



# Appendix A

## DETAILED STRATEGIES AND POLICY STATEMENTS





# MODAL INTERCONNECTIVITY





# STRATEGIES & POLICY STATEMENTS

Modal interconnectivity is crucial to supporting a seamless and sustainable transportation network in Prince Rupert. Every day, people arrive and depart Prince Rupert by a variety of modes that need to frequently and conveniently connect to other modes. Four strategies have been identified to improve modal interconnectivity:

- **Strategy 1.1: Improve the quality of transportation connections within transportation hubs**
- **Strategy 1.2: Improve access to and from station and terminal areas**
- **Strategy 1.3: Improve accessibility of travel information**
- **Strategy 1.4: Work with transportation service operators to improve service to and from Prince Rupert**

Each of these strategies are described in further detail below along with more detailed policy statements to lay out the steps the City can take to improve modal interconnectivity for all modes as they relate to the broader regional and provincial transportation contexts.



### Strategy 1.1: Improve the quality of transportation connections within mobility hubs

Residents and visitors travel to and from Prince Rupert using a range of modes of transportation, including roads, rail, air, and ferry. Mobility hubs such as the airport, seaplane bases, ferry terminals, cruise ship terminal, docks, and train station are the key entry points to the community for many people and are the first and last impression to and from the city. This means that transportation connections need to be accessible and enjoyable for a wide range of people. The City can work to enhance the user experience from the moment people arrive in Prince Rupert, ensuring that connections into the City are smooth, comfortable, enjoyable, and provide a positive impression of the community.

This strategy includes recommendations for the City to improve and update transportation connections and mobility hubs. Four policy statements have been identified for this strategy:

#### Policy 1.1.A: Require airport shuttle buses to include modern accommodation for people with mobility needs rather than school buses.

Timeframe	Implementation	Responsibility
Medium-Term	Capital	Primary

Many residents and visitors arrive via Prince Rupert Airport on Digby Island and take the City's contracted airport shuttle bus, which travels via land and a ferry, to the terminal on Kaien Island. The City should ensure that the shuttle bus is a consistent and comfortable experience that gives a good first impression to first-time visitors using the airport. In order to do so, the City should stipulate that the shuttle bus contractors use modern shuttle buses, which accommodate those with mobility impairments, rather than school buses.

#### Policy 1.1.B: Work with Tourism Prince Rupert to sponsor bus wraps that highlight the area's natural beauty and/or local businesses.

Timeframe	Implementation	Responsibility
Medium-Term	Capital	Primary

It would be beneficial for the City to work with Tourism Prince Rupert to sponsor bus wraps that highlight the area's natural beauty or local businesses, giving visitors a sneak peak into what they can experience in the community. It would also be beneficial for the City to explore the feasibility of having the airport shuttle bus service provided by BC Transit as opposed to another contractor.

#### Policy 1.1.C: Implement signage and wayfinding in the airport and on airport shuttle buses so travelers know where to go and collect their luggage.

Timeframe	Implementation	Responsibility
Medium-Term	Capital	Primary

In addition, the signage and wayfinding could be improved so that travelers know where to go and where to collect their luggage.

**Policy 1.1D: Update the OCP to include Map 5 for mobility hubs at key entry points (such as the airport, seaplane bases, ferry terminals, cruise ship terminal, docks, and train stations) with associated design guidelines to make access to and from key entry points convenient.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital	Secondary

The airport, seaplane bases, ferry terminals, cruise ship terminal, docks, and train station are key entry points to the community for many people. The City can help develop mobility hubs to make access to and from these key entry points convenient, as shown in **Map 5**. Mobility hubs are places where people can switch from one mode of transportation to another with convenient amenities. Amenities at mobility hubs should include:

- Integrated active transportation, air, water, rail, and bus options;
- Passenger pick-up and drop-off curbside space;
- Seating to increase accessibility and ensure comfort for those waiting;
- Wayfinding that provides simple, clear, and intuitive information to help people navigate spaces effectively;
- Free Wi-fi to enable access to digital multi-modal trip planning information;
- End-of-trip facilities that facilitate active transportation such as secure bicycle parking and e-bike charging infrastructure.
- Public art, placemaking, and landscaping to create a desirable space;
- Commercial land uses providing services and goods for visitors; Washrooms; and
- Safety features such as water access points, emergency telephones, and appropriate lighting.



## Strategy 1.2: Improve access to and from station and terminal areas

Prince Rupert is surrounded by many water-access communities that use the City as a destination to meet their daily needs. Prince Rupert also welcomes many visitors by boat, ferry, and air. The City can work with partners to better accommodate all modes, especially active transportation.

This strategy provides recommendations for the City to strengthen the connections to and from station and terminal areas. Three policy statements have been identified for this strategy:

### Policy 1.2A: Pursue partnerships to add active transportation connections to stations, terminals, and docks.

Timeframe	Implementation	Responsibility
Short-Term	Capital	Secondary

The City wants to encourage more sustainable and active transportation; improving active transportation connections to multi-modal areas such as Fairview, Seal Cove, Cow Bay, and the cruise ship terminal. Improving active transportation connections to these areas would help to facilitate this mode shift. Currently, it can be difficult to walk or cycle to or from docks, ferry terminals, and the seaplane bases. The City can work with service providers such as BC Ferries, Lax Kw'alaams, Metlakatla, and others to find ways to improve connections for people walking and cycling. In addition, when cruise ships arrive into Prince Rupert, there is a challenging connection to access the city by walking. The City should work with partners such as Tourism Prince Rupert and the cruise ship industry to explore alternative options to connect into the town from the cruise ship terminal. Options could include a funicular railway as identified in the Vision 2030 document or other opportunities such as covered/enhanced escalators. These opportunities would improve connectivity from the cruise ship terminal to downtown but also would create a unique and memorable experience and could be seen as part of an economic development strategy.



FIGURE 1 EXAMPLES OF MODAL INTEGRATION

**Policy 1.2B: Work with BC Transit to improve public transit connections to stations, terminals, and docks.**

Timeframe	Implementation	Responsibility
Short-Term	Capital	Secondary

In addition to active transportation connections, it can also be difficult to access the ferry terminals and sea plane bases by public transit, and public transit does not currently serve these destinations well. The City should work with BC Transit to explore routing to the existing BC Ferries terminal, as well as other docks and station areas to improve transit service to these areas while coordinating schedules with scheduled arrival and departure times.

**Policy 1.2C: Implement a new airport ferry landing at Rotary Waterfront Park as identified in the OCP.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital	Secondary

Prince Rupert is home to the Prince Rupert Airport on Digby Island, which is only accessible by a combination of bus and ferry service provided by the City. The airport is integral to the livelihood of the City, but the reliance on the ferry creates time and logistical challenges for people travelling to and from the City. Members of the community felt that centralizing where ferry terminals are located would help improve access to these transportation options.

The City's OCP identifies a new airport ferry landing at Rotary Waterfront Park at the foot of Bill Murray Way. The City should continue to advance the planning and design of a new airport ferry landing at Rotary Waterfront Park.

**Strategy 1.3: Improve accessibility of travel information**

Wayfinding and information about key destinations is important for an attractive transportation system. Improved travel information would be helpful for residents and visitors arriving in the City and could include details about travel options, how to get around the City, how best to get to destinations, and real-time updates on delays and service interruptions.

This strategy outlines policies the City can implement to improve the accessibility of travel information in Prince Rupert. Two policy statements have been identified for this strategy:

**Policy 1.3A: Provide up-to-date travel information on the City website.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Primary

The City could leverage its website to provide up-to-date travel information and use the opportunity to integrate multi-modal schedule information from the airport website and BC Ferries to make the information easy to find and understand.

**Policy 1.3B: Distribute hard copy schedule information.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Secondary

Some people may not have access to the internet or smartphones and would appreciate information on transportation options in Prince Rupert in hard copy. The City can work with BC Transit to include intermodal connection timing, locations and contact information on transit maps and schedules, making these available at key entry destinations (the airport, ferry terminals, transit exchange), working with service providers to update these documents as required.

#### Strategy 1.4: Work with transportation service providers to improve service to and from Prince Rupert

Community members indicated a broad desire for more options for transportation services that provide connections in and out of the City. These services include air, ferry, and rail services, the majority of which are privately operated or revenue-driven programs. The City has limited ability to require these operators to act, but there are opportunities to work with current operators to discuss the level of service that they provide and to ensure there are opportunities for new operators that might want to establish new services. This would help to ensure a more resilient transportation system by ensuring more transportation options.

This strategy outlines the policies the City can implement to improve and bring new services into Prince Rupert. Two policy statements have been identified for this strategy:

##### Policy 1.4A: Work with current transportation service providers to improve service and connections in the city.

Timeframe	Implementation	Responsibility
Short-Term	Policy & Programming	Secondary

Community members would like to see connections to other communities strengthened with increased frequency of regional transportation options and more integrated scheduling to make connections easier. The City should work with current operators to improve service and provide additional mobility options.

##### Policy 1.4B: Identify opportunities to incentivize the establishment of new air transportation service providers to increase competition for passenger benefit.

Priority	Project Type	Responsibility
Medium-Term	Policy & Programming	Secondary




As a small community, the market for air transportation options in Prince Rupert is also small. As a result, some operators do not have much competition or a need to innovate. In addition, travel to and from Prince Rupert is expensive due to the community's relatively remote location. The City should identify opportunities to help operators reduce costs and to streamline potential operations to create a more favourable business climate for potential future service providers. The City can study potential ways to incentivize and encourage market innovation such as removing policy barriers, investing in infrastructure, updating policy, digital platforms (including Mobility as a Service), dynamic pricing or transparent fare structures, and incentives for service outside of peak times or areas, etc.



U:\Projects\_VAN\578\002\1010-D-Design\GIS\Projects\Pro\_Projects\_PlayBapn\Mobility\_Hubs



MAP 5 MOBILITY HUBS

- |   |   |  |   |
|---|---|--|---|
|  Mobility Hub                |  Ferry Terminal                      |  Prince Rupert City Hall         |  Park / Open Space / Forested Area |
|  Mobility Hub Buffer (400 m) |  Recreation Facility                 |  Prince Rupert Public Library    |  School                            |
|   |  Museum of Northern British Columbia |  Prince Rupert Regional Hospital |  First Nation Reserve              |
|   |  Prince Rupert Airport               |  Railway                         |   |
|   |   |  Commercial / Mixed Use          |   |





# ACTIVE TRANSPORTATION



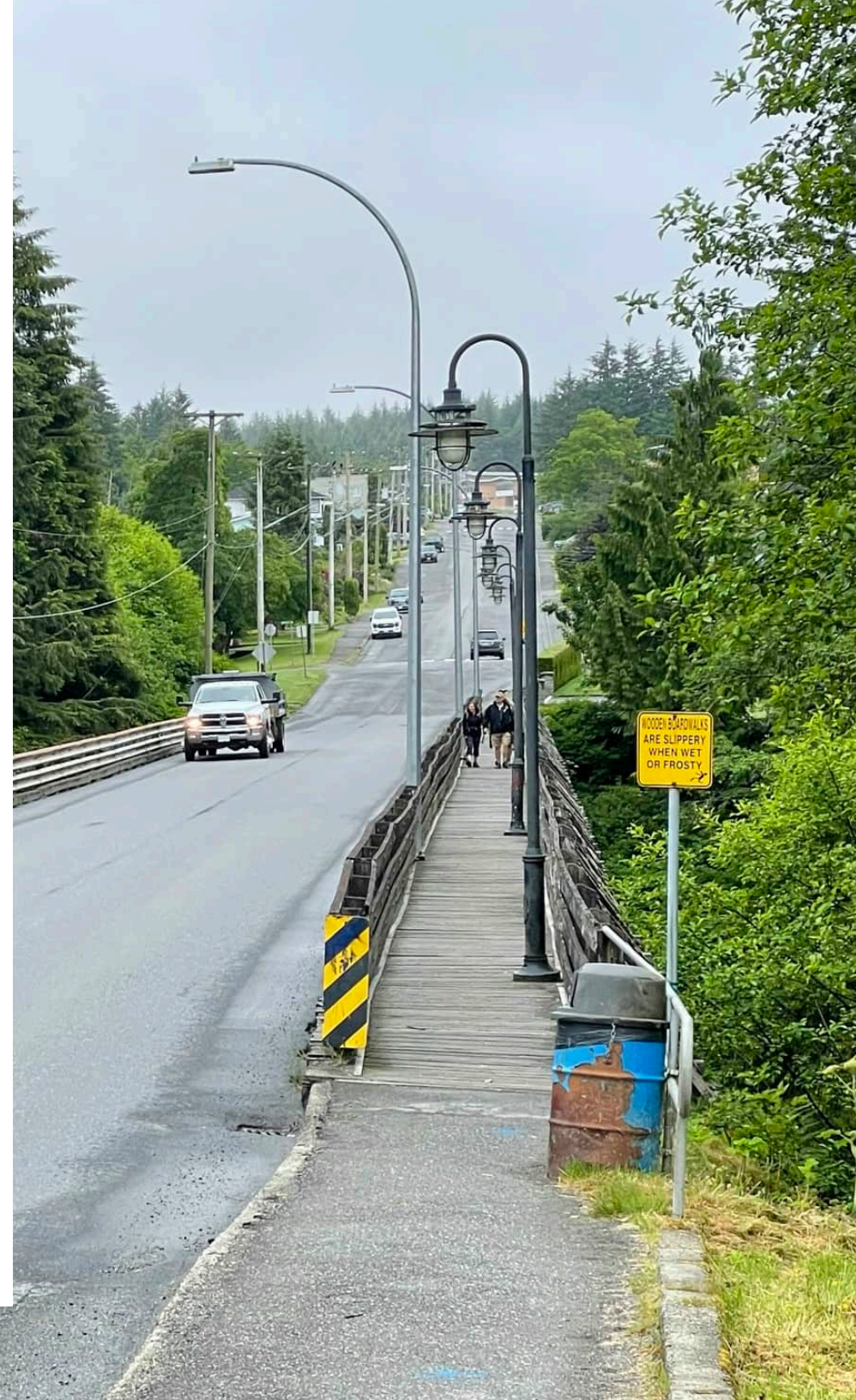


# STRATEGIES & POLICY STATEMENTS

Investments in active transportation infrastructure and support programs can make travelling by walking, cycling, rolling, or using a mobility aid, a more safe, convenient, and enjoyable experience. This would help make active transportation modes the preferred modes for more trips. Ten strategies have been identified to improve active transportation:

- **Strategy 2.1: Develop and adopt complete streets design standards focusing on enhanced active transportation facilities**
- **Strategy 2.2: Build a complete, connected, and accessible sidewalk network**
- **Strategy 2.3: Make walking a safe and more enjoyable experience**
- **Strategy 2.4: Design streets and trails to be universally accessible**
- **Strategy 2.5: Build a cycling and rolling network for people of all ages and abilities**
- **Strategy 2.6: Enhance trails and multi-use pathways to provide recreational opportunities**
- **Strategy 2.7: Create and enhance existing crossings to accommodate people of all ages and abilities**
- **Strategy 2.8: Focus on quick-build approaches to implementing pedestrian and cycling infrastructure using low-cost, flexible materials**
- **Strategy 2.9: Maintain active transportation facilities year-round**
- **Strategy 2.10: Develop support programs and initiatives that encourage people to use active transportation as the preferred mode for more trips**

Each of these strategies are described in further detail below along with more detailed policy statements to lay out the steps the City can take to improve active transportation.





### Strategy 2.1: Develop and adopt complete streets standards focusing on enhanced active transportation facilities

Streets are multi-functional spaces that serve many users and different modes of transportation. Streets should be planned, designed, operated, and maintained to enable accessible, comfortable, convenient, and safe access and mobility for all users, regardless of their selected mode of travel. This means accommodating the following functions within the road allowance:

- **Mobility of People:** Streets enable people to travel to their desired destination, including trips within a community or between communities, by walking, rolling, cycling, taking transit, ride-sharing, driving, and any combination.
- **Mobility of Goods:** Streets support the reliable movement of goods and services to serve the local economy and beyond.
- **Access for People:** Streets facilitate people's arrival to their destination or transfer point between modes. Access for people includes bus stops, bicycle parking, passenger loading zones, and driveways.
- **Access for Goods:** Streets facilitate the exchange of goods and services between buyers and sellers by providing the infrastructure and interfacing between the street, building, and commercial or business activity, including but not limited to sidewalk, storefront, display, driveway, and loading facilities.
- **Activation:** Streets provide social spaces for people to inhabit and enjoy, and contribute to a community's vibrancy, safety, and sense of place. Street activation includes plazas and parklets, outdoor patios, public art, wayfinding and special street name signage, and street furniture.
- **Greening:** Streets incorporate landscaping and sustainable features within streetscape design to mimic natural systems found in nature and contributes to aesthetics, comfort, and enjoyment of moving through or being on the street.
- **Storage:** Streets can provide parking for cars, commercial vehicles, bicycles, scooters, and other emerging technologies, as well as receptacles (i.e. recycling and garbage) to support people's use of the street

One policy statements has been identified for this strategy:

### Policy 2.1A Develop and adopt updated street design standards in the Subdivision and Develop Servicing Standards Bylaw based on complete streets principles focusing on enhanced active transportation facilities.

Timeframe	Implementation	Responsibility
Short-Term	Policy & Programming	Primary

Complete Streets is an approach to street design that considers the surrounding context, land use, and all street users – not just the movement of vehicles. Complete Streets ensure that the design and operation of the entire right-of-way support all road users. Because Complete Streets take a balanced approach to designing streets, they can reduce the frequency of collisions, better support land uses, and shift mode share to more active and sustainable modes. Planning and designing Complete Streets means providing characteristics that make streets destinations – places for people to be, instead of places to move through.

The City has a Subdivision and Development Servicing Standards Bylaw that is in line with industry standards such as Master Municipal Construction Documents (MMCD). The City should update this bylaw to be in line with best practices for active transportation and ensuring alignment with the BC Active Transportation Design Guide, with standard cross-section drawings for each classification of street to ensure all streets provide space for all roadway users and include boulevards and other features of complete streets and green streets.



