

DATE: September 16, 2021**FILE:** 6410-20**TO:** Chair and Directors
Regional District BoardSupported by James Warren
Deputy Chief Administrative Officer**FROM:** James Warren
Deputy Chief Administrative OfficerJ. Warren**RE: Regional Active Transportation Network Plan**

Purpose

In this report, staff provides the Comox Valley Regional District (CVRD) Board with the final Regional Active Transportation Network Plan (ATNP) and identifies potential next steps to support ATNP implementation.

Recommendation from the Deputy Chief Administrative Officer:

THAT staff be authorized to pursue development of implementation agreements, in accordance with Part 5 of the Comox Valley Regional District Regional Growth Strategy, Bylaw No. 120, 2010, being the “Comox Valley Regional District Regional Growth Strategy Bylaw No. 120, 2010”, with member municipalities, School District No. 71, the Ministry of Transportation and Infrastructure, and K’ómoks First Nation, to scope design, approval requirements and costing for the pedestrian, cycling and multi-use priority projects identified within the Comox Valley Active Transportation Network Plan (ATNP) dated July 2021, attached to this staff report dated September 16, 2021 as Appendix A;

AND FURTHER THAT staff be authorized to pursue grant funding opportunities to fund implementation of the priority projects identified in the ATNP;

AND FINALLY THAT staff be authorized to work with community partners to identify opportunities to support development of an active transportation culture in the Comox Valley, such as cycling safety courses.

Executive Summary

- The Regional ATNP initiative was undertaken through the Regional Growth Strategy (RGS) service and is intended to advance Goals 4 (transportation), 7 (public health and safety) and 8 (climate change). Seven pedestrian projects, six cycling projects and 11 multi-use projects were identified as priorities in the development of a connected, safe, and accessible network.
- The project was supported, in part, by grant funding provided by the Ministry of Transportation and Infrastructure (MoTI). Completion of a regional ATNP puts the CVRD and the member municipalities in a favourable position to pursue implementation grant funding as well as to coordinate local government funding such as Community Works funds.
- Staff is seeking authorization to begin implementation of the ATNP through the development of implementation agreements that would include project design, approval processes, and detailed costing mechanisms to fund specific projects.
- Implementation agreements are operational tools, permitted through the *Local Government Act* (RSBC, 2015, c. 1) (LGA) to advance RGS policies and growth management. Implementation agreements are also contemplated in the Regional Transportation

Memorandum of Understanding (MoU) that has been sent to member municipalities, School District No. 71, and MoTI.

Prepared by:

A. Mullaly

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General Manager of Planning
and Development Services

Government Partners and Stakeholder Distribution (Upon Agenda Publication)

K'ómoks First Nation	✓
Village of Cumberland	✓
Town of Comox	✓
City of Courtenay	✓
School District No. 71	✓
Ministry of Transportation and Infrastructure	✓
Comox Valley Cycling Coalition	✓

Background/Current Situation

The board has identified multi-modal transportation planning as a strategic priority. Active transportation is one part of a multi-modal system. Active transportation network planning is a key component of an integrated regional approach that responds to how people move within the Valley and is a way to influence behaviour changes that will result in modal shift.

The ATNP was undertaken at the same time as the Poverty Reduction assessment project. The two initiatives share key objectives, principally the recognition that an equitable transportation system includes active transportation infrastructure that meets the needs of a range of users. To this end, the priority projects and the recommended facility designs consider the principles of Triple A planning (all ages and abilities). The ATNP and its implementation will also support the goals of the draft Regional Airshed Strategy (to be made publically available in fall 2021), in particular, supporting the reduction of fine particulate matter within the transportation sector. Implementation of the ATNP will result in significant co-benefits within the realm of poverty reduction and equity planning, public health, and climate change.

The ATNP provides a framework, with clear priorities, to coordinate the design of active transportation infrastructure and develop a culture of active transportation in the Region. The plan identifies seven pedestrian projects, six cycling projects and 11 multi-use projects. A “future” set of projects is also identified. The routing and facility types for each priority project were identified based on:

- Engagement feedback;
- Access to key destinations (e.g. services, schools, bus stops);
- Gap assessment (e.g. gaps within existing and proposed routes and infrastructure);
- Routes of regional significance (e.g. connecting core settlement areas);
- Known safety concerns or “pinch points”; and
- Existing plans

The complete list of priority projects is included in Table 6 of the ATNP (Appendix A). Examples include:

Location	Facility Type
Paulsen Road – 600m connection to Miracle Beach Elementary School	Bicycle Accessible and Walkable Shoulder (approximate cost \$1.3 million)
Island Hwy 19A (Black Creek) – 300m connecting community and commercial amenities	Buffered Pedestrian Lane (approximate cost \$300,000)
Bates Road – 3.8km from Coleman Road to Waveland Road	Bicycle Accessible and Walkable Shoulder (approximate cost \$8.3 million)
Anderton Road – 1.4km between Ellenor Road and Ryan Road	Bicycle Accessible and Walkable Shoulder (approximate cost \$3.1 million)
Idiens Way – 800m from Anderton to the City of Courtenay boundary	Bicycle Accessible and Walkable Shoulder (approximate cost \$1.8 million)
Lake Trail Road – 600m to extend to planned City of Courtenay facility. Connection to Arden Elementary School.	Roadside Separated Multi-Use Path (approximate cost \$1.3 million)
Cumberland Road – 1.2km between the Village of Cumberland boundary and the City of Courtenay boundary	Painted Buffer Bicycle Lane (approximate cost \$900,000)
Island Hwy 19A – 6.8km between Union Bay and Buckley Bay	Bicycle Accessible and Walkable Shoulder (approximate cost \$14.8 million)

Note that a key future project, repeatedly identified through stakeholder and community engagement, is the provision of active transportation facilities within the Island Corridor Foundation’s E&N corridor (extending from Union Bay to the City of Courtenay’s southern boundary tying into the City’s Rotary rail trail).

In respect to building a culture of active transportation (necessary to support behaviour change), it is important to build on past successes, such as the Active and Safe Routes to School program, as well as identify further opportunities to influence modal choices. This report recommends that staff be authorized to work with community partners, such as the Comox Valley Cycling Coalition, to identify collaboration opportunities that would help broaden the reach of existing safe cycling workshops (e.g. funding to target workshops among new and/or reluctant riders within vulnerable groups).

Policy Analysis

Implementation agreements are enabled through section 451 of the LGA. They are intended to define the coordination of activities that will serve to implement an RGS. Agreements can be struck with a range of local authorities, including member municipalities and the School District, as well as the Provincial and Federal Crown and their agencies, and First Nations.

Options

This project was designed in accordance with the CVRD Board's strategic drivers and operational priorities. The plan's implementation will continue the advancement of the drivers and assist with the realization of key priorities, specifically,

- Supporting transportation modal shift that is key to reducing greenhouse gas emissions produced by transportation; and
- Supporting development of a regional, connected system to move residents and visitors seamlessly from one jurisdiction to the next.

Staff recommends that the board receive the final ATNP and authorize staff to pursue implementation agreements, grant funding, and community partnerships to advance the priority projects identified in the ATNP.

Alternatively, the board could direct that no further action to implement the ATNP be taken at this time.

Financial Factors

The project was partially funded through grant funding provided by the Ministry of Transportation and Infrastructure (\$47,500). Requisition amounting to \$30,000 was budgeted through the RGS service. CVRD staff time accounted for the remainder of the \$25,000 project budget.

Through the preparation of the implementation agreement(s) staff will explore the range of funding mechanisms that will support project design and construction. It is expected that a combination of tax requisition and grant funding will be required for the construction of priority projects.

Legal Factors

There are no specific legal factors that directly relate to the recommendations within this report.

Regional Growth Strategy Implications

The ATNP project was undertaken as a regional initiative under the RGS service. The work is intended to advance the RGS's transportation, public health and safety, and climate change goals. Active transportation planning at a regional level supports coordination of multi-modal transportation planning with significant co-benefits.

Implementation agreements are an operational tool enabled through the RGS provisions of the LGA and are intended to advance the goals of an RGS. These agreements are also provided for within the Regional Transportation MoU that is with the member municipalities and the Ministry of Transportation and Infrastructure (School District No. 71 has signed the MoU).

In respect to monitoring implementation and evaluating progress on modal shift arising from plan implementation, Table 7 within the ATNP (Appendix A) includes a range of indicators that can be incorporated into the overall monitoring of RGS progress. Example indicators under the umbrellas of implementation progress, investment, Green House Gas reductions, safety, education and regional coordination include:

- Number of priority projects in progress and/or completed;
- Annual investment in active transportation facilities;
- Modal share;
- Number of reported vehicle and active transportation user collisions;
- Number of public wayfinding installations;
- Regional data collection; and
- Number of coordinated projects completed.

The RGS “Hub” site, currently in development, will provide a platform to track progress on each active transportation related indicator.

Intergovernmental Factors

The ATNP was a regional initiative involving staff from member municipalities, K’ómoks First Nation, School District No. 71, Island Health, MoTI, and BC Transit. Continued collaboration with these governments and agencies is key to successful ATNP implementation. Each member municipality will determine how the ATNP may inform municipal active transportation planning within their municipal boundaries. The ATNP is consistent with MoTI’s *Active Transportation Design Guide*, as well as BC’s *Active Transportation Strategy, “Move, Commute, Connect”*.

Wicked problems such as climate change and inequity, transcend jurisdictional boundaries; it is not surprising that the solutions similarly require inter-jurisdiction coordination and collaboration.

Interdepartmental Involvement

Planning and development services staff led this initiative with input from community parks staff.

Citizen/Public Relations

The project involved significant community engagement. Targeted engagement included the establishment of two technical groups to support the project team. The first, comprised local government staff and transportation service providers. The second technical group was broader in scope focusing on land use and transportation expertise, including representatives from community organizations, key public land owners, and rights holders.

Broad public engagement included a survey, an online mapping tool (using Connect CVRD), four virtual facilitated open houses and a draft plan review period. Input from each of these groups informed the development of the plan and the identification of the priority and future projects. Staff will use Connect CVRD to present the final plan to the public as well as direct follow-up with each member of the technical groups.

In addition to the intergovernmental collaboration identified above, going forward, community partnerships will be integral to the successful implementation of the ATNP. The Comox Valley Cycling Coalition, in particular, was a key community partner contributor to the development of the plan. Staff recommends working with the Comox Valley Cycling Coalition and other community partners (such as the Comox Valley Community Health Network) to advance the objectives of the ATNP including the development of a local culture of active transportation use.

Attachments: Appendix A – Comox Valley Regional District Active Transportation Network Plan,
July 2021

Comox Valley Regional District ACTIVE TRANSPORTATION NETWORK PLAN

JULY 2021



comoxvalleyrd.ca   

Prepared for:

Comox Valley Regional District
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July 2021

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Appendix A.

Active Transportation Facility Design Guidelines



1. Overview

The Comox Valley is a large, diverse region that is home to distinct communities, landscapes, and character. These lands are the traditional territory of the K'ómoks First Nation, who continue to be the care takers of the Region's lands and waters. These people, places, and cultures have continually shaped the urban and rural areas around the Comox Valley, providing opportunities for residents and visitors to live, work, and play. The Comox Valley Regional District (CVRD) has created several plans and policies to ensure that the Region continues to emphasize economic, social, and environmental health. Central to these efforts is facilitating improvements to walking and rolling, cycling, horseback riding, and other forms of active transportation in a manner that is accessible, safe, convenient, and connected. With this responsibility, the CVRD developed its first ever Active Transportation Network Plan ("ATNP") to guide active transportation improvements throughout the Region.

The ATNP was created through collaboration with the community and key stakeholders, sharing experiences with active transportation, developing ideas, sharing results, and refining the ATNP's content and directions. This included two engagement periods involving virtual open houses, working, and learning sessions with local stakeholders, an online survey, interactive mapping, and a final review period for the ATNP.

The ATNP provides directions for how to achieve improved active transportation conditions in the Comox Valley over time through regional vision, goals, and targets. Through this process a long-term active transportation network and facility design guidelines have also been identified that are appropriate and implementable in the Region's rural and urban contexts. Ultimately, this document will support the CVRD and regional partners in pursuing grant opportunities and prioritizing active transportation investment that is immediately impactful from a regional connectivity perspective.

The ATNP is closely linked to many key local, regional, and provincial planning initiatives, which support the development of a regional active transportation objectives. As such, the ATNP aims to facilitate regional coordination on developing active transportation infrastructure that connects communities and destinations throughout the Comox Valley. Many of these planning documents, including the Regional Growth Strategy (RGS), broadly aspire for the Comox Valley to be a leader in environmental sustainability and low-carbon transportation. The ATNP encourages a transition from single-occupancy vehicles to active alternatives in a manner that increases the convenience and comfort of walking, rolling, cycling, and transit and strives to achieve the mode share and greenhouse gas emission targets set out in the RGS.

What is Active Transportation?

Active transportation includes any human-powered transportation form. Walking and cycling are the most popular and well-known forms of active transportation, however the definition extends much more broadly to include skateboarding, wheeling, pushing a stroller, in-line skating using a mobility aid, and horseback riding as examples.

What is the Active Transportation Network Plan?

The ATNP describes the vision, goals, and priorities for active transportation facilities in the Comox Valley. This includes identifying the long-term active transportation network, active transportation corridors of regional significance, the type and design of active transportation facilities, and the process and priorities for implementation.

Who is the ATNP for?

The ATNP is a guide for Comox Valley residents, regional and local government staff, elected officials, neighboring communities, external agencies, and land developers (and anyone else!) to understand the vision and plans for active transportation in the Comox Valley.

How Will the ATNP be Used?

The ATNP will be used to inform priorities and guide investment in active transportation facilities. This direction will apply to capital planning and public investment in infrastructure, and will guide land development toward providing the type of active transportation facilities sought in the Comox Valley. It will also communicate to provincial and federal funding agencies our community's priorities for active transportation infrastructure.



Why Active Transportation?

Investments in active transportation generally help to create a more balanced transportation system, one that is more accessible to a broader range of community members and represents a more effective, equitable investment in public infrastructure.

The following are some of the benefits associated with active transportation:

Reduce Environmental Impacts

Active travel modes contribute significantly less greenhouse gas (GHG) emissions and air pollution as compared to vehicles and help to address the Comox Valley's climate change targets. Trails and walking paths also allow for the preservation of green space and agricultural land and reduce the overall space requirements associated with roads and parking facilities.

Health + Well-Being

Human-powered travel contributes to increased activity levels, thereby reducing the health risks associated with a lack of physical activity such as heart disease and conditions resulting from high blood pressure and obesity. Secondary health benefits are also achieved through reduced automobile emissions and lower stress levels.

Equity + Inclusion

Investment in active transportation infrastructure and services supports the creation of a more equitable region that is inclusive of a broader range of community members, including children, older adults, and individuals with physical, sensory, or cognitive challenges that prevent them from driving.

Multi-Modal Safety

Increased use of active travel modes leads to fewer vehicles on the road and decreases concerns over speeding and safety. Consistent with key objectives in the RGS, the provision of safe and comfortable active transportation facilities is important in providing safe travel conditions and encouraging more walking, cycling, horseback riding, and use of transit.

Financial / Poverty Reduction

Walking and cycling facilities are generally less expensive than larger road infrastructure investments, representing a more effective use of public funds. Responsible investments in infrastructure is a key goal of this plan. Further, the cost to purchase and maintain a vehicle is typically a much more expensive approach to personal transport as compared to active transportation options.

Quality of Life

Engaging in active transportation provides improved access to the Region's many parks, beaches, and recreation opportunities, as well as increasing opportunities for face-to-face interaction that fosters social connectedness and combats social isolation.



Active Transportation + Poverty Reduction

The CVRD is dedicated to fostering a community that supports affordability, social inclusion, reconciliation, and opportunity. The Regional Poverty Assessment and Reduction Strategy is addressing many of the Region's specific needs in these areas, including affordable and accessible transportation.

The Poverty Reduction Strategy introduces the concept of "Game Changers", or an area that, if adequately addressed, produces benefits and outcomes that cascade into other areas. One of these Game Changers is Safe and Affordable Transportation, which is described as follows:

"Transportation Network Planning is aligned within an equity framework and as a result, road, active transportation, and transit improvements are prioritized to support underserved groups/regions and individuals experiencing barriers to access."

Throughout the development of the ATNP, equity and inclusion were key guiding themes that informed the long-term active transportation network and priority projects. Implementation of the ATNP should reflect the principles of Safe and Affordable Transportation that will ultimately support more equitable transportation systems in the CVRD.

1.1 Plan Process

The Active Transportation Network Plan was developed over the course of five months between November 2020 and June 2021. Through this process, the ATNP was built on a collaborative approach involving the project team, key stakeholders, and Comox Valley residents.

The Plan's progress was documented through a series of working papers that were shared with the community through the Connect CVRD website. The two working papers included the following:

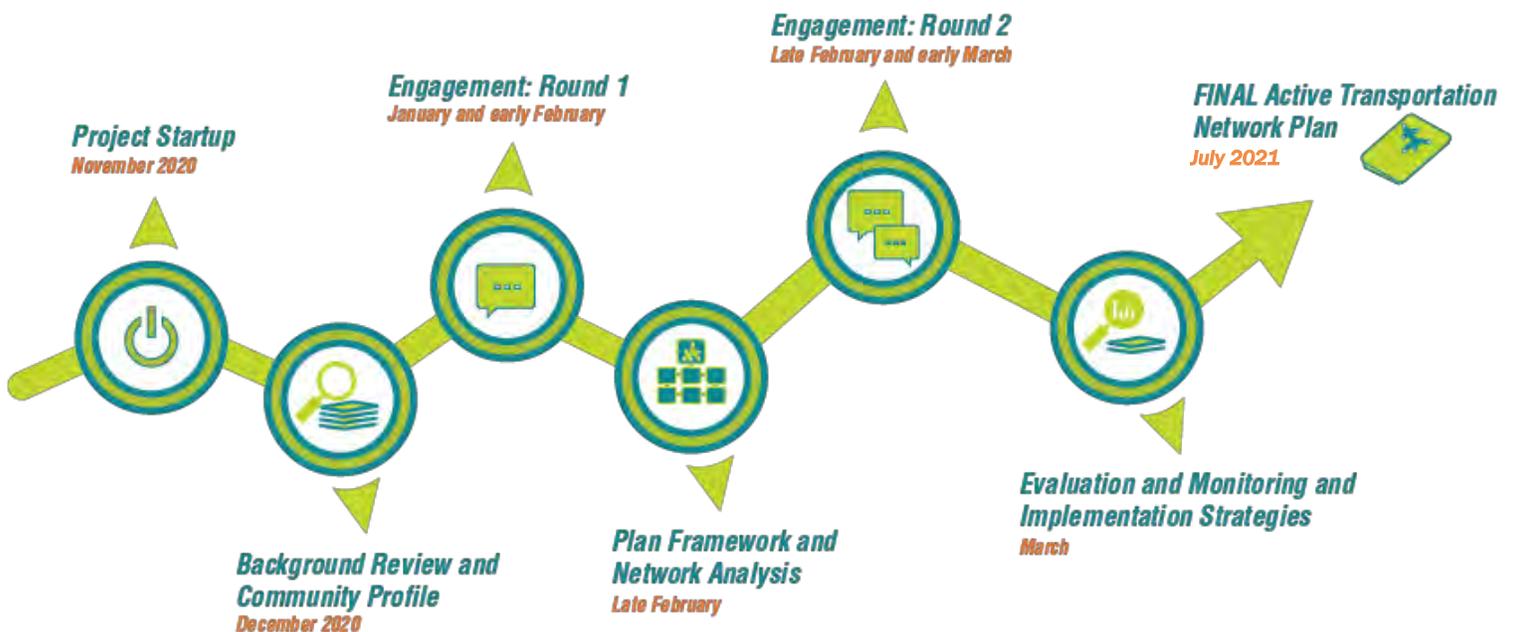
Working Paper no.1 – Community Profile

Outlines current conditions in the CVRD, including describing the existing active transportation network, local demographics and trip generators, and key policy directions that will influence regional transportation choice and land use.

Working Paper no.2 – “What We Heard” + Plan Framework

Provides a detailed summary of “what we heard” through the first engagement phase to develop an understanding of where and how Comox Valley residents travel, and key issues and opportunities for active transportation infrastructure. Also outlines the preliminary plan framework for the Active Transportation Network Plan, including draft vision, goals, and targets, as well as long-term networks and facility types.

