Cycling and E 29th

Council Workshop

February 6, 2023

DISTRICT OF NORTH VANCOUVER

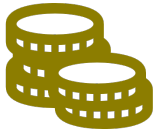
Workshop Agenda

- Why invest in cycling?
  - Regional context, District policies and priorities
- How we plan and design the cycling network
  - Engineering guidance
  - Considerations & constraints
  - Data monitoring
- E 29th Street Safety & Mobility Project

Why invest in cycling?

Changes in demographics, motor vehicle ownership, household incomes, types and number of trips have led to increased congestion.

Compared to driving, cycling is:



Less expensive than building wider and more roads for driving

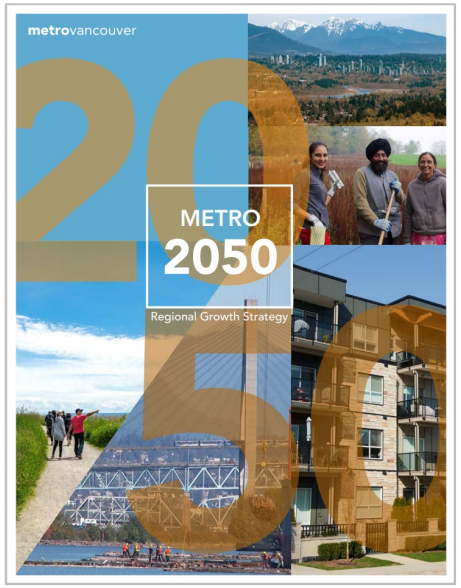
More space efficient, using less space to move more people

Healthier, promoting moderate physical activity

Cleaner and quieter

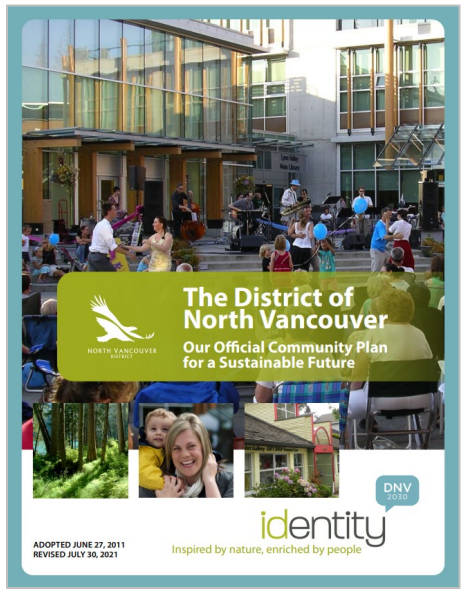
Key Takeaway
We can not build our way out of congestion

