Ministry of Transportation and Infrastructure

2019/20 – 2021/22 SERVICE PLAN

February 2019



Minister Accountability Statement



The *Ministry of Transportation and Infrastructure 2019/20 - 2021/22 Service Plan* was prepared under my direction in accordance with the *Budget Transparency and Accountability Act*. I am accountable for the basis on which the plan has been prepared.

Honourable Claire Trevena

Minister of Transportation and Infrastructure

February 6, 2019

Purpose of the Ministry

The Ministry of Transportation and Infrastructure plans transportation networks, provides transportation services and infrastructure, develops and implements transportation policies, and administers many related acts, regulations and federal-provincial funding programs. The Ministry strives to build and maintain a safe and reliable transportation system and provide affordable, efficient and accessible transportation options for all British Columbians. This work includes investing in road infrastructure, public transit, cycling network improvements and other green modes of transportation, reducing transportation-related greenhouse gas emissions, and strengthening the economy through the movement of people and goods.

The Ministry invests in highway rehabilitation and side road improvements, which includes road resurfacing, bridge rehabilitation and replacement, seismic retrofits, intersection improvements and upgrades to smaller side roads to help connect communities.

Two cost-sharing programs are also managed by the Ministry – the <u>British Columbia Air Access</u> <u>Program (BCAAP)</u> and <u>BikeBC</u>, which help local communities invest in priority aviation and cycling infrastructure improvements respectively.

The Ministry is responsible for five Crown corporations: the BC Transportation Financing Authority (BCTFA); <u>BC Railway Company (BCRC)</u>; Transportation Investment Corporation (TI Corp); BC Infrastructure Benefits Inc. (BCIB); and <u>BC Transit</u>.

Coastal Ferry Services

The Ministry is responsible for the Coastal Ferry Act which sets out the responsibilities for BC Ferries, the BC Ferry Commissioner and the Province with respect to the provision of coastal ferry services in British Columbia. Consistent with the Minister's mandate, a comprehensive operating review of the coastal ferry service was completed in 2018 and reviewed by government. The results of the review are anticipated to be released prior to March 31, 2019, and the Ministry will undertake implementation of key recommendations in 2019/2020.

Strategic Direction

The Government of British Columbia is putting people at the heart of decision-making by working to make life more affordable, improve the services people count on, and build a strong, sustainable economy that works for everyone.

Over the past year, significant government investments in areas including housing, child care and the elimination of fees, such as Medical Service Premiums, have contributed to making life more affordable for British Columbians today and into the future. Ministries are engaged in ongoing work to improve the availability of services citizens rely on including those related to primary medical care, education and training, transportation, the opioid crisis and poverty.

A strong economy that works for all regions of B.C. is diversified, resilient and improves the standard of living for people across the province. With that in mind, government is focusing on sustainable economic growth that strengthens our natural resource sector, continues the development of the emerging economy, supports small business and uses innovation and technology to solve B.C. problems. A key priority in 2019/20 and beyond will be driving economic growth with cleaner energy and fewer emissions. At the same time, ministries continue to build prudence into budgets and plan for challenges.

Underpinning the work of all ministries are two shared commitments: reconciliation with Indigenous peoples and consideration of how diverse groups of British Columbians may experience our policies, programs and initiatives. As part of these commitments, ministries are working to implement the United Nations Declaration on the Rights of Indigenous Peoples, Truth and Reconciliation Commission of Canada's Calls to Action, and Gender-Based Analysis+ policy and budgeting.

In July 2017, each minister was given a formal mandate letter that identifies both government-wide and ministry-specific priorities for implementation.

This service plan outlines how the Ministry of Transportation and Infrastructure will support the government's priorities, including selected action items identified in the Minister's <u>Mandate Letter</u>. Over the previous fiscal year, the Ministry of Transportation and Infrastructure made progress on these priorities by:

- Continuing to invest in rural and urban infrastructure, including improvements as part of the accelerated upgrades on <u>Highway 1 to the Alberta Border</u>.
- Eliminating tolls on the Port Mann and Golden Ears bridges.
- Working with BC Ferries to freeze and reduce fares, and restoring the seniors' 100 per cent discount on passenger fares Monday to Thursday.
- Considering the Coastal Ferries Review completed in 2018 which included examination of vessel procurement and ensuring coastal ferry service is delivered in the public interest.
- Accepting industry expert Dan Hara's report on ride-hailing and passing legislation in November 2018 to enable ride-hailing companies to enter B.C. in 2019.
- Announcing the Provincial Government's plans to fully fund the Pattullo Bridge Replacement Project.
- Providing significant investment toward improving public transit across B.C., including handyDart improvements.

The following performance plan outlines how the Ministry of Transportation and Infrastructure will continue to track progress on key mandate letter commitments and other emerging government priorities.

Performance Planning

Goal 1: Invest in rural and urban infrastructure improvements that help build a strong, sustainable economy

Objective 1.1: Use Provincial investment dollars effectively to complete priority projects on budget and on time

Key Strategies:

- Lead planning to address infrastructure needs of rural and urban B.C., working in partnership with other Provincial ministries to support local government's priority infrastructure projects;
- Develop strategic partnerships with federal and other local government agencies, communities and private sectors to invest in priority rehabilitation and improvement projects that serve the best interest of British Columbians;
- Lead negotiations for the next round of federal/provincial infrastructure programs; and
- Use innovative solutions and best practices to deliver the most cost effective transportation investment plans.

