



STRATHCONA REGIONAL DISTRICT (SRD), ELECTORAL AREA C
ACTIVE TRANSPORTATION NETWORK PLAN

ACTIVE TRANSPORTATION NETWORK PLAN

CURRENT STATE BACKGROUND REVIEW

December 2024

PREPARED FOR

Strathcona Regional District
990 Cedar Street
Campbell River BC, V9W 7Z8

This report is prepared for the sole use of Strathcona Regional District. No representations of any kind are made by Urban Systems Ltd. or its employees to any party with whom Urban Systems Ltd. does not have a contract. © 2024 URBANSYSTEMS®.

CONTENTS

- 1.0 OVERVIEW 1**
 - 1.1 WHY ACTIVE TRANSPORTATION?.....2
- 2.0 OUR COMMUNITY 3**
 - 2.1 FIRST NATIONS.....3
 - 2.2 JURISDICTION + SERVICE PROVIDERS.....3
 - 2.3 COMMUNITY CONTEXT + DEMOGRAPHICS 4
 - 2.4 LAND USE + DESTINATIONS.....7
 - 2.5 PLANNING + REGULATORY FRAMEWORK10
- 3.0 ACTIVE TRANSPORTATION TODAY 19**
 - 3.1 HOW WE MOVE19
 - 3.2 EXISTING CONDITIONS20
- 4.0 “WHAT WE HEARD” 27**
 - 4.1 ENGAGEMENT OBJECTIVES.....30
 - 4.2 ENGAGEMENT OPPORTUNITIES.....30
 - 4.3 KEY TAKE-AWAYS.....32

TABLES

- TABLE 1: PEER COMMUNITY MODE SHARE, 2021 CENSUS19**

FIGURES

- FIGURE 1: ELECTORAL AREA C OVERVIEW MAP.....5**
- FIGURE 2: AGE COHORTS, ELECTORAL AREA C6**
- FIGURE 3: ANTICIPATED AGE COHORT PERCENTAGES, 2021-2031.....6**
- FIGURE 4: QUADRA ISLAND LAND USE AND COMMUNITY DESTINATIONS.....9**
- FIGURE 5: EXISTING AND POTENTIAL TRAILS AND PARKS12**
- FIGURE 6: CONCEPTUAL COMMUNITY EXTERNAL NETWORK PATHS16**
- FIGURE 7: CONCEPTUAL COMMUNITY INTERNAL NETWORK PATHS17**
- FIGURE 8: AREA C MODE SHARE, TRIPS TO WORK, 2021 CENSUS.....19**
- FIGURE 9: QUADRA ISLAND TRAIL NETWORK.....22**
- FIGURE 10: QUADRA ISLAND ROAD NETWORK.....23**
- FIGURE 11: LOCATIONS OF CONCERN33**

1.0 OVERVIEW

The Strathcona Regional District's (SRD) Electoral Area C ("Area C") Active Transportation Network Plan (ATNP) will provide direction on how to achieve improved active transportation conditions on Quadra Island and its connections to outer communities and beyond that align with the policy goals, objectives and targets important to our community. The ATNP will identify priority network improvements to support people cycling, walking and wheeling, including people with disabilities, to improve road safety, remove and prevent barriers and create connectivity across our community.

The ATNP will be the first comprehensive transportation plan for Area C, building on direction established in the 2007 Quadra Island Official Community Plan (OCP) and associated Quathiaski Cove Village Plan.

This Current State Background Review document summarizes key findings related to the Area C's community profile and travel behaviours, a comprehensive policy review, snapshot of current active transportation infrastructure and, importantly, feedback from the first round of engagement with Area C residents. The information contained in this document will inform subsequent planning and engagement activities and will ultimately shape the final ATNP.

What is active transportation?

Active transportation consists of any form of human-powered transportation such as walking, cycling, or rolling (i.e. wheelchair or in-line skating). It can also include winter-based active modes, water-based active modes, and horseback riding, although these modes are typically more recreational in nature.

What is the Active Transportation Network Plan?

The Active Transportation Network Plan is a strategic document developed to provide a roadmap of the goals and objectives for improving active transportation within the Area C community. The project process will involve identifying a vision and goals for active transportation, an envisioned long-term active transportation network, the type and design of active transportation facilities, and priorities for implementation and investment in new facilities.

How will the Active Transportation Network Plan be used?

The Active Transportation Network Plan will inform priorities and guide investment in active transportation throughout Area C. It will inform capital planning and public investment in infrastructure, as well as guide community efforts and any land development toward providing desired active transportation facilities. It will assist in collaboration with adjacent jurisdictions and transportation service providers, as well as communicate the community's priorities for active transportation infrastructure to Provincial and Federal funding agencies to help strengthen future partnerships and support grant applications.

1.1 WHY ACTIVE TRANSPORTATION?

Quality of Life

Active transportation strengthens opportunities to enhance access throughout Area C, most notably Quathiaski Cove Village, our waterfront, parks and trails, and neighbouring communities, including creating opportunities for community interaction and fostering social connectedness and sense of place.

Greenhouse Gas (GHG) Emissions Reduction

Active transportation supports the goals to reduce greenhouse gas (GHG) emissions relating to on-road transportation by replacing vehicle trips with walking and cycling trips, and eliminating GHG emissions and air pollution associated with vehicle travel. This helps address a key goal of the Integrated Community Sustainability Plan and aligns with CleanBC.

Safety + Comfort

Investments in pedestrian and cycling infrastructure help people of all ages and abilities feel safe and comfortable engaging in active transportation without fear of a crash or conflict with vehicles.

Health + Well-Being

Travelling by active modes contributes to increased personal activity, directly impacting our health and reducing risks associated with a lack of physical activity. Research has also shown active transportation contributes to reduced stress levels and improved overall well-being.

Community Access

Active transportation is a cost-effective transportation option, accessed by a broad spectrum of the community. Investments in active transportation infrastructure help ensure that Area C is connected by safe and accessible facilities, contributing to a more equitable community.

Local Economy

More people walking and cycling supports our local economy through an increase in foot traffic to local businesses, providing new opportunities for recreation and tourism, and reducing household costs by offering more cost-effective travel options for Area C residents.

2.0 OUR COMMUNITY

2.1 FIRST NATIONS

Strathcona Regional District is located on the traditional unceded territory of the Ligwíldaǰw people. Quadra Island and the outer communities in particular are located on the traditional territories of the We Wai Kai First Nation (Cape Mudge), Klahoose First Nation, Wei Wai Kum First Nation, Homalco First Nation, and K'omoks First Nation.

In 2016, approximately 4.4% of the total population identified as indigenous. The Cape Mudge We Wai Kai reserve is currently home to 145 residents as per the 2021 Census.

2.2 JURISDICTION + SERVICE PROVIDERS

Strathcona Regional District (SRD)

The SRD has overall jurisdiction over Electoral Area C. This includes land management and land development functions, as well as planning and operating functions related to regional parks, including trails.

Ministry of Transportation + Transit (MOTT)

As an unincorporated community, the B.C. Ministry of Transportation + Transit (MOTT) has jurisdiction over all roadways in Area C, including planning, design, operations, and maintenance activities within road rights-of-ways. The MOTT also has authority over subdivision development approvals.

BC Ferries

BC Ferries provides service to Quadra Island via Quathiaski Cove, and from Heriot Bay to Cortes Island. Sailings departing from Quathiaski Cove terminal provide service to Campbell River on Vancouver Island.

In January 2023, round trip service between Campbell River – Quadra Island grew from up to 18 trips to up to 29 per day with the introduction of two hybrid electric Island Class vessels which deliver more service at peak time, allowing for greater service capacity. The new schedule was developed in consultation with the community and the Campbell River – Quadra Island – Cortes Island Ferry Advisory Committee through a public engagement process carried out in the spring of 2021.

2.3 COMMUNITY CONTEXT + DEMOGRAPHICS

2.3.1 LAND AREA

Area C is the largest electoral area within the SRD and covers approximately 10,650 square kilometres, including Quadra Island, Read Island, Redonda Island, Port Neville, Refuge Cove, Hardwick Island, East & West Thurlow Islands & Mainland Inlets.

Figure 1 on the following page highlights the land area covered by Electoral Area C. For the purposes of this ATNP, priority projects are focused on Quadra Island. Further maps will solely concentrate on Quadra Island.

2.3.2 POPULATION + DEMOGRAPHICS

The demographic statistics to the right from the 2021 Canadian Census are key metrics for the Area C community and influencing active transportation behaviours, as available through the 2021 Canadian Census.

The median age in Area C is 52.8, older than the SRD median age of 49.6. Area C has a relatively large seniors population. From 2011 to 2021, the senior aged population (65+) increased by over 2-times from 470 to 1,015 individuals. During the same period, the total number of youth (under 15) saw a slight decline of 3%, from 325 to 315. Additionally, the population of late teens and young adults (aged 15 to 24 years) decreased by 42%, dropping from 250 to 145.

Figure 2 highlights age group distribution for Area C.

