



MASTER TRANSPORTATION PLAN

Council Meeting December 19, 2023

VISON

North Cowichan is a connected community, where residents, employees, businesses, and visitors have transportation choices when deciding how to move around their network. Each transportation choice is supported with safe infrastructure. North Cowichan vehicle travel has become electrified to reduce impacts on the environment and align with the community's desire to be more sustainable. With greater transportation choices, the transportation network is resilient, supportive, and inclusive to all residents.

GOALS



Reduce Impact on Environment

Energy use in the transportation network is gradually reduced over time.

This goal relates to the OCP goals #1 (Focus Growth and Development), #2 (Build Resilient, Supportive, Inclusive Communities) and #7 (Prioritize Climate Action).



Transportation Equity

The transportation network can be accessed by all road users and transportation investments prioritize vulnerable road users.

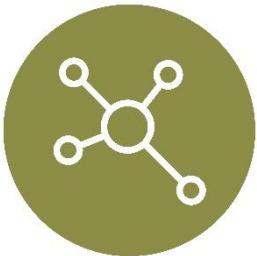
This goal relates to the OCP goals #2 (Build Resilient, Supportive, Inclusive Communities) and #3 (Encourage and Enable a Diverse Mix of Housing Types, Tenures, and Levels of Affordability).



Safety for All Modes

Streets are redesigned to support all modes especially vulnerable road users.

This goal relates to the OCP goal #2 (Build Resilient, Supportive, Inclusive Communities).

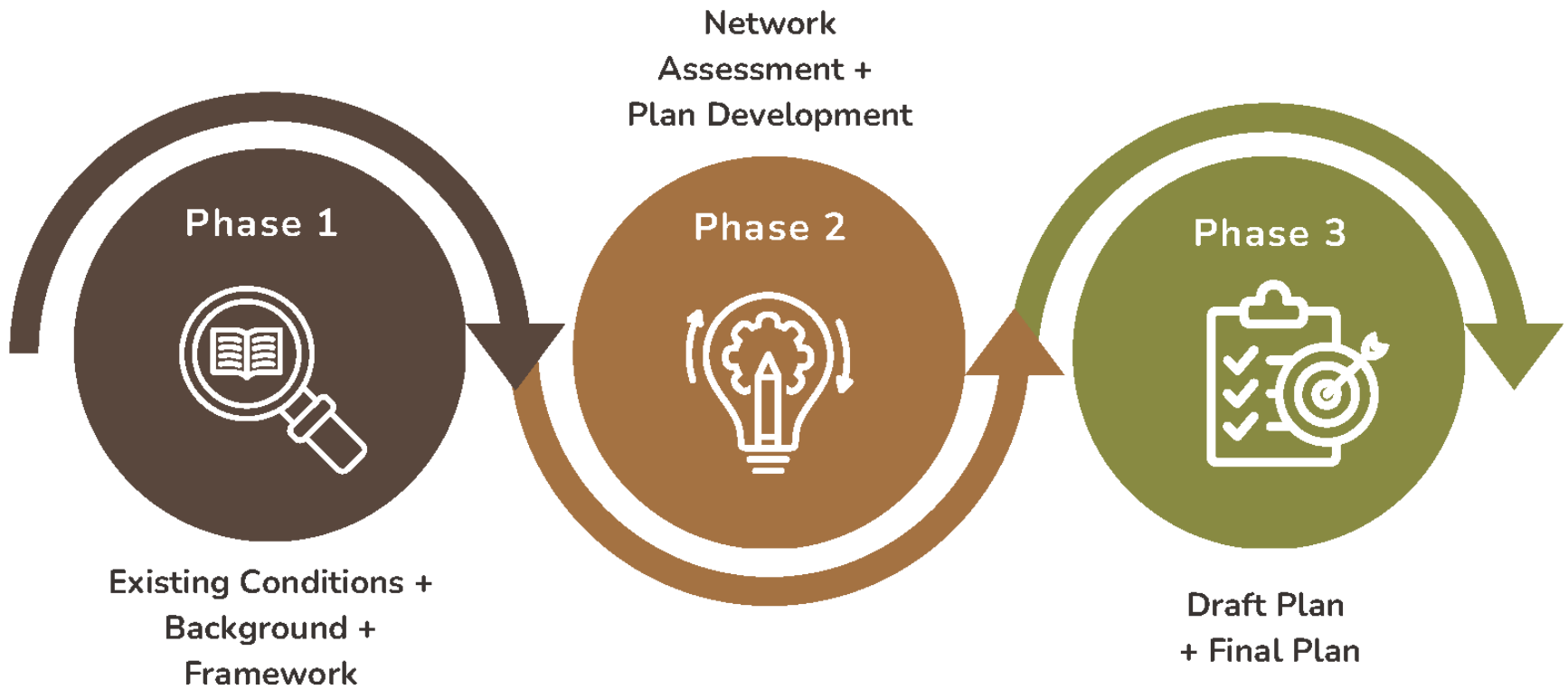


Connectivity

A connected network allows residents to travel to where they need to go, for any trip purpose.

This goal relates to the OCP goals #1 (Focus Growth and Development), #2 (Build Resilient, Supportive, Inclusive Communities) and #6 (Support a Thriving Economy).

