APPENDIX C

All Recommended Projects
Maps and Tables



PRIORITY TABLE DIRECTORY

In addition to the high priority projects provided in Section 4 of the report, the following tables include medium and low priority projects categorized using the following shading. Maps accompanying these tables illustrate all the high, medium, and low priority project locations.

| High Priority |
|-----------------|
| Medium Priority |
| Low Priority |

Improvements in the **COWICHAN VALLEY TRAIL COMPLETION AND IMPROVEMENTS** layer are all high priority apart from one medium priority project.

Improvements in the **EAST ROUTE** layer include both high and medium priority projects.

Improvements in the **COMMUNITY CONNECTIONS AND EXTENSIONS** layer include high, medium, and low priority projects.

TABLE C1: COWICHAN VALLEY TRAIL COMPLETION AND IMPROVEMENTS initiative consists of eight potential improvements described briefly below. These improvements seek to improve sub-standard gaps in the existing CVT alignment. Improved CVT branded wayfinding signage to be applied throughout the route. In addition to high priority projects provided in **Section 4** of the report, this table also includes a medium priority project. The accompanying maps illustrate the medium priority projects and the high priority projects, illustrated in **Section 4** of the report.

| MAP REF. | ROAD | SEGMENT | LENGTH | LOCATION | IMPROVEMENT | EXISTING CONDITIONS | IMPLEMENTATION NOTES |
|-------------|---|---|--------|------------------|--|--|---|
| Α | Bell McKinnon Road | Westholme Road to Herd Road | 3.7 km | North Cowichan | MUP/Shoulders | One approximate 1m wide shoulder on east side of roadway. Key CVT gap | Collaborate with CVRD Hospital Project, Bell McKinnon Local Area Plan. Pursue MUP on west side of road |
| В | Chemainus Road | Howe Road to Crofton Road | 3.7 km | North Cowichan | MUP/Shoulders | Approximate 1m shoulders with fog lines | Pursue CVT Trail with Rail opportunity east of Chemainus Road alignment |
| С | Chemainus Road | Crofton Road to Mt. Sicker Road | 1.7 km | North Cowichan | MUP/Shoulders | Approximate 1m shoulders with fog lines | Pursue CVT Trail with Rail opportunity east of Chemainus Road alignment |
| D | Arroyo Road, Christie Road | Christie Falls Trailhead to Christie Road., Christie Road. to Strathcona Road, 2nd Avenue. to Symonds Road | 2.8 km | Electoral Area H | Wayfinding Signage and Share Road Signage | Inadequate wayfinding for TCT and CVT. Moderate to low existing vehicle volumes allow for retained road cross section | Add 'Share the Road' signs and branded wayfinding |
| E | Cowichan Valley Trail | CVT through Ladysmith, intersection of Christie and Strathcona to Chemainus Road and Davis Road | 2.2 km | Ladysmith | Wayfinding Signage and Complete Streets | The on–going Ladysmith Active Transportation Plan will recommend an active transportation network in Ladysmith including a north–south route through the community | A primary north-south route should be supported with wayfinding for CVT connectivity through Ladysmith |
| F | Westholme Road | Mt. Sicker Road to Bell McKinnon Road | 3.0 km | North Cowichan | MUP/Shoulders | No shoulders or fog lines. Missing CVT link | Add 'Share the Road' signs. Widen shoulders and/or MUP |
| G | Water Line MUP | Johnston Road to Somenos Road | 7.5 km | North Cowichan | MUP | Water line, no trail or through route | Potential for Water Main line and/or Rail line MUP alignment from Chemainus Road and Howe Road intersection south to Friendship Trail |
| н | Herd Road, Cowichan Valley Highway, Somenos Road, Johnson Road | Bell McKinnon Road west across TCH to CVT | 2.5 km | North Cowichan | MUP/Shoulders and Wayfinding Signage | Approximate 1m shoulders on Cowichan Valley Highway. No shoulders or fog lines on Somenos Road. Missing CVT link | Add 'Share the Road' signs. Widen shoulders and/or MUP on Cowichan Valley Highway and Somenos Road. Add wayfinding on Johnson Road |

