*City of Salmon Arm*

# Active Transportation Network Plan

CITY OF SALMONARM

CONNECT SALMONARM

SMALL CITY, GREAT CONNECTIONS

YOU HELPED PAVE THE WAY

FINAL OCTOBER 2022

## PREPARED FOR:

**City of Salmon Arm**

Box 40, 500 – 2 Avenue NE
Salmon Arm, BC
V1E 4N2

## TERRITORIAL ACKNOWLEDGEMENT

*Mayor and Council are grateful for the land on which the City of Salmon Arm is located, which is the Traditional Territory of the Secwépemc people, with whom we share these lands where we live and work together.*

Funding for the City of Salmon Arm Active Transportation Network Plan was provided, in part, by the Province of British Columbia through the B.C. Active Transportation Infrastructure Grants Program. Funding for this plan will help the city develop safe and accessible active transportation routes for pedestrians, runners and cyclists of all ages and abilities.

File: 0521.0209.01

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# 1.0 INTRODUCTION

The City of Salmon Arm is nestled between the mountains of British Columbia's southern interior and along the southwest shores of Shuswap Lake on the traditional territory of the Secwépemc (Shuswap) people. The breathtaking natural beauty offers approximately 20,000 residents (and 45,000 residents from the broader Shuswap Lake community), a wide array of recreation, tourism, and cultural opportunities through its network of parks and trails. As the largest urbanized centre in the Columbia Shuswap Regional District (CSRD), Salmon Arm plays a key role as a regional service hub, attracting many new residents.

Walking, jogging, bicycling, and mountain biking are among the most popular recreation activities for all ages. Based on 2016 Census data, 9% of trips to/from school and work in Salmon Arm are made by active transportation. This is higher than other similar sized communities in the province and indicates a strong culture for active transportation and an opportunity to grow this number as more infrastructure and programming is implemented.

The City of Salmon Arm is committed to making it safer, easier, and more enjoyable to walk, bicycle, and use other forms of active transportation. The City, strongly supported by regional partners, has been exploring opportunities and implementing projects and programs to encourage active transportation over the years. Several studies and reports have been developed to better understand and address issues and concerns related to active transportation. This Active Transportation Network Plan (ATNP) is intended to help compile all the hard work, including ideas of community members, stakeholders, and committee members in one place to guide investments and inform decision making over the next 20 years.

## *What is Active Transportation?*

Active transportation includes any form of **human-powered transportation**, such as walking, bicycling, or rolling using a skateboard, in-line skates, scooter, mobility aids such as a wheelchair, and other modes. It may also include winter-based active modes (e.g., cross-country skiing and snowshoeing), water-based active modes (e.g., canoe, kayak, and stand-up paddle boarding), and even horseback riding. There are also several new and emerging transportation modes that can fit in this category and may use the same on-street routes, such as e-scooters, electric skateboards, and other small, one-person electric vehicles.

## *What is All Ages and Abilities (AAA)?*

The focus of the City of Salmon Arm's ATNP is on creating a comfortable and safe environment for people of all ages and abilities to walk, cycle, and roll within Salmon Arm. This means that the Plan considers people using a variety of mobility devices (e.g. walkers, wheelchairs, and mobility scooters) and bicycle types (e.g. bicycles with trailers, pedal assist e-bikes, bicycles built for people with mobility challenges, and others) to ensure that active transportation is feasible, comfortable and enjoyable year round for both residents and visitors. The plan also focuses on creating a network of bicycle facilities that are physically separated from traffic and on streets with low traffic volumes.

The ATNP has been divided into five sections:

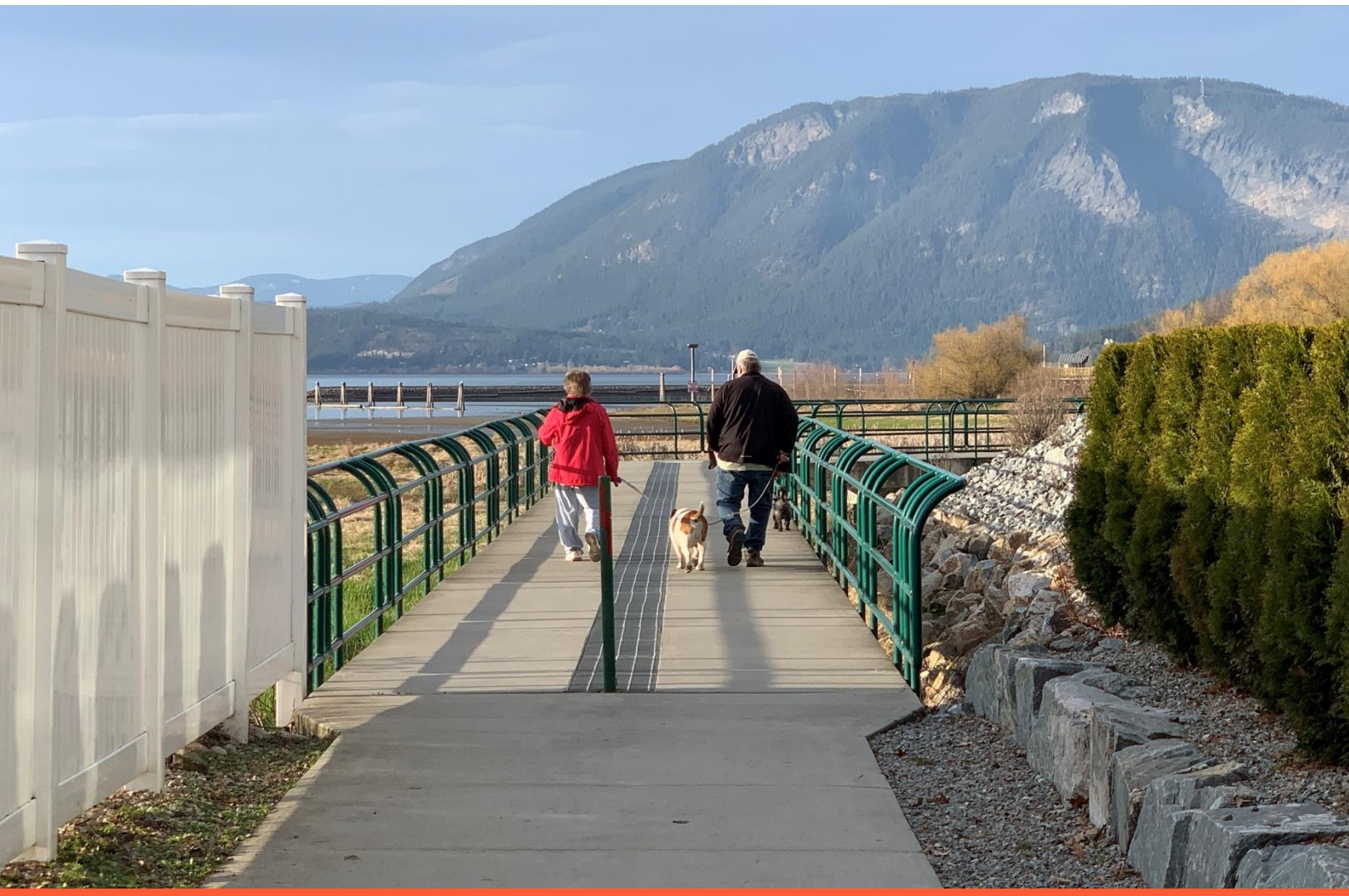
**Section 1: Introduction** highlights the overall purpose, process, and community engagement activities that have taken place to develop the ATNP.

**Section 2: Active Transportation Today** outlines the conditions and considerations for active transportation in Salmon Arm today. These are the factors that shaped and influenced the plan's themes and actions. It also outlines trends in active transportation more generally and explores the context in Salmon Arm specifically. This includes, understanding demographic and land use trends, connections to other relevant programs and policies, and existing conditions for walking and biking in Salmon Arm, including key issues and opportunities.

**Section 3: Future Directions** outlines the future direction of active transportation based on the ATNP's core themes of Connect, Experience, and Encourage. It then outlines several strategies and specific actions for improving active transportation in Salmon Arm.

**Section 4: Implementation & Monitoring** outlines a plan for putting the themes, strategies, and actions into practice. This includes prioritizing actions and active transportation facilities, laying out a timeframe and method of implementation, and identifying leaders to guide the implementation of each action. This section also outlines infrastructure cost estimates and funding strategies.

**Section 5: Closing** summarizes the plan and outlines the next steps for ensuring the ATNP is successfully implemented.



## Study Purpose and Objectives

The ATNP was developed over an 8-month process through a robust community and stakeholder engagement process. Building on best practices and community and stakeholder input, the plan identifies policies, programs, and initiatives to encourage active transportation based on three themes: **Connect**, **Experience**, and **Encourage**.

The strategies and actions provide holistic guidance regarding improvements to policies, standards, infrastructure, and programming to ensure that active transportation becomes a comfortable and convenient choice for everyone.

The plan includes an active transportation network that builds on the city's existing trail and sidewalk network and identifies infrastructure projects, implementation priorities, and cost estimates. The infrastructure will help increase comfort and safety for walking and biking in the community and will include sidewalks, crossing improvements, on-street bicycle routes, and multi-use pathways.

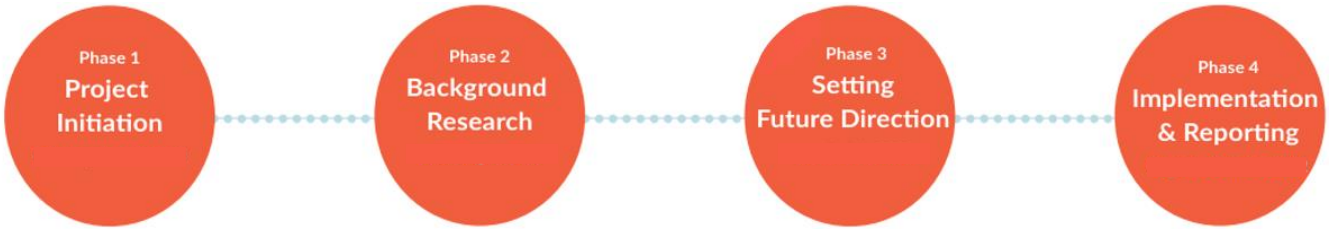
***The goal of the Active Transportation Network Plan is to create an accessible, safe, comfortable, and connected network for people of all ages and abilities.***

Key objectives of the ATNP include:

- Encouraging more people to walk, bicycle, and roll (travel by scooter, wheelchair, mobility aid etc.), facilitating comfortable and safe movement of non-motorized modes of travel throughout Salmon Arm. The plan identifies an Active Transportation Network for all-ages and abilities that will provide residents with accessible year-round connections.
- Promote the use of and facilitate active transportation for visitors to the community, considering barriers and motivators such as incentives, wayfinding, and end-of-trip facilities (safe bicycle parking, storage, and other amenities).
- Developing key network priorities including the identification of quick-wins and key major projects to help guide investment for the next 5, 10, and 20 years.

## Plan Process

The ATNP is being developed over an eight-month period and a four-phase process that was developed with comprehensive input and engagement from stakeholders and community members.



## Community Engagement

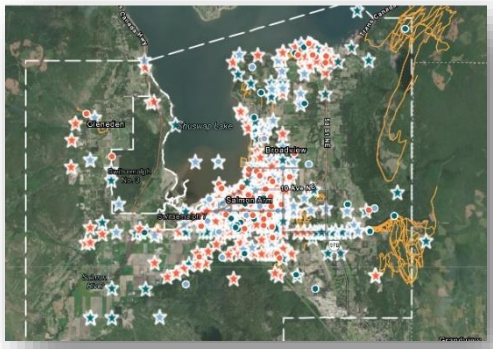
An effective and meaningful communications and engagement strategy is critical to the success of the ATNP. The City was keen to hear from a diverse range of voices so that the final ATNP is inclusive, forward-thinking, and reflects the needs and desires of the community. Salmon Arm residents and visitors were given the opportunity to help shape the development of the plan through two rounds of engagement. Through this process we engaged with thousands of residents through a series of events and engagement opportunities. A more detailed project engagement report can be found in the separate Engagement Summary Report.

### PROJECT BRANDING

A project brand – Connect Salmon Arm - was developed in collaboration with City staff and the Active Transportation Task Force (Council Committee) to create an identifiable look for the Plan. This included a project name, slogan, logo, and dedicated project website.

### NOTIFICATIONS, NEWSLETTER, & PROJECT MAILING LIST

A project mailing list was set up and updated throughout the project process. Individuals on the mailing list were notified when upcoming in-person and virtual community events were occurring and reminded to complete the project surveys. The City of Salmon Arm posted notifications through their social media channels and posted a video promoting the project when it launched. Additionally, a newsletter update summarizing the project process and the draft plan was sent out during the second round of engagement.



### PROJECT WEBSITE & ONLINE SURVEYS

A project website (www.connectsalmonarm.ca) was developed to share updates on the plan's development, and to host the community surveys. Two surveys were administered online with paper copies of the survey also distributed. The first survey was launched in April 2022 with 718 respondents, the second was launched in August 2022 with 515 responses.


### INTERACTIVE MAPPING EXERCISE

In addition to Community Survey #1, an interactive mapping exercise was also available between April 6 to 25, 2022. The mapping exercise received more than 600 comments. Participants were asked to share current transportation strengths and weaknesses at specific locations in Salmon Arm.

### ACTIVE TRANSPORTATION TASK FORCE MEETINGS

Active Transportation Task Force (ATTF) meetings were held virtually each month to discuss project progress, share resources, collect input, and discuss ideas. The ATTF is a group of stakeholders that provide information and recommendations to Council that will guide the City in developing the Active Transportation Plan. In addition to the monthly meetings, two workshops were held with members to discuss the draft

network (May 2022) and the draft plan recommendations, opportunities for quicks wins, and rapid implementation options (July 2022). Two additional meetings were held to review the draft plan and compile input from the ATTF (September 2022).

### STAKEHOLDER MEETINGS & FOCUS GROUPS

Meetings and discussions were held both virtually and in-person over the course of the project. Questions for each meeting were tailored to the interests and concerns of the individual groups. Meetings were held with Adam's Lake Indian Band, Neskonlith Indian Band, a group of Broadview neighbourhood parents, Greenways Liaison Committee, 5th Avenue Seniors, Social Impact Advisory Committee, and Downtown Salmon Arm.

### YOUTH ENGAGEMENT

Three workshops were completed with students in Grades 2/3, 7, and 11/12. Activities and questions were tailored to the different age groups and ranged from understanding what students like and don't like about their journeys to school to what types of projects they think would most benefit Salmon Arm and encourage more walking and biking.

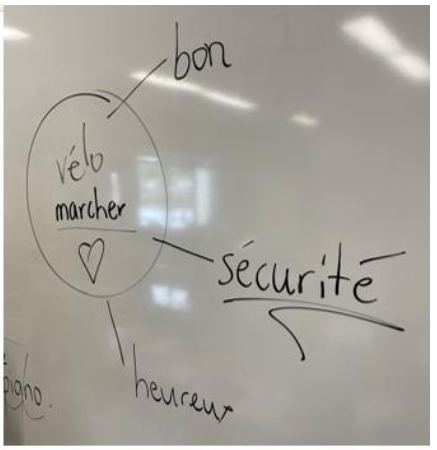
### IN-PERSON POP-UPS

Ten in-person events were held over the course of the project. Pop-ups were set up where we would be able to meet people where they naturally gather resulting in over 250 interactions.

### VIRTUAL COMMUNITY ENGAGEMENT: PRESENTING THE DRAFT PLAN

This virtual meeting was held to present the draft plan to community members. The plan was made available online in advance of this meeting and the project team presented a summary of the planning process and the recommendations of the plan. This meeting provided an opportunity for community members to ask questions and provide feedback on the draft plan.








# 2.0 ACTIVE TRANSPORTATION TODAY

This section sets the stage for the recommendations and directions outlined in the ATNP. It outlines the current state of active transportation in the City of Salmon Arm and highlights the opportunities to build on the work that has been done and plans and policies in place.

## The Case for Active Transportation

Over the past decade, communities of all sizes across North America have seen a significant interest in shifting away from a reliance on automobiles towards active forms of transportation, including walking and biking. This shift can help communities move towards a more balanced transportation system that encourages healthy and active living, creates a more livable community, and results in cost-effective and efficient solutions in terms of a community's infrastructure investments. The benefits of active transportation include:

- **Health Benefits:** While Salmon Arm has an extensive network of trails, there are limited formal biking facilities within the City. Investing in active transportation has been shown to create more physically active communities, which can in turn improve psychological well-being and reduce the risk of numerous chronic diseases. Walking can be the easiest and most affordable way for people in Salmon Arm to add exercise to their daily routines. We know approximately 87% of Salmon Arm residents commute by automobile and are inactive during their commutes.[1] With Salmon Arm's growing senior population, accessible active transportation infrastructure will support aging in place.
- **Safety Benefits:** Properly designed active transportation facilities that provide dedicated spaces for active transportation users and make people more visible within the roadway have the potential to reduce the risk of collisions, creating a safer transportation system for all road users. Roads designed for slower motor vehicle speeds have been shown to decrease the probability of serious injury and death for active transportation users, and they are much more comfortable for people walking, rolling, and biking. Road safety improvements are critically important as Salmon Arm has a higher rate of motor vehicle crashes when compared to the rest of the province (Provincial Health Services Authority, 2021).[2]
- **Economic Benefits:** Neighbourhoods and destinations that are attractive and accessible for people walking and biking can attract more visitors, who will in turn be patrons of local services and amenities. Investing in active transportation can result in a more balanced transportation system that is cost-effective and more equitable, making sure that people of all socioeconomic backgrounds are able to travel safely throughout the

### *How E-bikes Are Making Biking More Accessible?*

Topography and trip distance are two barriers that often limit bicycle use. Pedal assist electric bicycles (e-bikes) are becoming more affordable and are a transportation mode that is gaining popularity worldwide. E-bikes have the potential for increasing the appeal of cycling to a larger group of people and extending the range of destinations that can be reached by bicycle. This is particularly important with an aging population as this helps ensure everyone can bicycle.

[1] Journey to Work Mode Share, 2016 Statistics Canada)

[2] BC Community Health Profile. http://communityhealth.phsa.ca/HealthProfiles/PdfGenerator/Salmon%20Arm

Salmon Arm. With tourism seasonality in Salmon Arm, an active transportation network can decrease traffic volumes during peak season, support attracting seasonal workers, and grow tourism in a sustainable way.

- **Environmental Benefits:** Transportation is one of the largest contributors to greenhouse gas emissions in the province, with motor vehicles being the main culprit. With Highway 1 bisecting the community, active transportation can help to lower emissions while also reducing air pollution and motor vehicle congestion. Encouraging more trips to be made by active transportation is an important part of climate change resilience strategies and aligns with other provincial and federal climate change initiatives.
- **Societal Benefits:** Active transportation encourages social interaction, which helps to build trust, respect, understanding, and a sense of co-operation amongst community members. Studies have shown that these important social interactions diminish when motor vehicle volumes increase and walking infrastructure decreases.[3][4] These interactions are vital for people of all ages and abilities. In addition, providing more active transportation infrastructure can benefit some of the equity-seeking groups in Salmon Arm such as, women, the Black, Indigenous, and People of Colour (BIPOC) community, the LGBTQSIA+ community, and individuals with mobility and cognitive impairments, by creating safer spaces, lowering transportation costs, and improving access.


[3] City of Vancouver. Walking and Cycling in Vancouver: 2016 Report Card. [Online] 2017. http://vancouver.ca/files/cov/walking-cycling-in-vancouver-2016-report-card.pdf.

[4] Lucas, Karen & Peter Jones. Social Impacts and Equity Issues in Transport: An Introduction (guest editorial). *Journal of Transport Geography.* 2012, Vol 21. doi:10.1016/j.jtrangeo.2012.01.032.

## Community Context

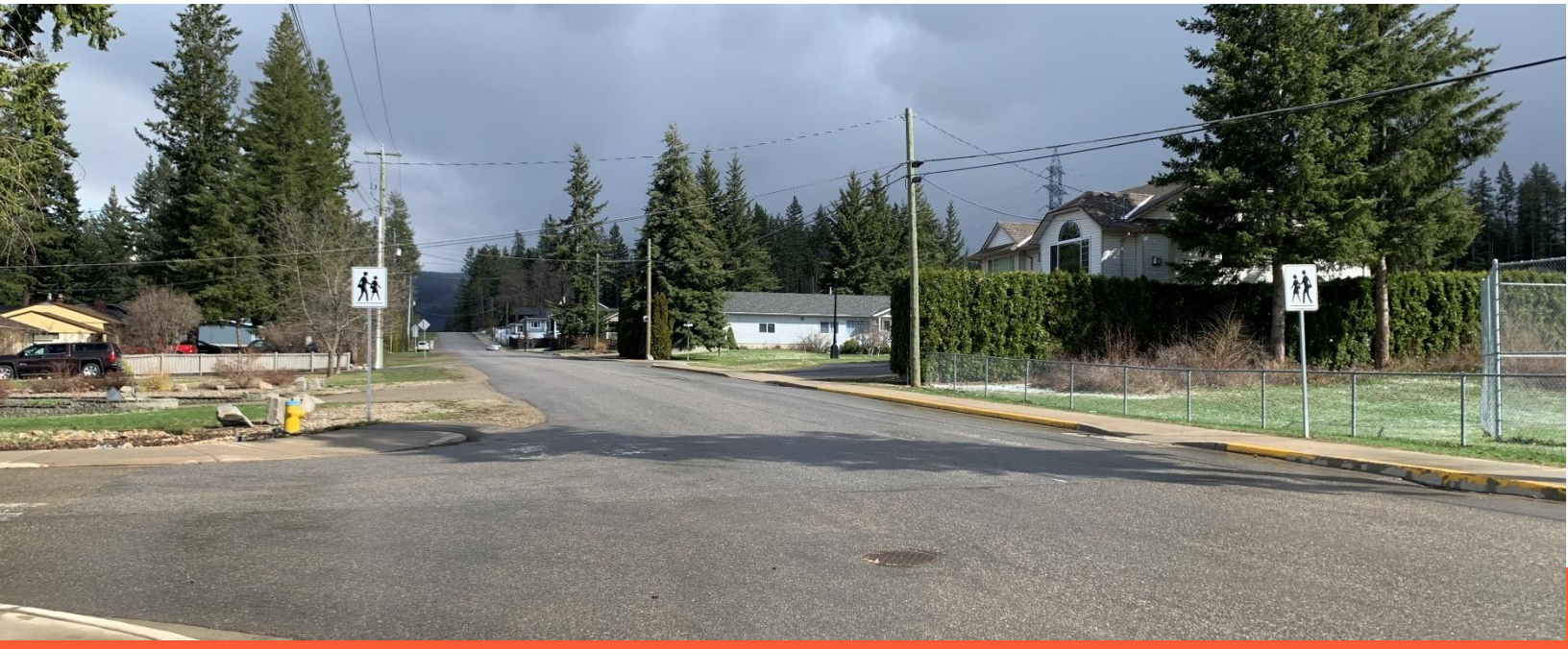
The City of Salmon Arm is located on the traditional territory of the Secwépemc (Shuswap) people along the shores of Shuswap Lake, bordered by Mount Ida to the south, the Fly Hills to the west, and the Larch Hills to the east. Salmon Arm is an active, healthy, and sustainable community of approximately 20,000 residents with a strong history of community cooperation, a passion for protecting the natural environment, and experiencing the outdoors. As the largest urban centre within the CSRD, Salmon Arm takes its name from the southernmost of four arms of Shuswap Lake. The beautiful natural surroundings and proximity to Shuswap Lake and Highway 1 draw many tourists and recreationalists who visit the area year-round to explore hundreds of kilometres of trails for mountain biking, hiking, skiing, and many more outdoor activities.

### Demographics

The population of Salmon Arm has experienced significant growth, as identified in the recent 2021 Census, with a population of 19,432 representing a 9.7% increase from the 2016 Census. According to the 2021 census, Salmon Arm is an aging community with 57% of the population over the age of 45, 29% of the population between the ages of 15-44, and 15% of the population under the age of 14. The median age in Salmon Arm is 51.6. Population trends projected by Interior Health identified increased growth in the 65+ age bracket, and a modest decline in population under age 45 is expected to 2040. As a major tourist and retirement destination for those in British Columbia, Alberta and beyond, creating infrastructure that meets the needs of all ages and abilities is a pressing need.

Considering community demographics is crucial for creating an equitable transportation system that is safe, comfortable, and accessible for all. It is especially important to understand the transportation needs of marginalized populations, which may include women, seniors, the BIPOC community, immigrants, and refugees, the LGBTQSIA+ community, and people who are socio-economically disadvantaged or experiencing homelessness or addiction.

Based on 2016 Census data, approximately 4% of the population identify as a visible minority. The largest visible minority groups are Japanese, South Asian, Chinese, Black, and Filipino. About 7% of population identify as Indigenous, mainly First Nations and Métis. Approximately 11% of the City's population are immigrants and over 13% of the population is considered low income.



## Equity Analysis

One of the aims of the plan is to develop a transportation network that serves all areas of the City and provides equitable access for all residents. This means being inclusive of – and prioritizing – people of all ages, abilities, backgrounds, and identities. It is especially important to focus on centering equity and supporting equity-seeking populations, which may include, but are not limited to, the following:

- Women
- Seniors
- The Black, Indigenous, and People of Colour (BIPOC) community
- Immigrants and refugees
- The LGBTQSIA+ community
- People with accessibility needs, including those with challenges related to mobility, vision, hearing, strength, dexterity, and/or comprehension
- People who are socio-economically disadvantaged
- People experiencing homelessness
- People experiencing substance use disorder

Equity-seeking populations face unique and intersecting challenges when navigating the transportation system, including the threat of discrimination and violence. They may be uncomfortable walking, rolling, and cycling due to personal safety concerns and lack of lighting. They may also need infrastructure treatments, that can include sidewalks, curb ramps, audible pedestrian signals, tactile warning indicators to safely navigate the transportation network. These populations – especially seniors and the BIPOC community – also tend to be overrepresented in traffic fatalities and serious injuries.

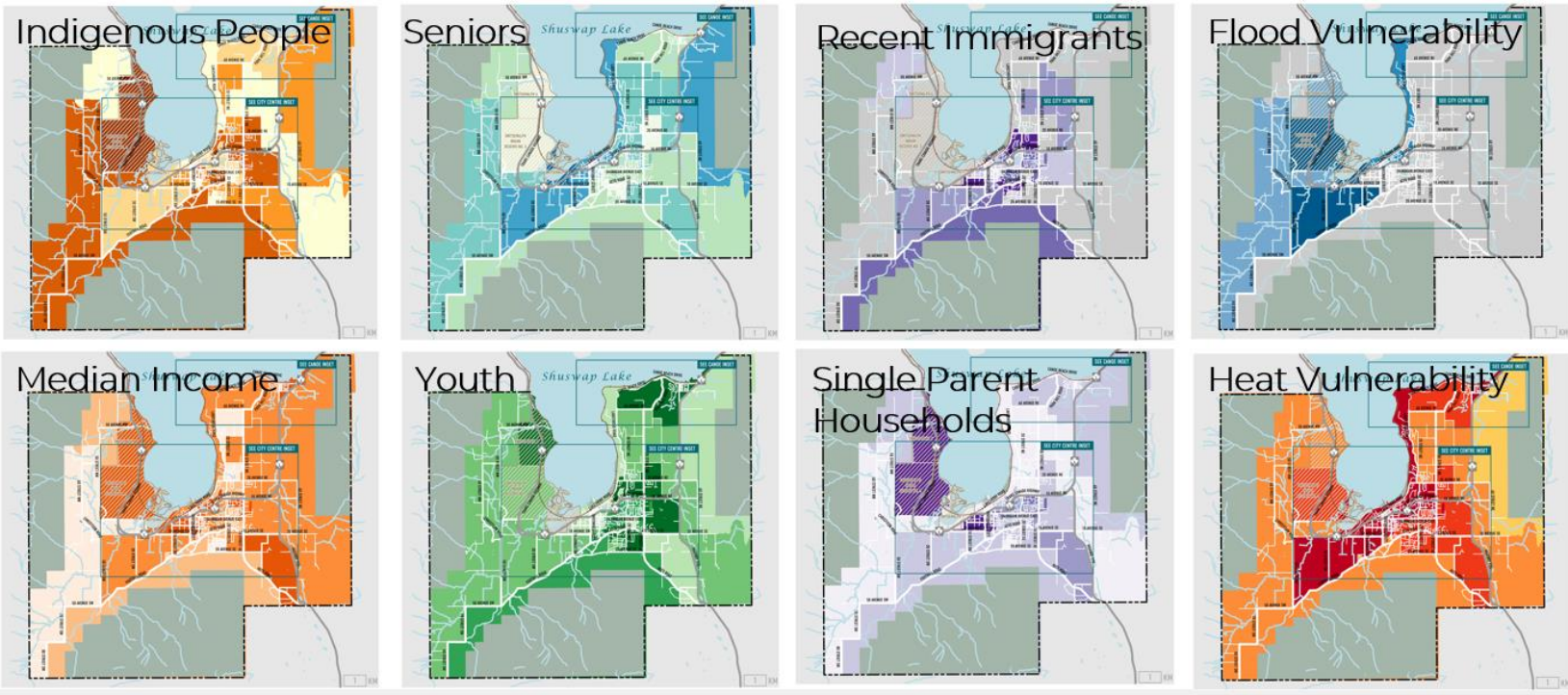
A GIS-based equity analysis was used to identify neighbourhoods where there are higher concentrations of equity-priority groups. The results of this analysis identify under-served areas in the city where there is an opportunity to make strategic investments to improve transportation equity.