PROCESS

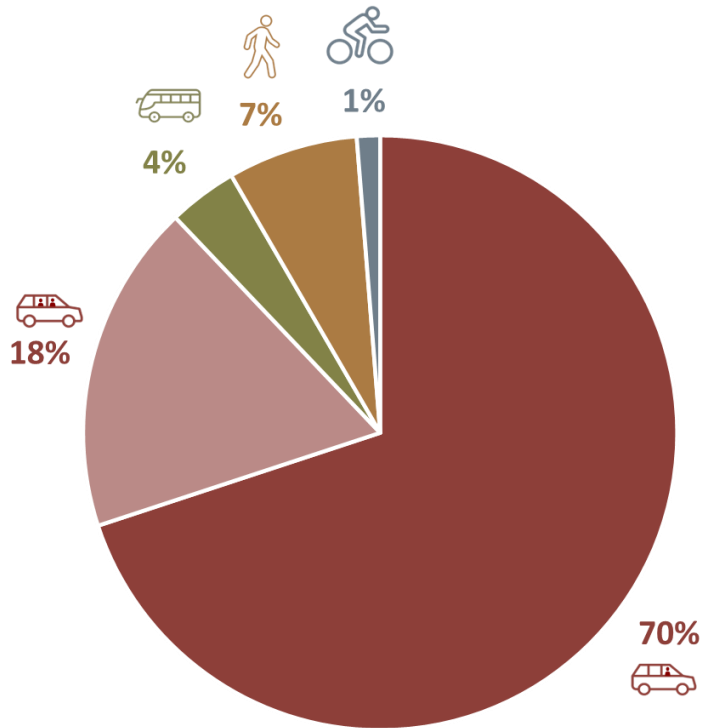


ENGAGEMENT

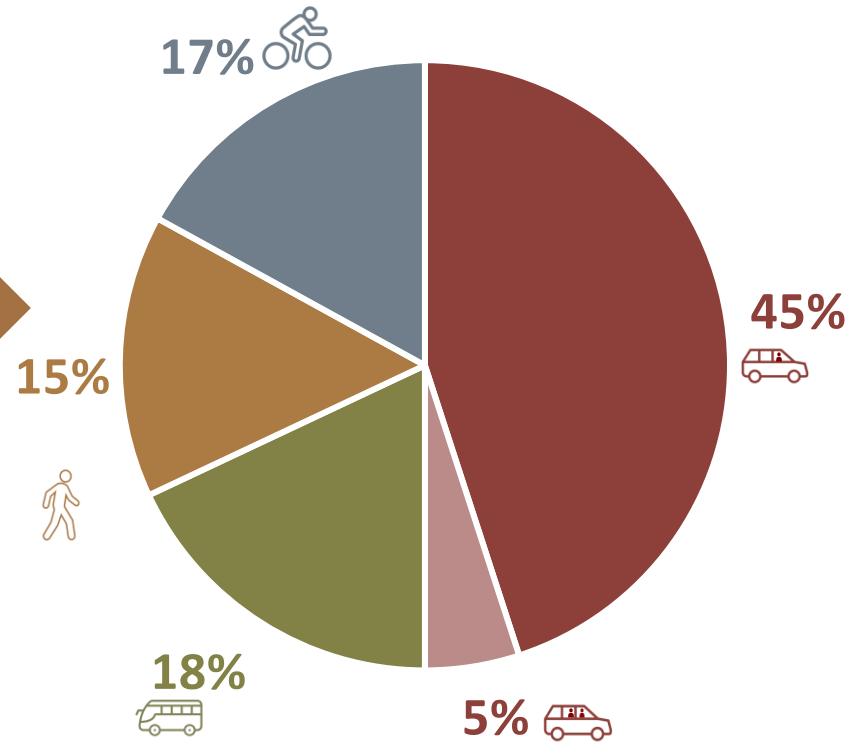
- First Nation Outreach
- Online Survey #1
- Interviews with key groups
- Online Survey #2
- Council Presentations
- Still to come.....
 - Final Community Engagement in January

MODE SHARE

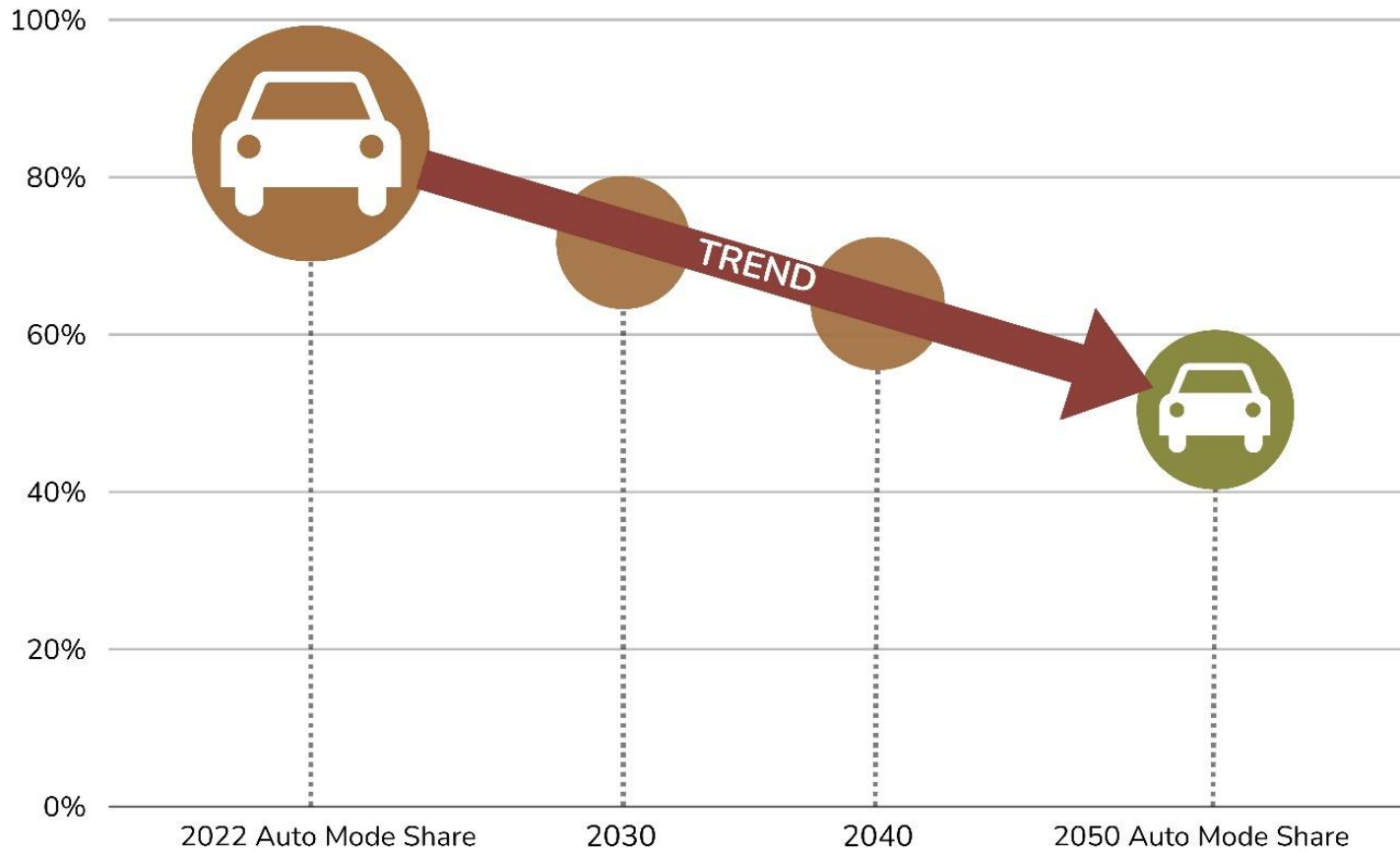
Today (2022)



Future (2050)

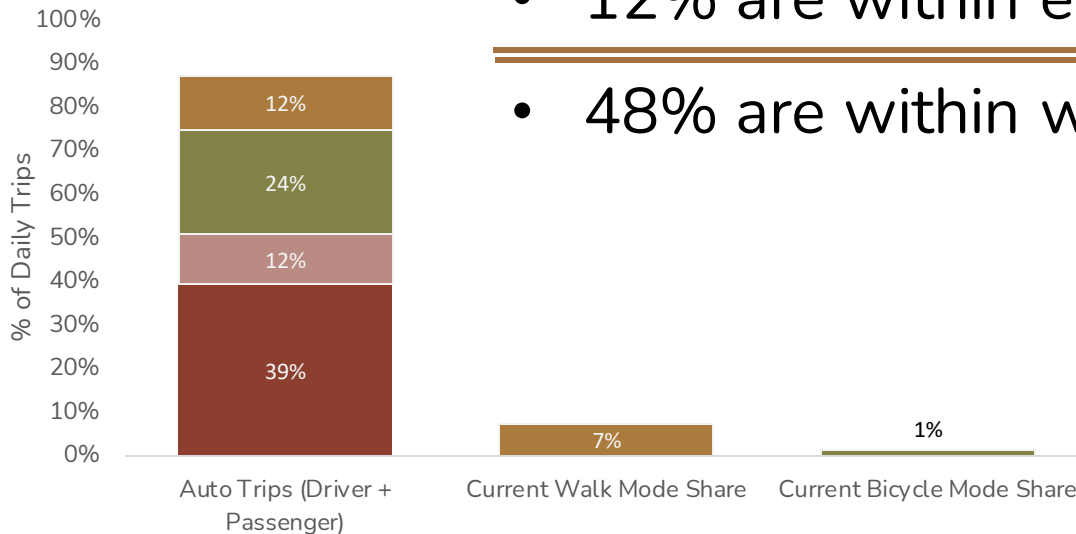


MODE SHARE 2050



CAN THE SHIFT HAPPEN?

