

CITY OF MAPLE RIDGE STRATEGIC TRANSPORTATION PLAN

Transportation Advisory Committee
Workshop #1 – Existing & Future Conditions



AGENDA

1. Introductions
2. Meeting Objectives
3. Plan Purpose & Process
4. Role of the Transportation Advisory Committee
5. Community Profile
6. Travel Patterns
7. Walking
8. Cycling
9. Transit
10. Driving / Goods Movement
11. Emerging Technology
12. Summary of Key Issues
13. Questions / Discussion
14. Closing



INTRODUCTIONS

PROJECT ORGANIZATION CHART



MULTI-MODAL PLANS AND STUDIES COMPLETED BY URBAN SYSTEMS IN METRO VANCOUVER

MUNICIPAL PROJECTS

- | | |
|--|---|
| 1 Walking and Cycling Components of Transportation 2040
- City of Vancouver | 9 Pedestrian and Cycling Master Plan
- City of Pitt Meadows |
| 2 False Creek South Multi-Modal Transportation Assessment
- City of Vancouver | 10 Transportation Master Plan
- City of Pitt Meadows |
| 3 Pedestrian Master Plan
- City of North Vancouver | 11 Strategic Transportation Plan Update
- District of Maple Ridge |
| 4 Long-Term Transportation Plan
- City of North Vancouver | 12 Strategic Transportation Plan Update
- City of White Rock |
| 5 Transportation Plan Synthesis and Implementation Strategy
- District of North Vancouver | 13 Master Transportation Plan
- City of Port Coquitlam |
| 6 Master Transportation Plan Update
- City of New Westminster | 14 Master Transportation Plan
- City of Langley |
| 7 Transportation Master Plan
- City of Port Moody | 15 Pedestrian Network Study
- District of West Vancouver |
| 8 Strategic Transportation Plan Update
- City of Coquitlam | 16 Cycling Network Prioritization Study
- City of Delta |
| 19 Latimer and Carveth Engineering Services Plan
- Township of Langley | 17 Transportation and Transit Master Plan
- City of Abbotsford |
| 21 Engineering Services Plan for Aldergrove Core Area
- Township of Langley | 20 Engineering Services Plan for Williams Neighbourhood
- Township of Langley |
| | 22 Brookwood-Fernridge Environmental and Engineering Services Plan
- Township of Langley |

PRIVATE PROJECTS

- 18 Sea Island Cycling Network Plan
- Vancouver Airport Authority

REGIONAL PROJECTS

- | | |
|---|--|
| 23 Southwest Area Transportation Plan
- TransLink | 24 Maple Ridge Pitt Meadows Area Transport Plan
- TransLink |
| • Regional Transportation Strategy 2050
- TransLink | • Metro Vancouver Regional Cycling Network Plan
- Ministry of Transportation & Infrastructure |
| • Regional Road Network Strategy
- TransLink | • Regional Transportation Strategy - Setting the Context
- TransLink |
| • Metro Vancouver Regional Cycling Network
- TransLink | • Regional Policies and Procedures Manual for OS/OW Goods Movement
- TransLink |

URBAN
SYSTEMS

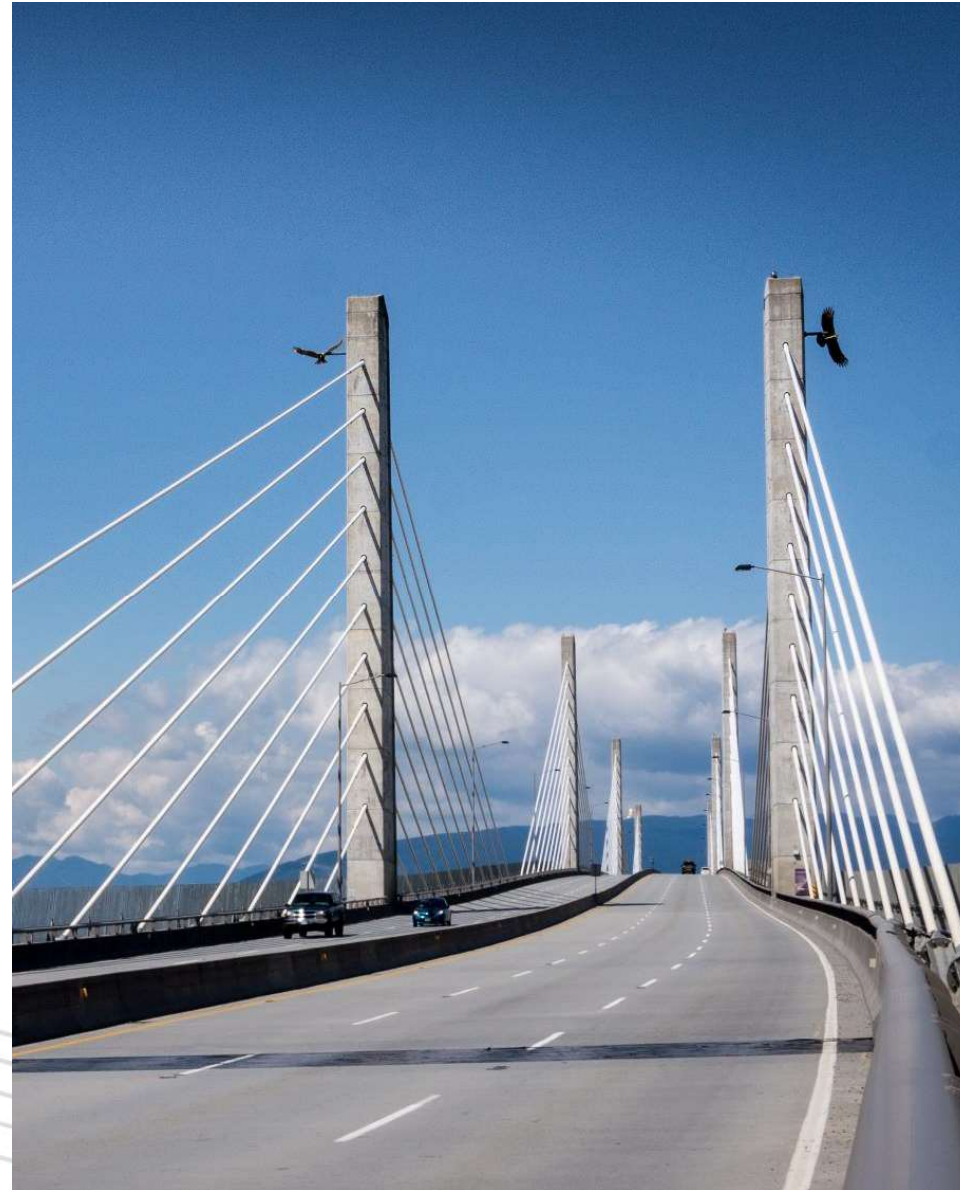
Spirt in Service for Vibrant Communities



MEETING OBJECTIVES

MEETING OBJECTIVES

- To introduce TAC to the project and the team
- To share the results of the existing and future conditions analysis that will inform the remainder of the project
- To build a common understanding of key transportation issues
- To provide TAC members with background knowledge that can be shared
- To invite TAC members to encourage community participation in the public engagement



The background of the slide is a light gray map of a city street grid. The grid consists of numerous thin, light gray lines representing streets, with some thicker lines indicating major thoroughfares. The pattern is dense and covers the entire background.

PLAN PURPOSE & PROCESS

WHAT IS THE STRATEGIC TRANSPORTATION PLAN?

- Update to the 2014 Strategic Transportation Plan
- Long-term plan for multi-modal transportation in Maple Ridge
- Identifies infrastructure projects
- Identifies policy and programming recommendations
- Provides an implementation plan and cost estimates



SCOPE OF WORK

FIVE PROJECT PHASES



Phase 1

- Project Launch & Administration

Winter 2021

Phase 2

- Existing & Future Conditions

Spring 2021

Phase 3

- Vision, Goals, & Plan Development

Summer 2021

Phase 4

- Strategy Development & Refinement

Fall 2021

Phase 5

- Implementation & Final Plan

Winter 2022

A light gray background featuring a detailed map of a city street grid. The grid consists of numerous intersecting lines representing streets, with some lines thicker than others to indicate major thoroughfares. The pattern is dense and covers the entire background.

ROLE OF THE TRANSPORTATION ADVISORY COMMITTEE

ROLE OF THE TRANSPORTATION ADVISORY GROUP

Primary Role

Provide context on the direction of the STP to help Council make informed decisions.

Secondary Role

Inform others in the community about the STP

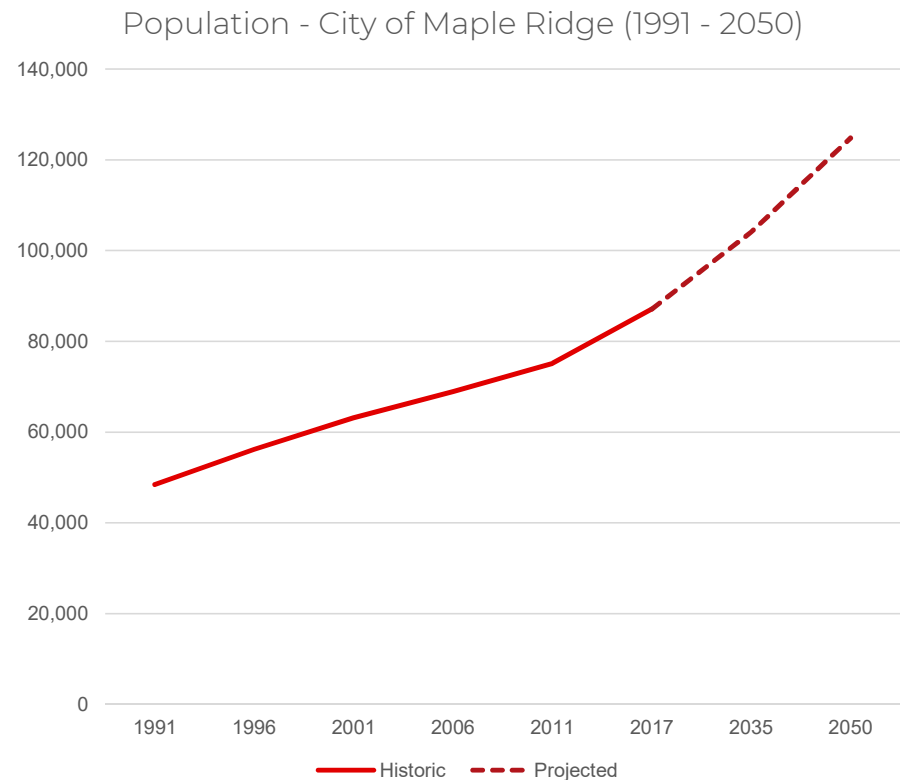


COMMUNITY PROFILE

COMMUNITY PROFILE

POPULATION & EMPLOYMENT

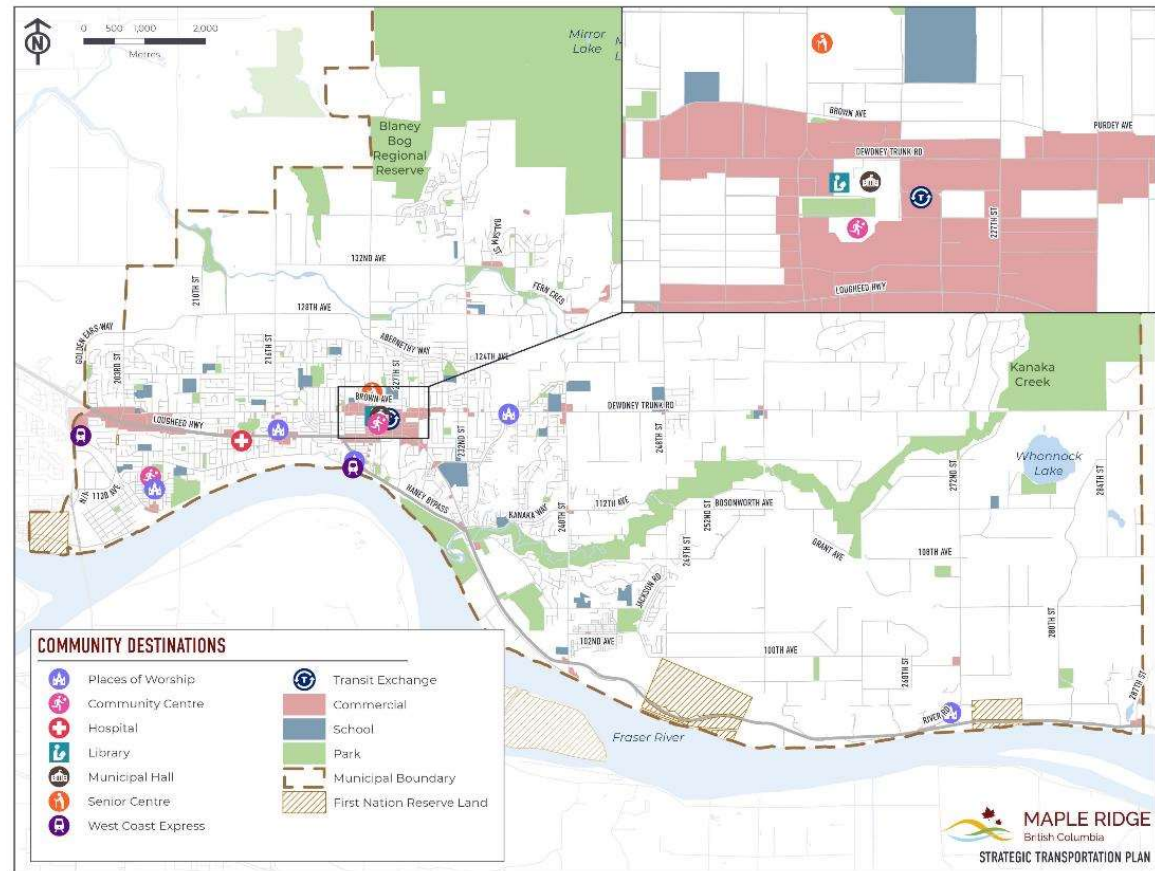
- 88,000 people – almost doubled in population in the last 30 years
- 2.7 people / household – higher than regional average of 2.6
- Forecast to reach 125,000 people by 2050
- 30,000 jobs within the City – forecast to grow faster than population & reach 43,500 by 2050