FIGURE 2 EXAMPLE OF COMPLETE STREET



## Strategy 2.2: Build a complete, connected, and accessible sidewalk network

Walking is the most fundamental form of transportation and is essential for health and well-being. Walking is a part of every trip, whether that trip is made by car, transit, or bicycle. If suitable conditions exist within a community – such as having a complete sidewalk network that connects people to the destinations they want to visit – walking trips can be increased.

This strategy includes policies to fill in gaps in the sidewalk network and ensuring that new sidewalks are built to a minimum standard. Two policy statements have been identified for this strategy:

**Policy 2.2A: Adopt the sidewalk network in Map 6 to guide future investments in sidewalks and invest in building the higher priority sidewalks in Map 9.**

Timeframe	Implementation	Responsibility
Ongoing	Capital	Primary

Although Prince Rupert has a well-developed sidewalk network, there are significant gaps in the network and areas of the City with little sidewalk coverage. This can create connectivity and accessibility issues for pedestrians. Sidewalk coverage and filling in gaps in the network is particularly important within high activity areas, along bus routes, and near parks, schools, hospitals, and other community destinations. The City should work to strategically invest in completing the sidewalk network. The recommended long-term sidewalk network is shown in **Map 6**. The long-term sidewalk network was developed based on the following principles:

- Sidewalks should be provided on **both sides of all arterial and collector streets**;
- Sidewalks should be provided on **both sides of all streets in the City Core**;
- Sidewalks should be provided on **at least one side of all local streets**, except where they end in cul-de-sacs;

- Sidewalks should be provided **directly adjacent to all schools and community facilities**, on the same side of the street as those facilities;
- Sidewalks should be provided **on all bus routes**, on the same side of the street as bus stops and connecting directly to bus stops; and
- Sidewalks should be provided to **complete any gaps in the network**.

**Policy 2.2B: Update the Subdivision and Development Servicing Standards Bylaw to include sidewalk requirements consistent with best practices including having sidewalks on both sides of all arterial and collector streets, at least side of all local streets, and ensuring a minimum width of 1.8 metres or wider in areas of high pedestrian activity.**

Timeframe	Implementation	Responsibility
Short-Term	Policy & Programming	Primary

The City should develop sidewalk requirements and incorporate them in standard street cross-sections for all road classifications in its Subdivision and Development Servicing Standards Bylaw. Sidewalk standards should be consistent with best practices as outlined in the B.C. Active Transportation Design guide, including:

- Sidewalks should be provided on **both sides of all arterial and collector streets**;
- Sidewalks should be provided on **at least one side of all local streets**, except where they end in cul-de-sacs;
- Sidewalks should be a **minimum of 1.8 metres in width, and wider in areas of high pedestrian activity**;
- Where possible, sidewalks should include a **furnishing zone** to provide a buffer between the sidewalk and the roadway. This furnishing zone helps to create a more comfortable walking environment and can also provide opportunities for street trees, benches, street lighting, utilities, and other amenities.

### Strategy 2.3: Make walking a safe and more enjoyable experience

Walking can be the preferred choice for most trips if it is time efficient, safe, and pleasant in both perception and reality. Beyond active transportation infrastructure such as sidewalks, the City can invest in high-quality public spaces and amenities and employ design elements such as Crime Prevention Through Environmental Design (CPTED).

This strategy outlines policies the City can implement to make walking an enjoyable activity and preferred choice for most short trips in Prince Rupert. Three policy statements have been identified for this strategy:

**Policy 2.3A: Develop and adopt new Design Guidelines to create a great walking experience year-round, including features such as weather protection, placemaking and plazas, street lighting, pedestrian amenities, street trees, and landscaping.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital	Primary

In addition to investing in infrastructure such as sidewalks, the overall design of the City's streets and neighbourhoods play an important role in promoting walking. Creating comfortable walkable spaces requires making pedestrians a priority at each stage of the development process and considering them comprehensively within the full design process. A number of urban design features and treatments should be used to improve the attractiveness and vibrancy of the City's streets and other pedestrian facilities, including:

- **Weather protection** such as awnings to address Prince Rupert's unique climate and provide shelter from rain, snow, and sun and create more inviting and sheltered outdoor spaces year round.
- **Placemaking and plazas** to create more spaces for people to

linger, gather, and socialize

- **Street lighting** to ensure pedestrian comfort as well as safety and security at all times of day, including pedestrian-scale lighting along commercial frontages, at transit stops or within other high pedestrian activity spaces.
- **Pedestrian amenities** such as places to rest, public art, drinking fountains, bathrooms to improve the attractiveness and comfort of the pedestrian environment and to create great 'people places'.
- **Street trees, landscaping, and boulevards** to increase the City's tree canopy, with priority on streets with high pedestrian demand, traffic volumes and where parking does not provide a buffer between the road and sidewalk.



FIGURE 3 EXAMPLES OF PUBLIC REALM AND URBAN DESIGN FEATURES



**Policy 2.3B: Improve personal safety and security by incorporating Crime Prevention Through Environmental design into the City Core and other Design guidelines into the OCP.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital	Primary

There are some areas of the City that are concealed or isolated, which can result in people feeling insecure or unsafe in these spaces. The City should focus on improving public security by focusing on Crime Prevention Through Environmental Design (CPTED), which is an approach to planning and designing communities that reduces opportunities for crime, and through the application of its design principles, ensuring people feel safe when they travel. CPTED principles suggest minimizing concealed and isolated routes or areas because people feel insecure in these spaces. By connecting them to the sidewalk network, and enhancing natural surveillance as well as lighting and sightlines, this can increase activity and make spaces feel safer and more inviting.

**Policy 2.3C: Work with Tourism Prince Rupert to support the implementation of a pedestrian wayfinding strategy for residents and visitors.**

Timeframe	Implementation	Responsibility
Short-Term	Capital Policy & Programming	Secondary

While many residents know how to travel through Prince Rupert by car, not everyone may know the best route. In addition, the City is also home to a significant tourism sector as a gateway community and with increasing cruise ship passengers. Pedestrian wayfinding creates a navigable pedestrian environment by identifying pedestrian routes, key destinations, and distances that allow users to assess their ability and comfort. Wayfinding can also enhance the route or neighbourhood's character, creating a sense of place. Tourism Prince Rupert is already working on a pedestrian wayfinding strategy for residents and visitors. The City should support Tourism Prince Rupert in implementing enhanced pedestrian wayfinding.

## Strategy 2.4: Design streets and trails to be universally accessible

A universally accessible transportation network is one that allows access by all people, regardless of their age, size, ability, or disability because of its design and composition. This includes people with reduced mobility, vision, hearing, strength, dexterity, and comprehension, among others. Designing streets and trails with pedestrian accessibility in mind can make it easy and convenient to walk to everyday destinations for a wide range of people. Best practice in accessibility is to follow Universal Design principles, which create inclusion for all by making designs equitable, flexible, and intuitive to navigate.

This strategy highlights steps the City can take to apply an accessibility lens in the design. Two policy statements have been identified for this strategy:

### Policy 2.4A: Update Subdivision and Development Servicing Standards Bylaw to follow universal design best practices.

Timeframe	Implementation	Responsibility
Ongoing	Capital	Primary

The City should update its design standards in its Subdivision and Development Servicing Standards Bylaw to follow universal design best practices. The B.C. Active Transportation Design Guide lays out a universal accessibility design toolkit covering a range of strategies that can improve the pedestrian network in Prince Rupert, including:

- **Accessible sidewalks** (at least 1.8 metres wide) that are free of obstructions;
- **Smooth surfaces** that are firm, slip-resistant, free of tripping hazards, and well maintained year-round;
- **Accessible curb ramps** at intersections;

- **Frequent benches and resting spots**, especially on uphill segments;
- **Detectable warning surfaces**;
- **Audible pedestrian signals**;
- Pedestrian-scale lighting and improved **lighting** and crosswalks; and
- Intuitive **wayfinding**.

As best practices evolve, the City should update its design standards to ensure that people of all ages and abilities can navigate the street network in Prince Rupert.

### Policy 2.4B: Ensure trails are designed to be universally accessible.

Timeframe	Implementation	Responsibility
Ongoing	Capital	Primary

Prince Rupert has an extensive network of trails that provide the community with a place to recreate, exercise, and connect with nature and others. However, many trails can be quite difficult to navigate due to challenging terrain. In 2017, the Kaien Island Trail Enhancement and Recreation Society developed the Kaien Island Trail Network Plan. The City should focus on opportunities to improve trail accessibility, including:

- Providing **switchback pathways** at accessible grades in addition to or instead of stairs where feasible;
- **Avoiding the use of maze gates** which make it challenging for some users to access;
- Providing **landing areas** on stairs;
- Providing **benches** to provide opportunities to rest; and
- Ensuring stairs have **hand rails**.



## Strategy 2.5: Build a cycling and rolling network for people of all ages and abilities

Currently, there are no dedicated on-street cycling or active mobility corridors in Prince Rupert. A complete and connected network of All Ages and Abilities (AAA) bicycle facilities is required to see a significant increase in cycling mode share. Focusing on creating a safe, comfortable, connected, and convenient network of bicycle facilities can see significant gains in ridership and encourages more diverse cyclists, such as women, children, and seniors. In addition to bicycle facilities, the City should invest in support facilities such as bicycle parking, end-of-trip facilities, and wayfinding to make cycling an easy and enjoyable mode of transportation for a broad cross section of people.

This strategy outlines actions for how the City can make cycling and rolling an attractive, convenient, and fun transportation option in Prince Rupert. Five policy statements have been identified for this strategy:

**Policy 2.5A: Adopt the complete, comfortable, and connected cycling and rolling network in Map 7 and implement priority recommendations as outlined in Map 10.**

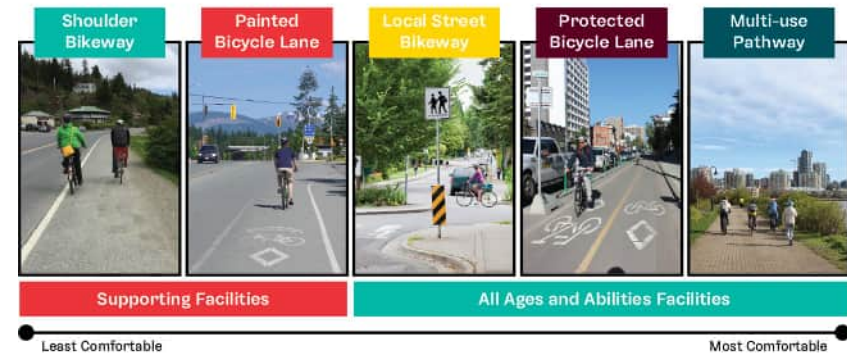
Timeframe	Implementation	Responsibility
Ongoing	Capital	Primary

The City should work towards developing a City-wide All Ages and Abilities ('AAA') cycling and rolling network that consists of physically separated facilities such as multi-use pathways, protected bicycle lanes, and off-street pathways on streets with high traffic volumes, and local street bikeways on quieter streets. The network should be integrated with on-street and off-street active transportation facilities to support recreation and commuting.

The cycling and rolling network is shown in **Map 3** and was developed based on the following principles:

- **A Comfortable Network.** The proposed cycling and rolling network focuses on developing a AAA network. The purpose of a AAA network is to provide an interconnected system of cycling and rolling facilities that are comfortable and attractive for all users. The AAA cycling and rolling network includes three types of bicycle facilities that are most effective at increasing ridership: local street bikeways, protected bicycle lanes, and off-street pathways, as shown below. These facilities are the most preferred types of facilities by all users and are proven to be the safest types of facilities.

### BICYCLE FACILITY TYPES



- **A Complete Network.** The proposed cycling and rolling network ensures all areas within Prince Rupert are within a close distance to a designated and complete cycling and rolling corridor. This involves developing a minimum City-wide grid that ensures that most residents and areas of the City are within 400 metres of a designated cycling and rolling corridor.

- **A Connected Network.** Providing direct AAA routes to Prince Rupert's waterfront, commercial, businesses, employment and educational destinations is an important component of making cycling and rolling an attractive transportation option. The proposed cycling and rolling network aims to provide high quality and direct north-south and east-west connections to connect each of the City's key community destinations such as schools, parks, and recreational opportunities.

**Policy 2.5B: Develop design standards for cycling and rolling facilities based on the B.C. Active Transportation Design Guide and incorporate them in standard street cross-sections for all road classifications in the Subdivision and Development Servicing Standards Bylaw.**

Timeframe	Implementation	Responsibility
Short-Term	Policy & Programming	Primary

Developing a design standard for cycling and rolling facilities means that all new infrastructure will be in line with that standard, whether they are built by the City or a developer. Developing design standards that are in line with the B.C. Active Transportation Design Guide means that these facilities will be considered comfortable for people of all ages and abilities and in line with national and international best practices. Design standards can include requirements for protected bicycle lanes, multi-use pathways, and other facility types, such as when they are required based on the road classification, how many (both or one side of the street), and how wide. The City should develop design standards for cycling and rolling facilities and incorporate them in standard street cross-sections for all road classifications in its Subdivision and Development Servicing Standards Bylaw.



**FIGURE 4 EXAMPLES OF ALL AGES AND ABILITIES (AAA) FACILITIES**



**Policy 2.5C: Provide secure bicycle parking and end-of-trip facilities throughout the City, including incorporating end-of-trip facilities at all City-owned facilities.**

Timeframe	Implementation	Responsibility
Short-Term	Capital	Primary

Bicycle parking and other end-of-trip facilities (such as showers, lockers, and repair stands) help to make cycling more attractive and convenient. Both short-term (e.g., bicycle racks) and long-term (e.g., bicycle lockers, cages, and parkades) bicycle parking options are important in making cycling a feasible everyday mode of transportation. Bicycle parking design should consider a range of bicycle shapes and sizes, including cargo bikes and bicycles with trailers. Bicycle racks can be branded and designed to enhance the streetscape as long they remain fully functional. The B.C. Active Transportation Design Guide recommends that 50% of long-term and 10% of short-term bicycle parking be designed to accommodate e-bikes by providing an electrical outlet. The B.C. Active Transportation Design Guide provides a full overview of end-of-trip facilities. The City should seek to provide secure bicycle parking and end-of-trip facilities in Prince Rupert.

In addition, while the Zoning Bylaw supports the incorporation of end-of-trip facilities in new developments, the City can take a proactive role in increasing the frequency and supply of cycling amenities at City-owned properties as outlined in Action 2.4D. This includes understanding the current supply and demand of cycling amenities and prioritizing the implementation at strategic locations such as community destinations or along well-used routes.

**Policy 2.5D: Update the Zoning Bylaw to support the installation of more high quality short- and long-term bicycle parking, e-bike charging infrastructure, and end-of-trip facilities throughout the community.**

Timeframe	Implementation	Responsibility
Short-Term	Policy & Programming	Primary

The City's Zoning Bylaw currently outlines minimum width dimensions and overhead clearance for bicycle parking which can be reviewed to strengthen the quality of the provision of bicycle parking. For example, the City can include the distinction between short-term and long-term bicycle parking (where short-term is typically outdoors and located in front of a building or within the public right-of-way, and long-term bicycle parking is typically indoors or covered and located within an enclosed space, making it more secure). In addition, the Zoning Bylaw could be amended to include requirements for e-bike charging, end-of-trip facilities such as showers, lockers, repair stands, and cages, as well as considerations for bicycles that are of different shapes and sizes (such as recumbent bicycles or cargo bicycles). The City should update its Zoning Bylaw to provide high quality bicycle parking and end-of-trip facilities throughout the community.



**FIGURE 5 EXAMPLES OF BICYCLE PARKING AND END OF TRIP FACILITIES**

**Policy 2.5E: Develop a cycling wayfinding strategy and implement wayfinding signage throughout the city.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital Policy & Programming	Primary

Cohesive and consistent cycling wayfinding makes for a safer and more enjoyable cycling experience for all. Wayfinding for cyclists can include pavement markings, signage, as well as physical or online maps that highlight the cycling network by facility type or comfort level. Other signs, such as Share the Road signs, can help to raise awareness for drivers. Wayfinding ultimately is meant to support cyclists in navigating a neighbourhood or area, and can be a way to brand routes, seamlessly connect to other routes, and build a culture of cycling. The City should develop a cycling wayfinding strategy that identifies signage needs, enhances wayfinding on existing facilities, and incorporates new wayfinding on future facilities.

**Strategy 2.6: Enhance trails and multi-use pathways to provide recreational opportunities**

Prince Rupert is well known for its beautiful natural setting and extensive recreational opportunities. The City has an extensive network of approximately 50 km of trails as well as 25 km of potential future trails that offer easy access to nature and recreational opportunities. However, many trails require upgrades to ensure they are well-maintained and accessible throughout the year. While trails refer to facilities that are accessible and intended for people walking, the City should also focus on multi-use pathways that support all forms of active transportation, including walking, jogging, cycling, skateboarding, rollerblading, and people using mobility aids.

This strategy outlines actions the City can take to make trails and multi-use pathways suitable for recreation for people of all ages and abilities. Three policy statements have been identified for this strategy:

**Policy 2.6A: Pave and upgrade trails and multi-use pathways in the City to meet AAA standards where feasible.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital Operations & Maintenance	Primary

Many of the existing trails and multi-use pathways in Prince Rupert are not accessible for people of all ages and abilities, and are not navigable by cyclists. Many of them have challenging terrain, with narrow, unpaved, dark pathways, with some overgrown areas and many stairs. In locations through environmentally sensitive areas, paving trails is often not preferred; however, there may be opportunities on routes that are well used, and provide a longer connection that is part of the larger transportation network to update existing trails to meet AAA standards, including wider, paved trails with more amenities such as lighting and benches. The City should conduct a study to explore the feasibility and desirability of paving and upgrading trails in the city to be accessible for people of all ages and abilities.



**Policy 2.6B: Integrate stairway and pathway maintenance into existing operations and maintenance budget.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital Operations & Maintenance	Primary

Stairways can help to maintain connectivity where standard pathways and ramps are not feasible. While stairways are not accessible for people using mobility devices, they provide railings and intermittent landing areas that allow people to rest, aiding their ascent. If stairways are used, a parallel accessible pedestrian route should be provided, if possible. Staircases should also be well maintained and inviting, including firm steps and solid railings. The City has implemented pathway and stairway connections through its trails and greenways to mitigate some of the steep and difficult terrain, and should continue to do so.