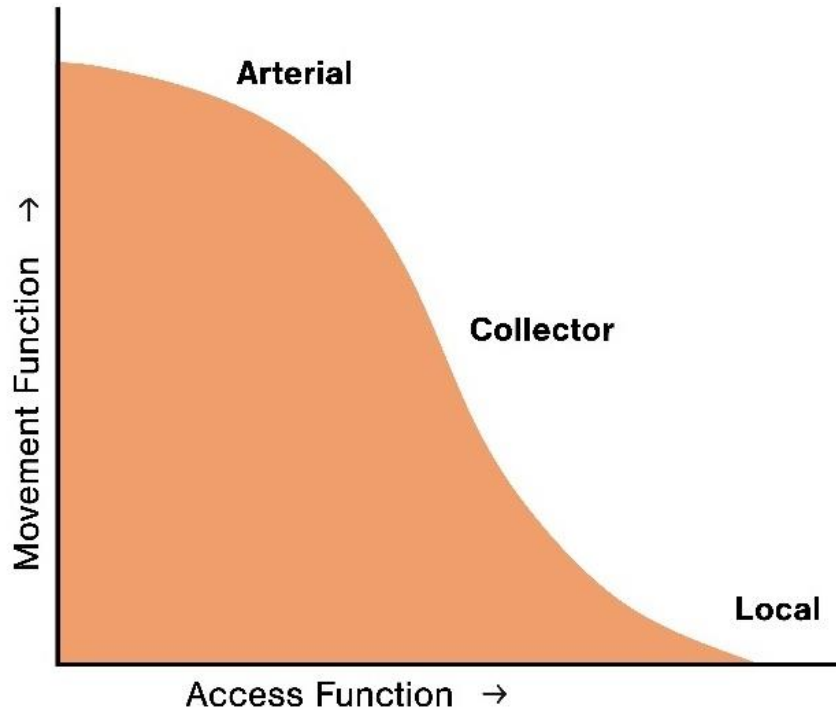
- Current Auto + Passenger Trips = 88%
 - 12% of these are in walkable distance
 - 24% are within standard bike distance
 - 12% are within e-bike distance
-
-
- 48% are within walkable/bikable distance



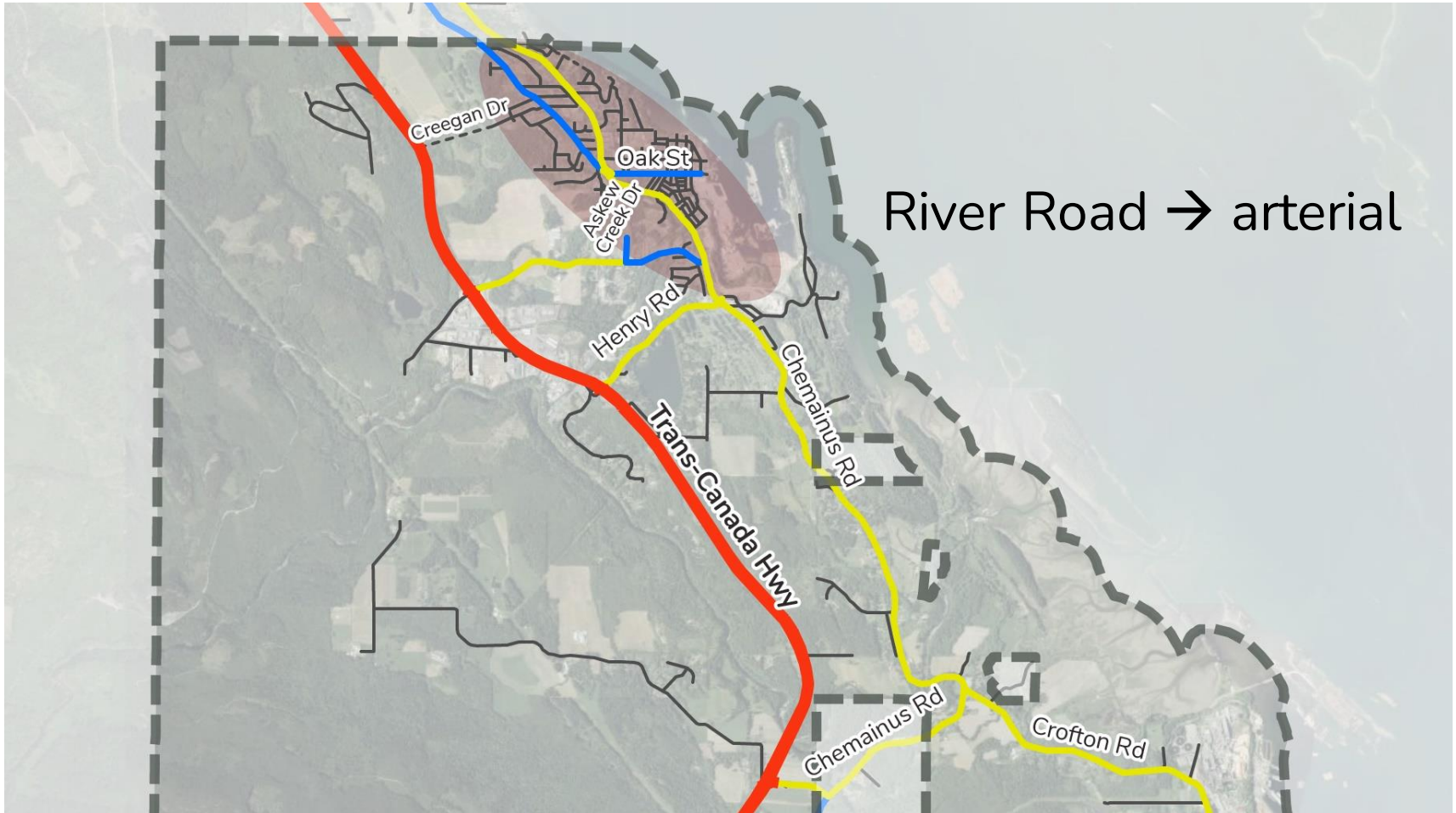
PHASE 3

- Changed from 2050 Horizon to OCP Full Build-Out for Modelling
- Aligned with DCC Process
- Updated long term additional density from 4,755 residential doors to 25,355 residential doors
- Now going from existing 13,580 residential doors
→ 38,935 residential doors
- Growth focused in Growth Centres as per OCP