The GIS analysis identifies areas where there are higher concentrations of people who are more dependent on active transportation for moving around. The equity analysis used 12 indicators based on Statistics Canada data (2016) and Interior Health data (2020) that mapped spatial patterns in vulnerability, including vulnerability to climate change-related health hazards. These variables were then combined to determine an overall equity score for each area. Because of the limited number of census tracts in the city, dissemination areas were used. These dissemination areas do not necessarily follow neighbourhood boundaries and are a limitation of the analysis.

*Table 1: Equity Analysis Indicators and Source*

| Indicators | Source |
|---|---|
| • Youth, older adults, recent immigrant populations, Indigenous peoples<br>• Low-income populations (based on medium household income)<br>• Single-parent households<br>• Visible minorities<br>• People with limited English | Census, 2016 |
| • Vulnerability to climate change - heat, smoke, flood and cold | Interior Health, 2020 |

The analysis identified the neighbourhoods as areas with the greatest equity need (Figure 1). Some of the individual variable maps can be seen below. It is important to note that there are several different methodologies that can be used to look at demographics and neighbourhood need, and this GIS analysis is limited to the information contained within the federal census. The equity-priority groups that are not captured within this GIS analysis (due to limitations in available spatial data) include persons with disabilities, the LGBTQSIA+ community, persons experiencing substance use disorder, and persons experiencing homelessness. These groups and areas have been considered as the network and recommendations in the plan were completed.



## *Equity as a Guiding Principle and Recommendations of the ATNP.*

- As part of the community survey analysis, cross tabulation analysis was done with key survey respondents based on location, age gender, limitations, and those who have indicated that they have faced barriers based due to race, national or ethnic origin, age, gender identity, sexual orientation, disability, family makeup, conviction for an offense or other factor. This allowed us to better understand the barriers and opportunities for active transportation for these specific groups. More detail about these findings are outlined in the accompanying ATNP Engagement Summary Report.
- Some of the recommendations of the plan (more detail provided in Section 3) that focus on providing an equitable transportation network include:
    - Ensure best practices in accessibility are considered for new transportation infrastructure projects and upgrades, including developing and adopting a Universal Design Policy.
    - The City will work with MoTI to install audible pedestrian signals at traffic signals within Salmon Arm and review and update pedestrian crossing times at intersections to provide adequate crossing time for all users.
    - The City will continue to find opportunities to reduce pedestrian crossing distances by providing narrower roads and motor vehicle lanes. The City will look for opportunities to install curb extensions or median islands.
    - The City will conduct an inventory of curb ramps at intersection and crossing locations, reviewing the presence and quality of the facility and developing a plan with priorities to install new curb ramps where they are missing and replace existing to align with best practice design guidance.
    - Improve safety through targeted neighbourhood improvements. Including exploring an approach to reduce posted speed limits on local roads and adding traffic calming.
    - Enhance visibility through lighting improvements along sidewalks, pathways, trails, and intersections where appropriate. The City will complete a Crime Prevention through Environmental Design (CPTED) review of commuter trails throughout the community recognizing that users may be travelling on these facilities after dark, particularly in winter months and at times when transit service is limited.
    - Apply an intersectional, equity-focused lens to the planning, design, and implementation of all active transportation facilities, amenities, and programs to support equity-seeking groups.
    - Update maintenance practices to ensure active transportation routes are in a state of good repair and are cleared of snow and ice in the winter.
- The results of the equity analysis were included as a criteria of the network prioritization analysis (outlined in more detail in Section 4). Projects identified in areas where equity need is greatest received a higher score in terms of project prioritization.

# COMBINED EQUITY SCORE

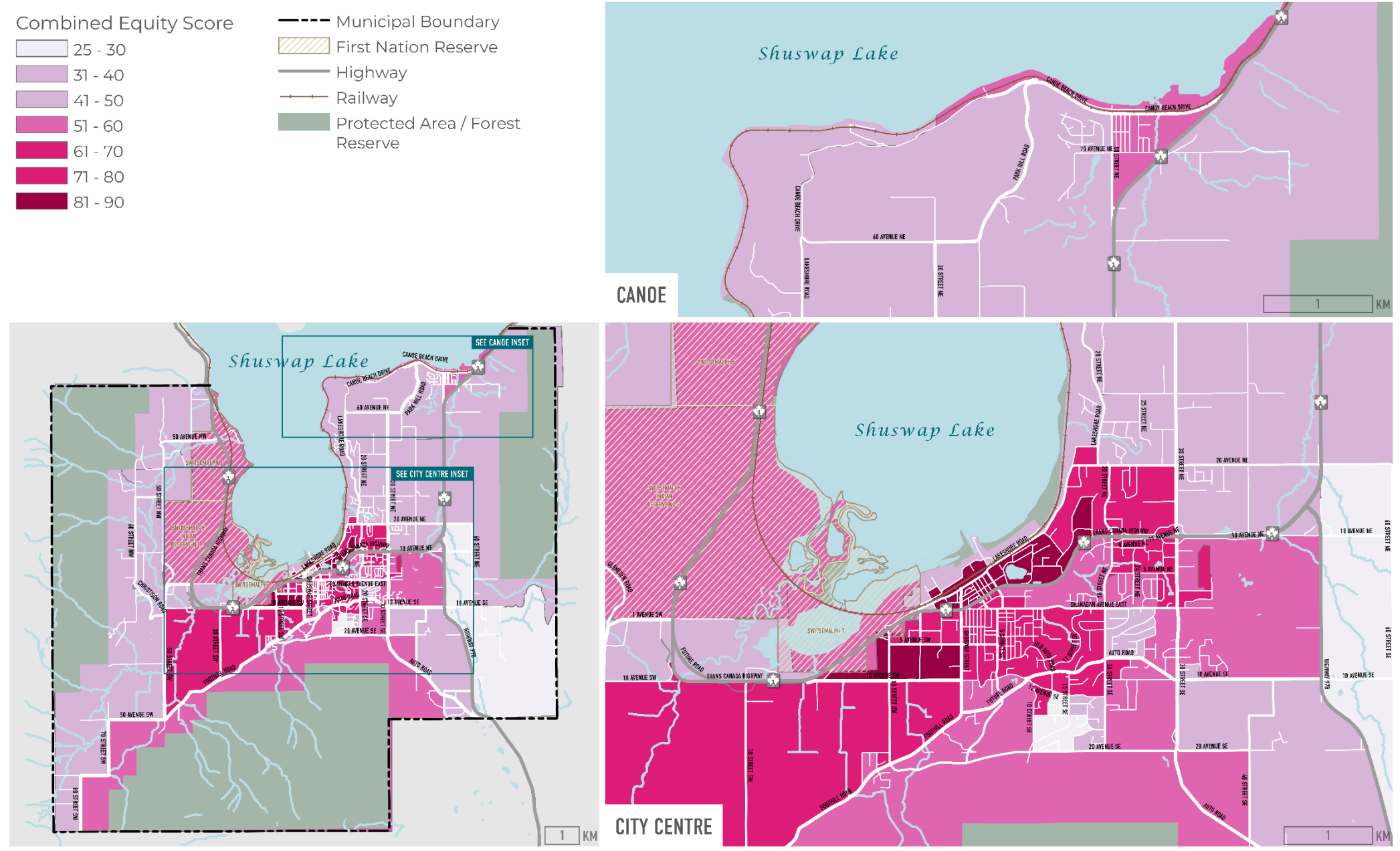



*Figure 1: Equity Analysis – Overall Score*

## Geography and Land Use

At 165.57 square kilometres, Salmon Arm is the largest city in the CSRD and serves as a regional service hub for several smaller surrounding communities. The City's Official Community Plan defines the Urban Containment Boundary (UCB) which limits development outside central areas of the city and emphasizes infill to make efficient use of infrastructure and to maintain a more compact form. Surrounding the UCB is the provincial Agricultural Land Reserve (ALR) which protects lands for long-term agricultural use. An extensive network of trails and parks lay a strong foundation for a connected and active community. There are 13 schools located in the city. Salmon Arm is also home to Okanagan College, a post-secondary school which has approximately 420 full time students annually. **Figure 2**, displays some of the key community destinations in Salmon Arm.

There are aspects of Salmon Arm's geography that create physical barriers causing mobility challenges for people walking, rolling, and biking. While the size of Salmon Arm and areas of steep topography can create challenges, the mountainous topography also makes it a destination for mountain biking and outdoor recreation.

The highways and major arterial roadways can also be challenging to cross and travel along for active transportation users. High motor vehicle speeds and volumes, along with a lack of comfortable walking and biking facilities on many of these roadways, create a disconnect between different areas of the city. Finally, there can be a psychological barrier to the uptake of active transportation, with biking sometimes perceived as a mode of last resort.

Neskonlith Indian Band and Adams Lake Indian Band have reserve lands neighbouring the City. There are several important destinations and trails located within these communities, including the Switzmalph Child Care Centre, Melamen Centre, Switzmalph Cultural Centre, Sandy Point, Pierre's Point Hall, Pierre's Point Community Band Offices. While the recommendations of the ATNP are focused on projects identified on roads within the City's jurisdiction, key connections to these communities and destinations outside of Salmon Arm are critically important. The plan highlights the need for regional connections and partnership opportunities to implement active transportation projects.

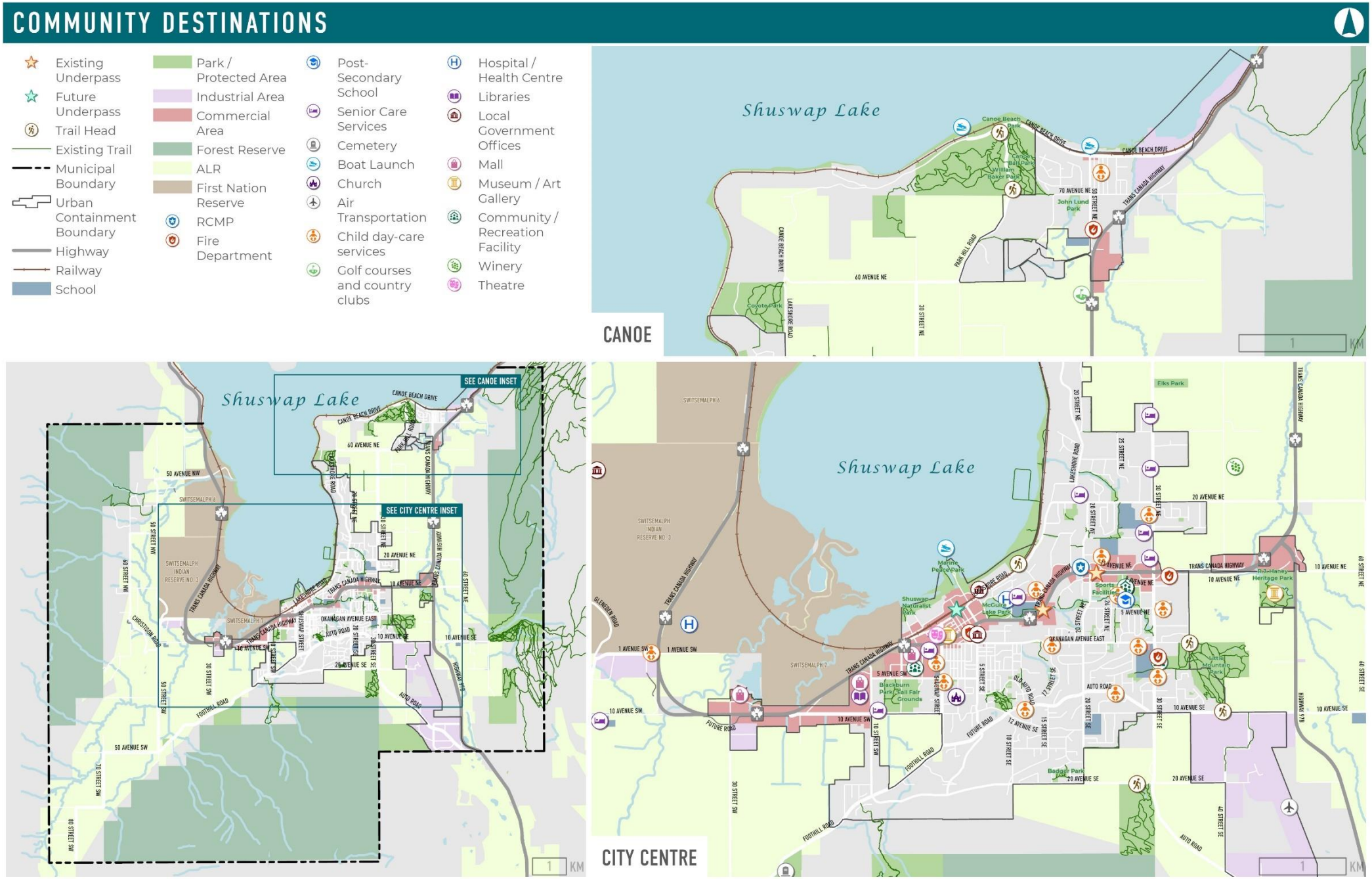


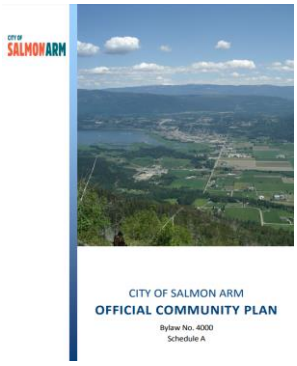

*Figure 2: Key Community Destinations*

## Policy Context

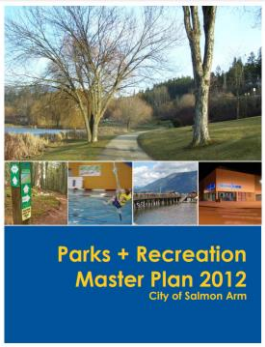
The ATNP was informed by many of Salmon Arm's and the region's key planning documents that contain pedestrian, biking, and trail related policies, plans, and goals. These documents include broader aspirations for growth and transportation and provide specific directions on how walking, biking, and rolling can become an integral part of Salmon Arm's transportation system.

The City's Official Community Plan, Greenways Strategy, and Parks and Recreation Master Plan, and the Corporate Strategy all support the development of the ATNP and informed the integration of the active transportation and greenways network.

Regionally, the Shuswap Regional Trails Strategy is an important document with the purpose of ensuring trails are authorized, mapped, developed, maintained, and promoted. A key focus of the strategy is to ensure First Nations interests are protected and to reduce/repair ecological damage from all trail use and manage land access appropriately. While the Trails Strategy does not touch on active transportation on Salmon Arm roadways, it does establish a strong framework that the active transportation network can connect to, facilitating the best connections to popular recreational trails and destinations.









There are several additional reports that were developed by the Shuswap Trail Alliance, the Greenways Liaison Committee, and other supporting organizations, individuals, and stakeholders that were reviewed and incorporated into the plan.

## Active Transportation in Salmon Arm

This section describes existing conditions in Salmon Arm, including travel patterns, existing active transportation infrastructure, and traffic safety concerns. This information has helped shape the ATNP and the development of recommendations that meet the context and needs of the community.

### How We Move

**Mode of Travel:** According to the 2016 Census data, 10% of Salmon Arm residents travel to work on foot, by bicycle, or using public transit. The remaining 87% commute by car, and 3% that have identified another mode of transportation (Figure 3). Since 1996, driving has increased slightly (2%), while walking has remained consistent, bicycling has dropped slightly, and public transit increased slightly (1%). As part of community engagement efforts, survey respondents were asked what their typical mode of transportation is for commuting purposes (work/school). Most respondents indicated they drive (68%), followed by walking (14%), bicycling (6%), and transit (1%).

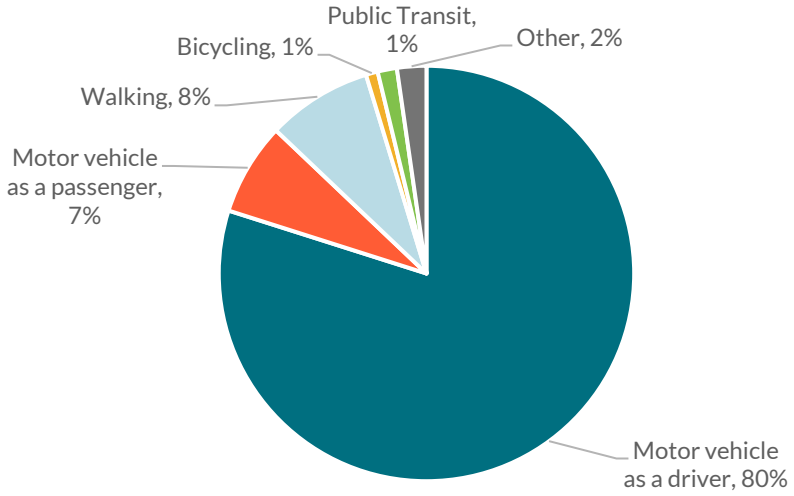



*Figure 3: Journey to Work Mode Share, 2016 (Source: Statistics Canada)*

School travel is often responsible for a large percentage of peak hour congestion, 50% of survey respondents indicated they have children attending school (Age 0-18). Investments in active school travel can support the growth of a healthier community and build a generation that is more comfortable using a range of modes of transportation. Of the survey respondents with children attending school, 45% said they drive their children to school, 33% walk, 17.5% take the school bus and 2.5% bicycle.

**Trip Length:** The 2016 Census notes that 80% of residents commute to work within the city with 68% of residents taking less than 15 minutes to get to work. This data is consistent with project survey responses, which identified that 72% of respondents have a commute time of 20 minutes or less, and 46% of respondents have a commute time of less than 10 minutes. Local commuting patterns, and short commuting times make the potential for active transportation trips quite high.

**Trip Purpose:** The community survey also asked respondents about which trips they choose to walk or cycle for. Respondents were asked to identify all that apply, the top five responses are identified in Figure 4.

| Mode of Travel | Top Five Trip Purposes |
|---|---|
| **Walking** | • Enjoy nature, parks, and Trails<br>• Exercise<br>• Spend time with family and friends<br>• Access shops, restaurants, or services (groceries, medical, banking etc.)<br>• Walk my dog |
| **Bicycling** | • Exercise<br>• Enjoy nature, parks, and trails<br>• Have fun<br>• Spend time with family and friends<br>• Access shops, restaurants, or services (groceries, medical, banking etc.) |

*Figure 4: Active Transportation Trip Purpose - Survey Responses*

The potential for increasing the number of trips made by active transportation is significant in Salmon Arm. The majority of respondents of the community survey noted that they currently use active transportation for mainly recreational purposes and identified a lack of infrastructure, topography, and connections to key destinations as their main barriers to walking, bicycling, and rolling more.

## Existing Network

Salmon Arm's existing active transportation network consists of sidewalks, multi-use pathways, trails, and signed bicycle routes (**Figure 5**). The city has approximately 117 kilometres of trails, most of which are unpaved, 1 kilometre of signed bicycle routes, and 70 kilometres of sidewalks.

While Salmon Arm has an extensive network of trails and some signed local bicycle routes, there are very few on-street routes with designated facilities for people bicycling that are separated from the motor vehicle lane (by paint or physical separation). There are also several gaps in the active transportation network that make it challenging to find a safe and connected route to key community destinations.

Sidewalks are typically located downtown and on arterial and collector streets in urban areas and as part of new development projects. The City's Subdivision and Development Servicing Bylaw requires sidewalks to be installed on both sides of collector/arterial streets or medium to high density development areas. This includes urban hillside areas, downtown, and development areas. Sidewalks are currently required on one side of urban local roads.

Salmon Arm's trail and greenway network is an important component of the existing transportation network. Most existing trails are unpaved and range in width and accessibility but provide important off-street connections to key destinations and are used for both recreation and transportation trips. Most significantly, existing trails that provide access to schools are a huge asset and provide off-street alternatives for those wanting to avoid motor vehicle traffic. The City along with the Greenways Liaison Committee and the Shuswap Trail Alliance have been working to implement the City's Greenways Strategy, providing new and improving existing trail connections within Salmon Arm.

### *End of Trip Facilities and Amenities*

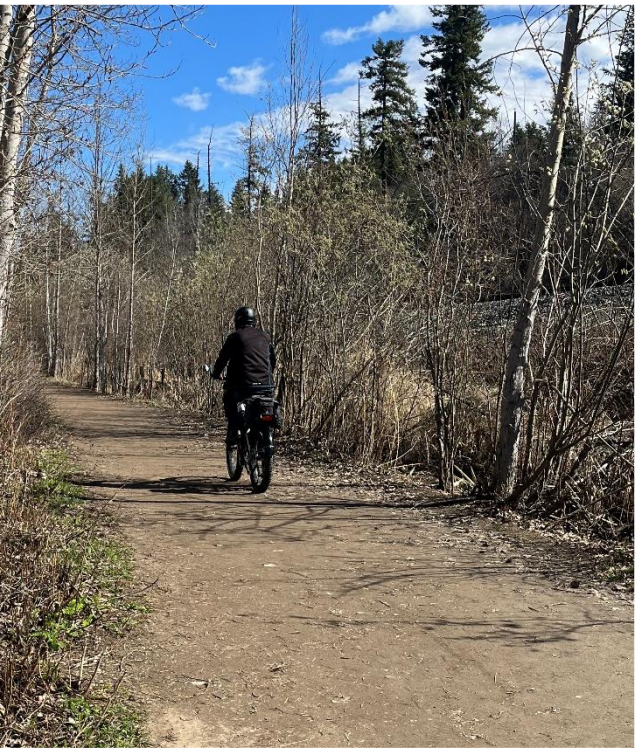
End of trip facilities such as secure bicycle parking, showers, and change rooms can make biking and multi-modal trips seamless and enjoyable. Bicycle racks can be found throughout downtown Salmon Arm. Bicycle parking tends to be harder to access and less visible outside of the downtown but can be found at destinations including, City Hall, the SASCU Recreation Centre, and at schools.

Salmon Arm's current Zoning Bylaw does not provide any requirements for bicycle parking (short or long-term) or end of trip facilities such as shower facilities, lockers, or access to e-bike, scooter, or mobility scooter charging stations.

### *Wayfinding and Signage*

Throughout Salmon Arm there is some signage and wayfinding information along trails. In most cases the name of the trail is provided along with a map showing the location of the trail, nearby connecting trails, level of difficulty, and information about permitted users on the trail. The information provided varies depending on the type of sign it is and when it was installed. The markers do not provide information about the length of the trail or distance to nearby destinations. On-street biking routes are typically marked with bike route signs.

The City worked with the Shuswap Trail Alliance to support the Secwépemc Landmarks and Trailhead Signpost project to host the first pilot landmark and post installation. This project works with Secwépemc leadership, elders, knowledge keepers, artists, storytellers, and young people to create cultural awareness of the traditional territories, oral history, and language throughout the Shuswap Lakes Region.





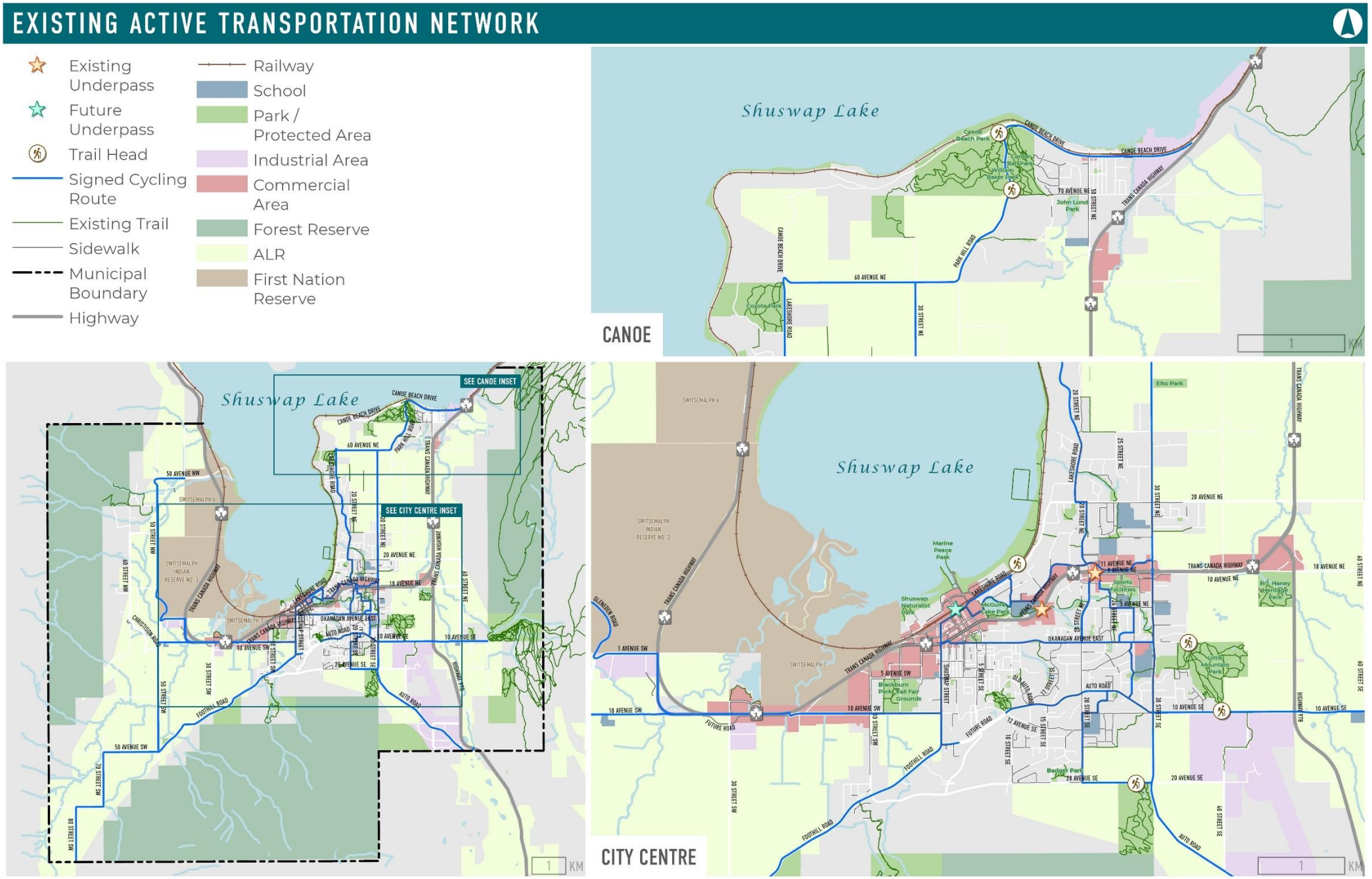



*Figure 5: Existing Active Transportation Network*

### *Safety Concerns*

Transportation safety is a core consideration in the planning of a transportation system. A review of Insurance Corporation of British Columbia (ICBC) data found that from 2011-2020 there were 22 collisions involving a motor vehicle and a bicyclist (3 of which were in a parking lot) and 49 collisions involving a motor vehicle and a pedestrian (18 of which were in parking a parking lot). **Figure 6** highlights the collisions where location data was available. Highway 1, 30 Street SE, 10 Avenue SW, and Shuswap Street have collisions reported at multiple locations along each corridor. Highway 1 and Shuswap Street, Hudson Avenue and Shuswap Street, and 30 Street and 11 Avenue NE are intersections with multiple collisions involving active transportation users.

Excluding collisions that occurred in a parking lot, that is an average of 1.9 bicyclist collisions per year and 3.1 pedestrian collisions per year. Looking at annual trends, the number of collisions involving pedestrians appears to have dropped in recent years whereas the number of collisions involving bicyclists has risen slightly. It is important to note that this does not include near miss collisions or collisions that were not reported to ICBC.

### *Issues and Opportunities*

Key issues and opportunities for active transportation were identified through the community engagement process. Most of the feedback on issues, centered around several specific barriers: connection, experience, and safety. These are summarized in the table and described below.

| | |
|---|---|
| **Connection** | • Lack of active transportation connections and gaps in the network<br>• Existing trail networks do not connect to key community destinations<br>• Sidewalks and trails are poorly maintained |
| **Experience** | • Curb ramps are not well maintained and are too steep<br>• Crossing times are not long enough for residents with mobility challenges |
| **Safety** | • Crosswalks along the highway still feel unsafe<br>• Narrow shoulders<br>• Poor lighting<br>• Motor vehicle speeds<br>• Sightlines<br>• Vehicles are not stopping for pedestrians<br>• Personal safety: concerns related to catcalling, travelling alone at night, lack of lighting along pathways, fear of interacting with people perceived to be underhoused, and pathways being isolated |

The community survey identified that the main issues and challenges for walking in Salmon Arm include a lack of sidewalks (58%), intersection safety (29%), steep hills (27%) and the speed/noise of vehicle traffic (27%). Additional barriers are identified below in **Figure 7**.