**Policy 2.6C: Develop a series of trail 'loops' throughout the city.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital Policy & Programming	Secondary

To help promote increased recreation on the trail network, as well as to promote tourism, the City should develop and promote a series of recreational loops that provide continuous connections to key destinations throughout the community, linking trails and greenways. These loops can make it easier for residents to navigate the cycling and rolling network and can also encourage residents and visitors to experience the varied beauty of Prince Rupert. The City should work with Kaien Island Trail Enhancement and Recreation Society to implement the Island Wide Pathway Network and promote a series of recreation loops throughout the city.

**Strategy 2.7: Create and enhance existing crossings to accommodate people of all ages and abilities**

Crossings are important in creating opportunities for people walking, cycling, and rolling to safely cross streets. However, there are important considerations to ensure that crossings are safe for people walking, cycling, and rolling. In the community survey, respondents noted that crosswalks in Prince Rupert are not visible enough and that crossing improvements are needed to make them safer, in addition to identifying locations that need new crossings.

This strategy outlines locations and policies to improve the safety of existing crossings and better facilitate safe active transportation crossings. Two policy statements have been identified for this strategy:

**Policy 2.7A: Provide additional pedestrian crossing enhancements to improve pedestrian safety and accessibility, such as new crosswalks, crosswalk upgrades, curb extensions, aligned curb letdowns, tactile surface treatments, lighting, audible pedestrian signals, and pedestrian countdown timers.**

Timeframe	Implementation	Responsibility
Short-Term	Capital	Primary

Creating safe and direct pedestrian connections, including mid-block crossings and cut throughs, helps make walking a safer and more enjoyable experience for people of all ages and abilities. The following enhancements should be considered along with the implementation of any crosswalk improvements:

- New marked crosswalks include opportunities for new crosswalks where warranted to improve pedestrian safety, connectivity, and accessibility. Raised crosswalks can also be used to extend the level of the sidewalk across the road and act as a traffic calming measure.

- Crosswalk upgrades include enhanced treatments such as Rectangular Rapid Flashing Beacons (RRFBs) and overhead flashers to raise visibility at crosswalks. To make crosswalks even more visible, pedestrian activated flashing lights can also be provided overhead. This would be more costly but may be more advantageous at certain locations.
- Curb extensions can be provided along roads with permanent parking to reduce pedestrian crossing distances.
- Aligned curb let-downs can increase the effectiveness and accessibility of crosswalks. It is also advisable to provide smaller curb radii so that curb let-downs can be aligned with crosswalks rather than directing pedestrians away from the painted crosswalk. This is especially important for users of mobility devices.
- Tactile surface treatments are treatments that can alert visually impaired pedestrians of the location of the edge of the curb and further direct them into the crosswalk (in addition to the aligned curbs noted above). locations where pedestrian volumes are high.
- Lighting should be present at all intersections to ensure people walking are clearly visible at night.
- Audible pedestrian signals can be used at signalized intersections to assist pedestrians with disabilities by communicating when to walk in non-visual formats, including audible tones, speech messages, or vibrating surfaces. Braille can also be found on pedestrian signals.
- Pedestrian countdown timers indicate to people walking how much time they have to cross the street at a signalized intersection. Countdown timers may be installed with or without pedestrian push button actuation.

The City should assess locations identified through public feedback and other studies to identify locations where new or enhanced crossings are warranted as per criteria established by the Transportation Association of Canada.

The community survey identified the following locations as requiring additional study into enhancements and crossings:

- New crossing at McBride Street and 9th Avenue
- Hwy 16 between 9th street and 2nd street (each intersection)
- Crossing improvements at library (6th Ave E and McBride)
- Intersection upgrades where McBride Street and Highway 16 separate



FIGURE 6 EXAMPLES OF ENHANCED PEDESTRIAN CROSSINGS



**Policy 2.7B: Provide cycling crossing treatments to improve cycling safety.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital	Primary

Intersections tend to be high conflict areas along cycling and rolling corridors, so careful consideration must be taken to ensure people cycling and rolling can navigate them in a safe and comfortable manner. These areas need treatments that make people cycling clearly visible to motorists at intersections. Treatments should aim to increase visibility, indicate clear right-of-way, and facilitate eye contact and awareness with other modes. Intersection treatments can improve cycling movements and can be coordinated with timed or specialized signals.

Crossing treatments can include elements such as colour, signage, medians, signal detection, and pavement markings. The type of treatment required depends on the bicycle facility, whether there are intersecting bicycle routes, street classification, and land use. Some examples of crossing treatments include:

- Protected intersections combine bicycle signal phasing, design elements and space allocation to help protect cyclists from turning cars.
- Coloured conflict zone Markings include green markings to designate conflict zones and areas where people cycling are travelling. They raise awareness and visibility of people cycling, make cycling movements more predictable, guide bicycle users and motorists through conflict zones or complex intersections, and provide clarity of right-of-way.
- Dashed bicycle lane markings through intersections position people cycling appropriately as they travel through the intersection and make other road users aware of people cycling.
- Bicycle boxes provide a space for people cycling to wait to cross the intersection. They are often located in advance of a vehicle stop line and provide the person cycling with a “head start” and make them more visible.

- Reduced crossing distances through treatments such as curb extensions or two-stage median crossings, which are positioned in the middle of the roadway allowing people cycling to cross the road in two stages instead of one providing them with a space to wait before making the second stage of their crossing.
- Cross-rides are pavement markings used to indicate that people cycling are permitted to use the crosswalk and do not need to dismount, although people cycling still need to yield to motor vehicle traffic before crossing at a cross-ride. These pavement markings may be combined with a pedestrian crosswalk or used on their own to indicate a separated bicycle crossing.
- Enhanced Bicycle Signal Crossings can include full signals as well as pedestrian and bicycle activated signals. Bicycle loop detectors, bicycle pushbuttons, or other technologies such as video, infrared, or pressurized mats can activate the signals. Dedicated bicycle signals with bicycle symbols on the signal heads can provide phasing between cyclists and motorists.



**FIGURE 7 EXAMPLES OF ENHANCED CYCLING CROSSINGS AND TREATMENTS**

**Strategy 2.8: Focus on quick-build approaches to implementing pedestrian and cycling infrastructure using low-cost, flexible materials**

Over the past several years, cities across Canada and throughout the world have increasingly shifted their approach to delivering active transportation infrastructure by following a rapid implementation or quick-build approach. Rapid implementation facilitates an urgent response to a range of critical issues facing our communities as outlined above, including climate action, social inequity, public health, road safety, congestion, and increasingly constrained municipal budgets.

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

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

This strategy lays out the steps the City can take to implement active transportation facilities using a quick-build, or rapid implementation approach. Two policy statements have been identified for this strategy:

**Policy 2.8A: Adopt a policy to use tactical urbanism approaches when appropriate to make safety and placemaking improvements to the bicycle network shown in Map 7.**

Timeframe	Implementation	Responsibility
Short-Term	Capital	Primary

Rapid implementation projects are typically implemented within the curb-to-curb width, often by reallocating road space from other uses such as on-street parking and/or motor vehicle lanes to accommodate bikeways. They use adjustable materials that have relatively low costs compared to typical capital projects such as painted buffers, flexible delineator posts, modular plastic curbs, planter boxes, pre-cast concrete curbs, extruded curbs, and concrete barriers. These treatments will work well in a coastal climate like Prince Rupert's.

Rapid implementation allows for the faster and more cost-effective implementation of complete cycling networks. It also provides more flexible infrastructure that can be quickly adjusted in response to public and stakeholder input. This also helps leverage the City's investments by focusing on low-cost improvements over the near-term, while working towards longer-term more permanent improvements that could be integrated with utility repairs or road upgrades.



**Policy 2.8B: Implement pedestrian safety and placemaking improvements following a tactical urbanism approach. Use tactical urbanism to implement safety improvements and for placemaking opportunities, as shown in Map 8.**

Timeframe	Implementation	Responsibility
Short-Term	Capital	Primary

Tactical urbanism is a valuable tool that enables light, quick, and cheap implementation of pedestrian safety and placemaking projects that address safety issues, equity concerns, and infrastructure gaps while engaging with the community. It consists of a series of rapid, low cost project implementation techniques that aim to test and showcase new ideas, enhance the public realm, and create lasting positive outcomes.

Tactical urbanism projects can include temporary parklets, street closures, and a number of other fun and creative project types. These projects can be on the ground for anywhere from a few hours to days or even weeks, and they can sometimes be transitioned into permanent projects. The City should identify opportunities to use tactical urbanism to implement safety improvements, such as interim curb extensions at intersections and improvements around schools, as well as for placemaking opportunities, as shown in **Map 8**.



**FIGURE 8 EXAMPLES OF RAPID IMPLEMENTATION CYCLING AND PEDESTRIAN IMPROVEMENTS**

**Strategy 2.9: Maintain active transportation facilities year-round**

While building active transportation facilities is important to increasing active transportation use, it is equally important to maintain these facilities to ensure they are safe at all times of day and year, as well as into the future. This requires planning for the regular inspection and maintenance of active transportation infrastructure such as sidewalks, bicycle lanes, and off-street pathways, with special consideration for clearing snow and overgrowth. The community survey noted that residents like the sidewalk, cycling, and trail network but felt that the maintenance standards could be improved. They felt that maintenance improvements would help to incentivize people to use more active modes when travelling in the city.

This strategy lays out the steps the City can take to keep the active transportation network in a state of good repair. Two policy statements have been identified for this strategy:

**Policy 2.9A: Review and update current maintenance and operating policies and procedures for active transportation infrastructure, including sidewalks, bicycle lanes, and multi-use pathways.**

Timeframe	Implementation	Responsibility
Short-Term	Operations & Maintenance	Primary

The City currently maintains over 70 km of roads for the community, as well as four bridges. Each year, the City prioritizes areas for infrastructural renewal in the capital budget according to the needs of the community. The City can seek to prioritize upgrades to the active transportation network by incorporating all active transportation infrastructure into the asset inventory, and in turn into the City's asset management plan. In addition, the City's Snow and Ice Control Policy 300-03 determines road and sidewalk priorities in order to manage snow and ice control operations on City controlled roads and sidewalks. However, the

City does not identify cycling routes or facilities, including trails, that could be cleared to better facilitate active transportation throughout the city. Currently, the City posts signs on stairs and pathways stating they are closed during winter months due to safety concerns and not having available staff to clear them of snow and ice. Residents noted in the community survey that the lack of snow removal from sidewalks is a challenge for walking. The City should review and update the maintenance and operating policies to align with the updated active transportation network, and explore ways to clear snow and ice from facilities.

**Policy 2.9B: Regularly inspect active transportation facilities to determine the need for maintenance, replacement, or new infrastructure.**

Timeframe	Implementation	Responsibility
Ongoing	Operations & Maintenance	Primary

Ensuring facilities can be used year-round is important, especially for those who rely on active and sustainable transportation as their main mode of transportation, but also to encourage more trips made by active modes year-round. Sidewalks, pathways, trails, crosswalks, and bicycle facilities need to be regularly reviewed and inspected to identify any failing infrastructure, safety concerns including overgrown vegetation, or weather-related debris or issues. The City should develop a regular inspection program to monitor and assess the condition of active transportation facilities and to determine the need for maintenance or repair. Residents noted in the community survey that overgrown vegetation presents a challenge for walking on sidewalks and trails. Some trails are not completely connected due to overgrown bushes or restricted access. The City can work to reinstate these cut throughs for pedestrian and cyclist access.

## Strategy 2.10: Develop support programs and initiatives that encourage people to use active transportation as the preferred mode for more trips

Building infrastructure is a core piece of creating active and sustainable mode shift, but programs that focus on education, awareness, and incentives can support trying something new in a safe way, as well as make people feel comfortable and excited about walking, cycling, and rolling. Education and social marketing initiatives help shift travel habits by highlighting the benefits of active transportation and providing information to make the trip easier, as well as garner interest among community members. Programs could include Safe Routes to School, cycling education programs, walking clubs, neighbourhood walking maps, wayfinding, Bike to Work/School Week, transit field trips, and more.

This strategy identifies policies to encourage the use of active transportation in Prince Rupert. Three policy statements have been identified for this strategy:

**Policy 2.10A: Develop and support programs to encourage walking.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Primary

Making walking an attractive and enjoyable activity will increase walking in Prince Rupert. The City should work with partners to develop and support a range of programs to encourage walking, including:

- **Safe Routes to school program:** These programs are designed to promote walking and cycling among school-aged children to help to encourage safe walking and cycling at a young age. These can include a “Walking School Bus” program where walking routes are coordinated, and students are “picked up” by a group of classmates so they can walk to school together. The City should develop a formal Safe Routes to School Program and develop School Travel Plans for 1-2 schools per year.



- **Walking clubs:** Forming clubs or groups can help get people active while encouraging social interaction. A common example of a walking club is a Seniors Walking Group, which provides many social and health benefits.
- **Neighbourhood walking maps:** Information about local walking routes for transportation and recreation can be provided. These maps can be linked with the bicycle network map. Maps should be available in hard copy and digital formats. Educational tips can also be provided on the City's website.

Coordination with non-profit organizations, community groups, and other agencies (e.g., ICBC, police, school district) can help improve the effectiveness of these programs. The City should partner with other organizations, agencies, non-profits, and other nearby communities to gain support for these programs and to help make them more effective.



FIGURE 9 EXAMPLE OF SAFE ROUTES TO SCHOOL

#### Policy 2.10B: Develop and support programs and facilities to encourage cycling.

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Primary

Education initiatives geared towards cyclists are also important components of growing active transportation mode share. Education initiatives can include:

- **Developing materials and tools that educate all road users** on how to use cycling routes as well as supporting programs that teach skills and awareness of road safety for all road users. Adult and youth bicycle skills courses and basic maintenance workshops recognize that bicycling education is important at all ages.
- **Promotional events:** Promotional events help to raise awareness and showcase the benefits of cycling and rolling as healthy sustainable transportation options. These events can be mixed in with other active transportation events. Bike to Work Week is a fantastic example of an enjoyable community event in many communities that simultaneously promotes cycling and provides cycling education.
- **Bicycle user map:** Bicycle user maps enable users to identify designated cycling routes that match their cycling ability and comfort level. The City should develop a bicycle map that identifies bicycle facility types and includes important local destinations and amenities. The map should be available in both hard copy and digital formats. The City should consider creating an interactive online map or encouraging innovation by releasing open-source mapping data.

- **Pump tracks, bike parks, and gardens:** The City should consider opportunities to encourage cycling through recreational facilities, such as pump tracks, bike parks, and “bike traffic garden” education parks with demonstration infrastructure. These can include display boards/kiosks, bike racks, and repair stands.

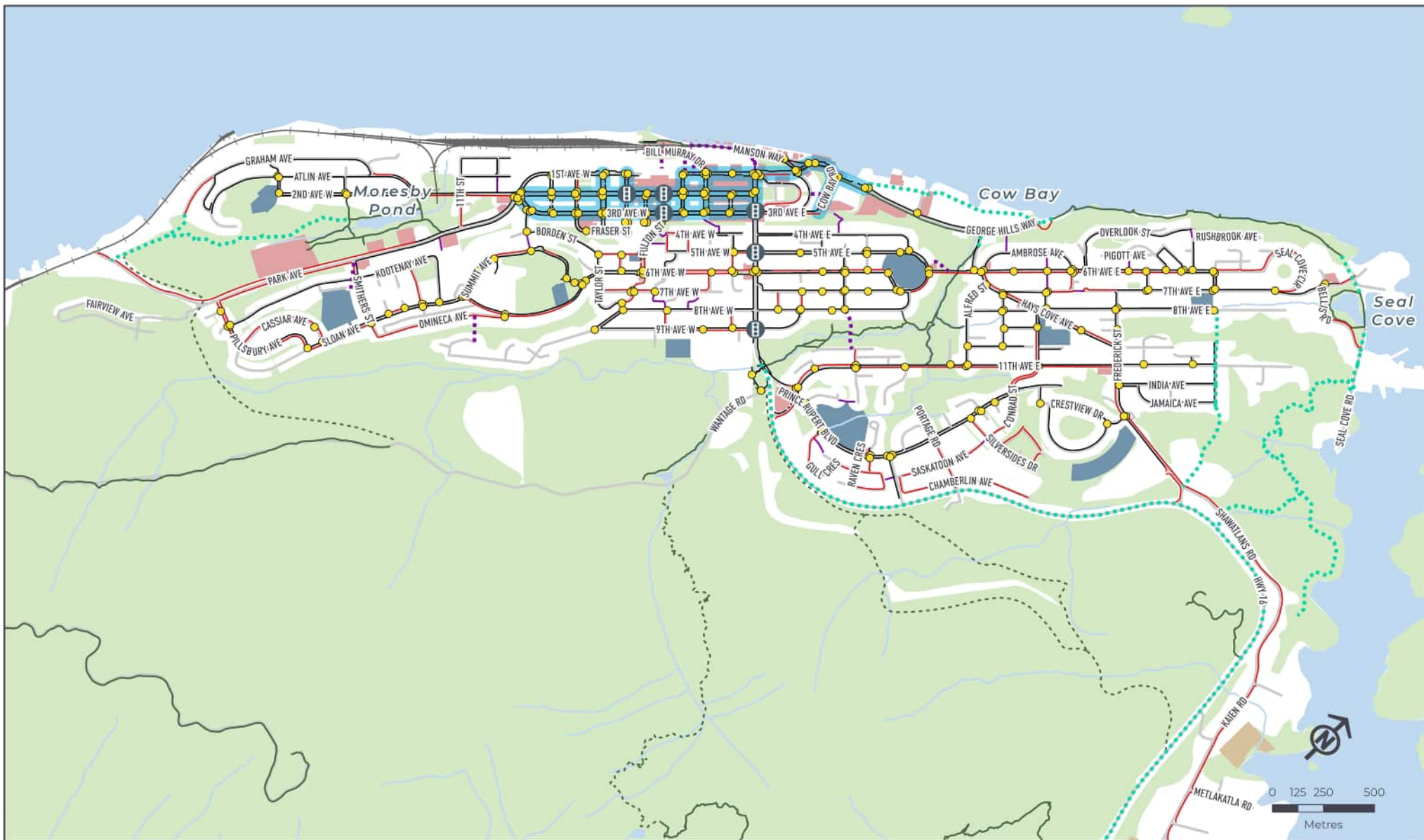
The City can partner with local bicycle shops, community members, health authorities, ICBC, or others in the development of road safety awareness, bicycle skills, and bicycle clubs.