ROAD CLASSIFICATIONS

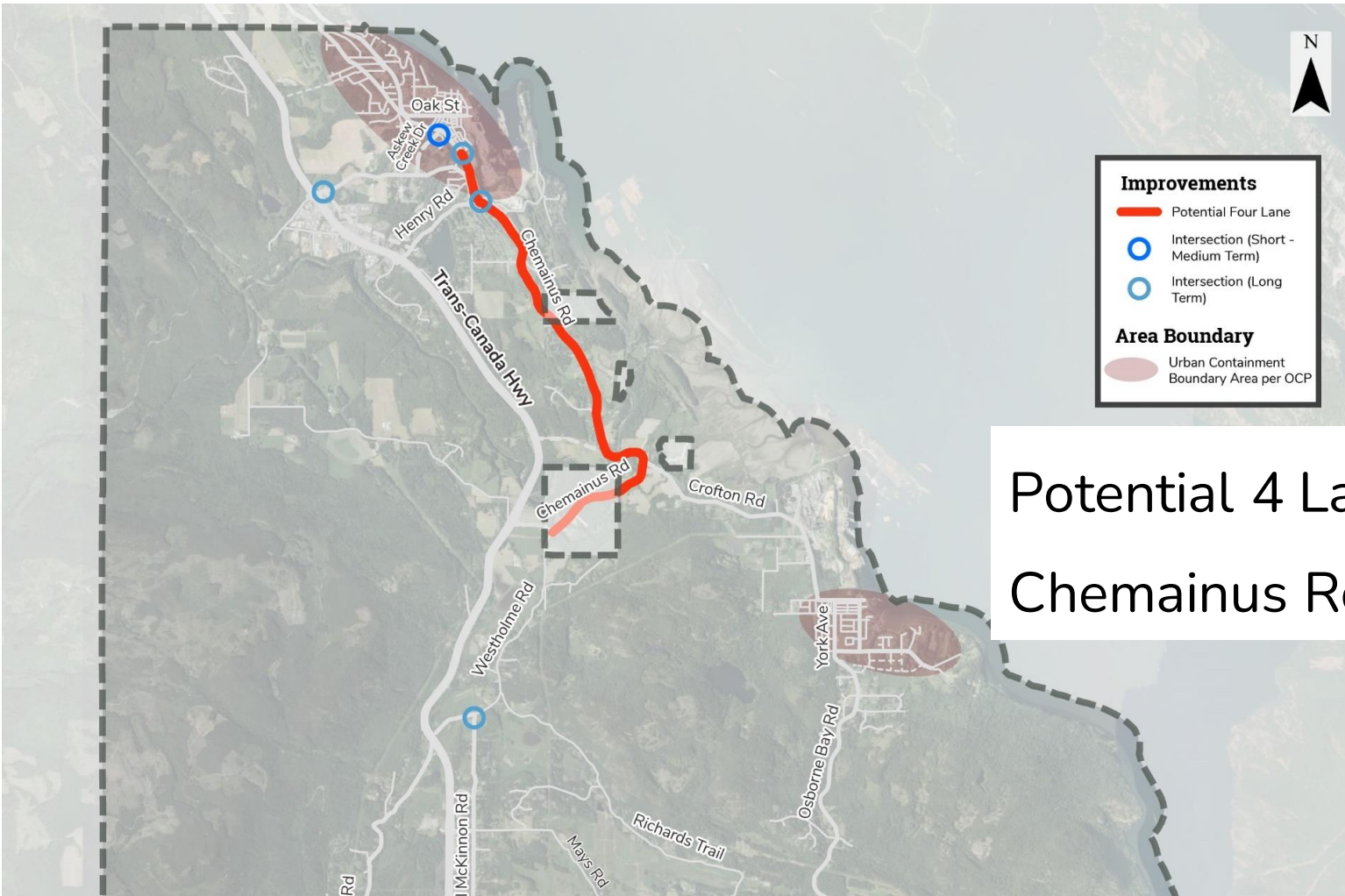


ROAD CLASSIFICATIONS



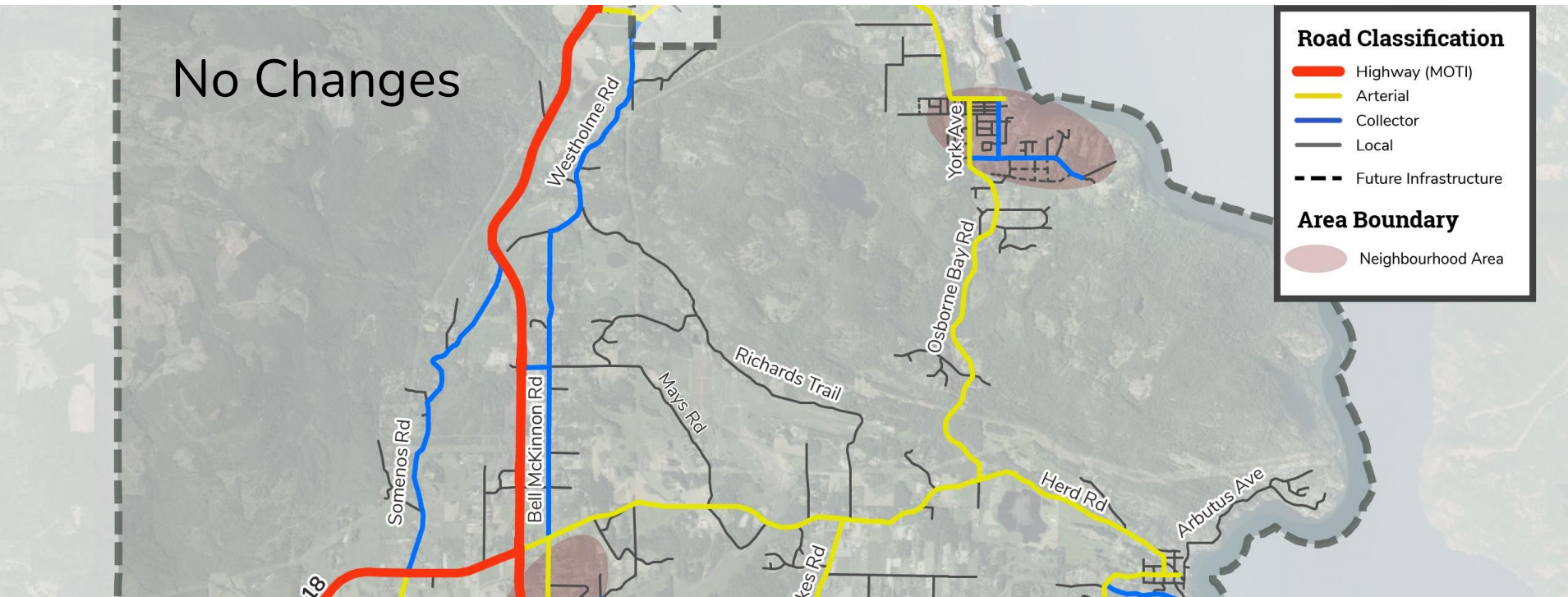
- Highway (MOTI)
- Arterial
- Collector
- Local
- - - Future Infrastructure

INTERSECTIONS

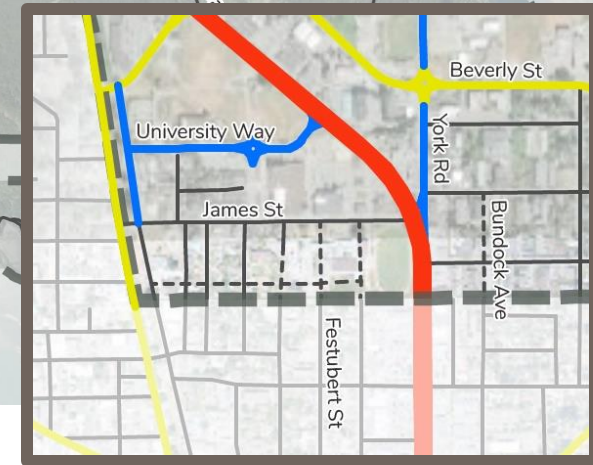
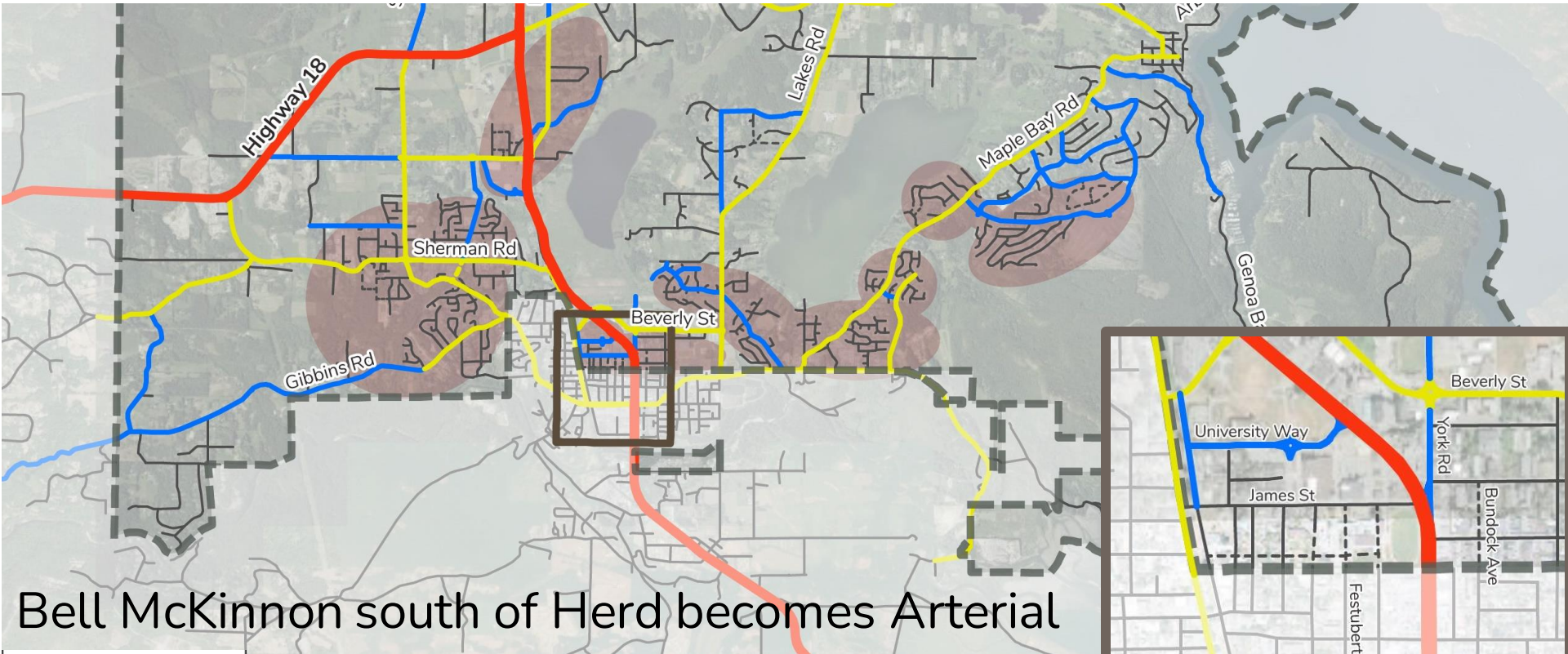


