

Victoria Regional RapidBus Implementation Strategy

Executive Summary

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BC Transit is committed to contributing to stronger, more sustainable communities in the Victoria Region. The need to realize this potential in the Victoria Region is increasingly important because of factors such as climate change, affordability, population growth, traffic congestion, an aging population and the economic impacts of the COVID-19 pandemic.

The Regional Growth Strategy and Regional Transportation Plan outline a vision where transportation is sustainable, offers choice and enables smart growth and livable communities. The Victoria Regional Transit Commission (VRTC) recently identified the goal of increasing transit mode share from 12% to 15% across the region. This means that daily transit travel would increase from approximately 80,000 to over 200,000 trips per day in 2038. Initiatives that are required to achieve this goal will be expanded and improved transit service (including RapidBus), sustainable land-use decisions, improved transit infrastructure and facilities and the expansion of technological improvements.

In fall 2020, the Ministry of Transportation and Infrastructure released the [South Island Transportation Strategy](#). This strategy was an integrated approach to support and encourage many travel choices by focusing policy and investment on increasing the infrastructure needed to build connections, capacity, improve safety and the choices for sustainable travel. As part of this strategy, and aligning with [BC Transit's 10 Year Vision](#) for the Victoria Region, one of the key priorities to support sustainable travel options is to advance rapid transit services around the region.

The RapidBus Implementation Strategy



This report is intended to provide the strategic and technical foundation needed to accelerate the implementation of RapidBus services throughout the Victoria region, with the goal of introducing the flagship Westshore-Downtown Victoria Line in the next three years and then subsequent RapidBus lines across the region.

RapidBus Vision

The implementation of RapidBus services in the Victoria Region has the potential to significantly increase transit mode share by:



Supporting post-pandemic regional economic recovery



Shaping and supporting growth and regional connectivity



Improving passenger comfort and convenience



Improving efficiency and capacity of the transit system



Support the region's climate action goals

What is RapidBus?

RapidBus is transit service that outperforms the personal automobile in speed, comfort and reliability. Beyond the importance of connectivity between areas of highest travel demands in the region, RapidBus must include a combination of branded services, corridor treatments, and improved station amenities. Over time, the RapidBus system will be implemented across several corridors to create a high capacity transit system. For existing and future transit customers, RapidBus will be **CONNECTED, FREQUENT, FAST,** and **RELIABLE** to increase ridership and support local governments in meeting their sustainable land use, climate and transportation goals..

CONNECTED

RapidBus is the cornerstone to supporting sustainable growth in the region. The system will connect urban centres and access to gateways, support multi-modal connections within mobility hubs as well as the Frequent Transit Network (FTN) and other local and specialized services.