**Policy 2.10C: Work with large employers to find ways to manage traffic during shift changes and promote active modes.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Primary

The City can engage with and work with employers and businesses in the city to encourage flexible work hours and other Transportation Demand Management (TDM) for business measures such as transit passes, end-of-trip facilities, Bike to Work week, among many others. This can include the Port of Prince Rupert and DP World as examples of large employers that the City could partner with to promote active transportation.

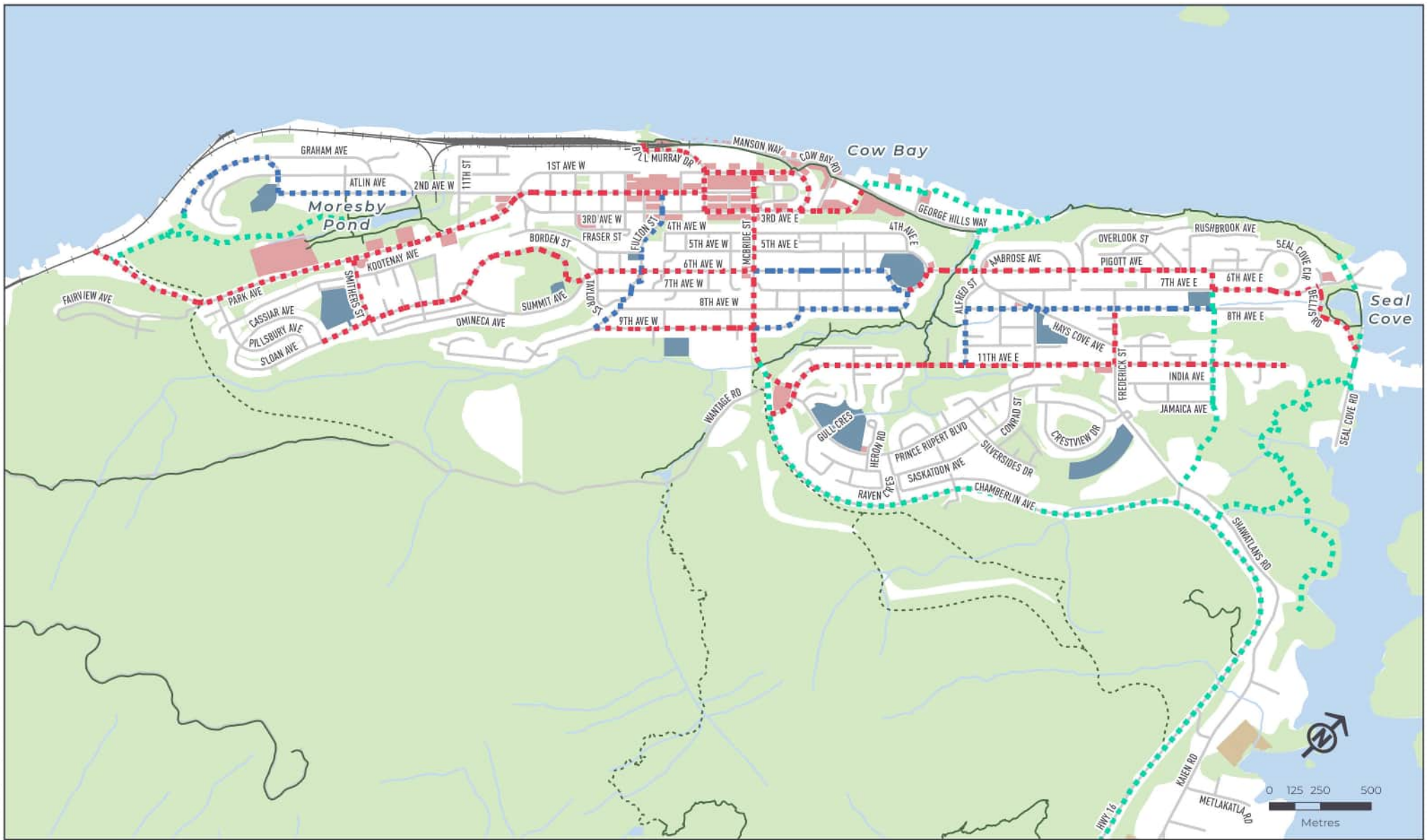




MAP 6 PROPOSED PEDESTRIAN FACILITIES

- |                     |                                  |                                     |
|---------------------|----------------------------------|-------------------------------------|
| ● Crosswalk         | — Existing Walking Path / Stairs | — Railway                           |
| ⓑ Traffic Signal    | ⋯ Proposed Walking Path / Stairs | ■ Commercial / Mixed Use            |
| — Existing Sidewalk | ⋯ Proposed Multi-Use Pathway     | ■ Park / Open Space / Forested Area |
| — Proposed Sidewalk | ■ Pedestrian Priority Street     | ■ School                            |
| — Existing Trail    |                                  | ■ First Nation Reserve              |
| ⋯ Proposed Trail    |                                  |                                     |

\\projects\_van\3578\002\01\0 - Design\GIS\Projects\Pro\_ Projects\_Ray\Bajon\Proposed\_Cycling\_Facilities



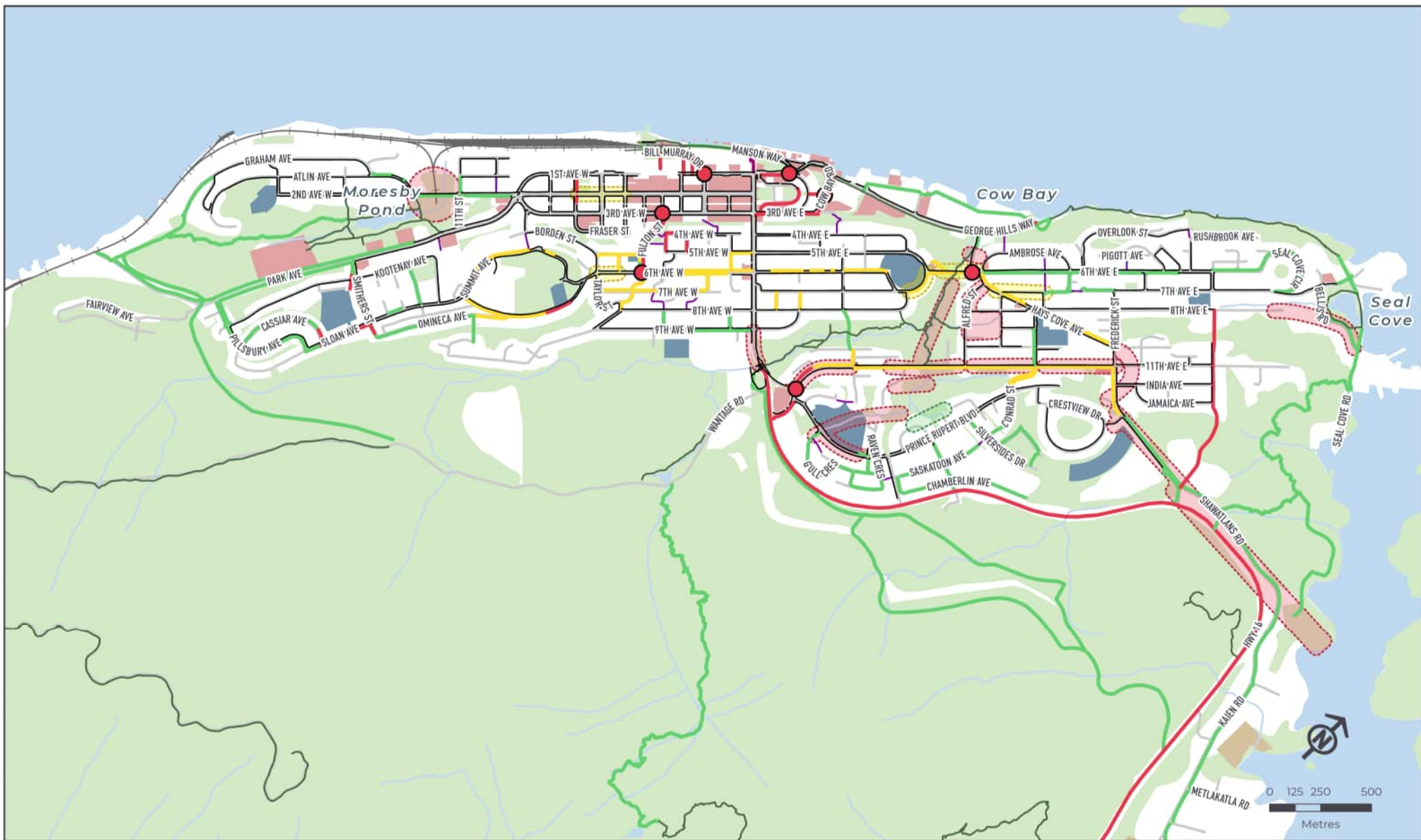
MAP 7 PROPOSED CYCLING FACILITIES

- |                                 |                                   |
|---------------------------------|-----------------------------------|
| Proposed Protected Bicycle Lane | Railway                           |
| Proposed Local Street Bikeway   | Commercial / Mixed Use            |
| Proposed Multi-Use Pathway      | Park / Open Space / Forested Area |
| Existing Trail                  | School                            |
| Proposed Trail                  | First Nation Reserve              |





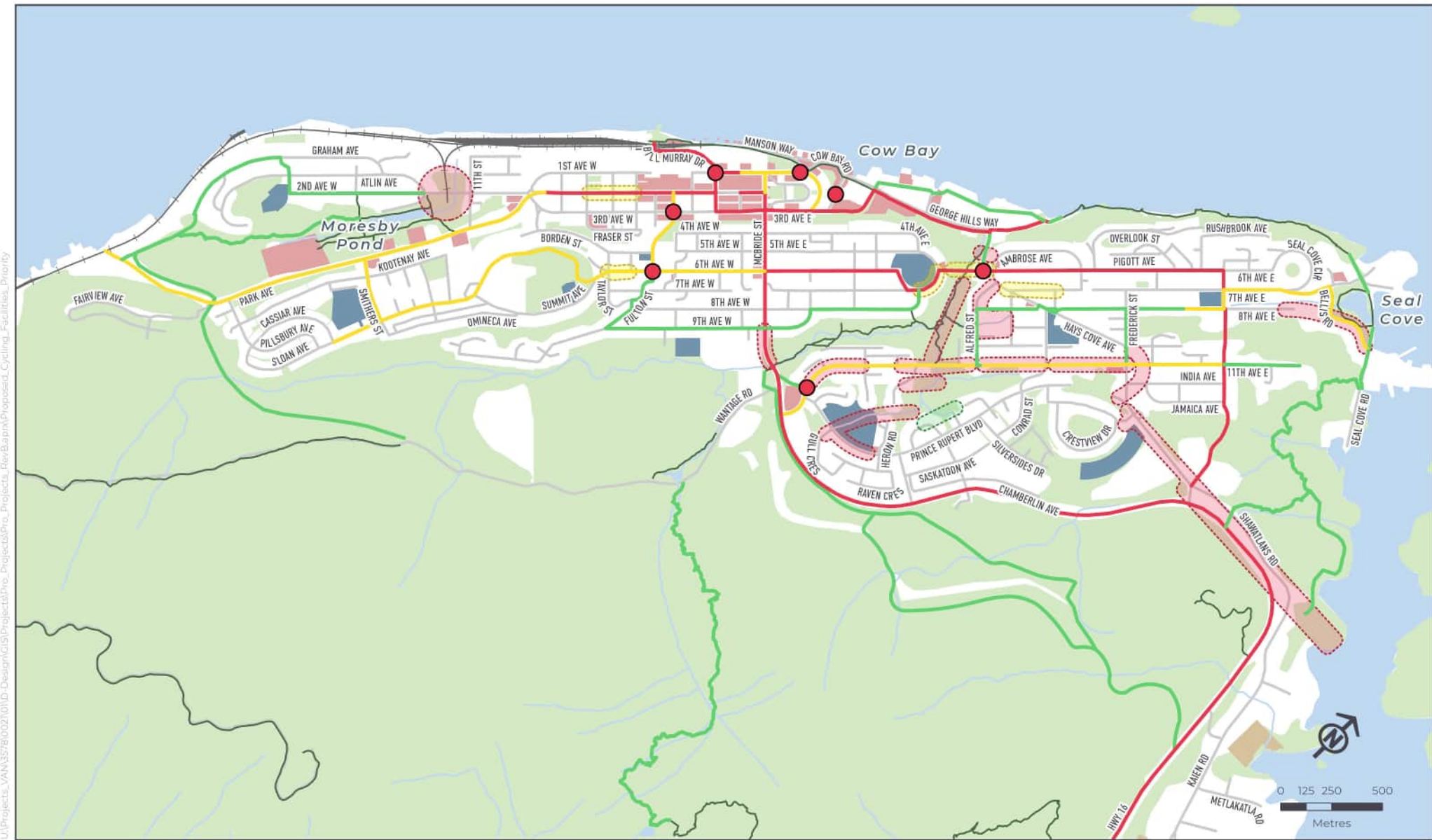
U:\Projects\_VAM\3578\002\010\ND-Design\ICISIP-objects\Pro\_Projects\_Rev\Bapm\Proposed\_Pedestrian\_Facilities\_Priority



MAP 9 PRIORITY PEDESTRIAN NETWORK

- |  |                      |                                   |
|--|----------------------|-----------------------------------|
| Pedestrian Safety and Placemaking Improvement Site - Short Term Priority | Short Term Priority  | Existing Walking Path / Stairs    |
| Short Term Priority  | Medium Term Priority | Railway                           |
| Medium Term Priority   | Long Term Priority   | Commercial / Mixed Use            |
| Long Term Priority   | Existing Sidewalk    | Park / Open Space / Forested Area |
|  | Existing Trail       | School                            |
|  |                      | First Nation Reserve              |





**MAP 10 PRIORITY CYCLING NETWORK**

- |  |  |                                   |
|--|--|-----------------------------------|
| ● Pedestrian Safety and Placemaking Improvement Site - Short Term Priority | Condition Assessment Priority Corridor | — Railway                         |
| — Short Term Priority  | Short Term Priority                    | Commercial / Mixed Use            |
| — Medium Term Priority   | Medium Term Priority                   | Park / Open Space / Forested Area |
| — Long Term Priority   | Long Term Priority                     | School                            |
|  | Existing Trail                         | First Nation Reserve              |



# PUBLIC TRANSPORTATION







## STRATEGIES & POLICY STATEMENTS

A convenient and reliable public transit system is crucial to creating a vibrant and sustainable community. The City has the opportunity to improve the service, amenities, and integration of transit in the city to work towards the vision for transit in the community. The City also has the opportunity to integrate active transportation, taxis, and ride-hailing with public transit to create a transit system that is easily accessed by all. Eight strategies have been identified to improve public transportation:

- **Strategy 3.1: Advocate for BC Transit to improve transit service to make it a convenient and reliable transportation option**
- **Strategy 3.2: Work with BC Transit to ensure the transit network connects people to where they want to go, reducing the need to transfer**
- **Strategy 3.3: Improve the transit customer experience**
- **Strategy 3.4: Improve transit accessibility**
- **Strategy 3.5: Ensure the taxi supply matches the demand**
- **Strategy 3.6: Encourage ride-hailing to provide more transportation options**
- **Strategy 3.7: Manage and regulate the curbside for both ride-hailing and taxis**
- **Strategy 3.8: Continue to work with partners to support and improve service for children and youth travelling to and from school**

Each of these strategies are described in further detail below along with more detailed policy statements to lay out the steps the City can take to improve public transportation.

### Strategy 3.1: Advocate for BC Transit to improve transit service to make it a convenient and reliable transportation option

Ensuring that transit service is reliable and efficient is one of the most important components of making transit a competitive alternative to driving and increasing transit ridership. As transit ridership increases, the need and ability to invest in the public transit system grows. Limited transit service is one of the top issues and challenges for public transportation in Prince Rupert. Residents noted that increasing the frequency and days of service would make transit more convenient. While improving transit service is within BC Transit's jurisdiction, the City can advocate for improvements.

This strategy outlines the steps the City and BC Transit can take to enhance the existing transit service to make it more convenient and reliable as a transportation option. Two policy statements have been identified for this strategy:

#### Policy 3.1A: Continue to work with BC Transit to extend weekday service times in the mornings and evenings on weekdays and to introduce Sunday service in the short-term.

Timeframe	Implementation	Responsibility
Short-Term	Operations & Maintenance	Secondary

Limited public transit service during weekday mornings and evenings was identified among the top issues and challenges for using public transit in Prince Rupert. Increased morning and evening transit service can help people who work different schedules or are travelling for social, entertainment or shopping purposes. The Transit Future Service Plan identified increased morning and evening service on weekdays as part of BC Transit's service priorities for 2022-2026. This would involve extending weekday morning service to 6:00am and weekday evening service to approximately 11:00pm with 60-minute frequency. This would require an increase of 2,925 annual service hours and one

additional bus over the next five years. The City should advocate for these improvements to ensure they occur within the short-term timeframe stated by BC Transit.

In addition, lack of transit service on Sundays was one of the biggest issues or challenges identified for using transit in Prince Rupert. The Transit Future Service Plan identified introducing Sunday service as part of BC Transit's service priorities for 2022-2026. This would involve introducing Sunday service on all Prince Rupert routes, excluding the 99 Special with a similar level of service to existing service levels on Saturdays. This would require an increase of 1,925 annual service hours and one additional bus over the next five years. The City should advocate for these improvements to ensure they occur within the short-term timeframe stated by BC Transit.

#### Policy 3.1B: Advocate for extended Saturday service times in the mornings and evenings in the short-term.

Timeframe	Implementation	Responsibility
Short-Term	Operations & Maintenance	Secondary

Weekend transit service is essential for employees who work on weekends, as well as to facilitate recreational, social, or shopping trips. The Transit Future Service Plan identified a long-term priority is to extend service times to 9:00pm and to 7:00am on Saturdays, which would require an increase of 600 additional annual service hours over the longer-term. Although the Transit Future Service Plan identifies this as a long-term service priority, it is recommended that the City advocate to make extending Saturday service hours a short-term priority over the next five years.