	Performance Measure	2018/19 Forecast	2019/20 Target	2020/21 Target	2021/22 Target
1.1	The percentage of projects that meet their budget and schedule ¹	91.5%	91.5%	91.5%	91.5%

¹ Data Source: Ministry of Transportation and Infrastructure

Linking Performance Measure to Objective:

1.1 This performance measure reflects the goal of being cost conscious and evaluates all Ministry capital construction and rehabilitation projects, within the overall Transportation Investment Plan, completed each year. This performance measure allows the Ministry to assess how efficiently and effectively it delivers this large suite of projects, and the consistent target represents the ability to maintain a high level of achievement despite challenges and the broad range of projects included in the target. This enables continued investment in projects that benefit rural and urban British Columbians, including those listed in Appendix A: Major Capital Projects.

Goal 2: Improve transportation network efficiency to provide British Columbians with safe and reliable access to the services they depend on

Objective 2.1: Improve Highway Safety and Reliability

Key Strategies:

- Monitor highway safety and improve high-risk locations;
- Maximize highway safety and reliability through both safety-focused enhancements and low-cost improvements;
- Work with safety partners to identify areas for safety improvements;
- Examine highway safety and reliability issues, considering climate forecasts, seismic hazards and the adaptive capacity of transportation infrastructure; and
- Continue to enhance commercial vehicle safety and enforcement in B.C.

Performance Measure	Baseline ²	2018/2019 Forecast	2019/2020 Target ³	2020/2021 Target ³	2021/2022 Target ³
Serious collision rate on Provincial Highways (Collision per Million Vehicle Kilometre) ¹	0.162	0.156	0.152	0.149	0.146

Data Source: The RCMP and ICBC

Linking Performance Measure to Objective:

2.1 Targeted safety improvements, together with sound regulations/policy, ongoing monitoring and enforcement in cooperation with safety partners, and the use of information systems and other technologies, creates a safer highway network with a reduced rate of serious crashes. The Ministry is committed to the safety and reliability of the transportation network to address areas of greatest need.

² The baseline value represents the serious collision rate for the five-year period of 2012 to 2016

³ The target is based on historical trends of the 5-year rolling average serious collision rate in the 10-year period between 2008 and 2017

Objective 2.2: Ensure a high standard of provincial highway rehabilitation and maintenance

Key Strategies:

- Administer highway maintenance contracts and assess service delivery;
- Invest in the provincial highway system to maintain safety and efficiency and mitigate the onset of deterioration and maximize the return on infrastructure investment;
- Systematically assess the condition of infrastructure to determine priority in the annual resurfacing and structure rehabilitation and replacement programs; and
- Integrate climate change and seismic resilience considerations into rehabilitation design and cost.

Performance Measu	re 2009/10 Baseline		2019/20 Target	2020/21 Target	2021/22 Target
2.2 Rating of Maintenance of performance using Contact Assessment Program ¹		93% ²	TBD ³	TBD ³	TBD ³

¹ Data Source: Ministry of Transportation and Infrastructure Construction and Maintenance Branch

Linking Performance Measures to Objectives:

2.2 Ensuring the safety and reliability of the highway system through a high standard of highway maintenance protects the health of citizens in both rural and urban settings, reduces delays and closures and increases traveller confidence in our transportation network. Information about the obligations of Maintenance Contractors is available on the Ministry's web site.

The Ministry is completing the Maintenance Contract Renewal process. The new maintenance contracts will include increased standards, resulting in enhanced winter maintenance, expanded sweeping along cycling routes and more communication with the public regarding rapidly changing road conditions during severe weather events and other incidents affecting travel on B.C. roads. With the increased standards placed on maintenance contractors, the metrics associated with this Performance Measure, including future targets, will be redefined and a new baseline will be established in 2019/20.

Climate Change Adaptation

The Ministry has implemented and continues to develop an integrated climate change adaptation program that provides policy and guidance to consulting engineers and Ministry staff and promotes adaptive engineering design for the British Columbia highway system. This work will improve decision-making and preparedness for climate change resilience in highway design, construction and maintenance.

² From April 1 2018 to September 30 2018

³ New Targets will be established in 2019/20

Objective 2.3: Provide excellent service to all British Columbians

Key Strategies:

- Communicate and engage more efficiently and effectively with the Ministry's stakeholders;
- Undertake annual surveys to better understand expectations and levels of service;
- Evaluate survey results to determine how to enhance service and act on the findings; and
- Participate in cross-government integration of permitting processes.

Performance Measure	2007/08	2018/19	2019/20	2020/21	2021/22
	Baseline	Forecast	Target	Target	Target
2.3 Survey of stakeholder and citizen satisfaction with Ministry services and processes, rated on a scale of 1 to 5 ¹	3.9	4.11	4.10	4.10	4.10

Data Source: The Ministry's survey is based on the Common Measurement Tool, a survey framework designed by the Institute for Citizen Centered Service to be administered by public sector organizations to facilitate the measurement of citizen satisfaction. All data for the 2017/18 measure has been collected, which is reflected in this being an actual result rather than a forecast. On this scale, 5 represents the highest level of achievement.

