DISTRICT OF KENT ACTIVE TRANSPORTATION NETWORK PLAN

FINAL

December 19, 2023

URBAN SYSTEMS

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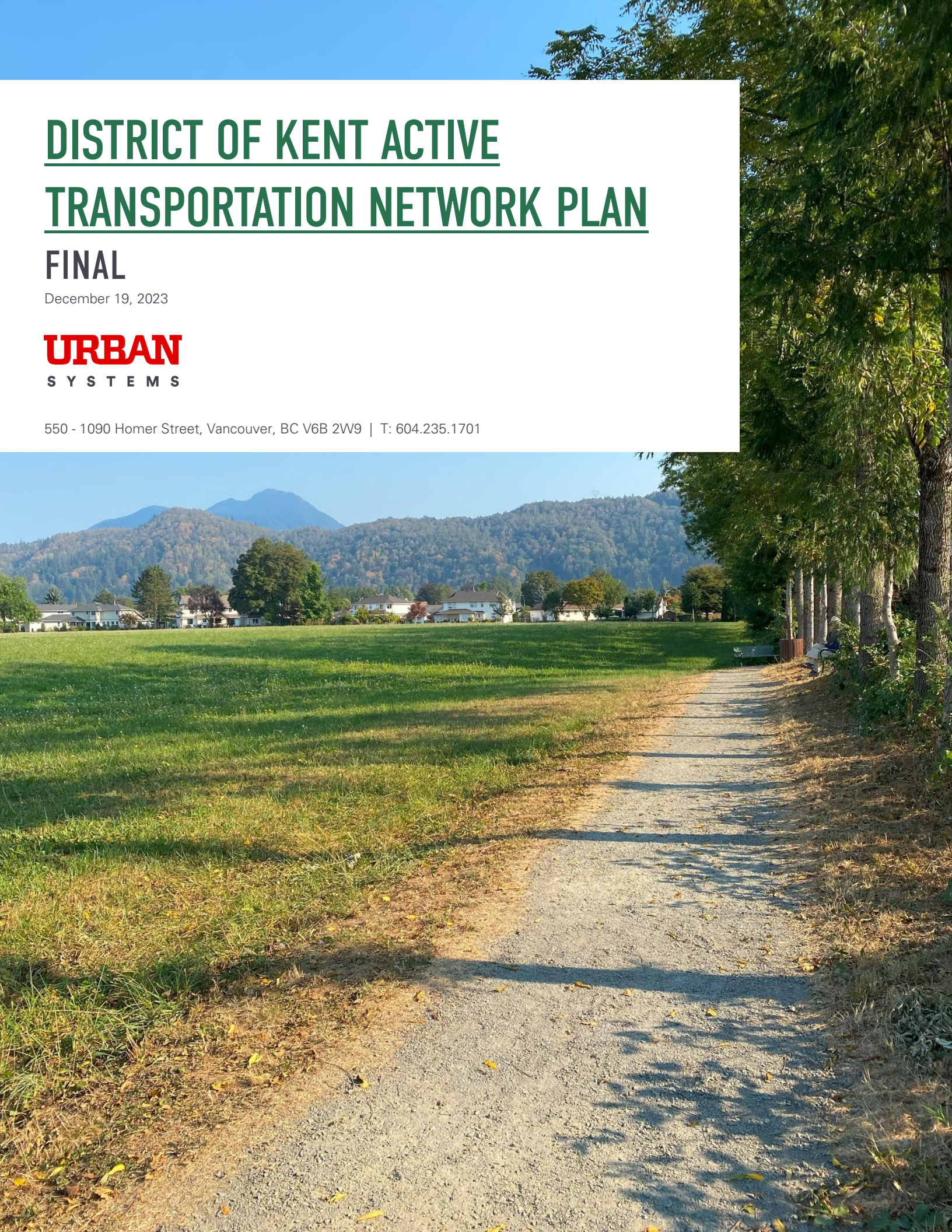

PREPARED FOR:

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1.0 Introduction

The District of Kent is committed to making it safer, easier, and more enjoyable to walk, bicycle, and use other forms of active transportation. By promoting and supporting more opportunities for active transportation, Kent can increase rates of physical activity, improve public health outcomes, enhance equity, independence, and social connections, and reduce automobile dependence, infrastructure demands, and greenhouse gas (GHG) emissions.

The Active Transportation Network Plan (ANTP) is an update to the District's 2009 Active Transportation Plan and is intended to align with best practice in infrastructure planning and design. The ATNP will help facilitate connections between the District's neighbourhoods, local and regional trail systems, and community destinations. The long-term active transportation network will focus on providing a safe, comfortable, and accessible experience for various users of all ages and abilities. The ATNP is intended to help guide Kent's investments in active transportation over the next 20 years and beyond.

What is Active Transportation?

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

Planning and designing active transportation facilities for people of All Ages and Abilities (AAA) is a national and international best practice that should be aspired to for all active transportation facilities in Kent.

The focus of Kent's ATNP is on people of all ages and abilities walking, bicycling, and rolling. This means that the ATNP considers people using a variety of mobility devices (e.g., walkers, wheelchairs, and mobility scooters) and bicycle types (e.g., bicycles with trailers, e-bikes, bicycles built for people with mobility challenges, and others) to ensure that active transportation is feasible, comfortable, and enjoyable for all the District's residents and visitors.

1.1 Report Structure

The ATNP has been divided into five sections:

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

Section 2: Setting the Context outlines the considerations that shaped the plan's strategies and actions. This includes understanding demographic and land use trends, connections to other relevant programs and policies, and existing conditions for walking and cycling in Kent, including key issues and opportunities.

Section 3: Setting the Future Direction introduces the ATNP's guiding principles and core themes of Connected Community, Enjoyable Experience, and Everyday Encouragement. It then outlines several action areas and specific actions for improving active transportation in Kent.

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

Section 5: Closing summarizes the plan and outlines the next steps for ensuring the Active Transportation Plan is successfully implemented.

1.2 Plan Purpose and Objectives

Since the completion of the 2009 Active Transportation Plan (ATP), the District has been working to implement many of the projects identified in the Plan, as a result, the District is looking for an updated list of projects to implement.

Additionally, since 2009 there has been a change in best practice for active transportation infrastructure design. Resources, such as the BC Active Transportation Design Guide, highlight the importance of providing All Ages and Abilities (AAA) active transportation infrastructure. There has been a significant change in understanding who we are designing infrastructure for. Recognizing that approximately 60% of the population is considered "interested but concerned" in using active transportation, meaning they are interested in walking and cycling more but are unlikely to unless they feel safe and comfortable doing so.

The ATNP will provide the District with a path forward to incorporate a walking and bicycle network built on best practices and community engagement. The ATNP will integrate the District's existing trail network with sidewalks, bicycle routes, and off-street gravel paths. The goal of the ATNP is to create an accessible, safe, comfortable, and connected network for people of all ages and abilities.

Key Objectives include:

- Align the Plan with current best practices to encourage more people to walk, bicycle, and roll (travel by scooter, wheelchair, mobility aid etc.), facilitating comfortable and safe movement of non-motorized modes of travel throughout the District.
- Provide and strengthen connections that enable people to travel by active modes to key destinations within the District. This includes within and to Agassiz and Mount Woodside, strengthen connections to Harrison Hot Springs and community and tourist facilities including recreational trails and loops, and other residential neighbourhoods.
- In the spirit of Lets'emot, of one mind, one heart, the District is committed to long-term relationships with local Indigenous communities and strengthening connections to these communities with active transportation infrastructure, as well as opportunities to educate residents and visitors on the history of the land.
- Identify key projects that create the most benefit for community members, enabling the District to tackle several community goals (affordability, health and social well-being, and environmental) at once.

1.3 Plan Development Process

The ATNP is being developed over a one-year period and includes four phases, as described below.

- Phase 1: Project Launch (September 2022) This phase involved the project kick-off meeting between the District staff and the consulting team, conducting a community site visit to explore existing conditions, and collecting and reviewing background information and data. This phase also involved preparing a community engagement plan for future phases of the planning process.
- Phase 2: Understanding Existing Conditions (October 2022-January 2023) This phase focused on understanding the existing state of active transportation in Kent. It included reviewing existing planning documents, conducting an inventory of existing active transportation infrastructure and programs, and holding the first round of stakeholder and community engagement. This memo is a review of the findings of Phase 2 and will form part of the final Plan document.
- Phase 3: Setting Future Directions (January-June 2023) This phase involved exploring potential directions for the future of active transportation in Kent. This included confirming the network planning principles, drafting a proposed active transportation network, and identifying policy and program options to support active transportation for the community. The second round of community and stakeholder engagement took place during this phase to gather input on the draft recommendations of the plan.
- Phase 4: Implementation and Reporting (June-September 2023) This phase focused on refining and prioritizing the draft content presented in Phase 3 and developing an implementation plan. This includes identifying project cost estimates and funding strategies. This phase included the documentation of the final plan and a presentation to District Council for approval.

1.4 Communications and Engagement

Ensuring community members are heard and their input is reflected in the plan is an essential component to the ATNP's community buy-in, support, and ultimate success. Various communications and engagement opportunities were offered at numerous points of the ANTP's development process to reach as broad of an audience as possible with both in-person and online options available.

Website and Online Surveys

A dedicated webpage was created on the District's website to store all key project information such as project updates and engagement events. It received over 200 views during the entire process. Two surveys were administered online with paper copies of the survey also distributed. The first survey launched in November 2022 with 240 responses, the second was launched in May 2023 with 19 responses.

Open House

The District hosted an open house at the Agassiz Friendship House on May 18 from 4:00 pm to 7:30 pm. The open house was designed to share what is being proposed in the draft ATNP and to provide an opportunity for community members to ask the District and its consultants questions about the initiative. The event featured information boards, draft active transportation network maps, and a feedback station.

In total, 4 people attended the open house. The information boards were also displayed at District Hall between May 23 and June 30.

Street Team Pop-Ups

Two in-person pop up events were held over the course of the project and resulted in over 40 interactions. Pop up events were held at the Community Recreation and Cultural Centre and the Winter Night Lights, places to meet people where they naturally gather.

News Release

Press Release: A press release was distributed on December 1, 2022 to local media announcing the planning process and opportunities for community engagement. The release was also posted to the News and Notices section of the District's website.

Social Media

The District's Facebook page was used to promote the project and feedback opportunities during both rounds of engagement. Outreach on Facebook and Instagram included 33 posts, reaching 5,563 people and resulting in 1,174 engagements. Twitter outreach involved 21 posts, resulting in 1,134 impressions and 58 engagements.

Stakeholder E-Blast

Emails were sent out to several stakeholders identified in the Community Engagement Strategy for the ATNP Update. The e-blast provided an update on the planning process and upcoming engagement opportunities.

2.0 Setting the Context

This section sets the stage for the recommendations and directions outlined in the ATNP. It outlines the community context, what active transportation looks like in the District today, and highlights opportunities to continue to enhance the work that has been done.

2.1 Community Context

The District is located near six First Nation's reserve lands referred to as, Lukseetissum, Wahleach Island, Seabird Island, Tseatah, Scowlitz, and Sts'ailes and home to the Shxw'ow'hamel, Seabird Island, Cheam, Sq'éwlets, Yale First Nation, and Sts'ailes. The District is a vibrant, rural community of approximately 6,400 residents in British Columbia's Fraser Valley. The District is bordered by the Fraser River, Harrison River, as well as the Village of Harrison Hot Springs and consists of several neighbourhoods, with the largest being the Agassiz townsite. In recent years, the District has experienced redevelopment and population growth. As a result, there is a desire to create stronger active transportation connections to and within the District's main townsite, Agassiz, to its western borders at Harrison Mills, and the surrounding First Nations communities. The community is bordered by natural features such as the Fraser River, Harrison Lake, and the mountains of Sasquatch Provincial Park.

Demographics

The population of Kent has grown 27% since 2001. According to the 2021 Census, the highest proportion of the population are working adults aged 15 to 64 (59.2%), followed by older adults aged 65+ (26.0%) and youth under the age of 14 (14.8%). The median age in the District is 48. The Housing Needs Report identified that limited transportation options in the District is a disincentive for both youth and older adults to stay in the community. The District is projected to continue growing and is expected to reach over 7,123 residents by 2025. As the District's population continues to age, ensuring there are suitable safe and comfortable transportation options and supporting infrastructure for community members to age in place is essential.

The median household income in the District is $78,000 per year and approximately 11% of the District's population are considered low income. The District is facing an increasing desire and need from community members for more transportation options, active transportation infrastructure, and tools to make the community more affordable and resilient and feel this would encourage more working age community members to stay in community.

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

Geography and Land Use

The District of Kent is a relatively large municipality with over 19,000 hectares located within the Fraser Valley. The Agassiz townsite is the District's core residential and commercial neighbourhood, however, most of the District is made up of agricultural land uses, in addition to various uplands and mountains. Agricultural land uses, due to its low density and lack of community destinations, creates a distance barrier for those who might adopt active transportation to access their daily needs. However, much of the District's terrain is flat (with some exceptions), which is ideal for active transportation and the varied terrain creates a scenic and beautiful setting for recreational active transportation.

In recent years, the District has experienced redevelopment and population growth within Agassiz but also at the Harrison Highlands development on Mount Woodside in the southwest of the District. The Harrison Highlands development does not include several common destinations that residents would access daily, including an elementary or secondary school, grocery store, medical services, and convenience/local neighbourhood stores. Not having these destinations nearby means that it is difficult to access them by anything other than a motor vehicle. The street network, discussed in more detail in Section 3.2, can make connecting areas of the District and land uses challenging.

The District is connected and bordered by a dyke system as well as informal trails. The dyke system was previously prohibited to recreationalists due to concerns from the agricultural community. Since Fall 2021, select sections of the District's dyke system has been open to the public, welcoming pedestrians, cyclists, dog walkers, and horseback riders to enjoy the trail as part of an ongoing pilot.

The District is connected to the City of Mission and Rosedale by two bridges (Harrison Mills Bridge and Agassiz-Rosedale Bridge) that are constrained for active transportation with no sidewalks and constrained or no shoulders.

Other significant land uses include two Federal correctional facilities, a Federal agricultural research facility, the UBC Dairy Education and Research Centre, and small-scale industry.

2.2 Policy Connections

Kent's ATNP update is closely linked to several other plans and policies at the local, regional, and provincial level. These documents set the overarching goals, visions, and objectives for land use, transportation, and other key long-term planning considerations in Kent and the region. This section lists some of these relevant documents that were reviewed as part of the planning process.

Local Plans and Policy

- Active Transportation Plan (2009)
- Agricultural Area Plan (2010)
- Age Friendly Plan (2013)
- Official Community Plan (OCP) (2014)
- Housing Needs Report (2020)
- Snow and Ice Control Plan (2022)
- Parks Acquisition, Improvement Trail Development Program (2015)
- Subdivision and Development Bylaw (2003, updated drafted)
- Zoning Bylaw (2002)

External Plans and Policy

- Fraser Valley Regional District - Experience the Fraser (2009)
- Fraser Valley Regional District - Fraser Valley Future 2050 (draft)
- Fraser Valley Regional District - 2020-2022 Strategic Plan
- BC Transit - Transit Future Action Plan (2021)
- Village of Harrison Hot Springs Official Community Plan (2007)
- Ministry of Transportation and Infrastructure – 1287 Agassiz-Rosedale Bridge Renewal Options Analysis (2012)
- Province of British Columbia - Move. Commute. Connect. (2019)
- Government of Canada - National Active Transportation Strategy (2021)

2.3 Active Transportation in Kent Today

This section describes existing conditions in Kent today, including travel patterns, existing active transportation infrastructure, and safety concerns. This information shaped the ATNP and the development of recommendations to best suite the context and needs of the community.

How Kent Moves

Mode Share

Based on the 2021 Census, the District's mode share is heavily vehicle oriented with 89% of all trips by vehicle. Approximately 6% of trips are by walking, 2% by bicycling, and 1% by transit (Figure 1Error! Reference source not found.). As a part of the community engagement process, ATNP community survey respondents were asked what mode they use most often for commuting purposes (work/school). Most respondents indicated they drive alone (83%), followed by driving with others (6%), bicycling (2%), and transit (1%). An additional 3% selected other and 16% selected not applicable.

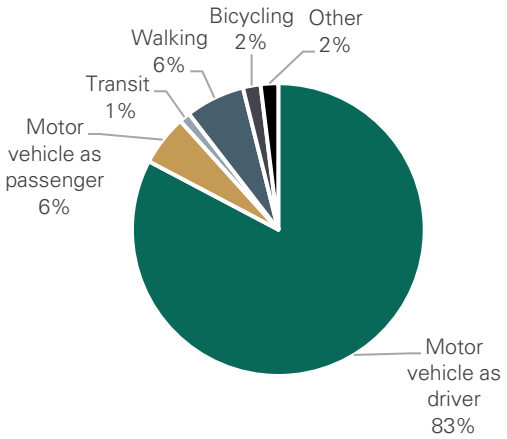


Figure 1: District of Kent Mode Share, 2021
Source: Statistics Canada Census

Trip Duration

The 2021 Census notes 37% of commuting trips are less than 15 minutes while 11% are one hour or more. The community survey found that 35% of commute trips (work/school) are less than 20 minutes, while 21% travel 20-30 minutes, and 23% travel over 30 minutes for their commutes. An additional 21% said they attend school/work from home.

Trip Purpose

The community survey also asked respondents about which trips they choose to walk or cycle for. Respondents were asked why they walk or cycle, the top five responses are identified in Figure 2.

