

**Village of Telkwa**  
**ACTIVE TRANSPORTATION**  
**NETWORK PLAN**



September 2022



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## Section 1 – Introduction





## 1.0 INTRODUCTION

The Village of Telkwa is working towards enhancing active transportation opportunities in the community by completing an Active Transportation Network Plan (ATNP). Its purpose is to establish a long term vision for active transportation and to identify steps that the Village can take both now and, in the future to move towards this.

The Telkwa ATNP creates a roadmap to guide strategic investments in active transportation, which can result in a more balanced transportation system that is accessible, cost-effective, and a more equitable approach to Village infrastructure investments.

### 1.1 What is Active Transportation?

This section largely draws from Chapter B of the BC Active Transportation Design Guide (BCATDG), which includes a detailed overview of active transportation and its benefits. According to the guide, active transportation is defined as follows:

*“Any form of human-powered transportation, including walking, cycling, or rolling using a skateboard, in-line skates, wheelchair, or other wheel-based forms of human-powered transportation. It also includes winter-based active modes, water-based active modes, and horseback riding, although these modes are typically more recreational in nature.”*



Active transportation users are a diverse group and include those who are walking, cycling, rolling (e.g., skateboarding, longboarding, scootering) and people using mobility devices such as wheelchairs, walkers, and strollers. All of these forms of active travel are pursued for a variety of reasons; some people may choose to walk for recreation, others may bike to work, some may use active transportation due to the lack of a personal vehicle, and others may be choosing to travel this way because of the environmental benefits. The reasons to travel by an active mode are multi-fold and so are the benefits, discussed below.



## Economic

Helps to draw visitors to travel to the Village core and discover more of the community. Supports attraction and retention of older adults and young families who prefer to spend less time driving or cannot drive.



## Environmental

Reduces vehicle trips and lowers community GHG emissions from transportation.



## Health

An affordable and accessible way to improve mental & physical health for both children and adults.



## Social

Encourages social interaction by creating opportunities for face-to-face interactions amongst community residents. This is particularly important for youth and supporting healthy aging in older adults.



## Safety

Makes roads safer by reducing the risk of collision for active transportation users. Helps alleviate safety as a barrier for residents choosing active transportation.





## 1.2 Approach

Undertaken from January 2022 to October 2022, the Telkwa Active Transportation Network Plan was guided by a collaborative process involving staff from the Village of Telkwa, community stakeholders, and the consulting team—all of whom played an important role in reshaping the future of active transportation in Telkwa. Section 3 provides a summary of the public engagement process and how the feedback helped shape the key directions of the ATNP.



The Plan encompassed three distinct phases that are presented briefly below:

- **Phase 1** – Network Summary & Baseline Conditions Assessment initiated the project and undertook the analysis of past plans and the existing conditions.
- **Phase 2** – Public Engagement to involve the public, stakeholders, and others to gather input, understand the challenges and opportunities, and craft the vision, direction, and goals for the ATNP.
- **Phase 3** – Plan Development & Implementation Plan made use of the background technical work, additional data collection and results from the Phase 2 engagement to detail the future network and develop the ATNP document.





## Section 2 – Our Community





## **2.0 OUR COMMUNITY**

### **2.1 Community Profile**

The Village of Telkwa lies on the traditional territory of the Witsuwit'en people in the Bulkley Valley in Northern British Columbia. Located along the Yellowhead Highway 16 on the banks of the Bulkley and Telkwa Rivers, the small community is 15 kilometres southeast of the Town of Smithers and 356 kilometres northwest of the City of Prince George. Telkwa is a member municipality of the Regional District of Bulkley-Nechako and its main industries are forestry, agriculture, and tourism.

Telkwa was incorporated in 1952 and has a population of 1,474 as of 2021 (an 11.1% increase from 2016). Development over the last hundred years has been shaped by the Telegraph Trail, a rush of settlers at the beginning of the 20<sup>th</sup> century, and the arrival of the Grand Trunk Pacific Railway. Additionally, a major fire in 1914 destroyed many of Telkwa's downtown buildings and several businesses moved to the new town site of Smithers. Some heritage buildings remain today as a tribute to the Village's history. Now, Telkwa is primarily a residential community that has attracted families with its rural setting, larger lots, and lower priced housing. Telkwa is surrounded by a beautiful natural landscape featuring provincial parks and numerous recreational opportunities.

#### **2.1.1 Geography**

The Village of Telkwa has an area of 7.04 square kilometres and a population density of 209.5 people per square kilometre. The Village sits at the confluence of Telkwa River and Bulkley River, with Tyhee Lake to the northeast. Highway 16 runs north-south through the Village, connecting with other communities in the Bulkley Valley including Smithers and Houston.

The majority of Telkwa's land use is residential, with commercial / service commercial land along Highway 16 / Fourth Street. Several parks are dispersed throughout the community, as well as a library and elementary school. Most of the Village's industrial area lies to the south.

Telkwa experiences hot summers and cold winters, with temperatures reaching up to 30 degrees Celsius and as low as -33 degrees Celsius. It has an average yearly rainfall of 444



mm and an average yearly snowfall of 183 cm, according to 2020 Environment Canada data.

## 2.1.2 Community Snapshot

The 2021 census recorded 1,474 residents in the Village of Telkwa. At the time of writing this report, population and dwelling counts are the only statistical indicators that have been released from the 2021 census. Therefore, most of the following community insights have been sourced from the 2016 census as well as previous Village studies and plans. These insights include demographic trends, local economy, and travel patterns that influence active transportation in the community.



### Young Community

Telkwa has a younger median age (34.3) and larger household size (average 2.7 people per household) than Houston, Smithers, and Bulkley-Nechako Area A. The median age of British Columbia is 43. There is a higher percentage of children in Telkwa (23% of the population is between 0-14 years old) compared to Houston (21%), Smithers (18%), and Bulkley-Nechako Area A (19%).



### Growing Population

Telkwa's population increased 11.1% (from 1,327 to 1,474) between 2016 and 2021. The seniors' community has been growing at a rapid pace, with double the number of individuals aged 65+ between 2006 and 2016 (an increase from 85 to 155).



### Service & Industrial Economy

Telkwa's major local industries and sources of employment are manufacturing, retail trade, forestry & trades, accommodation & food services, and public administration.





## Commuter Workforce

86% of the labour force travels to work outside of the Village and 89% of commutes are made by driving. Not a single household reported commuting by walking or bicycle and only 3% reported commuting by transit as of the 2016 census.



## Collisions

According to ICBC, there were four crashes in the Village of Telkwa between 2016-2020, all of which occurred at the intersection of Highway 16 and Telkwa High Road. None of the crashes involved a pedestrian or a cyclist. This awkward t-intersection is skewed, where vehicles heading northbound turning onto Telkwa High Road are able to carry their speed from travelling along Highway 16, without having to slow down.

### 2.1.3 Community Destinations

Telkwa is home to a variety of destinations, ranging from shops and services in the core to outdoor amenities throughout its many parks and natural areas. Key destinations are discussed in this section to ensure that they are considered in the analysis of the active transportation network.



*Tyhee Market, located in the northern part of Telkwa's commercial area*



## Commercial Hub

Telkwa's main commercial area is located along the Bulkley River with Highway 16 / Fourth Street running through it. The area has several shops and services including retail stores, accommodation, dining options, a post office, and a gas station. It also features four of the Village's parks, a riverfront trail, and the Telkwa Museum.



*Telkwa Elementary School*

## Telkwa Elementary School

Telkwa Elementary School is part of the Bulkley Valley School District and offers kindergarten to grade seven. It is the only school within the Village of Telkwa. Secondary schools for students in grades eight to twelve are in the neighbouring communities of Smithers and Houston.

## Parks

Telkwa's parks are key destinations for both locals and visitors. They benefit the community by fostering neighbourhood connections, supporting recreational activities, and hosting events. Parks also have great potential to connect locations through their own off-street paths and play a vital role in an active transportation network.

### Telkwa's Parks:

- Eddy Park
- Library Park
- Riverside Park
- Aldermere Ridge Park
- Hankin Park
- BBQ Grounds
- Woodland Park



- Additionally, Dockrill Rink & Community Garden and the Airstrip have been identified as two unofficial parks that are used by the community. Telkwa also has several areas that are used as parks or supporting infrastructure, including trail connections, the staircase between Aldermere Trail and Telkwa Elementary School, and the school field and playground.



*Eddy Park (left) and the staircase between Aldermere Trail and Telkwa Elementary School (right)*

#### 2.1.4 Regional Connections

There are seven other municipalities within the Bulkley-Nechako Regional District, the closest being Smithers (about 15 kilometres northwest) and Houston (about 50 kilometres southeast). Because Telkwa is a smaller community, connections to neighbouring areas are important for residents to access additional services, education, and employment opportunities. Currently, community members can travel within the region using the following transportation options:

- **BC Transit** – The Smithers & District Transit System provides service between Smithers, Telkwa, and Witset. Additionally, the Bulkley-Nechako Regional Transit System provides service to Burns Lake and Prince George, and the Hazelton Regional Transit System provides service to Kispiox.





- **Northern Health Connections** – This is a bus travel service program for patients needing to travel for out-of-town medical appointments in Northern BC.
- **First Nations Health Authority Health Benefits Program** – This helps provide coverage for health services to support BC First Nations, including access to medical transportation benefits through their home community's health service office.
- **BC Bus North** – This is an intercity bus service between Prince Rupert, Prince George, Dawson Creek, Fort St John, Fort Nelson, Valemount and many communities in between.
- **VIA Rail Canada** – A regional rail service is available between Jasper, AB and Prince Rupert, BC. There is a station in Telkwa close to downtown, across the Bulkley River and accessible from Alder Street, where the train stops on request. The train also stops in Smithers and runs from Prince Rupert to Prince George on Wednesdays and from Prince George to Prince Rupert on Mondays.
- **Dze L K'ant Friendship Centre** – The Centre provides connections to Telkwa, Smithers and Houston for First Nation Peoples.

Furthermore, Telkwa, the Ministry of Transportation and Infrastructure (MOTI), the Regional District of Bulkley-Nechako, and Smithers are working with the Cycle 16 Trail Society to develop a non-motorized paved trail connecting Smithers and Telkwa. Phase One will cover approximately 11 kilometres along the Highway 16 right-of-way and the trail is planned to be three metres wide with a yellow centreline. It will be open to all active modes of transportation, including walking and wheeling users. The project currently has various other sections of trail that are in either the conceptual or detailed design phases.



## 2.2 Planning and Policy Context

The BC government has taken a strong leadership role in supporting the creation of active transportation infrastructure in the province through the CleanBC plan. This includes the “Move. Commute. Connect.” Active Transportation Strategy (published 2019) that sets a goal to double the percentage of trips taken by active transportation by 2030. This strategy is supported by the BC Active Transportation Design Guide, a comprehensive guide that provides best practices for active transportation infrastructure.

The BC Active Transportation Design Guide defines active transportation as **“any form of human-powered transportation, including walking, cycling, or rolling using a skateboard, in-line skates, wheelchair, or other wheel-based forms of human-powered transportation”**.

Telkwa’s Active Transportation Network Plan aligns with the province’s active transportation policies by creating a local plan that addresses community challenges and provides solutions for supporting residents in choosing active modes of travel more often.

Locally, the Village of Telkwa has a range of related policies, initiatives, and plans that serve as the foundation for the ATNP to connect with and build upon. In many instances, Telkwa’s ATNP is a vehicle to implement many of the policies and actions outlined in these broader frameworks. Key Village documents and their connection with the ATNP are highlighted below. Additionally, regional documents that relate to active transportation are summarized in the following section.

### 2.2.1 Local Policies & Plans

#### **Village of Telkwa Official Community Plan and Integrated Community Sustainability Plan (Bylaw No. 613, 2011)**

The purpose of this plan is to guide long term vision and strategic land use decisions within the Village of Telkwa.

Increasing rates of fossil fuel use and travel to Smithers for services / transportation were identified among the unsustainable activities in Telkwa that need to be strategically reduced (2.2.1).