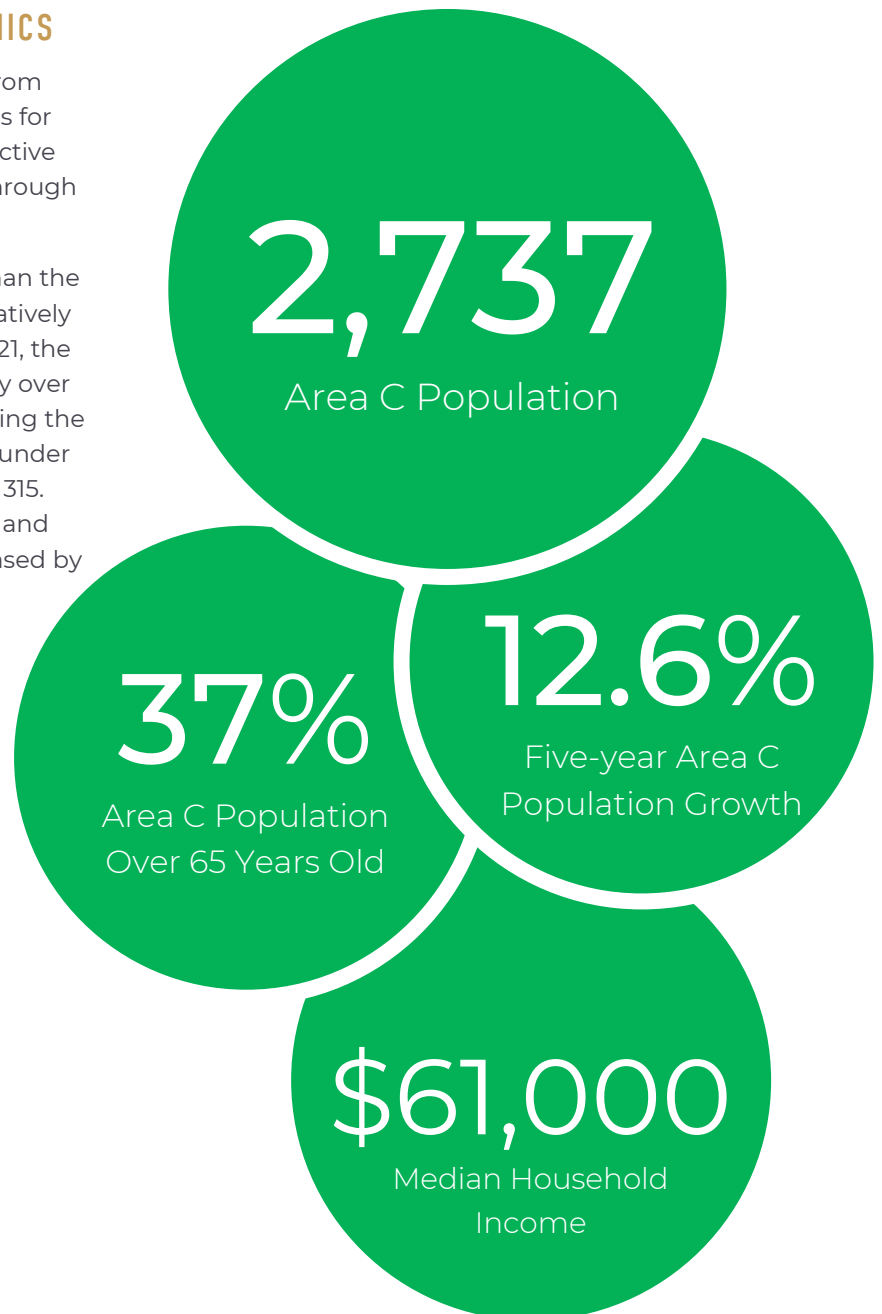




FIGURE 1. ELECTORAL AREA C OVERVIEW MAP

**Electoral Area C Active
Transportation Plan**
Fig. Overview Map

Administrative Boundaries

Electoral Area C

Municipality

Reserve Boundary

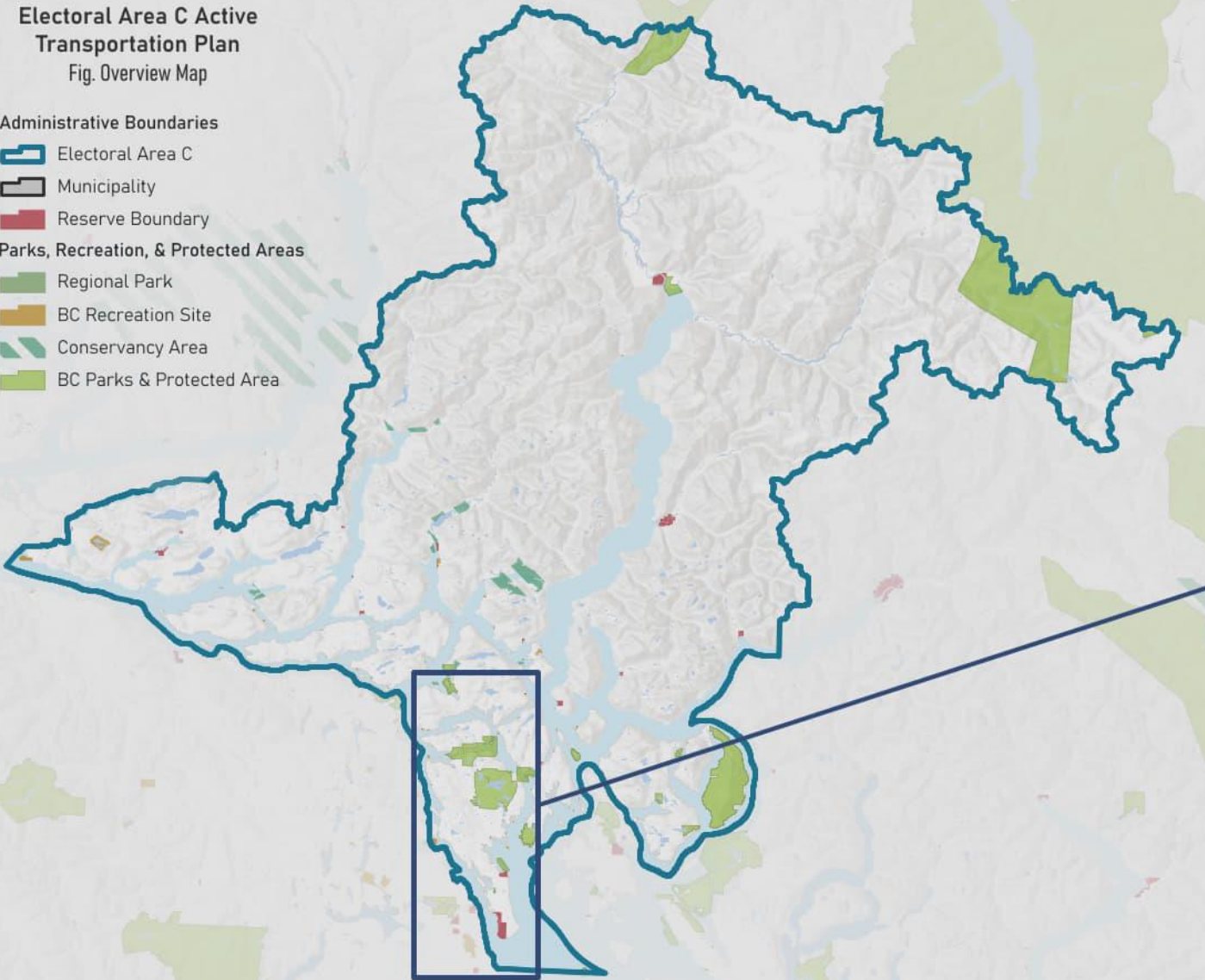
Parks, Recreation, & Protected Areas

Regional Park

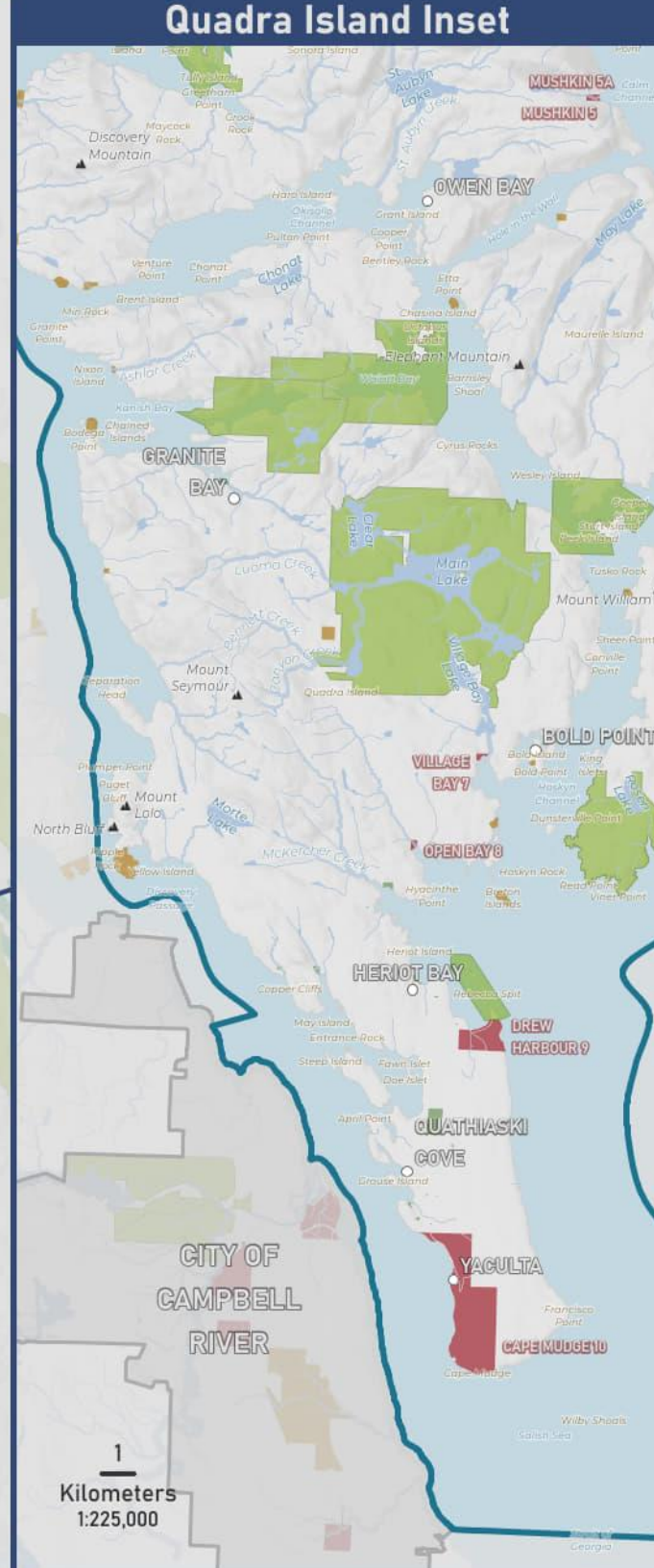
BC Recreation Site

Conservancy Area

BC Parks & Protected Area

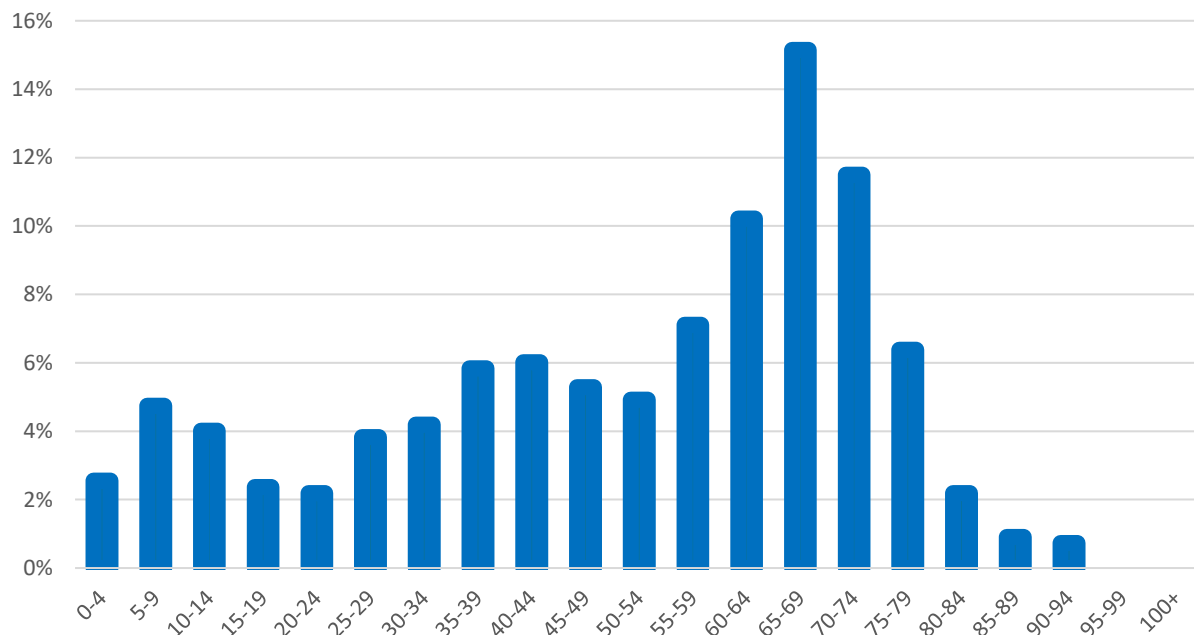


10
Kilometers
1:1,050,000



1
Kilometers
1:225,000

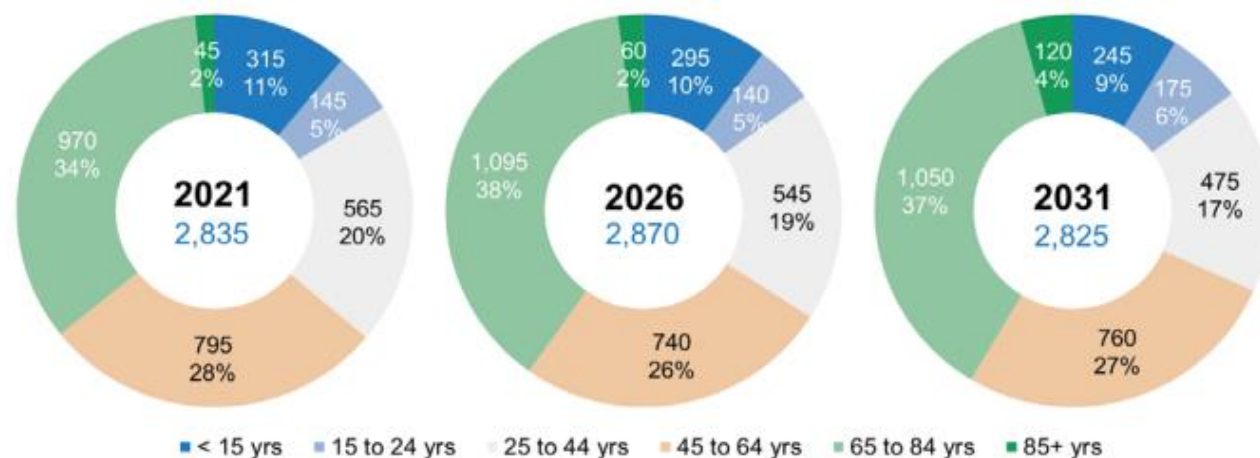
FIGURE 2. AGE COHORTS, ELECTORAL AREA C (2021 CENSUS)



The 2022 Electoral Area C Housing Needs Report¹ indicates that Area C’s population may decline over the upcoming decade to 2031, though marginally (2,835 to 2,825). By 2027, 5 years from the point of the report, the population may reach about 2,860.²

The report also anticipates what percent change different age cohorts could expect to experience from 2021 to 2026, based on the Historical Population Data and Statistics Canada. Results are shown in Figure 3.

FIGURE 3. ANTICIPATED AGE COHORT PERCENTAGES, 2021-2031



¹ Electoral Area C (Discovery Island – Mainland Inlets) Electoral Areas Housing Needs Report, May 2022

² Source: derived from Historical Population Data & Statistics Canada

2.3.3 EQUITY

It is important to consider how active transportation improvements may benefit and impact all demographic groups to ensure equitable access. Active transportation network and facility improvements must consider accessibility in design and implementation, especially as the population continues to age.

The 2021 Census indicates that the median household income in 2020 was \$60,800, which is lower than the SRD median total household income of \$75,000. Approximately 17.4% of Area C residents belong to a household below the low-income measure threshold.