**Strategy 3.2: Work with BC Transit to ensure the transit network connects people to where they want to go, reducing the need to transfer**

Transit needs to connect people to where they want to go in the most direct and efficient way. The current transit network provides good coverage throughout the City, but community members have identified areas such as the Port of Prince Rupert, a major employer and destination, that are not currently well-served by transit, as well as the fact that most people need to transfer buses downtown to get to their final destination.

The following strategies and actions lay out the steps the City can take to work with BC Transit to enhance the transit network in Prince Rupert. The long-term transit network is shown in **Map 11**. 5 policy statements have been identified for this strategy:

**Policy 3.2A: Advocate for a frequent spine transit corridor to BC transit as indicated in Map 11.**

Timeframe	Implementation	Responsibility
Medium-Term	Operations & Maintenance	Secondary

Frequent transit service provides a convenient, reliable, and frequent transit service all day long. Frequent transit is typically defined as service that is 15 minutes or better during peak hours, 30 minutes or better during off-peak periods, 15 hours a day, 7 days a week. The goal of establishing a spine frequent transit corridor is to allow people to spontaneously travel without having to consult a transit schedule, and that they will be connected to all community destinations. The City should work with BC Transit to increase service frequencies in Prince Rupert, with the focus on establishing a core frequent transit corridor as shown in Map 11 that spans the length of the community, running along the Yellowhead Highway from the ferry terminals and DP World terminal in the south, through the Core City, and continuing to the Prince Rupert Recreation Complex and key destinations beyond.

**Policy 3.2B: Improve transit service to the Fairview Docks Area as shown in Map 11.**

Timeframe	Implementation	Responsibility
Long-Term	Operations & Maintenance	Secondary

There is currently limited transit service to the Fairview docks area, with the route #55 offering limited transit service terms per day to and from the area between Monday and Friday. Enhanced service to this area would support potential transit connections to the ferry terminals, making the ferries and other communities accessed by the ferry more accessible by public transportation. This area also includes the Fairview container terminal, public docks, and is an important entry point for several water access communities, marine pilots, fishers, and others. Enhanced service to this area could be coordinated with BC Ferries schedules to ensure public transit is well coordinated with BC Ferries. The City should work with BC Transit and BC Ferries to advocate for improved transit service to the Fairview docks area.

**Policy 3.2C: Improve transit service to industrial areas as shown in Map 11.**

Timeframe	Implementation	Responsibility
Long-Term	Operations & Maintenance	Secondary

The industrial areas in Prince Rupert are also key employment centers that leave people with no choice but to drive. The City should work with BC Transit to advocate for connections to industrial areas in Prince Rupert. For example, in the stakeholder workshop it was noted that the Fairview Terminal employs approximately 900 staff who drive to work every day. This should also include improved service to the industrial area south of the City near Butze Rapids and to Seal Cove, which provides important multi-modal connections to the seaplane bases and ferry terminals to access adjacent communities. Enhanced service to industrial areas could be coordinated with the Port of Prince Rupert and major facilities such as DP World to coordinate transit service with shifts and scheduling. The City should work with BC Transit as well as major employers, seaplane operators, and ferry operators to advocate for improved transit service to industrial areas, with a focus on high demand times such as shift changes.

**Policy 3.2D: Provide improved transit service to recreational opportunities such as trails and Cow Bay as shown in Map 11.**

Timeframe	Implementation	Responsibility
Medium-Term	Operations & Maintenance	Secondary

Through community engagement, residents noted that there are limited transit opportunities to connect to places where they want to recreate such as the trail network and Cow Bay. The City should work with BC Transit to advocate for new and improved connections to Prince Rupert's recreational opportunities at trailheads and Cow Bay.

**Policy 3.2E: Ensure new developments have access to transit.**

Timeframe	Implementation	Responsibility
Ongoing	Policy & Programming	Primary

As the City of Prince Rupert grows, community destinations, amenities, and density may be in different areas than they are currently. The City should work with BC Transit to ensure there is adequate transit service to these new destinations and development areas and that they are serviced by direct routing that takes people to where they need to go.

**Strategy 3.3: Improve the transit customer experience**

In order to make transit an attractive transportation option, the user experience must be safe, comfortable, and enjoyable. While BC Transit operates public transit in Prince Rupert, the City can improve the built environment that connects people to and from transit to make it more accessible, safer, and more comfortable. For example, the City can improve bus stop passenger amenities at bus stops and transit exchanges with shelters and benches, as well as provide clear signage to help passengers navigate the system.



This strategy outlines key actions the City and BC Transit can take to improve the transit customer experience in Prince Rupert. Six policy statements have been identified for this strategy:

**Policy 3.3A: Increase the safety, comfort, and accessibility at bus stops.**

Timeframe	Implementation	Responsibility
Ongoing	Capital	Primary

Crime Prevention Through Environmental Design (CPTED) is a design theory that is based on the belief that the proper design of the built environment and public spaces can reduce the incidence and fear of crime and improve quality of life. Community members noted that they do not feel safe at night and while taking transit. CPTED can help to make the built environment around bus stops feel safer. Community members noted that they had personal safety concerns when walking and taking transit. The City can look to conduct a CPTED review of bus stops, considering the following design principles:

- Visibility;
- Access control;
- Lighting;
- Security hardware;
- Landscaping;
- Resistance to vandalism; and
- Maintenance.

In addition, bus stops can be more accessible for people of all ages and abilities, as well as accommodate those with mobility, visual, hearing and cognitive disabilities. A minimum level of universal accessibility can include the following features:

- Passenger landing pad;
- Wheelchair pad;
- Tactile Walking Surface Indicators; and
- Benches.

The City can ensure that all bus stops are considered accessible.

**Policy 3.3B: Develop and adopt design guidelines for bus amenity improvements as shown in Map 12, including shelter improvements or replacements that link up to wayfinding signage, and prioritize improvements as bus stops shown in Map 13.**

Timeframe	Implementation	Responsibility
Ongoing	Capital	Secondary

Improving bus stop customer amenities is a way that Prince Rupert can make transit use more accessible and enjoyable for its residents, with the goal of increasing ridership and improving the overall user experience. Amenities that make bus stops and transit exchanges more comfortable can also have a significant impact on passenger safety and satisfaction, in addition to attracting new customers. There are 104 bus stops in Prince Rupert and most of these bus stops do not have any amenities. Amenities can include:

- **Shelters** provide weather protection and make waits more pleasant, while benches provide a place to rest.
- **Benches** are important to provide places to wait for the bus. This can be particularly important for seniors and people with physical disabilities.
- **Garbage and recycling receptacles** keep the area clean and allow users to dispose of any trash.
- **Customer information** provides information on fares, delays, navigation, safety, and contact information.
- **Transit System Maps** assist with wayfinding and lets people know what bus goes to what station.
- **Real-time Updates** electronic displays providing real-time updates on the anticipated arrival of the next bus.
- **Lighting** creating an illuminated space so that people feel safe while waiting at night.
- **Accessibility** ensuring spaces surrounding the sidewalks are accessible for all, including those in wheelchairs.

BC Transit's BC Shelter Program supports investments in shelters to improve the customer experience. The City should prioritize shelter improvements, as shown in **Map 13**.



**FIGURE 10 EXAMPLES OF BUS STOP AMENITIES**



**Policy 3.3C: Pursue a capital project to update the downtown transit exchange with amenities that improve the convenience of transit and enhance the space for users and adjacent businesses.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital	Secondary

The City and BC Transit are currently exploring the potential to improve transit connections through downtown by developing new transit interchange infrastructure. To ensure this project can meet its intended goals, the City should ensure that the new transit exchange includes appropriate amenities that seek to improve the convenience of the mode and enhance the space for users and adjacent businesses. This will include close work with BC Transit, and adjacent businesses and property owners.

**Policy 3.3D: Ensure that wayfinding uses clear signage and routing information to assist users in navigating the transit system.**

Timeframe	Implementation	Responsibility
Short-Term	Policy & Programming	Secondary

Wayfinding can make the transit rider experience significantly better, making taking transit more attractive, simple, and ultimately increase ridership. By providing clear and simple information like route and system maps, schedules, expected travel times, real-time arrival times, and ridership procedures, riders can better navigate the transit system. For example, people with cognitive difficulties, language barriers, and tourists may need extra assistance using transit. Wayfinding can also provide information on how to connect to other modes. The City should develop a wayfinding strategy that creates a cohesive and intuitive approach to navigating the transit system in Prince Rupert. The City should also ensure that land entry points have clear signage and routing information directing people to transit.



**Policy 3.3E: Integrate end-of-trip facilities and other amenities that support first and last mile trips.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Secondary

Most riders will walk or cycle to transit. By enhancing the active transportation facilities that connect to transit stops or stations as well as the amenities that facilitate cycling, the City can encourage more people to walk or cycle as a first and last mile solution. Improved end-of-trip facilities such as secure bicycle parking, lockers, showers, charging infrastructure, and micro-mobility accommodations can support transit and cycling integration, making transit more accessible for cyclists.

**Policy 3.3F: Coordinate transit amenity upgrades with BC Transit's technology initiatives.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Secondary

BC Transit is committed to continuously enhancing the user experience. As part of this, BC Transit is moving forward with the installation and development of technology initiatives to improve efficiency, increase security, and put passengers in control of their transit experience, including the following initiatives:

- **Low Carbon Fleet Program:** BC Transit is actively pursuing new and emerging low carbon technologies, supported by the use of renewable fuels. In November 2018, BC Transit approved a Low Carbon Fleet Program to support provincial targets for GHG emissions and to align with the provincial CleanBC plan. Core to this program is a 10-year fleet replacement strategy to replace over 1,200 existing buses and expand the fleet by an additional 350 buses by using the potential of advanced GHG reducing technology.

- **Electronic Fare Strategy:** Smart ticketing provides new ways to pay. BC Transit is working to not only improve rider convenience but also enable mobility partnerships and create new data collection opportunities. Systems will also accommodate a mix of fare products, including cash fares. The system will also be able to operate in areas with low-cell phone coverage/service.
- **Digital On Demand:** Digital On Demand transit uses technology to dynamically dispatch a bus, van or fleet of vehicles dictated by riders. BC Transit is currently completing a feasibility to determine how and where digital on demand transit may be delivered in communities across BC.
- **BC Transit Moving Forward with Technology:** BC Transit is advancing several initiatives to modernize its customer experience. The NextRide program introduces real-time bus information and automated stop announcements onboard each bus. Since 2018, the NextRide program has successfully launched in several larger transit systems across the province. BC Transit plans to expand the program to smaller transit systems in the coming years. BC Transit is also implementing the “Umo” (you-mo) program, which will introduce a new digital payment system to BC Transit buses. This program is set to begin implementation in select transit systems in 2023. The goal is to introduce an electronic fare collection system where customers bring their own ticket (i.e. mobile phone app or credit card) and will require the introduction of onboard fare validators and a backend system for fare validation, payment processing, account management and payment reconciliation. BC Transit is also looking to incorporate closed-circuit television cameras (CCTV) on its buses to ensure passenger and employee safety. The program has already begun to roll out in larger transit systems and may be considered for smaller systems in the future.

### Strategy 3.4: Improve transit accessibility

Through community engagement it was noted that more accessible transit service for seniors was desired. Across the province, the gap between seniors who live independently and do not have drivers' licenses grows significantly as seniors age. A real barrier to using transit can be unfamiliarity with the mode and network. Providing training that can be tailored for unique groups and settings (e.g., seniors, youth, newcomers, etc.) can help participants feel comfortable and build confidence using transit as a means of everyday transportation. In addition, having a service that meets the unique needs of seniors such as HandyDART allows seniors to age in place without harming their mobility.

This strategy contains several actions the City can take to improve transit accessibility in Prince Rupert. Two policy statements have been identified for this strategy:

**Policy 3.4A: Pursue partnerships to develop programs that encourage the use of transit in Prince Rupert by different groups such as seniors, youth, and newcomers.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Primary

Programs like Seniors' Bus Buddy or informational workshops can provide training and hands-on skills for those who are new to transit. Partnerships with local organizations and schools can help educate residents about transit and how to use the system. In addition, community members can take the initiative to start groups that foster a sense of community. The City should partner with organizations (BC Transit, Northern Health, etc.) in the development of programs that encourage the use of transit in Prince Rupert.

**Policy 3.4B: Review HandyDART services to ensure it meets the needs of seniors in the community.**

Timeframe	Implementation	Responsibility
Ongoing	Policy & Programming	Secondary

BC Transit provides handyDART, an accessible, door-to-door shared transit service for people with permanent or temporary disabilities that prevent them from using fixed-route transit without assistance from another person. handyDART is a free program that picks customers up and takes them to their destinations.

**Strategy 3.5: Ensure the taxi supply matches the demand**

Prince Rupert's taxi system is well used. Its success can be attributed to multiple factors such as the number of people arriving in Prince Rupert by boat or other methods and the City's general walkability which limits the need for car ownership for many people. However, having an adequate supply of taxis is also important for lower income residents who might rely on taxis in certain cases where other modes are either not available, unsuitable, or otherwise inadequate.

One policy statement has been identified for this strategy:

**Policy 3.5A: Update the City's Vehicle for Hire Regulation to ensure taxi service meets the needs of users, to create incentives or requirements to increase the supply of accessible taxis, to modernize or support electronic payments, and to identify enforcement and complaint mechanisms.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Primary

Taxis are a private business; however, the City does control the number of licenses available to taxi companies in the City through its Vehicle for Hire Regulation Bylaw (1988). Conversations with the community and existing operators may be important to assess whether the current number of taxis is meeting current demands on the system. The City may also consider updating its Vehicle for Hire Regulation Bylaw to give more flexibility to operators that would allow them to provide more flexible service to meet the needs of potential users.

**Strategy 3.6: Encourage ride-hailing to provide more transportation options**

Advances in information technology have provided travel consumers with the ability to access, plan, reserve, and pay for travel options at the push of a button. Ride hailing was approved in the Province of BC in 2019. Ride-hailing services are operated by Transportation Network Companies (TNC), the largest of which are Uber and Lyft. Currently, neither company operates in the City, yet community members are curious about the benefits it could have for the community. Ride-hailing can serve as a complementary service to taxis and public transit in Prince Rupert. Like traditional taxi services, the presence of effective ride-hailing helps support a private vehicle-free lifestyle by providing Prince Rupert residents with additional travel choices. As such, the presence of effective ride-hailing may allow select residents, such as teenagers over the age of 16, who may not otherwise own a vehicle to primarily walk, cycle, and take public transit; using ride-hailing when necessary.



The following policy statement outlines how the City can bring ride-hailing to Prince Rupert. One policy statement has been identified for this strategy:

**Policy 3.6A: Conduct a study on the impact of ride-hailing in Prince Rupert.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Primary

The City should seek to introduce ride-hailing services in Prince Rupert. The City should study the impacts of ride-hailing and identify areas of improvement by acquiring data from TNCs on a periodic basis, such as length of trips, time of day, customer wait times, trip distributions (origins and destinations), and accessible versus non-accessible vehicle statistics. In addition, the City should work with BC Transit to explore whether ride-hailing could be used to expand basic transit provision to zones outside the current service area as an interim measure. Introduction of ride-hailing services requires updates to the City's Vehicle for Hire Regulation Bylaw (1988).

**Strategy 3.7: Manage and regulate the curbside for both ride-hailing and taxis**

Ride-hailing and taxis can complement the transit and active transportation networks, creating a safe and efficient transportation system. Creating dedicated spaces for taxis and ride-hailing supports management of streets during peak transportation times, as well as creating a clear delineation between services.

This strategy provides two actions the City can take to ensure that the curbside is managed for ride-hailing and taxis, as well as other modes, to create an efficient and pleasant experience for all. Two policy statements have been identified for this strategy:

**Policy 3.7A: Create dedicated on-street parking spaces for taxis and ride-hailing.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Primary

The City should explore the need for support infrastructure for ride-hailing including designated pick-up and drop-off zones at key locations and determine the relationship to established taxi infrastructure such as taxi stands. Designated loading spaces at high traffic destinations, especially during business hours, can relieve blocking from double-parking. Curbside flex zones can also provide accessible loading spaces.

**Policy 3.7B: Consider a curbside and congestion management permit policy.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Primary

A curbside and congestion management permit can help to manage streets and traffic congestion during peak transportation times. For example, the City of Vancouver requires ride-hailing operators to have a permit in order to stop at any curb in the metro core area between 7am-7pm. Operators have to pay a fee for each pick up and drop off (30 cents per pick-up and drop-off), with a fee reduction available for zero emissions vehicles (50%) and accessible vehicles (100%). Other considerations could include time or demand based, ensuring there is a high turnover. The City should explore the need for and parameters for current and future curbside management for ride-hailing and taxis.

**Strategy 3.8: Continue to work with partners to support and improve service for children and youth travelling to and from school**

Providing transit options for students is an important component for ensuring that the city's transportation network is equitable and accessible. The City currently works with BC Transit to offer student fares and afterschool special service.