Common threads in stakeholder discussions included connecting trails and greenspaces around the Village core and connecting pedestrian nodes (e.g., Telkwa Elementary School, Norma's Ark, Eddy Park, and BBQ Grounds) (2.3.2).

Some of the potential solutions to the unsustainable activities identified in 2.2.1 include establishing commuter bike trails and a Park & Ride (3.3).

*Section 5.0 – Environment* includes policies for increasing non-vehicular modes of transportation within an inter-modal system. These include mandating bike parking facilities, creating “human scale” frontages and development that encourage walking, and investigating the feasibility of a pedestrian and bike bridge to the southwest side of the river.

*Section 6.0 – Strategic Sustainability Action Plan* includes active transportation as a measure for implementing community sustainability. Specifically, it identifies the need to promote cycling, walking, and other modes of active transportation through a variety of activities and resources including:

- Painting lines on the highway
- Providing safety barriers to separate pedestrians from traffic
- Providing multi-use paths and constructing trails and crossings
- Installing bike lock-up areas and hosting a bike festival

### **Village of Telkwa Parks Master Plan (2021)**

*Focus Area 2: Mobility & Connectivity* includes building trail connections to fill network gaps and support safe active travel options while considering both young and senior users of varying abilities.

A variety of active transportation-related improvements are identified for Telkwa's parks, including:

- Better trail connectivity and improved access points
- Signage and wayfinding
- Improved pedestrian and bicycle infrastructure (e.g., separated and accessible paths, pedestrian-scale lighting, bike racks, etc.)
- “Park and walk” facilities



**“First steps” the Village can take to improve Mobility & Connectivity include:**

- 2.1** Develop a detailed design for a "shovel ready" project that focuses on completing missing trail linkages, starting from the Village core / riverfront area and working outwards.
- 2.2** Develop a policy that requires new subdivisions to provide trail connections to existing trail networks, where appropriate.
- 2.3** Work with MoTI on improvements along Highway 16, including crossing improvements for both pedestrians and cyclists.
- 2.4** Incorporate an "all ages and abilities" lens when planning trail upgrades.

## **Telkwa Age-Friendly Trail & Transportation Assessment (2016)**

The Telkwa Age-Friendly Trail & Transportation Assessment provides a detailed description of the trails in Telkwa, including information about the trail type, length, amenities, accessibility, and other key characteristics. It also includes potential trail improvements and their impacts.

In addition to trails, the assessment covers transportation resources that are available to the community. This includes transit service, bus stops, transit rider information, VIA Rail service, Medical Health bus, Telkwa to Smithers Trail Society CYCLE 16, and MOTI involvement in supporting transportation improvements.

## **Age-Friendly Community Assessment (2012)**

The Telkwa Age-Friendly Trail & Transportation Assessment includes a review of the actions from the 2012 Age-Friendly Community Assessment. The following trail updates since 2012 were identified:

- Grit boxes are installed every fall and removed in the summer months.
- No action taken to install a bench partway up Tower Neighbourhood stairs.
- A campaign regarding off-leash dogs has been active and dog waste bag dispensers have been installed in various locations on Telkwa trails.
- Development of the commuter trail off Coalmine Road has been extended both below the BBQ Grounds and at the south end of Willow Street to Cedar Street in the Woodland Area. The intention is to keep people off Coalmine Road.





Further recommended actions building on those already undertaken include:

- Install additional grit boxes at the stairs leading down from Highway 16 to Riverside Trail and stairs leading from Hubert Road to Tyhee Lake Park.
- Continue to install dog waste bag dispensers on trails with garbage facilities and add signage for dog and trail etiquette.
- Develop signage at the Bulkley Bridge indicating the off-road Coalmine commuter route. Invest in signage at trails. Work to connect Aldermere / Tower neighbourhood with Old Downtown and the service highway corridor. Partner with MOTI to extend bike path up Coalmine Road and invest in the Trails to Smithers / Telkwa portion. Work to eliminate hazards on existing trails.

### **Village of Telkwa Consolidated Traffic Bylaw No. 592, 2009**

*Section 9 – General Street Regulations* includes bylaws for maintaining sidewalks so as not to obstruct pedestrians. This includes the responsibility of all property owners / occupiers to cut back trees and shrubs, as well as keep sidewalks clear of snow, ice, dirt, litter, and rubbish.

Council will designate the priorities of routes for grading and maintenance of gravel roads and the cleaning of paved roads within the Village of Telkwa.

Every highway and portion of highway will be designated a Snow Removal Route and Council will designate the priorities of routes for snow removal.



## 2.2.2 Regional Policies & Plans

### **Smithers Telkwa Rural (Electoral Area A) OCP (Bylaw No. 1704, 2014)**

Transportation objective 4.5.1 (1) is to “ensure the establishment of a safe and efficient transportation network and to take into account vehicle, bicycle, and pedestrian traffic matters and the functional integrity of the transportation system in land use decisions”.

Transportation policy 4.5.2 (3) states that “the Ministry of Transportation and Infrastructure shall, wherever possible, be encouraged to accommodate safe pedestrian and bicycle use of public roads”.

### **Smithers OCP (Bylaw No. 1614, 2019)**

Objective 10.2.1 is to “provide an efficient, safe, reliable, and connected multi-modal municipal road system for residents, visitors, and business”. It includes supporting transit, bicycle, and pedestrian uses as key components of the transportation plan for the community.

Objective 10.2.2 is to “continue towards integrating Highway 16 with the municipal road network in order to increase the compatibility of adjacent uses, enhance the appearance and gateway experience, particularly through the downtown area”. It includes policies for pedestrian and cycling infrastructure, including improving sidewalks and cycling routes on frontage roads.

Objective 10.2.3 is to “emphasize walking and cycling within the community, as well as rail and transit for regional passenger travel over private vehicle use by ensuring non-automobile travel to, from, and within the community is safe, convenient and accessible.”

### **Smithers Active Transportation Plan (ATP)**

- ATP goals include (1) Improve the safety and accessibility of all active transportation users, (2) Maximize the convenience of the active transportation network so it is enjoyable for all users, (3) Develop network connections both in town and with rural areas, and (4) Foster a climate of active transportation to promote active living and community health.
- Strategic action 2A5 is to Formalize a Buffered Bike Lane on Highway 16, which would improve safety for cyclists visiting and / or passing through Smithers.





- Strategic action 2D1 is to Support the Design and Construction of the Telkwa-Smithers Pathway Project. The ATP recommends that the Town continue to work with the Cycle 16 Trail Society, the Village of Telkwa, Regional District of Bulkley-Nechako and the Ministry of Transportation & Infrastructure to finalize the design of the pathway and support funding applications for construction.

#### **District of Houston OCP (Bylaw No. 1111, 2019)**

*Section 4.5.2.5 – Road Network* includes policy to expand existing pedestrian and bike networks consistent with Age Friendly planning principles.

*Section 5.1.7 – Parks, Trails, and Open Space (Urban Service Area)* includes policies that support active transportation improvements, including:

- Park pathway improvements
- Extending the existing trails system to link with other facilities in the Rural Service area and adjacent Regional District of Bulkley-Nechako subdivisions
- Developing a pedestrian bridge across Buck Creek on the north side of Highway 16



### Section 3 – Public & Stakeholder Engagement





### 3.0 PUBLIC & STAKEHOLDER ENGAGEMENT

#### 3.1 Overview

Community engagement is essential to better understanding active transportation from the perspective of residents, visitors, and community stakeholders. The engagement activities aimed to hear from a diversity of perspectives to ensure Telkwa's Active Transportation Network Plan reflects the unique needs and priorities of the community. Activities included:

**158**

#### **Survey Participants**

Telkwa residents and visitors shared their active transportation experiences and ideas in a community survey. A \$50 gift card to a Telkwa business was offered as an incentive prize.

**0**

#### **Youth Mapping Participants**

A youth mapping activity was shared with Telkwa Elementary school as a way for youth to participate. Unfortunately, no submissions were received.

**12**

#### **Workshop Participants**

A workshop with local stakeholders and community groups provided further perspectives on local active transportation with a focus on understanding key barriers and priority projects.

A total of **170 people participated** in the engagement activities.



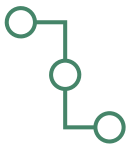
## 3.2 What We Heard

While community input from the survey and stakeholder workshop were diverse, several overarching themes emerged from the engagement process.



### 1. LIMITED INFRASTRUCTURE

Many expressed the lack of both cycling and walking infrastructure as a top barrier to using active transportation in Telkwa, but also as the top area for improvement.



### 2. CONNECTIVITY GAPS

Desire for safe connections along travel corridors that connect Telkwa neighbourhoods with community destinations. This includes the Tower neighbourhood, Highway 16, Coalmine Road, community trails (in and out of Telkwa) and Tyhee Lake.



### 3. BULKLEY BRIDGE

Many reported feeling unsafe when crossing the Bulkley Bridge due to the narrow crossing and lack of safe approaches on both sides of the bridge.



### 4. HIGHWAY 16

While Highway 16 is a key transportation corridor that runs through Telkwa, there is a need for a multi-use path, safe Highway crossings and reduced vehicle speed.



### 5. WINTER MAINTENANCE

Winter conditions and maintenance were identified as a limiting active transportation factor during the winter months. This includes lack of a walking path on Highway 16 and Coalmine Road due to snow berms.



### 6. DIVERSE ABILITIES

Telkwa residents are diverse in their abilities to safely move around the community. This includes children, seniors, those using mobility aids and pushing strollers.



## Top Active Transportation **Activities**

 **96%**  
Walking & Hiking

 **60%**  
Biking

 **25%**  
Snowshoeing

## Top **Motivators** for Choosing Active Transportation

 **91%**  
Fun & recreation

 **84%**  
Health & fitness

 **54%**  
Time with friends & family


## Top **Community Destinations** when Using Active Transportation

 **81%**  
Bulkley/Telkwa Rivers

 **73%**  
Village trails

 **64%**  
Riverside Area

## Top Active Transportation **Barriers**


 **66%**  
Lack of developed sidewalks & trails

 **59%**  
Lack of cycling paths or infrastructure

 **54%**  
Winter conditions (snow/ice)

## Top Active Transportation **Improvements**

 **73%**  
More Developed Sidewalks & Trails

 **55%**  
Bike lanes that are physically protected from motor vehicles

 **39%**  
Improved winter maintenance





## Location of Work or School



**43%** Outside of Telkwa  
to surrounding  
communities



**18%** Within Telkwa

## Main Mode of Transportation: Work or School

**70%** Vehicle (driver or passenger)

**4%** Walk

**4%** Bike or e-bike

## Main Mode of Transportation: Other Trips

**92%** Vehicle (driver or passenger)

**3%** Bike

**1%** Walk (1%) / BC Transit (1%)



An in-person workshop with local stakeholders and key community groups was held. Key barriers and priority projects were identified as below.

#### KEY BARRIERS

- ➔ Lack of **trail connections** that link residential areas with key destinations.
- ➔ **Accessibility** and **winter maintenance** concerns along key routes (i.e. Highway 16, Coalmine Road and trails).
- ➔ Limited **public transit** service and high cost for seniors that do not drive.
- ➔ **Highway** safety concerns with vehicle speed, crossings, and shoulder.
- ➔ Unsafe **Bulkley Bridge** and **road crossings**.
- ➔ **Lack of trail information**, including signage or clear route information.

#### PRIORITY PROJECTS

- ➔ **Highway 16** crosswalks & safe walking / cycling path to Eddy Park.
- ➔ **Connect** Tower neighbourhood to Village core and **new crosswalk** by school to Juniper Fitness.
- ➔ **New Bulkley Bridge** designed to support active transportation.
- ➔ Improved **Transit schedule** for more transportation flexibility for seniors.
- ➔ Improved **trail accessibility** in the winter and trail **information**.



