



ACTIVE TRANSPORTATION PLAN

CITY OF CHILLIWACK

AUGUST 2022



PREPARED FOR:



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1.0 INTRODUCTION

Located on the traditional, ancestral, and unceded territory of the Stó:lō Coast Salish peoples, Chilliwack is a growing community of over 100,580 people that includes a vibrant urban core, family-oriented neighbourhoods, rural areas with abundant agriculture, and access to beautiful natural areas and trails. As the community continues to grow, there is a need to provide a greater range of mobility options that improve sustainability and provide access for all.

With guidance from community residents, the City has created this **Active Transportation Plan** to help guide investments in active and sustainable transportation to support a more balanced transportation system—one that is more accessible, cost-effective, and efficient in terms of infrastructure investments. This Plan aligns with the Province of B.C.'s Active Transportation Strategy, which lays out a vision for an integrated, safe, and accessible active transportation system throughout the province.

1.1 WHAT IS ACTIVE TRANSPORTATION?

Active transportation refers to all forms of human-powered transportation that move people and goods to and from destinations. Walking – including people using personal mobility devices such as wheelchairs and mobility scooters – and cycling are the most popular forms of active transportation, but it can also include skateboarding, scootering, and in-line skating. Electric micromobility devices such as e-bikes, e-scooters, and other small, one-person electric vehicles are also an increasingly popular means of travel that often share the same spaces as bicycles and other active transportation users.

Promoting walking and rolling as attractive and convenient transportation choices can help reduce automobile dependence, increase physical activity levels, improve public health, reduce infrastructure demands, and create a more livable and vibrant community.

FOCUS AREA: WALKING

This Active Transportation Plan focuses on the walking-related components of active transportation, including sidewalks, multi-use pathways, crossings, and other related infrastructure and policy improvements that will make it safer and easier to travel by foot or personal mobility device. Cycling is less of a focus because a long-term vision has already been established. The City completed a **Cycle Vision Plan** in 2017 that identifies where Chilliwack should prioritize future cycling infrastructure. People rolling using skateboards, scooters, in-line skates, and electric micromobility devices typically use the same facilities as people cycling, meaning their needs are largely covered in the Cycle Vision Plan as well. Where these two plans overlap is around multi-use pathways, which can be used by all active transportation users.

People walk for a variety of reasons, such as transportation to school, work, and to run errands; to connect to transit; and for recreation and exercise. This includes people walking dogs or pushing strollers, jogging, and meeting up with friends. This Plan covers all these trip purposes, aiming to create a long-term walking network that supports the needs of people of all ages and abilities.

1.2 BENEFITS OF ACTIVE TRANSPORTATION

There are significant benefits associated with investing in active transportation, including the following:

Environment

Transportation is one of the largest sources of greenhouse gas (GHG) emissions in Chilliwack and throughout the province. Active transportation contributes significantly less GHG emissions than motor vehicles, which is why increasing active transportation mode share is a key component of regional, provincial, and federal strategies to address the climate crisis. This is especially important in the wake of the severe weather events that impacted Chilliwack in 2021, which underline the need for urgent action. Trails and walking paths can also allow for the preservation of green space, reduce overall spatial requirements associated with roads and parking facilities, and contribute to resilient and sustainable transportation systems.

Economic

The local economy stands to benefit from an increase in pedestrian activity, particularly businesses in Chilliwack's urban core. Improved active transportation infrastructure presents new recreational and tourism opportunities that support local business. Additionally, active transportation is generally less expensive than larger road infrastructure investments, representing a more cost-effective use of public funds. Further, the cost to purchase and maintain a vehicle is typically a much more expensive approach to personal transport as compared to active transportation options, meaning there are financial benefits for individuals, local businesses, and the City as a whole.

Health

Active transportation is an affordable and accessible way for people of all ages and abilities to exercise, contributing to increased activity levels and healthier communities. Regular physical activity reduces the risk of early death and numerous chronic diseases. Active transportation also helps reduce stress levels, reduce air pollution stemming from motor vehicle emissions, and can increase opportunities for face-to-face interaction, which helps improve social connectedness and combat social isolation. For all these reasons, active transportation can be transformative for both physical and mental health.

Equity

Equity means striving for a just and fair society where all people can participate and reach their full potential. Many intersecting factors – including race, gender, sexual orientation, income, age, ability, religion, and others – influence a person's well-being and access to resources, opportunities, and services such as transportation. Addressing structural inequities and ensuring communities are healthy, vibrant, diverse, and inclusive for all requires focusing on equity priority groups who are often more reliant on transit and active transportation, including children, older adults, people who cannot afford a car, and people with physical, sensory, or cognitive disabilities that prevent them from driving. A lack of safe, reliable, and accessible transportation infrastructure often disproportionately impacts the health, safety, and opportunities of these groups. Investments in active transportation create a more equitable transportation system that can be utilized by a broader range of community members, allowing more people to pursue economic and social opportunities.

Safety

Providing dedicated, properly designed facilities for walking and rolling can create a safer transportation system for all road users by enhancing people's visibility within the roadway and

decreasing the chance of collisions. Increased use of active travel modes can also lead to fewer vehicles on the road and decreases road safety concerns.

1.3 PLANNING PROCESS

The Active Transportation Plan kicked off in April 2021 and was developed over approximately one year. The planning process included an assessment of the existing active transportation network, a review of background documents, and technical analysis by City staff and consultants to inform the network plan and identify policy and practice updates. This included examining the City's Land Development Bylaw, reviewing the City's crosswalk installation methodology, and prioritizing where sidewalks and other walking facilities should be built.

The plan was informed by feedback from City committees and community members. The first round of community engagement occurred from June 17 to October 15, 2021, and focused on identifying local active transportation barriers, challenges, and desires. Due to Provincial Health Orders (PHO) regarding the COVID-19 pandemic, initial portions of the engagement took place on the City's Engage Chilliwack online platform.

Once PHO restrictions eased in August, staff coordinated pop-up activities at various locations throughout the community, including the Chilliwack Fair, Downtown Market, Pride Festival, and several other events and locations. A summary of public participation numbers is provided in **Figure 1**. After community engagement was complete, the results were analyzed and incorporated into the planning process to create a draft Active Transportation Plan, including preparing an implementation plan with cost estimates. A second round of community engagement was completed in spring 2022, where the draft plan was presented for feedback. This round of engagement is summarized in more detail below.



Figure 1: Phase 1 Community Engagement Participation Summary

1.4 COMMUNITY ENGAGEMENT SUMMARY

In developing an inclusive and well-informed Active Transportation Plan, community participation was essential. This included hearing from residents how they move as they go about their daily routines, how they would like to move in the future, and what their priorities are when it comes to active transportation. As outlined above in **Figure 1**, the City's Phase 1 Active Transportation Survey received 381 responses, in addition to further engagement through pop-up events, committee meetings, a mapping exercise, and hundreds of face-to-face and phone conversations.

Key findings from round one of the community engagement process are summarized below. A full summary of the engagement process is provided in **Appendix A**.

- **People mostly feel safe walking in Chilliwack.** 71% of respondents feel mostly or very safe when walking in Chilliwack and over 60% of people describe themselves as either “strong and fearless” or “confident and enthused” pedestrians. However, nearly a quarter of respondents said they feel mostly or very unsafe, meaning there is work to be done.
- **The lack of infrastructure is a significant barrier to walking in Chilliwack.** When asked about the biggest barrier to walking more often, 15% of people said it's the lack of sidewalks and pathways. When asked where to direct transportation investment, 19% of residents said to build more sidewalks, while another 13% want more paved trails or multi-use pathways.
- **Maintenance is another major barrier to walking.** The top suggestion for directing transportation investment was to improve maintenance on existing sidewalks and pathways (24%). It was found that the condition and accessibility of existing walking facilities also discourage people from walking in Chilliwack.
- **Improved intersections, accessibility, and amenities are important.** Intersection safety, poor lighting, and a lack of rest areas also serve as barriers to walking. Approximately 10% of respondents want to invest in more amenities like benches and water fountains at locations throughout the city, including along walking and cycling routes and at transit stops. Respondents also want investment in intersection upgrades, including lighting, crossings, and signals. Accessibility improvements such as curb cuts, tactile paving, and wider sidewalks were also selected by a small percentage of respondents.
- **Improvements are needed throughout the city.** Chilliwack Proper (24%), South Sardis/Vedder (19%), and North Sardis (13%) were the top requests for neighbourhoods needing active transportation improvements. When factoring in where respondents live (and assuming that people often want improvements in their own neighbourhood), there were additional improvement requests in North Sardis, Yarrow, Greendale, Rosedale, Fairfield Island, and on Indigenous lands.
- **Residents are willing to invest more in sidewalks.** Nearly 60% of respondents are comfortable increasing the annual sidewalk budget, 29% want it left the same, and only 12% want it decreased.
- **Respondent Demographics:** Over 86% of respondents are residents of Chilliwack, and they predominantly live in Chilliwack Proper, South Sardis/Vedder, North Sardis, and Promontory, although responses came from people throughout the city. More men (59%) than women (38%) responded. Over half were above the age of 45 and 25% were older than 65. Over half are employed, 28% are retired, and 6% are business owners. 30% of respondents noted having a physical or cognitive disability that impacts their use of active transportation facilities. 85% identify as white, while 10% identify as Indigenous (5%) or other ethnic background (5%). 88% own a vehicle.

Phase 2 of community engagement focused on collecting feedback on the draft Plan, confirming recommendations and the approach to prioritization. The City's Phase 2 Active Transportation Survey received 178 responses, in addition to further engagement through 10 pop-up events, committee meetings, meetings with Indigenous representatives the City had over 250 conversations about the draft Active Transportation Plan.

Key findings from round two of the community engagement process are summarized below. A full summary of the engagement process is provided in **Appendix A**.

- **People in rural areas want to walk as well.** Most residents agreed that their priorities were shown in the pedestrian priority areas outlined in the Plan, with some suburban areas indicating support for their pedestrian priorities to be included.
- **Prioritize connections to popular recreational areas.** Most key destinations were included in the Plan. Through discussions it was found that everyone had different priorities and destinations that were important to them, which created a challenge to track.
- **The active transportation network should be equitable.** Ensuring vulnerable populations were included in the engagement process and as part of the framework for project prioritization was a top priority. While there were some limitations with the equity analysis (census information), focused outreach did occur.
- **The Plan generally reflected the values of community members.** Based on the feedback collected, 72% of people's values aligned with the sidewalk prioritization criteria.

2.0 COMMUNITY OVERVIEW

2.1 CHILLIWACK CONTEXT

LAND USE AND DESTINATIONS

Chilliwack marks the start of the Lower Mainland area and serves as a key urban centre in the Fraser Valley. Located in the floor of the Fraser Valley, Chilliwack maintains a distinct character centered around its fertile agricultural lands and beautiful natural setting, while also serving as a gateway to the Metro Vancouver area. With a 2021 population of 100,580, Chilliwack is one of the fastest growing communities in BC. According to Statistics Canada, Chilliwack's population increased 11.2% between 2016 and 2021, making it the third fastest growing municipality in the province.

Chilliwack is composed of diverse neighbourhoods, with Chilliwack Proper, Sardis, and Vedder forming an urban north-south spine flanked by several rural developed neighbourhoods, including Promontory, Greendale, Yarrow, Chilliwack Mountain, Eastern Hillside, Rosedale, and Ryder Lake. While rural in character, these areas contain small walkable core areas with pedestrian-oriented destinations such as schools, parks, and small commercial areas that warrant consideration for enhanced active transportation facilities. Some of these communities are also built into the steep hillsides surrounding the valley floor, resulting in challenging topography for active transportation users and land development. Between these communities is the fertile agricultural reserve land (ALR), forested hillsides, and riparian systems such as the Chilliwack River.



















Figure 2 shows land use and key destinations in Chilliwack that generate active transportation trips. This includes parks, schools, commercial areas, and key community spaces such as recreation/community facilities, healthcare facilities, libraries, homeless facilities, places of worship, and senior facilities. These locations can generate trips made by active transportation and are important locations for new and enhanced walking infrastructure. Full page versions of the maps included in this document can be found in **Appendix B**.

There are several First Nation communities located throughout the Chilliwack area, as shown on **Figure 2**. Chilliwack is located on the traditional, ancestral, and unceded territory of the Stó:lō Coast Salish peoples. As outlined in the City's 2040 OCP, the Ts'elxwéyeqw Tribe provides the following perspective on Chilliwack:

The City of Chilliwack is within S'ólh Téméxw (Stó:lō Territory), with the largest population of aboriginal people in close proximity to Vancouver. The Ts'elxwéyeqw and Pilalt are the two Stó:lō tribes whose territories are directly associated with the Chilliwack municipal area. Today's Indian Act Bands were established in the late 1800s from some of the many historic villages of these two tribes, including Cheam, Kwaw Kwaw Apilt, and Skwah (Pilalt); and Aitchelitz, Skowkale, Shxwhà:y, Soowahlie, Squiala, Tzeachten, and Yakweakwioose (Ts'elxwéyeqw). Pilalt villages and reserves are located along the Hope River. Ts'elxwéyeqw villages and reserves are located along the Chilliwack River system.

The Active Transportation Plan is designed to meet the needs of all Chilliwack residents, and the diverse urban Indigenous population. The plan considers connections to First Nations communities, but it does not provide any recommendations within First Nations lands, except where the City maintains and operates the roadway through permit.

KEY DESTINATIONS

-  City Hall
-  Hospital
-  Cultural Centre
-  Library
-  Museum
-  Recreation / Community Facility
-  Place of Worship
-  Senior Facility
-  Homeless Facility
-  Downtown Transit Exchange
-  School
-  Commercial
-  Industrial
-  Mixed Commercial and Industrial
-  Park
-  ALR / Forested Area
-  First Nation Reserve Land
-  Municipal Boundary

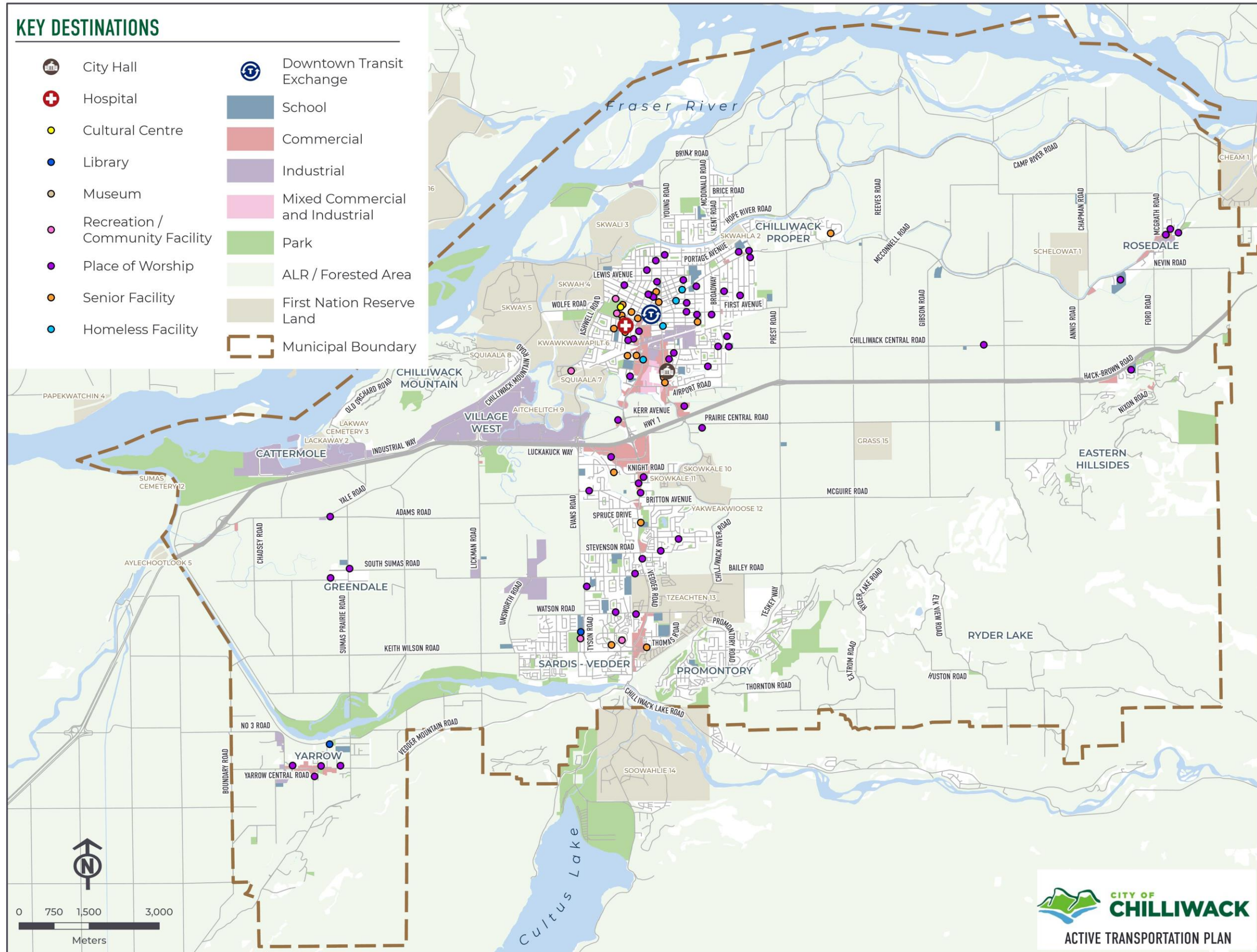


Figure 2: Key Destinations

EQUITY ANALYSIS

A GIS-based equity analysis was used to identify neighbourhoods where there is an opportunity to increase the number of trips made on foot and where there are higher concentrations of equity-priority groups. The analysis used five indicators based on Statistics Canada data from 2016, including the percentage of youth, older adults, recent immigrant populations, Indigenous peoples, and low-income populations. These variables were then combined to determine an overall equity score of 1-5 for each census tract. The highest possible score for a census tract is 25, which would indicate the highest equity need.