Figure 2: Active Transportation Trip Purpose - Community Survey Responses

Destinations

Based on the 2021 Census, 40% of residents in Kent commute within their Census subdivision of residence while 60% commute to a different Census subdivision. The community survey found similar results, where 36% of respondents are traveling outside the District of Kent but within the Fraser Valley Regional District for work, college, or school, while 31% travel within the District of Kent.

Promoting active school travel can promote a healthier community that is comfortable using a range of modes of transportation as adults. Of the survey respondents with children attending school, 29% said their children take a school bus, 22% drive their children to school, 13% walk, 3% bicycle, and 1% carpool. 34% have a commute of less than 20 minutes, meaning there may be potential to increase the number of children traveling to school by active transportation.

2.4 Existing Network

This section provides an overview of the existing transportation network. Kent's existing transportation network, includes its streets, active transportation facilities, and transit network.

Street Network

The existing street network includes arterial, collector, and local street connections throughout the community which are under the District's jurisdiction. Lougheed Highway, Haig Highway and Agassiz-Rosedale Highway, including the Agassiz-Rosedale Bridge, are under Ministry of Transportation and Infrastructure (MoTI) jurisdiction. Streets under MoTI jurisdiction typically have higher traffic volumes, speeds, and accommodate large vehicles and commercial trucks. These streets bisect the community and can make active transportation crossings and travel challenging.

Active Transportation Network

Kent's existing active transportation network consists of sidewalks, shoulders that accommodate people cycling and walking, trails, and off-street paths and spans approximately 263 kilometres. The Trans Canada Trail also runs through the District. Kent has over 18 kilometres of sidewalk and nearly 60 kilometres of shoulders for bicycles. Most of Kent's existing active transportation infrastructure and community destinations such as schools, parks, commercial, and institutional are in Agassiz. A map displaying the existing active transportation network can be seen in Figure 3.

Table 1: Active Transportation Network Facilities

Facility Type	km
Trails	6.7
Informal Recreation Trails	154.9
Shoulders	59.8
Sidewalks	18.7
Trans Canada Trail*	23.3
**Note the Trans Canada Trail measure includes some shoulders*	

Sidewalks are mostly located on local streets in Agassiz. There are some key destinations in the community that are missing sidewalks on both sides of the street, such as schools and senior homes. Additionally, some sidewalks in Agassiz are discontinuous, ending mid-block. A few of the streets in Agassiz have sidewalks on both sides, connecting residents and visitors to the shops and services on Pioneer Avenue and Cheam Avenue. Mount Woodside has good sidewalk coverage but has steep hills and is disconnected from Agassiz and the City of Mission.

Sidewalk Standards in Kent:

The District's Subdivision and Development Bylaw design standards require sidewalks on urban arterial, urban collector, urban local, and cul-de-sac streets on both sides of the street that are 1.5 metres in width. Sidewalks are currently not required for roads classified as a rural local or rural collector, but these street classifications require a 1.0 metre gravel shoulder on both sides of the street.

Kent has an extensive trail network that includes off-street gravel paths, informal recreation trails, and a portion of the Trans Canada Trail providing community members and visitors excellent transportation connections and recreation routes. Within Agassiz, trails provide connections to seniors homes, community recreation centres and the broader Trans Canada Trail. Trail improvements could be made to enhance access and accessibility to ensure that they are suitable for people of all ages and abilities. The remaining trail network beyond Agassiz provides opportunities for recreation, exercise, and fun. The vast dyke system connects residents and visitors to the pristine landscape overlooking the Fraser and Harrison Rivers. The District has been opening the dykes as part of a pilot project initiated by a push from community members.

End of Trip Facilities and Amenities

Supporting amenities such as end-of-trip facilities and secure bicycle parking can also facilitate more bicycle use. While the District's Zoning Bylaw does require bicycle parking in new developments, there is limited secure bicycle parking in the District and a lack of end-of-trip facilities such as showers, lockers, and charging stations for electric bicycles and scooters. A lack of secure bicycle parking was noted as a main challenge for bicycling in Kent in the community survey.

Wayfinding and Signage

Share the Road signs have been installed in three locations in the District at Mountain View Road, Fir Road, and Pioneer Avenue, signalling to drivers that they should expect and respect bicyclists on the road. Speed limits were also lowered around Fir Road to 30 km/h and signs have been installed to reflect this.

Safety Concerns

Transportation safety is a core consideration in the planning of a transportation system. A review of ICBC data found that there were 9 collisions involving a motor vehicle and a pedestrian and 6 collisions involving a motor vehicle and a cyclist. Highway 9 at Mackay Crescent at Morrow Road, Evergreen Drive at Pioneer Avenue, and Highway 9 at Pioneer Avenue are intersections with multiple collisions involving active transportation users.

Approximately 7% of community survey respondents said they feel mostly or very unsafe when walking and that the lack of facilities and vehicles not yielding at crosswalks were the biggest barriers. This percentage is higher for people biking, with approximately 30% of community survey respondents saying they feel mostly or very unsafe when biking with a lack of designated bicycle facilities and motor vehicle speeds being the top barriers. Findings of the community survey revealed that community members would like to see safety concerns addressed along the highways in Kent as speeding and unsafe conditions for walking and biking (including vehicles driving on the shoulders and a frequency of collisions or close calls) are key concerns.

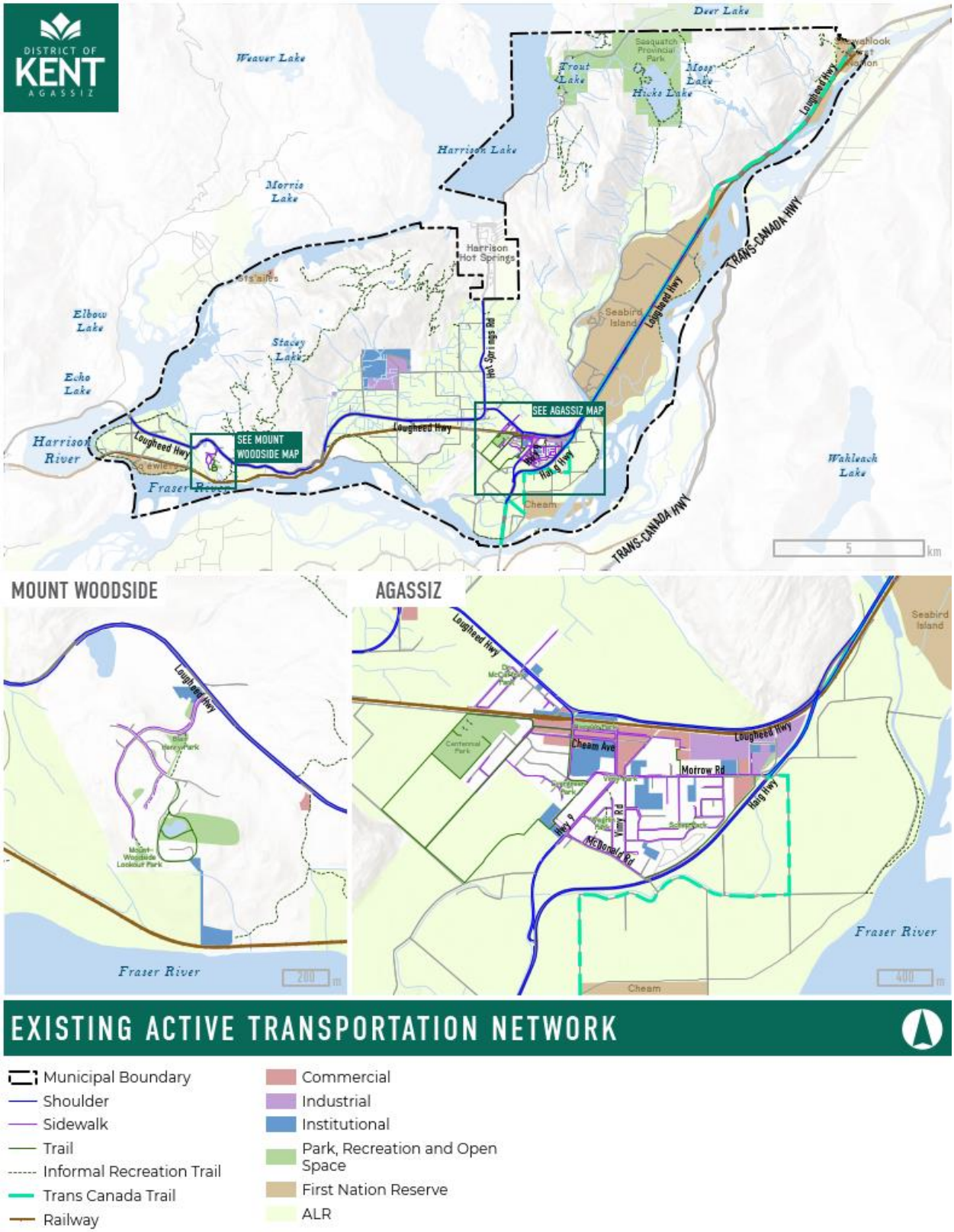


Figure 3: Existing Active Transportation Network

Transit Network

There are two transit routes in Kent, Route 71: Agassiz-Harrison and Route 72: Hope (Figure 4). The routes have relatively infrequent service on weekdays (approximately once per hour during peak times from 6-10am and 3-6pm and every two hours from 10am-3pm and 6-10pm) and Saturdays (approximately every two hours).

There are 24 bus stops throughout the District. Many of the bus stops in the District do not have a shelter, bench, garbage cans, schedule, wayfinding, or lighting in the vicinity of the bus stop. Additionally, a lack of sidewalks, curb ramps, and landings at bus stops means that bus stops can be challenging to access, especially for those with mobility challenges.

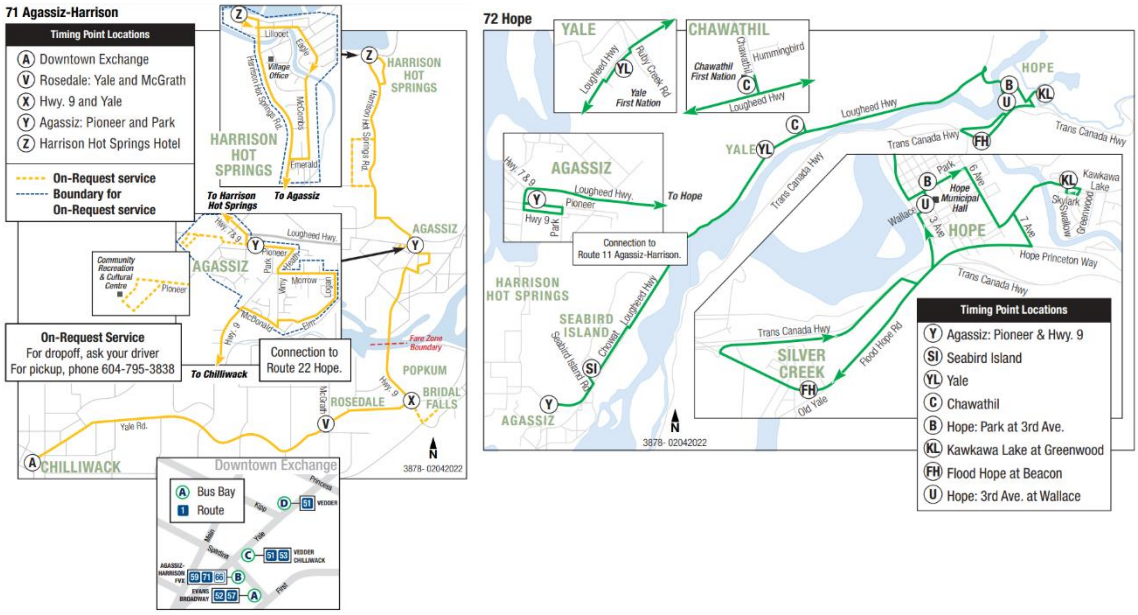


Figure 4: Route 71 and 72 Overview of BC Transit in Kent (Source: BC Transit)

What are some new ways of travelling?

Micromobility is a category of small one-person electric vehicles, such as e-bikes, e-scooters, or other devices. These extend the comfort and ease of travelling over longer distances and / or carrying heavier loads. Micromobility can be privately owned, or owned and operated as part of shared transportation systems. It can be used for personal travel or play a role in goods movement via cargo e-bikes.

Micromobility, both shared and personal, is becoming more prevalent to sustainably and affordably move around communities. Communities need to ensure there is supporting infrastructure for micromobility.

While 60% of respondents to the community survey said they would not be interested in using a shared micromobility service, 40% said they would be interested, with electric bike share being the most popular option (18%). The District also has the opportunity to participate in the Province's active transportation electric kick scooter pilot project that allows for the use of electric kick scooters on roads within their communities.

2.5 Key Issues and Opportunities

Key issues and opportunities for active transportation were identified through the community engagement process. Existing conditions review are summarized in this section.

- The top barriers for active transportation in Kent are a lack of designated active transportation infrastructure (trails, sidewalks, bicycle lanes, and bicycle routes) and motor vehicle traffic (motor vehicle speeds, vehicles failing to yield or stop at crossings).
- Based on responses from the community survey, there is an overall sense that by providing safe facilities for active transportation, more people will choose to walk and bicycle more. In addition to slowing vehicles and providing quality infrastructure, residents also want to see the quality of District streets improved such as potholes, cracks, missing pavement markings, and narrow shoulders.
- Community Survey respondents use walking and biking as exercise and recreation. The trail network is well used and loved by residents and visitors and has an opportunity to be expanded. In addition, the Trans Canada Trail runs through the District which is an opportunity to establish a high quality tourism generator and recreational facility.
- There is an opportunity to fill in sidewalks strategically around key community destinations that are active transportation generators. The District has an opportunity to establish sidewalk coverage standards by street classification such as ensuring all arterial and collector streets have sidewalks on both sides.
- A review of historical Census data illustrates that many of the Journey to Work trips taken in Kent are short and could be replaced by active transportation.
- Based on the technical review, active transportation connections between Agassiz, Mount Woodside, and neighbouring communities such as Harrison Hot Springs, Mission, Chilliwack, and First Nations such as Seabird Island First Nation need improvements to make walking and cycling safer. Respondents from the community survey noted that the stretch of Highway 7 between Seabird Island First Nation and Agassiz is used regularly by pedestrians and cyclists and they would like to see improvements such as a bicycle lane and crosswalk. The District can look to work with MOTI to improve some of these connections or look to establish alternative connections.

3.0 Setting the Future Direction

The sections below introduce the principles, themes, and actions for the active transportation network plan. Next, Section 4 provides an implementation plan that prioritizes and outlines costs and funding strategies for each action. See Appendix A for a full summary of the themes, actions, and prioritization.

3.1 Principles, Themes, and Actions

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

Reconciliation

Collaboration through continued conversations, art, tourism, and active transportation connections

Age-friendly

Support independent mobility for people of all ages

Equity

Provide safe, accessible, and affordable access for people of all backgrounds and identities

Cost effective

Provide cost effective solutions to implement strategies, actions, and projects identified

Implementable

Develop a realistic and implementable plan that can be achieved through phases and cost share opportunities

Building off these planning principles, along with the feedback and input received from community members and stakeholders, the technical review of the existing network, and a review of existing plans and policies, three key themes were identified to enhance active transportation in Kent. The three overarching themes of the plan are:

- Connected Community
- Enjoyable Experience
- Everyday Encouragement

Each theme includes several strategies and actions that will enhance active transportation in the District.

The following icons show where each of the action items came from:

Community engagement

Technical review

Integration with existing plans and policies

Theme: Connected Community

The **connected community** theme focuses on providing safe and comfortable connections between destinations within the District and neighbouring communities. It also includes actions that identify opportunities to improve the integration of active transportation with transit, other modes of transportation, and District policies and projects.

There are four strategies under Connected Community with a total of 10 actions.

Strategy 1: Expand and Enhance the Sidewalk Network

A complete and connected sidewalk network is the foundation of pedestrian safety for people of all ages and abilities. Kent has approximately 19 kilometres of sidewalks throughout the entire District. However, there are still areas of the community where there are gaps in the sidewalk network that provide access to important community destinations. A lack of sidewalks can be a barrier to walking, as people are forced to walk on the street or unpaved areas that are less accessible, desirable, and safe.

In addition to gaps in the sidewalk network, community members noted that there are some locations where existing sidewalks need repair. The District of Kent currently has an existing sidewalk and pedestrian infrastructure inspection program that replaces and installs new sidewalk letdowns (curb ramps) for accessibility. Reviewing and expanding this program can ensure that all pedestrian infrastructure related gaps are addressed.

The following three actions were identified to expand and enhance the sidewalk network to ensure there are continuous accessible walking routes to destinations.

Action 1.1. – Fill Gaps in the Sidewalk Network to Provide Connections to Key Destinations

- Fill gaps in the sidewalk network that provide connections to community destinations such as schools, parks, senior residences, transit stops, and commercial and institutional areas. Figure 5 identifies the proposed sidewalks in the active transportation network.
- Implement the proposed sidewalk network based on priority as outlined in Section 4 of the ATNP.
- Continue to fill in gaps in the pedestrian network through new development. This will be achieved through the District's Subdivision and Development Bylaw.

Action 1.2. – Continue the Sidewalk and Pedestrian Infrastructure Inspection Program

- Continue the Sidewalk and Pedestrian Inspection Program and consider reviewing and expanding the program.
    - This expansion may include inspecting and inventorying sidewalks to determine if they meet minimum standards (width) or are in poor condition (uneven surfaces). Additionally, crosswalks (presence of signs and painted lines) and the trail network could be included as a part of this program.
    - Based on this review, a guiding document and how to guide can be developed for the program.
- Consider exploring ways to include community input on quality and the prioritization of sidewalk upgrades into the program.