COMMUNITY PROFILE

DESTINATIONS

- Regional Town Centre with commercial and services
- Regional and provincial parks
- Hospital
- Local schools, community centres, libraries, seniors centres, park, and places of worship serve diverse populations
- Neighbouring Indigenous communities and reserve land

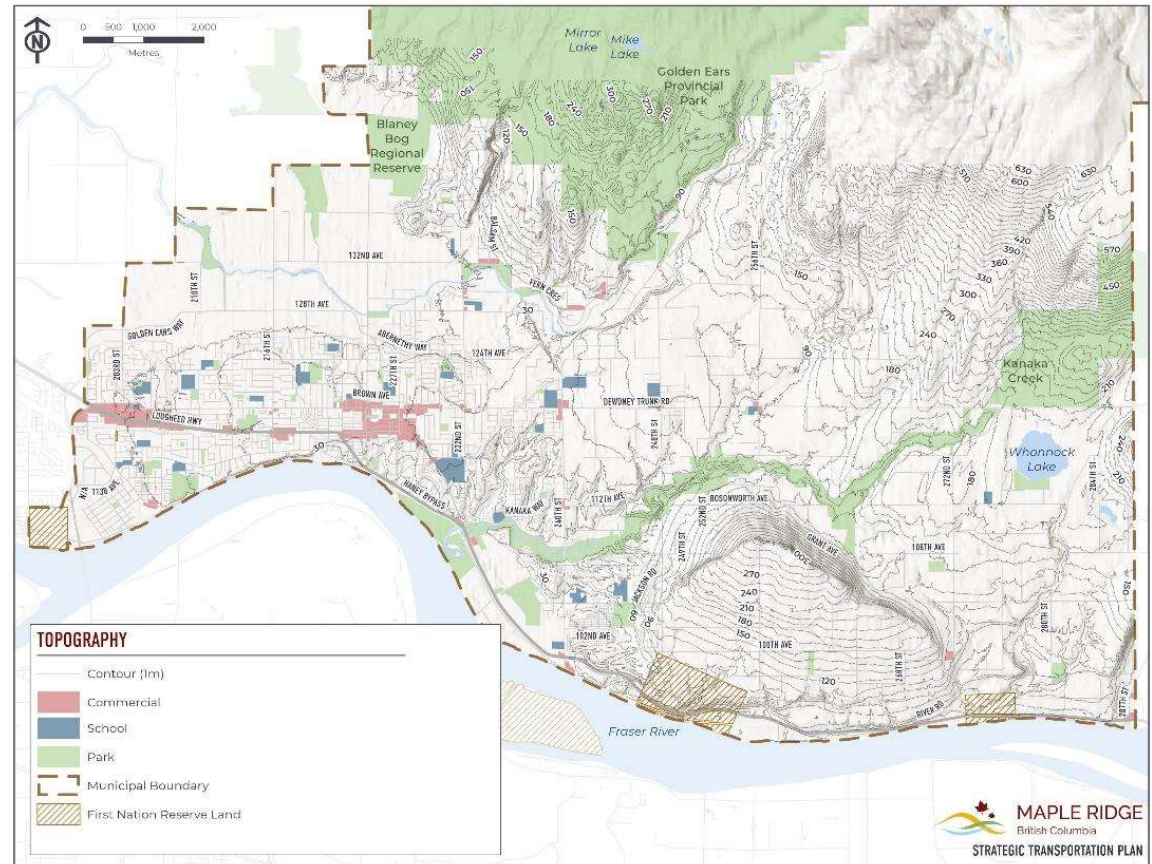


U:\Projects_VAN\1914\007800\1\0-Design\GIS\Projects\Maple_Ridge\Maple_Ridge_Community_Destinations_8.5.11_Rev8
Last updated by: macteo on April 6, 2021 at 5:20 PM

COMMUNITY PROFILE

GEOGRAPHY

- Most established neighborhoods are relatively flat
- Some significant grades north of Haney Bypass and in newer neighbourhoods

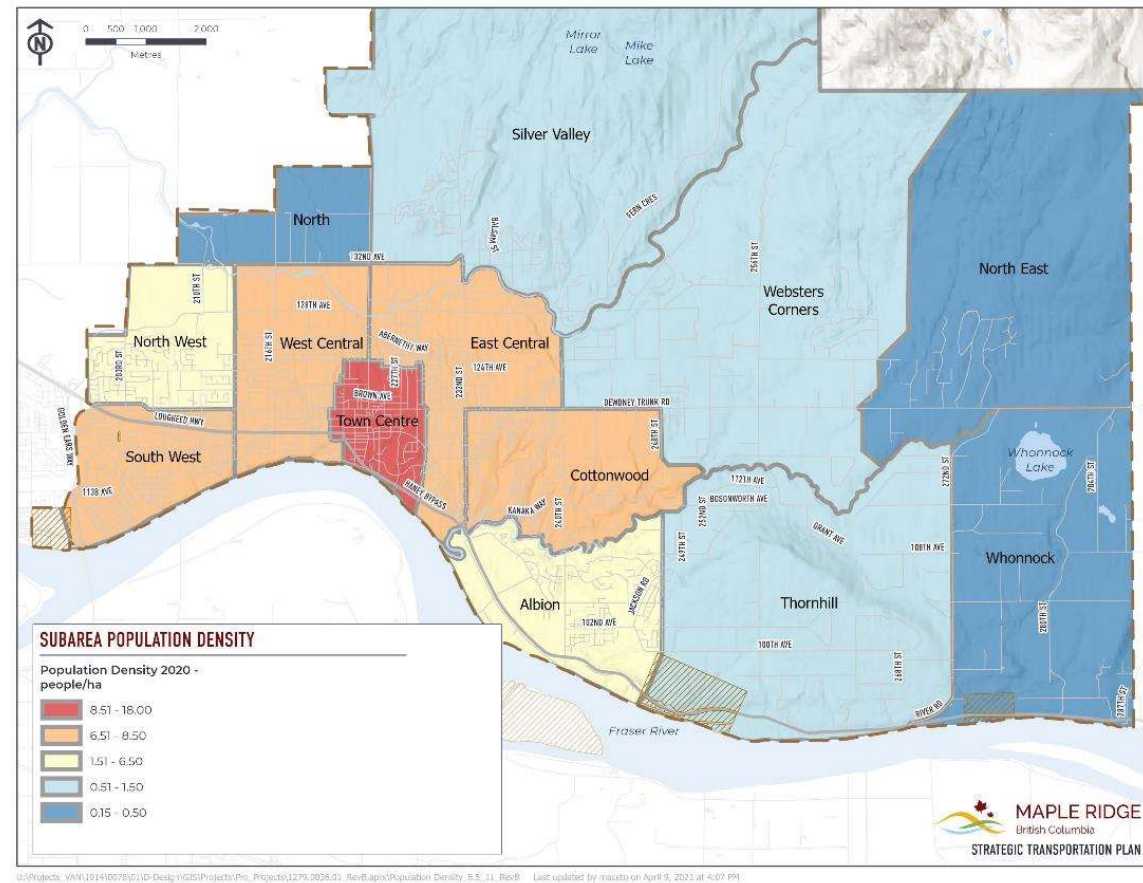


U:\Projects_V\191-450\3011-D-Design\GIS\Projects\Photo\1275.0036.01.aprx\Topography_8.5.11_RenB Last updated by macleo on March 29, 2011 at 5:18 PM

COMMUNITY PROFILE

POPULATION DENSITY

- Highest population in the Town Centre and surrounding areas.
- Lower density areas require more capital to provide the same level of service to fewer people

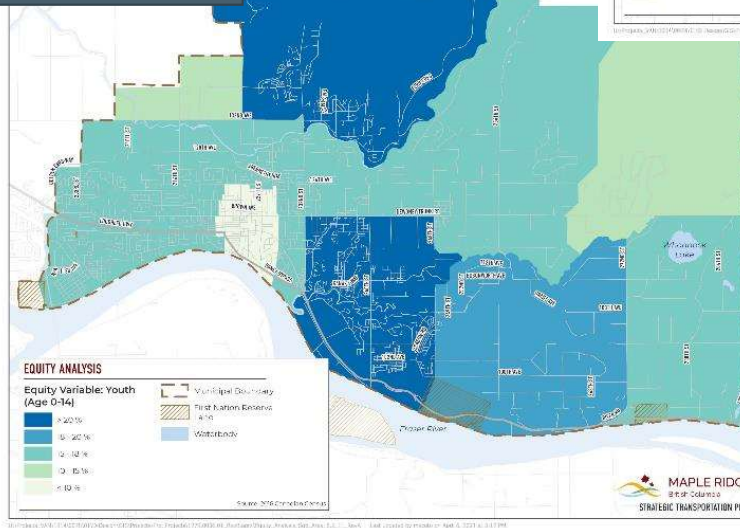


COMMUNITY PROFILE

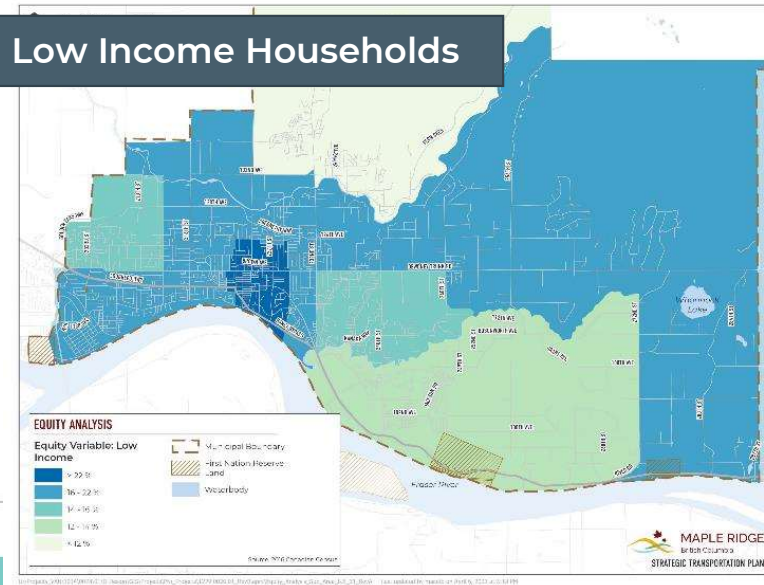
VULNERABLE POPULATIONS

- Safe, accessible, and affordable transportation choices critical for vulnerable populations

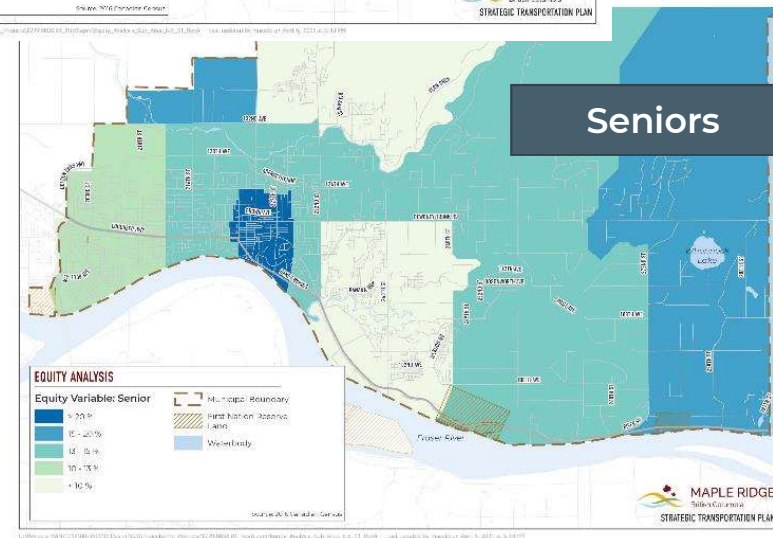
Youth



Low Income Households



Seniors



COMMUNITY PROFILE

KEY TRENDS & ISSUES

- Relatively large land mass with many kilometers of transportation infrastructure
- Grades and stormwater management create challenging conditions in some neighbourhoods
- Growing population and employment require sufficient capacity of safe, reliable transportation
- Increasing density in Town Centres and along key corridors create opportunity to move more people by walking, cycling, and transit
- Town Centre area needs special considerations for seniors and low-income households.
- Needs of youth particularly important in newer neighbourhoods.