Figure 3 shows the results of the equity analysis for Chilliwack. Census tracts in Chilliwack scored from a low of 4 to a high of 22. It should be noted that low populations in certain census districts and in First Nations reserves can skew the data compared to higher population locations. The Fraser River Ecological Reserve, as well as nearby islands and parkland, were excluded from the analysis for this reason.

The areas of highest equity need are the First Nations reserve lands. While this analysis includes First Nations lands, the recommendations in this plan apply only to upgrades of City-owned or operated infrastructure within those jurisdictions, while considering connections to First Nations lands. In some cases, roads through First Nations lands are under the City's jurisdiction, and these have been included in the plan's technical analysis.

Chilliwack's downtown core has a moderate-high equity need, with most of the remaining areas within the urban growth boundary demonstrating a moderate equity need. The rest of the City, including the southwest portion of the Vedder neighbourhood and all rural areas, have a moderate-low equity need.

It is important to note that there are several different methodologies that can be used to look at demographics and neighbourhood need, and this analysis is limited to the information contained within the federal census. The equity-priority groups that are not captured within the census and the formal equity analysis include persons with disabilities, the LGBTQSIA+ community, persons experiencing substance use disorder, and persons experiencing homelessness. These groups have been considered as the network and recommendations in the plan were completed.

EQUITY ANALYSIS

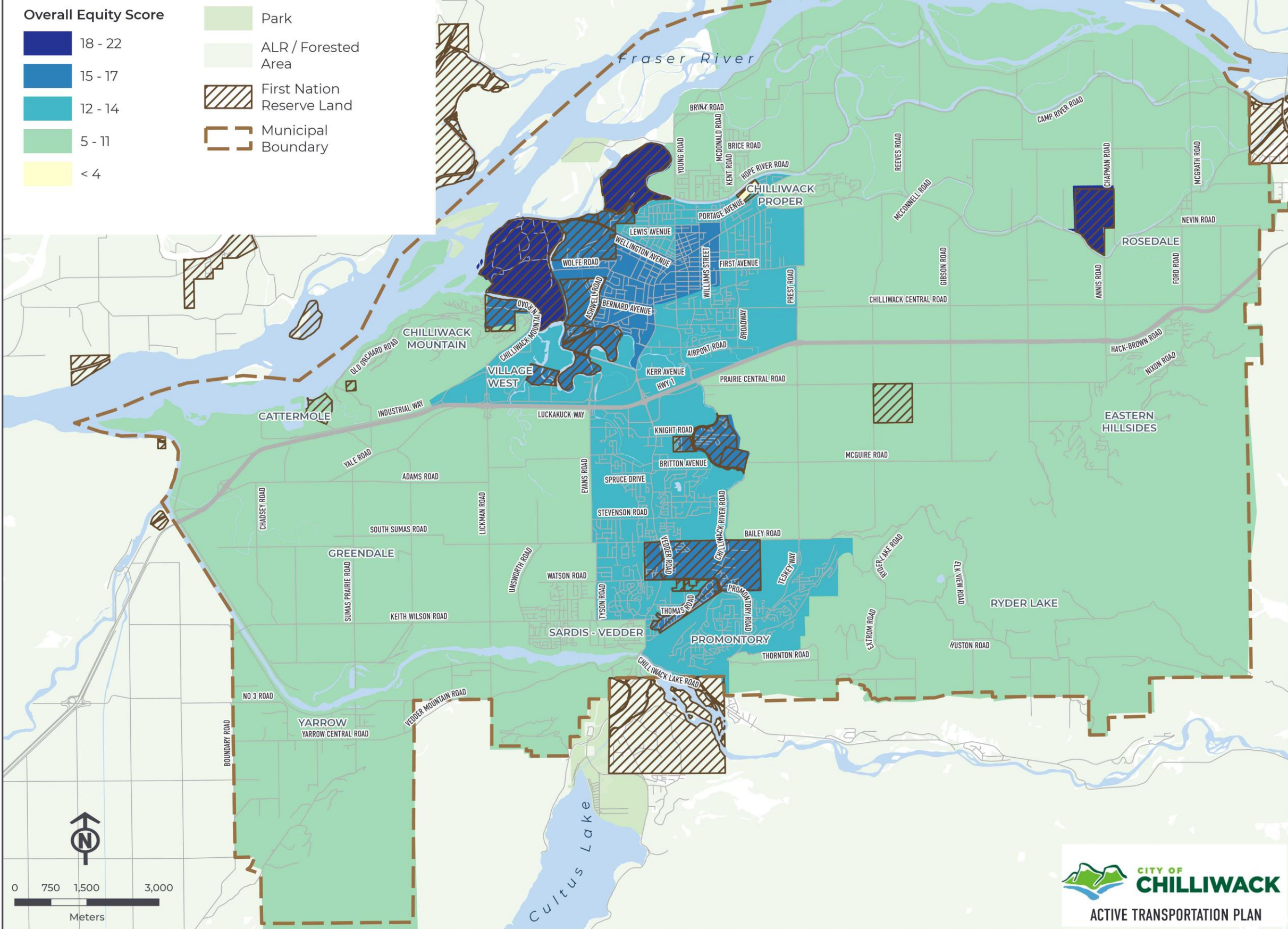


Figure 3: Equity Analysis – Overall Score

TRAVEL PATTERNS

Historically, Chilliwack's predominantly dispersed and rural population resulted in dependence on motor vehicles for daily transportation. Driving remains the most common mode of transportation for commuting trips, with over 91% of commuting trips made by car in 2016 according to Census data from Statistics Canada (**Figure 4**). About 2% of commuting trips were made by transit and only 5% were made by active transportation, with walking at 4% and cycling at 1%. However, there is significant opportunity to grow the share of sustainable transportation trips, especially as the City grows. As outlined in Section 2.2, many of the local, regional, and provincial plans guiding growth and development in Chilliwack are focused on creating more dense, mixed-use areas that promote walking, cycling, and transit.

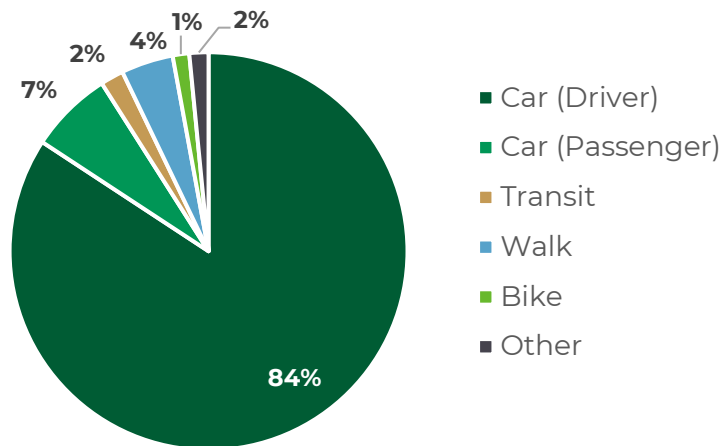


Figure 4: Chilliwack Mode Share (Statistics Canada, 2016)

Additionally, it is important to remember that many active transportation trips are made for reasons other than commuting, including recreation, exercise, and running errands. The community survey conducted as part of the Active Transportation Plan revealed the following information about travel patterns in Chilliwack:

- **Most people in Chilliwack get around by car...** 69% of survey respondents use motor vehicles as their main mode of transportation, while 21% use active transportation (14% walk and 7% bike). Another 9% use transit, while the remaining 1% use taxi or ride hailing.
- **...but people want to drive less.** When asked what transportation mode they would prefer to use if conditions were ideal, 17% said walk (+3% above current mode share), 23% said bike (+16%), and 20% said transit (+11%). Only 37% said car (-32%). This indicates that if the City provides improved conditions for walking, cycling, and taking transit, many people will consider using these modes.
- **People walk everyday, for many reasons.** Over 75% of respondents report walking at least 4-6 times per week. The top reasons include enjoying parks and trails, exercising, and accessing shops, restaurants, and services.
- **Most walking trips are relatively short.** In general, most people are willing to walk about 20 minutes to access destinations in Chilliwack. People are willing to walk further to work or school than they are to access transit, shops, services, and leisure activities.

The survey results show that there is interest in active transportation and great potential to increase the proportion of walking, cycling, and transit trips in the City. Section 2.5 summarizes further key details from the community survey. A full summary of the engagement process is provided in **Appendix A**.

SAFETY

Ten-year (2011-2020) crash data provided by ICBC was summarized for Chilliwack. **Figure 5** shows the average number of collisions per year in Chilliwack. This information includes both casualties (i.e. collisions resulting in injury or death) and property damage, and it accounts for crashes involving vehicles, cyclists, and pedestrians. The places with the largest concentrations of collisions are along major roads such as Highway 1, Vedder Road, and Yale Road. There are major clusters (>40 collisions/year) where the highway intersects with Lickman Road and Evans Road, as well as where Vedder Road intersects with Luckakuck Way and Watson Road. Chilliwack Proper also sees a high frequency of collisions along Yale Road.

Figure 6 shows the average number of collisions per year resulting in a casualty (injury or fatality). Many of the key hotspots are the same, although it is the intersections of Vedder Road and Luckakuck Way as well as Watson / Promontory Road that stand out, with over 18 collisions involving a casualty every year. This map underlines the need to focus on intersection safety along major roadways, including arterials and collectors. While there are casualty collisions on local roads throughout the city, these are less common, and the outcomes are less severe.

Figure 7 shows the average number of collisions per year involving pedestrians or cyclists. The collisions on this map are distributed evenly throughout the city, with only a few locations averaging 1 or more collisions per year (concentrated in the Village West area of downtown Chilliwack, as well as along Vedder Road in the Vedder neighbourhood). While the number of reported pedestrian and cyclist collisions is relatively low compared to overall collisions, there are likely several more minor incidents or “near misses” that go unreported. The locations where vehicle collisions occur often indicates the location of underlying traffic safety issues and motorist indecision, which may impact comfort and safety among pedestrians and cyclists.

Additionally, the community interactive map posted on EngageChilliwack.com provided comments related to safety during the first phase of the consultation. These comments include concerns about driver behaviour (speeding, yielding behaviour, etc.) and requests for infrastructure improvements such as improved crossings, sidewalks, safer cycling facilities, and road maintenance. The largest clusters of safety comments were in Chilliwack Proper, Sardis, and Vedder, but there were comments throughout the city, including Eastern Hillside, Rosedale, Yarrow, and other neighbourhoods.

AVERAGE NUMBER OF COLLISIONS PER YEAR (2011 - 2020)

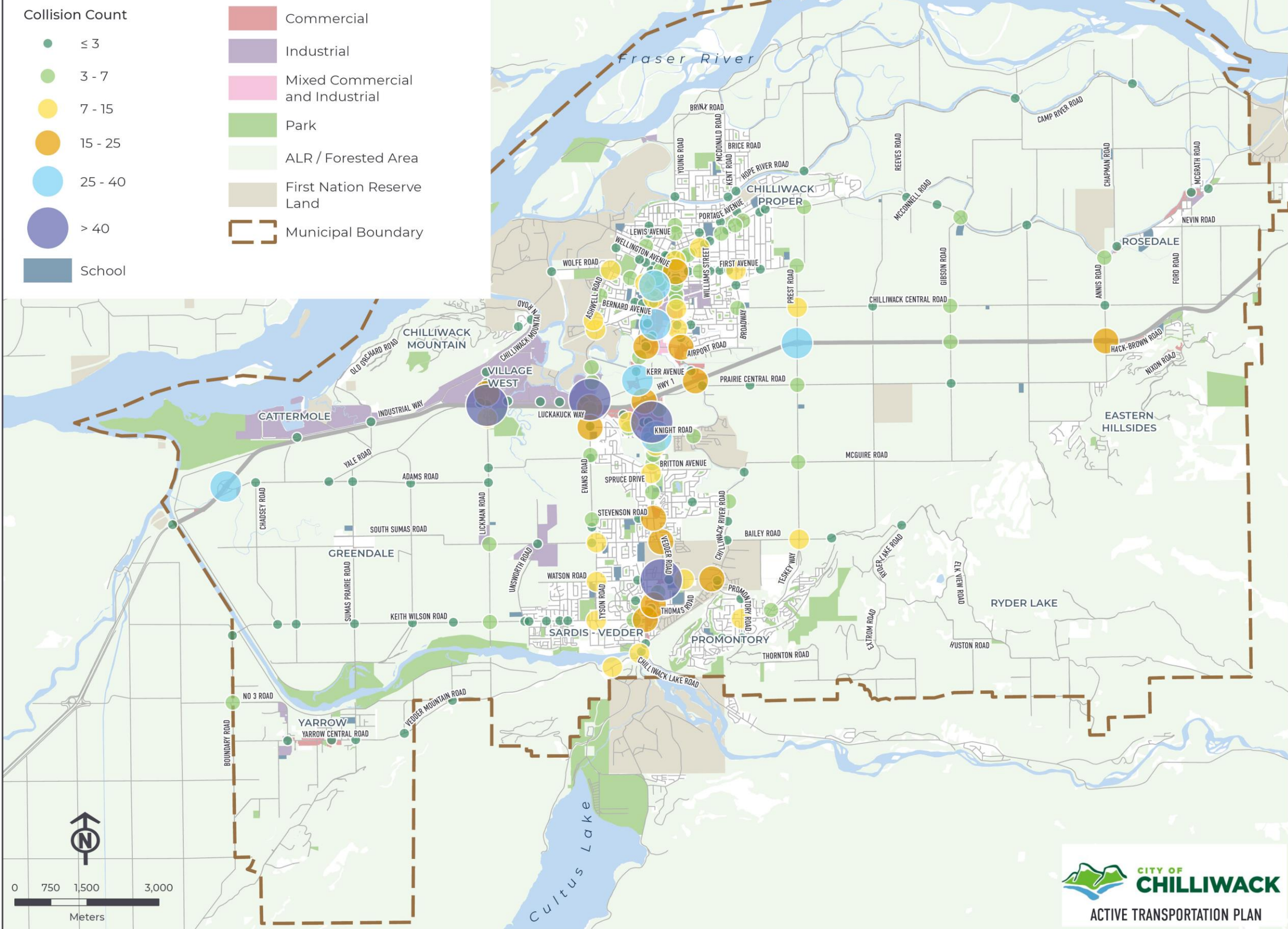
















Figure 5: Average Collisions per Year (2011-2020)

AVERAGE NUMBER OF COLLISIONS PER YEAR RESULTING IN AN INJURY OR FATALITY (2011 - 2020)

| | | |
|---|--|---|
| Collision Count | |  Commercial |
|  ≤ 2 | |  Industrial |
|  2 - 4 | |  Mixed Commercial and Industrial |
|  4 - 8 | |  Park |
|  8 - 12 | |  ALR / Forested Area |
|  12 - 18 | |  First Nation Reserve Land |
|  > 18 | |  Municipal Boundary |
|  School | | |

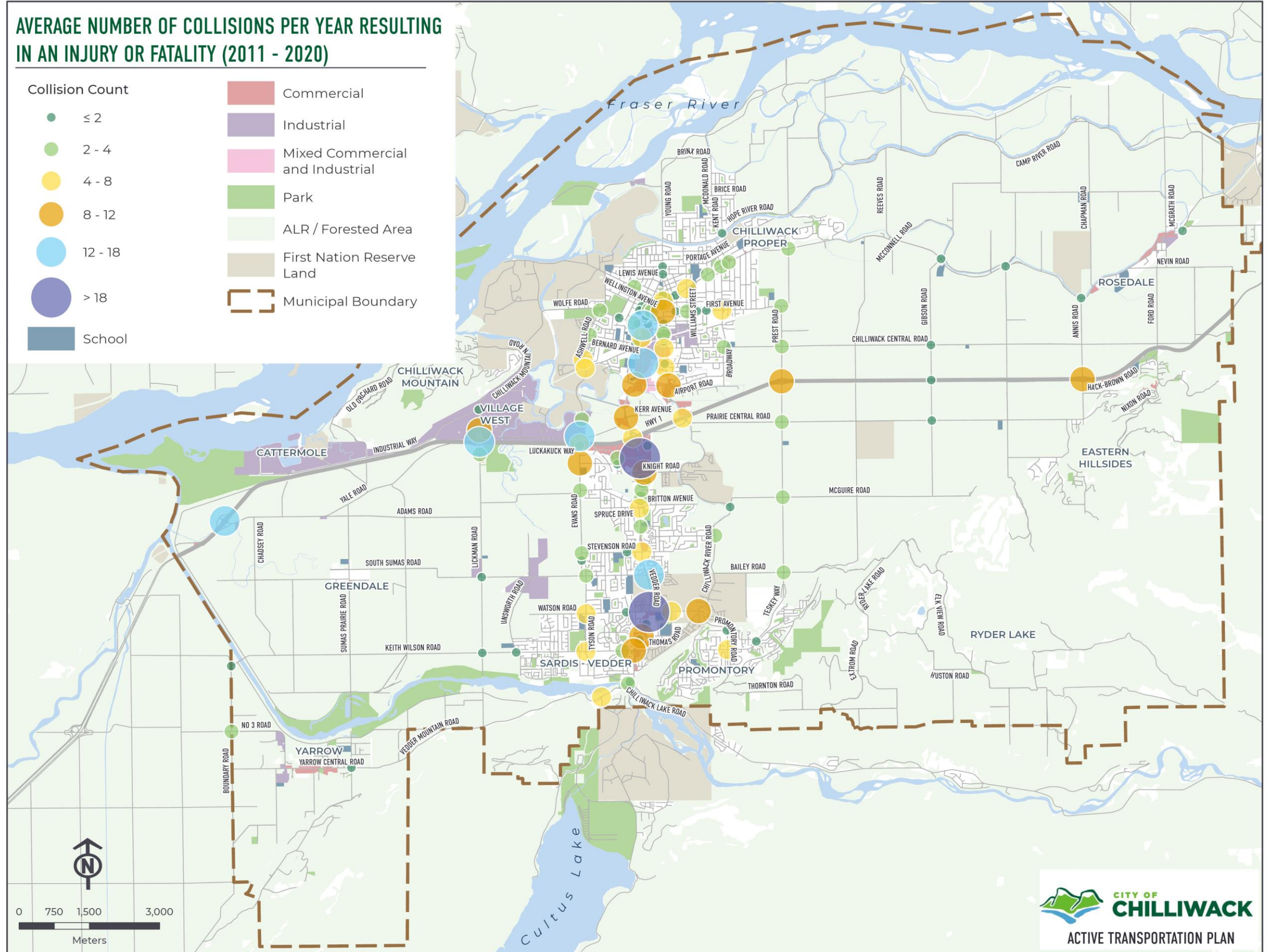


Figure 6: Average Collisions per Year Resulting in Injury or Fatality (2011-2020)