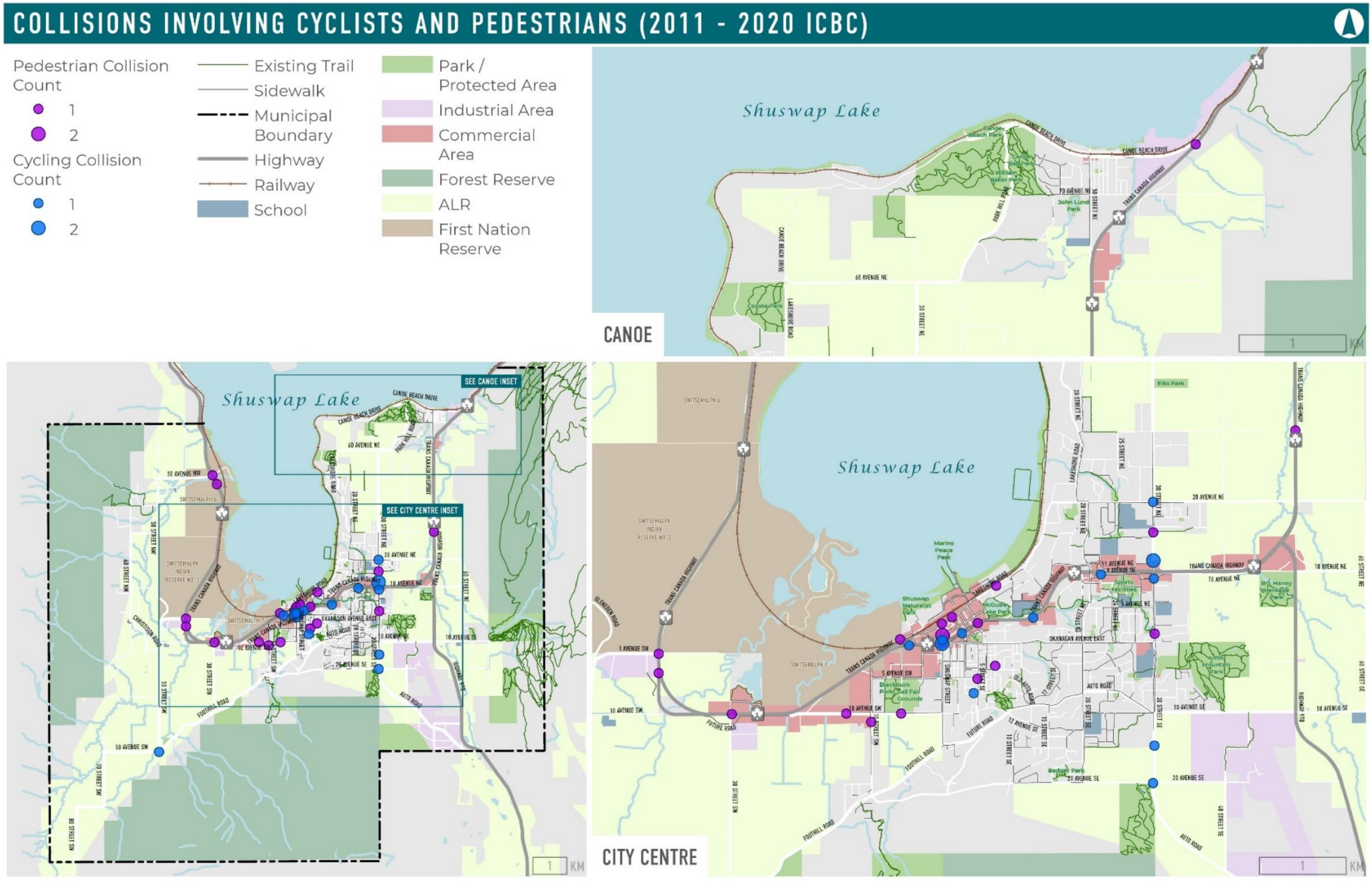



*Figure 6: Collisions Involving Cyclists and Pedestrians 2011-2020 (Source: ICBC)*

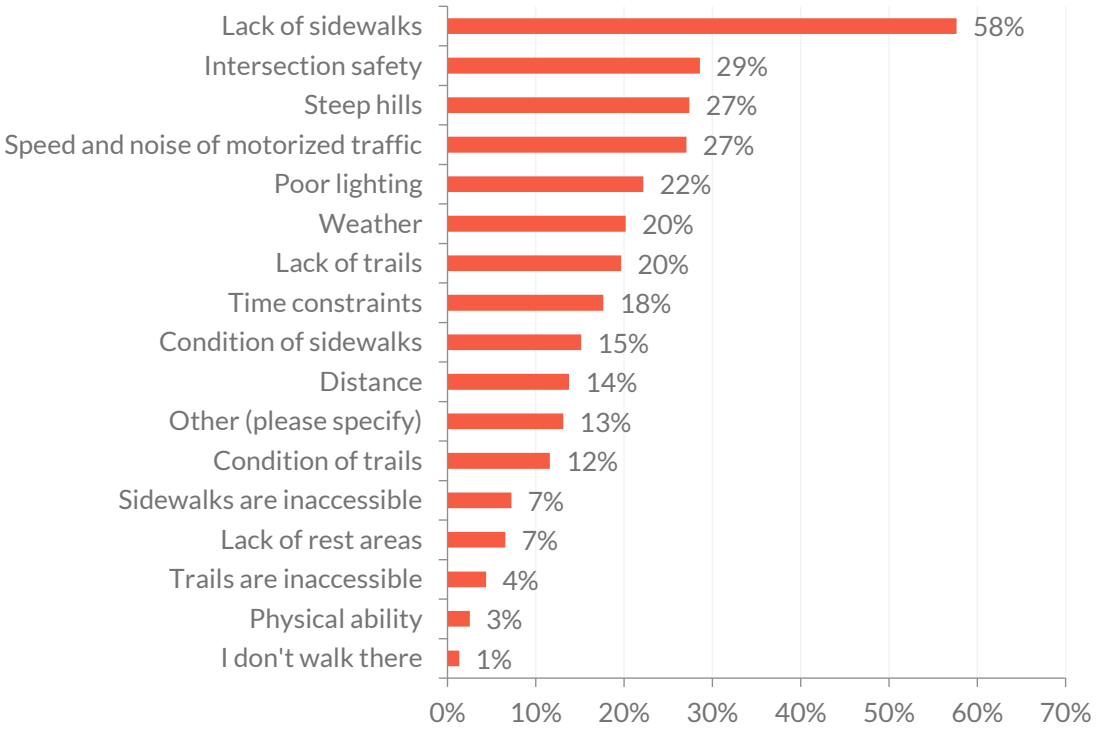



*Figure 7 - Barriers to Walking in Salmon Arm (Source: ATNP Phase 1 Survey)*

In terms of issues or challenges related to bicycling in Salmon Arm, the lack of designated bicycle lanes and bicycle routes were identified by more than half of respondents (67%) as a main challenge. Other top challenges as identified in **Figure 8** include steep hills (45%), and the volume, speed, and size of traffic (33%).

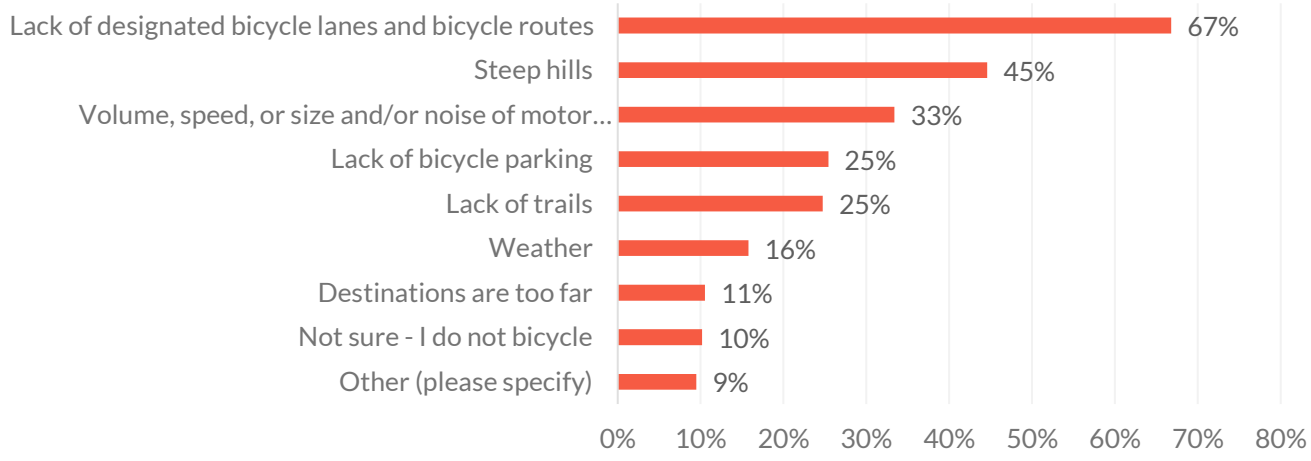



*Figure 8 - Barriers to Bicycling in Salmon Arm (Source: ATNP Phase 1 Survey)*

Throughout the community and stakeholder engagement, several key locations continued to be identified. These locations include:

- 10 Avenue SW and 10 Avenue SE – does not feel safe for walking or biking
- 20 Avenue SE – needs a walking or biking route
- Highway 1 – not comfortable for walking or biking along or to cross
- Okanagan Avenue - missing sidewalks and unsafe
- Lakeshore Road – needs improved conditions for walking and biking
- 30 Street SE- unsafe intersections and unsafe walking and biking connections between schools
- Downtown to Uptown - connections for people walking and biking needed

Opportunities for enhancing active transportation in Salmon Arm include adding more designated walking and biking infrastructure. Multi-use pathways were the type of infrastructure most community survey respondents said they would like to see to help encourage more walking and biking. The following is a summary of some of the other opportunities identified.

- Adding sidewalks and on-street bicycle infrastructure throughout the city, and filling in gaps in the network. Ensuring key destinations have high quality infrastructure for all ages and abilities will ensure residents can use active transportation to access schools, work, and key community destinations (parks, shopping, municipal buildings).
- The extensive trail network throughout the city provides significant opportunity to enhance safe connections to schools, a desire that was identified throughout engagement efforts from youth, parents, and other key stakeholder groups. Building stronger connections will help strengthen active transportation opportunities for youth.
- Providing accessible infrastructure and filling in gaps in the network can improve accessibility and support people with mobility challenges and residents of all ages and abilities get around safely. Ongoing seasonal maintenance is important to help keep residents of all ages safe and active year-round.
- Many survey respondents said they use active transportation for exercise, to enjoy nature, and to explore the community with family and friends. Many visitors to Salmon Arm also enjoy exploring Salmon Arm's amenities. Enhancing the trail network and key regional connections such as the potential West Bay Connector, extension of the Foreshore Trail, and other projects can strengthen tourism and local economic development.
- Providing additional amenities at transit stops (bicycle parking, benches, shelters) can increase the likelihood of multi-modal trips and help increase transit use in the city. Providing additional end-of-trip facilities (short- and long-term bicycle parking, lockers, showers) in key areas can help ensure biking becomes a more common way to get around.

# 3.0 SETTING FUTURE DIRECTION

## Principles, Themes, and Actions

To guide future investments, the ATNP is structured around the following goal:

***The goal of the Active Transportation Network Plan is to create an accessible, safe, comfortable, and connected network for people of all ages and abilities.***

Building a culture for active transportation in Salmon Arm will require significant investments in a network of safe high-quality infrastructure, in addition to new programs and policies to promote awareness, education, and safety of all road users.

A critical component through the development of the ATNP was ensuring that the planning process, and the recommendations of the plan, were inclusive, equitable, and reflected what community members and stakeholders identified was important to them. The direction of the ATNP was guided by five planning principles:


Building off these planning principles along with the feedback and input received from community members and stakeholders, three key themes were identified to enhance active transportation in Salmon Arm. The three overarching themes are: **Connect**, **Experience**, and **Encourage**. Each of these theme areas are intended to support the City to achieve the project goal.

**Connect:** Focuses on providing safe and comfortable connections between destinations within Salmon Arm and identifies strategies to improve integration of active transportation with transit, other modes, and other projects.

**Experience:** Focuses on enhancing the experience for people walking, rolling, and biking, making active transportation a convenient and reliable way to get around.

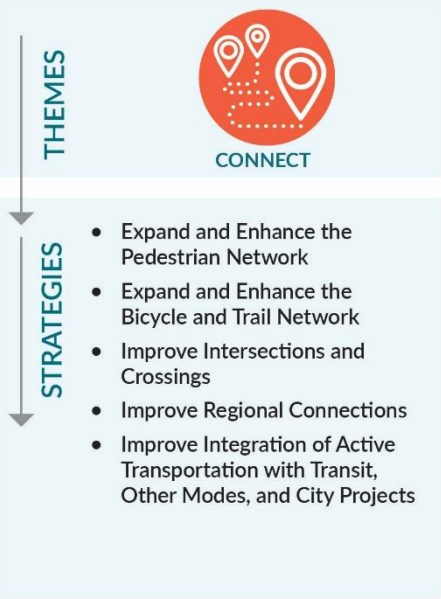
**Encourage:** Focuses on making active transportation more visible and common in Salmon Arm through wayfinding, education, awareness, and promotion.

Each theme includes several strategies and detailed implementation actions that will enhance active transportation in Salmon Arm.

| THEMES | CONNECT | EXPERIENCE | ENCOURAGE |
|---|---|---|---|
| STRATEGIES | • Expand and Enhance the Pedestrian Network<br>• Expand and Enhance the Bicycle and Trail Network<br>• Improve Intersections and Crossings<br>• Improve Regional Connections<br>• Improve Integration of Active Transportation with Transit, Other Modes, and City Projects | • Provide More Bicycle Parking and Other End-of-Trip Facilities<br>• Provide an Active Transportation Network that is Safe, Accessible, and Equitable for All<br>• Maintain the Active Transportation Network Year-Round<br>• Create Great Places and Streets | • Make it Easy to Get Around<br>• Increase Education and Awareness<br>• Further Develop Bicycle Tourism Opportunities |

The sections below expand on the themes and introduces the actions. Section 4 provides an implementation strategy that outlines next steps, prioritizes, and outlines costs and funding strategies to implement the ATNP.

## Theme: Connect




The theme **Connect** includes actions that will help ensure a complete and connected active transportation network throughout Salmon Arm and improve regional connections. This theme focuses on providing safe and comfortable connections between destinations and better integration of active transportation with transit, other modes, and other City projects. A well-connected network of both on- and off-street active transportation facilities can significantly improve the ease of moving around the community, increase recreation opportunities and make travelling by active transportation safer and more practical transportation choices.

Through community and stakeholder engagement, input was collected on the level of support for the proposed strategies and actions related to the theme Connect. Input highlighted the importance of implementing more designated active transportation infrastructure (bicycle routes, multi-use pathways, and sidewalks) and improving safety for people walking, rolling, and biking. The strategies under the theme Connect, on average, were the highest priority actions compared to the other two themes.

There are six strategies under Connect, under each of the six strategies are a list of actions. There are 15 actions under the theme Connect.

### Strategy: Expand and Enhance the Pedestrian Network

Developing a complete, accessible, and connected network of sidewalks and pedestrian facilities is the foundation of pedestrian safety for all ages and abilities and is critical for supporting and encouraging more active trips in Salmon Arm. It is important that the pedestrian network meets minimum standards and provides accessible year-round connections to key destinations in the community. Salmon Arm has a pedestrian network that includes approximately 70 kilometres of sidewalks, and a network of over 117 kilometres of trails. However, there are still areas of the community with no sidewalks or gaps in the sidewalk network. A lack of sidewalks can discourage people from walking as they are forced to walk on the street or on unpaved areas beside the street. This is not only less accessible and desirable, but it can also be unsafe. There are also existing sidewalks that require upgrades.

The three actions identified to expand and enhance the sidewalk network are summarized below:

- Action1: Fill gaps in the pedestrian network based on priority.
- Action 2: Upgrade existing sidewalks based on condition and priority.
- Action 3: Update the pedestrian facility requirements in the City's *Subdivision and Development Servicing Bylaw*.

### *1. Fill gaps in the pedestrian network based on priority.*

Sidewalks form the backbone of a well-connected pedestrian network for people of all ages and abilities. The City will work to fill in gaps in the pedestrian network and create a walking and rolling environment that is accessible to all residents. Gaps in the pedestrian network can be seen in **Figure 9** which illustrates streets that have sidewalks on one side, both sides, and streets that have no sidewalks.

**Figure 10** identifies high priority locations in the City of Salmon Arm where additional sidewalks or pedestrian infrastructure (multi-use pathways or paved shoulders) are proposed based on the evaluation criteria outlined in Section 4, community and stakeholder input, and network connectivity considerations.

In addition to these locations, there are opportunities to fill gaps in the pedestrian network through new development, working to provide continuous pedestrian facilities on streets throughout Salmon Arm as part of the development approvals process.

### *2. Upgrade existing sidewalks based on condition and priority.*

To ensure the pedestrian network can be maintained to a high quality, sidewalk upgrades will be planned based on the condition and priority. To support this, the City will ensure the existing inventory of the condition of sidewalks is integrated with the existing GIS inventory.

Based on this condition assessment of sidewalks, the City will formalize a prioritization process for the replacement of existing sidewalks to current design standards when they reach a certain defined poor condition. The active transportation network prioritization criteria, as outlined in Section 4, can be used to support the prioritization process. The City will also capitalize on opportunities to require wider sidewalks be implemented as part of new developments and road rehabilitation projects within downtown Salmon Arm and other high activity/priority areas where feasible.

## *The Role of Multi-use Pathways in Salmon Arm*

Multi-use pathways were identified as the preferred facility type by community survey respondents to encourage both walking and biking. Paved multi-use pathways that are adjacent to the street can serve all active transportation users. While they are wider than a typical sidewalk, they can provide an important AAA facility and fill gaps in both the pedestrian and cycling network. While intersection crossings and the different travel speeds of users can create some challenges, multi-use pathways provide an opportunity to accommodate all active transportation users with one facility. It is important to note that multi-use pathways may be appropriate as an alternative to a sidewalk on streets with no existing sidewalk facilities. However, on streets with existing sidewalks, where the intent is to fill in a gap in the sidewalk network, a sidewalk would be the preferred facility.

# PEDESTRIAN NETWORK GAP ANALYSIS

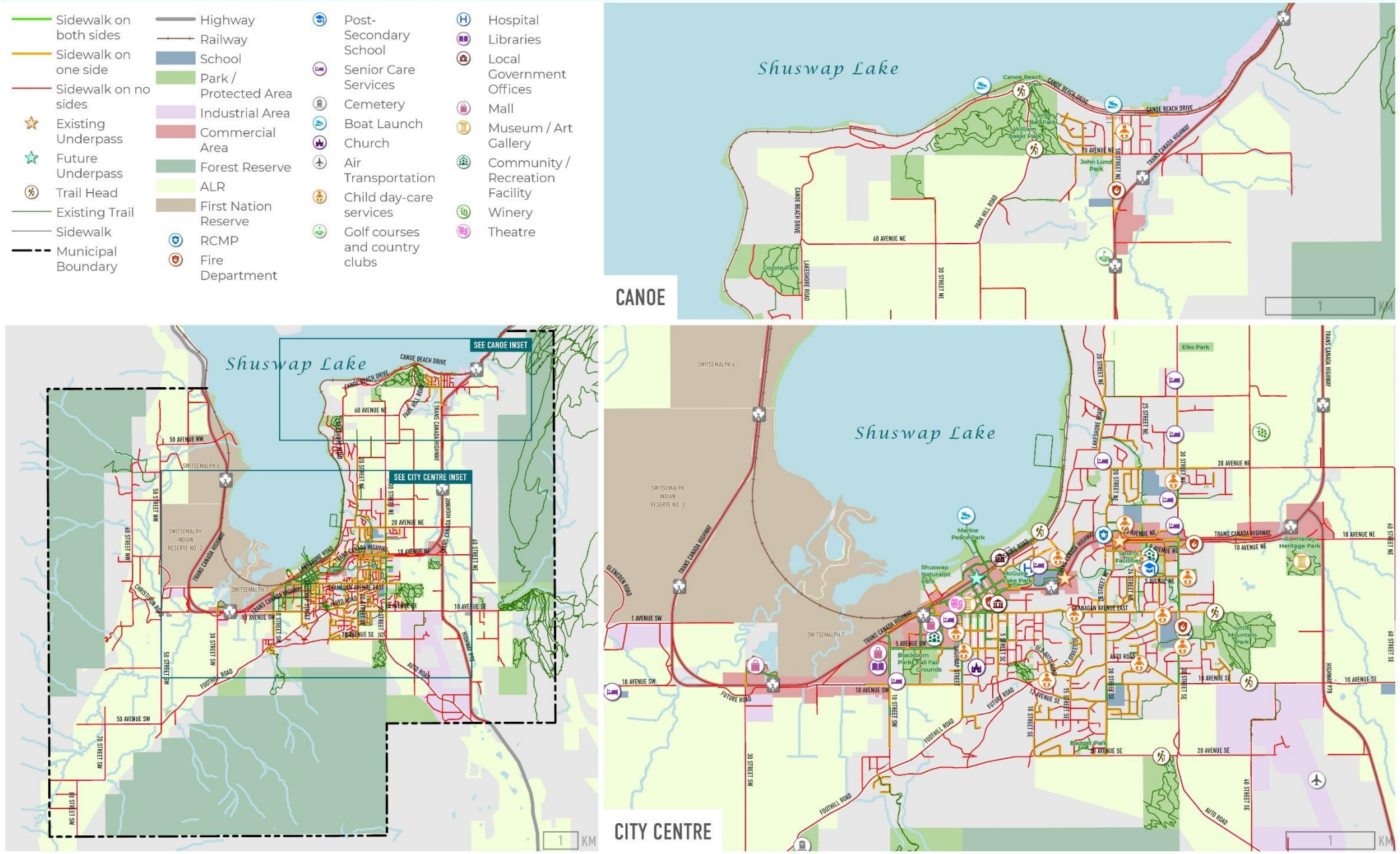



*Figure 9: Pedestrian Network Gap Analysis*

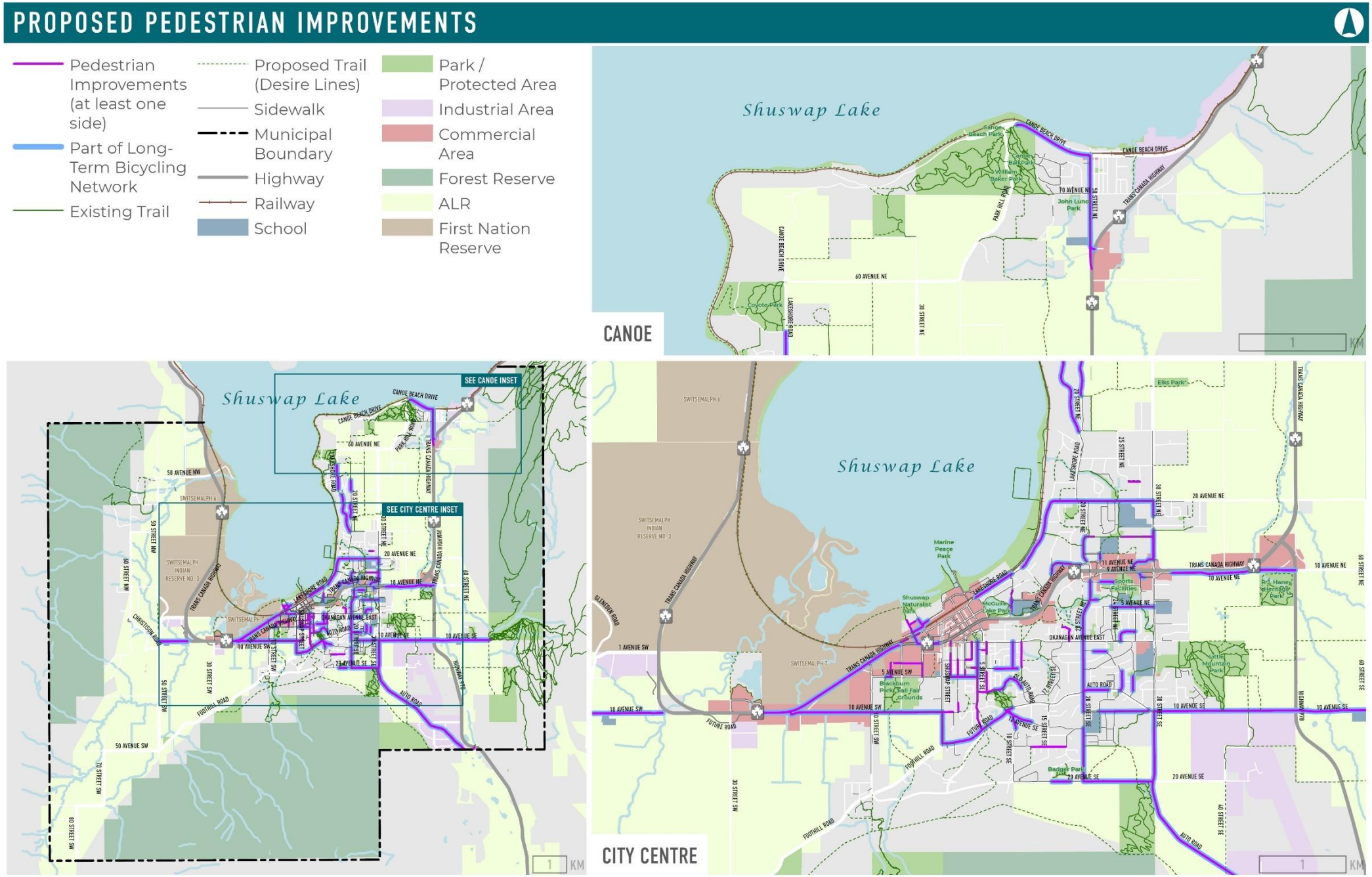



*Figure 10: Proposed Pedestrian Network*

### *3. Update the pedestrian facility requirements in the Subdivision and Development Bylaw.*

Salmon Arm's Subdivision and Development Servicing Bylaw outlines current sidewalk requirements for new roads, this includes where sidewalks are required, how many, and how wide. The current Bylaw requires sidewalks on both sides of the street for collector/arterial streets in urban and rural areas. The following summary details on how well the current Bylaw aligns with best practice design guidance for pedestrian facilities. It is important to note that guidelines typically provide a range of widths and facilities to be considered based on community context.

**Sidewalk**

- **Width:** The width and boulevard requirements for sidewalks in the Subdivision and Development and Servicing Bylaw aligns with current best practice design guidance.
- **Location Requirements:** Best practice states that where possible, it is desirable to require sidewalks on both sides of all streets within the urban land use context. The City of Salmon Arm requires sidewalks on both sides of arterial and collector roadways and one side of local streets within urban areas. Requiring sidewalks on both sides of local streets in urban areas is desirable however, ongoing maintenance requirements and capital costs must be considered before amending the requirements. This is something the City will consider updating in future iterations of the Bylaw once the impacts to long term maintenance, asset management, current budget priorities and allocations are assessed and understood.

**Multi-use Pathway**

- **Width:** The recommended width of a multi-use pathway is between 3.0 and 4.0 metres depending on the context (B.C Active Transportation Design Guide and TAC). The width requirements for multi-use pathways in the Subdivision and Development and Servicing Bylaw meet current design guidance. In future updates, the City will consider providing a range of multi-use pathway facility types in areas where higher user volumes are anticipated.

  The City may also consider increasing the width of Type 1 and Type 2 trail facilities, requiring a wider width at locations that are identified as part of the Active Transportation Network Plan where a higher volume of users is anticipated.
- **Location:** It is preferential to provide an active transportation facility on both sides of the street wherever possible, however this does not necessarily need to be a multi-use pathway and is context specific. The guidance in the Subdivision and Development Servicing Bylaw aligns with current best practice regarding the location of multi-use pathway facilities.

**Shoulder**

- **Width:** Based on the B.C. Active Transportation Design Guide, walkable shoulders should provide a Pedestrian Through Zone that is a minimum of 1.5 metres wide. In locations where a higher volume of pedestrians is expected, a Pedestrian Through Zone of 1.8 metres is recommended. The current requirements in the Subdivision and Development and Servicing Bylaw do not meet current design guidance.
- **Location:** Where sidewalks and bicycle lanes are not present, shoulders can act as an alternative facility for people walking and biking. Paved shoulders provide a space that is accessible for all users

including people using wheelchairs and mobility devices and creates a more predictable environment for all road users.

Not all shoulders identified in the Bylaw are paved. Additionally, there are some cases in the current Bylaw where roads are not required to have a sidewalk or a shoulder, this creates an environment where people walk or roll in the roadway or on an unpaved surface.

As maintenance and asset management impacts are understood, and the current budget priorities and allocations is accessed, the City will update requirements in the Subdivision and Development Bylaw regarding the width and location of sidewalks and paved shoulders. The City will continue to update the Bylaw as best practices change.

### Strategy: Expand and Enhance the Bicycle and Trail Network

Providing a complete and interconnected network of on-street bicycle routes and off-street trails throughout Salmon Arm is critical to supporting and encouraging more bicycling. Salmon Arm has an extensive network of trails, several signed bicycle routes, and bicycle accessible shoulders but has limited designated bicycle routes that would be considered comfortable for people of all ages and abilities. This can prevent biking and trail use, particularly for those who might be interested in biking more but have safety concerns that prevent them from doing so.

The three actions identified to expand and enhance the bicycle and trail network are summarized below:

- Action 4: Develop a complete and connected bicycle network for people of all ages and abilities that connects to key destinations in Salmon Arm based on priority.
- Action 5: Implement new and upgrade existing trail connections as outlined in the Active Transportation Network Plan (building on the recommendations of the Greenways Strategy).
- Action 6: Update Bicycle Facility Requirements in the City's Subdivision and Development Servicing Bylaw.

