

TYLin



City of Temiskaming Shores
Downtown Cores
Mobility Study

Presentation to Council
March 19, 2024

TYLin Project #10777





Agenda

- ❑ Study Introduction & Purpose
- ❑ Project Timeline
- ❑ Overview of Complete Streets and Vision Zero Principles
- ❑ Policy Review and Design Guidelines
- ❑ Existing Transportation Network Gaps and Opportunities
- ❑ Baseline Traffic Analysis
- ❑ Phase 1: Minor / Partial Improvements
- ❑ Phase 2: Major / Full Improvements
- ❑ Summary of Consultation
- ❑ Phasing
- ❑ Cost Estimates
- ❑ Funding
- ❑ Next Steps

Study Introduction & Purpose

This Mobility Study focuses on the two downtown cores of the City of Temiskaming Shores.

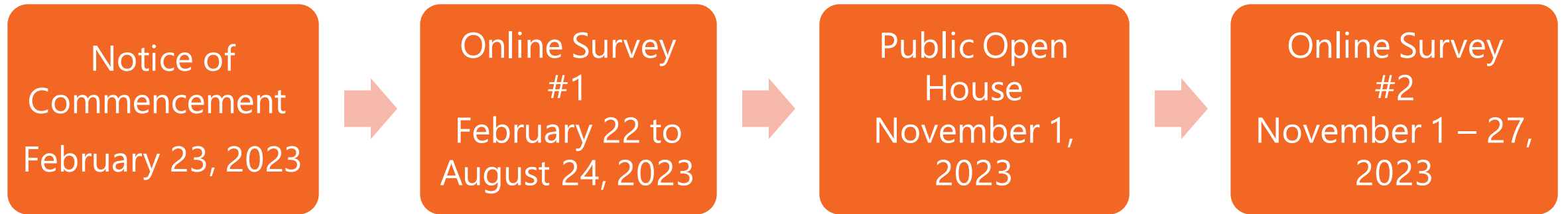
It will help give direction to create and improve opportunities to connect people to businesses and community spaces in the City by balancing the needs of all modes of transportation.

The goals of the Study include:

- ❑ Providing the best transportation service for all users;
- ❑ Accommodating land use and urban design;
- ❑ Incorporating Active Travel; and
- ❑ Providing implementation feasibility, estimated cost of construction, and phasing strategy.

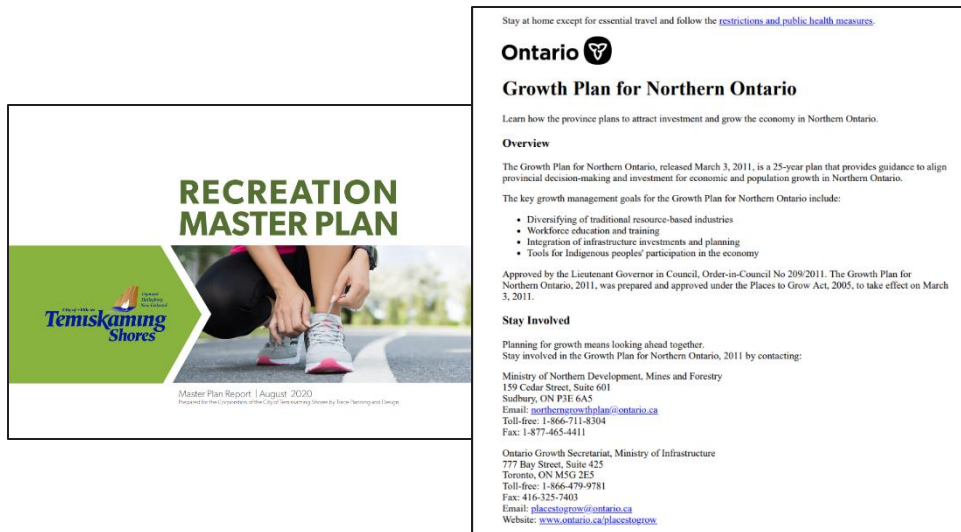
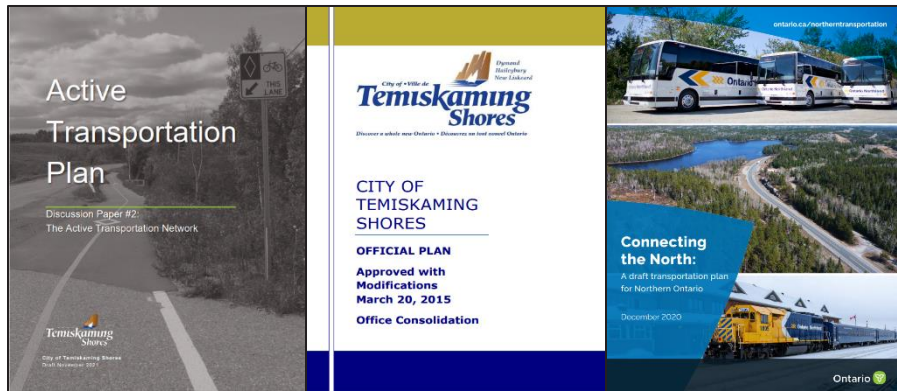


Project Timeline & Milestones



Policy Review

The following local, regional and provincial policies and design guidelines have been reviewed with focus on transportation to help inform City's plans and aspirations for the community.



Active Transportation Plan (2021)

The Recreation Master Plan (2020)

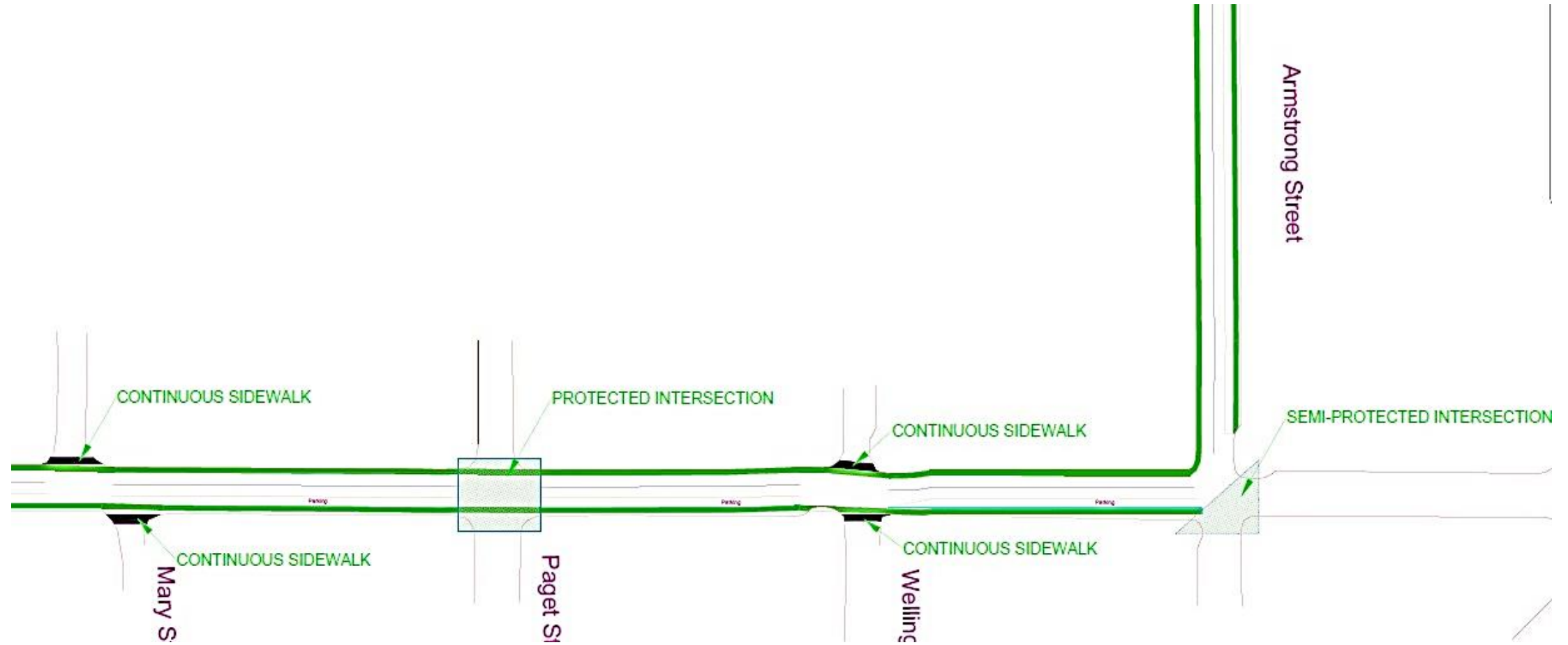
Connecting the North (2020)

Official Plan (2015)

Growth Plan for Northern Ontario (2011)

A Complete Streets Approach

Study Methodology



Complete Streets | Definition & Goals

Definition:

A Complete Streets approach is a transportation and urban planning philosophy that seeks to design streets and transportation networks to be safe, accessible, and accommodating for all users, regardless of their mode of travel, age, ability, or socioeconomic status.

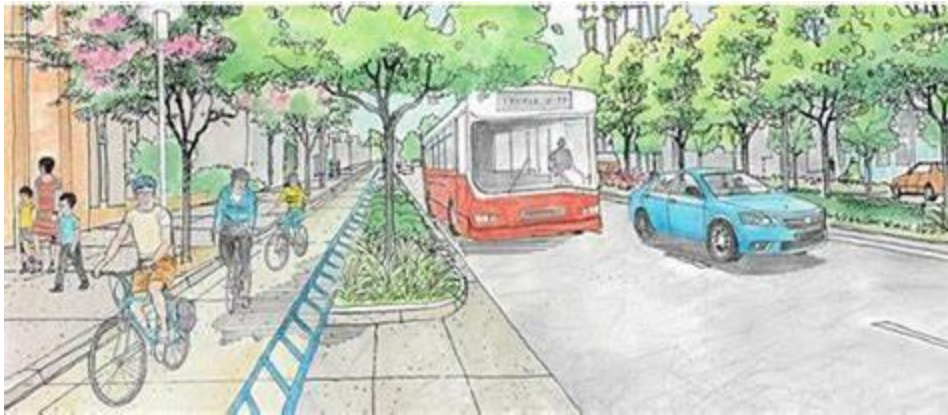
Goal:

To create safe and inclusive streets for all. By using a Complete Streets approach, we can create spaces that allow all users to thrive.



Source: California Bike Coalition

Complete Streets | Components



Safety / Vision Zero

Multi-modal Design

Spatial Division of Streets

Universal Design

Design Elements

Community Engagement

Complete Streets | Design Elements



Continuous sidewalks



Bicycle lanes



Protected intersections



Traffic Calming



Street Furniture



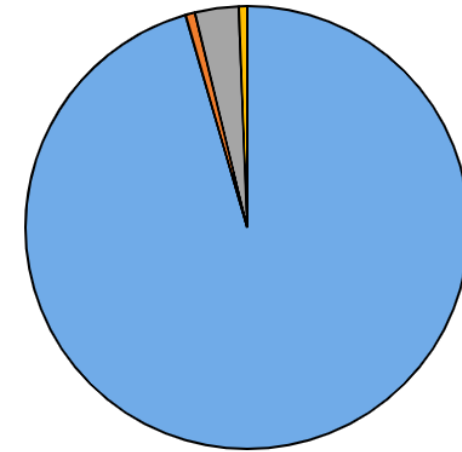
Trees and Vegetation

Complete Streets | Vision Zero

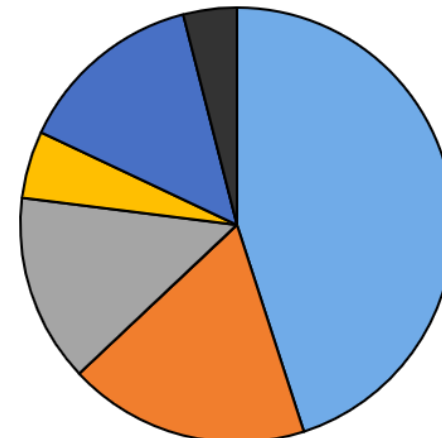
Vision Zero is a complementary approach to the Complete Streets Principle. It is a road safety initiative with the primary objective of eliminating traffic-related fatalities and severe injuries altogether.