AVERAGE NUMBER OF PEDESTRIAN AND CYCLING COLLISIONS PER YEAR (2011 - 2020)

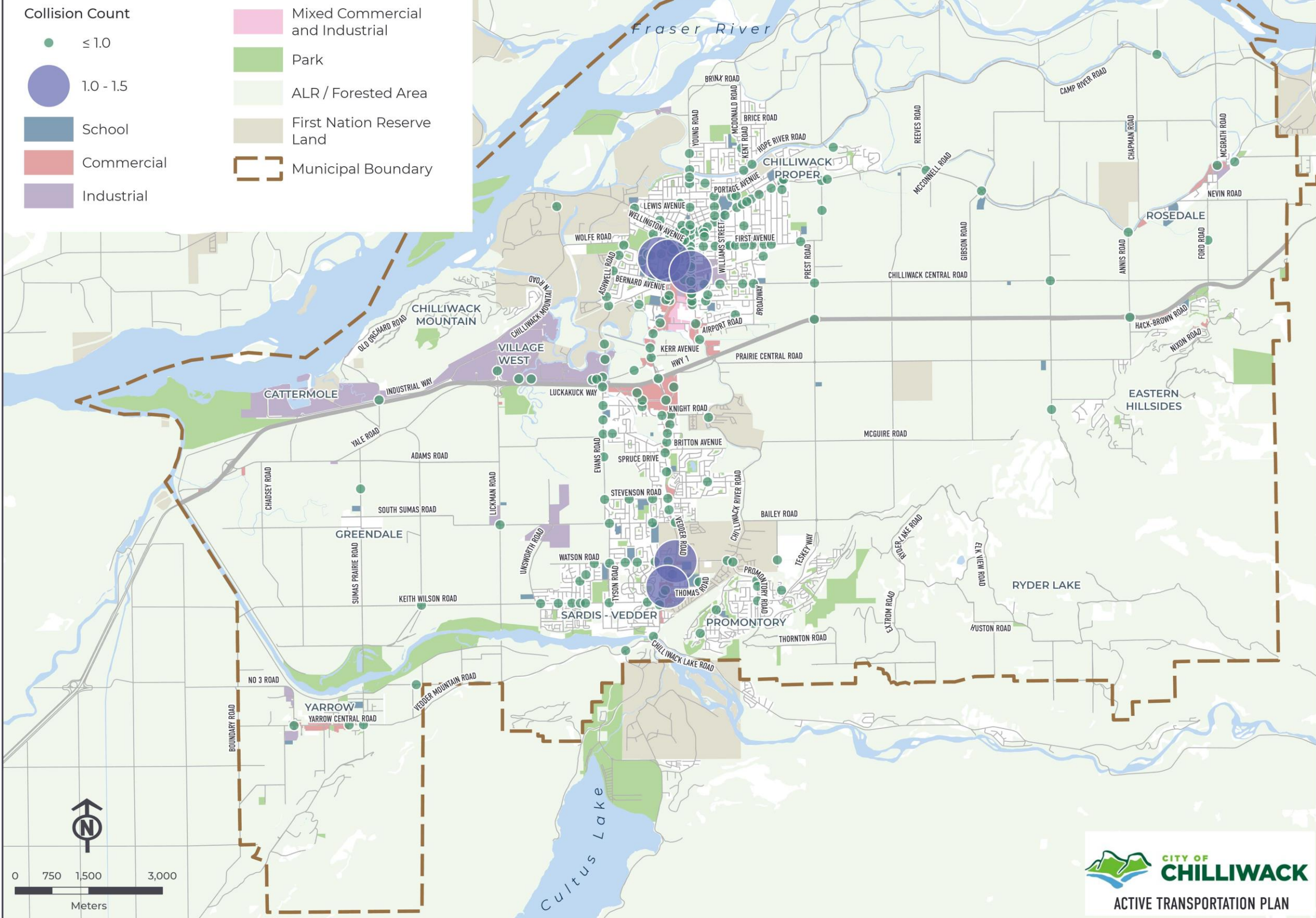


Figure 7: Average Collisions Involving Pedestrians and Cyclists Per Year (2011-2020)

2.2 POLICY CONTEXT

LOCAL POLICY

Official Community Plan

Chilliwack's **Official Community Plan** (2014) provides the vision, goals, and actions needed to make Chilliwack a healthy, engaged, and sustainable community. Key goals include managing growth responsibly, protecting the environment, and building healthy, attractive communities that include a range of sustainable mobility options. There are several policies that address parking, goods movement, and sustainable transportation, including emphasizing the creation of a walkable community that is safe and accessible to people of all ages.

Neighbourhood Plans

The City has a series of neighbourhood plans that build on the City's OCP vision and support land use, environmental, and transportation planning. Each of Chilliwack's neighborhoods have a unique feel, which is noted in these plans. The most recent neighbourhood plans, such as the **Sardis Neighbourhood Plan** (2020) and the **South Vedder Neighbourhood Plan** (2022), emphasize the need to accommodate multi-modal transportation for all ages and abilities, including establishing complete and continuous sidewalk and cycling networks, providing wider separated sidewalks on high activity corridors, and installing pedestrian amenities on key corridors such as Vedder Road. Visionary cross-sections are included in these plans, showing wider sidewalks with pedestrian amenities. The proposed mobility plans include new sidewalks and trails that are relevant to the pedestrian network in this Active Transportation Plan, especially the South Vedder Neighbourhood plan which identifies future sidewalks and trails to implement as development occurs.

Transportation Plan Update (2018)

Chilliwack's **Transportation Plan Update** provides a comprehensive multi-modal overview of transportation systems, with separate plans for cycling, pedestrians, signals, safety, and other aspects. The pedestrian plan listed two primary goals: improve mobility and improve safety. It identified several pedestrian improvements priorities such as sidewalks, enhanced crosswalks, and street lighting, most of which have been completed since the plan's adoption.

Greenspace Plan (2018)

The **Greenspace Plan** is focused on ensuring the provision of adequate greenspace, parkland, and recreational facilities to meet the needs of a growing and diversifying population, with an emphasis on fitness, outdoor recreation, energy conservation, and the protection of natural areas. The plan touches on walking, cycling, and multi-use facilities, even including blueways for water-based active transportation (kayaking, canoeing, rafts, and rowboats). Appendix B of the Greenspace Plan provides a **Trail Network Plan** (TNP) that links people, places, and public amenities within city boundaries and to other regional trail systems, aiming to make Chilliwack a more walkable, bikeable, and livable City. The TNP includes about 100km of existing trails and pathways as well as many proposed trails. The TNP defines several on- and off-road facilities that contribute to the trail network.

Cycle Vision Plan (2017)

The **Cycle Vision Plan** encourages cycling and improved safety for cyclists, with a focus on eliminating gaps on and between existing routes, adding new routes, and adding physically protected facilities. This plan also includes recommendations for several quick win projects, a city-wide cycling wayfinding

system, implementing additional bicycle parking, establishing a monitoring program, and tying in the bicycle network with the City's trail network, including extending the Sardis Rail Trail south the Vedder River and north to Hocking Avenue. Several projects identified in the Plan have been implemented or are in the planning stages.

Climate Action Plans (Ongoing)

The City is currently updating two Climate Action Plans – one for City operations and one for the broader community. The planning process is framed around the fact that addressing climate change is one of the most critical issues of our time – both locally and across the planet. Changes to the climate are already noticeable with more frequent extreme-weather events (droughts, floods, heat waves, fires), including the severe weather that severely impacted Chilliwack over the course of 2021, and these changes are projected to increase over the coming decades. For Chilliwack, the impacts are projected to result in more extreme heat days, longer dry spells in summer, more precipitation in spring, fall and winter, warmer winters, and more intense extreme weather events. The Climate Action Plans will address strategies to reduce total greenhouse gas emissions in the short term, which will include changes to the way people move within the City. The draft Climate Action Plan aligns with the provincial targets of reducing GHG emissions by 40% by 2030 (compared to 2007 levels) and achieving net-zero emissions by 2050. It has a pedestrian and cycling mode share target of 10% by 2030 and 15% by 2050, with a transit mode share target of 5% by 2030 and 10% by 2050.

REGIONAL POLICY

Regional Growth Strategy (FVRD)

In 2020, the Fraser Valley Regional District (FVRD) released a draft **Regional Growth Strategy** (RGS) outlining a vision for a network of healthy, vibrant, distinct, and sustainable communities. Encouraging the development of compact, complete communities is critical to reducing the impact on natural environments, build economic strength, and support effective transportation services. The RGS goal and actions for transportation highlight the need for improving transportation safety, choice, and efficiency. It aims to promote sustainable modes to reduce GHG emissions by 50% by 2050 relative to 2007 levels.

Transit Future Plan (BC Transit)

BC Transit's Chilliwack Area **Transit Future Plan** (2012) set a goal of increasing the City's transit mode share from 1% to 2% by 2036. This target is now expected to be exceeded. To continue this shift, it is paramount that the City's transit service is more accessible by active transportation, ensuring that 'first and last mile' connections are convenient and accessible. A draft **Transit Future Action Plan** was released in late 2021, building on the 2012 plan and identifying and prioritizing transit service and infrastructure investments over the next five years.

Experience the Fraser (FVRD & Metro Vancouver)

Experience the Fraser (ETF) is a concept developed in 2009 by Metro Vancouver and the FVRD in partnership with the Province. ETF is a continuous trail system on both sides of the Fraser River that is meant to stimulate investment for tourism initiatives across the two regions. ETF is a recreational, cultural and heritage project that spans 160 kilometres, with 550 kilometres of trails and recreational blueways (of which 43% are already in place) along the Lower Fraser River Corridor connecting Hope to the Salish Sea (**Figure 8**). Within the City of Chilliwack, the route is nearly continuous for 26km from the Vedder Canal to the city's eastern boundary near Highway 9. The long-term route could see a Sumas River crossing north of Highway 1, a connection through First Nations lands, and a bridge over Hope River to Island 22, connecting to the Cartmell Road Wing Dyke the Fraser East Dyke at Young Road. It is

anticipated that the trail will see regional use as a linear cycling route as well as local use by people walking and cycling.



Figure 8: Experience the Fraser Project Area

PROVINCIAL POLICY

CleanBC

The Province's **Clean BC** plan (2018) laid out the framework for climate action in BC, including a targeted 40% reduction in greenhouse gas emissions by 2030, and 60% by 2040, relative to 2007 levels. The province also committed to ensuring 100% of all vehicles sales are zero-emission vehicles by 2040. Local and regional governments have followed suit, with similar GHG emissions reduction targets and policies to increase the proportion of trips made by sustainable transportation modes. More recently, **CleanBC: Roadmap to 2030** provided an update with comprehensive targets and actions to meet the BC's 2030 and 2050 targets. These will be achieved through multiple initiatives to reduce distance travelled, encouraging mode shift to energy efficient transportation, and accelerate shift to Zero Emission Vehicles.

Move, Commute, Connect

Move, Commute, Connect – B.C.'s Active Transportation Strategy (2019) lays out the province's intent to promote and invest in active transportation. The strategy contains several short-, medium-, and long-term initiatives that aim to double the percentage of trips taken with active transportation by 2030. Initiatives include expanding education and encouragement programs, reviewing the Motor Vehicle Act, improving active transportation facilities and end-of-trip facilities, and expanding active transportation funding, which resulted in the newly updated BC Active Transportation Infrastructure Grants Program. The strategy also advocates for 'getting to Vision Zero,' which means eliminating fatalities and serious injuries.

B.C. Active Transportation Design Guide

Alongside the Active Transportation Strategy, the Province released the **B.C. Active Transportation Design Guide** (2019), a comprehensive set of planning and engineering guidelines offering recommendations for the planning, selection, design, implementation, and maintenance of active transportation facilities across the province. The Design Guide is a crucial resource for practitioners across the province and should be further referenced as future active transportation infrastructure projects are advanced.

FEDERAL POLICY

National Active Transportation Strategy

Canada's first **National Active Transportation Strategy** was released in July 2021. The Strategy, and the Active Transportation Fund, will invest \$400 million over five years to help build new and expanded networks of active transportation facilities and undertake planning studies. This new Fund is part of an eight-year, \$14.9-billion public transit investment to support communities as they build vibrant neighbourhoods where people can safely live, work, and play. The Strategy's vision is for Canadians of all ages, ethnicities, abilities, genders, and backgrounds to be able to access active transportation safely and conveniently in their communities, and to significantly increase active transportation mode share. The Strategy recognizes that the most effective active transportation infrastructure provides a complete network that allows users to safely move through communities and to destinations, including schools.

3.0 TRANSPORTATION NETWORK

3.1 EXISTING NETWORK

ROAD NETWORK

Chilliwack's road network is shown in **Figure 9** and consists of Freeway, Major Arterial, Minor Arterial, Major Collector, Minor Collector, and Local Road classifications. Each street classification plays an important role in the overall network, generally with the more major roads focused on moving traffic and the local streets primarily providing access. Understanding the street network and the specific function of each street classification is important in planning appropriate routes for active transportation and determining appropriate walking and cycling facilities – while pedestrian facilities are important everywhere, higher order roadways like arterials and collectors have greater traffic volumes and speeds, resulting in greater need for physically separated sidewalks and pathways on both sides of the street. Local roadways in rural contexts may only require sidewalks on one side of the road, multi-use pathways, or paved shoulders, unless they connect to key pedestrian destinations such as schools and community facilities.

Additionally, there are several non-city roads shown on the road classification map. These roadways are outside of the City's jurisdiction because they are located on private/strata property or are on First Nations lands. These non-City roads have been excluded from analysis in this plan but are shown on maps to underline their importance in overall pedestrian network connectivity.

Highway 1 travels east-west through the city, creating a barrier between the north and south parts of the city. A network of major and minor arterials serves as key spines for motor vehicle traffic, including Vedder Road, Yale Road, Evans Road, and Chilliwack River Road. Prairie Central Road, South Sumas Road, Vedder Mountain Road, Keith Wilson Road, Yale Rd, Chilliwack Central Rd, and other east-west arterials provide connections from the urban growth area to developed rural neighbourhoods such as Yarrow, Greendale, and Eastern Hillside.

TRANSIT NETWORK

Transit and active transportation are intrinsically related. Transit trips are door-to-door, not stop-to-stop, so creating seamless first- and last-mile connections is critical to the success of any transit network. Improving access to transit through active transportation improvements has been shown to increase transit ridership.

Chilliwack's transit system is operated by BC Transit. Current transit routes and stops are shown in **Figure 10**. The Downtown Chilliwack transit exchange is a key connection between multiple routes, including the 66-Fraser Valley Express (FVX), a well-used regional express route connecting Chilliwack to Abbotsford and the Township of Langley. In March 2022, the FVX was extended to connect to Lougheed Town Centre in Burnaby, providing direct access to TransLink's SkyTrain system and making interregional travel faster and more convenient.