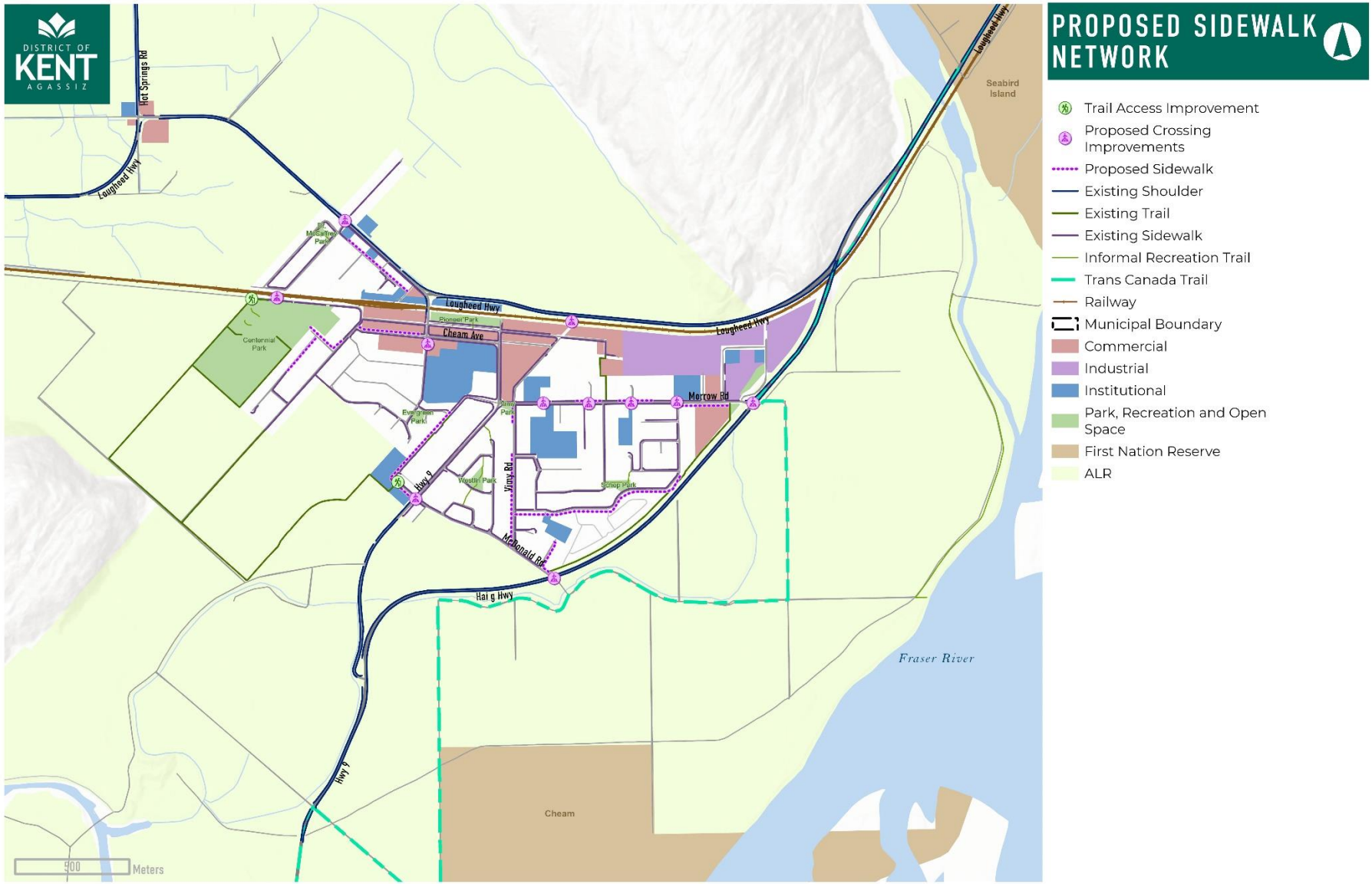


Figure 5: Proposed Sidewalk Network

Action 1.3. – Update Pedestrian Facility Requitements in the District's Subdivision and Development Bylaw

- Update the District's Subdivision and Development Bylaw to ensure road cross sections incorporate best practices in active transportation facility design based on the B.C. Active Transportation Design Guide and the Transportation Association of Canada. The following discrepancies between current guidelines and the existing Bylaw are listed below:
    - Sidewalks:
        - **Location:** Existing best practice states that where possible, it is desirable to require sidewalks on both sides of all streets within the urban land use context.

          The District's current Bylaw aligns with best practice guidance.
        - **Width:** Existing best practice states that the desired width for sidewalks is 1.8 metres. 1.5 metre sidewalks can be implemented as an absolute minimum and only to be used in constrained situations for short distances.

          The District's current Bylaw requires 1.5 metre sidewalks. It is recommended that this increased to 1.8 metres and potentially wider (2.4 - 3.0 metres) in areas with commercial land use or where higher rates of pedestrian activity are anticipated.
    - Shoulder:
        - **Location:** Existing best practice states that where sidewalks and bicycle lanes are not present, shoulders can act as an alternative facility for people walking and biking. Paved shoulders provide a space that is accessible for all users including people using wheelchairs and mobility devices and creates a more predictable environment for all road users.

          Not all shoulders identified in the Bylaw are paved.
        - **Width:** Existing best practice states that walkable shoulders should provide a Pedestrian Through Zone that is a minimum of 1.5 metres wide. In locations where a higher volume of pedestrians is expected, a Pedestrian Through Zone of 1.8 metres is recommended.

          The current requirements in the Bylaw do not align with best practice and are less than 1.5 metres.
    - Multi-use Pathways:
        - **Location:** It is preferential to provide an active transportation facility on both sides of the street wherever possible, however this does not necessarily need to be a multi-use pathway and is context specific.

          The guidance in the Subdivision and Development Bylaw aligns with current best practice regarding the location of multi-use pathway facilities.
        - **Width:** Existing best practice notes the desired width of multi-use pathways is 3.0 and 4.0 metres depending on the context.

          The District's current design guidance is 2.0 metres and does not align with current best practice.

Strategy 2: Expand and Enhance Multi-use Pathways, Trails, and Other Cycling Routes

Providing an interconnected cycling network that integrates and expands the existing network is essential to supporting and building a culture of cycling in the District. Kent has over 160 kilometres of trails (formal and informal recreation trails combined) and nearly 60 kilometres of shoulder bicycle routes. However, there are no designated protected bicycle routes in the District. Increasing cycle trips requires a network of comfortable cycling routes that connect people to the places they want to go.

Trails were identified as the top reason for walking and cycling in the community survey. Since Fall 2021, select sections of the District's dyke system have been open to the public, welcoming pedestrians, cyclists, dog walkers, and horseback riders to enjoy the trail as part of an ongoing pilot, adding to the District's active transportation network.

Expanding the trail network to include portions of the dyke system was one of the top suggestions in the community survey. The District should continue to engage with community members and stakeholders to ensure that decisions regarding the dyke system's future accurately reflects the vision of all community members.

Additionally, ongoing partnerships and communication are crucial to ensuring that the active transportation network is well integrated to neighbouring communities around Kent. This includes regularly communicating with First Nation communities, neighbouring municipalities, and the Ministry of Transportation and Infrastructure (MoTI) to ensure all jurisdictions are on the same page and working towards the same goal.

The following four actions were identified to expand and enhance multi-use pathways, trails, and other cycling routes.

Action 2.1 – Implement New and Upgrade Cycling and Trail Connections

- Implement the proposed cycling and trail network as outlined in Figure 10.
- Implement the proposed connections based on priority as outlined in Section 4 of the ATNP.
- Continue to fill gaps in the cycling network through new development. This will be achieved through the District's Subdivision and Development Bylaw.

The District of Kent's proposed cycling and trail network includes a few different types of infrastructure. The section below describes the different facility types proposed and seen on Figure 10.

- Rural Active Transportation Route – Several rural roads have been identified as part of the active transportation network.

  Treatments along these routes could include signage, pavement markings, traffic calming, or an off-street trail adjacent to the roadway. Some of the streets identified include:
  - McDonald Road S (between Haig Highway and Dyke Road)
  - Tranmer Road (between Haig Highway and McDonald Road S)
  - Hamilton Road/Limbert Road/Ashton Road (between Dyke Road and Pioneer Avenue)
  - Ashton Road/Else Road/ Birch Road/McCallum Road/Hardy Road providing an alternative north/south road to travelling along Hot Springs Road
  - Tuyttens Road between Highway 9 and Cutler Road

Figure 6: Multi-use Pathway (Squamish)

Protected Bicycle Lane - A bicycle lane that is physically separated from motor vehicles, making it safer and more comfortable. Protected bicycle lanes are also separated from the sidewalk, ensuring separation between bicyclists and pedestrians. Protected bicycle lanes may be placed on one or both sides of a street, and they may be designed for one- or two-way bicycle travel. Protected bicycle lanes are typically implemented on streets with higher motor vehicle volumes and speeds.

The District will work with MoTI to implement a protected bicycle lane between McDonald Road N/Mackay Crescent and Evergreen Drive (via Cheam Avenue).

Figure 7: Protected Bicycle Lane Example (Abbotsford)

- Trail – Proposed trails are either paved or unpaved shared facilities for bicycles and pedestrians. Trails can be located adjacent to streets, rail corridors, in greenspaces. They are intended to connect to key destinations within the District and provide recreational facilities.

Figure 8: Existing Trail (Kent)

- Upgrade Existing MoTI Facility for Active Transportation – There are several streets within the District that have existing active transportation facilities, but they not considered comfortable for people of all ages and abilities. In other cases, these streets have no existing facilities. The District will work with MoTI and continue to advocate for higher quality active transportation facilities on roads under their jurisdiction. This may include wider shoulders, protected bicycle lanes (bollards or barriers), pavement markings, and signage.

Figure 9: Existing MoTI Roadway

As new cycling infrastructure is implemented it is important to consider the design and treatments at intersections. This can include designated space for cyclists to wait at intersections, conflict zone markings, signage informing motor vehicle drivers of the presence of cyclists, and pushbuttons at intersections for cyclists to activate the signal change.

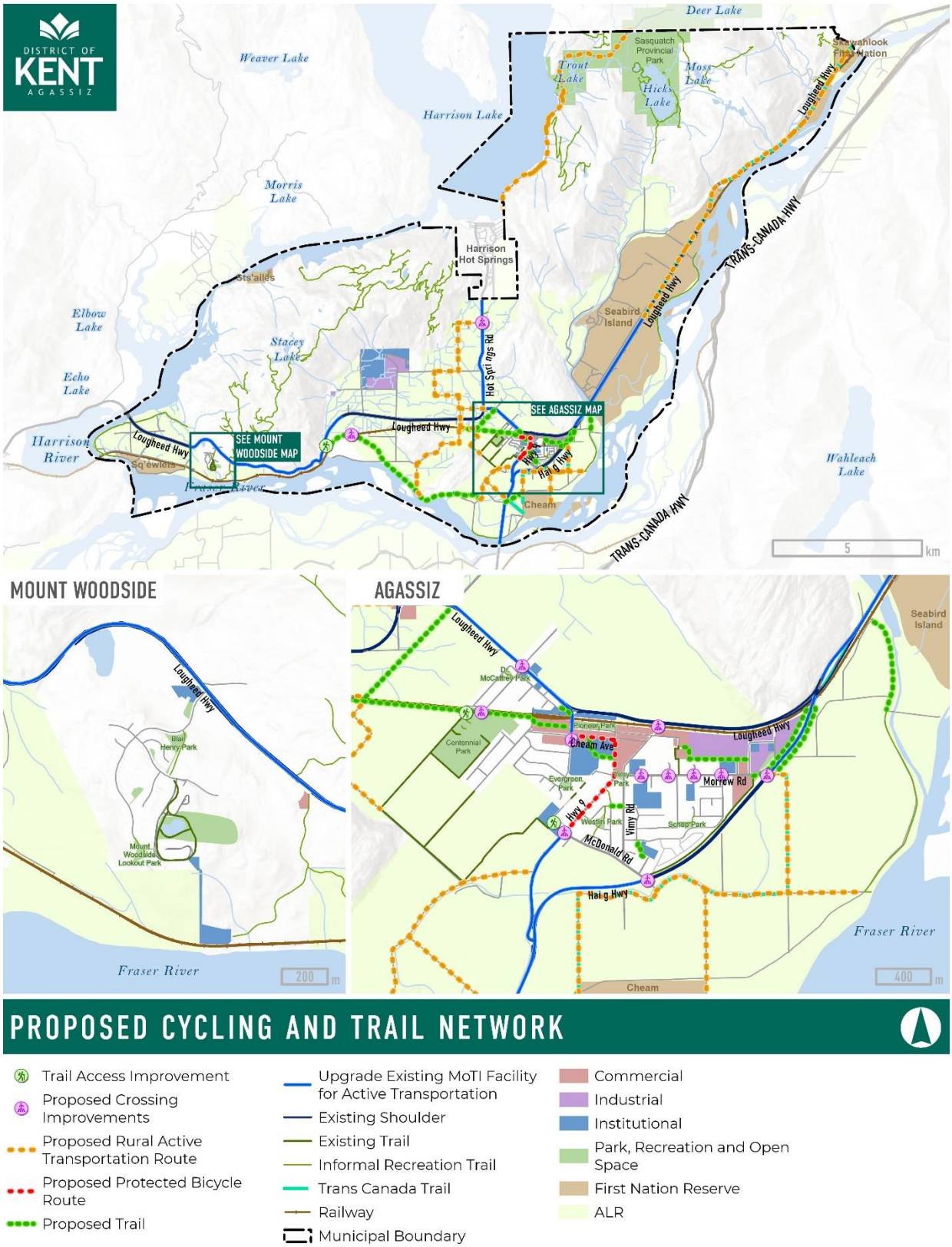


Figure 10: Proposed Cycling and Trail Network

Action 2.2. – Improve Access to Trails by Filling in Network Gaps and Enhancing Accessibility and Comfort

- Provide trail access improvements to make it easier for people of all ages and abilities to access trails (Figure 10). This can include:
  - Ensuring the trail connects to the road or sidewalk.
  - Providing curb ramps to trail entrances.
  - Welcome signage and messages, including a map of the area showing all connecting trails, riders' code of conduct or trail etiquette, and any relevant notices regarding current trail conditions, work-in-progress, or trail closures.
  - Benches, bicycle parking, bicycle repair stations.
  - Waste and recycling bins.
  - Public washrooms.
  - Motor vehicle parking.
- Add wayfinding and signage along trails. See wayfinding and route action (Action 8.1).

Action 2.3. – Continue to Engage with Community Members and Stakeholders to Formally Incorporate Portions of the Dyke System into the Formal Trail Network

- Continue the pilot allowing access for people walking and cycling on the trails that are part of the dyke system.
- Consider adding additional amenities along routes, such as waste and recycling receptacles, benches, and signage.
- Continue having conversations with community members and stakeholders to explore formalizing the dyke system to be a part of the larger trail network.

Action 2.4. – Work With Other Jurisdictions to Provide a Seamless Well Integrated Active Transportation Network To Neighbouring Communities.

- Collaborate and work in partnership with First Nation communities, neighbouring municipalities, and MoTI to ensure safe and comfortable connections.
  - Explore improving active transportation connections on Lougheed Highway (Highway 7) and Highway 9, including the Agassiz Rosedale Bridge.
  - Consider adding bollards along the active transportation corridor on Hot Springs Road between Agassiz and the Village of Harrison Hot Springs.
- Work with MoTI to ensure roads in the District under their jurisdiction are designed for the community context and in accordance with current best practice.

Strategy 3: Improve Safety and Accessibility at Intersections and Crossings

Creating a safe and resilient active transportation network involves a comprehensive understanding of areas and intersections where safety is a concern. Community input is important to understanding and addressing various safety concerns and perspectives.

The following three actions were identified to improve safety and accessibility at intersections and crossings.

Action 3.1 – Monitor and Address Pedestrian and Cycling Safety Concerns at Intersections

- The District will work with MoTI to make safety and network connectivity improvements at intersections throughout the District.

  Figure 10 identifies the intersections where a review of safety concerns and upgrades are recommended based on a review of ICBC collision data and input from community members. Additional design work will be required to confirm the types of treatments that are feasible. Treatment options include, providing reduced corner radii and installing curb extensions to shorten crossing distance, providing raised crosswalks, flashing beacons, cyclist pushbuttons at signalized intersections, reviewing existing traffic control, and grade separated crossings.

  It is important to note that when considering the installation of traffic calming features such as curb extensions, designers must consider the role of the corridor as a cycling route and the space required for cyclists. This is to avoid creating pinch-points for cyclists.

- The District will continue to review ICBC and the RCMP data to monitor pedestrian and cycling collisions, near misses, and other safety concerns. The District will develop a list of additional crossing locations that are warranted or required to enhance the active transportation network as it's built, expanding the list of locations identified in Table 2.