Some of the key principles of Vision Zero include:

- ❑ **Shared Goals:** make streets safer for all users and reduce the number of traffic-related injuries and fatalities.
- ❑ **Design Integration:** components such as traffic calming measures, well-defined crosswalks, and protected bike lanes, can contribute to the Vision Zero goal of safer road design.
- ❑ **Holistic Approach:** to transportation design inherently aligns with Vision Zero's principle of considering all factors that contribute to road safety.



Comparison of fatalities by mode of transportation, 2020
(source: Transport Canada)



Motor vehicle serious injuries by road user class, 2020
(source: Transport Canada)



▶ Network Review

Existing Gaps & Opportunities

Conditions evaluated include:

Vehicular Network

Traffic

Road Safety

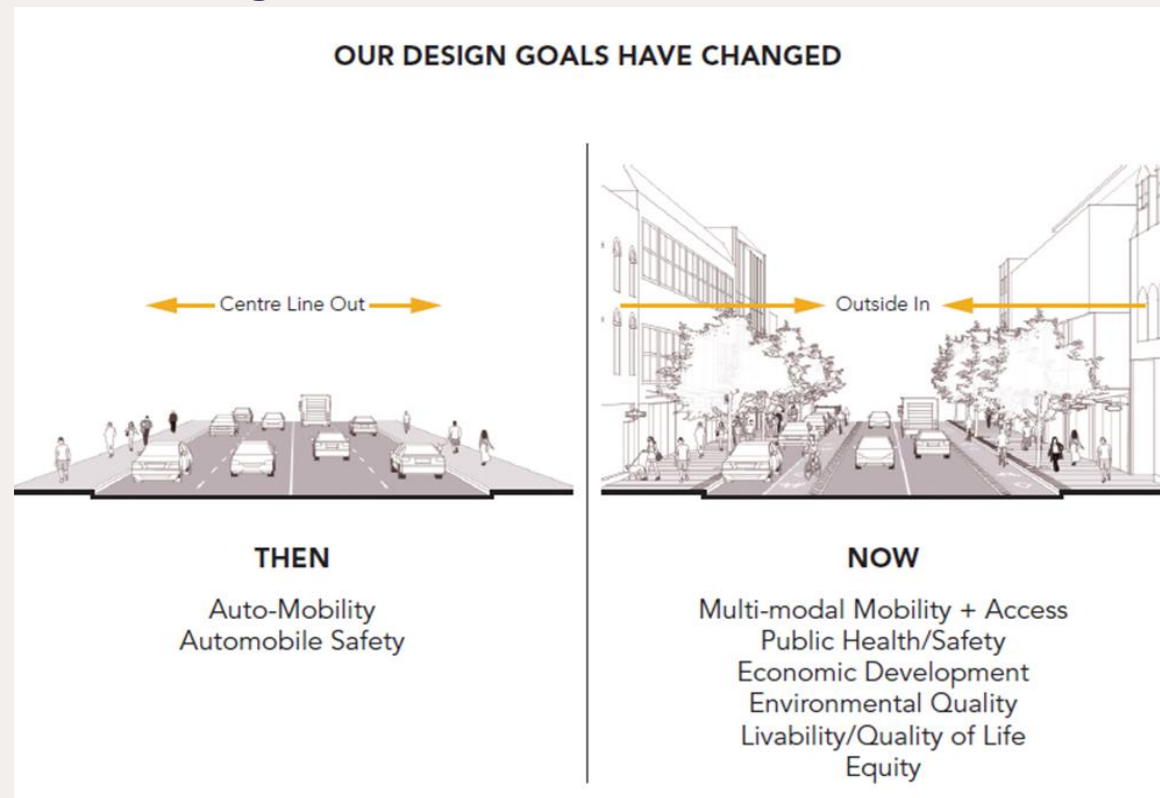
Active Transportation

Parking

Transit

Using policy recommendations, current industry best practices and design guidelines, gaps in the existing network were identified.

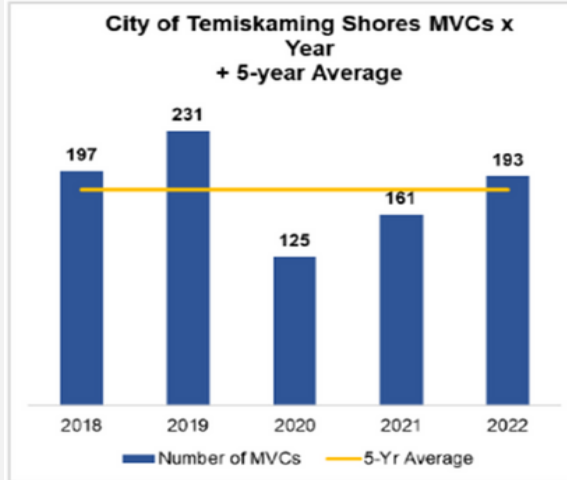
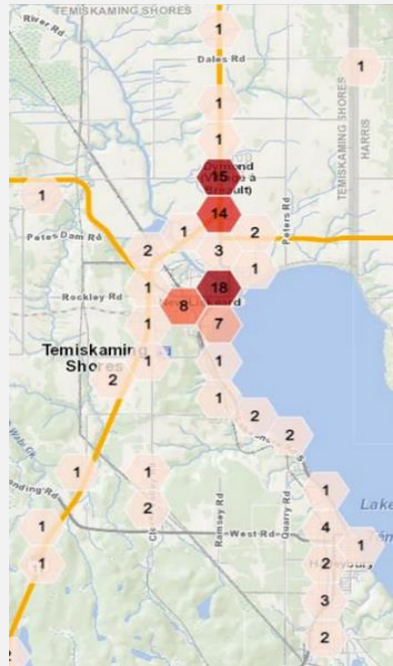
Consequently, opportunities for improvements using Complete Streets framework were investigated.



(source: City of Toronto Complete Streets Guideline, 2023)

Road Safety Review

Collision Data Review

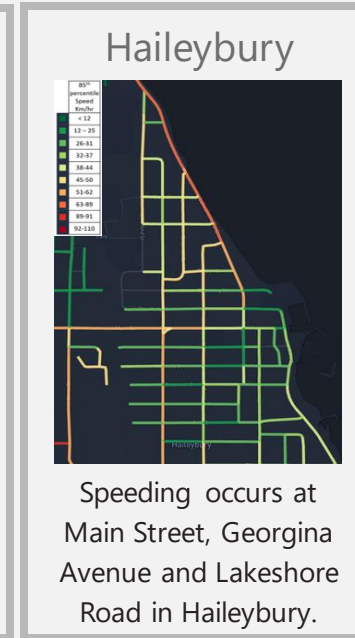


During the 5-year period, from year 2018 through 2022, the City saw a total of 907 reportable motor-vehicle-collisions (MVCs) with an average of 181 MVCs per year.

Vehicular Speed Review



Speeding occurs at Whitewood Avenue, Armstrong Street, Lakeshore Road, Elm Avenue, Beavis Terrace in New Liskeard.



Speeding occurs at Main Street, Georgina Avenue and Lakeshore Road in Haileybury.

The two downtown cores have posted speed limits of 50 km/h or less.

Wide lanes, lack of pavement markings, speed limit signage, traffic calming measures, and lack of appropriate traffic controls are probable causes for speeding on these downtown roads.



Design Solutions

The Project Team has studied traffic calming measures to reduce speeding along high-speed roads. Traffic calming measures include narrowing lane widths, introducing curb bump-outs, installing protected intersections, upgrading crosswalks, and improving traffic controls.

Baseline Traffic Analysis

Do-Nothing is typically considered to serve as a baseline to compare solutions and scenarios for future horizon years.

Traffic operations analysis for 5-year (2028) and 20-year (2043) future horizons to investigate if any traffic operations improvements would be required. The following analyses were performed to identify any traffic improvements for the future study network:

- Intersection Operational analysis
- Arterial Operational analysis
- Signal Warrant analysis (at existing stop-controlled intersections)
- All-Way-Stop-Control (AWSC) Warrant Analysis (at existing Two-Way-Stop-Controlled intersections)

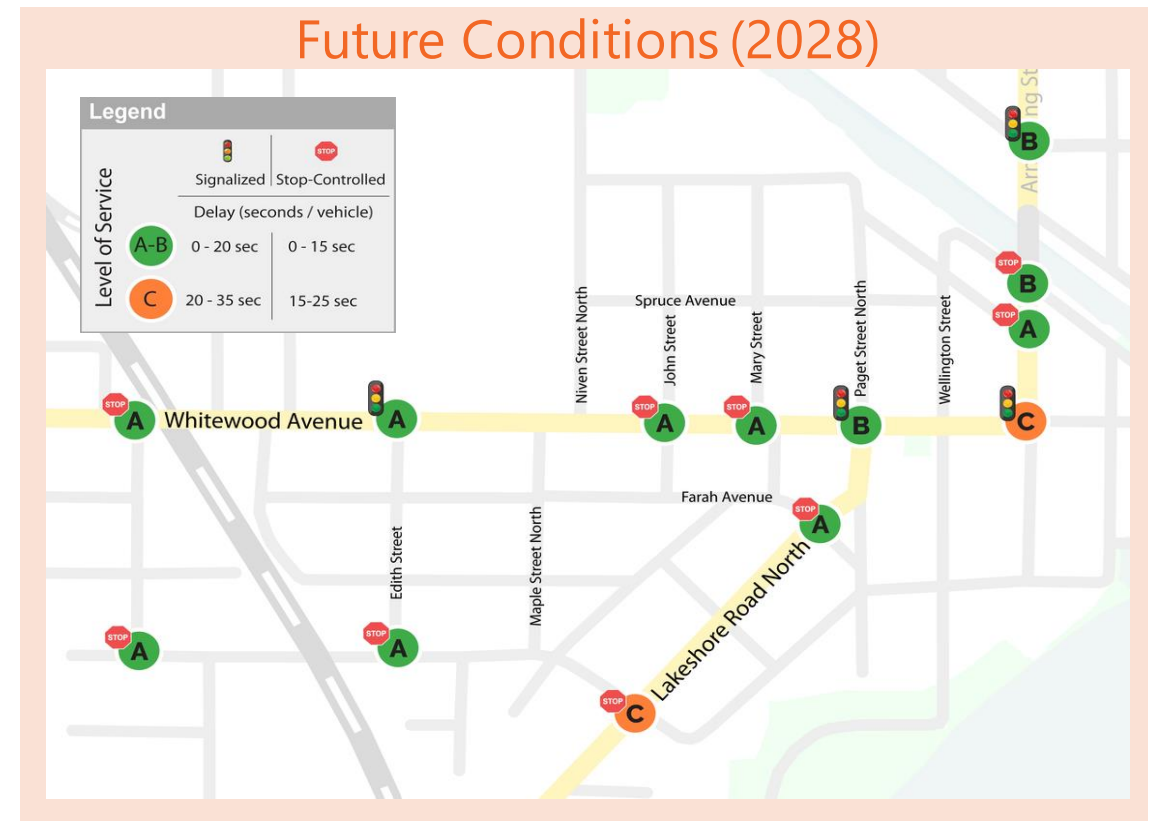
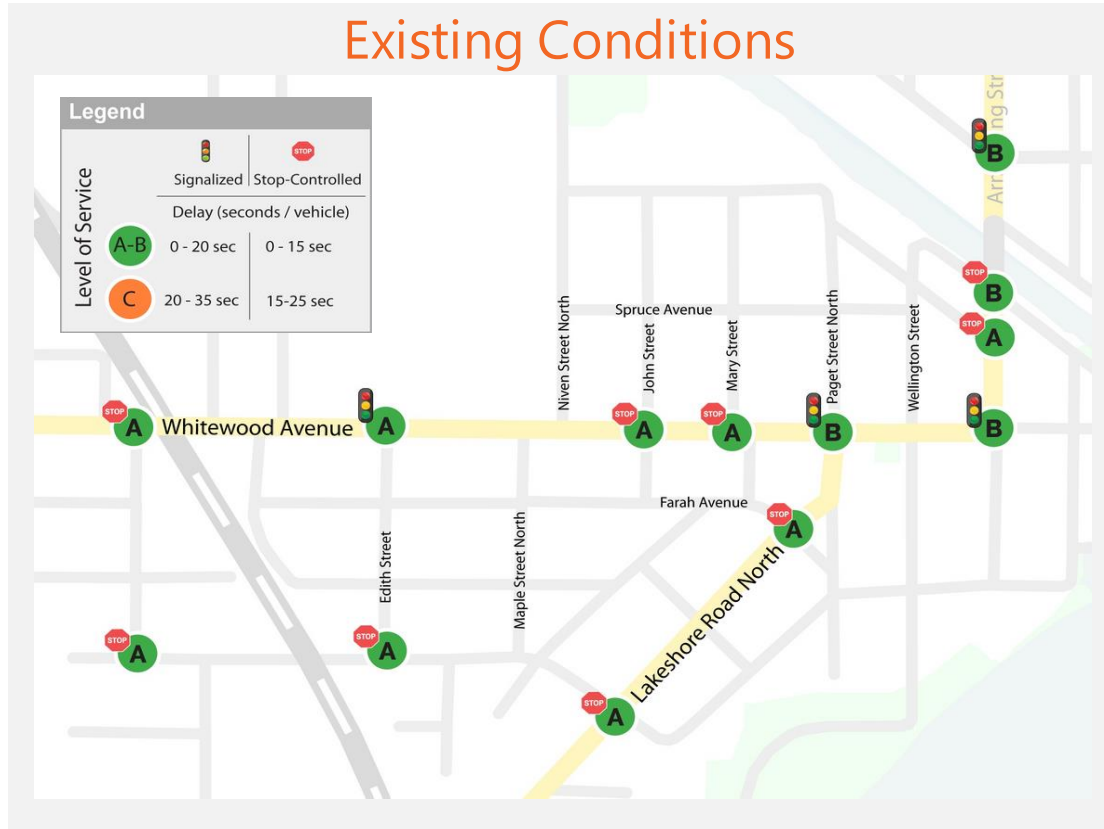