**Section 4 – Existing Networks, Gaps, And Community**





#### **4.0 EXISTING NETWORKS, GAPS, AND COMMUNITY DESTINATIONS**

A Baseline Conditions Assessment was undertaken for the Village as part of Phase 1 of the project. The assessment looked at the existing conditions of the road network, pedestrian & trail network, and cycling network. Gaps in these networks and key community destinations have been highlighted. Key takeaways from the baseline conditions assessment are as follows:

- Even though Telkwa has an extensive trails network within and outside of the Village boundary, connections to the trails are difficult for people walking and cycling.
- The pedestrian network is underdeveloped with walkable shoulders only available on Highway 16. Even though Telkwa is a rural community, walkable shoulders and off-street pathways may be warranted on certain roads based on guidance from the BC Active Transportation Design Guide.
- There are no formal cycling facilities in the Village. Even though some bike users can cycle on the Highway 16 shoulder or in vehicle travel lanes on Village roads, these facilities are not comfortable or safe for all ages and abilities.
- The Strava data indicated that there is demand for cycling activity on Highway 16 and on several Village roads including Riverside Trail, Coalmine Road, and Fifth Street. All of these roads require more detailed analysis and public engagement to determine the types of cycling facilities that are most suitable for them.
- Intersections in the Village—particularly at Highway 16—do not accommodate people cycling safely. All of these intersections are under the jurisdiction of MOTI and will require further exploration as part of the ATNP process to identify the types of treatments needed to increase cyclist safety.



**Section 5 – Looking Ahead (Vision & Goals)**



## 5.0 LOOKING AHEAD (VISION & GOALS)

The Village already has several foundational plans in place as outlined in Section 2.2. These plans provide a common vision for what the community aspires to be in the future. To articulate the future state of transportation in Telkwa, a vision statement was created and builds on the Villages' foundational plans. It provides the overall direction for how active transportation can contribute to Telkwa's environmental, economic, community, and cultural fabric.

### 5.1 Vision

*Telkwa is a small community where children, families, seniors, and visitors can walk, cycle, and roll to the majority of destinations in Telkwa the majority of the year. Its surrounding natural areas and high-quality trail network serves as the backbone to its active transportation network that is safe, connected, and inclusive. With a complete network, Telkwa residents and visitors can easily move around their community where active travel is a safe, fun and healthy choice for transportation and recreation.*

### 5.2 Goals

#### 1. Connectivity with Trails

Enhance key connections between the trails and Village roads to provide greater recreation options to the community.

#### 2. An Accessible Network for All

Design all active transportation infrastructure to be accessible to all residents, regardless of age, ability, or socio-economic status.

#### 3. Active Travel in All Seasons

Maintain the active transportation network throughout the year—especially strategic travel corridors in the winter season—to encourage year-round walking, cycling, and rolling.





## Section 6 – Network Improvements





## 6.0 NETWORK IMPROVEMENTS

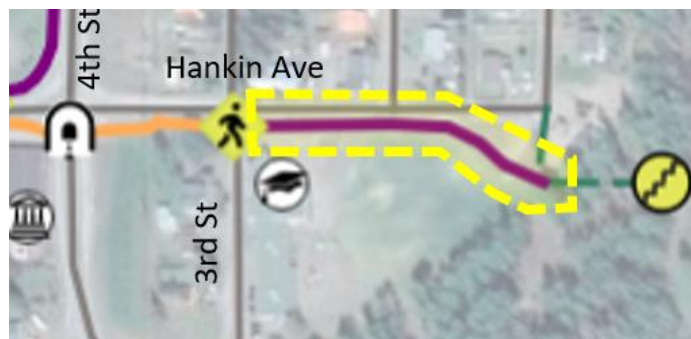
Telkwa's network improvements include infrastructure upgrades to create the envisioned active transportation network and travel corridors. These improvements are summarized in the section below and illustrated on the Ultimate Active Transportation Map located in **Appendix A**. It is composed of two pages, one for north of the Bulkley River and the other for south of the river.

### 6.1 Quick Wins

#### 6.1.1 Hankin Avenue Paved Path Adjacent to School

The pedestrian highway underpass on Hankin Avenue is an excellent link for school children and the greater community in general to cross the highway. Further to the east, a stairwell connects the Village core to the Tower neighbourhood. However, between the two important pieces of infrastructure, there is a missing link, without any active transportation accommodations along Hankin Avenue from Telkwa Elementary School towards the stairs.

There is an opportunity to repurpose some of the wide gravel area adjacent to the school to facilitate parking and add a path for active transportation users. The idea is to pave the area to create 30 degree angle parking and a 2.0m pedestrian corridor along the school's fence line. A barrier along the edge of the parking and the pedestrian space, such as that of timber logs should be considered as a natural feature that blocks the overhang of vehicles into the walkway zone. This is a cost-effective treatment that keeps the natural look and feel of Telkwa and has been a successful approach elsewhere to



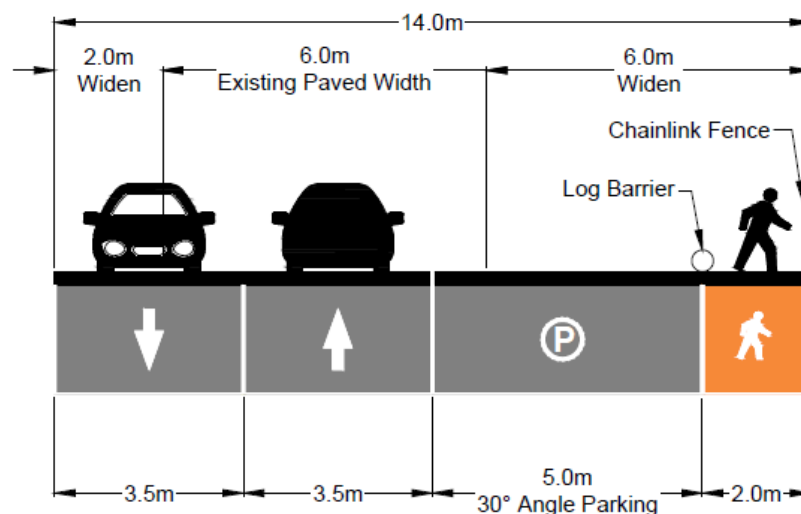


*Iona Beach in Richmond, BC recently converted angled parking to parallel parking and added walkway separated by a row of logs sourced from a local beach to separate vehicles and active transportation users*

define a dedicated active transportation space as shown in the example photo. Road widening on both sides of the existing paved width will be required. Approximately 2.0m on the north side of the road and 6.0m along the south side up until the fence line. A 3.0m MUP that keeps cyclists off the road may also be possible with further widening.

East towards the bus loop, after angle parking ends, the corridor has two options. One would be along the inside of the school fence towards the stairs. The other would be maintained within the road right-of-way across the two bus access driveways. The preference is to avoid vehicle / active transportation conflicts across the driveways although both solutions are workable.

## HANKIN AVE (ADJACENT TO SCHOOL)







Other elements to note:

- Paving the angle parking area will allow parking spots to be defined with line paint.
- Appropriate drainage infrastructure will also need to be considered with the removal of the gravel soaker strips.
- 3.5m lane width is appropriate for school buses.



*Hankin Avenue looking east adjacent to the school. The wide gravel parking area could accommodate a pedestrian path similar to the Iona Beach example along the fence line.*

## 6.1.2 Tower Neighbourhood Staircase Bike Accommodation



The staircase from Hankin Avenue to Tower Street is a great benefit to the community as it allows people who walk to avoid travelling along a dangerous section of the highway to access the Village core. This staircase could be further enhanced to accommodate wheeled users by way of a bicycle stairway (bike channel) along the edge of the stairs. Bicycle stairways are a great way for people who cycle to overcome obstacles in a way that is safe and direct. A bicycle stairway allows for a cyclist to push their bike either up or down



*Photo by Mateusz Konieczny of a bicycle stairwell in Poland. Retrieved from Wikipedia Commons*

a staircase by having the wheels in the channel to provide a smooth rolling surface. Providing a bicycle stairway is a great short-term option to allow for bicycle access to the Tower neighbourhood as the topography is too steep to allow for a separate bike path alongside the staircase. The existing property easement for #1711 Tower Street, which is used for existing staircase access, will need to be updated to legalize bicycle use via the easement to access the stairway and bike channel.





*Existing staircase connecting the Village core with Tower neighbourhood.*



*Example bicycle stairway in Kelowna, BC with a aluminium channel along the outside of the staircase.*





### 6.1.3 South Telkwa Trail Widening and Pedestrian Signage

There is an opportunity to formalize this connection by widening some of the existing gravel trails and crossings in the South Telkwa area in and around the BBQ Grounds. These trails are vital as they form important connections to the residential streets of Walnut Street and Willow Street, through the BBQ grounds and towards the Bulkley River bridge.

There are several gravel trails in and around the BBQ Grounds. Some of these trails should be considered for upgrade to a wider width that better accommodates pedestrians with mobility challenges and those who bike. A width



*Example of a narrow trail in South Telkwa to widened to a gravel MUP cross-section*

sufficient to allow for two bicycles to safely pass or ride alongside each other is recommended. See **Section 7.2** for additional Multi-Use Pathway (MUP) design guidance. Pedestrian crossing signage should also be added at key road crossings (that remain unpaved) as identified on the ultimate active transportation network maps.



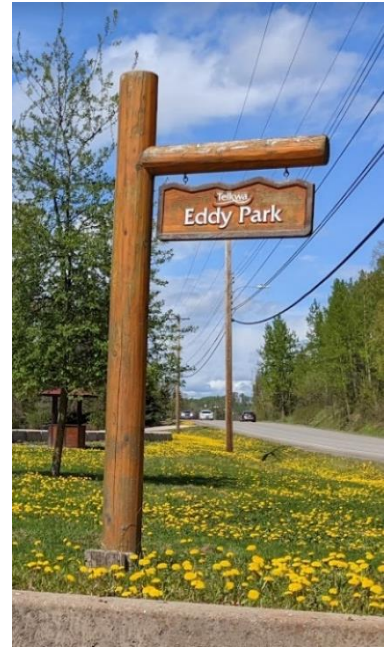
*The Zig Zag Trail from Oak Crescent to Telkwa Coalmine Road is a good example of infrastructure that provides an important connection that addresses accessibility concerns.*

#### 6.1.4 Riverside Trail & Cycle 16 Trail Connection

The ongoing Cycle 16 Trail project will be a great regional connector for Telkwa and the surrounding areas. The regional project is set to connect Smithers and Telkwa with a paved MUP that is separate from highway traffic. This project terminates at the northern edge of Eddy Park in Telkwa and it is up to the Village to integrate the route into their network. For this, the proposed routing is along Riverside Trail on the dike towards the Bulkley River bridge. A connection to Cycle 16 will need to be made between the existing west concrete walkway spur on the trail to the terminus point of Cycle 16 Trail.







*Existing MUP connection shown to highway shoulder on the right concrete MUP. The terminus of the left MUP will be the future connection point for Cycle 16 Trail through Eddy Park.*

## 6.1.5 Village Core / Off-Highway

There is the opportunity to make the Village core more accessible for active transportation with a link between the waterfront pathway near the skating rink and Hankin Avenue near the pedestrian underpass.

The existing streets in the area are gravel. This poses a challenge to active transportation users as it is difficult to define road space for pedestrians on a gravel route. Three MUP's are proposed with connections to the Riverside Trail.

First, is a gravel MUP that zigzags between the Village's destinations and attractions. The starting point would be at the skating rink by the Riverside Trail and then zigzag







through the streets towards the proposed crosswalk on Hankin Avenue near the pedestrian underpass. The gravel surface can maintain the status quo or be converted to a crushed limestone or 3/8in cartpath, for the MUP area. Cartpath is commonly used at golf courses and provides a smooth, hard surface for users that is more cost-efficient than asphalt. Cartpath is usually a lighter gravel colour so it can provide some contrast between the path and road surface. The difference in material for the drive lanes and path will aid in clearly defining where vehicles can and cannot go and will go a long way to creating an All Ages and Abilities (AAA) facility that everyone can feel safe and comfortable on. Other options to demarcate the space with or without cartpath treatment include:

- Parking curbs
- Timber logs back to back as a more natural treatment, or
- Low height permeable fence where appropriate.