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

Intersection Location	Jurisdiction	Suggestions to Explore
Haig Highway at Morrow Road	MoTI	• Work with MoTI to review safety concerns at the intersections and determine how to improve safety and comfort for people walking and cycling across MoTI infrastructure. • Conduct a crossing review at these locations to determine if a crossing or upgrade in traffic control is warranted. • Additional signage along the roadway can be implemented to inform motor vehicle drivers that these are high activity pedestrians and cyclist crossing locations. • These are locations with existing and proposed active transportation connections and a higher frequency of pedestrian and cyclists crossing at these locations is anticipated.
Haig Highway at McDonald Road		
Highway 9 at McDonald Road		
Lougheed Highway at McCaffrey Road		
Hot Springs Road at Golf Road		• Golf Road and Hot Springs Road are well used cycling corridors and part of the Circle Farm Tour route. • Work with MoTI to review safety concerns at the intersections and determine how to improve safety and comfort for people walking and cycling across MoTI infrastructure. • Review sightlines and add signage to raise awareness of the presence of people walking and cycling at this location.
Morrow Road at: • Vimy Road • Garden Place • Cedar Place • Logan Road	District of Kent	• Review current pedestrian crossing control to determine if a special crosswalk (overhead flashing beacon) or a pedestrian signal is warranted. • Curb extensions could be implemented to reduce crossing distances. • The District will investigate whether the corridor has speeding issues and implement speed reduction measures.
Evergreen Drive at 7024 Cheam Avenue	District of Kent & property owner	• Explore opportunities to address access management concerns associated with the existing parking lot and parking layout. Motor vehicles are crossing over the space allocated for pedestrians to access Evergreen Drive/Cheam Road. This is creating an environment of uncertainty and safety concern for all road users. • The District can work with property owners to formalize access to the parking lot and reconfigure parking spots. This will create an opportunity to formalize the sidewalk / pedestrian space.
McCaffrey Road at Rail Crossing (connect McCaffrey Road to Pioneer Avenue)	Rail Crossing (Canadian Pacific Kansas City Rail)	• Explore opportunities with Canadian Pacific Kansas City Rail to provide a formalized crossing over the rail at McCaffrey Road to provide a connection to Pioneer Avenue and the community destinations in the area. The crossing may be grade separated (underpasses and overpasses).
Heath Road Extension and Rail Crossing (connect Heath Road/Pioneer Avenue and Lougheed Highway)	Rail Crossing (Canadian Pacific Kansas City Rail)	• Explore opportunities with Canadian Pacific to provide a formalized crossing over the rail at Heath Road to provide a connection to Pioneer Avenue. The crossing may be grade separated (underpasses and overpasses).
Dyke Road at Rail Crossing	Rail Crossing (Canadian Pacific Kansas City Rail)	• The ATNP has identified the District work towards implementing active transportation access (multi-use pathway) along Dyke Road which would cross over the railway line. • The District will work with Canadian Pacific Kansas City Rail to formalize this crossing and identify the treatment requirements to cross safely and connect the route to Lougheed Highway.

Action 3.2 – Enhance the Accessibility of Intersections and Crossings

- Ensure best practices in universal design and accessibility are incorporated for new and improved active transportation projects and upgrades. This includes providing:
  - Accessible slopes and grades with appropriate landing areas and resting spots.
  - Accessible ramps where applicable and appropriate.
  - Curb ramps for road access.
  - Audible pedestrian signals at signalized intersections.
  - Surfaces that are smooth, firm, slip resistant, and free of tripping hazards.
  - Year-round monitoring and maintenance.
- Encourage MoTI to review and update pedestrian crossing times at intersections to provide adequate crossing time for all users.
- Reduce pedestrian crossing distances by providing narrower roads and lanes and considering curb extensions or median islands where feasible.

Action 3.3 – Ensure Active Transportation Safety and Accessibility at New Intersections, Bridge Crossings, and Underpasses

- There are locations where grade separated crossings may be considered over rail or major road corridors. If these projects are pursued, the District will work with partners to ensure future overpasses (or underpasses) are safe and accessible for active transportation users.

Strategy 4: Improve Integration of Active Transportation with Transit, Other Modes, and District Projects

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

The following five actions were identified to improve integration of active transportation with transit, other modes, and District projects.

Action 4.1 – Improve Transit Connections and User Experience

- BC Transit's Transit Future Action Plan identifies new routes within Kent. The District can play a role in facilitating more transit use by implementing more active transportation connections (sidewalks, trails, crosswalks, and cycling routes) that provide direct connections to transit and by providing comfortable supporting amenities such as shelters, benches, wayfinding, schedules, and lighting.
    - Expand the existing inventory of transit stops in the District. The inventory should include information about location, accessibility (accessibility landing pads, sidewalk connections, curb ramps, etc.), seating, and shelter.
- The District will continue to install amenities at transit stops to support multi-modal trips in various weather conditions. This includes prioritizing the addition of benches, shelters, and bicycle parking at key stops, where space is available. These are stops that are located near schools, senior care services, commercial areas, municipal facilities and community destinations, recreation centres, and parks.
- The District can continue advocating with BC Transit to improve service in the District. Integrating transit and active transportation is an opportunity for the District of Kent through bicycle parking, creating opportunities for drop-offs, and ensuring that transit routes are direct and efficient.

Action 4.2 – Ensure Land Use Policies Support and Encourage Active Transportation

- Incorporate actions and recommendations identified in the ATNP into the Official Community Plan, Zoning Bylaw, and other planning and policy documents.
- Ensure development of policies consider active transportation and that land use planning in the District encourages more walking and bicycling, such mixed land use, compact designs, and providing more housing close to transit stops.

Action 4.3 – Seek Opportunities to Integrate New Active Transportation Facilities in Conjunction with Other District Projects, Plans, and Developments

- Levy funds from developers through a variety of means such as Development Cost Charges, density bonuses, or parking. Develop a reserve funds bylaw for "transportation infrastructure that supports walking, bicycling, public transit or other alternative forms of transportation" as outlined in the Local Government Act, LGA 906 (7). Money received in lieu of provision of off-street parking contributes to this reserve fund.

- Ensure future development and roadway infrastructure projects include active transportation infrastructure (including new sidewalks, bicycle facilities, multi-use pathways, and amenities) and that they are connected to the active transportation network.
- The District can develop a list of reference criteria for reviewing new plans, developments, and infrastructure projects to ensure they incorporate active transportation.

Action 4.4 – Consider the Impact of New and Shared Mobility on the Active Transportation Network, Facility Design, and District Policy

- Ensure new active transportation facilities are designed for all intended users, recognizing that the operating envelopes and speeds of new mobility technologies may impact facility design (e.g., facility width, accessibility etc.).
- Stay current on best practice and the experiences of other municipalities to identify active transportation supportive legislation for the use of new mobility technologies (e.g., e-scooters, hoverboards, motorized skateboards, segways etc.).
- Explore participating in the Province's active transportation electric kick scooter pilot project to investigate the feasibility of allowing e-scooters in the community.

Action 4.5 – Explore Expanding the Existing Parks, Recreation, and Trails Group to Incorporate Active Transportation and Accessibility

- Expand the group's scope to also discuss all types of active transportation and accessibility.

Theme: Enjoyable Experience

The **enjoyable experience** theme focuses on creating safe and comfortable connections between destinations within the District and neighbouring communities. It also identifies ways to enhance the experience for people using active transportation in the District year-round.

There are three strategies under Enjoyable Experience with a total of 9 actions.

Strategy 5: Create an Active Transportation Network that Prioritizes Safety, Accessibility, and Equity.

There are several approaches that can be made to make walking and cycling in Kent safer and more accessible. To understand barriers and the unique needs of all community members, it is important that extra effort is made to engage equity-seeking groups as part of the planning and design process. An active transportation network that prioritizes safety, accessibility, and equity is an active transportation for everyone.

The following three actions were identified for developing a safe and accessible active transportation network for everyone.

Action 5.1 – Apply an Intersectional, Equity-Focused Lens to the Planning, Design, and Implementation of All Active Transportation Facilities, Amenities, and Programs to Support Equity-Seeking Groups

- The District will work with community members to develop a checklist of the different lenses and factors that are considered during the design and implementation of all active transportation facilities, amenities, and programs. This approach builds on the work of Kimberlé Crenshaw regarding the lens of intersectionality and the principles of Gender Based Analysis Plus (GBA+)
- The District will conduct targeted communication and engagement on active transportation projects with targeted groups to understand their unique needs and issues.

Action 5.2 – Improve Safety Through Targeted Neighbourhood Improvements

- The District will consider an approach to reducing posted speed limits on residential/local roads. There are examples of municipalities doing this on streets based on road classification or specifically on corridors that are designated bicycling or active transportation routes that the can be referenced (City of Merritt, City of Surrey, District of Saanich, etc.).
- The District will also identify corridors where implementing traffic calming features such as speed humps, curb extensions, traffic circles, reduced curb radii, and traffic diversion is desirable to help reduce motor vehicle speeds and volumes. Candidate locations are routes that are identified as part of the proposed active transportation network.
    - Explore tactical urbanism approaches that use low cost, temporary, flexible materials to implement quick build traffic calming measures.

Action 5.3 – Enhance Visibility Through Lighting Improvements Along Sidewalks, Pathways, Trails, and Intersections Where Appropriate

- Conduct an inventory of existing lighting that includes information about location and lighting type. This will include reviewing existing lighting locations to identify priority locations.
- Ensure lighting is appropriate within context, pedestrian scale, and is dark sky compliant.
- The District can work with BC Hydro to seek opportunities to provide additional lighting along roadways throughout the District.

Strategy 6: Create Vibrant Places and Streets.

Streets that are designed to be attractive and inclusive can liven up an area, transforming the environment into a fun and welcoming space. Complete street design principles ensure all modes are considered in the design of the roadway and public realm. Some streets can even be reconsidered to provide more space to serve the needs of pedestrians only, or to integrate patios and parklets to increase gathering spaces and economic activity. There are opportunities to test out programs and street closures temporarily before making them permanent. Additionally, providing amenities and support facilities can make active transportation more attractive and convenient.

The following four actions were identified to support making streets a more vibrant place.

Action 6.1. – Develop Guidelines for the Installation of Public Amenities Through Capital Projects and Developments

- Develop guidelines for the design, placement, and installation of public amenities (such as seating and washrooms) and landscaping, through capital projects and development.
- Consider establishing a public art program that provides opportunities to showcase the work of local artists as well as partnering with and celebrating the areas Indigenous Peoples.
- The District will work with businesses to create more opportunities to provide bicycle parking, patios, public seating, and other amenities within the road right-of-way.

Action 6.2. – Provide More Bicycle Parking and End-Of-Trip Options Throughout the District.

- Update the District's Zoning Bylaw to support the installation of high-quality bicycle parking, e-bike charging infrastructure, and end-of-trip facilities.
    - Require multi-family developments to provide short- and long-term bicycle parking with accommodations for e-bikes and non-standard bicycles such as cargo bicycles and recumbent bicycles.
- Conduct an inventory of existing bike parking throughout the District. Ensure the District has bike parking at all civic facilities.
- Develop a program to install short-term bicycle parking within the public right-of-way.

Types of Bicycle Parking

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

Bicycle corrals provide short-term bicycle parking, the term refers to a grouping of bicycle racks located on the street. They are typically located in a parking space that was traditionally allocated to motor vehicles. Because they are often located within the roadway, bicycle corrals minimize sidewalk clutter, free up space for other uses, and increase bicycle parking at locations with high demand.

Action 6.3. – Continue to Create Pedestrian-Only Zones, Either Temporarily, Seasonally, or Permanently

- Continue to create pedestrian-only zones during festivals and special events such as Canada Day and the Fall Fair parade.
- Identify potential locations for temporary, seasonal, or permanent pedestrian only streets.
- Engage with local businesses in Agassiz to assess the level of interest to support more of these initiatives.

Action 6.4. – Adopt an Approach to Implementing Complete Streets

- Explore best practices and existing guidance to complete streets, then develop a custom approach for Kent.
- Ensure all new road projects consider complete streets designs and principles.

Strategy 7: Maintain the Active Transportation Network Year-Round

To ensure people are using active transportation to get to where they need to go and enjoy recreational routes year-round, it is essential to plan for the maintenance of all active transportation infrastructure including sidewalks, cycling facilities, and trails.

The following two actions were identified to support the maintenance of an all-seasons active transportation network.

Action 7.1. – Improve Maintenance Practices and Procedures for Active Transportation

- Review and update practices and procedures for maintenance and snow removal on active transportation infrastructure. This includes adding allocated budgets to the Snow Control Plan.
- Inspect active transportation infrastructure on an annual basis to include addressing sightlines, vegetation, and obstructions as a part of maintenance practices and procedures.
- Develop an approach to regularly implement repairs to ensure active transportation facilities are in good condition.

Action 7.2. – Prioritize Upgrades and Maintenance of the Active Transportation Network

- Review the Snow Control Plan's prioritization matrix to include cycling and trail facilities as the active transportation network is built out. Update the Snow Clearing app map to reflect these changes.
- Work with MoTI to maintain active transportation facilities that are under MoTI jurisdiction (see Action 4.2).

Theme: Everyday Encouragement

The everyday encouragement theme focuses on making active transportation a part of the **community's everyday routine** through wayfinding, education, awareness, and promotion.

There are four strategies under Everyday Encouragement with a total of 10 actions.

Strategy 8: Ensure the Active Transportation Network is Easy to Navigate.

Providing wayfinding and signage that guides individuals and helps them understand distances to key destinations and features can create a more comfortable and safer experience for all users. Directional information along pathways helps residents learn new infrastructure and supports tourists as they navigate access to key destinations. A cycling guide would document and share safe cycling route options for community members and tourists alike.

The following two actions were identified to make the active transportation easier to navigate.

Action 8.1. – Develop an Active Transportation Wayfinding and Signage Program

- Review current active transportation signage and wayfinding and add new signs that support pedestrians and cyclists in navigating the active transportation network.
    - Signage can also help to warn drivers of active transportation routes or give direction to share the road. This can be done by documenting areas where signage is inconsistent, redundant, or needed and prioritize the addition of necessary signage.
- The District can develop and enact a Wayfinding Signage Strategy to be implemented on existing routes and as new active transportation infrastructure is built.
- The District can consider working with partners to develop a regional approach to signage and wayfinding.

Action 8.2. – Develop a District Cycling Guide to Include Infrastructure Map and Information About Cycling in Kent

- Create a District cycling guide to document cycling routes for all skill levels. Include a map that shows cycling facilities, bicycle parking, and regional cycling destinations. This can be done with the support of local partners like the Fraser Valley Regional District, neighbouring communities, and the Harrison River Valley Tourism Board.

Strategy 9: Support Economic Development and Bicycle Tourism.

Promoting and developing bicycle tourism and economic development opportunities will ensure that active transportation is promoted to both visitors and residents as a way to explore the District and neighbouring communities in the Fraser Valley. It is also a great way to explore the community and learn about local history and destinations. Collaboration and partnerships with key stakeholders will ensure the success of these efforts.

The following two actions were identified to promote economic development and bicycle tourism efforts.

Action 9.1. – Continue to Explore and Implement Regional Bicycle Tourism Initiatives

- Work with Harrison River Valley Tourism Board to include cycle routes on the Circle Farm Tour map.
- Partner with the Harrison River Valley Tourism Boar and Agassiz-Harrison Chamber of Commerce, to explore more opportunities for regional bicycle tourism initiatives.
- Install wayfinding and signage to guide touring cyclists along preferred routes (see Action 8.1).

Action 9.2. – Explore Opportunities to Promote Tourism Activities that Celebrate Local Arts, Culture, and Heritage

- Promote local tourism initiatives such as the Fraser Valley Regional District's Experience the Fraser project on District's website and social media channels.
- Collaborate with Harrison River Valley Tourism Board to expand on walking and cycling experiences in Kent.

Strategy 10: Make Active Transportation Fun and Easy.

Active transportation is a fun and easy way to get around the community. Building momentum and getting community members familiar with the benefits of active transportation encourages them to incorporate walking and cycling into their daily routines. Education and awareness are essential components to encouraging more active trips and supports the implementation of new infrastructure.

The following three actions outline education and encouragement initiatives for promoting active transportation.

Action 10.1. – Explore Opportunities to Increase Education and Awareness of Active Transportation

- Educate residents about the benefits of active transportation through community-wide communications and marketing efforts and promotions.
- Create education programs tailored to specific community group members and demographics. This can include youth-oriented programs and initiatives such as bicycle education and skills training for students in elementary school and targeted bicycle skills programs for older adults.
- Support Go By Bike Week.
- Support Active and Safe Routes to School programs and initiatives.

Active and Safe Routes to School

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

Engaging school communities in processes such as School Travel Planning can help to better understand built environment solutions that would support more active trips. Through this process the District can develop a list of infrastructure projects for each school to encourage more active transportation. It is recommended that the District increase partnerships with key organizations (School District #78, ICBC, Fraser Health, CAA) and others for this purpose.

Action 10.2. – Partner with Organizations in the Development of Road Safety Awareness and Education Campaigns for All Road Users

- Partner with ICBC and Fraser Health to support the development of road safety awareness and education campaigns for all road users.

Action 10.3. – Celebrate the Installation of Walking and Cycling Facilities with Grand Openings and Events Throughout the Year

- Celebrate and share when new active transportation facilities are built. This can be done through website material, videos, posts on social media, and events that raise awareness and build on the excitement of the ongoing implementation of the ATNP.
- Create an annual report card to communicate results of the monitoring program to track progress and maintain accountability.

Strategy 11: Support and Monitor the Implementation of the Active Transportation Network Plan.

Successful implementation of the ATNP requires ongoing support and monitoring through tracking and creating dedicated funding to build out the network and finding ways to ensure their continuing progress.

The following two actions were identified to support and monitor the implementation of the plan.

