# SUBJECT: Island Highway transit priority plan and Park & Ride study

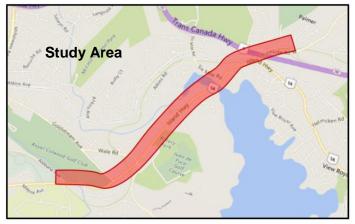
# PURPOSE

This report provides an update to the Victoria Regional Transit Commission (the "Commission") on the Island Highway Transit Priority Plan and Park & Ride Study for **INFORMATION**.

# BACKGROUND

The Transit Future Plan, approved by the Commission in May 2011, provides a vision for transit over the next 25 years. One of the key priorities of this plan is to develop a rapid and frequent transit network. In particular, five corridors were identified as part of the long-term plan for the provision of rapid transit services and dedicated facilities – Douglas Street, Highway 1, Island Highway, McKenzie Avenue and Highway 17. Bus lanes have been partially implemented on Douglas Street and are in the process of being implemented on Highway 1. The Island Highway is the next priority corridor.

Increased traffic congestion on the Trans Canada and Island Highways results in slower transit travel time for passengers and impacts schedule reliability. There are eight transit routes that operate on the Island Highway Corridor, providing connections to local and regional destinations. These eight transit routes carry over 20 per cent of people travelling on the corridor at peak travel times, while representing only 1.5 per cent of total vehicle use of the corridor.



The implementation of transit priority measures is key to achieving the goals of the Victoria Region Transit Future Plan. At the direction of the Commission, BC Transit, in partnership with municipal staff from View Royal, Colwood and Langford, developed concepts for transit priority along the Island Highway corridor between Goldstream and the Colwood Exchange.

# DISCUSSION

In November 2017, BC Transit retained SNC-Lavalin Inc. (SLI) to conduct the Island Highway Transit Priority Study. The objective of the study was to develop concept designs and cost estimates for future transit priority measures on the Island Highway that support the functional needs of BC Transit, the City of Colwood and the Town of View Royal. A technical advisory committee, comprised of City of Colwood, Town of View Royal, Capital Regional District and Ministry of Transportation and Infrastructure staff, provided guidance and expertise throughout the study process. The full Island Highway Transit Priority Study report is attached.

# **Recommended Transit Priority Concepts**

The recommended transit priority concepts combine sections of dedicated bus lanes, queue jump lanes and transit signal priority, to provide the optimal conditions for travel time savings along the Island Highway Corridor between Goldstream and the Trans-Canada Highway. The report also recommends equipping 55 buses with transit signal priority equipment. The on-street transit priority concepts are summarized in the table below, while additional information and maps are provided in the appendices of this report.

Location	Municipality	Recommended Treatment		
Goldstream Ave &	Colwood	Queue-jump transit lane and transit signal		
Island Hwy/Sooke Rd Intersection		priority		
Wale Rd & Island Hwy Intersection	Colwood	<ul> <li>Queue-jump transit lane and transit signal priority</li> </ul>		
Six Mile & Island Hwy Intersection	View Royal	<ul> <li>Southbound transit lane and transit signal priority</li> </ul>		
Island Hwy – Dukrill	View Royal	Southbound transit lane		
Rd to Intersection with Hwy 1/Burnside		<ul> <li>Northbound shared right turn lane with queue jump transit lane at intersection</li> </ul>		
Rd West		Transit signal priority at intersection		
		<ul> <li>1.8 metre painted buffered bike lanes</li> </ul>		

### **Benefits**

Together, these improvements will provide an estimated 20 per cent transit travel time savings in the critical direction at peak times. In the non-critical direction at peak time, these improvements will provide an estimated 5 per cent transit travel time savings. These savings will make transit a more attractive transportation choice allowing customers to get to their destination quicker and also provides the opportunity for travel time savings to be reinvested back into the transit system to improve service levels on this corridor.

Transit travel Direction	AM Peak Period			PM Peak Period		
	Travel Time no Improvements (mm:ss)	Travel Time (with transit Priority Improvements	Transit travel time savings	Travel Time no Improvements (mm:ss)	Travel Time (with transit Priority Improvements	Transit travel time savings
Southbound	5:30	5:10	00:20	8:30	5:55	2:35
Northbound	18:10	14:50	3:20	6:20	6:05	0:15

## **Preliminary Construction Cost Estimates**

Preliminary class D construction cost estimates have been developed for the transit priority concepts. The transit priority concepts have been broken down into eight construction projects which could be implemented separately, or as packages, with a total estimated construction cost of \$6 million. Estimates include construction costs, property acquisition allowances, transit signal priority equipment, traffic management, engineering and a contingency of 20 per cent. Total project budgets would require confirmation of project management approach and related costs, along with detailed engineering design and project tendering process.

### **Next Steps**

The next step is to review the transit priority concepts with Colwood and View Royal Councils for approval in principle. Pending approval from Councils, a proposed budget and a recommendation to move forward to detailed design with the construction packages will be brought to the December Commission Meeting. Upon approval from the Commission, BC Transit would proceed to detailed design. The detailed design process includes retaining an engineering consultant and working with local government staff to further develop a design that is agreeable to all stakeholders and is ready for tendering and construction. Engagement may be required with parties that would be impacted by project construction.

# RECOMMENDATION

It is recommended that the Commission receive this report for INFORMATION.

Respectfully,

James Wadsworth Planning Manager

Attachment: Island Highway Transit Priority Plan and Park & Ride Study

## APPENDIX

The Transit Priority Treatments have been broken down into separate construction packages and the packages are described in the maps and tables below.

Southbound			Northbound		
Construction Package ID	Description	Comments	Construction Package ID	Description	
S1	SB queue jump lanes from south of Craigflower Creek bridge to signals just south of ENR Overpass (see sketch-001-A)	Shown as Option 1 on Sketch 001- A. Can be combined with Package S4	N1	NB queue jump bus lane from Colwood Crescent (Jermone Rd) to Goldstream Ave (see Sketch 005)	
\$2	SB queue jump bus lane from Trans Canada Hwy 1 Off Ramp to just north of Craigflower Bridge (see sketch-001-B)	Can be combined with Package S1	N2	NB bus lane north and south of Ocean Blvd (see Sketch 004)	
S3	SB bus lane from Trans Canda Hwy 1 Off Ramp to signals just south of ENR Overpass (see sketches 001-A and 002)	Shown as Option 2 on Sketches 001-A and 002. Can be combined with Package S4	N3	NB bus lane from Dukrill Rd to signals just south of ENR Overpass (see Sketches 003 and 001-A)	
S4	SB bus lane from signals just south of ENR Overpass to 6-Mile Rd (see sketches 001-A and 003)	Can be combined with Package S1 and S3			
S5	SB bus lane north and south of Wale Rd (see Sketch 004)				

In addition, Transit Signal Priority (TSP) is being recommended for the 6 Mile, Wale Road and Goldstream intersections. TSP implementation requires Traffic Signal Controller Upgrades, Traffic Signal TSP Equipment and Bus TSP equipment for 55 buses.