Potential 4 Laning of
Chemainus Road

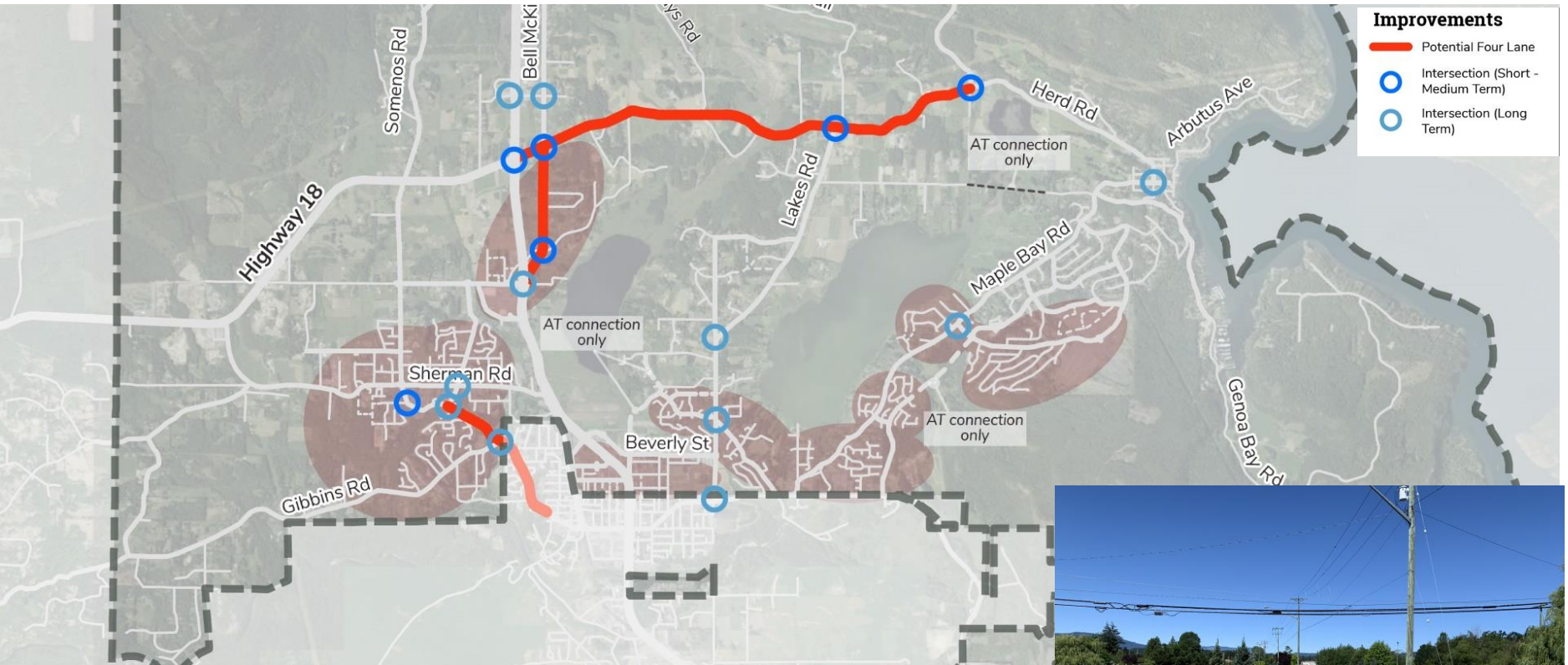
ROAD CLASSIFICATIONS



ROAD CLASSIFICATIONS



INTERSECTIONS

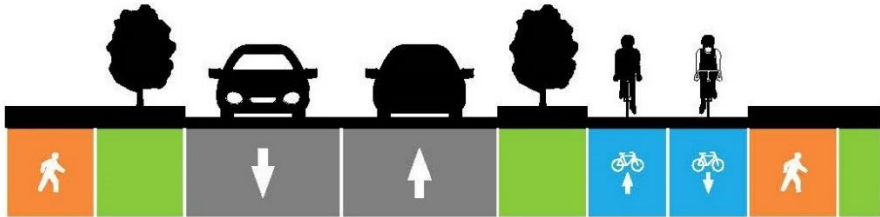


Potential 4 Laning of Bell McKinnon, Herd & Cowichan Lake Road

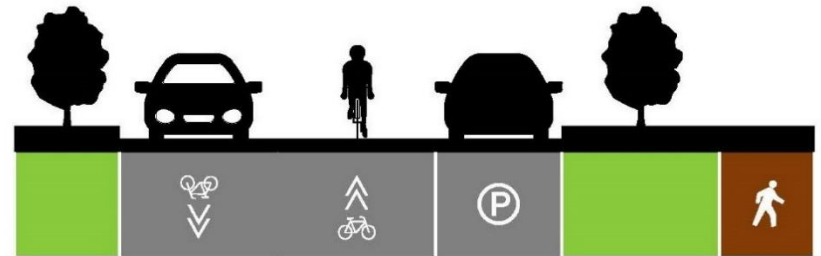
CROSS SECTION ELEMENTS

FACILITY TYPE	Adjacent Land Use	ADT (vpd)	ROW	Travel Lane	Travel Way	Shoulder (paved)	Multi-use Pathway	Bicycles	Sidewalk	Parking	Buffer
Rural Arterial	Residential > 4,000m ²	3,000 to 12,000	25-30m	3.5m	n/a	✓ 0.5m	✓ 3.0 to 4.0m	✗	✗	2.4m possible in limited cases	✓ 2.0m to 3.0m
Urban Arterial	Mixed use; Commercial; Multi-family	5,000 to 30,000	25-30m	3.5m	n/a	✗	✗	✓ 3.0 to 4.0m	✓ 1.8 to 3.0m	2.4m possible in limited cases	✓ 2.0m to 3.0m
Rural Collector	Residential > 4,000m ² or Agricultural	1,000 to 5,000	25-30m	3.3-3.5m	n/a	✓ 0.5m	✓ 3.0 to 4.0m	✗	✗	✓ 2.4m	✓ 2.0m to 3.0m
Urban Collector	Mixed use; Commercial; Multi-family	3,000 to 8,000	25-30m	3.3-3.5m	n/a	✗	✗	✓ 3.0 to 4.0m	✓ 1.8 to 3.0m	✓ 2.4m	✓ 2.0m to 3.0m
Rural Local	Residential > 4,000m ² or Agricultural	< 1,000	20m	n/a	5.0 to 6.0m	✓ 0.5m	✓ 1.8m	✓ none	✗	✓ 2.4m	✓ 2.0m to 3.0m
Residential Local	Single Family < 4,000m ²	<1,000	20m	n/a	5.0 to 6.0m	✗	✗	✓ none	✓ 1.8 to 2.0m one side	✓ 2.4m	✗
Urban Local	Mixed use; Commercial; Multi-family	<3,000	20m	3.0m	n/a	✗	✗	none	✓ 1.8 to 3.0m	✓ 2.4m	✓ 2.0m