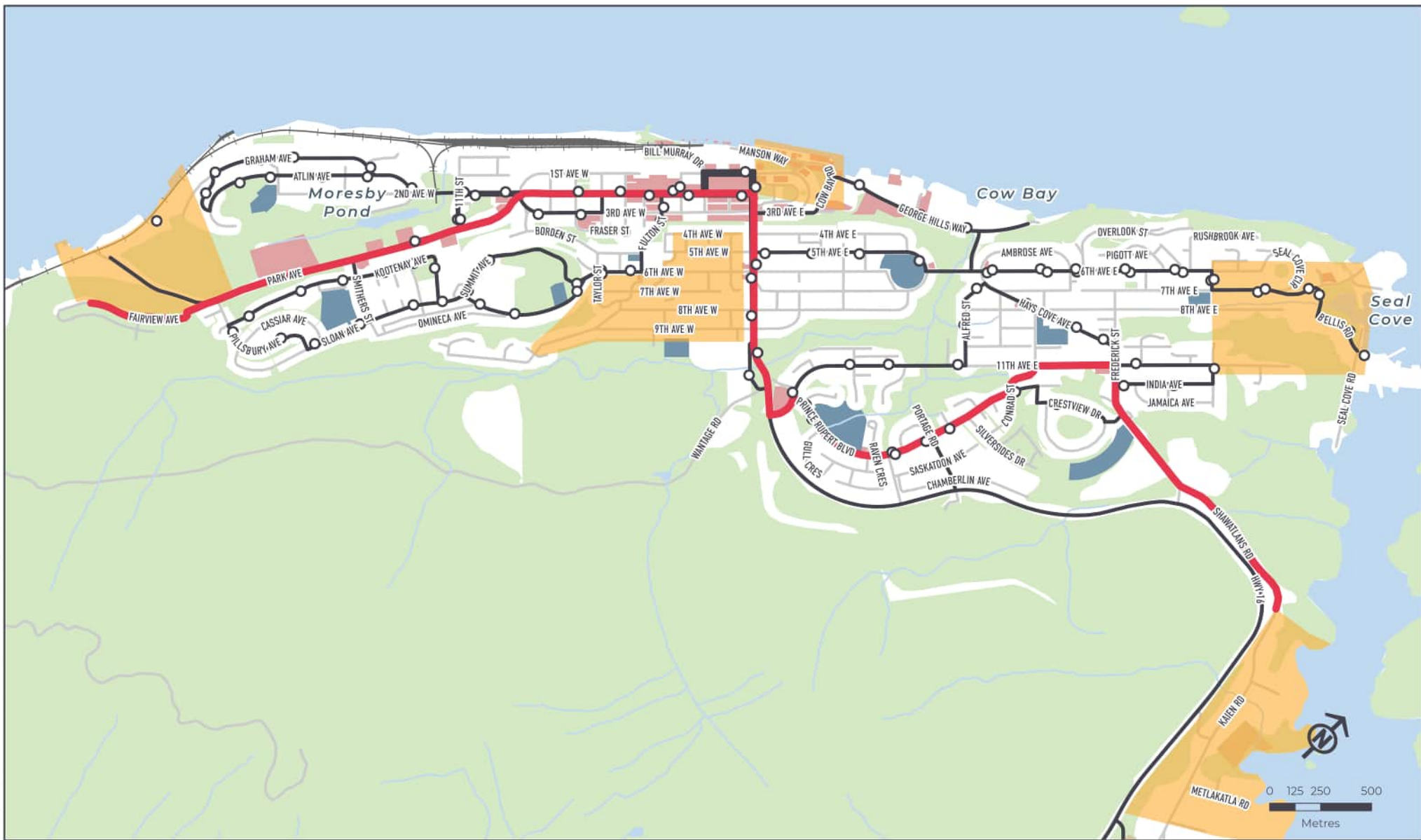
The following policy statement outlines how the City can continue to support student transit services in the city. One policy statement has been identified for this strategy:

**Policy 3.8A: Continue to work with BC Transit to provide student transit services.**

Timeframe	Implementation	Responsibility
Ongoing	Policy & Programming	Secondary

The mode share for youth in Prince Rupert is high. The City should continue to work with BC Transit and School District No. 52 to ensure that its youth and school service programs remain up to date and are working well with the community.

U:\Projects\_VAM\578\002\W01WD-Design\GIS\Projects\Pro\_Projects\_Rev\Bajon\Proposed\_Transit\_Network

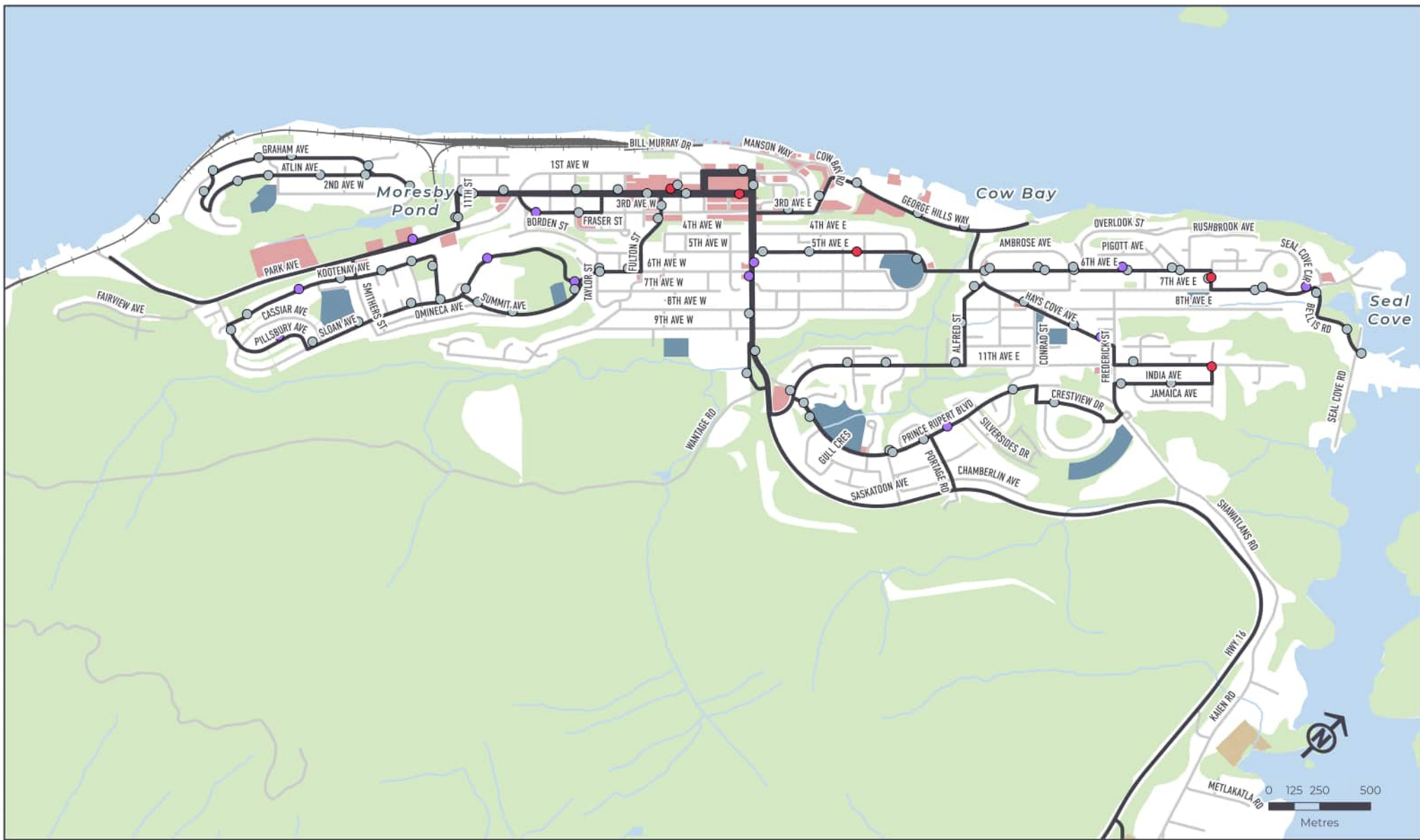


MAP 11 PROPOSED TRANSIT NETWORK

- |  |                                     |
|--|-------------------------------------|
| ○ Bus Stop                               | —+— Railway                         |
| — Bus Route                              | ■ Commercial / Mixed Use            |
| — Conceptual Frequent Transit Corridor   | ■ Park / Open Space / Forested Area |
| ■ Areas for Improved Transit Connections | ■ School                            |
|  | ■ First Nation Reserve              |



U:\Projects\_VAM\578\002\W01\WD-Design\GIS\Projects\Pro\_Projects\_Rev\Baprx\Transit\_Network\_Amenities



MAP 12 TRANSIT NETWORK AMENITIES

Bus Stop Amenities

- Shelter and Bench Present
- Only Shelter Present
- No Amenities Present
- Bus Route

- Railway
- Commercial / Mixed Use
- Park / Open Space / Forested Area
- School
- First Nation Reserve





# DRIVING





# STRATEGIES & POLICY STATEMENTS

The City can make improvements to its street network to make it more efficient in its people and goods moving capacities, as well as make it safer for all road users. By taking a balanced, multi-modal approach to transportation planning, Prince Rupert's streets can function better, see less collisions, and improve the quality of life in Prince Rupert with more sustainable transportation and placemaking opportunities. Seven strategies have been identified to improve public transportation:

- **Strategy 4.1: Update the City's street network classifications to reflect the intended function**
- **Strategy 4.2: Design and deliver people-first streets**
- **Strategy 4.3: Regularly maintain the road network to preserve a state of good repair**
- **Strategy 4.4: Improve safety for all road users**
- **Strategy 4.5: Adopt the updated goods movement network to ensure the safe and efficient movement of goods**
- **Strategy 4.6: Support the electrification, automation, and sharing of transportation modes to ensure that the City can accommodate future trends**
- **Strategy 4.7: Review parking supply and demand that encourages appropriate use to support the needs of residents, visitors, and businesses**

Each of these strategies are described in further detail below along with more detailed policy statements to lay a path forward for the City to make the street network a safe and enjoyable place for all road users.



#### Strategy 4.1: Update the City's street network classifications to reflect the intended function

The street network classification system describes the intended function of the roadway and guides decision making about changes in physical design characteristics, as well as the access characteristics of surrounding land uses. Streets are multi-functional spaces that serve many users and different modes of transportation. Streets should be planned, designed, operated, and maintained to enable accessible, comfortable, convenient, and safe access and mobility for all users, regardless of their selected mode of travel. This means accommodating a variety of functions within the road allowance, including active transportation, public transit, driving, and goods movement.

This strategy includes policies the City can implement to ensure its street network classifications reflect the intended function of the roadway. One policy statement has been identified for this strategy:

##### Policy 4.1A: Review and update the City's street network classification map (Map 14).

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Primary

A road classification system describes the intended function of a street, which guides decision-making about changes in design elements, as well as the access to surrounding land uses. The City's OCP includes a road network classification system that only includes highways, collector street, and local streets. It is suggested that the street network classification also include an arterial street classification. These classifications are summarized below:

- **Highways** are under the MoTI jurisdiction and are intended to serve interregional and provincial travel. The primary role of these corridors is to move people and goods regionally with limited or no access to adjacent properties, parking, or storage.

Highway 16 is currently designated as a Highway through the entire length of the City, including Park Avenue, 2nd Avenue, and McBride Street.

- **Arterial streets** primarily service a mobility function and are intended to move people and goods throughout the City with limited access to adjacent properties.
- **Collector streets** primarily serve a dual function of mobility between neighbourhood streets and the arterial network as well as access to individual properties. On-street parking is usually permitted and transit service is also supported.
- **Local streets** are primarily designed to serve access to private properties and allow neighbourhood residents to travel to the collector road system. Parking is usually permitted and transit service is not normally supported other than handyDART.

An updated street classification system has been developed to reflect network connectivity, current and anticipated travel demands and is shown in **Map 7**. Suggested changes include:

- Adding a new Arterial Street classification;
- Adding a Future Highway designation and connection for the Wantage Road bypass (as described in further detail below);
- Adding future Collector street connections (as described in further detail below)
- Downgrading Park Avenue, 2nd Avenue, and McBride Street (north of 11th Avenue East) from Highway to Arterial classification (recognizing these will still be under MoTI jurisdiction until the Wantage Road bypass is advanced); and
- Downgrading Summit Avenue North, 5th Avenue East, 7th Avenue East, and Manson Way from Collector to Local classification.

The updated multi-modal street network classification should consider all road users including pedestrians, cyclists, buses, private vehicles, and commercial trucks. The function and needs of each road classification needs to be clearly defined to provide a safer and yet functional environment to all road users.

TABLE 1 PROPOSED CROSS SECTION UPDATES

	Primary Functions	Secondary Function	Vehicle Lanes	Crossing Opportunities	Pedestrian Facilities	Cycling Facilities	On-street Parking
Highway	<ul style="list-style-type: none"> <li>Regional mobility for people</li> <li>Regional mobility for goods</li> </ul>	<ul style="list-style-type: none"> <li>Access for people</li> <li>Access for goods</li> </ul>	2-4 3.6-metre lanes	Every 400-800 metres	4.0 metre multi-use pathway on one side separated by landscaped boulevard	4.0 metre multi-use pathway on one side separated by landscaped boulevard and/or paved shoulders	None
Arterial	<ul style="list-style-type: none"> <li>Local and regional mobility for people</li> <li>Local and regional mobility for goods</li> </ul>	<ul style="list-style-type: none"> <li>Access for people*</li> <li>Access for goods</li> <li>Activation</li> <li>Greening</li> </ul>	2-4 3.3-metre lanes	Every 200 – 400 metres	Minimum 1.8 metre sidewalk on both sides separated by landscaped boulevard (wider width desired in City Core)	Protected bicycle lanes	Both sides (commercial areas only)
Collector	<ul style="list-style-type: none"> <li>Local mobility for people</li> <li>Access for people</li> <li>Access for goods</li> </ul>	<ul style="list-style-type: none"> <li>Mobility for goods**</li> <li>Activation</li> <li>Greening</li> <li>Storage</li> </ul>	2 3.3-metre lanes	Every 100-200 metres	Minimum 1.8 metre sidewalk on both sides separated by landscaped boulevard (wider width desired in City Core)	Protected bicycle lanes (per the Cycling and Rolling Network Plan)	Both sides
Local (Residential)	<ul style="list-style-type: none"> <li>Access for people</li> <li>Access for goods</li> <li>Greening</li> </ul>	<ul style="list-style-type: none"> <li>Activation</li> <li>Storage</li> <li>Mobility for People</li> </ul>	2 3.0-metre lanes	Every 100 metres	1.8 metre sidewalk on at least one side separated by landscaped boulevard	Local street bikeway (per the Cycling and Rolling Network Plan)	Both sides
Local (Industrial Land Use)	<ul style="list-style-type: none"> <li>Mobility for goods</li> <li>Mobility for people</li> <li>Access for goods</li> </ul>	<ul style="list-style-type: none"> <li>Access for People</li> </ul>	3.0 metre lanes	Every 200-400 metres	1.8 metre sidewalk on one side separated by landscaped boulevard	Not required	None

\*Access for people via private vehicle on arterials is typically limited to facilitate faster, higher

\*\* Although most truck routes are along Arterials, Collector streets often serve to connect Arterials to Industrial areas or other destinations. Trucks are permitted to travel from a truck route to their destination by the most direct path and Collectors serve a mobility for goods function in these contexts.



## Strategy 4.2: Design and deliver people-first streets

This strategy identifies a number of improvements to highways, arterials, and collectors to improve mobility for all road users. These improvements include capacity improvements for motor vehicles as well as complete streets improvements to improve mobility for all road users.

The improvements described below are shown in **Map 15**. Three policy statements have been identified for this strategy:

### **Policy 4.2A: Work with MoTI and the Prince Rupert Port Authority to initiate a planning study to examine the feasibility of the Wantage Road bypass.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Secondary

Prince Rupert is an important regional gateway in Northwestern British Columbia for all modes of transportation, and the efficient movement of people and goods through the City is critical to the local, regional, provincial, and national economies. Highway 16 is under MoTI jurisdiction and currently runs through the urban area of Prince Rupert along Park Avenue, 2nd Avenue, and McBride Street, including passing directly through the City Core. Highway 16 accommodates significant regionally serving traffic volumes, with between 13,000 and 20,000 vehicles per day on 2nd Avenue and McBride Street, as well as a high proportion of trucks. While the City recognizes the critical importance of ensuring mobility for people and goods, these high traffic and truck volumes are not compatible with the City's vision for a vibrant City Core that puts people first.

As such, the City should work with partners, including MoTI and the Prince Rupert Port Authority, to encourage alternate routes that fulfill the function of regional movement of people and goods. An important first step in this regard was the recent opening

of the Fairview-Ridely Connector Corridor (FRCC), which is a 5km segment of privately-owned road by the Prince Rupert Port Authority. This corridor provides direct road access for container traffic headed to the DP World terminal and reduces the need for goods movement travelling to the Port to travel through the urban area of the City. This new connection reduces the trans-loading haul distance to the marine terminal from 20 kilometres down to five kilometres for the more than 200 trucks that carry containers to the site each day and will help to reduce truck traffic congestion within the urban area. The City should continue to encourage all truck traffic destined for the Port to use this corridor as an alternative to travelling through the City.

In addition, the City's OCP also identifies a proposed highway bypass route using the Wantage Road alignment, which generally follows the northwestern base of Mount Hays. A general alignment already exists for this corridor with an unfinished gravel road that could be updated to provincial highway standards. This would provide a direct connection from the area around 11 Avenue East and Wantage Road to the Port and the ferry terminals, and would provide a more direct, reliable, and efficient route to access the Port and ferry terminals, while also improving safety and vibrancy within the urban area by reducing the need regional movement of people and goods to be travelling through the heart of the City.

The development of the Wantage Road bypass would allow the City to downgrade Park Avenue, 2nd Avenue, and McBride Street from a Highway to an Arterial street and potentially to transfer ownership of those streets from MoTI to the City. This would allow the City to move forward with improvements to these streets that are more aligned with the City's vision for a vibrant, people-first urban area, as described in further detail below.

The City should work with MoTI to initiate a planning study to examine the feasibility and develop a design of the Wantage Road bypass.