Action 11.1. – Pursue and Prioritize Dedicated Funding for Active Transportation

- Prioritize seeking external funding through grants and other programs to continue to expand and build out the active transportation network.
- A list of funding opportunities is made available in Section 4 of the plan. Continue to monitor and update the list periodically to make sure content is up to date and add new funding opportunities as they arise.

Action 11.2. – Monitor the Implementation of the Active Transportation Network Plan

- Explore opportunities to add automatic bicycle counters on active transportation facilities such as trails.
- Create an annual report card to communicate results of the monitoring program to track progress and maintain accountability.

4.0 Implementation Plan

The ATNP outlines several short- and long-term projects and policies to enhance and encourage active transportation in the District of Kent. These actions will require capital investment and coordination between municipal departments, other levels of government, and external agencies. An Implementation Framework has been created to facilitate this process by identifying priorities, timeframes, and order-of-magnitude cost estimates for each capital project. The sections below provide more information on project prioritization, costs, and funding strategies.

There are a few key considerations for the implementation of the ATNP:

- **The strategies and actions outlined in the Plan lay the groundwork for implementation, but ongoing commitment is required.** To see the strategies and actions achieved, additional capital and operational investments and resources (including labour and personnel) will be required. This includes investments in new infrastructure, upgrades to existing infrastructure, ongoing maintenance of existing and new facilities, resources for development of new standards and policies, funding for new programming and public education, and staff resources. Achieving the vision and goals will require the ongoing support from the District and its partners, working with developers, and looking for external grant and funding opportunities.
- **The ATNP is intended to be a flexible document to help guide what comes next.** There is some level of flexibility in the proposed active transportation network, particularly regarding the specific corridors and facility types that are recommended. The Plan presents recommendations and suggestions based on the engagement process and technical analysis; however, the District may determine that a different facility type or route is more appropriate based on planned development, land use, or upcoming infrastructure projects.
- **Additional work may be required.** Many of the initiatives in the ATNP require more detailed input and technical work. The District will need to work closely with partners, residents, and community groups to move forward with priorities in the ATNP.

4.1 Prioritizing Actions

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

- **Budgeting:** The assumed order-of-magnitude cost for each action has been provided. These costs include capital and/or operational costs depending on applicability. The number of dollar signs indicates a high-level cost assumed for each action:
    - $$$ – Major projects ($1 million plus)
    - $$ – Moderate ($100,000 to $999,000)
    - $ – Low (less than $100,000)

  Actions that present opportunities for funding support and partnerships have also been identified.
- **Timeframe for Implementation:** Each action is identified as either:
    - **Short-term –** Within 8 years
    - **Medium-term** – Within 8 to 20 years
    - **Long-term** – 20 years and beyond

  Many actions will be implemented on an ongoing basis, in which case they are shown under each timeframe. It is important to note that timeline for implementation was determined based on several factors including, community and stakeholder support and input, alignment of strategic drivers, ease of implementation, partnership opportunities, etc.

- **Method of Implementation:** This column identifies how each action will be implemented: as a capital project, through ongoing operations and maintenance, or as a policy or programming initiative.
- **Responsibility:** This column suggests the primary and secondary responsibility for each action. Many actions are the primary responsibility of the District (including the Engineering Services, Public Works, Development Services), while other actions should be led by external agencies, such as the FVRD, MoTI, Harrison River Valley Tourism Board, community groups, the private sector, etc.

4.2 Network Prioritization

Priorities were identified for the active transportation network based on several factors, including:

- Building on the existing network of sidewalks and paths to fill in gaps in the network and provide continuous facilities.
- Connecting key destinations, including schools, parks, community facilities, and the commercial areas.
- Applying input received through community engagement and District staff.
- Looking for opportunities to implement lower-cost 'quick wins' for rapid implementation.

The following maps identify the proposed sidewalk (Figure 11), cycling and trail (Figure 12), and intersection projects (Figure 13) by priority.

There are locations where projects identified on MoTI infrastructure have been prioritized. The District will need to work with MoTI to implement these projects and the timeline or implementation will be dependent on MoTI.

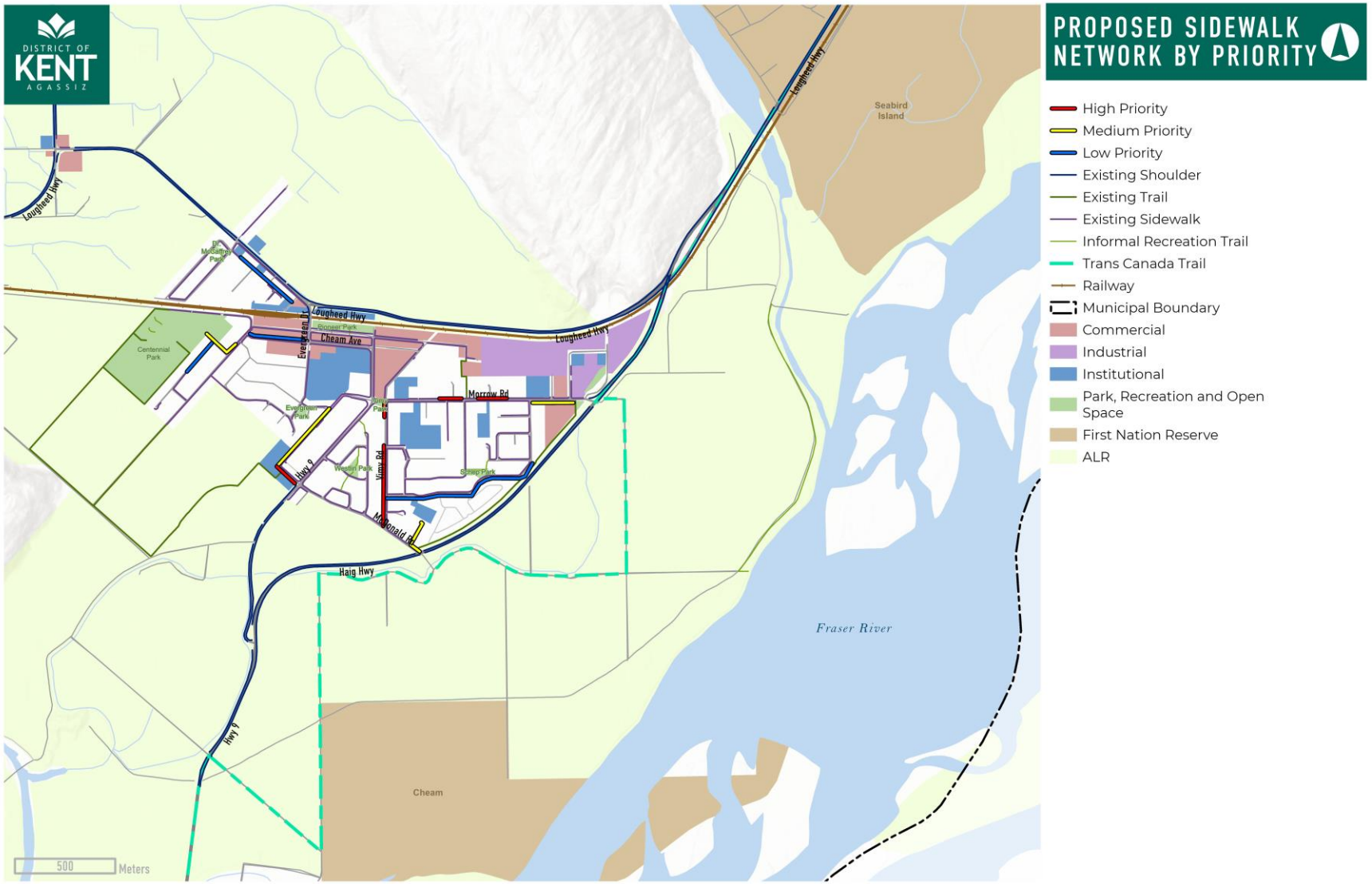


Figure 11: Proposed Sidewalk Network by Priority

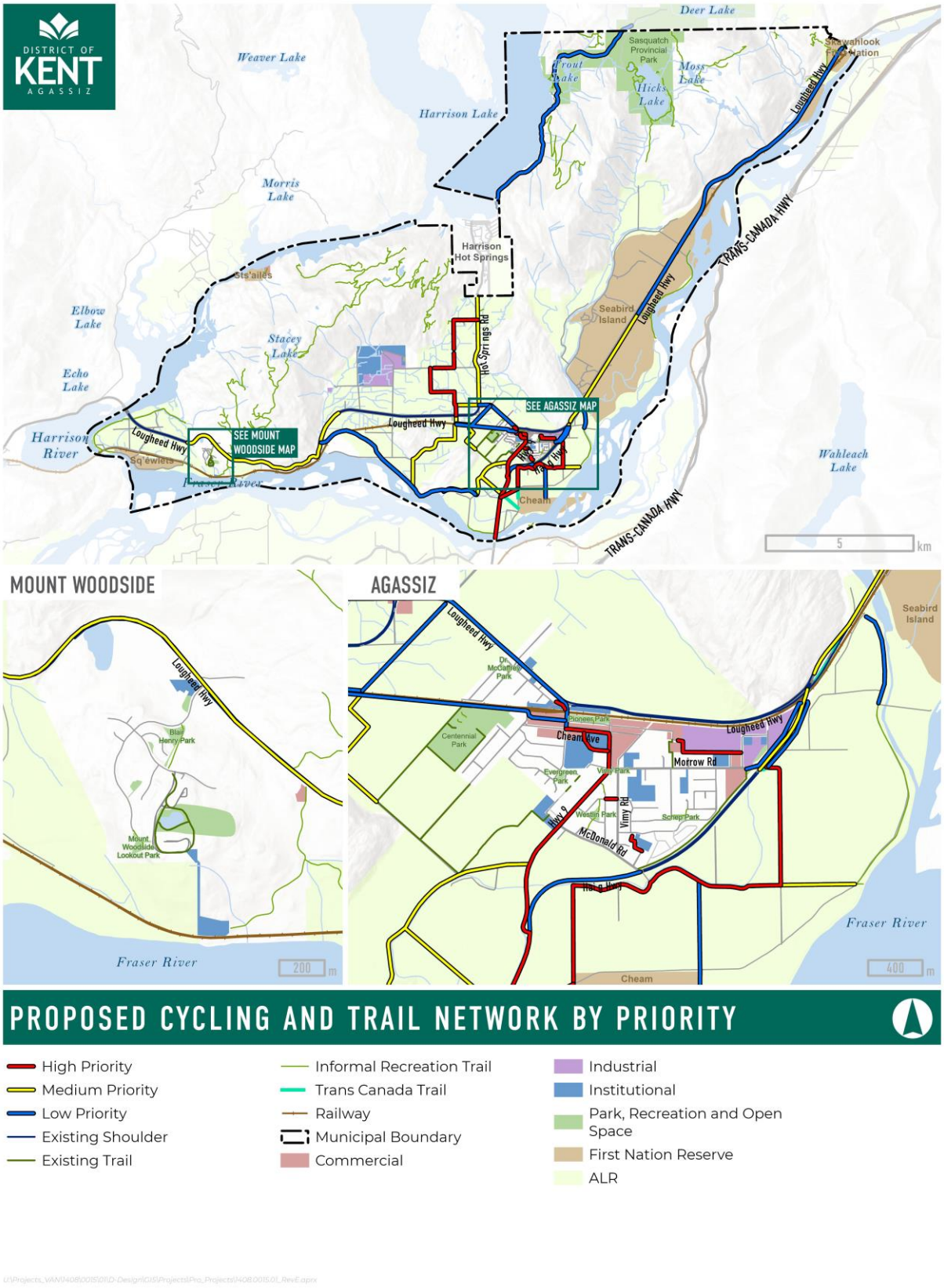


Figure 12: Proposed Cycling and Trail Network by Priority

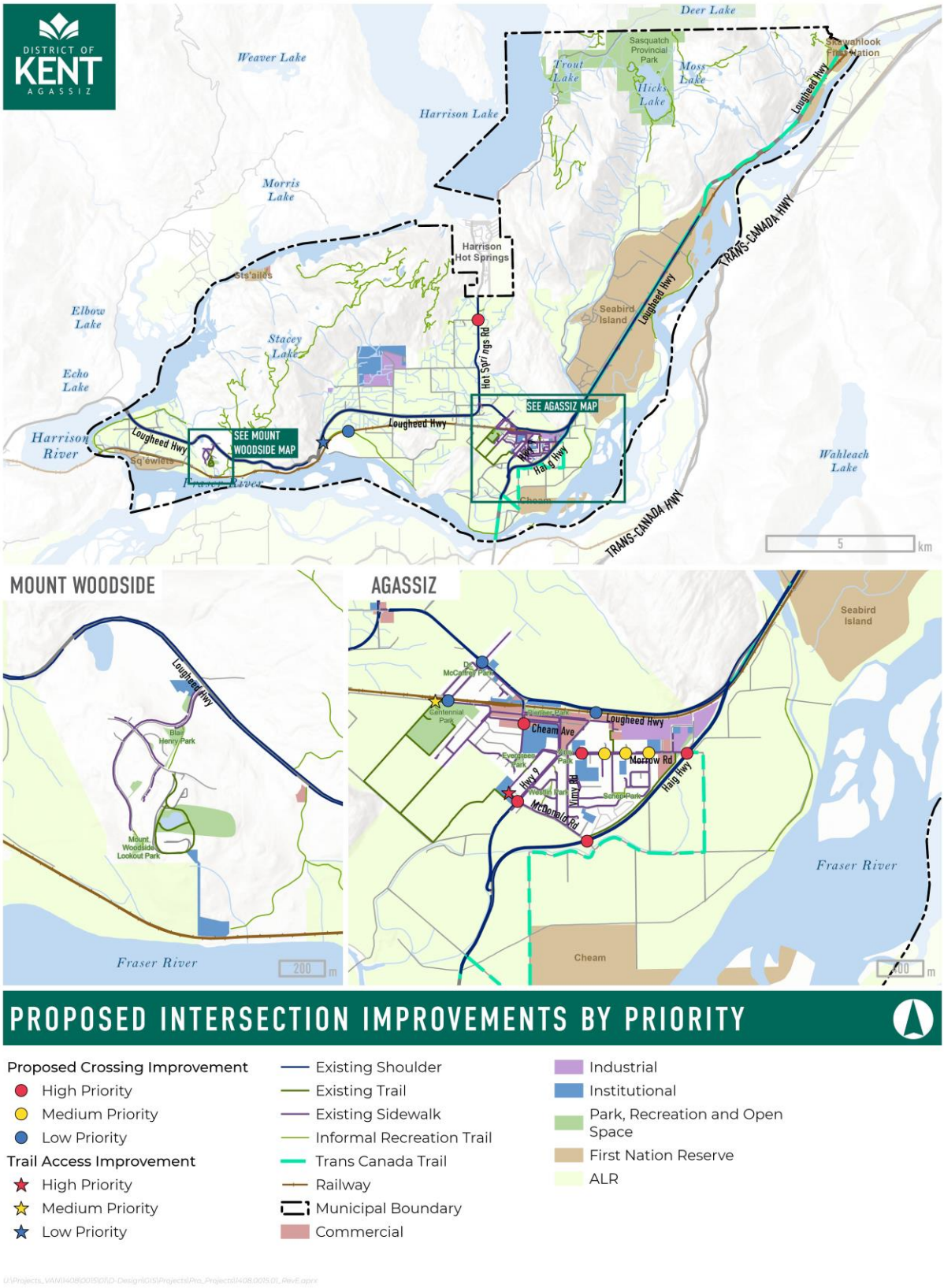


Figure 13: Proposed Intersection and Trail Access Improvements by Priority

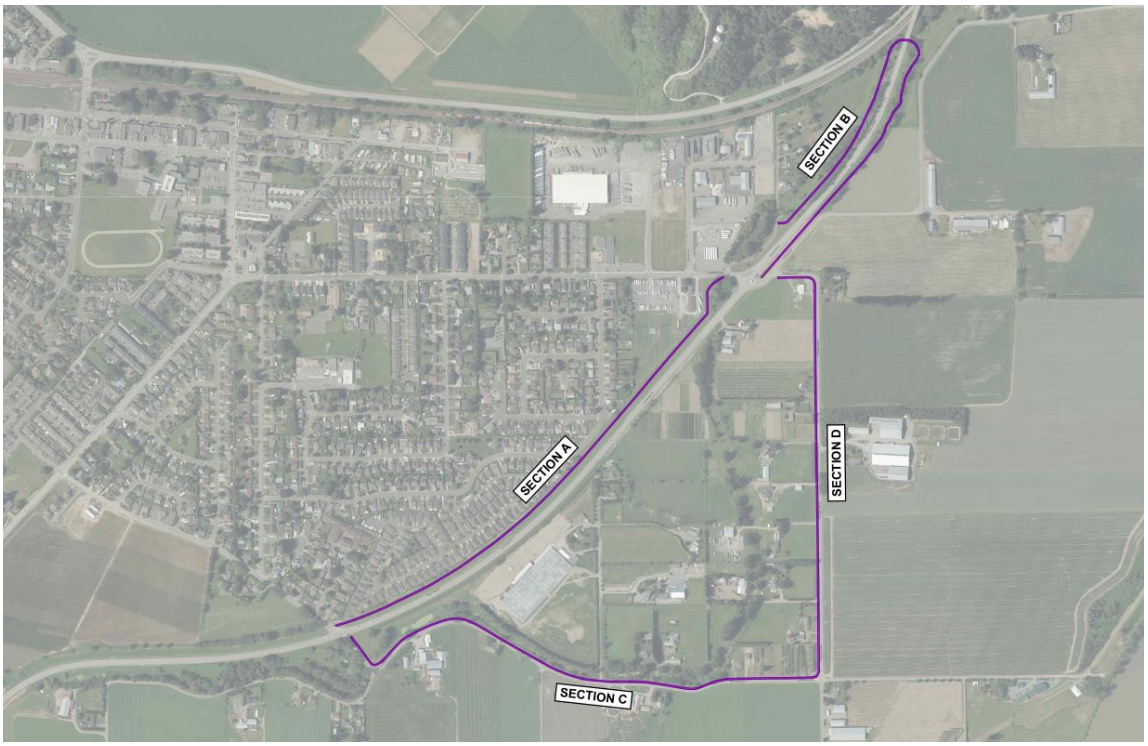
4.3 Priority Project

The proposed 4.5km Multi-Use Pathway Loop will provide residents and visitors with an accessible, continuous multi-use facility that is safe and comfortable for people walking, cycling, and rolling, an important transportation and recreation facility, and a destination in itself. The multi-use pathway will be paved and the first of its kind in the District.