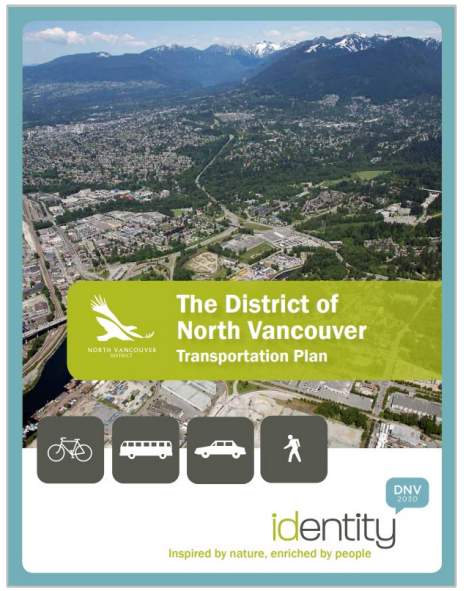
Regional Context

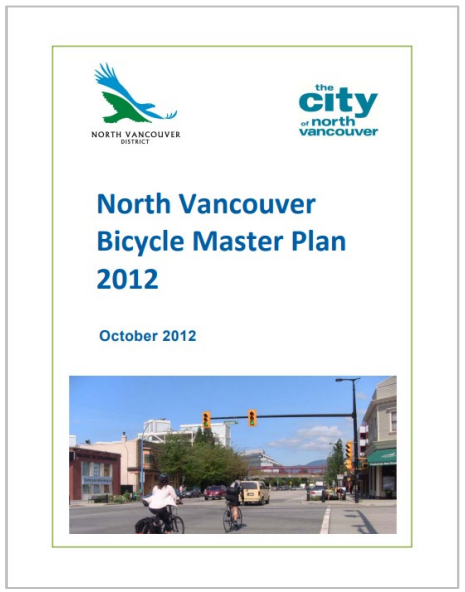


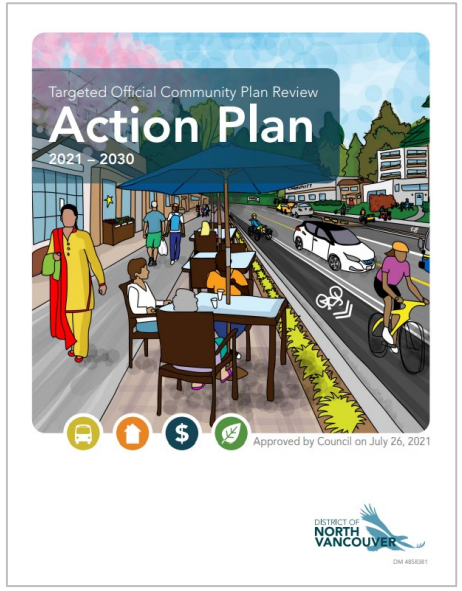
Key Takeaway While we can make decisions within the District, the region is growing and our transportation network will feel the pressure