*Cartpath gravel forms a hard surface that is suitable for active transportation. 3/8in Cartpath material example shown on the Mission Creek Greenway in Kelowna BC. Images Retrieved from:  
[https://www.hikinqaddiction.ca/trails/viewtrail.php?trail\\_id=11](https://www.hikinqaddiction.ca/trails/viewtrail.php?trail_id=11) &*



*The skating rink is an important amenity to tie into the Village core active transportation network.*

The second section of gravel MUP proposed in the Village core is between the proposed crosswalk on Hankin Avenue near the pedestrian underpass, which heads south past the Village Hall and towards the existing crosswalk across Riverside Street to the Riverside Trail. This MUP would be constructed with the same techniques applied as the skating rink to Hankin Avenue MUP route described above.

The third and final section of gravel MUP proposed is in the Village core between the Highway 16 / Hope Avenue intersection and the Riverside Trail along the north side of Hope Avenue. This MUP would be constructed along the fence line with the same techniques applied as described above.





*Hope Avenue looking west towards the Riverside Trail. Proposed gravel MUP alignment next to fence line.*



*Hope Avenue looking east towards 4<sup>th</sup> Street (Hwy 16) from near dike.*





## 6.2 Partner Improvements (MOTI, CN Rail)

A number of improvements are recommended to infrastructure that is directly owned and operated by a third-party authority within Telkwa's village boundaries. Highway 16, Bulkley River Bridge, Telkwa Coalmine Road, Telkwa High Road, and Tyhee Road are all Ministry of Transportation and Infrastructure (MOTI) assets that the Village does not have direct control over. The CN Rail railway also runs through the Village on the south side of the river. For all projects in this section special coordination will be required with the respective authority. As such, timelines for implementation may result in technical studies and additional review, and as such may become longer-term projects.

### 6.2.1 4th Street (Highway 16)

4<sup>th</sup> Street (Highway 16) runs through the Village core and acts as the Village's main street. Present day, there are no dedicated pedestrian facilities on the corridor. This means that pedestrians and cyclists must use the narrow paved shoulders alongside highway traffic. The drive lanes are wide and there aren't many cues that signal to motorists that they are entering the Village core where pedestrians and cyclists may be present. 4<sup>th</sup> Street should be improved to provide a dedicated active transportation space to make it safe and comfortable for users to access businesses along the highway. This can be accomplished by providing cost-efficient urban elements to the west side of the highway over a 350m length between Hankin Avenue and Hope Avenue.





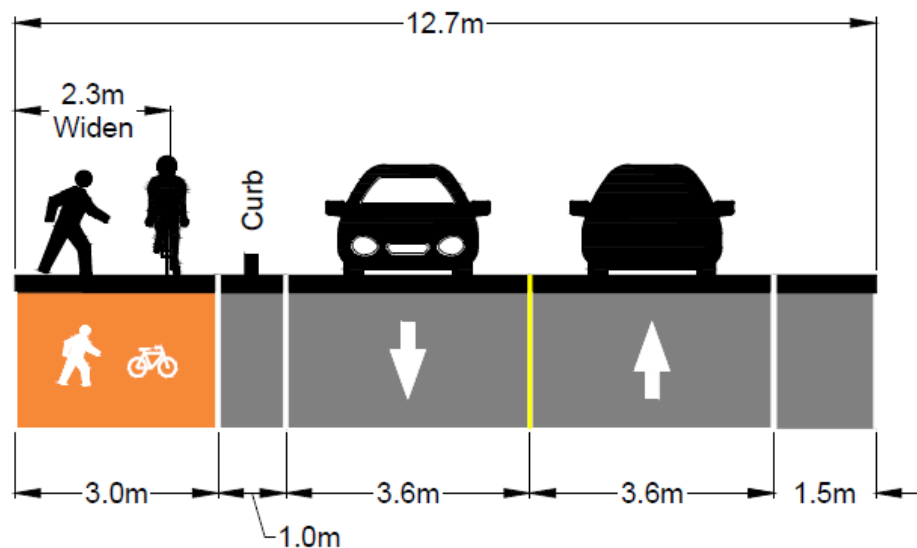
*4th Street (Hwy 16) near Hope Avenue looking south towards Canada Post*

The proposed cross-section includes 2.0m of asphalt widening to provide a paved dedicated active transportation MUP along the west side of the street. As such, drainage improvements may need to be considered. The cross-section changes by narrowing drive lanes from 3.9m to 3.6m, which is more in line with a more appropriate urban highway cross-section. The west side is proposed, as it is the side with most of the businesses and attractions. A 1.0m buffer space from vehicle traffic is provided between the MUP and travel lanes. In the buffer space, an extruded curb is a potential treatment option that would be economical and provide a visual cue to vehicles that they are in a pedestrian environment. Flexible delineator posts should also be placed on the curb at the start or end points to enhance visibility in the winter months. Regarding snow clearing, the buffer and paved shoulder provide some snow storage width. The MUP will require additional clearing to remove the snow plowed into it from the large highway



plows. A 1.5m paved shoulder is still available on the east side of the road to facilitate a clear zone that can be utilized for snow storage and active transportation users who choose not to cross the road to use the MUP or need to access a local business on the east side of the highway.

## 4TH STREET (HWY 16) (BETWEEN 5TH ST & HAWKIN AVE)



There are three crossing opportunities for active transportation users in the Village core. They include:

- The pedestrian underpass at Hankine Avenue and Highway 16
- Crosswalk at Madison Avenue
- Crosswalk at Hope Avenue.





## 6.2.2 Bulkley River Bridge

The Bulkley River bridge is the only vehicle and active transportation connection between the north and south side of the Bulkley River in Telkwa. As such, it is a vital connection and in its present form, is unsafe for pedestrians and cyclists to access. The bridge is one lane wide and requires a yield condition for vehicles and has a narrow separate walkway next to the south railing of the bridge. The yield condition causes vehicles to queue on each approach, which makes it difficult for active transportation users to find a safe place to walk and to cross the road to get to the bridge walkway from the north side.



*Looking towards Bulkley River bridge from Riverside Trail*

Long term the MOTI has plans to replace the aging bridge with a new one. However, the timing and alignment for the potential replacement bridge over

the Bulkley River is unknown. Regardless, active transportation should be an important consideration for any bridge works. Options include:

- Integrating a wide active transportation path on the new bridge
- Dedicating the old bridge for active transportation use only



Unfortunately, it is not easy to widen the roadway to provide a dedicated space given the rock outcrops on either side of the bridge. Short term, an option has been developed to suit the interim needs of the community. A direct connection from the Riverside Trail to a crosswalk at the north approach is proposed as an alternative. This crosswalk should be accompanied by a pedestrian-activated flashing beacon with lights and signage on both sides of the bridge structure overhead. The crossing visibility is key. Efforts should be made to repaint yearly after the winter season once faded.



*Schematic of MUP routing and crossing location from Riverside Trail towards the bridge's walkway.*





*The current approach on the north side has no pedestrian accommodations to crossover to the bridge's walkway.*



*The bridge's walkway is narrow but separate from vehicle traffic. The narrow width makes it difficult for cyclists to use it if there are others on the bridge.*



*A cyclist taking the lane to cross the vehicle bridge deck.*





## 6.2.3 Rail Crossing

The pedestrian rail crossing south of the Bulkley River Bridge has accessibility issues as it is not very bike or wheelchair friendly in its current form. There is a corral fence that forces the user to dismount their bike and weave their way through. Larger bikes such as tandems or bikes with trailers would have issues navigating the opening. The photo below illustrates this more clearly.

The corral should be removed and the active transportation rail crossing upgraded to be aligned with the zebra crosswalk and fully accessible for all users. Key features include a perpendicular crossing angle, smooth rolling surface, indicator warning lights and sounds to alert users of an approaching train.



*There is a corral next to the rail crossing that makes it difficult for cyclists to use the route. Modern BC AT Design Guide standards recommend against such a treatment.*





*Existing active transportation rail crossing looking north towards Bulkley River bridge. The crossing does not have a perpendicular crossing angle, smooth rolling surface, or indicator warning lights.*

## 6.2.4 Hankin Avenue Multi-Use Pathway and Crossing (West)

To link the pedestrian underpass and the Riverside Trail more directly, a paved MUP is proposed along the north side of Hankin Avenue west of the highway. This MUP would run along the property line in the boulevard space and provide separation from the roadway.





There is a narrow stretch adjacent to #1679 Riverside Street's fence as shown in the photo below. To make room for the MUP along the blue fence line, road widening on the inside of the 90-degree corner may need to take place. A ramp up to the Riverside Trail would also be required at the west end.



*Looking west on Hankin Avenue towards the Riverside Trail. The proposed paved MUP would run along the blue fence line on the south side of the road. Some road widening may be required on the inside of the corner to provide room for the MUP.*

To facilitate crossing from the west side of the pedestrian underpass across the road to the proposed MUP on the north side of Hankin Avenue, a crosswalk with a raised concrete centre median and Rectangular Rapid Flashing Beacon (RRFB) should be installed on Hankin Avenue near the Hankin Avenue / Village Hall Driveway. For this crossing, it is key that its location be placed far enough back from the highway intersection to give vehicles a sufficient stopping distance after making a northbound left or a southbound right at the Highway 16 / Hankin Avenue intersection heading west towards the crossing.



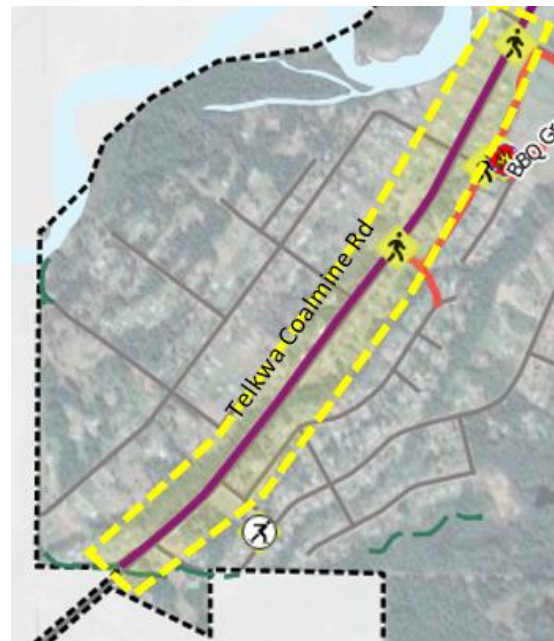


*Looking east from Hankin Avenue / Village Hall Driveway towards the existing pedestrian underpass for Highway 16.*

## 6.2.5 Telkwa Coalmine Road

Telkwa Coalmine Road has a variety of road uses ranging from heavy truck traffic to people walking their dogs, heading to school or going to / from the Village core. It is a desirable route for active transportation users as it is the only paved road south of the Bulkley River bridge. Although the road has a lower volume of traffic, it is important to separate users as mixing truck traffic with pedestrians and cyclists is not ideal for safety and comfort reasons.

Telkwa Coalmine Road between the rail tracks and Skillhorn Road is a candidate for widening to provide room for a paved MUP with buffer separation. The existing cross-section width is approximately 10m. If the road was widened by 2m on the west side, a 3m all ages and abilities MUP could be provided





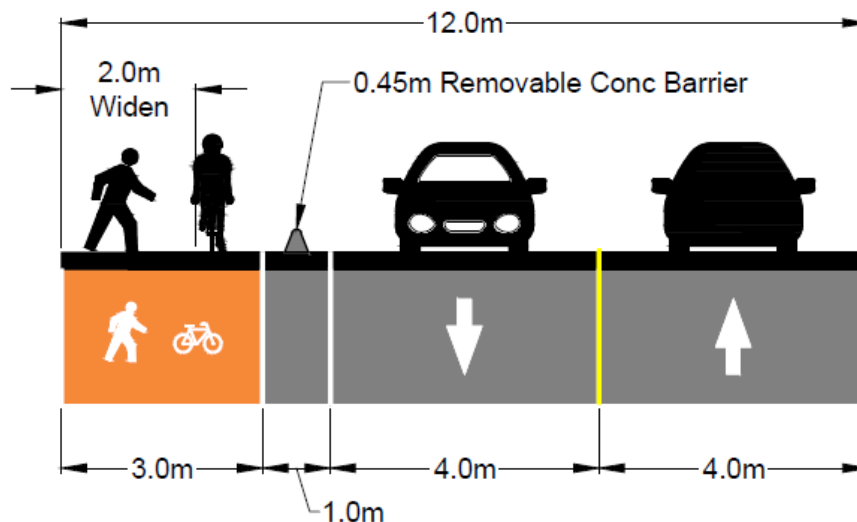
with a buffer barrier treatment to enhance active transportation safety and comfort. Considerations for the buffer treatment would need to accommodate winter snow removal. As such, the barriers should either be removable in the winter or provisions made such that snow is cleared behind the barriers in the winter months.