Statistics Canada released the *2017 Canadian Survey on Disability* in 2019. The report provides national and provincial data on disability prevalence, types, severity, and economic conditions. However, granular data for areas like Area C is not available, limiting discussions to the provincial level. In 2017, 926,100 British Columbians aged 15 years old or older reported having at least one disability, or about 25% of all residents in that age cohort. If the same proportion applied to Area C's 2021 population, that would mean about 620 residents could be living with a disability. The prevalence of disability highlights the importance of universally accessible active transportation network and facility design, as will be further outlined in this report.

2.4 LAND USE + DESTINATIONS

A choice of rural lifestyles is provided on Quadra Island and its connections to outer communities and beyond, for example large lots, wood lots, forested areas and natural landscaping, and small family farms. Residential uses are spread throughout the community, with the goal of ensuring the type and scale of residential uses maintain the rural character of Area C and integrate residential development within existing terrain and nature. Distinct residential communities on Quadra Island consist of Quathiaski Cove, Heriot Bay, Quadra Loop and Cape Mudge Village.

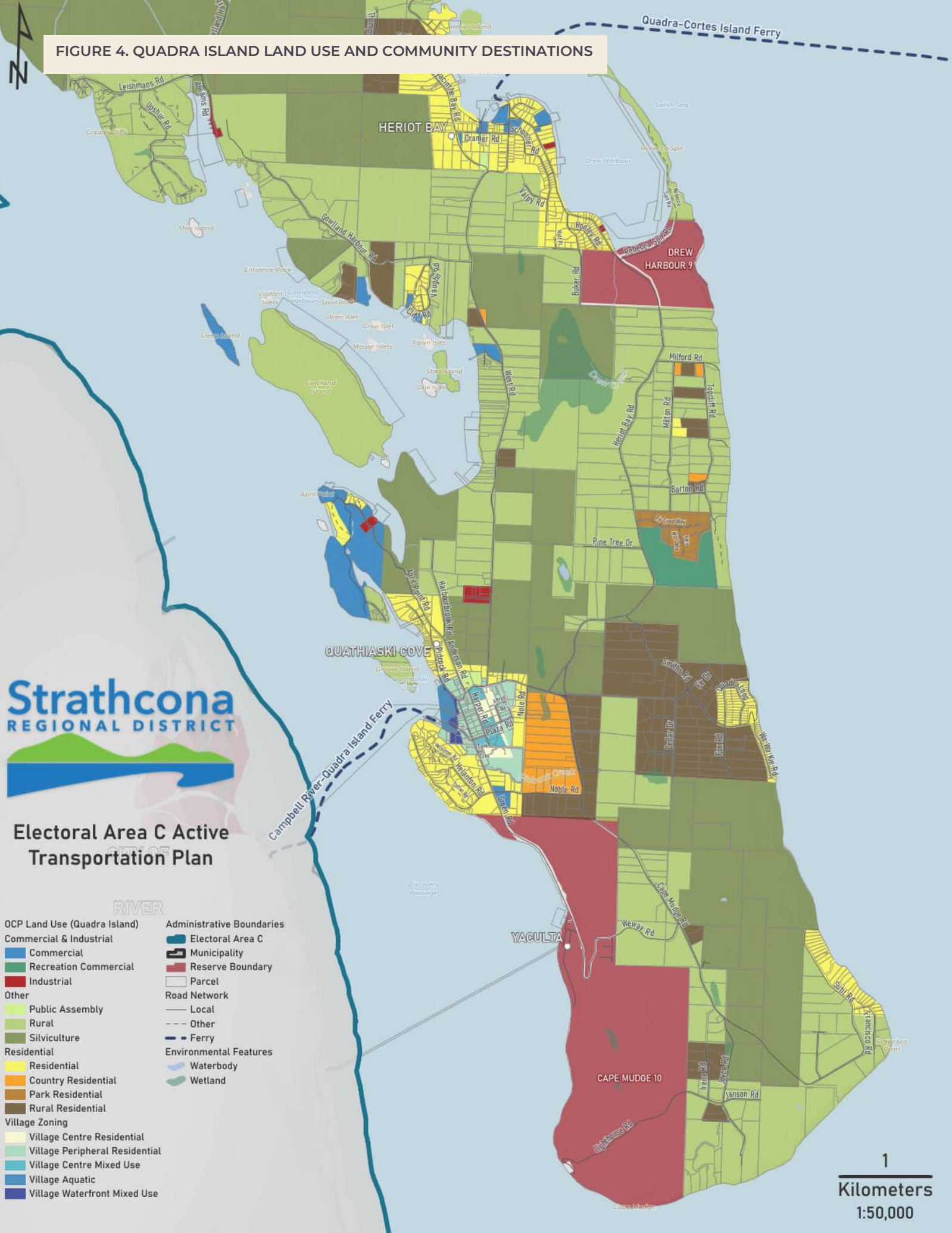
Commercial activity is largely concentrated in Quathiaski Cove and Heriot Bay. The main community destination on Quadra Island is Quathiaski Cove, which serves as the primary commercial center. Quathiaski Cove is situated near the Quadra Island-Campbell River ferry terminal. Heriot Bay, located on the east side of the island, provides various services including groceries, liquor, a post office, and a craft shop, a Government Wharf, boat and kayak rentals, as well as accommodation options such as resorts, bed and breakfasts, and campgrounds. It also offers some camping and boating supplies and houses the local branch of the Canadian Legion.