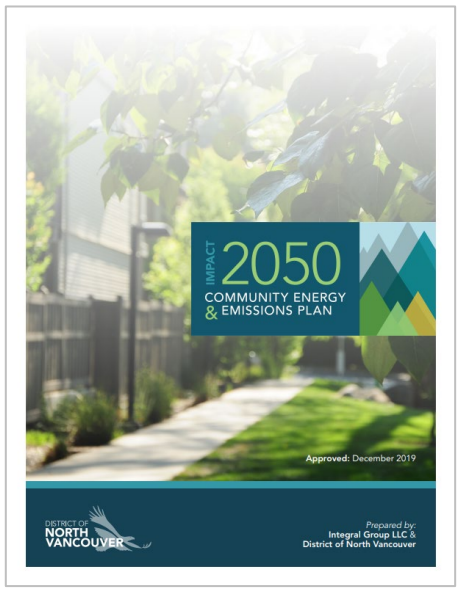
Municipal Context









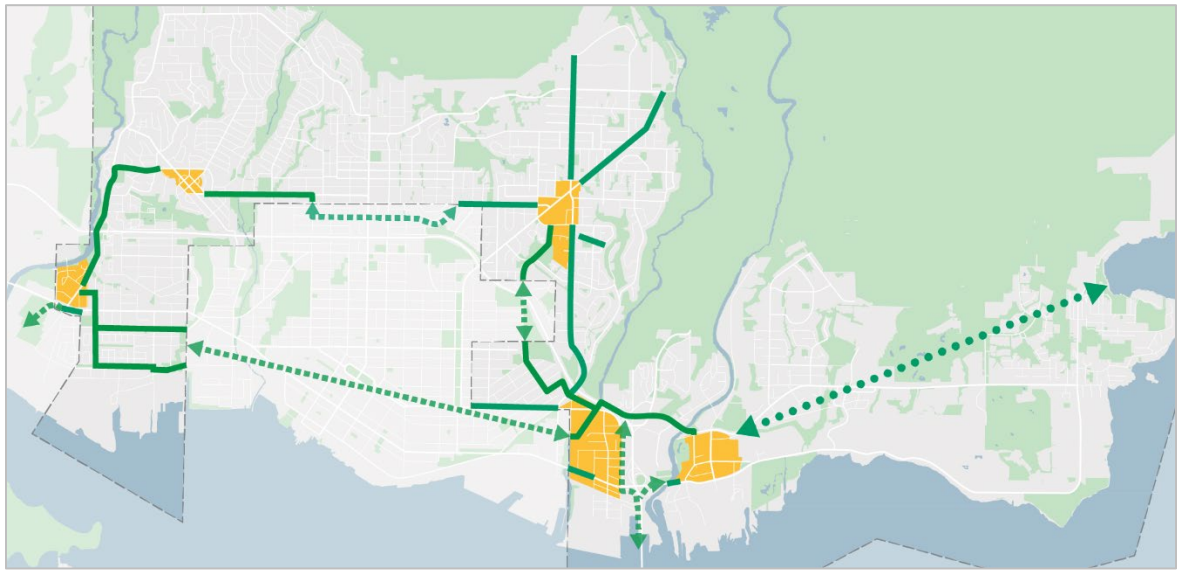


Key Takeaway Cycling is part of a multiprong approach to solving the District's goals and challenges

Council Priorities

Examples of Council Guidance

- Prioritize routes that connect the town and village centres to one another, to the bridgeheads and to our neighbouring municipalities



- Prioritize routes that connect to key parks and have direct connections along arterials
- Reallocate road space on arterials for cycling connections
- Development to fund for transportation in town and village centres

Bicycle Rider Spectrum

	Interested but Concerned		Enthusiastic and Confident	Strong and Fearless
	37% - 60% 		9% - 28% 	2% - 6% 
25% - 38% Uninterested or unable	Prefer complete separation or routes with low motor vehicle speeds and volumes		Comfortable riding in traffic when needed, but prefer dedicated bicycle facilities	Comfortable with or without dedicated facilities, and prioritize speed and directness
Facility Comfort Level	Most	Some	Few	Very Few

Sources: BC Active Transportation Design Guide, Hub Cycling, TransLink, Alta Planning + Design