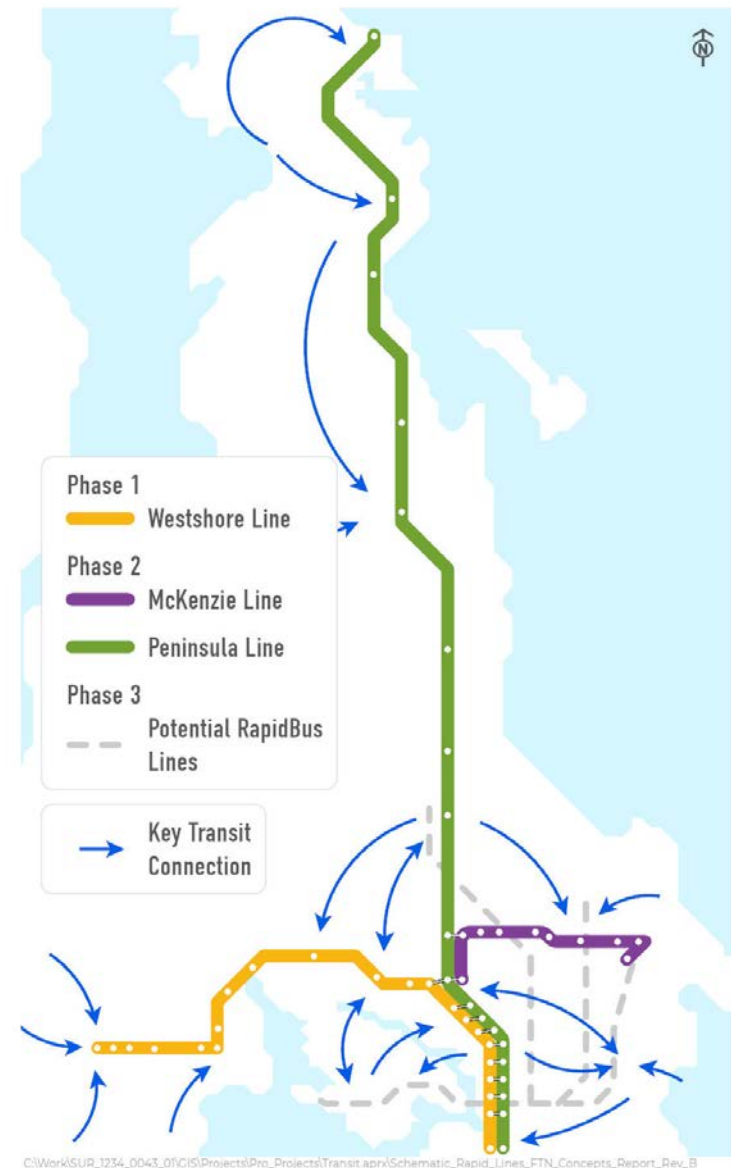
FREQUENT

RapidBus service would have a targeted minimum frequency of every 10 minutes, with higher frequency as demand requires.

FAST & RELIABLE

When mixed with traffic, transit travel times can be 25% to 50% of posted speeds and even less on some days for many congested corridors. The travel times can also vary by 10 to 20 minutes or more from one day to the next due to non-recurring incidents that impact all travel. All RapidBus corridors will include transit priority infrastructure to significantly reduce travel times and improve reliability for customers.

FIGURE E.1 – RapidBus Network Concept Plan



Common Questions

When Will RapidBus Be Implemented?

The implementation of infrastructure enhancements and service expansion has been underway for the past several years in support of the Rapid Transit Network. The goal is to implement the Westshore-Downtown Victoria Line within the next three years, and then the proposed other lines in subsequent years.

Is RapidBus Different than Frequent Transit Network?

Crossing the threshold to becoming a RapidBus service includes delivering consistent and frequent services, limiting the number of stops to high passenger volume areas, expanding transit priority infrastructure, implementing attractive and comfortable stations and creating a unique brand.



What is the Impact of Covid?

Communities will be facing a steep climb towards economic recovery as a result of the significant impacts of the COVID-19 pandemic. The efficient movement of people makes economies run as it generates economic participation, especially for those people who are already facing affordability challenges. For many people across the province, public transit is the only way they can get to their jobs in essential services. Further to this, the challenges that public transit helps address, including climate change, affordability and congestion, will exist long after the pandemic is over. So it is important that communities across the province continue to leverage the positive momentum made in transit ridership growth over the past five years.

Where Will RapidBus Be Implemented?

The 2011 Victoria Region Transit Future Plan identified the original Rapid Transit Network that prioritized improving service quality between the Westshore, Peninsula, UVIC and Downtown Victoria areas. These connections remain the priorities today as a large percentage of transit ridership is generated by these corridors. In addition to these connections, several other corridors may be future candidates for RapidBus type services in the future.

Why RapidBus & Not Light Rail Transit (LRT)?