The final ATNP assembles the key technical and engagement tasks developed in each working paper, which were added to and refined through further public and stakeholder input. The diagram below shows the progression of the ATNP process from November 2020 to June 2021.



1.2 Community Engagement

Input from the community has been an essential component of the planning process. A first round of public engagement took place over January and February 2021, receiving input from nearly 1,000 individuals, and providing project information to 2,700 through visits to the project webpage on ConnectCVRD.

A second round of public engagement took place in March 2021 and focused on the proposed active transportation framework and key ATNP recommendations. This input helped the project team fine-tune the framework to ensure it best reflects the regional priorities and compliments the region's supporting policies.

The community engagement activities undertaken for the Active Transportation Network Plan and the level of engagement on each platform are described further on the following pages.

January 26, 2021

Active Transportation Network Plan

The Comox Valley Regional District is launching its first ever Active Transportation Network P...

[View Project](#)

Active Transportation Network Plan Survey

Building an active transportation network plan to support active transportation for all ages and abilities (<https://www2.gov.bc.ca/gov/content/family-social-supports/seniors/about-seniorsbc/seniors-related-initiatives/age-friendly-bc>: <https://www.880cities.org/>)

Active transportation relates to human-powered or human assisted forms of travelling to work, school, socializing or running errands. It can take many forms and is continually evolving as new technologies emerge. It includes:

- Walking (including people walking their pets or service animals, people jogging, and people using mobility devices such as wheelchairs, walkers, and strollers)
- Cycling (including the use of pedal assist e-bikes, bicycle trailers, etc.)
- Rolling (skateboarding, in-line skating)
- Other emerging modes such as electric unicycles or other personal mobility technologies;
- And can include winter and water focused travel such as snowshoeing and kayaking however these are not a main focus of this network plan.

We want your input on how to build a more active, healthy, vibrant, and safe community through active transportation. Specifically, the purpose of this survey is to better understand how residents currently move around and what improvements would encourage more active transportation to meet the everyday needs throughout the Comox Valley Regional District.

To ensure the Plan reflects the community's priorities, we want to hear from you!

This survey will help identify issues, opportunity, and community priorities such as **routes to schools or other community facilities, connections** between trails and on-street facilities (sidewalks, bike lanes), **safety improvements** where these facilities cross roadways or otherwise intersect, and where **building upon the Region's existing active transportation infrastructure** would be most beneficial.

Engagement Activities

A variety of community engagement activities were undertaken targeting broad feedback from a diverse range of Comox Valley residents and stakeholders. Activities were undertaken in January through March 2021 when public health requirements related to the COVID-19 required that all gatherings and engagement activities occur “virtually”. As a result, activities that might otherwise be in-person (i.e., open houses), were held virtually using a variety of digital platforms. While this has its drawbacks in terms of technology proving challenging and unfamiliar for some, it also presents an opportunity to reach other Comox Valley residents through new means where they otherwise may not have participated. The following is a synopsis of the activities that were undertaken.

Community Survey

A survey was created and distributed to understand how community members travel through the Comox Valley, and to identify barriers, opportunities, priorities, and motivations for using active transportation in the region. The survey received 837 responses, demonstrating a significant interest in active transportation within the region and provided valuable insight into walking, cycling, and travel behaviours in the CVRD.

Interactive Mapping

An interactive mapping tool was available alongside the online community survey. This mapping input opportunity was available through the ConnectCVRD project page for the same period of the online survey. This mapping input opportunity received 782 input points.

Open Houses

Four virtual open houses were held over the two engagement phases. The first two open houses focused on familiarizing Comox Valley residents with the ATNP and facilitating discussion around the community’s experience and aspirations for active transportation, while the second two discussed the long-term networks and infrastructure improvements. Sessions were held “virtually” using Zoom videoconferencing. A total of 70 participants attended the four open house sessions.

Learning Sessions + Working Group Activities

Two unique technical groups were assembled to help guide the CVRD and the project team in understanding the local context, identifying opportunities of overlap and possible collaboration, and assisting in extending the reach of community engagement notifications to maximize participation levels. The Learning Sessions involved local jurisdictions and key transportation service providers, while the Working Group brought together agencies with local knowledge and a specific interest in active transportation.

Engagement “By The Numbers”

The level of participation in the community engagement activities hosted during the ATNP process are summarized below.



2. Shaping Influences

2.1 Demographics

The demographic make-up of the community plays a significant role in transportation choices and travel patterns. The following overview provides a summary of key considerations that influence the ATNP.

A Mix of Urban + Rural

The Comox Valley is home to approximately 66,500 people (as of 2016). Approximately 35% of the regional population resides in the Electoral Areas with a population in each of Areas A, B, and C of between 7,000 and 8,600 people.

A Growing Community

The CVRD's population grew by 13.6% between 2006 and 2016. Cumberland grew the fastest at 36.3% while all others, (Electoral Area B as an exception), rose by approximately 15%. Based on this growth, the area's population is anticipated to grow to 70,875 by 2025 (up 10.1% from 2016).

An Aging Community

Except for the Village of Cumberland, the region reports declining numbers of young persons and young adults. Population growth has been attributed most to older residents. Overall, the median age within the CVRD was 50.3, up from 44.9 in 2006. The senior population saw a significant growth rate of 58.2% between 2006 and 2016.

Further, an estimated 13,680 residents are living with at least one disability. This is based on provincial data regarding disabilities across the province.

An Expansive Region

The CVRD encompasses 2,425 square kilometres of which 72% (1,725 km²) is land. The majority of the Comox Valley's population is situated within the major economic centres of Courtenay, Comox and Cumberland, however, population and settlement are well spread throughout the region.

2.2 Jurisdiction

A range of governmental agencies exist in the Comox Valley with jurisdiction over active transportation facilities and services. This section outlines the key jurisdictions that will influence this plan and their respective responsibilities regarding active transportation. See the map, [Jurisdiction Overview](#), below.

Comox Valley Regional District

The CVRD is responsible for planning, maintaining, and operating community parks and trails. The Regional District also undertakes regional transportation planning and infrastructure initiatives that include special consideration for active transportation. This includes policies outlined in the *Regional Growth Strategy (RGS)*, the *Rural Comox Valley Official Community Plan*, and the *Comox Valley Transportation Road Network Plan*.

K'ómoks First Nation

K'ómoks First Nation (KFN) is a separate and distinct Nation that has, since time immemorial, occupied and continues to maintain its authority, jurisdiction, governance and management of the lands and resources within the unceded Traditional Territory of the K'ómoks First Nation. KFN is responsible for community and development planning on KFN reserve-lands including planning related to multi-modal transportation. Should KFN's treaty settlement package be confirmed, KFN will also be responsible for the governance and planning over its treaty settlement lands.

City of Courtenay, Town of Comox, Village of Cumberland

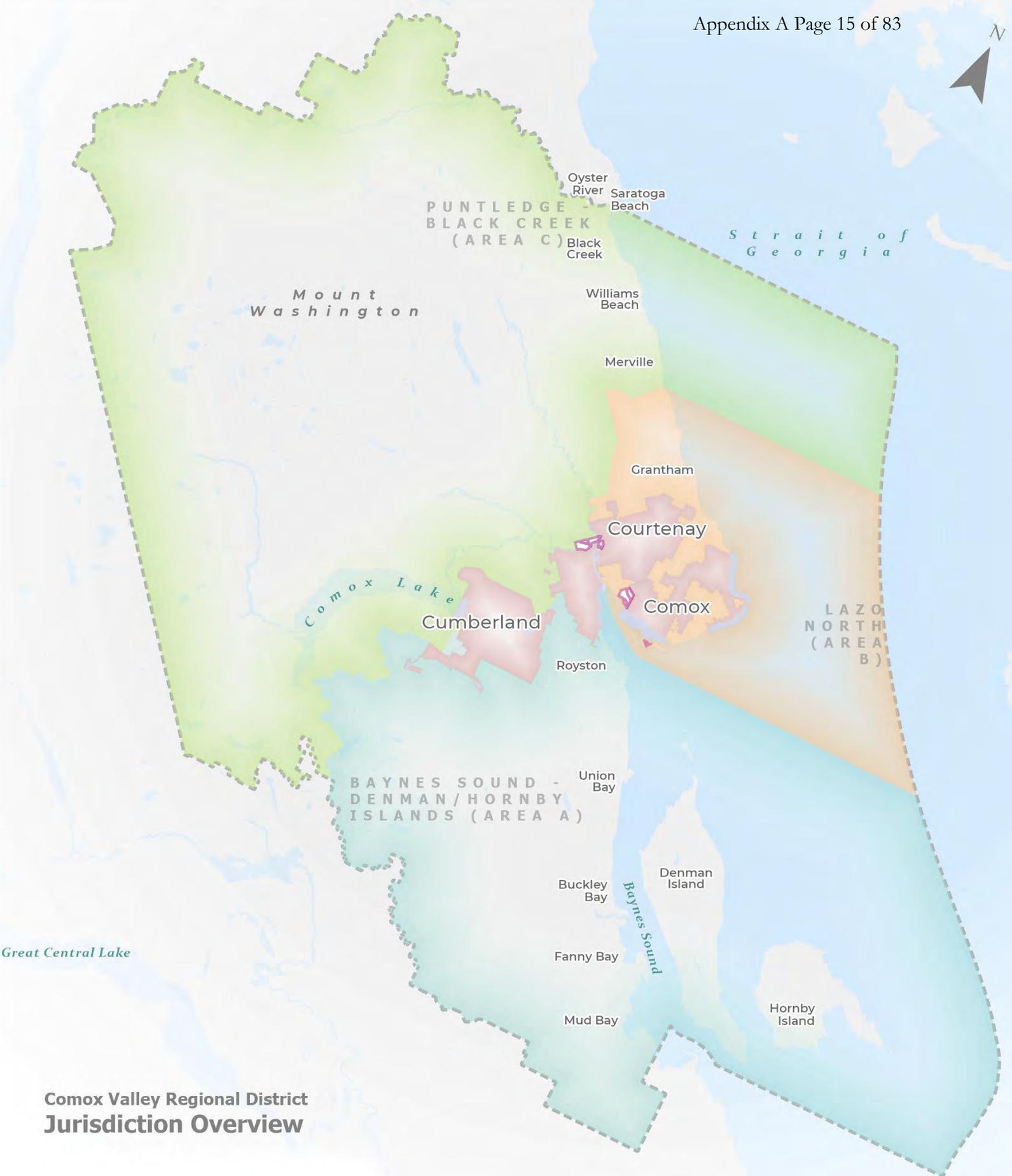
The municipalities within the Comox Valley are responsible for planning, design, and maintenance of rights-of-way within the municipality, including sidewalks and cycling facilities. Each is also responsible for local trails as well as trails and walkways in municipal parks and property. These communities have developed active transportation plans and strategies unique to their respective areas that will be essential to regional active transportation planning.

Ministry of Transportation and Infrastructure

The Ministry of Transportation and Infrastructure (MoTI) has jurisdiction over all road rights-of-way outside of the municipal boundaries including Highway 19 and 19A. MOTI jurisdiction also includes identified highway corridors through municipalities, such as portions of Cliffe Avenue and Ryan Road.

BC Transit

Transit service is provided as part of the Comox Valley Regional Transit System. Decisions on transit routes, service levels, fares and local taxation are made by the CVRD Board. CVRD in coordination with BC Transit engages local government partners and community members in service planning and long-range planning initiatives. The *Comox Valley Transit Future Plan* was also undertaken by BC Transit.



Comox Valley Regional District Jurisdiction Overview

-  Regional Boundary
-  Electoral Area A
-  Municipality
-  Electoral Area B
-  K'ómoks First Nation
-  Electoral Area C

2.3 Land Use

Land Use Profile

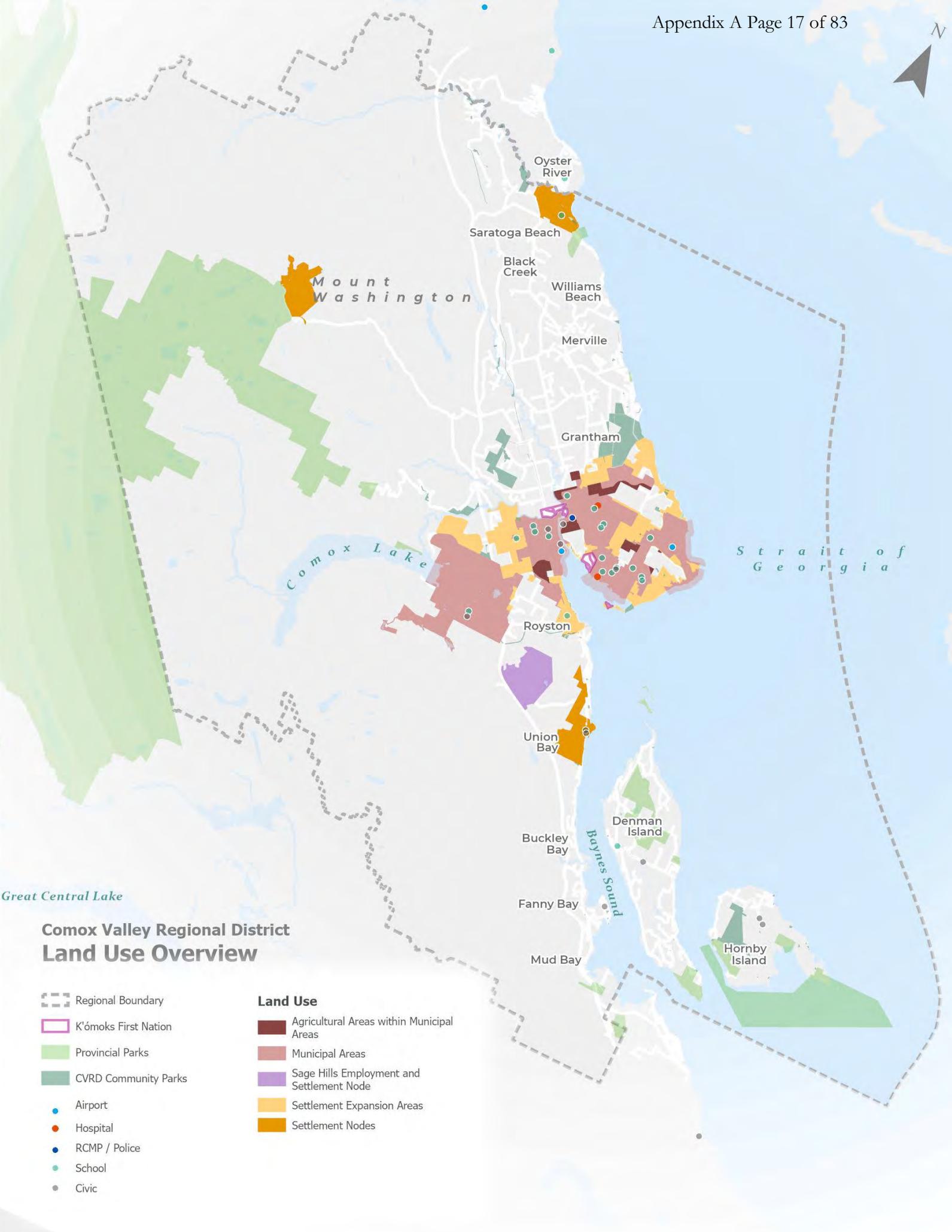
The CVRD features a great variety of land uses from large areas of agricultural and park land to more urban settings. The highest density development occurs within the municipal boundaries of the City of Courtenay, Town of Comox, and Village of Cumberland. Most of the region's residential, commercial, and institutional uses are found within these municipalities and are therefore major employment generators. Settlement patterns outside of these areas are more dispersed with several smaller nodes, like Royston, Union Bay, Fanny Bay, Saratoga, and Oyster River. These communities are often separated by large areas of agricultural or resource land that represent a majority of the CVRD's land base, meaning there can be large distances between communities. Key land uses and destinations are shown in the [Land Use Overview Map](#) below.

Core Settlement Areas

The *Regional Growth Strategy* identifies several classifications for settlement areas in which the CVRD will look to focus future development and population growth. These Core Settlement Areas are divided into:

- **Municipal Areas** – Those areas that are within the City of Courtenay, Town of Comox, and Village of Cumberland
- **Settlement Nodes** – Planned settlement areas in Union Bay, Saratoga Beach, and Mount Washington
- **K'ómoks First Nation Lands** – Reserve and treaty settlement lands governed by K'ómoks First Nation
- **Settlement Expansion Areas** – Areas located adjacent to municipal boundaries that either contain existing settlement and servicing or have been identified as areas for potential future growth

The RGS (Policy 1.2), directs at least 90% of future growth in the CVRD to the Core Settlement Areas to promote efficiency in land use and infrastructure, reduce environmental impacts, and support transportation choice. Each Core Settlement Area will develop a complete, walkable Town Centre that supports transit-oriented development through increased density of residential and employment uses in these areas. K'ómoks First Nation Lands remain outside of the jurisdiction of the RGS, however through the RGS the Regional District aims to support economic development and growth on Nation lands.



Comox Valley Regional District Land Use Overview

- Regional Boundary
- K'ómoks First Nation
- Provincial Parks
- CVRD Community Parks
- Airport
- Hospital
- RCMP / Police
- School
- Civic

- Land Use**
- Agricultural Areas within Municipal Areas
 - Municipal Areas
 - Sage Hills Employment and Settlement Node
 - Settlement Expansion Areas
 - Settlement Nodes

Agricultural Land Reserve

Approximately 9% of the CVRD is in the Agricultural Land Reserve (ALR). Most of this land is located north of Courtenay and Comox between Highway 19 and the Salish Sea, with other smaller areas around Denman and Hornby Islands and nearby Fanny Bay and Buckley Bay.

Community Destinations

This section describes key community destinations that are considered through the Active Transportation Network Plan process.

Activity Hubs

The Comox Valley has several key activity hubs that attract residents from across the Region to work, shop, and recreate. These centres support the greatest mix of land uses, including the highest concentrations of residential, commercial, and institutional uses and often provide the most active transportation-friendly environments in the Region, with ready access to regional active transportation routes and recreational amenities. Some of the key activity hubs in the Comox Valley are as follows:

- Downtown Courtenay
- Downtown Comox
- Village of Cumberland
- Mount Washington
- CFB Comox

Parks

The CVRD has numerous provincial, community, and local parks that provide a wide range of recreation opportunities for residents. As a mountainous and seaside area, activities include walking, cycling, mountain biking, hiking, camping, snow and water-based activities, shoreline seating, playgrounds, and field sports. Residents of all ages and abilities rely on these community destinations to maintain active and healthy lifestyles and making them accessible by numerous modes of transportation is important. These facilities themselves offer opportunities for active transportation connections through trails and pathways. The CVRD is currently exploring a regional parks service which could play an important role in delivering active transportation facilities.

Ferries

BC Ferries operates three ferry services that link the CVRD and provide access to the Sunshine Coast and Lower Mainland. Hornby and Denman Islands are connected by the Shingle Spit (Hornby) – Gravelly Bay (Denman) route, and Denman Island is connected to Vancouver Island via to Buckley Bay. The longest ferry service in the region connects the Little River Ferry Terminal to Powell River. This route is one of the primary access points to the Sunshine Coast and can connect to the Lower Mainland via the Sunshine Coast Highway.

2.4 Policy Context

This section identifies over-arching municipal, regional, and provincial policy objectives that will help guide the direction of the ATNP.

Regional Growth Strategy

The *Regional Growth Strategy* (RGS) is a foundational document of the Active Transportation Network Plan. Through direction in the RGS, there are clear goals and objectives established for the CVRD that the ATNP aims to address. Most relevant are the goals and objectives on transportation, public health and safety, and climate change. High-level policy guidance provided by these portions of the RGS are summarized below.



Transportation

Goal #4 of the RGS focuses on Transportation, including active transportation. The goal is stated as follows (to the right):

“Develop an accessible, efficient and affordable multi-modal transportation network that connects Core Settlement Areas and designated Town Centres, and links the Comox Valley to neighbouring communities and regions”

Public Health and Safety

Supporting active transportation contributes to health and safety initiatives by encouraging more active lifestyles, reducing local pollution, and designing for safe and accessible infrastructure. The RGS identifies active transportation as an important component of health and safety in the community in Goal #7:

“Support a high-quality of life through the protection and enhancement of community health, safety and well-being”

Climate Change

The RGS prioritizes action on climate change in the CVRD through policies addressing emissions related to buildings, transportation, solid waste, and forestry. This section identifies specific emissions reduction for these sectors and some of the necessary actions to achieve these targets. The RGS goal on climate change is as follows (to the right):

“Minimize regional greenhouse gas emissions (GHG) emissions and plan for adaptation”

Rural Comox Valley Official Community Plan

The *Rural Comox Valley Official Community Plan* (OCP) guides decision making on land use planning in the Comox Valley's Electoral Areas. Transportation is central to land use planning, with active transportation playing an important role in the vision for transportation infrastructure in the region.