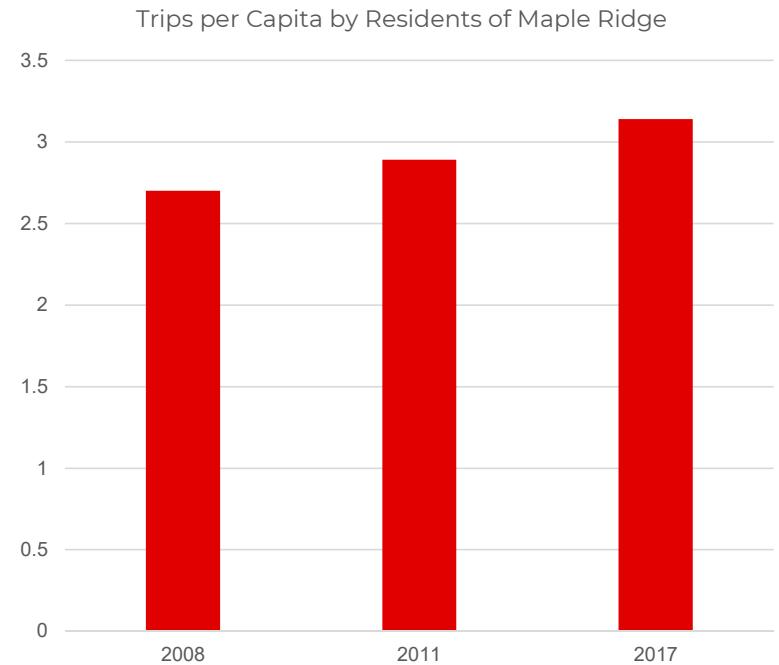


TRAVEL PATTERNS

TRAVEL PATTERNS

HOW MUCH DO WE TRAVEL?

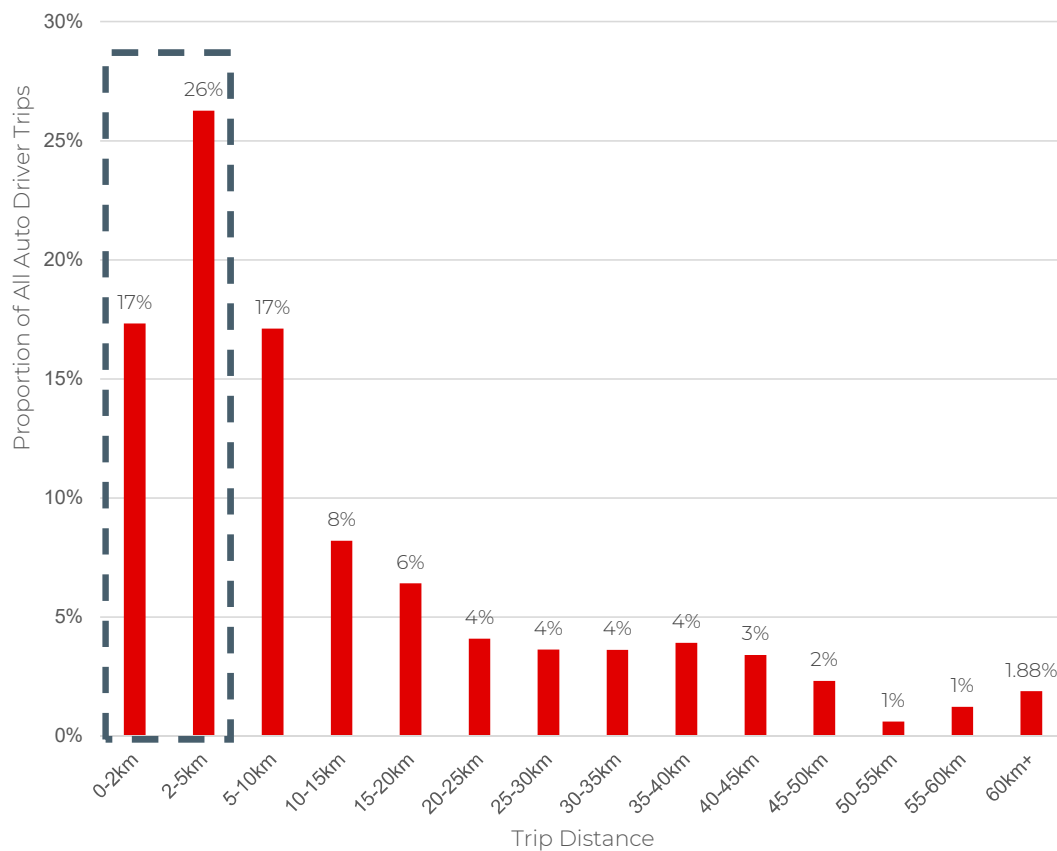
- Maple Ridge residents make an average of 3.1 trips per day, this is comparable to the Metro Vancouver average (3.1 trips per person per day).
- Has been increasing over time
- Total of 31 km of travel per person per day



TRAVEL PATTERNS

HOW FAR DO WE TRAVEL?

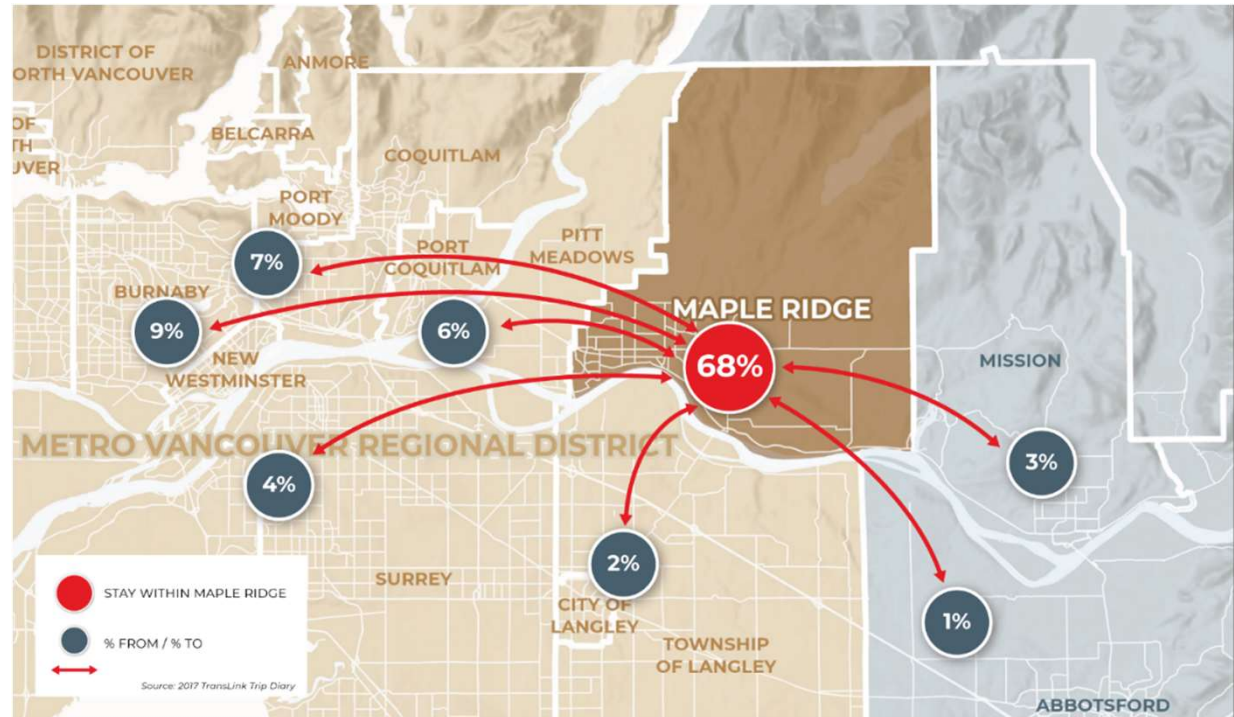
Mode	Trip Distance (km/trip)
Auto Driver	13.9
Auto Passenger	11.1
Bike	2.9
Other	8.8
Transit	24.6
Walk	0.9



TRAVEL PATTERNS

WHERE DO WE TRAVEL?

- Most trips (68%) by Maple Ridge residents start and end in Maple Ridge
- Other common destinations: Burnaby / New Westminster (9%), Tri-Cities (7%), and Pitt Meadows (6%)
- Pressure on western gateway and access to Town Centre

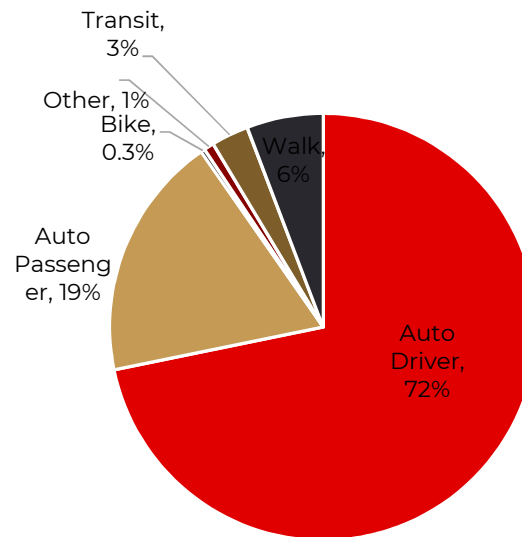


TRAVEL PATTERNS

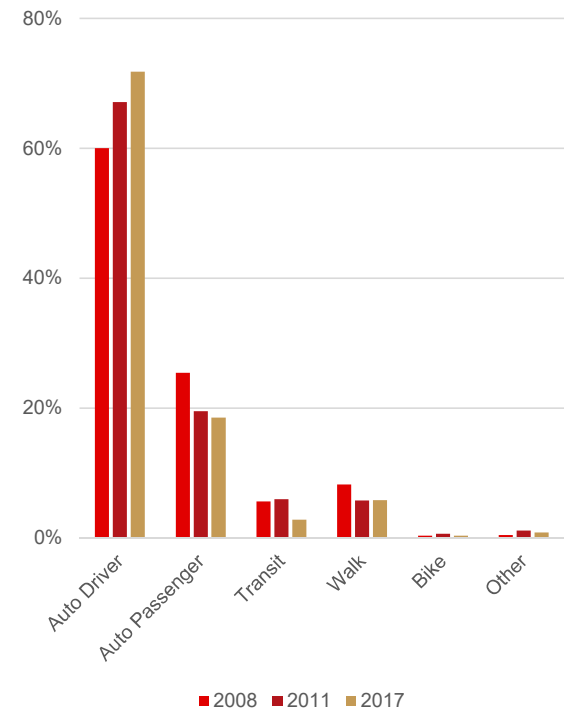
HOW DO WE TRAVEL?

- Majority of trips (72%) are auto as a driver
- Driver mode share has increased over time
- Highest auto driver mode share in Metro Vancouver.
- Most of region's, auto driver mode share is decreasing

Mode Share of All Trips Made by Maple Ridge Residents (2017)



Mode Share Percentage in Maple Ridge, 2008-2017

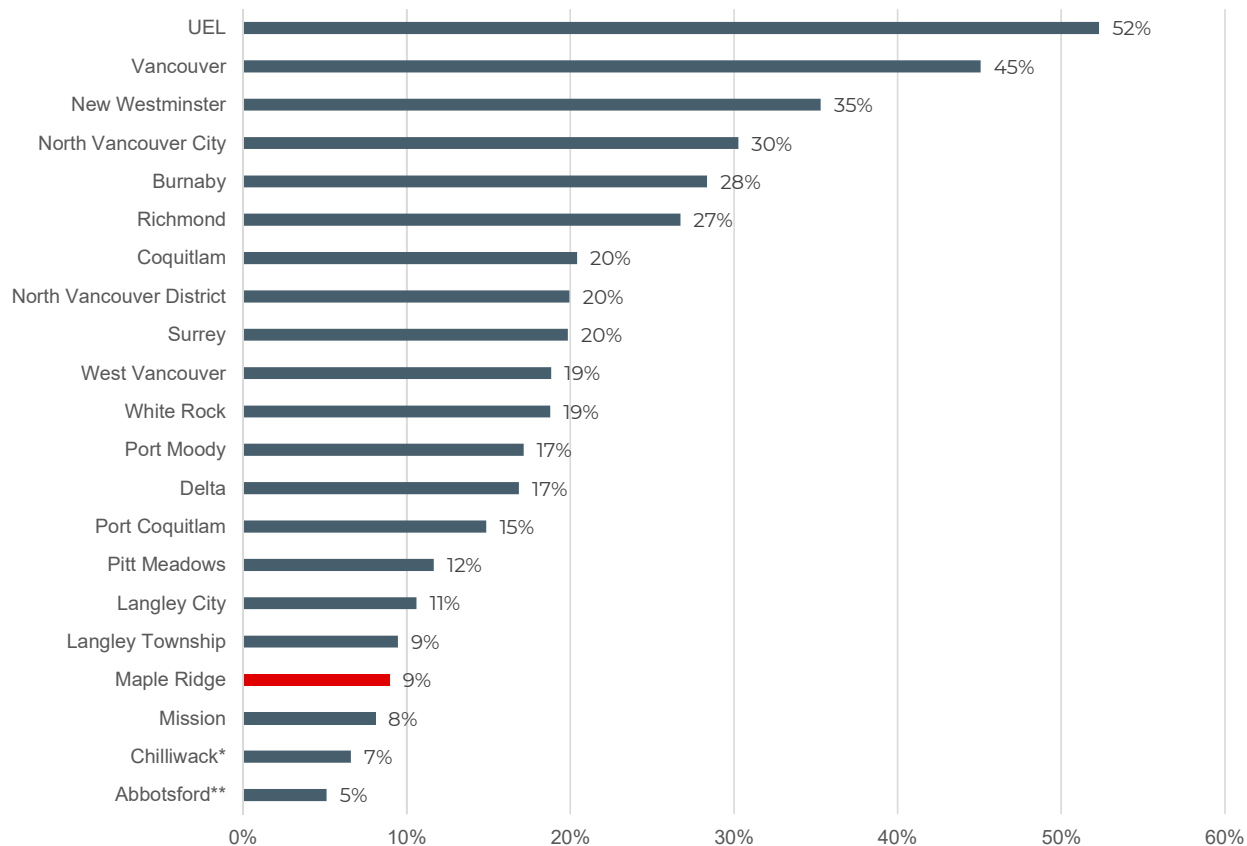


TRAVEL PATTERNS

HOW DO WE COMPARE?