The Victoria region has consistently identified the need for attractive, high capacity transit services such as LRT and commuter rail. RapidBus does not eliminate the need to consider LRT or other forms of higher capacity transit systems or even parallel RapidBus facilities. On the busiest corridor - Douglas Street – RapidBus treatments described in this strategy could support more service and ridership assuming increased vehicle capacities. Along other corridors to the Westshore, Peninsula, and UVIC, RapidBus services, facilities and vehicles could support substantially more service frequencies and ridership. Although LRT or other forms of high capacity transit may be required within the next 20 years or more, RapidBus provides sufficient capacity at a fraction of the cost. A well designed RapidBus network can offer many of the same benefits of LRT and considered a pre-cursor to rail-based transit in the future.

RapidBus Implementation Strategy

Phases & Timelines

The RapidBus implementation strategy has been divided into three different phases as summarized below in Figure E.2. It is expected that these phases will progress concurrently. The graphic below summarizes the key

activities associated with each phase along with the preliminary timelines for completion. Implementation of RapidBus requires collaboration, leadership and funding from all levels of government including BC Transit, municipalities, Ministry of Transportation and Infrastructure as well as the Federal Government. Multi-disciplinary working groups will be established to advance key actions required over the next three years.

FIGURE E.2 – Victoria Regional RapidBus Implementation Phasing & Timelines

		2021				2022				2023
		SPRING	SUMMER	FALL	WINTER	SPRING	SUMMER	FALL	WINTER	
PHASE 1 IMPLEMENTATION OF WESTSHORE TO DOWNTOWN VICTORIA RAPIDBUS LINE	Kick-off an Implementation Working Group with representation from all partners directly involved									
	Develop final branding of RapidBus services									
	Public Engagement									
	Initiate Westshore transit network planning analysis									
	Finalize service expansion resources required and secure funding									
	Finalize capital infrastructure costs and secure funding									
	Design and construct RapidBus stations									
	Commence work on Uptown Mobility Strategy	Ongoing								
	Commence work on Parliament Precinct Exchange strategy	Ongoing								
	Finalize street treatment design and budgets for Highway 1, Old Island Highway and South Douglas									
Continue analysis of infrastructure opportunities on Sooke Road and Goldstream Avenue										
PHASE 2 CONTINUE DESIGN & CONCEPTUAL ANALYSIS OF MCKENZIE & PENINSULA RAPIDBUS LINES	Initiate a detailed corridor review of the McKenzie corridor									
	Identify bus stops along McKenzie corridor where infrastructure can be improved in preparation for a future RapidBus Line	Ongoing								
	Commence work on Uptown Mobility Strategy	Ongoing								
	Continue the development of the Peninsula Local Area Transit Plan, with emphasis on opportunities for future RapidBus Service integration									
	Continue to identify and implement infrastructure improvements on Highway 17	Ongoing								
	Complete construction of enhanced UVic exchange									Complete
PHASE 3 EXPLORE OPPORTUNITIES TO EXPAND THE RAPIDBUS NETWORK TO OTHER PARTS OF THE VICTORIA REGION	Collaborate with Local Government partners to complete a network scan of key corridors for future RapidBus services	Timeline to be developed in collaboration with local government partners								

Phase 1 - Implement Westshore Line

The Westshore Line has been at the centre of planning, design, and implementation of RapidBus features for many years. BC Transit along with area municipalities and the Ministry continue to advance infrastructure improvements that include everything from street treatments and station area enhancements through to service increases along the corridor.

The Westshore Line will connect Langford Centre Station to the Legislature Station in downtown Victoria, and will provide a single transfer connection to the UVIC and Peninsula Lines at Uptown/Saanich Exchange. The Westshore Line connects the regional centres of downtown Victoria, Uptown, Colwood Corners and Langford Centre, as well as several other urban nodes as illustrated in Figure E.3. Attractive walking and cycling facilities are needed within 800m of station areas and additional park-and-ride facilities could be strategically located along the RapidBus corridor. Transit priority treatments continue to be planned and designed across the corridor.