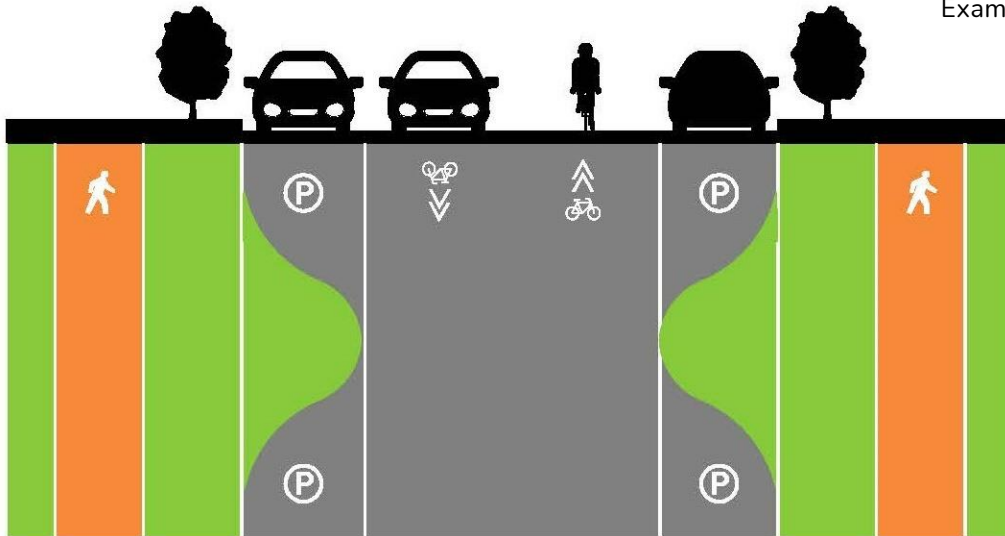
CROSS SECTION EXAMPLES



Example of an Urban Collector Cross Section with a Bi-Directional Protected Bike Lane, Buffers, and Sidewalks

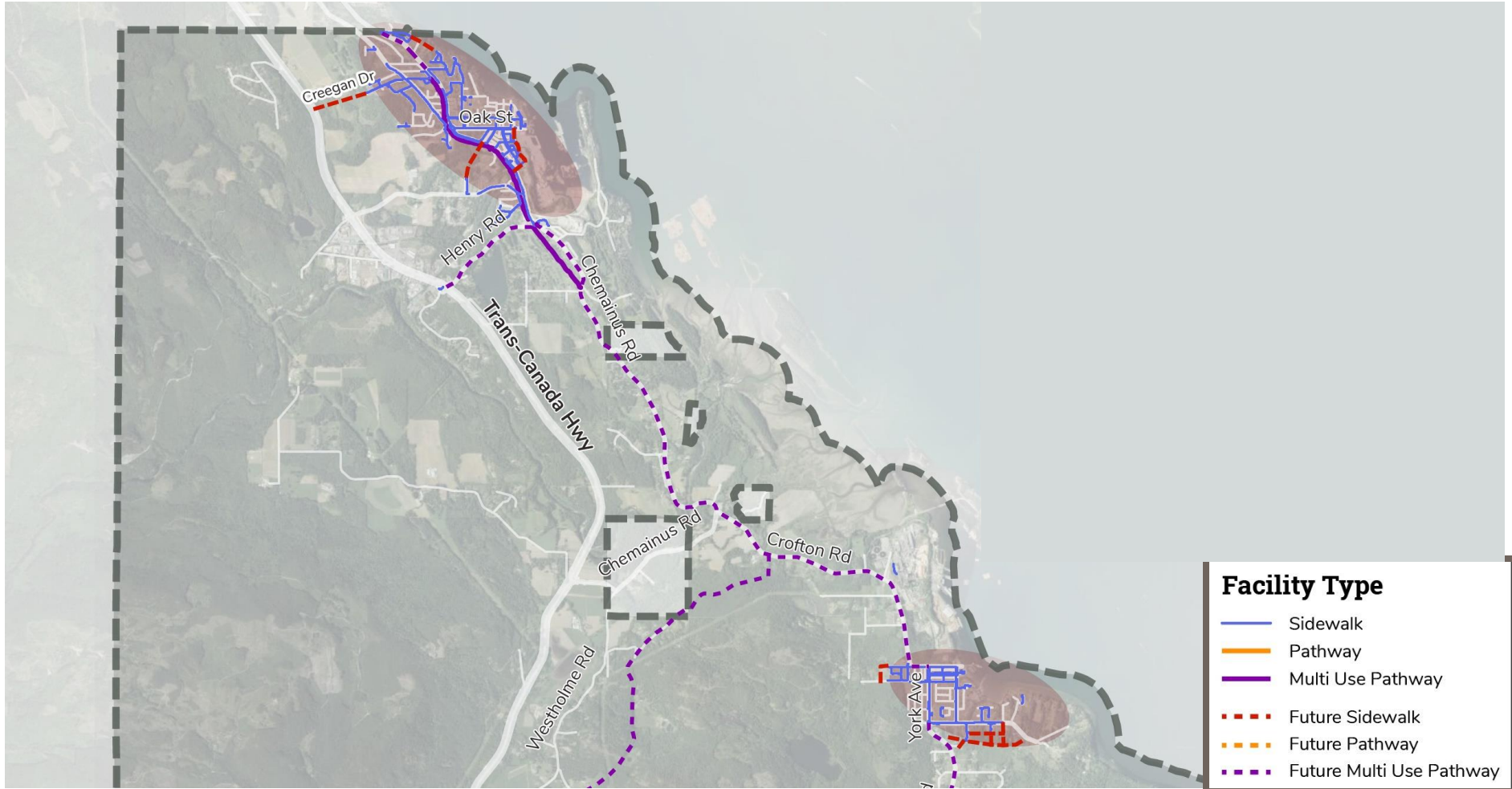


Example of a Rural Local Cross Section with a Pathway, Parking, and Bicycle Boulevard