The proposed project includes upgrading an existing narrow gravel pathway and building a network around this already popular and well used facility. The project will provide a loop that connects Haig Highway through agricultural lands along McDonald Road and Tanner Road. The existing pathway is adjacent to Haig Highway a B.C. Ministry of Transportation and Infrastructure roadway that has no designated pedestrian or bicycle facilities. The proposed project will extend the pathway north and provide a grade separated crossing of Haig Highway. On the east side of Haig Highway the pathway will continue along Tranmer Road and MacDonald Road looping back around to Haig Highway. Intersection crossing upgrades have also been identified at two locations (in addition to the new grade separated crossing) at Haig Highway and Morrow Road and Haig Highway and MacDonald Road. The project will also include the installation of additional pathway and roadway lighting as well as some additional tree planting and landscaping. Pavement markings and signage will also be installed along the pathway.

The project has been broken down into four sections. Below is a description of each section including the existing conditions and the proposed design for the corridor. The proposed designs have been based on a feasibility review conducted by Urban Systems as well as discussions with District of Kent staff, following the BC Active Transportation Design Guide. Additionally, details about this project, including cost estimates, can be found in Appendix B.

- Section A: Haig Highway South
- Section B: Haig Highway North (Including Pixley Lane)
- Section C: McDonald Road South (West of 1221 Tranmer Road)
- Section D: Tranmer Road and McDonald Road South (East of 7700 McDonald Road)



4.4 Quick Build Techniques and Strategies

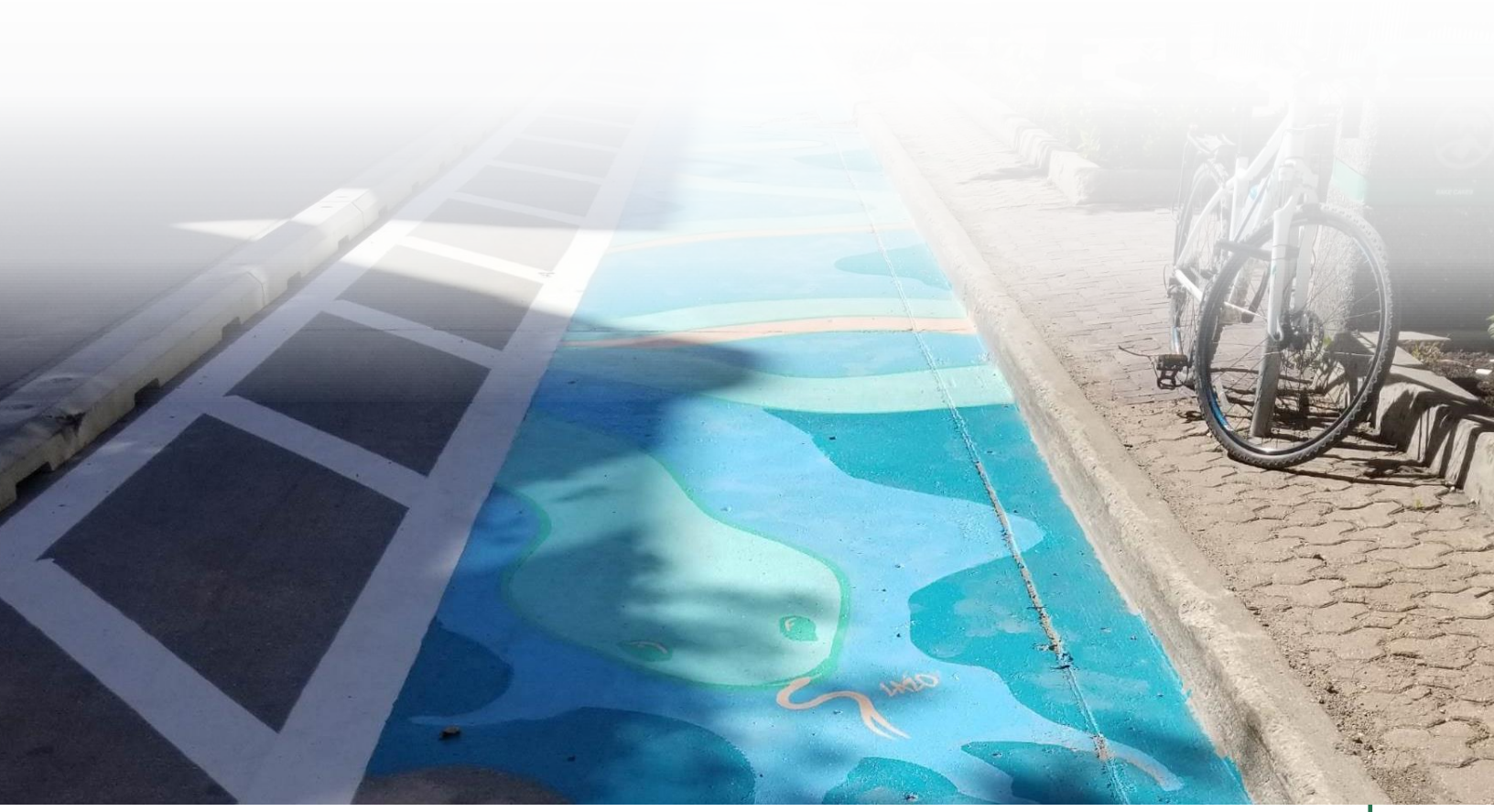
Over the past several years, communities across Canada and throughout the world have increasingly shifted their approach to delivering active transportation infrastructure by following a rapid implementation or quick build approach.

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

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

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

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



Rapid implementation projects include several key elements:

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

w

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

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

There are several types of All Ages and Abilities cycling facilities that are generally considered for rapid implementation projects – protected bicycle lanes, multi-use pathways, and sidewalks. These facilities can be implemented using a range of materials, as shown below.

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

4.5 Implementation Resourcing and Funding

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

Ensure staff resources are available to implement the ATNP. Implementation of the ATNP will not only require capital resources, it will often require additional staff resources to implement the various actions identified. Planning and design support, whether as a staff position and/or through the hiring of consultants, can help to ensure the ATNP is implemented in a timely, coordinated manner.

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

Collaborate with operations and maintenance staff to understand their equipment and staffing needs based on any new active transportation facility types and treatments. Truck-mounted plow blades can work in many applications, including neighbourhood bikeways. However, specially designed, right-sized equipment is also available to sweep and clear protected bicycle lanes and multi-use facilities. Several manufacturers make this equipment, such as Bobcat, Multihog, Holder, and Trackless. There are a variety of attachments that can help with de-icing, sweeping, and plowing bicycle lanes and pathways. One machine typically costs around $200,000 to $300,000 depending on which attachments are required.

4.6 Funding Strategies

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

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

Local

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

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

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

- Voluntary public realm improvements
- Community amenity contributions
- Density bonusing contributions
- Funding in lieu of parking
- Providing high quality bicycle parking facilities

Provincial

The Provincial Government administers the **Active Transportation Infrastructure Grant** program (previously known as BikeBC) which promotes new, safe, and high quality active transportation infrastructure through cost-sharing with local governments. Funded projects promote active transportation to work, school, or errands. Funded projects can also generate tourism-related traffic based on their proximity to amenities and points of interest for tourists and through linkages to other communities. To ensure maximum success at obtaining grant funding, the District should have grant-ready concepts pre-developed for application.

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

The Union of BC Municipalities' **Community Works Fund** is one of three funding streams from the Renewed Gas Tax Agreement between Canada, British Columbia, and the Union of BC Municipalities. The fund provides predictable, long-term, and stable funding to local governments for investment in infrastructure and capacity building projects. Project examples include public transit, active transportation, parks, trails, bicycle facilities, cultural infrastructure, and long-term infrastructure plans. Funding is delivered twice annually to local governments, with the amount of funding determined by a per capital formula.

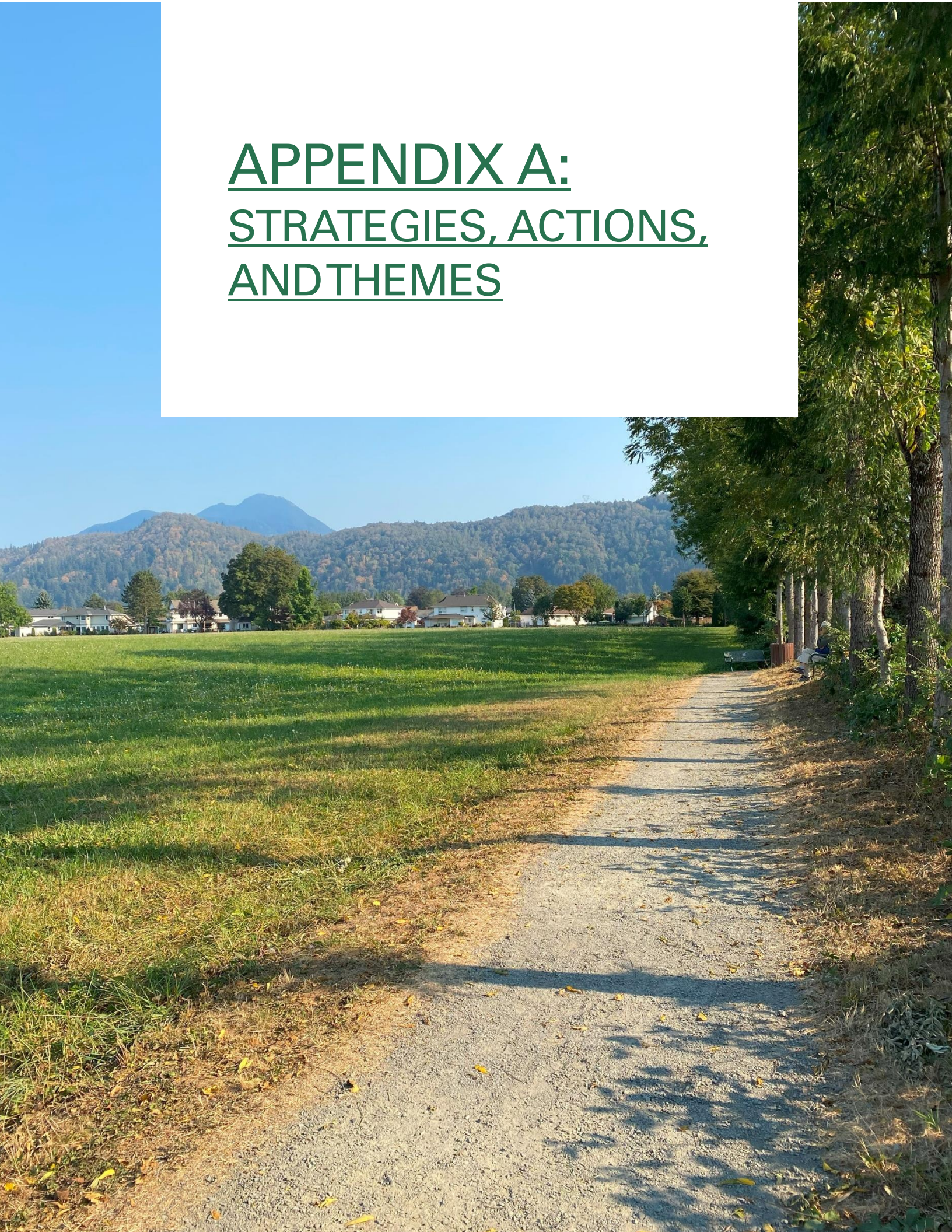
ICBC provides funding for road improvements, including pedestrian and bicycle infrastructure, particularly where these have the potential to reduce crashes, improve safety, and reduce claim costs to ICBC. Funding is available through ICBC's Road Improvement Program. Other ICBC programs include the Speed Watch Program (through the Community Policing Centres), Speed and Intersection Safety Program, Counter Attack, Operation Red Nose and Road Sense Speaker Program for Schools. Funding is available annually, with the application deadline typically in February.

Federal

Green Municipal Funds are managed by the Federation of Canadian Municipalities, with a total allocation of $550 million. This fund is intended to support municipal government efforts to reduce pollution, reduce greenhouse gas emissions and improve quality of life. The expectation is that knowledge and experience gained in best practices and innovative environmental projects will be applied to national infrastructure projects.

Infrastructure Canada manages 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. In 2022, the Federal Government announced and the **National Active Transportation Grant** program, which will fund $400 million in active transportation across Canada over the next five years.

APPENDIX A:
STRATEGIES, ACTIONS, AND THEMES



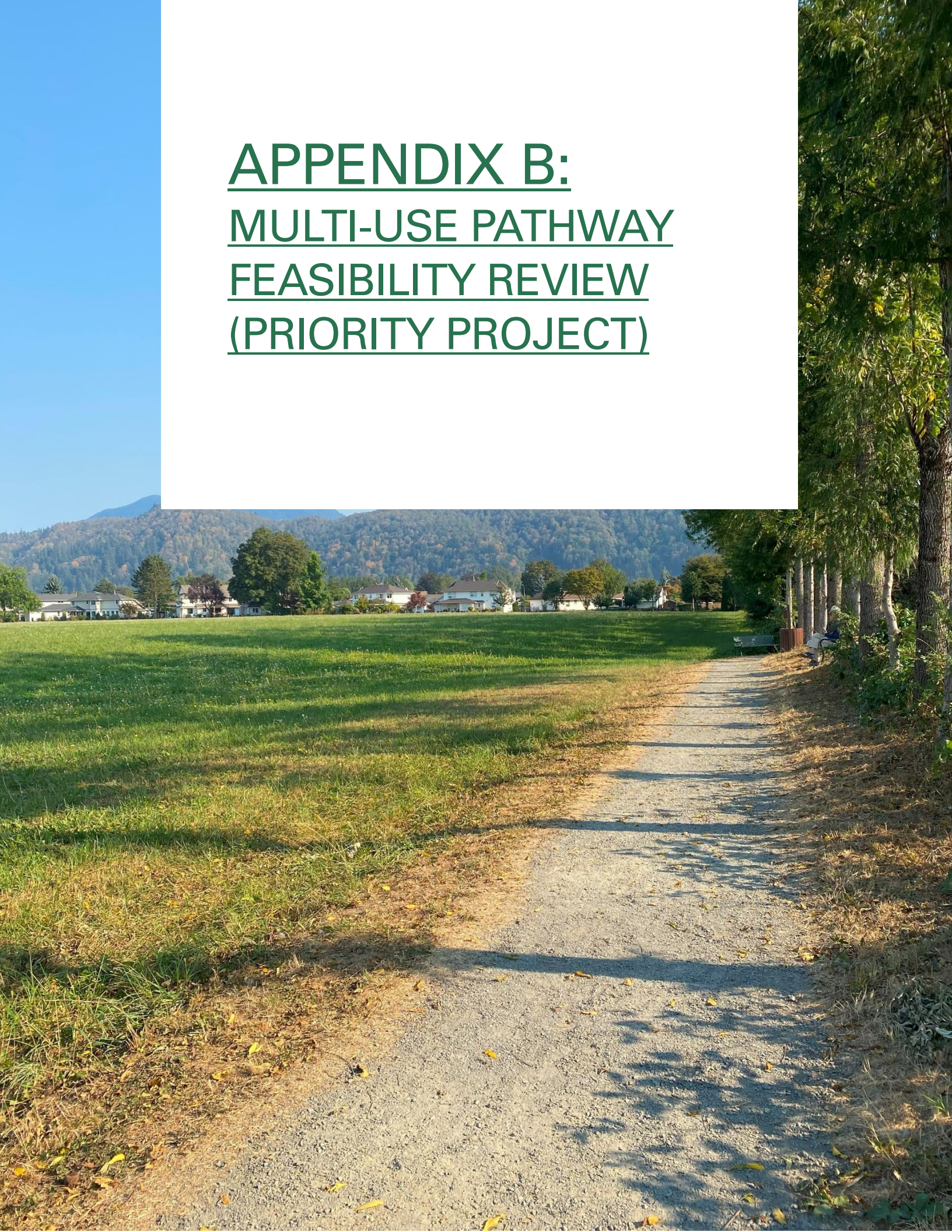
CONNECTED COMMUNITY

Action #		Funding Partners Available	Magnitude*	Short (within 8 years)	Medium (8-20 years)	Long-Term (20+ years)	Capital	Operations and Maintenance	Policy and Programming	Primary	Secondary
	Strategy 1: Expand and Enhance the Sidewalk Network										
1.1	Fill gaps in the sidewalk network to provide connections to key destinations.	✓	$$$				✓	✓		Engineering Services, Public Works	Development Services
1.2	Continue the sidewalk and pedestrian infrastructure inspection program.		$					✓	✓	Engineering Services, Public Works	Development Services
1.3	Update pedestrian facility requirements in the District's Subdivision and Servicing Bylaw.		$						✓	Development Services, Engineering Services	
	Strategy 2: Expand and Enhance Multi-use Pathways, Trails, and Other Cycling Routes										
2.1	Implement new and upgrade existing cycling and trail connections.	✓	$$$				✓	✓		Engineering Services, Public Works	Development Services
2.2	Improve access to trails by filling in network gaps and enhancing accessibility and comfort.	✓	$$$				✓			Engineering Services, Public Works	Development Services
2.3	Continue to engage with community members and stakeholders to formally incorporate portions of the dyke system into the formal trail network.		$						✓	Development Services, Engineering Services	
2.4	Work with other jurisdictions to provide a seamless well integrated active transportation network to neighbouring communities	✓	$$						✓	Engineering Services, Public Works, Development Services	FVRD, MoTI, Neighbouring Indigenous Communities (i.e., Seabird Island First Nation)
	Strategy 3: Improve Safety and Accessibility at Intersections and Crossings										
3.1	Monitor and address pedestrian and cycling safety concerns at intersections.	✓	$$						✓	Engineering Services	Development Services
3.2	Enhance the accessibility of intersections and crossings.	✓	$$				✓			Engineering Services	Development Services, MoTI
3.3	Ensure active transportation safety and accessibility at new intersections, bridge crossings, and underpasses.		$						✓	Engineering Services	Development Services, MoTI, Canadian Pacific Rail
	Strategy 4: Improve Integration of Active Transportation with Transit, Other Modes, and District Projects										
4.1	Improve transit connections and user experience.	✓	$$						✓	Engineering Services	Development Services, BC Transit
4.2	Ensure land use policies support and encourage active transportation.		$						✓	Development Services	Engineering Services, Public Works
4.3	Seek opportunities to integrate new active transportation facilities in conjunction with other District projects, plans, and developments.	✓	$						✓	Engineering Services, Public Works, Development Services	MoTI
4.4	Consider the impact of new and shared mobility on the active transportation network, facility design, and District policy.		$						✓	Engineering Services	Public Works
4.5	Explore expanding the existing Parks, Recreation, and Trails group to incorporate active transportation and accessibility.		$						✓	Development Services	District Council