TABLE C2: EAST ROUTE scored second highest in priority rankings. This initiative consists of 18 improvements, which are described below. This potential route compliments the CVT, which traverses west to Lake Cowichan by providing a north-south route that retains a predominately East of Trans-Canada Highway alignment, connecting Chemainus, Crofton, Maple Bay, Duncan, Cowichan Bay, Cobble Hill, Shawnigan Lake and Mill Bay. East Route-specific wayfinding signage is to be applied throughout the route. In addition to the high priority projects presented in **Section 4** of the report, this table includes medium priority projects. The accompanying maps illustrate the medium priority projects and the high priority projects illustrated in **Section 4** of the report.

| MAP REF. | ROAD | SEGMENT | LENGTH | LOCATION | IMPROVEMENT | EXISTING CONDITIONS | IMPLEMENTATION NOTES |
|-------------|--|--|--------|------------------------------------|--|---|--|
| 1 | Shawnigan Lake Mill Bay Road | Shawnigan Lake Village to TCH | 5.3 km | Electoral Areas A, B | MUP/Shoulders | Ongoing work program of improved shoulders and segments of MUP | Complete work program initiated in 2022 to improve shoulders and segments of MUP |
| J | Tzouhalem Road | Trunk Road to Maple Bay Road | 6.3 km | North Cowichan/ Cowichan Tribes | MUP/Shoulders | No shoulders or fog lines. Key route with notable pedestrian activity. Missing link between Duncan and Maple Bay/Cowichan Bay | Important connectivity gap. Opportunity to work with Cowichan Tribes and MOTI |
| К | Cowichan Bay Road | Lochmanetz Road to Cowichan Bay Village (Marina) | 3.2 km | Electoral Area D | MUP/Shoulders + 'Share the Road' signs | Substandard, inconsistent shoulders with fog lines | Important connectivity gap along Tzouhalem Road between Duncan and Cowichan Bay. Add 'Share the Road' signs. Widen shoulders and/or MUP |
| L | Mill Bay Road South – Malahat Nation | Rozon Road to Mill Bay Ferry Terminal | 3.0 km | Malahat Nation | MUP/Shoulders | Substandard, inconsistent shoulders with fog lines | Pursue MUP or shoulder improvements along road in coordination with anticipated Malahat Nation water main work scheduled for 2024. Water main removal along roadways west edge provides opportunity to collaborate |
| М | Mill Bay Road North | Handy Road to Rozon Road | 2.1 km | Electoral Area A | MUP/Shoulders | Substandard, inconsistent shoulders with fog lines | Pursue adaptive MUP or shoulder improvements along road, which could include both rural and urban cross sections with AT infrastructure |
| N | Barry Road to Horton Road Connection | Shawnigan Lake-Mill Bay Road to Horton Road | 1.5 km | Electoral Area A | MUP/Signage | Barry Road has approximately 1.7 m wide shoulders. Horton Road is a low vehicle volume route, without shoulders or fog lines | Through future development, obtain connection between Horton Road and Barry Road using either Hayden Place or a more northern alignment to connect Frances Kelsey Secondary School to Horton Road. Horton Road could be retained as local route without shoulders, signed as AT route. Horton Road connects to Kilmalu Road. Add Wayfinding and 'Share the Road' signage along route |
| 0 | Stone Bridge Trail | Stone Bridge to Shawnigan Lake - Mill Bay Road | 490 m | Electoral Area A | MUP | Approximate 3m wide MUP connects Barry Road across Shawnigan Creek | Preserve and augment AT trail connection from Barry Road Walkway termination to Shawnigan Lake - Mill Bay Road. Add wayfinding route signage |

