportation and Infrastructure right-of-way and replanting: 1.4 ha
- Storm water management and treatment
- Reinstatement of trails
- Replacement of vehicle access and parking (location to be determined)



Cuthbert Holmes Park adjacent to Trans-Canada Highway





## Improving Safety for all Users

The table below shows the estimated safety benefits that the interchange would provide by 2038, compared to existing conditions.

Options 1 and 2 provide improved safety when compared to existing conditions.

Option 2 is expected to have fewer vehicle collisions as there are reduced left turn conflicts.

Both Options 1 and 2 provide significant improved connections which will keep pedestrians and cyclists away from conflict with vehicles.



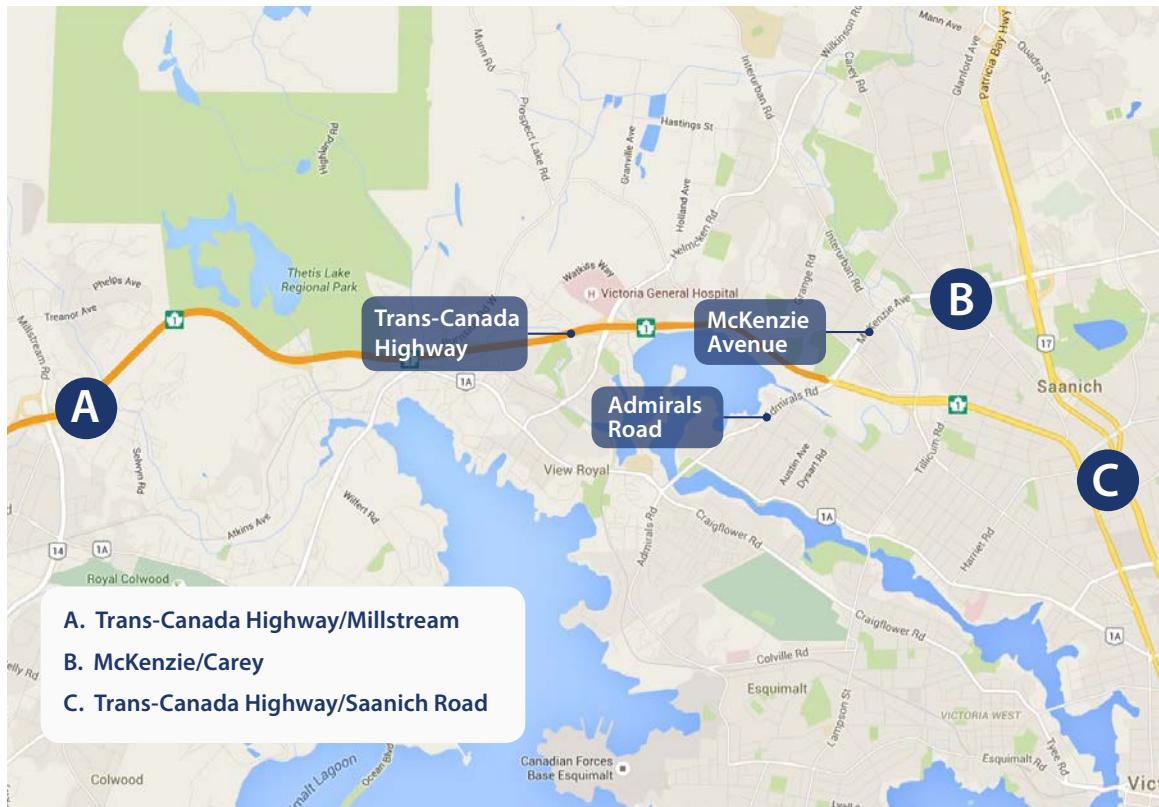
*Pedestrian and cycling conflicts with vehicles are eliminated with the Galloping Goose Trail separated from traffic.*

Option	Current Conditions	Option 1: Diamond Interchange	Option 2: Partial Cloverleaf
Collision Rate	Almost three times Provincial average	Provincial average	Below Provincial average
Safety Benefits	Not applicable	\$26 million	\$30 million

## Significant Travel Time Savings for Commuters

The table below shows the travel time savings the interchange would provide, compared to existing conditions.

Options 1 and 2 would provide similar travel time savings, which is estimated to be \$188 million by 2038.



	Route	2016 (mins)	2018 (mins)	2038 (mins)
Morning Peak	A to B	26	7.5	8.0
	A to C	30	8.5	9.5
Afternoon Peak	B to A	25	7.0	7.5
	C to A	25	8.0	8.0

In both Options 1 and 2, in 2018, commuters on the Trans-Canada Highway heading towards downtown Victoria will save an average of 22 minutes in the morning and 17 minutes in the afternoon.



## Ensuring Capacity for the Future

The maps below show the predicted worst-case morning and afternoon queues for each option in:

- 2018, when the interchange will open
- 2038, the 20-year planning horizon for the project

As shown below, there is less queueing predicted in Option 2.



Option 1: Diamond Interchange



Option 2: Partial Cloverleaf

## Minimizing Travel Delays During Construction

### What did we hear in fall 2015?

- Maintain current traffic flow, minimize delays and maximize predictability during construction

### What are we doing?

- Objectives for traffic management during construction are:
  - Minimize disruption and maintain existing commute times
  - No increase in short-cutting traffic through neighbourhoods
  - Keep travellers informed of construction impacts
- Options 1 and 2 have comparable construction staging and delays

### Keeping Travellers Informed

Regular construction updates and advance notification of specific construction activities would be provided through social media, DriveBC website ([www.drivebc.ca](http://www.drivebc.ca)) and changeable message signs.