Example of a two-way stop-controlled intersection (Browning St and Lakeshore Rd) in Haileybury displaying a lack of clear pavement markings for stop bars, centerlines etc. and having no dedicated space for pedestrian crossings



Proposed Solutions

Traffic Operations in New Liskeard



Traffic operations will remain acceptable under future conditions based on projected 5- and 20-year growth. The Level of Services (LOS) show that the transportation network within the study area will be functioning well, with low delays and no capacity issues during both AM and PM peak hours.

Traffic Operations in Haileybury

Traffic operations will remain acceptable under future conditions, based on 5- and 20-year growth projections.

Individual vehicles delays of a maximum of 15 seconds occur during peak periods and are acceptable.

Recommended improvements:

All-Way Stop-Control at:

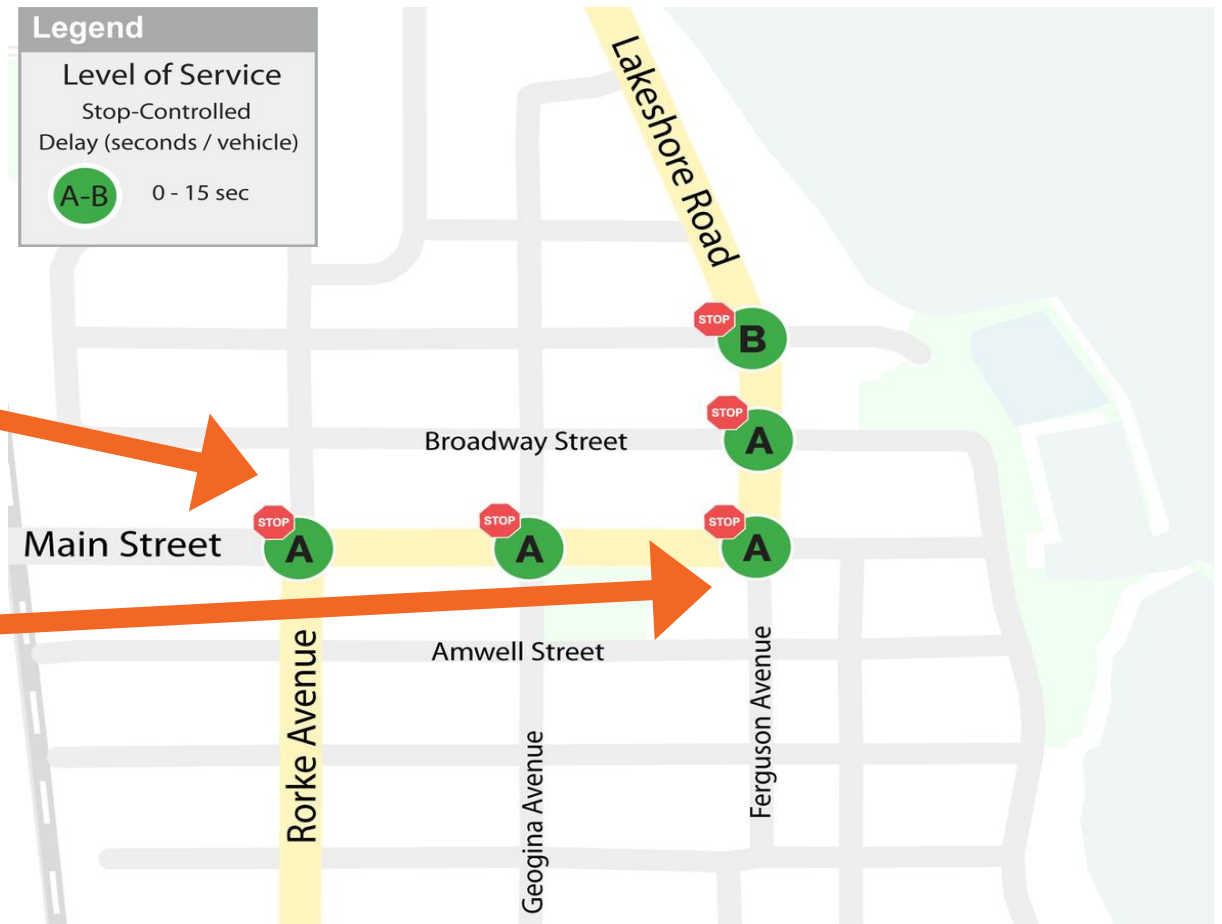
- Main St/Rorke Ave
- Main St/Ferguson Ave

Northbound Channelized right-turn removal at:

- Main St/Rorke Ave

To improve vehicular and pedestrian safety reduce turning speeds at the crosswalk.

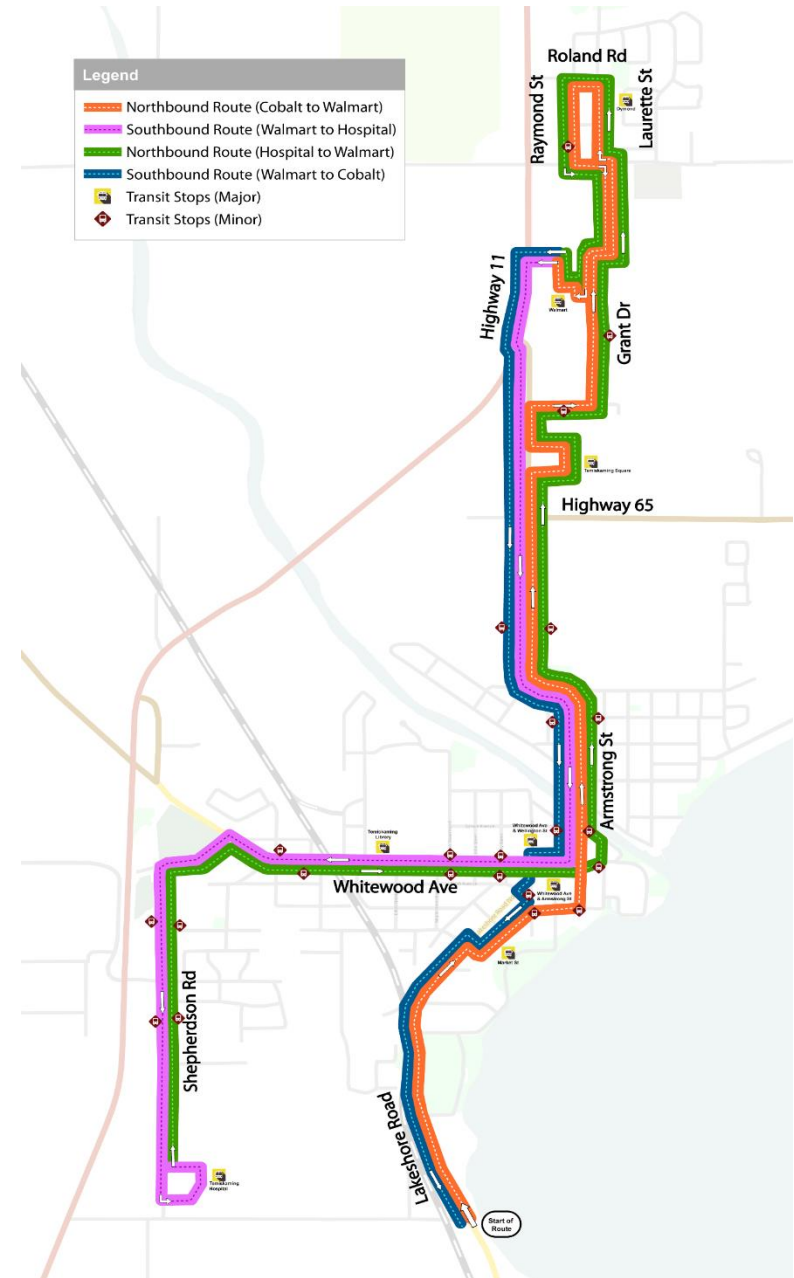
Existing and Future (2028) Traffic Conditions



Transit in New Liskeard

Existing Network

- Primarily operates on major arterial and collector roads, and along local roads in Dymond.
- There are 7 major bus stop locations, servicing routes on both sides of the roadway.
- There are 23 minor bus stop locations, some of which lack bus shelters.



Transit in New Liskeard

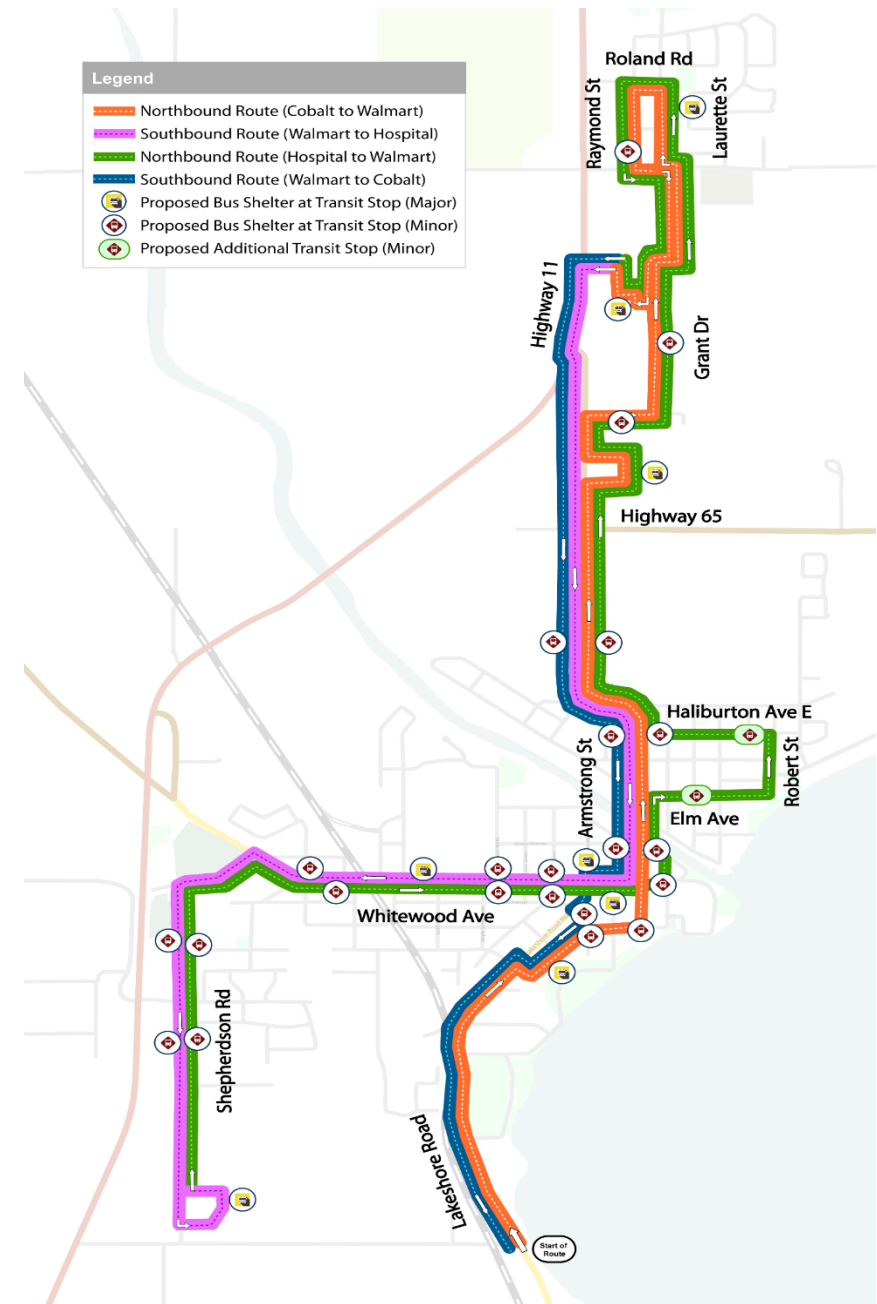
Future Recommendations

Short-Term:

- Adjust northbound route to expand service.
- Improve wayfinding and bus stop signage.
- Upgrade major bus stop infrastructures.

