



CAMPBELL RIVER MASTER  
TRANSPORTATION PLAN AND DOGWOOD  
CORRIDOR STUDY  
Baseline Conditions Report

Prepared For: City of Campbell  
River Date: October 19, 2022  
Our File No: 3265.B01  
Your File No: RFP 21-54

**WATT** VICTORIA  
302 – 740 Hillside Ave  
Victoria, BC V8T 1Z4  
250-388-9877



## TABLE OF CONTENTS

<b>1.0</b>	<b>OVERVIEW</b> .....	<b>1</b>
1.1	Project Timeline .....	2
<b>2.0</b>	<b>COMMUNITY PROFILE</b> .....	<b>4</b>
2.1	Location .....	4
2.2	Demographic Summary .....	6
2.3	Transportation Mode Share .....	6
2.4	Land Use & Trip Generators.....	8
<b>3.0</b>	<b>REVIEW OF PLANS &amp; TECHNICAL STUDIES</b> .....	<b>11</b>
3.1	Municipal Plans & Studies .....	11
<b>4.0</b>	<b>PUBLIC &amp; STAKEHOLDER ENGAGEMENT</b> .....	<b>15</b>
4.1	Who We Heard From & Travel Patterns .....	16
<b>5.0</b>	<b>PEDESTRIAN &amp; TRAIL NETWORK CONDITIONS</b> .....	<b>22</b>
5.1	Overview.....	22
5.2	Sidewalk Network.....	23
5.3	Sidewalk Standards.....	23
5.4	Pedestrian Counts.....	26
5.5	Crossings .....	27
5.6	Trail Network.....	28
5.7	Barriers to Walking.....	28
5.8	What We Heard from the Community.....	35
<b>6.0</b>	<b>CYCLING NETWORK CONDITIONS</b> .....	<b>39</b>
6.1	Overview.....	39
6.2	Cycling Network .....	39
6.3	Cycling Standards .....	42
6.4	Cycling Counts .....	42



6.5	Barriers to Cycling.....	43
6.6	What We Heard from the Community.....	50
7.0	TRANSIT NETWORK CONDITIONS .....	54
7.1	Overview.....	54
7.2	School Bus Service Overview .....	55
7.3	BC Transit Service Overview .....	55
7.4	Bus Stop Infrastructure.....	57
7.5	Ridership Summary.....	58
7.6	Ferry Service Overview .....	60
7.7	Ferry Infrastructure .....	60
7.8	What We Heard from the Community.....	61
8.0	STREET & TRAFFIC CONDITIONS.....	65
8.1	Road Network & Classification .....	65
8.2	Road Standards .....	68
8.3	Traffic Volumes.....	71
8.4	Traffic Conditions .....	73
8.5	Traffic Collisions .....	75
8.6	Traffic Speeds .....	81
8.7	Traffic Calming.....	83
8.8	Goods Movement.....	83
8.9	What We Heard from the Community.....	84
9.0	PARKING .....	88
9.1	Off-Street Parking.....	88
9.2	On-Street Parking .....	91
9.3	Downtown Parking Review .....	91
10.0	WHAT WE HEARD ON VISIONING .....	93



## APPENDICES

### Appendix A – Online Survey Responses

## FIGURES

Figure 1 - Age and Gender of Survey Respondents (Online Survey) .....	16
Figure 2 - Top Destinations in Campbell River (Online Survey) .....	17
Figure 3 - Main Modes of Transportation (Online Survey) .....	18
Figure 4 - Frequency of Active Transportation Use (Online Survey) .....	19
Figure 5 - Top Issues / Barriers to Walking Around Campbell River (Online Survey) .....	35
Figure 6 - Top Roads that Feel Unsafe for Walking (Online Survey).....	36
Figure 7 - Top Opportunities to Improve the Walking Environment in Campbell River (Online Survey).....	37
Figure 8 - Top Issues / Barriers to Cycling Around Campbell River (Online Survey) .....	50
Figure 9 - Top Roads that Feel Unsafe for Cycling.....	51
Figure 10 - Top Opportunities to Improve the Cycling Environment in Campbell River (Online Survey).....	52
Figure 11 - Top Issues / Barriers to Using Transit Within and Through Campbell River (Online Survey).....	61
Figure 12 - Top Opportunities for Improving Transit in Campbell River (Online Survey) .....	62
Figure 13 - Top Challenges to Driving Within and Through Campbell River (Online Survey) .....	84
Figure 14 - Most Desired Improvements for Driving Within and Through Campbell River (Online Survey).....	85



## MAPS

Map 1 – Jurisdictional Map.....	5
Map 2 – Land Uses + Key Destinations.....	9
Map 3 – Pedestrian + Trail Network.....	25
Map 4 – Cycling Network.....	41
Map 5 – Transit Network.....	56
Map 6 – Transit Boarding + Alighting Activity.....	59
Map 7 – Road Classifications.....	67
Map 8 – Average Annual Daily Traffic.....	72
Map 9 – Level of Service – PM Peak Hour.....	74
Map 10 – Total Vehicle Collisions (2017-2021).....	77
Map 11 – Collision Rates (2017-2021).....	78
Map 12 – Posted Speed Limits.....	82



## TABLES

Table 1 – Mode Share, Campbell River vs. BC .....	6
Table 2 – Mode Share, Campbell River vs. Neighbouring Urban Areas.....	7
Table 3 – Existing Sidewalk Standards .....	23
Table 4 – Peak Hour Pedestrian Counts .....	26
Table 5 – Existing Walkway, Greenway, Trail & Bikeway Standards.....	28
Table 6 – Existing Cycling Facility Standards.....	42
Table 7 – Peak Hour Cycling Counts.....	43
Table 8 – Existing Road Network Inventory.....	66
Table 9 – Existing Corner Radii Standards.....	69
Table 10 – Existing Road Cross-Section Standards.....	70
Table 11 – Road Classifications to be Reviewed.....	71
Table 12 – Top 10 Highest Collision Locations in Campbell River .....	75
Table 13 – Top 10 Vehicle Collision Rate Locations in Campbell River .....	76
Table 14: Top Bicycle Collision Locations in Campbell River .....	79
Table 15: Top Pedestrian Collision Locations in Campbell River .....	80
Table 16 – Existing Design Speed Standards .....	81





## 1.0 OVERVIEW

The City of Campbell River is updating its Master Transportation Plan (MTP) with the goal to improve transportation options across the City for people of all ages and abilities. The MTP has a 25-year planning horizon and will guide the City’s decisions related to all aspects of the transportation network.

The purpose of the Baseline Conditions Report is to provide a comprehensive analysis of Campbell River’s transportation network today. This includes a review of existing travel patterns, a summary of the land use patterns and key trip generators, and policies / planning direction for the transportation network that will influence growth and travel mode choice. Further, a detailed analysis is provided for each transportation mode / network, as follows:

- Section 5.0 (Pedestrian & Trail Network Conditions)
- Section 6.0 (Cycling Network Conditions)
- Section 7.0 (Transit Network Conditions)
- Section 8.0 (Street & Traffic Conditions)
- Section 9.0 (Parking)

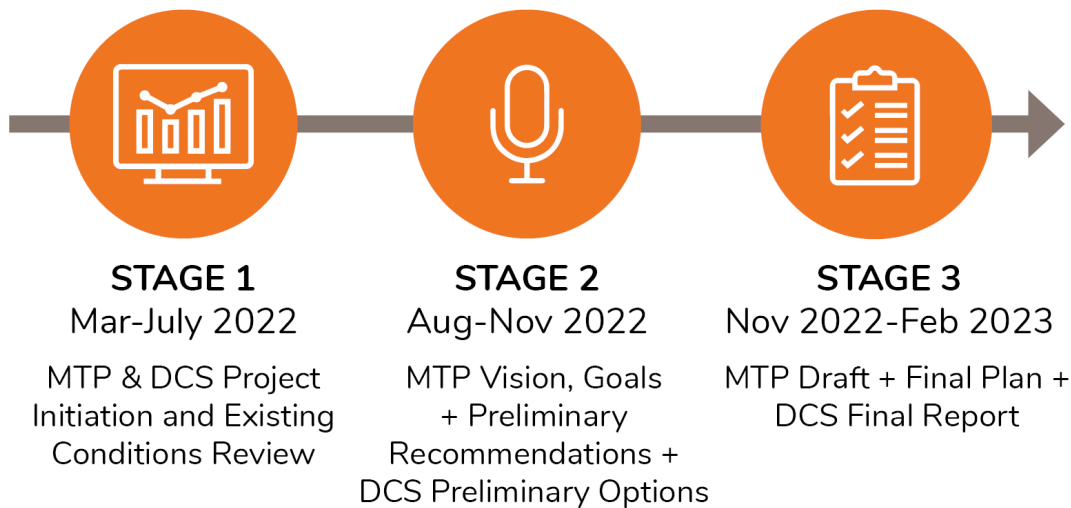
The MTP study is running concurrently with a comprehensive study of the Dogwood Street Corridor. This document also provides a detailed analysis of existing conditions on the Dogwood Corridor within each of the numbered sections above. A summary of the results from the first phase of consultation is introduced in **Section 4.0**, with specific findings integrated throughout the report.





### 1.1 Project Timeline

This project is following a three-phase approach to the development of the plan. The graphic below illustrates the three-phase timeline for the MTP project and Dogwood Corridor Study. We are currently at the end of Phase 1.







## 2.0 COMMUNITY PROFILE

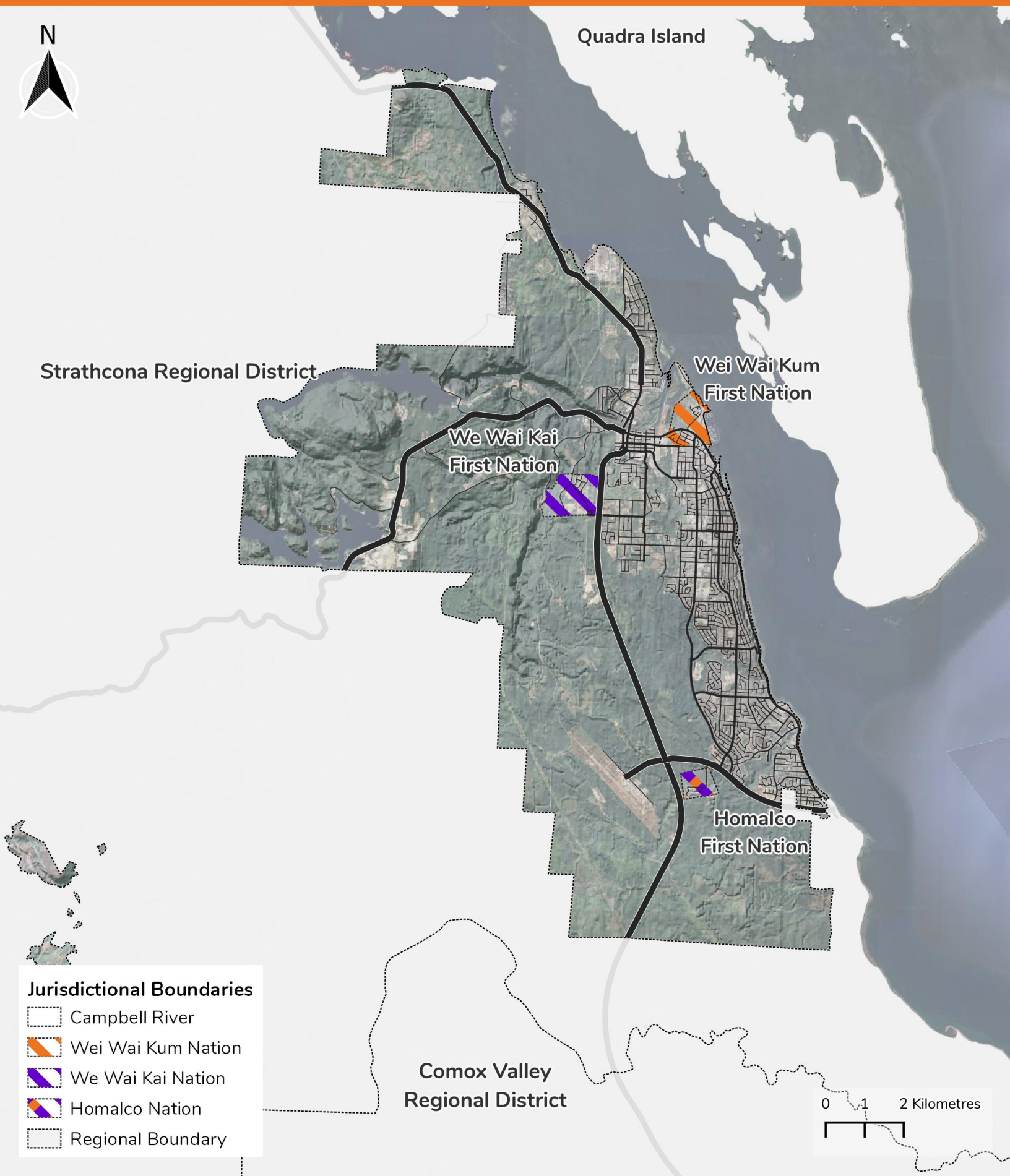
### 2.1 Location

Campbell River is a vibrant, growing, and active community located midway along Vancouver Island’s eastern shore. Bounded by the Discovery Passage to the east and forest lands to the west, development within the City of Campbell River has primarily taken place within two to three kilometres of the coast along an 18-kilometre span of coastline. The Wei Wai Kum, We Wai Kai, and Homalco First Nations are all located within the City’s boundary.

Campbell River is located centrally within the Strathcona Regional District, which is comprised of five municipalities (including Campbell River), four electoral areas, and the Ka:’yu:’k’t’h’/Che:k:tles7et’h’ First Nations. The Strathcona Regional District spans north central Vancouver Island, the Discovery Islands, and mainland area inlets.

**Map 1** illustrates the location of Campbell River and the surrounding jurisdictions.

## Map 1: Jurisdictional Map



Quadra Island

Strathcona Regional District

Wei Wai Kum  
First Nation

We Wai Kai  
First Nation

Homalco  
First Nation

Comox Valley  
Regional District

### Jurisdictional Boundaries

- Campbell River
- Wei Wai Kum Nation
- We Wai Kai Nation
- Homalco Nation
- Regional Boundary

0 1 2 Kilometres



## 2.2 Demographic Summary

According to the Statistics Canada 2021 census, the City of Campbell River has a population of 35,519, an increase of 7.6% from 2016. According to population projections in the 2012 Sustainable Official Community Plan (SOCP), the population is expected to exceed 40,000 by 2036.

The City's 2021 median population age is 48.0 years. This is an increase from 46.5 years in 2016 and 45.3 years in 2011. The current median age is also higher than the 2021 BC provincial average of 42.8 years. The age group of 65 and over makes up 26% of the City's population. The 2012 SOCP has forecasted that growth in Campbell River will be sustained by expansion of the retirement age population, while the under 25 age group will remain relatively stable. These projected demographic changes underscore the importance of building a transportation network that is inclusive for all ages and abilities – particularly for the senior population.

## 2.3 Transportation Mode Share

**Table 1** shows a comparison between transportation mode share in Campbell River and the provincial average based on the Statistics Canada 2016 Census (mode share data from the 2021 census is not available at the time of writing). The data indicates that Campbell River is currently an auto-dependent community with approximately 86% of commuting trips occurring by car, which is 10% higher than the provincial average.

**Table 1 – Mode Share, Campbell River vs. BC**

Mode	Campbell River	British Columbia
Car (Driver)	78%	71%
Car (Passenger)	8%	5%
Transit	2%	13%
Walk	5%	7%
Bike	2%	2%
Other	5%	2%



A mode share comparison was also made between Campbell River and the neighbouring urban areas (see **Table 2**). The comparison with the neighbouring urban areas indicates the following:

- Commuting characteristics for Campbell River are generally consistent with urban areas in the Comox Valley Regional District
- Auto passenger and “other” mode share is higher in Campbell River than in the neighbouring urban areas, suggesting increased uptake of carpooling and alternative modes of travel for commuting
- The cycling mode share is slightly lower than in the neighbouring urban areas

**Table 2 – Mode Share, Campbell River vs. Neighbouring Urban Areas**

Mode	Campbell River	Courtenay	Comox	Cumberland
Car (Driver)	78%	77%	79%	81%
Car (Passenger)	8%	6%	5%	4%
Transit	2%	3%	2%	2%
Walk	5%	7%	6%	7%
Bike	2%	4%	5%	3%
Other	5%	3%	3%	3%



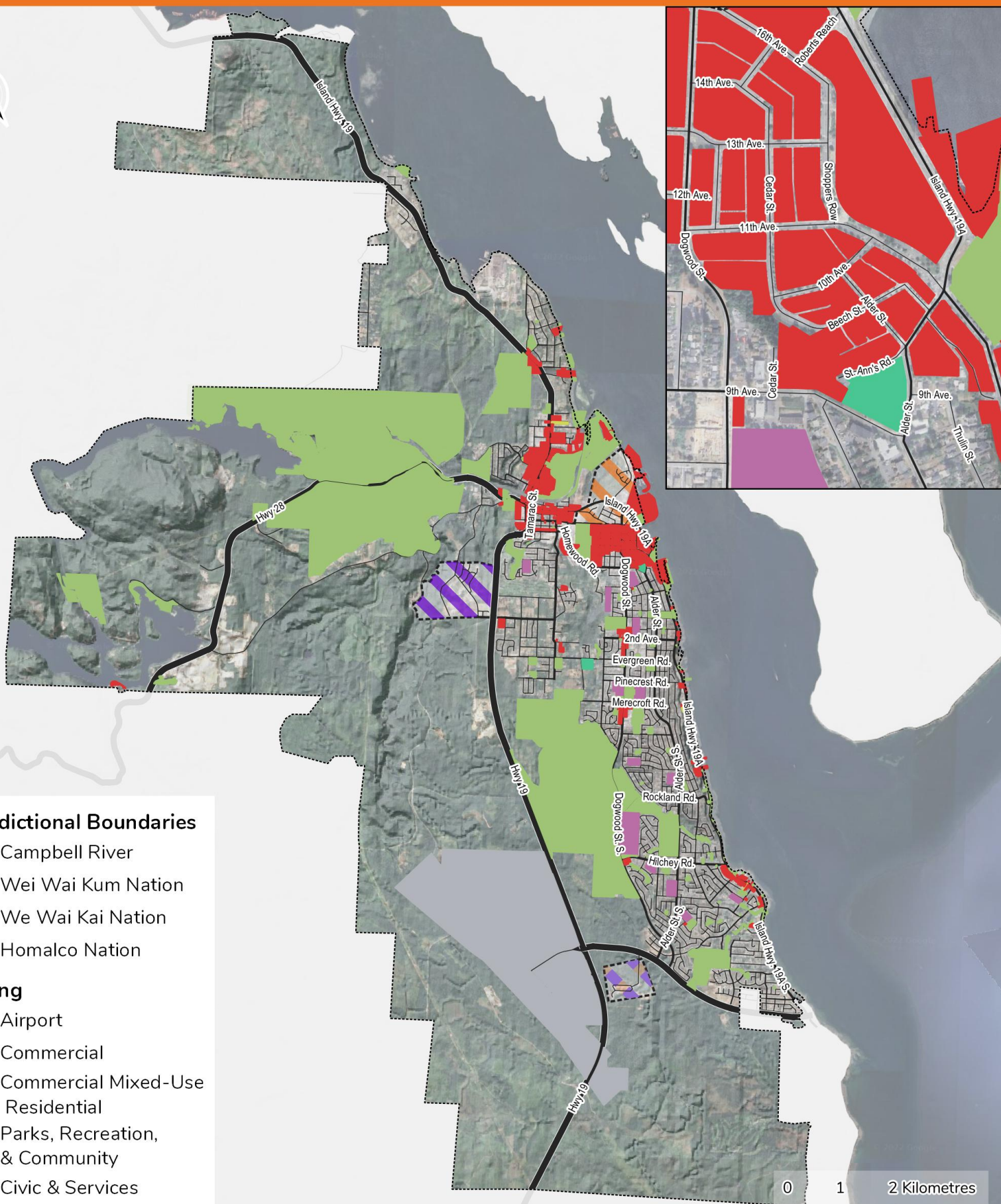
## 2.4 Land Use & Trip Generators

**Map 2** presents the City's land uses and major trip generators. A robust transportation plan cannot be completed without understanding both current and future land uses. The land use data provides an indication of where residents and employees are travelling to and from. Further, the locations of the major trip generators are important for understanding how well the road network serves residents who may be trying to access these destinations by a sustainable mode (e.g. walking, cycling, transit). As shown in the map, common destinations in Campbell River include:

- Parks (e.g. Beaver Lodge Lands, Willow Point Park, Robron Park, Robert Ostler Park)
- Schools (e.g. North Island College, Carihi Secondary, Timberline Secondary)
- Employment areas (e.g. Downtown, Willow Point)
- BC Ferries terminal
- Campbell River Hospital
- Recreational facilities (e.g. Campbell River Community Centre, Sportsplex)

# Campbell River Master Transportation Plan and Dogwood Corridor Study

## Map 2: Land Uses & Key Destinations

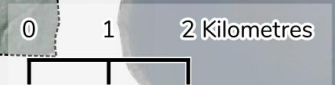


### Jurisdictional Boundaries

- Campbell River
- Wei Wai Kum Nation
- We Wai Kai Nation
- Homalco Nation

### Zoning

- Airport
- Commercial
- Commercial Mixed-Use Residential
- Parks, Recreation, & Community
- Civic & Services
- Schools & Institutions







### REZONING APPLICATION

AN APPLICATION HAS BEEN SUBMITTED TO THE CITY OF CAMPBELL RIVER FOR A SITE SPECIFIC TEXT AMENDMENT TO THE RM-4 ZONE TO AMEND THE DENSITY PROVISIONS AS THEY PERTAIN TO THIS PARCEL ONLY. FOR DENSITY TO BE CALCULATED AS FLOOR AREA RATIO (FAR) FOR A FUTURE BRACKETED BUILDING.



PROPERTY ADDRESS:  
741 BIRCH ST

#### FOR PUBLIC HEARING INFORMATION CONTACT

THE CITY OF CAMPBELL RIVER  
DEVELOPMENT SERVICES DEPARTMENT PHONE: 250-284-5225  
EMAIL: PLANNING@CAMPBELLRIVER.CA

#### FOR FURTHER INFORMATION CONTACT

GREEN BLAINE  
CHRONIC PACIFIC DEVELOPMENT CORP.  
CAMPBELL RIVER, BC V9W 3P8  
250-287-8120



## 3.0 REVIEW OF PLANS & TECHNICAL STUDIES

### 3.1 Municipal Plans & Studies

#### **Sustainable Official Community Plan**

Campbell River's current Sustainable Official Community Plan was adopted in 2012. The SOCP estimated that road transportation accounts for 67% of the City's greenhouse gas emissions, and recognizes the importance of efficient land use planning integrated with transportation systems to relieve traffic congestion and reduce greenhouse gas emissions.