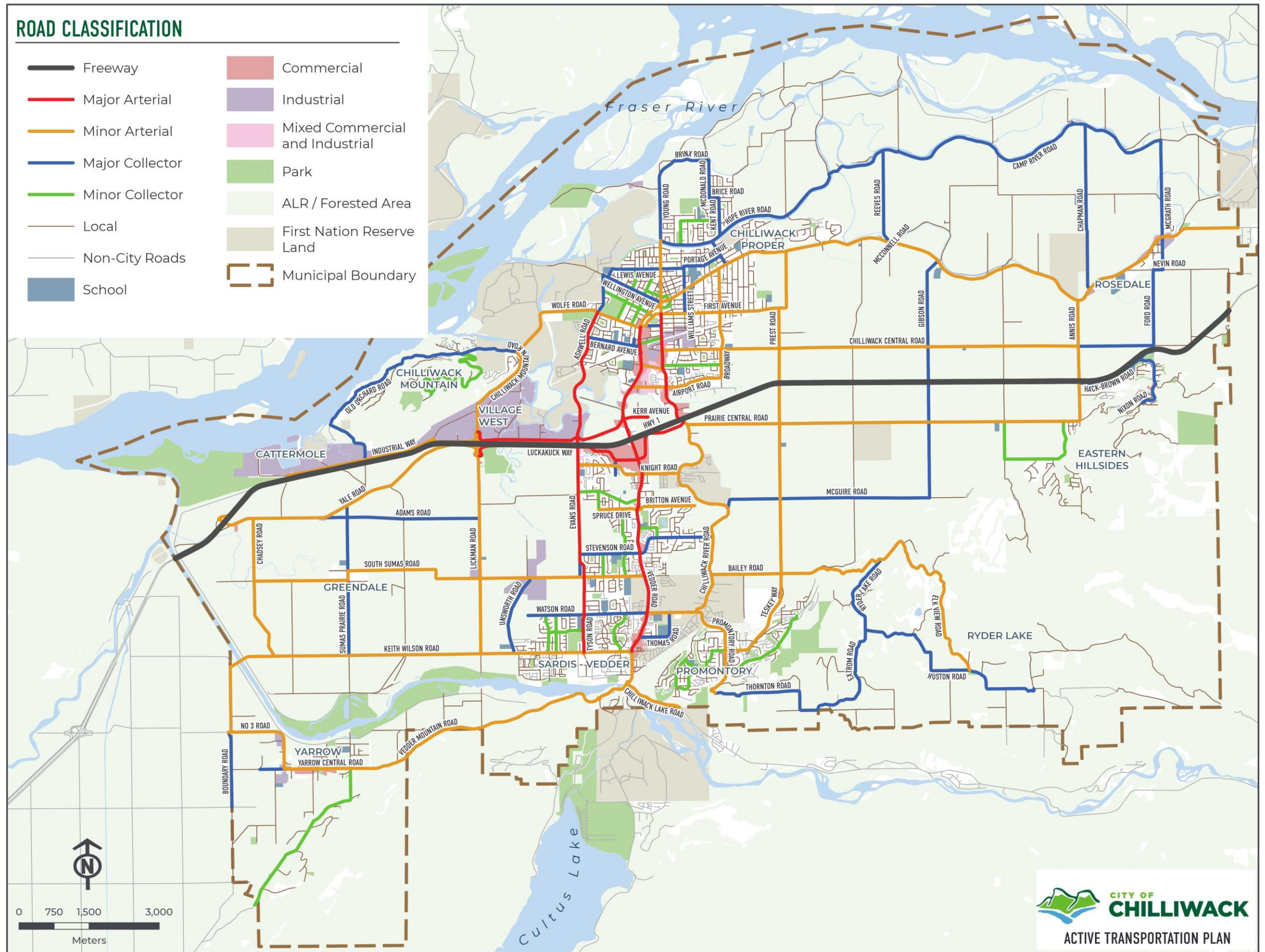


Figure 9: Road Classification

TRANSIT NETWORK

-  Downtown Transit Exchange
-  Bus Route
-  Fraser Valley Express
-  School
-  Commercial
-  Industrial
-  Mixed Commercial and Industrial
-  Park
-  ALR / Forested Area
-  First Nation Reserve Land
-  Municipal Boundary

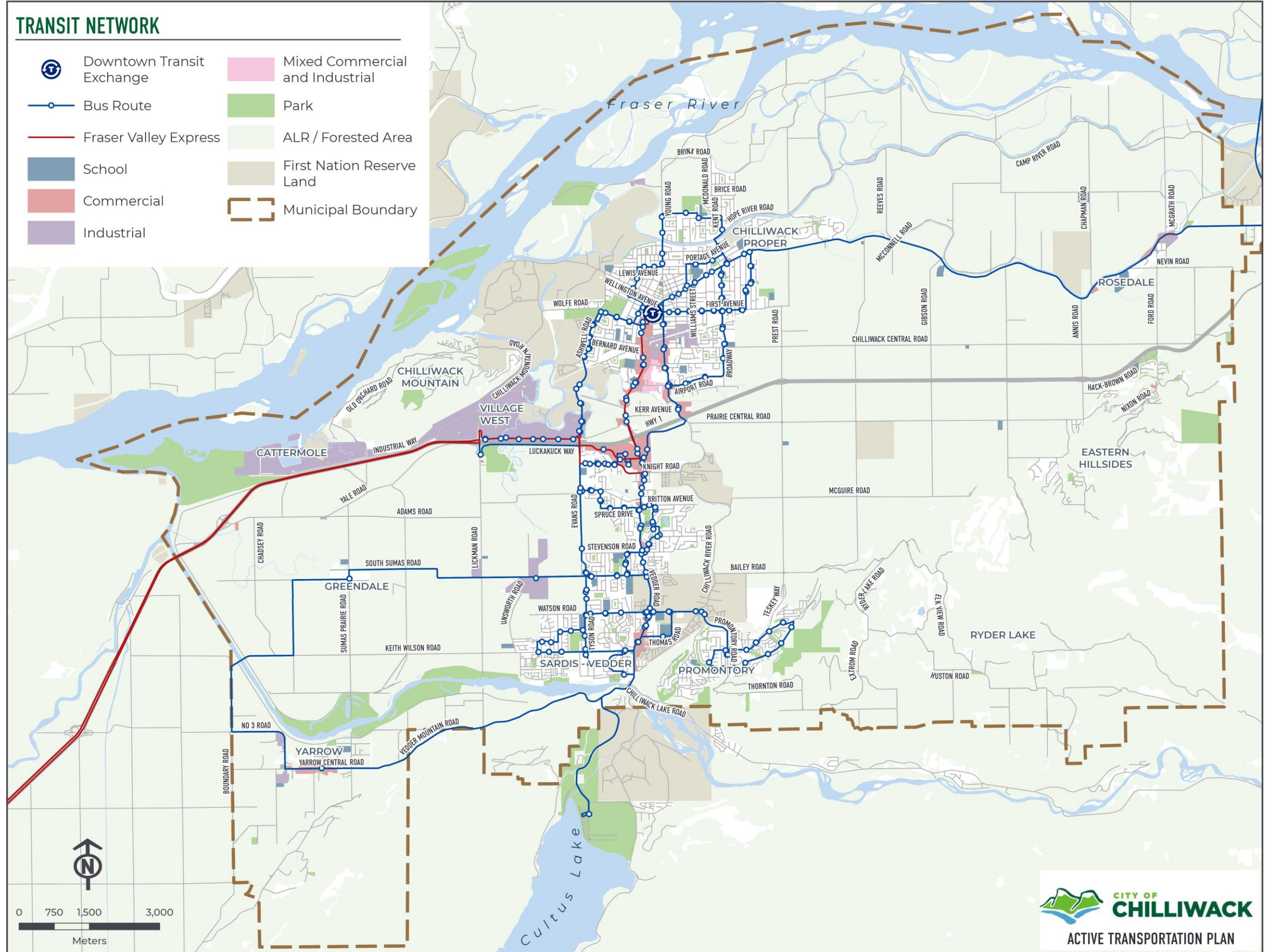


Figure 10: Transit Network

ACTIVE TRANSPORTATION NETWORK

Chilliwack's active transportation network consists of on-and off-street bicycle facilities, multi-use pathways and trails, and sidewalks.

Existing Pedestrian Network

The existing sidewalk and trail network is shown in **Figure 13**. Sidewalks form the foundation of the pedestrian network, with over 623 kilometres of sidewalk on the ground today (see **Table 1**). There are also over 125 kilometres of multi-use pathways and trails in Chilliwack. Multi-use pathways refer to paved pathways, and where adjacent to a roadway they serve as the primary pedestrian facility for that corridor. Trails may be unpaved and are often more recreational in nature, with many clustered along watercourses or in the hillsides (e.g. Experience the Fraser, Vedder Greenway network, Promontory, Vedder Mountain, etc.). The Valley Rail Trail is a key urban trail that provides a north-south spine through the city, connecting downtown Chilliwack with the Vedder Greenway network. **Figure 14** is an excerpt from the City's Parks and Trails Guide which shows the trail network in more detail, including a list of trails by length, user type (walk, hike, bike, or equestrian), and level of accessibility.

Additionally, **Figure 13** shows paved walkways between residential streets (e.g. between cul-de-sacs) that add connectivity and permeability to the active transportation network. In more rural areas, there are also paved and gravel road shoulders that are used by people walking and rolling (see **Figure 11**).



Figure 11: Example of a Paved Shoulder Facility for Walking and Cycling

Pedestrian Network Gaps

Figure 15 shows gaps in the pedestrian network. Roads in green have pedestrian facilities (sidewalk or multi-use pathway) on both sides, while roads in yellow have pedestrian facilities on only one side and roads in orange do not have pedestrian facilities. Today, nearly 440 kilometres (70%) of the City's 624 kilometres of roadways do not have pedestrian facilities on either side, and another 124 kilometres (20%) only have pedestrian facilities on one side of the street (**Table 1**). About 10% of all roads (63km) have pedestrian facilities on both sides. In total, there are about 1,000 kilometres of missing pedestrian facilities in Chilliwack (if the City were to require sidewalks or multi-use pathways on both sides of all roadways, however, sidewalks are only being proposed in an urban context). As outlined in **Table 1**, sidewalk coverage changes based on road class, with 73% of major arterials having sidewalks on both sides compared to only 22% of both minor arterials and major collectors, 56% of minor collectors, and 29% of local roads. Minor arterials and major collectors have low sidewalk coverage because they run through many of the City's rural areas, whereas many of the major arterials, minor collectors, and local streets are in more urban areas.

This urban vs. rural split is shown in **Table 2**, which outlines down sidewalk coverage in Chilliwack's urban areas (within the urban growth boundary and Promontory) compared to the rural areas. About 42% of Chilliwack's roadways are located within the urban area. As shown in **Table 2**, sidewalk coverage is significantly higher in these urban areas – approximately 40% of urban roads have sidewalks on both sides, and another 38% have sidewalks on at least one side. Only 22% of urban roads are missing sidewalks on both sides. The downtown core has the most complete network of sidewalks, although the larger Chilliwack Proper area has many streets with no sidewalks or sidewalks on only one side. The

Vedder and Promontory neighbourhoods have good coverage on one side of the street, and sidewalks along most of Vedder Road provide a continuous north-south connection through the urban area. There are significant gaps across many other neighbourhoods of Chilliwack. In the rural areas, most roadways (92%) have no sidewalks, and 6% have sidewalks on one side.

Table 1: Existing Sidewalk Network Summary by Road Class

| Roadway Class | 0 Sidewalks (km) | 1 Sidewalk (km) | 2 Sidewalks (km) | Total Length (km) |
|------------------------|------------------|-----------------|------------------|-------------------|
| Local | 247.4 | 81.4 | 20.5 | 349.3 |
| Minor Collector | 13.9 | 9.7 | 8.0 | 31.5 |
| Major Collector | 66.3 | 12.8 | 5.7 | 84.8 |
| Minor Arterial | 103.0 | 13.4 | 15.5 | 131.9 |
| Major Arterial | 7.1 | 6.3 | 13.1 | 26.6 |
| Total Length | 437.7 | 123.7 | 62.8 | 624.2 |
| Percent | 70% | 20% | 10% | 100% |

Table 2: Existing Sidewalk Network Summary by Area

| Area | 0 Sidewalks (km) | 1 Sidewalk (km) | 2 Sidewalks (km) | Total Length (km) |
|---|------------------|-----------------|------------------|-------------------|
| Within Urban Growth Boundary* | 104.9 (40%) | 101.0 (38%) | 57.5 (22%) | 263.2 |
| Outside of Urban Growth Boundary | 332.9 (92%) | 22.7 (6%) | 5.4 (0.02%) | 360.9 |
| Total Length | 437.7 | 123.7 | 62.8 | 624.2 |
| Percent | 70% | 20% | 10% | 100% |

* Including Promontory neighbourhood

The interactive map used as part of Active Transportation Plan’s community engagement process provides detailed insights from community members regarding specific infrastructure gaps across the city. The largest clusters of sidewalk and pathway comments were in Chilliwack Proper, followed by the Sardis and Vedder areas. There were also several sidewalk requests in some of the hillside or rural communities such as the Eastern Hillside. The interactive map also includes several accessibility related comments that focus on sidewalks, curb ramps, barriers to people walking and cycling, and pedestrian amenities. Accessibility is a primary consideration when filling gaps in the sidewalk network.

Bicycle Facilities

Chilliwack’s bicycle network is shown in **Figure 16** and includes a range of on- and off-street facilities. Most of the network consists of painted bicycle lanes and shared lanes (streets with sharrow pavement markings on them). Many of the City’s bicycle lanes and shared lanes are on collector and arterial roadways. Neighbourhood bikeways are another type of on-street bicycle facility located on calm local streets with low traffic speeds and volumes. The bicycle network also includes off-street paved and unpaved pathways – many of which overlap with the trails shown on **Figure 14**. As noted in Section 2.2, the Cycle Vision Plan outlines the need to add more protected facilities to ensure that people of all ages and abilities feel safe and comfortable when riding.

Signals

Safe crossings and intersections are a key consideration for the pedestrian network. Across busy roads, signalized crossings are often important pieces of infrastructure for increasing visibility and pedestrian safety. **Figure 17** shows the locations of all traffic signals and rectangular rapid flashing beacons (RRFBs) in the city. RRFBs are a type of side mounted flashing beacons installed at high activity crosswalks with flashing amber lights that alternate back and forth to attract motorists' attention, increasing yielding behaviour (see **Figure 12**).

The community interactive map also provided comments related to crossings. These comments include requests for crosswalks, enhanced crosswalks (overhead flashing beacons and RRFBs), crossing guards, and other crossing enhancements, such as signal timing and bicycle crossing improvements. The largest clusters of crossing comments were in Chilliwack Proper, followed by the Sardis and Vedder areas.



Figure 12: RRFB at Pedestrian (left) and Mixed-Use (right) Crossings

EXISTING SIDEWALK NETWORK

- | | |
|------------------------|---------------------------------|
| — Sidewalk | Commercial |
| Trail Type | Industrial |
| - - - - Non-City Trail | Mixed Commercial and Industrial |
| - - - - Trail | Park |
| - - - - Walkway | ALR / Forested Area |
| — City Roads | First Nation Reserve Land |
| — Non-City Road | Municipal Boundary |
| ■ School | |

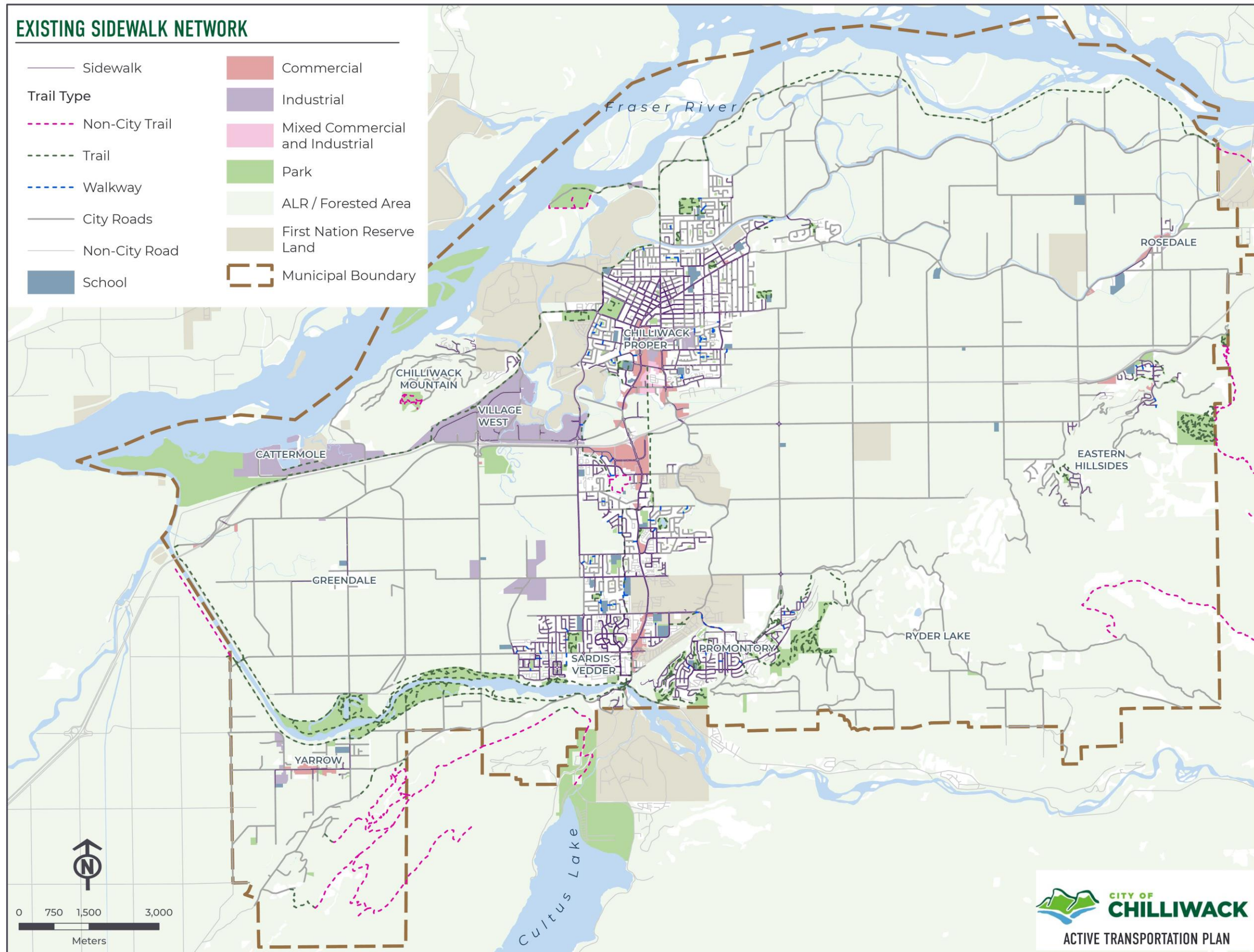
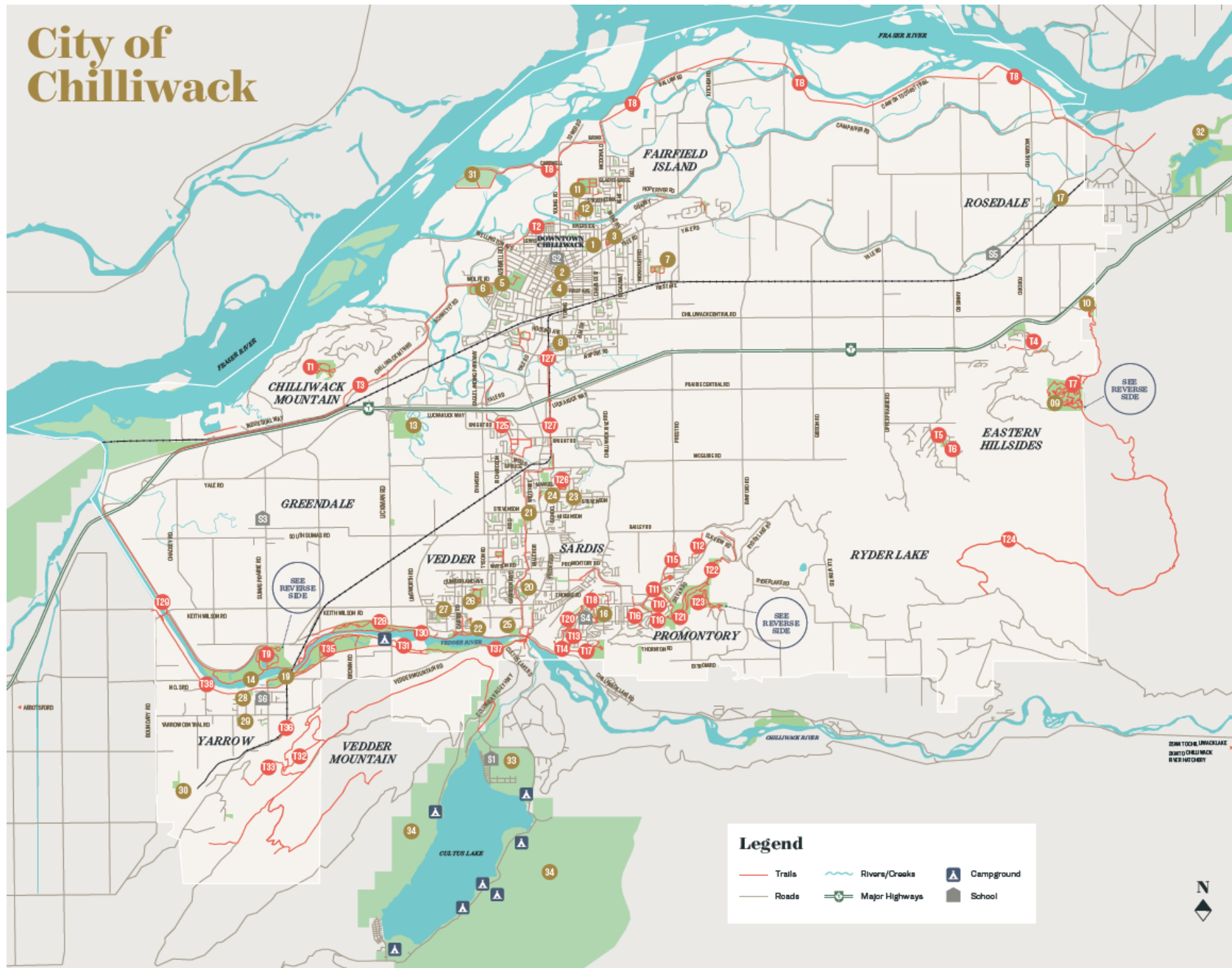