Linking Performance Measures to Objectives:

2.3 Providing British Columbians with easy access to services, while ensuring these services are efficient and effective, contributes to quality of life and supports industry and the local economy. The persistent targets represent the Ministry's ability to consistently deliver high quality service.

Goal 3: Invest in transportation options that enhance network efficiency and support climate change objectives

Objective 3.1: Reduce greenhouse gas emissions from the transportation sector Key Strategies:

- In partnership with various levels of government and First Nations, expand public transit including bus service and rapid transit;
- In collaboration with the Ministry of Municipal Affairs and Housing continue to encourage compact and mixed land-use around transit stations and along transit corridors through policy and funding agreements;
- Implement intelligent transportation systems to manage traffic and congestion, reduce idling, and enable improved transit service;
- Expand the use of high occupancy vehicle lanes and transit priority measures; and
- Collaborate with the trucking industry to reduce emissions from the commercial vehicle sector
 including by reducing commercial truck permit wait times, increasing the use of
 weigh-in-motion technology at inspection stations, building rail grade separations, and
 improving rural road infrastructure.

Performance Measure		2018/19 Forecast	2019/20 Target	2020/21 Target	2021/22 Target
		Forecast	Target	Target	Target
3.1	Annual public transit ridership in B.C. ¹	309 million	318 million	326 million	331 million

Data Source: Ministry of Transportation and Infrastructure, and BC Transit and TransLink ridership forecasts

Linking Performance Measures to Objectives:

3.1 Increased use of public transit (higher ridership) helps reduce greenhouse gas emissions generated by motor vehicles, improves the efficiency of the transportation network by opening up capacity, diminishes our carbon footprint, and makes life more affordable for British Columbians by providing a lower cost transportation alternative to private vehicles. The reduction of greenhouse gas emissions from the transportation sector is a priority for government.

Clean Transportation

The Ministry is working toward an interconnected transportation network that will support a clean, sustainable economy, address climate change, reduce greenhouse gas emissions, and bring B.C.'s communities together through coordinated transportation services people can count on.

The Ministry is developing an Active Transportation Strategy to support and increase safe walking, cycling and other forms of active transportation by enhancing programs like BikeBC. Electrification of rest stops and truck stops on provincial highways and contributing to the expanded use of zero-or low-emission buses are just a few of the ways the Ministry is ensuring clean transportation options are available to British Columbians. This work supports CleanBC, the Province's strategy to put B.C. on the path to a cleaner future.

Objective 3.2: Support local economies and communities through the continued development of a multi-modal transportation system

Key Strategies:

- Encourage shifting to more efficient and lower-carbon emitting modes of transportation and cleaner burning fuels such as natural gas, hydrogen and electricity;
- Develop an Active Transportation Strategy and invest in infrastructure that supports safe cycling, walking and other forms of active transportation;
- Continue to build a cohesive network of electric vehicle (EV) charging stations so EV drivers can feel confident to travel throughout B.C.; and
- Introduce app-based ride-hailing and other flexible transportation options.

Performance Measure	2018/19	2019/20	2020/21	2021/22
	Forecast	Target	Target	Target
3.2 Number of locations with public EV charging installed or supported by the Ministry ¹	12	20	25	30

¹ Data Source: Ministry of Transportation and Infrastructure

Linking Performance Measures to Objectives:

3.2 Promoting the use of zero-emission vehicles (ZEVs), including EVs and other lower-carbon emitting transportation options, contributes to the overall health of our communities by reducing greenhouse gas emissions generated by motor vehicles, and thus helping to diminish our carbon footprint. Tracking the number of EV charging stations along provincial highways provides a measure of the effectiveness of the EV charging station network. A robust network accelerates EV adoption and EV use for inter-community trips.

Strong communities and economies are integral to continued provincial prosperity. Through the development of multi-modal transportation network, the Ministry is supporting economic innovation and community health.

App-based Ride-Hailing in B.C.

British Columbians made it clear that ride-hailing is an important issue, and in response the Province prioritized finding a "made in B.C. solution", as committed in the Minister's Mandate Letter. As a result, the Province adopted key recommendations brought forward as part of the Hara Report on modernizing the taxi industry.

In November 2018, the government introduced legislation to allow ride-hailing companies to begin operating in B.C. With a focus on passenger safety, the Passenger Transportation Amendment Act modernizes the legislative framework for passenger-directed vehicles and was given Royal Assent on November 27, laying the foundation for the entry of app-based ride-hailing services in 2019.

Resource Summary

resource summary									
Core Business Area	2018/19 Restated Estimates ¹	2019/20 Estimates ²	2020/21 Plan	2021/22 Plan					
Operating Expenses (\$000) ³									
Transportation and Infrastructure Improvements	11,687	16,987	16,445	16,445					
Public Transportation ⁴	338,730	348,321	353,499	355,636					
Highway Operations	526,584	544,168	543,958	543,958					
Commercial Transportation Regulation	1,580	3,208	3,195	3,195					
Executive and Support Services	11,511	12,932	12,851	12,851					
Total	890,092	925,616	929,948	932,085					
Ministry Capital Expenditures (Consolidated Revenue Fund) (\$000)									
Highway Operations	3,436	2,885	2,344	2,377					
Total	3,436	2,885	2,344	2,377					

¹ For comparative purposes, the amounts shown for 2018/19 have been restated to be consistent with the presentation of the 2019/20 Estimates.