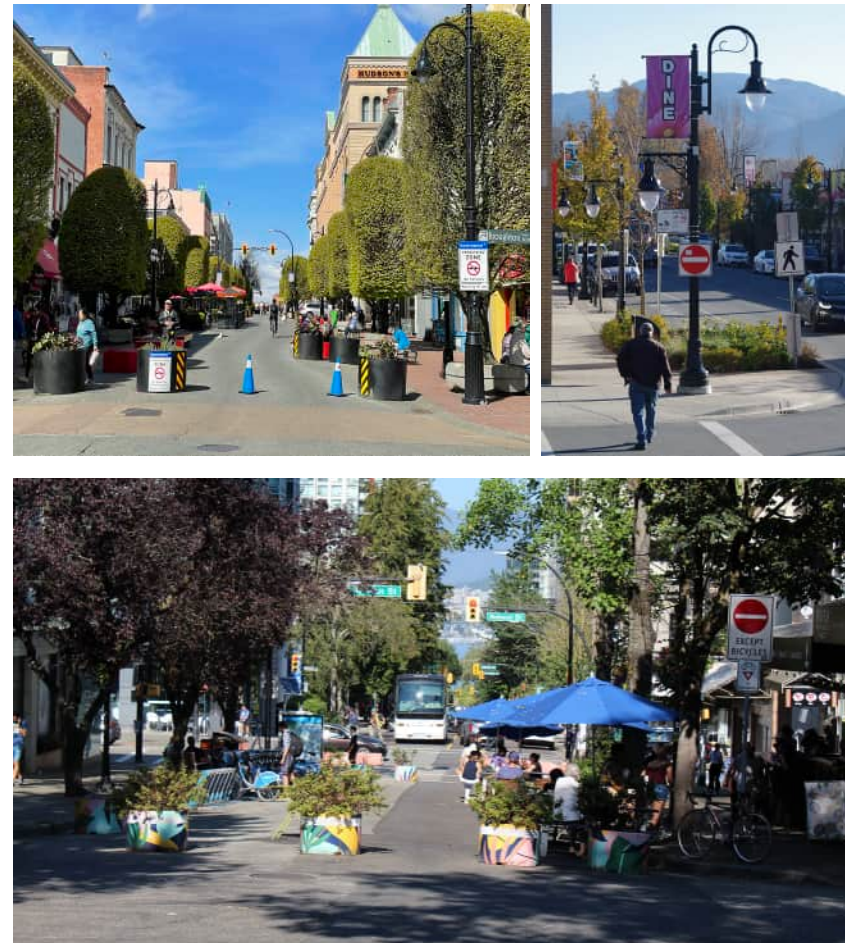
**Policy 4.2B: Improve the streets shown in Map 15 to create vibrant streets focused on putting people first and to increase parking supply by using angled parking where appropriate.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital	Primary

As noted in the previous action, the proposed Wantage Road bypass is expected to divert much of the existing volume of through traffic and heavy truck traffic away from the urban area, including the Core City. This has created an opportunity to revisit the strategy and function of the local street network in the Core City, with a specific focus on 2nd Avenue and 3rd Avenue, with an increased focus on designing high quality, vibrant, people-focused streets with enhanced pedestrian and cycling facilities, streetscaping, traffic calming, and increased on-street parking.

Opportunities for improvements have been identified in a number of previous studies, including Vision 2030 and a recent study looking at options for enhancing traffic and parking through the City Core, including a preferred option. Improvements to streets in the City Core are shown in **Map 15** and include:

- **1st Avenue West:** Provide new connection between 6 Street and 3 Street through the potential future redevelopment of Rupert Square Shopping Mall
- **2nd Avenue West:** Narrow the cross-section of 2nd Avenue by reducing the number of vehicle lanes to one-lane in each direction and a two-way left turn lane and/or centre median which would become a dedicated left turn lane at the end of each block. On-street parking would be maintained on both sides of the street along with wider sidewalks and protected bicycle facilities. This also includes:
  - » **New roundabouts** at 2nd Avenue West and McBride Street and at “Five Corners” at the intersection of 1st Avenue West, 2nd Avenue West, 3rd Avenue West, and Park Avenue;



**FIGURE 11 EXAMPLES OF PEOPLE-FOCUSED STREETS**

- » **New traffic signals** at 1st Street, 2nd Street, and 7th Street;
- » **New and enhanced crosswalks at all intersections;** and
- » **Curb extensions** at all intersections to improve safety and reduce conflicts.

This option includes several opportunities to also beautify and add greenery in the street within the wider sidewalks and centre median. These improvements would significantly improve safety, increase the existing on-street parking supply, and maintain traffic operations by accommodating turning movements.

- **3rd Avenue West:** Reconfigure the cross-section of 3rd Avenue by providing one-lane in each direction and a two-way left turn lane and/or centre median which would become a dedicated left turn lane at the end of each block. On-street parking would be maintained on both sides of the street along with wider sidewalks, new marked crosswalks, and curb extensions at all intersections to increase safety. The City could also consider intersection improvements such as additional traffic signals as warranted.
- **3rd Avenue East:** Extend 3rd Avenue East from Cow Bay Road to George Hills Way to improve connections to the Marina District. This would involve reconfiguring the intersection at George Hills Way to prioritize the 3rd Avenue East as the direct connection to the City Core.
- **5th Avenue East:** Extend 5th Avenue from Hays Cove Circle to George Hills Way.
- **Cow Bay Road (between 3rd Avenue East and George Hills Way):** In conjunction with the 3rd Avenue East, reimagine Cow Bay Road to a pedestrian priority street with significantly enhanced pedestrian treatments, including 'woonerf' style treatments with textured paving on the roadway, wider sidewalks, curb extensions to increase safety, and a new mid-block crosswalk with a new public walkway and stairway to 1st Avenue East.
- **McBride Street:** While no previous studies have been conducted for potential road space reallocation on McBride Street, a revised cross-section could be developed similar to 2nd Avenue by reducing the number of vehicle lanes to one-lane in each direction and a two-way left turn lane and/or centre median to allow for wider sidewalk, protected bicycle lanes, new or enhanced marked crosswalks, and curb extensions at all intersections to increase safety.
- **New local roads to serve the Marina District.**
- **New parks, plazas, and parklets, including:**
  - » **Renewal of Rotary Waterfront Park** with a new airport ferry landing dock;
  - » **Other new parks, plazas and parklets** – list currently being finalized through the Prince Rupert Parks Plan process



**Policy 4.2C: Develop a placemaking conceptual plan for the City Core with amenities such as streetscape beautification, public art, heritage preservation, cultural and heritage aspects, public and tourist facilities, and solutions for crime prevention.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital	Primary

As noted in the Vision 2030 document, placemaking is a critical aspect to creating vibrant streets in the City Core. Any improvements within the City Core should seek to bring out the full placemaking potential, including urban design concepts and associated programming that include the following components:

- **Streetscape beautification** and street cross-sections, including wayfinding, signage, lighting, and weather protection;
- **Public art** including creative ideas such as rain-activated paint and lighting, musical drainage spouts/gutters;
- **Heritage preservation** to retain the key defining character of the City Core;
- **First Nations cultural landscapes and heritage** to protect this valuable legacy and help foster reconciliation;
- **Public and tourist facilities** such as public restrooms, tourist information kiosks, and new public green spaces; and
- **Solutions for crime prevention** and other safety measures.

The City should develop conceptual designs for each of the above options, including placemaking and green streets components noted above. It should be noted that the City should partner with MoTI on the redesign of 2nd Avenue and McBride Street as these are currently under MoTI jurisdiction.



**FIGURE 12 EXAMPLES OF STREETScape BEAUTIFICATION AND PUBLIC ART**

### Strategy 4.3: Regularly maintain the road network to preserve a state of good repair

Asset management is about responsible planning for the replacement, maintenance, acquisition, and disposal of assets rather than replacing assets once they fail, which usually costs more and creates service disruption. The City wants to plan for several generations into the future, ensuring that the transportation network is both safely maintained and does not require additional, reactive repairs. By coordinating with other infrastructure plans, the City can make improvements to other infrastructure at the same time. This strategy sets out steps the City can take to work towards an asset management approach to its infrastructure.

Assessment findings, budget review and staff input shows that Prince Rupert will need to increase investment in their transportation infrastructure to sustain existing service levels and address deteriorating assets. In addition, investments in infrastructure must increase to support its growing population and promote sustainable mode share. Staff have indicated challenges meeting current maintenance requirements needed to maintain existing service levels, let alone increase service levels.

The City should take every opportunity to extend the remaining life of existing infrastructure to avoid service level reduction and further financial strain. In addition, keeping the transportation system in a state of good repair can ensure that all road users stay safe, and enjoy their mode of choice in Prince Rupert.

The City recently conducted an Asset Management Strategy including Infrastructure Replacement Priorities which provides guidance for improvements to the transportation network.

Six policy statements have been identified for this strategy:

### Policy 4.3A: Develop an annual plan and budget to fix potholes and address failing pavement conditions based on condition assessment.

Timeframe	Implementation	Responsibility
Ongoing	Operations & Maintenance	Primary

Current practice in Prince Rupert is to apply a temporary asphalt pavement overlay and not address anything else, such as failing surface features, road base structures, and underground utilities. The cost of inadequately maintaining the road system is a more expensive option than reconstructing roads.

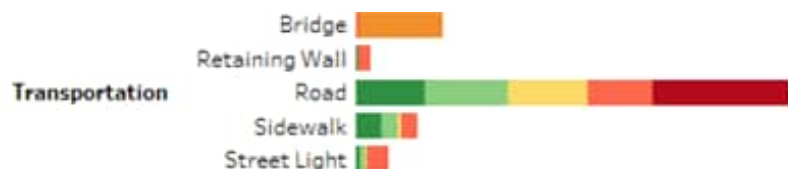
### Policy 4.3B: In conjunction with the City's Asset Management Plan, develop a strategy to address transportation infrastructure that has a high risk of failure.

Timeframe	Implementation	Responsibility
Short-Term	Capital	Primary

As part of the City's recent Asset Management Strategy, water, sanitary, storm and transportation assets were inventoried. The City owns a range of transportation assets, including 86.6 km of roads, 51.6 km of sidewalks, 1,374 streetlights, 6 bridges, and 14.9 km of retaining walls. The inventory found the following for all assets (not just transportation assets)

- \$185M worth of assets are past their expected service life (the "backlog")
  - » \$130 M of these assets are considered high to very high likelihood of failure
  - » \$53 M of these assets are considered high risk of failure
- \$181 M worth of all assets are considered high to very high likelihood of failure
- \$98 M worth of ALL assets are estimated to be at high risk of failure

The Asset Management Strategy reviewed the condition of assets based on physical inspection data, break history, and age vs expected life and found many transportation assets have a high likelihood of failure, particularly for the road network, as shown below.



This transportation infrastructure has a total replacement cost of \$177.4 million, including \$43.7 million of transportation assets that are classified as high risk, or approximately 25% of all transportation assets.

**Policy 4.3C: Conduct a City-wide pavement condition assessment and develop a multi-year pavement rehabilitation plan.**

Timeframe	Implementation	Responsibility
Medium-Term	Operations & Maintenance	Primary

The City should conduct a pavement condition assessment that examined current roadway pavement conditions throughout the City and provides a multi-year rehabilitation program. This study could guide the City in developing rehabilitation programs to ensure that the roads are paved and remain in good condition, supporting the transportation choices of Prince Rupert residents, visitors, and businesses. This assessment could also include capturing an inventory of all sidewalks, curb and gutter, and signage in the City which is an important first step for asset management to have baseline data for these assets.

The City should continue to assess its pavement condition at regular intervals and plan to address problem areas across departments where possible. The City should also assess other transportation-related infrastructure such as bridges, streetlights, and traffic signals to ensure that Prince Rupert remains in a state of good repair, and the City has a clear understanding of what investments are needed and when.

**Policy 4.3D: Develop a strategy to renew or replace the existing trestle bridges.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital	Primary

The City's road network includes three wooden trestles, each of which have exceeded their life expectancy by nearly 20 years. Until the trestles are replaced, at an estimated cost of \$25 million, options for replacement or rerouting should be explored. Until an option is selected and implemented, the City should regularly assess the trestles for structural capacity and load limits. The City should also work with partners and other levels of government to develop a financial strategy over the long-term to renew or replace the existing trestle bridges.

**Policy 4.3E: Coordinate transportation improvements based on the priorities from the Asset Management Strategy.**

Timeframe	Implementation	Responsibility
Ongoing	Capital	Primary

As part of the implementation strategy for the Transportation Plan, the City should coordinate and prioritize transportation improvements to projects that have a high risk and/or high priority for other infrastructure upgrades. This will ensure a coordinated approach to improving transportation infrastructure by ensuring transportation projects are undertaken strategically with other infrastructure upgrades where possible.



**Policy 4.3F: Develop an Asset Management Program to track asset condition, planned work, and proposed capital works.**

Timeframe	Implementation	Responsibility
Medium-Term	Operations & Maintenance  Policy & Programming	Primary

The City should take a holistic view to managing its infrastructure assets in a coordinated way across departments. The City should establish an Asset Management Program that centrally manages the City's infrastructure asset information and considers and prioritizes all infrastructure rehabilitation and improvement needs that are informed through ongoing inspections and condition monitoring. This should include all transportation assets, including streets, sidewalks, transit stops and amenities, bicycle facilities, traffic signals, and signs, among other things. This Asset Management Program should inform and support ongoing and prioritized capital planning whether the project is deferred or advanced and support collaboration and sharing of projects.

Part of creating the City's Asset Management Program is to enable information to be collected, shared, and used to inform and prioritize maintenance, rehabilitation, and capital planning. Staff highlighted the desire to see more collaboration between Operations, Engineering, and Finance so that each department can provide key contribution to current needs, resources, cost tracking, budget impact, prioritize spending, and funding strategies. Informing the City's Asset Management Program is best when it is a team effort with identified roles and responsibilities.

In discussions with City staff, it was identified that there is not currently an internal system that enables the effective tracking of asset condition, planned work and proposed capital works. There would also be a benefit of increasing deliberate collaboration between Engineering, Operations, and Finance as each department holds valuable information and insight for

effective planning. Using systems that enable collaboration and project planning helps to reduce the burden of each department summarizing content in disparate systems to support specific meetings. Current examples of collaborative systems include ESRI's new capital project solutions templates and Decision Optimization Technology as well as others worth exploring. Although the asset management considerations within the scope of the plan is limited, City staff consulted as part of the planning process were consistent in highlighting the need for additional staff resources and budget to sustain the existing transportation assets. Staff are committed to sustaining Prince Rupert's assets and feel that proactive and life-extending maintenance works may be best done internally to ensure the work is done well and that the best value is realized.

**Strategy 4.4: Improve safety for all road users**

Speed is a key factor in motor vehicle accidents, and higher speeds increase the severity of all crashes and the number killed and seriously injured. By managing speeds, the City can decrease the likelihood of crashes and the chances of injuring the driver or other road users. Speeds can be managed in a variety of ways such as traffic calming, monitoring speeds, signage, and enforcement.

This section outlines policies the City can implement to reduce vehicle speeds and improve safety for all road users. Three policy statements have been identified for this strategy:

**Policy 4.4A: Develop an annual traffic data collection program to systematically monitor traffic volumes and speeds to inform a systematic, objective approach to addressing transportation issues.**

Timeframe	Implementation	Responsibility
Long-Term	Policy & Programming	Primary

The City regularly receives complaints from residents about a wide range of transportation issues. However, the City does not have a formal process for collecting these complaints or for analyzing the warrant for improvements. The City should develop an annual traffic data collection program to systematically monitor traffic volumes and speeds, including local streets. The City could develop a rotating list of streets to be included over a 3–5-year period to ensure it has objective data that it can use to respond to requests and complaints. The City should also develop a formal process to receive requests for traffic calming and should develop an objective approach to addressing transportation issues based on this data.

**Policy 4.4B: Develop a speed reduction and traffic calming strategy throughout the City.**

Timeframe	Implementation	Responsibility
Short-Term	Policy & Programming	Primary

Travel speeds are the main factor in how serious a crash will be and whether a crash occurs at all. The risk of death and injury increases significantly as travel speeds increase. Research has shown that a pedestrian struck at 30 km/h has a 90% chance of surviving, while at 50 km/h they have only a 15% chance of survival. The City should develop an approach to reducing posted speed limits, looking to other municipalities (City of Surrey, District of Saanich, Village of Harrison Hot Springs) that are reducing posted speeds, including considering reducing the posted speed limit on all local streets to 30 km/h.



**Policy 4.4C: Develop design guidelines for intersection safety, access, and efficiency for all road users for any future intersection upgrades.**

Timeframe	Implementation	Responsibility
Medium-Term	Capital	Primary

There are a number of locations throughout Prince Rupert that have been identified to have safety issues and/or operational issues, including those that are either on the City's road network or MoTI's highways. At most locations, improvements involve intersection modifications such as adding turn lanes, installing new traffic signals, installing pedestrian and bicycle signals, crosswalk upgrades, and/or installing new crosswalks throughout the City.

Small intersection improvements can mitigate existing safety issues and extend the life of infrastructure, helping to delay larger more expensive improvements.

Road safety is supported by ICBC through their Road Safety Improvement Program and could be a source of funding for spot safety improvements in Prince Rupert.

#### Strategy 4.5: Adopt the updated goods movement network to ensure the safe and efficient movement of goods

Goods movement is a crucial component of the regional and municipal transportation network. It must be accommodated to ensure the reliable flow of goods to, from and within the City of Prince Rupert. Goods movement in Prince Rupert is especially important given the proximity of the Port of Prince Rupert. While the City's truck route meets most of the city's needs, there are corridors that are designated as truck routes that could be adjusted to better support safe and efficient movement of goods, as well as the neighbourhood context.

This strategy lays out policies the City can implement to streamline goods movement in Prince Rupert. One policy statement has been identified for this strategy:

**Policy 4.5A: Adopt the updated goods movement network in Map 16 and make sure that it is communicated and understood by industrial operators.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Primary

Goods movement is an important component for a thriving economy as it allows businesses and residents to receive goods and employs all of the folks in between the producer and consumer. As the second largest port in Canada and a gateway for all modes of transportation, goods movement is critical to the local, regional, provincial, and national economies. Prince Rupert also has a growing population, and to ensure the City's business community continues to thrive, the City should update its truck route map to promote a more reliable, efficient, and stronger local goods movement network that balances the competing priorities on some corridors. The recommended updated goods movement network map is shown in **Map 16** and identifies the Fairview-Ridley Connector Corridor and future Wantage Road bypass as an additional truck routes.

#### Strategy 4.6: Support the electrification, automation, and sharing of transportation modes to ensure that the City can accommodate future trends

Electric vehicles (EVs) are growing in popularity in BC, and the number of electric vehicles is set to increase significantly: the provincial government has introduced legislation requiring all motor vehicles sold by 2040 to be zero emissions. Electric vehicles require local and regional networks of charging infrastructure. There are currently only two electric vehicle charging stations in Prince Rupert at 1st Avenue and Market Place. In addition, carsharing, car rental, and automation are other trends that are likely here to stay as they increase mobility without having to purchase a private vehicle. There are currently no car share options in the City.

This strategy lays out the steps the City can take to prepare itself for future transportation trends. Three policy statements have been identified for this strategy:

**Policy 4.6A: Actively develop programs to attract new ways of travelling including carshare, car rental, and automation.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Secondary

Car share companies and cooperatives provide a valuable service to residents and may allow some households to own fewer vehicles. These companies typically locate in areas where their vehicles will be well used, including in denser, mixed-use areas. Autonomous vehicle technology is rapidly evolving and Level 4 automation (whereby the vehicle can drive itself without supervision in well-mapped urban environments) is likely to be available by 2030 and widespread by 2050. The City can proactively welcome and regulate carshare and autonomous vehicles, researching their impacts, and ensuring an equity approach is taken. This can include consistent bylaws and municipal policies around use of vehicles, pricing, curbside regulations, technology, and other levers to work towards a positive impact.