| MAP REF. | ROAD | SEGMENT | LENGTH | LOCATION | IMPROVEMENT | EXISTING CONDITIONS | IMPLEMENTATION NOTES |
|-------------|------------------------|--|--------|----------------------------|--|--|--|
| Р | Shawnigan Lake Road | From Renfrew Road to Cobble Hill Village | 4.3 km | Electoral Area B | MUP/Shoulders | Substandard, inconsistent shoulders with fog lines. This route connects two commercial areas/communities | Add 'Share the Road' signs. Widen Shoulders and/or MUP |
| Q | York Avenue | Chaplin Street to Adelaide Street | 800 m | North Cowichan | Signed Route or Painted Bike Lanes | Inconsistent cross section, sporadic sidewalks. Some curbside parking activity near residential frontages | Due to the urban context of York Road, a more urban cross section with protected bike lanes may be considered in consultation with Municipality of North Cowichan |
| R | Cowichan Bay Road | Cowichan Bay south to TCH | 4.1 km | Electoral Area D | MUP/Shoulders | Substandard, inconsistent shoulders with fog lines. This route connects two commercial areas/communities | Widen shoulders and/or MUP |
| S | Telegraph Road | Cowichan Bay Road to Kilmalu Road | 8.7 km | Electoral Areas C, D, A | MUP/Shoulders | Substandard, inconsistent shoulders, some section with no fog lines | Add 'Share the Road' signs. Widen shoulders and/ or MUP |
| т | Crofton Road | Chemainus Road to Chaplin Street @ York Avenue | 3.5 km | North Cowichan | MUP/Shoulders | Recently widened and repaved with approximate 1m shoulders with fog lines. Main connection to Crofton and its ferry terminal | Future resurfacing may look to widen asphalt on shoulders to 1.5–1.8 m. In interim add Wayfinding and 'Share the Road' signage |
| U | Osborne Bay Road | Adelaide to Herd Road | 4.5 km | North Cowichan | MUP/Shoulders | Approximate 1m shoulders with fog lines | Future resurfacing may look to widen asphalt on shoulders to 1.5–1.8 m. In interim add Wayfinding and 'Share the Road' signage |
| V | Herd Road (East) | Osborne Road east to Maple Bay Road | 2.4 km | North Cowichan | MUP/Shoulders | Approximate 1m shoulders with fog lines | Future resurfacing may look to widen asphalt on shoulders to 1.5–1.8 m. In interim add Wayfinding and 'Share the Road' signage |
| W | Cobble Hill Road | Cobble Hill to TCH/ Valleyview Centre | 2.5 km | Electoral Area C | MUP/Shoulders | Approximate 1m shoulders with fog lines | Future resurfacing may look to widen asphalt on shoulders to 1.5 – 1.8 m. In interim add Wayfinding and 'Share the Road' signage |
| Х | Kilmalu Road | Telegraph Road west to Horton Road | 500 m | Electoral Area A | MUP/Shoulders | No shoulders or fog lines. Controlled crossing of TCH | Widen shoulders. Add "East Route" wayfinding if Church Way connection is not viable |
| Y | Church Way | Kilmalu Road south to Shawnigan Lake Mill Bay Road | 750 m | Electoral Area A | MUP/Shoulders | Church Way is a low vehicle volume route, without shoulders or fog lines | Pursue potential MUP opportunity south of Church Way to connect to Lashburn Road. This would retain "East Route" to the east of the TCH. If Church Way can connect to Lashburn Road then Church Way could be retained as a local route without shoulders, signed as AT route |
| Z | Maple Bay Road | Maple Bay to Tzouhalem Road and Duncan | 6.0 km | North Cowichan | MUP/Shoulders | Approximate 1m shoulders with fog lines | Future resurfacing may look to widen asphalt on shoulders to 1.5 – 1.8 m. In interim add Wayfinding and 'Share the Road' signage |

TABLE C3: COMMUNITY CONNECTIONS AND EXTENSIONS presents potential improvements that seek to provide connections to the CVT and East routes, resulting in a comprehensive Regional Network. In addition to the high priority projects presented in Section 4 of the report, this table includes medium and low priority projects. The accompanying maps illustrate the medium and low priority projects and the high priority projects, illustrated in **Section 4** of the report.