- Among the lowest non-auto mode share in the region

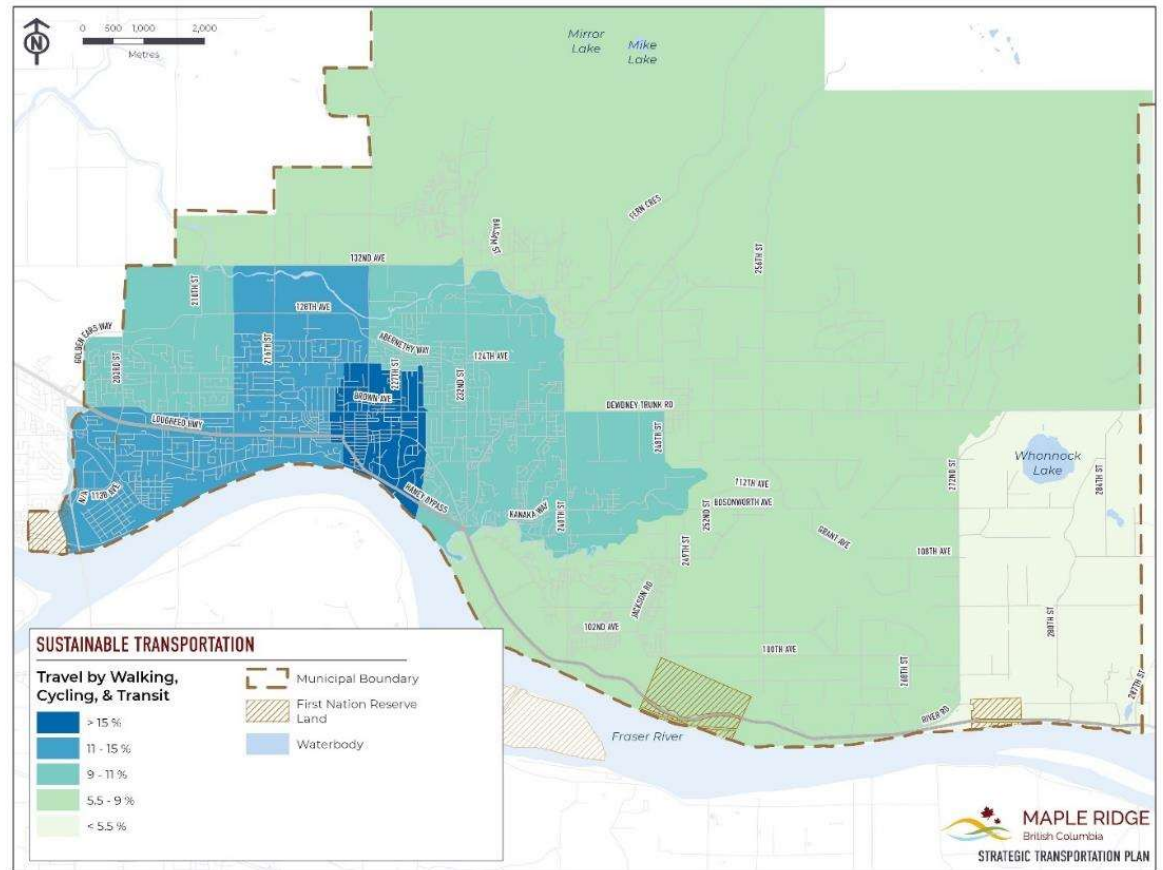
Proportion of All Trips Made by Sustainable Transportation Modes in the Lower Mainland Region (2017)



TRAVEL PATTERNS

HOW DO WE TRAVEL?

- Highest non-auto mode share in highest density neighbourhoods, lower income, more commercial land use, more destinations



U:\Projects_VAN\1914\0078\01\01-Design\02\Projects\Pre-Projects\1279.0036.01_Rev\Map\Maple Ridge Sustainable Transportation SL 11_Rev0 Last updated by macteo on April 6, 2023 at 5:15 PM

TRAVEL PATTERNS

KEY ISSUES & TRENDS

- Number and distance of trips is increasing over time
- Proportion of driving trips is increasing over time
- Resulting increase in vehicle traffic contribute to congestion, greenhouse gas emissions
- Highest non-auto mode share in Town Centre, followed by Southwest and West Central – higher density, lower income, more commercial and other local destinations

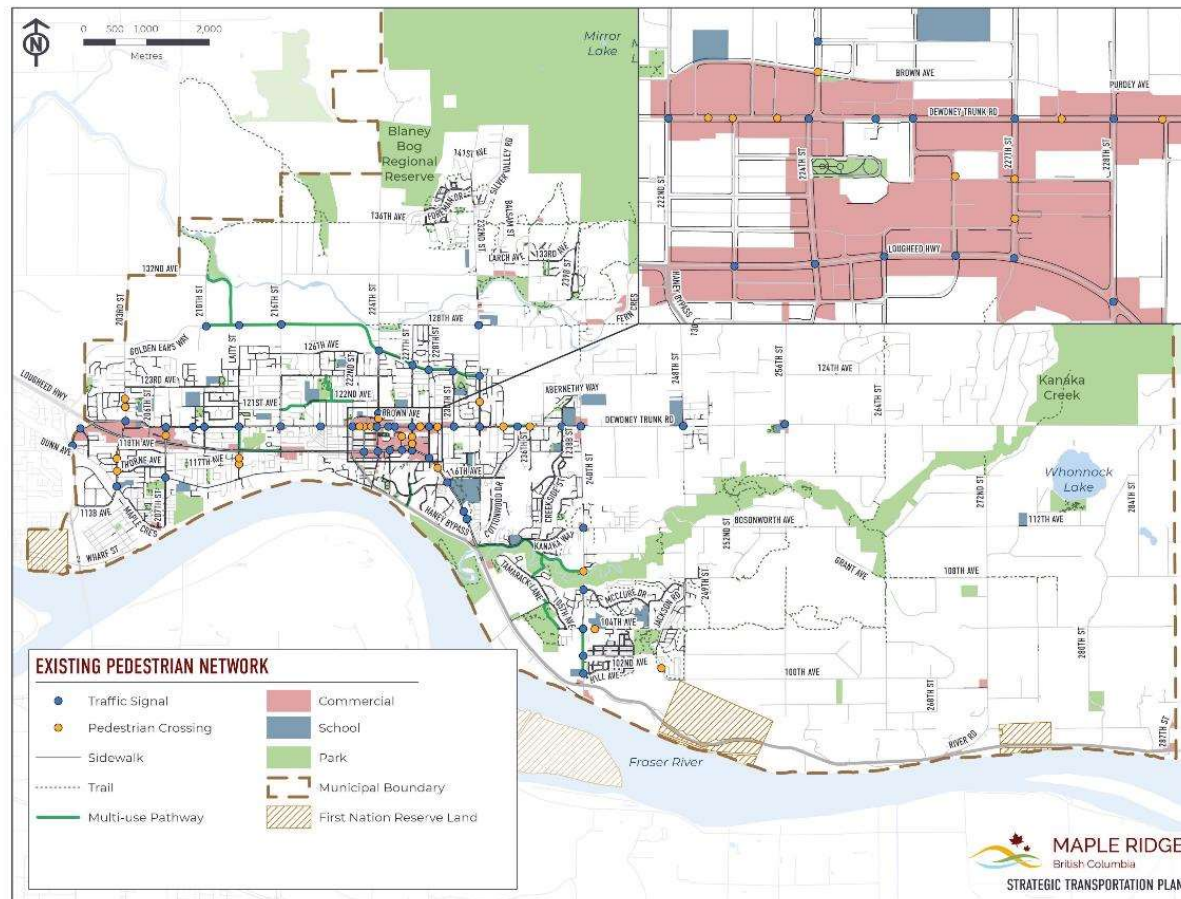


WALKING / WHEELING

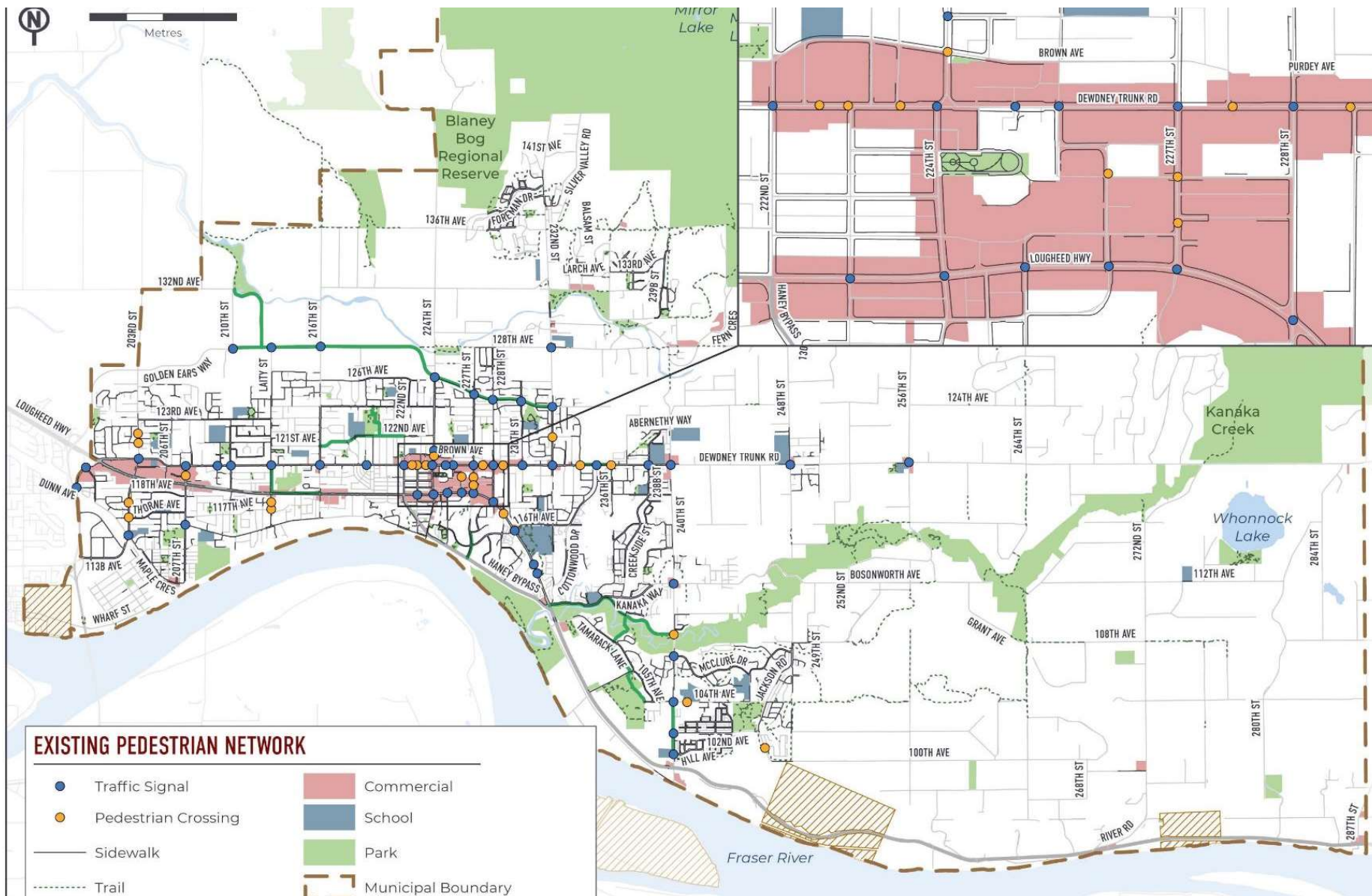
WALKING / WHEELING

INFRASTRUCTURE COVERAGE

- Approximately 35% of roadways have sidewalks or MUPs on one or both sides.
- Neighbourhoods built in different years and with different standards
- Rural and some established areas have rural roads, surface drainage, no sidewalks
- High density of pedestrian crossings in Town Centre