The SOCP's overarching Transportation and Mobility theme was to offer safe, accessible, convenient, and affordable transportation choices with emphasis on high quality walking, cycling, and transit options. The SOCP outlined several desired outcomes for the 2020 and 2060 horizon years, in addition to the following key objective and policies:

- Prioritize walking in Campbell River
- Develop and improve the role of bicycle facilities to increase the cycling mode share
- Increase the viability and attractiveness of transit, and increase its mode share
- Improve the long-term street network for safe, multi-modal use in a fiscally responsible manner
- Support walking, cycling, and transit use through transportation demand management

The City will be updating its SOCP in 2023.

#### **Master Transportation Plan**

Campbell River's current Master Transportation Plan was prepared in 2012, in conjunction with the 2012 SOCP. The 2012 MTP outlined factors influencing uptake of each mode, observations on the existing network, and a long-term strategy for each mode. It also developed an implementation strategy outlining short, medium, and long term priorities, and cost estimates for each improvement project. The 2012 MTP also recommended the implementation of a monitoring strategy to track progress of implementing the MTP's goals in a meaningful, measurable, and manageable way.



Implementation of the monitoring program does not appear to have materialized after the adoption of the 2012 MTP. Based on WATT’s field review in July 2022, the vast majority of the short term improvements to active transportation infrastructure recommended in the 2012 MTP were not implemented. A handful of medium or long-term improvements were constructed in conjunction with adjacent land development projects. Short-term road improvements on Dogwood Street, Alder Street and Highway 19A have been partially constructed.

Furthermore, several corridors identified for pedestrian improvements in the 2012 MTP (including Hilchey Road, Eardley Road, Erickson Road, Galerno Road, Harrogate Road, Larwood Road, and Fir Street) have all undergone watermain upgrades in the last ten years, resulting in a missed opportunity to piggyback off of capital works projects for other utility improvements.

BC Transit has implemented some of the recommended improvements listed in the 2012 MTP, including:

- Extending evening service to Monday, Tuesday and Wednesdays
- Establishing a U-Pass program at North Island College
- Establishing primary transit routes on Dogwood, Alder, and Highway 19A
- Extending primary transit service to South Dogwood and North Campbell River

The COVID-19 pandemic introduced substantial challenges with the expansion and enhancement of transit services, not just in Campbell River, but worldwide, as ridership decreased, and transit agencies were forced to adjust to a sudden loss of revenue.

### **Downtown and Campbellton Area Transportation Network and Parking Study**

The 2007 Downtown and Campbellton Area Transportation Network and Parking Study provides guidance on transportation-related decisions in the Downtown and Campbellton areas up to 2027. The study provided a conceptual road network, proposed traffic control changes at key intersections, as well as cycling, pedestrian, and truck route modifications. The study also provided recommendations related to parking management downtown.



### **Refresh Downtown**

The 2017 Refresh Downtown study provides a holistic framework for the future redevelopment of Campbell River's downtown area. The Refresh Downtown study provides a list of design principles (including prioritizing pedestrians and creating connections to the waterfront, the escarpment, transit routes, and multimodal pathways), street typologies and cross sections, key intersection improvement locations (Highway 19A / Maritime Heritage Centre Entrance, Highway 19A / Robert's Reach Road, and Highway 19A / St. Ann's Road / Shoppers Row), and streetscape improvement opportunities.

### **South Island Highway (19A) Conceptual Design**

The 2005 Conceptual Design for Highway 19A provided recommendations for long-term improvements within the public right-of-way and adjacent public lands. The corridor extends from 1<sup>st</sup> Avenue to Hilchey Road in the north, and from Willow Creek to Jubilee Parkway in the south. The plan provided a standard cross-section, recommendations for intersection and pedestrian crossing treatments, guidelines for access management, cycling and transit provisions, and phasing / implementation options.

### **Transit Future Plan**

BC Transit's 2011 Transit Future Plan for the Campbell River region outlines the goals, targets, and implementation strategy for improvements to Campbell River's transit network over a 25 year time horizon. The 2012 MTP's transit improvement priorities mirror those in the 2011 Transit Future Plan.

Provide more secure bicycle parking	•
Improve accessibility (e.g., fix curb ramps, address grade challenges)	•
I am not interested in cycling	•

Have another idea to make cycling safer and more convenient?

**WORK ON CYCLING FRIENDLY ERICKSON CONNECTION**  
Isl. Hwy to

- Willow Creek Conservatio forest + Tr
- Dogwood
- the Bealer Lodge
- new housing developments

**Share the Bike Lanes**

**Better Hwy**  
We need a connecting corridor with stories Beach area

**We need a safe, separated bike route into through and out of the town**  
(north/south)

**E-bike users need to slow down on the trails!**

**Need better connectivity from Quinson Heights to ERT**

**Use a sticky note to write comments!**

**Clean up after Construction is very bad in the bike lanes on Island Hwy**

**Signage required on multi-use paths, we trails to indicate that multiple users are allowed to use them.**

**Traffic Calming in certain areas (ie Hwy 198 in Campbellton)**

**Accessibility - cyclist friendly traffic signal activation**

**LAIVES TO BE CLEARED REGULARLY**

**NO BIKE LANE LEAVING TOWN NORTH**

**mobility scooters**  
lack of safe north-south routes to downtown.  
① pave pathway north of Edm school  
② ramp on Hwy 198 east against Roberts Rd

**he uses road. side-walk is uncomfortable**  
③ bike lane on 16th between Honeysuckle - willmott  
④ 3-way stop at Honeysuckle 16th Ave to slow down

**mobility scooters**  
- needs better design for mobility scooters  
- wider sidewalks  
- use road

**Seperated Bike lanes + fix Erickson**

**Consider signage + enforcement on the seawall to slow down e-bike users!**



## 4.0 PUBLIC & STAKEHOLDER ENGAGEMENT

The Phase 1 public and stakeholder engagement occurred concurrently with the completion of the Phase 1 technical analysis. The key objectives of engagement in Phase 1 were:

- To understand existing barriers to walking, cycling, driving, and taking transit in Campbell River
- To understand opportunities to reduce barriers and improve conditions for walking, cycling, driving, and taking transit in Campbell River; and
- To understand community priorities and visions for a future transportation network

The engagement activities in this phase included the following:

- **A public “Ideas Fair”**, which was held on Thursday July 14, 2022 at the Campbell River Community Centre
- **A public online survey** made available to all members of the public from July 6<sup>th</sup> to August 6<sup>th</sup>, 2022
- **A mini “Ideas Fair”** at the Campbell River Farmer’s Market on Sunday July 17, 2022, where members of the public were asked to share their vision for the future of transportation in Campbell River



Ideas Fair at the Campbell River Community Centre

Engagement by the numbers...

**404** survey responses    **45** ideas fair participants    **12** participants in the mini Ideas Fair

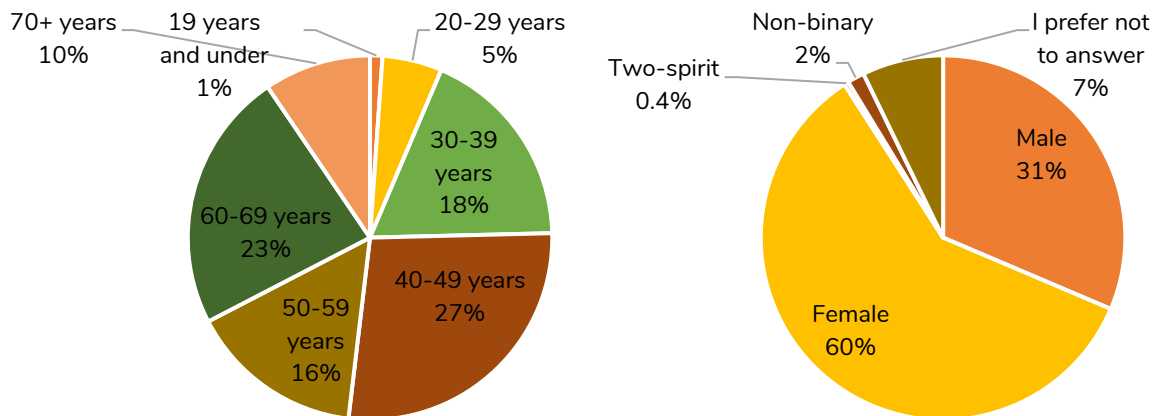
Raw comment responses from the online survey (sanitized to remove inappropriate content) are provided in **Appendix A**.



#### 4.1 Who We Heard From & Travel Patterns

As shown in **Figure 1**, 94% of survey respondents were above the age of 30. The two most dominant age groups included 40-49 years (27%) and 60-69 years (23%). The fewest responses were received from those in the range of 20-29 years (5%) and 19 years and under (1%).

A higher proportion of survey respondents identified as female (60%) compared to male (31%). 2% identified as non-binary and 0.4% identified as two-spirit.



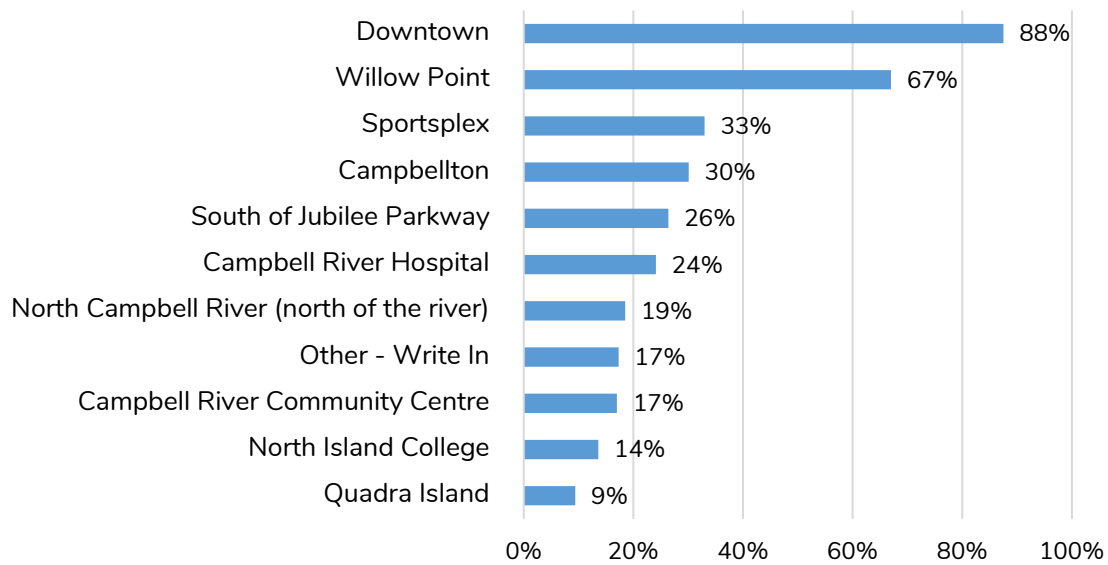
**Figure 1 - Age and Gender of Survey Respondents (Online Survey)**

Additionally, about 6% of survey respondents indicated that someone in their household regularly uses a mobility device (e.g., mobility aid, wheelchair).



**Figure 2** shows the top destinations in Campbell River according to survey respondents. Most respondents selected Downtown (88%) or Willow Point (67%). The destination selected by the least number of respondents is Quadra Island (9%).

'Other – Write In' responses included Mercroft Village, Tyee Spit / Dick Murphy Park, Strathcona Gardens Recreation Complex, the Seawalk, and École Phoenix Middle School.

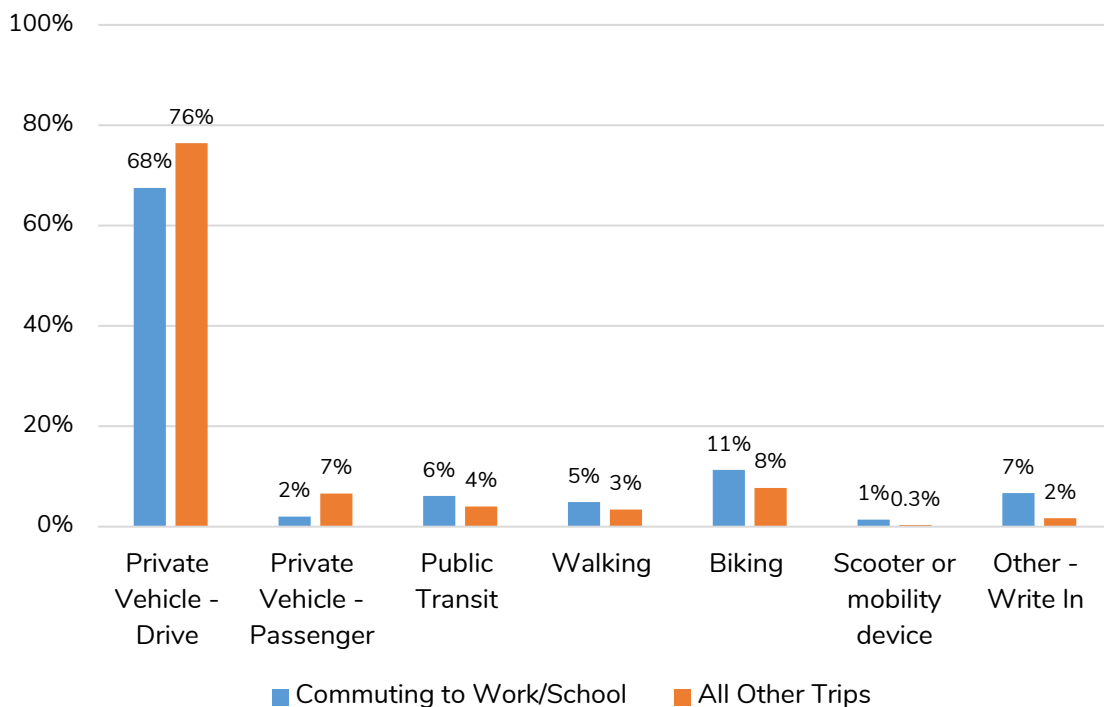


**Figure 2 - Top Destinations in Campbell River (Online Survey)**





Survey respondents were asked to indicate their main mode of transportation for commuting to work or school, as well as all other trips (such as going to the grocery store, recreating, visiting family and friends, etc.). As shown in **Figure 3**, the vast majority selected ‘Private Vehicle – Drive’ for both commuting (68%) and all other trips (76%). ‘Biking’ was the next highest, with 11% of respondents using this mode for commuting and 8% for all other trips. The least common mode was ‘Scooter or Mobility Device’, with only 1% of respondents using this mode to commute and 0.3% for all other trips.

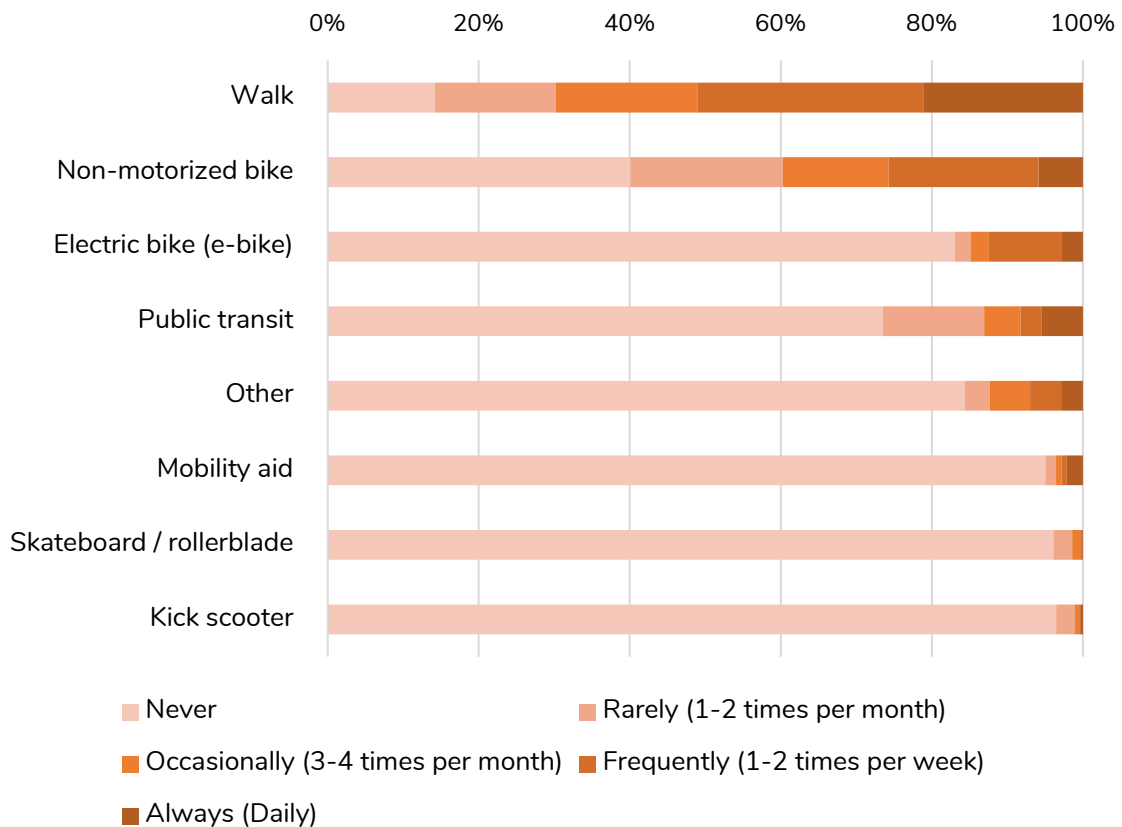


**Figure 3 - Main Modes of Transportation (Online Survey)**

Most of the respondents who selected ‘Other-Write In’ for commuting wrote that they are retired or work from home so don’t commute. Those who selected this option for all other trips wrote that they use Handy Dart or use a combination of modes.



Additionally, survey respondents were asked to indicate the frequency that they use different active transportation modes. See **Figure 4**. The most frequent modes are walking (with 51% of respondents always or frequently using this mode) and non-motorized bike (with 26% of respondents always or frequently using this mode). The modes that are used the least frequently are kick scooter and skateboard / rollerblade (with 96% of respondents selecting ‘Never’ for each of these modes).



**Figure 4 - Frequency of Active Transportation Use (Online Survey)**

Specific engagement findings relevant to each of the modes is included in **Sections 5.0 to 8.0**, which serve to augment and substantiate some of the technical findings presented in those sections.



## **ABOUT THE PROJECT ADVISORY TEAM (PAT)**

A Project Advisory Team has been created to guide the development of the Master Transportation Plan and Dogwood Corridor Study. The purpose of the committee is four-fold:

1. Review technical information provided by the City and the consultant team and provide comments, concerns, ideas, and general feedback to be considered in development of the MTP and DCS;
2. Promote and raise awareness of both the MTP and DCS among the group or organization they represent;
3. Act as a representative of a larger stakeholder group where applicable; and
4. Provide technical feedback relative to their organization's mandate / perspective where applicable.

The PAT is a diverse group of organizations comprising the following:

- BC Ferries
- BC Transit
- City staff
- Homalco First Nation
- ICBC
- Local RCMP
- Ministry of Transportation and Infrastructure
- PW Transit
- River City Cycling Club
- School District 72
- Wei Wai Kum First Nation
- We Wai Kai First Nation

The first of three meetings was held with the PAT in June 2022. The purpose of the first meeting was to introduce the group and understand the key concerns and priorities from each of the organizations that need to be considered as part of the MTP.





## 5.0 PEDESTRIAN & TRAIL NETWORK CONDITIONS

### 5.1 Overview

Campbell River is home to an extensive recreational trail network that provides residents and visitors to the area with an opportunity to connect with nature. The Greenways Loop, a 28km recreational trail circling the City, embodies the environment the City has to offer, traversing through the Beaver Lodge Forest Lands, and alongside Campbell River and the Pacific Ocean.

While the City has several recreational assets and amenities that support active modes such as walking, its overall pedestrian network is fragmented, particularly in the northwestern part of the City. Additionally, the concentration of commercial destinations within a few small cores and along the waterfront make it challenging for residents of Campbell River to choose walking for their everyday needs.

The City recognizes that an integrated approach to transportation planning is critical for supporting a mode shift to increase walking trips. The 2012 SOCP contains specific policies to prioritize walking in Campbell River:

- Policy 8.1.1 – Sidewalk coverage will be strategically increased as financial resources permit and as guided by the MTP
- Policy 8.1.2 – Enhanced pedestrian treatments will be incorporated and prioritized into pedestrian precincts, as identified in the MTP “Pedestrian Priority Areas” Map. Enhanced pedestrian treatments include improved crossings, accessibility, and amenities such as signage and wayfinding, landscaping, benches, and lighting.
- The development and improvement of the greenways loops and other greenways will be supported by the City and through partnerships with senior levels of government. Improvements include: continues, accessible pathway along streets to support both pedestrians and cyclists; significant landscaping, narrow crossings; traffic calming; pedestrian rest areas and lighting; public art and interpretative signage; and alternative stormwater management techniques such as rain gardens and bioswales.



## 5.2 Sidewalk Network

The overall sidewalk network consists of approximately 157km of sidewalk facilities. As shown in **Map 3**, sidewalks are provided on many streets within the Urban Containment Boundary but are limited in the Quinsam Heights and North Campbell River neighbourhoods.

## 5.3 Sidewalk Standards

Requirements for sidewalks are provided in the City’s standard cross sections in Appendix A of the Subdivision and Development Servicing Bylaw, and are outlined in **Table 3**.