The section of Telkwa Coalmine Road between the existing paved shoulder south to Woodland Street is particularly narrow in its existing condition. If a phased approach to construction is taken, this section should be the priority.



*Looking north on Telkwa Coalmine Road from near Woodland Street. The existing paved walkable shoulder is located on the west side of the road in the distance.*

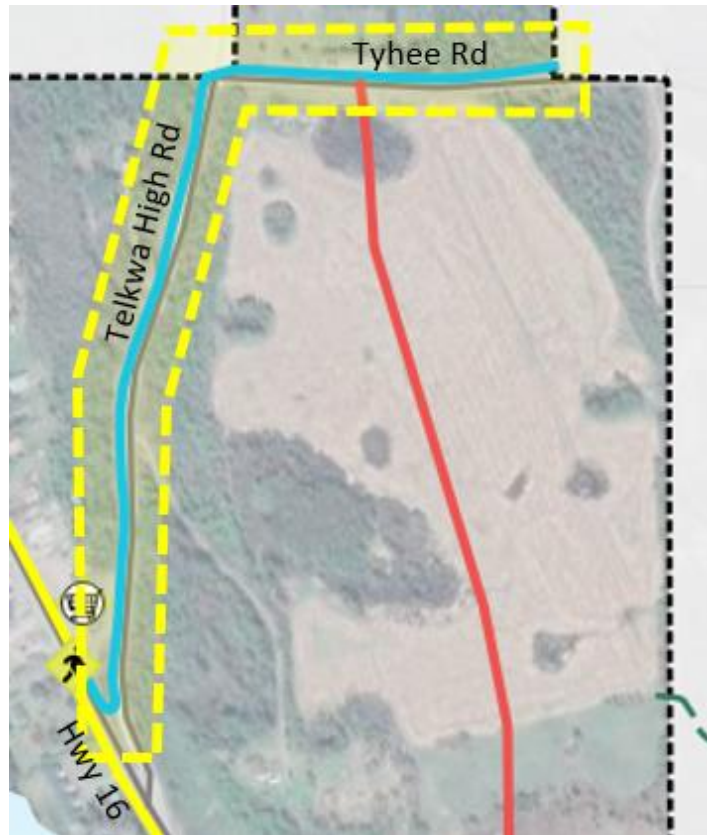
## TELKWA COALMINE RD (BETWEEN RAIL TRACKS & SKILLHORN RD)





## 6.2.6 Telkwa High Road and Tyhee Road

Telkwa High Road and Tyhee Road are part of an important connection between Highway 16 and Tyhee Lake Provincial Park, as well as, a second access point to the Tower neighbourhood and the proposed Blissful Grove subdivision development. The road's asphalt is in poor condition and there are ongoing geotechnical concerns that might make it difficult to make improvements in the near future. As an alternative, prominent 'Share the Road' signage should be installed as an interim condition.



Long term, the narrow roadway should be widened at the time of repaving. The current cross-section width varies but is approximately 7m along the narrower sections, which does not give enough room for a dedicated active transportation space. The proposed improvement is a 2.5m walkable paved shoulder on the west side of the road and a 1.5m paved shoulder on the east side. This facility would be delineated from vehicle traffic with a painted white line and accommodate pedestrians and southbound cyclists on the west side and northbound cyclists on the east side of the road. The west side of the road is preferable for alignment

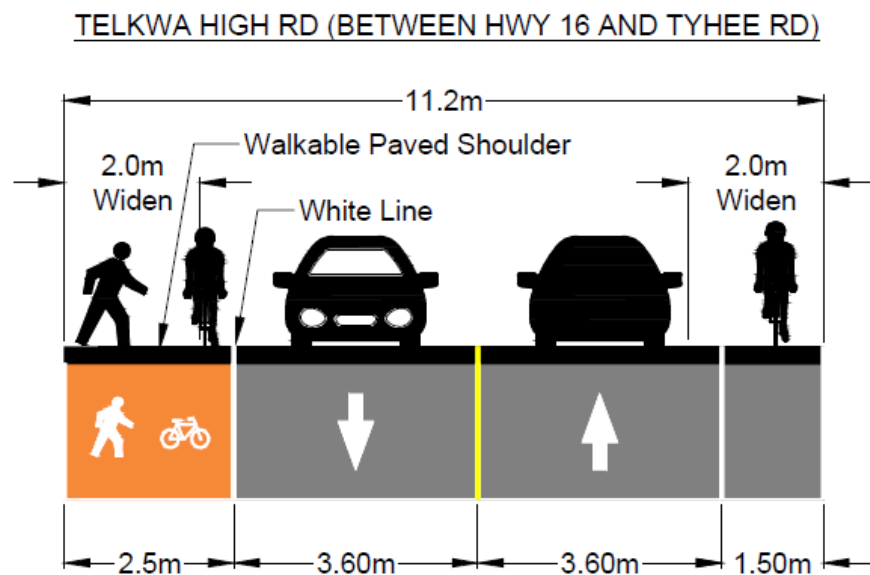




for pedestrians as it ties into the proposed highway crossing at Highway 16 / Telkwa High Road without the need for a second crossing of Telkwa High Road.



*Looking east on Telkwa High Road from near Highway 16. The existing road has a rural cross section with no active transportation accommodations.*





### 6.2.7 Highway Crossings and Telkwa Coalmine Road Crossings

Current day, there is a highway underpass for active transportation at the Hankin Road / Highway 16 intersection and zebra pedestrian crossings at Hope Avenue / Highway 16, Telkwa High Road / Highway 16, and Birch Street / Telkwa Coalmine Road. These connections are good but the zebra crossings along the highway could be improved for visibility and additional crossings added to improve connectivity between the east and west side of the highway.

For the existing highway zebra crossing in the Village core at Hope Avenue / Highway 16 and the proposed crossings at Madison Avenue / Highway 16, a raised concrete centre median 0.6-0.9m wide should be provided to reinforce the crossing locations to vehicles. Ideally, this median would be wider to provide more of a pedestrian refuge area in the middle of the roadway, but this may be difficult due to right-of-way limitations. Consideration should also be given to oversized load truck requirements, in which case, rollover curbs may be applicable in this scenario. The medians should have a cutout in the middle for pedestrians to cross at a level grade and have pedestrian-activated Rectangular Rapid Flashing Beacons (RRFB) to alert highway vehicles of their crossing. Further north of the village core at the Telkwa High Road / Highway 16 zebra crossing an RRFB should also be installed as this crossing is slated to become part of the Cycle 16 Trail corridor.



*4th Street (Hwy 16) near Hope Avenue looking south towards Canada Post. This crosswalk is proposed to have a centre median and pedestrian activated RRFB lights.*



*An example of a pedestrian crosswalk with a Rectangular Rapid Flashing Beacon (RRFB) in Smithers, BC.*





*An example of a pedestrian crosswalk with a raised concrete centre median in BC.*

On Coalmine Road there are currently two zebra pedestrian crossings. One is located south of the Bulkley River bridge to cross the rail tracks and the other is at #1343 Coalmine Road to connect with the gravel MUP network. A third zebra crossing should be considered at Birch Street / Coalmine Road to give access to the BBQ Grounds and the associated trail network.

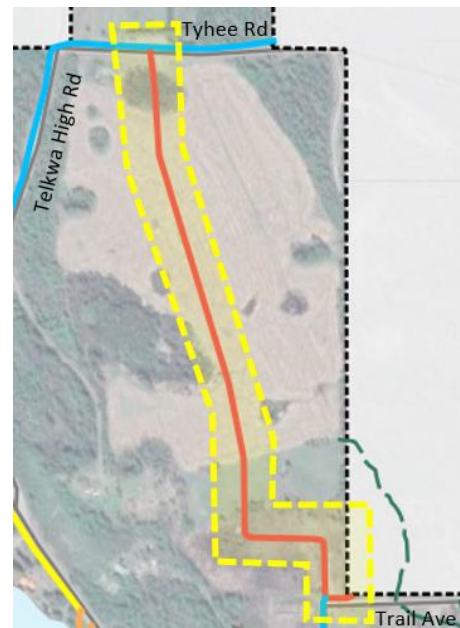


*Existing crosswalk south of the Bulkley River bridge is sufficient in its current form.*

## 6.3 Long Term Improvements

### 6.3.1 Future Development Areas

As subdivisions develop or redevelop, there is an opportunity to make improvements for active transportation users. Efforts should be made to include a separate facility where possible. Currently, the Blissful Grove subdivision under construction in the northern part of the Tower neighbourhood between Hubert Street and Tyhee Road plans to provide a 2.0m separated gravel walkway.







In the rural context, a separated gravel or paved MUP is suitable. A painted pedestrian shoulder would also be suitable on a paved road if the road is of low volume (<1,000 vehicles/day) and speed (<30 km/hr). See **Section 7** for additional design guidance.



*An example of a future development area is the Blissful Grove subdivision in Telkwa. It has an appropriate cross for a new subdivision and accommodates active transportation users via a gravel MUP separated by a drainage ditch.*

### 6.3.2 Riverside Multi-Use Pathway (in unpaved section)

The riverside MUP on the river dike is the signature centrepiece of the Telkwa active transportation network. It is located next to the Village core along the scenic Bulkley River. Either end of the corridor is complete with a concrete MUP. Unfortunately, along Riverside Street for a distance of 200m, the MUP ends and users are defaulted onto the narrow gravel road due to available right-of-way width. Design options are limited in this section as the road right-of-way is narrow between the river dike and the adjacent





properties. Ideally, the whole length of the Riverside Trail would be fully AAA accessible. Thus, some improvements are recommended for the portion of the trail on Riverside Street.

A dedicated paved 3.0m MUP for approximately 70m is recommended to be provided on Riverside Street south of Hope Avenue where the road right-of-way is wider. There may be room to shift the gravel road closer to the property fence lines to create additional room for the MUP. This section of Riverside Street should operate as a one-way northbound travel direction for vehicle traffic due to the limited road width available.