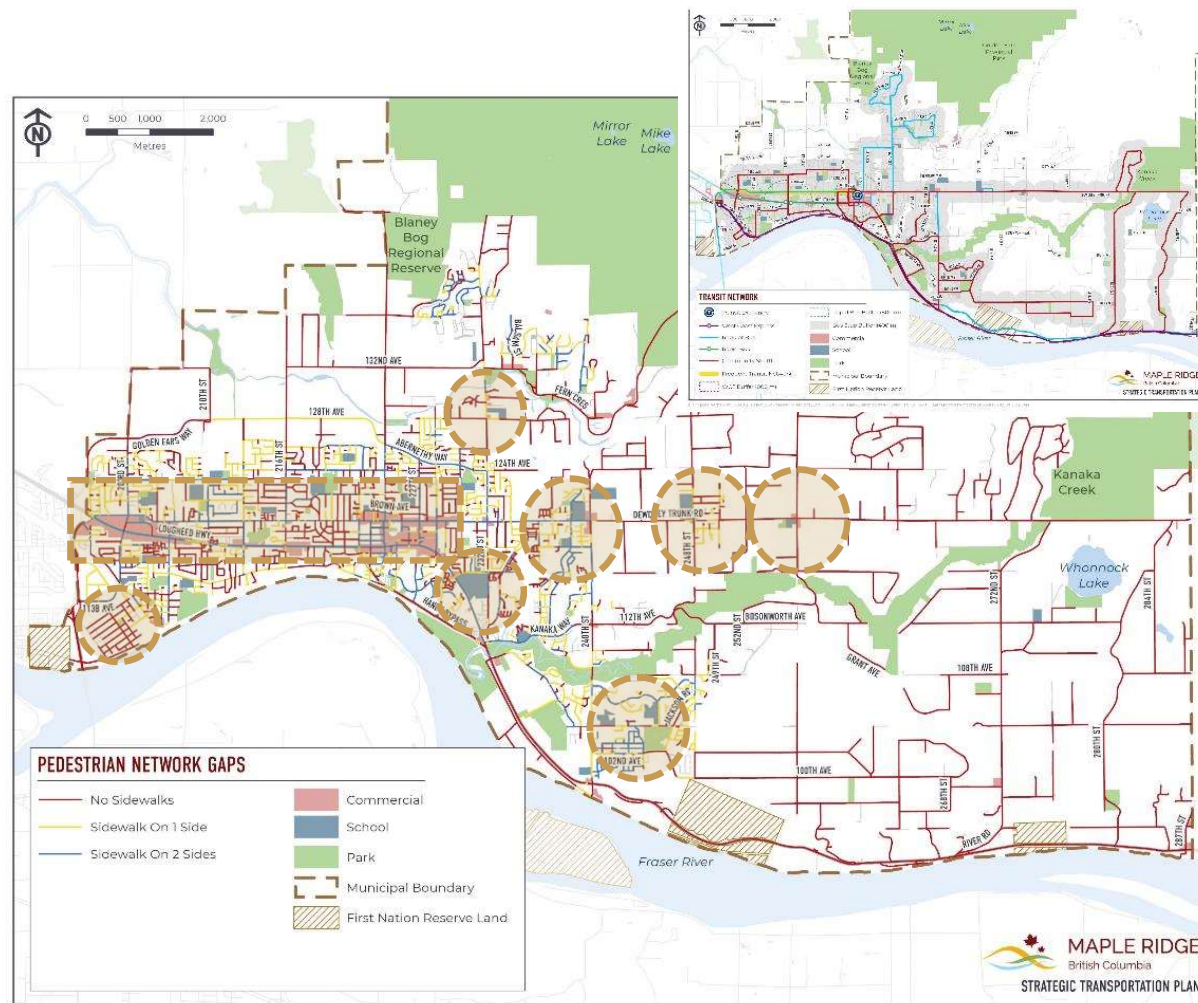
U:\Projects_VAN\1814-0078\0112-Design\GIS\Projects\Pro_Projects\1279-0035-01_Rev\agrs\Walking_Network_B.5_11_RevA Last updated by macteo on April 8, 2021 at 11:33 AM



WALKING / WHEELING

NETWORK GAPS

- Sidewalk gaps along RapidBus, Frequent Transit Network, & commercial corridors reduce accessibility and comfort of walking & transit
- Gaps around schools & community destinations
- Neighbourhoods with historic / rural characteristics lack sidewalks

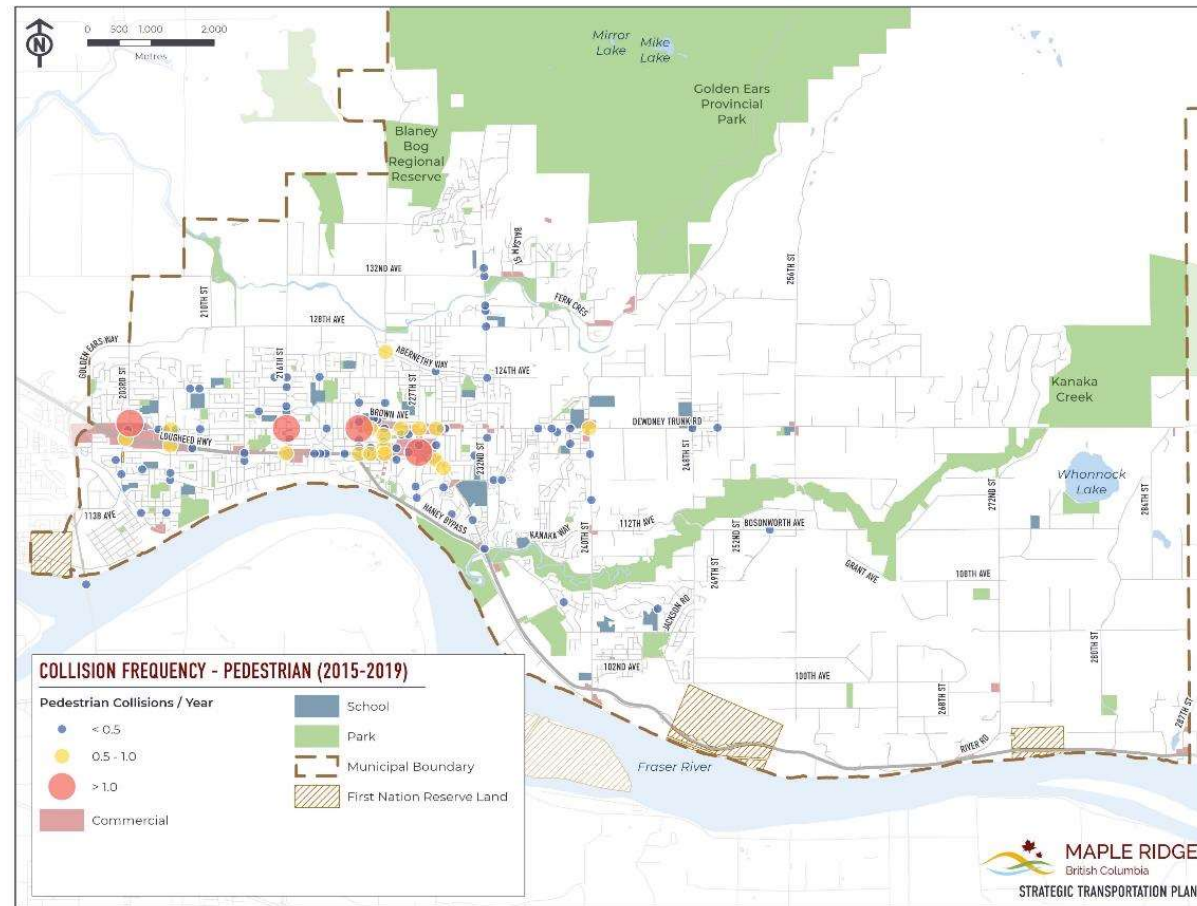


U:\Projects_VAN\1914\0078\01-Design\GIS\Projects\Pre_Projects\1279_0036_01_Rev\apn\Sidewalk_Gap_8.5_11_RevB Last updated by maceto on April 9, 2021 at 10:20 AM

WALKING / WHEELING

SAFETY

- Highest frequency of pedestrian collisions in Town Centre & commercial areas
- Clusters around schools and locations with limited sidewalks / pedestrian infrastructure
- Collisions involving pedestrians are more likely to result in injury or death than those involving only vehicles



WALKING / WHEELING

KEY ISSUES & GAPS

- Some common destinations, including transit stops, parks, schools, community facilities, and commercial areas have sidewalk gaps and / or sidewalks on only one side of the roadway
- Most local streets do not have sidewalks on either side of the street
- Drainage type makes sidewalk construction difficult in some areas
- Limited crossing opportunities on some busy roadways
- Higher quality pedestrian amenities in newer neighbourhoods are delivered by developers and paid for by the residents of these areas, this creates a challenge when determining who should pay for new pedestrian amenities in older areas of the city.

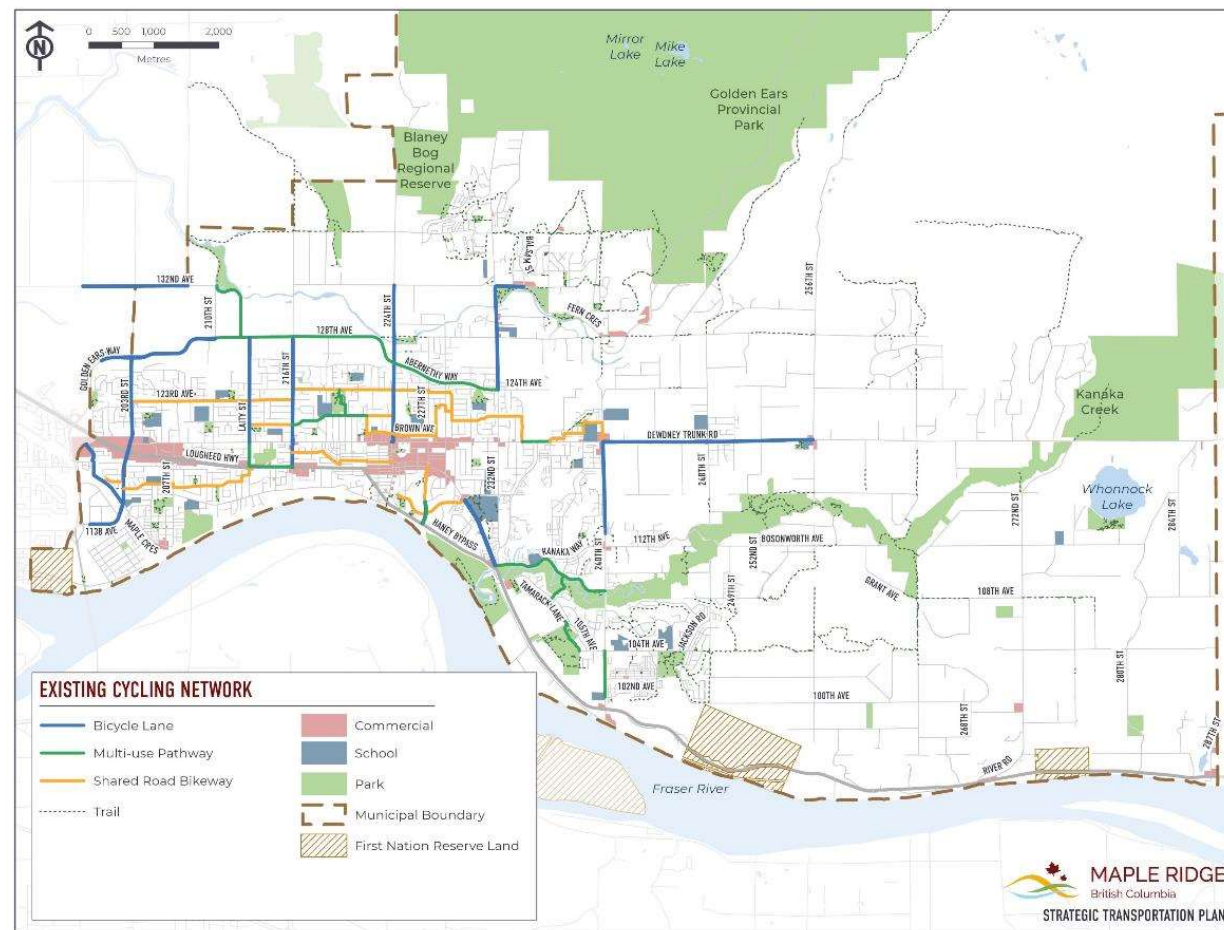


CYCLING

CYCLING

INFRASTRUCTURE COVERAGE

- Bicycle routes in Maple Ridge are predominantly made up of three types of facilities
 - On-street bicycle lanes (~44 km)
 - Shared road bikeways (~19 km)
 - Multi-use pathways (~14 km)
- Additional park and community recreational trails