#### *4. Develop a complete and connected bicycle network for people of all ages and abilities that connects to key destinations in Salmon Arm based on priority.*

The proposed active transportation network, including design principles, facility types, and proposed routes, is introduced in detail below and in **Figure 11**. To develop the proposed biking and trails network, a series of guiding principles was established.

- **Comfortable: A network that has routes that are comfortable for people of all ages and abilities, all-year round.**

  The ATNP focuses on developing an All Ages and Abilities (AAA) active transportation network. The purpose of a AAA network is to provide an interconnected system of on-street biking routes, multi-use pathways, and shoulders that are comfortable and attractive for all users. Improving safety and providing more destinated biking facilities and multi-use facilities have been identified through the community engagement process as one of the most important ways to encourage more bicycling trips. Research and experience elsewhere have shown that facilities that are comfortable for people of all ages and abilities have the greatest impact on encouraging people to bicycle more, particularly for individuals that are interested in biking, but have concerns about safety and comfort. It is also critical that intersections are designed to be comfortable and are based on AAA principles.

- **Complete: A network that provides destinated routes and facilities so that most residents have a route nearby.**

  The active transportation network should provide City-wide coverage, ensuring that most residents in Salmon Arm are within proximity (approximately 400 metres) of a designated bicycle route. This is important for making biking an accessible and convenient option for all residents.

- **Connected: A network that connects to major destinations, including schools, parks, commercial areas, and community facilities**

  Connecting key destinations with biking facilities is an important component of making biking a convenient transportation choice. The proposed bicycle network is designed to provide direct, high-quality connections between each of Salmon Arm's existing neighbourhoods and future growth areas, as well as key destinations such as downtown, schools, parks, and community facilities.

# PROPOSED LONG TERM BICYCLING NETWORK

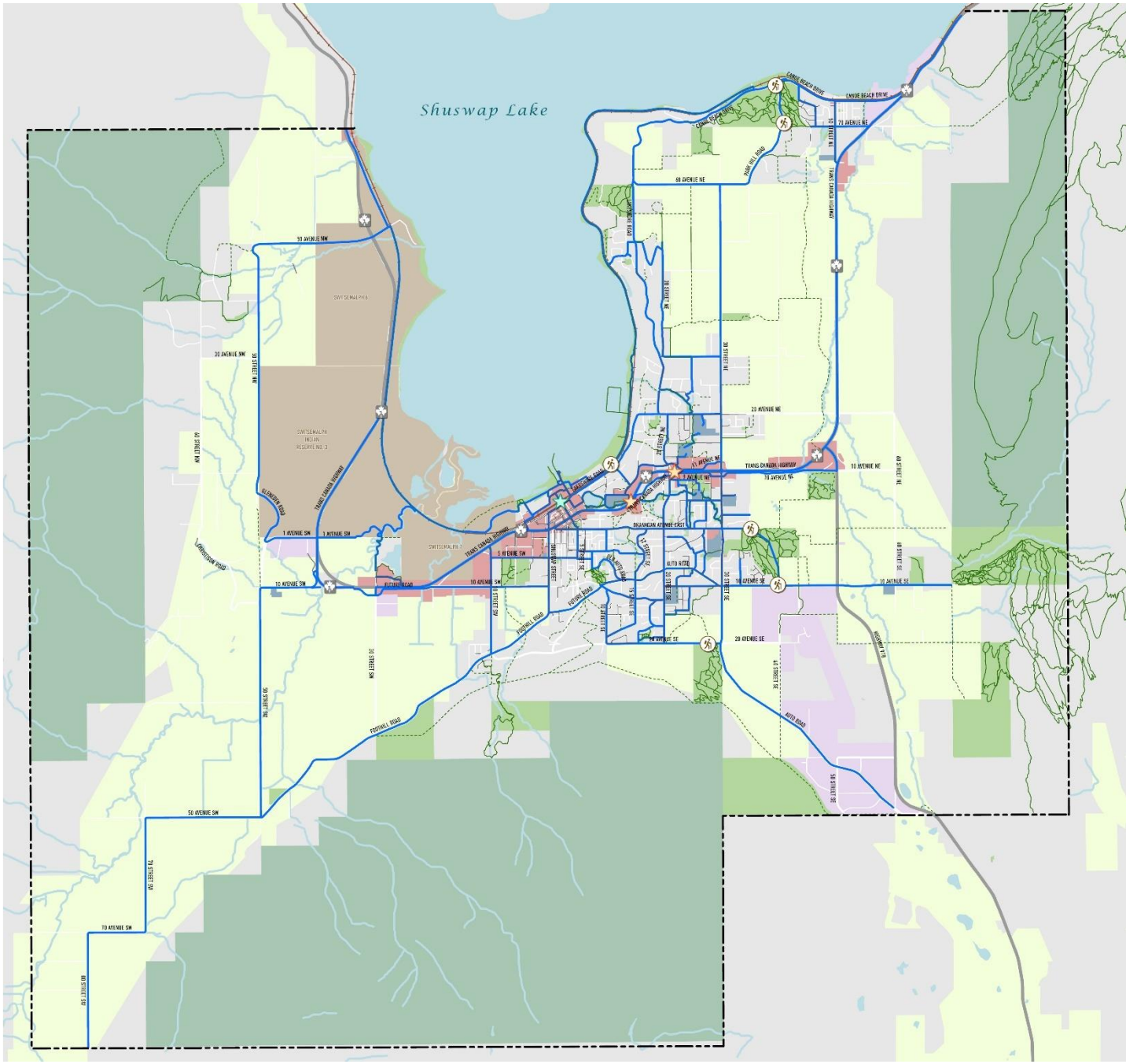



*Figure 11: Proposed Long-Term Bicycling Network*

Salmon Arm's proposed active transportation network includes three types of AAA bicycling facilities, the City will aim to provide AAA facilities on all the routes identified in **Figure 11** wherever feasible. This includes neighbourhood bikeways on local streets and multi-use pathways or protected bicycle lanes on collector and arterial streets. The pages below describe the three AAA facility types.

- **Neighbourhood Bikeway:** Streets with low motor vehicle speeds and less traffic that are comfortable for people of all ages and abilities to ride. In Salmon Arm, this includes proposed bicycle network routes that are located on local roads. Guidelines (TAC and the B.C. Active Transportation Design Guide) suggest that roads with less that 1,000 motor vehicles per day and motor vehicle speeds of 30 km/hour are suitable for a neighbourhood bikeway. Neighbourhood bikeways typically include signage and pavement markings designating them a bicycle facility and may include traffic calming treatments such as speed humps, curb extensions or traffic circles to help slow down motor vehicles.

  Examples of corridors that would be suitable neighbourhood bikeways:

  - 4 Avenue SE
  - 10 Street SE
  - 8 Avenue SE/25 Street SE/1 Avenue SE utilizing some of existing walkways within the neighbourhood.
  - 24 Street NE

## *When To Use Sharrow Pavement Markings?*

Pavement markings that show a bicycle stencil and chevrons are often referred to as a sharrow. This pavement marking is used to indicate a shared environment where people bicycling and motor vehicles share the roadway.

The pavement marking itself does not indicate the facility type. For example, sharrows should be used on neighbourhood bikeways which are quiet local streets with low motor vehicle volumes and speeds and are considered a AAA bicycle facility.

Sharrows can also be used on busier arterial and collector roadways to indicate that people bicycling and motor vehicles must share the lane. The use of a sharrow in this case would not be considered a AAA bicycling facility and is not recommended in Salmon Arm.

## *Types of Traffic Calming*

**Traffic calming** measures consist of devices that reduce motor vehicle speeds closer to the speed cyclists and other active transportation users are moving and/or reduce motor vehicle volumes, thereby making neighbourhood streets safer and more pleasant active transportation routes.

The types of traffic calming devices suitable for active transportation routes, particularly neighbourhood bikeways, can generally be categorized as vertical deflections and horizontal deflections.

**Vertical Defection** measures, like speed humps, speed tables, raised intersections, raised crosswalks, etc., cause a vertical upward movement of the motor vehicle. This lowers motor vehicle speeds as drivers slow down to navigate the infrastructure. Vertical deflections have the secondary benefits of reducing motor vehicle volumes and deterring neighbourhood short-cutting traffic.

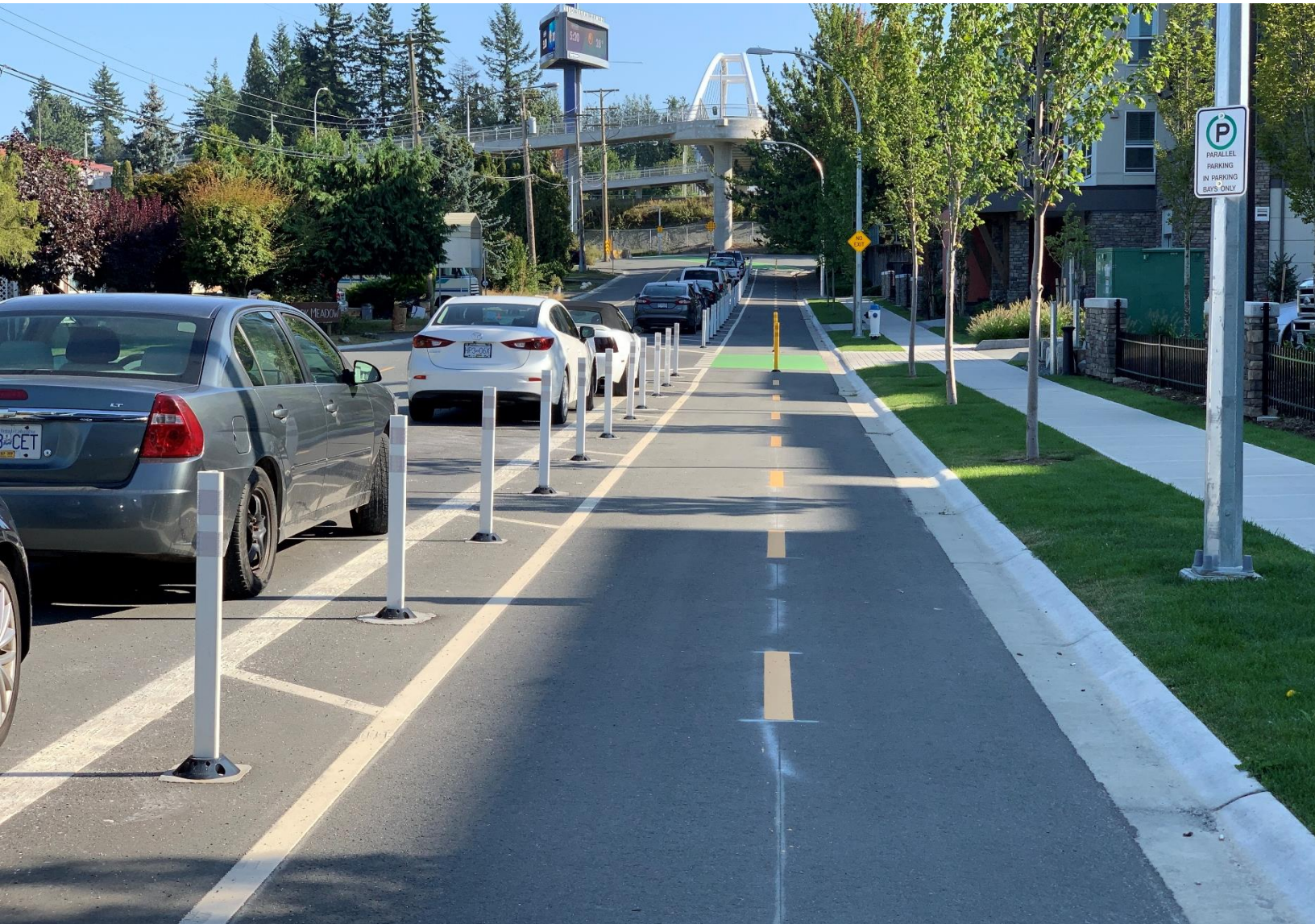
**Horizontal Deflection** measures include a lateral shift in the travel pattern of motor vehicles and cause motorists to slow down in response to either a visually narrower road or a need to navigate a curving travel lane. Traffic calming features that create a horizontal deflection include, curb extensions, traffic circles, chicanes, raised median island.

In addition to the traffic calming treatments noted above, **pavement markings, surface treatments, access restrictions (traffic diversion), and roadway narrowing** can help to reduce motor vehicle speeds and volumes.


- **Protected Bicycle Lane:** A bicycle lane that is physically separated from motor vehicles, making it safer and more comfortable. Protected bicycle lanes are also separated from the sidewalk, ensuring separation between bicyclists and pedestrians. Protected bicycle lanes may be placed on one or both sides of a street, and they may be designed for one- or two-way bicycle travel. There are many types of protected bicycle lanes, offering varying types of treatments to provide protection. Types of separation include flexible delineator posts, wheel stops, planter boxes, raised or landscaped medians, and concrete barriers. A combination of these treatments can be used along a corridor, for example flexible delineators can be mounted on top of wheel stops to enhance visibility of the barrier. Planters can be placed along the facility to provide separation and used at intersections to create curb extensions. There are several ways these treatments can be used to enhance the comfort and safety of the active transportation network.

  Examples of corridors that would be suitable protected bicycle lanes. In most cases, this will require road space reallocation and in some cases widening into the available bloulvard (right-of-way):

  - Lakeshore Drive between Marine Park Drive and Shuswap Street N
  - Shuswap Street between Lakeshore Road and Foothill Road
  - 5 Avenue SW between 5 Street SE and 10 Street SW
  - Okanagan Avenue East



- **Multi-Use Pathway:** Multi-use pathways that are physically separated from motor vehicles and shared between people walking, biking, and using other forms of active transportation, like wheelchairs, skateboards, and scooters (if paved). Multi-use pathways can be located adjacent to the roadway or through parks and other green spaces.

  Some examples of corridors that would be suitable multi-use pathways:

  - Canoe Beach Drive between 53 Street NE and Canoe Beach.
  - Downtown to Uptown Connection - A multi-use pathway could be located along 6 Avenue NE, 16th Street NE, and 11 Avenue NE.
  - 10 Avenue SW between Shuswap Street and the TransCanada Highway.
  - 10 Avenue SE between 30 Street SE and the South Canoe Trails
  - 20 Avenue SE between 20 Street SE and Auto Road (Shuswap Memorial Cemetery Trails).
  - 30 Street SE between 30 Avenue NE and 20 Avenue SE.
  - 20 Avenue NE between 30 Street NE and Lakeshore Road.
  - Lakeshore Road between 20 Avenue NE and Marine Park Drive.

While most of the network, particularly in the urban area of the City will be AAA facilities, there may be some locations, like rural roads, where supporting facilities are more appropriate in the shorter-term. Supporting facilities (non-AAA facilities) include:

- **Painted Bicycle Lane:** Separate travel lanes for bikes marked by a painted line, a reserved for bikes symbol, and signage.
- **Buffered Bicycle Lane:** A painted bicycle lane with extra painted lines that create a wider buffer between cyclists and motor vehicles.
- **Paved Shoulders:** Where sidewalks and bicycle lanes are not present, shoulders can act as an alternative facility for people walking and biking. Paved shoulders provide a space that is accessible for all users including people using wheelchairs and mobility devices and creates a more predictable environment for all road users.

### *5. Implement new and upgrade existing trail connections as outlined in the Active Transportation Network Plan (building on the recommendations of the Greenways Strategy).*

Expand and connect the trail network by implementing new and improving existing connections throughout the City as identified in the Proposed Trails Map (**Figure 12**) and the Greenways Strategy.

**It is important to note that the proposed trails identified in Figure 12, are desire lines showing network connections. In many cases they are not located on property under the City's jurisdiction (City owned properties). This means the alignment of these trails has not been determined and are longer-term projects.**

**Figure 13** shows the existing and proposed trail network with City owned properties overlayed. Developing and formalizing these connections outside of City owned property will require collaboration with key departments and partners (e.g., School District, Shuswap Trails Alliance, Parks). Priorities will focus on improving active connections to key destinations, such as schools and community facilities. The City will also continue to build on the Parks and Recreation Master Plan, seeking opportunities to integrate small bike skills features in neighbourhood parks. The City and the Shuswap Trail Alliance will continue to monitor the quality of existing pathway infrastructure and inventory locations where upgrades are needed.

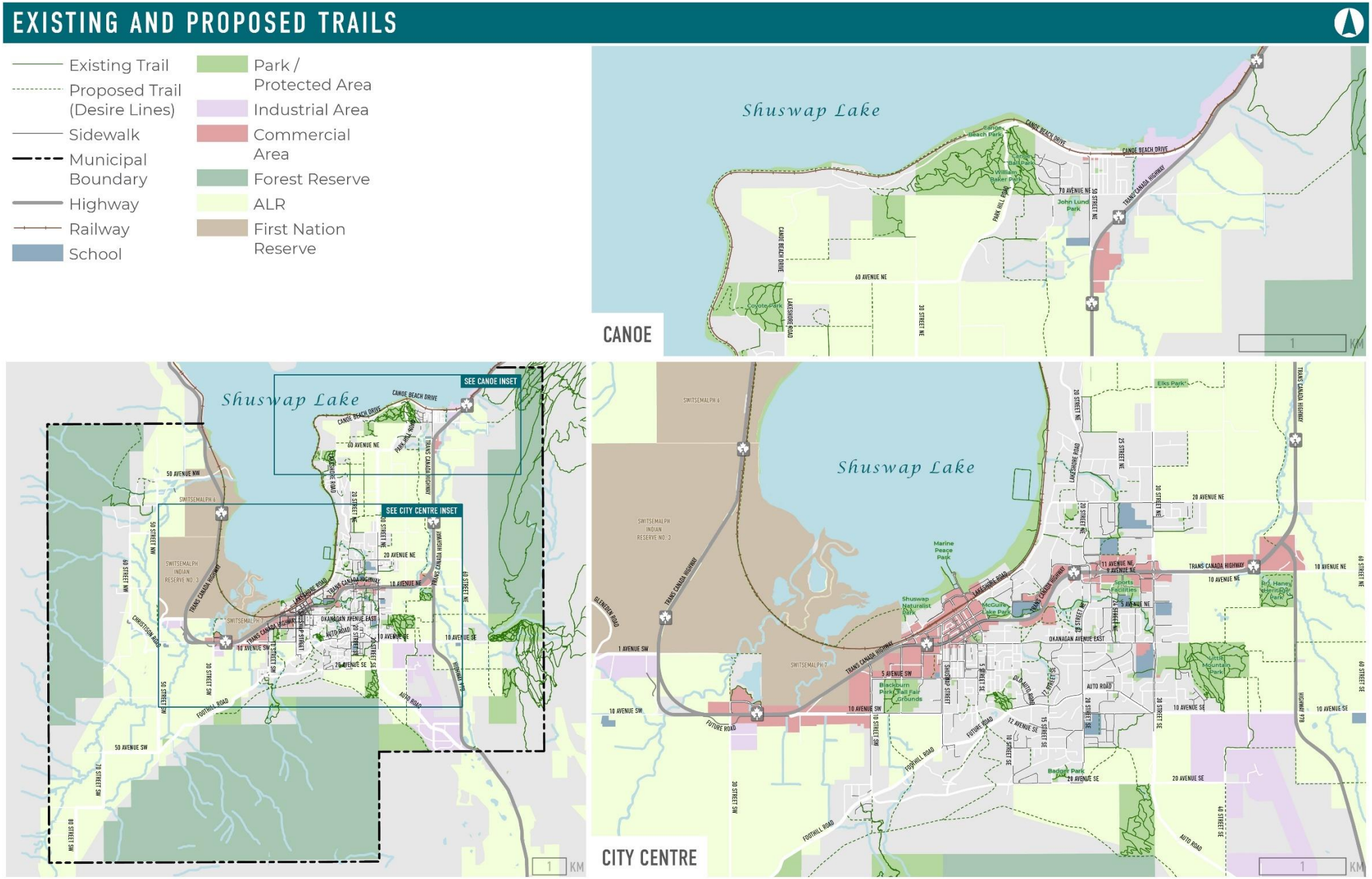



*Figure 12: Existing and Proposed Trail Network*

# EXISTING AND PROPOSED TRAILS (WITH CITY OWNED PROPERTY)

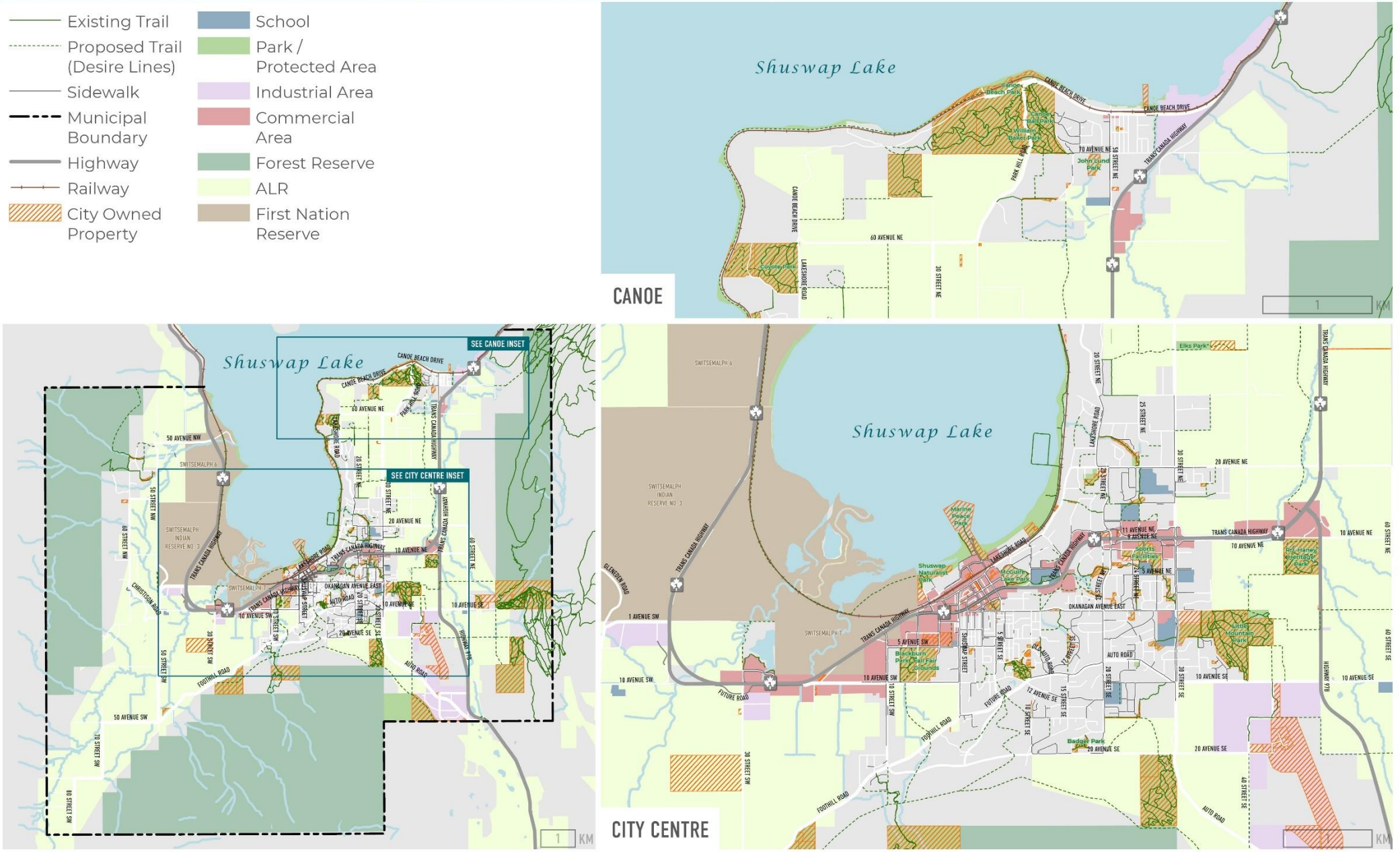



*Figure 13: Existing and Proposed Trails and City Owned Properties*

### 6. *Update Bicycle Facility Requirements in the City's Subdivision and Development Servicing Bylaw.*

Salmon Arm's Subdivision and Development Servicing Bylaw outlines current bicycle facility and multi-use pathway requirements for new roads, including where facilities are required, how many, and how wide. The current Bylaw requires 1.5 metre bicycle lanes on urban and rural collector roads and a multi-use pathway on urban arterial roadways. The following summaries how the existing Bylaw aligns with current best practice design guidance.

**Bicycle Lane**

- **Facility Type**: Based on the Subdivision and Development and Servicing Bylaw three types of bicycling facilities are included, painted bicycle lanes, multi-use pathways, and shoulders. Multi-use pathways are considered an AAA facility, whereas bicycle lanes and shoulders are usually only considered AAA on low volume and speed roadways. In future updates of the Bylaw, the City will add protected bicycle lanes as the preferred facility type on arterial and collector roadways. Adding neighbourhood bikeway options for local roads, that includes requirements for traffic calming treatments, signage, and pavement markings is also an option.
- **Width:** The desired width for bicycle lanes (painted, buffered, and protected) is between 1.8 metres to 2.1 metres with an absolute minimum of 1.5 metres regardless of road classification. In future updates of the Bylaw, the City will update the width requirements for biking facilities on all roadways to 1.8 metres and up to 2.1 metres with additional space for a buffer or physical separation. The width of the buffer is particularly important if the bicycle lane is located next to a parking lane. The width of a parking lane is generally 2.4 metres. If a bicycling facility is located adjacent to a parking lane, a 0.9 metre buffer is recommended to avoid an open motor vehicle door.
- **Location:** AAA bicycle facilities are recommended as the preferred AAA bicycling facility type on arterial collector roads and neighbourhood bikeways are preferred on local streets. The City can provide a cross section option for roads that are identified as part of the long-term active transportation network to ensure AAA facilities are implemented.

**Motor Vehicle Lanes**

- **Widths:** Motor vehicle lane widths vary based on several factors including the classification of the roadway, if it is a designated truck route, bus route, number of lanes, slope, etc. Vehicle lane widths identified in the Bylaw range from between 3.5 to 4.0 metres. There are examples of communities throughout BC that have been reducing their required lane widths for various reasons, including encouraging lower motor vehicle travel speeds, and creating more space for active modes. Motor vehicle lane widths of 3.0 to 3.3 metres on local streets and collector streets and 3.3 to 3.5 metres on arterial roads are not uncommon, though tend to be context specific. The City will consider reducing the required motor vehicle lane widths on new roadways and determine what is appropriate for the Salmon Arm context. As noted above, the general width of a motor vehicle parking lane is 2.4 metres.

The City will update the Subdivision Division and Development Bylaw to include AAA bicycle facilities and ensure widths of proposed facilities align with context appropriate best practices. The City will also review the width of motor vehicle lanes based on road classification.

## Strategy: Improve Intersections and Crossings

Barriers such as major intersections, highways, and rail corridors can be significant impediments to active transportation. There are many such barriers to safe and convenient use of active transportation in Salmon Arm. Intersection improvements and other crossing enhancements can make using the active transportation network safer and feel more comfortable and convenient.

The two actions identified to improve intersections and crossings are summarized below:

- Action 7: Monitor and address pedestrian and bicyclist safety concerns at intersections
- Action 8: Ensure active transportation safety and accessibility at underpasses and overpasses.

### *7. Monitor and address pedestrian and bicyclist safety concerns at intersections.*

Safety at intersections was identified as one of the top concerns by community members in Salmon Arm. Intersections that are located along Highway 1 and Highway 97B, including all signalized intersections, are under the jurisdiction of the Ministry of Transportation and Infrastructure (MoTI). All other intersections are under the City's jurisdiction. There are reported ICBC collisions involving pedestrians and bicyclists at MoTI and City intersection. Safety concerns were identified at both by stakeholders and community members.

- The City will work with MoTI to make safety and network connectivity improvements at intersections throughout Salmon Arm.

  **Figure 14** identifies the intersections where a review of safety concerns and upgrades are recommended based on a review of ICBC collision data and input from community members and stakeholders. Additional design work will be required to confirm the types of treatments that are feasible. Treatment options include, providing reducing corner radii and installing curb extensions to shorten crossing distance, providing raised crosswalks, flashing beacons, and reviewing existing traffic control. This may include upgrading unsignalized intersections to a full traffic signal. Some suggestions to explore at these locations are outlined below (**Table 2**). It is important to note that when considering the installation of traffic calming features such as curb extensions, designers must consider the role of the corridor as a cycling route and the space required for cyclists. This is to avoid creating pinch-points for cyclists.

- The City will develop a list of additional crossing locations that are warranted or required to enhance the active transportation network as it's built, expanding the list of locations identified in **Table 2**.
- The City will conduct a review of trail crossing locations (locations where trails intersect with a roadway) to determine if additional treatments are required and to address safety concerns and improve visibility.
- The City will review the current crossing installation analysis methodology. Ensuring it considers safety, best practices, and latent demand (i.e. the potential for new users who would use a new crosswalk, which is relevant where the current pedestrian activity is underrepresented due to the lack of a marked crosswalk).
- The City will enhance crossings to support people walking, cycling, and rolling with curb extensions, raised crosswalks, flashing beacons, etc. Prioritizing high activity locations including downtown, near schools, community facilities, and destinations frequented by equity-seeking groups.