Schools	Quadra Elementary School is located central to Quathiaski Cove, on Heriot Bay Road at Harper Road. Enrollment each year is approximately 100 students. Students are required to take the ferry from Quadra Island to Campbell River to access middle and secondary school.
Parks	Quadra Island has many parks and recreational sites, including Rebecca Spit National Park, Main Lake Provincial Park, Surge Narrows Marine Park, Small Inlet Marina Park and Octopus Islands Marine Park. Rebecca Spit, in particular, is a key destination for residents and visitors to Quadra Island, including many who arrive by bicycle.

Recreation	Quadra Island Community Centre is located on West Road and is a highly used local amenity that offers art and recreation opportunities for all age groups. Other key recreational opportunities include the Quadra Island Golf Course and the We-Wai-Kai Camp Site.
Ferries	BC Ferries operates two ferry services to / from Quadra Island. The Campbell River service is an approximately 10-minute trip occurring 28 times each day (every 30 minutes) via the Quathiaski Cove terminal. This route served approximately 935,000 passengers in the 2023-2024 fiscal year, of which 11,500 were bicycle trips (1.2%). This equates to approximately 31 bicycle trips per day. The Cortes Island (Whaletown) service is via the Heriot Bay terminal, with a 45-minute trip time offered 6 times each day. This route served approximately 122,000 passengers in 2024. These ferry services are important both for local residents to access Campbell River, many by foot and bicycle, as well as in facilitating visitor access to Quadra Island and Cortes Island.

Figure 4 shows existing land use destinations and community destinations on Quadra Island.

FIGURE 4. QUADRA ISLAND LAND USE AND COMMUNITY DESTINATIONS



Strathcona
REGIONAL DISTRICT

**Electoral Area C Active
Transportation Plan**

OCP Land Use (Quadra Island)

- Commercial & Industrial**
- Commercial
- Recreation Commercial
- Industrial
- Other**
- Public Assembly
- Rural
- Silviculture
- Residential**
- Residential
- Country Residential
- Park Residential
- Rural Residential
- Village Zoning**
- Village Centre Residential
- Village Peripheral Residential
- Village Centre Mixed Use
- Village Aquatic
- Village Waterfront Mixed Use

Administrative Boundaries

- Electoral Area C
- Municipality
- Reserve Boundary
- Parcel
- Road Network**
- Local
- Other
- Ferry
- Environmental Features**
- Waterbody
- Wetland

2.5 PLANNING + REGULATORY FRAMEWORK

Established policies, plans, and studies help direct active transportation in Area C at varying scales from community-wide initiatives to specific corridors and intersections, as well as help to contextualize land use, environmental, and economic development goals, and integrate mobility into broader community vision and goals. This section describes the current planning and regulatory framework guiding the development of the ATNP.

2.5.1 QUADRA ISLAND OFFICIAL COMMUNITY PLAN (OCP), 2007

The Quadra Island Official Community Plan (OCP) provides a guide for future land use and community development for Quadra Island and its connections to outer communities and beyond. The OCP is an important statement of community values and goals as they relate to active transportation.

Objectives

The Quadra Island OCP includes the following objectives relating to transportation planning:

- 2.2c (i) To encourage road design and construction standards that meet the safety and transportation needs of the community.
- (ii) To encourage a road system in keeping with the natural environment, and one that includes development and maintenance of pedestrian, equestrian, and bicycle paths as part of the transportation system.
- (iii) To establish 'rural road' standards for the Island.

Policies

The Quadra Island OCP also includes the following policies both specific to active transportation as well as other policy areas that relate more broadly to active transportation.

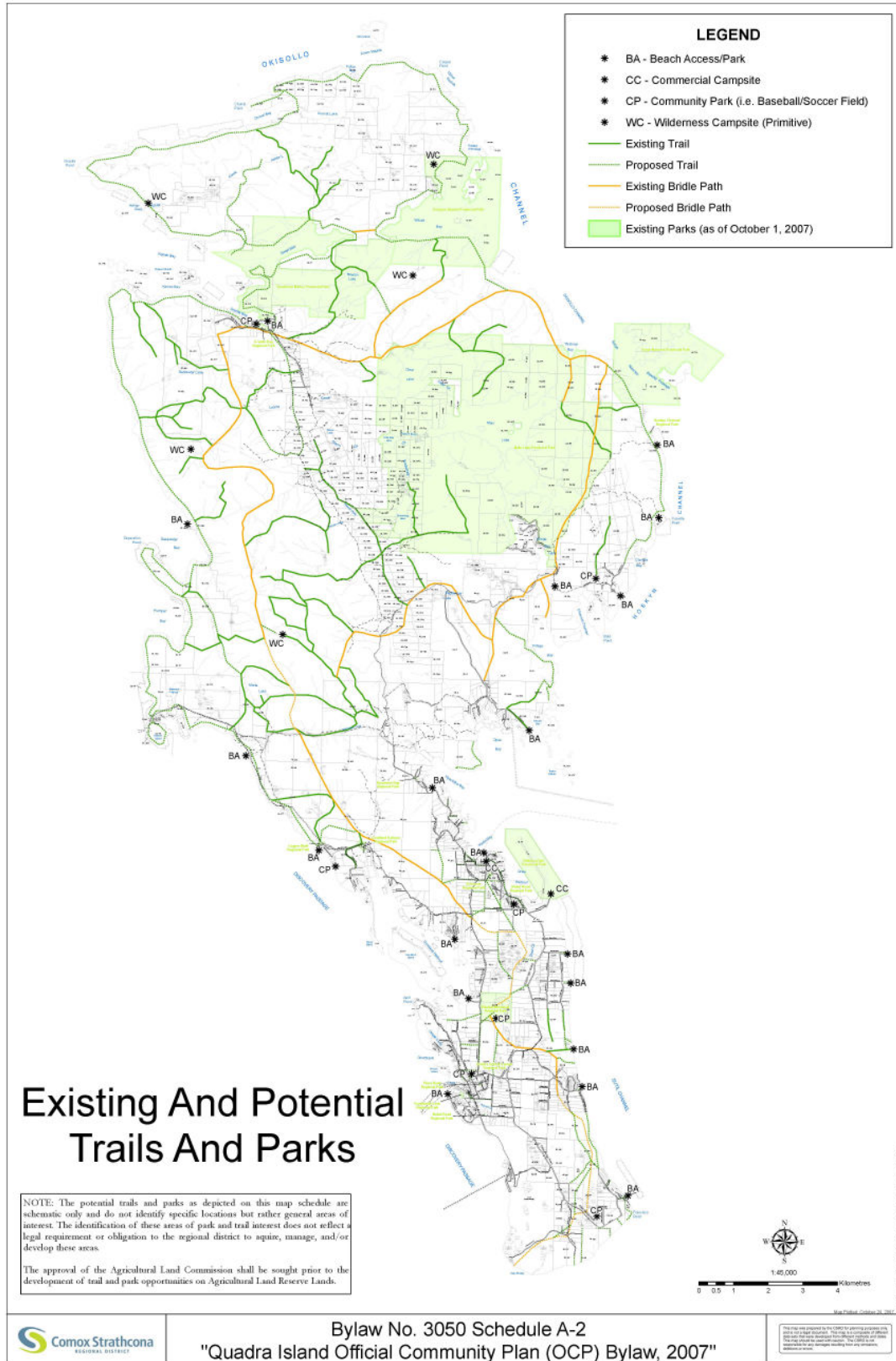
- 3.1.1 (c) *Identification of an appropriate site in the Surge Narrows and Granite Bay areas for the possible future establishment of a small public dock facility shall be encouraged.*
- 3.3.2 (b) *The Ministry of Transportation and Infrastructure shall be requested to identify public accesses to the shoreline as well as continue to encourage walking paths along these accesses.*
- (d) *The Ministry of Transportation and Infrastructure shall be encouraged:*
 - (iv) *to consult with the regional district and the community respecting opportunities for the accommodation of community walkways, bicycle paths and bridle trails within the unused portions of road rights-of-way.*
- (e) *Public transport systems and programs or initiatives that promote shared ridership and pedestrian and bicycle movement shall be encouraged.*
- (f) *The provision of pathways for the safe and convenient use by pedestrians and cyclists shall be encouraged when planning for any new development or subdivision.*
- 3.4.4.1 (c) *Support neighbourhood form that provides opportunities for energy efficient modes of transportation such as walking, cycling or ride-share, and those which incorporate green building features into the siting and construction of buildings to make them more energy efficient.*

Existing and Potential Trails and Parks

Schedule A-2 of the OCP identifies existing and potential trails on Quadra Island, noting also that additional trail interests are identified in Quathiaski Cove as identified in the Quathiaski Cove Village Plan (see Section 2.5.2 below). Identified potential trails are conceptual only and identify community intent to realize new facilities over time. Identified trail connections generally provide linkages between community parks, beach accesses and campsites.

The existing and potential trails and parks in Area C are shown as **Figure 5** on the following page.

FIGURE 5. EXISTING AND POTENTIAL TRAILS AND PARKS³



³ Quadra Island OCP, Schedule A-2, page 40

2.5.2 QUATHIASKI COVE VILLAGE PLAN, 2011

The Quathiaski Cove Village Plan is Schedule B to the Quadra Island OCP. It is intended to provide a strong model of village structure and to inform and guide development within the Cove.

The Village Plan defines the most important aspects of the Village being as follows, with many of the identified items either directly or indirectly supported by the development of the ATNP:

- be compact, walkable and mixed use,
- be green in terms of landscaping and sustainability features,
- provide for a variety of small footprint housing types that are appropriate to seniors, young families and youth,
- provide for affordable housing options, including rentals, and
- provide for excellent public space and public amenity in the pedestrian realm.