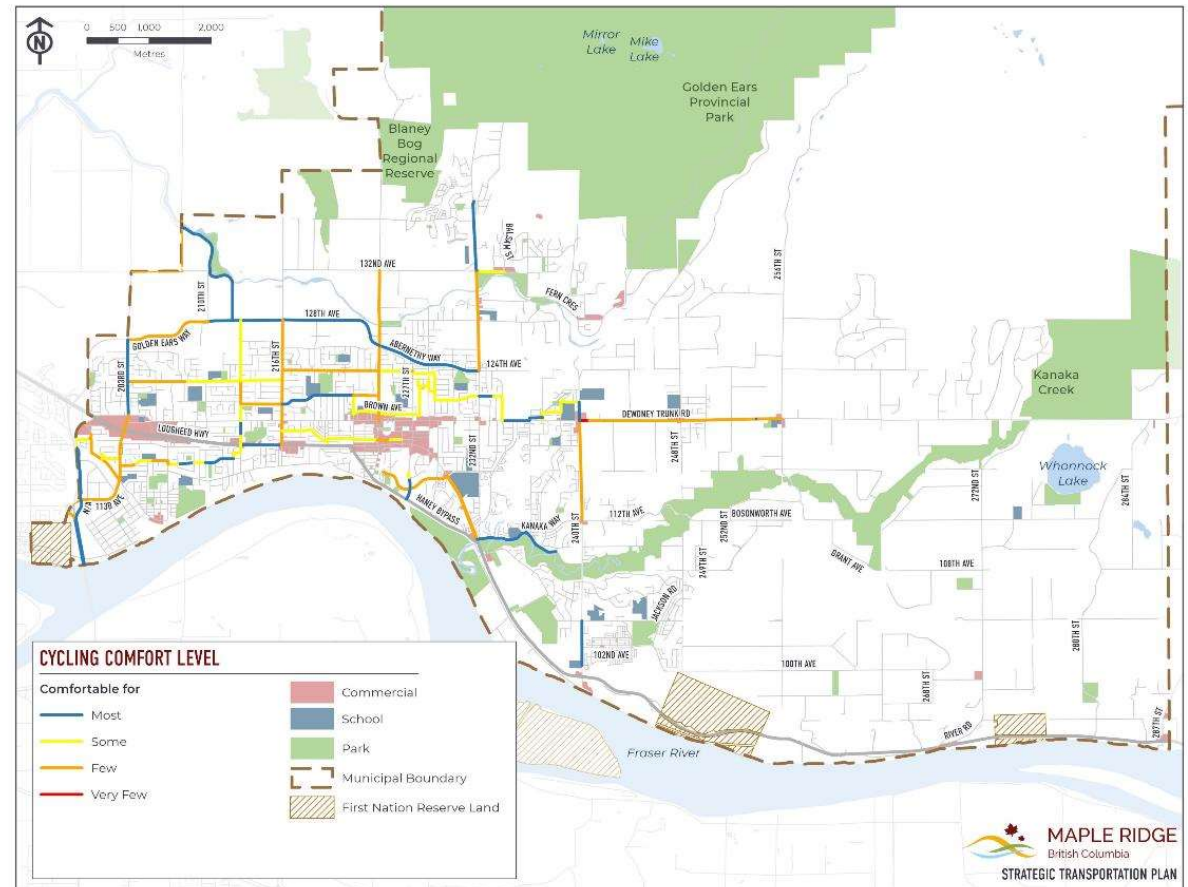


Q:\Projects_VAN\1314\0278\02\IC-Design\GIS\Projects\Maple_Ridge\0036_01_Rev8\aprx\Existing_Bike_Network_S.S_11_10.aprx Last updated by macos on April 8, 2021 at 8:53 AM

CYCLING

NETWORK GAPS

- Not all existing bicycle facilities are comfortable for people of all ages and abilities (AAA)
- There are areas of the community with no or few designated cycling routes
- Limited routes in the Town Centre

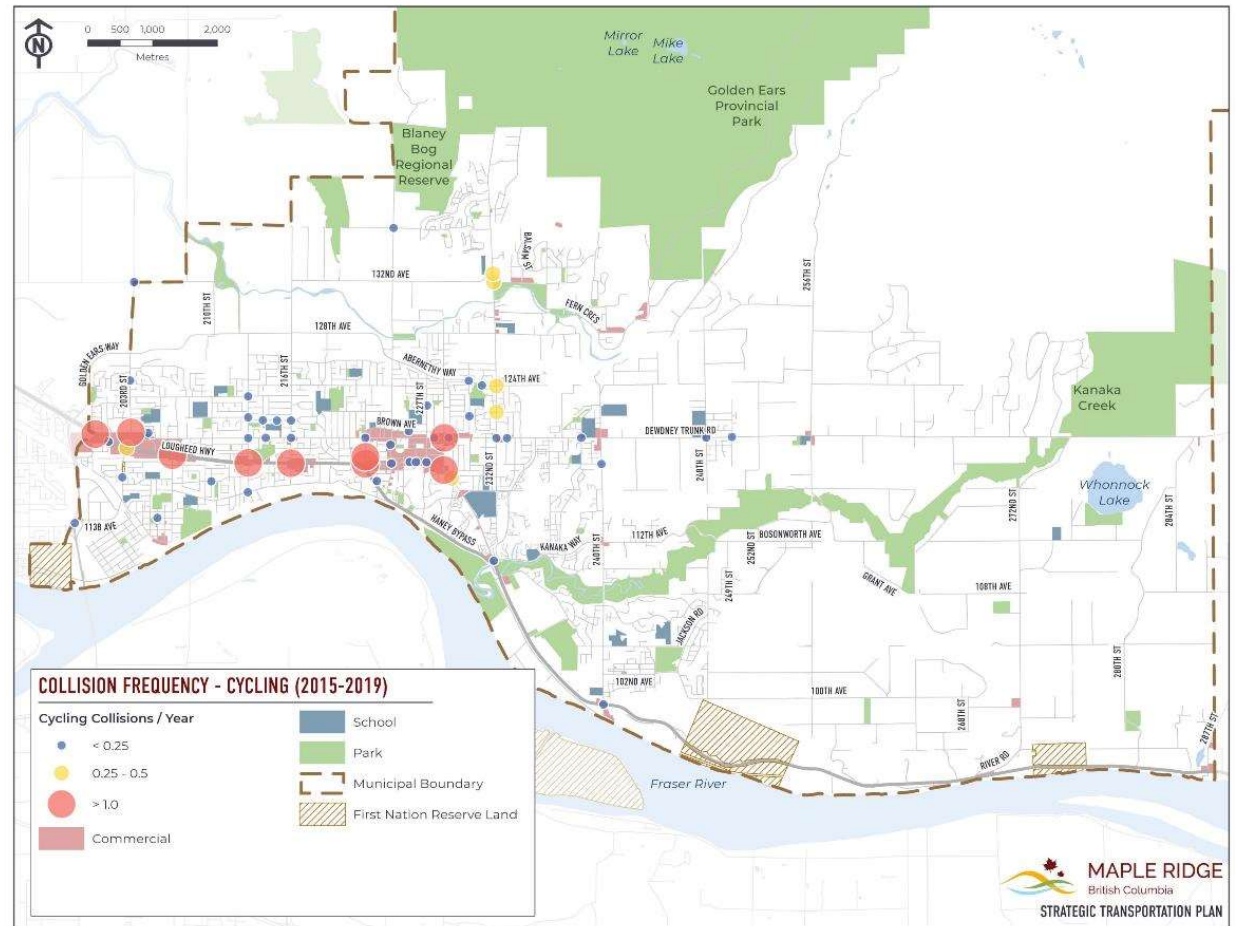


U:\Projects_VAN\1914\0078\01\10-Design\GIS\Projects\Rev_Projects\1279.0036\01_RevB.aprx\Cycling_Comfort_8.5_11_RevB Last updated by mscod on March 31, 2021 at 11:01 AM

CYCLING

SAFETY

- Highest frequency of pedestrian collisions along Lougheed Highway, 232 Street, and within the Town Centre
- Like pedestrians, collisions involving cyclists are more likely to result in injury or death than those involving only vehicles



U:\Projects\WAK\1914\0078\01\0-Design\GIS\Projects\Pro_Projects\1229_0036\01_Rev8.aprx\Collision_Frequency_Cycling_8.5.11_RevA Last updated by macceto on April 26, 2021 at 4:38 PM

CYCLING

KEY ISSUES & GAPS

- Gaps in the network
- Lack of connected routes to key destinations
- Limited facilities considered AAA
- Opportunities to enhance and build the Major Bikeway Network and the Regional Greenway Network
- Low cycling mode share

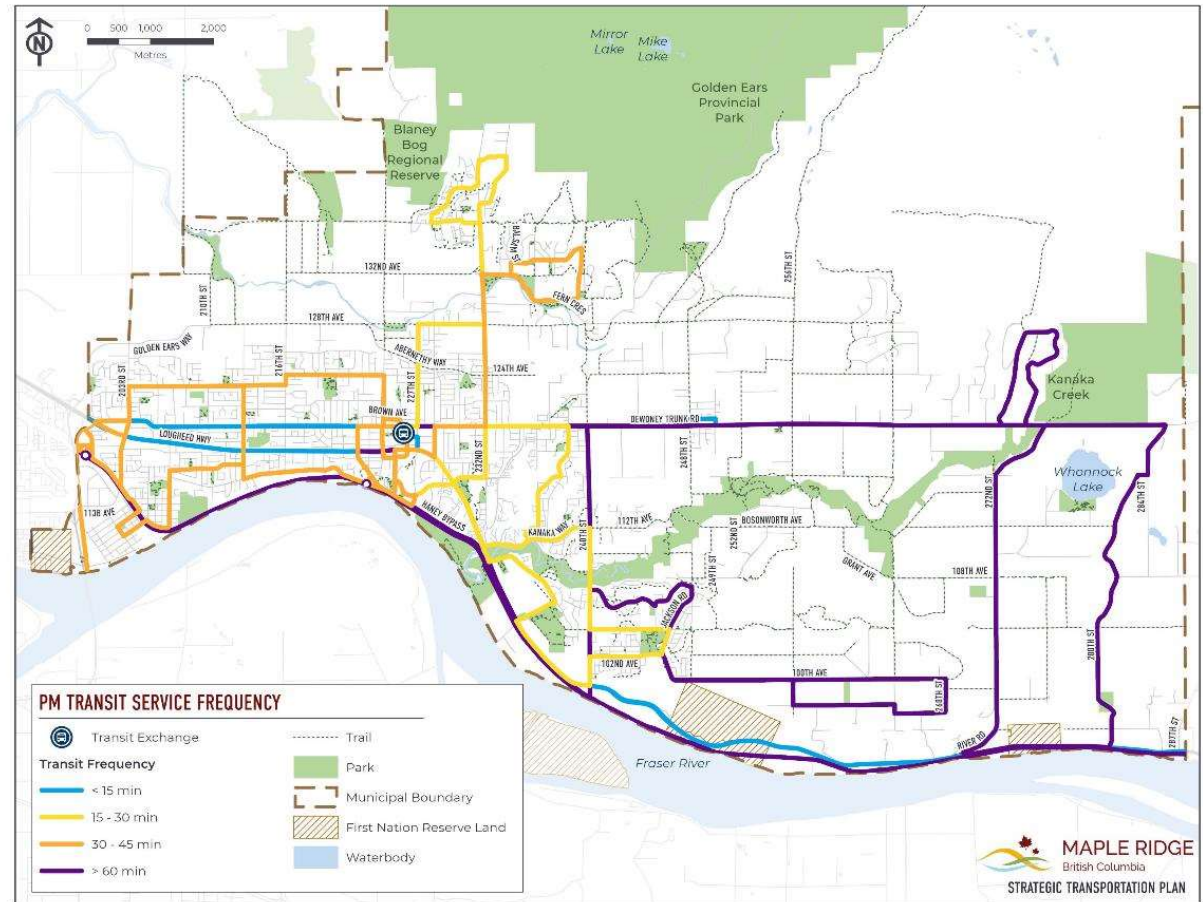
The image features a light gray background with a complex, stylized map pattern. The map consists of numerous thin, intersecting lines representing streets and roads, with some circular nodes indicating roundabouts or major intersections. Overlaid on this map is a large, solid red rectangle. Centered within this red rectangle is the word "TRANSIT" in a bold, white, sans-serif font.