Long-Term:

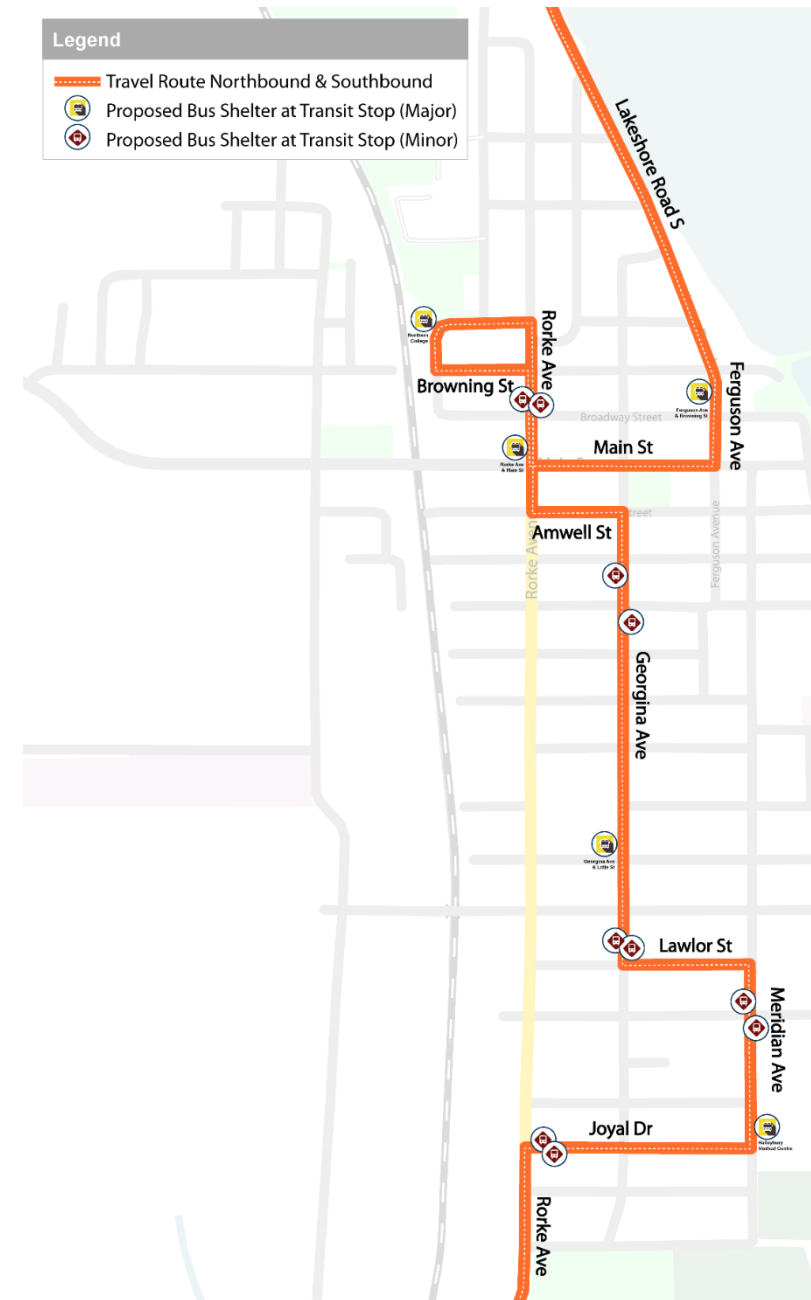
- Explore separating north-south and east-west routes for efficiency and improved frequency.
- Connect bus service to the future Northlander Rail Station in New Liskeard and enable seamless transfers between communities.



Transit in Haileybury

Existing Network

- All residential neighborhoods in Haileybury are within a 400 m radius (10-minute walk) of a bus stop.
- There are 5 major and 12 minor bus stop locations, serviced by both northbound and southbound transit routes.
- Major stops are typically marked on both sides of the road, while minor stops typically lack formalized bus stop infrastructure including concrete pads and signage.



Transit in Haileybury

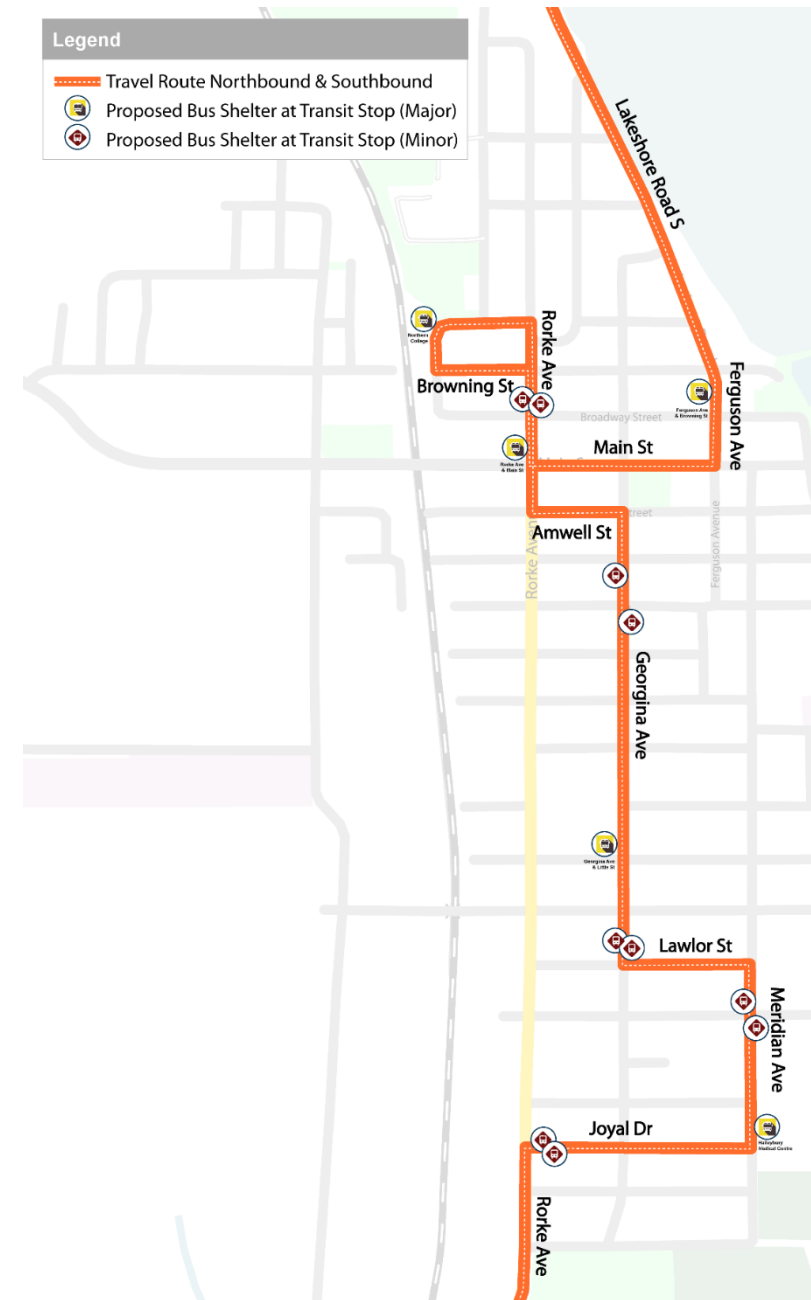
Future Improvements

Short-Term:

- Enhance service with better maps, wayfinding, and improved amenities at existing stop locations.

Long-Term:

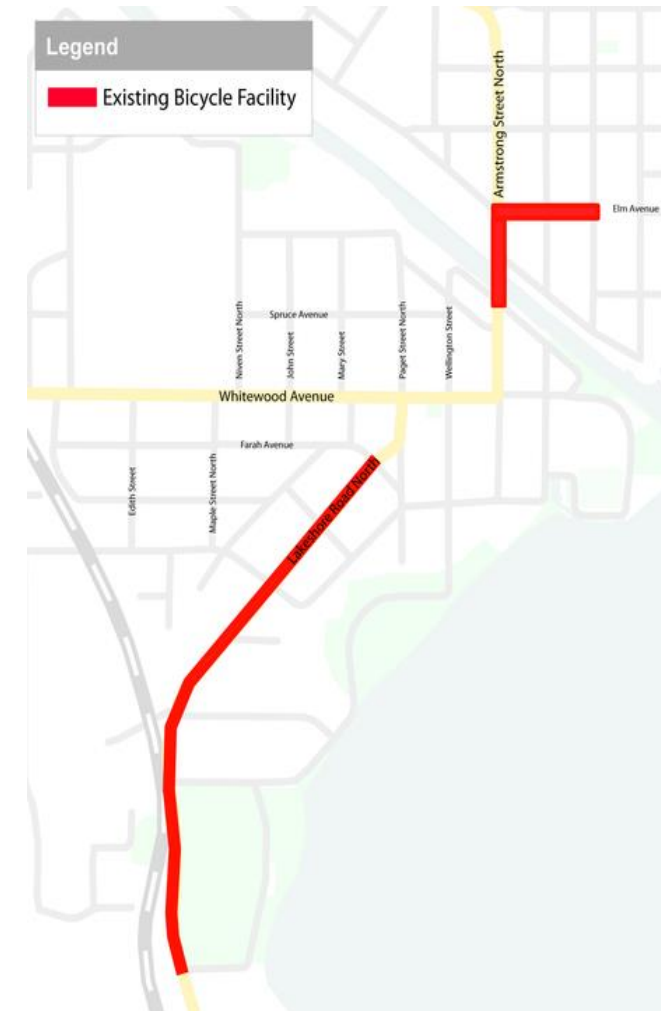
- Consider separating City service to provide a dedicated route within Haileybury, and one route connecting each community.
- Increase bus frequency and improve wayfinding for passengers to enhance convenience and efficiency.
- Advocate for a rail station in Haileybury with discounted fares for travel between the two communities.



Active Transportation in New Liskeard

Existing Conditions

- Cycling facilities are disconnected and generally insufficient across the downtown core.
- Limited and substandard pedestrian crossing opportunities on major roads including Whitewood Avenue and Armstrong Street.
- Narrow sidewalks on one side of the street, especially near Farah Avenue.
- The skewed intersection at Farah Avenue and Dymond Crescent results in a challenging 20 m crossing distance.