The Village Plan contains specific content relating to transportation and infrastructure. Of significance, Section 2.3.10 clarifies the following:

The Quathiaski Cove Village Plan vision is one of pedestrian and bicycle-oriented transportation, safely separated from main vehicle routes. The connectivity of paths with the surrounding Quadra Island trails system is also essential. The importance of a ferry shuttle and eventually an island bus service is also recognized and should be encouraged when financially feasible.

Traffic flow during busy ferry times is a management problem and can present a safety risk to pedestrian and cyclists on main roads in Quathiaski Cove. However better pavement marking and warning signs may improve pedestrian crossings in these areas. Where alternatives to the use of main traffic routes are not available, the best approach is to separate pedestrian and bicycle traffic from vehicles, wherever possible.

The design elements of a transportation system around Quathiaski Cove are as follows:

2.3.10.1 Path and Cycling System

(i) The elements of the Quathiaski Cove Village pedestrian system are:

- *separation of the pedestrian route from traffic, with barriers, if necessary,*
- *safe, well marked road crossings, with traffic calming devices,*
- *path surfacing able to support strollers and push-buggies, and*
- *naturalized, well landscaped pedestrian zones with shade and wind shelter.*

(ii) The elements of the Quathiaski Cove Village bicycling system are:

- *separation of bicycle paths from main roads (Quathiaski Cove Rd, Harper Rd and Heriot Bay Rd) by bypass route or barriers if necessary,*
- *separation of bicycle paths from pedestrian paths by 2 metres spacing or barriers, if necessary,*
- *compacted and mud-free, permeable path surfacing (e.g. gravel, unit pavers), and*
- *the provision of bike racks at each main commercial destination.*

Key directions for parks, open space, trails and greenways are addressed in Section 2.3.7.2 of the Village Plan. This section sets objectives for the Village that relate to creating a comprehensive and connected trail system, assuring that walking and cycling network are safe and comfortable, and providing active transportation facilities that are separated from vehicle traffic.

Conceptual pathway networks are identified in the Village Plan that highlight desired pathway and pedestrian connections in and nearby the Village. Two maps from the Village Plan identifying desired pathway linkages are shown as **Figures 6 and 7** on the following pages.

A series of specific policies are included that are directly relevant to the ATNP process, as follows:

- (i) Park planning priorities for the Village shall include;*
 - *the identification of a pedestrian waterfront walkway, and a direct connection from the waterfront to the Village centre, where appropriate*
 - *the development of safe, accessible and continuous pedestrian routes providing connectivity to and throughout the neighbourhood*
- (ii) The development of a comprehensive park and trail system within the Quathiaski Cove Village shall be supported and implemented through a variety of mechanisms such as, but not limited to, parkland dedication at time of subdivision, acceptance of donations of land and/or cash, density bonusing provisions, the use of rights-of-way and/or licenses, and the acquisition of land.*
- (vi) Parks and open space provision in the Quathiaski Cove Periphery areas shall be natural, forested vegetated space that shall be sized and located to maximize habitat value. Trails through these areas are appropriate where these will not interfere with habitat and ecological protection.*
- (ix) The trail system design considerations for Quathiaski Cove shall emphasize several functions and characteristics in order:*
 - *to make walking a safe, pleasurable experience by separation from vehicle traffic and provision of greenway paths*
 - *to provide a surface for pedestrian wheeled conveyances such as strollers and shopping carts*
 - *to provide for cycling, separated from pedestrians where possible*
 - *to interconnect the green elements of the Cove Network (i.e. parks, wooded buffers, riparian edges etc)*
- (x) Greenway networks that brings trees and ground-level vegetation into the neighbourhood and provide places to walk and cycle shall be encouraged for these values as well as serving the following functions:*
 - *it provides summer shade*
 - *it provides surface water treatment and absorption*
 - *it buffers noise*
 - *it provides habitat for birds, squirrels etc*
- (xi) The inclusion of an Internal Path Network and green system shall be encouraged as part of any development in order to provide walking and cycling connections for residents that enable connections to and from adjacent public spaces (paths, greenway networks, parks and squares).*

Beyond the policies and directions noted above, the following are a series of other policies included in the Village Plan that help describe community intent and with relevance to the ATNP:

- 2.3.9 (iv) *Provide support for favourable living environment for young and old alike, including “barrier-free” design considerations in both the public and private realm.*
- 2.3.10.4 (i) *On secondary roads, such as Green Road and Cooper Road the use of traffic calming measures are a possible means of reducing the pedestrian risk and the noise affecting residents. Appropriate calming measures for secondary roads in Quathiaski Cove may include:*
- *pavement markings and surface changes*
 - *pinch points (neck down)*
 - *chicanes*
 - *planters & curb extensions at the road edge and/or traffic circles*

The Village Plan also includes a series of more detailed design guidelines contained in Section 5 that apply to all lands within the Quathiaski Cove Village Containment Boundary, as identified in Schedule B-1 of the OCP (generally reflecting the area understood to be part of the Village).

The section addresses general guidelines including desired form and design relating to street types and trails and greenways, such as:

(xi) Street Types:

- *Pedestrian paths on main roads in Quathiaski Cove should be physically separated from vehicles. Where appropriate, bicycle traffic may also be separated.*
- *The character of streetscapes should be dominated by trees planted on adjacent greenways.*
- *Curb-and-gutter hard road edges are strongly discouraged; road edges should be constructed with compacted gravel and landscape materials, with traffic barriers as necessary.*
- *Driveways and side roads intersecting main roads should be marked by bulges at the intersection points; bulges may be built with stone and gravel, pavers etc. but should not be planted with trees or shrubs that will interrupt vision.*
- *Where neighbourhood streets may provide an undesirable traffic shortcut, or circuit allowing excessive speeds, visual barrier points with signage indicating that passage is limited to emergency vehicles only are encouraged. These should be clearly marked with pavement changes, colours etc. not with actual barriers.*

(xii) Trails and Greenways:

- *Trails meant for cycling shall provide adequate path width to separate pedestrians and cyclists, a minimum of 3 m (10ft.).*
- *Compacted gravel surfacing is appropriate for trails, so long as it is stable enough for wheels. Trails that may require emergency vehicle access, such as those internal to neighbourhoods, may use reinforced turf wide enough for such access.*
- *Greenways shall be planted with native plants materials and trees producing edible fruit and nuts. Mulch is recommended to reduce summer water needs. Swales shall be profiled to encourage year-round plant growth, and seeded with native aquatic plants.*

FIGURE 6. CONCEPTUAL COMMUNITY EXTERNAL NETWORK PATHS⁴



⁴ Quathiaski Cove Village Plan, Diagram 1, page 18

2.5.3 SRD AREA C INTEGRATED COMMUNITY SUSTAINABILITY PLAN, 2023

The Integrated Community Sustainability Plan (ICSP) is a long-term plan developed in consultation with community members to identify shared direction for long-term success and sustainability. It establishes the long-term vision and goals for the future of the area, serving as the high-level compass for decision-making and for supporting the development of more detailed plans and regulations, such as an Official Community Plan and zoning bylaws.

While the Integrated Community Sustainability Plan directions are relatively broad reaching, there were a number of key themes and specific comments from the community survey activity that are relevant to the ATNP, as follows:

- *Promotion of active transportation through provision of safe bike lanes and off-road pathway for pedestrians, cyclists and mobility challenged residents*
- *Desire for more integrated transportation services, including the need for more parking at the ferry terminal, a shuttle bus on Quadra Island and improved alignment of transit and ferry schedules*
- *Focus on public / community transportation initiatives (i.e., transit, shuttle)*

2.5.4 PROVINCIAL PLANS / STRATEGIES

The following provincial plans and policies guide the work being carried out through the Area C ATNP.

CleanBC, 2018

The Province's CleanBC initiative lays out a framework for climate action including green buildings, cleaner industry and waste, green jobs, and sustainable transportation, targeting greenhouse gas emission reductions from 2007 levels of 40% by 2030, 60% by 2040, and 80% by 2050. By establishing the ATNP and implementing infrastructure improvements envisioned in the ATNP, the SRD and partners will be directly aligning with the key goals stated in CleanBC.

Move, Commute, Connect - B.C.'s Active Transportation Strategy, 2019

B.C.'s Active Transportation Strategy lays out the Province's intent to promote and invest in active transportation. The strategy contains several short-, medium-, and long-term initiatives that aim to double the percentage of trips taken with active transportation by 2030. Initiatives include expanding education and encouragement programs, reviewing the Motor Vehicle Act, promoting Vision Zero principles, improving active transportation facilities and end-of-trip facilities, incorporating active transportation in provincial highway design, partnering with the tourism sector to promote active transportation, and expanding active transportation funding, which resulted in the updated B.C. Active Transportation Infrastructure Grants Program.

British Columbia Active Transportation Design Guide, 2019

The B.C. Active Transportation Design Guide is a comprehensive set of planning and engineering guidelines offering recommendations for the planning, selection, design, implementation, and maintenance of active transportation facilities across the province. The Design Guide covers pedestrian, cycling, and multi-use facilities, intersection design, amenities, wayfinding, multi-modal integration, new mobility, and post implementation considerations such as monitoring and maintenance. The Design Guide will be a key resource in considering best practices for walking and cycling infrastructure as part of the ATNP development.

3.0 ACTIVE TRANSPORTATION TODAY

3.1 HOW WE MOVE

The 2021 Census for Area C indicates how residents commute to work. This information is important to understand how future active transportation networks and infrastructure can best support current and future residents. Figure 8 highlights existing mode share, of which approximately 16% walk or cycle to work. As summarized in Table 1, Area C's active transportation mode share is higher than Area B and island communities with comparable populations, such as Pender Island and Galiano Island.