TRANSIT

TRANSIT

SERVICE FREQUENCY

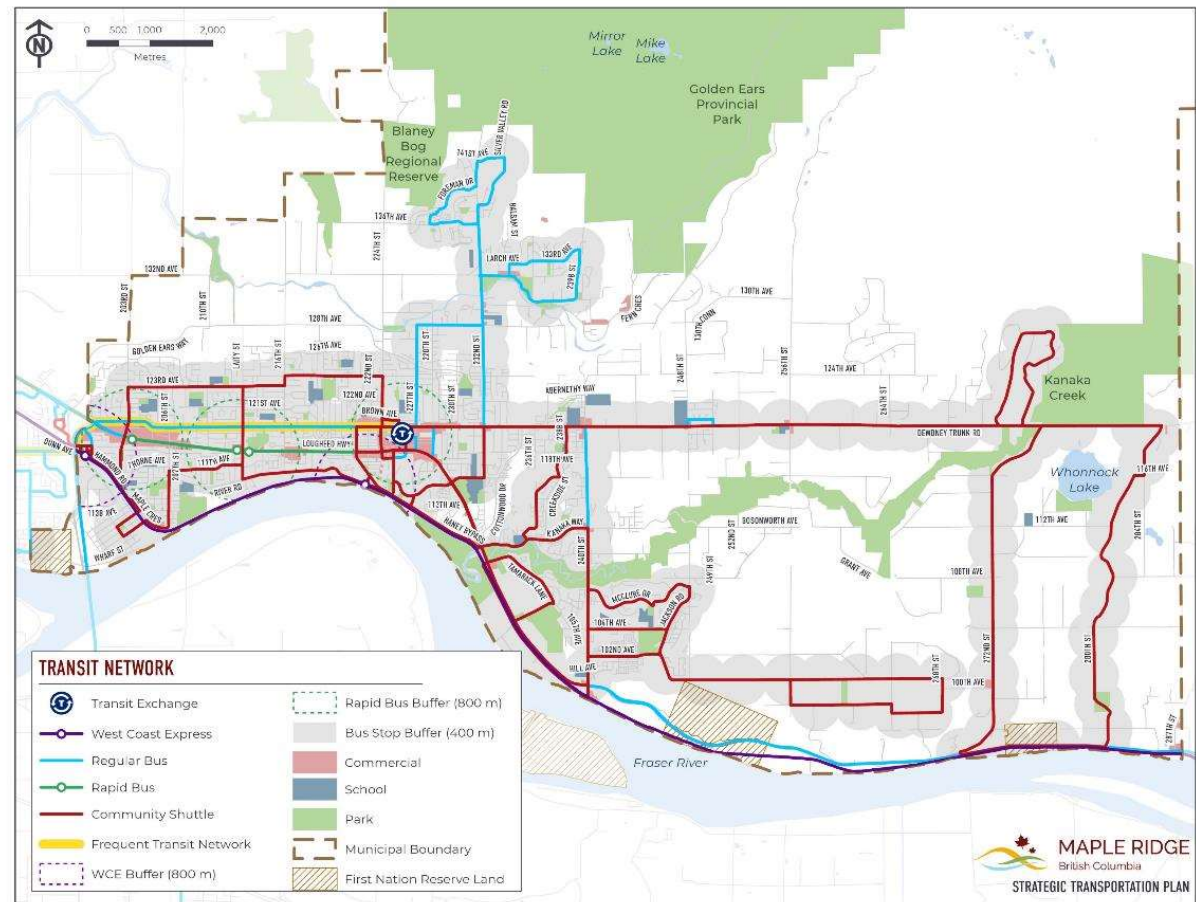
- New RapidBus on Lougheed Highway provides fast, frequent service
- Dewdney Trunk Road part of FTN with frequent service
- Other routes are less frequent – some as low as 60 minutes
- Transit travel speeds are slower than driving for most trips
- West Coast Express provides limited, fast service



TRANSIT

COVERAGE

- Most residents (83%) live within 400 m of a bus stop with some transit service
- Fewer live within 400 m of high frequency service

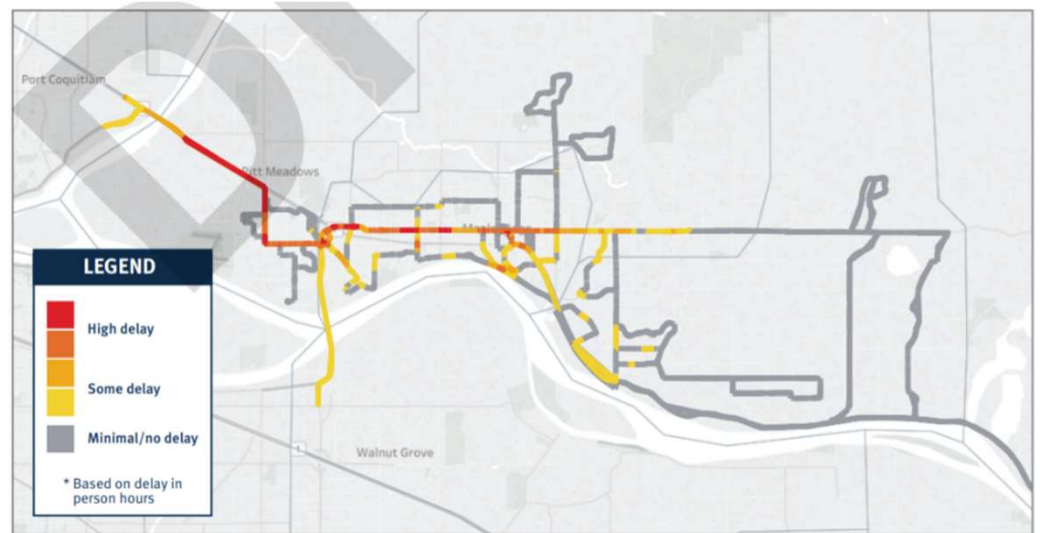


\\Projects_VAN\1914\078\01\Design\GIS\Projects\Proj_Projects\1279_003\01_Rev\Maprx\Transit_Network_Buffer_S3_11_Rev01.mxd Last updated by macsio on April 8, 2021 at 11:28 AM

TRANSIT

BUS SPEED & RELIABILITY

- Congestion decreases the speed and reliability of bus service and increases the cost of providing transit
- R3 RapidBus included some transit priority improvements; however, buses are still slowed by congestion on Lougheed Highway, as well as Dewdney Trunk Road
- Data shown here is before launch of R3



Source: TransLink Maple Ridge – Pitt Meadows Draft Area Transport Plan, 2020

TRANSIT

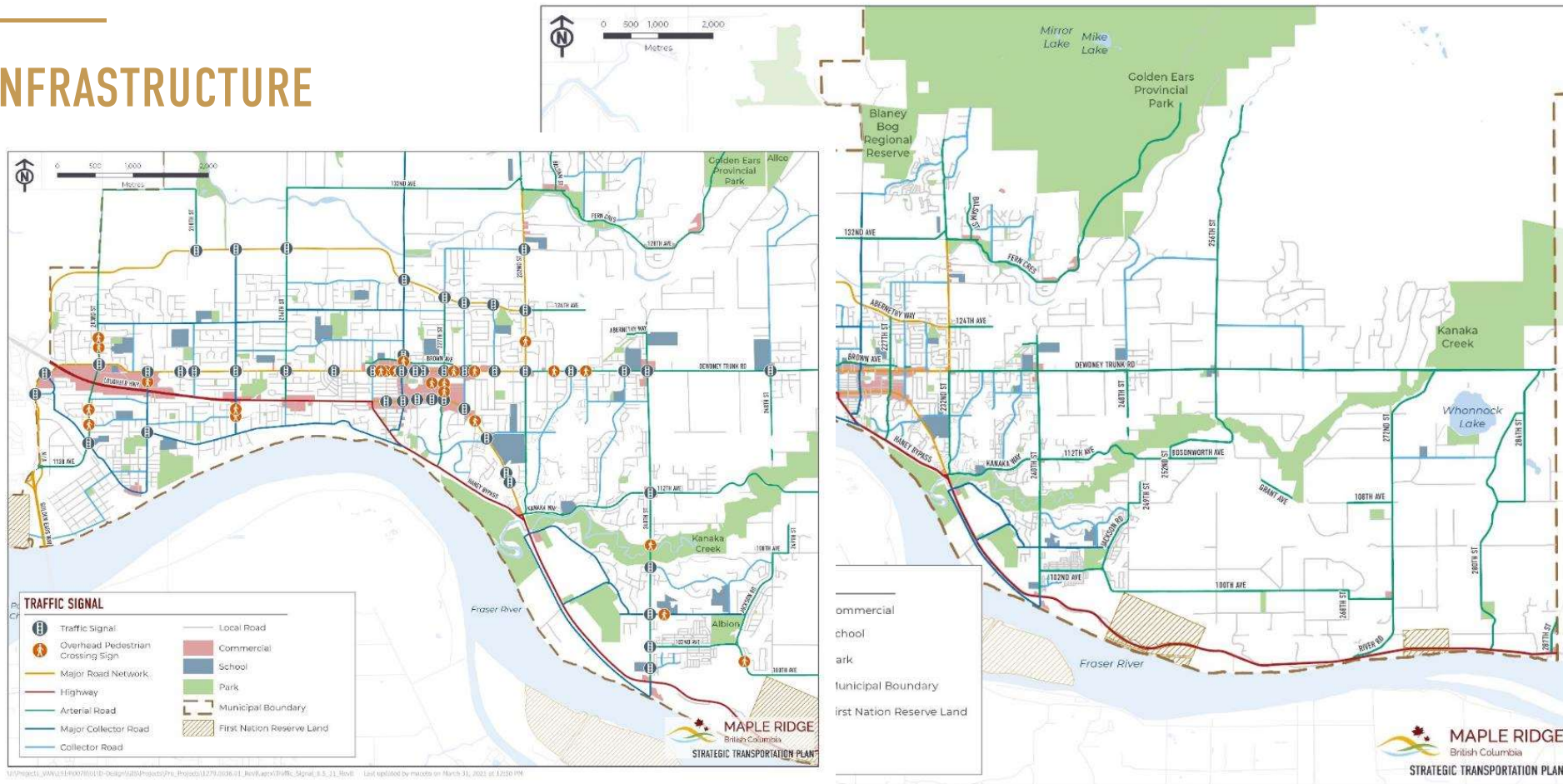
KEY ISSUES & GAPS

- Few residents live close to frequent, high speed transit with extended service hours, including weekends
- Frequency and span of service of West Coast Express is limited
- Congestion along Dewdney Trunk Road and Lougheed Highway decrease the speed and reliability of bus service.
- Transit exchanges lack amenities such as washrooms and some are physically constrained
- Some bus routes are at / over capacity during peak times



DRIVING / GOODS MOVEMENT

INFRASTRUCTURE

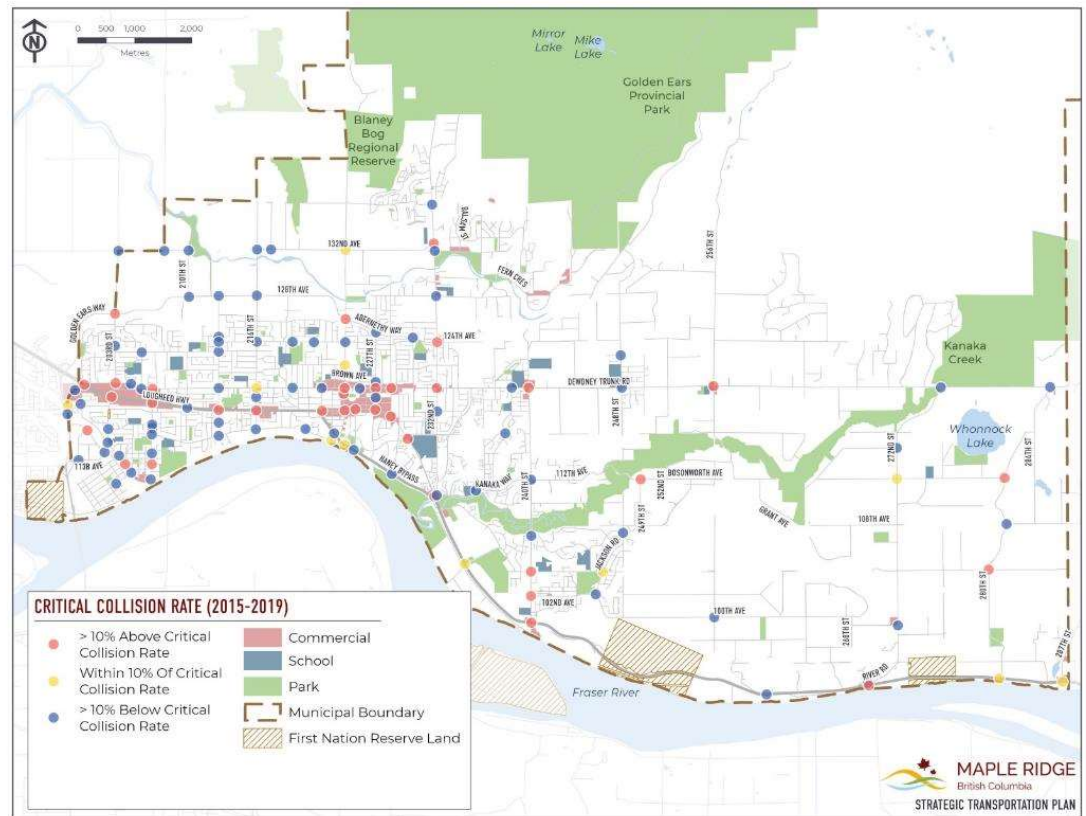


DRIVING / GOODS MOVEMENT

Information provided is a high level assessment based on limited data.