- The City will work with community partners to implement quick-win and interim measure projects around schools or other high activity locations to increase safety and visibility at intersections, using lower cost treatments allowing for quicker implementation.
- The City will continue to monitor ICBC collision data and work with the RCMP and Interior Health to monitor collisions, near misses, and other safety concerns. Based on this information the City will advocate and prioritize improvements at these locations.

*Table 2: Intersections with Identified Safety Concerns with Improvement Suggestions to Explore*

| Intersection Location | Jurisdiction | Suggestions to Explore |
|---|---|---|
| **Highway 1 at Shuswap Street** | MoTI | • Work with MoTI to review detailed collision descriptions to better understand safety issues and develop mitigation measures. Mitigation measures can include opportunities for additional grade separated crossings (underpasses and overpasses).<br>• Study the feasibility of removing the channelized right turns, particularly at 30 Street NE and Highway 1.<br>• The City will prioritize discussions with the province and present ideas to enhance intersections for people walking, cycling, and rolling. This can also include corridor improvements focused on reducing speeds on the highway that can help to improve safety and comfort at intersections.<br>  ○ **Transverse pavement** markings have been shown to be effective at reducing speeds and improving safety and can be considered near curves and at other locations with demonstrated speeding issues.<br>  ○ **Dynamic slow down speed** signs along the corridor.<br>  ○ **Gateway features** can be installed, including signage and pavement markings, to help motorists recognize the urban context of the highway through Salmon Arm and the high presence of people walking, cycling, and rolling.<br>• Work with RCMP on enforcement of speeding and failing to comply to traffic controls. |
| **Highway 1 at Alexander Street NE** | MoTI | |
| **Highway 1 at 4 Street NE** | MoTI | |
| **Highway 1 at 6th Street NE** | MoTI | |
| **Highway 1 at 30 Street SE** | MoTI | |
| **Highway 97B at 10 Avenue SE** | MoTI | |
| **30 Street at 11 Avenue NE** | City of Salmon Arm | • Review truck turning movements to assess the feasibility of reducing the crossing width and corner radii of 11 Avenue NE and provide curb extensions to enhance pedestrian visibility. Consider the installation of a raised crosswalk.<br>• Conduct a crossing review at 30 Street to determine if a crossing is warranted and the desired traffic control.<br>• If a new crossing is not feasible, install a sidewalk or multi-use pathway facility on the east side of 30 Street. |
| **30 Street at 9th Avenue NE** | City of Salmon Arm | • Review truck turning movements to assess the feasibility of reducing the crossing width and corner radii of 9 Avenue NE, providing curb extensions to enhance pedestrian visibility and a raised crosswalk.<br>• There is already an alternative crossing options of 30 Street (a mid-block crossing south of the intersection with a pedestrian refuge island and lighting), this is the preferred crossing location due to proximity to the highway. By improving the Highway crossing (see above) positive benefits will likely also be seen at this location. |

| | | |
|---|---|---|
| **Shuswap Street at Hudson Avenue NE** | City of Salmon Arm | • Explore the removal of channelized right turn lane and realigning the intersection and crosswalks.<br>  ○ Remove the two parking stops on the west side of Shuswap Street located between the existing crosswalk and Hudson Avenue NE to improve sightlines and visibility of people crossing. The space could be used to provide a curb extension.<br>• Provide raised crosswalks. |
| **Lakeshore Drive - Downtown** | City of Salmon Arm | • Throughout the planning process requests for additional pedestrian mid-block crossings were identified on Lakeshore Drive. Lakeshore Drive has also been identified as an important cycling connection.<br>  ○ The City will conduct a corridor study of Lakeshore Drive between 10 Avenue NE and Shuswap Street to identify to plan for cycling and pedestrian facilities. |
| **20 Avenue NE at 24 Street NE** | City of Salmon Arm | • The City will investigate whether the corridor has speeding issues and will implement speed reduction measures as required.<br>• Review current pedestrian crossing control to determine if Rapid Rectangular Flashing Beacons (RRFB) is warranted. |
| **Okanagan Avenue East at 30 Street SE** | City of Salmon Arm | • Review current pedestrian crossing control to determine if a special crosswalk (overhead flashing beacon) or a pedestrian signal is warranted). |
| **Auto Road at 20 Street SE** | City of Salmon Arm | • Review intersection design and reconfigure into a four-way intersection.<br>• Provide sidewalks / pedestrian facilities at the intersection and review current pedestrian crossing control to see if higher level control is required.<br>• The City will investigate whether the corridor has speeding issues and implement speed reduction measures. |
| **Park Hill Road - Trail Crossing / Parking** | City of Salmon Arm | • This is a trail crossing and a parking location. The City can review the crossing location and consider installing a designated crossing, advanced warning signage would be installed along Park Hill Road and signage at the trail to warn users they are crossing the road. |
| **50 Street NE at 72 Avenue NE** | City of Salmon Arm | • Conduct a review of the intersection to determine if a pedestrian crosswalk is warranted to accommodate pedestrian crossings. The City will investigate whether the corridor has speeding issues and implement speed reduction measures. |

# PROPOSED INTERSECTION IMPROVEMENTS

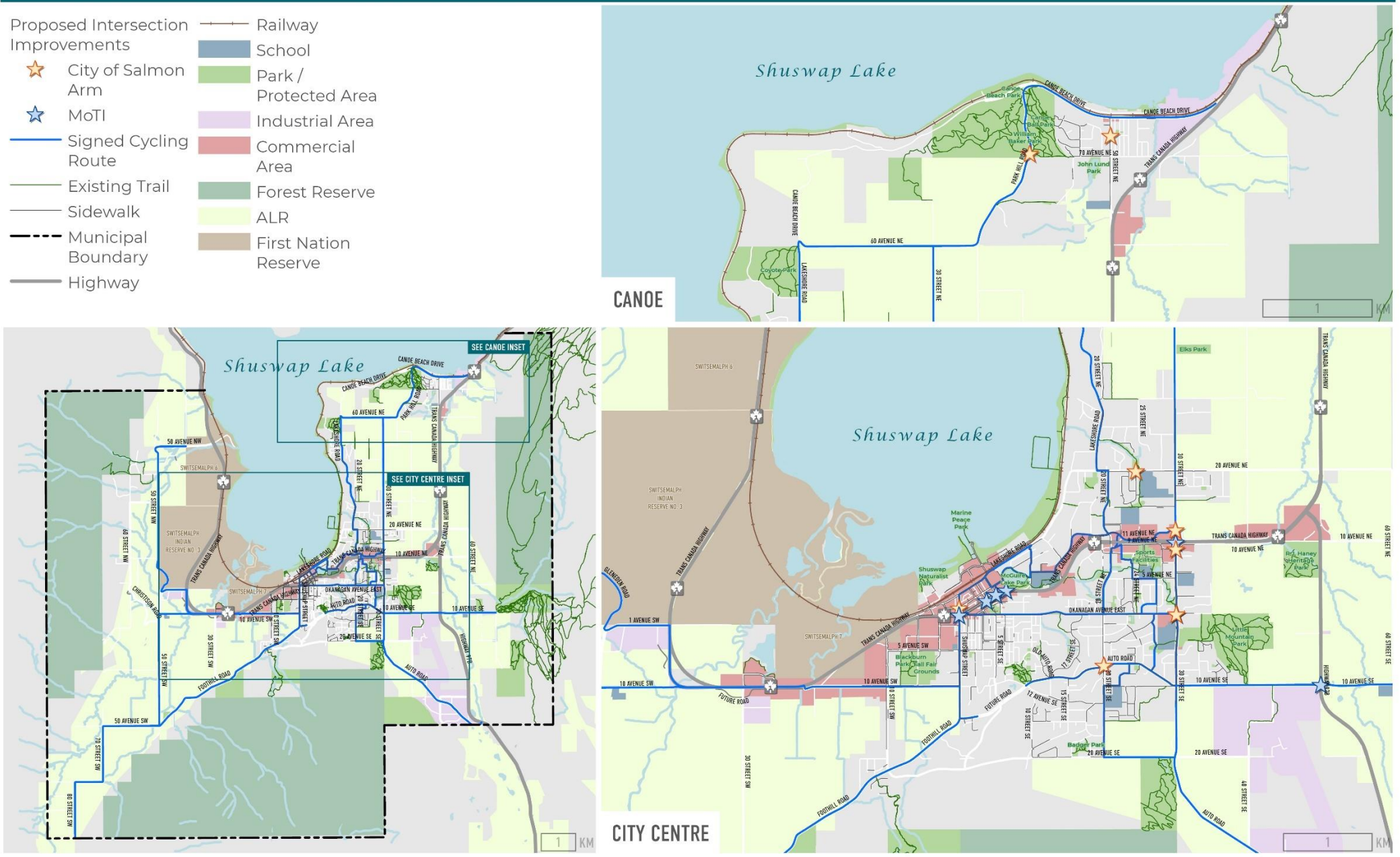



*Figure 14: Proposed Intersection Improvements*

### *8. Ensure active transportation safety and accessibility at underpasses and overpasses.*

There are three existing underpasses that provide grade separated crossings under Highway 1, two are for active transportation users only and the third at 21 Street NE is for all modes. A new underpass (railway crossing) is currently under construction and there has been discussion about future opportunities for grade separated crossings within Salmon Arm. Some locations discussed include a railway overpass to access the foreshore and additional crossings of Highway 1. The City will work with partners to ensure future underpasses and overpasses are safe and accessible for active transportation users.

The two existing active transportation underpasses have facilities for people walking, rolling, and cycling; however, they may not necessarily feel comfortable, safe, or provide the most direct route. The City will work with partners to provide safer and more convenient walking and cycling facilities on underpasses and overpasses. This includes ensuring facilities meet current design standards in terms of width, clearance, appropriate railings, ramps, signage, and pavement marking. Additionally, designs will consider Crime Prevention Through Environmental Design (CPTED) principles. CPTED is a design theory that is based on the belief that the proper design of the built environment and public spaces can reduce the incidence and fear of crime and improve quality of life.

## *Example Of Improving Walking and Biking Connections And Safety At Underpasses.*

- **Connections and accessibility:** The underpass at J.L Jackson Secondary (Jackson Campus) is an important component of the Turner Creek Rotary Trail. On the north side of the Highway the trail is located on School District property. In one direction, there is a paved ramp that takes users to the sidewalk on 6 Avenue NE, in the other there is staircase that directs people west to the trail that continues to McGuire Lake Park and is the more direct route to access the school grounds. The location of the stairs means that people biking, or rolling are required to take the ramp the long way around.

  Through discussions with the School District to formalize the trail connections (Action 5), there is also an opportunity to explore implementing a ramp or retrofitting a bicycle access ramp on the existing staircase. Improvements on the south end of the underpass, like paving the approach and adding pavement markings, can also help to formalize this entry.

- **Comfort and safety:** Both existing underpasses have been painted with community artwork which helps to create a more welcoming environment, however there are lighting and CPTED concerns particularly at the underpass at J.L Jackson Secondary (Jackson Campus). The blue paint in this structure makes it feel darker and less inviting at night. Updating the artwork and using lighter colours can make the space feel brighter. Replacing the light bulbs with brighter fluorescents can make it feel more comfortable.

## Strategy: Improve Regional Connections

Salmon Arm is located on the traditional territory of the Secwépemc people and is part of the Columbia CSRD. Neskonlith Indian Band and Adams Lake Indian Band have reserve lands neighbouring Salmon Arm. There are several existing and planned trail projects aimed to provide connections throughout the region and the area around Salmon Arm. Ensuring plans are well integrated and that the City continues to work with regional partners, including Indigenous Communities, the CSRD, Shuswap Trail Alliance, MoTI, and nearby municipalities to provide well-integrated active transportation connections is the focus of this section.

The two actions identified to improve regional connections are summarized below:

- Action 9: Ensure future active transportation connections are well integrated throughout the region.
- Action 10: Work with MOTI and other agency partners to ensure high quality active transportation standards are incorporated into all regional roadway projects.

### *9. Ensure future active transportation connections are well integrated throughout the region.*

The City will support initiatives by the Shuswap Trail Alliance and other regional organizations and committees, including the West Bay Connector project and expansion of the Foreshore Trail. The City will work closely with Indigenous communities, neighbouring municipalities, and CSRD to align connections and partner on construction efforts where practical.

### *10. Work with MOTI and other agency partners to ensure high quality active transportation standards are incorporated into all projects.*

There are several major roadways in Salmon Arm that are under the jurisdiction of the MoTI. Highway 1 for example, travels through urban areas of the community and should have a different look, feel, and function than highways and other corridors under MoTI jurisdiction. The City will continue to work with MoTI to provide a context sensitive design that incorporate high quality active transportation facilities in accordance with current best practice. This approach also applies to other agency partners, including Canadian Pacific Railway, implementing transportation infrastructure in the City.

## Strategy: Improve Integration of Active Transportation with Transit, Other Modes, and City Projects

The actions under this strategy seek to seamlessly connect active transportation planning, policies, and infrastructure to other plans and projects that are occurring in the City. This will ensure effective application of the Active Transportation Plan and efficient use of financial resources. Integration requires coordinating with other local plans and committees to make sure that land use and transportation are integrated. This strategy also identifies ways to integrate active transportation with other modes of transportation, including transit and considers the impacts of new and shared mobility on the active transportation network.

The five actions identified to improve integration of active transportation with transit, other modes, and City projects are summarized below:

- Action 11: Ensure direct sidewalk, trail, and bicycling connections are provided to transit stops and along routes.
- Action 12: Ensure land use policies support and encourage active transportation.
- Action 13: Seek opportunities to implement new active transportation facilities in conjunction with other projects, plans, and developments.
- Action 14: Understand and address the impact of new and shared mobility on the active transportation network, facility design, and City policy.
- Action 15: Develop an Active Transportation, Trails, and Accessibility Working Group.

### *11. Ensure direct sidewalk, trail, and bicycling connections are provided to transit stops and along routes.*

The City will ensure the design of active transportation infrastructure considers the location of, and access to, transit stops. For example, this includes prioritizing connections to transit and that designs of active transportation facilities consider the impact on transit vehicles and passengers.

The City will continue to install amenities at transit stops to support multi-modal trips in various weather conditions. This includes prioritizing the addition of benches, shelters, and bicycle parking at key stops, where space is available. These are stops that are located near schools, senior care services, downtown, municipal facilities and community destinations, recreation centres, and parks.

### *12. Ensure land use policies support and encourage active transportation.*

This will be done by incorporating the recommendations of the ATNP into other plans and policies, including the OCP, Zoning Bylaw, Subdivision and Development Servicing Bylaw, parking studies, and future planning documents, recognizing the important relationship between land use and transportation. This will also be done by supporting the development of policies that support more walking and bicycling, such mixed land use, compact designs, and providing more housing close to transit stops.

### *13. Seek opportunities to implement new active transportation facilities in conjunction with other projects, plans, and developments.*

The City will continue to levy funds from developers through a variety of means such as Development Cost Charges, density bonuses, or parking. By designating this funding to an Alternative Transportation Infrastructure Reserve Fund, it can be used specifically for active transportation infrastructure.

The City will ensure future development projects include high quality active transportation infrastructure (including new sidewalks, bicycle facilities, walkways, multi-use pathways, and amenities) and are connected to the active transportation network (**Figure 10** and **Figure 11**). The City will develop a list of reference criteria for reviewing new plans, developments, and infrastructure projects to ensure they incorporate active transportation.

The City will ensure that all municipal roadway projects, both new and retrofit projects, incorporate best practices in active transportation and accessible design.

### 14. *Understand and address the impact of new and shared mobility on the active transportation network, facility design, and City policy.*

New and shared mobility present a lot of opportunity for increasing accessibility and use of active transportation within Salmon Arm. They can also present some challenges, including safety issues related to travel speeds, impact on pathway material, etc. This action ensures that new and shared mobility technologies (e.g., e-scooters, e-bicycles, hoverboards, motorized skateboards, segways etc.) are reviewed, considered, and monitored as trends, best practice, and technology changes.

- To better understand the impact of new and shared mobility on active transportation, the City will conduct a best practice precedent review of peer municipalities to identify active transportation supportive legislation regarding the use of new mobility technologies (e.g., e-scooters, hoverboards, motorized skateboards, segways etc.). This review will also include understanding the impacts on active transportation infrastructure and other users. For example, identifying locations where separating users or wider providing facilities may be required to accommodate passing, etc.
- The City will update the Traffic Bylaw to enable the use of small wheels (children's bicycles, kick-scooters, and wheelchairs) on sidewalks and to permit the use of motorized mobility devices on sidewalks where a safe bicycle route is not provided.
- The City will ensure new active transportation facilities are designed for all intended users, recognizing that the operating envelopes and speeds of new mobility technologies may impact facility design (e.g., facility width and the need for users to be separated).
- The City will support the development and operation of a e-bike share program. The City will identify a partner to work with (collaborate with others) to conduct a Bike Share Feasibility study to analyze the potential for a bike share program to identify system needs (scale, technology) and impacts for the operation of bike share within Salmon Arm.
- The City will explore the development of a program to incentivize the purchase of an e-bike by community members.

### *15. Develop an Active Transportation, Trails, and Accessibility Working Group.*

A integrated group can ensure that broad perspectives are included by facilitating representatives from across committees, groups, and City departments to meet regularly to find ways to integrate active transportation in an efficient and effective manner. The City will work with current committees to reorganize to consider all forms of active transportation and accessibility while advocating for discreate budgets for trail projects, pedestrian infrastructure, and biking routes. Municipal Council will work with existing groups to identify a committee structure that is appropriate for the City.

## Theme: Experience

For active transportation to become a more attractive and competitive way to move around the City, the network needs to be as accessible and convenient as possible. Strategies aimed at improving the user experience relate to equity and access and the types of infrastructure that are needed to support the convenient and comfortable use of the network across Salmon Arm.


The **Experience** theme ensures that all residents and visitors will have a comfortable, safe, and enjoyable experience when walking, rolling, and bicycling in Salmon Arm. This includes designing and building safe and accessible facilities, ensuring routes are well maintained, providing key amenities that encourage active transportation, and creating great streets that people want to visit.

The level of support for the proposed strategies and actions related to the theme Experience was collected through community and stakeholder engagement. Input highlighted the importance of enhancing accessibility at intersections and crossings, improving maintenance practices and procedures for the active transportation network, and increasing safety through targeted neighbourhood improvements that reduce motor vehicle speeds.

There are four strategies identified focused on enhancing the active transportation user Experience and under each strategy there are a series of actions. There are 13 actions under the theme Experience.

## Strategy: Provide More Bicycle Parking and Other End-of-Trip Facilities

End-of-trip facilities encourage people to bicycle as a primary mode of transportation by providing a secure place to leave their bicycle and a place to tidy up and/or change upon arriving at their destinations. Bicycle parking is provided at various destinations throughout Salmon Arm; however, we heard from community members that more parking is required, particularly secure bicycle parking that allows them to feel confident their bicycle will be there upon their return

Ensuring bicycle parking is provided at key destinations, and as part of new developments, is critical to make cycling a practical option. Updates to the City's Zoning Bylaw and new programs will help to ensure that secure bicycle parking is provided based on best practices and that they accommodate various types of bicycles.

The City's downtown off-street parking commission should be included as a stakeholder as part of the implementation of the actions under this strategy. The parking commission should also consider expanding their range of considerations to include bicycle parking.

The three actions identified to provide more bicycle parking and other end-of-trip facilities are summarized below:

- Action 16: Require short-term and long-term bicycle parking and end-of-trip facilities through development.
- Action 17: Develop a program to install short-term bicycle parking within the public right-of-way.
- Action 18: Provide more bicycle parking and end-of-trip options throughout the City and at special events.

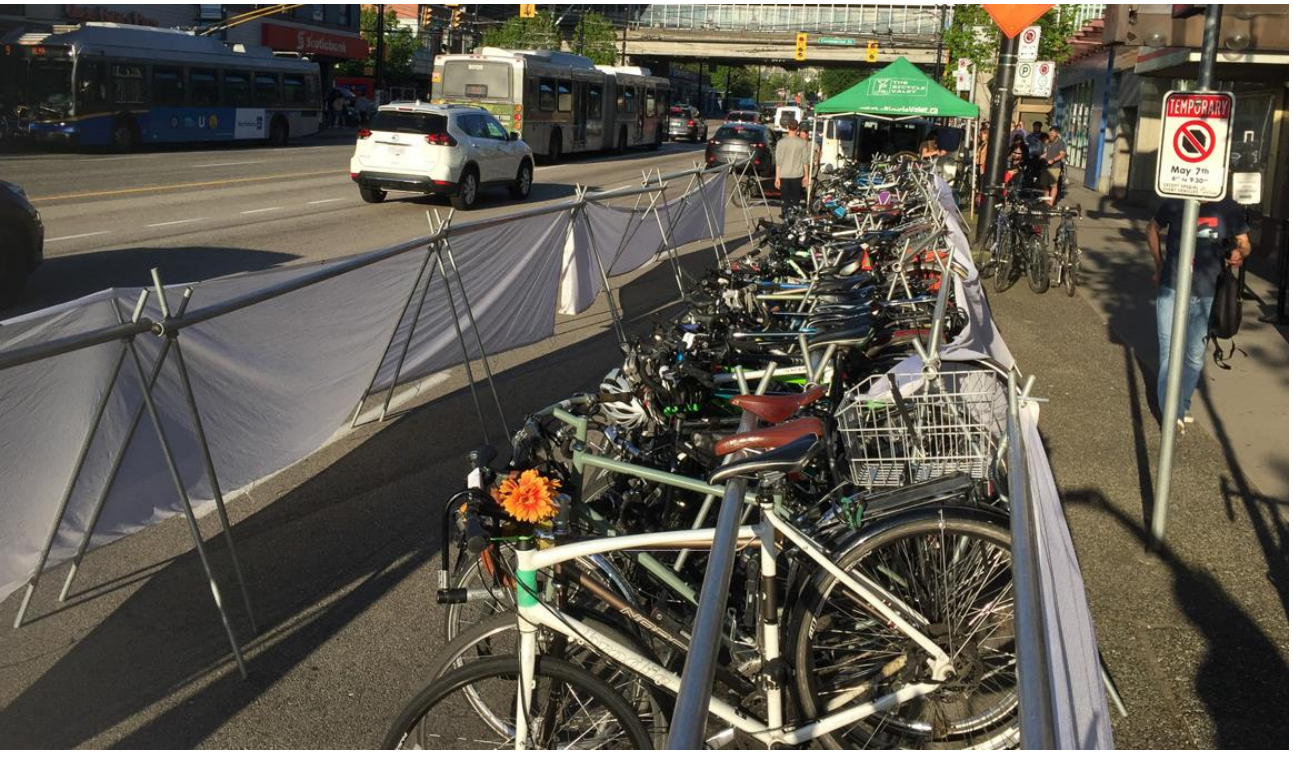
### *16. Require short-term and long-term bicycle parking and end-of-trip facilities through development.*

The City's existing Zoning Bylaw does not include any requirements for short or long-term bicycle parking in new developments. The City will update the Zoning Bylaw to ensure that secure bicycle parking is being provided. Guidelines, regulations, and requirements will be established for the provision of change rooms and shower facilities. Guidance to inform Zoning Bylaw updates can reference the B.C. Active Transportation Design Guide and other municipal examples. Recommendations will account for the space and other requirements for e-bikes (i.e., charging stations), cargo bikes, and other 'non-standard' types of bicycles.

### *Types of Bicycle Parking*

**Short-term bicycle parking** is typically outdoors and located in front of a building or within the public right-of-way. **Long-term bicycle parking** is typically indoors or covered and located within an enclosed space, making it more secure.

**Bicycle corrals** provide short-term bicycle parking, the term refers to a grouping of bicycle racks located on the street. They are typically located in a parking space that was traditionally allocated to motor vehicles. Because they are often located within the roadway, bicycle corrals minimize sidewalk clutter, free up space for other uses, and increase bicycle parking at locations with high demand. Bicycle corrals can also be easily adapted to host bikeshare systems.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### *17. Develop a program to install short-term bicycle parking within the public right-of-way.*

The City will conduct an inventory of existing bicycle parking facilities within the downtown and at other high activity locations, and develop a program to install bicycle parking in these areas. The City will ensure the program is also designed to support businesses and other partners in implementing more bicycle parking, including bicycle corrals, as desired. This study will also consider the design and style of parking racks available and opportunities to install e-bike charging stations within the public right-of-way and sharing information about their location with community members.

The City will identify an annual budget for the installation of bicycle parking facilities.

### *18. Provide more bicycle parking and end-of-trip options throughout the City and at special events.*

Providing more bicycle parking and end-of-trip facilities throughout the City can be done in several ways. Firstly, the City will update requirements to ensure the provision of high-quality bicycle parking and end-of-trip facilities at City of Salmon Arm owned and operated facilities, including covered bicycle parking at City Hall, parks, and recreation centres.

The City will review existing facilities at trail heads and develop a list of amenities that can be implemented at these locations. Based on the use of the trails, the review will identify locations where trail head amenities could be installed (trail head amenities include, washrooms, drinking fountains, bicycle and motor vehicle parking, bicycle repair stations, etc.) In addition to trail head locations, the City will work to provide more public washrooms throughout the City along trails, walking, and biking facilities.

The City will also work with partners to provide secure bicycle valet parking at special events.

## Strategy: Provide an Active Transportation Network that is Safe, Accessible, and Equitable for All

Universal design is a fundamental design principle that ensures the built environment is safe and accessible for all, regardless of age, language, background, or any type of physical or cognitive impairment. Chapter B.3 of the B.C. Active Transportation Design Guide provides a more detailed overview of universal design. To understand barriers and the unique needs of all community members, its important that extra effort is made to engage equity-seeking groups as part of the planning and design process. Once their needs are identified, they will be prioritized to create an accessible active transportation network.

The five actions identified to provide an active transportation network that is safe, accessible, and equitable for all are summarized below:

- Action 19: Ensure best practices in accessibility are considered for new transportation infrastructure projects and upgrades.
- Action 20: Enhance the safety and accessibility of intersections and crossings.
- Action 21: Increase safety through targeted neighbourhood improvements.
- Action 22: Enhance visibility through lighting improvements along sidewalks, pathways, trails, and intersections where appropriate.
- Action 23: Apply an intersectional, equity-focused lens to the planning, design, and implementation of all active transportation facilities, amenities, and programs to support equity-seeking groups.

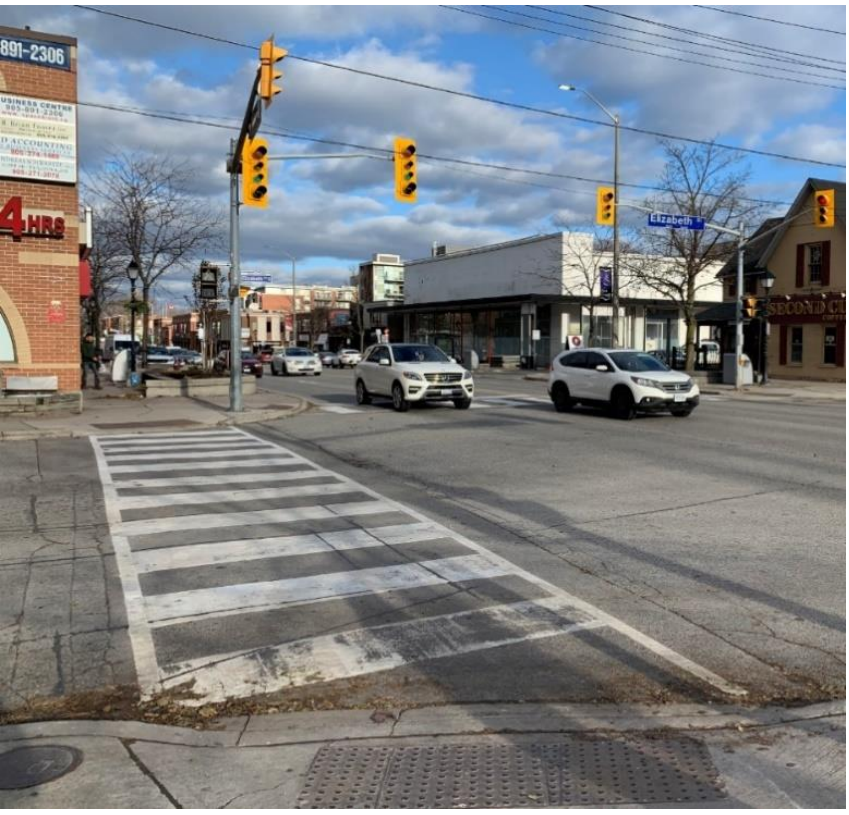
### *19. Ensure best practices in accessibility are considered for new transportation infrastructure projects and upgrades.*

The City will develop and adopt a Universal Design Policy that includes design criteria to be employed through the design, contracting, and the tender process. Ensure that as new and upgrade projects and infrastructure are initiated and built, best practices in accessibility are considered.

### *20. Enhance the safety and accessibility of intersections and crossings.*

Building on the location specific intersection safety recommendations identified in Action 7, this action focuses on intersection improvements that can enhance accessibility while also improving safety at intersections.