Figure 13: Existing Sidewalk and Trail Network



By the Numbers

COMMUNITY PARKS & FACILITIES

- 01 Centennial Park/Chilliwack Secondary
- 02 Central Community Park
- 03 Nimsman Park on Portage
- 04 Saksh Park
- 05 The Landing
- 06 Tomsonard Park
- 07 Walden Park - E.G. Leary
- 08 Chilliwack YMCA
- 09 Community Forest
- 10 Laska Creek Park
- 11 Fairfield Park
- 12 Guyana Vaughan Park
- 13 Chilliwack Heritage Park
- 14 Great Blue Heron Nature Reserve
- 15 Vedder Greenway
- 16 Promontory West Park
- 17 Rosedale Park
- 18 Mount Thom Park
- 19 Brown Creek Wetlands
- 20 Chasen Centre
- 21 Chilliwack Track & Field/Sardis Secondary
- 22 Peach Park Vedder
- 23 Sardis Park
- 24 Sardis Sports Fields
- 25 Vedder Park
- 26 Watson Glen Park
- 27 Webster Park
- 28 Yarrow Community Park
- 29 Yarrow Pioneer Park
- 30 Yarrow Sportsfield
- 31 Island 22 Regional Park
- 32 Chasen Lake Wetlands Regional Park
- 33 Cultus Lake Park (CLPS)
- 34 Cultus Lake Provincial Park

TRAILS

- T1 Hillkeap Regional Park
 - T2 Hope River Rotary Trail
 - T3 Lickman Ponds Trail
 - T4 Allan Creek Trail
 - T5 Kensington Trail
 - T6 Old Marble Hill Road
 - T7 Community Forest
 - T8 Experience The Fraser
 - T9 Great Blue Heron Nature Reserve
 - T10 Russell To Sylvan
 - T11 Teskey Way Trail
 - T12 Bailey - Roxford Trail
 - T13 Bridlewood Trail P
 - T14 Bridlewood West Trail
 - T15 Jirkeason Stairs
 - T16 Lafferson Creek Trail
 - T17 Salmon Ridge Trail P
 - T18 Thomson Creek Trail
 - T19 Walker Creek Trail
 - T20 Wooden Park Trails
 - T21 Thom Creek Trail
 - T22 Karver's Trail
 - T23 Mount Thom Park Trails
 - T24 Elk Mountain Trail
 - T25 Luckakuck Creek Trail
 - T26 Sardis Park Loop Trail
 - T27 Valley Road Trail
 - T28 Peach Creek Rotary Trail
 - T29 Vedder North Dyle
 - T30 Vedder Rotary Trail North
 - T31 Vedder Rotary Trail South
 - T32 Duck Farm Loop*
 - T33 Vedder Mountain West Trails*
 - T34 Vedder Mountain Hiking Trail
 - T35 Brown Creek Wetlands
 - T36 Old Yale Wagon Road
 - T37 Vedder South Dyle Trail
- *Outside of City Limits

TRAILS OVERVIEW

| | | MAP LABEL | LENGTH (KM) | TRAIL RATING | WALKERS | HIKERS | CYCLISTS | EQUESTRIAN | ACCESSIBLE |
|---------------------------------|---------------------|-----------|-------------|--------------|---------|--------|----------|------------|------------|
| Hillkeap Regional Park | Chilliwack Mountain | T1 | 2.0 | 2 | ● | ● | ● | ● | |
| Hope River Rotary Trail | Down town | T2 | 1.1 | 1 | ● | ● | ● | ● | |
| Lickman Ponds Trail | Down town | T3 | 15 | 1 | ● | ● | ● | ● | |
| Allan Creek Trail | Eastern Hillside | T4 | 0.3 | 1 | ● | ● | ● | ● | |
| Kensington Trail | Eastern Hillside | T5 | 0.4 | 2 | ● | ● | ● | ● | |
| Old Marble Hill Road | Eastern Hillside | T6 | 0.9 | 2 | ● | ● | ● | ● | |
| Community Forest | Eastern Hillside | T7 | 7.7 | 3 | ● | ● | ● | ● | |
| Experience The Fraser | Fairfield Island | T8 | 16.7 | 1 | ● | ● | ● | ● | |
| Great Blue Heron Nature Reserve | Vedder Greenway | T9 | 2.9 | 1 | ● | ● | ● | ● | |
| Russell To Sylvan | Promontory | T10 | 0.3 | 1 | ● | ● | ● | ● | |
| Teskey Way Trail | Promontory | T11 | 2.0 | 1 | ● | ● | ● | ● | |
| Bailey - Roxford Trail | Promontory | T12 | 0.9 | 2 | ● | ● | ● | ● | |
| Bridlewood Trail | Promontory | T13 | 1.0 | 2 | ● | ● | ● | ● | |
| Bridlewood West Trail | Promontory | T14 | 0.8 | 2 | ● | ● | ● | ● | |
| Jirkeason Stairs | Promontory | T15 | 0.1 | 2 | ● | ● | ● | ● | |
| Lafferson Creek Trail | Promontory | T16 | 0.7 | 2 | ● | ● | ● | ● | |
| Salmon Ridge Trail | Promontory | T17 | 15 | 2 | ● | ● | ● | ● | |
| Thomson Creek Trail | Promontory | T18 | 0.8 | 2 | ● | ● | ● | ● | |
| Walker Creek Trail | Promontory | T19 | 1.0 | 2 | ● | ● | ● | ● | |
| Wooden Park Trails | Promontory | T20 | 25 | 2 | ● | ● | ● | ● | |
| Thom Creek Trail | Promontory | T21 | 33 | 2 | ● | ● | ● | ● | |
| Karver's Trail | Ryder Lake | T22 | 1.4 | 2 | ● | ● | ● | ● | |
| Mount Thom Park Trails | Ryder Lake | T23 | 4.1 | 2 | ● | ● | ● | ● | |
| Elk Mountain Trail | Ryder Lake | T24 | 5.0 | 3 | ● | ● | ● | ● | |
| Luckakuck Creek Trail | Sardis | T25 | 1.2 | 1 | ● | ● | ● | ● | |
| Sardis Park Loop Trail | Sardis | T26 | 0.7 | 1 | ● | ● | ● | ● | |
| Valley Road Trail | Sardis | T27 | 2.2 | 1 | ● | ● | ● | ● | |
| Peach Creek Rotary Trail | Vedder Greenway | T28 | 1.7 | 1 | ● | ● | ● | ● | |
| Vedder North Dyle | Vedder Greenway | T29 | 9.5 | 1 | ● | ● | ● | ● | |
| Vedder Rotary Trail North | Vedder Greenway | T30 | 9.1 | 1 | ● | ● | ● | ● | |
| Vedder Rotary Trail South | Vedder Greenway | T31 | 7.1 | 1 | ● | ● | ● | ● | |
| Duck Farm Loop* | Vedder Mountain | T32 | 6.0 | 3 | ● | ● | ● | ● | |
| Vedder Mountain West Trails* | Vedder Mountain | T33 | 2.1 | 3 | ● | ● | ● | ● | |
| Vedder Mountain Hiking Trail | Vedder Mountain | T34 | 6.1 | 3 | ● | ● | ● | ● | |
| Brown Creek Wetlands | Vedder Greenway | T35 | 33 | 1 | ● | ● | ● | ● | |
| Old Yale Wagon Road | Yarrow | T36 | 0.9 | 1 | ● | ● | ● | ● | |
| Vedder South Dyle Trail | Vedder Greenway | T37 | 7.4 | 1 | ● | ● | ● | ● | |

Figure 14: Chilliwack Trail Overview (City of Chilliwack)

PEDESTRIAN NETWORK GAP

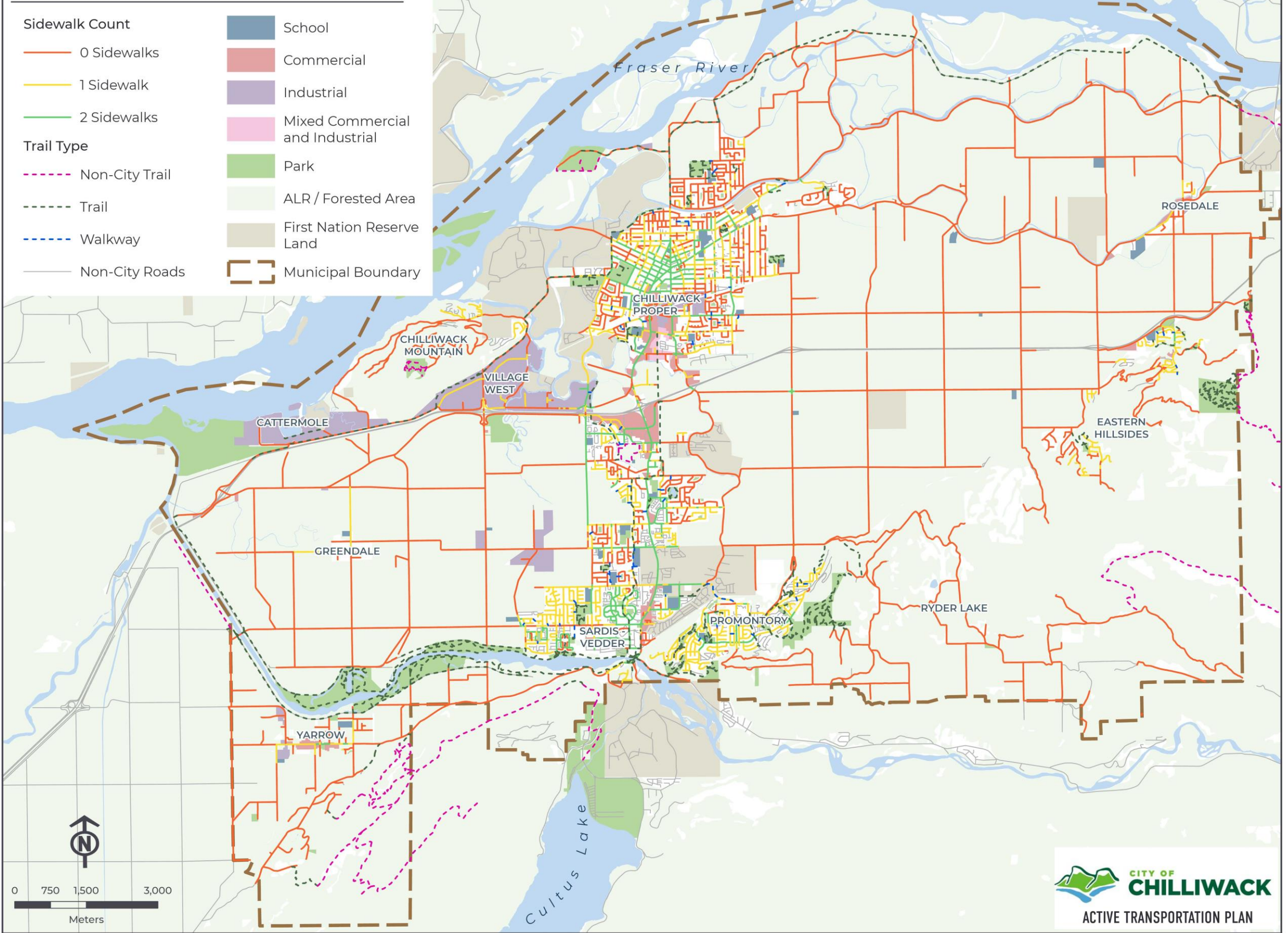


Figure 15: Existing Pedestrian Network Gaps

EXISTING CYCLING NETWORK

- | | |
|---|---|
| Bike Facility |  School |
|  Bicycle Path - Gravel |  Commercial |
|  Bicycle Path - Paved |  Industrial |
|  Bicycle Lane |  Mixed Commercial and Industrial |
|  Shared Lane |  Park |
|  Neighbourhood Bikeway |  ALR / Forested Area |
| Trail Type |  First Nation Reserve Land |
|  Non City Trail |  Municipal Boundary |
|  Trail | |
|  Walkway | |

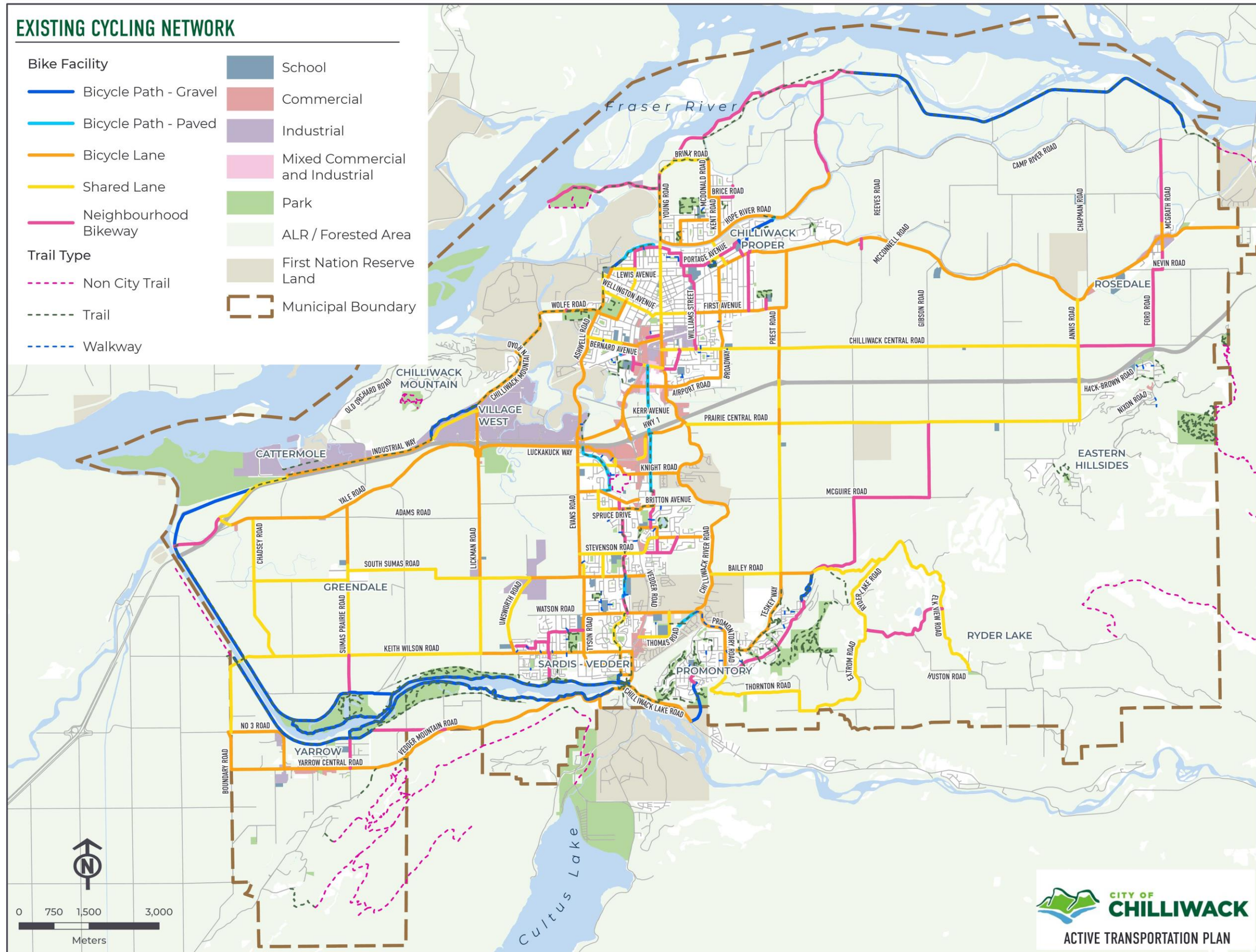


Figure 16: Existing Cycling Network

TRAFFIC SIGNALS

- | | |
|---------------------------|---------------------------------|
| Type of Traffic Signal | Industrial |
| ● Traffic Control Signals | Mixed Commercial and Industrial |
| ● RRFB* | Park |
| ● RRFB* (upcoming) | ALR / Forested Area |
| ■ School | First Nation Reserve Land |
| ■ Commercial | Municipal Boundary |