**Table 3 – Existing Sidewalk Standards**

Classification	Pedestrian Facilities
Urban Local Low Density	1.5m sidewalk (one side)
Urban Local High Density	1.5m sidewalk (both sides)
Urban Local Commercial	1.5 sidewalk (both sides)
Urban Local Industrial	1.5m sidewalk (one side)
Urban Collector – Minor	1.5m sidewalk (both sides)
Urban Collector – Major	1.5m sidewalk (both sides)
Urban Arterial – 3 Lane	1.5m sidewalk, 4.0m MUP
Urban Arterial – 4 Lane	1.5m sidewalk, 4.0m MUP
Rural Local Residential	1.5m paved shoulder (one side)
Rural Local Commercial / Industrial	1.5m paved shoulder (one side)
Rural Collector	1.5m paved shoulder (both sides)

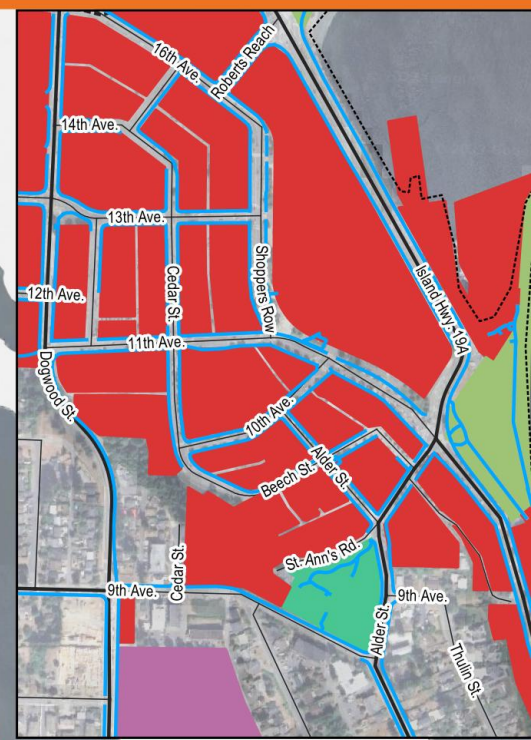
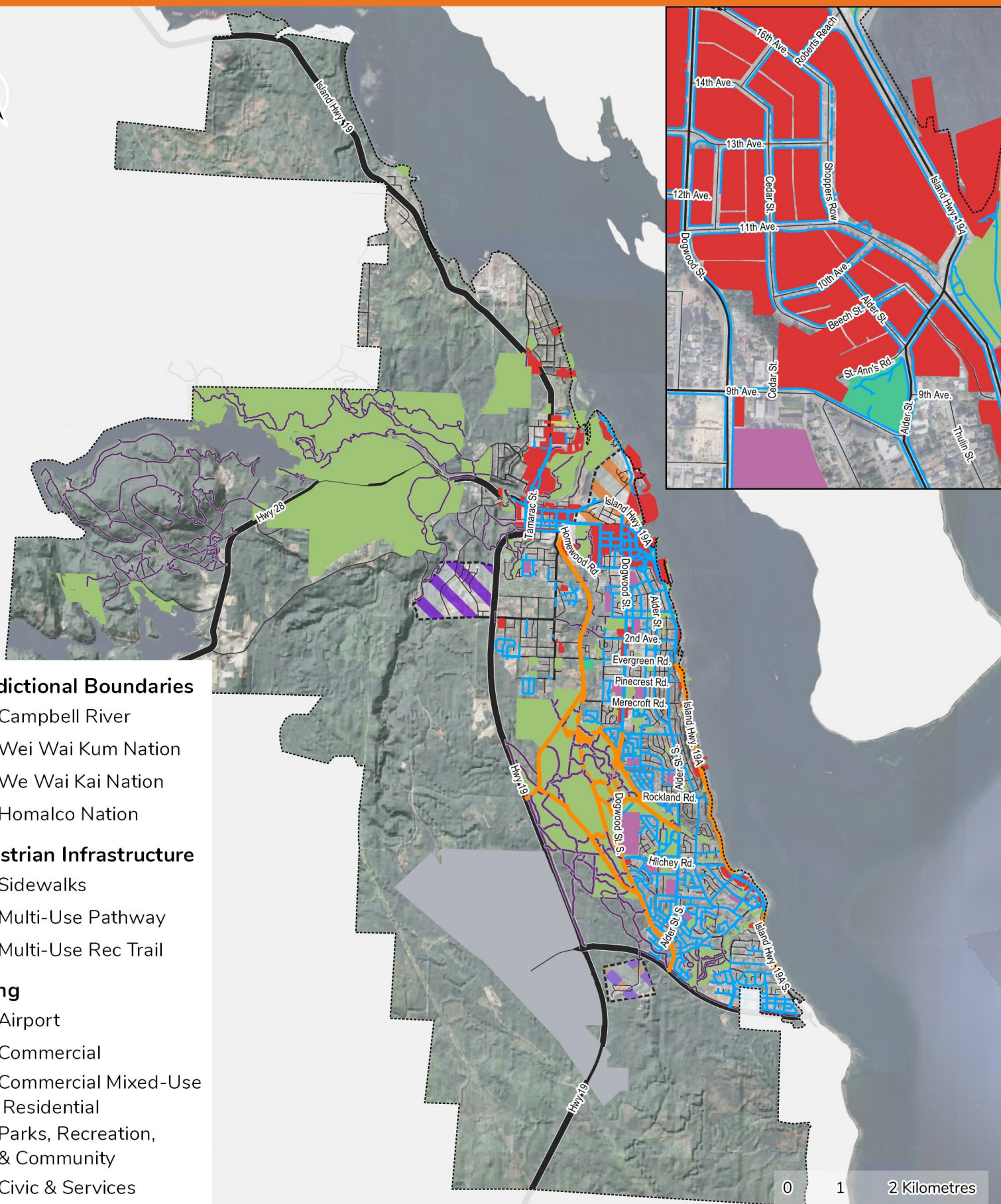


Sidewalk requirements, in addition to the table above, and as illustrated in the city's standard cross-sections, are as follows:

- Works and services infill projects less than 1 block in length may use a cross section similar to the existing roadway context with the written approval of the City.
- Sidewalks should be separated from the curb with a boulevard where possible; however, in cases where this is not physically possible, the City may allow the sidewalk to be adjacent to the curb.
- Sidewalks should normally cross-fall towards the roadway or infiltration swale at 2%.
- Where necessary, to meet existing sidewalk arrangements or heavier pedestrian flow, the City may require more sidewalk than outlined in the standards above to be constructed.
- Sidewalks should be at least 1.5m wide in single-family residential areas, at least 1.8m wide in multi-family residential areas, and at least 2.5m wide in commercial areas. Sidewalks in all other land uses should be at least 1.5m wide. Where railings are required, the sidewalk may be required to be widened to retain 1.5m clear.
- Sidewalks shall conform to Master Municipal Construction Documents (MMCD) Standard Detail Drawings C2 or C3.
- Pedestrian ramps shall be provided in curbs and sidewalks at all intersections and crosswalks and shall be in accordance with the MMCD Standard Detail Drawing C8 or C9.
- Paved shoulders on local rural roads shall be delineated with a line to accommodate pedestrians, as an alternative to a sidewalk. Paved shoulders on rural collector roads shall accommodate cyclists as an alternative to bicycle lanes, and accommodate pedestrians as an alternative to sidewalks.

# Campbell River Master Transportation Plan and Dogwood Corridor Study

## Map 3: Pedestrian & Trail Network



**Jurisdictional Boundaries**

- Campbell River
- Wei Wai Kum Nation
- We Wai Kai Nation
- Homalco Nation

**Pedestrian Infrastructure**

- Sidewalks
- Multi-Use Pathway
- Multi-Use Rec Trail

**Zoning**

- Airport
- Commercial
- Commercial Mixed-Use Residential
- Parks, Recreation, & Community
- Civic & Services
- Schools & Institutions







## 5.4 Pedestrian Counts

Peak hour pedestrian counts were conducted by City staff at 48 intersections between 2019 and 2022 to assess existing pedestrian activity. **Table 4** shows the top ten locations for pedestrian activity based on the collected data.

**Table 4 – Peak Hour Pedestrian Counts**

Rating	Intersection	Pedestrians / Hour	Time Period
1	Shoppers Row / 11 <sup>th</sup> Avenue	213	Noon
2	Dogwood Street / 4 <sup>th</sup> Avenue	200	PM (School Peak)
3	South Alder Street / Holm Road	183	PM (School Peak)
4	Dogwood Street / 7 <sup>th</sup> Avenue	128	PM (School Peak)
5	Shoppers Row / 10 <sup>th</sup> Avenue	123	Noon
6	Dogwood Street / 2 <sup>nd</sup> Avenue	120	PM (School Peak)
7	Dogwood Street / Merecroft Road	102	PM (School Peak)
8	Shoppers Row / 13 <sup>th</sup> Avenue	79	AM
9	Hilchey Road / Penfield Road	79	PM (School Peak)
10	Cedar Street / 11 <sup>th</sup> Avenue	71	Noon

Six of the top ten pedestrian locations are located adjacent or close to schools, with peak pedestrian volumes occurring in the afternoon school peak. The remaining four intersections are located downtown, with peak pedestrian volumes occurring during the morning or lunch peak periods. Six of the top ten pedestrian locations are signalized, while the remaining four are unsignalized, but have marked crosswalks on all four legs of the intersection.



## 5.5 Crossings

There are currently 42 pedestrian-activated crossing locations within the City's boundaries.

As per the BC Motor Vehicle Act (MVA) pedestrians have the right-of-way over vehicles at intersections. No signage or markings are required to make it a legal crossing point; however, many people are unaware of this regulation. Additional features such as signs, pavement markings, and flashers to identify crosswalks promotes a sense of security for pedestrians crossing an intersection.

Motor Vehicle Act Definition of a Crosswalk:  
“(a) portion of the roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by signs or by lines or other markings on the surface, or (b) the portion of a highway at an intersection that is included within the connection of the lateral lines of the sidewalks on the opposite sides of the highway, or within the extension of the lateral lines of the sidewalk on one side of the highway, measured from the curbs, or in the absence of curbs, from the edges of the roadway”

The City does not currently have a standard policy to determine the need for the installation of signed and marked crosswalks. City staff review crosswalk requests from members of the public and use both the Transportation Association of Canada (TAC) Pedestrian Crossing Control Guide and the BC MoTI Pedestrian Crossing Control Manual for BC. City staff use these documents as a base, add engineering judgement to decide where and what type of crosswalks are required. The City should develop a formal crosswalk policy that includes these considerations.



## 5.6 Trail Network

The City has a well-developed trail network, including over 28km of multi-use pathways, and over 32km of multi-use trails. Requirements for walkways, greenways, trails, and bikeways are provided in Appendix A of the Subdivision and Development Servicing Bylaw, and are outlined in **Table 5**.

**Table 5 – Existing Walkway, Greenway, Trail & Bikeway Standards**

Trail Type	Width	Surface
Walkways and Easements – Multi-Use and Barrier Free	Min. 3.0m	Concrete or asphalt
Walkways and Easements – Pedestrian Use Only	1.8m	Gravel
Multi-Use Trail	Min. 2.0m, max 3.0m	Gravel (not barrier-free) Asphalt (barrier-free)
Commuter Cycle Bikeway	Min 2.5m, max 3.0m	Gravel or asphalt
Leisure Cycle Bikeway	Min. 3.0m	Gravel or asphalt
Hiking Trail	Min. 0.25m, max 0.6m	Natural terrain, grubbed out but not surfaced
Boardwalk	Min. 1.5m, max 2.0m	Wood or metal decking

## 5.7 Barriers to Walking

As discussed above, walking only accounted for 5% of total commute trips in 2016. Further, online survey no.1 reported that only 3% of survey respondents indicated that they walk for non-commuting trips including the grocery store, recreation, and visiting family friends. There are several reasons why walking mode share is low in Campbell River; this section discusses the key technical barriers in the pedestrian network and **Section 5.8** summarizes the barriers to walking as reported by the public.



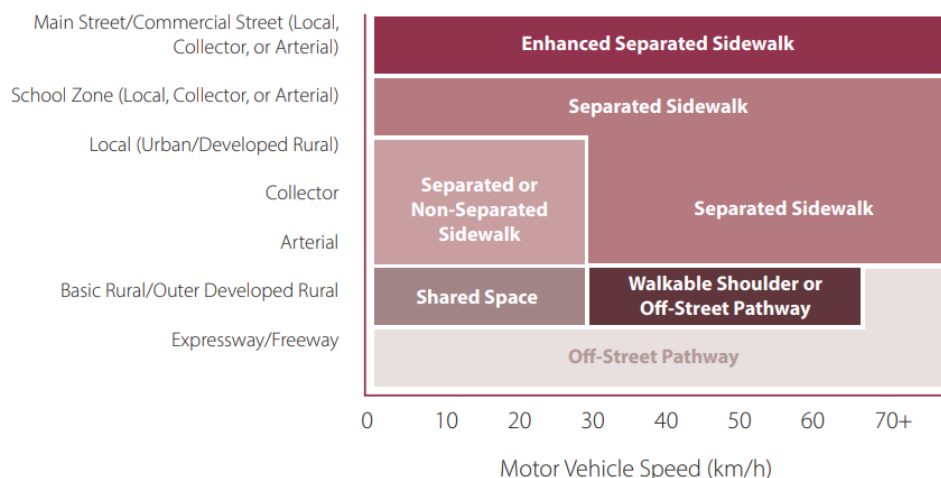
### 5.7.1 Lack of Pedestrian Facilities

Even though the City has over 150 kilometres of sidewalks, there are gaps in the network, most notably in the Quinsam Heights neighbourhood and in the northern part of the City. As shown in **Map 3**, there are several east-west roads within the Quinsam Heights neighbourhood that lack sidewalk or any pedestrian facilities including:

- Shetland Road (Local Road)
- Willis Road (Arterial Road)
- Evergreen Road (Collector Road)

Based on existing traffic volumes and speed limits, all three of these roads should warrant a pedestrian facility according to the BC Active Transportation Design Guide. The image below illustrates the types of pedestrian facilities that are suitable on a road based on road / land use context and motor vehicle speed. Based on the Design Guide, streets like Evergreen Road and Shetland Road would be candidates for a walkable shoulder or off-street pathway whereas Willis Road warrants a separated sidewalk facility.

Similarly, there are several roads in northern Campbell River that lack pedestrian facilities including Coulter Road, Perkins Road, and Perth Road, for example.



Pedestrian Facility Selection Decision Support Tool. Source: BC Active Transportation Design Guide



Willis Road is an arterial road within the Quinsam Heights neighbourhood. It provides no pedestrian facilities, which results in people walking having to share the road with vehicles. Willis Road has been identified by the Wei Wai Kum First Nation as an unsafe corridor for pedestrians and a major gap in the overall pedestrian network.



### 5.7.2 Lack of Accessibility in Pedestrian Network

For persons with disabilities or mobility impairments, along with those who use strollers to move around the City, there are several accessibility challenges that may be resulting in a less comfortable pedestrian experience. The two main accessibility related barriers observed by the consultant team include:

- **Deficient curb ramps** | Curb ramps, which are also referred to as “curb cuts” and “sidewalk letdowns” are found at most intersections in the City. They are required for people using wheelchairs, power scooters, and other mobility devices, but also benefit people with strollers, baggage, and delivery carts.

Even though many of the curb ramps in the City’s downtown are more accessible than those outside of the downtown, there are still gaps. For example, the BC Active Transportation Design Guide recommends “double curb ramps” as they provide full universal access by landing pedestrians directly in the crossing area and in the desired direction of travel, rather than entering the road at an angle and having to reorient themselves.



Example of an inaccessible crosswalk and curb ramp at the intersection of Cheviot Road and Petersen Road (left) and a double curb ramp design (right) from the BC Active Transportation Design Guide.



- **Sidewalk obstructions** | Sidewalk obstructions are another barrier to accessibility in the pedestrian network. There are several streets in the network where utility poles and/or trees obstruct the pedestrian through zone, which leave little space for people walking—especially those using mobility devices—to utilize the sidewalk.



Examples of obstructed sidewalks



### 5.7.3 Lack of Separated Sidewalks

Most of the existing sidewalks in the network are considered “non-separated”, which refers to a facility located directly next to motor vehicle traffic. The BC Active Transportation Design Guide advises against non-separated sidewalks on collectors, arterials, or industrial roads with motor vehicle speeds greater than 30km/h. On these roads, a separated sidewalk is recommended as higher motor vehicle speeds and volumes can negatively impact pedestrian safety and comfort.

A separated sidewalk is defined as one where the furnishing zone (which provides space for utilities, street, furniture, landscaping, street trees, etc.) separates the sidewalk from the roadway. It provides a buffer and enhances pedestrian safety and comfort while providing space for sidewalk amenities and utilities. The guide indicates that separated sidewalks:

- Increase the safety and comfort for people walking due to the larger buffer from motor vehicles
- Provide space in the Furnishing Zone for utilities and sidewalk amenities such as benches, bicycle racks, street trees, and landscaping, while maintaining an unobstructed sidewalk
- Provide an adequate slope area for driveway ramps between the curb and sidewalk

Even though it is not feasible to provide separated sidewalks across the pedestrian network, there are some streets that would be candidates for this facility type based on their land use / road context, traffic volumes, and speeds. These streets include:

- Dogwood Street (9<sup>th</sup> Avenue to 16<sup>th</sup> Avenue)
- 13<sup>th</sup> Avenue (Ironwood Street to Shoppers Row)
- Cedar Street / Beech Street (13<sup>th</sup> Avenue to Alder Street)
- Alder Street (5<sup>th</sup> Street to St. Ann’s Road)



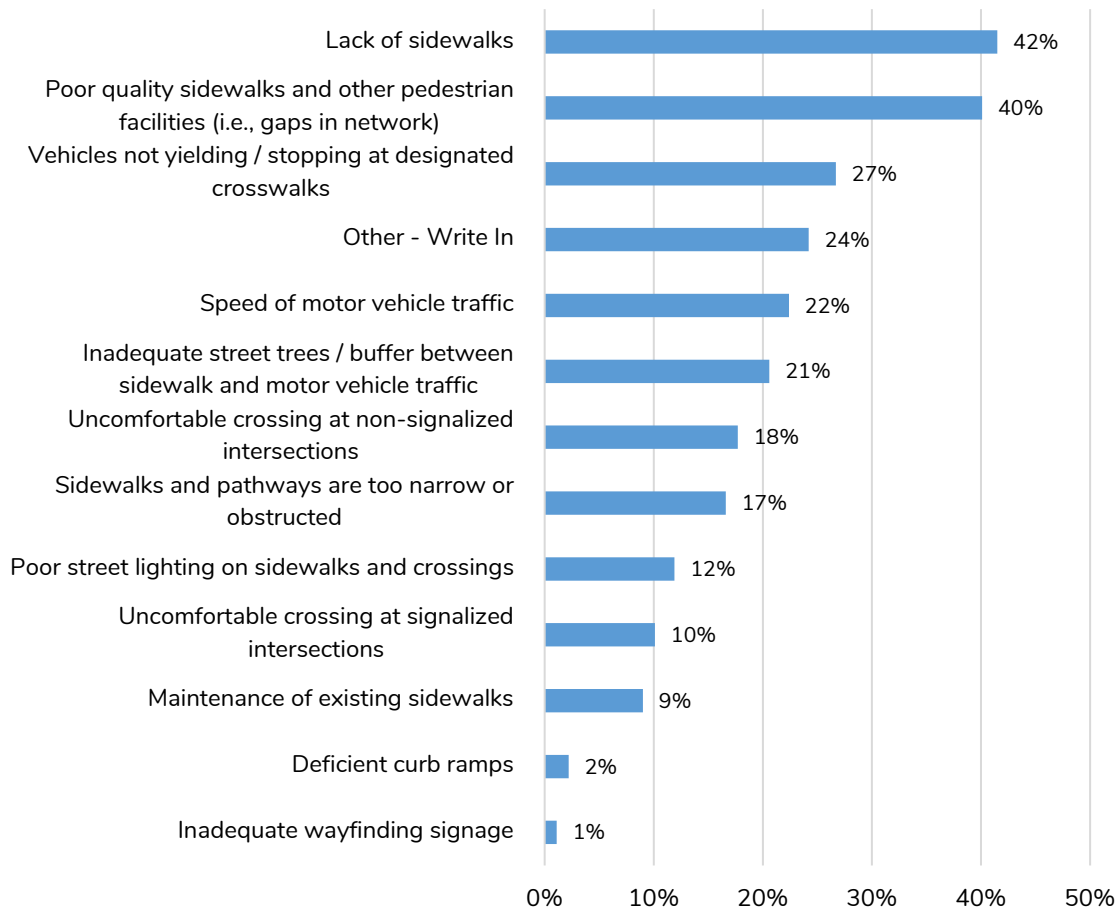


*This section of S Alder Street is an example of where a separated sidewalk facility is available for people walking / rolling.*



## 5.8 What We Heard from the Community

The top three barriers to walking indicated by survey respondents were ‘Lack of sidewalks’ (42%), ‘Poor quality sidewalks and other pedestrian facilities (i.e., gaps in network)’ (40%), and ‘Vehicles not yielding / stopping at designated crosswalks’ (27%). See **Figure 5**.

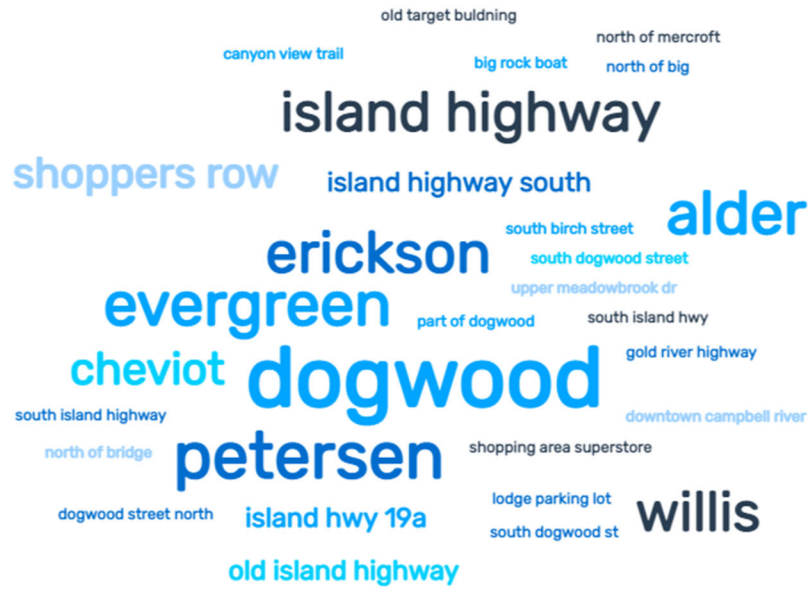


**Figure 5 - Top Issues / Barriers to Walking Around Campbell River (Online Survey)**

24% of respondents selected ‘Other – Write In’. Themes that arose from their responses included pedestrian conflicts with motorized and non-motorized bicycles (e.g., people riding too fast on shared paths), lack of safe crossings on Dogwood Street and in the midtown area, lack of convenient pedestrian routes, vehicle noise and exhaust, and feeling uncomfortable or unsafe in some areas (especially downtown) due to behaviour by people experiencing homelessness.