- The City will work with MoTI to install audible pedestrian signals at traffic signals within Salmon Arm and review and update pedestrian crossing times at intersections to provide adequate crossing time for all users.
- The City will continue to find opportunities to reduce pedestrian crossing distances by providing narrower roads and motor vehicle lanes. The City will install curb extensions or median islands where feasible, while being mindful of the long-term plan for bicycle infrastructure along the corridor (as seen in Figure 11).
- The City will conduct an inventory of curb ramps at intersection and crossing locations, reviewing the presence and quality of the facility and will develop a plan with priorities to install new curb ramps where missing and replace existing ramps to align with best practice design guidance.




### *21. Improve safety through targeted neighbourhood improvements.*

Studies have shown that speed limit reductions are associated with a decrease in collision rates and a reduction in injury severity.[5]


The City will consider an approach to reducing posted speed limits on residential/local roads. There are examples of municipalities doing this on streets based on road classification or specifically on corridors that are designated bicycling or active transportation routes that the can be referenced (City of Merritt, City of Surrey, District of Saanich, etc.)

The City will also identify corridors where implementing traffic calming features such as speed humps, curb extensions, traffic circles, reduced curb radii, and traffic diversion is desirable to help reduce motor vehicle speeds and volumes. Candidate locations are routes that are identified as part of the proposed active transportation network, and additional corridors.

Additional corridors can be identified based on community member input and locations where intersection safety is an issue. The City can monitor corridor speeds, or use big data to help identify corridors, such as Tom Tom data.

### *22. Enhance visibility through lighting improvements along sidewalks, pathways, trails, and intersections where appropriate.*

Improving visibility at crosswalks and on trails was identified by respondents of both community surveys. As was mitigating personal safety concerns on trails. It is important to note that lighting would only be considered on trails that are being used for transportation purposes after dark and would not be considered as part of nature or recreational trails.

- The City will complete a Crime Prevention Through Environmental Design (CPTED) review of commuter trails throughout the community recognizing that users may be travelling on these facilities after dark, particularly in winter months and at times when transit service is limited.
- Building on the City's existing inventory of lighting, the City will review lighting locations and consider the installation of more lighting where warranted, based on spacing and coverage and community input. Ensuring additional lighting is appropriate within the context, pedestrian scale, and dark sky compliant.
- The City will continue to work with BC Hydro to seek opportunities to provide additional lighting along roadways throughout the City.

[5] Fridman, L., Ling, R., Rothman, L. et al. Effect of reducing the posted speed limit to 30 km per hour on pedestrian motor vehicle collisions in Toronto, Canada - a quasi experimental, pre-post study. BMC Public Health 20, 56 (2020). https://doi.org/10.1186/s12889-019-8139-5

*23. Apply an intersectional, equity-focused lens to the planning, design, and implementation of all active transportation facilities, amenities, and programs to support equity-seeking groups.*

The City will work with stakeholders, including marginalized and under-represented groups, to develop a checklist of the different lenses and factors that are considered during the design and implementation of all active transportation facilities, amenities, and programs. This approach builds on the work of Kimberlé Crenshaw regarding the lens of intersectionality and the principles of Gender Based Analysis Plus (GBA+),

The City will conduct targeted communication and engagement on active transportation projects with targeted groups to understand their unique needs and issues.

## *Intersectional & Equity Focused Framework Examples*

**The Canadian Commission for UNESCO** has developed toolkits around the role of municipalities in topics such as youth engagement, welcoming immigrants and refugees to Canada, and reconciliation with Indigenous peoples. These toolkits provide pathways for advancing social equity across municipal functions and highlight examples of good practices from Canadian municipalities that are members of the Coalition of Inclusive Municipalities.

https://en.ccunesco.ca/resources#f:_60C90EF1-0D93-4807-8C4D-7E7DC8F68595=[Toolkit]

The Government of Canada's has free online training resources and guides on the GBA+ framework. The GBA+ framework provides an intersectional feminist lens to support equitable service delivery across government functions. Local governments seeking to establish a strategic framework to embed social equity within their functioning can access the Government of Canada's GBA+ free online training, resources, and guides.

https://women-gender-equality.canada.ca/en/gender-based-analysis-plus/take-course.html

### Strategy: Maintain the Active Transportation Network Year-Round

To encourage a shift to active transportation, it is important that the active transportation network can be used year-round. This requires planning for the regular inspection and maintenance of sidewalks, bicycle lanes, and trails, with special consideration for snow storage and removal. This also includes ensuring the active transportation network is accessible even during construction periods. Maintenance was one of the top priorities under Experience, as identified by community survey respondents.

The two actions identified to maintain the active transportation network year-round are summarized below:

- Action 24: Improve maintenance practices and procedures for the active transportation network.
- Action 25: Prioritize upgrades and maintenance of the active transportation network.

### *24. Improve maintenance practices and procedures for the active transportation network.*

Updating the City's maintenance practices in conjunction with the implementation of the active transportation network will be an important component of ensuring it can be used year-round and is kept in a state of good repair. In addition to the capital cost of implementing the infrastructure projects identified in the ATNP, the ongoing operations and maintenance costs need to be considered as part of the City's annual budget. The following actions identify opportunities to improve maintenance practices and procedures for the active transportation network.

- Design active transportation facilities that consider all types of weather and facilitate drainage, snow removal, and snow storage. This includes considerations about facility type, buffer space for snow storage, and proper drainage.
- Review and update current maintenance and operating policies and procedures for active transportation infrastructure, including sidewalks, bicycle routes, and paved multi-use pathways to ensure year-round use. Prioritizing snow clearing and maintenance on streets designated as cycling routes, paved multi-use pathways, and future separated bicycle lanes.
- Work with partners, such as the Shuswap Cycling Club, to develop a map that shows the location of winter-maintained trails and active transportation routes.
- Work with City Council to ensure Salmon Arm has appropriately sized equipment, operating funding, and staff resources to maintain all types of active transportation infrastructure. Working with Public Works and Council to understand the budget impacts of implementing and maintaining infrastructure year-round.
- Provide accessible detours for people walking and bicycling during construction and maintenance by reviewing current construction detour policies and developing new guidelines for contractors and City departments to ensure that they represent best practice for accommodating all active transportation users during construction and maintenance.

### *25. Prioritize upgrades and maintenance of the active transportation network.*

To ensure quality and maintenance issues on active transportation facilities are monitored and prioritized, the City will develop a sidewalk, crosswalk, pathway, and bicycling route assessment program to identify active transportation infrastructure in need of upgrade. Repainting crosswalks and lines designated active transportation facilities will be prioritized. The City will review the cost and logistics required to develop an app or tool to allow users to report maintenance issues.

### Strategy: Create Great Places and Streets

Streets that are designed to be inclusive, attractive, comfortable, and safe for all users and all modes will encourage more people to walk, roll, and bicycle. Complete street design principles can ensure that all modes are considered in the design of the roadway and public realm. Reallocating road space by transforming travel lanes or parking spaces into wider sidewalks, bicycle lanes, or public patios can transform the function and appearance of a street, creating an engaging and welcoming environment. This can have economic benefits while also creating new community gathering spaces. These transformations can be done on a temporary, seasonal, or permanent basis, and the City can work with businesses and showcase examples from other communities to build support. The City will also work with the downtown parking commission to discuss opportunities to reallocate parking space for other uses.

The three actions identified to maintain the active transportation network year-round are summarized below:

- Action 26: Develop guidelines for the installation of public amenities through capital projects and developments.
- Action 27: Explore opportunities to create pedestrian-only streets, temporarily, seasonally, or permanently.
- Action 28: Develop a Complete Streets Guide for City Streets.

#### *26. Develop guidelines for the installation of public amenities through capital projects and developments.*

To help guide the installation of public amenities, the City will develop guidelines for the design, placement, and installation of public amenities (such as seating and washrooms) and landscaping, through capital projects and developments. As part of supporting the implementation of the Heritage Strategy and the Alive with the Arts strategy (Objective 2.4), the development a public art program was recommended. The public art program was intended to include guidelines for partnering with local artists, provides opportunities for equity-seeking groups, and seeks opportunities for partnering with and celebrating the area's Indigenous Peoples. Also recommended is the acknowledgment of heritage and significant sites through the installation of information signage and place names.

To support these guides and programs the City can develop a policy where a designated percentage of capital budgets for certain projects (municipal building projects, active transportation projects, parks development, and redevelopment projects) goes towards commissioning new and maintaining existing public art pieces and amenities and/or identify an annual budget for their installation.

The City will work with businesses to create more opportunities to provide bicycle parking, patios, public seating, and other amenities within the road right-of-way.

#### *27. Explore opportunities to create pedestrian-only streets temporarily, seasonally, or permanently.*

As part of the upcoming Integrated Transportation Network Plan, the City will look for opportunities to identify potential locations for temporary, seasonal, or permanent pedestrian-only streets (building on the special events where this already occurs). This will require engaging with businesses and stakeholders on the level of interest and support for such initiatives and looking at other case study examples to understand what has worked in different locations.

### *28. Develop a Complete Streets Guide for City Streets.*

Explore best practices and existing Complete Streets guidance, to develop a custom approach for Salmon Arm. Ensure that all new road projects incorporate complete streets designs and principles. The development of a Complete Streets Guide can also be completed as part of the upcoming Integrated Transportation Network Plan.

## Theme: Encourage

The theme **Encourage** includes actions that will make it easier for residents and visitors to get around Salmon Arm by active modes. This theme area focuses on encouraging active transportation for all ages by improving access to education opportunities and making active transportation more visible across Salmon Arm through wayfinding, awareness, and celebration.


The actions under the theme Encourage will help to build a supportive culture for active transportation in Salmon Arm, making it easier and more enjoyable to get around. Encouragement initiatives are important and cost-effective measures that ensure residents and visitors have a safe, enjoyable, and convenient experience when using active transportation to navigate Salmon Arm.

Some of the ways the City can encourage active transportation is through increased opportunities for education and skill-building. These education opportunities will support residents of all ages to make active trips a part of everyday routines. The City can work to raise awareness and promote active transportation investments as a way to encourage participation. Sharing progress with community members through consistent reporting on the implementation of the Active Transportation Network Plan will help demonstrate progress in the community. The City can also support local and regional economic development opportunities through encouraging the development of bicycle tourism opportunities that celebrate arts, culture, and heritage, such as the Salty Street Fest and Saturday Market.

Input was collected on the level of support for the proposed strategies and actions related to the theme Encourage. Input from community members and stakeholders prioritized the support of Active and Safe Routes to School Programs and Initiatives. Input also included a strong desire to see more opportunities for both youth and adults to learn about how to be a safe and confident bicyclist. There was strong support for working with key partners to develop engaging maps to promote active trips to key destinations in the city, and continue to support development of a regional bicycle tourism initiative.

There are three strategies under Encourage, each strategy includes a series of actions. There are 9 actions under the theme Encourage.

## Strategy: Make it Easy to Get Around

Wayfinding is crucial for both residents and visitors, as it helps people understand directions and find key destinations. Wayfinding information provides important information about distances, features, amenities, and identifies route options. Wayfinding information can also help promote the local economy and identify key community facilities and destinations.

The two actions identified to make it easier to get around are summarized below:

- Action 29: Enhance and expand active transportation wayfinding and signage downtown and in other areas with high pedestrian activity.
- Action 30: Work with partners to develop engaging maps to promote active trips and key destinations.

### *29. Enhance and expand active transportation wayfinding and signage downtown and in other areas with high pedestrian activity.*

This includes finding opportunities to add signage on new and existing facilities, developing guidelines for the installation of neighbourhood entry or gateway signs, and creating central hubs for active transportation. Central hubs can include features such as, a network map and information kiosk, protected bicycle parking, an e-bike charging station, and other amenities.

The City will improve connections and provide wayfinding from neighbourhood streets to trails focusing on signing connections to schools and community facilities. Provide information about the time it may take to travel to destinations and the accessibility of the trail.

### *30. Work with partners to develop engaging maps to promote active trips and key destinations.*

Developing and updating maps of the City's pedestrian, trail, and bicycling network as new facilities and infrastructure is added serves as an important navigation and trip planning tool. Key partners, including Shuswap Tourism, Shuswap Trails Alliance, Shuswap Cycling Club, and the Downtown Business Improvement Area can collaborate in the development of engaging maps that identify key routes and connections and point out key community destinations. The development of smaller scale neighbourhood-based walking and cycling maps can support more residents to choose active transportation for short trips, including travel to school, running errands within the community, and for recreation.


## Strategy: Increase Education & Awareness

Education and awareness are integral components to encouraging more active trips, and to support the implementation of new infrastructure and other community initiatives. Supporting residents of all ages to learn key skills related to safe bicycle riding and repair help build confidence and increase the likelihood of using a bicycle to get around the community. Awareness initiatives can vary widely but can include providing information to the public on the benefits of active transportation, and hosting events to promote and celebrate its use.

The five actions identified to increase education and awareness are summarized below:

- Action 31: Educate residents on the benefits of active transportation.
- Action 32: Support Active and Safe Routes to School programs and initiatives.
- Action 33: Support programs that encourage adults to bicycle and promote road safety.
- Action 34: Celebrate active transportation.
- Action 35: Monitor the implementation of the active transportation network plan and report back on successes.

### *31. Educate residents on the benefits of active transportation.*

A key component to encourage a culture of active transportation is to demonstrate the benefits of active transportation to residents and help individuals see how it can fit into their everyday lives. Community-wide communications and marketing efforts that feature a diversity of ages, genders, and ethnicities as regular users of active transportation can help illuminate the benefits of active transportation as part of everyday travel.

Building partnerships with organizations such as ICBC and Interior Health can support the development of road safety awareness and education campaigns for all road users. Collaborations and partnerships with academic researchers (CHATR lab) and Interior Health can help to articulate the links between health, and active living.

The City will actively engage with partners and researchers to educate residents on the benefits of active transportation.

### *32. Support Active and Safe Routes to School programs and initiatives.*

Enabling walking and cycling trips to school is important to help youth develop independence and healthy lifestyle habits of walking and bicycling they can carry into adulthood. Stakeholder input identified Active and Safe Routes to School as the most important strategy within the Encourage theme.

Active and Safe Routes to School is a community-based initiative that promotes the use of active transportation and works through shared partnerships to address the barriers to active travel. This includes promotion of the benefits of walking and cycling to school, working with partners to support pedestrian and bicycle skills training for students, conducting neighbourhood walkabouts, transportation surveys, hosting walking clubs, walking/cycling school buses, and walking and biking to school days can help promote active trips to school.

Engaging school communities in processes such as School Travel Planning can help to better understand built environment solutions that would support more active trips. Through this process the City can develop a list of infrastructure projects for each school to encourage more active transportation. It is recommended that

the City increase partnerships with key organizations (School District #83, ICBC, Interior Health, CAA) and others for this purpose.

It is important to note that the proximity of proposed ATNP infrastructure projects to schools is incorporated in the prioritization criteria for implementation of the active transportation network.

### *33. Support programs that encourage adults to bicycle and promote road safety.*

It's never too late to learn to ride a bike. Adult bicycle skills courses and basic maintenance workshops recognize that bicycling education is important at all ages. Many riders may be interested but do not feel confident or comfortable to try bicycling on their own or to make it a part of their everyday routine without support. Providing training for adults that can be tailored for unique groups and settings (e.g., seniors, newcomers, etc.) can help participants feel comfortable and build confidence using a bicycle as a means of everyday transportation. Partnerships with local bicycle shops and the Shuswap Cycling Club can help educate adults about different types of bicycles and how they can be adapted to suit different mobility needs. The City will partner with organizations (ICBC, Interior Health, etc.) in the development of road safety awareness and education campaigns for all road users.

The City will encourage and support partners in the development of programs and initiatives that encourage adults to bicycle.

### *34. Celebrate active transportation.*

An important component of encouraging a culture of active transportation is ensuring residents are aware of new active transportation infrastructure projects. The City will celebrate these new investments through website material, videos, social media, events, and activations that get people excited about the implementation of the ATNP.

When constructing active transportation infrastructure, a portion (5%) of the capital costs can be allocated to education and awareness. Funding for education and awareness initiatives can come from a wide variety of sources including grants, community partners, the business community, and other partners.

Increasing awareness about the opportunities to walk and bike in daily life is an important approach to encourage more active trips. The City and partner organizations will look for opportunities to promote walking and bicycling to the grocery shop, eating out, running errands and appointments through various campaigns such as Bike or Walk to Work Week, Bike to Shop Week, and Go by Bike Week. The City will continue the promotion and celebration of active transportation friendly events and groups such as the Saturday Market, Salty Dog Enduro, etc.

### *35. Monitor the implementation of the active transportation network plan and report back on successes.*

Monitoring active transportation trips, investments and initiatives can help to tell the story of walking and bicycling within a community. It can help promote walking and cycling and justify future investments. Monitoring is also a tool to track progress towards achieving goal of the ATNP and ensure that Salmon Arm is implementing the proposed strategies, actions, and infrastructure identified. There is a more detailed monitoring plan outlined in Section 4, that builds on this action.

- To assist in monitoring the implementation of the Active Transportation Network Plan, the City will develop a data collection and monitoring program. This plan can include the installation of counters on bicycle routes and trails to monitor activity and report back on findings.
- The City will develop mode share targets and a timeline for achieving them. This will include targets for the percentage of walking, cycling, and transit trips.
- The City will develop a Short-Term Active Transportation Action Plan that aligns with City Council's priorities. This action plan will be updated as part of the annual budgeting process to identify upcoming projects, initiatives, funding sources and implementation partners as part of its efforts to prioritize the implementation of ATNP actions, monitor and communicate successes and to keep the ATNP a living document. The Plan will be reported back to the public to ensure awareness for current planned projects and investments in active transportation.

## Strategy: Further Develop Bicycle Tourism Opportunities

Salmon Arm and the surrounding area offers numerous outdoor tourism opportunities that contribute to the City's diverse economy. The expansive regional trail network creates significant potential for bicycle tourism and local economic development opportunities. Supporting partnerships and promotion of active transportation options for visitors. Several groups including Shuswap Tourism, Shuswap Trail Alliance, and the Shuswap Cycling Club have been working to develop a Shuswap Cycling Guide. The City can promote walking and cycling tours locally and work with neighbouring communities to encourage regional bicycle tourism opportunities.

The two actions identified to further develop bicycle tourism opportunities:

- Action 36: Explore opportunities to promote experiential tourism activities that celebrate local arts, culture, and heritage.
- Action 37: Continue to support the development of a regional bicycle tourism initiative.

### *36. Explore opportunities to promote experiential tourism activities that celebrate local arts, culture, and heritage.*

Collaborations with key partners such as Shuswap Tourism can promote a wide variety of walking and cycling experiences within Salmon Arm. Several initiatives are underway that the City can support and consider as part of enhancing the local arts and culture experience.

- Increase awareness of Secwépemc traditional territory through the support of Adams Lake Band, Neskonlith Band, Little Shuswap Lake, Splatsin, and the Shuswap Trail Alliance by continuing to implement the Secwépemc Landmarks project.
- Promote local tourism and the arts and culture sector through supporting the implementation of Big Ideas #2 (Show Up & Celebrate) and #3 (Activate Spaces Through the Arts) from the Arts and Culture Plan. These themes speak to increasing awareness and participation with the arts, and transformative creative placemaking. Working with arts partners can create a rich cultural experience for those walking and cycling to explore activations in the public realm, and to create great streets and places.
- Partnerships with Shuswap Tourism can help promote new walking and cycling experiences in Salmon Arm, including a local active transportation map, bicycle rental, and sample walk and ride experiences.

### *37. Continue to support the development of a regional bicycle tourism initiative.*

Promotion of cycling, hiking, and mountain biking and other activities is a high priority for the region. This action includes continuing to work with Shuswap Tourism, the Shuswap Trail Alliance, the Shuswap Cycling Club, and others to develop the Shuswap Cycle Guide and run complimentary events and programs. Promotion on the City's website and social media channels can help spread he word.

# 4.0 IMPLEMENTATION & MONITORING

The strategies and actions developed as part of the ATNP are intended to guide Salmon Arm's policy, planning, capital investment decisions, and provide on-going operations and maintenance in support of active transportation over the next 20 years and beyond. While the ATNP has been developed as a long-term plan, it will require financial investment, staff resources, and an implementation strategy to prioritize improvements as immediate (0-3 years), short-term (3-10 years), medium-term (10-20 years) and long-term (20+ years). This chapter also includes a monitoring strategy to ensure that the ATNP is implemented as intended and that progress towards the goal is being made.

## Implementation Plan

The implementation plan was developed based on the following guiding principles:

**The ATNP is only the beginning and there is still a lot of work to do.** The strategies and actions outlined in the ATNP document all the hard work and ideas of community members, stakeholders, and City staff. The actions lay the groundwork for implementing the ambitious ATNP over the long-term. However, it is important to recognize that implementation will require significant investment and resources. This includes investments in new infrastructure, ongoing maintenance of existing and new facilities (including new equipment), resources for the development of new standards and policies, funding for new programming and public education, and staff resources. Achieving the actions of the ATNP will require the ongoing support of the City and its partners, along with sustained investment in active transportation.

**Community and stakeholder engagement will be conducted prior to implementing many of the recommendations of the ATNP**. Many of the actions and potential infrastructure projects identified in the ATNP require more detailed input and technical work. The City will work closely with partners, residents and stakeholder groups to move forward with priorities in the ATNP.

**The ATNP is a flexible and living document.** While the City is working towards implementing the proposed active transportation networks, there is some level of flexibility regarding the specific locations that are identified. The Plan presents recommendations and suggestions based on the engagement process and technical analysis; however, Salmon Arm will need to review the feasibility and develop designs for the proposed infrastructure projects. The implementation of the ATNP will also require ongoing public engagement as new projects are considered.

**The implementation strategy focuses on implementing infrastructure in high priority areas over the next 20 years.** The ATNP is intended to be an action-oriented document, with the emphasis on implementing the high priority infrastructure projects and the short term, medium term, and long term actions. After the first 10 years, the City will conduct a comprehensive review and update of the ATNP to monitor progress and revisit its priorities.

As noted in Action 35, in the immediate term, the City will develop a Short-Term Active Transportation Action Plan that aligns with City Council's priorities. This action plan will be updated as part of the annual budgeting process to identify upcoming projects, initiatives, funding sources and implementation partners as part of its efforts to prioritize the implementation of ATNP actions, monitor and communicate successes and to keep the ATNP a living document.

## Strategies and Actions

An approach for implementing each of the actions identified in the ATNP is outlined below. These tables provide guidance with respect to:

- **Alignment with Strategic Drivers:** Each action is categorized based on its relative alignment to each of the strategic drivers outlined in the Corporate Strategic Plan (People, Places, Assets, Environment, and Economy).
    - A solid circle (●) indicates that there is strong alignment with the strategic driver.
    - A hollow circle (❍) indicates that there is supporting alignment with the strategic driver.
    - A blank space indicates the action does not specifically align with the strategic driver.
- **Budgeting:** The assumed order of magnitude cost for each action has been provided. These costs include capital and/or operational depending on applicability. The number of dollar signs indicates a high-level cost assumed for each action:
    - $$$ – Major projects ($1 million plus)
    - $$ – Moderate ($100,000 to $999,000)
    - $ – Low (less than $100,000)

  Actions that present opportunities for funding support and partnerships have also been identified.
- **Timeframe for Implementation:** Each action is identified as either:
    - **Immediate-term –** Within 3 years (2023-2026)
    - **Short-term –** Within 3 to 10 years
    - **Medium-term** – Within 10 to 15 years
    - **Long-term** – 20 years and beyond

  Many actions will be implemented on an ongoing basis, in which case they are shown under each timeframe. It is important to note that timeline for implementation was determined based on several factors including, community and stakeholder support and input, alignment of strategic drivers, ease of implementation, partnership opportunities, etc.
- **Method of Implementation:** This column identifies how each action will be implemented: as a capital project, through ongoing operations and maintenance, or as a policy or programming initiative.
- **Responsibility:** This column suggests the primary and secondary responsibility for each action. Many actions are the primary responsibility of Salmon Arm (including the Engineering & Public Works, Development Services, and Recreation / Parks and Fields), while other actions should be led by external agencies, such as the CRSD, MoTI, BC Transit, Shuswap Trail Alliance, community groups, or the private sector.

# CONNECT

| | ALIGNMENT WITH STRATEGIC DRIVERS | | | | | BUDGETING | | TIMEFRAME | | | | METHOD OF IMPLEMENTION | | | RESPONSIBILITY | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | People | Places | Assets | Environment | Economy | Funding Partners Available | Magnitude* | Immediate (0-3 years) | Short (3-10 years) | Medium (10-20 years) | Long-Term (20+ years) | Capital | Operations and Maintenance | Policy and Programming | Primary | Secondary |
| **Strategy: Expand and Enhance the Sidewalk Network** | | | | | | | | | | | | | | | | |
| Action 1: Fill gaps in the pedestrian network based on priority. | ● | ● | ● | ● | ● | ✓ | $$$ | | | | | ✓ | ✓ | | Engineering & Public Works | Development Services, Financial Services, Municipal Council, Shuswap Trail Alliance |
| Action 2: Upgrade existing sidewalks based on condition and priority. | ● | ● | ● | ❍ | ❍ | ✓ | $$$ | | | | | ✓ | ✓ | | Engineering & Public Works | Development Services, Financial Services |
| Action 3: Update the pedestrian facility requirements in the City's Subdivision and Development Servicing Bylaw. | ● | ❍ | ❍ | ❍ | ❍ | | $ | | | | | | | ✓ | Development Services Engineering & Public Works | |
| **Strategy: Expand and Enhance the Bicycle and Trail Network** | | | | | | | | | | | | | | | | |
| Action 4: Develop a complete and connected bicycle network for people of all ages and abilities that connects to key destinations in Salmon Arm based on priority. | ● | ● | ● | ● | ● | ✓ | $$$ | | | | | ✓ | ✓ | | Engineering & Public Works | Development Services, , Financial Services, Municipal Council, Shuswap Trail Alliance, Shuswap Cycling Club |
| Action 5: Implement new and upgrade existing trail connections as outlined in the Active Transportation Network Plan (building on the recommendations of the Greenways Strategy). | ● | ● | ● | ● | ● | ✓ | $$$ | | | | | ✓ | ✓ | | Engineering & Public Works, Shuswap Trail Alliance | Development Services, Financial Services, School District, Recreation / Parks and Fields, Shuswap Cycling Club |
| Action 6: Update Bicycle Facility Requirements in the City's Subdivision and Development Servicing Bylaw. | ❍ | ❍ | ❍ | ❍ | ❍ | | $ | | | | | | | ✓ | Engineering & Public Works, Development Services | |
| **Strategy: Improve Intersections and Crossings** | | | | | | | | | | | | | | | | |
| Action 7: Monitor and address pedestrian and bicyclist safety concerns at intersections. | ● | ● | ● | | | ✓ | $$ | | | | | ✓ | ✓ | | Engineering & Public Works | Development Services |
| Action 8: Ensure active transportation safety and accessibility at underpasses and overpasses. | ● | ● | ● | | | ✓ | $ | | | | | ✓ | | ✓ | Engineering & Public Works | Development Services, MoTI |
| **Strategy: Improve Regional Connections** | | | | | | | | | | | | | | | | |
| Action 9: Ensure future active transportation connections are well integrated throughout the region. | ❍ | ● | ● | ❍ | ● | ✓ | $$ | | | | | | | ✓ | Shuswap Trail Alliance, CSRD, Indigenous Communities, Nearby Municipalities | Engineering & Public Works, Development Services |
| Action 10: Work with MOTI and other agency partners to ensure high quality active transportation standards are incorporated into all projects. | ❍ | ● | ● | ❍ | | ✓ | $ | | | | | | | ✓ | MoTI, Other Agency Partners | Engineering & Public Works |
| **Strategy: Improve Integration of Active Transportation with Transit, Other Modes, and City Projects** | | | | | | | | | | | | | | | | |
| Action 11: Ensure direct sidewalk, trail, and bicycling connections are provided to transit stops and along routes. | ● | ● | ● | ❍ | | ✓ | $$$ | | | | | ✓ | | ✓ | Engineering & Public Works | Development Services & BC Transit |
| Action 12: Ensure land use policies support and encourage active transportation. | ● | ● | ● | ❍ | ❍ | | $ | | | | | | | ✓ | Development Services | Engineering & Public Works |
| Action 13: Seek opportunities to implement new active transportation facilities in conjunction with other projects, plans, and developments. | ❍ | ● | ● | ❍ | | | $ | | | | | | | ✓ | Engineering & Public Works, Development Service, Recreation / Parks and Fields | Shuswap Trail Alliance |
| Action 14: Understand and address the impact of new and shared mobility on the active transportation network, facility design, and City policy. | ❍ | ● | ❍ | ❍ | | | $ | | | | | | | ✓ | Engineering & Public Works | Shuswap Trail Alliance, CSRD |
| Action 15: Develop an Active Transportation, Trails, and Accessibility Working Group. | ● | ● | ● | | | | $ | | | | | | | ✓ | Development Services | Municipal Council |