FIGURE 8. AREA C MODE SHARE, TRIPS TO WORK, 2021 CENSUS

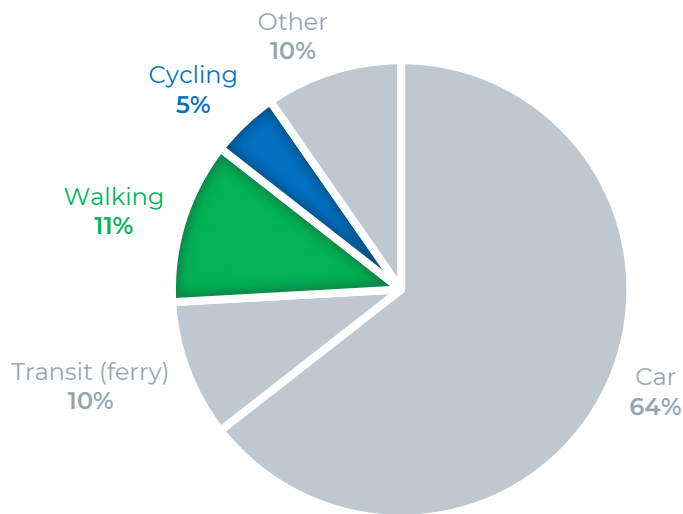


TABLE 1. PEER COMMUNITY MODE SHARE, 2021 CENSUS

Community	Population	Active Transportation Mode Share
SRD, Area C	2,737	16%
SRD, Area B	1,059	11%
Galiano Island	1,396	9%
Pender Island	2,467	10%

The 2021 Census indicates that approximately 39% of residents commute under 15 minutes to work daily, and another 26% commute between 15 and 29 minutes. The 2016 *Quadra Community Social Determinants of Health Fact Sheet* determined that among employed residents, 62.8% drive, 11% walk, 7.4% bike and 18.8% use other travel modes including carpooling or other forms of transportation. A 2019 *Fact Sheet* also indicated that approximately 36.6% of employed residents work off-island, which necessitate a ferry ride.⁶ This data supports the need for improved active transportation connections to ferry terminals for those commuting off-island, in addition to middle and secondary school students who travel to Campbell River.

⁶ Social Determinants of Health Fact Sheet: Quadra Island, 2019

3.2 EXISTING CONDITIONS

3.2.1 TRAILS

The existing active transportation network in Area C is primarily comprised of trails. The existing trail network is identified on Figure 9.

A multi-use pathway was constructed in 2022 along Harper Road connecting Quathiaski Cove Village and the Seniors Housing Society property and Quadra Elementary School. The 200m pathway is well-used by residents and families travelling to school. This facility is an example of the types of trail facilities that could make up an expanded active transportation network.

The existing trail network on Quadra Island consists of over 100km of well-utilized trails throughout the South and North island. Important community trail linkages include the Community Centre trail, connecting Heriot Bay Road with the Quadra Community Centre, “Quadra Links” trails to the south of Barton Road, and the Kay Dubois trail connecting Sutil Road with the Quadra Loop community. Other well-utilized recreational trails are located within Rebecca Spit Marine Park and to the north of Gowlland Harbour Road throughout the expansive northern part of the island.

A series of informal, non-SRD owned or managed lands of assorted tenures are also a key part of the existing trail network. In some cases, the use of lands might be fully permitted (ie. crown lands), the owner might not be aware of use, or the use may not be enforced but not permitted. Many of the un-built roadway dedications are in active use but without proper tenure to permit access. Additional un-built roadway dedications are currently unused and may be good candidates for future trail development.

3.2.2 ACTIVE TRANSPORTATION

Beyond the trail network, active transportation on Quadra Island is accommodated on streets. Most streets lack shoulders resulting in people walking and cycling sharing the street with vehicle traffic. This is appropriate on very minor roads but becomes unsafe and uncomfortable where traffic volumes and/or speeds are higher. This is particularly challenging on more major streets such as Heriot Bay Road, West Road, Smiths Road and Green Road.

Quathiaski Cove Village has the highest concentration of pedestrian activity. While there is an off-street pedestrian trail along Harper Road, there is still room to improve pedestrian connectivity and safety around the village. The presence of on-street parking in the Village is an added challenge where it conflicts with people walking. Additionally, crosswalks are not provided, and people are forced to cross at unmarked locations, presenting safety concern in select locations.

Residents of Heriot Bay experience challenges on West Road and Heriot Bay Road in particular, where there is a lack of roadside facilities and vehicles regularly queue at the Heriot Bay ferry terminal. A number of people cycle between Heriot Bay and Rebecca Spit, and are more likely to interact with vehicle traffic, particularly in the summer months as tourists travel via bicycle towards Rebecca Spit.

3.2.3 CONNECTIONS TO FERRIES

Quadra Island residents rely heavily on ferry service to travel on and off island. Two BC Ferries terminals are located on Quadra Island. The terminal at Quathiaski Cove provides service to Campbell River, while the terminal at Heriot Bay provides service to Cortes Island.

Walking and cycling accessibility to the Quathiaski Cove terminal is currently limited and relatively unsafe. There are no sidewalks nor dedicated walking or cycling facilities connecting Quathiaski Cove Village to the terminal. Pedestrians and cyclists are currently required to walk or cycle next to vehicle traffic on narrow lanes. There is limited bicycle parking at the Quathiaski Cove ferry terminal. Currently, cyclists who are looking to walk-on the ferry or park their bicycles before boarding use the existing fence to lock their bicycles.

The Heriot Bay Ferry Terminal is also difficult to access for pedestrians and cyclists. The lanes approaching the terminal on West Road are narrow, with pedestrians and cyclists forced to squeeze next to or in between backed-up vehicles to access the terminal. There is no bicycle parking at this terminal. While BC Ferries is currently in the process of solidifying a Heriot Bay dock improvement, upgrades will be mostly focused on marine operations rather than off-ferry conditions or road network connections.

3.2.4 WHARVES

In addition to the BC Ferries terminals, there are public wharves accessible at the following locations, primarily to access the various isolated islands in Area C:

- Granite Bay Wharf
- Hoskyn Island Wharf
- Surge Narrows
- Evans Bay
- Owen Bay

3.2.5 ROAD NETWORK

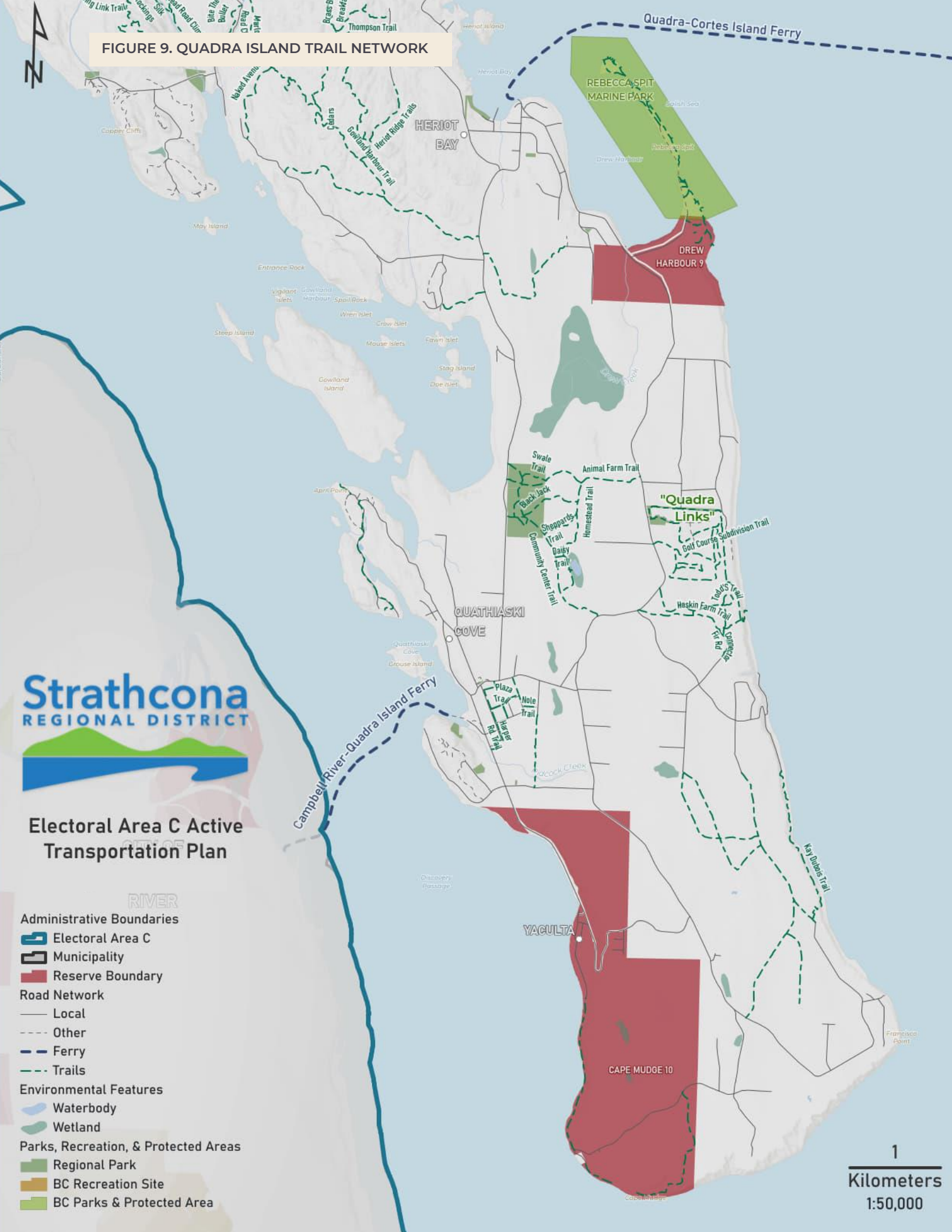
Area C's road network is primarily located on Quadra Island. **Figure 10** presents the current road network on Quadra Island North and South. All streets on Quadra Island are designated as local roads, which generally have lower speed limits and traffic volumes.

The most major corridors on Quadra Island include Heriot Bay Road and West Road. These are the routes connecting Quathiaski Cove to Heriot Bay, including connections to the elementary school, community centre and various neighbourhoods. Both roads have shoulders in select locations, but largely lack dedicated space for people walking and cycling. Besides the major roads, all other roads generally do not contain roadside shoulders nor dedicated walking or cycling facilities.