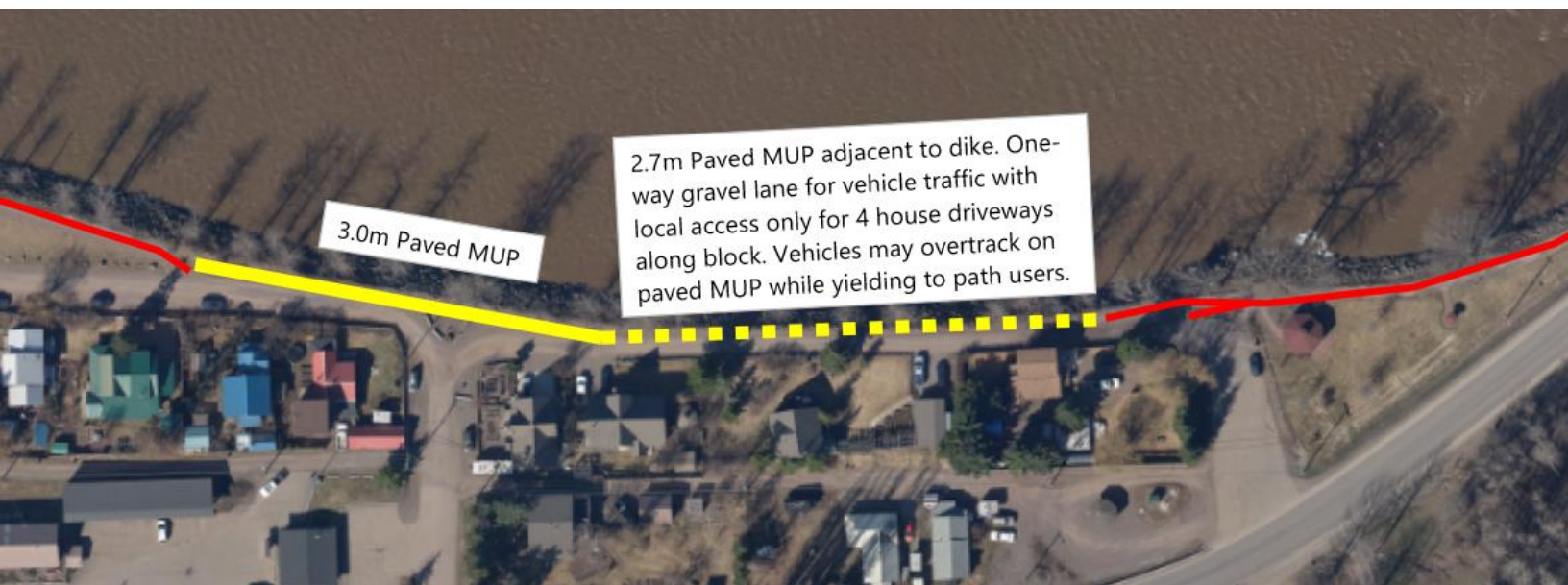


*Looking south along Riverside Street from Howson Avenue towards the section of MUP that is incomplete.*

North of Hope Avenue along Riverside Street has a narrower cross-section. There is no concrete walkway in this section and the dike does not have any upgrades planned for the near future. The proposed solution is to keep the road operating as a one-way for local traffic in the northbound direction and to provide a paved 2.7m MUP along the dike's edge for a distance of approximately 120m to link up with the concrete dike near the Riverside Street / Hope Avenue intersection at the north end. Given the narrow cross-section



width, there is not enough space to keep the MUP and drive lane fully separate. As such, the limited amount of vehicles expected for the four driveways along this stretch will need to straddle the edge of the MUP and the gravel lane. Larger trucks such as a garbage truck will overlap further. The paved MUP along with appropriate signage will serve to clearly define and encourage the active transportation corridor along the road. Signs such as 'Share the Road', 'Yield to Pedestrians and Cyclists', 'Local Traffic Only', 'One-Way', 'No-Parking', and '20km/hr Speed Limit' should be utilized. The MUP should also have pedestrian and bike symbols painted on it to further reinforce the dedicated space for the MUP. See the following figure for a schematic of the different sections.



*Schematic for the paved MUP portion of the Riverside Trail for the missing link in the middle. Red sections on either side are existing concrete MUPs.*

### 6.3.3 All Ages and Abilities / Accessible Route to Tower Street

There is a strong need for an accessible active transportation route to the Tower neighbourhood. In the interim, a bicycle staircase, as suggested in the Quick Wins section, will suffice but, longer term, a more accessible solution should be considered.

Numerous routes were considered with directness and elevation difference being the most important factors. Given that, a route is proposed that connects the south end of



3<sup>rd</sup> Street with Tower Street between the properties of #1851 and #1754 Tower Street. A strip of land acquisition will be required between the two properties. There is an existing easement for a utility corridor in the area that might be a possibility for alignment. Regardless, the paved MUP would be approximately 280m long and have an average grade of 8%. A careful alignment should be chosen as to keep grades below 8%. This may require switchbacks in sections. Once this route is in place, the MUP will allow active transportation users to avoid having to travel down Tower Street to the highway and then riding or walking adjacent to high-speed highway traffic. The need to interact with highway traffic will be eliminated completely with the nearby pedestrian underpass on Hankin Avenue.







## Section 7 – Infrastructure Design Guidelines





## **7.0 INFRASTRUCTURE DESIGN GUIDELINES**

The project team reviewed the BC Active Transportation Design Guide and Transportation Association of Canada (TAC) guidelines to develop a compilation of best practices applicable to active transportation facilities in rural areas. The following design guidance is just a short summary and it has been further tailored to the Telkwa context with bona fide BC examples and insight provided. This information will be an important resource for the Village in the development of the active transportation network.

### **7.1 Accessibility Improvements & Universal Design**

It is paramount that communities provide the ability to independently and safely access services for everyone. Most municipalities have already started planning their streets to accommodate the mobility needs of all ages and abilities, regardless of any type of physical or cognitive impairment. Universal design in active transportation facilities and particularly the pedestrian infrastructure considers impairments to mobility, vision, hearing, comprehension, and strength and dexterity. This ultimately provides a pedestrian environment that is safe, comfortable and convenient for everyone. As an example, the provision of resting spots is critical for different groups. As such, benches and other types of seating options can be considered along pedestrian routes, urban centres, and areas where a higher proportion of people with mobility impairments live. Accessible ramps, smooth surfaces, tactile strips, visual cues, and audible pedestrian signals are only some of the elements that are part of the universal accessibility design toolbox.

Walking is a healthy, inexpensive mode of transportation, which most people do daily, whether it is walking to work, walking to catch a bus, or walking from a vehicle to the store. The walking environment influences people's opinions on what mode they will choose and where they are willing to park and walk.

The Village should strive to provide a barrier-free pedestrian and ultimately active transportation network to be inclusive for people of all ages and abilities. Infrastructure design should also promote accessibility and provide features that enhance pedestrian safety. Special considerations can be made for areas with a higher proportion of people



with physical or cognitive impairments. Wide, connected sidewalks and pedestrian paths should be installed to improve access to shops, parks and other community amenities. The Village should consider developing guidelines or standards for streetscape that meet or exceed the BC AT Guide that includes accessible ramps and minimum width of sidewalks.

According to 2016 Statistics Canada data, not a single household in Telkwa reported commuting by walking or bicycle. This illustrates the importance of providing a well-connected pedestrian network, which translates into an inclusive, equitable, accessible and safe transportation network for all residents and visitors of Telkwa. The benefits of promoting a complete pedestrian network are numerous, well-documented and include the following:

- Equitable use of public funds for a transportation network that is accessible to all.
- Enables community interaction, which leads to a more livable and vibrant community.
- Increases physical activity and improves health.
- Promotes an environmentally friendly transportation mode, which can reduce motor vehicle use.

## 7.2 Multi-Use Pathways (MUP)

Given the local context of the Village and the smaller population base, it is envisioned that any two-way separated active transportation facilities will be multi-use paths (MUP). According to the BC Active Transportation Design Guide, MUPs are off-street pathways that are physically separated from motor vehicle traffic and can be used by any non-motorized user including pedestrians and cyclists as well as other forms of active transportation such as skateboards, in-line skates. Key attributes are as follows:

- **Desired Width** | According to TAC, the recommended lower limit width is 3.0m, which provides comfortable width for one cyclist in each direction.
- **Constrained Limit Width** | 2.7m is the practical lower limit width, which is based on an operating envelope of a single cyclist (1.2m) and the operating envelope (1.5m) of two pedestrians walking abreast.
- **Surface Material** | The preferred surface type is asphalt, which can accommodate a wide range of users and trip purposes. It provides a smooth continuous surface





that is accessible to all user groups and its resiliency and flexible material can last over a decade if appropriately installed and maintained. Alternatively, crushed aggregate, carpath or stabilized earth are other gravel materials that may be considered. Gravel MUP's should be formed using firm materials that offer adequate stability.

- **Signage** | Both TAC and the BC Active Transportation Design Guide recommend the Shared Pathway sign (MUTCDC RB-93), which indicates that both people walking and cycling are permitted to use the pathway.
- **Pavement Markings** | A multi-use pathway symbol can supplement signage and enhance awareness of the shared-use function of the pathway if the surface material allows for markings.



*Shared pathway sign recommended for multi-use pathways and example of pavement marking*

### 7.3 Walkable Shoulders

Walkable shoulders should be considered in the context where a road has no curb and gutter and operates as a rural roadway. In these cases, concrete sidewalks can be prohibitively expensive. Without walkable shoulders, pedestrians, cyclists and vehicles share the same space on the road and active transportation users naturally gravitate to the edge of the roadway. The BC AT Design Guide does provide guidelines to allow for a dedicated pedestrian space in a rural road context:

- The absolute minimum shoulder width is 1.5 metres based on the horizontal operating envelope of a person cycling.



- Walkable shoulders are not a desired facility if posted speeds are greater than 50 km/hr.
- On walkable shoulders on roadways posted above 50 km/hr, increase the shoulder width up to 2.5m depending on context.
- Walkable shoulders should be free of obstructions.
- Walkable shoulders are delineated by a solid white longitudinal line along the side of the travelled lane. The width of this stripe should be 100mm and be retroreflective to increase its visibility.
- Walkable shoulders can be further enhanced by placing bicycle and pedestrian stencils and warning signage periodically.
- A shoulder should be placed on each side of the road to accommodate cyclists.

Other locations that have done this type of separation in a rural context include Thacker Drive in West Kelowna, shown below.



*Example of a walkable shoulder in West Kelowna, BC*



A second example that integrates cyclists has an accessible shoulder on both sides of the road with an extended walkable shoulder on the one side to accommodate pedestrians. This is the preferred treatment for Telkwa High Road.



*Example of a walkable shoulder in Coldstream, BC. Image Retrieved From: BC AT Design Guide*

## 7.4 Quick-Build Active Transportation Facilities

Over the last 20 years, municipalities have been moving towards dedicating more road space to people walking, rolling, and cycling. Movements such as “Complete Streets,” “Road Diets,” Vision Zero,” “Green Transportation” are ultimately supporting the same goal, enabling more transportation options in a safe and equitable way. Municipalities have passed motions or made changes to infrastructure to accommodate this change in mindset. A combination of these policies ensures that the transportation network will focus on improvements in the quality of life of our residents, prevention of traffic collisions, and reductions in GHG emissions.

Further, driven by the COVID-19 pandemic, municipalities have fast-tracked projects prioritizing walking, rolling, and cycling. Many of those municipalities that explored pilot projects throughout the COVID-19 pandemic have since transitioned into long term solutions that have become part of the transportation network and even set ambitious targets such as designating 10% or more of the roadway to sustainable modes and





pedestrian spaces.<sup>1</sup> Where possible, providing an interim or a “quick-build” approach is an efficient way of reallocating roadway space in a cost-efficient and timely manner that can be implemented within the existing paved width. See various example photos below.



*Example of a quick-build MUP in Kelowna, BC using line painting and pre-cast concrete barriers*



*Example of a quick-build MUP in Calgary, AB using rubber barrier curb and plastic delineators*

The Village could consider reallocating road space like this to people walking, rolling, and cycling in areas of high demand for active travel or where there may be a need for creating an accessible facility.

The use of temporary materials can allow quick-build facilities to be set up in the months of highest use and removed in the winter months to allow for proper winter maintenance. This could be beneficial in challenging situations and a way to test its usage before going permanent.







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<sup>1</sup> City of New Westminster (2021). *Streets for People*. Available online at: <https://www.newwestcity.ca/streets-for-people>



There are various barrier types that can be used to separate vehicle traffic from pathway users. The following **Table 1** summarizes some of the materials that are used typically in quick-build infrastructure and are considered appropriate for Telkwa's context. Flexible delineators are often a low cost option that yields positive results from users in terms of actual and perceived safety. There is also the opportunity to mix and match barrier types to shape a solution. A couple of examples include jersey barriers & planter boxes or parking stops & delineators.

**TABLE 1: QUICK-BUILD MATERIALS**

Type	Flexible Delineators	Plastic Planters	Parking Stops	Precast Curbs or	Concrete Jersey Barriers	Timber Logs
						
Height	90 cm	60 – 90 cm	10 cm	10 – 15 cm	30 – 80 cm	30 – 50 cm
Installation	Epoxy surface mount OR Sub-surface base, twist lock delineator	Placed on surface, filled with soil and plants	Steel bolts or rebar with plastic or metal shield OR Construction adhesive	Forklift placement with rebar pin	Forklift placement	Direct forklift placement or placed on log pedestals (to create a taller barrier)
Cost	Low	High with routine maintenance	Low	Moderate	Moderate	Low
Safety / Comfort	Moderate	Moderate	Low / Moderate	Moderate	High	Moderate



## 7.5 Highway Crossings

The Village does not currently have a standard policy to determine the need to install signed and marked crosswalks. As a result, many crosswalks are installed inconsistently. The following photos show typical crosswalks in BC, the top two of which are located in Telkwa.