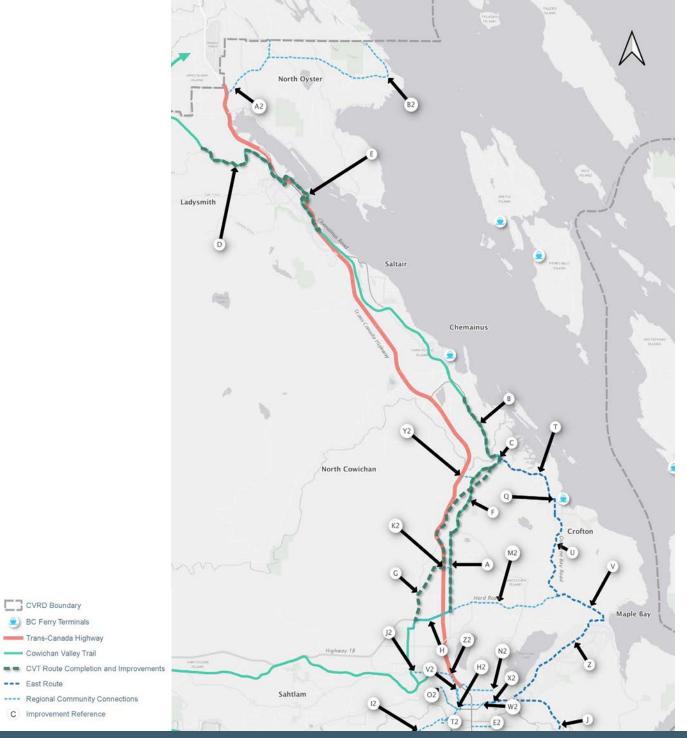
| MAP REF. | ROAD | SEGMENT | LENGTH | LOCATION | IMPROVEMENT | EXISTING CONDITIONS | IMPLEMENTATION NOTES |
|-------------|------------------------|--|---------|--|---------------------------|---|---|
| A2 | Cedar Road | TCH to RDN | 3.7 km | Electoral Area H | MUP/Shoulders | Approximate 0.6 m shoulders with fog lines. Recent (2022) work on Cedar Road between Chuck Wagon retail and Cedar Community Centre | Collaborate with Nanaimo Regional District and MOTI to connect the two Regional Districts. Add 'Share the Road' signs. Widen shoulders and/or MUP |
| B2 | Yellow Point Road | Cedar Road to RDN | 7.9 km | Electoral Area H | MUP/Shoulders | No shoulders or fog lines | Collaborate with Nanaimo Regional District. Add 'Share the Road' signs. Widen shoulders and/or MUP |
| D2 | Renfrew Road | Shawnigan Lake Road to Cowichan Valley Trail | 5.5. km | Electoral Area B | MUP/Shoulders | Inconsistent, often below standard shoulders with fog lines, areas towards west without shoulders or fog lines | Add 'Share the Road' signs. Widen shoulders and/or MUP. Priority to segment east of West Shawnigan Lake Road intersection |
| E2 | Boys Road | TCH to Mission Road | 1.0 km | Cowichan Tribes / Duncan | MUP/Shoulders | Approximate 1.0 m shoulder with fig on north side along western segment (300 m). No shoulders or fog lines on eastern segment (700 m) | Collaborate with Cowichan Tribes and MOTI |
| F2 | North Shore Road | River Road to Meade Creek Road | 2.3 km | Electoral Area I | MUP/Shoulders | Isolated pieces (450m) of parallel MUP as the road traverses Lake Cowichan First Nation. The remainder of the route has no or substandard shoulders | Add 'Share the Road' signs. Widen shoulders and MOTI MUP. Priority to eastern segments of roadway |
| G2 | South Shore Road | Stone Avenue to Honeymoon Bay | 9.1 km | Electoral Area I | MUP/Shoulders | Substandard, inconsistent shoulders, some section with no fog lines | Add 'Share the Road' signs. Widen shoulders and/or MUP. Priority to eastern segments of roadway |
| H2 | Allenby Road | Government Street to Allenby Road/ Miller Road | 675 m | Cowichan Tribes/ Electoral Area E | MUP/Shoulders | Northeast 225 m section has urban profile with curbs, gutters, and sidewalks. Southwest 450 m section has no shoulders or fog lines | Northeast section – Add protected or buffered bike lanes. Southwest section - widen shoulders and/or MUP. Collaborate with Cowichan Tribes and MOTI |
| 12 | Indian Road | Allenby Road to Glenora Road | 3.5 km | Electoral Area E | MUP/Shoulders | Partial MUP, ongoing work program. Connects Glenora and Deerholme to Duncan | Collaborate with Cowichan Tribes and MOTI to complete MUP |
| J2 | Sherman Road | Cowichan Lake Road to Canada Avenue | 1.7 km | North Cowichan | Complete Streets | Urban road with curb, gutter and curb- side parking | Complete Street cross section may include painted or buffered bike lanes, bike route signage or sharrows |
| K2 | Mays Road | Cowichan Exhibition Park to Bell McKinnon Road | 400 m | North Cowichan | MUP/Shoulders | No shoulders or fog lines | Add 'Share the Road' signs. Widen shoulders and/or MUP |
| L2 | Meade Creek Road | Meade Road to Youbou Road | 3.4 km | Electoral Area I | Wayfinding Signage and | No shoulders or fog lines | Wayfinding signage at intersections to connect AT route from North Shore Road to Youbou Road |