The geography of Quadra Island also results in unsafe road conditions. Quadra Island has many steep and curvy roads that lead to poor sightlines and blind corners. Many of these roads, such as Heriot Bay Road, create unsafe conditions for cyclists and pedestrians.

In the summer months, Quadra Island's population increases substantially due to tourists visiting the island by car or bicycle. Many visitors are unfamiliar with local road conditions and may be less careful when passing other road users on the narrow and winding streets. There is an opportunity to better promote road safety on Quadra Island, especially during the summer months which see an influx of visitors near commercial centres and parks.

FIGURE 9. QUADRA ISLAND TRAIL NETWORK



Strathcona
REGIONAL DISTRICT



Electoral Area C Active Transportation Plan

RIVER

Administrative Boundaries

Electoral Area C

Municipality

Reserve Boundary

Road Network

Local

Other

Ferry

Trails

Environmental Features

Waterbody

Wetland

Parks, Recreation, & Protected Areas

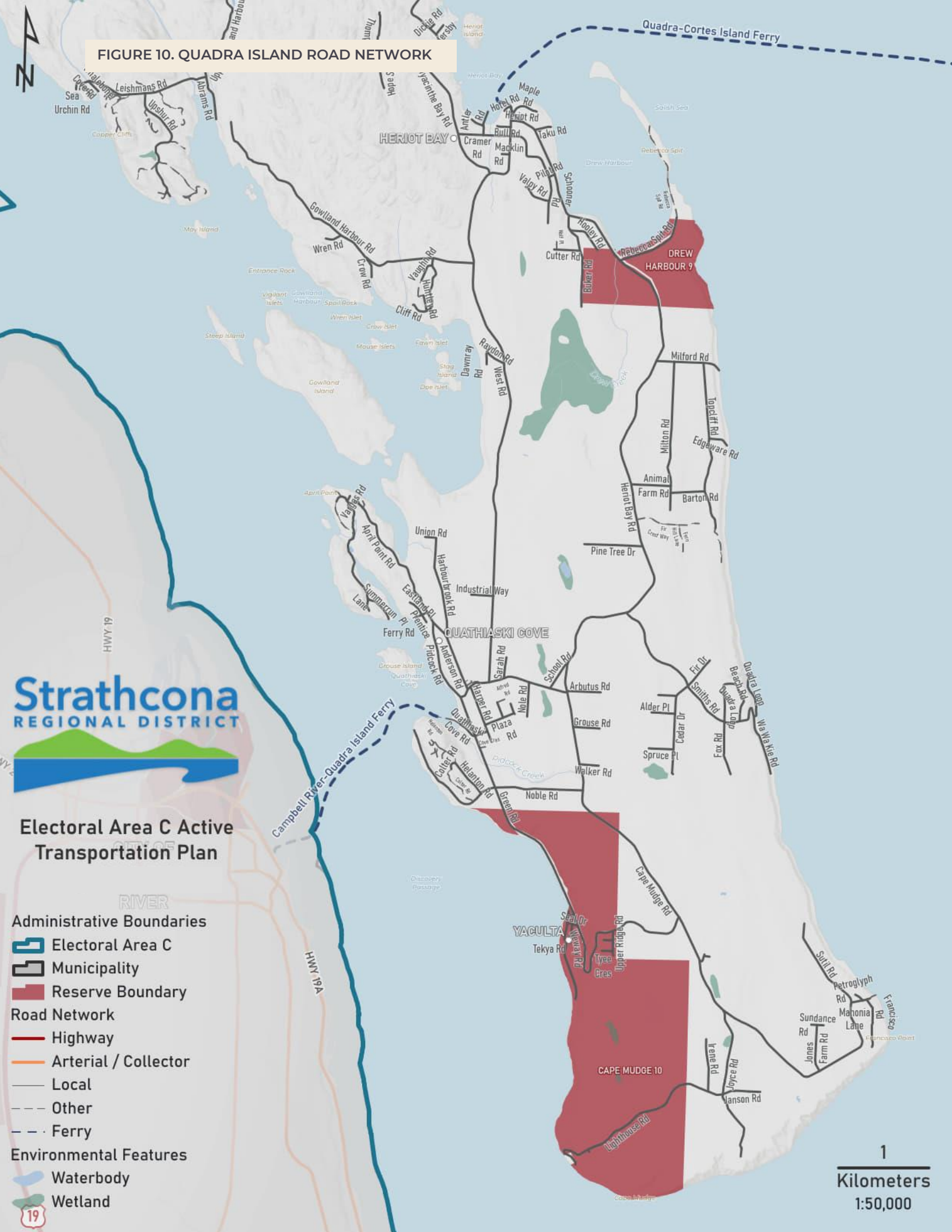
Regional Park

BC Recreation Site

BC Parks & Protected Area

1
Kilometers
1:50,000

FIGURE 10. QUADRA ISLAND ROAD NETWORK



Electoral Area C Active Transportation Plan

- RIVER**
- Administrative Boundaries**
- Electoral Area C
- Municipality
- Reserve Boundary
- Road Network**
- Highway
- Arterial / Collector
- Local
- Other
- Ferry
- Environmental Features**
- Waterbody
- Wetland



1
Kilometers
1:50,000



Narrow Lanes and Lack of Accessible Shoulders

Most streets across Quadra Island are narrow and do not contain accessible shoulders or separated facilities for walking and cycling. Active transportation users are generally forced to use the small or nonexistent roadside shoulders, in close proximity to vehicle traffic.





Quathiaski Cove Ferry Terminal

The image to the left shows the ferry lineup conditions at the intersection of Harper Road and Quathiaski Cove Road. The lack of pedestrian crossings in this area creates safety concerns for pedestrians and cyclists, as well as vehicle collisions. The lack of accessible roadside shoulders or separated multi-use pathways, aside from the 200m pathway on Harper Road, forces pedestrians and cyclists to use narrow shoulders adjacent to vehicle traffic.



Heriot Bay Ferry Terminal

The image to the left shows the ferry lineup conditions on Heriot Bay Road at the Heriot Bay Ferry Terminal. The lack of accessible roadside shoulders or separated multi-use pathways forces pedestrians and cyclists to use narrow shoulders adjacent to vehicle traffic, or the narrow diagonally-marked strip between vehicles.



Harper Road Multi-Use Pathway

The image to the left shows the existing 200m multi-use gravel pathway that parallels a section of Harper Road from Plaza Road to Heriot Bay Road. This pathway, is well utilized by seniors and families, albeit on a relatively small section of roadway.



Quadra Elementary School

Quadra Elementary School is located at the intersection of Harper Road and Heriot Bay Road. There is an un-signalized pedestrian crosswalk that requires maintenance due to faded paint, as depicted below. Additionally, it has been raised by residents that vehicles descending Telephone Hill towards the elementary school and Harper Road frequently speed, creating safety hazards for students and families. While the Harper Road multi-use pathway is often utilized by school children, it is only accessible on a small section of roadway.

3.3 MOBILITY STATISTICS

3.3.1 ROAD SAFETY + CRASH DATA

The ICBC Vancouver Island crash dataset⁷ provides insight into reported crashes in Area C between 2019 and 2023. Importantly, the ICBC crash data provides an inventory of all crashes over the five-year period resulting in an ICBC claim. Crashes not resulting in a claim are not included, nor are “near misses” or other active transportation focused incidents that do not result in a claim.

Data indicates that there were 412 reported crashes over the five-year period, **an average of approximately 82 crashes per year**. Occurrence of crashes is relatively consistent year-over-year, although with modestly more occurring in 2022 and 2023 when total trip making is known to be higher after the COVID pandemic conditions had largely passed.

Crash incidents are catalogued by severity, either resulting in a casualty or property damage only. Casualty crashes are those where an injury of fatality occurs and are of highest interest. Casualty crashes represent approximately 8% of all crashes over the five-year period. This is a relatively low proportion of casualty crashes compared to the average province-wide (19%) and among all Vancouver Island communities (16%).

Crash incidents are also catalogued where a pedestrian or cyclist is involved. Interestingly, none of the 412 crashes over the five-year period were indicated to involve a pedestrian or cyclist, whereas across the province approximately 2-3% of all crashes included a pedestrian or cyclist over the same time period.

A high-level locational analysis was undertaken to understand any locational trends among crashes occurring. Two locations were highlighted where more than one (1) casualty crash has occurred over the five-year period:

1. West Road on the approach to the Heriot Bay terminal (3 separate locations)
2. Cape Mudge Road / Noble Road intersection (2 crashes)

When expanded to consider both casualty and property damage only crashes over the five-year period, concentrations of crashes are evident in the locations noted above, as well as in Quathiaski Cove Village (distributed in different locations) and in the vicinity of the Gowlland Harbour Road / Vaughn Road intersection.

Beyond the safety concerns evident in the analysis of ICBC crash data above, a series of locations of concern were identified through community engagement and conversations with key interest groups that are highlighted in **Section 4.0**.

⁷ Vancouver Island Crashes by Insurance Corporation of British Columbia

3.3.2 GREENHOUSE GAS EMISSIONS

This project included an analysis of the greenhouse gas (GHG) reductions associated with potential active transportation investments. This analysis provides a baseline from which the potential impact can be measured as more people choose to travel by active modes.

GHG Inventory

The Province of B.C.'s Community Energy and Emissions Inventory (CEEI) provides community-level greenhouse gas (GHG) emissions and energy consumption estimates for communities across B.C. The data covers buildings, municipal solid waste, and on-road transportation sectors for 161 municipalities, 28 regional districts, and 1 region. Data was made available for all SRD Unincorporated Areas (including Area C).

2021 data for on-road transportation for all trips in the SRD Unincorporated Areas provided the following results:⁸

- A total of **41 trillion vehicle km** were traveled in 2021
- GHG emissions for on-road transportation totalled **14,000 kilotonnes of CO₂e**.

To adjust the above results to represent just Area C's share of the population, total numbers were divided by a ratio of Area C's population relative to the overall SRD Unincorporated Area population. Following this adjustment, Area C vehicle kilometers and GHG emissions results were then filtered to reflect only "commute trips," as the CEEI data encompassed all trip types. Commute trips are specifically used in this calculation because they are identified in the Census and serve as the basis for GHG emissions reductions calculations in the subsequent subsection. Using trip-diary from municipalities with similar demographic and geographic makeups as SRD Area C, it was observed that the average percentage of commute trips compared to total trips is around 23%. Therefore, 23% was used to calculate commute trips for Area C.