### Unmarked Crossing

At the intersection of any two roads with pedestrian facilities, all legs of the intersection are legally considered to contain crosswalks, regardless of whether or not they are marked with signage or pavement marking.



### Marked Crossing

A marked crossing typically includes a twin parallel line crosswalk with two parallel white lines that delineate the crossing. Zebra crossings include wide white parallel lines and offer better visibility. They are often used at mid-block crossings, school zones, or school route crosswalks.



### Overhead Pedestrian Flasher

These crosswalks include a traffic device installed to enhance warning and awareness for motorists of a crosswalk at intersections and mid-block locations. They are signed with an illuminated pedestrian crossing sign and a pedestrian-activated flashing amber beacons. Pavement markings are typically zebra crossings.





## **Rectangular Rapid Flashing Beacon**

Rectangular Rapid Flashing Beacons (RRFBs) have flashing amber lights that alternate back and forth to attract motorists' attention and thereby increase yield behaviour.

These types of crossings are based on best practices from TAC and the BC Active Transportation Design Guide.

Expanding and improving active transportation corridors will continue to promote and encourage residents to walk / cycle within the community. However, crossing busy highways provides real and perceived safety risks for residents. Some feel insecure with vehicles travelling at higher speeds and others feel invisible to distracted motorists trying to get to their destinations as fast as possible. Additional measures that focus on creating safer crossings of known barriers should be implemented to improve cycling safety and increase cyclist and pedestrian comfort, allowing people of all ages and abilities to navigate the network safely. Highway 16, running through the Village is the busiest road and also carries truck traffic. With those factors, the most challenging crossings all involve the highway. The Village should utilize an assessment tool to evaluate potential crossing improvements and work with the MOTI to implement warranted improvements. Two warrant analysis tools are widely applied in BC along with qualified engineering judgement. They include:

- TAC - Pedestrian Crossing Control Guide (2018)
- BC MOTI – Pedestrian Crossing Control Manual for British Columbia (1994)

As part of improving safety, the Village should work with the Ministry of Transportation and Infrastructure to upgrade crossings to align with design recommendations in the BC AT Design Guide. Section G.3 (Pedestrian Crossings) and G.5 (Off-Road Pathway



Crossings) of the guide provide guidance on unsignalized mid-block crossings. The common themes in all enhanced pedestrian crossing enhancements include:

- Improved visibility (additional overhead signage and signal treatments)
- Shorter crossing distances (curb extensions, refuge median)







# Section 8 – Supporting Policies





## 8.0 SUPPORTING POLICIES

### 8.1 Programs & Education

Programs to educate and encourage active transportation are an essential part of nurturing an active community culture. Ideas for this include:

- Host a bike festival with activities such as a film festival, show and shine, family trail ride, and demo day. A good opportunity for such an event would be during a ribbon cutting ceremony for a significant active transportation investment such as Cycle 16. Vernon, BC has an [excellent example](#) of a bike fest that could be adapted for Telkwa's context.
- Form a local [Speed Watch](#) program (RCMP), a volunteer educational program aimed at reducing incidents of speeding designed to raise public awareness. Volunteers are trained by local RCMP, in partnership with ICBC.
- Share resources with Telkwa Elementary School, such as ICBC's [road safety resources for teachers](#), which provides free learning resources to teach students road safety skills and awareness.
- Encourage mobility scooter orientation training for seniors with local RCMP to review rules of the road and safety.
- Support kids' bike safety skills like [Learn2Ride](#) or Bike Rodeo program.
- Encourage community participation in [Go By Bike Week for Schools](#) or [Go By Bike Week](#), a provincially funded program.
- Endorse local applications from the school or non-profit groups, such as the [Active School Travel Pilot Program](#).



*Vernon's Bike Fest held a demo day as part of the event. Image retrieved from: <https://www.pinkbike.com/photo/17034614>*



## 8.2 Amenities

Below are recommended amenity upgrades that complement the overall active transportation network. These can be phased in to replace existing models or be added as the network develops over time.

- **Accessible site furnishings.** Replacing or adding accessible site furnishings would accommodate persons with a broader range of physical abilities. This includes benches, chairs, and picnic tables at strategic locations in the Village. Examples of accessible site furnishings are provided below.



*Photo: Wishbone Site Furnishings*

- **Bike Racks.** The following bike racks follow current best practices regarding performance criteria and generally work for all types of bikes. Examples of recommended bike rack styles (inverted U and post and ring) are shown below. These racks support the frame at two locations and make it easy for locking the frame to rack versus the schoolyard style, which typically lockup from ground level.



Photo: Urban Racks



Photo: Matrix



Photo: Wishbone Site Furnishings

- **Signage (Wayfinding) Enhancements.** Coordinated signage helps to support users to better navigate and understand the network around Telkwa. Below are examples of regulatory signs and creative pavement markings:



Photos: BC Active Transportation Design Guidelines

## 8.3 Maintenance

The benefits of a cycling network quickly disappear if it is not adequately maintained throughout the year. For the cycling network to be successful and a viable option for people cycling, it will require regular maintenance and snow removal. Bicycle planning research has found that icy / snowy conditions, debris, potholes, and uneven paving all have negative impacts on cycling as they pose hazards to people cycling and are potential causes for crashes.<sup>2</sup>

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<sup>2</sup> Winters, M., Davidson, G., Kao, D., Teschke, K., 2011. Motivators and deterrents of bicycling: comparing influences on decisions to ride. *Transportation* (38), 153-168.





The Village does not currently have the proper equipment and programs required to maintain the recommended cycling facilities. This is especially the case for protected bicycle facilities and multi-use pathways where smaller machinery is needed to access the lanes for snow removal and clearing of debris. The overall maintenance of the network includes several components, as follows:

- Sweeping and removing gravel, debris, and leaves; trimming adjacent vegetation; and adjusting bollards and other elements related to protected bike lane delineators.
- In the fall and winter months, it is critical to clear and remove debris and snow and treat and remove ice or slippery conditions.
- There are also asset management activities, which can include repairing pavement surfaces and other road surface appurtenances such as utility covers; replacing worn pavement markings, signs, and signals; mitigating locations with pooling water or drainage issues; replacing broken delineators; maintaining street and path lighting; and repairing and maintaining equipment that is used to maintain cycling facilities.
- Another option is to remove quick-build material barriers during the winter months to allow for conventional snow plows to clear the full road width.



*Example of a John Deere tractor from the City of Calgary clearing snow in a protected bike lane. This tractor has different attachments (brush, bucket, sprayer on the back) that can be used to clear snow, leaves, and other debris from a cycling facility.*

## 8.4 Digital On-Demand Transit

One of the ways that the Village can continue to improve transit is the exploration of Digital On-Demand Transit (DODT). BC Transit is currently in the process of conducting a feasibility study to determine the applicability of On-Demand technology in BC Transit systems and evaluating the impacts of the adoption of this technology on various areas of its business: fleet, technology, customer perception and Local Government partner agreements.

The Village should work with the RDBN and BC Transit to consider the opportunity to implement DODT services as they become available. This may involve work by the Village to map out “virtual” stops for the service.



## WHAT WE HEARD ABOUT TRANSIT

In the online survey no.1, the public voiced concerns regarding the limited public transit service and high cost for seniors that do not drive, as well as, a desire for an improved transit schedule to give more transportation flexibility for seniors. There is also no transit connection to the Tower neighbourhood. A Digital On-Demand Transit may be a great option for the Village to consider given the rural low density context of Telkwa.

### 8.5 Village Policies & Bylaws

Adjusting Village policies and bylaws to align with the Active Transportation Network Plan will create the framework necessary to move forward with the slated network improvements and the overall vision for active transportation as a part of this plan.

Potential updates include:

1. Traffic Bylaw #592

Add to 7.3.a.ii to state parking should be prohibited in front of or within 3.0m of a public or private driveway. This will allow for better sightlines of pedestrians and other active transportation users along sidewalks and MUPs.

2. Subdivision and Servicing Bylaw #642

Update road cross-sections to incorporate a complete streets approach which factors in active transportation accommodation. For example, none of the road cross-sections provide space for people who cycle in their current form, whereas new arterial and collector roads most likely should provide this dedicated space.

3. Develop Snow Clearing Policy / Maintenance Policy

For Telkwa to be a destination where active transportation users can use and experience the network the majority of the year, a Snow Clearing Policy and Road Maintenance Policy should be developed that prioritizes active transportation routes in the snow clearing process and gives guidelines on street sweeping (gravel and leaves), as well as tree trimming when necessary.





**Section 9 – Implementation Strategy**



## 9.0 IMPLEMENTATION STRATEGY

### 9.1 Action Plan

The action plan provides an implementation strategy with the steps necessary to realize the vision of the active transportation network plan and assigns a target time frame. Even though the Village will be responsible for the implementation of most actions, other important partners may need to be involved to help support the action and help deliver the project.

The implementation actions outlined in **Table 2** correspond to the associated section number in the report which includes further details about the item. The implementation actions are separated into the following categories:

- Quick Wins – Actions that can be completed in the short term (1-5 years).
- Partner Improvements – Actions that require significant coordination with external organizations such as MOTI or CN Rail. This results in projects that have a longer lead time for the planning process and more involved funding structures.
- Long Term Improvements – Actions that have a longer time horizon and can be undertaken by the Village to solidify the active transportation network (5-10+ years).
- Bylaw and Policy Updates – Actions that are on the programmatic level or those that help to form the regulatory aspects that enable a safe and well-maintained active transportation network.

Implementation timeframes are suggested in **Table 2**. The timing gives a sense of priority and the overall time period in which the plan should be implemented. It is recognized however that given the Village's limited budget and the reliance on grant funding, timelines may have to adjust to suit.



**TABLE 2: IMPLEMENTATION ACTIONS**

Quick Wins			
Action		Timeframe	Partner
6.1.1	Hankin Avenue Paved Path Adjacent to School	1 - 5 years	School District
6.1.2	Tower Neighbourhood Staircase Bike Accommodation	1 - 5 years	-
6.1.3	South Telkwa Trail Widening and Pedestrian Signage	1 - 5 years	-
6.1.4	Riverside Trail & Cycle 16 Trail Connection	1 - 5 years	RDBN / MOTI
6.1.5	Village Core / Off-Highway	1 - 5 years	-
Partner Improvements			
Action		Timeframe	Partner
6.2.1	4th Street (Highway 16)	1 - 5 years	MOTI
6.2.2	Bulkley River Bridge	1 - 5 years	MOTI
6.2.3	Rail Crossing	1 - 5 years	CN Rail
6.2.4	Hankin Avenue Multi-Use Pathway and Crossing (West)	5-10 years	MOTI
6.2.5	Telkwa Coalmine Road	1 - 5 years	MOTI
6.2.6	Telkwa High Road and Tyhee Road	5-10 years	MOTI
6.2.7	Highway Crossings and Telkwa Coalmine Road Crossings	1 - 5 years	MOTI





### Long Term Improvements

Action		Timeframe	Partner
6.3.1	Future Development Areas	ongoing	Developer
6.3.2	Riverside Multi-Use Pathway (in unpaved section)	5-10 years	-
6.3.3	All Ages and Abilities / Accessible Route to Tower Street	5-10 years	-

### Bylaws and Policy Updates

Action		Timeframe	Partner
8.1	Provide Funding and Support to Local Advocacy Groups for Programs to Educate and Encourage Active Transportation in the Community	ongoing	Local Advocacy Groups
8.2	Consider Amenity Updates Including Accessible Street Furniture, Bike Racks, and Wayfinding Signage With Street or Park Improvement Projects	ongoing	-
8.3 / 8.5.3	Develop Snow Clearing Policy / Maintenance Policy That Accommodates Active Transportation in the Priority Matrix	1-3 years	-
8.4	Explore the option for Digital On-Demand Transit (DODT) after BC Transit has developed the technology	1-5 years	BC Transit
8.5.1	Update Traffic Bylaw #592 to Prohibited Street Parking Within 3.0m of a Public or Private Driveway	1-3 years	-
8.5.2	Update Subdivision and Servicing Bylaw #642 to Change Road Cross-Sections to a Complete Streets Approach Which Incorporates Active Transportation	1-3 years	-



## 9.2 Funding Opportunities

With Telkwa's limited tax base and small population, the availability of grant funding, namely provincial and federal funding, is essential. The following grant funding is available to support the implementation of Telkwa's ATNP:

### VILLAGE FUNDING

In 2022, the Village released its municipal budget (2022 – 2026 Financial Plan). Each year, the Village is required to adopt a five-year financial plan for the municipality, which lays out how Telkwa will allocate its limited financial resources to achieve Council's strategic goals. The budget includes all the revenues and expenses for each of the Village's services such as Public Works & Engineering. Of the \$4,627,000 general revenue the Village received in 2022, grants represented 38% of funding. The capital plan does not define road improvements as a capital works category. Rather, anything roadways that aren't linked to a water or sewer project end up in the 'Other' category which does not have yearly funds set aside for road improvements. As such, with the current structure of the five-year financial plan, roads and active transportation are not a priority. The Village has an opportunity to utilize funds from its 'Other' budget to help pay for the infrastructure improvements recommended in the ANTP.