# EXPERIENCE

| | ALIGNMENT WITH STRATEGIC DRIVERS | | | | | BUDGETING | | TIMEFRAME | | | | METHOD OF IMPLEMENTION | | | RESPONSIBILITY | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | People | Places | Assets | Environment | Economy | Funding Partners Available | Magnitude* | Immediate (0-3 years) | Short (3-10 years) | Medium (10-20 years) | Long-Term (20+ years) | Capital | Operations and Maintenance | Policy and Programming | Primary | Secondary |
| **Strategy: Provide More Bicycle Parking and Other End-of-Trip Facilities** | | | | | | | | | | | | | | | | |
| Action 16: Require short-term and long-term bicycle parking and end-of-trip facilities through development. | ❍ | ● | ❍ | ❍ | ● | | $ | | | | | | | ✓ | Development Services | Engineering |
| Action 17: Develop a program to install short-term bicycle parking within the public right-of-way. | ❍ | ● | ❍ | ❍ | ● | | $$ | | | | | | | ✓ | Engineering & Public Works, Development Services, Recreation / Parks and Fields | Shuswap Trail Alliance, Shuswap Cycling Club |
| Action 18: Provide more bicycle parking and end-of-trip options throughout the City and at special events. | ❍ | ● | ❍ | ❍ | ● | ✓ | $$ | | | | | ✓ | ✓ | | Engineering & Public Works, Development Services, Recreation / Parks and Fields | Shuswap Trail Alliance, Shuswap Cycling Club, Other potential partners |
| **Strategy: Provide an Active Transportation Network that is Safe, Accessible, and Equitable for All** | | | | | | | | | | | | | | | | |
| Action 19: Ensure best practices in accessibility are considered for new transportation infrastructure projects and upgrades. | ● | ● | ❍ | | | ✓ | $ | | | | | | | ✓ | Engineering & Public Works | Development Services |
| Action 20: Enhance the safety and accessibility of intersections and crossings. | ● | ● | ❍ | | | ✓ | $$$ | | | | | ✓ | | | Engineering & Public Works | |
| Action 21: Improve safety through targeted neighbourhood improvements. | ● | ● | ❍ | | | | $$$ | | | | | ✓ | ✓ | ✓ | Engineering & Public Works | |
| Action 22: Enhance visibility through lighting improvements along sidewalks, pathways, trails, and intersections where appropriate. | ● | ● | ❍ | ❍ | | ✓ | $$$ | | | | | ✓ | ✓ | | Engineering & Public Works | Shuswap Trail Alliance |
| Action 23: Apply an intersectional, equity-focused lens to the planning, design, and implementation of all active transportation facilities, amenities, and programs to support equity-seeking groups. | ● | ● | ❍ | | ❍ | | $$ | | | | | | | ✓ | Engineering & Public Works, Development Services, Recreation / Parks and Fields | |
| **Strategy: Maintain the Active Transportation Network Year-Round** | | | | | | | | | | | | | | | | |
| Action 24: Improve maintenance practices and procedures for the active transportation network. | ❍ | ● | ● | ❍ | ❍ | ✓ | $$$ | | | | | ✓ | ✓ | ✓ | Engineering & Public Works | Shuswap Trail Alliance, Shuswap Cycling Club |
| Action 25: Prioritize upgrades and maintenance of the active transportation network. | ❍ | ● | ● | ❍ | ❍ | ✓ | $$$ | | | | | | ✓ | ✓ | Engineering & Public Works | Shuswap Trail Alliance |
| **Strategy: Create Great Places and Streets** | | | | | | | | | | | | | | | | |
| Action 26: Develop guidelines for the installation of public amenities through capital projects and developments. | ❍ | ● | ❍ | | ● | | $ | | | | | ✓ | | ✓ | Engineering & Public Works, Development Services | |
| Action 27: Explore opportunities to create pedestrian-only streets, either temporarily, seasonally, or permanently. | ❍ | ● | ❍ | | ● | | $$ | | | | | | | ✓ | Engineering & Public Works, Development Services | |
| Action 28: Develop a Complete Streets Guide. | ❍ | ● | ❍ | ❍ | ● | | $$ | | | | | | | ✓ | Engineering & Public Works, Development Services | |

# ENCOURAGE

| | ALIGNMENT WITH STRATEGIC DRIVERS | | | | | BUDGETING | | TIMEFRAME | | | | METHOD OF IMPLEMENTION | | | RESPONSIBILITY | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | People | Places | Assets | Environment | Economy | Funding Partners Available | Magnitude* | Immediate (0-3 years) | Short (3-10 years) | Medium (10-20 years) | Long-Term (20+ years) | Capital | Operations and Maintenance | Policy and Programming | Primary | Secondary |
| **Strategy: Make it Easy to Get Around** | | | | | | | | | | | | | | | | |
| Action 29: Enhance and expand active transportation wayfinding and signage downtown and in other areas with high pedestrian activity. | ● | ● | ❍ | | ❍ | ✓ | $ | | | | | ✓ | | ✓ | Shuswap Trail Alliance Engineering & Public Works | Downtown Salmon Arm |
| Action 30: Work with partners to develop engaging maps to promote active trips and key destinations. | ● | ● | ❍ | | ❍ | ✓ | $ | | | | | | | ✓ | Partners (Shuswap Trail Alliance, Downtown Salmon Arm, Shuswap Cycling Club, Shuswap Tourism) | Development Services, Engineering and Public Works |
| **Strategy: Increase Education and Awareness** | | | | | | | | | | | | | | | | |
| Action 31: Educate residents on the benefits of active transportation. | ● | | ❍ | ❍ | | ✓ | $ | | | | | | | ✓ | Partners: Interior Health, Researchers | Development Services |
| Action 32: Support Active and Safe Routes to School programs and initiatives. | ● | ❍ | ❍ | ❍ | ❍ | ✓ | $ | | | | | | | ✓ | Development Services, School District | |
| Action 33: Support programs that encourage adults to bicycle and promote road safety. | ● | ❍ | ❍ | ❍ | ❍ | ✓ | $ | | | | | | | ✓ | Partners: Shuswap Trail Alliance, Shuswap Cycling Club, Interior Health, Shuswap Cycling Club | Development Services |
| Action 34: Celebrate active transportation. | ● | | ❍ | | | ✓ | $ | | | | | | | ✓ | Development Services | |
| Action 35: Monitor the implementation of the active transportation network plan and report back on successes. | ● | | ● | | | ✓ | $ | | | | | | | ✓ | Engineering & Public Works, Development Services | |
| **Strategy: Develop Bicycle Tourism Opportunities** | | | | | | | | | | | | | | | | |
| Action 36: Explore opportunities to promote experiential tourism activities that celebrate local arts, culture and heritage. | ● | ● | ● | ❍ | ● | ✓ | $ | | | | | | | ✓ | Development Services | Partners: Shuswap Trail Alliance, CSRD, Indigenous Communities, Downtown Salmon Arm, Shuswap Cycling Club |
| Action 37: Continue to support the development of a regional bicycle tourism initiative. | ● | ● | ● | ❍ | ● | ✓ | $ | | | | | | | ✓ | Engineering & Public Works, Development Services | Shuswap Cycling Club |

The following is the list of actions that have been identified as priorities to be initiated within the immediate (0 to 3 year) timeframe. This does not mean that other can't be started earlier, just that these are the priority areas to focus on initially:

## Connect:

- Begin filling high priority gaps in the pedestrian network. (Part of Action 1)
- Update the pedestrian facility requirements in the City's Subdivision and Development Servicing Bylaw. (Action 3)
- Begin developing a complete and connected bicycle network (starting with the high priority projects). (Part of Action 4)
- Work with the School District and Shuswap Trail Alliance to formalize trail connections to schools. (Part of Action 5)
- Update Bicycle Facility Requirements in the City's Subdivision and Development Servicing Bylaw. (Action 6)
- Monitor and address pedestrian and bicyclist safety concerns at intersections identified in Table 2. (Part of Action 7)
- Begin to understand and address the impact of new and shared mobility on the active transportation network, facility design, and City policy. Update the Traffic Bylaw to enable the use of small wheels (children's bicycles, kick-scooters, and wheelchairs) on sidewalks and to permit the use of motorized mobility devices on sidewalks. (Part of Action 14)
- Develop an Active Transportation, Trails, and Accessibility Working Group. (Action 15)

## Experience:

- Require short-term and long-term bicycle parking and end-of-trip facilities through development by updating the City's Zoning Bylaw. (Action 16)
- Develop and adopt a Universal Design Policy to ensure best practices in accessibility are considered for new transportation infrastructure projects and upgrades. (Part of Action 17)
- Enhance visibility through lighting improvements along sidewalks, pathways, trails, and intersections where appropriate. Starting with completing a CPTED review of commuter trails throughout the community. (Part of Action 22)
- Apply an intersectional, equity-focused lens to the planning, design, and implementation of all active transportation facilities, amenities, and programs to support equity-seeking groups. (Part of Action 23)
- As new active transportation infrastructure is built, improve maintenance practices and procedures for the active transportation network. (Part of Action 24)

Encourage:

- Work with partners to develop engaging maps to promote active trips and key destinations. (Action 30)
- Support Active and Safe Routes to School programs and initiatives. (Action 32)
- Begin celebrating active transportation as new infrastructure projects are implemented. (Action 34)
- Develop a five-year Active Transportation Action Plan that aligns with City Council's priorities. (Part of Action 35)
- Develop mode share targets and a timeline for achieving them. This would include targets for the percentage of walking, cycling, and transit trips (Part of Action 35).

## Network Prioritization

The proposed long-term ATNP identifies over 220 kilometres of pedestrian facilities, multi-use pathways, bicycle routes, and trails. This magnitude of improvement will require investment and will take many years for Salmon Arm to implement. Priorities have been established to focus improvements to high demand and high need areas that either currently experience, or have the potential for generating, the highest levels of active trips.

A GIS based analysis was conducted to provide the City with a tool to guide the prioritization of infrastructure investments in Salmon Arm. Additional feedback was collected through public engagement to understand how infrastructure investments should be prioritized. The purpose of this section is to outline the methodology used to identify priorities to implement the active transportation network.

A GIS-based prioritization methodology was used to identify priority locations based on a list of variables. Criteria for the prioritization of active transportation infrastructure was developed in collaboration with municipal staff and feedback from public engagement. Each variable contains scoreable information, and the results were combined to generate an overall score for the network. To provide the City with a comprehensive tool that can be used to access both new infrastructure and upgrade projects, all streets in Salmon Arm were included, and is available for the City to use. The criteria are shown in Table 3 and include road classification; connections to key generators such as transit stops, schools, parks, and other destinations; network need and connectivity; equity (based on the analysis described in Section 2); and safety.

It is important to note that the prioritization approach outlined above is just one GIS-based tool used to identify active transportation priorities and capital projects in Salmon Arm. Through additional planning work, feasibility studies, feedback from residents, and alignment with other plans and capital projects some routes may be reprioritized. There are other variables that need to be

### *Prioritization Criteria*

- Road Classification
- Proximity to Transit
- Proximity to Schools
- Proximity to Active Transportation Generators (point features on Figure 2)
- Network Connectivity
- Network Need
- Equity (Based on Equity Analysis)
- Safety (Based on ICBC Collision Data)

considered which may not be fully accounted for in the GIS analysis, such as accessibility and equity considerations. Additional engagement with targeted groups may be required to ensure that equity is fully considered. The results of the analysis for prioritizing the pedestrian network gaps can be seen in **Figure 15** and the proposed bicycling network in **Figure 16**.

It is important to note, the pedestrian network gaps can be filled by sidewalks or multi-use pathways, and in some cases paved shoulders, depending on the context, including what bicycling facility is implemented. Pedestrian priority areas (i.e. open streets) can also be considered in certain contexts. Detailed facility selection will be refined on a corridor-by-corridor basis as the City implements this plan.

*Table 3: Network Prioritization Criteria*

| FACTOR | DESCRIPTION | SCORE |
|---|---|---|
| Road Classification | Ministry of Transportation & Infrastructure/Provincial Highway | 25 |
| | Urban Arterial Roads | 20 |
| | Urban Collector Road | 15 |
| | Urban Local Road (Local roads outside of the Urban Containment Boundary)* | 10 |
| | Rural Arterial | 15 |
| | Rural Collector | 10 |
| | Rural Local Road (Local roads within the Urban Containment Boundary)* | 5 |
| | Lane | NA |
| Transit | Within 200 metres of a bus stop | 15 |
| | Within 800 metres of a bus stop | 5 |
| Schools | Directly adjacent to any school | 30 |
| | School within 200m | 15 |
| | School within 400m | 5 |
| Active Transportation Generators * | Directly adjacent to/within any key destination or commercial area | 25 |
| | Key destination/commercial area within 200m | 20 |
| | Key destination/commercial area within 400m | 15 |
| Network Connectivity ** | Connects to existing facility on both ends | 25 |
| | Connects to existing facility on one side | 15 |
| | Does not connect to an existing facility | 0 |
| Network Need | No active transportation facility on either side | 25 |
| | Active transportation facility already on one side | 15 |
| | Active transportation facility on both sides | 0 |
| Equity *** | Located in area of high equity need | 30 |
| | Located in area of moderate equity need | 15 |
| | Located in area of low equity need | 0 |
| Population Density | Located in Area of High Population Density | 15 |
| | Located in Area of Moderate Population Density | 10 |
| | Located in Area of Low Population Density | 5 |
| Safety (ICBC Collision Data) | Located within 200m of a collision involving a pedestrian and/or cyclist | 25 |
| | Location within 800m of a collision involving a pedestrian and/or cyclist | 15 |

**Destinations as shown on Figure 2 but excluding parks and schools to avoid double counting*
*** Applies to pedestrian network prioritization*
**** Based on the Equity Analysis described in Section 2 (seeFigure 1)*

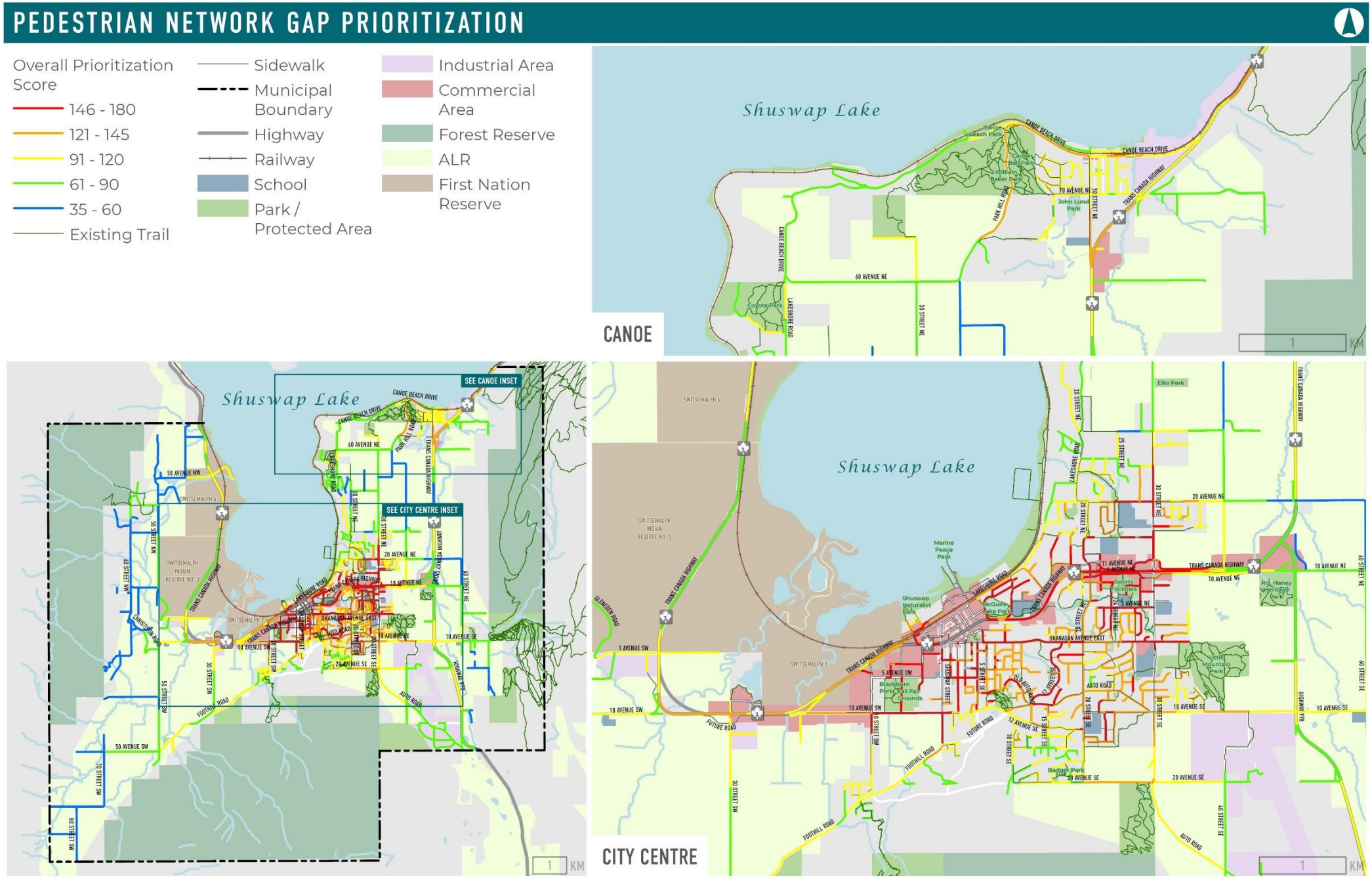



*Figure 15: Pedestrian Network Gap Prioritization Results*

# BICYCLING NETWORK PRIORITIZATION

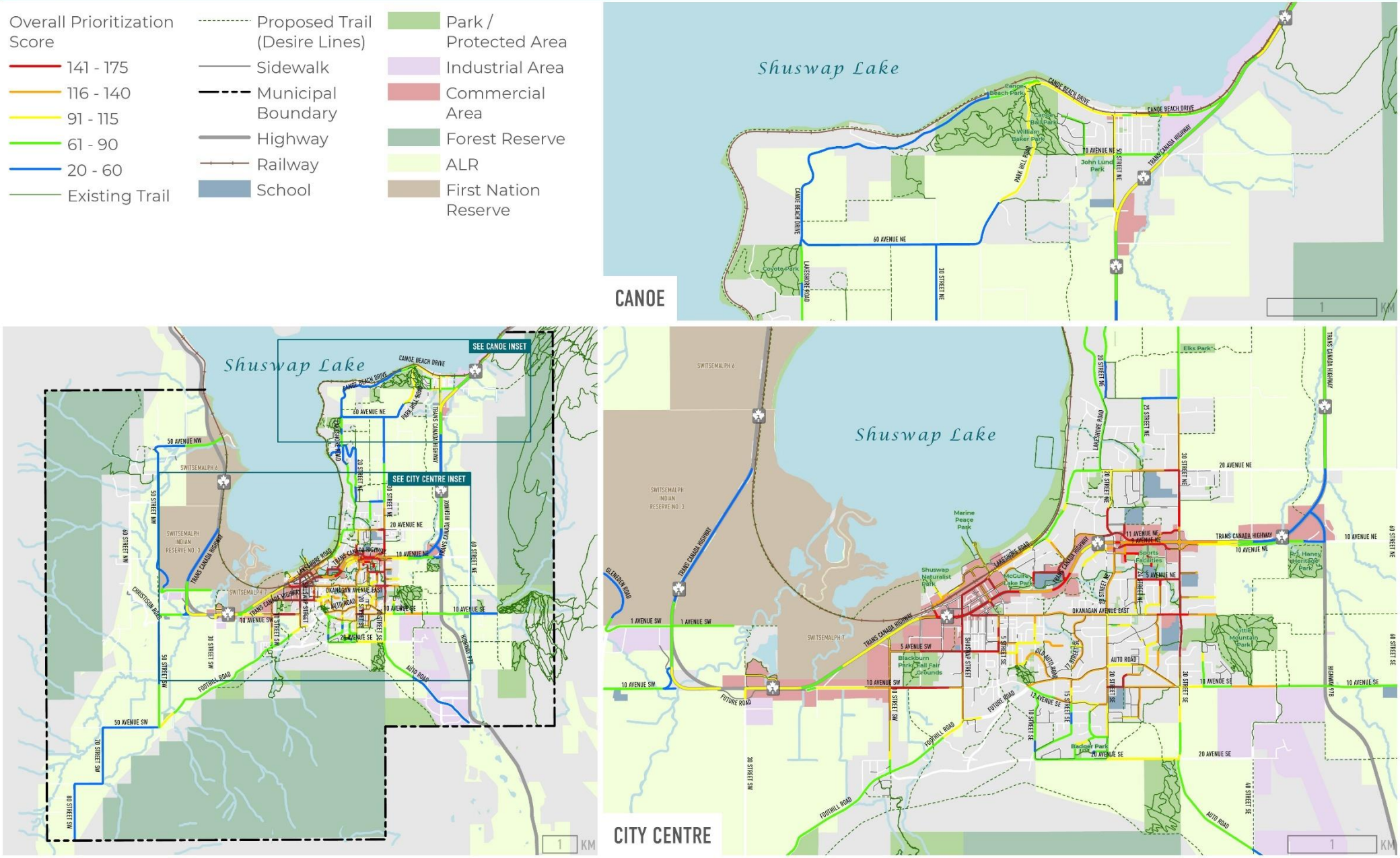



*Figure 16: Bicycling Network Prioritization*

## Environmental Benefit Analysis

This project included an analysis of the greenhouse gas (GHG) reductions associated with potential active transportation investments. This analysis demonstrates the potential benefits of investing in active transportation facilities that support long term shifts towards sustainable transportation.

A tool provided by the Federation of Canadian Municipalities was used to estimate the emissions reductions associated with shifts in commuting patterns across Salmon Arm. The tool provides estimates that consider the city-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 2016 Census, Government of Canada, US EPA, 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.

Currently 9% of residents in Salmon Arm use active transportation to get to work, while 1% use transit. To perform this analysis, future commuting modal share estimates were used to demonstrate the potential environmental benefits of increasing the active transportation modal share to 20% by 2050, and the public transit modal share to 5% by 2050. Using these modal share estimates, the net-environmental impacts include:

- A reduction in **2,946** daily vehicle trips (**766,038** annual trips) by 2050.
- A reduction in annual vehicle kilometres travelled by **5,259,012 kilometres**, which equates to a reduction in **504,865 litres** of fuel.
- An increase in **1,543** new daily active transportation trips, and an annual sustainable trip distance of **2,754,721 kilometres** made by increases to walking, cycling, and public transit trips.
- An annual GHG reduction of **1,110,703 kilograms ($CO_2e$)**.

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

As outlined in Action 35, the City will develop mode share targets and a timeline for achieving them. This would include targets for the percentage of walking, cycling, and transit trips.

## Priority Projects

Building off the active transportation network prioritization described above, several projects were identified by community members, stakeholders, and City staff for priority implementation, as shown in **Figure 17**. Projects were selected to fill priority gaps, connect key destinations, and spread projects across the City's neighbourhoods. Many more projects will need to be implemented to complete the City's active transportation network, but these will be longer-term projects. The projects identified here can be implemented through rapid implementation techniques and lower-cost treatments as described in the section below (Quick Build Techniques and Strategies). Additional study and community engagement will be required to access the feasibility, design specifications, and treatments used prior to implementation.

### *Priority Infrastructure Projects- Corridors*

**Project A: Canoe Beach Drive - Multi-use Pathway**. Provide a multi-use pathway along Canoe Beach Drive between 53 Street NE and Canoe Beach to provide an off-street space for people to walk, bike, and roll to and from the beach.

**Project B: Downtown to Uptown - Multi-use Pathway**. This project includes providing a multi-use pathway between McGuire Lake Park and 30 Street NE. The multi-use pathway would be located along 6 Avenue NE, 16th Street NE, and 11 Avenue NE. The City has already developed a design for this project and will continue to apply for funding support to implement this project as soon as possible.

**Project C: 20 Avenue & Lakeshore Road Downtown Connection Multi-use Pathway & Protected Bicycle Lane.** Provide a multi-use pathway on 20 Avenue NE (between 30 Street NE and Lakeshore Road) and Lakeshore Road (between 20 Avenue NE and Marine Park Drive) and a protected bicycle lane (consider bi-directional) on Lakeshore Road between Marine Park Drive and Shuswap Street N. downtown. This would require removing parking and loading on the north side of Lakeshore Road through downtown. Lower cost and quick build implementation techniques can be used to implement the protected bicycle lane component of the project.

Lakeshore Drive downtown is also an important pedestrian corridor and opportunities to provide additional pedestrian crossing locations were also identified. The City will conduct a corridor study of Lakeshore Drive between 10 Avenue NE and Shuswap Street to identify to plan for cycling and pedestrian facilities.

**Project D: Shuswap Street Bicycle Route**. Provide a comfortable cycling facility on Shuswap Street between Lakeshore Road and Foothill Road This would require removing parking and loading on sections of Shuswap Street.

**Project E: 10 Avenue SW Multi-use Pathway.** Provide a multi-use pathway on 10 Avenue SW between Shuswap Street and the pathway installed as part of the Highway 1 project, providing a shared walking and cycling facility on one side of the street. Project E would connect to the exiting facility adjacent to the highway and continue to 50 Street SW creating a continuous connection between 50 Street SW and downtown via Shuswap Street (Project D).

**Project F: Fill Neighbourhood Sidewalk Gaps.** There are several locations where an existing sidewalk ends and people walking, and rolling are required to either cross the street or move onto the roadway. This project would fill in missing sidewalks to provide continuous accessible routes for people walking and rolling.

**Project G: 20 Avenue SE Multi-use Pathway and Sidewalk Connections to Hillcrest School.** Provide a multi-use pathway on 20 Avenue SE and fill in the gap in the sidewalk network on 20 Street SE to provide a continuous connection to Hillcrest School and along 20 Avenue to Shuswap Memorial Cemetery Trails.

**Project H: 10 Avenue SE Multi-use Pathway.** Provide a multi-use pathway on one side of 10 Avenue SE between 30 Street SE and the South Canoe Trails providing a walking and cycling connection beside the roadway.

**Project I: 30 Street NE School Connector.** Multi-use pathway and intersection improvements. Provide a multi-use pathway on one side of 30 Street SE and improve intersections for active transportation along the corridor.

**Project J: Hillcrest/South Broadview Active Transportation Connection Feasibility Study.** In advance of the installation of the Auto Road Connector it will be important to explore the feasibility of implementing active transportation facilities on Auto Road and providing an active transportation connection between 30 Street SE and Shuswap Street and into downtown Salmon Arm. The City will conduct a feasibility study and begin the design process to provide walking and cycling facilities along this important connection. The study will explore the preferred north/south corridor(s) providing the preferred connection into downtown. Initial suggestions include exploring an interim route using neighbourhood streets (3 Street SE, 4 Street SW, and 6 Street SE) to access Old Auto Road.

**Project K: West Bay Connector Trail.** This project will provide a trail connection between Salmon Arm to Trappen. This will provide an alternative active transportation route separated from Highway 1 and the railway. This project is a partnership between several groups, including Neskonlith Band, Adams Lake Band, City of Salmon Arm, Columbia Shuswap Regional District, Interior Health, CP Rail, the Province of BC, Switzmalph Cultural Society, and the Shuswap Trail Alliance. The City is committed to continuing to support this project. A study is currently underway and the City has committed capital funding to support implementation, as a result no additional capital funding has been included in the cost estimate for the priority projects.

**Based on input received throughout the study the top four active transportation projects were :**

- Project B: Downtown to Uptown Connection
- Project C: 20 Avenue & Lakeshore Road Downtown Connection
- Project F: Fill Neighbourhood Sidewalk Gaps
- Project A: Canoe Beach Drive - Multi-use Pathway

These projects, particularly Project B, C, and A accommodate both pedestrians and cyclists and are great candidate projects for cost share and grant programs. For Projects B and C, the City has already been exploring design options and completed public engagement for components of these projects separately. High-level cost estimates for these projects are provided in the cost estimate section below.