Based on the mathematics outlined above, 2021 on-road transportation commute-only trip emissions for Area C are as follows:

- **2,955,269,340 vehicle km** traveled
- GHG emissions for on-road transportation totalled **1,014 kilotonnes of CO₂e**

GHG Emissions Reductions Forecasting

A tool provided by the Federation of Canadian Municipalities (FCM) was then used to estimate the emissions reductions associated with shifts in commuting patterns across Area C. The tool provides estimates that consider the community-wide impacts of shifting from the current mode share to a more sustainable and active mode share for commuting trips. The tool uses available data from the 2021 Census, Government of Canada, US Environmental Protection Agency, and the BC Climate Action Toolkit. The tool measures mode share impacts at a static point in time and is intended to present a general estimate of environmental impact.

Of note, this data utilizes Census identified commute trips only. Commute trips are assumed to represent approximately 20-30% of all trips per Census data.

Currently 16% of residents in Area C use active transportation to get to work, while 10% use transit. To perform this analysis, future commuting modal share estimates for 2050 were used to demonstrate the

⁸ Source: 2021 Community Energy and Emissions Inventory data

potential environmental benefits of increasing the active transportation modal share. Low, moderate and high GHG reduction scenarios were presented with different mode share targets.

Modal share estimates to determine net environmental impact were applied using a moderate scenario approach of a 33% increase in trips by active transportation by 2050. Hypothetical GHG emissions data, based on a moderate scenario approach are indicated below:

- A reduction in **58** daily vehicle trips (**15,080** annual workday trips)
- A reduction in annual vehicle kilometres travelled by **265,396 km**, which equates to a reduction in **25,478 litres of fuel**
- An increase in **80** new daily active transportation trips, and an annual sustainable trip distance of **364,920 km** made by increases to walking, cycling, and public transit trips.
- An annual GHG reduction of **56,052 kilograms (CO₂e)**.

This tool can also be used to understand the GHG reductions for individual projects and support funding applications.

4.0 “WHAT WE HEARD”

The ATNP planning process includes a two-phase community engagement process to allow residents of Quadra Island and its connections to outer communities and beyond to provide input into the ATNP. The first phase of community engagement was carried out through Fall 2024 with a focus on understanding current issues and identifying possible solutions.

The following is an overview of key take-aways from the first phase of engagement.

4.1 ENGAGEMENT OBJECTIVES

The activities undertaken as part of this initial phase of engagement support the following engagement objectives:

- To inform community members of the purpose and opportunities to engage in the process of developing the ATNP
- To engage residents and stakeholders in dialogue on active transportation challenges and opportunities, and to collect ideas to improve the active transportation network
- To educate community members of the benefits of active transportation and accessibility and the current state of active transportation in the community
- To collect and incorporate meaningful feedback to ensure the ATNP is reflective of the community's needs and priorities and ensure concerns and ideas are reflected in the proposed active transportation network and priorities

4.2 ENGAGEMENT OPPORTUNITIES

Community Survey - A community survey was developed and made available to the public from October 15th to November 15th, 2024. The community was asked to answer questions related to their priorities and concerns related to active transportation on Quadra Island and the outer communities and beyond. A mapping component to the survey was also made available. Participants were able to pin specific locations of concerns related to walking and cycling and leave comments.

Open House - A three hour in-person engagement activity was hosted at the Quadra Community Centre on October 29th, 2024. The goal of this event was to inform residents of the plan process and goals, as well as understand community concerns related to active transportation and ideas for improvement. Residents in attendance were interested and passionate about active transportation improvements on Quadra Island. In particular, they engaged with the mapping exercise, similar to the online version, where they could visually indicate locations of concern and ideas for improvement.

Interviews - Interviews were held in November with key interest groups and local First Nations. These discussions garnered input into organizational priorities for active transportation.

ENGAGEMENT BY THE NUMBERS



151 survey responses



35 residents engaged at Quadra Island Community Centre



7 interest group conversations



82 "sticky dot" votes received during the open house



85% of survey participants walk to **enjoy nature, parks, and trails.**



The top active travel priorities were **physical and mental health and improving road safety.**

4.3 KEY TAKE-AWAYS

Barriers to Walking and Cycling

Residents and visitors expressed barriers to cycling and walking throughout Quadra Island, including a lack of dedicated active transportation facilities and roadside shoulders, narrow lanes, lack of sidewalks, as well as vehicle traffic issues such as speed, volume and noise.

Lack of Connectivity

Area C residents expressed a desire to see improved active transportation connectivity between key Quadra Island neighborhoods and commercial centres, as well as improved trail conditions.

Origins and Destinations

Quathiaski Cove Ferry Terminal is a key trip generator for those traveling to and from Campbell River. Residents of Cortes Island also regularly utilize the Heriot Bay Ferry Terminal to travel through Quadra Island to reach Campbell River. Safe and efficient active transportation connections to both ferry terminals were expressed as critical for the community.

Road Safety

Area C residents expressed a general lack of safety for active transportation users on roads due to high vehicle speeds, blind corners, steep topography and narrow lanes without adequate roadside shoulders or active transportation infrastructure.

Figure 11 on the following page presents locations on the map as colors based on density of comments and community concerns. These locations/areas will be used in subsequent stages of the ATNP to understand priority areas for improvement. Areas with a high density of community active transportation comments are denoted by the purple color, and include the following locations:

Quathiaski Cove Village

- No crosswalks for pedestrians or cyclists
- No roadside pathways connecting the village to the ferry terminal
- Ferry traffic and unloading speeds create issues for pedestrians and cyclists trying to cross Harper Road to the Cove

Quadra Elementary School

- No sidewalks or accessible shoulders around school
- Crosswalks are in poor condition

West Road at Heriot Bay Road, Heriot Bay Ferry Onramp

- Traffic congestion from Cortes Island ferry traffic
- Lack of cyclist and pedestrian infrastructure

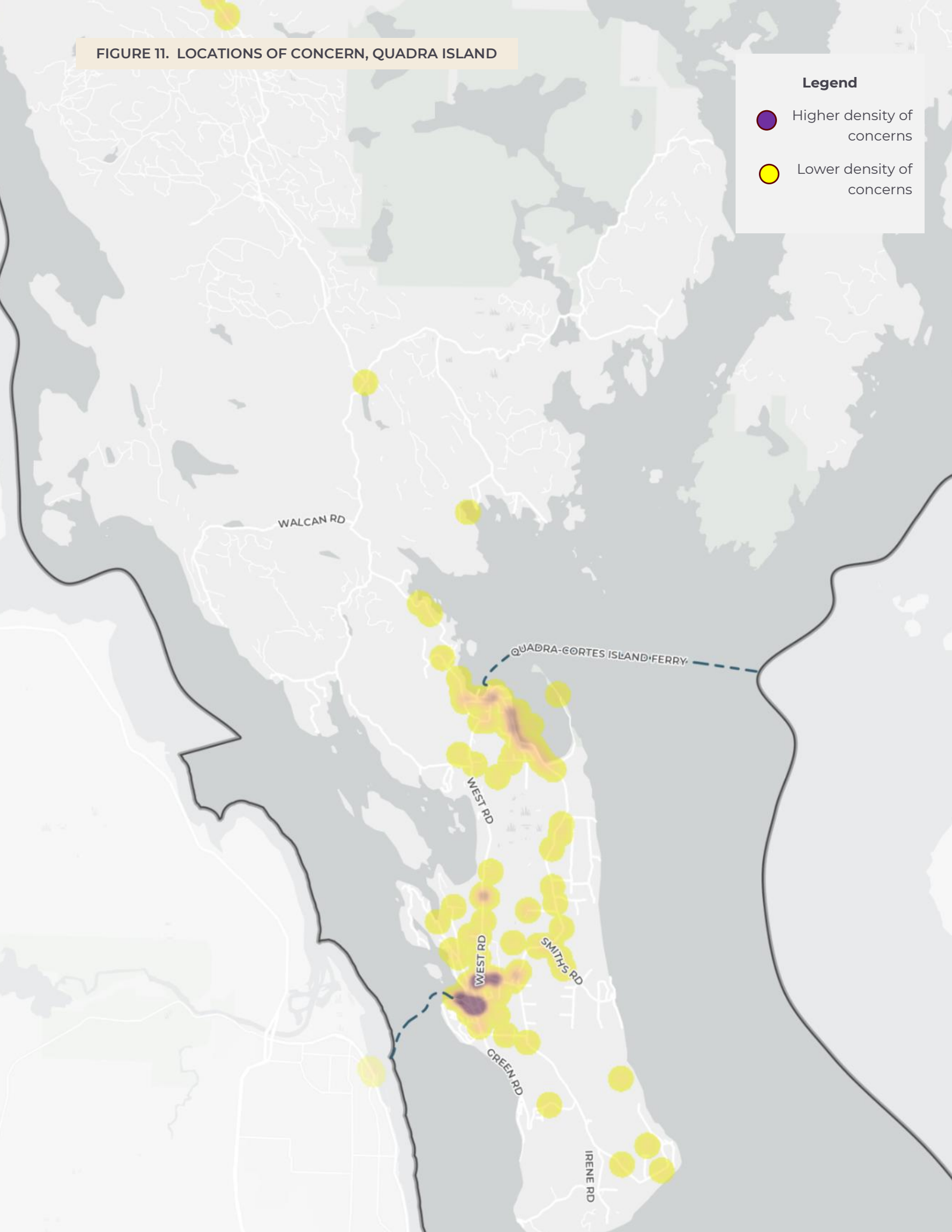
Heriot Bay Road between Rebecca Spit and West Road

- Blind corners, narrow lanes and steep hills create safety issues for pedestrians and cyclists

West Road

- Desire to see a roadside trail or accessible shoulder connecting the community center to Quathiaski Cove and the elementary school

FIGURE 11. LOCATIONS OF CONCERN, QUADRA ISLAND



Legend

- Higher density of concerns
- Lower density of concerns