The OCP establishes the intent to develop an active transportation network through the CVRD's trails and roads, minimize the environmental impacts of transportation, and to collaborate with local government and provincial authorities to achieve these goals. A higher proportion of active transportation users and achieving equitable investment in transportation infrastructure are set out among the objectives of the OCP.

Transportation Road Network Plan

The 2014 *Transportation Road Network Plan* supports the implementation of the OCP with strategies and actions directed at improving transportation infrastructure and encouraging alternative transportation in rural areas. Policies in this document highlight the CVRD's commitment to active transportation and the importance of developing an active transportation network that integrates the entire region. Similar support is shown for transit initiatives, including encouraging greater transit connections within the CVRD and to neighbouring regions, and introducing bus stop design guidelines.

The Plan proposes an active transportation network that will ultimately form the basis of the ATNP. Three classes of infrastructure and their design are identified in the network with certain active transportation projects in the network prioritized through the plan.

The *Transportation Road Network Plan* also sets out a modal hierarchy that prioritizes active modes above motorized vehicles. The hierarchy is as follows:

1. Walking
2. Cycling
3. Transit
4. Commercial Vehicles
5. Shared Vehicles
6. Single-Occupant Vehicles

Infrastructure design guidance is also provided that describes key design parameters for each facility type. These standards are revisited through the Active Transportation Network Plan process for alignment with more recent best practices, including guidance contained in the *B.C. Active Transportation Design Guide*.

Other Documents

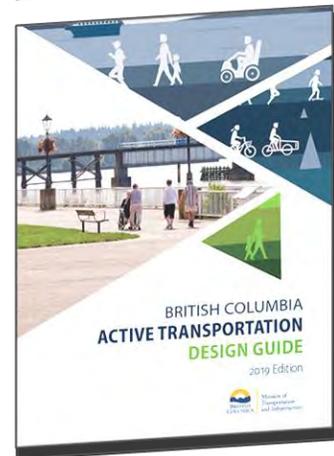
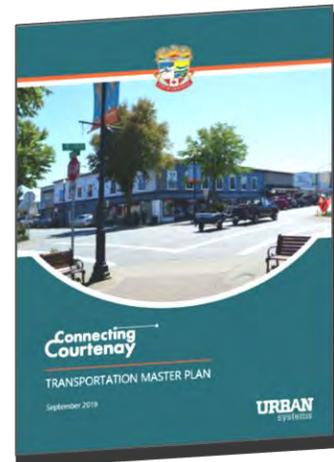
In addition to the critical guidance provided by the *Regional Growth Strategy*, *Rural Official Community Plan*, and the *Transportation Road Network Plan*, several other local, regional, and provincial documents provide important direction for active transportation in the Comox Valley.

In a regional context, the *Comox Valley Sustainability Strategy*, *Rural Comox Valley Parks and Greenways Strategic Plan*, and *Comox Valley Cycling Plan*, all include relevant policy and recommendations that will be important for the ATNP. These documents will inform the ATNP's approach to the integration of the Region's sustainability principles, current and future off-road trails and greenways, and past, cycling-focused network planning.

At the municipal level, the City of Courtenay, Town of Comox, and Village of Cumberland each have their own planning initiatives that guide active transportation in their respective communities. Each community's Official Community Plan addresses land use and growth, transportation, parks and recreation, and sustainability, all of which will inform the ATNP. Courtenay and Comox have also completed independent transportation related projects, the *Courtenay Transportation Master Plan* and *Comox Transportation Master Plan*, that provide direction for active transportation initiatives and long-term transportation networks in these communities. Cumberland's *Parks and Greenways Master Plan* also identifies a number of multi-use pathway connections in the Village.

Provincially, several sustainability and active transportation initiatives have established new goals and standards for communities across British Columbia. CleanBC has been central to prioritizing sustainable policy and programs in the province, including cleaner transportation. BC's Active Transportation Strategy, *Move. Commute. Connect.*, supports CleanBC with specific active transportation actions at the provincial level that also affect the ATNP. The provincial government has also outlined province-wide standards for active transportation facilities through the *B.C. Active Transportation Design Guide* that form the basis of walking, cycling, and multi-use facilities recommended for the Comox Valley.

Finally, A memorandum of understanding (MOU) was established in 2019 between the CVRD and Ministry of Transportation and Infrastructure (MOTI) clarifying the value that both organizations place on active transportation and the intent to work cooperatively to establish principles to allow active transportation infrastructure in MOTI rights-of-way and develop a standardized approach to pursuing this infrastructure.



2.5 Mobility Statistics

Travel Mode Split

According to the 2016 Census, driving is the main mode of commuting among all Comox Valley residents, with 79.5% of the employed population driving their vehicle to work and a further 5.5% travel as a passenger in a vehicle, as shown in **Figure 1**. The remaining 15.1% of commuters travel by sustainable methods, whether on foot, bicycle, transit, or other modes.

Census trip to work mode split data by area within the Comox Valley indicates that approximately 4% more trips to work are made by vehicle among residents of rural areas as compared to residents of the municipalities. The share of trips made by sustainable travel modes is lower among rural residents, where the proportion of trips made by public transit, cycling and walking are approximately two-thirds of those among residents of Courtenay, Comox, and Cumberland.

Within the rural areas, the proportion of trips to work by vehicle is lower and the proportion of trips by active modes is highest in Area A (Baynes Sound – Denman/Hornby Islands) as compared to Areas B and C. The cycling mode share in Area A (3.7%), as an example, is nearly equal to the cycling mode share among local municipalities (4.2%).

Mode split among CVRD rural residents for the period 1996 to 2016 (20 years) indicate a general increase in the proportion of driving trips to work over the past 20 years (approximately 4%). The proportion of walking trips have decreased from 4.9% to 3.5% of all trips, while public transit and cycling shares have remained relatively consistent.

Compared to neighbouring regional districts, the Comox Valley's sustainable mode share is slightly lower than that of the Strathcona Regional District (15.8%) and higher than that in the Regional District of Nanaimo (13.4%). **Figure 2** shows a comparison of transportation mode shares between regional districts on Vancouver Island and the Sunshine Coast, with the CVRD having the third highest sustainable mode share of the six regional districts represented.

FIGURE 1. TRAVEL MODE SPLIT FOR TRIPS TO WORK, COMOX VALLEY, 2016

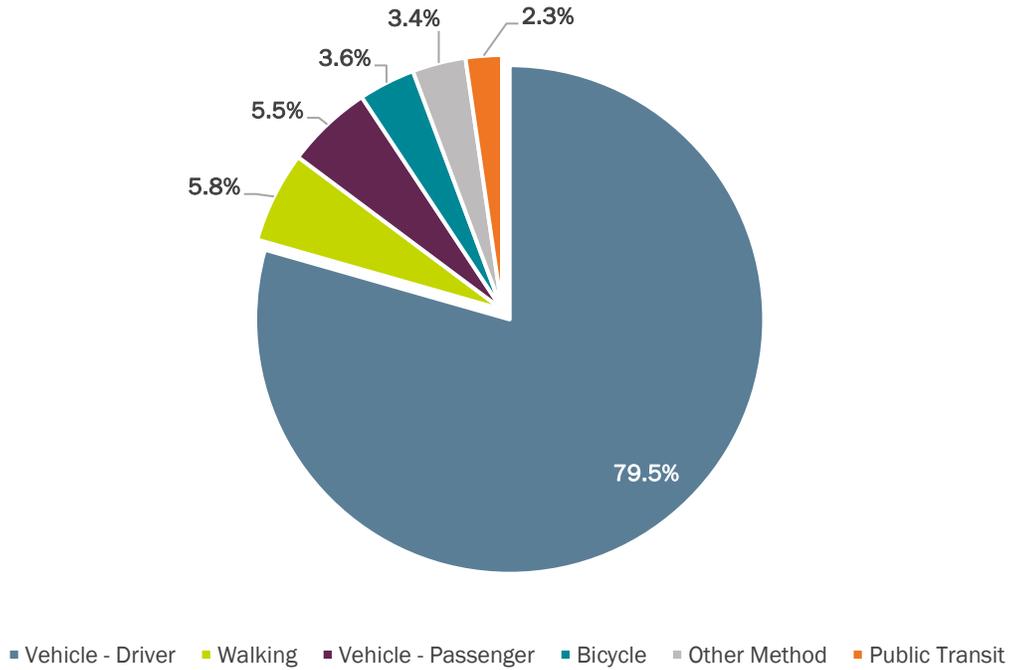
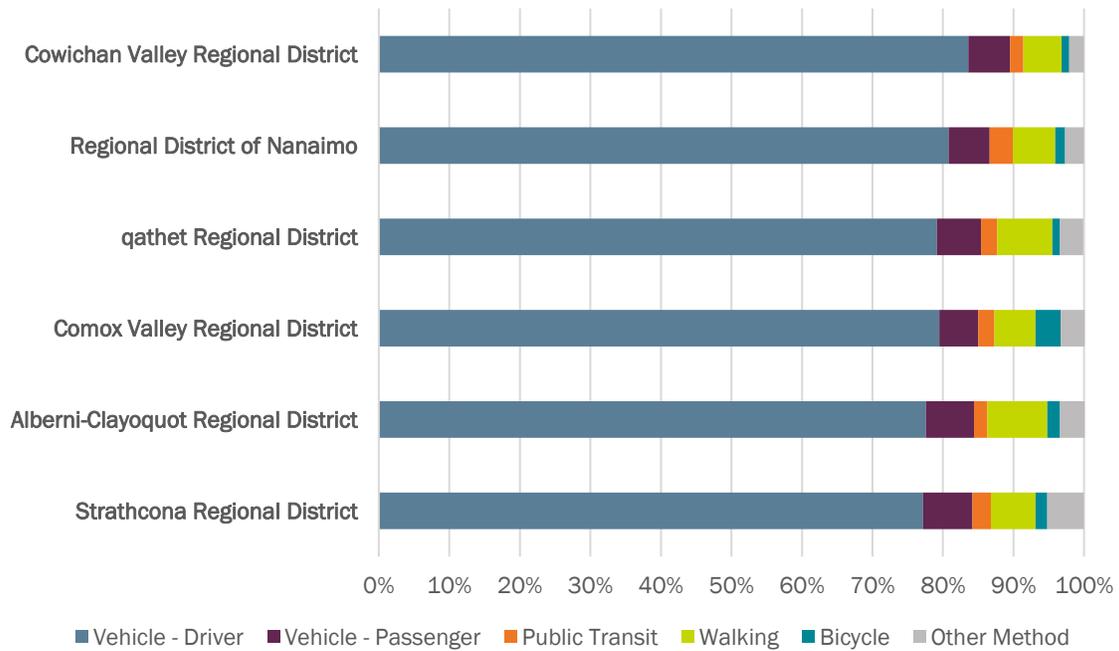


FIGURE 2. MODE SPLIT FOR TRIPS TO WORK, COMPARISON COMMUNITIES, 2016



Trip Distance

Due to the size of the Comox Valley trips between regional destinations can vary widely in duration and distance. The 2016 Census collected information on length of commuting trips for residents in the Comox Valley, including information on how far each mode would typically travel. Overall, 76% of commuters in the CVRD would travel fewer than 10 kilometres to work, 53% of which would travel fewer than 5 kilometres. Among sustainable modes trip lengths were shorter, as approximately 76% of commuters travelled fewer than 5 kilometres.

Other, non-commuter trips in the region are more difficult to understand without specific origin-destination information. The 2016 Census indicates that 45.9% of residents commute to a different census subdivision within the census division of residence, travelling outside of their community but within the CVRD. A further 12.2% commute to a different census division entirely, presumably to the north in Campbell River or south in the Nanaimo region.

Greenhouse Gas Emissions + Active Transportation

The RGS firmly places climate change and the effects of greenhouse gas (GHG) emissions at the centre of the region's future since emissions from transportation represent a substantial component of GHG emissions in the Comox Valley. Across British Columbia and Canada, the transportation sector is a major contributor of greenhouse gas (GHG) emissions largely from light-duty or passenger vehicles. In 2018, emissions from on-road transportation accounted for over 28% of all GHG emissions in British Columbia, an increase of 22% since 2017¹.

Transportation policies in the RGS aim to curtail the environmental impacts of transportation, one of the primary reasons to encourage greater participation in active transportation. The RGS specifically identifies short-, medium-, and long-term GHG emission reductions in the transportation sector up to a 50% reduction of transportation-related emissions by 2030. These targets are aligned with the goals of the *Comox Valley Sustainability Strategy* and provincially legislated GHG reductions with the goal of reducing total emissions in the CVRD by 80% by 2050. The Sustainability Strategy also includes goals for mode share by 2050, which aim to shift private conventional mode share to only 24%.

Understanding the GHG emissions specifically attributed to transportation in the Comox Valley and the impacts of increasing active transportation mode shares on GHG emissions is a key outcome of the Active Transportation Network Plan. Without specific trip-level data, estimating the resulting reduction from active transportation uptake is challenging to determine. However, the infrastructure improvements and programming identified in the ATNP will contribute to this effort, creating opportunities for increased travel by sustainable modes. The data necessary to estimate GHG reductions resulting from active transportation improvements are summarized in **Section 4.4**.

¹ Provincial Greenhouse Gas Inventory, 2018. Retrieved from <https://www2.gov.bc.ca/gov/content/environment/climate-change/data/provincial-inventory>

2.6 Existing Transportation Networks

This section describes existing infrastructure and conditions of the Comox Valley's transportation networks, including the region's active transportation, road, and transit networks, along with discussion on traffic safety. Understanding current conditions is essential to developing a safe, accessible, and convenient active transportation network.

Active Transportation

Walking

There is limited dedicated pedestrian infrastructure in the Comox Valley outside of the municipalities. This is a common issue for rural areas due to low population densities and long distances between destinations, therefore few rural roads have safe and comfortable pedestrian facilities like raised sidewalks or roadside trails.

The region's trail network represents the majority of pedestrian or multi-modal facilities and are an important community resource. Across the CVRD, local trails in rural areas extend over 200 km. Parks like Seal Bay Nature Park, have large or highly connective trail networks as shown in the [Active Transportation Network Map](#) on page 23. These and other community parks provide recreational opportunities for hikers and walkers and opportunities to connect the region across park land.

While the nature of the local trail system facilitates multi-modal travel and maintains rural character, it can be challenging for people utilizing mobility devices, particularly where walking and rolling surfaces are unfinished (i.e., gravel, chip), do not include suitable transitions at roadway crossings, or where steep grades are present. A key objective for the Active Transportation Network Plan is to create multi-modal facilities that are safe and comfortable for residents of all ages and abilities.

Pedestrian crossings are another key consideration. Currently, very few intersections on rural roads have crossing infrastructure and high driving speeds and dark roads lead to dangerous crossing conditions. Measures like pedestrian-controlled signals, improved lighting and painted crosswalks can all contribute to safe crossings on rural roads. Pedestrian lighting is another opportunity and, as with crossings, require MOTI approval and maintenance. Lighting in rural areas requires consideration of impacts on surrounding lands, including respecting a desire for dark skies.



One Spot Trail at Piercy Road

Cycling

Similar to the pedestrian network, cycling facilities in the rural areas of the CVRD are also limited. There is a total of approximately 140 km of cycling facilities identified in the region, 17 km of roadside greenway and 123 km of cycling routes as seen in the [Existing Active Transportation Network Map](#), on the following page. Facilities like the One Spot Trail along Condensory Road are not included in these designations, which are also cyclist-friendly facilities. The existing network interconnects rural areas in the CVRD and provides options for cycling to rural areas. Major designated routes include Highway 19A, which connects the region's rural areas to the municipalities, north to Campbell River, and south toward the Regional District of Nanaimo. Other designated routes include Anderton Road and Waveland Road north of the Town of Comox, Knight Road, Marsden Road, Duncan Bay Main Line, and Lake Trail Road.

The two existing facility types are described in the Transportation Road Network Plan as the following:

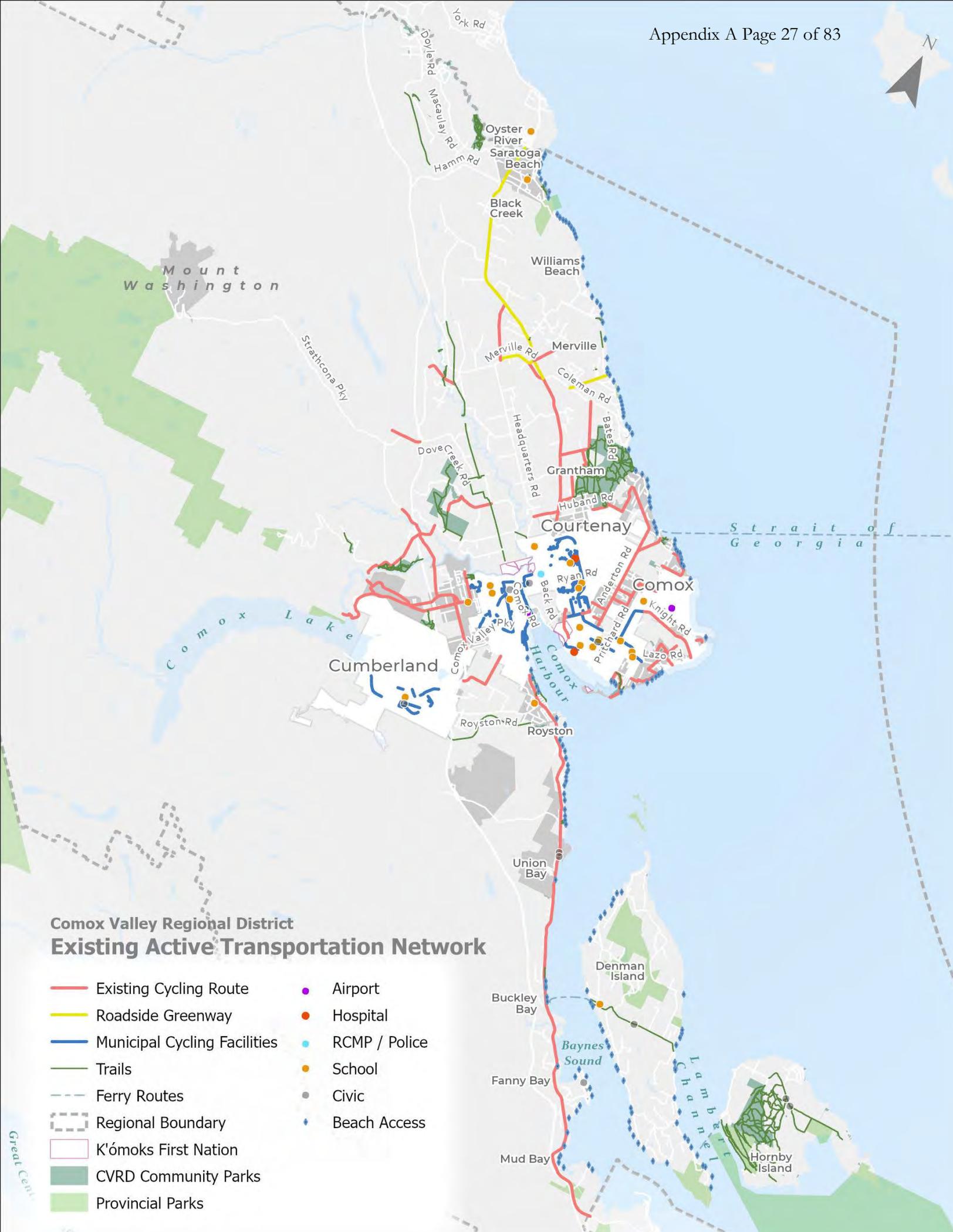
Shoulder Bikeway

Cycling routes identified in the existing network most closely resemble shoulder bikeways. These facilities are typically used on rural roads without curb and gutter where a wide, paved shoulder can be shared with pedestrians and equestrians. Parking is not permitted on these bikeways, where routes are identified with “bike route” signage.