* RRFB = Rectangular Rapid Flashing Beacon (i.e. enhanced crosswalk)

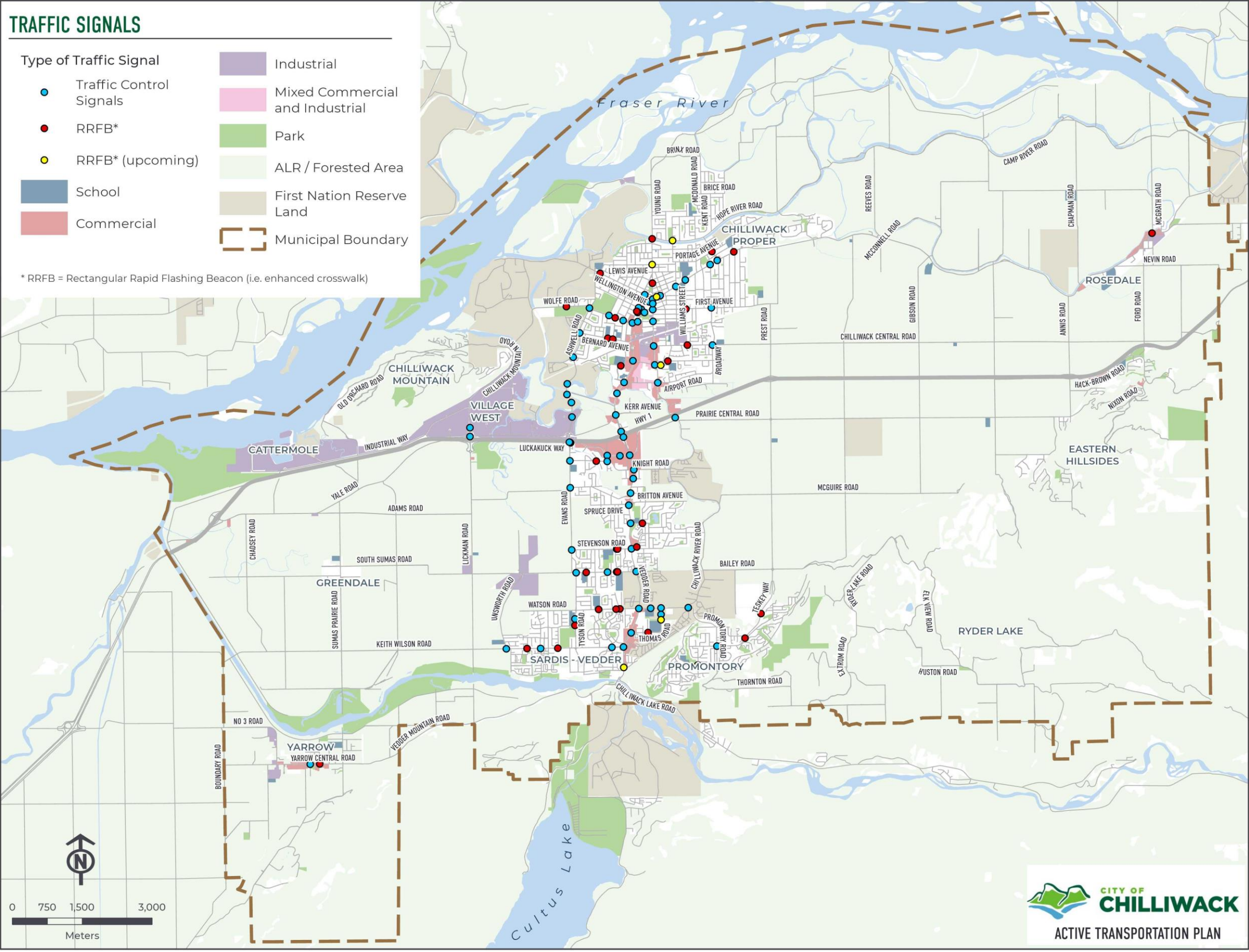


Figure 17: Signals

3.2 PROPOSED NETWORK

PRIORITIZATION APPROACH

As outlined in Section 3.1, there are many gaps in pedestrian facilities within the City of Chilliwack. With a fixed budget for active transportation improvements each year, the City needs to be able to prioritize where to build new facilities and upgrade existing facilities each year. Priorities were identified for future active transportation investments based on several guiding principles. These principles were derived from the City's existing plans, including the OCP, the Transit Future Plan, Climate Action Plan, and Parks Recreation and Culture Master Plan, as well as the B.C. Active Transportation Design Guide. The guiding principles include:

- Ensure equity in mobility and access for all citizens, including children, youth, seniors, and other equity-priority groups.
- Encourage active transportation for school and regular short distance trips.
- Encourage healthy living, a sense of community and a vibrant street life for neighborhoods associated with downtown and community cores and other service nodes in the urban corridor.
- Encourage active living in suburban neighborhoods through safe, comfortable, and attractive pedestrian facilities and streetscape elements (such as lighting, trees, benches), and linkages to community amenities such as parks and indoor recreation facilities.
- Focus on providing alternate modes of transportation (including mobility scooters) for seniors to service providers, shopping facilities and other frequent destinations.
- Increase accessibility of public transportation by improving sidewalk connectivity to the City's bus stops and transit exchanges.

A GIS analysis was conducted to identify priority locations for implementing pedestrian infrastructure. The prioritization criteria were developed based on the guiding principles above as well as best practices from other jurisdictions. The criteria are shown in **Table 4** and cover road class; population density; land use; pedestrian network need and connectivity; equity (based on the analysis described in Section 2.1); and connections to key pedestrian generators such as transit stops, schools, parks, and other destinations.

The resulting pedestrian facility priority map is shown in **Figure 18**. The areas of highest need are located within the urban growth boundary, particularly in Chilliwack Proper. **Table 3** breaks down how many kilometres of sidewalk are required on one or two sides of the road based on their level of priority. 52 km of sidewalks are needed to achieve sidewalks on one side of all high priority streets, while 159 km of sidewalks are needed to achieve sidewalks on both sides of all high priority streets. As outlined in **Table 2** above, around 206 km of sidewalks are needed to achieve sidewalks on both sides of all urban streets in the city.

Table 3: Kilometres of Sidewalk Needed by Priority Level

| Priority | 2 Sidewalks Needed (km) | 1 Sidewalk Needed (km) |
|-----------------|-------------------------|------------------------|
| High (136-190) | 52 | 55 |
| Medium (86-135) | 92 | 55 |
| Low (35-85) | 293 | 14 |

Table 4: Sidewalk Prioritization Criteria

| Factor | Description | Score |
|--|---|------------|
| Road Classification | Major Arterial | 25 |
| | Minor Arterial | 20 |
| | Major Collector | 15 |
| | Minor collector | 10 |
| | Local | 5 |
| | Highway | NA |
| | Non-City Roads | NA |
| | Lane | NA |
| | Ramp | NA |
| | Cul-de-sacs | 0 |
| Transit | Within 200 metres of a bus stop | 25 |
| | Within 400 metres of a bus stop | 20 |
| | None | 0 |
| Schools | Directly adjacent to any school | 25 |
| | School within 200m | 20 |
| | School within 400m | 15 |
| Parks | Directly adjacent to park | 25 |
| | Park within 200m | 20 |
| | Park within 400m | 15 |
| Pedestrian 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 more than one Pedestrian Facility (Sidewalk, MUP, or Trail) | 25 |
| | Connects to one Pedestrian Facility | 15 |
| | Does not connect to a Pedestrian Facility | 0 |
| Network Need | No Sidewalks on Either Side | 25 |
| | Sidewalk Already on One Side | 15 |
| | Sidewalks on Both Sides | NA |
| 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 |
| Equity ** | Located in Area of High Equity Need | 25 |
| | Located in Area of Moderate Equity Need | 15 |
| | Located in Area of Low Equity Need | 0 |
| Urban Areas and Rural Nodes *** | Located in Urban Growth Boundary or Rural Developed Neighbourhood (Outside the Urban Growth Boundary) | 10 |
| | None | 0 |
| MAXIMUM SCORE | | 225 |

* Destinations as shown on **Figure 2**, but excluding parks and schools to avoid double counting

** Based on the Equity Analysis described in Section 2.1 (see **Figure 3**)

*** Rural Developed Neighbourhoods include Promontory, Greendale, Yarrow, Chilliwack Mountain, Eastern Hillside, and Rosedale

SIDEWALK PRIORITIZATION

- | | |
|-------------------------------|---------------------------------|
| Sidewalk Prioritization Score | Commercial |
| High: 136 - 190 | Industrial |
| Medium: 86 - 135 | Mixed Commercial and Industrial |
| Low: 35 - 85 | Park |
| Non-City Trail | ALR / Forested Area |
| Trail | First Nation Reserve Land |
| Walkway | Municipal Boundary |
| School | |

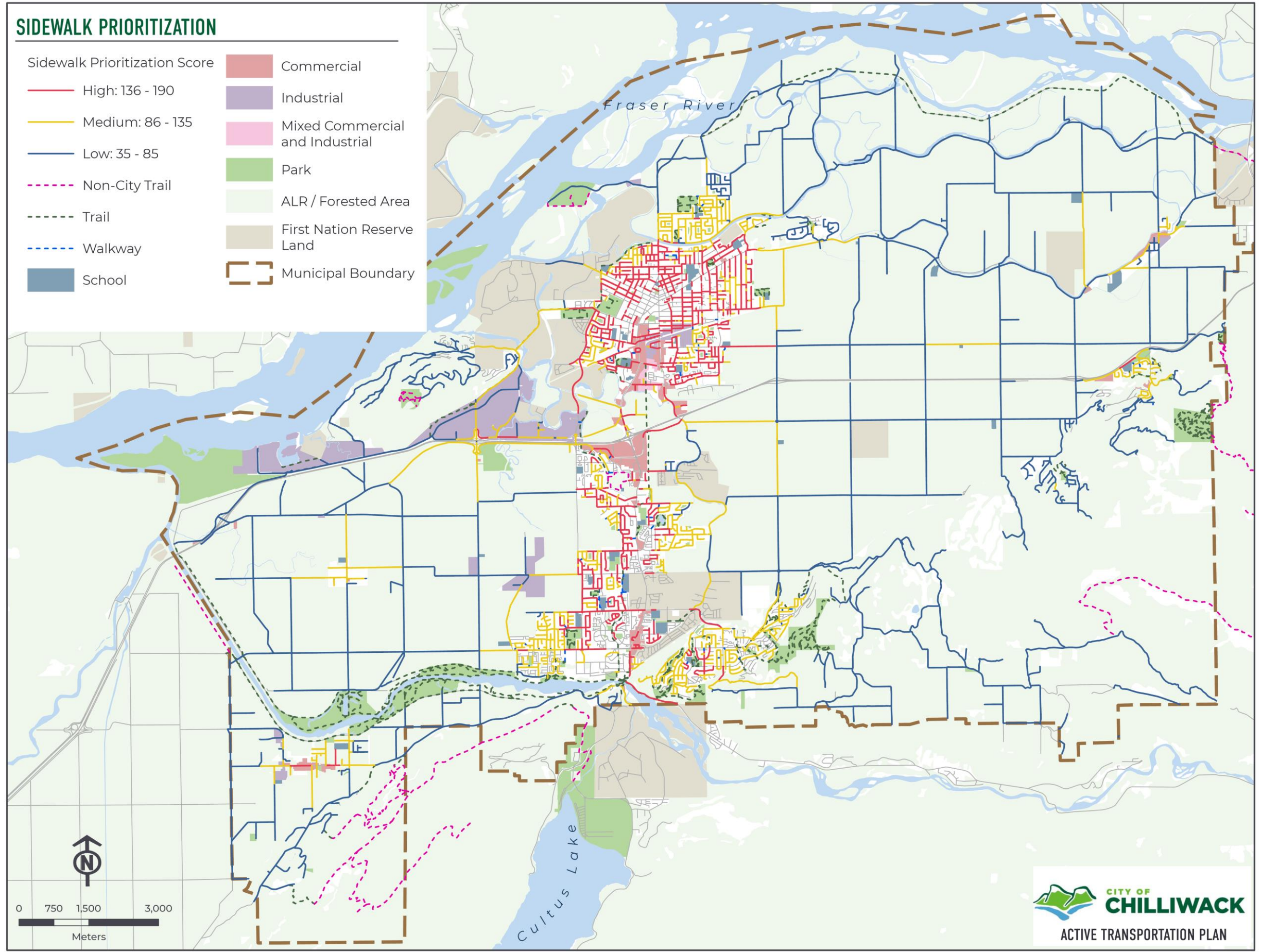


Figure 18: Sidewalk Prioritization - Raw Results

GIS Prioritization Example: Tyson Road

Tyson Road between Keith Wilson Road and the Sardis Sports Complex provides an example of how the prioritization scoring was applied. Beside the sports complex, there are sidewalks on both sides of Tyson Road. However, south of the sports complex, there was a sidewalk gap on the west side of Tyson Road. When the scoring criteria from **Table 4** was applied, this gap received a score of 180 out of 190, making it a high priority. The detailed scores for each criterion are shown below:

| Tyson Road (Keith Wilson Road to Sardis Sports Complex) | Score |
|--|--------------|
| Road Classification Score | 25 |
| Transit Score | 25 |
| Schools Score | 15 |
| Parks Score | 20 |
| Pedestrian Generators Score | 15 |
| Network Connectivity Score | 25 |
| Network Need Score | 15 |
| Population Density Score | 15 |
| Overall Equity Score | 15 |
| Urban Areas and Rural Nodes Score | 10 |
| Overall Sidewalk Prioritization Score | 180 |

It should be noted that in many cases, road segments are on the cusp between being a low, medium, or high priority gap. There is flexibility when interpreting and applying these scores, and there are many other factors to consider, as outlined below.

It is important to note that the prioritization outlined above is just one GIS-based tool used to identify pedestrian facility priorities and capital projects in Chilliwack. Through additional planning work, feasibility studies, feedback from residents, and alignment with other plans and capital projects, such as the Official Community Plan and Neighbourhood Plans, some routes may be reprioritized. There are other variables that need to be 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 pedestrian network gaps can be filled by sidewalks or multi-use pathways, and in some cases paved shoulders, depending on the context, including what active transportation facilities have been identified in the Cycle Vision Plan and other community plans. Pedestrian priority areas (i.e. open streets) could also be considered in certain contexts. Detailed facility selection will be refined on a corridor-by-corridor basis as the City implements this plan.

Based on the pedestrian network prioritization described above, several projects were identified by City staff for priority implementation, as shown in **Figure 19**. Projects were selected to fill priority gaps, connect key destinations, and spread projects across the City's neighbourhoods in addition to capital projects that have already been confirmed. This map identifies several categories of projects, including those with confirmed capital funding, those with short (0-5 years), medium (5-10 years), and long-term (10+ years) implementation timelines, and those providing connections to Indigenous communities

that may require future analysis and discussions. Many more projects will need to be implemented to complete the City's active transportation network, but these will be longer-term projects.