**Policy 4.6B: Continue to install charging infrastructure for electric vehicles of all sizes and shapes at City Hall and other civic locations in the community, including compatibility with e-bikes.**

Timeframe	Implementation	Responsibility
Short-Term	Capital	Secondary

Prince Rupert is aiming to reduce its greenhouse gas emissions (meet or exceed an 80% reduction of 2007 levels by 2050) and mitigate the impact of climate change. The City's OCP identifies transportation as an action area to facilitate the use of more sustainable modes. Part of this is leveraging current and future trends such as electrification. Electric vehicles will be required to be sold by 2040, meaning that the prevalence will grow exponentially until then. The City can continue to install charging infrastructure at City Hall and other civic locations in the community, ensuring that devices such as e-bikes, cargo bikes, scooters, electric vehicles, and emerging modes are able to use these outlets.

**Policy 4.6C: Update and adopt changes to the Zoning Bylaw and Development Permit Requirements to require new electric charging infrastructure for new developments and to provide a Development Permit exemption for electric vehicle charging infrastructure.**

Timeframe	Implementation	Responsibility
Short-Term	Policy & Programming	Primary

The City can ensure that new developments build more electric charging infrastructure as part of construction. The City should review its requirements for new developments, including the following information:

- Require outlets in secure bicycle parking areas

- Ensure building can accommodate a high level of future charging, including parking spaces that are ready for the installation of a final connection point.
- A minimum requirement for Level 2 chargers as part of parking requirements for commercial and institutional land uses.

**Strategy 4.7: Review parking supply and demand that encourages appropriate use to support the needs of residents, visitors, and businesses**

As in many communities across North America, parking management is a long-standing issue in Prince Rupert. Parking allows residents, visitors, and businesses to meet their daily needs. However, without regulating or pricing parking, parking can become a serious challenge for the City.

Parking management requires changing the way we think about parking programs and solutions. Parking problems go beyond motorists not being able to find a convenient and free parking space at every time and place. A parking problem can refer to inadequate or overabundance of supply, inefficient management, inadequate user information, and other problems associated with parking facilities and activities. Parking management is necessary to manage the diversity of problems that may arise and weigh solutions and their impacts. Parking management is also key to meeting planning principles outlined in the Official Community Plan that support healthy, sustainable, and diverse land use patterns, which includes reducing sprawl and automobile-dependence.

This strategy outlines policies the City can implement to understand the current and future supply and demand of parking, as well as ways to make it more accessible for everyone. Ten policy statements have been identified for this strategy:

**Policy 4.7A: Update the Zoning Bylaw to remove minimum parking requirements within the Parking Specified Areas (PSA) in the City Core and consider removing minimum parking requirements elsewhere in the city.**

Timeframe	Implementation	Responsibility
Short-Term	Policy & Programming	Primary

Minimum parking requirements for off-street parking are specified within the City's Zoning Bylaw. The City's Interim Parking Management Strategy recommends removing these requirements within the Parking Specified Area (PSA) in the City Core, which would mean that developers are no longer required to provide the specified number of parking stalls or pay in-lieu fees in the City Core. This does not prevent developers providing additional off-street parking if desired and does not affect existing businesses. This change would be introduced to ensure that there is no loss of existing parking. Removing minimum parking requirements is recommended as a best practice to create efficient use of existing parking, remove barriers to development, and support densification. The City should continue to move forward with removing minimum parking requirements from designated Parking Specific Areas in the City Core, and should expand on this to further remove all minimum parking requirements in the City over the longer-term.

**Policy 4.7B: Introduce pay parking in the City Core.**

Timeframe	Implementation	Responsibility
Long-Term	Policy & Programming	Primary

Currently, the City does not charge for on-street parking anywhere in the City, including the City Core. This leads to high occupancy rates and low turnover, particularly in the City Core, during times of peak parking demand. Implementing pay parking in the City Core would serve to encourage higher turnover, which is shown to support local businesses by allowing direct, short-term access for shoppers rather than long-term stays in valuable parking stalls. Like other paid on-street parking, best practice suggests requiring payment during business hours throughout the week. Strategically designating pay parking areas for on-street parking would support this outcome, while also generating revenue for the City to support parking enforcement, management, and other initiatives.

Before implementing any changes to parking, the City should consider studying parking conditions in the City Core. Understanding current conditions will help inform thresholds or conditions of when and where pay parking will be required in the City Core, which could include establishing block-by-block occupancy and turnover rates, and the ratio of parking stalls by floor area or number of units.

**Policy 4.7C: Develop a Residential Parking Permit Program in areas of high parking demand.**

Timeframe	Implementation	Responsibility
Long-Term	Policy & Programming	Primary

Some residential areas of the city may experience parking pressures due to adjacent land uses, including residential areas around the City Core, hospital, and schools. Residential parking permit programs can help to reduce parking demand on residential streets. The City should develop a residential parking permit program in residential areas with high parking demand.

**Policy 4.7D: Identify locations for accessible parking.**

Timeframe	Implementation	Responsibility
Short-Term	Policy & Programming	Primary

The provision of public and private accessible parking that is suitable for a variety of users is an essential function of municipal parking regulations. Accessible stall design in Prince Rupert is required to be consistent with BC Building Code; however, since 2018, the provincial building code no longer includes requirements for accessible parking design or supply. This change means that the City will eventually have to develop standards for the location and design of accessible parking in addition to the supply rates outlined in the Zoning Bylaw. As such, the City should consider amending relevant municipal bylaws to ensure that accessible parking standards meet needs in Prince Rupert. As part of this effort, a review of best practice from leaders in accessible parking should be conducted, including the Canadian Standards Associations (CSA), Accessibility for Ontarians with Disabilities Act (AODA), and Americans with Disabilities Act (ADA).

**Policy 4.7E: Encourage Shared Parking Agreements between private businesses, or private businesses and the City to optimize existing parking.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Primary

Shared parking agreements can be developed by implementing opportunities for existing businesses to rent out their required stalls for commercial or public use through arrangements administered by the City.

Shared private-public parking is the conversion of private parking facilities to serve the public through its integration into the public management system. Public parking (parking facilities that may be used by the public) inherently serves multiple destinations. The private owner and the City agree for the municipal enforcement system to enforce the rules. Any revenue can go to the city or be shared. The municipality can benefit from incorporating share agreements into their public enforcement system through ticketing.

Parking Stall Leases would allow shared parking among destinations or users through arrangements between private businesses. This would involve establishing a commercial stall lease license that parking owners can apply for with the City and an amendment to the Zoning Bylaw. Allowing sharing agreements to rent out excess parking spaces or allow multiples destinations to be served by a single parking lot can incentivize development because it allows developers to cut down on costs, as well as optimize their existing spaces and gain back monetary benefits from their surplus parking.

Shared parking encourages a “park once” mentality and increases walking, rather than driving, between destinations. Although, if not coordinated or estimated properly, parking conflict or supply shortages may occur. Additionally, if parking agreements or shared parking is managed publicly, increased enforcement and administration resources may be required.



**Policy 4.7F: Seek opportunities to develop public parking lots in the City Core as needed to serve longer term users through land acquisition or conversion of municipally-owned lots.**

Timeframe	Implementation	Responsibility
Long-Term	Capital	Primary

This action supports contingency-based planning. The need for increased long-term parking that is better placed to strategically support high demand areas has been identified. Seeking opportunities for public off-street parking lots is one option to address this need. Off-street parking should be shared, prioritize longer-term parking (e.g., employee parking), and be efficient so as not to oversupply and compete with other land uses. The introduction of more public off-street parking would enable easier sharing agreements and allow the City to benefit from permitting and ticketing. Finally, parking supply should be geared towards serving an area, not a specific destination, to promote densified, walkable areas.

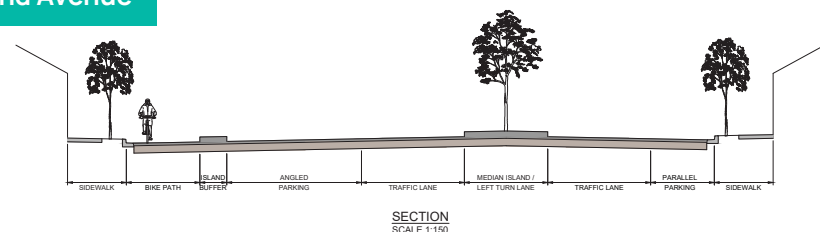
Specifically, the development of an interim parking lot on Lot 9 is recommended to be developed in the next year. This lot would serve the lower Cow Bay area and meet demand for longer term parking for businesses such as Breakers, Cowpuccinos or Smiles.

**Policy 4.7G: Reconfigure 2nd Avenue and 3rd Avenue West to increase on-street parking. This serves both parking management, streetscape, placemaking, and traffic calming purposes.**

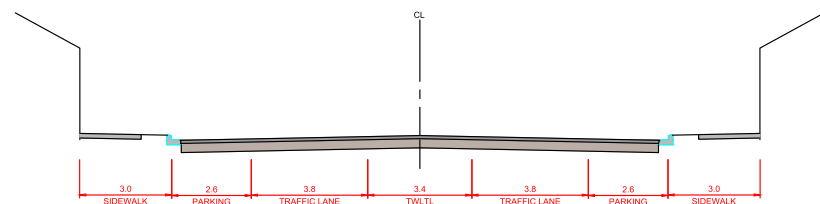
Timeframe	Implementation	Responsibility
Long-Term	Policy & Programming	Primary

On-street parking is convenient, visible, and can be easily made cost efficient. It is a form of shared parking, with each space serving many destinations, and so tends to have a high load factor. It does not require access lanes, and so uses less land per parking space than off-street parking. It is also relatively inexpensive, and can provide a buffer between pedestrians, cyclists, and vehicle traffic. Converting parallel to angled parking increases the number of stalls and makes parking faster and easier. Under some conditions, angled parking increases the rate of collisions, although it tends to reduce their severity. New on-street parking would be regulated to prioritize customer and other high turn-over users and may be designed to user-pay parking in the future. As discussed earlier, the redesign of 2nd Avenue and 3rd Avenue West has the potential to increase the on-street parking supply in the City Core.

#### 2nd Avenue



#### 3rd Avenue West



**FIGURE 13 CROSS-SECTION DRAWINGS OF POTENTIAL PARKING RECONFIGURATION ON 2ND AVENUE AND 3RD AVENUE WEST**

**Policy 4.7H: Maximize parking on north-south cross streets to serve longer term users and free up street parking.**

Timeframe	Implementation	Responsibility
Medium-Term	Operations & Maintenance	Primary

Businesses have raised the issue of customer parking being taken up by employees, as well as a scarcity of spaces available for employees downtown that allows longer term parking. While this problem can be characterized as inadequate supply, it is also insufficient prioritization of parking. Parking prioritization controls who, when, and how long vehicles may park at a particular location to prioritize facility use. Prioritization may be promoted through regulations or pricing systems.

Due to the increased capacity to accommodate parking due to the relative widths, as well as their relative locations in the Downtown Core, 2nd and 7th Streets between 3rd and 2nd Ave West are recommended as potential areas to serve longer term users. Within the next 1-3 years, this action would involve changing the time restrictions to 4 hours along these streets to allow employees to remain parked in the same spot, with opportunity to move their vehicle at lunchtime, without penalty. In the longer term, this change may be followed by shortening of time restrictions along 3rd and 2nd Avenue West to promote higher turnover and further direct employees and longer-term users to not take up customer parking in front of businesses.

These changes would be implemented with an education campaign targeted at businesses and employees downtown and focused enforcement to promote a change in usage.

**Policy 4.7I: Increase enforcement actions.**

Timeframe	Implementation	Responsibility
Long-Term	Policy & Programming	Primary

Parking management benefits from increased enforcement. In the next 1-3 years staff would look into ways that enforcement of parking regulations and management can be more efficient and increase compliance.

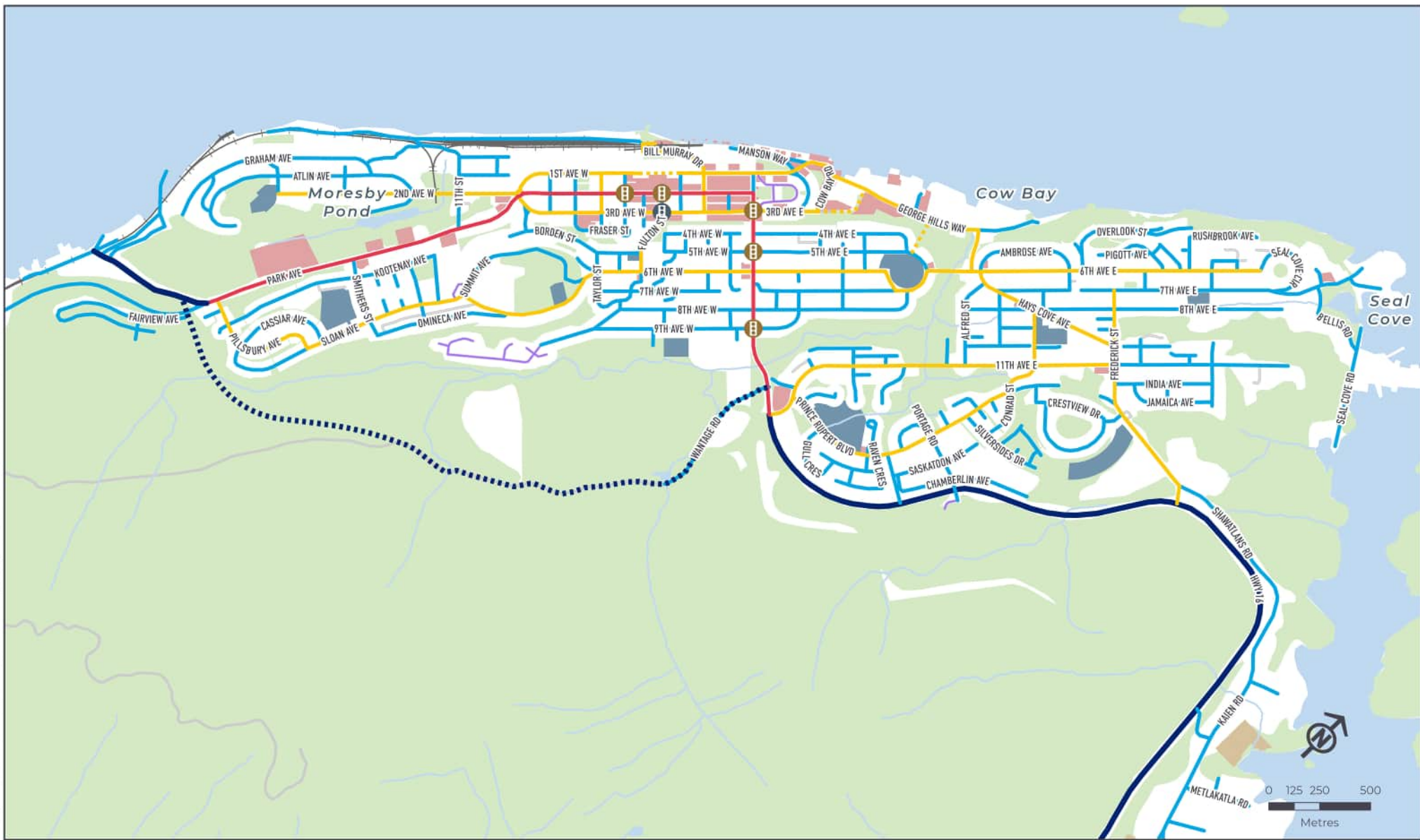
**Policy 4.7J: Implement an Interim Parking Wayfinding Strategy.**

Timeframe	Implementation	Responsibility
Medium-Term	Policy & Programming	Primary

A parking wayfinding system is an integrated electronic or signage system that indicates where parking lots are located and identifies regulations and pricing for each location. These systems can support locals and visitors find parking, reduce frustration at lack of parking, and shift thinking about the parking shortage.

While a wayfinding system would best be implemented as one piece of an integrated payment, enforcement, and wayfinding system, an interim plan may simply consist of identifying locations and regulations of existing parking downtown. For example, this can include the development of a brochure or putting existing parking information on the Go-Map or Prince Rupert website. An interim strategy can be updated or implemented into an online app once a comprehensive parking strategy is developed to allow easier ad-hoc adjustments.

U:\Projects\_VAM\578\002\W01\WD-Design\GIS\Projects\Pro\_Projects\_Rev\Baprx\Proposed\_Streets\_Classification



MAP 14 PROPOSED STREET NETWORK CLASSIFICATION

- |  |  |   |
|--|--|---|
|  Municipal Traffic Signal |  Future Collector |  Railway                           |
|  MOTI Traffic Signal      |  Local            |  Commercial / Mixed Use            |
|  Highway                  |  Strata           |  Park / Open Space / Forested Area |
|  Future Highway           |  Lane             |  School                            |
|  Arterial                 |  Other Streets    |  First Nation Reserve              |
|  Collector                |  |   |









UVProjects\_VAM\3578\002\010\ND-Design\GIS\Pro-objects\Pro\_Projects\_Dev\Bapn\Street\_Network\_Improvements\_Priority



MAP 17 PRIORITY STREET NETWORK IMPROVEMENT

- |  |   |  |                      |
|--|---|--|----------------------|
|  | New Traffic Signal - Short Term Priority  |  | Short Term Priority  |
|  | New Traffic Signal - Medium Term Priority |  | Medium Term Priority |
|  | New Roundabout - Medium Term Priority     |  | Long Term Priority   |

- Condition Assessment Priority Corridor**
- |  |                      |
|--|----------------------|
|  | Short Term Priority  |
|  | Medium Term Priority |
|  | Long Term Priority   |
|  | Other Streets        |

- |  |                                   |
|--|-----------------------------------|
|  | Railway                           |
|  | Commercial / Mixed Use            |
|  | Park / Open Space / Forested Area |
|  | School                            |
|  | First Nation Reserve              |