| MAP REF. | ROAD | SEGMENT | LENGTH | LOCATION | IMPROVEMENT | EXISTING CONDITIONS | IMPLEMENTATION NOTES |
|-------------|----------------------------------|---|--------|--|-----------------------|--|---|
| | | | | | Share Road Signage | | |
| M2 | Herd Road (West) | Osborne Bay Road to Bell McKinnon Road | 5.4 km | North Cowichan | MUP/Shoulders | Approximate 1m shoulders with fog lines. High vehicle speeds. Crofton to Duncan connection | Future resurfacing may look to widen asphalt on shoulders to 1.5 – 1.8 m. In interim add Wayfinding and 'Share the Road' signage |
| N2 | Beverly Street | TransCanada Highway to Canada Avenue | 280 m | North Cowichan | Complete Streets | East of TCH, Beverley Street has bike lanes and nearby parallel MUP. Also, an option to use MUP on dyke | Extend AT amenities west of controlled TCH crossing to Canada Avenue and parallel Friendship Trail. Collaborate with Vancouver Island University Cowichan Campus to create direct MUP from Beverley / TCH intersection south to Vancouver Island University Cowichan Campus and Canada Avenue/Friendship Trail |
| 02 | Government Street | Cowichan Lake Road to Trunk Road | 1.5 km | Duncan/ Electoral Area E | MUP/Shoulders | Inconsistent bike lanes and sharrows | Recommended as a regional connection with consistent bike lanes, but at local level the higher priority alternative route is Carinsmore Street to Jubilee Street to Ingram Street which is in Duncan's Active Transportation Plan |
| P2 | Koksilah Road | Miller Road south and east to Cowichan Bay Road | 9.9 km | Cowichan Tribes/ Electoral Areas E/ D | MUP/Shoulders | Substandard, inconsistent shoulders. Areas with and without fog lines. Crosses TCH, provides link with East Route | Add 'Share the Road' signs. Widen shoulders and/or MUP |
| Q2 | Youbou Road | Meade Creek Road to Creekside Drive | 1.3 km | Electoral Area I | MUP/Shoulders | Substandard, inconsistent shoulders | This section of Youbou Road would connect proposed Meade Creek Road route to existing MUP and local road route at Creekside Drive (Mile 77 Park). Add 'Share the Road' signs. Widen shoulders and/or MUP |
| R2 | Youbou Road | Swordforn Trail west to Alder Crescent/ Cedar Drive | 4.1 km | Electoral Area I | Complete Streets | Substandard, inconsistent shoulders | Future resurfacing may look to widen asphalt on shoulders to 1.5 – 1.8 m. In interim add Wayfinding and 'Share the Road' signage |
| S2 | Shawnigan Lake South Trail | Shawnigan Lake Road Rail with Trail MUP to Recreation Road | 1.2 km | Electoral Area B | MUP | Gap in Shawnigan Lake Rail with Trail MUP | Continue Rail with Trail initiative from existing termination south to Old Mill Park |
| T2 | Miller Road | Indian Road to Koksilah Road | 2.0 km | Electoral Area E | MUP/Shoulders | Inconsistent substandard shoulders, no fog lines. Miller is preferred over the parallel Allenby Road due to the difficulty of widening Allenby Road when it nears the Cowichan River | Add 'Share the Road' signs. Widen shoulders and/or MUP |
| U2 | Hutchinson Road | Cobble Hill Road to Telegraph Road | 3.8 km | Electoral Area C | MUP/Shoulders | Substandard, inconsistent shoulders, some section with no fog lines. Provides east/west connection across TCH. Connects Ecole Cobble Hill | Add 'Share the Road' signs. Widen shoulders and/or MUP |