Action #	ENJOYABLE EXPERIENCE	Funding Partners Available	Magnitude*	Short (3-10 years)	Medium (10-20 years)	Long-Term (20+ years)	Capital	Operations and Maintenance	Policy and Programming	Primary	Secondary
	Strategy 5: Create an Active Transportation Network that Prioritizes Safety, Accessibility, and Equity										
5.1	Apply an intersectional, equity-focused lens to the planning, design, and implementation of all active transportation facilities, amenities, and programs to support equity-seeking groups.		$$						✓	Engineering Services, Public Works, Development Services	
5.2	Improve safety through targeted neighbourhood improvements.	✓	$$$				✓	✓		Engineering Services, Public Works	
5.3	Enhance visibility through lighting improvements along sidewalks, pathways, trails, and intersections where appropriate.	✓	$$$				✓	✓		Engineering Services, Public Works	
	Strategy 6: Create Vibrant Places and Streets										
6.1	Develop guidelines for the installation of public amenities through capital projects and developments.		$						✓	Engineering Services, Public Works, Development Services	
6.2	Provide more bicycle parking and end-of-trip options throughout the District.	✓	$						✓	Development Services	Engineering Services
6.3	Continue to create pedestrian-only zones, either temporarily, seasonally, or permanently.		$$						✓	Engineering Services, Public Works, Development Services	
6.4	Adopt an approach to implementing Complete Streets.		$$						✓	Engineering Services, Public Works, Development Services	
	Strategy 7: Maintain the Active Transportation Network Year-Round										
7.1	Improve maintenance practices and procedures for active transportation.		$$$					✓	✓	Public Works	Engineer Services
7.2	Prioritize upgrades and maintenance of the active transportation network.		$$$					✓	✓	Public Works	Engineering Services

Action #	EVERYDAY ENCOURAGEMENT	Funding Partners Available	Magnitude*	Short (3-10 years)	Medium (10-20 years)	Long-Term (20+ years)	Capital	Operations and Maintenance	Policy and Programming	Primary	Secondary
	Strategy 8: Ensure the Active Transportation Network is Easy to Navigate										
8.1	Develop an active transportation wayfinding and signage program.	✓	$$				✓		✓	Engineering Services, Public Works	
8.2	Develop a District Cycling Guide to include infrastructure map and information about cycling in Kent.		$						✓	Development Services	Fraser Valley Regional District, Harrison River Valley Tourism
	Strategy 9: Support Economic Development and Bicycle Tourism										
9.1	Continue to explore and implement regional bicycle tourism initiatives.	✓	$						✓	Fraser Valley Regional District, Harrison River Valley Tourism	
9.2	Explore opportunities to promote tourism activities that celebrate local arts, culture and heritage.	✓	$						✓	Fraser Valley Regional District, Harrison River Valley Tourism	
	Strategy 10: Make Active Transportation Fun and Easy										
10.1	Explore opportunities to increase education and awareness of active transportation.	✓	$						✓	Development Services, School Districts, Fraser Health	
10.2	Partner with organizations in the development of road safety awareness and education campaigns for all road users.	✓	$						✓	Development Services	ICBC, RCMP
10.3	Celebrate the installation of walking and cycling facilities with grand openings and events throughout the year.	✓	$						✓	Development Services	
	Strategy 11:Support and Monitor the Implementation of the Active Transportation Network Plan										
11.1	Pursue and prioritize dedicated funding for active transportation.		$						✓	Engineering Services, Development Services	
11.2	Monitor the implementation of the Active Transportation Network Plan.		$						✓	Engineering Services, Public Works, Development Services	

APPENDIX B:
MULTI-USE PATHWAY FEASIBILITY REVIEW (PRIORITY PROJECT)



FEASIBILITY REVIEW

MULTI-USE PATHWAY LOOP

Haig Highway, Tramner Road, and McDonald Road

March 28, 2022

URBAN SYSTEMS

550 - 1090 Homer Street, Vancouver, BC V6B 2W9 | T: 604.235.1701

PREPARED FOR:

District of Kent
7170 Cheam Avenue
Agassiz, BC V0M 1A0

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File: 1408.0012.01

CONTENTS

APPENDICES

1.0 OVERVIEW

Urban Systems Ltd was retained by the District of Kent to prepare an overview and develop a full understanding of a multi-use pathway loop project. The proposed 4.5km Multi-Use Pathway Loop will provide residents and visitors with an accessible, continuous multi-use facility that is safe and comfortable for people walking, cycling, and rolling, an important transportation and recreation facility, and a destination in itself. The multi-use pathway will be paved and the first of its kind in the District.

The proposed project includes upgrading an existing narrow gravel pathway and building a network around this already popular and well used facility. The project will provide a loop that connects Haig Highway through agricultural lands along McDonald Road and Tanner Road. The existing pathway is adjacent to Haig Highway a B.C. Ministry of Transportation and Infrastructure roadway that has no designated pedestrian or bicycle facilities. The proposed project will extend the pathway north and provide a grade separated crossing of Haig Highway. On the east side of Haig Highway the pathway will continue along Tranmer Road and MacDonald Road looping back around to Haig Highway. Intersection crossing upgrades have also been identified at two locations (in addition to the new grade separated crossing) at Haig Highway and Morrow Road and Haig Highway and MacDonald Road. The project will also include the installation of additional pathway and roadway lighting as well as some additional tree planting and landscaping. Pavement markings and signage will also be installed along the pathway.

The purpose of this report is to document the feasibility of the project including a description of the proposed project, including the project extent, facility type and design specifications, and estimated cost. Additionally, cross sections and design assumptions for each section of the project out outlined below. The intent is that this report and study will set the District up to move forward with functional and detailed design of the pathway loop project and provide materials that can be used in discussions with community members and stakeholders.

2.0 PROJECT BACKGROUND

The District of Kent has identified active transportation infrastructure in several of its plans, including the Official Community Plan and Active Transportation Plan. The District's OCP has laid out the community's priorities towards active transportation, such as working collaboratively with First Nations to build trail segments in Kent, provide links for walking and cycling between Agassiz and Harrison Hot Springs, support recreational tourism, and implement new cycling, pedestrian and hiking infrastructure and improvements. In addition, the Park Acquisition, Improvement and Trail Development Program report identifies the community's expressed desire for additional trails within the developed areas of the District. Active transportation infrastructure and promoting active transportation also aligns with the goals and recommendations of the District's Age Friendly Plan and Housing Needs Report.

Through the development of the current Official Community Plan, Active Transportation Plan and the Park Acquisition, Improvement and Trail Development Program, there was significant community and stakeholder engagement which identified strong support for existing and new trail systems, especially those bordering agricultural land. The OCP recommends that urban and rural trail development and safety improvements to the existing trail system (Dyke Trail) for human-powered recreation use (walking, cycling) should continue. Through engagement for the previous Active Transportation Plan, a lack of bike lanes or paved shoulders was the top active transportation barrier in the District, and a lack

of sidewalks was second. The Park Acquisition, Improvement and Trail Development Program identified several loop trails that could function independently but also connect to form a complete network.

The project outlined in this report is seen as a first step to building a more complete walking and cycling network in the community.

3.0 BENEFITS OF ACTIVE TRANSPORTATION

Promoting and providing more opportunities for active transportation can play an important role in enhancing the community's health, environment, and economy. It also ensures community members can safety move in and around Kent. Key benefits of active transportation include:

- **Health Benefits:** Walking and cycling are some of the easiest and most affordable ways for people in Kent to add exercise to their daily routines. Investing in active transportation has been shown to create more physically active communities, which can in turn improve psychological well-being, prevent weight gain and obesity, and reduce the risk of numerous chronic diseases.
- **Safety Benefits:** Properly designed active transportation facilities that provide dedicated spaces for active transportation users and make people more visible within the roadway have the potential to reduce the risk of collisions, creating a safer transportation system for all road users. Roads designed for slower motor vehicle speeds have been shown to decrease the probability of serious injury and death for active transportation users, and they are much more comfortable for people walking, rolling, and cycling.
- **Economic Benefits:** Neighbourhoods and destinations that are attractive and accessible for people walking and cycling can attract more visitors, who will in turn be patrons of local services and amenities. Investing in active transportation can result in a more balanced transportation system that is cost-effective and more equitable, making sure that people of all socioeconomic backgrounds are able to travel safely throughout the District.
- **Environmental Benefits:** Transportation is one of the largest contributors to greenhouse gas emissions in the province, with motor vehicles the main culprit. Active transportation can help to lower emissions while also reducing air pollution and motor vehicle congestion.
- **Societal Benefits:** Active transportation and additional recreation facilities encourage social interaction, help to build trust, respect, understanding, and a sense of co-operation amongst community members. Studies have shown that these important social interactions diminish when motor vehicle volumes increase and walking infrastructure decreases. These interactions are vital for people of all ages and abilities.

4.0 PROJECT DETAILS

4.1 PROJECT DESCRTIPTION AND FACILITY TYPES

The project has been broken down into four sections. Below is a description of each section including the existing conditions and the proposed design for the corridor. The proposed designs have been based on a feasibility review conducted by Urban Systems as well as discussions with District of Kent staff, following the BC Active Transportation Design Guide.

- Section A: Haig Highway South
- Section B: Haig Highway North (Including Pixley Lane)
- Section C: McDonald Road South (West of 1221 Tranmer Road)
- Section D: Tranmer Road and McDonald Road South (East of 7700 McDonald Road)

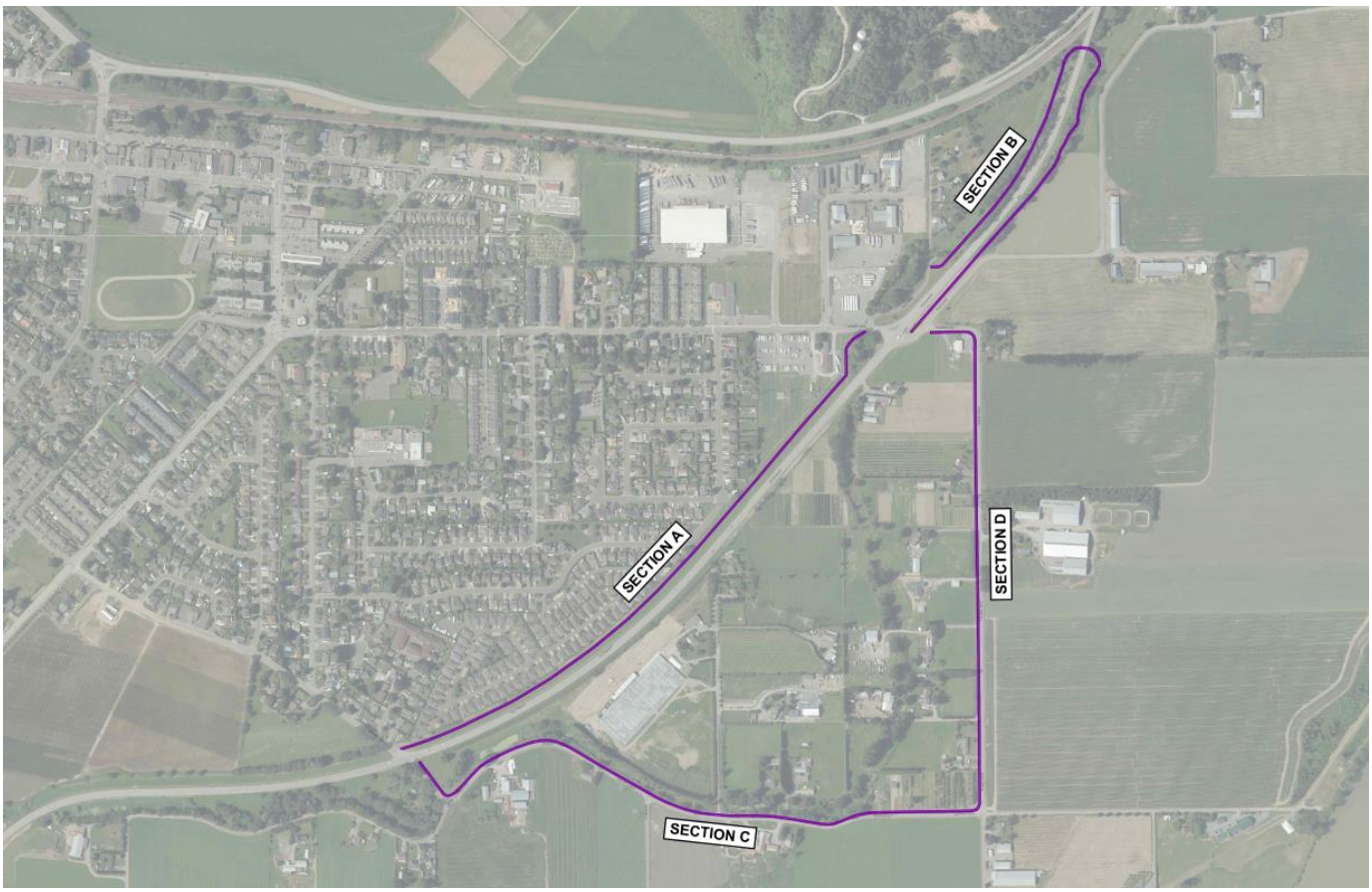


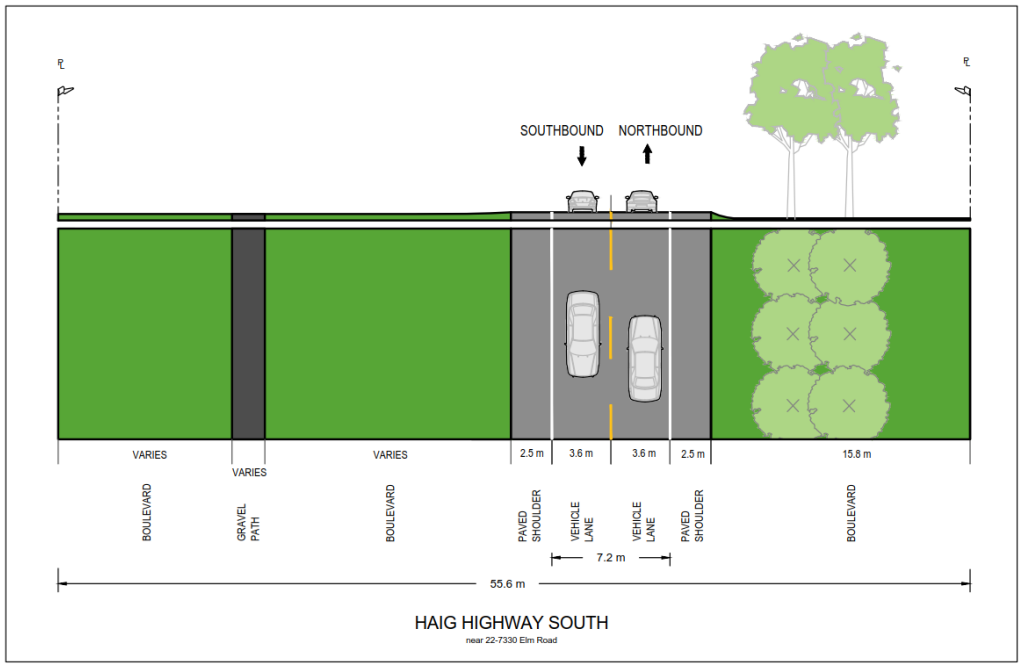
Figure 1. District of Kent Proposed Multi-Use Path Sections.