Roadside Greenway

Under the *Transportation Road Network Plan*, there are two cycling facility types under the Roadside Greenway classification: separated pathways and wide shoulders. A separated pathway is the preferred facility type, providing separation from traffic in rights-of-way with adequate width to accommodate them. These pathways are suitable to cyclists, pedestrians, and equestrian users. The wide shoulder option is similar to a shoulder bikeway where enhanced, paved shoulders can also accommodate a variety of active transportation users. Improving shoulders is also a more cost-effective option for developing active transportation infrastructure.

These types of cycling facilities do not necessarily offer all cyclists safe and comfortable conditions for commuting or recreational trips. It should be recognized however that building cycling infrastructure to All Ages and Abilities (AAA) standards across the region may be challenging due to dispersed settlement patterns and long distances which results in high costs for facility development. It is more realistic that the CVRD will capitalize on the abundance of natural trails and low-traffic roads to build a network of varied cycling infrastructure that integrates with existing facilities in Courtenay, Comox, and Cumberland. Establishing cycling facility design standards that facilitate safe comfortable conditions and that are well suited to the rural context will be a key outcome of the Active Transportation Network Plan, using guidance contained in the *B.C. Active Transportation Design Guide*, which are described in **Section 3.5** and **Appendix A**.



**Comox Valley Regional District
Existing Active Transportation Network**

- | | | | |
|--|------------------------------|---|---------------|
|  | Existing Cycling Route |  | Airport |
|  | Roadside Greenway |  | Hospital |
|  | Municipal Cycling Facilities |  | RCMP / Police |
|  | Trails |  | School |
|  | Ferry Routes |  | Civic |
|  | Regional Boundary |  | Beach Access |
|  | K'ómoks First Nation | | |
|  | CVRD Community Parks | | |
|  | Provincial Parks | | |

Public Transit

Bus service in the CVRD is largely focused within the population centres in Courtenay, Comox, and Cumberland. Of the 253 bus stops in the region, only 21% of stops (54 total) are outside of the municipal boundaries. As shown in the [Transit Network Map](#) below, there are currently fifteen bus routes operating in the region, with six routes providing direct service to the region's rural areas and neighbouring regions. These six routes are all considered to be part of the Local Transit Network, meaning that service frequency is 60 minutes or greater. Descriptions of these routes are listed below. Many of the more populous rural areas are also offered on-demand service from BC Transit within defined boundaries, such as around Union Bay and Fanny Bay.

Route 10 – Fanny Bay / Downtown Courtenay

Among the longest routes in the region, this service connects Fanny Bay to Downtown Courtenay with stops in Buckley Bay, Union Bay, and Royston.

Route 11 – Airport via Little River / Downtown

This route connects some of the region's essential transportation hubs with service from Downtown Courtenay to the Little River Ferry Terminal, CFB Comox, and the Comox Valley International Airport.

Route 12 – Oyster River / Downtown Courtenay

This route is one of two that offers transit service to the rural areas north of Comox and Courtenay, connecting Courtenay to Black Creek, Saratoga Beach, and Oyster River. Connections can also be made to Campbell River Transit from the Oyster River exchange.

Route 13 – Seal Bay / Merville

An infrequent shuttle service, Route 13 provides from Merville to Downtown Courtenay, North Island College, and the Comox Valley Sports Centre.

Route 14 – Union Bay

This shuttle service connects Union Bay and Royston to Downtown Courtenay.

Route 20 – Cumberland (via Royston)

This route connects South Courtenay to Royston and Cumberland.

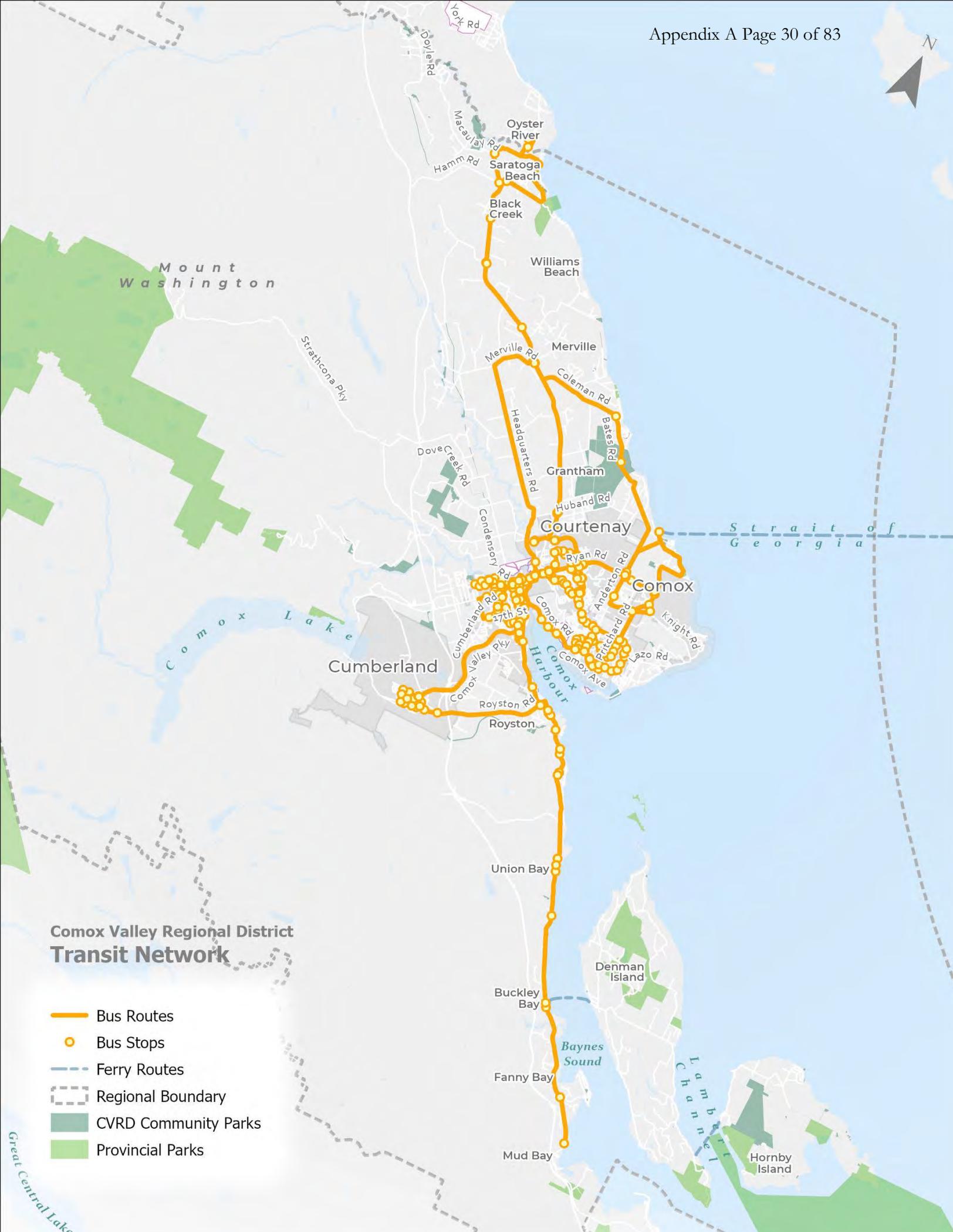
Bus stop facilities along rural roads can be designed in several different ways, however, stops tend to be minimal in the amenities and infrastructure provided. Common amenities at urban bus stops, such as shelters, benches, and transit pads are generally only provided at key locations along rural transit routes. Otherwise, stops may only constitute signage on a road's shoulder. These minimal designs create several challenges for comfort, safety, and accessibility. Transit users may have to travel along the roadside to reach a stop, that will provide limited protection from bad weather, seating, or easy access for elderly or disabled users. Safety and accessibility are key goals of the *Transit Future Plan* and are key considerations for increasing transit ridership in the region.

Regional transit connections were also prioritized in the *Transit Future Plan*, with improvements to the Oyster River exchange identified as a specific action to improve integration with Campbell River Transit. The CVRD, in partnership with BC Transit, is currently studying improvement options for this location that would enhance passenger amenities, better integrate with adjacent properties, and expand bus bay capacity.

The vast area contained in the Comox Valley and the resulting long trip distances limit the ability for many to walk or cycle for long distance trips, instead making public transit the choice alternative to driving for longer distance trips. Consideration of transit service and specific bus stop locations is integrated throughout the Active Transportation Network Plan to understand where active transportation facilities may strengthen access to public transit, thereby facilitating greater transit ridership and increasing active transportation trip making.



Rural bus stops along Highway 19a



Comox Valley Regional District Transit Network

-  Bus Routes
-  Bus Stops
-  Ferry Routes
-  Regional Boundary
-  CVRD Community Parks
-  Provincial Parks

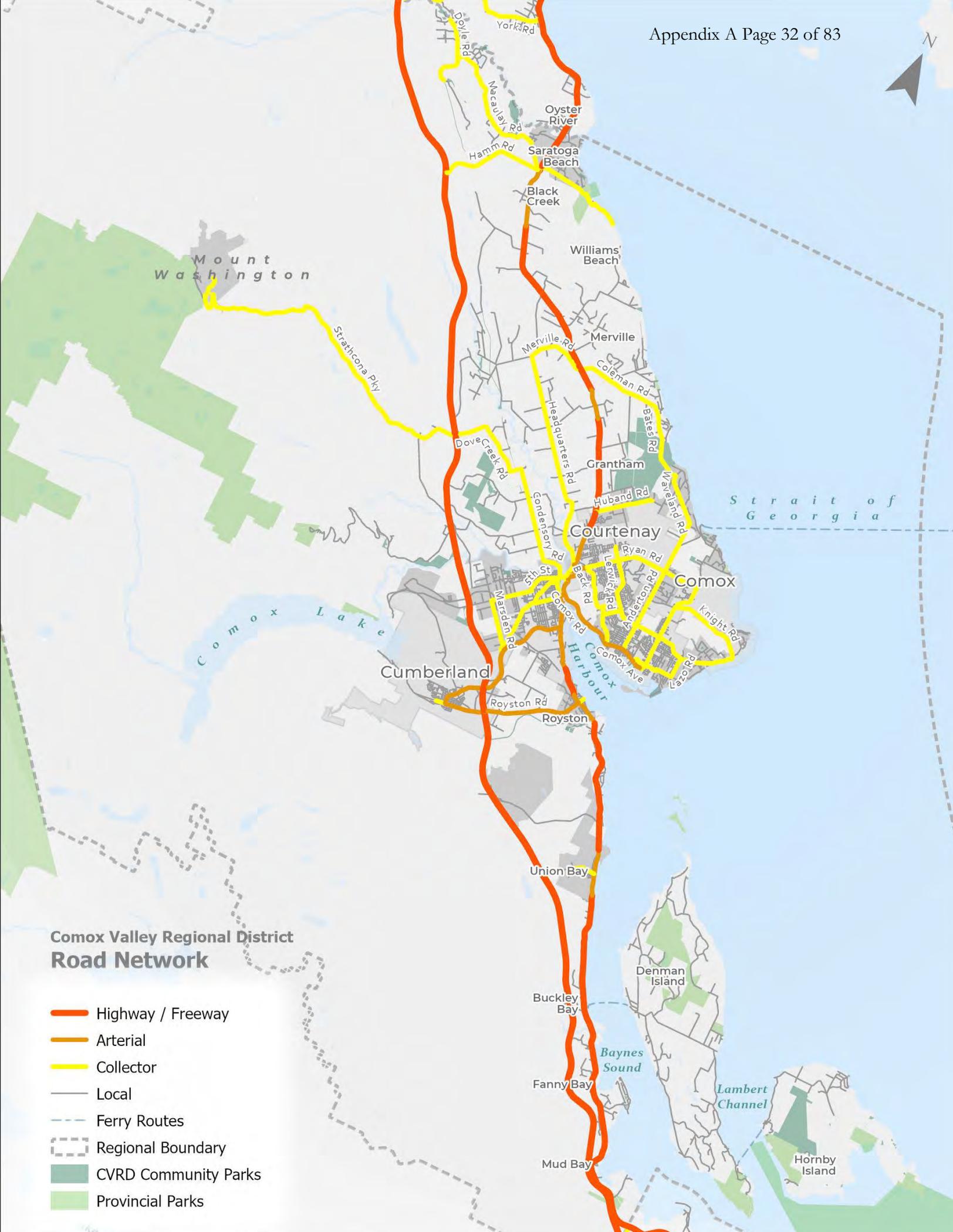
Streets

The region's road network is extensive, with approximately 1,113 km of roads throughout the Valley, 777 km of which is outside of the municipal boundaries. The region's road network is generally considered according to four road classifications, as follows:

- Highway / Freeway
- Arterial
- Collector
- Local

The road network and classifications are shown in the [Road Network Map](#) below. The most major roads in the Regional District include Highway 19, the primary highway connecting Campbell River and Nanaimo, and Highway 19A the Old Island Highway, which connects many of the coastal and rural communities from Fanny Bay to Oyster River. Other regionally significant roads include the Strathcona Parkway to Mount Washington and Strathcona Provincial Park, Headquarters Road connecting Courtenay and Merville, Condensory Road, and Royston Road. Many of these roads connect to Highway 19 and 19A, where a limited number of grade-separated and signalized intersections are in place.

Most of the CVRD's rural road network was designed during a period in which vehicle travel was prioritized in design. These roads represent typical rural road standards, with shoulders of varying width that are not designed for safe and comfortable travel for pedestrians or cyclists. This is consistent with active transportation conditions described in previous sections, that most rural roads do not have pedestrian or cyclist infrastructure. The Active Transportation Network Plan process will identify options to improve roadside conditions for active transportation users, as well as opportunities to provide dedicated walking and cycling facilities separated from roadways.



Comox Valley Regional District Road Network

-  Highway / Freeway
-  Arterial
-  Collector
-  Local
-  Ferry Routes
-  Regional Boundary
-  CVRD Community Parks
-  Provincial Parks

2.7 Multi-Modal Safety

Traffic and road safety are an important component of creating a safe and welcoming environment for active transportation users. In areas like the CVRD, active transportation users encounter a variety of conditions across the Regional District’s urban, suburban, and rural roads that place people near traffic, which can lead to involvement in vehicle collisions. This section provides a summary of collisions in the CVRD, including those involving active transportation users.

All Collisions

Since 2015, ICBC has published overall and location-specific data on collisions in British Columbia, including tracking those incidents that directly involve a pedestrian or cyclist. It should be noted that the collisions analyzed in this dataset are only those that are reported to ICBC and therefore do not account for “near misses” or bicycle-pedestrian collisions that go unreported.

Between 2015 and 2019 a total of 15,977 collisions were reported in the CVRD. Collisions are typically concentrated in more urban areas, with incidents in Courtenay and Comox accounting for 85% of all collisions across the Region. ICBC data shows fewer collisions in the region’s rural areas, likely due to less traffic. As shown in **Table 1** several locations outside of the member municipalities were noted as having high numbers of collisions between 2015 and 2019. Many of these locations are concentrated at higher volume intersections along Highway 19 and Highway 19A.

**TABLE 1. LOCATIONS WITH HIGHEST NUMBER OF VEHICLE COLLISIONS
(OUTSIDE OF COURTENAY, COMOX, AND CUMBERLAND)**

Location	Collisions			Annual Average
	Property Damage	Casualties	Total	
Hamm Rd / Island Hwy N	28	6	41	8.2
Hamm Rd / Inland Island Hwy	23	6	29	5.8
Buckley Bay Rd / Island Hwy S	19	7	26	5.2
Condensory Rd / Piercy Rd	16	5	21	4.2
Coleman Rd / Island Hwy N / Poulton Rd	12	8	20	4
Inland Island Hwy / Piercy Rd	14	6	20	4
Headquarters Rd / Smith Rd / Tsolum River Rd	10	3	13	2.6
Island Hwy S / Royston Rd	7	6	13	2.6
Catherwood Rd / Island Hwy N / Regent Rd	9	3	12	2.4
Coleman Rd / Hardy Rd	10	2	12	2.4
Comox Valley Pky / Minto Rd	11	1	12	2.4

Pedestrian and Cyclist Collisions

Overall, 200 collisions or 1.25% of all recorded incidents in the CVRD between 2015 and 2019 involved a pedestrian or cyclist. Like other collisions, most cyclist and pedestrian incidents are focused within the regional centre, including 94.5% in Comox or Courtenay, with some isolated occurrences in outlying communities. Following the same trends, additional data from the Comox Valley RCMP recorded a further 20 collisions involving pedestrians or cyclists in the CVRD in 2020. Based on these two datasets, the rural areas in the CVRD had few collisions involving active transportation users, with only 7 total reported collisions occurring outside of the municipal boundaries between 2015 and 2020.

In the past 5 years the following locations, shown in **Table 2**, have all had 3 or more collisions involving a pedestrian or cyclist. These locations are all within the City of Courtenay or Town of Comox. Incidents identified in the Regional District include a pedestrian incident at the Island Hwy / Huband Rd intersection and cyclist collisions at Miracle Beach Dr / Clarkson Rd and Hamm Rd / Highway 19.

TABLE 2. HIGHEST VEHICLE COLLISION LOCATIONS INVOLVING PEDESTRIANS / CYCLISTS (ENTIRE CVRD)

Community	Location	Total Collisions Involving AT User
City of Courtenay	Back Road and Ryan Road (Turning Lane)	6
	Lerwick and Ryan Road (Turning Lane)	6
	5 th Street and Anderton Avenue	4
	19 th Street and Cliffe Avenue	3
	26 th Street and Fitzgerald Avenue	3
	5 th Street and Duncan Avenue	3
	Lerwick Road	3
	Old Island Highway and Ryan Road (Turn Lane)	3
	Old Island Highway and Tsolum Road	3
Town of Comox	Aspen Road and Guthrie Road	3

3. Future Directions

3.1 Vision

The following vision statement has been developed to describe the desired future conditions for active transportation in the Comox Valley. The vision reflects the collective input of Comox Valley residents and key guiding documents such as the Regional Growth Strategy.

The Comox Valley's active transportation network will be safe and comfortable for people of all ages and abilities. The integrated and connected network will facilitate a cultural shift towards sustainable transportation modes thereby reducing regional GHG emissions.

Walking will be a first choice for shorter trips, while cycling and transit will be convenient choices for longer journeys

3.2 Goals

Distinct goals are identified below that describe what the Comox Valley community is seeking to achieve with respect to active transportation. These goals are used to guide the long-term planning and priority actions throughout the ATNP.



Goal One

Ensure safe transportation choices are available for all people regardless of age or ability.



Goal Two

Observe a significant shift to sustainable transportation to support a reduction in GHG emissions.



Goal Three

Build a culture and promote active transportation.



Goal Four

Create more places for people to walk, roll, or bicycle.



Goal Five

Establish an inclusive and accessible active transportation network for all residents and visitors.



Goal Six

Coordinate and maintain a regional multi-modal transportation network.

3.3 Targets

Active and sustainable transportation targets and their associated benefits are identified with the CVRD's Regional Growth Strategy. These include targets related to shifting mode share towards more sustainable modes including transit and those fulfilled by walking and cycling. Realizing the mode-shift targets could influence the RGS's existing on-road transportation emission reduction targets, as shown below in **Table 3**.

All targets build off 2006 baseline conditions and include interim 2015 and 2020 targets. While the public transit mode share is approaching the 2030 target set out in the RGs, significant change is required if the target of 20% of all trips by active modes (walking, cycling) is to be realized by 2030. The infrastructure improvements and supporting programs identified in the ATNP have been identified in pursuit of this target.

TABLE 3. REGIONAL GROWTH STRATEGY TARGETS FOR SUSTAINABLE MODE SHARES & GHG EMISSION REDUCTIONS (ON-ROAD TRANSPORTATION)

Regional Growth Strategy 2030 TARGETS	Data Source	Progress Measures (Passed)	
		Short-Term (2015)	Medium-Term (2020)
Sustainable Mode Share			
2.5% Transit Mode Share	BC Transit	1.5%	2%
20% of Trips Fulfilled by Walking and Cycling (Active Transportation Mode Share)	Census Canada	10%	11%
On-Road Transportation GHG Emission Reductions			
50% Reduction in GHG Emissions	CEEI	-20%	-33%

3.4 Long-Term Network

Defining a long-term active transportation network is an essential outcome of this process. These dedicated networks for walking and rolling and cycling must consider each mode's convenience, comfort, and safety, and how the network fits with the Region's rural character, while providing connections for active travel throughout the Comox Valley. Ultimately, the long-term active transportation network is the basis for developing new active transportation infrastructure in the Comox Valley and will guide the location and characteristics of these facilities.