Active Transportation in New Liskeard

Proposed Future Network Improvements

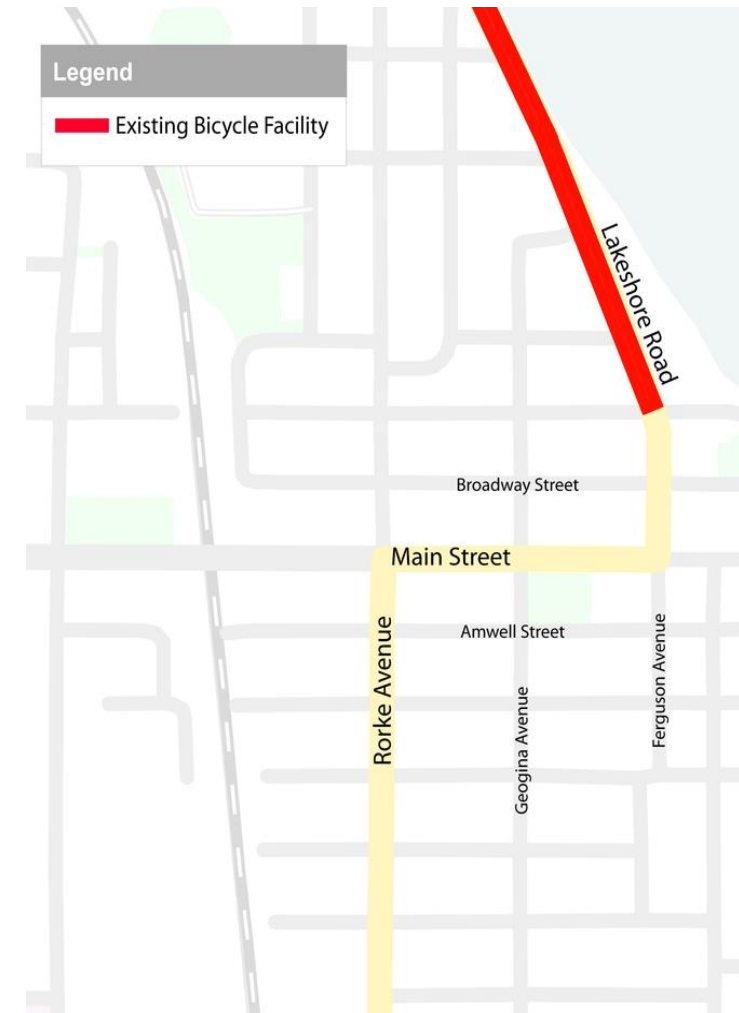
- **New on-street bike lanes** with a safety buffer from vehicular traffic.
- **New protected intersections** to improve safety for drivers, cyclists and pedestrians.
- **Traffic calming measures** including mini-roundabouts, and new pedestrian crossings.
- **Continuous sidewalks** at select intersections to slow vehicular turning speeds in areas with increased pedestrian activity.
- **Pedestrian bridge** to improve connectivity across the Wabi River.



Active Transportation in Haileybury

Existing Conditions

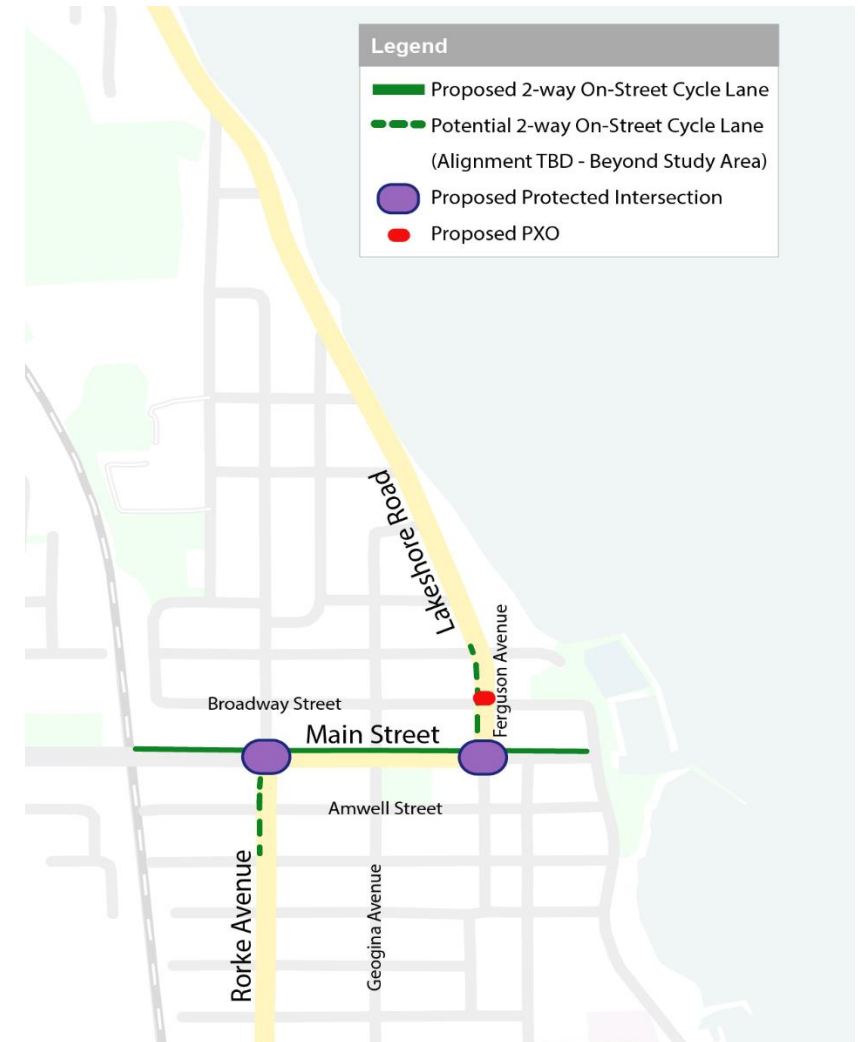
- Cycling facilities are disconnected and generally insufficient across the downtown core.
- Many sidewalks are of substandard width, with minimal separation from travel lanes.
- Pedestrian crossings on Main Street are affected by the significant slope, higher-speed traffic, and lack of stop controls.
- Safety data verifies a need to address these issues for improved pedestrian safety, comfort, and accessibility in the core.



Active Transportation in Haileybury

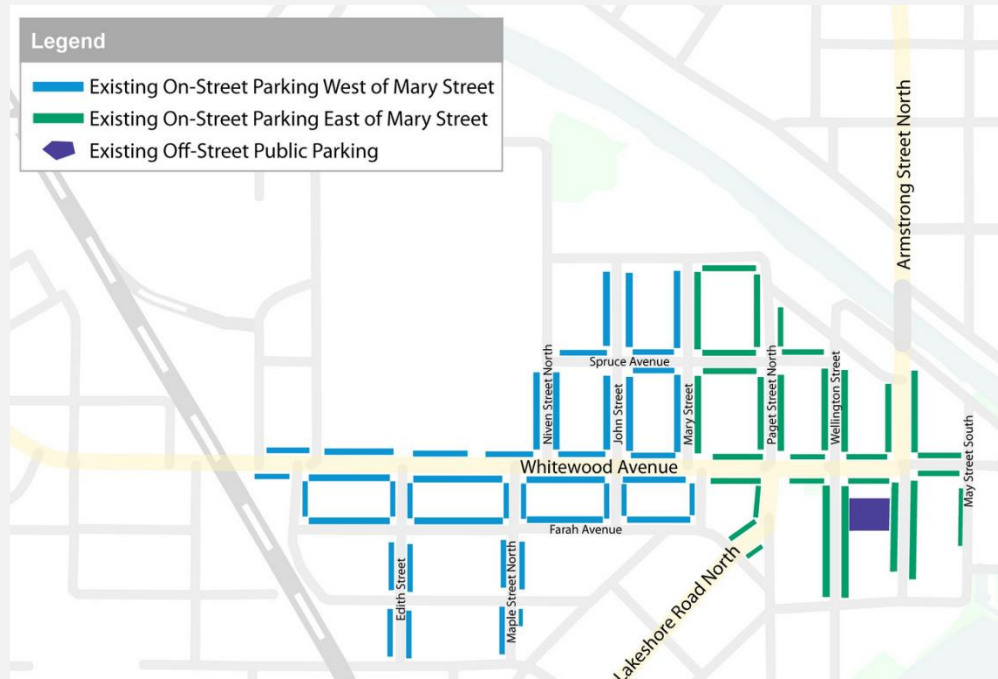
Proposed Future Network Improvements

- **New on-street bike lanes** with a safety buffer from vehicular traffic.
- On **Main Street**, a **bi-directional cycle track** is proposed, to maintain on-street parking on both sides of the roadway.
- **New protected intersections** to improve safety for drivers, cyclists and pedestrians. An all-way stop at Main Street & Ferguson will slow traffic approaching the core.
- Additional **traffic calming measures** including new pedestrian crossings and curb bump-outs are proposed.



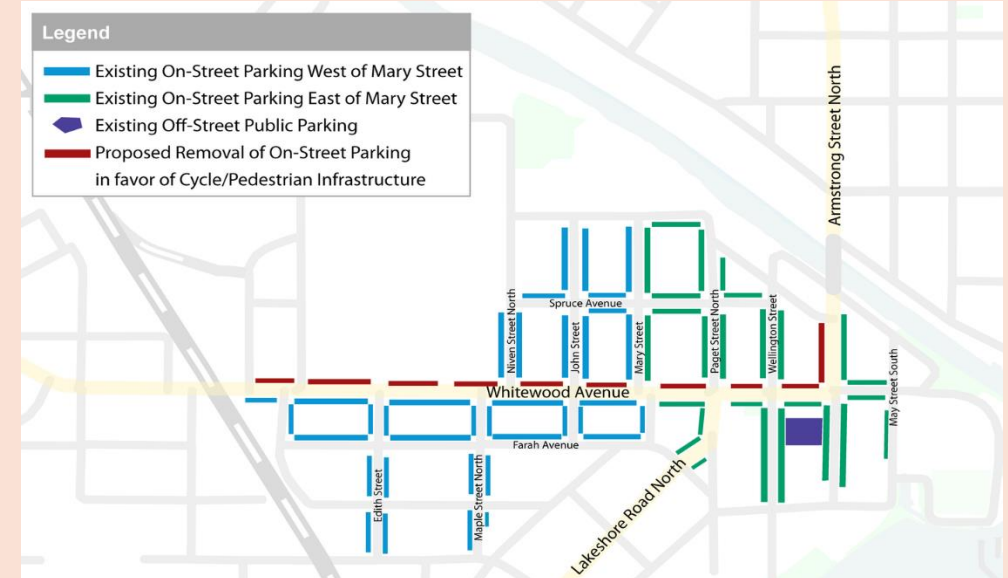
Parking Conditions in New Liskeard

Existing Conditions



- Pavement markings are insufficient in most on-street parking zones.
- Existing off-street parking lot south of Whitewood Avenue is inefficient as a gravel lot without clear delineation of parking spaces.
- There are approximately 757 on- and off-street parking spaces available.

Proposed Future Network



- Select on-street parking areas are proposed to be reallocated for public realm improvements including wider sidewalks, zones for street furniture, formalized bus stops and cycling infrastructure.
- The proposed changes will eliminate 80 parking spaces, maintaining a total of 677 parking spaces in the downtown area.
- To improve the parking experience, it is recommended that the off-street lot south of Whitewood Avenue be upgraded from gravel to asphalt with painted markings, lighting, and wayfinding signage.