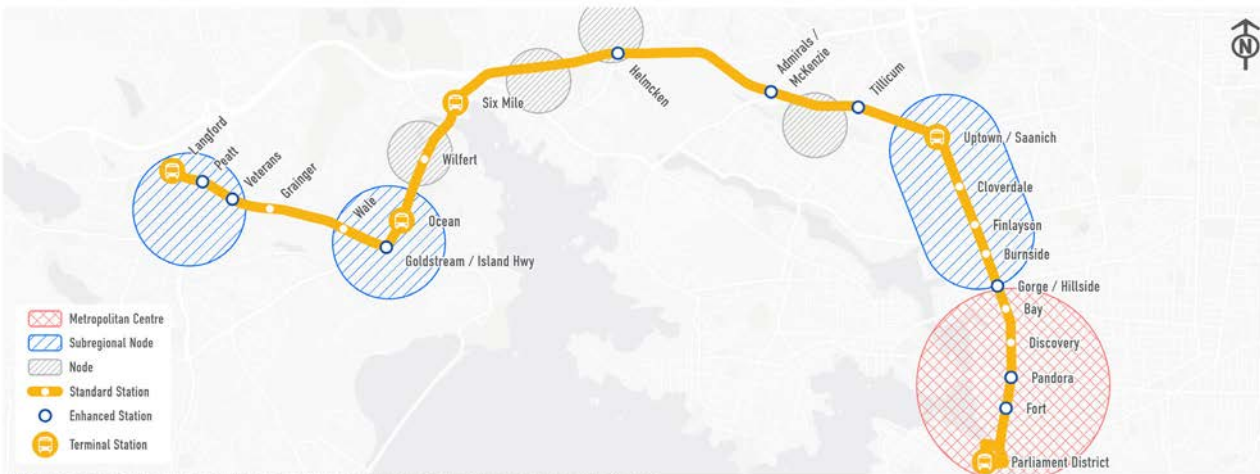
Veterans Station Area



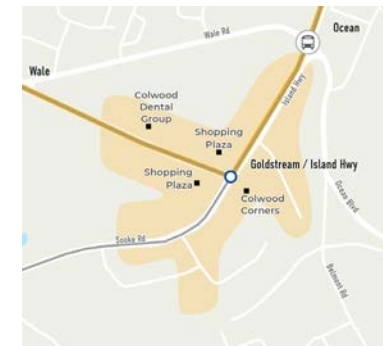
Six Mile Station Area



FIGURE E.3 – Westshore Line Stations & Designated Urban Areas



Goldstream / Island Station Area



AS PART OF THE IMPLEMENTATION STRATEGY, THE KEY FEATURES OF RAPIDBUS SERVING THE WESTSHORE LINE ILLUSTRATED IN FIGURE E.4 WILL INCLUDE:

- 22 stations in each direction with potential for fewer stops to reduce travel times and increase RapidBus capacity.
- Extend Douglas (south) curb bus lanes, Highway 1 bus-on-shoulder, and Old Island Highway intersection queue jumpers (or bus lanes in next 10-years).
- Consider long-term RapidBus route alternatives to connect Langford Station (Goldstream, E&N, etc.).
- Dedicated bus lanes could eliminate existing travel time variability during peaks of approximately 15 to 20 minutes between Goldstream / Old Island Highway and Parliament District.
- 11,000 daily rides today with potential to increase to more than 30,000 daily rides by 2038 to achieve mode share targets.

FIGURE E.4 – Westshore Line 10 Year Infrastructure Plan



Phase 2 - Assessment & Design of McKenzie & Peninsula Lines

McKenzie Line

The McKenzie Line will connect Uptown and the University of Victoria with a frequent, fast, and reliable RapidBus service connecting to the Westshore Line and Peninsula Line at the Uptown Station. As illustrated in Figure E.5, the Line connects the University with the designated urban nodes of Quadra Village and University Heights along with the Uptown mobility hub. Attractive walking and cycling connections are needed within 800m of each station area and connections to the Frequent Transit Network at Quadra Street and Shelbourne Street as well as McKenzie Avenue west of Highway 17.