The network is informed by directions in the *Transportation Road Network Plan*, active transportation planning initiatives within the municipalities and neighbouring regions, and the insight provided by a diversity of stakeholders and Comox Valley residents. This analysis provides opportunities to identify how active transportation can connect community members with key regional destinations, neighbouring communities, and recreational opportunities throughout the Comox Valley.

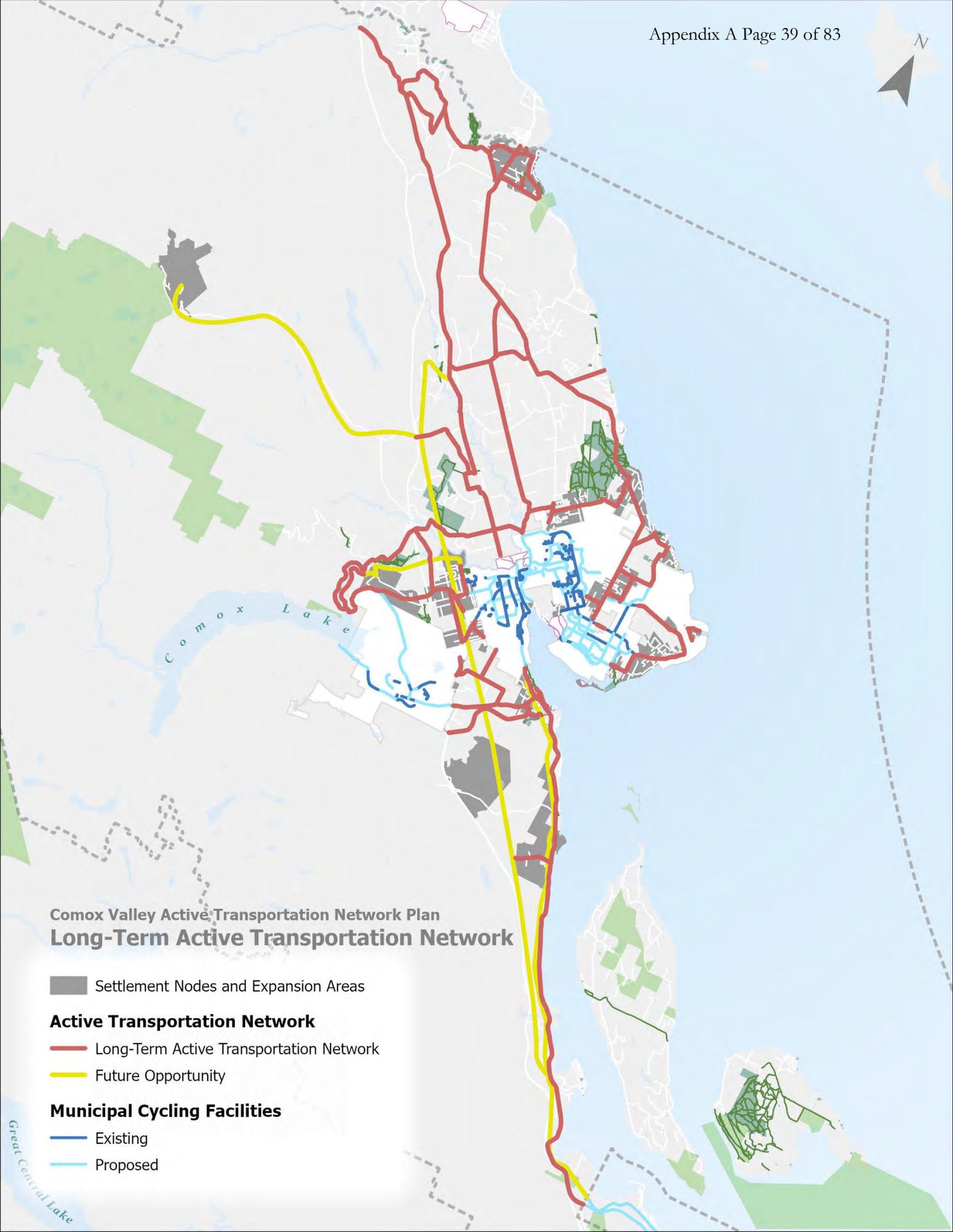
Long-Term Active Transportation Network

The long-term active transportation network defines the long-term active transportation corridors throughout the CVRD's rural areas upon full build-out. This represents a vision for active transportation facility development at full build-out that will help guide incremental changes that are coordinated and aligned with the long-term vision.

Throughout the engagement process, residents expressed a keen interest in providing safer, more convenient, and more comfortable active transportation options that link regional centres with the Comox Valley's large rural areas. The network builds on existing pedestrian, cycling, and multi-use routes like the One Spot Trail and Cumberland-Royston Railway Trail and integrates with routes identified by the public and stakeholders and the *Transportation Road Network Plan* as desirable locations for new or improved active transportation facilities. These factors were included in an active transportation gap analysis conducted as part of the network development process. The long-term network is shown in the [Long-Term Active Transportation Network Map](#) below.

Key considerations for the long-term active transportation network include:

- Connecting active transportation routes to existing or planned facilities between core settlement areas
- Connecting the long-term network with planned routes in neighbouring regions
- Connecting rural communities with direct and safe active transportation routes
- Connecting rural schools and other community amenities to the active transportation network
- Implementing pedestrian improvements within the Pedestrian Facility Development Areas
- Providing opportunities for routes that fulfill both commuting and recreational purposes
- Addressing known safety issues for active transportation users



Comox Valley Active Transportation Network Plan Long-Term Active Transportation Network

-  Settlement Nodes and Expansion Areas
- Active Transportation Network**
 -  Long-Term Active Transportation Network
 -  Future Opportunity
- Municipal Cycling Facilities**
 -  Existing
 -  Proposed

Great Central Lake



Alongside the long-term network, seven aspirational active transportation alignments have been identified that provide significant long-term potential to connect key destinations and address gaps in the regional active transportation network. These “Future Opportunities” are projects that are long-term endeavours that could be challenging to realize in the timeframe of the ATNP implementation but are valuable long-term improvements that the CVRD and partner agencies should work to retain the ability to achieve if and when investments are warranted and opportunities arise through parallel initiatives and land development. The seven “Future Opportunities” are described in **Table 4**.

Facility types to be implemented on the routes identified in the long-term network will be determined by the characteristics of the adjacent street, intended user groups, and the anticipated volume of active transportation users on the route. Facility types for pedestrian, cycling, and multi-use routes are described in **Section 3.5** and **Appendix A**.

TABLE 4. POSSIBLE “FUTURE OPPORTUNITIES” FOR ACTIVE TRANSPORTATION

Project	Description
E&N Corridor	<p>The E&N Rail Corridor is among the most significant active transportation opportunities in the Comox Valley. A potential trail along the corridor would connect Courtenay to Royston, Union Bay, and on to the Regional District of Nanaimo.</p> <p>It is acknowledged that further collaboration with K'ómoks First Nation and the ICF will be required if active transportation facilities are to be realized on the E&N Corridor.</p>
Condensory Road	<p>It is acknowledged that K'ómoks First Nation is a critical partner for a fully connected regional transportation system. Collaboration with K'ómoks First Nation is required if active transportation facilities are to be realized throughout the region.</p> <p>For the segments of Condensory Road, Comox Road, and Back Road identified through KFN lands, the CVRD will work collaboratively with K'ómoks First Nation to identify how a fully connected transportation network can be achieved.</p>
Comox Road	
Back Road	
Comox Valley Utility Right-of-Way	<p>This utility right-of-way is a linear feature with the potential to connect the region along a north-south corridor between Fanny Bay and Headquarters Road. Utility rights-of-way in other communities have been used as off-road, multi-use routes that connect existing service roads underneath the powerlines without having to remove vegetation as would be required for a new facility.</p>
Puntledge Powerhouse Right-of Way	<p>Identified as an opportunity by stakeholders, this right-of-way follows the penstock from the Comox Lake Dam to the Puntledge Powerhouse, northeast of Courtenay.</p> <p>Like the utility right-of-way described above, the powerhouse right-of-way is an opportunity to develop an off-road, multi-use connector without entirely new infrastructure. This route could provide another linkage between the Puntledge River / Nymph Falls area through to Courtenay.</p>
Mount Washington Connector	<p>Options to facilitate active transportation access to Mount Washington could be explored either through facilities on Strathcona Parkway or through a new off-road facility. This route could become a recreational asset that complements the outdoor recreation opportunities at Strathcona Provincial Park and Mount Washington Alpine Resort.</p>

Walking + Rolling

Walking and rolling are fundamental to mobility, with most trips beginning and ending on foot. Encouraging walking and rolling trips in rural areas can be challenging, with long distances and a lack of facilities make walking and rolling inconvenient and uncomfortable, particularly for people using mobility devices. As such, the Active Transportation Network Plan aims to develop a long-term walking network that provides suitable conditions for pedestrian activity in the Comox Valley's rural areas.

The long-term active transportation network focuses on developing pedestrian facilities around the Settlement Expansion Areas and Settlement Nodes identified in the Regional Growth Strategy, as well as rural community centres in the areas like Merville, Black Creek, and Fanny Bay. All areas within reasonable walking distance of these locations and outside municipal boundaries are included in "Pedestrian Facility Development Areas." These are the areas that will be the focus on future pedestrian infrastructure improvements that emphasize connecting residential neighbourhoods to neighbouring communities, local schools, community centres, and recreational amenities. The extent of the Pedestrian Facility Development Areas is shown in the [Pedestrian Facility Development Areas Map](#), on the following page.

Key considerations for the Pedestrian Facility Development Areas included:

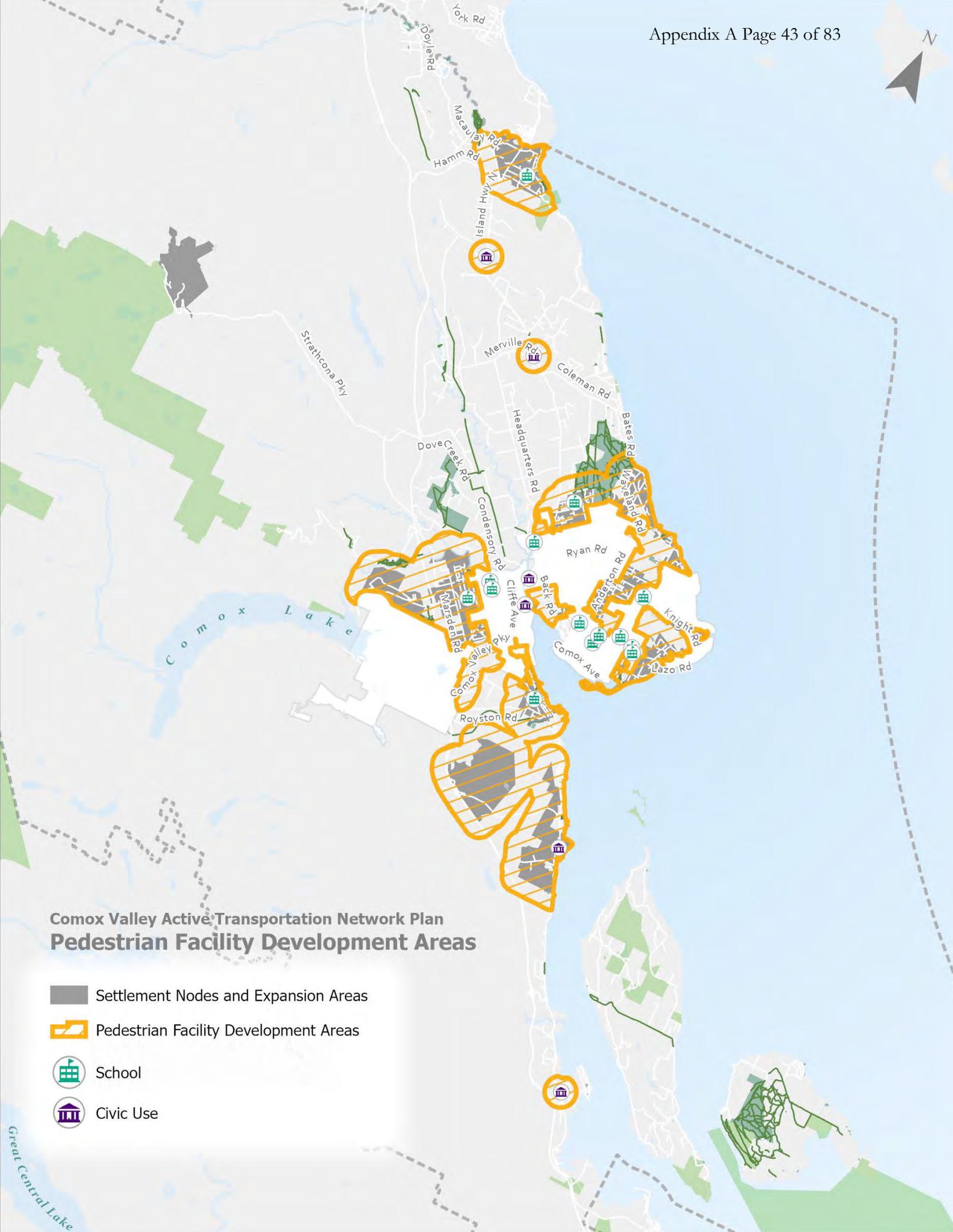
- Anticipating future development in the Core Settlement Areas
- Ensuring safe pedestrian routes connecting to school and community centres
- Providing flexibility for pedestrian infrastructure to be built where it will be most impactful for the community

Pedestrian facilities may also be appropriate in specific locations beyond the Pedestrian Facility Development Areas, particularly where efforts can be made to connect pedestrian facilities with existing multi-use pathways like the One Spot Trail or proposed facilities like the E&N Corridor.



What is "Walking Distance"?

Walking distance is
defined as 800m,
approximately a
10-minute walk
for most people.



Comox Valley Active Transportation Network Plan Pedestrian Facility Development Areas

-  Settlement Nodes and Expansion Areas
-  Pedestrian Facility Development Areas
-  School
-  Civic Use

The E&N Corridor Rail Trail in the Comox Valley

The E&N Rail Corridor is a key north-south active transportation route in the Long-Term Active Transportation Network. Currently, there are no active transportation facilities within the rail corridor outside of the City of Courtenay, however engagement feedback and previous planning efforts strongly support establishing a multi-use path within the corridor. The cleared right-of-way and the gentle slopes of the rail grade make for suitable development conditions and the potential for a safe, comfortable route that is separated from heavy traffic routes like Highway 19A. The highway would be the alternative route for many active transportation users, which currently does not provide continuous safe conditions walking, rolling, or cycling.

The Island Corridor Foundation (ICF) has been entrusted to manage the corridor and recognizes and acknowledges the aboriginal title and rights of First Nations along the E&N Corridor, as formalized in the 2010 Declaration on Aboriginal Title. The rail corridor is not currently operational, however the ICF continues to advocate for re-establishing regular rail service between Courtenay, Nanaimo, and other Vancouver Island centres. The ICF also supports active transportation within the rail corridor and has produced design guidelines for infrastructure that accommodates multi-use paths alongside active rail. As opposed to the “Rail to Trail” approach, commonly seen in former rail corridors, the ICF maintains a “Rail with Trail” mandate in which any active transportation facilities will share the corridor with rail service.

This route would extend nearly 28 km from Courtenay through Royston, Union Bay, and other communities along the Region’s southern coast before entering the Regional District of Nanaimo. Despite the opportunity presented by the E&N Corridor, several issues would have to be addressed before active transportation could be facilitated along the route, including developing road and water crossings for rail and active modes.

Several other communities across Vancouver Island have already utilized segments of the E&N Corridor as an opportunity for active transportation. These communities, including those outlined below, provide a precedent for the corridor in the Comox Valley.

- 1. Capital Regional District**
17 km of constructed or planned paved multi-use trail within the E&N Corridor
- 2. Regional District of Nanaimo**
8.25 km of completed paved multi-use trail within the E&N Corridor
- 3. City of Courtenay**
2.5 km of completed gravel multi-use trail with the E&N Corridor

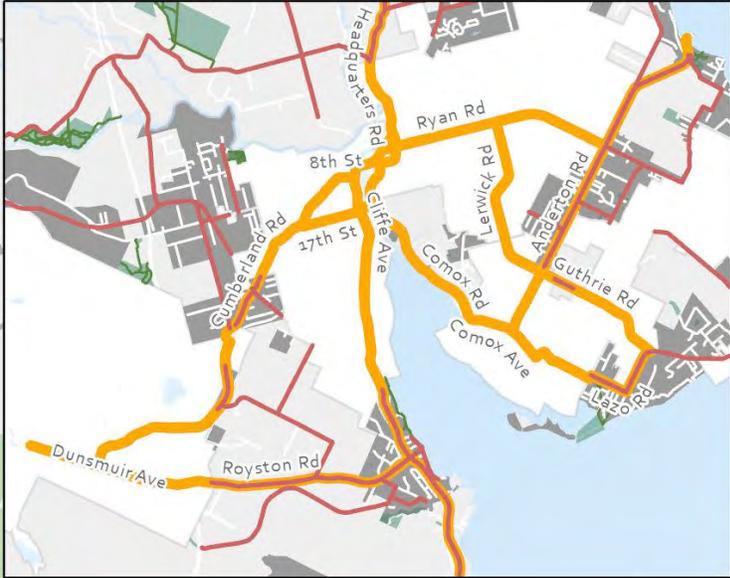
Regional Active Transportation Network

Regional coordination is an essential component of the Active Transportation Network Plan. To that end, a Regional Active Transportation Network has been identified that includes corridors of regional significance that provide important regional and inter-regional connections between rural and urban communities, as well as to communities beyond the Comox Valley. These routes are shown in the [Regional Active Transportation Network Map](#), below.

The regionally significant routes were identified through the following criteria:

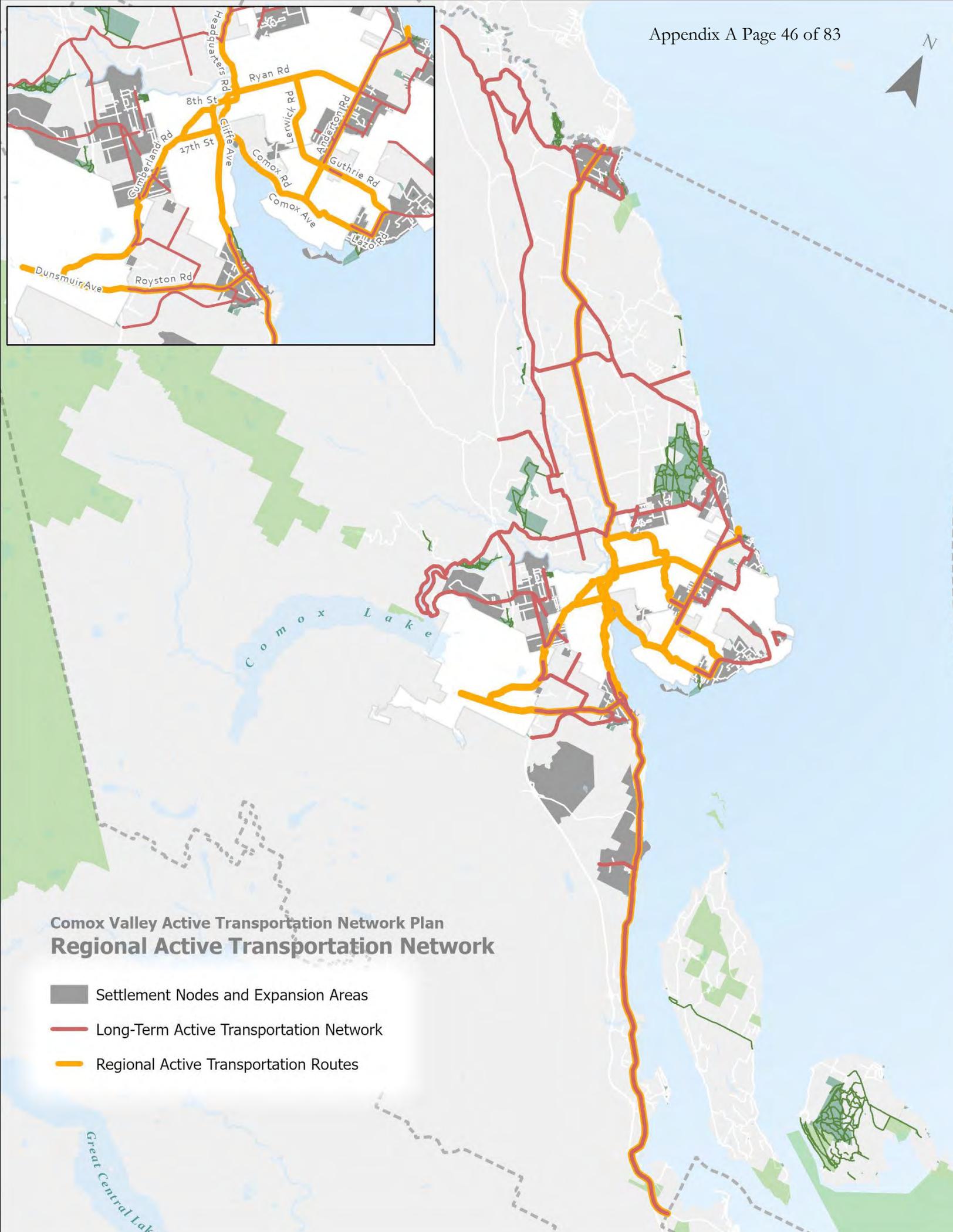
- Aligned with existing and planned facilities in urban and rural areas
- Routes with an existing or anticipated high number of active transportation users
- Connections to regional centres and employment areas, including Downtown Courtenay, Comox, and Cumberland, and other hubs like North Island College and North Island Hospital
- Routes that facilitate inter-regional travel, including to the Sunshine Coast via the Little River Ferry Terminal

The intent of the Regional Active Transportation Network is to identify corridors that are of greatest regional significance. This will allow each of the agencies in the Comox Valley to support the creation of a regional network through facility development with their jurisdiction, including the member municipalities, K'ómoks First Nation, and the Ministry of Transportation and Infrastructure. With collaboration as a key goal, collectively prioritizing regional corridors will support both local and regional active transportation objectives, as well as clarify coordinated regional priorities when advancing joint initiatives and seeking external funding support.