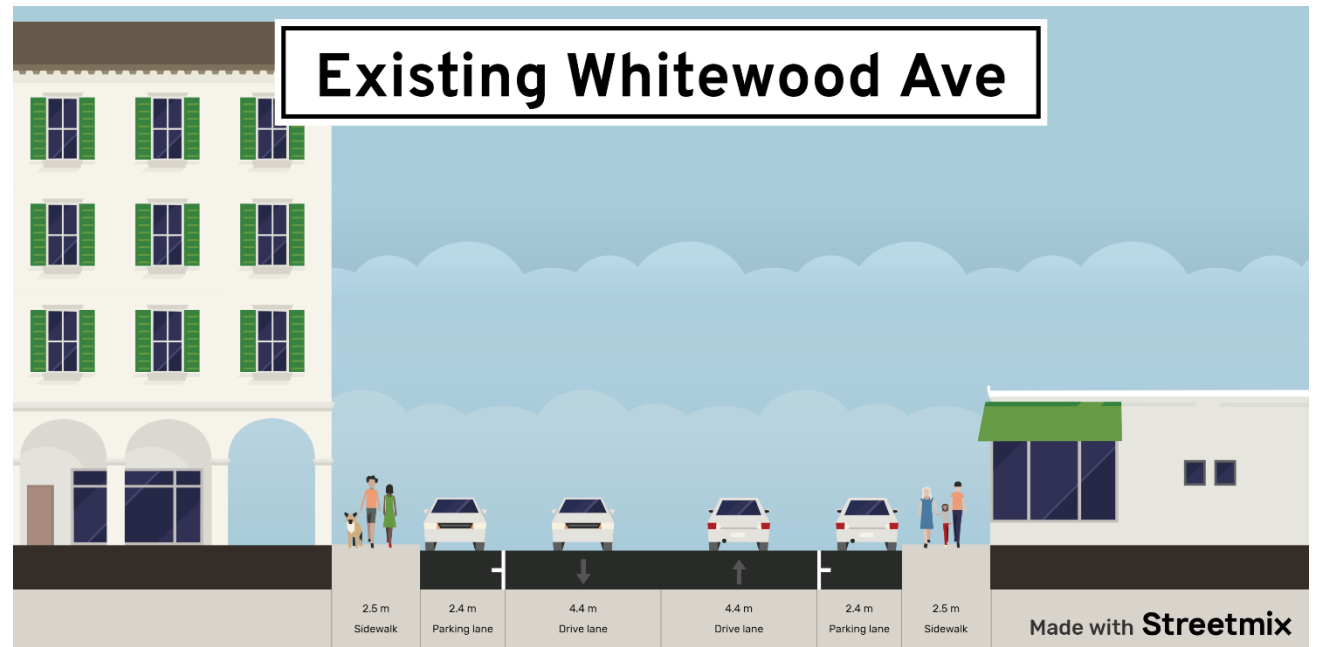
Parking Conditions in Haileybury

No changes planned for on- or off-street parking facilities in Haileybury.

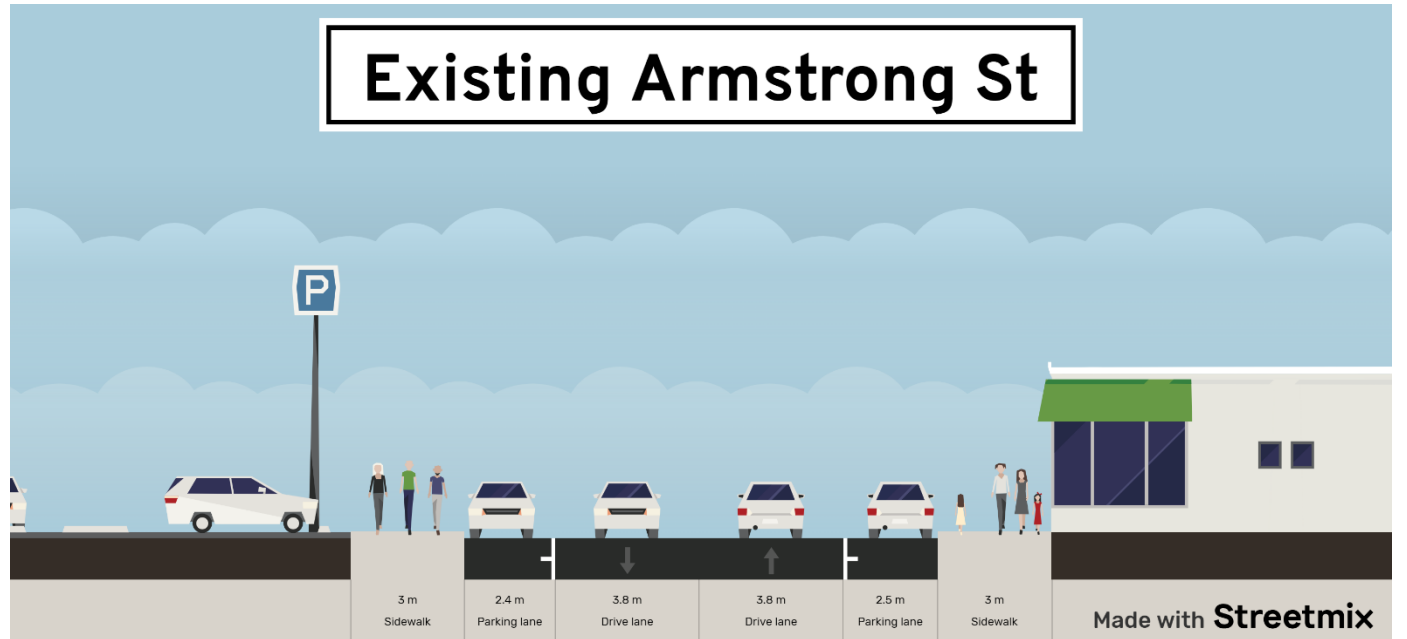
- On-street parking reductions are not recommended due to high demand on Main Street and limited off-street alternatives.
- The proposed bi-directional cycle track on Main Street will utilize space within the existing right-of-way, by narrowing travel lane widths and delineating parking spaces. The proposed design preserves on-street parking on both sides of Main Street.
- There are approximately 941 on- and off-street parking spaces available, including the off street lot by Browning Street. The majority of on-street spaces are not clearly marked along residential streets, however provide sufficient supply around the core.



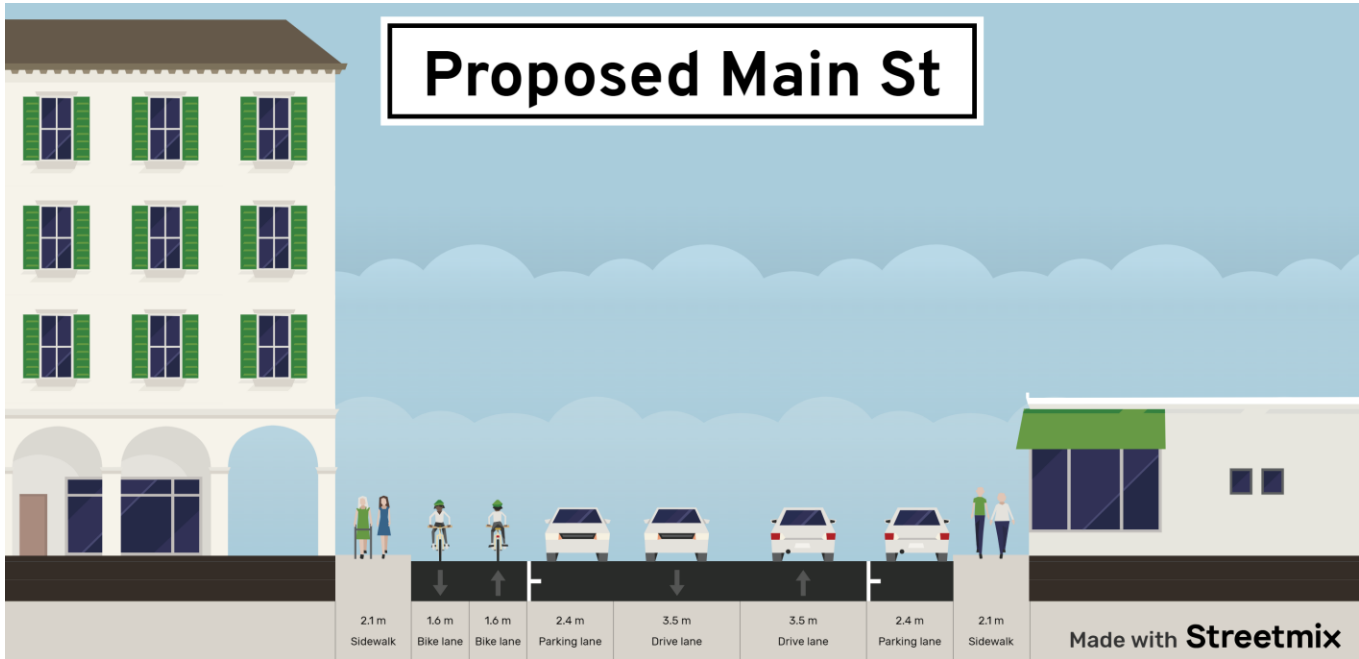
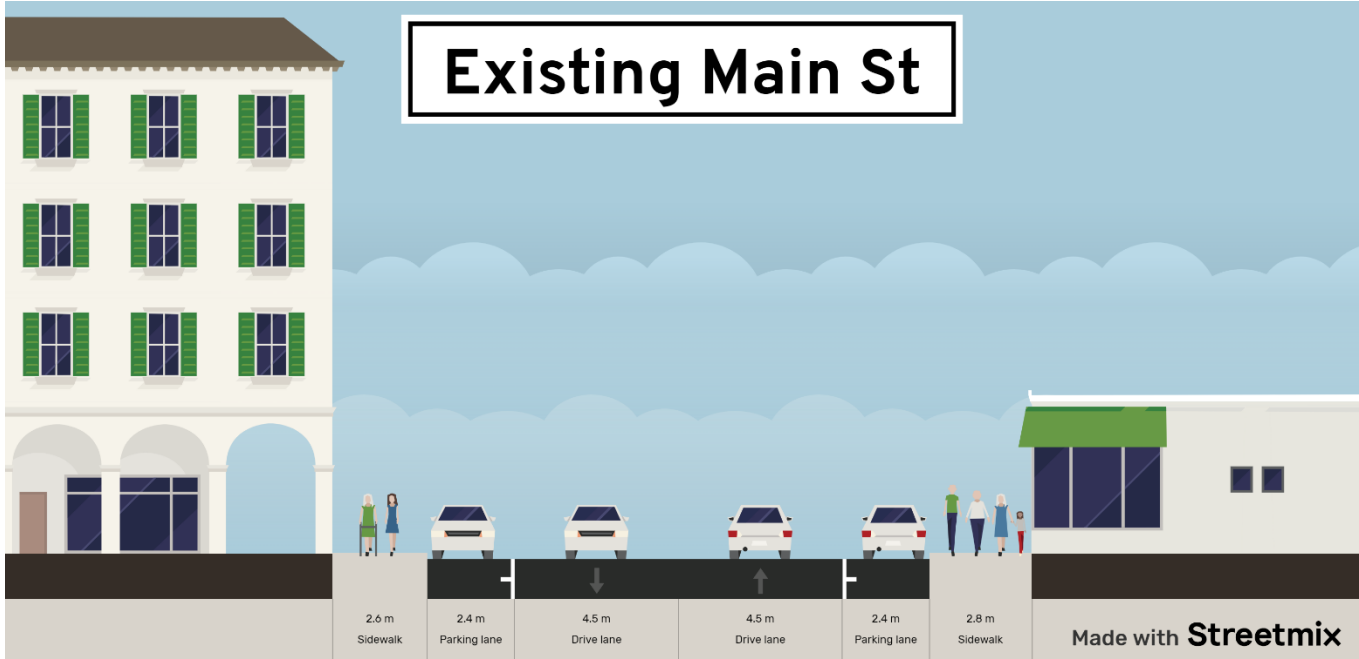
Recommended Complete Streets Cross Section: New Liskeard