| MAP REF. | ROAD | SEGMENT | LENGTH | LOCATION | IMPROVEMENT | EXISTING CONDITIONS | IMPLEMENTATION NOTES |
|-------------|---|--|--------|----------------------------|-----------------------------|---|---|
| | | | | | | Elementary School to proposed East Route | |
| V2 | Duncan Street | Beverley Street to Trunk Road | 900 m | Duncan | Complete Streets | 90-degree parking along west edge. Sidewalk, curb and gutter along east edge | Introduce sharrows to indicate rollers share travel lane, and traffic calming such as augmented pedestrian crossing points |
| W2 | Coronation Avenue | Duncan Street to Trunk Road | 1.1 km | Duncan | Complete Streets | Curb, gutter and sidewalks on both sides. East, west connection through Duncan, controlled crossing of TCH | In Duncan Active Transportation Plan. Design consistent with Duncan AT Plan recommendations |
| X2 | Trunk Road | Coronation Avenue to Tzouhalem Road | 570 m | Duncan | Complete Streets | Curb, gutter and sidewalks on both sides. Connects Coronation Avenue to Tzouhalem Road, consider adding buffered or protected bike lanes | In Duncan Active Transportation Plan. Design consistent with Duncan AT Plan recommendations |
| Y2 | Mt. Sicker Road | Westholme Road to TCH | 580 m | North Cowichan | MUP/Shoulders | Inconsistent substandard shoulders, no fog lines | Collaborate with Halalt First Nation. Add' Share the Road' signs. Widen shoulders and/or MUP |
| Z2 | Canada Avenue | Sherman Road to Beverly Street | 780 m | Duncan | MUP | Gap in adjacent and parallel Friendship Trail MUP | In Duncan Active Transportation Plan. Fill MUP gap |
| А3 | Boal Road, Chaster Road, Francis Street | Polkey Road to Corfield Road | 1.2 km | Electoral Areas E and D | Wayfinding Signage | No shoulders, no fog lines. Provides connections to the TCH pedestrian overpass located south of Duncan | Add wayfinding and 'Share the Road' signage on Boal Road. Widen shoulders on Chaster Road and Francis Street, add and 'Share the Road' signage |
| В3 | Frayne Road | East terminus to west terminus | 1.9 km | Electoral Area A | 'Share the Road' Signage | East of TCH segment (600 m) – No shoulders. West of TCH segment (1.3 km) - Approximate 1.2 m wide shoulders West- east controlled TCH crossing to Mill Bay Road/ East Route | East segment – add 'Share the Road' signs. Widen shoulders and/or MUP. West segment - add 'Share the Road' signs. Consider widening shoulders during future resurfacing |

ALL RECOMMENDED PROJECTS IN FOCUS

The maps on the following pages showcase all recommended projects focused by north, east, west, and south sections of the Cowichan Valley region. The purpose of these maps is to present all project segments on an area-by-area basis to illustrate how the proposed project segments and improvements function together. Each labeled project segment is described on the corresponding table.