Comox Valley Active Transportation Network Plan
Regional Active Transportation Network

-  Settlement Nodes and Expansion Areas
-  Long-Term Active Transportation Network
-  Regional Active Transportation Routes



Recreation Facilities in the Comox Valley

The rural areas of the CVRD are the focus of this ATNP. However, within the urban areas, or member municipalities, the CVRD operates three major recreational facilities. Improving active transportation connections to, and in some instances between, these facilities could be beneficial.

CVRD recreational facilities include:

- Comox Valley Sports Centre
- Comox Valley Aquatic Centre
- Comox Valley Exhibition Grounds



Improved connections to these venues should be considered and undertaken as opportunities present themselves, both through linear on-street projects as well as connections between the recreation facilities and other neighboring destinations such as George P. Vanier Secondary School, the Comox Valley Sports Centre, and Comox Valley Exhibition Grounds. This area along Headquarters and Vanier Roads is an activity hub and offers considerable opportunity for improved connections and increased recreational opportunities between the venues themselves and the surrounding recreational trail network.

The Comox Valley Exhibition Grounds are historic and reflect the agricultural history and nature of the regional district. The grounds are a popular destination for weekly farmers markets and larger special events. They are also an important venue for numerous community groups and host equestrian activities, among many others. Improving connections between the exhibition grounds and surrounding proposed active transportation network could improve overall connectivity as well as mitigate safety and parking concerns along Headquarters Road. Looking further afield, future connections to surrounding regional trails for all users could be beneficial to the operation of this venue which has future planned on-site active transportation improvements and planned improved access to recreational trails and the Tsolum River. The Comox Valley Aquatic Centre could also be better integrated with large employment and educational destinations such as the North Island Hospital, North Island College, and surrounding trail networks.

The routes of regional significance are shown on the [Regional Active Transportation Network Map](#).

3.5 Facility Design

The Comox Valley ATNP sets out to establish a variety of facilities to ensure the comfort and safety of all active transportation users travelling throughout the Comox Valley. These facilities aim to enhance the active transportation network while supporting financially responsible infrastructure development that is compatible with MoTI guidelines, nearby road design, and function, as well as surrounding context, land use, and rural character. The facility categories and types are summarized in **Table 5** below.

TABLE 5. SUMMARY OF ACTIVE TRANSPORTATION FACILITY TYPES

Category	Facility Types
1. Multi-Use	a. Bicycle Accessible & Walkable Shoulders
	b. Roadside Separated Multi-Use Pathway
	c. Off-Road Multi-Use Pathway
2. Walking + Rolling	a. Buffered Pedestrian Lane
3. Cycling	a. Painted Buffered Bicycle Lane
	b. Shared Lane Bicycle Route

These facility types are designed to meet best practice and, where possible, All Ages and Abilities (AAA) standards for active transportation infrastructure as outlined in the *BC Active Transportation Design Guide*. All Ages and Abilities is the approach to active transportation planning and infrastructure design that aspires to create facilities that are comfortable, convenient, safe, and attractive for everyone, regardless of age or ability. AAA facilities will be designed differently in urban and rural settings, as traffic volumes and speeds change and trip distances grow.

Currently, only sections of the One Spot Trail would be considered a AAA facility in the Comox Valley's rural areas. The Comox Valley ATNP aims to expand facility options for the diverse active transportation users in the Region.



One Spot Trail

User Groups

The range of active transportation facilities that will be developed through the implementation of the ATNP will accommodate and appeal to a wide range of active transportation users. The key active transportation user groups that facility type is targeting have been identified on the following pages using the following icons:



Walking + Rolling



Cycling



Equestrian

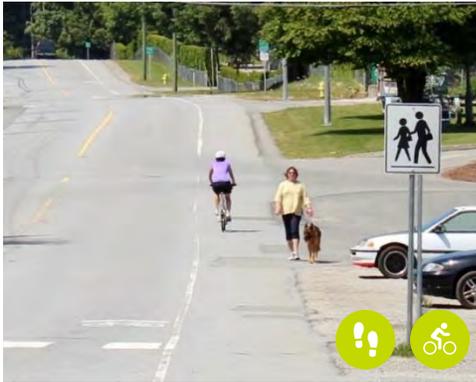
Surface Material

While paved surfaces are generally preferred for their smooth finish and reduced maintenance, soft surfaces may be more appropriate in rural areas where paved surfaces conflict with rural or agricultural character and may preclude equestrian use.

Soft surfaces represent a reduced capital cost as compared to asphalt or concrete surfaces and may be pursued where budget is limited, including certain pathway facilities using a soft surface on an interim basis with the intent to install a hard surface at a later date.

Numerous Comox Valley residents identified the challenge of chip seal surfaces along rural roads. Recognizing the maintenance benefits of chip sealing, effort should be made to ensure that chip sealing is minimized along key active transportation corridors and limited only to the portion of the roadway travelled by vehicles to retain smooth rolling surfaces where cyclists are accommodated.

For example, on Headquarters Road, north of Smith Road, a side strip along the road was paved with a smoother surfacing material to make it more suitable for cycling. This approach should be considered for other rural cycling routes where chip sealing is MoTI's preferred choice of road surfacing.



Bicycle Accessible + Walkable Shoulder (1a)

Roadside shoulder for people walking, rolling, and cycling.

Characteristics:

- Desired width of 1.8 - 2.5 m
- Desired buffer width of 0.9 m
- Roadways with speeds 50 km/h or lower and with fewer than 2,000 vehicles per day

Surface:

Asphalt



Roadside Separated Multi-Use Pathway (1b)

Roadside pathway shared by all active transportation users separated from traffic by a physical buffer.

Characteristics:

- Desired pathway width of 3.0 – 4.0 m
- Desired street buffer zone of 2.0 m
- Separation from traffic

Surface:

Asphalt (preferred), crushed aggregate may be considered



Off-Road Multi-Use Pathway (1c)

Shared pathway with space for walking, rolling, cycling, and equestrian users on off-road corridors like greenways, railways, or utility rights-of-way.

Characteristics:

- Desired width of 3.0 – 4.0 m
- Desired street buffer zone of 2.0 m (if required)
- Dedicated active transportation route away from traffic

Surface:

Asphalt (preferred), concrete, crushed aggregate, or stabilized earth



Buffered Pedestrian Lane (2a)

Pedestrian-specific on-street facility separating people walking from traffic with a painted or physical buffer.

Characteristics:

- Desired width of 2.0 m
- Lane buffered by longitudinal pavement markings or vertical separation such as bollards

Surface:

Asphalt



Painted Buffered Bicycle Lane (3a)

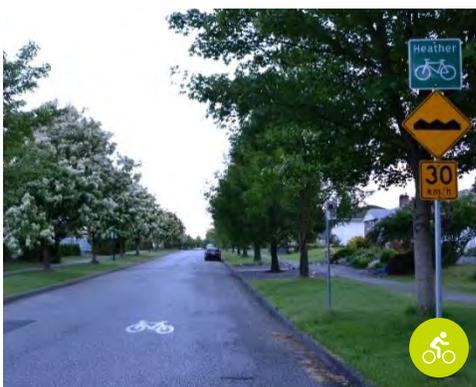
On-street cycling facility that provide dedicated space for cyclists through a painted line and buffer area.

Characteristics:

- Desirable width of 2.0 m
- Desirable street buffer of 0.6 - 0.9 m
- Typically, uni-directional on both sides of a roadway

Surface:

Asphalt



Shared Lane Cycling Route (3b)

Low volume, low speed roads that provide safe, comfortable cycling conditions shared with traffic.

Characteristics:

- Low traffic speed, low traffic volumes
- Road width permits vehicles to overtake cyclists
- Preferred on roadways with speeds 50 km/h or lower and with fewer than 500 vehicles per day

Surface:

Asphalt

4. Actions + Monitoring

Success in meeting the ATNP framework requires a targeted and strategic approach to implementation. The following section contains the path forward toward realizing the objectives of the ATNP, describing priority investments in active transportation infrastructure, opportunities for regional collaboration, and a monitoring program to track progress over time.

4.1 Priority Projects

The Long-Term Active Transportation Network represents the build-out of active transportation facilities that will occur in the rural areas over decades. Recognizing the desire to advance improvements in the coming years, a series of priority projects have been identified that are to be pursued as highest priority. These projects represent a strategic approach to infrastructure improvement, representing short-term investments that address locations of highest priority and represent good value to the community. Many have been discussed previously as part of past planning initiatives and have generally been acknowledged as the most important active transportation projects to address current issues and enhance network connectivity.

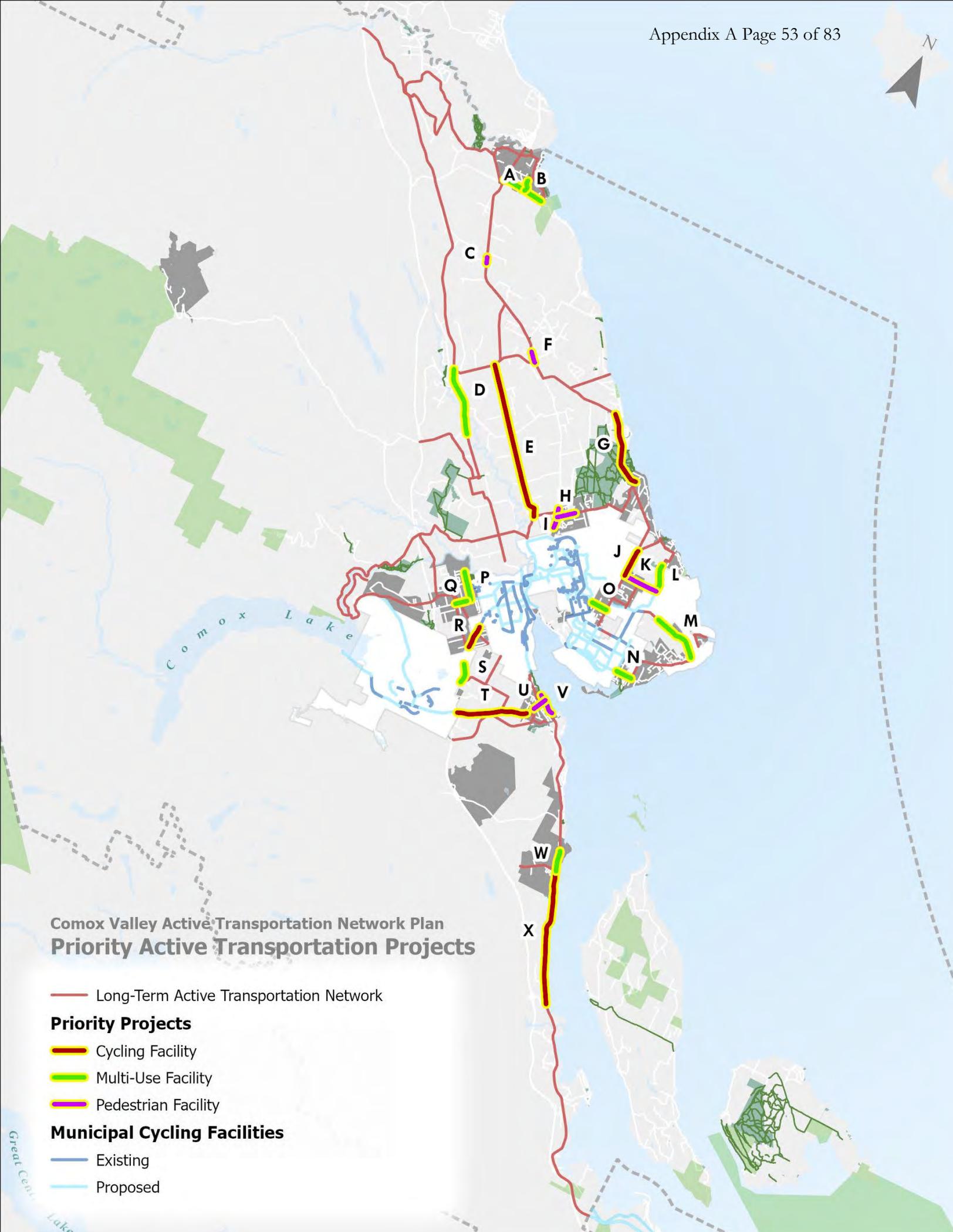
The priority projects are identified in the map [Priority Active Transportation Projects](#) on subsequent pages and are described in **Table 6**, which include:

- **7 Pedestrian Projects**
- **6 Cycling Projects**
- **11 Multi-Use Projects**

It should be noted that the majority of the identified priority projects fall within roadways under the Ministry of Transportation and Infrastructure’s jurisdiction and are subject to design requirements and approvals from MOTI. The CVRD intends to work cooperatively with the MOTI, as well as local government agencies, to realize safe, continuous active transportation facilities along rural roads. The ultimate alignment and facility type for each priority project will be further explored and confirmed as each project is advanced through subsequent design phases.

How Were Priority Projects Chosen?

- Community feedback and support during engagement activities
- Conversations with specific transportation stakeholder groups
- Access to key destinations such as residential and commercial areas, school, community halls and bus stops
- Areas that address a network gap or connect to future facilities
- Routes of regional significance that connect municipalities, K’omoks First Nation, rural areas, and neighbouring areas
- Locations that address a known safety concern
- Locations within the Pedestrian Facility Development Areas



Comox Valley Active Transportation Network Plan
Priority Active Transportation Projects

— Long-Term Active Transportation Network

Priority Projects

— Cycling Facility

— Multi-Use Facility

— Pedestrian Facility

Municipal Cycling Facilities

— Existing

— Proposed

TABLE 6. ACTIVE TRANSPORTATION PRIORITY PROJECTS

		Length	Facility Type	Description	Cost
A	Paulsen Rd	600 m	Bicycle Accessible and Walkable Shoulder	Multi-use roadside shoulder connection to Miracle Beach Elementary from Miracle Beach Dr. Could include crossing improvements depending on the location of connecting facilities.	\$1.3-million
B	Miracle Beach Dr	2.2 km	Roadside Separated Multi-Use Pathway	Multi-use roadside connection from Highway 19A to Miracle Beach Provincial Park. Will provide connections to Paulsen Rd and Miracle Beach Elementary.	\$4.5-million
C	Highway 19A (Black Creek)	300 m	Buffered Pedestrian Lane	Buffered pedestrian lane connecting commercial and community amenities between Black Creek Rd and Black Creek Community Church.	\$300,000
D	One Spot Trail (Headquarters Rd to Tsolum Spirit Park)	3.4 km	Off-Road Multi-Use Pathway	Off-road, multi-use facility extension and improvements on the One Spot Trail across the Tsolum River through Tsolum Spirit Park to Headquarters Rd.	\$1.8-million
E	Headquarters Rd	8 km	Bicycle Accessible and Walkable Shoulder	Roadside shoulder cycling facilities on Headquarters Rd from Rennison Rd to Merville Rd.	\$17.4-million
F	Highway 19A (Merville)	600 m	Buffered Pedestrian Lane	Buffered pedestrian lane connecting commercial and community amenities between Merville Community Hall and transit stops south of Merville Rd.	\$500,000
G	Bates Rd	3.8 km	Bicycle Accessible and Walkable Shoulder	Roadside shoulder cycling facilities on Bates Rd from Coleman Rd to Waveland Rd through Seal Bay Nature Park.	\$8.3-million
H	Huband Rd	900 m	Buffered Pedestrian Lane	Buffered pedestrian lane between Highway 19A and Mottishaw Rd connecting to Huband Elementary with potential crossing improvements at Mottishaw Rd.	\$800,000
I	Highway 19A (near Huband Rd)	1 km	Buffered Pedestrian Lane	Buffered pedestrian lane between the City of Courtenay boundary and Parker Rd with potential crossing improvements at Huband Rd.	\$800,000

TABLE 6. ACTIVE TRANSPORTATION PRIORITY PROJECTS, cont.

		Length	Facility Type	Description	Cost
J	Anderton Rd	1.4 km	Bicycle Accessible and Walkable Shoulder	Roadside shoulder cycling facilities on Anderton Rd from Ellenor Rd to Ryan Rd.	\$3.1-million
K	Ryan Rd E	1.8 km	Buffered Pedestrian Lane	Buffered pedestrian lane between Anderton Rd and Military Row connecting commercial and community amenities, including Airport Elementary and Comox Valley Regional Airport.	\$1.4-million
L	Little River Rd	1.4 km	Bicycle Accessible and Walkable Shoulder	Multi-use roadside shoulder facilities between Kilmorley Rd and Ryan Rd E connecting to commercial and community amenities, including Airport Elementary and Comox Valley Regional Airport.	\$3 million
M	Knight Rd	2.6 km	Bicycle Accessible and Walkable Shoulder	Enhancements to multi-use roadside shoulder facilities on Knight Rd from Glacier Greens Golf Course to Lazo Rd.	\$5.8-million
N	Lazo Rd	800 m	Bicycle Accessible and Walkable Shoulder	Multi-use roadside shoulder facilities on Lazo Rd from Torrence Rd to Balmoral Rd.	\$1.8-million
O	Idiens Way	800 m	Bicycle Accessible and Walkable Shoulder	Multi-use roadside shoulder facilities on Idiens Way from Anderton Rd to the City of Courtenay boundary.	\$1.8 million
P	Powerhouse Rd	1.5 km	Bicycle Accessible and Walkable Shoulder	Multi-use roadside shoulder facilities on Powerhouse Rd from Rachel Rd to Lake Trail Rd. Will connect to Ruth Master Greenway, Arden Elementary, and multi-use facility on Lake Trail Rd.	\$3.2-million
Q	Lake Trail Rd	600 m	Roadside Separated Multi-Use Pathway	Multi-use roadside separated pathway on Lake Trail Rd to extend planned facility in the City of Courtenay. Will provide connection to Arden Elementary.	\$1.3-million

TABLE 6. ACTIVE TRANSPORTATION PRIORITY PROJECTS, cont.