SECTION A: HAIG HIGHWAY SOUTH

A multi-use pathway is proposed adjacent to Haig Highway South. The pathway would be located on the west side of the provincial highway in place of the existing gravel pathway running from McDonald Road to Morrow Road.

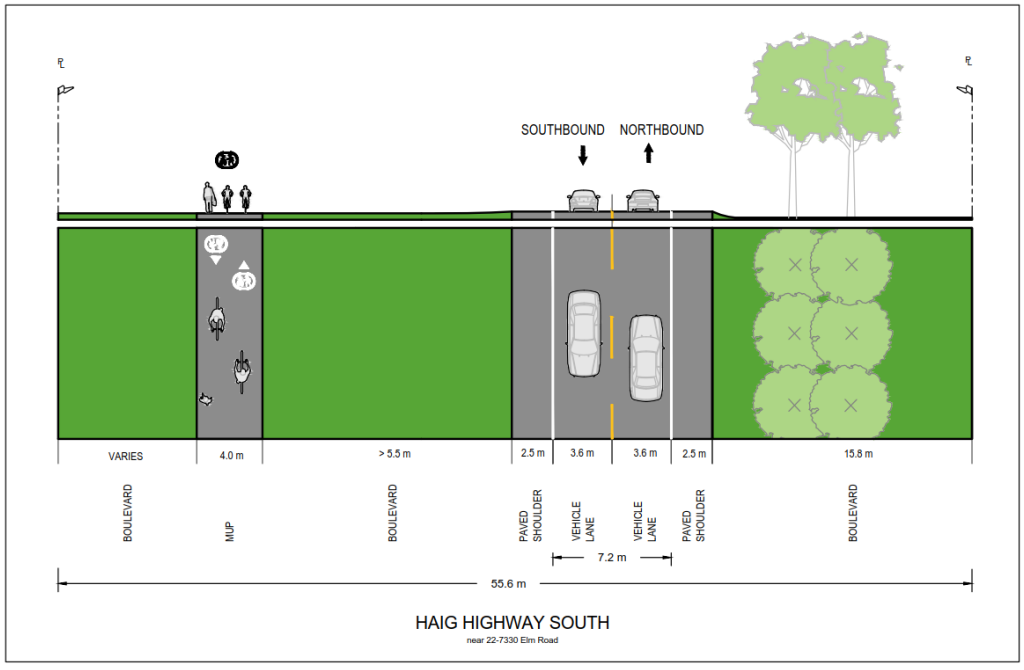
Existing Conditions:

- Gravel pathway of varying width from McDonald Road to Morrow Road with connection to Elm Road
- Paved shoulders beside travel lanes in both directions
- No on-street pedestrian or cycling facilities



Proposed Design:

- 4.0 m off-street multi-use pathway
- Minimum buffer of 5.5 m on the east side of the pathway to separate cyclists and pedestrians from high-speed traffic
- New signing and pavement markings to identify this section as a multi-use pathway
- Other potential landscaping and lighting improvements

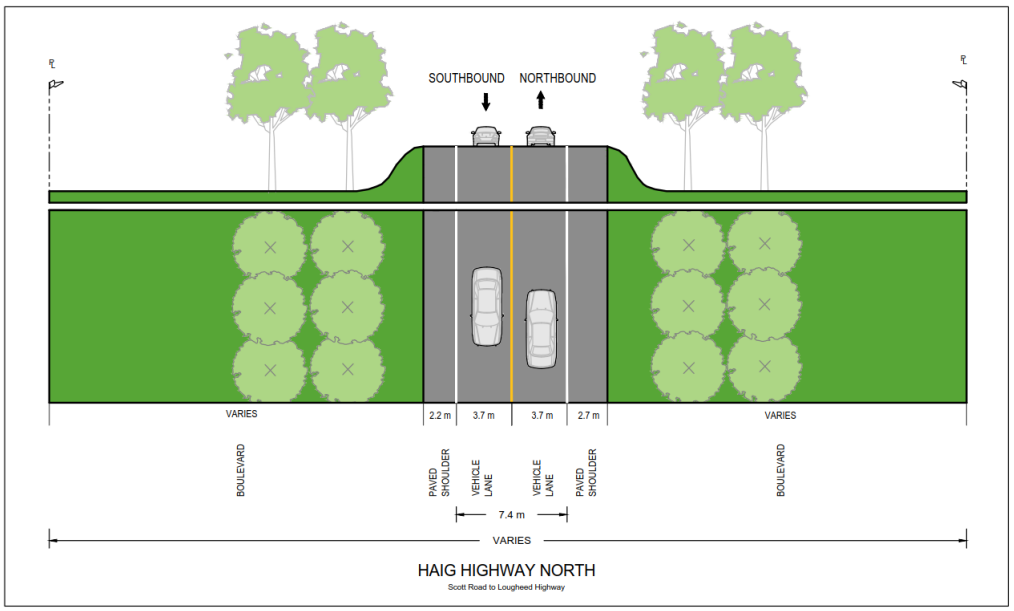


SECTION B: HAIG HIGHWAY NORTH (INCLUDING PIXLEY LANE)

Multi-use pathways are proposed on each side of Haig Highway from Morrow Road to Lougheed Highway. The pathways will be located beyond the existing trees and vegetation and will run below the highway using the underpass at the north end. There is a portion of this section that is located on Pixley Lane, a low volume road segment that services three residential properties.

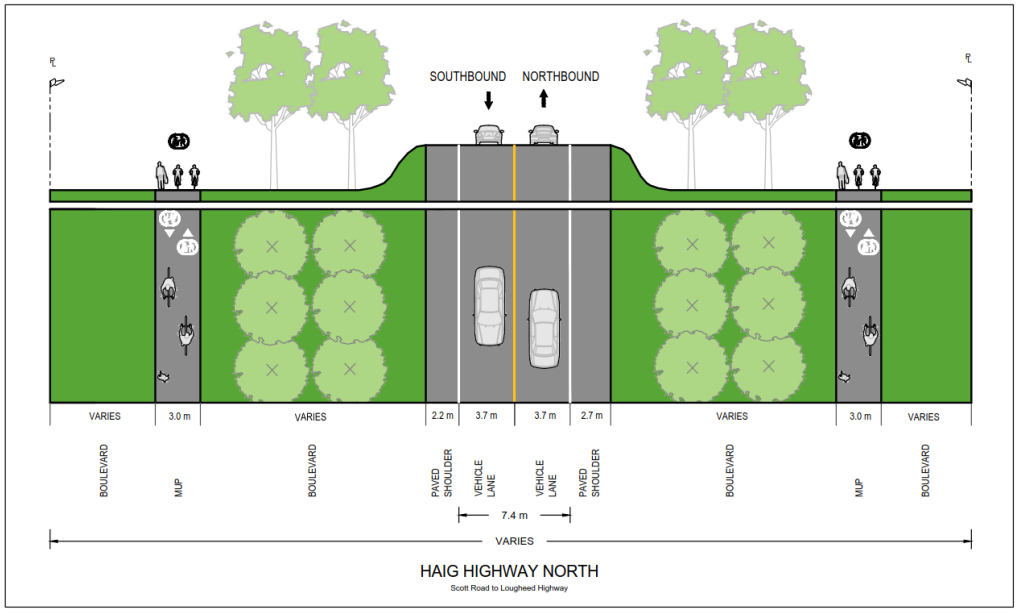
Existing Conditions:

- Steep grades and vegetation on both sides of highway
- Paved shoulders beside travel lanes in both directions
- No pedestrian or cycling facilities



Proposed Design:

- 3.0 m multi-use pathways on each side of highway, connecting at underpass near Lougheed Highway
- Boulevards on both outer sides of the pathways
- New signing and pavement markings to identify multi-use pathways in this section
- Other potential landscaping and lighting improvements



SECTION C: MCDONALD ROAD SOUTH (WEST OF 1221 TRANMER ROAD)

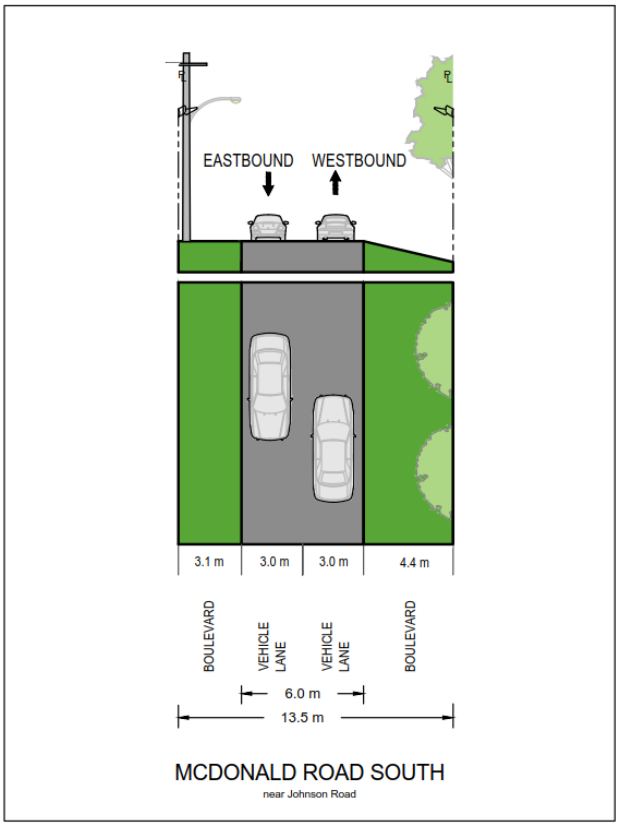
As part of this project, a 3.0 m multi-use pathway will be installed on the north side of McDonald Road within the District's right-of-way. Fill will be placed over the existing ground surface adjacent to the roadway to maintain an even surface across the width of the multi-use pathway. The pathway will be separated from the roadway by a low-height barrier.

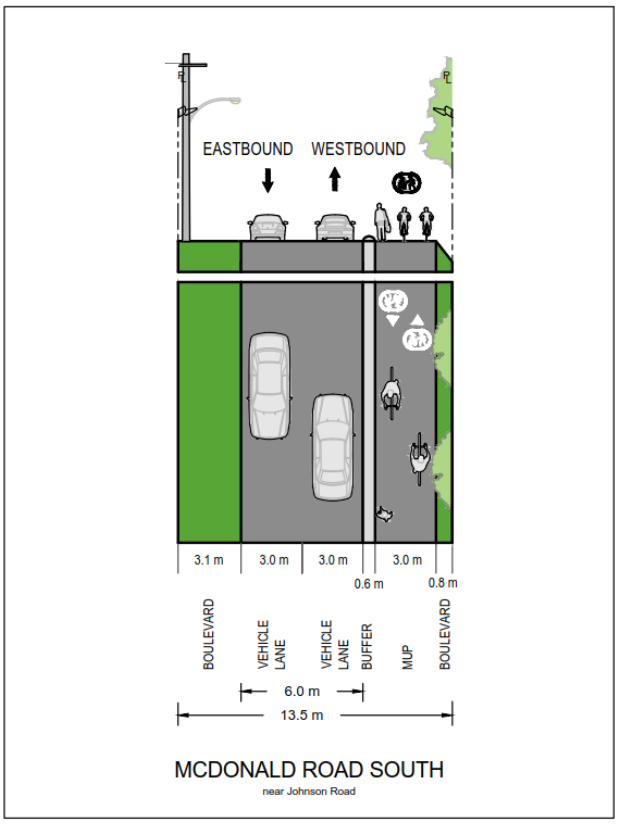
Existing Conditions:

- No shoulder on either side of roadway
- No pedestrian or cycling facilities
- Several utility poles alongside roadway
- Slight grade on north side and vegetation near north property line

Proposed Design:

- Relocate nine utility poles and fill grade on north side of McDonald Road South
- 3.0 m multi-use pathway on the north side of the street
- New 0.6 m low-height barrier between the multi-use pathway and roadway
- New signing and pavement markings to identify this section as a multi-use pathway
- Other potential landscaping and lighting improvements





SECTION D: TRANMER ROAD AND MCDONALD ROAD (EAST OF 7700 MCDONALD ROAD)

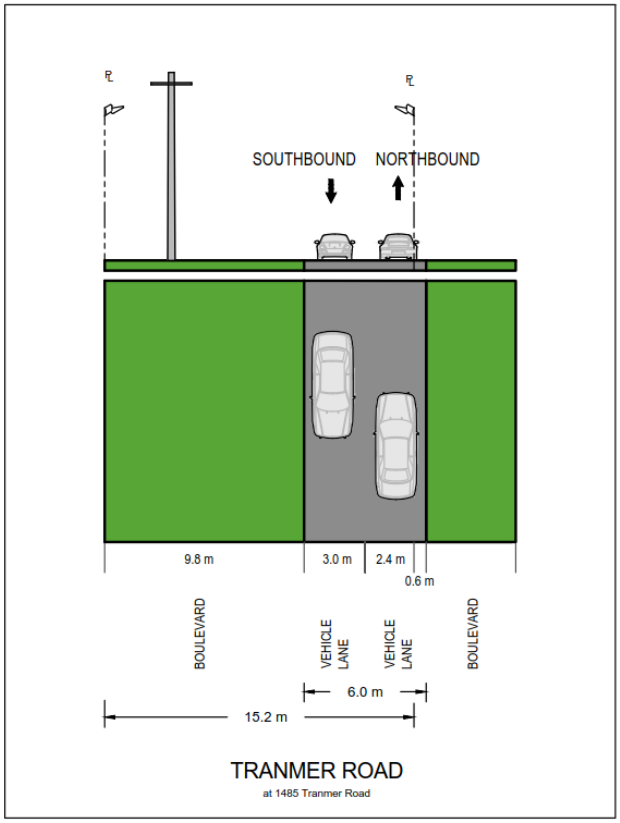
A 3.0 m multi-use pathway is proposed on the west side of Tranmer Road in the District's right-of-way. A 1.5 m vegetation buffer can be kept to separate the pathway from vehicle travel lanes, and a boulevard of approximately 5 m will be maintained between the pathway and the west property line.

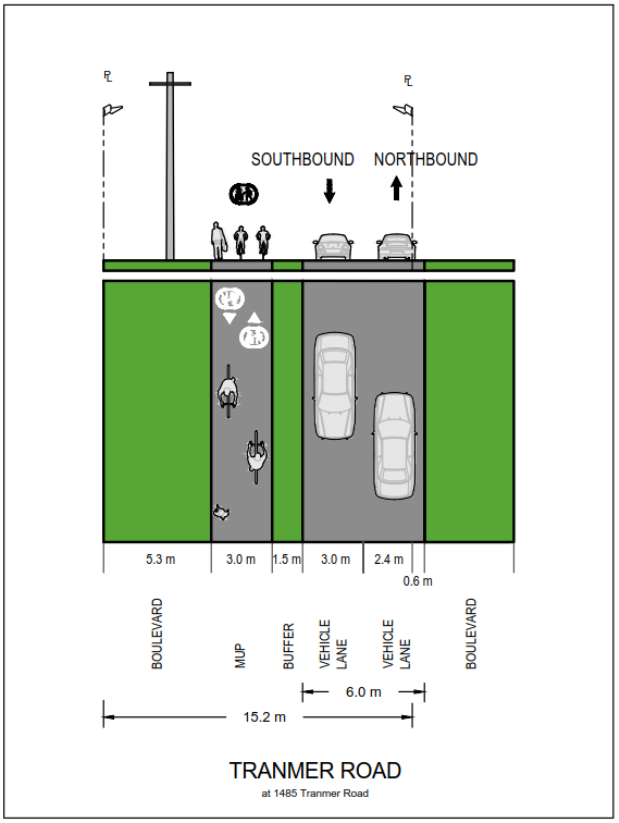
Existing Conditions:

- No shoulder on either side of roadway
- No pedestrian or cycling facilities
- Several utility poles alongside roadway
- East property line within roadway in some areas

Proposed Design:

- Relocate three utility poles on west side of Tranmer Road
- 3.0 m off-street multi-use pathway on the west side of the street
- 1.5 m buffer between the multi-use pathway and roadway
- New signing and pavement markings to identify this section as a multi-use pathway
- Other potential landscaping and lighting improvements





5.0 PLANNING-LEVEL CONCEPT DRAWINGS

Based on a review of existing conditions and the proposed pathway options it was established that the multi-use pathway project would be feasible. It was identified that Section A and D would be implementable within the existing road right-of-way. The grade is relatively flat and there are limited obstructions.

Sections B and C are a bit more challenging due to constrained rights-of-way and the need to work with property owners and stakeholders. Additional surveys may be required for Section B to determine the obstructions alongside the proposed route. The location of utility poles and topography along Section C create challenges that will need to be addressed through future design phases.

Additional design considerations regarding intersection treatments, drainage, landscaping, lighting, and pathway signage would need to be required in further design phases.

Appendix A includes the planning-level concept drawings for the proposed pathway loop with some of the additional considerations, issues, and opportunities identified.

6.0 COST ESTIMATE

A Class D (order of magnitude) cost estimate was prepared for the identified network improvements for planning purposes. The estimate determined the overall cost to be approximately **$10,100,000** including contingency (30%) and engineering design fees (15%). An allowance for intersection treatments, drainage, landscaping, lighting, and pathway signage is included in the cost estimate. Potential property acquisition cost is not included.

The detailed cost estimates including breakdowns by corridors, estimate notes, assumptions and limitations are included in Appendix B.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