² Further information on program funding and vote recoveries is available in the Estimates and Supplement to the

³ Operating expenses are reported net of funding from external sources, primarily the BC Transportation Financing

Authority.

⁴ Public Transportation operating expenses include government contributions towards public transit and coastal ferry services.

Transportation Investments

(\$ millions)	2019/20 Budget	2020/21 Plan	2021/22 Plan	Total
Provincial Investments:				
Highway Corridor Rehabilitation	214	234	203	651
Side Road Improvements	110	110	110	330
Pattullo Bridge Replacement	186	298	280	764
Highway 1 to Alberta Border	148	244	256	648
Broadway Subway	332	400	389	1,121
Transit Infrastructure	242	188	229	659
Transportation and Trade Network Reliability	337	206	123	666
Safety Improvements	27	30	29	86
Community and other programs	37	21	19	77
Total Provincial Transportation Investments	1,633	1,731	1,638	5,002
Investments funded through contributions from Federal	Governm	ent and O	ther Parti	ners:
Contributions from all partners	498	594	600	1,692
Total Investments in Transportation Infrastructure ¹	2,131	2,325	2,238	6,694

¹Total investments include operating and capital spending.

Appendix A: Major Capital Projects

Major Capital Projects (over \$50 million)	Targeted Completion Date (Year)	Project Cost to Dec 31, 2018 (\$ millions)	Estimated Cost to Complete (\$ millions)	Approved Anticipated Total Capital Cost of Project (\$ millions)
Highway 97 HOV Six-Laning from Highway 33 to Edwards Road	2018	63	3	66

Objective: 4.5 kilometre six-laning of Highway 97 through Kelowna from Highway 33 to Edwards Road, extensions of HOV lanes to improve Rapid Transit, intersection improvements at Leathead, McCurdy, Findlay/Hollywood and Sexsmith roads, and access consolidation and realignment of Rutland Road to provide separation from intersection on Highway 97.

Costs: The estimated cost is \$66 million inclusive of property costs and contingencies. The Government of Canada is contributing half of eligible costs up to a maximum of \$18.0 million under the Major Infrastructure component of the Building Canada Fund and close to \$1 million from the City of Kelowna. The project is expected to be complete in fall 2018 due to complications related to extreme weather in the spring and early arrival of winter. Additional work caused by the unforeseen site conditions, such as the discovery of unknown underground utilities, utility relocations, additional engineering and construction monitoring, has led to a delay.

Benefits:

- Improve traffic flow and reduce congestion on a core National Highway System route;
- Improve safety for road users;
- Improve rapid transit service and ridesharing opportunities with the continuation of the HOV lanes through the project;
- More efficient and safer connections to UBCO, Kelowna Airport, Quail Ridge; Rutland, Glenmore, Ellison, Lake Country and beyond for motorists and transit users; and
- Safer access to and from adjacent properties.

Risks:

- Property acquisition expropriation settlements; and
- Landscaping.

Highway 1 – Admirals Road/McKenzie Avenue	2019	67	18	85
<u>Interchange</u>				

Objective: Construction of an interchange on the Trans-Canada Highway at the intersection with Admirals Road and McKenzie Avenue to improve traffic flow and reliability and reduce congestion on a core National Highway System route. The project includes construction of shoulder bus lanes, extension of the merge lanes, and construction of a grade-separated structure for the Galloping Goose Regional Trail.

Costs: The estimated cost is \$85 million, inclusive of property acquisition costs and contingencies. The Government of Canada is contributing half of eligible costs up to a maximum of \$32.6 million under the Provincial-Territorial Infrastructure Component of the new Building Canada Fund.

Benefits:

- Improve safety for all road users;
- Reduce congestion and improve travel times through a key corridor; and
- Support transit use, cycling and other alternatives to single occupant vehicles.

- Geotechnical conditions;
- Archeological impacts;
- Relocation of a large Capital Regional District waterline; and
- Maintaining adequate traffic flow during construction may require temporary works and development of comprehensive traffic control plans.

Major Capital Projects (over \$50 million)	Targeted Completion Date (Year)	Project Cost to Dec 31, 2018 (\$ millions)	Estimated Cost to Complete (\$ millions)	Approved Anticipated Total Capital Cost of Project (\$ millions)
Highway 1 Widening and 216 Street Interchange	2019	33	26	59

Objective: Widening the Trans-Canada Highway to six lanes between 202 Street and 216 Street and construction of a diamond interchange at 216 Street to improve traffic flow, reliability and congestion on a core National Highway System route used extensively for moving people and goods.

Costs: The estimated project cost is \$59 million, inclusive of property acquisition costs and contingencies. The Government of Canada is contributing half of eligible costs up to a maximum of \$22.3 million under the Provincial-Territorial Infrastructure Component of the new Building Canada Fund. The Township of Langley is contributing \$14.3 million toward the cost of the interchange.