		Length	Facility Type	Description	Cost
R	Cumberland Rd	1.2 km	Painted Buffered Bicycle Lane	Separated bicycle lane facility from the Village of Cumberland boundary to City of Courtenay boundary. Key connection between the member municipalities and future bicycle networks in these communities.	\$900,000
S	Comox Valley Pkwy	1 km	Roadside Separated Multi-Use Pathway	Paved multi-use roadside separated pathway from the Village of Cumberland boundary towards the City of Courtenay. Key connection between the member municipalities and future bicycle networks in these communities. Routing could utilize adjacent side road in-place of Comox Valley Pkwy.	\$2.1 million
T	Royston Rd (Trent Rd to Cumberland)	3.5 km	Painted Buffered Bicycle Lane	Separated bicycle lane facility from the Village of Cumberland boundary to Cameron Rd. Key connection between population centres and future bicycle network in Cumberland.	\$2.7-million
U	Royston Rd (Marine Dr to Hyland Rd)	700 m	Buffered Pedestrian Lane	Buffered pedestrian lane between Marine Dr and Hyland Rd connecting to the Royston Seaside Trail, Royston Elementary with potential crossing improvements at Livingston Rd and Highway 19A.	\$600,000
V	Marine Dr / Royston Seaside Trail	1.1 km	Buffered Pedestrian Lane	Buffered pedestrian lane between Hayward Ave and Ross Rd connecting to the Royston Seaside Trail.	\$900,000
W	Highway 19A (Union Bay)	1 km	Bicycle Accessible and Walkable Shoulder	Multi-use roadside shoulder facilities on Highway 19A in Union Bay between Jones St and McLeod Rd.	\$2.3-million
X	Highway 19A (Union Bay to Buckley Bay)	6.8 km	Bicycle Accessible and Walkable Shoulder	Roadside shoulder cycling facilities on Highway 19A between McLeod Rd in Union Bay and to Buckley Bay Rd in Buckley Bay.	\$14.8-million

4.2 Policies + Programs

Policies and programs are an important avenue to ensure that opportunities to support the build-out of new active transportation facilities are realized. This includes changes in policies, new regulations, and public facilities.

Education and School Travel Planning

Embedding a level of ease and familiarity with active transportation amongst the next generation. Active and Safe Routes to Schools programs (ASRTS) aim to improve safety, health, and fitness habits for students. Programs require partnerships among municipalities, school districts, community, and parent volunteers (often parent advisory committees), and road safety and law enforcement agencies.

The CVRD and the member municipalities should work with partners to build upon the past success of the Collaborative School Travel Planning initiative in the Comox Valley which included diverse community partners all working towards making active transportation the new normal for students within the region.

Most elementary schools throughout the region have completed the planning initiative. However, actions identified throughout the planning process have not been implemented, nor incorporated into local and/or regional project priorities. At a minimum this program should be completed at all rural schools. This would require funding for the initiative itself, as well as ongoing active transportation funding to address the recommendations.

A School Travel Program could be established throughout the region, further strengthening regional coordination (see **Section 4.3**) while providing educational benefit for emerging network users. Other considerations that could fit within a regional School Travel Program include, but are not limited to:

- Develop a consistent regional evaluation strategy for Active and Safe Routes to School Programs
- Act as coordinator, working with partners to deliver programs and special events (Bike to School Week, etc.)
- Roll out a region-wide cycling skills course to school-aged children (building on, or supporting programming currently provided by Comox Valley Cycling Coalition)
- Pursue long-term, stable funding for an Active and Safe Routes to Schools Program
- Provide expertise to serve as a resource for municipalities and other groups

Public Bicycle Facilities

Short- and long-term bicycle parking provide cyclists somewhere to leave their bicycles whether for a short trip to fulfill essential tasks, or throughout the workday. Policies specifying bicycle parking requirements for new construction and redevelopment ensure that cyclists can depend on parking availability.

To encourage consistent and sufficient provision of bicycle parking throughout the region, the CVRD should pursue the following actions:

- Develop requirements for bicycle parking and bicycle end-of-trip facilities in both newly constructed buildings and redevelopment.
- Consider adopting the requirements for short-term (Class I) and long term (Class II) parking.
- Work with member municipalities to prioritize the installation and upgrade of bicycle parking and charging facilities for electric vehicles in regional centres, villages, and transit hubs and update parking requirements as needed.



Public bike parking, Courtenay City Hall

Lighting and Public Safety

Standards for lighting and other public safety measures should be developed to align with best practice for active transportation corridors. Enhanced safety standards will enable comfortable travel by active transportation at various times of day and in all seasons, particularly increasing the viability of active modes for those commuting during the early morning or late evening.

Lighting and other public safety standards should be appropriate and respectful of the Region’s rural and urban contexts and provide adequate lighting for multi-modal transportation, including vehicles, bicycles, pedestrians, and those using mobility devices. Priority for lighting projects should be placed on transit routes and around transit stops, on high volume active transportation routes, and in areas of known safety concerns.

Lighting improvements on rural corridors will be under the jurisdiction of MoTI and must be consistent with the Ministry’s standards and respect the CVRD’s *Dark Sky Policy*.

Equestrian Users

The Province defines active transportation as “any form of human-powered transportation, including walking, cycling, or rolling using a skateboard, in-line skates, wheelchair, or other wheel-based forms of human-powered transportation.” Other active modes could include winter-based active modes, water-based active modes, and horseback riding, although these modes tend to be used more for recreation than daily transportation and are not therefore the focus of this Active Transportation Network Plan.

Multi-use pathways are intended to be used by a wide range of users with varying ages, abilities, operating speeds, and dimensions. Notable potential uses of multi-use pathways within the CVRD include horseback riding which may warrant special consideration. When changes of expansion projects occur along known equestrian corridors considerations for their use should be explored. In addition, trail etiquette should be encouraged to support a conflict-free environment for all users.



Roadside equestrian warning sign

Wayfinding

A common wayfinding system helps active transportation users identify key connections and destinations to guide their journeys and support trip planning.

A common set of guidelines for directional signage will contribute to making the region more universally accessible by providing consistent and predictable messaging while also increasing awareness and promotion of the network.

Developing a wayfinding signage approach that considers best practices for sign colour, placement, frequency, scale, and content ensures consistency across the region. Identifying regionally accepted signage standards could increase the likelihood that wayfinding is included alongside capital projects and support a more integrated active transportation network.



Existing wayfinding, Piercy Road

Land Development

Active transportation facility development in rural areas relies heavily on the presence of continuous rights-of-way, whether road and transportation dedications, utility corridors or otherwise. The CVRD intends to work with the Ministry of Transportation and Infrastructure to achieve new and widened rights-of-way through subdivision applications to create continuous active transportation corridors through rural areas.

Further, the CVRD intends to work to retain all existing rights-of-way for the potential for active transportation facility development in future.

Development Regulations

All levels of government within the Comox Valley are encouraged to revisit and update their development regulations to ensure they support regional active transportation priorities and to ensure active transportation objectives are achieved through land development. The following are some of the opportunities to update development regulations:

- Update engineering and development standards for consistency throughout the region and to ensure active transportation design best practices are achieved
- Establish requirements for bicycle parking and cycling end-of-trip facilities (showers, change rooms) in land use regulations
- Create or update design guidelines to encourage active and sustainable transportation facilities above-and-beyond those included in regulation

Facilities Maintenance

Sweeping and road clearing was cited by Comox Valley residents as a key issue, particularly on roadside shoulders in rural areas. As new roadside facilities are developed in future and a greater number of cycling trips are made in the Comox Valley, the need to maintain current facilities will be greater and expand maintenance efforts required to ensure proper upkeep on the regional network.

Improved sweeping and road clearing will require additional resources. These responsibilities are primarily assumed by the Ministry of Transportation and Infrastructure, as rural roads fall within their jurisdiction. Recognizing the desire for increased maintenance, as well as the financial commitment that would be required, the CVRD should continue to liaise with the Ministry to identify opportunities to prioritize routine maintenance on key active transportation corridors, as well as to seek opportunities to increase maintenance capacity to improve on current levels and in anticipation of future active transportation facilities. Further, and where possible, future road maintenance contracts should be updated to include a greater level of sweeping, snow clearing, and general maintenance along identified active transportation routes.

Reducing the use of chip seal surfaces or, at a minimum, using asphalt along road edges along key active transportation corridors is another opportunity to enhance cycling conditions on rural roads.

4.3 Regional Coordination

The successful implementation of this regional Active Transportation Network Plan will require the CVRD and its member municipalities and partners to think ‘bigger and bolder’ to achieve shared goals and GHG reduction targets. In addition, the goals, objectives, and supporting policies outlined in the RGS (Bylaw No. 120, 2010, see **Section 2.4** above) outline the need for regional coordination on a variety of issues that cross jurisdictional boundaries, including transportation. The City of Courtenay, Town of Comox, and the Village of Cumberland have identified objectives and requirements for transportation mobility within their official community plans and, where available, their transportation master plans or equivalent supporting policies. Implementation of these plans also has regional benefit that may be best realized through improved regional coordination both through governing leadership and staff-based avenues.

A sustained regional funding mechanism should be sought to support the emerging network’s development and work towards achieving the regional and local transportation goals and help soften the jurisdictional boundaries that define each community in name with a active transportation network that connects them all. As an example, the establishment of a regional trails service could further enable regional coordination and tax requisition to further the implementation of this Plan through infrastructure and the acquisition of necessary land to make critical regional connections over the long term.

Planning and Promotion

Transportation is directly linked to various aspects of local and regional planning and is not a localized system. It is important that the CVRD’s ATNP not belong only to the CVRD, but that it also be considered the plan of member municipalities and electoral areas – This should be recognized as a regional plan that strengthens the networks’ integration and supporting programming throughout the region and will fit under the umbrella of the CVRD’s Regional Growth Strategy service which will plan for regional transportation, of which active transportation is included.

A coordinated approach can be achieved with the formation of a Technical Advisory Committee (TAC) which could consist of representatives from the CVRD, all member municipalities, K’ómoks First Nation, Ministry of Transportation and Infrastructure (MoTI), School District 71, and BC Transit as described within the 2020 Memorandum of Understanding regarding regional transportation planning within the Comox Valley. The TAC should collaboratively establish a data-collection and monitoring program including key performance indicators for the region, identify and recommend regional active transportation priorities, support multi-modal transportation planning and policy development, and public education and promotion of active transportation throughout the region. A central point of contact and a dedicated staff person to act as a regional representative for all transportation-based considerations within the region would be an asset to realizing the vision of this plan and other RGS goals.

Strategic Investments

Building on the ATNP, a strategic and sustained approach should be undertaken to guide the long-term outlook of key active transportation investments, adequately fund future growth, and support the development of an integrated transportation system.

Active transportation infrastructure requires a level of investment which may be difficult to deliver on a sustained basis to meet future demand. The TAC should work as a united voice to leverage funding from senior levels of government for regionally significant transportation projects both within member municipalities and the rural areas, with implementation and operations being shared between local, regional, and senior governments as identified below.

To realize the vision of the ATNP the TAC may also make recommendations regarding where regional funding for transportation will be directed and which projects should be pursued through various funding and grant opportunities. Together, the region and its member municipalities and partners can leverage more funding and momentum to realize the goals laid forth in this plan.



Roadside pathway, Cumberland

Funding

While the Active Transportation Network Plan is estimated to cost approximately \$400 million over the next 25 years and beyond, these costs can be shared by pursuing external funding from other levels of governments, partnerships with other organizations and the development industry, and integration of improvements with other plans and projects.

This section describes several strategies that the CVRD may consider to leverage its investments and maximize its ability to implement transportation improvements. The CVRD should pursue all available sources of funding for transportation facilities and other supporting programs. As funding opportunities change regularly, the information in this section is subject to change. The CVRD and member municipalities should regularly check with all levels of government to keep up to date on current funding opportunities.

Capital Planning

The CVRD should incorporate the recommendations from the Active Transportation Network Plan into its five-year financial plan and capital expenditure program to ensure that the projects are accounted for in the region's capital planning process. To accommodate this, the CVRD may seek changes to its capital budget to fund the implementation of this Plan over the medium- and long-term. The CVRD should also seek to integrate transportation improvements with other capital projects, such as utility projects and work to highlight the importance of active transportation facilities as a game changer in the region.

Development Process

An important component of the implementation of the Active Transportation Network Plan will be the CVRD's ability to leverage transportation investments during planning of new development projects. This can be done through the Comox Valley Regional District Planning Procedures and Fees Bylaw No. 328 and may focus more on bicycle amenities and active transportation connections on and through development sites.

Provincial Programs and Initiatives

The B.C. Active Transportation Infrastructure Grants Program offers two grant options for Indigenous governments and local governments, including municipalities, regional districts, and Islands Trust. Network planning grants help communities develop active transportation network plans to support active transportation for all ages and abilities.

To ensure maximum success at obtaining grant funding, the CVRD should strive to have grant-ready concepts pre-developed for application and work closely with project partners to increase chance of funding successes

Federal Funding

There are several programs that provide funding for environmental and local transportation infrastructure projects in municipalities across Canada. Typically, the federal government contributes one third of the cost of municipal infrastructure projects. Provincial and municipal governments contribute the remaining funds, and in some instances, there may be private sector investment as well.

National Active Transportation Strategy

In March 2021 the Government of Canada announced \$400 million over five-years to help build new and expanded networks of pathways, bike lanes, and pedestrian bridges. This is the first federal fund dedicated to building active transportation infrastructure throughout Canada. Funding details are forthcoming.

Green Municipal Funds

The Federation of Canadian Municipalities manages the Green Municipal Fund. This fund is intended to support municipal government efforts to reduce pollution, reduce greenhouse gas emissions, and improve quality of life. The expectation is that knowledge and experience gained in best practices and innovative environmental projects will be applied to national infrastructure projects.

Carbon Tax Rebate

Each municipality that has signed the Climate Action Charter receives an annual rebate based on completion of the CARIP form. The CVRD could choose to direct this funding towards sustainable transportation projects, such as funding bicycle, pedestrian, and transit infrastructure.



Shared lane markings, Comox

ICBC

ICBC provides funding for road improvements, including pedestrian and bicycle infrastructure, particularly where these have the potential to reduce crashes, improve safety, and reduce claims costs to ICBC. Funding is available through ICBC's Road Improvement Program, and other ICBC programs include the Speed Watch Program (through the Community Policing Centres), Speed and Intersection Safety Program, Counter Attack, Operation Red Nose, and Road Sense Speaker Program for Schools. In addition to capital funds, ICBC may also be interested in supporting data collection throughout the region which could support the CVRD's monitoring efforts.

Private Sector

Some corporations or major employers wish to be good corporate neighbours—to be active in the community and to promote environmentally-beneficial causes. Bicycle and pedestrian routes and facilities in particular are well suited to corporate sponsorship and have attracted sponsorship in the past.

Development Cost Charges

The Comox Valley Regional District Parkland Development Cost Charges Bylaw No. 238, 2012 imposes parkland development cost charges. This could be updated to include projects identified in the Active Transportation Network Plan such as off-street multi-use pathways or other projects such as wayfinding on lands owned by the regional district.

Health Funding

Various health-focused funding opportunities are available and may support different components of this Active Transportation Network Plan such as funding for school-based programming and education, age-friendly amenities, and accessibility improvements, etc.

Tourism Funding

The implementation of the Active Transportation Network may also have a positive impact on tourism activity within the CVRD. Highlighting the connection between tourism, recreation, and active transportation facilities and regional connectivity typically increases funding opportunities. The Province offers various tourism funding sources that may support components of this plan including funding for tourism-based events which may help build the culture and promote active transportation within the region, regional economic trusts, indigenous tourism resources, and community tourism resources.

4.4 Monitoring Framework

A monitoring strategy is recommended to ensure that the ATNP is being implemented as intended and to determine the extent to which successful implementation is achieving identified goals and targets. Monitoring will enable the CVRD and regional partners to appropriately allocate monetary and staff resources to implement prioritized initiatives, as well as support future decision making and adjustments to ATNP implementation as required. This may be completed as part of the CVRD's Regional Growth Strategy monitoring.

The monitoring framework described on the following page has been designed to be meaningful, measurable, and manageable.

Manageable

Monitoring takes into account resource limitations and focuses effort where it is most important and may utilize established information.

Measurable

The program includes criteria that are measurable using data that is available or may be readily obtained.

Meaningful

The monitoring strategy will yield meaningful results and point to success in achieving the vision, goals, and targets of the ATNP.

Measuring Progress + Change

Progress indicators and measures of success are shown and described on the following pages. Those goals that are most applicable to the measures provided have been identified in **Table 6**, including general measures of success for the overall ATNP and specific measures related to each of the ATNP goals. Some of these measures will monitor success related to multiple goals as identified within this framework.

An annual Regional Active Transportation Report Card, addressed through Regional Growth Strategy monitoring, is one way the CVRD and partner organizations can track progress and change relating to the identified indicators. Pursuing the report card on an annual (or bi-annual) basis will allow for both consistent tracking of change allowing for course corrections where required, as well as hold the CVRD and regional partners accountable to seeing through the intentions of the ATNP.

Monitoring the implementation of this document will directly address each of these goals to ensure that the ATNP provides the intended benefits to the Region's residents. The goals of the Comox Valley ATNP are described below.

Goal One	Ensure safe transportation choices are available for all people regardless of age or ability.
Goal Two	Observe a significant shift to sustainable transportation to support a reduction in GHG emissions.
Goal Three	Build a culture and promote active transportation.
Goal Four	Create more places for people to walk, roll, or bicycle.
Goal Five	Establish an inclusive and accessible active transportation network for all residents and visitors.
Goal Six	Coordinate and maintain a regional multi-modal transportation network.

TABLE 7. ACTIVE TRANSPORTATION REPORT CARD INDICATORS

Measure	Key Goal(s)
Implementation Progress	
Bicycle Accessible, Walkable Shoulders or Buffered Pedestrian Lanes (Projects Completed)	Goal One, Goal Four
Off-Road and/or Roadside Multi-Use Pathways (Number of Projects Completed)	
Painted Buffered Bicycle Lane and/or Shared Lane Bicycle Routes (Projects Completed)	
Transit Access (Number of Projects Completed)	Goal One, Goal Five, Goal Six
Annual Investment Levels	
Bicycle Accessible and Walkable Shoulders or Buffered Pedestrian Lanes (Annual Spending)	Goal One, Goal Four
Off-Road and/or Roadside Multi-Use Pathways (Annual Spending)	
Painted Buffered Bicycle Lane and/or Shared Lane Bicycle Routes (Annual Spending)	
Transit Infrastructure (Annual Spending)	Goal One, Goal Five, Goal Six
Network Development	
Overall Pedestrian Network (KM Pedestrian Facilities Complete)	Goal Four, Goal Five
Multi-Use Pathway Network (KM Multi-Use Facilities Complete or Upgraded)	
Bicycle Network (KM Bicycle Facilities Complete)	
Mode Share, All Trips	
Walking (%)	Goal Two
Cycling (%)	
Transit (%)	
Driving (%)	
Mode Share, Trips to Work*	
Walking (%)	Goal Two
Cycling (%)	
Transit (%)	
Driving (%)	
Mode Share, Trip to School*	
Walking (%)	Goal Two
Cycling (%)	
School Bus (%)	
Transit (%)	
Carpooling (%)	
Family Vehicle (%)	

Measure	Key Goal(s)
Active Transportation Volumes*	
Number of people walking on key corridors	Goal Two
Number of people cycling on key corridors	
GHG Emissions*	
Regional transportation-related GHG emissions (on-road, tonnes)	Goal Two
Safety	
Number of Active Transportation Facilities considered to be 'All Ages and Abilities'**	Goal One, Goal Five
Number of Reported Vehicle Collisions Involving Pedestrians or Cyclists	Goal One
Perception of Safety for Active Transportation Users***	Goal One, Goal Three
Number of New Crosswalks	Goal One
	Goal Five
Transit Integration + Access	
Proportion of transit stops that are accessible	Goal Five, Goal Six
Proportion of transit stops that are connected to accessible walking facilities	
Education + Encouragement	
Number of schools within the CVRD that have completed the Active and Safe Routes to School Program	Goal One, Goal Three, Goal Four, Goal Five, Goal Six
Number of action items completed from the Active and Safe Routes to School Action Plans	
Number of public wayfinding displays and installments	
Number of themed active transportation days at CVRD schools	Goal Three
Number of annual walking and/or cycling events including infrastructure "grand openings"	Goal Three, Goal Six
Regional Coordination	
Common wayfinding strategy or design guidelines	Goal Three, Goal Five
Regional data collection program achievements, establishment and/or expansion	Goal Six
Coordinated active transportation projects completed (Member Municipalities and CVRD)	
Active transportation projects identified in approved capital funds (Member Municipalities, CVRD)	

* Once data is available - needs monitoring program established

** Alignment with facility design found within the BC Active Transportation Design Guidelines

*** Align with existing resident satisfaction surveys or vital signs surveys, etc.

Leadership + Coordination

As is the case with many regions in the province, coordination between the Regional District and member municipalities requires clear communication and ongoing collaboration due to the jurisdiction and authority granted to each. This extends both to the provision of new infrastructure, as well as monitoring progress and change.

A key responsibility of the regional coordination role will be collecting and assessing mobility data to support the Regional Active Transportation Report Card.