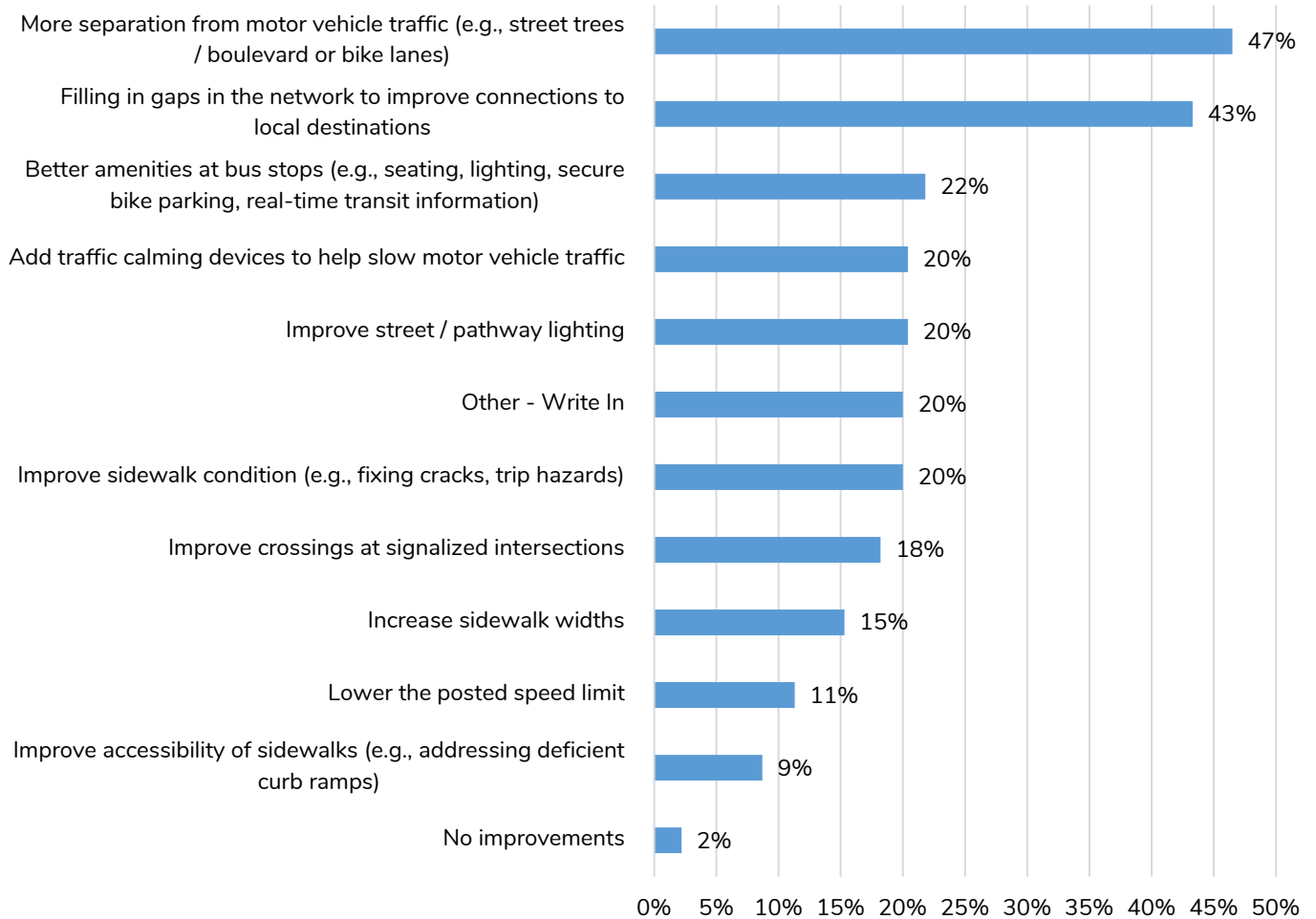
Respondents were also asked to identify the top three roads that they feel unsafe walking on. They provided a range of responses, with the most common being Dogwood Street, Petersen Road, Evergreen Road, Alder Street, and Island Highway (19A). See **Figure 6**.



**Figure 6 - Top Roads that Feel Unsafe for Walking (Online Survey)**

When asked about the top opportunities they would like to see to improve the walking environment in Campbell River, survey respondents indicated that the most important improvements are ‘More separation from motor vehicle traffic’ (47%) and ‘Filling in gaps in the network to improve connections to local destinations’ (43%). See **Figure 7**.

Themes from respondents who selected ‘Other – Write In’ included increasing the number of sidewalks, creating more separation between people walking and cycling, reducing crossing distances, better road maintenance (e.g., snow removal), and finding solutions for people experiencing homelessness.



**Figure 7 - Top Opportunities to Improve the Walking Environment in Campbell River (Online Survey)**

Feedback heard through the Ideas Fair was consistent with the survey results. The most preferred ways to make walking safer and more convenient in Campbell River (as told by sticky dot votes) were ‘More separation from motor vehicle traffic’ and ‘Build more sidewalks’. Further comments included the following desired improvements:

- More separation of people walking and cycling
- Better street lighting for pedestrians
- Prioritizing snow removal / general maintenance on sidewalks
- Lowering vehicle speed limits on residential roads





## 6.0 CYCLING NETWORK CONDITIONS

### 6.1 Overview

The cycling network in Campbell River is much more limited than the pedestrian network. The 2012 SOCP contains specific policies to support cycling in Campbell River:

- Policy 8.2.1 – Enhancements to the bicycle network will be supported by the City and through developments and partnerships with senior levels of government, focusing on existing routes and planned routes as identified in the MTP “Long Term Bicycle Network” Map
- Policy 8.2.2 – Comprehensive design guidelines will be developed and maintained for both on-street and off-street bicycle facilities that support:
  - corridor treatments that include bicycle lanes, paved shoulders, marked wide curb lanes, local bikeways, and multi-use pathways; and
  - crossing treatments that include marked crossings, median islands, signalized crossings, bicycle loop detectors, bike boxes and grade-separated crossings.
- Policy 8.3.3 – Bicycle support strategies will be established by the City and through private developments and partnerships with senior levels of government to develop and enhance:
  - on-street bicycle parking with bicycle racks, corrals, shelters, and lockers;
  - wayfinding and route signage;
  - public bike sharing programs;
  - end-of-trip facilities;
  - bicycle-transit integration through racks on businesses and secure parking at major transit facilities and centres; and
  - education and awareness programs on cycling skills, safety, routes, destinations, parking, retailers, and others.

### 6.2 Cycling Network

**Map 4** illustrates the existing cycling network. As shown below, the existing network has three cycling facilities of varying lengths.



### **Bicycle Boulevard**

Shared-use lanes and neighbourhood bikeways fall under Campbell River’s definition of Bicycle Boulevard. On both types of facilities, cyclists share the road with motor vehicles. There are currently 26 kilometres of bicycle boulevard in the City. While neighbourhood bikeways are designed for streets with low vehicle volumes and speeds, many of the City’s shared-use lanes are on high-speed, high-volume roads. These facilities are not suitable for All Ages and Abilities (AAA), and are not comfortable—or safe—for people cycling.



### **Bicycle Lane**

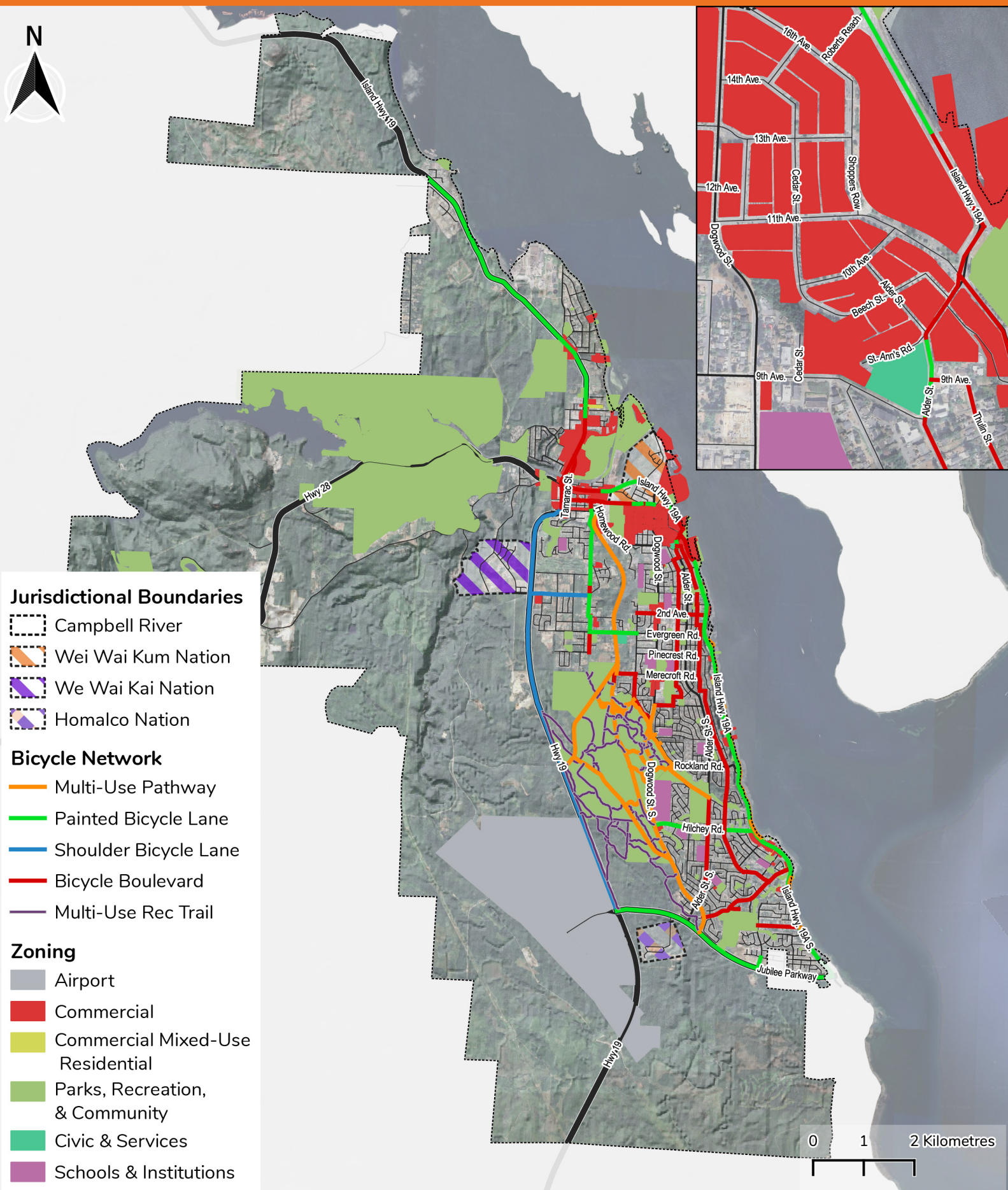
A designated lane for people cycling to use that is not physically protected from motor vehicle traffic. On-street and shoulder bicycle lanes are the most common cycling facility in Campbell River, with 37 kilometres (10km of shoulder bicycle lanes, and 27km of on-street bicycle lanes)



### **Multi-use Pathway**

Multi-use pathways are off-street facilities that are physically separated from motor vehicle traffic and are shared by people walking and cycling. There are currently 29 kilometres of multi-use pathways in the City.

## Map 4: Cycling Network



**Jurisdictional Boundaries**

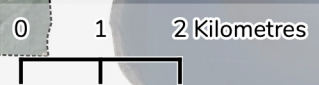
- Campbell River
- Wei Wai Kum Nation
- We Wai Kai Nation
- Homalco Nation

**Bicycle Network**

- Multi-Use Pathway
- Painted Bicycle Lane
- Shoulder Bicycle Lane
- Bicycle Boulevard
- Multi-Use Rec Trail

**Zoning**

- Airport
- Commercial
- Commercial Mixed-Use Residential
- Parks, Recreation, & Community
- Civic & Services
- Schools & Institutions







### 6.3 Cycling Standards

Requirements for cycling facilities are provided in the City’s standard cross sections in Appendix A of the Subdivision and Development Servicing Bylaw, and are outlined in **Table 6**.

**Table 6 – Existing Cycling Facility Standards**

Classification	Cycling Facilities
Urban Local Low Density	N/A
Urban Local High Density	N/A
Urban Local Commercial	N/A
Urban Local Industrial	N/A
Urban Collector – Minor	4.3m shared vehicle lane
Urban Collector – Major	1.5m unbuffered bike lane
Urban Arterial – 3 Lane	1.4m unbuffered bike lane, 4.0m MUP (one side)
Urban Arterial – 4 Lane	1.4m unbuffered bike lane, 4.0m MUP (one side)
Rural Local Residential	N/A
Rural Local Commercial / Industrial	N/A
Rural Collector	N/A

### 6.4 Cycling Counts

Peak hour cycling counts were conducted by City staff at 48 intersections between 2019 and 2022 to assess existing bicycle traffic at intersections. **Table 7** shows the top ten locations for cycling activity based on the collected data.



**Table 7 – Peak Hour Cycling Counts**

Rating	Intersection	Cyclists / Hour	Time Period
1	Dogwood Street / 7 <sup>th</sup> Avenue	25	PM
2	South Alder Street / Holm Road	16	PM (School Peak)
3	Highway 19A / Dogwood Street	12	PM
4	Shoppers Row / 13 <sup>th</sup> Avenue	11	PM
5	Highway 19A / Shoppers Row / St. Ann's Road	11	Noon
6	Highway 19A / Hilchey Road	10	PM
7	Dogwood Street / Hilchey Road	10	PM
8	Highway 19A / Willow Point Plaza Entrance	10	PM
9	Dogwood Street / South Alder Street	10	PM
10	Ironwood Street / 16 <sup>th</sup> Avenue	9	PM

Eight of the top ten cycling locations are located on designated cycling routes (i.e. streets with a bicycle boulevard, multi-use pathway, or un-buffered bicycle lane). The top two cycling locations are located near schools, with the next five locations located downtown.

### 6.5 Barriers to Cycling

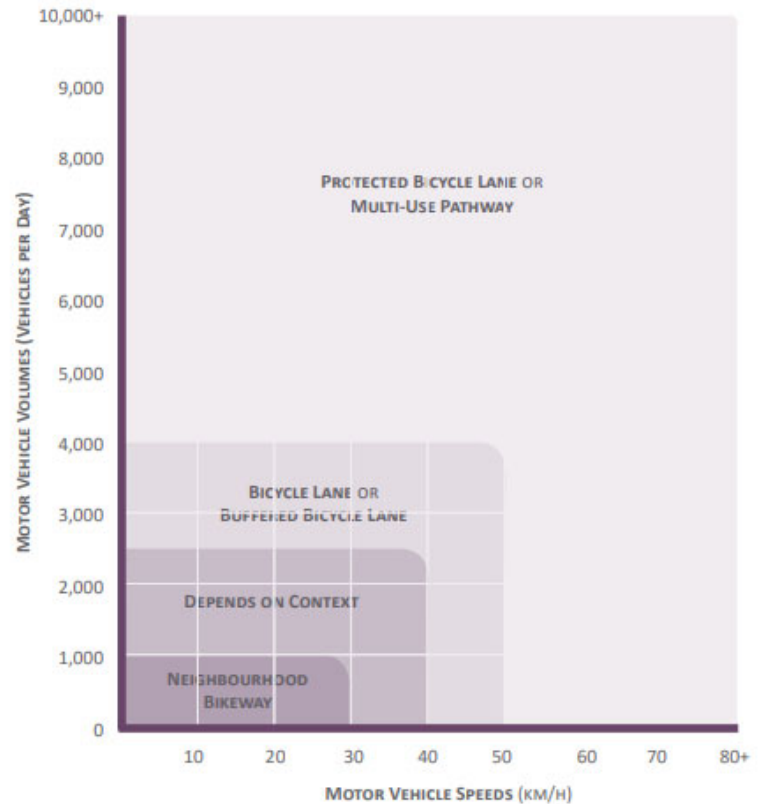
Similar to walking, people cycling in Campbell River face several barriers, which also explains its relatively smaller mode share. An even smaller percentage of people in Campbell River commute by bicycle (2%) according to the 2016 census. This section discusses the key technical barriers in the cycling network and **Section 6.6** summarizes the barriers to cycling as reported by the public.



### 6.5.1 Existing Cycling Facilities Do Not Meet All Ages and Abilities Standards

Even though the City has cycling facilities on several of its roads, most of the facilities do not meet best practices and/or accommodate people of all ages and abilities. The BC Active Transportation Design Guide recommends that for streets with more than 4,000 vehicles/day (regardless of the posted speed limit), cycling facilities should be considered that separate people cycling from motor vehicles. That means that most of the collector and arterial roads in Campbell River should have protected bicycle lanes or a type of multi-use pathway.

As shown in the 'Bicycle Facility Selection Decision Matrix' (right), both motor vehicle volumes and speeds are used to determine bicycle facility type selection. The matrix does not show a shared-use lane, which make up approximately 30% of Campbell River's existing cycling network. Shared use lanes are designated on several arterial roads including 2<sup>nd</sup> Avenue, Hilchey Road, and Alder Street, for example.



Bicycle Facility Selection Decision Matrix.  
Source: BC Active Transportation Design Guide

According to TAC, for motor vehicle speeds of 30km/h or less, shared use roadway conditions are typically acceptable as the relative speed difference between cyclists and motor vehicles is no more than 10km/h - 20km/h. TAC indicates that for roadways with motor vehicle volumes of less than 2,500 vehicles per day, a bicycle boulevard is the only suitable facility and should only be considered on local roads. Further, shared lanes are not suitable on roadways with greater than 10 heavy vehicles in the peak hour including transit buses and trucks.



*Alder Street is designated as a cycling route. As shown in the photo, the road has a shared-use lane, which requires people cycling to share the road with motor vehicles. Based on the posted speed limit and daily traffic volumes, a higher quality cycling facility with protection is more suitable for this corridor.*

Through the development of the Master Transportation Plan, a more detailed analysis will be completed to identify the types of AAA facilities required in the network and what should be prioritized in the short, medium, and long-term.



### 6.5.2 Existing Network

In addition to the City’s existing cycling facilities not meeting AAA standards, there are also several gaps within the network where no cycling facilities are available, which results in poor connectivity and safety issues for people cycling. Examples of gaps in the network as included below:

- **Willis Road** – as discussed in **Section 5.7**, there is a lack of both pedestrian and cycling facilities along this road. As a result, residents living in the Quinsam Heights neighbourhood along with those living in the Wei Wai Kum First Nation reserve do not have an east-west cycling facility to connect to other parts of the City.
- **Birch Street** – Birch Street is a critical north-south corridor with connections to schools (e.g., Pinecrest Elementary, Cedar Elementary, Ecole Phoenix Middle School), parks (e.g., Robron Park, Pinecrest Park, Coronation Park), and other major trip generators including the hospital. The lack of a cycling facility along this corridor makes it more challenging for employees to commute by bike and for parents dropping off / picking up their children, who may be looking for alternative option to Dogwood Street.
- **9<sup>th</sup> Avenue** – the section from Homewood Road to Alder Street also represents a gap in the network, especially for those looking to access key destinations on the edge of the downtown.

The network gaps above—in addition to others—will be explored in more detail throughout the development of the MTP.



### 6.5.3 Intersections

According to the Insurance Corporation of British Columbia (ICBC), four out of five crashes involving cyclists take place at intersections in BC.<sup>1</sup> It is crucial for the success of both the cycling and pedestrian network to have a safe crossing point and to mitigate as many conflicts as possible through well-thought design. There are several design solutions that can be utilized to improve cyclist safety at intersections including signage, conflict green markings, and not allowing vehicles to turn right on a red light, for example. The widths of cycling facilities should continue the width they have along the corridor as users are more prone to congregate with other users while waiting for their turn to cross.

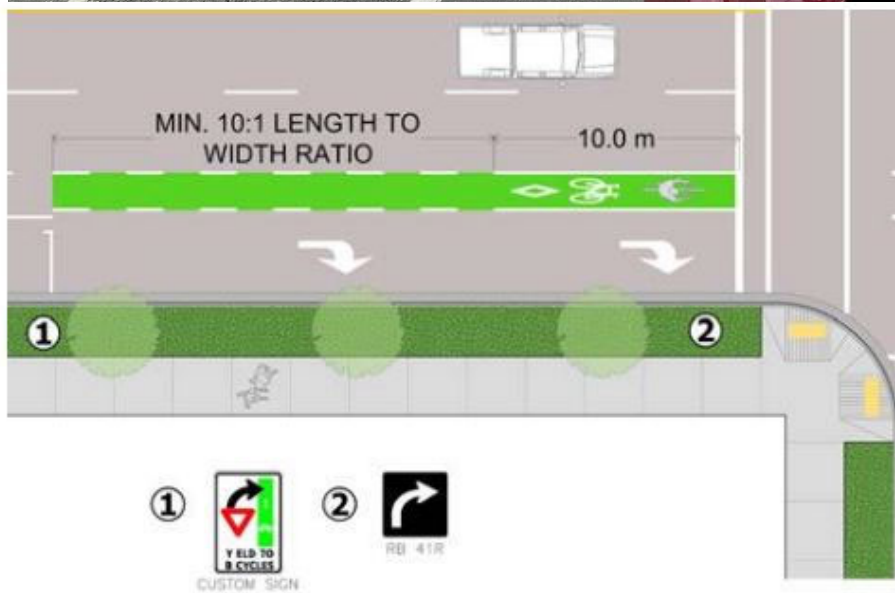
The most serious conflicts to remediate are between the curbs, where motor vehicles and vulnerable road users are likely to intersect. The BC Active Transportation Guide recommends the following at intersections:

- Reduce the turning speed of motor vehicles;
- Increase the visibility of people walking and biking;
- Denote clear right-of-way; and
- Facilitate eye contact and awareness with other modes.

The City's existing cycling network has limited design treatments at the intersections, which will require a more detailed review as part of the development of the MTP.

---

<sup>1</sup> ICBC (2022). Cycling Safety. Available online at: <https://www.icbc.com/road-safety/sharing/Pages/cycling-safety.aspx>



Highway 19A / Mall Access intersection (top), where a person cycling is at risk of a right-hook collision from a vehicle turning right. Image on the bottom is the recommended treatment for a continuous bicycle lane with dedicated turn lane to protect cyclists on the intersection approaches

Source: BC Active Transportation Design Guide

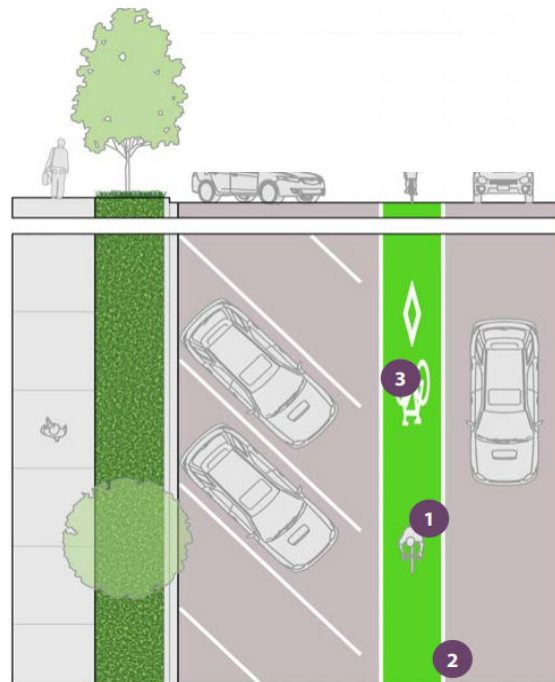


#### 6.5.4 Angled Parking Downtown

Another barrier to cycling is angled parking, which is the common parking configuration in the downtown along 16<sup>th</sup> Avenue and Shoppers Row. According to the BC Active Transportation Design Guide, angled parking is not preferred adjacent to a bicycle lane due to the lack of sightlines for drivers backing out. Conversion of the angled parking to back-in angled parking can increase motorist's sightlines and reduce the risk of drivers blindly backing out of the parking stall into the bicycle lane.