Benefits:

- Improve safety for all road users;
- Reduce congestion and improve travel times through a key corridor;
- Support transit use, cycling and other alternatives to single occupant vehicles; and
- Keep regional traffic off local streets.

Risks:

• Night work is required as no lane closures during the day will be permitted. Night work includes building an earth berm in proximity to residents.

<u>Highway 91 – Alex Fraser Bridge</u>	2019	41	29	70
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Objective: Implement a counter-flow system during peak travel times through the addition of a seventh lane, a moveable barrier system and a delay time information system.

Costs: The estimated cost is \$70 million. The Government of Canada is contributing half of eligible costs up to a maximum of \$34 million under the National and Regional Priorities of the new Building Canada Fund.

Benefits:

- Improve traffic capacity and reduce travel time delays for commuters and goods movement during peak times; and
- Respond to community and local government concerns.

- Archeological impacts; and
- Managing traffic during construction.

Major Capital Projects (over \$50 million)	Targeted Completion Date (Year)	Project Cost to Dec 31, 2018 (\$ millions)	Estimated Cost to Complete (\$ millions)	Approved Anticipated Total Capital Cost of Project (\$ millions)
Highway 97 Stone Creek to Williams Road	2019	50	15	65

Objective: Located approximately 25 kilometres south of Prince George, between two recently improved Cariboo Connector four-lane projects, this project will upgrade 3 kilometres of Highway 97 from Stone Creek to Williams Road from two lanes to four lanes. The project includes significant slope stabilization, extensive retaining walls, river armouring along the Fraser River and construction a new rail bridge to accommodate the four-laning. Once completed, this project will result in about 11.5 kilometres of continuous four-laning along Highway 97.

Costs: The estimated cost is \$65 million inclusive of planning, design, construction and claims. The road was open to traffic in October 2018. Final project completion is expected in 2019.

Benefits:

- Improve safety and reliability of the Highway 97 corridor;
- Replace a CN Rail bridge to accommodate the four laning and increase the overhead clearance from 4.65 metres to 5.5 metres;
- Stabilize known landslides; and
- Provide safe passing opportunities for highway users.

Risks:

• The project is in substantial completion and remaining risks are reduced to contractor claim items. The project team is currently in negotiations with the Contractor and contingency is allocated to this risk.

Williams Lake IR#1 to Lexington Road Project	2019	48	9	57
Williams Lake IR#1 to Lexington Road FToject	2019	40	9	31

Objective: The Williams Lake IR#1 to Lexington Road Project involves widening 6.1 kilometres of Highway 97 from two to four lanes and will provide intersection and pedestrian underpass improvements, and access consolidation.

Costs: The approved project budget is \$57 million. The project is a provincial project with no cost sharing partners. To date, \$48 million has been spent on the project and \$9 million is planned for 2019.

Benefits:

- Improved safety, mobility and reliability on Highway 97; and
- Improved safety for local residents of the City of Williams Lake, First Nations Communities and the surrounding area with improvements to intersections and accesses.; and
- Employment opportunities for Williams Lake Indian Band.

- Geotechnical conditions:
- Impacts to local businesses due to construction; and
- Damage to asphalt due to winter conditions.

Major Capital Projects (over \$50 million)	Targeted Completion Date (Year)	Project Cost to Dec 31, 2018 (\$ millions)	Estimated Cost to Complete (\$ millions)	Approved Anticipated Total Capital Cost of Project (\$ millions)
Highway 7 Corridor Improvements	2020	28	42	70

Objective: Improve safety, capacity and mobility on Highway 7 between the City of Pitt Meadows and the District of Mission including: a right turn extension at Harris Road (Pitt Meadows); safety improvements from 222 Street to Kanaka Way (Haney Bypass-Maple Ridge); and four-laning from Silverdale Avenue to Nelson Street (Mission).

Costs: Total project cost is estimated at \$70 million including a \$22 million contribution under the Provincial-Territorial Component of the new Building Canada Fund.

Benefits:

- Address key safety issues along Highway 7;
- Improve capacity constraints between the District of Mission and the City of Pitt Meadows; and
- Support the Province's commitment to provide a continuous divided four-lane corridor from Mission to Pitt Meadows.

Risks:

- Environmental impacts to fish bearing stream and ditches; and
- Traffic management during construction.

Highway 99 – Ten Mile Slide	2020	13	47	60
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Objective: Long-term stabilization of the Ten Mile Slide, approximately 17 kilometres northeast of Lillooet and located within Xaxli'p's Fountain Reserve 1A.

Costs: The estimated cost is \$60 million, which includes planning, engineering, construction, mitigation, site supervision, First Nations accommodation and contingency. Phase 1 for the advanced anchor work is under construction and will be complete this winter. Tender of Phase 2 for the main stabilization contract is anticipated to commence construction in spring 2019 with completion in 2020. The project team continues to work with Xaxli'p to finalize an agreement for the construction of these improvements within their reserve.

Benefits:

- Improve safety and reliability;
- Maintain direct connection between Lillooet and Kamloops;
- Maintain community connectivity and cohesiveness for the Xaxli'p community;
- Respond to requests for a long-term solution dating back to the mid-1990s; and
- Limit future costs associated with extra-ordinary maintenance and stabilization measures.