# MAJOR PROJECTS – PRIORITIES

- Existing Underpass
- Future Underpass
- Trail Head
- Long-Term Active Transportation Network
- Existing Trails
- Proposed Trails
- Sidewalk
- Municipal Boundary
- Highway
- Railway
- School
- Park / Protected Area
- Industrial Area
- Commercial Area
- Forest Reserve
- ALR
- First Nation Reserve

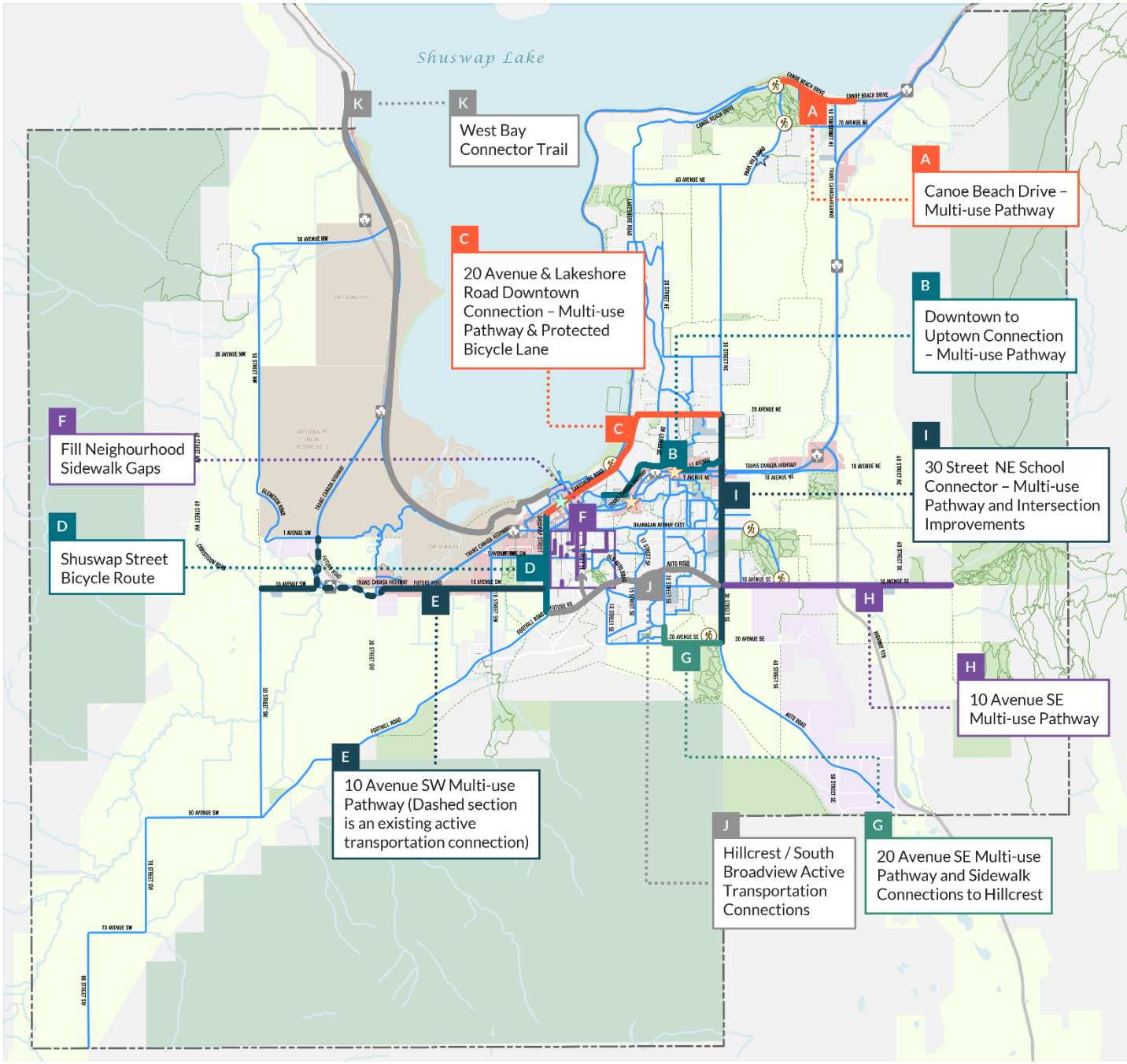



*Figure 17: Priority Infrastructure Projects*

### *Supporting Projects*

In addition to the infrastructure projects listed above, several other priority projects that can help to encourage more trips by walking, rolling, and bicycling are outlined below.

- **Use rapid implementation techniques and lower cost materials** to implement the major projects listed above and the long-term active transportation network. This can involve using treatments like plastic bollards (delineator posts), planters, precast concrete curbs, and paint to delineate space for people walking and cycling on roadways. This can be done to provide cycling, multi-use, or pedestrian spaces. In most cases, this will require removing parking or reducing the width of motor vehicle lanes. The City will require capital dollars to purchase these materials and operations budget for implementation and ongoing maintenance.

- **Formalize trail connections to schools.** As outlined under Action 5 (implement new and upgrade existing trail connections as outlined in the Active Transportation Network Plan), the City and the Shuswap Trail Alliance will work with the school district to formalize trail connections to schools and upgrade trails to enhance accessibility so they can be used by people rolling.
- **Intersection improvements at City intersections.** As outlined under Action 7 (monitor and address pedestrian and bicyclist safety concerns at intersections) there were several intersections that were identified as high priority locations to address safety concerns. This can include repainting crosswalks, relocating signage, shortening crossing distance, installing raised crossings, upgrading curb ramps, providing new traffic control, etc. A list of locations is provided under Action 7. Improving intersections under MoTI's jurisdiction was also identified as a high priority, the City will prioritize discussions with the province and present ideas to enhance intersections for people walking, cycling, and rolling.
- **Explore reducing speed limits on local streets.** As outlined in Action 21, communities throughout BC have been reducing speed limits on local/residential streets to improve safety for people walking and cycling. The City will explore opportunities to reduce speed limits on all local streets or in designated neighbourhoods.
- **Sign and identify the best routes to get around by walking, rolling, and cycling.** Add more information signage along roads and at trails that connect to key destinations and are accessible for people using active modes. This would include information about distance/time to destinations, if the route is accessible for most, etc.

  On local streets with low volumes and speeds, adding bicycle route signage may be all that is needed to create a designated bicycle route. If motor vehicle speeds are high, traffic calming treatments like speed humps, raised crosswalks, curb extensions, traffic circles, decorative pavement markings can be used to lower speeds. The City can install signage and implement traffic calming on local streets to create designated active transportation routes.

## Quick Build Techniques and Strategies

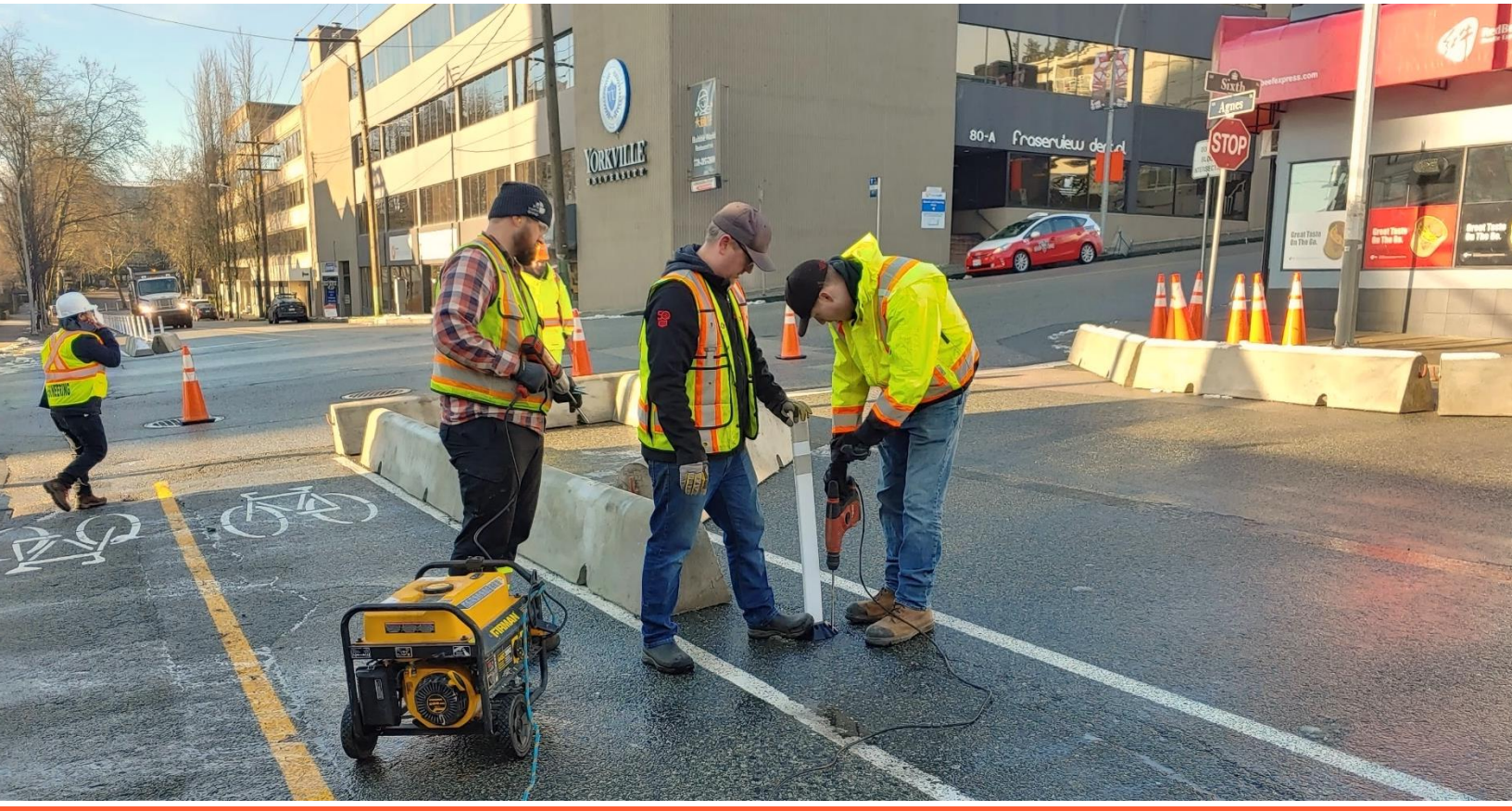
Over the past several years, cities across Canada and throughout the world have increasingly shifted their approach to delivering cycling infrastructure by following a rapid implementation or quick build approach.

Rapid implementation facilitates an urgent response to a range of critical issues facing our communities as outlined above, including climate action, social inequity, public health, road safety, congestion, and increasingly constrained municipal budgets.

Rapid implementation of active transportation infrastructure provides the opportunity to quickly change the function of a street with temporary or low-cost, flexible materials, meaning a faster and more cost-effective active transportation route or network. It also allows for on the ground design adjustments, acting as an interim period prior to implementing more permanent materials if desired. Ultimately, it is another tool for cities to act quickly, leave room to make modifications as the need arises, and do so in the most cost-effective way possible.

Rapid implementation enables the delivery of AAA active transportation infrastructure—as well as comprehensive active transportation networks—all at once and at a lower cost than traditional methods.

While rapid implementation projects can be implemented relatively quickly using low-cost materials, this does not mean that they are lower quality than traditional projects. These projects follow best practices in AAA design. Depending on the materials selected, rapid implementation can provide a high degree of physical separation using durable materials, creating a AAA facility that can last for several years. These projects can also create opportunities for amenities, activation, and beautification, resulting in more vibrant, attractive, people-first streets.



Rapid implementation projects include several key elements:


Rapid implementation projects can be implemented relatively quickly, often in a matter of days or weeks. Because they often do not require significant capital construction, they may not require time-consuming design and tendering processes and can often be installed by City crews. This can also help minimize construction impacts on a community.


Rapid implementation projects make use of lower-cost materials such as flexible delineator posts, curbs, landscaped planters, or concrete barriers. These projects also typically occur within the available curb space and require minimal capital construction.


Materials used for rapid implementation projects are flexible and adjustable. This approach recognizes that, as design professionals, we do not always have all the answers. This provides the opportunity to pilot, monitor, and adjust designs as needed, based on lived user experience

There are two types of All Ages and Abilities cycling facilities that are generally considered for rapid implementation projects – protected bicycle lanes and neighbourhood bikeways. Both facility types can be implemented using a range of materials, as shown below.

It is important to note that while these options can be lower cost, ensuring that there is equipment and resources available to maintain the facilities will be important to ensure the success of the project. Poorly maintained routes that aren't appealing to potential users and critics can make it more challenging to implement future projects.

## Cost Estimates

### *Unit Costs*

The ATNP includes order-of-magnitude capital cost estimates and ongoing operating and maintenance cost estimates for the implementation and maintenance of active transportation corridor routes. The cost estimates presented below are based on typical unit costs and recent construction and operation and maintenance pricing in the within British Columbia. The unit costs that were used as the basis to generate cost estimates are shown in Table 4. Intersection enhancements are also proposed as part of the ATNP, however the specific treatment at crossing locations is context specific and will require additional study. Intersection enhancements can range from $5,000 for a marked crosswalk to $450,000 for a full signal (**Table 5**). Grade separated structures, overpasses and underpasses, can vary in cost depending on several variables and can range significantly from $2 to $8 million dollars or more.

*Table 4: Corridor Treatment Capital and Operating Unit Costs*

| Facility Type | Capital Cost (per km) | Assumptions | Annual Operating and Maintenance Unit Cost (per km) – year-round maintenance |
|---|---|---|---|
| **Neighbourhood Bikeway** | $40,000 | Assuming improvements limited to signage, pavement markings, and speed humps. Excludes property impacts and property acquisitions. | $2,000 |
| **Protected Bicycle Lane (within curb width)** | $250,000 | Assuming road space reallocation, new pavement markings, and lost cost buffer separation. Excludes property impacts and signal modifications. | $50,000 |
| **Protected Bicycle Lane (widening required)** | $1,250,000 | Excludes property acquisition. | $50,000 |
| **Multi-use Pathway Adjacent to roadway (new)** | $500,000 | Assuming no curb and gutter or drainage modifications required. Excludes lighting and property impacts. | $10,000 |
| **Multi-use Pathway Adjacent to roadway (utility relocation /drainage required)** | $1,000,000 | Excludes property acquisition. | $10,000 |
| **Off Street Trail (unpaved)** | $150,000 | Stonedust or other granular materials, typically 2 to 3 metres wide. | $1,500 |
| **Sidewalk (curb and gutter)** | $870,000 | Excludes property acquisition. | $1,000 |
| **Separated shoulder – Shared walking & bicycling space** | $250,000 | Assuming road space reallocation and lost cost buffer separation. Excludes property impacts and signal modifications. | $2,000 |

*Table 5: Intersection Treatment Capital Cost*

| Intersection Enhancement | Cost Per Location |
|---|---|
| **Marked Crosswalk (one crosswalk)** | $2,500 to $5000 |
| **Rectangular Rapid Flashing Beacon (RRFB) / Enhanced Crosswalk** | $20,000 to $75,000 |
| **Full Signal (four-way traffic signal)** | $250,000 to $450,000 |
| **Curb Extensions (one side of crossing)** | $10,000 to $20,000 |

The cost estimates have been provided to identify the relative cost for planning purposes and should not be used for budgeting purposes. Additional costs not included in these cost estimates can be significant including, detailed project design, retaining walls, utility pole removal or replacement, etc. As a result, at locations where these types of treatments are required the cost per kilometre will be significantly higher.

The City will continue to seek out new opportunities to work with developers, other agencies, and levels of governments to establish cost-sharing agreements, or to seek grant opportunities to offset total project costs. Cost estimates have been developed for facilities on City-owned roadways.

As seen above in **Table 4**, there is a range of costs associated for each of the different facility types depending on the materials used and the existing conditions. The proposed active transportation network is approximately 220 kilometres. Broken down by mode, this is approximately 112 kilometres of proposed bicycling facilities adjacent to existing roadways, 37 kilometres of pedestrian facilities adjacent to roadways, and over 63 kilometres of trails. **Table 6** outlines the length of the proposed network by facility type including more details about the road classification of the proposed bicycling facilities.

For the long-term network, an average unit price for the preferred facility type for the corridors and projects identified was used to provide a cost estimate for the plan. As summarized in **Table 6**, the total cost to implement all recommended active transportation network improvements (excluding intersection projects) is approximately $90 million (excluding routes on MoTI roadways). It is recognized that this network will be implemented in phases and there will be opportunities to implement the active transportation network as part of other City and development projects.

There are 20 kilometres of priority projects as identified in **Figure 17**, it is anticipated that these projects will cost approximately $17 million as seen in **Table 7**. This includes assumptions that rapid implementation techniques will be used for portions of the network. These are the projects the City will focus on implementing over the immediate, short, and medium-term.

*Table 6: Cost Estimate Proposed Long-Term Active Transportation Network*

| Facility Type | Kilometres (km) | Cost Estimate |
|---|---|---|
| **Pedestrian Facilities*** | 37 | $32,000,000 |
| **Proposed Trail (Unpaved)** | 63 | $11,000,000 |
| **Bicycling Facilities (by road classification)** | | |
| **Multi-use Pathway (MoTI Routes)** | 17 | $17,000,000 |
| **Multi-use Pathway or Protected Bicycle Lane (Urban Roadways - Arterial or Collector)** | 33 | $31,000,000 |
| **Multi-use Pathway or Separated Shoulder (Rural Roadways - Arterial or Collector)** | 29 | $14,000,000 |
| **Neighbourhood Bikeway (Local Roadways)** | 33 | $1,400,000 |

**9.1 km of the proposed pedestrian facilities are also identified on the long-term bicycling network and could be filled by multi-use pathways or other shared walking and cycling facilities*

*Table 7: Cost Estimate Priority Infrastructure Projects*

| Project | Kilometres (km) | Cost Estimate |
|---|---|---|
| **Project A: Canoe Beach Drive** | 1.1 | $600,000 |
| **Project B: Downtown to Uptown Connection** | 2.0 | $2,000,000 |
| **Project C: 20 Avenue & Lakeshore Road Downtown Connection** | 3.2 | $2,900,000 |
| **Project D: Shuswap Street Bicycle Route** | 1.4 | $400,000 |
| **Project E: 10 Avenue SW Multi-use Pathway** | 2.8 | $2,800,000 |
| **Project F: Fill Neighbourhood Sidewalk Gaps** | 2.6 | $2,300,000 |
| **Project G: 20 Avenue SE Multi-use Pathway and Sidewalk Connections to Hillcrest School** | 1.0 | $1,000,000 |
| **Project H: 10 Avenue SE Multi-use Pathway** | 3.2 | $1,700,000 |
| **Project I: 30 Street NE School Connector** | 3.2 | $3,400,000 |
| **Project J: Hillcrest/South Broadview Active Transportation Connection Feasibility Study (No Capital Cost)** | – | $150,000 |
| **Project K: West Bay Connector Trail** | - | Previously allocated |
| **Total** | **20.56** | **$16,850,000** |

## Implementation Resourcing and Funding

As noted above, implementing the ANTP will require significant investment and resources. This includes staff resources and new equipment and materials for implementing and maintaining the active transportation network.

**Ensure staff resources are available to implement the ATNP.** Implementation of the ATNP will not only require capital resources, it will often require additional staff resources to implement the various actions identified. Dedicated bicycle and pedestrian program coordinators are common in North American cities and, along with other transportation engineers, planners and communications specialists, staff resources are a critical part of creating walkable and bikeable cities. Planning and design support, whether as a designated staff position and/or through the hiring of consultants, can help to ensure the ATNP is implemented in a timely coordinated manner.

**Invest in the equipment needed to adequately maintain facilities in all seasons.** Winter maintenance is an important consideration in Salmon Arm, especially when snow and ice is combined with steep topography. Proactive (applying de-icing material before an expected snow event) and reactive (plowing and de-icing after the snow event) winter maintenance are two possible strategies, with proactive maintenance helping to reduce de-icing and snow clearing needs. Several de-icing materials are available, including road salt, pre-wetted salt, sand and gravel, and de-icing additives such as beet juice and cheese brine.

Collaborate with operations and maintenance staff to understand their equipment and staffing needs based on any new active transportation facility types and treatments. Truck-mounted plow blades can work in many applications, including neighbourhood bikeways. However, specially designed, right-sized equipment is also available to sweep and clear protected bicycle lanes and multi-use facilities. Several manufacturers make this equipment, such as Bobcat, Multihog, Holder, and Trackless. There are a variety of attachments that can help

### *How are Other Communities Implementing Their Active Transportation Plan.*

Communities throughout the province have been implementing their active transportation plans through a combination of allocating dollars through capital planning programs, through grant and cost share initiatives, funding support from regional districts, development projects, and more. Details about these different funding strategies can be found in the section below.

In terms of capital planning and budgeting programs, communities will often allocate a set amount in their annual budget specifically for the implementation of active transportation projects. Communities may allocate funding based on a specific project planned for that year.

For example, in 2022 the District of Squamish allocated $800,000 to active transportation improvements. The City of Whitehorse allocates $50,000 annually for sidewalk projects and in 2022 allocated another $1.4 million to two specific active transportation projects.

In 2021, the City of Nelson received approximately $200,000 in conditional grants for transportation projects which assisted in their implementation of the Third Street Bicycle Route.

In 2022, the District of Saanich allocated $1.9 million in short term solutions to advance the active transportation plan implementation and another $3.7 million to install new sidewalks.

with de-icing, sweeping, and plowing bicycle lanes and pathways. One machine typically costs around $200,000 to $300,000 depending on which attachments are required.

## Funding Strategies

To maximize value and benefit, the ATNP identifies potential funding strategies and sources that the City may consider supporting the implementation of the active transportation network, amenities, and policy and development improvements. The City will regularly check with all levels of government to keep up to date on current funding opportunities and should actively pursue all available sources of funding.

Note: as funding opportunities change regularly, the information in this section is subject to change.

### *Local*

The City will incorporate the recommendations from the ATNP into its short-, medium-, and long-term budgeting plans to ensure that the active transportation network is accounted for in the capital planning process. To accommodate this, the City will need to make changes to its capital budget to fund the implementation. The City will also seek to integrate transportation improvements with other capital projects, such as road renewals and utility projects.

The City has a Development Cost Charges (DCC) Bylaw that should be updated to include projects identified in the ATNP. It should be emphasized that DCC eligible projects should not only include street network projects but can also include active transportation projects that benefit new growth in the community.

An important component of the implementation of the ATNP will be the City's ability to leverage transportation investments during planning of new development projects. Some ways in which transportation investments can be leveraged through developers include:

- Public realm improvements;
- Community amenity contributions;
- Density bonusing contributions;
- Funding in lieu of parking; and
- Providing high quality bicycle parking facilities.

**Community groups and organizations** will also support the implementation of the ATNP. Programs such as 'adopt-a-rack' (bicycle parking), trail maintenance and clean up, bicycle training, celebration events, and parades, can all be led by interested members of the community. The Shuswap Trail Alliance has been an important partner of the City and has initiated countless active transportation projects.

**Private Sector and Service Clubs.** In addition, to support residents and businesses, many corporations wish to be good corporate neighbours — to be active in the community and promote environmentally-beneficial causes. Bicycle routes and multi-use trails are well-suited to corporate sponsorship and have attracted significant sponsorship both at the local level and throughout North America. In many communities, service clubs (such as the Rotary Club) have been involved in funding and building bicycle infrastructure and facilities, including pathways and bicycle parking. In the past, Salmon Arm's Rotary Club has made important contributions to the community's active transportation network.

### *Provincial*

The Provincial Government administers the **Active Transportation Infrastructure Grant** program (previously known as BikeBC) which promotes new, safe, and high-quality active transportation infrastructure through cost-sharing with local governments. Funded projects promote active transportation to work, school, or errands. Funded projects can also generate tourism-related traffic based on their proximity to amenities and points of interest for tourists and through linkages to other communities. To ensure maximum success at obtaining grant funding. The Downtown to Uptown Connection project is a great candidate for a capital funding application, as is the Lakeshore Road multi-use project.

The Province provides cost-share funding of up to $500,000 per project. Funding is offered based on applicant's community profile. Indigenous governments or partnership between local government(s) and an Indigenous government may apply for up to 80% of total projects. Municipal or regional governments may apply up to 70% of total eligible project costs depending on the community's population size.

**Local Government Climate Action Program**

The Local Government Climate Action Program (LGCAP) provides local governments with funding to support the implementation of local climate actions that reduce emissions and address the impacts of climate change. The intent of the LGCAP is to help the province achieve the legislative climate targets and the goals outlined in the CleanBC Roadmap to 2030. The City has used this program to install projects that focus on promoting a shift in travel modes and lighting projects.

**Union of BC Municipalities' Community Works Fund** is one of three funding streams of the Renewed Gas Tax Agreement between Canada, British Columbia, and the Union of BC Municipalities. The fund provides predictable, long-term, and stable funding to local governments for investment in infrastructure and capacity building projects. Project examples include public transit, active transportation, parks, trails, bicycle facilities, cultural infrastructure, and long-term infrastructure plans. Funding is delivered twice annually to local governments, with the amount of funding determined by a per capital formula. More information can be found online at: https://www.ubcm.ca/funding-programs/canada-community-building-fund/community-works-fund

**ICBC** provides funding for road improvements, including pedestrian and bicycle infrastructure, particularly where these have the potential to reduce crashes, improve safety, and reduce claims costs to ICBC. Funding is available through ICBC's Road Improvement Program. Other ICBC programs include the Speed Watch Program (through the Community Policing Centres), Speed and Intersection Safety Program, Counter Attack, Operation Red Nose and Road Sense Speaker Program for Schools. Funding is available annually, with the application deadline typically in February. More information can be found online at: www.icbc.com/about-icbc/community-relations/Pages/community-grants.aspx.

### *Federal*

**Green Municipal Funds** are managed by the Federation of Canadian Municipalities, with a total allocation of $550 million. This fund is intended to support municipal government efforts to reduce pollution, reduce greenhouse gas emissions, and improve quality of life. The expectation is that knowledge and experience gained in best practices and innovative environmental projects will be applied to national infrastructure projects. The *Transportation Networks and Commuting Options* funding stream covers "Plans and Strategies, Studies, Pilot Projects, Capital Projects, Signature Initiatives." It is designed to support Canadian communities to develop transportation systems and networks that will encourage people to switch to less-polluting transportation options.

FCM funding is available annually. Funding ranges from maximum $175,000-$500,000 up to 50% of eligible costs. Municipalities and partners with 20,000 people or less may qualify for grants of up to 80%. Loans between $5M-$10M cover 80% of project costs with a grant of up to 15% of the loan. More information can be found online at: https://fcm.ca/en/funding.

**Infrastructure Canada** manages several programs that provide funding for environmental and local transportation infrastructure projects in municipalities across Canada. In 2021, Infrastructure Canada announced a first-of-its-kind national active transportation grant program aimed at improving active transportation access across the country by supporting planning and capital projects. The program provides 100% funding for plans to a maximum of $50,000 and more for capital works, provided they are identified and supported through existing policy. Capital projects for Municipal applicants can be funded at a level of 60%. Projects involving Provincial assets are funded to 40%. Future intakes of this fund are anticipated annually. More information can be found online at: https://www.infrastructure.gc.ca/trans/index-eng.html

## Monitoring Strategy

Measuring success of the ATNP means monitoring how well the City is working towards achieving the goals, strategies, and actions of the plan. An approach to measuring success must include a monitoring and reporting plan that is:

- **Meaningful.** Monitoring should show meaningful results and point to where success is being achieved towards the goal, strategies, and actions within the ANTP.
- **Measurable.** Monitoring needs to establish clear criteria that are measurable and for which data or information can be readily obtained.
- **Manageable.** Monitoring implementation should consider resource limitations and identify measures where information is accessible, and data is simple to collect.

The following section outlines the type of data that should be reviewed and monitored to understand how well the City is working towards achieving the goal of the ATNP and encouraging more people to walk and bicycle within Salmon Arm. Data, including Census data, ICBC, RCMP, and the City's inventory of existing facilities already exists, but it will be important to ensure that as new infrastructure projects are implemented the City's database is updated.

*Table 8: Metrics of Success*

| Key Performance Measure: | Metric | Data |
|---|---|---|
| **Increase the rates of people walking, bicycling, and taking transit in Salmon Arm and decreased rates of motor vehicle use.** | Walking, bicycling, and transit mode share (%) | Statistics Canada |
| | Walking and bicycling volumes on key corridors (#) | Count Data (automatic counters can be installed as part of new projects) |
| **Reduced probability of serious injury and death for users.** | Number of collisions involving people walking and cycling (#) | ICBC, RCMP, Interior Health |
| | Number of fatal collisions involving people walking and cycling (#) | ICBC, RCMP, Interior Health |
| | Proportion of all collisions involving people walking and cycling (%) | ICBC, RCMP, Interior Health |
| | Proportion of all fatal collisions involving people walking and cycling (%) | ICBC, RCMP, Interior Health |
| **Build an active transportation network of facilities that are accessible for people of all ages and abilities.** | Total length of bicycling network (by facility type) (total km) | Salmon Arm |
| | Total km of AAA bicycling network (by AAA facility type) (total km) | Salmon Arm |
| | Proportion of Salmon Arm's total jobs and population within 400 meters of the AAA bicycling network (% of City) | Salmon Arm |
| | Proportion of Salmon Arm's urban land area (within the Urban Containment Boundary) within 400 meters of the AAA bicycling network (% of City) | Salmon Arm |
| | Proportion of Salmon Arm's total land area within 400 meters of the bicycling network (% of City) | Salmon Arm |
| | Total length of pedestrian network (total km) | Salmon Arm |

| | | |
|---|---|---|
| | Proportion of streets with a pedestrian facility on at least one side (% of streets by road classification) | Salmon Arm |
| **Create a culture for active transportation.** | Number of schools within Salmon Arm that have completed Active and Safe Routes to School Programs (#) | Salmon Arm |
| | Number of annual walking and cycling events including infrastructure grand openings (#) | Salmon Arm |
| | Number of wayfinding displays (#) | Salmon Arm |

# 5.0 CLOSING

The ATNP provides a comprehensive approach to guide Salmon Arm's progress and investments in active transportation over the next 20 years and beyond. The ATNP includes recommendations for improving policies, standards, infrastructure, and programs over the long-term, along with priorities over the immediate-term and short-term. The ATNP will contribute to increased transportation options by improving the accessibility, comfort, convenience, and safety of active transportation.

The ATNP is just one step towards implementing the vision for walking and cycling in Salmon Arm, and it is not the last. The themes and actions identified in the ATNP are intended to lay the groundwork for implementation over the long-term. However, it is important to recognize that implementation will require investment and resources. This includes investments in new infrastructure, upgrades to existing infrastructure, ongoing maintenance of existing and new facilities, resources for development of new standards and policies, funding for new programming and public education, and staff resources. It will also require ongoing coordination between local planning processes and between various stakeholders and levels of government, especially when it comes to implementing inter-jurisdictional projects.

The ATNP has been developed based on extensive technical work and engagement with Salmon Arm residents. Through this public engagement process, thousands of community members provided input into the development plan at various phases. The City of Salmon Arm would like to thank all community members for their participation in the process and valuable input developing the ATNP.