### Construction Staging

It is anticipated that construction staging would be as follows:

1. Construction of relocated Galloping Goose Trail
2. Construction of ramps to carry all Trans-Canada Highway traffic and shift McKenzie; relocation of traffic to ramps and shifted McKenzie
3. Excavation of Trans-Canada Highway and construction of vehicle overpass and highway
4. Construct new north-south pedestrian overpass and decommission existing pedestrian overpass





## Option Considerations

Consideration	Option 1: Diamond Interchange	Option 2: Partial Cloverleaf
Safety	<ul style="list-style-type: none"> <li>\$26 million in savings</li> </ul>	<ul style="list-style-type: none"> <li>\$30 million in savings</li> </ul>
Travel Time	<ul style="list-style-type: none"> <li>Comparable – \$188 million in savings</li> </ul>	
Transit	<ul style="list-style-type: none"> <li>Comparable – includes bus-on-shoulder lanes and does not preclude future light rail transit</li> </ul>	
Cyclists and Pedestrians	<ul style="list-style-type: none"> <li>Comparable – provides safe and separate cycling and pedestrian facilities</li> </ul>	
Cuthbert Holmes Park	<ul style="list-style-type: none"> <li>0.25 hectares of park impacted</li> <li>Impacted lands to be replaced by highway right-of-way</li> <li>All impacted lands would be mitigated</li> </ul>	<ul style="list-style-type: none"> <li>1.4 hectares of park impacted</li> <li>Impacted lands to be replaced by highway right-of-way</li> <li>All impacted lands would be mitigated</li> </ul>
Opening Day (2018)	<ul style="list-style-type: none"> <li>No queues for highway traffic</li> <li>Moderate left turn traffic queues on Trans-Canada Highway eastbound off-ramp onto McKenzie, clearing every cycle</li> </ul>	<ul style="list-style-type: none"> <li>No queues for highway traffic</li> <li>No queues for left turn traffic onto McKenzie</li> </ul>
Future Capacity (2038)	<ul style="list-style-type: none"> <li>No queues for highway traffic</li> <li>Extended queues for left turn traffic, still contained to ramp</li> </ul>	<ul style="list-style-type: none"> <li>No queues for highway traffic</li> <li>No queues for left turn traffic onto McKenzie</li> </ul>
Construction Management	<ul style="list-style-type: none"> <li>Comparable – maintain existing commute times</li> </ul>	
Cost	<ul style="list-style-type: none"> <li>\$3–5 million less costly than Option 2</li> </ul>	<ul style="list-style-type: none"> <li>\$3–5 million more costly than Option 1</li> </ul>

## Next Steps

- Consider input from this engagement period and from other stakeholder groups and First Nations
- Select preferred interchange design option
- Complete detailed design of selected option to determine:
  - Noise mitigation (baseline monitoring complete)
  - Detailed environmental mitigation strategy
  - Detailed construction management plan

## Thank You for Coming!

Please remember to provide us with your feedback by:  
Completing a feedback form and leaving it with our team

Filling out the online feedback form at  
[engage.gov.bc.ca/mckenzieinterchange](http://engage.gov.bc.ca/mckenzieinterchange)  
by March 18, 2016

Sending an email to [mckenzieinterchange@gov.bc.ca](mailto:mckenzieinterchange@gov.bc.ca)  
by March 18, 2016

### WE ARE HERE





# McKenzie Interchange Project

## Spring 2016 Engagement

The McKenzie Interchange Project is a new interchange on the Trans-Canada Highway at the intersection with Admirals Road and McKenzie Avenue in Saanich. The intersection is the number one bottleneck in the province outside of the Lower Mainland.

The McKenzie Interchange Project will improve traffic flow of passenger, transit and goods movement vehicles and reduce collisions and congestion-related impacts to the economy, environment and public health.

The input that you provide will be considered, along with technical and financial information, as we design the McKenzie Interchange Project.

**Please provide your feedback by March 18, 2016.**

## Feedback Form

**1a. Please rate your level of agreement with Option 1: Diamond Interchange with Trans-Canada Highway Under McKenzie/Admirals.**

Strongly Agree	Somewhat Agree	Neither Agree Nor Disagree	Somewhat Disagree	Strongly Disagree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**1b. Please provide your reasons for your level of agreement.**

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**2a. Please rate your level of agreement with Option 2: Partial Cloverleaf with Trans-Canada Highway Under McKenzie/Admirals.**

Strongly Agree	Somewhat Agree	Neither Agree Nor Disagree	Somewhat Disagree	Strongly Disagree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**2b. Please provide your reasons for your level of agreement.**

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**3a. Please rate your level of agreement with the pedestrian and cycling facilities proposed as part of the McKenzie Interchange Project.**

Strongly Agree	Somewhat Agree	Neither Agree Nor Disagree	Somewhat Disagree	Strongly Disagree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**3b. Please provide any comments you may have regarding the pedestrian and cycling facilities.**

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4. Please provide any comments you may have regarding transit facilities proposed as part of the McKenzie Interchange Project.

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5. Are there any specific mitigation measures for Cuthbert Holmes Park that you would like the Ministry of Transportation and Infrastructure to consider?

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6. Please provide any additional comments you may have regarding the McKenzie Interchange Project.

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## Thank you for your input!

Public and stakeholder engagement are essential to the success of this project, which benefits from the knowledge and experience of those who travel in the McKenzie Interchange Project area.

## Privacy Policy

Personal information collected through this survey will inform the McKenzie Interchange Project under the authority of s.26 of the *Freedom of Information and Protection of Privacy Act*. If you have any questions about the collection, use and disclosure of your personal information, please contact:

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