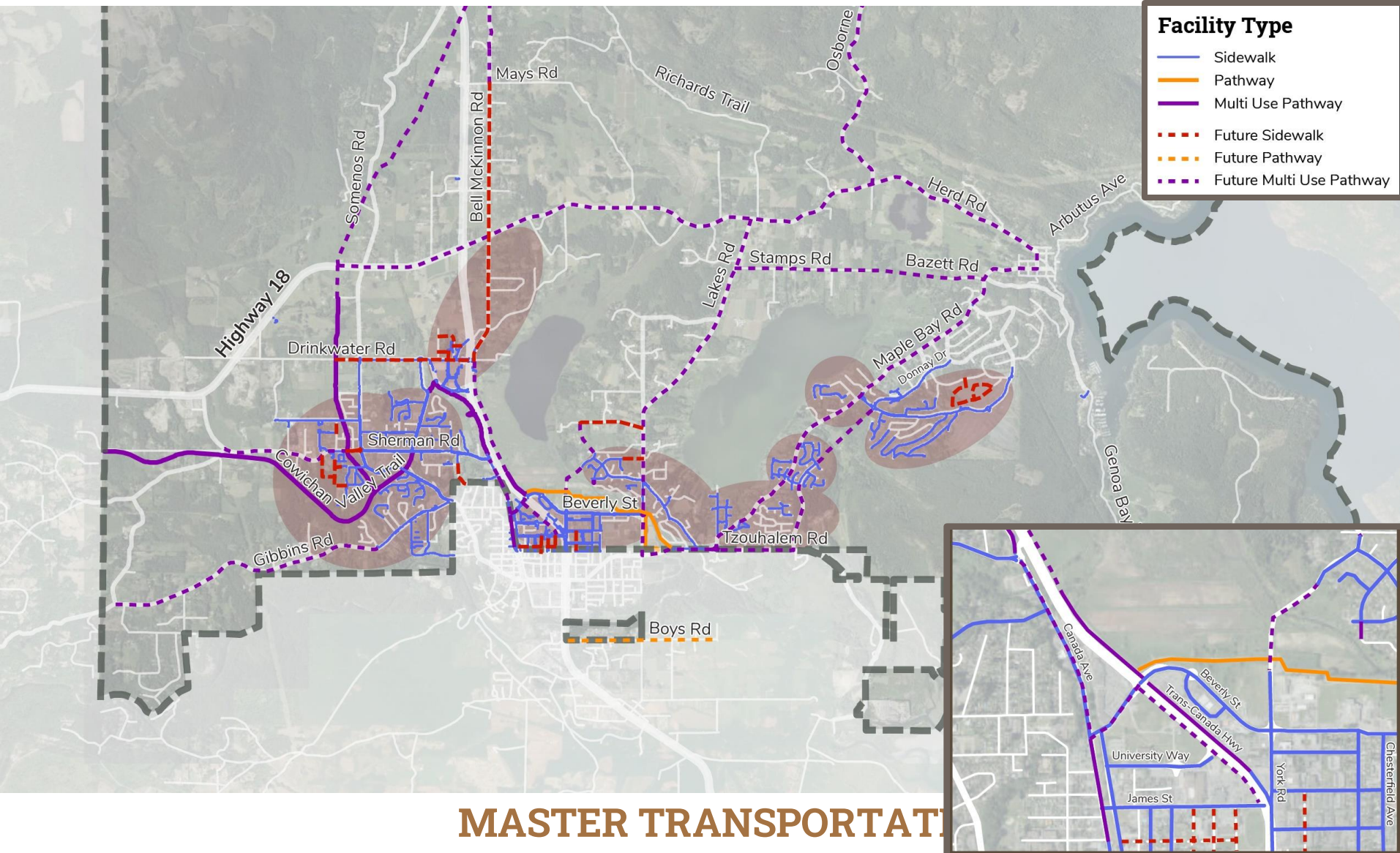
Example of a Residential Local Cross Section with Sidewalks, On-street Parking, and a Bicycle Boulevard

PEDESTRIANS

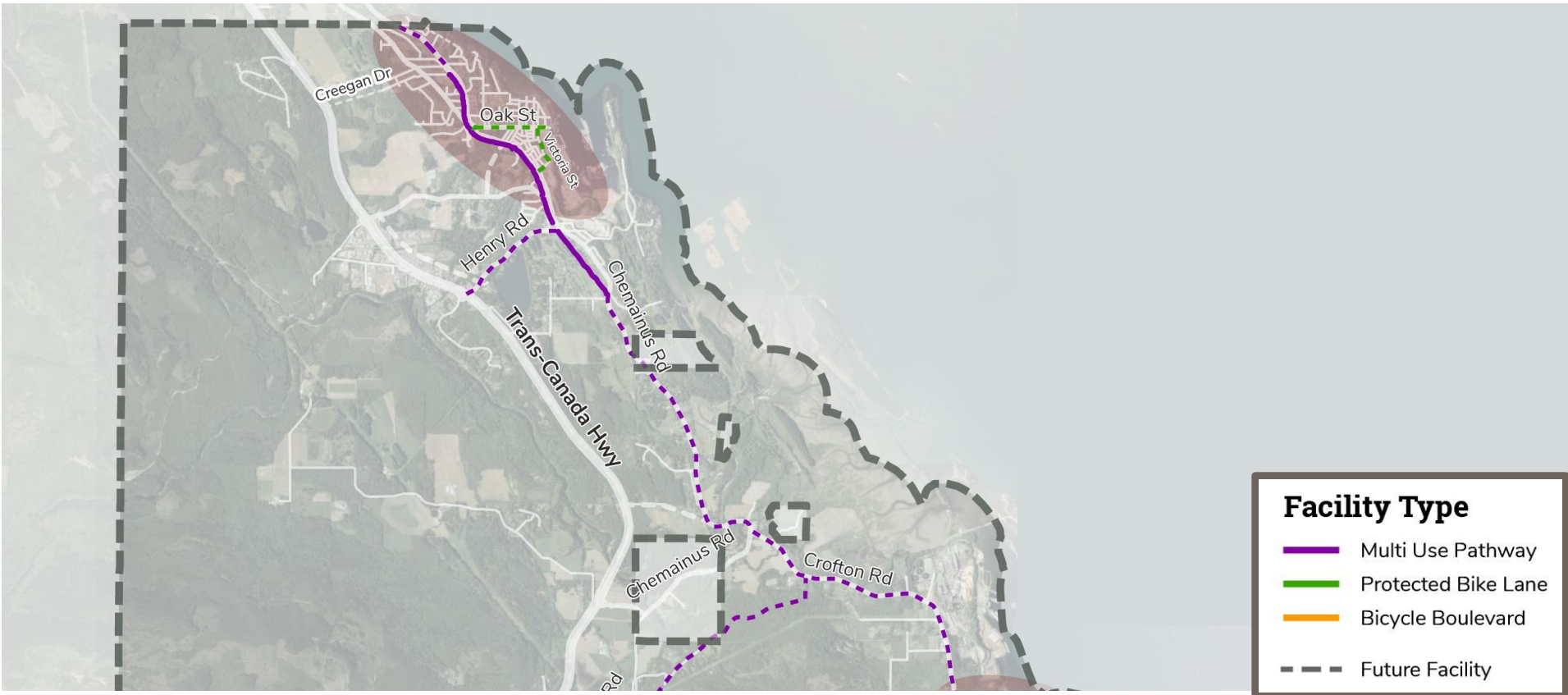


Facility Type	
—	Sidewalk
—	Pathway
—	Multi Use Pathway
- - -	Future Sidewalk
- - -	Future Pathway
- - -	Future Multi Use Pathway