Quadra Station Area

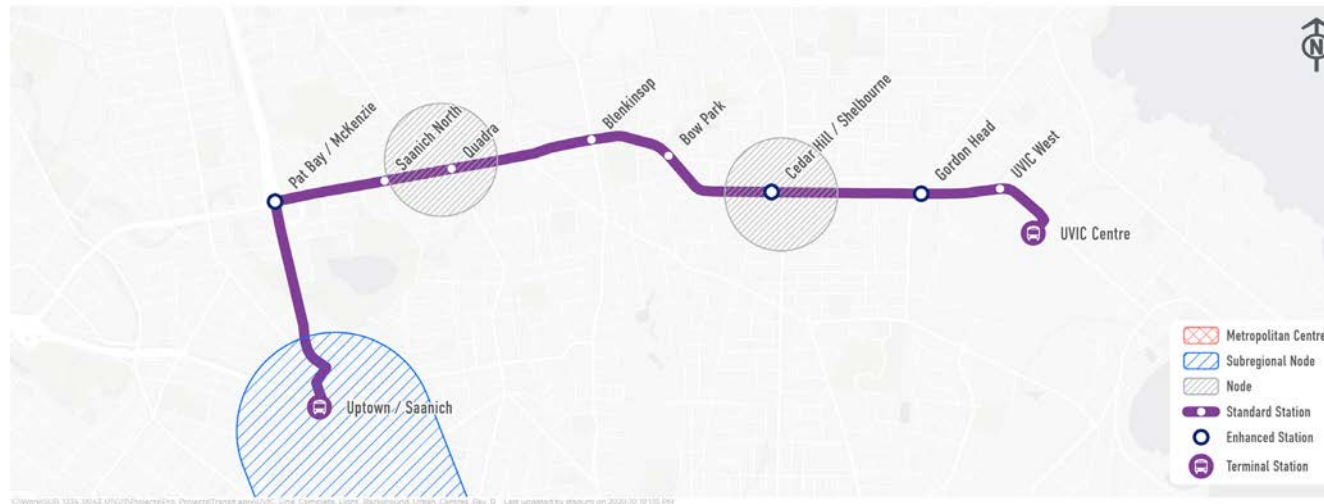
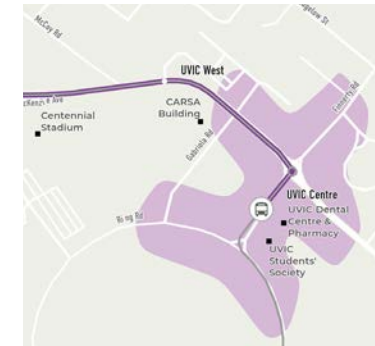