ACTIVE TRANSPORTATION NETWORK IMPLEMENTATION PRIORITIES

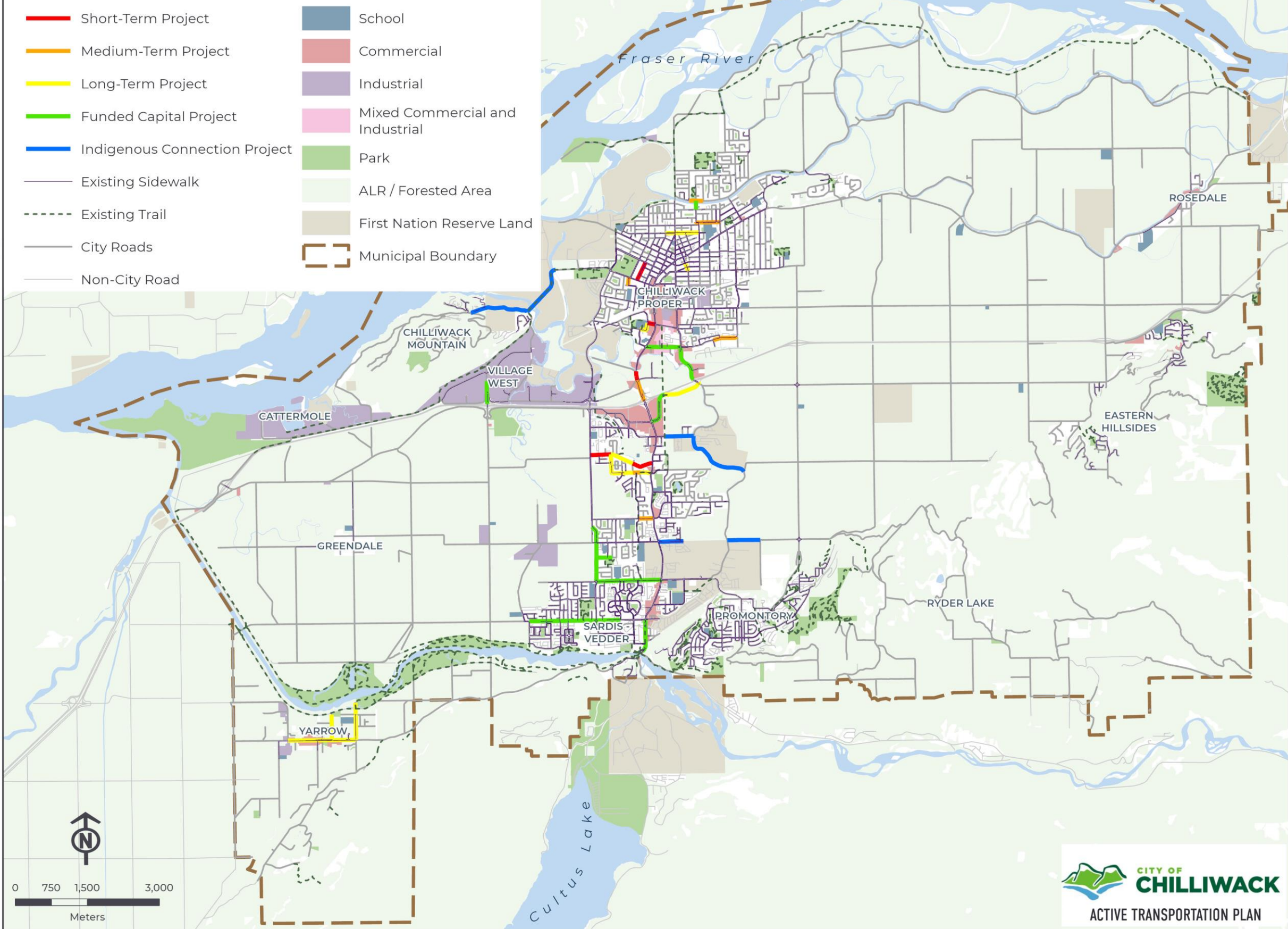


Figure 19: Active Transportation Network Implementation Priorities

PEDESTRIAN FACILITY UPGRADES

It is recognized that throughout the city, there are areas where existing pedestrian infrastructure could be enhanced to create a more accessible and comfortable environment for walking and rolling. Improvements such as additional designated crossings, enhancing existing crossings, lighting, wayfinding and signage, widening existing walking space, and providing a buffer between sidewalks and the roadway are a few options the City can consider. Additionally, the City can explore opportunities to provide pedestrian priority or pedestrian only streets, either temporarily, seasonally, or permanently, particularly in the downtown.

There are several steps the City can take to identify locations where upgrades may be required. For example, the City is conducting an inventory of the existing curb ramps in the City to determine if they meet current standards and prioritize upgrades to these locations. It is recommended that the City focus upgrades and enhancements in areas with the highest pedestrian activity or the highest potential for activity. These locations are those that also scored the highest for implementing new infrastructure. Additional review of these areas and specific corridors would be required to understand existing conditions and the types of upgrades that would be the most effective in creating a more welcoming environment for active transportation.

4.0 POLICY AND PRACTICE RECOMMENDATIONS

While infrastructure such as sidewalks and pathways are foundational to encouraging active transportation, enabling, and encouraging a shift to active transportation requires ensuring that the networks are designed and built for a wide range of users, that intersections and crossings are safe, that facilities are properly maintained, and that other supporting measures are in place. This section of the Active Transportation Plan goes beyond capital and infrastructure recommendations and focuses on policy, operations, and programs that encourage and enable active transportation.

4.1 LAND DEVELOPMENT BYLAW UPDATE

STANDARD PEDESTRIAN FACILITY REQUIREMENTS

The City's Land Development Bylaw provides design criteria for all City infrastructure, including transportation, water, drainage, and sanitary systems, private utilities, street lighting, and landscaping. The design criteria section outlines the minimum standards and requirements the City will accept in the design and record drawing submissions for development works. The Bylaw also includes Master Municipal Construction Documents, service agreements, and Standard Drawings. The Bylaw's scope covers subdivisions, developments, and municipal properties or rights of way in the City of Chilliwack. The City is planning an update to the existing Land Development Bylaw in 2022/2023. This creates an opportunity to update the requirements related to active transportation. As part of the development of the Active Transportation Plan, the existing Bylaw was reviewed and recommendations for consideration as part of the update were identified and are highlighted below.

The existing Land Development Bylaw outlines standard pedestrian facility requirements, including where a sidewalk is required, whether one is required on one or both sides of the street, and how wide the sidewalk must be. Currently, the City's Bylaw has not yet been updated to align with best practices in active transportation infrastructure design or the City's existing planning documents. For example, the Bylaw standards do not align with the recommendations of the City's 2018 Transportation Plan, which calls for wider minimum sidewalk widths than the Bylaw's standard drawings. Furthermore, neither the Bylaw nor the City's 2018 Transportation Plan recommendations fully align with the B.C. Active Transportation Design Guide (BCATDG), which is currently the best practice in British Columbia. The BCATDG provides guidance for sidewalk requirements in urban and rural contexts (**Figure 20**) as well as recommended sidewalk facility widths (**Table 5**).

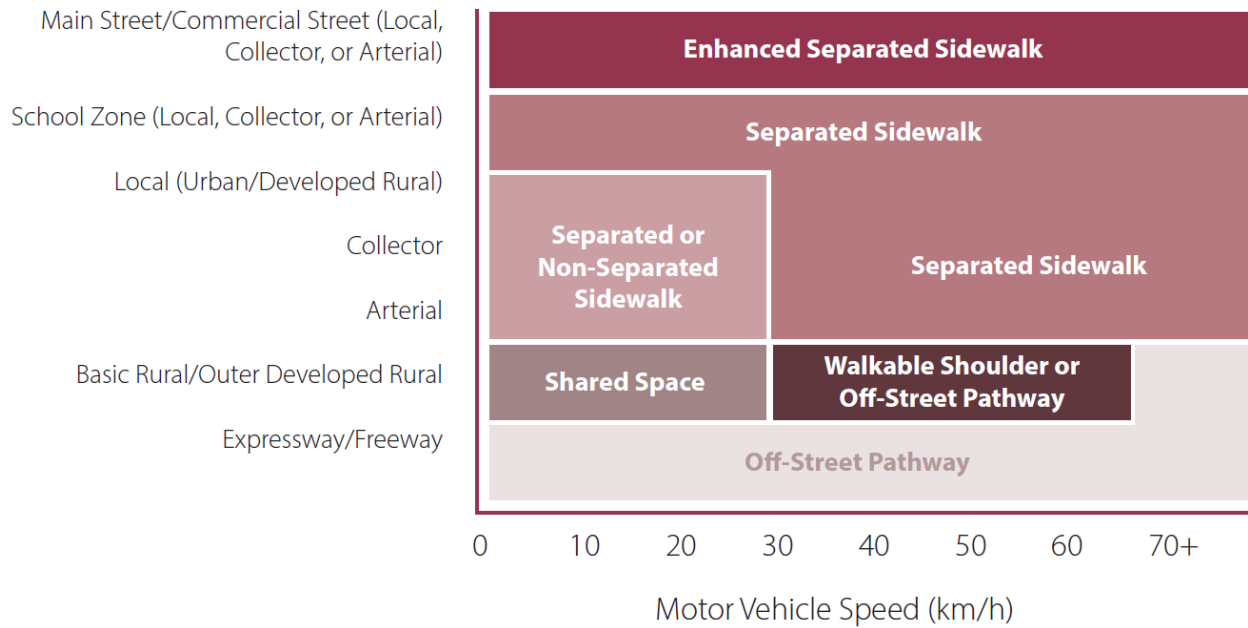


Figure 20: BCATDG Pedestrian Facility Selection Decision Support Tool

Source: B.C. Active Transportation Design Guide (Figure C-20)

Table 5: BCATDG Pedestrian Through Zone Recommended Widths

| Land Use Context | Road Type | Separation | Desirable (m) | Constrained Limit (m)* |
|---|----------------------|----------------------------|---------------|------------------------|
| Single- Family Residential | Local | Non-Separated or Separated | 1.8 | 1.8 |
| | Collector/Arterial** | Separated | 1.8 | 1.8 |
| Multi- Family Residential | Local | Non-Separated or Separated | 2.1 | 1.8 |
| | Collector/Arterial** | Separated | 2.4 | 1.8 |
| Industrial | Any** | Separated | 2.1 | 1.8 |
| Commercial | Any** | Separated | 2.4-3.0 | 2.1 |
| Area of high pedestrian activity (including temporary, special event, or seasonal)*** | Any | Separated | 3.0-4.0 | 2.4 |

* The absolute minimum width of the Pedestrian Through Zone is 1.5 metres, which should only be used under constrained conditions for distances under 100 metres

** Non-separated sidewalks are not recommended on collector, arterial, or industrial roads with motor vehicle speeds greater than 30 km/h (see **Chapter C.1**). If non-separated sidewalks cannot be avoided due to site constraints, a minimum of 0.5 metres may be added to the Pedestrian Through Zone width to provide extra separation from motor vehicles.

*** Areas of high pedestrian activity have peak pedestrian volumes of 400 pedestrians/peak 15-minute period, as per Table 6.3.1. in the TAC *Geometric Design Guide for Canadian Roads*.

Source: B.C. Active Transportation Design Guide (Table C-5)

The following updates to the Land Development Bylaw are recommended:

- Update the pedestrian facility requirements (i.e. the number and location of required sidewalks) to meet best practices such as the BCATDG.
 - Sidewalks are recommended on both sides of all urban roadways in Chilliwack. Separated sidewalks (i.e. sidewalks with a boulevard) are recommended in all urban areas of Chilliwack, especially along main commercial streets, in school zones, and along roads with speeds >30km/h.
 - Rural developed neighbourhoods (including Promontory, Greendale, Yarrow, Chilliwack Mountain, Eastern Hillside, and Rosedale) should be considered "Developed Rural" on **Figure 20** and thus have sidewalk requirements similar to an urban setting.
 - In all other rural areas, ("Basic/Outer Developed Rural" in **Figure 20**), it is recommended that walkable shoulders should be provided on both sides of the roadway. Ensure that walkable shoulders are provided on both sides instead of just one improves network connectivity and helps to satisfy the requirements of Motor Vehicle Act Section 182(2), which requires pedestrians to walk on the shoulder facing oncoming traffic.
- Update sidewalk width requirements to meet the best practices described in the BCATDG. The minimum sidewalk width in all contexts should be 1.8m instead of the current 1.5m requirement, except in commercial areas or areas with high pedestrian activity where 2.1m-2.4m are required. It is recommended that a range of sidewalk widths is provided in the Land Development Bylaw to cover different contexts.
- Update paved shoulder width requirements to meet the best practices described in the BCATDG. Chapter C.4 of BCATDG notes that walkable shoulders should have a minimum width of 1.5m (or 1.8m for areas with high pedestrian volumes), while Chapter D.6 notes that bicycle accessible shoulders may require additional width (1.8 to 3.0m). It is therefore recommended that paved shoulders be 1.5-3.0m wide, depending on the context. Currently, the minimum requirement is 1m width.
- Where appropriate, a multi-use pathway could be considered in place of a sidewalk (see Section 4.4). The Land Development Bylaw should outline geometric design standards for multi-use pathways to ensure they provide a seamless pedestrian connection.
- Ensure consistency between the Land Development Bylaw's Design Criteria text and the requirements shown in the Standard Drawings.

SPECIAL STUDY AREAS

Requiring a sidewalk on one or both sides of the roadway may not be feasible in all contexts. The City recognizes that barriers such as steep topography and sensitive riparian areas (e.g. fish bearing watercourses) can make sidewalk construction technically or financially unfeasible, which can have an impact on development. There are also contexts where sidewalks may not be necessary due to relatively low pedestrian activity, including in rural subdivisions with low existing and planned connectivity. Part of the Land Development Bylaw review included identifying 'Special Study Areas' where sidewalk alternatives may be considered.

In the community survey for the Active Transportation Plan, respondents were asked what approach the City should take when faced with scenarios where sidewalk construction is not practical. The results of this question are summarized in **Figure 21**. Road space reallocation, including reducing the number or width of motor vehicle lanes or removing on-street parking should be considered on a case-by-case

basis. However, the top response was to consider an alternate walking facility, such as an off-street multi-use pathway or, in rural areas, a paved shoulder. This decision requires ensuring balance between accommodating best practices for pedestrian accessibility and network connectivity while ensuring that development is accommodated.

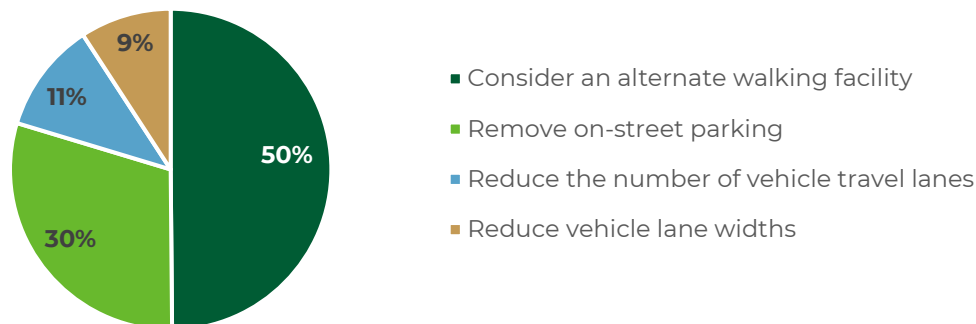


Figure 21: Where sidewalks are not possible, what compromise is preferred?

A GIS analysis was conducted to identify the Special Study Areas where sidewalk alternatives may be considered. The criteria for this analysis are described in **Table 6**. The resulting map is shown in **Figure 22** and highlights special consideration areas in yellow, orange, and red. The map highlights Chilliwack Mountain, Promontory, Ryder Lake, and the Eastern Hillside as areas where the slope is greater than 20%. Watercourses are clustered in these hilly areas as well but are also present throughout the valley floor. Finally, rural areas are highlighted in yellow, emphasizing places where there is less need for a sidewalk network. When a project occurs within any area highlighted on this map, it should trigger a special study to confirm whether the standard sidewalk requirements should be used or if an alternate facility may be considered.

Table 6: Special Study Area Criteria

| Factor | Description |
|--|---|
| Topography | Applies to lands with natural slopes of 20% or more, as per the City's Hillside Development Standards. |
| Watercourses | Applies a buffer of 30 metres around all watercourses that are sensitive fish/vegetation habitat. This does not necessarily prohibit development within the buffer, but it requires that development within the buffer be approved, as referenced in the Development Permit Area 3 process for development within Riparian Areas. |
| Rural Areas | Small urban subdivisions in rural areas (i.e. all areas outside the Urban Growth Boundary and Rural Developed Neighbourhoods) with little or no opportunity for future connectivity or where limited infill subdivision is anticipated. |
| Local Roads in Rural Developed Neighbourhoods | Local roads within Rural Developed Neighbourhoods may have sidewalks on only one side of the road at the discretion of City staff, and if the road does not connect to a key pedestrian generator, school, park, or trail. This adds flexibility in rural areas where sidewalks on both sides may not be required. |

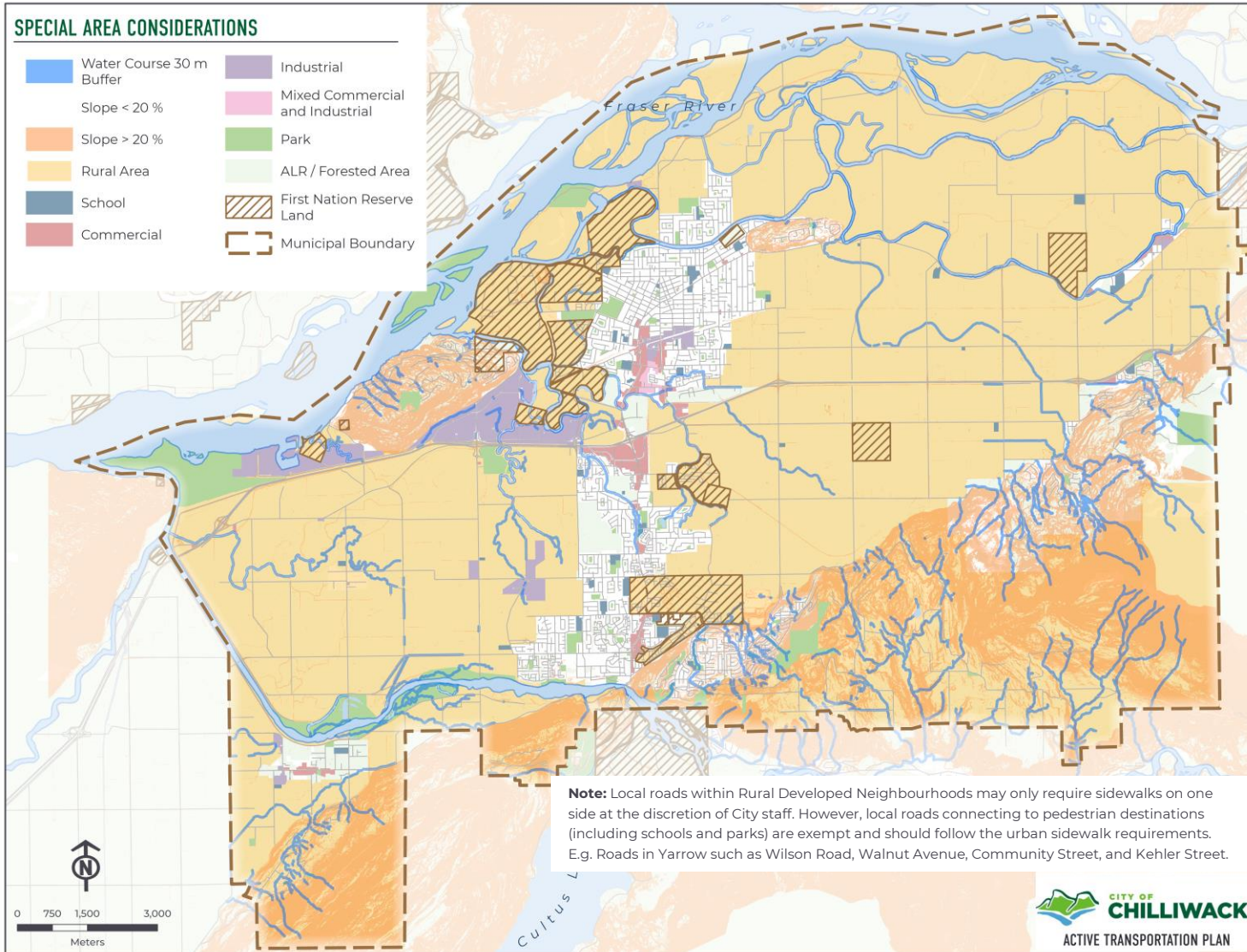


Figure 22: Special Study Areas for Sidewalk Alternatives

4.2 NEW CROSSINGS

As part of the Active Transportation Plan, a review of the City's crosswalk installation analysis methodology was conducted. The objective of the review was to identify if any changes or revisions to the approach should be made based on 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).