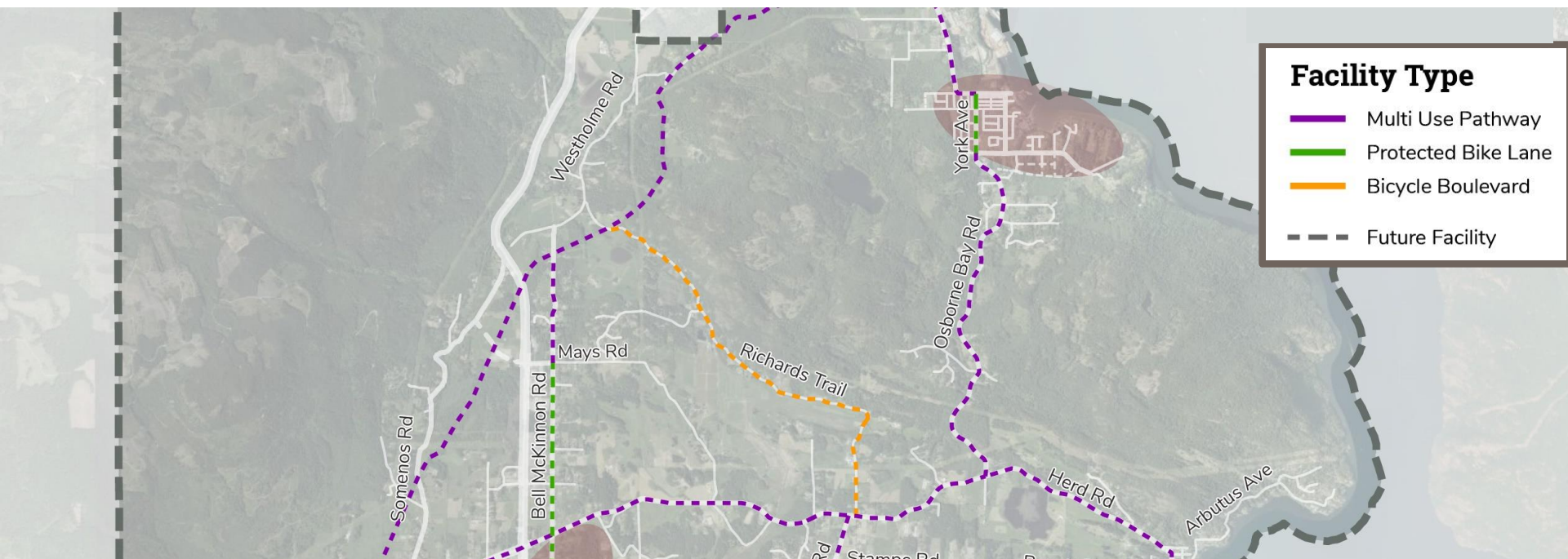
PEDESTRIANS



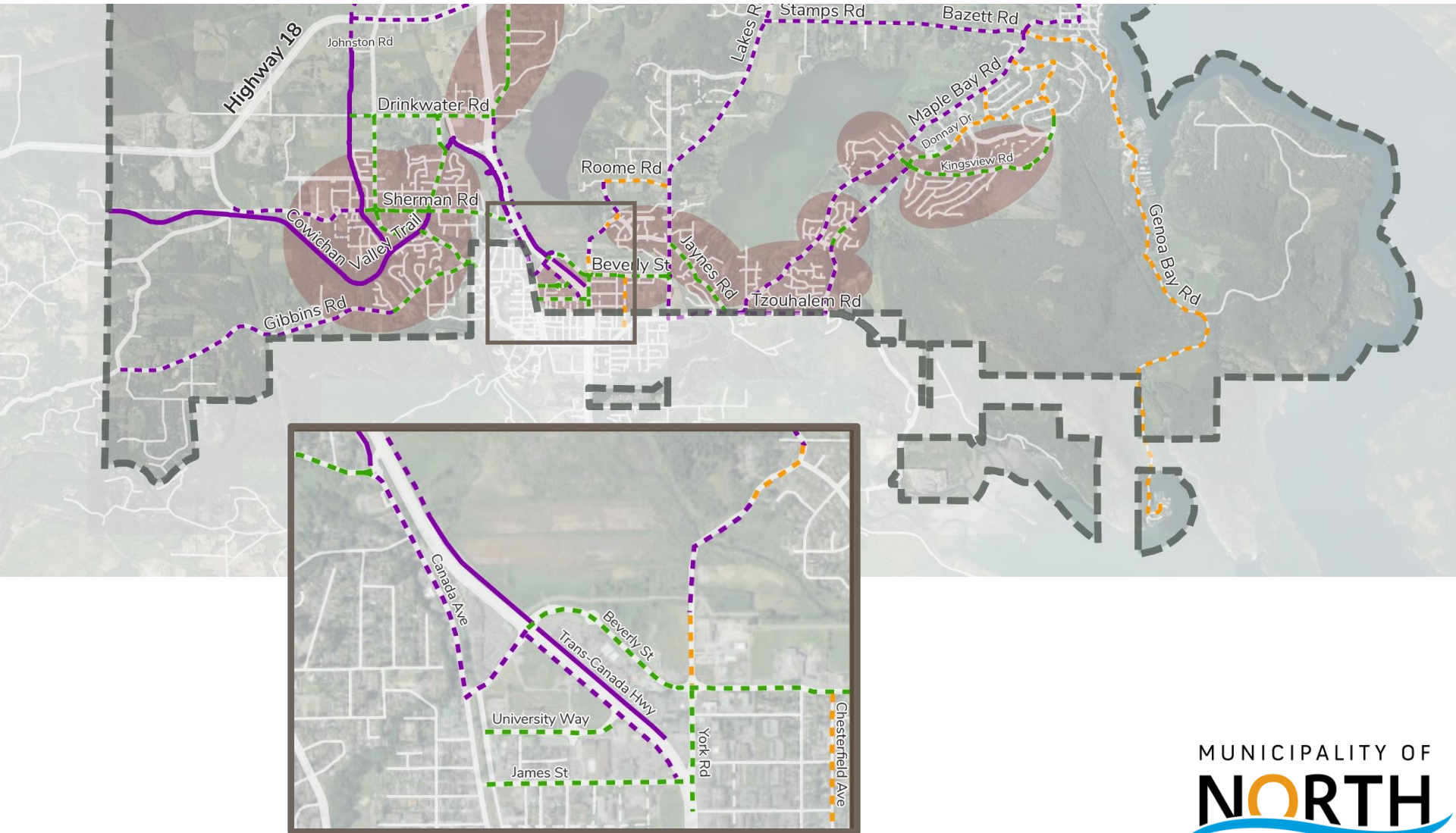
BICYCLES / MULTI-USE



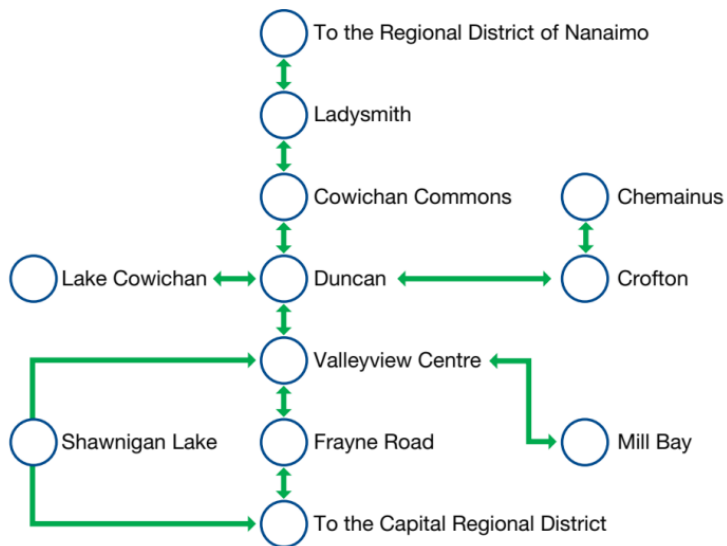
BICYCLES / MULTI-USE



BICYCLES / MULTI-USE



TRANSIT



Bus Stop Location	Urban Containment Boundary Area per OCP	Amenity		
		Universally Accessible	Bench	Shelter
Cowichan Lake Rd & Avondale (NB & SB)	Berkey's Corner		X	X
Cowichan Lake Road 3250 Block (NB)	Berkey's Corner			X
Beverly at 2540 Block	South End		X	X
Beverly at 2500 Block	South End		X	X
Beverly at Chesterfield (EB & WB)	South End		X	X
Howard & Dingwall (NB & SB)	South End		X	X
Lakes Road & Moose	Quamichan	X	X	X
Donnay 1500 Block (EB & WB)	Maple Bay		X	X
Chisholm & Maple Bay Road	Maple Bay	X	X	X
Kingsview & Selkirk (EB & WB)	Maple Bay	X	X	X
Crofton Road & Musgrave	Crofton		X	X
Crofton Road & Chaplin	Crofton		X	X
York & Chaplin	Crofton		X	X
Crofton Road & Chemainus Road	Chemainus		X	X
Oak & Daniel	Chemainus	X	X	X
Chemainus Road 9930 Block	Chemainus		X	X

MUNICIPALITY OF

NEW MOBILITY & PARKING

Parking & TDM Actions

- Review of the Municipality's off-street parking
- Explore Transportation Demand Management (TDM)
- Revisit its Cash-in-Lieu of Parking Bylaw
- Review Municipality's on-street parking management framework & tools:
 - Designated Residential Parking
 - Time Limited Parking
 - Parking Enforcement



New Mobility Actions

- Consider an EV Charging Infrastructure Gap Analysis
- Consider a top-up to the BC government's EV Charger Rebate Program
- Consider an additional incentive to the province's e-bike rebate program
- Continue to monitor provincial legislation around NZEVs and e-scooters

THANK YOU



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