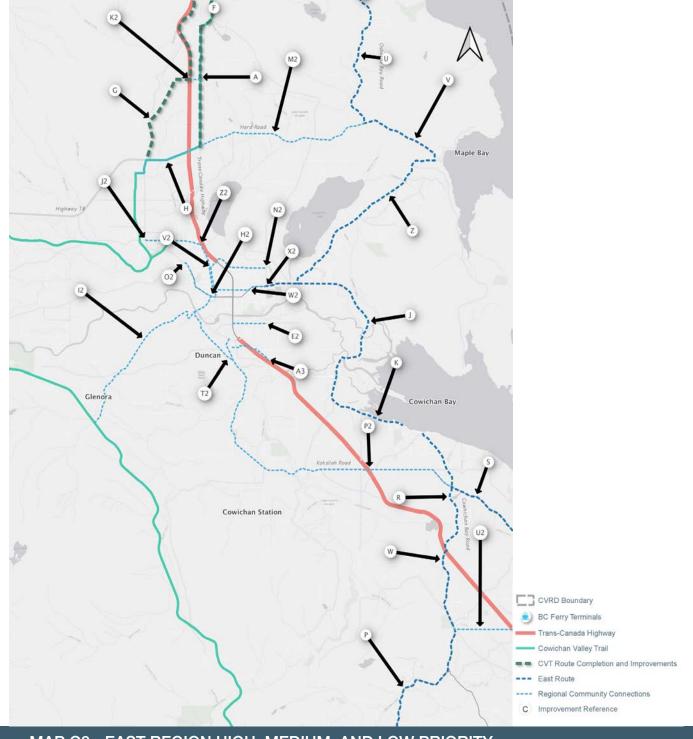
MAP C1 - NORTH REGION HIGH, MEDIUM, AND LOW PRIORITY PROJECTS

CVRD Boundary

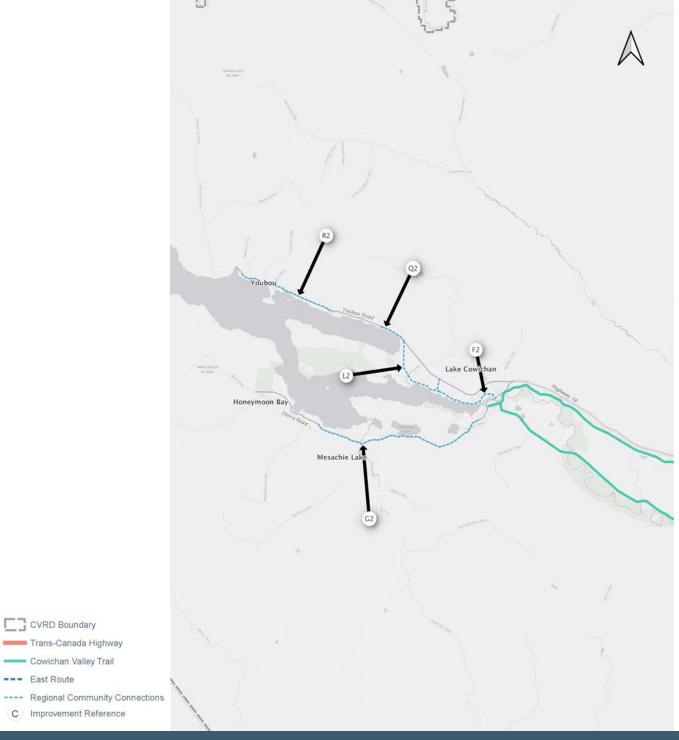
--- East Route

BC Ferry Terminals Trans-Canada Highway Cowichan Valley Trail

---- Regional Community Connections C Improvement Reference



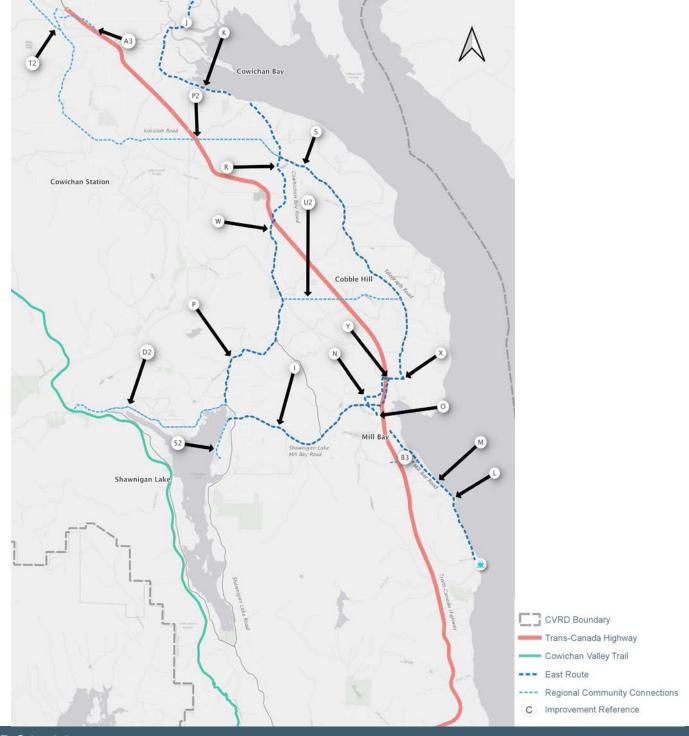