As shown in the image below, if streets like 16<sup>th</sup> Avenue and Shoppers Row are deemed to be priorities for a cycling facility, then the following design treatments should be considered based on the BC Active Transportation Design Guide:

- The bicycle lane should be 1.8m wide
- A buffer should be provided between the bicycle lane and the edge of the angled parking lane
- The width of the buffer should be 0.9m for front in angled parked and 0.6m for back in angled parking with a maximum width of 1.4m



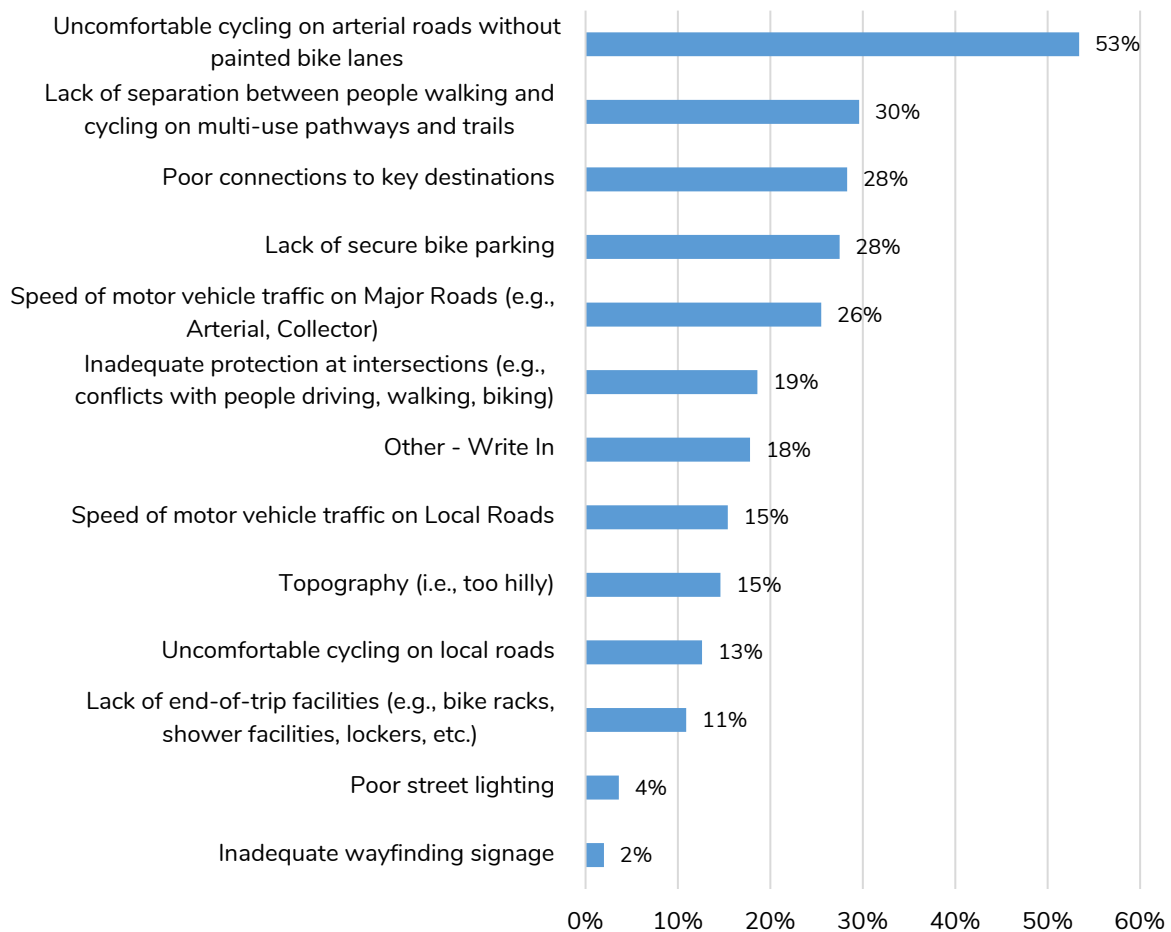
The recommended design treatments for a bicycle lane adjacent back-in angled parking. Source: BC Active Transportation Design Guide





## 6.6 What We Heard from the Community

The top barriers to cycling indicated by survey respondents were ‘Uncomfortable cycling on arterial roads without painted bike lanes’ (53%), ‘Lack of separation between people walking and cycling on multi-use pathways and trails’ (30%), ‘Poor connections to key destinations’ (28%), and ‘Lack of secure bike parking’ (28%). See **Figure 8**.

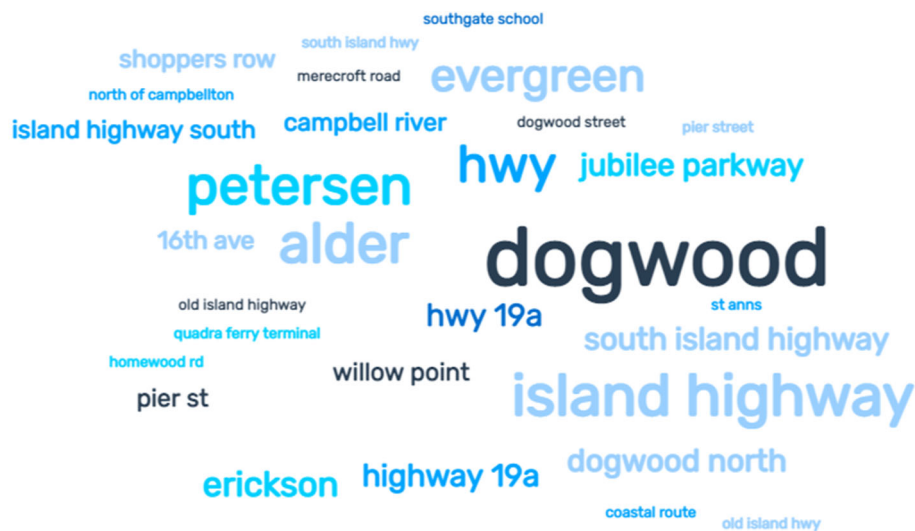


**Figure 8 - Top Issues / Barriers to Cycling Around Campbell River (Online Survey)**

18% of respondents selected ‘Other – Write In’. Themes from those responses included poor maintenance of bike lanes (i.e., need to clear debris), lack of continuous and protected bike lanes, and confusion about right-of-way for people cycling.



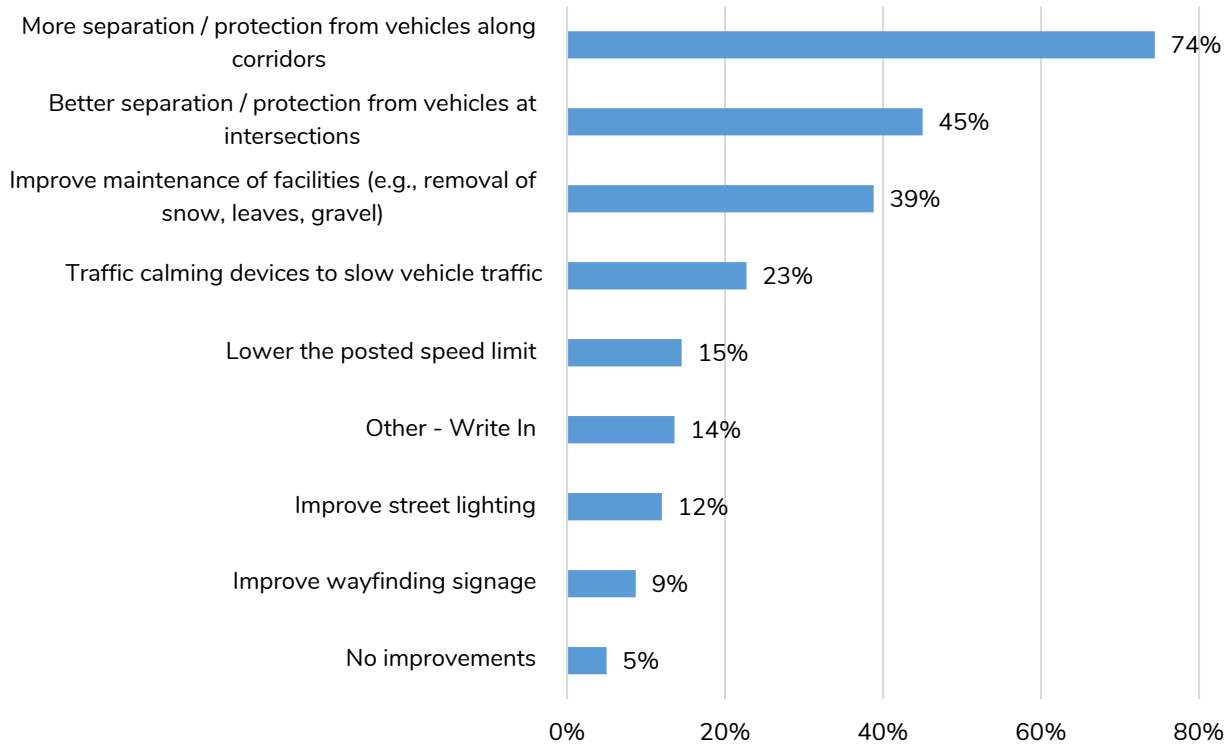
Respondents were also asked to identify the top three roads that they feel unsafe cycling on. They provided a range of responses, with the most common being Dogwood Street, Island Highway (19A), Alder Street, Petersen Road, and Evergreen Road. See **Figure 9**.



**Figure 9 - Top Roads that Feel Unsafe for Cycling**

When asked about the top opportunities they would like to see to improve the cycling environment in Campbell River, survey respondents indicated that the most important improvements are 'More separation / protection from vehicles along corridors' (74%), 'Better separation / protection from vehicles at intersections' (45%), and 'Improve maintenance of facilities' (39%). See **Figure 10**.

Themes from respondents who selected 'Other – Write In' included increasing the number of painted bike lanes, more convenient bicycle crossings, bike routes that are separate from main roads, improved maintenance of bike lanes, and increased law enforcement for motor vehicles.



**Figure 10 - Top Opportunities to Improve the Cycling Environment in Campbell River (Online Survey)**

Similar feedback was heard during the Ideas Fair. The most preferred ways to make cycling safer and more convenient in Campbell River (as told by sticky dot votes) were 'More separation / protection from vehicles along corridors', 'Better separation / protection from vehicles at intersections, and 'Provide more secure bicycle parking'. Further comments included the following desired improvements:

- Improved signage on multi-use paths
- Making Erickson Road more bike-friendly
- Safe, separated bike lane into town
- Better infrastructure for mobility scooters
- Better maintenance of bike lanes
- Safe driving education for motor vehicle drivers





## 7.0 TRANSIT NETWORK CONDITIONS

### 7.1 Overview

Public Transportation services in the City of Campbell River are served by BC Transit's Campbell River Transit System, BC Ferries, and School District 72. All transit routes are operated by BC Transit while the City of Campbell River owns and maintains the bus stops. The 2012 SOCP contains specific policies to support transit in Campbell River:

- Policy 8.3.1 – Partnerships with BC Transit and land use regulations will be established and maintained to improve transit services by fostering the following as per the MTP's "Long-Term Transit Strategy" Map:
  - the provision of a Frequent Transit Network (FTN) with more convenient, reliable, and frequent service throughout the entire day and on evenings, seven days per week, on Dogwood Corridor and Island Highway Corridor;
  - the provision of a Local Transit Network (LTN) with direct, relatively frequent service that runs all day and into the evening, on Alder Corridor, North Campbell River, Petersen-Downtown Circulator, and Jubilee; and
  - the provision of services that focus on the following targeted needs: regional services that provide connections between cities; neighbourhood service areas; HandyDART services, and seniors transit.
- Policy 8.3.2 – Transit priority treatments will be established as financial resources permit, and include physical, operational, and regulatory improvements.
- Policy 8.3.3 – Partnerships with BC Transit will be maintained to increase the attractiveness and accessibility of passenger facilities at transit exchanges, stops, and facilities, and to improve customer information and expand transit pass programs.



## 7.2 School Bus Service Overview

Campbell River School District 72 provides school bus transportation for students that fall under the following categories:

- Kindergarten to grade 3 students living more than 4km from the nearest school
- Grade 4 to 12 students living more than 4.8km from the nearest school
- Students living on reserve
- Students requiring accessible transportation

Students may apply for courtesy ridership if there is remaining space on the route after all eligible riders have been accounted for.

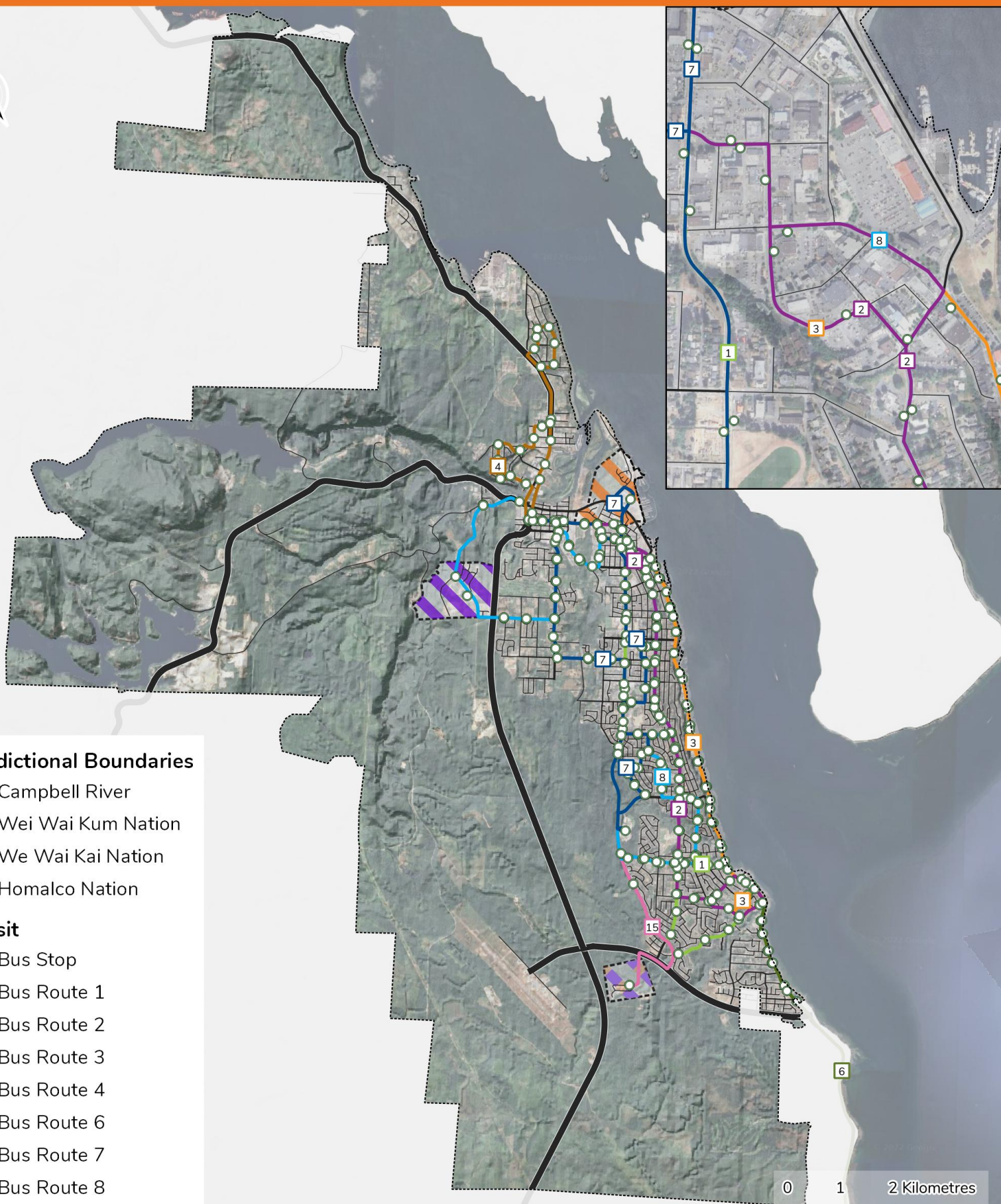
## 7.3 BC Transit Service Overview

Campbell River is currently serviced by eight transit routes (see **Map 5**). The bus routes operate on a conventional fixed route but vary in the level of service (frequency). The following routes operate in Campbell River:

- Route 1 – Campbellton / Willow Point via Dogwood
- Route 2 – Campbellton / Willow Point via Alder
- Route 3 – Discovery Mall / Willow Point via Hwy 19A
- Route 4 – Campbellton
- Route 6 – Oyster River / Willow Point
- Route 7 – Petersen
- Route 8 – Quinsam / North Island College
- Route 15 – Homalco

Connecting service to Courtenay via the Comox Valley Regional Transit System is available at Oyster River via Route 6.

## Map 5: Transit Network

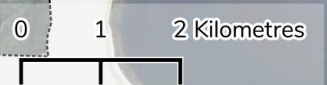


### Jurisdictional Boundaries

- Campbell River
- Wei Wai Kum Nation
- We Wai Kai Nation
- Homalco Nation

### Transit

- Bus Stop
- Bus Route 1
- Bus Route 2
- Bus Route 3
- Bus Route 4
- Bus Route 6
- Bus Route 7
- Bus Route 8
- Bus Route 15





## 7.4 Bus Stop Infrastructure

Bus stop infrastructure is varied in quality throughout the City. Bus stops range from modern shelters with seating and direct sidewalk connectivity to nearby destinations, to an uncovered bench with a sidewalk adjacent but no accessible crossings to nearby destinations, to a bare concrete pad with no dedicated pedestrian facilities in the area.



Examples of varying bus infrastructure throughout the City.

The City of Campbell River, in partnership with BC Transit's Transit Shelter Program, has been gradually upgrading existing substandard bus shelters throughout the City.





## 7.5 Ridership Summary

BC Transit has provided ridership data for each of its bus stops within the City. Referred to as “average bus stop activity”, the data measures the average total number of boardings (on to the bus) and alightings (exiting the bus) per day in 2021. Preliminary data from 2022 is also included for select bus stops. **Map 6** illustrates the boarding and alighting across the bus stops. The data suggests the following trends:

- Transit ridership is relatively low across the City, with over 80% of bus stops seeing less than 30 passengers per day
- The Erickson Road / Reef Crescent stop experiences the highest level of transit ridership in the City, with over 200 passengers per day on average. This stop serves as a junction for four different bus routes (1, 2, 3, 6), serves as the transfer point for passengers to / from the Comox Valley Regional Transit System, and provides access to various amenities on Campbell River’s Waterfront
- The Dogwood Street / 16<sup>th</sup> Avenue and Community Centre Exchange stops both experience over 100 passengers per day on average. Both stops serve as a junction for multiple routes, and provide access to major commercial centres downtown (Mariner Square, Tyee Plaza)
- Preliminary data from January through May 2022 indicates increased ridership (130 passengers per day on average) at North Island College with the return of in-person schooling
- Preliminary 2022 data also indicates high ridership at the 16<sup>th</sup> Avenue / Willow Street / Tamarac Street stops (junction for five different bus routes), and the 16<sup>th</sup> Avenue / 1460 Block stop (access to Walmart and Nunns Creek Park)

## Map 6: Transit Boarding & Alighting Activity



### Jurisdictional Boundaries

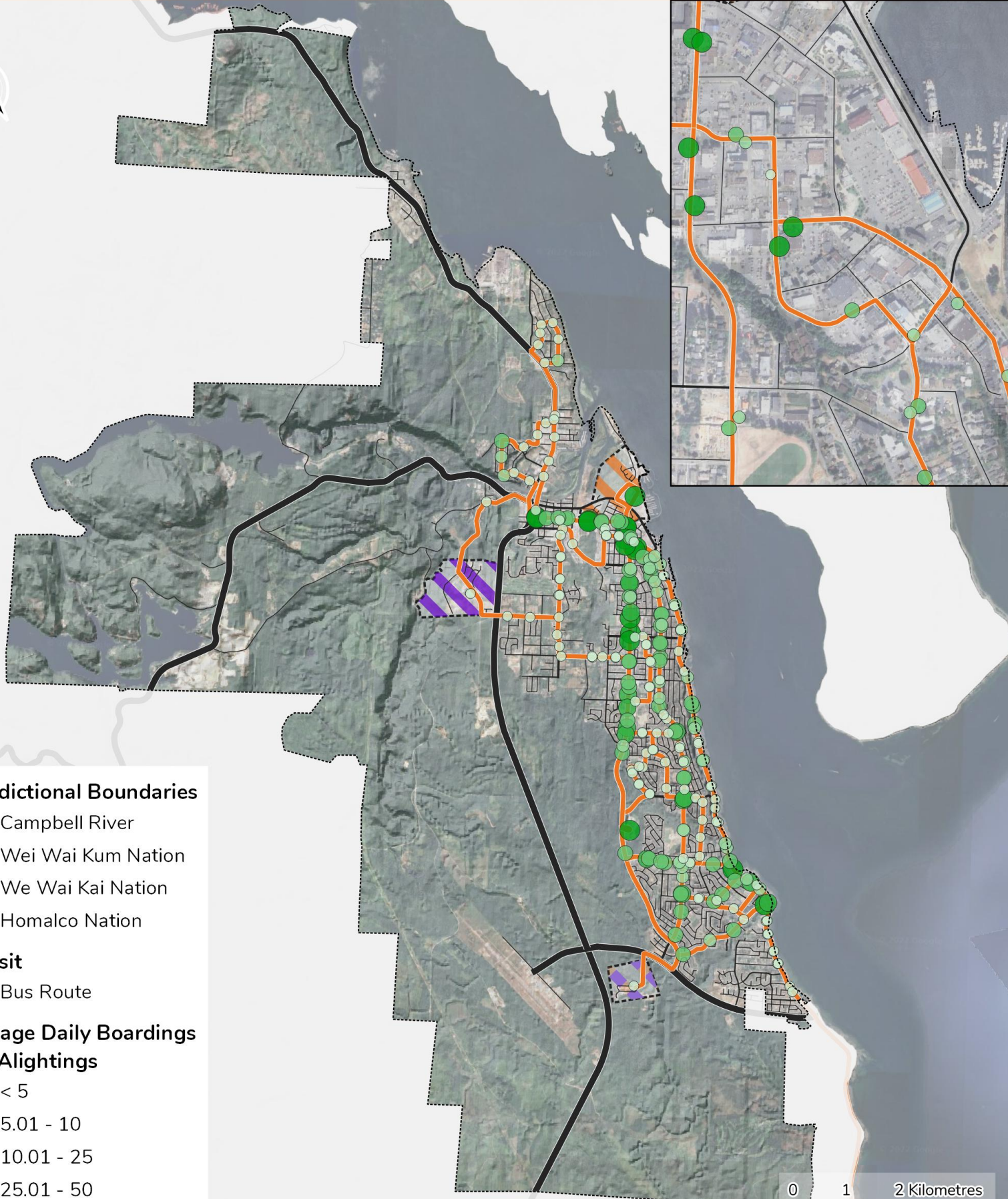
- Campbell River
- Wei Wai Kum Nation
- We Wai Kai Nation
- Homalco Nation

### Transit

- Bus Route

### Average Daily Boardings and Alightings

- < 5
- 5.01 - 10
- 10.01 - 25
- 25.01 - 50
- > 50.00





## 7.6 Ferry Service Overview

The Campbell River to Quadra Island ferry operates seven days a week, from approximately 6:15 AM to 10:30 PM. Headways are hourly, with a sailing duration of approximately ten minutes.