- Geotechnical conditions (ongoing slide movement);
- Managing traffic during construction;
- Impacts to the Xaxli'p Fountain Reserve 1A; and
- Archaeological finds.

Major Capital Projects (over \$50 million)	Targeted Completion Date (Year)	Project Cost to Dec 31, 2018 (\$ millions)	Estimated Cost to Complete (\$ millions)	Approved Anticipated Total Capital Cost of Project (\$ millions)
Highway 1 – Lower Lynn Corridor Improvements	2021	100	98	198

Objective: Construction of replacement structures over Highway 1 at Mountain Highway, Keith Road/Dollarton Highway as well as municipal improvements on Keith Road. The project also includes the construction of westbound collector-distributor lanes and the construction of two new structures on either side of the existing Highway 1 Lynn Creek Bridge.

Costs: The estimated cost is \$198 million, inclusive of property acquisition costs and contingencies. The Government of Canada is contributing \$66.6 million under the Provincial Territorial Component of the new Building Canada Fund and the Major Infrastructure Component of the old Building Canada Fund, and the District of North Vancouver is contributing \$54.7 million.

Benefits:

- Improve safety for all road users;
- Reduce congestion and improve travel times through a key corridor; and
- Support community connectivity.

Risks:

- Geotechnical conditions;
- Archeological impacts;
- Utility relocations; and
- Managing traffic during construction.

Illecillewaet Four-Laning and Brake Check	2022	8	55	63
Improvement Project				

Objective: The Illecillewaet Four-Laning and Brake Check Improvement Project is part of the Trans-Canada Highway program that supports the provincial commitment to accelerate upgrades to the Alberta border. The project scope includes providing approximately 2 kilometres of four-lane highway to increase vehicle storage during winter closures and to improve passing opportunities, expanding the existing brake check area to accommodate 15 trucks and accommodation of eastbound traffic turn-around to enable trucks and cars in the event of a road closure.

Costs: The estimated project cost is \$62.95 million and is cost shared with a federal contribution of \$15.5 million. The estimated total project cost includes engineering, construction, First Nations consultation, archaeology, and project management.

Benefits:

- Improved safety, mobility and reliability;
- Improved travel speeds and relieved congestion will reduce driver frustration and improve safety;
- Improved capacity and safety for queued vehicles and reduced traveller delay due to highway closures during winter storm and avalanche control events;
- Improved brake check safety and capacity; and
- Provides an opportunity for vehicles to safely turn around in the event of extended highway closures.

- Geotechnical conditions;
- Environmental impacts; and
- Potential cost increase and schedule delay related to higher construction bid prices and schedule delays.

Major Capital Projects (over \$50 million)	Targeted Completion Date (Year)	Project Cost to Dec 31, 2018 (\$ millions)	Estimated Cost to Complete (\$ millions)	Approved Anticipated Total Capital Cost of Project (\$ millions)
Highway 1 Hoffman's Bluff to Jade Mountain	2023	20	179	199

Objective: Upgrading approximately 11.9 kilometres of the Trans-Canada Highway to four-lanes, including highway realignment, improved highway access, frontage roads, replacement of the Chase Creek Bridge, and a Commercial Vehicle Safety Enforcement inspection facility. It will also provide greater pedestrian/cycling connectivity between the Village of Chase and Neskonlith Indian Reserve.

Costs: Estimated project cost is \$199.22 million, with the Government of Canada contributing \$55.09 million under the Provincial-Territorial Component of the new Building Canada Fund.

- The Hoffman's Bluff to Jade Mountain project is composed of three segments to be delivered in three phases:
 - o The first phase, Chase Creek Road to Chase West, will be ready for tender in late 2019 and will be completed in spring 2022;
 - The second phase, Chase West to Jade Mountain, is planned to start in late 2019 and finish in the spring of 2022; and
 - The final phase, Hoffman's Bluff to Chase Creek Road, is scheduled for completion in 2023.

Benefits:

- Improve safety, mobility and reliability of this section of Highway 1 for all road users;
- Increase capacity on a vital transportation link between British Columbia and the rest of Canada, supporting regional, provincial and national economic growth;
- Improve intersections and accesses for local residents of the Village of Chase, Indigenous communities and the surrounding area; and
- Improve pedestrian and cyclist accommodation for the communities.

Risks:

- Potential costs and time associated with reaching an accommodation agreement with First Nations;
- Potential additional costs related to completing property acquisition; and
- Potential cost increase and schedule delay related to evaluation of scope change requests following stakeholder input.

Highway 91/17 and Deltaport Way Upgrade	2023	27	218	245
Project				

Objective: A combination of improvements to the existing Highway 91, Highway 17, Highway 91 Connector and Deltaport Way to improve travel safety and efficiency. These upgrades will improve local and commercial travel in the area and reduce conflicts between commercial vehicles and other traffic. They also complement the Alex Fraser Bridge improvements and 72nd Avenue Interchange projects.

Costs: The estimated cost is \$245 million, with the Government of Canada contributing \$81.7 million, the Port of Vancouver \$80 million, the Province of BC \$80 million, and the Tsawwassen First Nation \$3.5 million.