MAP C2 - EAST REGION HIGH, MEDIUM, AND LOW PRIORITY



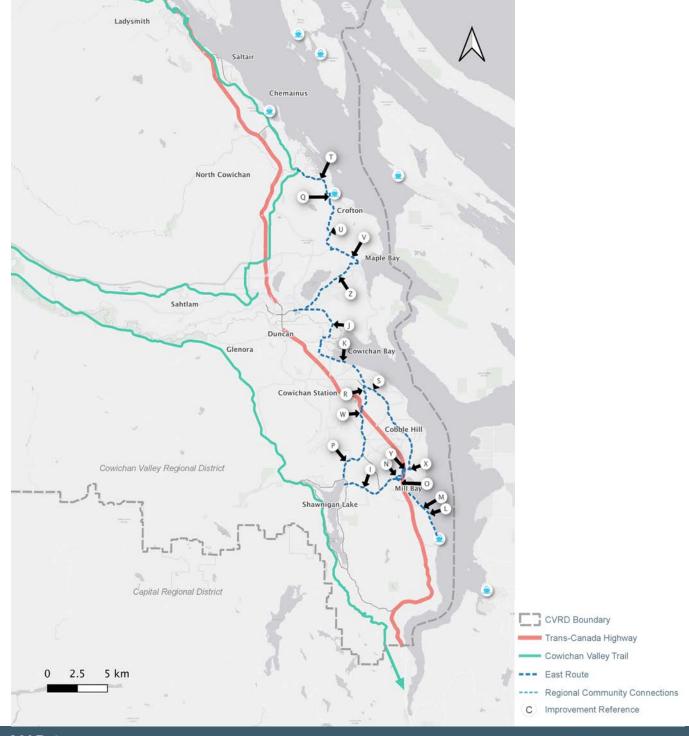
MAP C3 - WEST REGION HIGH, MEDIUM, AND LOW PRIORITY PROJECTS

CVRD Boundary Trans-Canada Highway Cowichan Valley Trail --- East Route

C Improvement Reference



MAP C4 - SOUTH REGION HIGH, MEDIUM, AND LOW PRIORITY PROJECTS



MAP C5 - EAST ROUTE HIGH AND MEDIUM PRIORITY PROJECTS