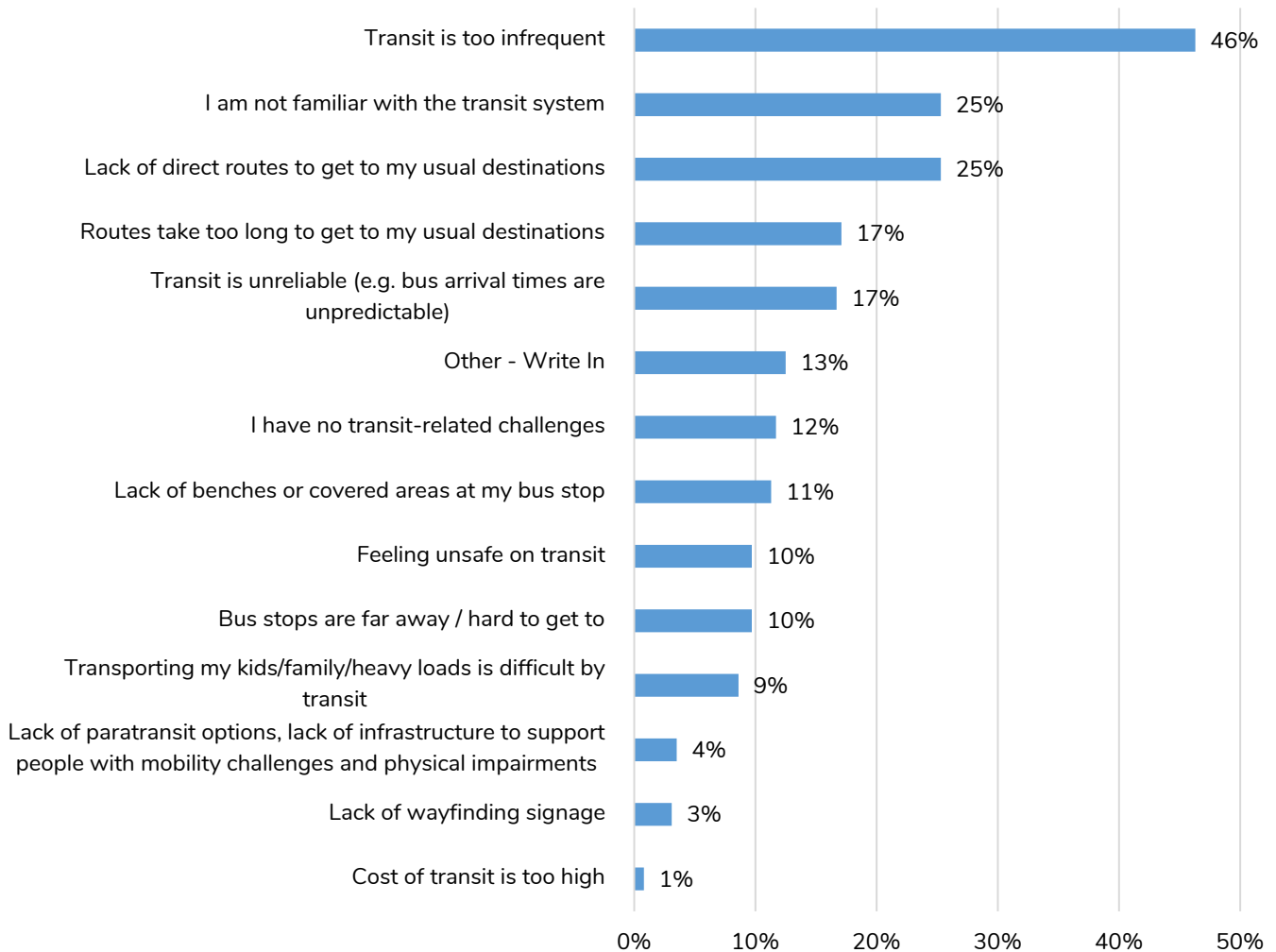
## 7.7 Ferry Infrastructure

The Campbell River Ferry Terminal is located in the downtown core and is accessed from Highway 19A. Entry to the ferry terminal is provided at its southern end. The driveway is located on the outer edge of a horizontal curve, and access is permitted both from the northbound and southbound directions. Exit from the terminal is provided at a signalized intersection at its northern end. Pedestrian crosswalks are provided on the north and east legs of this intersection only. An additional crossing for pedestrians entering the ferry terminal is provided between the entry and exit driveways, opposite Tye Plaza's rear driveway. This intersection is signalized on the northbound and southbound approaches only.



## 7.8 What We Heard from the Community

The top challenges to using transit indicated by survey respondents were ‘Transit is too infrequent’ (46%), ‘I am not familiar with the transit system’ (25%), and ‘Lack of direct routes to get to my usual destination’ (25%). See **Figure 11**.

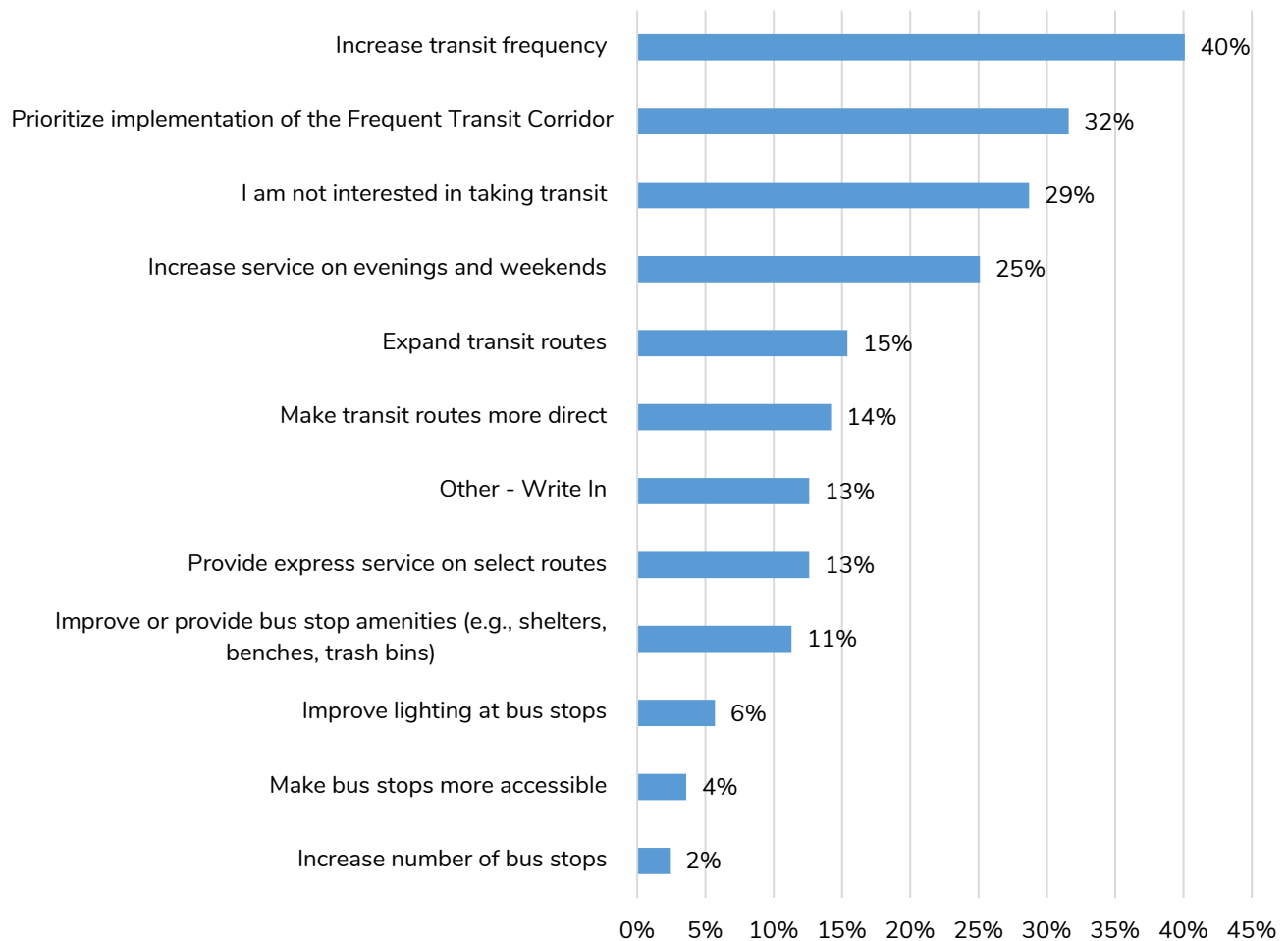


**Figure 11 - Top Issues / Barriers to Using Transit Within and Through Campbell River (Online Survey)**

13% of respondents selected ‘Other – Write In’. Themes from those responses included bus or bus stops feeling unsafe, schedule not convenient, lack of clear maps / information, and service not running early or late enough (especially for youth accessing programs or employment).



Respondents were also asked the following question: *Recognizing that transit service is largely under the jurisdiction of BC Transit, what could we do to make it easier to use transit within and through Campbell River? (Select up to three).* The top three responses were ‘Increase transit frequency’ (40%), ‘Prioritize implementation of the Frequent Transit Corridor’ (32%), and ‘I am not interested in taking transit’ (29%). See **Figure 12**.



**Figure 12 - Top Opportunities for Improving Transit in Campbell River (Online Survey)**

Themes from respondents who selected ‘Other – Write In’ included implementing earlier and later service, making routes more direct, improving transit information, and improving affordability.



Feedback heard through the Ideas Fair was similar to the survey results. The most preferred ways to make using transit more convenient in Campbell River (as told by sticky dot votes) were 'Increase transit frequency', 'Increase service on evenings and weekends', and 'Make transit routes more direct'. Further comments included the following desired improvements:

- Increasing service span and service during commuter times
- Linking transit service to Nanaimo
- Service to and from Quinsam reserve
- Improving hospital service
- Increasing the number of neighbourhood routes





## 8.0 STREET & TRAFFIC CONDITIONS

### 8.1 Road Network & Classification

**Map 7** shows the existing road network including road classifications within the City boundary. Road classification is based on factors including adjacent land use, service function, traffic volumes, traffic flow characteristics, vehicle types, vehicle speeds, and connections with intersecting roads. The existing road classifications are as follows:

**Provincial Highway** – Traffic movement is the primary function of highways with speed limits of around 80km/h to 100km/h and limited access to adjacent properties. Highway 19, Highway 28, and Jubilee Parkway are the three provincial highways under the jurisdiction of BC MoTI that run through the City’s boundaries. These roads carry volumes of over 10,000 vehicles per day, which includes high proportions of heavy vehicles. Provincial highways also tend to prioritize vehicle movement over pedestrian and cycling infrastructure.

**Arterial** – Traffic movement is an important function of arterials to connect vehicles from collectors to highways. Minor arterials typically carry vehicle volumes in the range of 5,000 to 20,000 vehicles per day, while major arterials typically experience 10,000 to 30,000 vehicles per day. Posted speed limits are generally between 50km/h and 60km/h. Heavy vehicles can also be expected on these roads. Arterial roads in Campbell River include roads such as Highway 19A, Dogwood Street, Petersen Road, and 16<sup>th</sup> Avenue. Pedestrian and cycling infrastructure on these types of corridors should be separate and / or protected due to higher speeds and volumes of vehicles.

**Collector** – The intent of collector roads is to balance direct access to adjacent properties while maintaining traffic flow and connecting local roads and arterials. Residential collector roads typically carry vehicle volumes of less than 8,000 vehicles per day, while industrial and commercial collectors typically carry between 1,000 and 12,000 vehicles per day. Posted speed limits are generally between 30km/h and 50km/h. Heavy vehicles may be permitted on these roads. The City’s collector roads include roads such as Ironwood Street, McPhedran Road, Robron Road, and Mercroft Road. These roads tend to need to balance vehicle movement with pedestrian and bicycle accommodations. Separate facilities should be provided, but based on lower volumes than arterials, the level of the facility can be lower.





**Local** – The primary function of local roads is to provide direct access to properties rather than easy traffic flow. Local roads are intended to connect with collector roads. Local roads in single-family residential neighbourhoods typically carry less than 1,000 vehicles per day, while local roads in multi-family residential neighbourhoods, commercial, or industrial areas typically carry up to 3,000 vehicles per day. Traffic flow on local roads is usually interrupted with on-street parking and driveway access activity. Heavy vehicle access is usually limited on these roads with exceptions for garbage pickup and occasional residential loading / unloading activities. Due to lower volumes, pedestrian and bicycle infrastructure can be integrated with vehicles through neighbourhood bikeways and sidewalks.

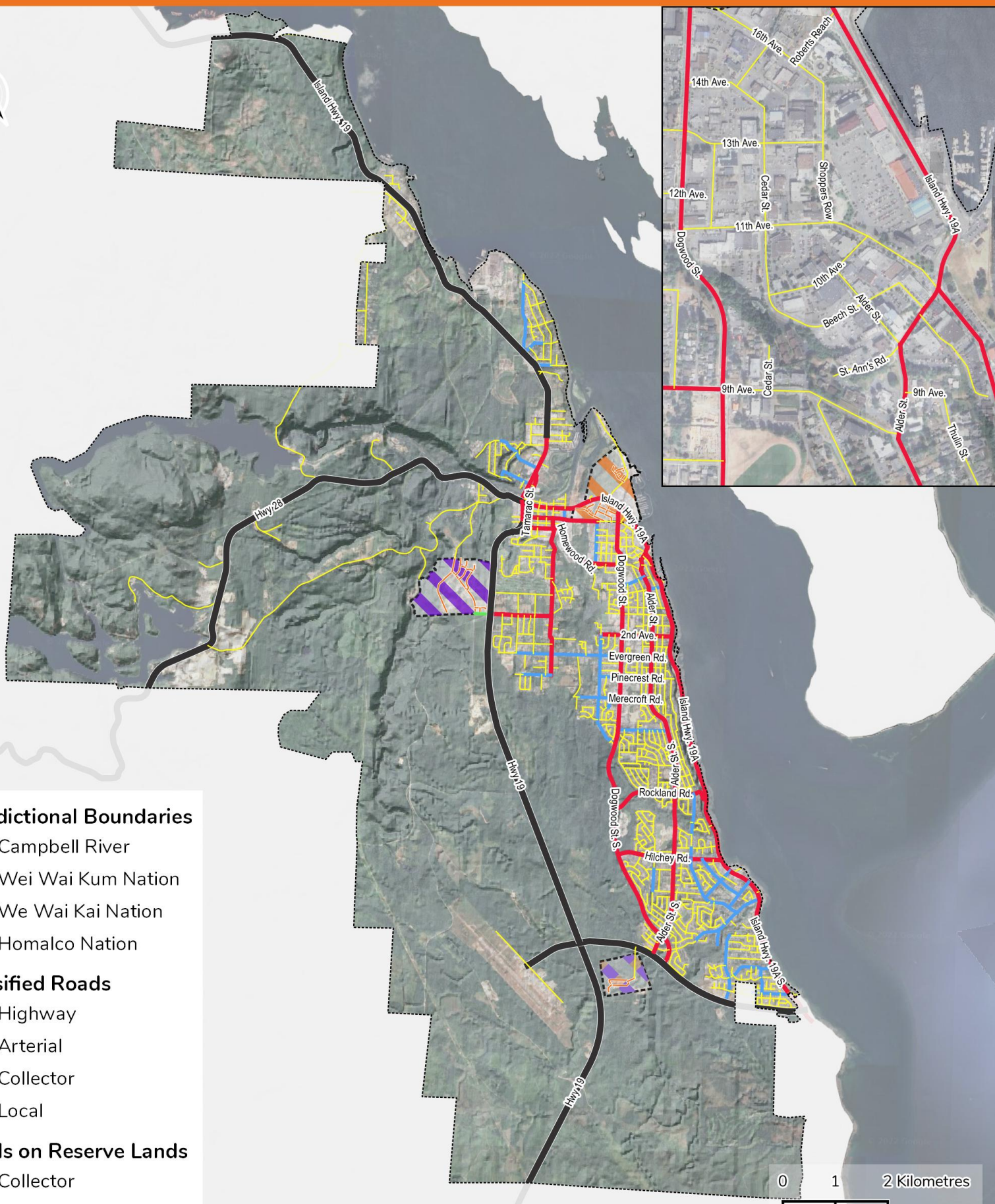
**Table 8** shows the breakdown of road classifications in the Campbell River road network based on overall length in kilometres. There is a total of 341km of roads within the City of Campbell River.

**Table 8 – Existing Road Network Inventory**

Road Classification	Length	Percentage
Highway	53km	16%
Arterial	46km	13%
Collector	25km	7%
Local	187km	55%
Logging	30km	9%
Total	341km	100%

Fifteen different classifications of roads are provided within the City’s GIS data. This includes four different classifications of arterial roads (arterial, urban arterial, rural arterial, and minor arterial), four different classifications of collector roads (collector, urban collector, rural collector, and reserve collector), and four different classifications of local roads (local, urban local, rural local, and reserve local).

## Map 7: Road Classifications



### Jurisdictional Boundaries

- Campbell River
- Wei Wai Kum Nation
- We Wai Kai Nation
- Homalco Nation

### Classified Roads

- Highway
- Arterial
- Collector
- Local

### Roads on Reserve Lands

- Collector
- Local





## 8.2 Road Standards

The City's Subdivision and Servicing Bylaw No. 3419, published in 2010, provides both performance-based and prescriptive standards for road design. The performance standards for street systems include:

- Accommodate motor vehicle traffic in a manner compatible with the environment in which the street is located.
- Employ traffic calming measures as appropriate to maximize road safety.
- Avoid excessive road widths, which can otherwise create speeding problems and increase stormwater runoff.
- Provide emergency access for fire, police and ambulance vehicles.
- Minimize crossing distances and maximize safety of pedestrians at intersections.
- Minimize curb radii at intersections – while recognizing that larger radii may be required on specific corners on bus routes and in commercial areas.
- Provide for safe and efficient bicycle use – on the roadway, and optionally on off-street multi-use pathways – and provide continuity of connection to the bicycle network.
- Provide sidewalks on at least one side of local streets and both sides of arterial and collector roads, and provide continuity of connections in the pedestrian network.
- Design street, bicycle and pedestrian networks to avoid indirect and lengthy travel paths, and to encourage walking to school, business, commercial or recreation areas.



**Table 9** outlines the current standards for curb radii at intersections.

**Table 9 – Existing Corner Radii Standards**

	Local	Collector – Residential	Collector – Commercial / Industrial	Arterial	Right-Turning Large Vehicle
Local	3m	5m <sup>[1]</sup> 3m <sup>[2]</sup>	8m	8m <sup>[1]</sup> 5m <sup>[2]</sup>	11m <sup>[1]</sup> 8m <sup>[2]</sup>
Collector – Residential		5m	8m <sup>[1]</sup> 5m <sup>[2]</sup>	8m <sup>[1]</sup> 5m <sup>[2]</sup>	11m <sup>[1]</sup> 8m <sup>[2]</sup>
Collector – Commercial / Industrial			11m <sup>[1]</sup> 8m <sup>[2]</sup>	11m <sup>[1]</sup> 8m <sup>[2]</sup>	11m <sup>[1]</sup> 8m <sup>[2]</sup>
Arterial				8m	11m <sup>[1]</sup> 8m <sup>[2]</sup>
Right-Turning Bus					11m <sup>[1]</sup> 8m <sup>[2]</sup>

Notes:

1. Where no on-street parking is provided
2. Where on-street parking is provided

**Table 10** shows typical cross-section width allocations for the City’s current road standards, which includes specifications for a variety of different road classifications and contexts.



**Table 10 – Existing Road Cross-Section Standards**

Classification	ROW (m)	Travel Lane Width (m)	Parking Lane Width (m)	Road Edge
Urban Local Low Density	20	3.0	2.0 (one side, alternating)	Curb & gutter
Urban Local High Density	20	3.0	2.0 (both sides)	Curb & gutter
Urban Local Commercial	20	3.0	2.1 (both sides)	Curb & gutter
Urban Local Industrial	20	3.3	2.1 (both sides)	Curb & gutter
Urban Collector – Minor	20	4.3 <sup>(1)</sup>	2.4 (one side)	Curb & gutter
Urban Collector – Major	23	3.3	2.4 (both sides)	Curb & gutter
Urban Arterial – 3 Lane	25	3.3	N/A	Curb & gutter
Urban Arterial – 4 Lane	28	3.3	N/A	Curb & gutter
Rural Local Residential	20	3.0	2.0 (one side, optional)	Shoulder
Rural Local Commercial / Industrial	20	3.75	2.0 (one side, optional)	Shoulder
Rural Collector	20	3.3	N/A	Shoulder

Notes:

1. 4.3 metre travel lane is shared with cyclists
2. Sidewalk and cycling facilities for each section are outlined in Table 3 and Table 6, respectively

Inconsistencies between the City’s current road classifications (i.e. highway, arterial, collector, and local), and the cross section standards (i.e. high / low density, commercial, industrial, etc.) create confusion between developers and City staff. The 2017 Refresh Downtown study also had an entirely different set of street typologies and proposed cross sections in comparison to the existing road classifications and cross section standards.

All of the road cross section elements including lane widths, road edge, sidewalks, trails / pathways, bicycle facilities, and parking will be reviewed and updated in Phase 2.



### 8.3 Traffic Volumes

**Map 8** shows daily two-way traffic volumes in the City of Campbell River. The volumes are based on intersection turning movement counts collected between 2019 and 2022, and BC MoTI data. Traffic volumes collected prior to 2022 were factored up to account for general corridor growth.