SAFETY - COLLISION RATES

- Intersections where the number of collisions is higher than what might be expected based on number of vehicles

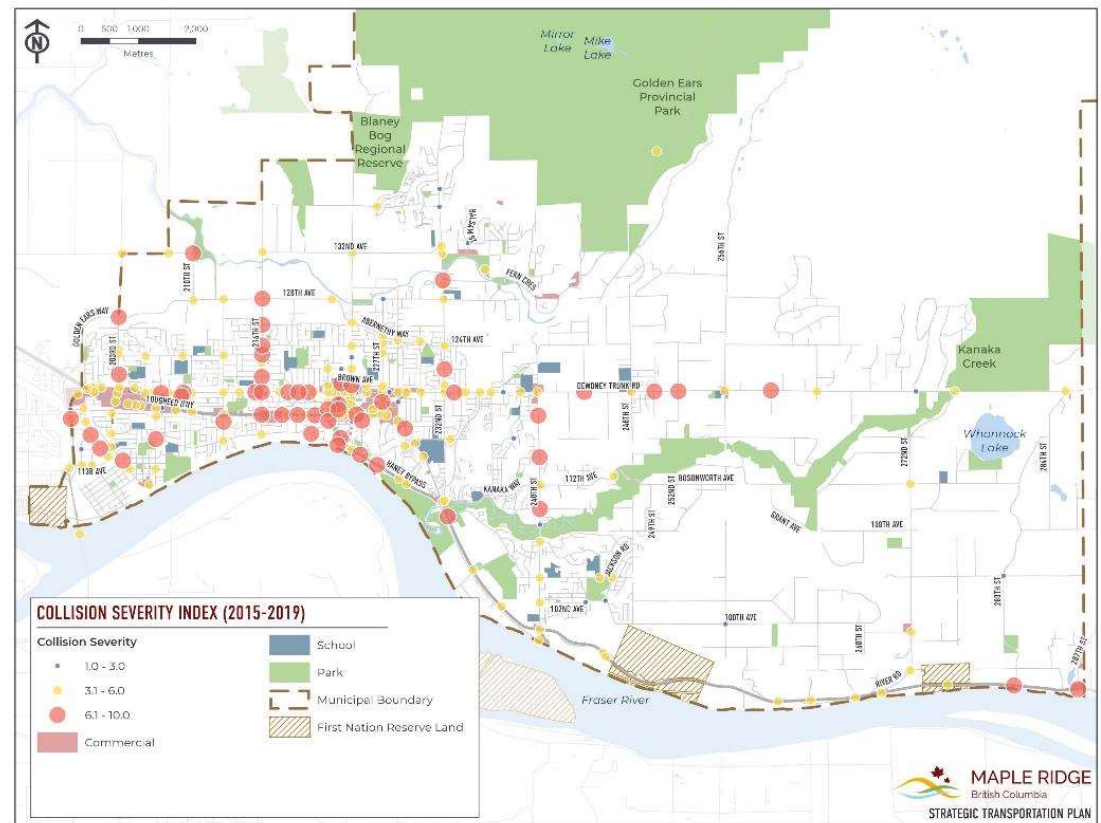


DRIVING / GOODS MOVEMENT

Information provided is a high level assessment based on limited data.

SAFETY - SEVERITY

- Intersections where there is a higher proportion of casualty collisions – i.e. collisions that result in an injury or fatality
- High level assessment using available data
- Higher severity often associated with higher speeds or more vulnerable road users



DRIVING / GOODS MOVEMENT

PEAK HOUR AVERAGE SPEED



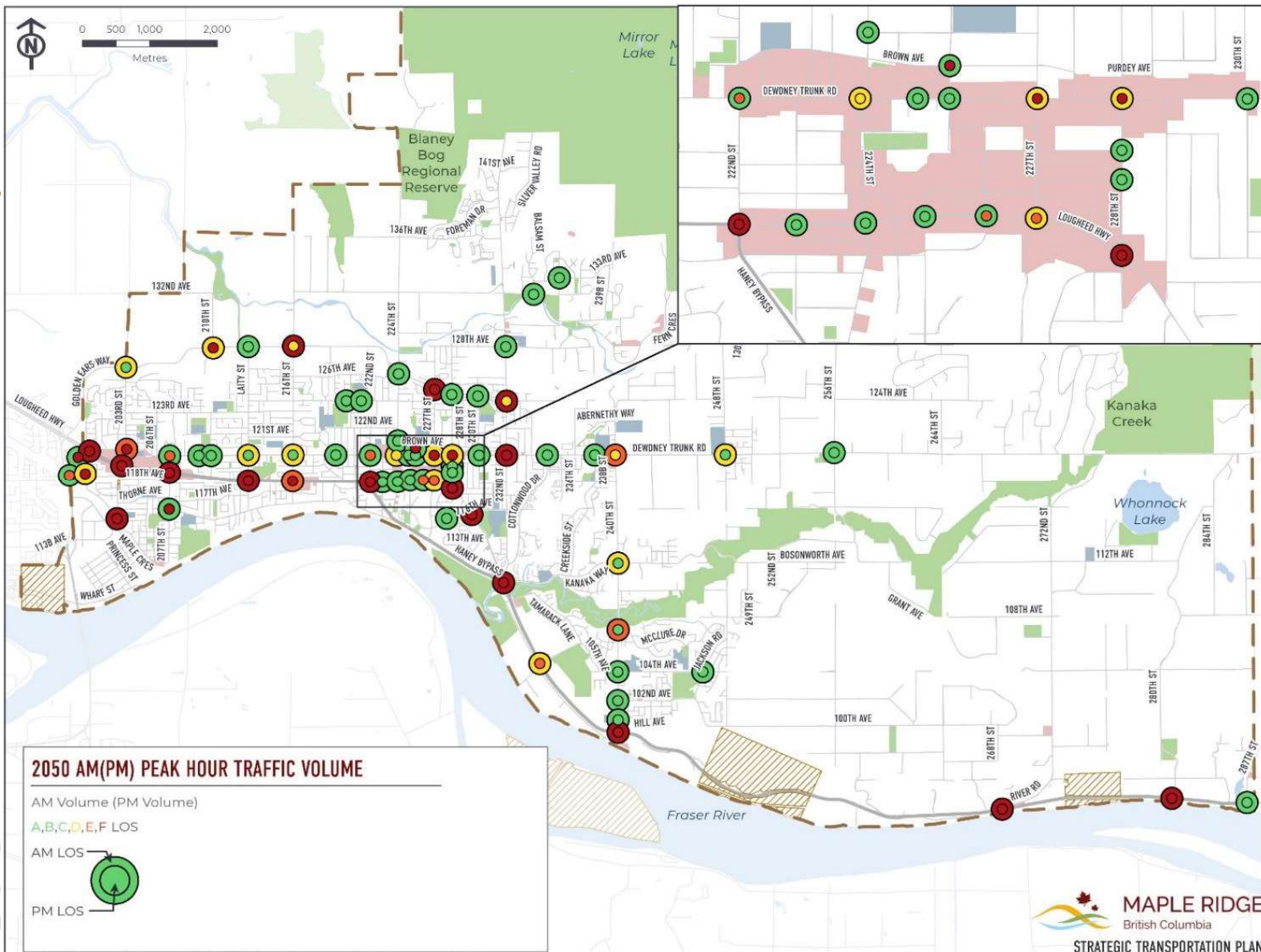
U:\Projects_VAN\19140078\01-Design\GIS\Projects\Pro-Projects\1279.0036\01-Rev\Bor\Tort\Maple_Ridge_Peak_Speed_8.5.11_Rev1 Last updated by mroberts on April 21, 2021 at 10:03 AM

MAPLE RIDGE
British Columbia
STRATEGIC TRANSPORTATION PLAN

MAPLE RIDGE
British Columbia
STRATEGIC TRANSPORTATION PLAN

URBAN
SYSTEMS





DRIVING / GOODS MOVEMENT

KEY ISSUES & GAPS

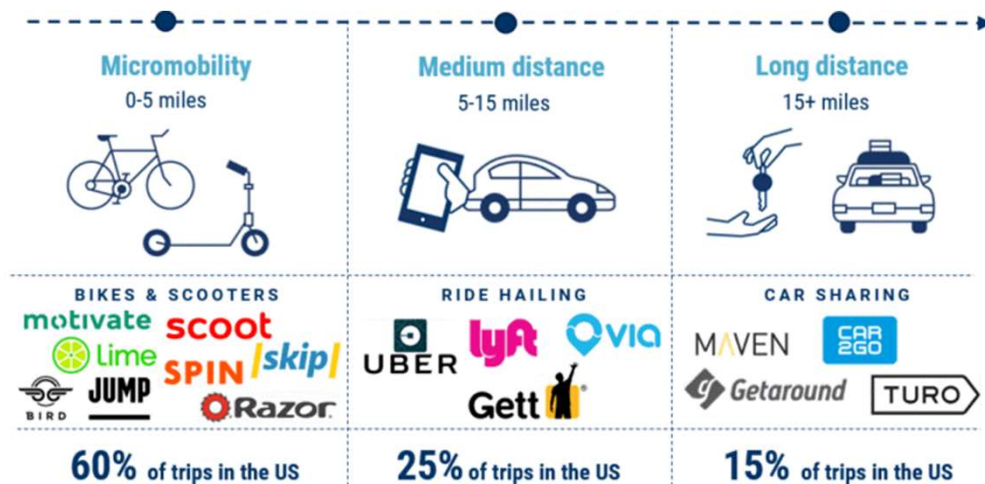
- Safety challenges, including higher severity and frequency collision locations along Lougheed Highway, Dewdney Trunk Road, 216th Street, 224th Street, and other locations
- Congestion, low reliability along the western gateway to the City from Golden Ears Bridge and Pitt Meadows
- Slow travel speeds and low reliability on connections to new and changing neighbourhoods
- Some intersection operational issues – expected to increase in the future as traffic grows



EMERGING MODES

EMERGING MODES

MICROMOBILITY, RIDE HAILING, CAR SHARING



Source: NHTS

CBINSIGHTS

- No car share companies are currently operating in Maple Ridge
- Ridehailing companies – e.g. Uber and Lyft – operating across Lower Mainland municipalities including Maple Ridge since June 2020
- No micromobility (e-scooters, e-bikes) operators are currently in Maple Ridge
- Metro Vancouver region (through TransLink) looking at how to manage emerging trends in transportation to ensure consistency for road users across Metro Vancouver

EMERGING MODES

ELECTRIC VEHICLES

- Maple Ridge has several accessible Level 2 charging stations, generally at civic sites:
 - Memorial Peace Park, Maple Ridge City Hall, Beast Clock, Ridge Meadows Hospital, Maple Ridge Operations Centre, SPCA
- Maple Ridge has two Level 2 charging stations in private sites:
 - West Coast Toyota and Fraser Regional Correctional Centre
- Council has expressed an interest in reviewing electric vehicle charging stations
 - On March 12, 2019 staff were directed to amend the Off-Street Parking and Loading Bylaw to integrate the revised set of electric vehicle charging infrastructure requirements

A light gray background featuring a detailed map of a city street grid. The grid consists of numerous intersecting lines representing streets, with some lines being thicker than others to indicate major thoroughfares. The pattern is dense and covers the entire background.

DISCUSSION – KEY ISSUES

DISCUSSION GUIDE

GUIDING PRINCIPLES

- Keep comments short and clear – let's ensure everyone has a turn to speak on the topics that matter to them.
- Focus on high level thoughts and themes – very detailed commentary, including fine grain locations may be better suited to the public mapping exercise and / or survey where it can be more effectively captured.
- Seek to understand the alignment and tensions between your perspectives and those of others




What are the top issues facing Maple Ridge now
and into the future



Understanding that available capital is limited and different types of improvements can benefit different groups and at different intensities...

What aspects of the transportation system should be given the highest priority moving forward?



Thinking about cycling infrastructure overall, what is the relative importance of regional / longer distance connections compared to local neighbourhood connections to community destinations and commercial hubs?



Thinking about cycling infrastructure **retrofit to existing roads**, what types of cycling infrastructure do you prefer? What is your perspective of the benefits and challenges of different types of infrastructure? Does your perspective change for infrastructure in **new neighbourhoods**?



What are your thoughts on transit in Maple Ridge
and are there areas where you would like to see
improvements?



The previous STP identified new connections and road network improvements for the medium and long terms that will be reconsidered as part of this plan.

Which new connections and / or major roadway capital improvements that should be considered as part of this work?



What should the City consider when planning for emerging trends in transportation such as electric and autonomous vehicles and advancements in micro-mobility?



CLOSING