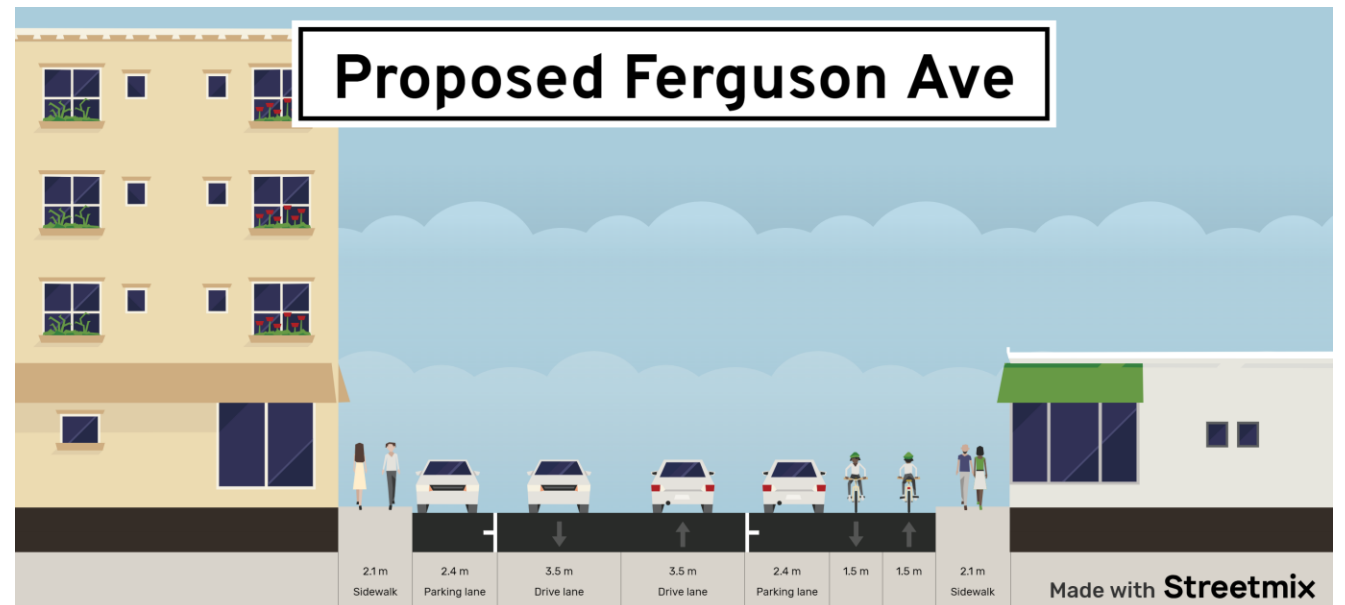
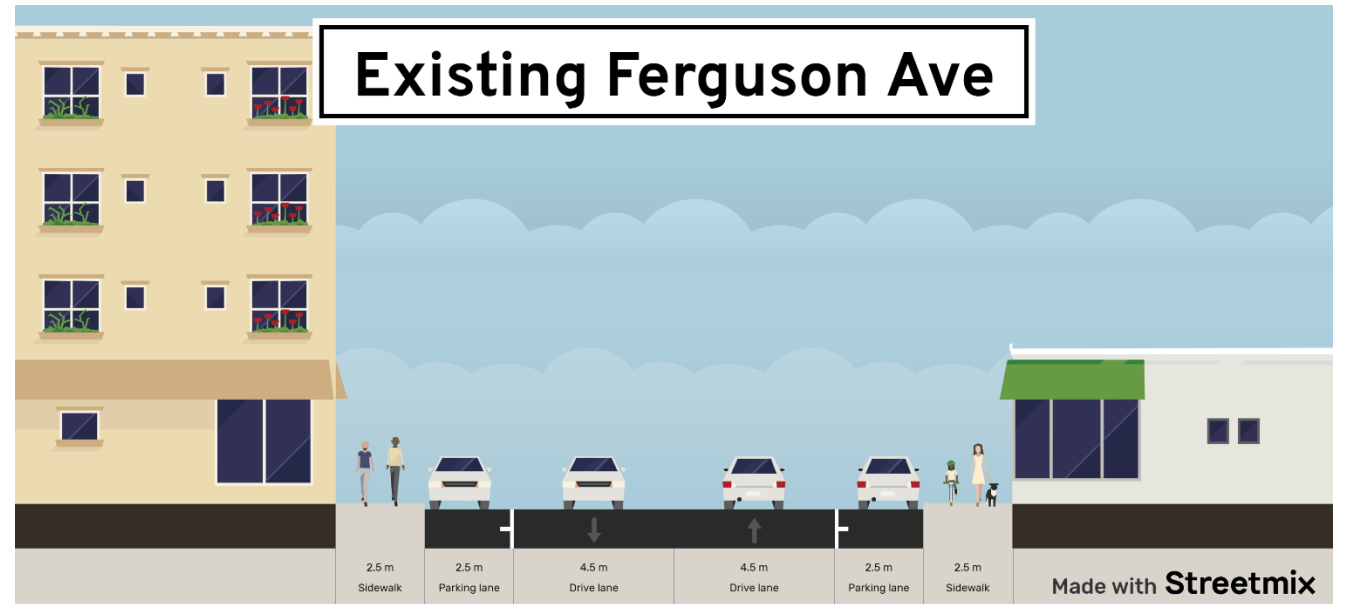
Recommended Complete Streets Cross Section: New Liskeard



Recommended Complete Streets Cross Section: Haileybury



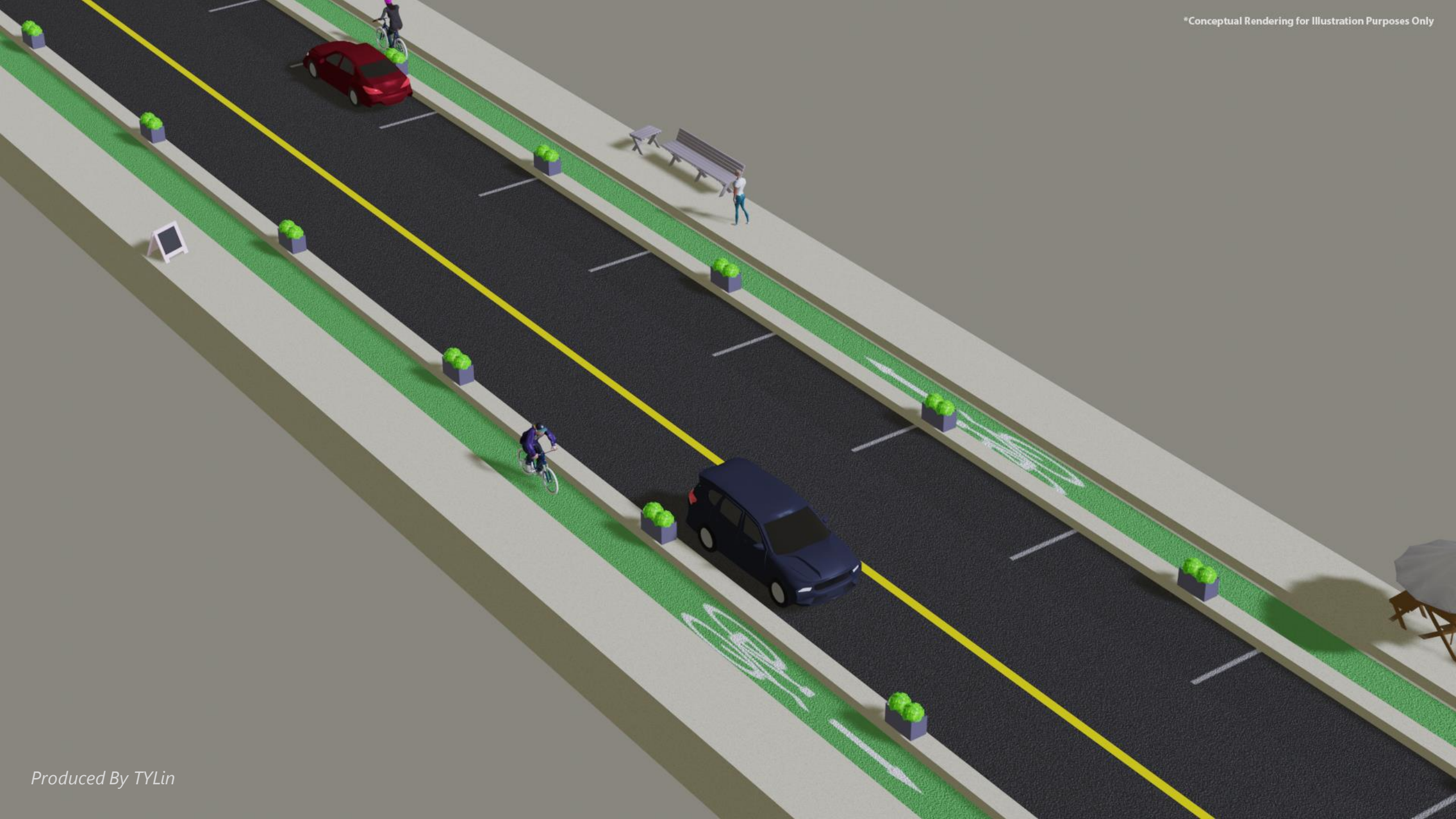
Recommended Complete Streets Cross Section: Haileybury

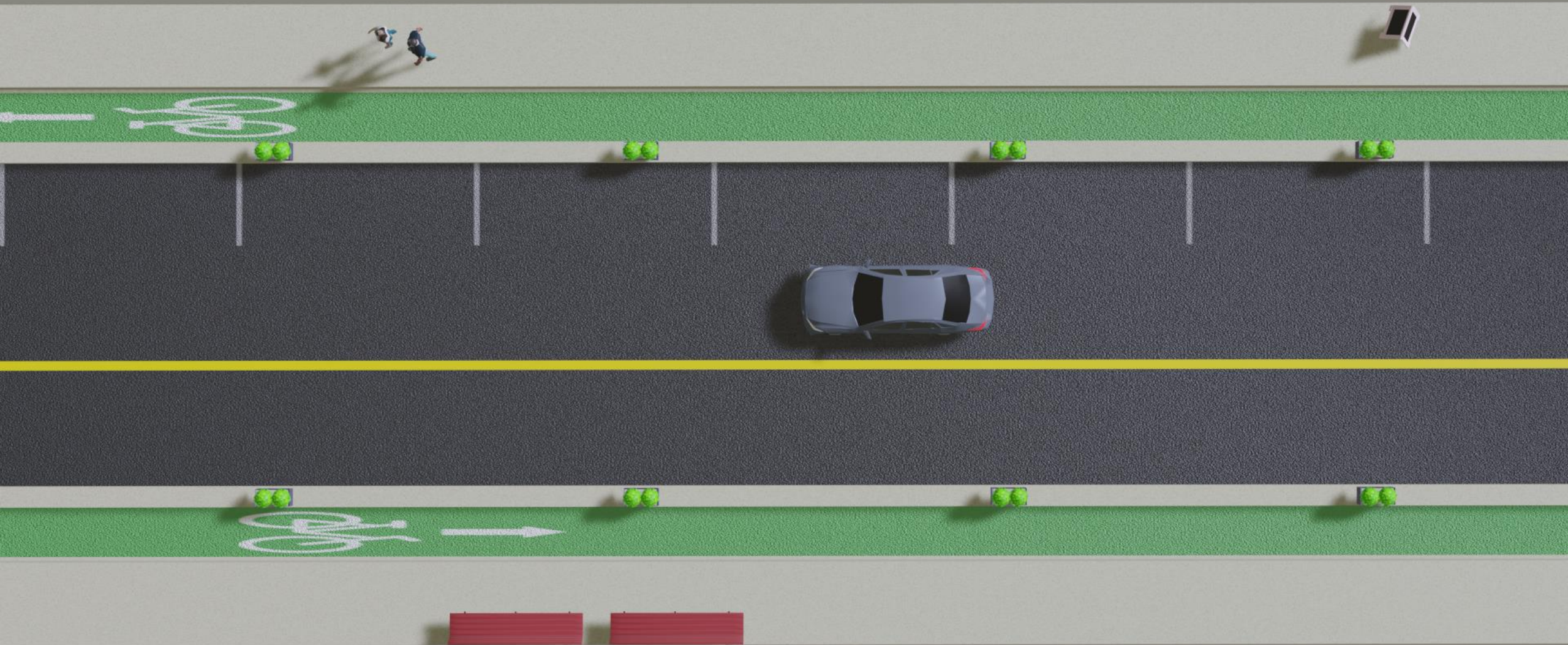


Whitewood Ave Visualization

Existing Road







Whitewood Ave Rendering

Proposed Road Improvements

*Conceptual Rendering for Illustration Purposes Only



Produced By TYLin

Whitewood Ave Rendering

Road After Improvements



What we heard

Public Open House





Consultation Summary

The public provided valuable input and showed great interest in the Mobility Study. Multiple comments circled around the following themes:

- **Traffic Calming and Safety:** Concerns and suggestions were raised regarding the need for traffic calming measures, especially near schools, with a specific mention of TDSS and NLPS.
- **Bike Lanes and Continuous Sidewalks** received positive feedback, with support for connections from downtown to the waterfront and other strategic locations. There were specific requests for bike lanes on Sharpe Street to enhance connectivity.
- **Pedestrian Safety:** There were calls for additional pedestrian safety measures, such as a pedestrian light at John Street, PXOs at various locations, and improvements to crosswalk markings.
- **Parking:** Consideration for the removal of on-street parking in certain areas. Suggestions for changes in parking arrangements, including flipping parking to the business side of the street in New Liskeard. Specific locations, such as Rorke, were highlighted for attention, with suggestions for better pavement markings and the long-overdue need for traffic calming.