Although grants are expected to make up a large portion of the funding for active transportation, yearly funding should be allocated to contribute toward roadway projects.

Of note, in 2024, \$100,000 in funds are set aside to purchase a new preowned snow plow for the Village. Consideration should be given to the clearing of important active transportation routes with the purchase of any new snow clearing equipment, as well as, yearly operating costs.

### PRIVATE DEVELOPMENT

As the Village continues to grow and develop, it will be important to leverage active transportation investments during the planning of new development projects. The Village has the ability, through bylaws and policies, to request financial contributions for active transportation infrastructure including sidewalks and cycling facilities, for example. For all new development applications along roads where a pedestrian or cycling facility



has been recommended in the medium or long term the Village should refer the developer(s) to the infrastructure design guidelines in the ATNP and request a financial contribution to build part of the facility as part of frontage and roadway improvements. New roads constructed as part of development should be considered for active transportation if they are a through route or the road classification is set to be that other than local.

### **NORTHERN CAPITAL AND PLANNING GRANT**

The 2019 Northern Capital and Planning Grant is a provincially funded grant that helps address long-standing infrastructure needs and support planning for future opportunities. From this grant, Telkwa was allocated \$3,590,000. Local governments may use the grant to meet an immediate infrastructure need for their community, save it for a future opportunity, or leverage it to secure other sources of funding, including borrowing, reserves and other grant programs, to cover major infrastructure and long term planning initiatives. Unfortunately, it appears that the majority of funds have been already allocated for other projects. The Village should look for additional intakes in the future.

### **B.C. ACTIVE TRANSPORTATION INFRASTRUCTURE GRANT PROGRAM**

The B.C. Active Transportation Infrastructure Grants Program offers two grant options for Indigenous governments and local governments, including municipalities, regional districts, and Islands Trust. Specifically, the Active Transportation Infrastructure Grant allows eligible governments to apply for a maximum of two grants if they satisfy the following criteria (based on the 2022 intake):

- Previously funded active transportation projects (formerly BikeBC) awarded before 2021/2022 are complete by the time of the application submission
- Project is part of an active transportation network plan or equivalent
- Project can begin construction once provincial funding has been announced
- Projects will be completed by March 2024 (projects under \$1 million) or by March 2025 (projects over \$1 million)
- Projects are open to the public

The grant program typically requires that projects be “shovel-ready”. Based on the criteria above, the Village could apply to the grant program to receive funds to pay for





one or more of the Quick-Win projects that can be implemented on a shorter timeline without the need for extensive coordination with other partners. The province cost-shares to a maximum of \$500,000 per project and the Village would be eligible for 70% of the provincial funding.

## **LOCAL GOVERNMENT CLIMATE ACTION PROGRAM (LGCAP)**

The provincial government has announced a new funding program to help local governments tackle the impacts of climate change that will funnel \$76 million towards local projects over the next three years. This grant is the successor to the Climate Action Revenue Incentive Program (CARIP), which has now concluded. The Village of Telkwa has been receiving grants from the CARIP program since 2014. In the Village's most recent CARIP public reports (2018/2019), several corporate actions were identified for transportation ranging from the purchase of a new plow to help with snow clearing, to consideration of expansion of local trails for walking and biking, which the ANTP provides support on.

To be eligible for the first year of funding for the LGCAP grant, applicants are required to:

- Be signatories to the B.C. Climate Action Charter or be a B.C. Modern Treaty Nation
- Measure and report corporate greenhouse gas emissions in the first year or prepare for mandatory emissions measurement and reporting for year two
- Demonstrate climate investment (i.e., matching funding or in-kind contributions) equivalent to 20% of the provincial funding received
- Report on projects linked to one or more objectives from the CleanBC Roadmap to 2030 and/or the Climate Preparedness and Adaptation Strategy
- Have their Chief Financial Officer, or equivalent position, submit and publicly post:
  - a completed and signed attestation form to confirm all funds were, or will be, used towards climate action
  - a completed PDF version of the required program survey

The Village has received funding as part of the programs first year intake in 2022. Opportunities should continue to be explored for future intakes to support active transportation projects.



## **ICBC**

ICBC provides funding for road improvements including pedestrian and cycling infrastructure to help to reduce crashes, improve safety, and reduce claims costs to ICBC. Funding is available through the following programs:

- ICBC's Road Improvement Program,
- Speed Watch Program (through the Community Policing Centres)
- Speed and Intersection Safety Program
- Counter Attack Program
- Operation Red Nose Program
- Road Sense Speaker Program for Schools.

## **NATIONAL ACTIVE TRANSPORTATION FUND**

The Active Transportation Fund (ATF) is a national, merit-based contribution program intended to support projects that improve active transportation infrastructure across Canada. Announced in March 2021, the Fund will make available \$400 million over five years to help build new and expanded networks of pathways, bike lanes, trails and pedestrian bridges, as well as support Active Transportation planning and stakeholder engagement activities.

Contributions are available for capital projects that build new or enhance existing active transportation infrastructure, or which provide ancillary features and facilities that promote active transportation or enhance user safety and security. The maximum program contribution rate from Canada is 60% for municipal projects. The government was accepting applications in 2022 from January 27 to March 31. It is anticipated that the announcement for funding in 2023 will be released later in 2022.

## **GREEN MUNICIPAL FUNDS**

The Green Municipal Fund (GMF) is a program administered by the Federation of Canadian Municipalities intended to help Canadian communities expand their sustainability initiatives. Since 2000, the GMF has deployed \$900M in financing to 1,250+ sustainability initiatives and a further \$1 billion has been committed to the fund through the Federal 2019 budget.



The specific GMF initiative that is relevant to Telkwa is the “Capital Project Transportation Networks Commuting Options”, which is a combined loan and grant funding program for capital projects that reduce pollution by improving transportation systems and networks. This program covers a number of topics including bike paths, walking and cycling networks that promote accessibility and safety, and evaluation of active transportation infrastructure, among others.

### 9.3 Monitoring & Evaluation

A plan is only effective if it is actively monitored and evaluated on a regular basis. Monitoring and evaluation will allow measuring performance to guide investment and ensure the effectiveness of the Plan. Some possible progress indicators and measures of success are outlined in **Table 3** below.

**TABLE 3: PROGRESS INDICATORS AND MEASURES OF SUCCESS**

ATNP Goal	Measure of Success	Indicator	Data Source
<b>Connectivity with Trails</b>	Total length of active transportation network (by facility type)	Total km	Village
	Bicycle/pedestrian volume at key locations such as the highway underpass or Bulkley River bridge	Users / Year	Village
<b>An Accessible Network for All</b>	Number of crosswalk improvements installed	Number	Village
	Number of collisions involving people walking and cycling (by type and intersection)	#	ICBC / RCMP
<b>Active Travel in All Seasons</b>	Walking, cycling, and transit mode share (commute)	%	Statistics Canada
	Total length of active transportation infrastructure cleared in the winter season	Total km	Village
	Village transportation-related GHG emissions	Tonnes	RDBN GHG Emissions Data / BC CEEI Emissions Data



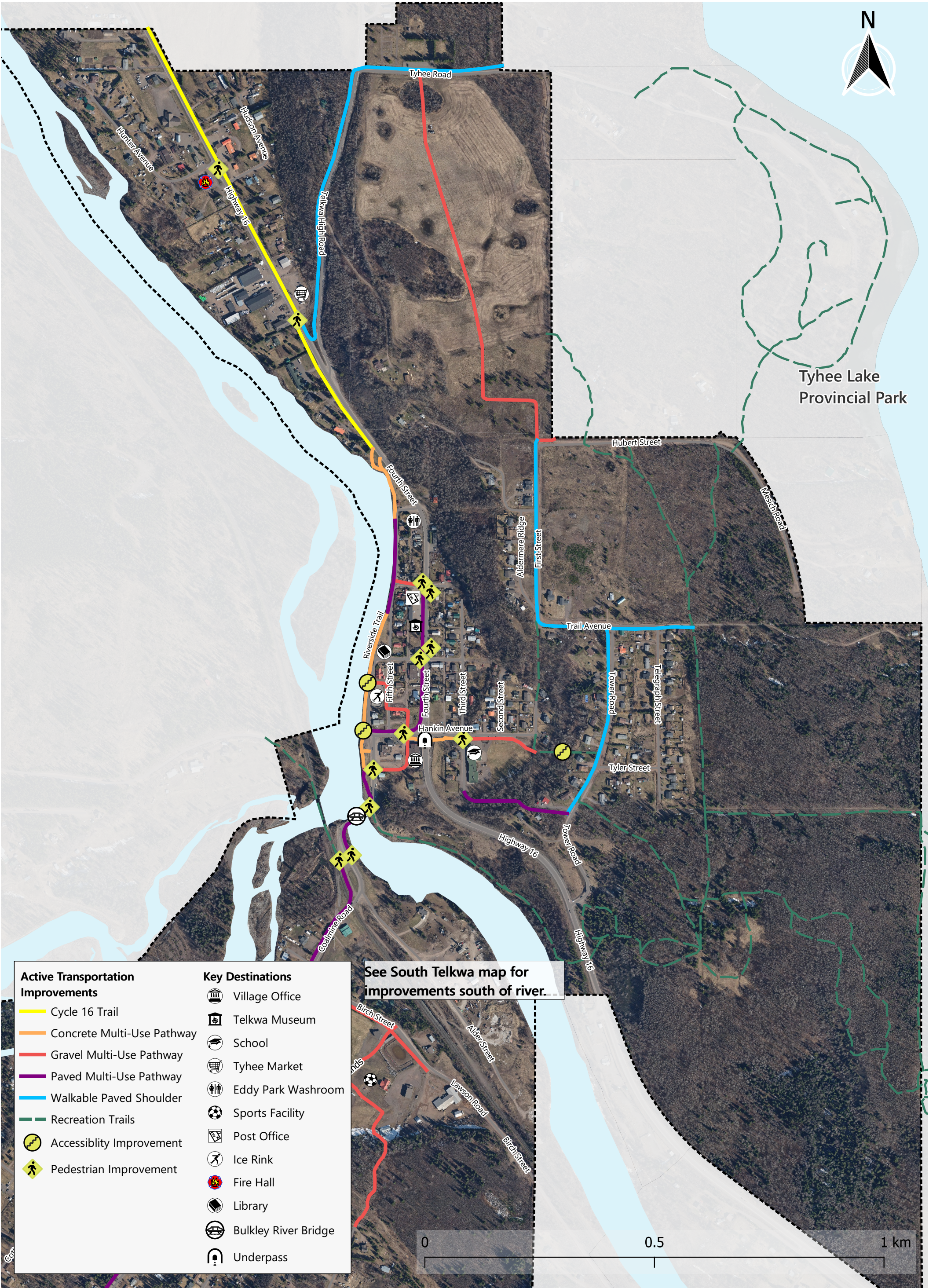


## APPENDIX A - MAPS



# North Telkwa

## Ultimate Active Transportation Network





South Telkwa  
Ultimate Active Transportation Network