There are several tools guiding agencies for selecting pedestrian crosswalks devices, as listed below. The City currently references the 1994 BC Ministry of Transportation and Infrastructure (MOTI) Guide as well as a simplified methodology that was developed as part of the 2018 Transportation Plan Update.

- 1994 Pedestrian Crossing Control Manual for British Columbia, BC Ministry of Transportation and Infrastructure (MOTI) (1994 MOTI Guide)
- 2012 Pedestrian Control Guide, Transportation Association of Canada (TAC) (2012 TAC Guide)
- 2018 Pedestrian Crossing Guide, TAC (2018 TAC Guide)

The results of the review suggest that the City's current approach aligns with the industry standard in general, but a few gaps exist. These gaps include accounting for minimal requirements, latent demand, and specific considerations of using RRFBs, which are described in the most recent (2018) TAC guide. Given that TAC continues to update their guidelines and applies a more holistic approach by considering both rural and urban land use, as well as current and future demand, TAC's 2018 guide is recommended as the preferred and most comprehensive guide. Based on the review of the City's current methodology and available resources, the following actions are recommended to the City to consider moving forward:

- Update the approach by including the minimal requirements described in the 2018 TAC Guide.
- Revisit the simplified matrix described in the City's Updated Transportation Plan and update it accordingly following the 2018 TAC Guide. This also includes the procedure of selecting RRFBs.
- Develop the appropriate thresholds of the distance ("d") between the study location and nearby traffic control. The minimal distance is typically in the range of 100m to 200m depending on the community. In general, pedestrian crosswalks can be placed more closely in an urban area with higher pedestrian activities than rural areas. The City can consider developing different thresholds for urban (i.e., 100m to 150m) and rural areas (i.e., 200m). In a high pedestrian area (more than 25 pedestrians for more than four hours on a typical day), a marked crosswalk should be located no more than 100m apart.

In addition to updating the City's current analysis method, the City can consider the following items to determine whether a pedestrian device warrant is required:

- Whether the inquiry was made due to concerns of vehicle speeding. A marked crosswalk should not be installed to address speeding issues. Instead, the City should investigate whether the site has speeding issues and should implement speed reduction measures.
- Whether the site meets the minimal threshold of pedestrian and vehicle activities, if not, then whether the site is in a rural area, and perhaps other mitigations such as better lighting can be considered.

4.3 BEYOND THE NETWORK

In addition to building a complete and connected pedestrian network with safe intersections and crossings, there are several other supporting measures that can help make it safer, more convenient, and more enjoyable to get around Chilliwack using active modes. Some key supporting measures are outlined below.

PLACEMAKING

There is opportunity to use the streets within Chilliwack to enhance neighbourhood placemaking. Transportation corridors are part of the public realm, and they typically represent a city's largest land use asset. Designing key corridors as walkable public spaces will increase the attractiveness of the corridor and support active transportation. Providing places to rest, interesting things to look at, boulevard trees, and wayfinding signage add to an area's sense of place and make it comfortable and convenient to walk and roll. Elements such as public art provide the opportunity to incorporate local history, Indigenous knowledge, and other interpretive information. On the cycling side, providing access to amenities such as secure bike parking, showers, lockers, and emergency bike repair stations help to make cycling a more convenient form of transportation.

Tactical Urbanism & Rapid Implementation

Many communities have used tactical urbanism techniques to implement placemaking improvements rapidly and for little budget, providing flexibility to make changes as needed. This has been demonstrated over the past two years of the COVID-19 pandemic, with many communities reallocating road space to create extra space for walking, rolling, and gathering, including pop-up patios and parklets. The TransLink [Tactical Urbanism Toolkit](#) provides a proactive approach for active transportation and placemaking projects through thoughtful communication plans and strategic community engagement tactics. Furthermore, the Federation of Canadian Municipalities' [COVID-19 Street Rebalancing Toolkit](#) provides advice for temporarily redesigning streets to ensure physical and mental health, safety, and well-being, while also encouraging active transportation.

OPERATIONS AND MAINTENANCE

Maintaining existing active transportation facilities is also an important component to ensuring the network can be used year-round by everyone. This requires planning for the regular inspection and maintenance of sidewalks, with special consideration for snow storage and removal. As new infrastructure is installed, the City will also need to consider the impact on long-term operations budgets. Ensuring that new infrastructure is designed to provide adequate drainage, snow storage and removal, and sand and gravel removal can help to alleviate long-term maintenance challenges. Additionally, having an up-to-date inventory of maintenance complaints and projects can help to ensure projects are documented and prioritized.

The City is responsible for clearing snow and ice from sidewalks that are located adjacent to municipal properties and facilities and at the downtown transit terminus. As outlined in the City's Highway and Traffic Bylaw (No. 4686) all other sidewalks must be cleared by the adjacent property owner or tenant by (no later than) noon on the day following the 'deposit' of the snow and ice. Currently, the City supports the local Snow Angels program that offers support to those who need assistance keeping their sidewalk clear. As new sidewalk and pedestrian infrastructure is implemented, the City may consider developing a program to remind property owners of their responsibility to keep facilities clear and ensure that sidewalks are cleared in a timely manner, addressing feedback or reports of uncleared

facilities. The implementation of new sidewalks should consider winter maintenance and who will be responsible for clearing.

The City has a sidewalk inspection program and tracks all maintenance complaints and repairs in Cityworks software. Maintenance budgets are reviewed annually to ensure service levels are maintained; however, it is important for staff to monitor and implement best practices to stay ahead of potential maintenance related issues.

ACCESSIBILITY

It is critical that people of all ages and abilities can access a range of mobility options and fully participate in the community. Designing for people with a broad range of mobility challenges is essential to creating an equitable community. It is recommended to ensure network accessibility, that the City conduct an audit and inventory to identify infrastructure in need of upgrades and prioritize improvements to enhance accessibility. The City can also consider allocating a portion of the annual transportation budget to retrofit existing facilities.

Design features such as audible intersections signals, accessible push buttons, legible street signage, high quality lighting, slip resistant surfaces, and tactile walking surface indicators (TWSI) can all contribute to enhancing network accessibility.

About Tactile Walking Surface Indicators (TWSI) - Figure 23

Other municipalities within BC and Canada recommend installing TWSI's at all new or redeveloped crossings with ramps leading into the crosswalk or roadway and at locations where there is a refuge island. Other considerations, such as how close they are located to public facilities such as schools, hospitals, community centres, etc. can also influence when they are used.

Directional indicators which typically look like parallel linear grooves, commonly seen in plazas or at transit stations, can be used on sidewalks, curb ramps, shared streets. Attention indicators (via truncated domes) can be used at locations such as, curb ramps, transit stops, and railway crossings.



Figure 23: Tactile Attention Indicator and Tactile Direction Indicator

Source: BC Active Transportation Design Guide

INCREASE AWARENESS

Approaches to increasing awareness can include enhanced wayfinding and signage, trip planning tools, and route maps. Mapping and wayfinding are key components of an active transportation network. It is recommended that the City explore ways to identify and name routes, along with route signage to highlight key destinations and distances. For example, the draft Vedder Greenway Recreation Plan is recommending reviewing trail and place names to reflect Indigenous knowledge and sense of place. A similar approach could be taken to key active transportation corridors throughout the city.

EDUCATION AND OUTREACH

Education, engineering, enforcement, evaluation, and engagement initiatives shall include providing information to the public on the benefits of active transportation. The methods may include, hosting events to promote active transportation, skills-building programs, promotional campaigns, and supporting programs that teach skills and awareness of road safety, walking and cycling, and public education campaigns.

The City of Chilliwack Safer City Program shall continue to include planning for initiatives and education by incorporating the Safer School Travel Program, which encourages walking and rolling to school through education, evaluation, and infrastructure improvements around schools. The Safer City program shall also continue to include pedestrian safety projects, school zone safety projects, cycling safety education, low-powered vehicle and scooter education, rail safety education, rectangular rapid flashing beacon education, intersection safety projects, school bus safety education, and other vulnerable road user education and project initiatives that support and promote active transportation.

POLICY AND REGULATION

The Active Transportation Plan has identified several updates to the Land Development Bylaw. Additionally, the City should identify other policy direction and actions that specifically support walking and rolling in Chilliwack, and ensure consistency across City plans, policies, and bylaws. There are also opportunities to work with partners to review the Motor Vehicle Act and recommend updates to accommodate active transportation. Slower traffic speeds reduce both the frequency and severity of collisions. This is especially true for collisions involving pedestrians – the faster the car is moving at the moment of impact, the greater the chance of serious injury or fatality. There are a number of pilot programs such as in the nearby communities of Surrey and Vancouver to reduce neighbourhood speed limits. The City should monitor the conclusions of these studies to direct future speed limit policies and practices.

PARTNERSHIPS

Achieving a modal shift to include a higher percentage of active transportation is strengthened through partnerships. The City should seek ways to partner with health authorities, school districts, business improvement districts, advocacy groups, and other community organizations that can help encourage walking and rolling.

5.0 IMPLEMENTATION & MONITORING

5.1 COSTS

The unit cost assumptions for implementing active transportation infrastructure are shown in **Table 7**, which represents typical unit costs and recent construction pricing in other similar sized communities in British Columbia. The cost estimates are based on retrofitting an existing right-of-way with a pedestrian facility or crossing improvement or installing a new multi-use pathway on an existing City-owned property, with minimal additional surface preparation and grading required. The unit costs recognize that sidewalk and pathway installation may require curb, gutter, and drainage in some contexts. Any required land acquisition, structures, traffic control devices, burying hydro lines, and further engineering studies have not been included in the cost.

Additionally, **Table 7** provides cost estimates for several types of amenities, wayfinding elements, and intersection treatments. These costs are to be used to identify the relative cost between projects for planning purposes and should be refined for detailed budgeting. Projects such as intersection upgrades and grade separated crossings require a more detailed review to determine the cost for construction. As a result, the cost estimates for these projects have not been included.

Table 7: Unit Costs (based on 2021 construction costs)

| Facility | Unit Cost |
|---|------------------------|
| Linear Facilities | |
| Sidewalk (one side) | \$900,000 / km |
| Multi-Use Pathway | \$900,000 / km |
| Intersection Treatments | |
| Marked Crosswalk (one crosswalk) | \$5,000 |
| Rectangular Rapid Flashing Beacon (RRFB) / Enhanced Crosswalk | \$25,000 |
| Full Signal (four-way traffic signal) | \$200,000 to \$500,000 |
| Curb Extensions (one side of crossing) | \$10,000 |
| Amenities | |
| Benches | \$500 to \$1,500 |
| Planters | \$400 to \$1,200 |
| Washroom (Fully Serviced) | \$130,000 |
| Wayfinding | |
| Pedestrian Map Panel | \$8,500 - \$11,000 |
| Pedestrian Kiosk | \$18,000 - \$20,000 |
| Directional Signage | \$1,800 |

The planning level cost estimate of the short and medium-term project recommendations, as identified in **Figure 19**, can be seen below in **Table 8**.

Table 8: Proposed Project Cost Estimates (based on 2021 construction costs)

| Implementation Timeline | Length (KM) | Rounded Cost Estimate |
|-----------------------------------|-------------|-----------------------|
| Short-Term Projects (0-5 years) | 2.8 | \$2,700,000 |
| Medium Term Projects (5-10 years) | 2.4 | \$2,500,000 |

5.2 IMPLEMENTATION CONSIDERATIONS

CURRENT FUNDING MECHANISMS

Sidewalk improvements are funded several ways in Chilliwack, including the capital Concrete Works Program, Development Cost Charges (DCCs) and Capital works, provincial and federal grants, and through development.

Development Cost Charges (DCCs) and Capital Works account for around 1-3 kilometres of sidewalks. Grant funding varies by year. Development typically accounts for around 3 kilometres of sidewalks replaced or installed each year, although these are not necessarily in the highest priority locations and may lack connectivity to the existing network.

FUNDING STRATEGIES

The City should continue accessing funding from a variety of sources, as described in above. Implementation costs for the actions listed in the Active Transportation Plan can be greatly reduced by securing external funding sources and partnership opportunities. This section describes several strategies that the City may consider to leverage its investments and maximize its ability to implement transportation improvements.

The City should pursue all available sources of funding for transportation facilities and programs, including the programs identified below. As funding opportunities change regularly, the information in this section is subject to change. The City should regularly check with all levels of government to keep up to date on current funding opportunities.

- **Capital Planning:** Continue to fund capital improvements. It is recommended that the City review funding sources and review opportunities to accelerate the implementation.
- **Developers:** An important component of the implementation of the Active Transportation Plan 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:
 - Sidewalk and pathway construction,
 - Voluntary public realm improvements;
 - Community amenity contributions;
 - Density bonusing contributions;
 - Funding in lieu of parking; and
 - Providing high quality bicycle parking facilities.

- **Federal Funding:** There are several programs that provide funding for environmental and local transportation infrastructure projects in municipalities across Canada. Typically, the federal government contributes one third of the cost of municipal infrastructure projects. Provincial and municipal governments contribute the remaining funds, and in some instances, there may be private sector investment as well. The Federal Government recently received applications to the National Active Transportation Fund (ATF), which will provide \$400 million over five years to help build new and expanded active transportation facilities across the country. Additional intakes are expected in the future.
- **Provincial Programs and Initiatives:** The Provincial Government administers the Active Transportation Infrastructure Grant program, which promotes new, safe, and high-quality active transportation infrastructure through cost-sharing with local governments. The grant program provides funding for infrastructure which forms part of an active transportation network plan adopted by a BC local government. To ensure maximum success at obtaining grant funding, the City should have grant-ready concepts pre-developed for application.
- **Green Municipal Funds:** The Federation of Canadian Municipalities manages the Green Municipal Fund, with a total allocation of \$550 million. This fund is intended to support local government efforts to reduce pollution, reduce greenhouse gas emissions, and improve quality of life. The expectation is that experience gained in best practices and innovative environmental projects will be applied to national infrastructure projects.
- **Carbon Tax Rebate:** Under the Local Government Climate Action Program, each municipality that has signed the Climate Action Charter receives an annual grant to support GHG reduction initiatives. The City could choose to direct this funding towards sustainable transportation projects, such as funding bicycle, pedestrian, and transit infrastructure.
- **ICBC:** ICBC provides funding for road safety improvements, including pedestrian and bicycle infrastructure, particularly where these have the potential to reduce crashes, improve safety, and reduce claims costs to ICBC. Funding is available through ICBC's Road Improvement Program, and other ICBC programs include the Speed Watch Program (through the Community Policing Centres), Speed and Intersection Safety Program, Counter Attack, Operation Red Nose, and Road Sense Speaker Program for Schools
- **Private Sector:** Many corporations wish to be good corporate neighbours— to be active in the community and to promote environmentally-beneficial causes. Bicycle and pedestrian routes and facilities are well-suited to corporate sponsorship and have attracted significant sponsorship both at the local level and throughout North America. Examples in BC include Construction Aggregates in Sechelt, which constructed an overpass over a gravel conveyor to provide a link for pedestrians and cyclists, as well as 7-Eleven and Molson Breweries, which have each sponsored multi-use pathways in Metro Vancouver.

5.3 MONITORING

Measuring the success of the Active Transportation Plan requires monitoring Chilliwack's progress in implementing the network and supporting policy recommendations. The Plan is the first step towards enhancing users' safety and experience while accommodating all users and providing excellent experiences. Without ongoing monitoring, it will be impossible to understand if this is being achieved.

The approach to measuring success must include a monitoring plan that is:

- **Meaningful.** Monitoring should yield meaningful results and point to the success in achieving the outcome of the Active Transportation Plan.
- **Measurable.** Monitoring needs to establish criteria that are measurable and for which data or information can be readily obtained.
- **Manageable.** Monitoring implementation needs to consider resource limitations and identify measures where information is accessible, or data is simple to collect.

Table 9 outlines several key performance indicators (KPIs) to monitor throughout the implementation of the Active Transportation Plan. Each KPI includes one or more indicators and a potential source of data. It is important to note that there are other measures that the City may identify to be monitored overtime. It is suggested that the City develop a formal monitoring plan for the Active Transportation Plan that may include public reporting, public input, new projects, and investments in active transportation facilities.

Table 9: Key Performance Indicators for Active Transportation

| Measure of Success | Indicator | Source |
|--|---|---|
| Increasing the number of trips made by active transportation | Percentage of people walking and cycling | Census data (Statistics Canada) Trip Diary Survey (Metro Van) Trail user counters |
| Increasing Safety for Active Transportation Users | Rates of pedestrian and cycling collisions (overall, serious injury, and fatality) | ICBC |
| Increasing network connectivity and accessibility | Number of new kilometres / projects implemented (AAA cycling facilities, sidewalks, multi-use pathways, curb ramps, etc.) | City of Chilliwack capital statistics |



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CITY OF COVINGTON