Benefits:

- Improve travel time and reliability through Delta, with congestion-reduction travel time savings;
- Improve traffic safety for good movers and the travelling public, with lowered collision risk and better operating hours at the Nordel commercial inspection facility; and
- Support community and economic development, with better access to employment areas, faster access between South Delta and North Delta/Surrey, improved cycling connections, improved permitting and inspection service for commercial vehicle operators.

- Geotechnical conditions;
- Traffic management during construction;
- Archeological finds; and
- Utility relocations.

Major Capital Projects (over \$50 million)	Targeted Completion Date (Year)	Project Cost to Dec 31, 2018 (\$ millions)	Estimated Cost to Complete (\$ millions)	Approved Anticipated Total Capital Cost of Project (\$ millions)
Highway 1 – Salmon Arm West	2023	28	135	163

Objective: Upgrade six kilometres of the Trans-Canada Highway to four lanes to improve safety, mobility and reliability on this key section of the corridor. The project includes a new bridge across the Salmon River, a new interchange, up to seven intersections and approximately four kilometres of frontage roads.

Costs: The current estimate is \$162.7 million including a \$48.5 million Government of Canada contribution under the Provincial-Territorial Component of the Building Canada Fund. The project is composed of three segments and will be delivered in three phases. The first phase, from 1 Avenue SW to 10 Avenue SW, will be ready for tender in summer 2019 with a target completion in summer 2021.

Benefits:

- Improve the safety, mobility and reliability of the Trans-Canada Highway corridor;
- Improve safety for the City of Salmon Arm, local Indigenous community members and the surrounding area with improvements to intersections and accesses;
- Improve pedestrian and cyclist accommodation with construction of a multi-use pathway that will integrate with the community trail networks; and
- Mitigate impacts of projects on Aboriginal interests including archaeological, environmental and cultural interests.

Risks:

- Potential costs and time associated with reaching an accommodation agreement with First Nations;
- Potential costs and schedule delay associated with archaeological finds;
- Potential costs and schedule delay with property acquisition completion; and
- Disposition of the existing Salmon River Bridge to the City of Salmon Arm.

R.W. Bruhn Bridge and Approaches Project	2023	7	218	225

Objective: The R.W. Bruhn Bridge and Approaches Project supports the provincial commitment to accelerate Highway 1 upgrades to the Alberta border, while also addressing the immediate needs of the aging bridge infrastructure and the associated safety, mobility and reliability issues along this route. The project scope includes four-laning approximately 1.9 kilometres of Highway 1 and replacing the R.W. Bruhn Bridge. The Project extends approximately 2.5 kilometres and includes at-grade intersection improvements at Old Sicamous Road, Old Spallumcheen Road, Gill Avenue and Silver Sands Road. The scope also includes a new multi-use path to increase safety for pedestrians and cyclists.

Costs: The estimated project cost is \$224.5 million. The project is cost shared between the provincial and federal governments with a federal contribution of \$91.1 million and a provincial contribution of \$133.4 million. Federal funding is being provided through the new Building Canada Fund. The estimated total project cost includes engineering, construction, land acquisition, First Nations consultation, archaeology, and project management.

Benefits:

- Improved safety and traffic flow along the Trans-Canada Highway corridor;
- Replacement of aging R.W. Bruhn Bridge;
- Improved safety of local road connections at the Trans-Canada Highway;
- Enhance safety for pedestrians and cyclists along the Trans-Canada Highway corridor; and
- Continued collaboration with Indigenous people and government on project opportunities and accommodation.

- Potential costs and time associated with reaching an accommodation agreement with First Nations;
- Archeological finds;
- Potential costs and schedule delay with property acquisition completion; and
- Geotechnical conditions.

Major Capital Projects (over \$50 million)	Targeted Completion Date (Year)	Project Cost to Dec 31, 2018 (\$ millions)	Estimated Cost to Complete (\$ millions)	Approved Anticipated Total Capital Cost of Project (\$ millions)
Pattullo Bridge Replacement Project	2023	13	1,364	1,377

Objective: A new four-lane bridge that meets current seismic and road design standards and provides a safe and reliable crossing for vehicles, pedestrians and cyclists and network connections in Surrey and New Westminster.

Costs: The estimated cost is \$1.377 billion which includes planning, engineering, construction, site supervision, property acquisition, regulatory approvals, removal of the existing Pattullo Bridge and contingency. The estimated cost includes both capitalized and expensed costs. The new bridge is expected to open in 2023. The removal of the existing bridge will occur after the new bridge is in service.

Benefits:

- Improve safety for drivers;
- Improve seismic resiliency and emergency response capability;
- Improve regional connectivity;
- Improvements for the movement of goods; and
- Safer corridors for pedestrians and cyclists.

Risks:

- Managing traffic during construction;
- Archeological impacts;
- Permitting/regulatory requirements;
- Utility relocations;
- Third party agreements; and
- Geotechnical conditions.

Highway 1 – Phase Four of the Kicking Horse	2024	16	434	450
Canyon Project				

Objective: Upgrade the final 4.8 kilometres of the Kicking Horse Canyon section of the Trans-Canada Highway to a modern, four-lane standard, completing the corridor improvements from the junction of Highway 95 at Golden to the western boundary of Yoho National Park. This portion of the Trans-Canada Highway serves as a gateway between British Columbia and the rest of North America, connecting resource extraction sites with processing, manufacturing and distribution centres, and is a key part of the province's resource economies, tourism and inter-provincial trade. The first three phases of the project have been completed and are now in operation.