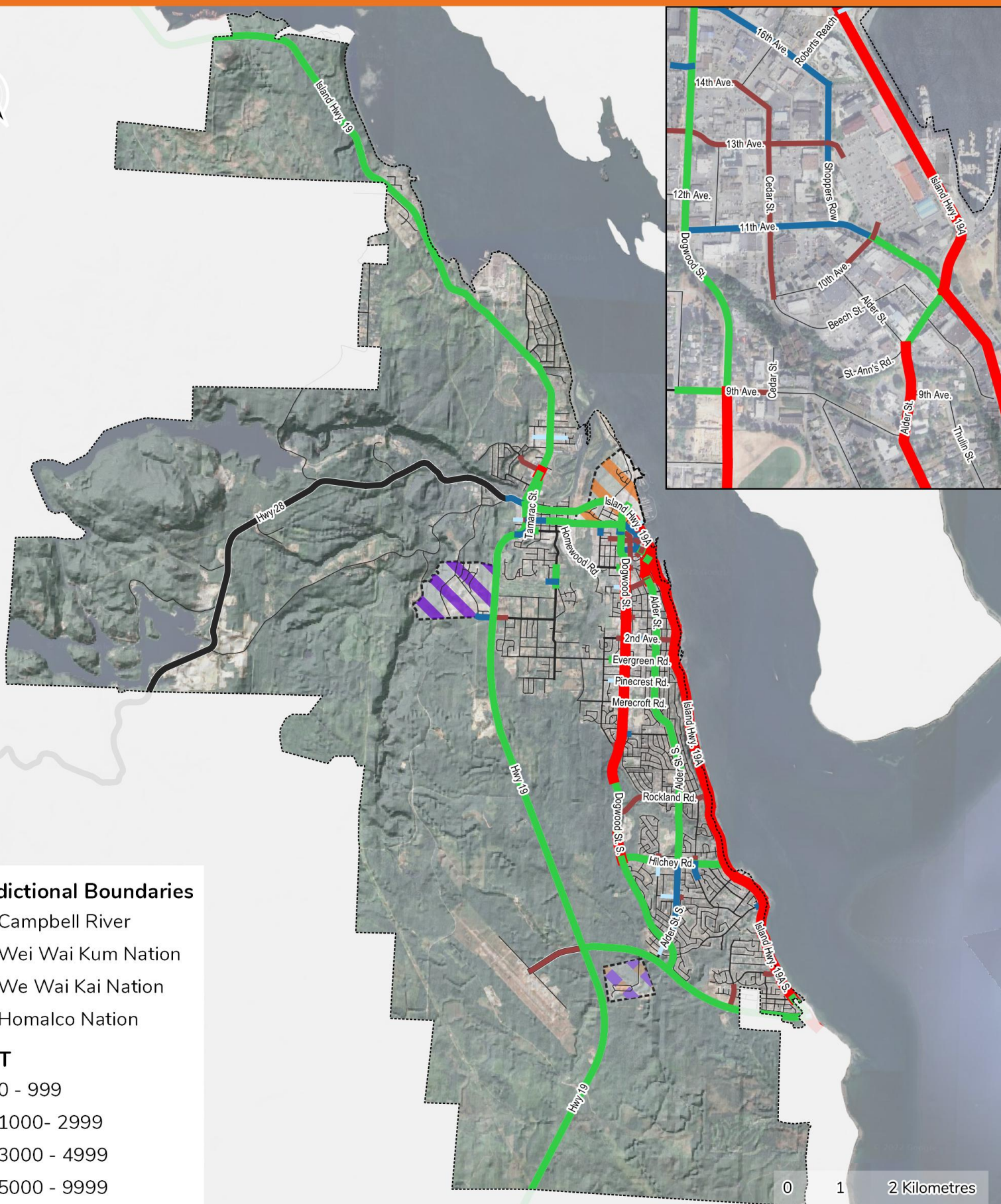
Traffic volumes along corridors were compared with existing roadway classifications to determine any discrepancies in the existing function of the roads to their current classification. Several corridors were identified that experience volumes above or below their current classification. These corridors are outlined in **Table 11**.

**Table 11 – Road Classifications to be Reviewed**





Road Segment	AADT (vpd)	Existing Classification	Functioning Classification
<i>Existing Classification too low</i>			
11 <sup>th</sup> Avenue	3000-4000	Local	Collector
16 <sup>th</sup> Avenue (East of Ironwood Street)	4000-6500	Local	Collector / Arterial
Shoppers Row	3500-4500	Local	Collector
<i>Existing Classification too high</i>			
2 <sup>nd</sup> Avenue	1500-3000	Arterial	Collector
7 <sup>th</sup> Avenue	1500	Collector	Local
Alder Street (South of Hilchey Road)	3000-5000	Arterial	Collector
Rockland Road	1500-3000	Arterial	Local / Collector
Willis Road	3000	Arterial	Collector

# Campbell River Master Transportation Plan and Dogwood Corridor Study

## Map 8: AADT



### Jurisdictional Boundaries

-  Campbell River
-  Wei Wai Kum Nation
-  We Wai Kai Nation
-  Homalco Nation

### AADT

-  0 - 999
-  1000 - 2999
-  3000 - 4999
-  5000 - 9999
-  10000 +





## 8.4 Traffic Conditions

**Map 9** shows existing Levels of Service (LOS) in the City of Campbell River's key intersections during the afternoon (PM) peak hours at 53 of the City's intersections.

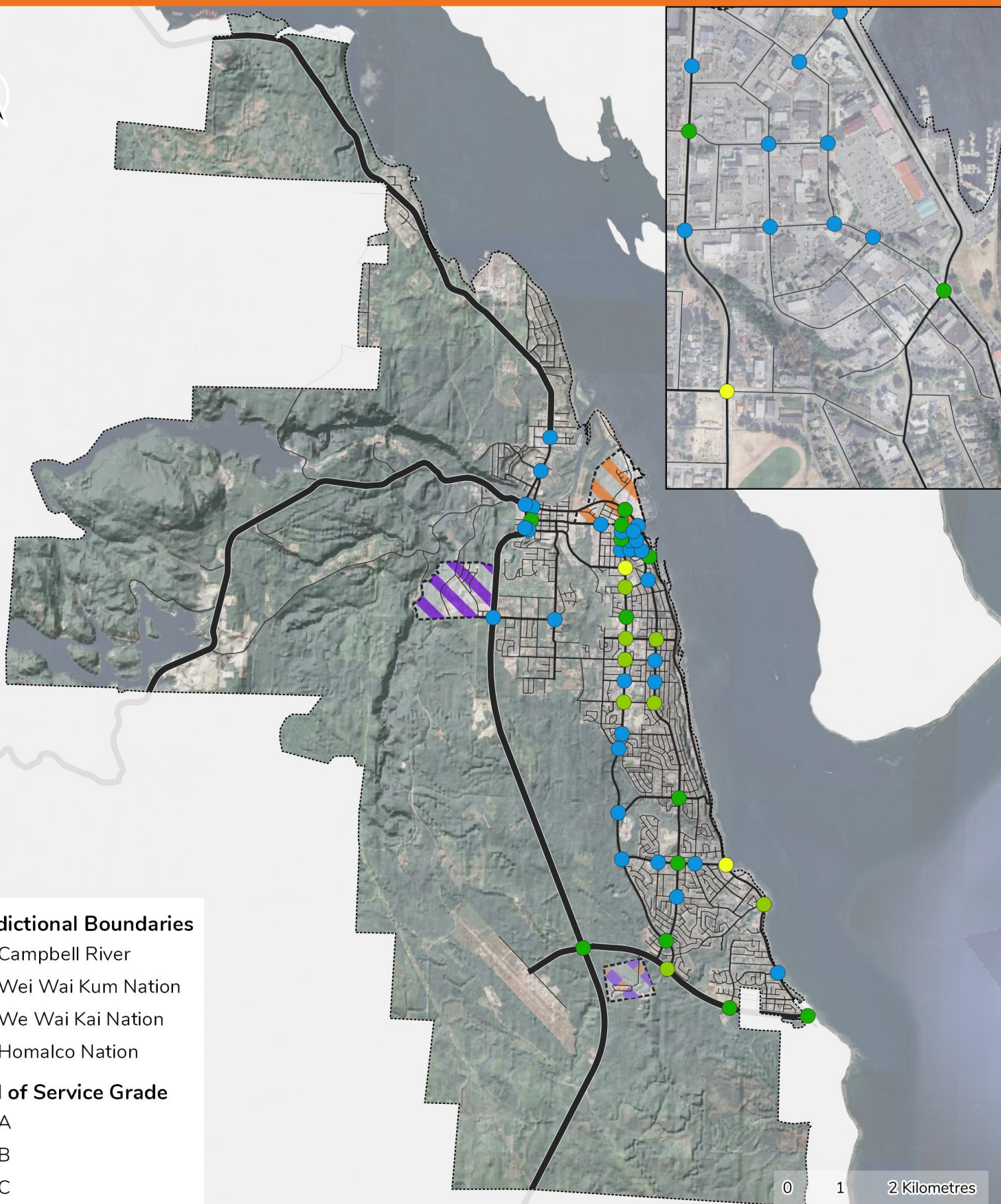
LOS is a measure of effectiveness that is used to characterize and evaluate traffic operations at intersections based on average delay per vehicle and type of traffic control. LOS breaks delay into a six-point scale ranging from LOS A (excellent conditions with minimal or no delay) to LOS F (poor conditions with extensive delay).

As seen in **Map 9** the majority (45 of 53) of Campbell River's intersections function at LOS A or LOS B in the PM peak hour. There are a few (8 of 53) that operate at LOS C and LOS D, of which 5 occur on the Dogwood Street corridor, 2 occur on the Alder Street corridor, and the remaining one is at Highway 19A / Hilchey Road.

The results indicate that generally Campbell River experiences little delay in traffic. It should be noted that the LOS scores in **Map 9** are the average score for the intersection as a whole, and that individual movements at a given intersection may experience different conditions.



## Map 9: Level of Service - PM Peak Hour



**Jurisdictional Boundaries**

- Campbell River
- Wei Wai Kum Nation
- We Wai Kai Nation
- Homalco Nation

**Level of Service Grade**

- A
- B
- C
- D

0 1 2 Kilometres



## 8.5 Traffic Collisions

Traffic collision data can be one indicator of safety issues at an intersection or along a corridor. Collision statistics were obtained from ICBC. **Map 10** shows the total number of collisions at intersections in Campbell River from 2017-2021. **Table 12** shows the top 10 collision locations on the City’s roads based on total collisions.

**Table 12 – Top 10 Highest Collision Locations in Campbell River**

Rank	Location	5-Year Total Collisions	Average Collisions Per Year
1	Highway 19A / Dogwood St	65	13.0
2	Highway 19 / Willis Rd	60	12.0
3	Highway 19A / Shoppers Row	49	9.8
4	Dogwood St / 2nd Ave	47	9.4
5	Highway 19A / Jubilee Pkwy	47	9.4
6	Highway 19 / Jubilee Pkwy	41	8.2
7	Dogwood St / Merecroft Rd	36	7.2
8	Dogwood St / 16th Ave	34	6.8
9	Dogwood St / Hilchey Rd	34	6.8
10	Dogwood St / 4th Ave	30	6.0

**Map 11** shows the range of collision rates for 2017-2021. Collision rates are calculated by dividing the total collisions in 5 years with the total entering traffic volumes at the intersection. This rate is used to illustrate locations where there may be high collisions for a lower amount of traffic. **Table 13** shows the top 10 collision locations based on collision rates.

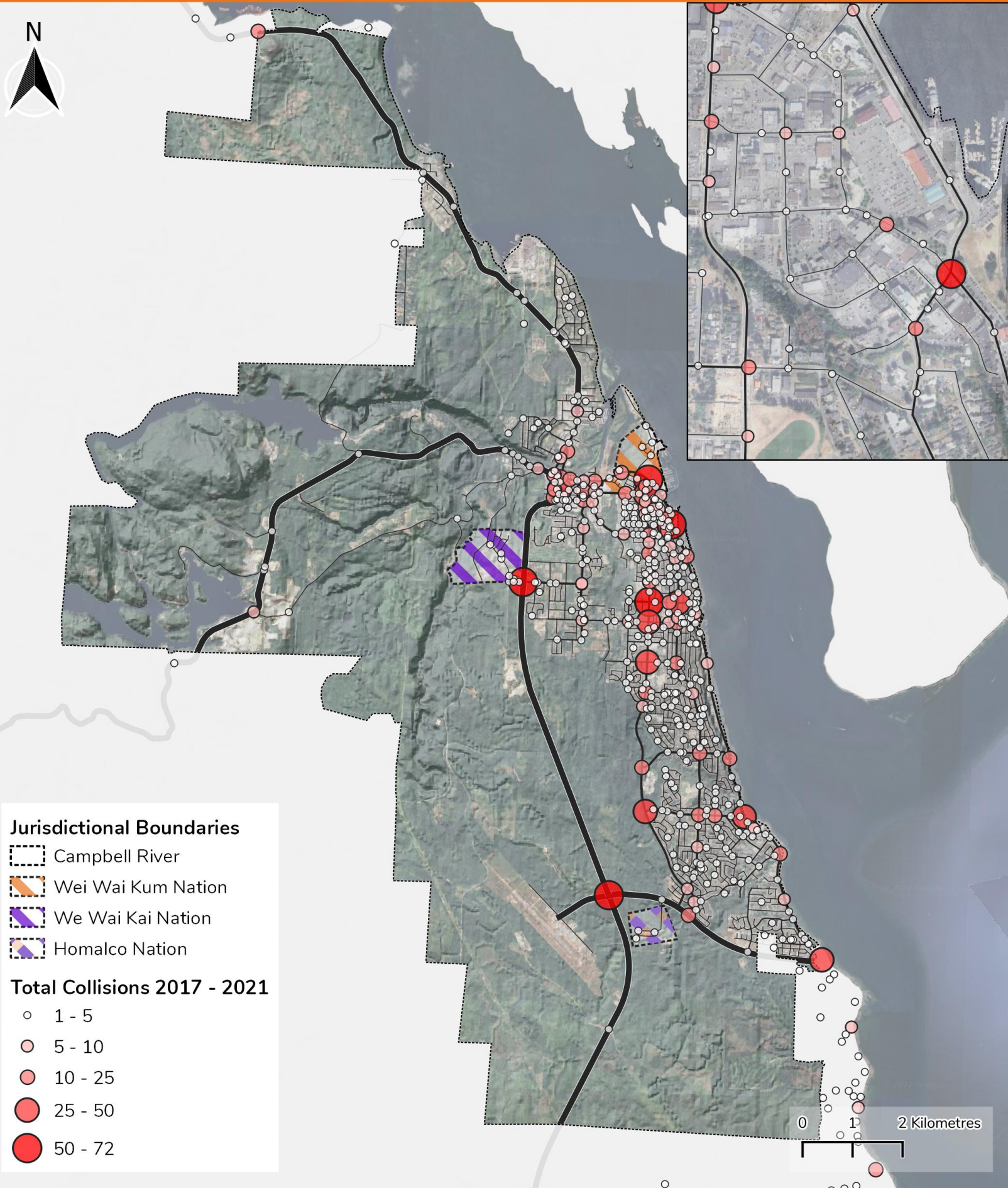


**Table 13 – Top 10 Vehicle Collision Rate Locations in Campbell River**

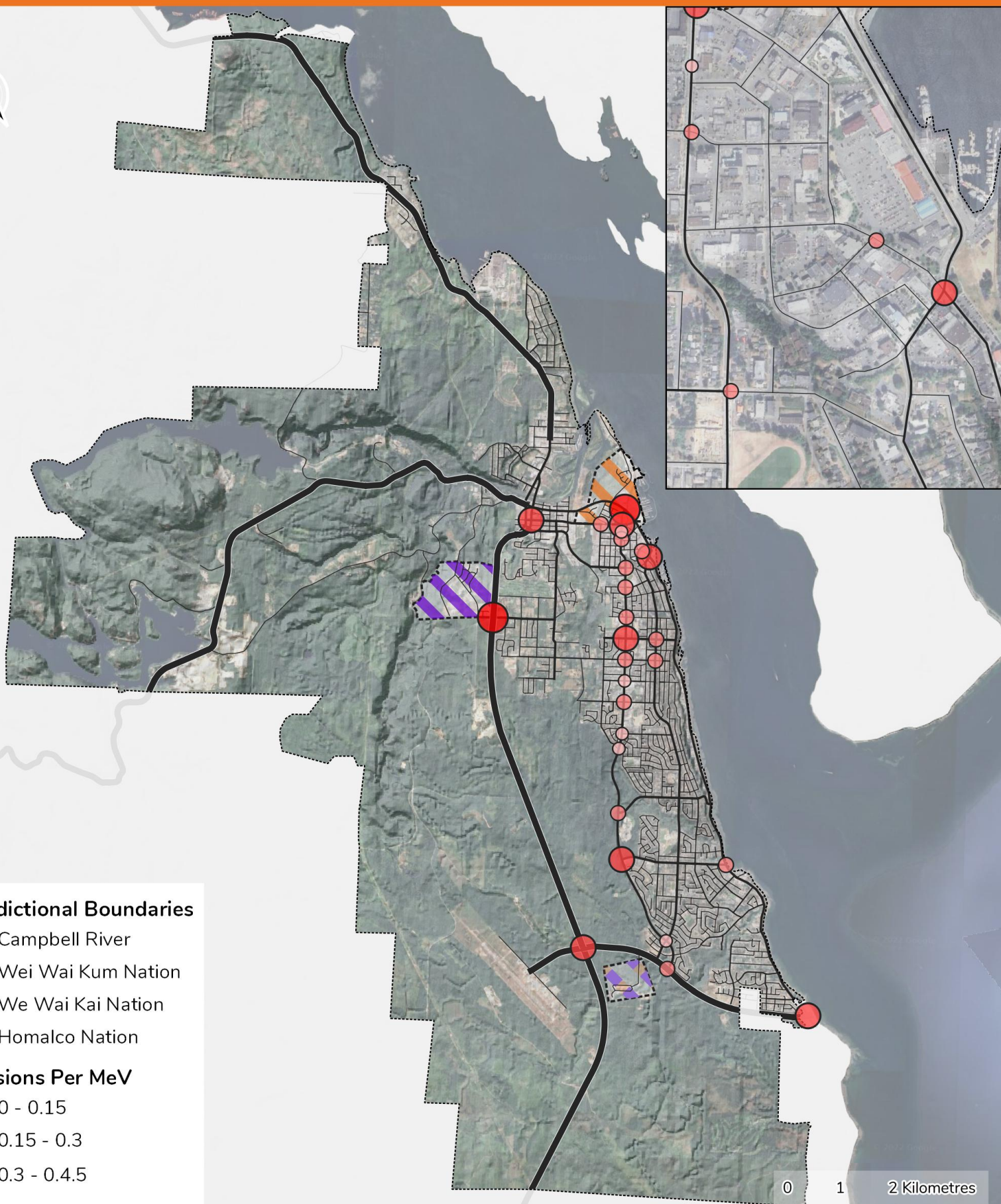
Rank	Location	Collision Rate (collisions per million vehicles entering)
1	Highway 19 / Willis Rd	0.601
2	Highway 19A / Dogwood St	0.594
3	Highway 19A / Jubilee Pkwy	0.365
4	Tamarac St / 16th Ave	0.361
5	Dogwood St / 2nd Ave	0.358
6	Highway 19 / Jubilee Pkwy	0.337
7	Highway 19A / Shoppers Row	0.315
8	Dogwood St / 16th Ave	0.312
9	S Dogwood St / Hilchey Rd	0.312
10	Alder St / 2nd Ave	0.278

The crash rates seen in **Table 13** show overlap with many of the same intersections as seen in **Table 12**, with both Highway 19A / Dogwood St and Highway 19 / Willis Rd ranking in the top 2. Tamarac St / 16th Ave is the only intersection in **Table 13** that does not appear in **Table 12** and although it ties with Dogwood St / 4th Ave for having 30 crashes in the past 5 years the crash rate is significantly higher revealing it as being more dangerous. Similarly, Dogwood St / Mercroft Rd does not make the Top 10 for crash rate (13<sup>th</sup> place with a rate of 0.228) but ranks high for total number of crashes.

## Map 10: Total Vehicle Collisions (2017 - 2021)



## Map 11: Collision Rates (2017 - 2021)



### Jurisdictional Boundaries

- Campbell River
- Wei Wai Kum Nation
- We Wai Kai Nation
- Homalco Nation

### Collisions Per MeV

- 0 - 0.15
- 0.15 - 0.3
- 0.3 - 0.45
- 0.45 - 0.6





**Table 14** shows the top intersections for bicycle involved collisions. Collisions in **Table 14** include those involving scooters.

**Table 14: Top Bicycle Collision Locations in Campbell River**

Rank	Location	5-Year Total Collisions	Average Collisions Per Year
1	Dogwood St / Erickson Rd	2	0.4
2	Dogwood St / 2nd Ave	2	0.4
3	Dogwood St / Robron Rd	2	0.4
4	Highway 19A / Shoppers Row	1	0.2
5	Dogwood St / Mercroft Rd	1	0.2
6	Dogwood St / 16th Ave	1	0.2
7	Highway 19A / Hilchey Rd	1	0.2
8	Dogwood St / Evergreen Rd	1	0.2
9	Ironwood St / 16th Ave	1	0.2
10	Dogwood St / Jubilee Pkwy	1	0.2
11	Alder St / Evergreen Rd	1	0.2

The most notable intersection was Dogwood Street / Erickson Road with two crashes; both crashes involved passenger vehicles making a right turn from Erickson Road onto Dogwood Street and striking cyclists using the multiuse path.



**Table 15** shows the top pedestrian collision locations.

**Table 15: Top Pedestrian Collision Locations in Campbell River**

Rank	Location	5-Year Total Collisions	Average Collisions Per Year
1	Dogwood St / Highway 19A	3	0.6
2	Shoppers Row / 10th Ave	3	0.6
3	Highway 19A / Jubilee Pkwy	2	0.4
4	Highway 19A / Hilchey Rd	1	0.2
5	Dogwood St / 7th Ave	1	0.2
6	Dogwood St / 13th Ave	1	0.2
7	Highway 19 / Willis Rd	1	0.2
8	Dogwood St / 16th Ave	1	0.2
9	Dogwood St / 4th Ave	1	0.2
10	Tamarac Rd / 16th Ave	1	0.2
11	Dogwood St / 9th Ave	1	0.2
12	Dogwood St / Jubilee Pkwy	1	0.2
13	Highway 19 / Jubilee Pkwy	1	0.2

The total number of pedestrian involved collisions is low. Highway 19A is a major corridor, as is Dogwood Street. A review of the collision data indicated that many pedestrian-related crashes involved drivers stopping suddenly for crossing pedestrians and getting rear ended.

Shoppers Row / 10th Ave is in the heart of the downtown area and has high pedestrian volumes. Additionally, the intersection geometry, slip lanes, parking lot, and ferry terminal all create a scenario which is busy with automobile traffic.



## 8.6 Traffic Speeds

**Map 12** shows the posted speed limits for many of the principal roads in the City. The majority of streets in Campbell River maintain the default posted speed limit of 50km/h in urban areas. Several neighbourhoods (including Quinsam Heights and North Penfield) and streets (including Murphy Street, Nodales Drive, Jubilee Heights) are signed at 40km/h. Portions of 2<sup>nd</sup> Avenue and Birch Street in the vicinity of Campbell River hospital are signed at 30km/h. South Dogwood Street (between McPhedran Road and Jubilee Parkway) is signed at 60km/h. Outside of urban areas, most roads under the jurisdiction of MoTI are signed at 80km/h or higher.

Design speed requirements for each road classification are outlined in **Table 16**. The Subdivision and Servicing Bylaw states that the posted speed limit for vehicles may be much slower than the design speed to which the road is built, but should not be faster.