- Implementation Progress
- Annual Investment Levels
- Network Development
- Mode Share, Trip to Work
- Mode Share, Trip to School
- GHG Emissions
- Education and Enforcement
- Safety
- Transit Integration + Access
- Regional Coordination



Seal Bay Nature Park

Data Collection

Specific regional multi-modal transportation data is required to support monitoring. Two means of collecting regional data are identified – regional travel data and corridor counts. As the Comox Valley ATNP is implemented, this process will be aided by the development of an ArcGIS Hub site that will assist the CVRD in monitoring progress on all RGS targets and indicators, including those related to sustainable transportation mode share and emissions reductions from on-road transportation.

Regional Travel Data

Undertaken once every five years, the Census provides a snapshot of the percentage of all trips to work made by each travel mode (i.e., travel mode split). Unfortunately, it is limited only to commute trips and does not provide supporting information on trip distance and trip origin -destination.

Regional travel data should be collected once every five years to aid in regional transportation planning efforts and to understand how residents travel throughout the region. This information can be collected using “big data” sources that utilize activity from mobile devices. This information utilizes a large dataset and provides measures in tracking ATNP progress, including the following:

- Travel mode split (all trips)
- Trip distance (length), trip duration (time)
- Trip origins – destinations (where people travel to and from)

Corridor Counts

Multi-modal traffic counts along key corridors are recommended to understand the volume and characteristic of active transportation traffic on the region’s most popular routes. This data can be used to identify the total number of active transportation users on key corridors, the number of pedestrians versus cyclists, changes in volumes over time, and hourly / daily / seasonal variations.

The CVRD and member municipalities should work to identify corridors that are to be the focus of the corridor counts. It is suggested that the program consist of 8 – 10 corridors once fully established, evenly distributed throughout the Comox Valley, and focused on corridors where active transportation infrastructure has been developed.

How Is This Data Collected?

The Comox Valley Cycling Coalition has undertaken corridor counts in past and has indicated a willingness to support regional data collection in future. This is a great opportunity for the region to benefit from the support of this group and should be utilized as the ATNP monitoring program is established.

Longer-term, the CVRD and municipal partners should work to establish a formalized corridor count program that utilizes permanent count stations in select locations along key corridors in Comox, Courtenay, Cumberland, and rural areas. These devices will allow for on-going collection (rather than limited to when people are in-field) and provide the opportunity to understand variations in active transportation user volumes by hour, day, and season.

Evaluating the Impact of Active Transportation Facilities on GHG Emissions

Analyzing the broad impacts of an active transportation facility is supported by data input both pre- and post-implementation. Most GHG-related impacts are evaluated against changes in vehicle-kilometres travelled (vkt), which is developed through the regional travel data and corridor count programs identified in this section. These inputs can be supplemented with additional information to help characterize the economic, health, and other environmental benefits of active transportation improvements in the community. As such, quantitative and qualitative inputs are both important to developing this well-rounded evaluation of a facility.

As part of the evaluation process for projects undertaken through the Green Municipal Fund, the Federation of Canadian Municipalities outlines three core aspects through which to build assessments and data collection:

Usage

Refers to how many individuals use or are expected to use the subject of the transportation project assessment funding over a given period of time.

Mode Shift

Relates to the share of trips that used to use a less desirable transportation mode and now use the active transportation project being assessed.

Trip Characteristics

Refer to typical trip distances (in km) that are estimated or now completed using the subject of the active transportation project assessment.

For example, if seeking to evaluate the change in vehicle-kilometres travelled from a new multi-use path to understand the GHG emissions reductions related to the project, the following data inputs would support this analysis:

Pre-Implementation

Usage and Mode Shift: Daily vehicle traffic volume, corridor characteristics, and facility length

Trip Characteristics: Average commute distance by mode (Census)

Post-Implementation

Usage: Active transportation user counts

Mode Shift: Survey of facility users asking question such as: Are you using the facility for transportation or leisure? If the path were not here, how would you have travelled?"

Trip Characteristics: Average commute distance by mode (Census)

APPENDIX A.

Active Transportation
Facility Design Guidelines

Facility Considerations

Several active transportation facility types have been developed for the purposes of developing a safe and comfortable long-term network that is appropriate to local context and character. All facilities designed and constructed should strive to achieve All Ages and Abilities (AAA) design standards. All Ages and Abilities is the approach to active transportation planning and infrastructure design that aspires to create facilities that are comfortable, convenient, safe, and attractive for everyone, regardless of age or ability. In rural contexts like those in the CVRD's Electoral Areas, ensuring the most appropriate facility type to achieve AAA will depend on the speed and volume of traffic on the neighbouring roadway. Therefore during the design phase specific road characteristics should be considered and either altered to align with AAA requirements (ie. reduce volumes and/or speeds), or the active transportation facility itself should be designed to provide adequate protection from motor vehicle traffic.

The multi-use, pedestrian, and cycling facilities included in the CVRD ATNP are intended to meet current best practices and are inspired by design standards outlined in the *BC Active Transportation Design Guide*. As the long-term network is developed, understanding project specific opportunities and constraints is critical to ensuring that the appropriate facility is selected and designed according to these considerations.

Multi-Use Facilities

The Long-Term Active Transportation Network identifies a variety of active transportation routes throughout the Region providing connection for diverse active modes. As such, three multi-use facilities are proposed for the Comox Valley. These facilities are designed to accommodate walking, rolling, and cycling on varying road classes and off-road trails that are appropriate for rural contexts, and that will be important components of the Region's long-term active transportation network.

This section provides design guidance for multi-use facility types under both desired and constrained conditions. The three multi-use facility types are:

- Bicycle Accessible and Walkable Shoulder (1a)
- Roadside Separated Multi-Use Pathway (1b)
- Off-Road Multi-Use Pathway (1c)

Bicycle Accessible and Walkable Shoulders (1a)

Bicycle accessible and walkable shoulders are areas in which no formal bicycle nor pedestrian facility are provided, and people pedestrians, cyclists, or equestrians may share the roadway shoulder. Shoulder widths should vary with motor vehicle traffic speed and volumes, should be paved on both sides of the roadway, and should not permit parking in the shoulder. Additionally, painted street buffers should be considered on roads with higher traffic speeds and volumes.

Shoulders are only considered to be bicycle accessible where pavement markings are present separating the shoulder from motor vehicle traffic, there is sufficient operating space, and there is a smooth, paved surface that is free of debris. Despite being bicycle-friendly, bicycle accessible shoulders are not considered to be a AAA cycling facility.

Desirable shoulder widths are between 1.8 and 2.5 m and must be a minimum of 1.5 m, with asphalt used as the surface material. Providing greater width in a shared shoulder facility will prevent conflict between users and reduce the likelihood of users having to move into motor vehicle traffic. Preferably, bicycle accessible and walkable shoulders should be adjacent to roads with fewer than 2,000 vehicles per day and a posted speed limit of 50 km/h or less. Where possible it is desirable to provide a painted buffer area between the shoulder and vehicle traffic lanes to further increase separation from traffic.

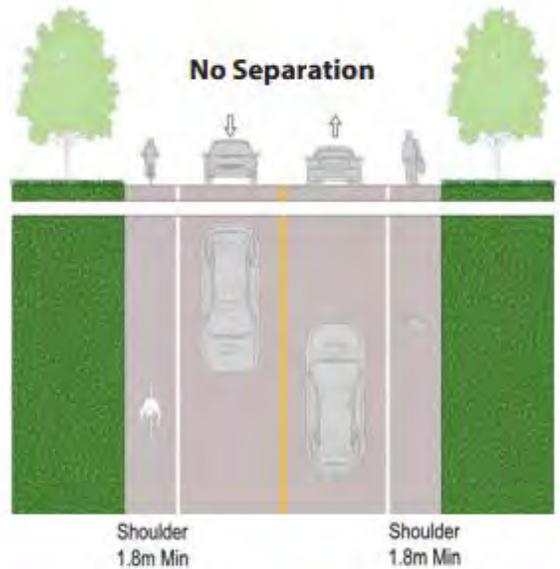
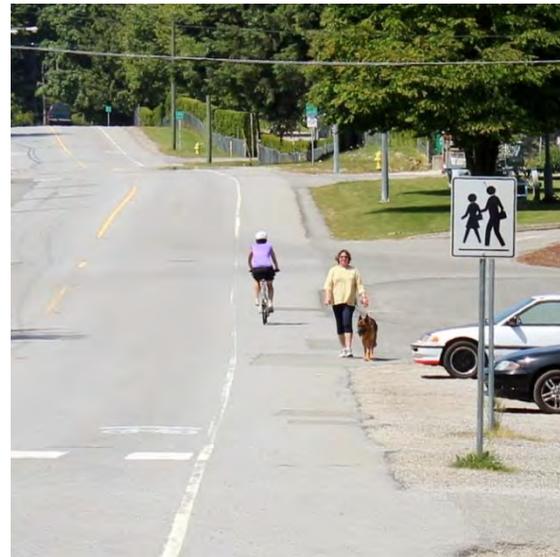


FIGURE C-27 // OFF-ROAD PATHWAY VS. NO SEPARATION

Facility Design Parameters

Shoulder Width		Traffic Characteristics		Street Buffer		Surface Material
Desirable	Constrained	Posted Speed	Volume	Desirable	Constrained	
1.8 – 2.5 m	1.5 m	≤50 km/h (preferred)	≤2,000 vpd (preferred)	1.2 m	0.9 m	Asphalt
		≤70 km/h (constrained)	≤5,000 vpd (constrained)			

Roadside Separated Multi-Use Pathway (1b)

Roadside multi-use pathways are off-street pathways shared by all active transportation users, including people walking, rolling, cycling, and on horseback. Pathways are separated from motor vehicle traffic by landscaped or other physical buffers, providing a safer, more comfortable experience for users.

This is the preferred multi-use facility option due to the greater level of separation and improved active transportation experience. Where appropriate measures are taken and sufficient width is provided for all users, these facilities can also be considered a AAA cycling route. Should pathway volumes and the ratio of cyclists to pedestrians become sufficiently high, it may be desirable to consider separate walking and cycling facilities.

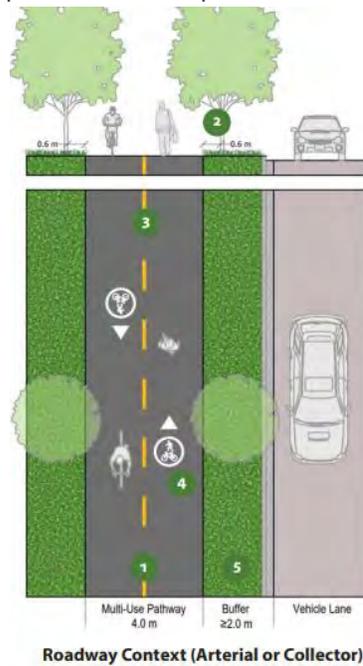
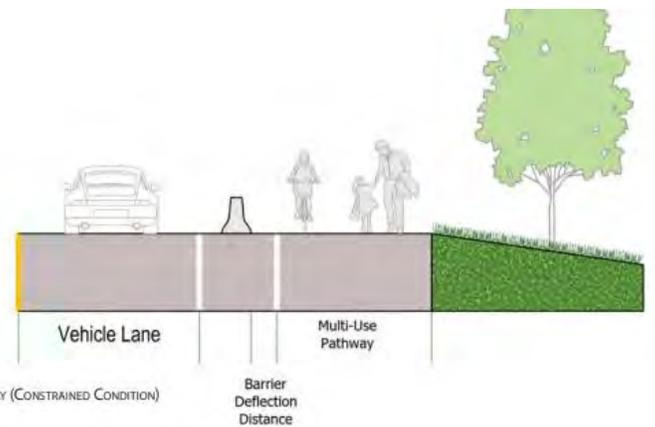


FIGURE F-67 // PROTECTED MULTI-USE PATHWAY (CONSTRAINED CONDITION)

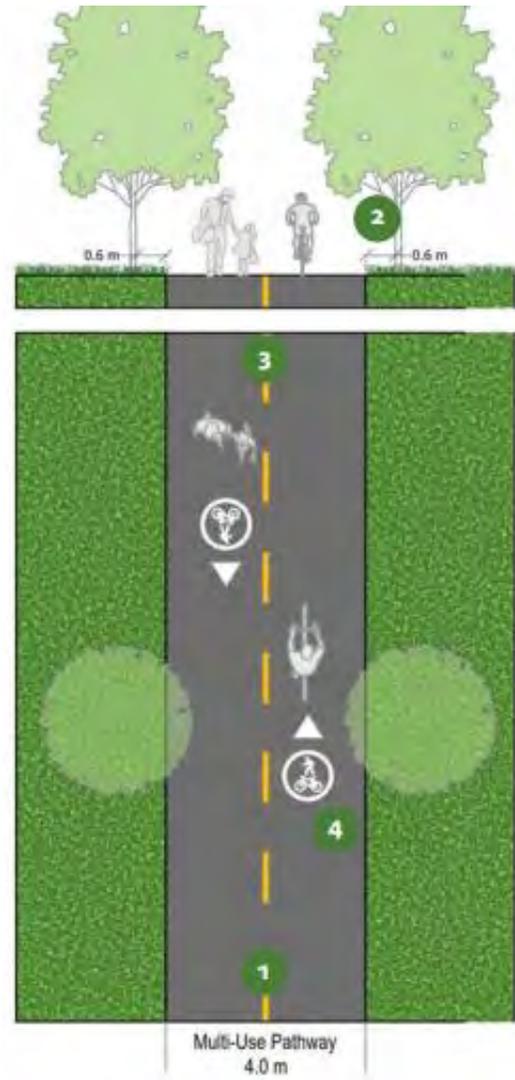


Desired widths for roadside separated multi-use pathways are between 3.0 and 4.0 m or where space is constrained 2.0 m wide. The accompanying street buffer should be a minimum 1.5 m wide, or desirably up to 2.0 m wide. Varied surface treatments may be used depending on context, adjacent land uses, and intended user groups, however asphalt or crushed aggregate are preferred.

Facility Design Parameters

Pathway Width		Street Buffer Zone		Surface Material
Desirable	Constrained	Desirable	Constrained	
3.0 – 4.0 m	2.0 m	2.0 m	1.5 m	Asphalt (preferred)

Off-Road Multi-Use Pathway (1c)



Off-Road Multi-Use Pathways are connecting trails that provide the greatest level of separation for active transportation users from motor vehicle traffic. Pathways can parallel roadways, utility and rail corridors, or existing greenway routes. Like the Roadside Separated Multi-Use Pathway facility type, Off-Road Multi-Use Pathways are shared by all active transportation users.

Facility design guidance is similar to roadside separated multi-use pathway. As such desired pathway widths are between 3.0 m and 4.0 m and could be as narrow 2.0 m wide in a constrained right-of-way. When located beside a road, a landscaped or other physical buffer zone of 2.0 m is desirable to provide separation from traffic. Design may change depending on the intended user groups, with asphalt surfaces being appropriate where pedestrians and/or cyclists are the primary user group, or crushed aggregate and wood chip surfaces if equestrian users are prevalent. Depending on surface materials these pathways could not be appropriate for people of all ages and abilities.

Facility Design Parameters

Pathway Width		Street Buffer Zone		Surface Material
Desirable	Constrained	Desirable	Constrained	
3.0 – 4.0 m	2.0 m	2.0 m	1.5 m	Asphalt, Gravel, or Wood Chips

Pedestrian Facilities

Developing pedestrian network in the Comox Valley will consist of one pedestrian facility type, the Buffered Pedestrian Lane. This infrastructure aims to support safe and comfortable walking and rolling in the Comox Valley, that increases access for residents to important community destinations. The specific characteristics and design parameters of this facility type are described in this section.

Buffered Pedestrian Lane (2a)

Buffered pedestrian lanes provide designated pedestrian space at-grade with the roadway and are intended to function like a sidewalk without the associated costs. At minimum, these lanes should be separated from motor vehicle traffic by longitudinal pavement markings. On roadways with lower speeds, vertical separation such as concrete wheel stops, or flexible and rigid bollards maybe provided to discourage motor vehicle intrusion into the pedestrian lane. These pedestrian-specific facilities should be implemented in the Pedestrian Facility Development Areas around the Core Settlement Areas and other identified pedestrian areas.



Facility Design Parameters

Lane Width		Surface Material
Desirable	Constrained	
2.0 m	1.8 m	Asphalt

Cycling Facilities

In addition to the multi-use facilities identified above, the Long-Term Active Transportation Network identifies a variety of active transportation routes that are most amenable to cycling. Cycling specific facilities are intended to accommodate safe on-road travel by bicycle and provide cyclists dedicated space or specific road treatments that support this goal.

This section provides design guidance for these facility types under both desirable and constrained conditions that also suit the characteristics of the adjacent road, including motor vehicle speed and volume. The two cycling facility types are:

- Painted Buffered Bicycle Lane (3a)
- Shared Lane Bicycle Lane (3b)

While the identified cycling facilities are designed to be comfortable and convenient, neither of the proposed facility types are considered All Ages and Abilities (AAA). However, should the opportunity arise, these facilities can be readily upgraded to provide greater separation for cyclists and achieve AAA standards.

Painted Buffered Bicycle Lane (3a)

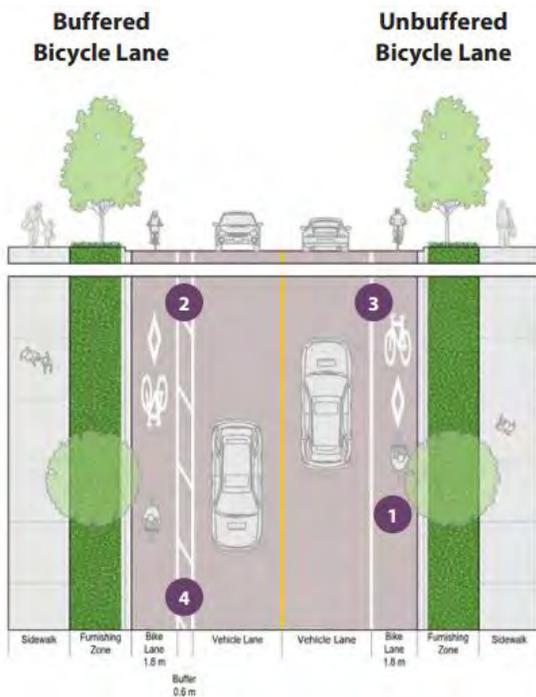
Painted and buffered bicycle lanes are on-street bicycle lanes separated from motor vehicle traffic by a painted buffer area. Painted bicycle lanes are typically uni-directional and provided on both sides of a street. These facilities are the preferred cycling facility type where there is sufficient road width, with emphasis on developing these facilities in the Core Settlement Areas and on locations connecting to existing and proposed bicycle lanes in the City of Courtenay, Town of Comox, and Village of Cumberland.

The desirable width for a bicycle lane is 2.0 m, with a constrained width of 1.5 m. The buffer between the bicycle lane and motor vehicle traffic must be 0.3 at minimum and is ideally 0.6 m. Bicycle lanes should be paved with asphalt and will not be accommodated on other surface materials.



Facility Design Parameters

Lane Width		Street Buffer		Surface Material
Desirable	Constrained	Desirable	Constrained	
2.0 m	1.5 m	0.6 m	0.3 m	Asphalt



Shared Lane Bicycle Route (3b)

Shared lanes are low traffic, low speed local streets where cyclists share the road with motor vehicles but are given priority. Shared lanes are preferable to an unmarked cycling route where road width cannot accommodate a bike lane or full shoulder, but demarcated facilities are preferred where there is sufficient road width. These facilities may also include traffic calming and diversion to support lower traffic speeds and volumes. In rural areas these facilities are not the preferred facility type due to the lack of alternate through routes and should be used as a supplementary facility type to the higher design standard facilities such as painted bicycle lanes and off-road multi-use pathways.



The desired road clear width for shared lane bicycle routes is 5.5 m, and a minimum of 4.3 m in constrained circumstances. Traffic characteristics of shared lane bicycle routes are an essential consideration and will only be accommodated on roads with fewer than 500 vehicles per day, desirably fewer than 500 vehicles per day. Since they are most likely to be located on local roads, shared lane bicycle lane routes will be accommodated on asphalt surfaces.

Facility Design Parameters

Road Clear Width		Traffic Characteristics		Surface Material
Desirable	Constrained	Desirable	Maximum	
5.5 m	4.3 m	≤500 vehicles per day	≤500 vehicles per day	Asphalt