Costs: The current estimate for Phase 4 is \$450 million. The Government of Canada is contributing \$215.2 million under the National Infrastructure Component of the new Building Canada Fund.

Benefits:

- · Increase the safety, reliability and capacity on a critical provincial and national gateway; and
- Economic development through increased tourism and efficient movement of goods and services.

- Challenging climatic and geographic conditions; and
- Traffic management during construction.

Major Capital Projects (over \$50 million)	Targeted Completion Date (Year)	Project Cost to Dec 31, 2018 (\$ millions)	Estimated Cost to Complete (\$ millions)	Approved Anticipated Total Capital Cost of Project (\$ millions)
Broadway Subway Project	2025	18	2,809	2,827

Objective: The proposed project is a 5.7 kilometre extension of the existing Millennium Line along Broadway from VCC-Clark station, entering a 5 kilometre long tunnel at the Great Northern Way campus and continuing as a subway to Arbutus Street. Six underground stations will be built: one at the Great Northern Way campus, and five along Broadway Avenue (Main Street, Cambie Street, Oak Street, Granville Street and Arbutus Street). Upon completion, it will be fully integrated into the regional transportation network and operated by TransLink.

Costs: The Broadway Subway Project will cost \$2.827 billion, and will be funded through contributions of \$1.830 billion from the Government of British Columbia, \$897 million from the Federal Government and \$100 million from the City of Vancouver. The Project is a key part of the rapid transit program in Metro Vancouver's Mayors' Council 10-Year Vision, Phase 2. The Vision is funded by the governments of B.C. and Canada, TransLink, and local municipalities.

Benefits:

- Provide faster, convenient and more reliable transit service;
- Improve transportation options and economic development potential;
- Fill gap in regional transit network;
- Connect communities and regional destinations;
- Help meet future needs by keeping people and goods moving and supporting a growing economy;
- Support environmentally friendly transportation options; and
- Improve regional affordability and access to the Broadway Corridor.

- Traffic management during construction;
- Geotechnical Conditions;
- Third Party Agreements;
- Future expandability; and
- Utility relocations.

Appendix B: List of Crowns, Agencies, Boards and Commissions

BC Transit

BC Transit coordinates the delivery of public transportation across B.C. with the exception of those areas serviced by TransLink (Metro Vancouver).

BC Transportation Financing Authority (BCTFA)

BCTFA has a mandate to plan, acquire, construct, hold, improve or operate transportation infrastructure throughout B.C. The BCTFA owns all provincial highways and land held for construction of future transportation infrastructure. However, administration, regulatory responsibility and operational authority for management of highways, as set out in the *Transportation Act*, are the responsibility of the Minister and the Ministry of Transportation and Infrastructure. The BCTFA has no dedicated staff. Management is provided by staff at the Ministry of Transportation and Infrastructure.

BC Railway Company (BCRC)

BCRC has a primary mandate to acquire and hold railway corridor and strategic port lands and to make related infrastructure investments to provide benefits to the province. BCRC owns the former BC Rail railway lands and tracks infrastructure, which is leased to CN Rail through the Revitalization Agreement. Consistent with western trade corridor strategies, BCRC owns and operates the Roberts Bank Port Subdivision rail line. BCRC, through its subsidiary BCR Properties Ltd., also owns port-related lands which are leased to terminal operators, including those upon which the Vancouver Wharves and Squamish Terminals port facilities operate.

Transportation Investment Corporation (TI Corp)

TI Corp became a subsidiary of BCTFA on April 1, 2018, with a mandate to provide enhanced oversight, management and delivery of major capital transportation projects.

BC Infrastructure Benefits Inc. (BCIB)

BCIB has a mandate to provide the skilled workforce for the construction of select public-sector infrastructure projects. BCIB has signed the Community Benefits Agreement with the Allied Infrastructure and Related Construction Council of British Columbia (AIRCC). BCIB's focus will be to help build better communities by maximizing opportunities for British Columbians to benefit from select public-sector infrastructure projects.

BCIB has a permanent Board of Directors and work continues to fully operationalize the company. In 2019/20, BCIB will establish its values and vision, finalize its policies, define its goals and its performance measures, and operationalize its processes. Once developed, BCIB will provide the goals, objectives, and strategies as well as the performance and reporting frameworks in their future Service Plan.

BCIB will use the <u>Community Benefits Agreement</u> to help provide opportunities for British Columbian workers, including those from underrepresented groups, to build and prepare British Columbia's skilled workforce for future projects.

BC Container Trucking Commissioner

The Office of the BC Container Trucking Commissioner enforces compliance with the *Container Trucking Act*, issues Container Trucking Services licences within the Truck Licencing System and facilitates ongoing policy and regulatory review.

Passenger Transportation Board

The Passenger Transportation (PT) Board is an independent tribunal established under the *Passenger Transportation Act*. In its adjudicative roles, the PT Board operates independently from Government. The PT Board is accountable to the Minister of Transportation and Infrastructure for complying with applicable government administrative, financial and human resources and other policies. More information on the Board's role and its strategic plan is available at: www.ptboard.bc.ca.