**Table 16 – Existing Design Speed Standards**

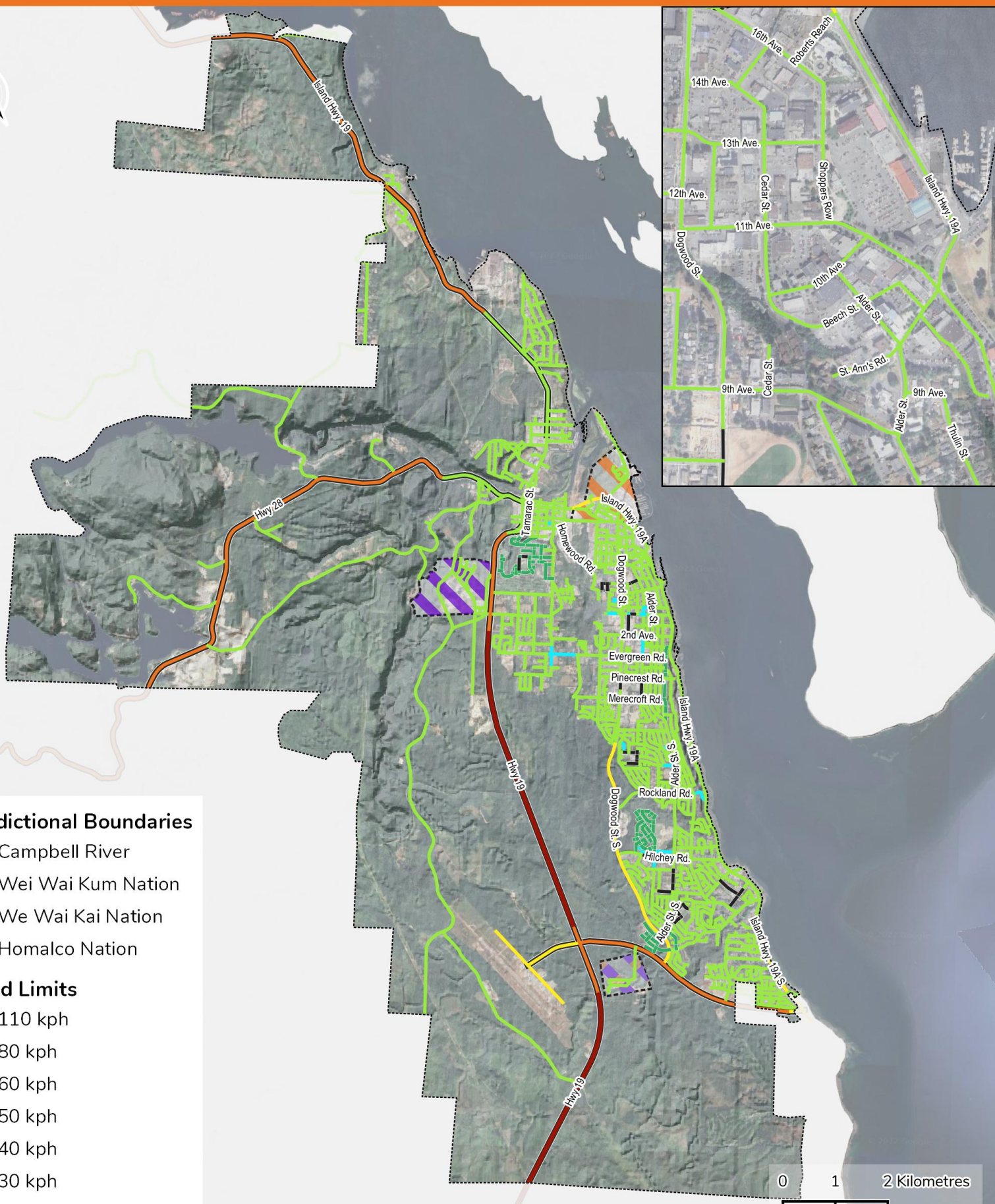
Context	Road Classification	Minimum Design Speed (km/h)
Rural	Local	60
Residential	Local	50
Residential (Multiple Family), Commercial, Industrial, Public Assembly	Local	50
All	Collector	TAC standard
	Arterial	TAC standard
	Lane	30
	Walkway	--

Speed plays a critical role in the cause and severity of collisions. Reducing the design speed in order to reduce curb radii and narrow travel lanes encourages lower travel speeds and provides a safer place for people to walk, park, and drive on City streets. Design speeds for each road classification will be reviewed in detail in Phase 2.



# Campbell River Master Transportation Plan and Dogwood Corridor Study

## Map 12: Posted Speed Limits



**Jurisdictional Boundaries**

- Campbell River
- Wei Wai Kum Nation
- We Wai Kai Nation
- Homalco Nation

**Speed Limits**

- 110 kph
- 80 kph
- 60 kph
- 50 kph
- 40 kph
- 30 kph
- School Zone





## 8.7 Traffic Calming

The City has an existing Neighbourhood Traffic Management Policy that was developed in July 2009. The policy has two different procedures; one for new development, and one from existing neighbourhoods.

The Neighbourhood Traffic Management Policy follows a four stage process to study and implement traffic calming requests, and provides examples of traffic calming measures and appropriate situations for their implementation.

Since the policy's implementation in 2009, there have been advances and additional traffic calming options that can be deployed. The existing Neighbourhood Traffic Management Policy will be reviewed and updated to reflect current best practices.

## 8.8 Goods Movement

Schedule J of the Traffic and Highways Bylaw outlines designated truck routes within the City of Campbell River:

- Highway 19
- Highway 19A (north of St Ann's Road)
- Highway 28
- 9<sup>th</sup> Avenue
- 14<sup>th</sup> Avenue
- 16<sup>th</sup> Avenue
- Dogwood Street (except between 9<sup>th</sup> Avenue and 16<sup>th</sup> Avenue downtown)
- Homewood Road
- Jubilee Parkway
- Petersen Road

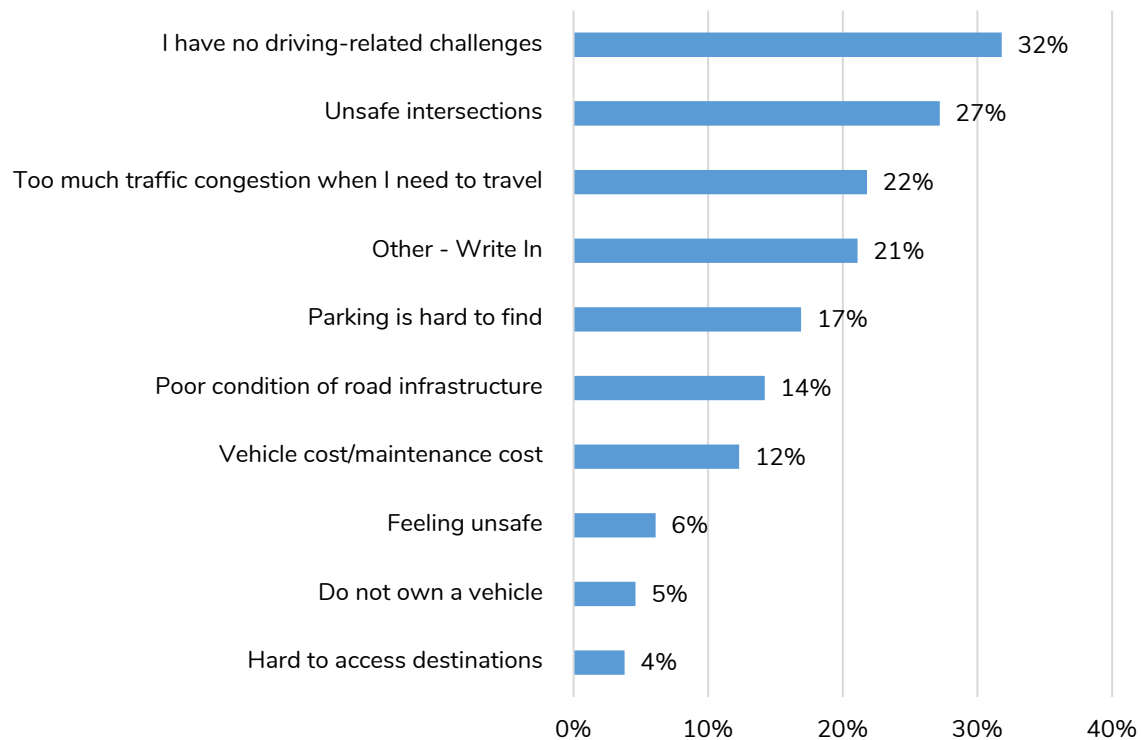
The truck routes designated in the Traffic and Highways Bylaw does not preclude trucks from deviating from the truck route to reach their destination / delivery location; however they can only take the shortest path from the truck route to reach their destination.



In Phase 2, key trucking origins and destinations will be reviewed, along with road classifications to determine appropriate truck routes for Campbell River. Updated Traffic Bylaw materials will be provided.

### 8.9 What We Heard from the Community

Respondents were asked to indicate the top challenges they experience driving within and through Campbell River. The top responses were 'I have no driving-related challenges' (32%), 'Unsafe intersections' (27%), and 'Too much traffic congestion when I need to travel' (22%). 'Hard to access destinations' was selected by the fewest number of respondents (4%). See **Figure 13**.

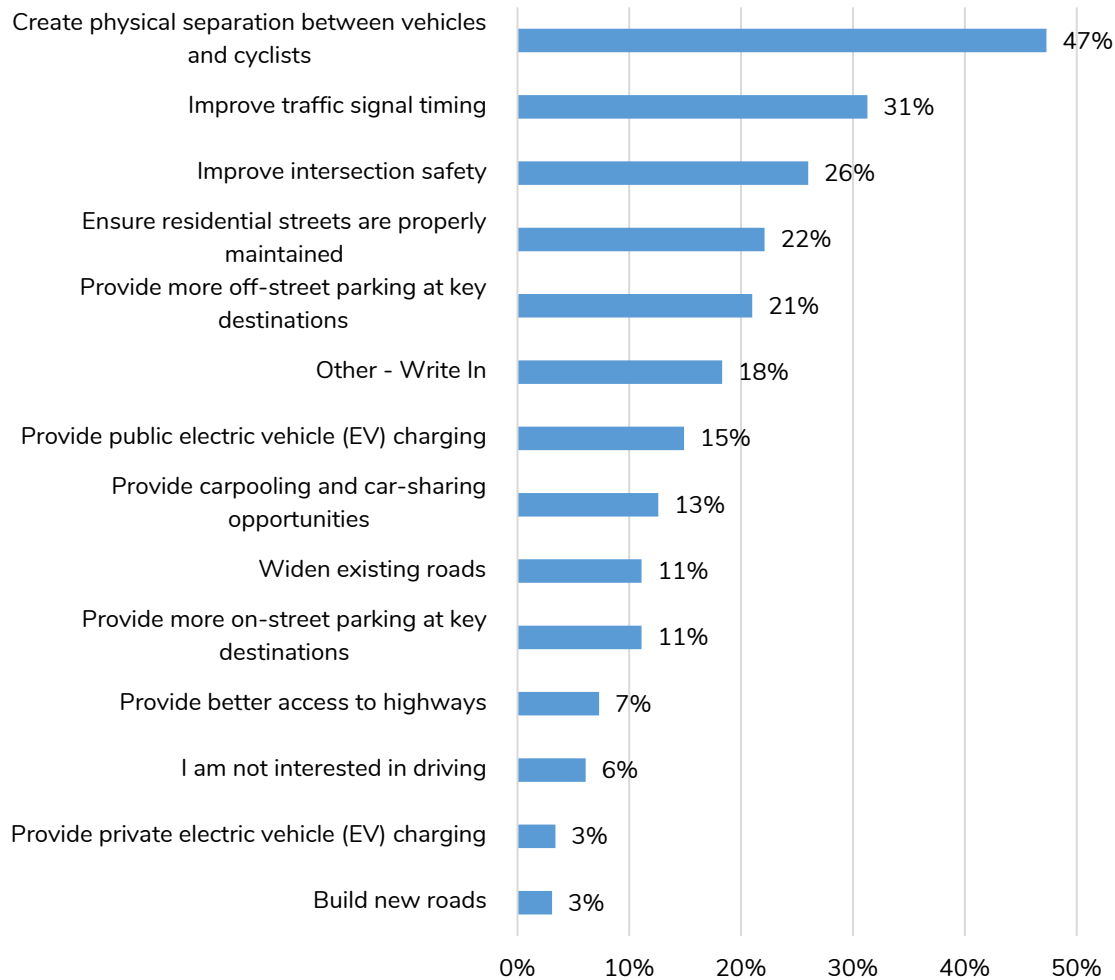


**Figure 13 - Top Challenges to Driving Within and Through Campbell River (Online Survey)**

21% of respondents selected 'Other – Write In'. Many of those responses related to poor signal timing along Dogwood. Other themes included poor driving (e.g., drivers speeding and tailgating) and poor lighting and visibility at intersections. Several respondents also commented about the need to prioritize other modes over driving.



Respondents were also asked what would make it easier to drive within and through Campbell River. The top three responses were ‘Create physical separation between vehicles and cyclists’ (47%), ‘Improve traffic signal timing’ (31%), and ‘Improve intersection safety’ (26%). See **Figure 14**.



**Figure 14 - Most Desired Improvements for Driving Within and Through Campbell River (Online Survey)**

Themes from respondents who selected ‘Other – Write In’ included improving visibility of people walking and cycling, desire for closer destinations that do not require a vehicle, reducing the number of vehicles on the road, enforcing speed limits, and improving active transportation options.



Feedback from Ideas Fair participants largely aligned with the survey results. The most preferred ways to make driving and goods movement easier in Campbell River (as told by sticky dot votes) were 'Create physical separation between vehicles and cyclists' and 'Encourage people to drive less'. Further comments included the following desired improvements:

- Improved signal timing on Dogwood
- Reducing parking downtown and disincentivizing driving by creating better options
- Closing Shoppers Row to vehicle traffic between 11<sup>th</sup> Ave and 13<sup>th</sup> Ave
- Creating a Willis Rd and 2<sup>nd</sup> Ave connection
- Improving traffic lights at St. Ann's Rd and Old Island Hwy
- Implementing a bicycle-activated signal at intersections





## 9.0 PARKING

### 9.1 Off-Street Parking

The City's Zoning Bylaw includes requirements for off-street parking. Section 4.21 of the Zoning Bylaw includes the specific parking supply rates, design standards for off-street parking areas, and loading requirements. Based on a high-level review of the off-street parking requirements, there are several potential amendments that could be made to align the requirements with best practices and current trends. This may include the following:

- **Bicycle Parking** | New developments in Campbell River are not required to provide any short-term or long-term bicycle parking. Bicycle parking requirements are common in many other municipalities on Vancouver Island. Courtenay, Comox, and Cumberland all have requirements for bicycle parking. The provision of bicycle parking is important for supporting and facilitating bike trips for residents, employees, and visitors.
  
- **Non-standard bicycle parking** | Non-standard bicycles are longer, wider, and heavier than a typical bicycle, which makes them more challenging to park than a regular bike. Non-standard bikes include tricycles, electric cargo bikes, or a bike with a trailer, for example. Because of their size, they require different parking configurations. As electric bicycles and other non-standard bikes become more commonplace, it will be important that new developments provide the right parking to allow users to park their bicycles securely and conveniently. Considerations for the City's Zoning Bylaw could include:
  - That a minimum percentage of the required long-term and short-term bicycle parking spaces be designed as non-standard bicycle parking spaces
  - That all non-standard bicycle parking spaces be provided as ground anchored racks
  - That all non-standard bicycle parking spaces have minimum dimensions of 3.0m long and 0.9m wide due to their larger size compared to a regular bicycle
  - That a minimum percentage of the non-standard bicycle parking spaces have access to an electrified 110V outlet to facilitate charging for e-bike users



Example of a 'half-height' stand in Malmo, Sweden, which is intended to accommodate non-standard bicycles. It provides the space needed for longer bicycles and pavement markings help reduce tripping hazards. Photo credit: Kevin Hickman

- **Uniform Rate for Apartment** | The parking requirement for apartments is 1.3 spaces per dwelling unit plus 1 visitor parking space per 5 dwelling units. This requirement does not reflect the dynamic nature of multi-family residential uses. Research has found that parking demand for multi-family uses varies depending on location, the housing tenure (e.g. strata owned condo, rental apartment, affordable), and the size of the unit. In light of this research, municipalities have updated their Zoning Bylaws / Parking Bylaws to create a scale of parking rates for multi-family residential. Examples include:
  - The City of Nanaimo has different requirements for multiple family dwellings based on the number of bedrooms and geographic location. Proposed developments in “Area 5”, which encompasses the downtown, require less parking than “Area 1”, which is the more suburban areas of the City.<sup>2</sup>

---

<sup>2</sup> More information about Nanaimo’s parking bylaw is available online at: <https://www.nanaimo.ca/bylaws/ViewBylaw/4500.pdf>





- The City of Victoria also differentiates its multi-family parking requirements by location and unit size, but also includes different requirements for condominium, apartments, and affordable housing uses.<sup>3</sup>
- The City of Colwood’s draft off-street parking regulations bylaw also differentiates its residential multi-family use by location and unit size. Proposed developments that are in the “urban centre” designation are subject to a lower parking requirement compared to all other areas in the city.<sup>4</sup>
  
- **Accessible parking** | The City’s accessibility parking requirement is based on the BC Building Code. However, this is an outdated requirement. In 2018, the BC government made a regulatory amendment to remove accessible parking requirements from the BC Building Code and allow municipalities to regulate accessible parking through Part 14 of the Local Government Act. The City’s Zoning Bylaw could be amended to include more specific regulatory direction on the number of accessible parking spaces and their design. This could include the following:
  - **Dimensions & Layout:** A standard accessible space is typically 6.0m in length and 3.9m in width. A van accessible space—intended for persons who use a wheelchair (manual or motorized) or a mobility scooter—is typically 6.0m in length and 4.8m in width. The 4.8m width comprises 3.3m for the parking space and 1.5m for the access aisle.
  - **Signage:** All accessible parking spaces should have a visible sign at the end of the space identifying its intended use by individuals displaying an accessible parking placard.
  - **Pavement Marking:** All accessible spaces should be required to have the International Symbol of Access pavement marking to denote an accessible parking space.

---

<sup>3</sup> More information about the City of Victoria’s off-street parking requirements is available online at: <https://www.victoria.ca/assets/Departments/Planning~Development/Development~Services/Zoning/Bylaws/Schedule%20C.pdf>

<sup>4</sup> More information about the City of Colwood’s parking bylaw is available online at: <https://www.colwood.ca/sites/default/files/DRAFT%20Colwood%20Off-Street%20Parking%20Regulations%20Bylaw%2C%20Apr%2015%202021.pdf>



- **Pedestrian Facilities** | For certain uses including commercial / retail (e.g., shopping centres, strip malls), where a large number of vehicle parking spaces are required, a pedestrian walkway should be considered over the length of the parking facility to provide direct access to the primary building entrance. This would minimize occurrences of people walking across the parking lot and behind parked vehicles. Further, the requirement could also stipulate that any vehicle parking spaces abutting the pedestrian facility have a physical barrier to prevent the vehicle encroaching into the walking space.

Division 2, Section 5 of the City’s Traffic and Highways Bylaw also provides regulations for off-street parking facilities, including regulations permitting paid parking in specified off-street lots. Currently, paid parking is only provided at Campbell River Airport; all other off-street public parking facilities are free.

## 9.2 On-Street Parking

On-street parking is regulated in Division 2 of the Traffic and Highways Bylaw. Section 4 outlines general regulations for parking, and Section 6 outlines regulations for commercial vehicles.

## 9.3 Downtown Parking Review

The City collects parking data in the downtown area every few years, with the most recent study undertaken in 2019. The 2019 study reported the following key findings:

- There were approximately **1,400 public parking spaces** in the downtown core, with approximately one third of those being on-street and two thirds off-street.
- The average **parking utilization** across the entire downtown during the study period was 63%, with only two areas (Cypress Street and the Beech Street public parking lot) exceeding an average occupancy of 85%.
- The study concluded that time limited parking restrictions should continue to be used to manage parking in the downtown with consideration of pay parking in the future if demand consistently exceeds 85% utilization.





## 10.0 WHAT WE HEARD ON VISIONING

Survey respondents were asked the following question: *Imagine Campbell River in 20 years. We have successfully implemented the Master Transportation Plan. One bold, ambitious part of the plan stands out. What is it? (100 words or less).* The following themes arose from the comments:

- Safe and separated active transportation network suitable for all ages and abilities
- Active transportation used regularly and is more convenient than driving
- Active transportation prioritized over driving within the City core
- Reduced air and noise pollution caused by vehicles
- Well-connected cycling routes
- Fewer collisions
- Healthy, vibrant, people-centred community
- More greenery / nature throughout the City (e.g., along trees along sidewalks)
- Convenient public transit service

### Quotes from online survey respondents:

*“Majority of citizens are walking, biking and using public transportation for the majority of their transportation needs.”*

*“A city with lots of nature where you don't need a car. Walk, cycle to work, school, shopping easily and pleasantly along treed pathways, through parks with minimal interaction with vehicle traffic.”*

*“It feels simple and safe to bike with my family from home all over the city with safe ways for bikes and pedestrians to cross busy streets.”*

*“You added greenspace to corridors instead of taking it away. The trees cool the roads, separate pedestrians from cars, and lend an uplifting feel to the streets, increasing use.”*



Similarly, Ideas Fair participants were asked to describe their vision for the future of transportation in Campbell River. Their comments included the following:

- Human-centred city with safe, pleasant, and efficient walking, cycling, and transit facilities
- Safe bike paths, more sidewalks, less parking in favour of greater density
- Take the lane sign / share the road signs
- Prioritization of active modes, making the biking, walking, and taking transit more convenient than driving
- Safe walking and cycling routes to school, between neighbourhoods, and to businesses
- More connectivity between towns with public transit
- Speed limit on the Seawalk
- Making sure everyone can access programs located around the community
- Support for roundabouts

The online survey also included the following question: *The Master Transportation Plan will guide our transportation-related decisions over the next 20 years. Looking forward, what are the most important issues the updated Plan should address? Please rank the following in order of importance (1=most important, 7=least important).*

Overall, respondents ranked the options as follows:

1. Pedestrian and cycling safety
2. Maintenance and upkeep of transportation infrastructure
3. Climate change and improved air quality
4. Improved and expanded transit service
5. Preparing for new and emerging mobility technologies such as electric bikes, e-scooters, driverless or autonomous vehicles
6. Affordability of travel for all residents
7. Safety for drivers
8. Traffic congestion



Ideas Fair participants were also asked to vote (with sticky dots) on active transportation infrastructure improvements from other communities that they would like to see. The following examples received the most votes:



### Complete Streets

These streets accommodate people walking, biking, taking transit or driving in a balanced or complete manner. Treatments vary depending on vehicle speeds and volumes but can include wide sidewalks, street trees for shade, protected bike lanes, and travel lanes for people driving.



### Dutch Style Roundabouts

Dutch style roundabouts slow traffic on major roads while separating people biking. People biking are also typically separated from people walking and both have the right of way at designated crossings. Canmore, AB and Vernon, BC both have these roundabouts.



### Micromobility

Micromobility refers to affordable, lightweight, low-speed, personal mobility vehicles that can be used for transportation, goods movement, or recreation. People can own their own or use them through a shared program similar to carsharing.