Cedar Hill / Shelbourne Station Area



FIGURE E.5 – Stations & Designated Urban Areas

UVIC Station Area

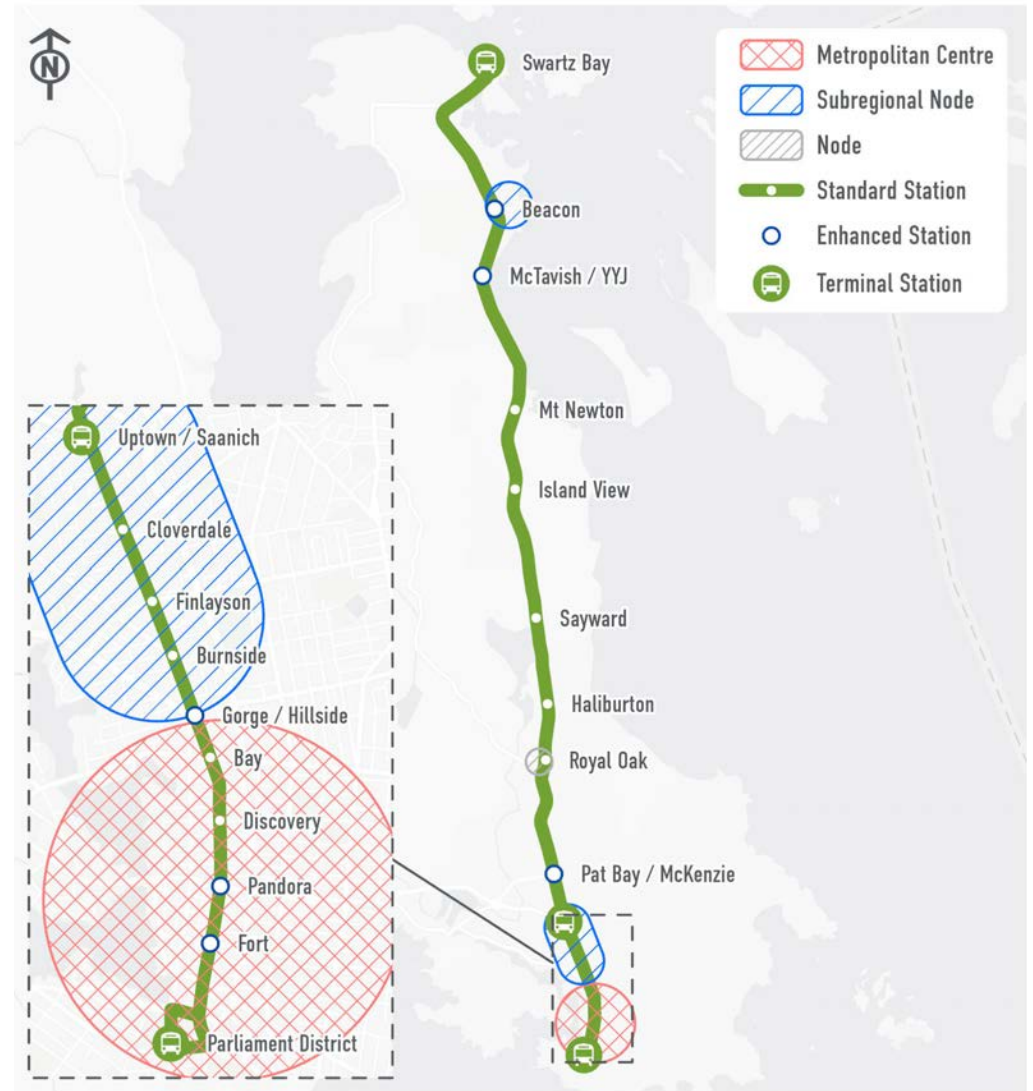


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Peninsula Line

The Peninsula Line extends along Highway 17 between Swartz Bay Ferry Terminal through the designated urban centres of Sidney, Uptown and downtown Victoria. Although much of the corridor north of Uptown is surrounded by rural land uses, integrated transit services and attractive intermodal connections are essential. RapidBus and / or local service connections to Sidney and the airport still need to be designed through local area planning. Additionally, Frequent Transit Network services across the Peninsula can may be interlined and operate along the RapidBus corridor and/ or provide attractive transfers for customers. Park-and-ride / pick-up and drop-off facilities are required across the corridor at strategic locations to intercept vehicle trips with an attractive, convenient alternative to driving. Transit priority treatments being planned with the Ministry of Transportation and Infrastructure include intersection queue jumpers as well as bus-on-shoulder facilities to reduce travel times and improve reliability.

FIGURE E.6 – Peninsula Line Stations & Designated Urban Areas



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Phase 3 - Explore Expansion of RapidBus Network

Collaborate with Local Government partners to complete a network scan of key corridors for future RapidBus service. Corridors will include, but not limited to, Shelbourne, Quadra, Esquimalt-UVic and Hillside. Scope will include review land use patterns, ridership modeling, street treatment opportunities and network analysis.

FIGURE E.7 – Network of Frequent & Rapid Transit Corridors