Overall, the community showed an active support for the improvement of transportation infrastructure, safety measures, and the aesthetic appeal of public spaces.

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Implementation



Phase 1: Minor Traffic Improvements

Traffic Control Upgrades

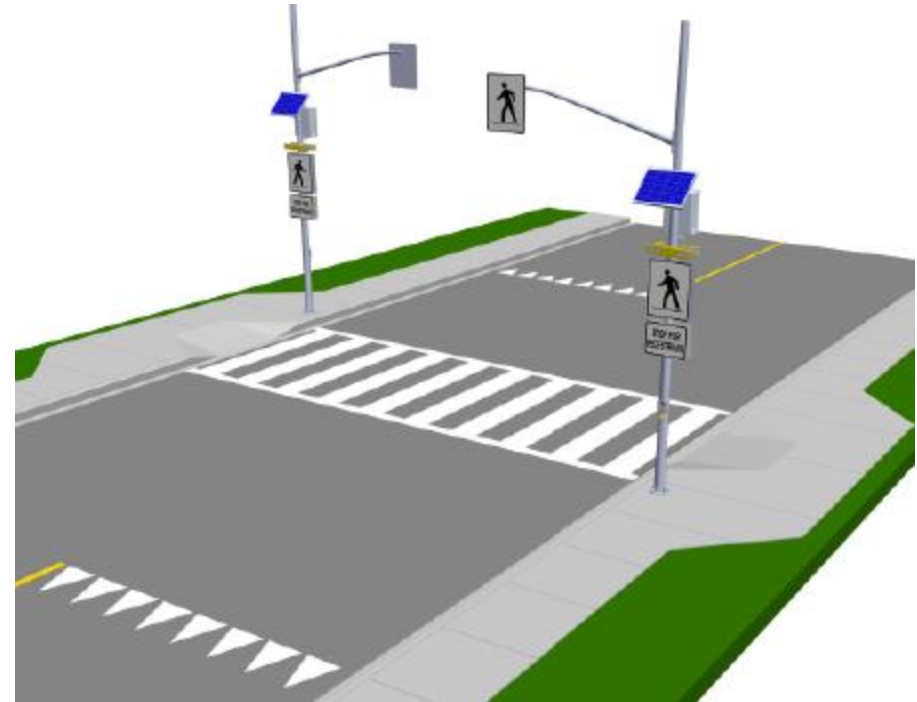
Traffic Operations and All-Way Stop Control (AWSC) analysis for the future scenarios support upgrading following intersections to have All-way Stop Control for added safety, despite not meeting volume threshold:

- ❑ Main St & Ferguson Ave (2028)
- ❑ Main St & Rorke Ave (2043)

Pedestrian Crossovers (PXO)

PXOs are proposed at the following intersections for safer pedestrian crossing:

- ❑ Broadway St & Ferguson Ave (Haileybury)
- ❑ Armstrong St & Church St (New Liskeard)



Example of a Pedestrian Crossover (PXO), Level 2: Type B. Source: Ontario Traffic Manual, Book 15

Phase 1: Safety Improvements

Pavement Markings

To improve visibility and delineation between vehicular traffic and vulnerable road users, pavement markings should be applied for:

- Striped Crossing at intersections
- Centerlines
- On-Street bike lanes
- On-Street parking

Curb Extensions for Safety

Curb Extensions are recommended in New Liskeard at the following intersections:

- Whitewood Ave & Armstrong St
- Whitewood Ave & Edith St
- Whitewood Ave & Paget St

Overall, this phase addresses some safety concerns and gaps in the existing roadway network for vulnerable road users through great measures that align with the Complete Streets Framework.

Phase 2: Major/ Full Improvements

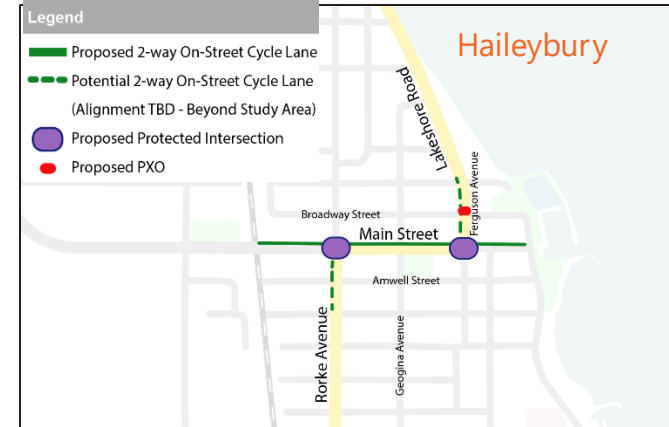
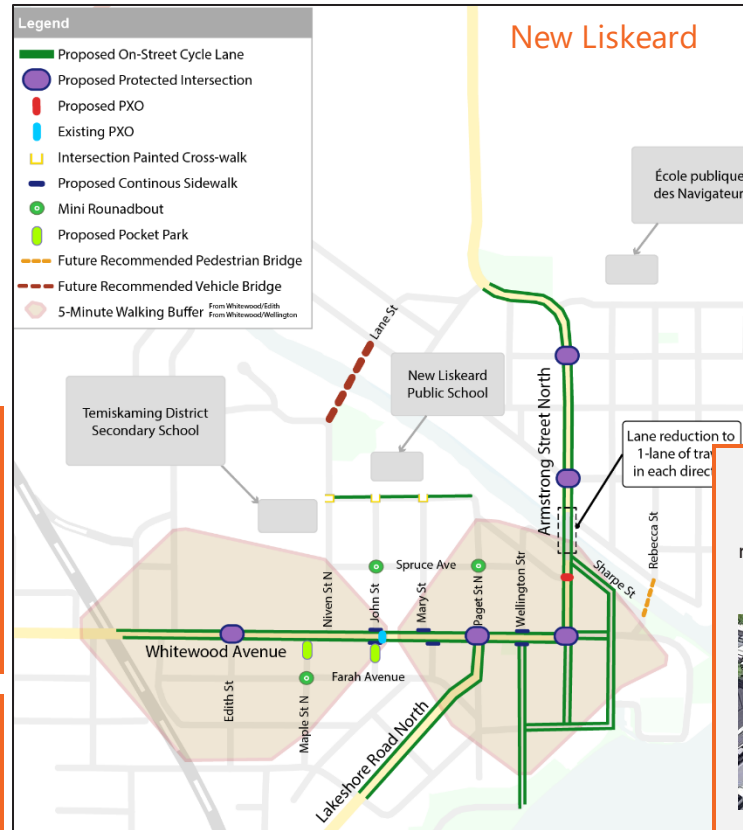
Continuous Sidewalks ensure seamless and safe pathways for pedestrians, promoting accessibility, and contributing to vibrant, walkable communities.



Mini Roundabouts on local streets are compact traffic calming features that improve intersection flow, mitigate the risk of collisions and improve safety for pedestrians.



Pocket Parks are small, green spaces that utilize redundant accesses to provide refuge for relaxation and recreation.



Protected Intersections prioritize cyclist and pedestrian safety by offering dedicated space and right-of-way protection, reducing the risk of collisions at intersections.



On-Street Cycle Lanes are dedicated sections off road that enhance cyclist safety and encourage active and eco-friendly transportation.



Phase 2 builds upon the solutions from Phase 1 and involves full Complete Streets framework to improve safety for all road users. It includes a larger scale transformation of various roads across both downtown cores.

Phase 1 Components & Cost Estimates

Phase 1 (1-5 years)		
Category	Item	Cost
Traffic Controls, Intersection & Pavement Design	Stop Signs	\$700
	Pedestrian Crossovers (PXO)	\$40,000
	Pavement Markings	\$9,870.04
	<i>Subtotal</i>	<i>\$50,570.04</i>
Traffic Calming Measures	Curb Bump-Out	\$60,000.00
	<i>Subtotal</i>	<i>\$60,000.00</i>
Total		\$110,570.04

Phase 2 Components & Cost Estimates

Phase 2 (5-10 years)		
Category	Item	Cost
Active Transportation	Concrete Sidewalk Construction	\$27,847.89
	Crosswalk	\$67,905
	Painted Bike Lanes	\$4,833,020
	Protected Intersection	\$9,100,000
	Pocket Park	\$1,064,000
	<i>Subtotal</i>	<i>\$15,092,772.89</i>
Transit	Bus Pad	\$110,925
	Bus Shelter	\$1,170,000
	Bike Rack	\$9,800
	Wayfinding Signage	\$910
	<i>Subtotal</i>	<i>\$1,291,635</i>

Category	Item	Cost
Traffic Calming Measures	Mini Roundabout	\$750,000
	<i>Subtotal</i>	<i>\$750,000</i>
Parking & Placemaking	Parking Lane Marking	\$2,030
	Parking Lot Paving	\$104,400
	<i>Subtotal</i>	<i>\$106,430</i>
Total		\$17,240,837.89

Overall Cost Estimates

Overall Cost Estimate	
Category	Cost
Active Transportation	\$15,092,772.89
Transit	\$1,291,635.00
Traffic Controls, Intersection & Pavement Design	\$50,570.04
Traffic Calming Measures	\$810,000.00
Parking and Place Making	\$106,430.00
Total	\$17,351,407.93

Funding Opportunity



Green Municipal Fund (GMF)

The Green Municipal Fund, a \$1.6 billion program funded by the Government of Canada. Its aim is to accelerate local governments' transition to sustainability through a unique mix of funding, resources, and training, empowering municipalities to enhance resilience and improve the lives of Canadians.

GMF Target Sub-Sectors for Change:

- 1 Energy
- 2 **Transportation** →
- 3 Land Use
- 4 Circular Economy
- 5 Water

GMF aims for net-zero transportation emissions in municipalities through demand management, affordable transit, and active transportation, utilizing zero-emission vehicles. Investments also prioritize resilience in infrastructure and equipment.

Overview of GMF's Pilot Project – Signature Initiatives:

- **Planning Studies**
 - Grant for up to 50 percent of eligible costs
 - Up to a maximum of \$175,000
- **Feasibility Studies**
 - Grant for up to 50 percent of eligible costs
 - Up to a maximum of \$175,000
- **Pilot Projects**
 - Grant for up to 50 percent of eligible costs
 - Up to a maximum of \$500,000
- **Capital Projects**
 - Combined grant and loan for up to 80% of eligible costs
 - Loan up to a maximum of \$10 million
 - Grant up to 15% of total loan amount.

Funding Opportunity

Discussions with GMF:

- Discussion with GMF indicate a typical 50% grant for studies and pilot projects
- New offer to launch this spring that may allow applicants to receive grants covering up to 80% of project costs.
- These applicants include:
 - Municipalities (or their partners) with a population of 10,000 or under;
 - The city had a total population of 9,634 in the Canada 2021 Census
 - Regional governments or groups of municipalities where the average population of the member municipalities is 10,000 or under ;
 - Eligible Indigenous communities; and,
 - Northern communities.

Northern and Indigenous communities applying to the GMF for the first time may qualify for grants covering up to 100% of eligible costs.

As a northern community, Temiskaming Shores could benefit greatly from this opportunity.



Opportunity

Federal Funding for Full Reconstruction

- With Federal grant funding possible up to 100%, it is recommended that the City consider applying as soon as possible.
- Unlocks the opportunity for the immediate advance of Detailed Design and Construction of streetscape improvements for the full downtown core.
- Project can start right away and be complete within the next 5 years.

Study Next Steps

Next Steps:

- Council to endorse the Downtown Cores Mobility Plan
- TYLin to finalize the Downtown Cores Mobility Plan documentation.
- Publish Notice of Completion



Additional Considerations

Recommended that the City consider:

- Preparation of GMF Application
- Detailed Design & Construction of Downtown Streetscape Plan
- Implementation of a Traffic Calming Policy
- Consideration of Automated Speed Enforcement Implementation Strategy
- Consider advancing study & redesign of Rorke Avenue
- Transit Master Plan & Northlander Integration Strategy
- City-wide Active Transportation Plan update
- Paid Parking Study or limited Pilot Program
- Planning as a Service Operational Strategy