Separation & Safety

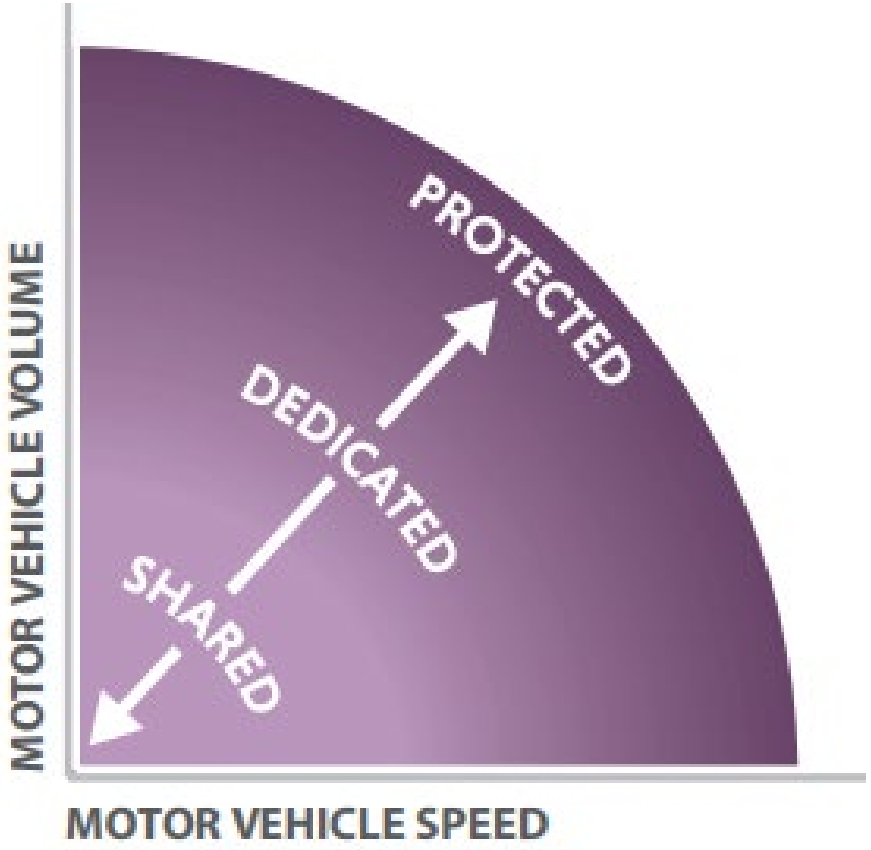
Faster motor vehicle speeds

= Slower driver response

= Longer brake time

= More forceful collision

= Increased injuries/fatalities

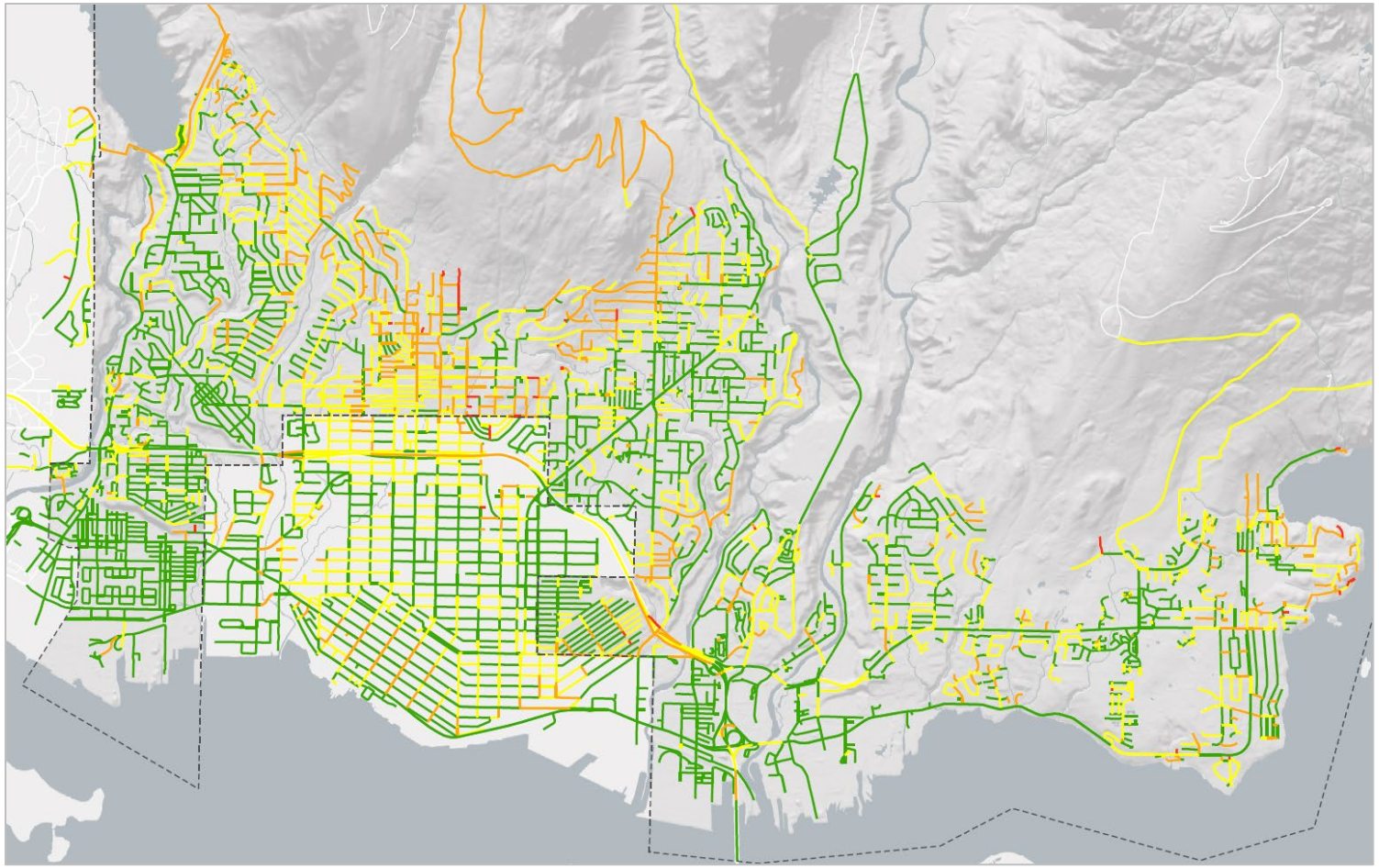


Source: B.C. Active Transportation Design Guide

What does ‘comfortable for most’ look like?

SHARED		DEDICATED	PROTECTED	
Shared street	Neighbourhood bikeway	Buffered cycle lane	Multiuse path	Bike path (inc. cycle tracks)
				
Speed: ≤ 30km/h Volume: ≤ 2,000 ADT		Speed: ≤ 60 km/h	Usually most cases	

Network Planning Considerations



- Land use & neighbourhood design
- Connectivity
- Completeness
- Directness
- Density and diversity
- Comfort
- Multimodal Integration
- Topography

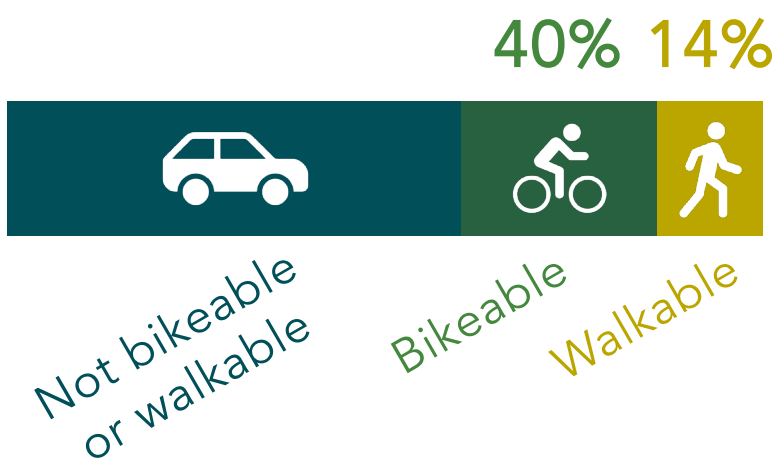
Design Considerations

- Available road width and right-of-way
- Types of users
- Presence of on-street motor vehicle parking
- High percentage of heavy trucks and bus traffic
- Number of conflict points (including driveways)
- Impacts to trees and vegetation
- Costs and available funding and grants
- Other maintenance and operational issues
- Sight lines at intersections and driveways
- Conflicts with utilities and relocation constraints

What is the data telling us? Travel Surveys

Separation of cyclists from motor vehicles remains a key objective

- Mode share has remained between 1.5% and 2.6% since 2016, indicating a mostly strong and fearless demographic
- 'Lack of separation from traffic' was top concern by 47% of residents (2020 Cycling Survey)



Many motor vehicle trips could be made by active modes

- 40% of existing auto driver trips could be done by cycling (2021 NSTS)

What is the data telling us? Strava & Lime

E- bike usage is on the rise

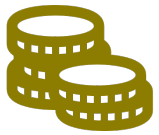
- Proportion of e-bike trips increased from 1.5% to 4.2% between 2019 and 2022

New people are trying cycling in new ways

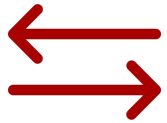
- 45,000 more Strava trips by nearly 7,000 more users in 2022 than 2018
- Strava trips account for estimated 15-25% of all the trips in the District
- Over 100,000 trips taken by 22,000+ riders on Lime e-bikes, totalling over 230,000km or 5 ¾ trips around the equator

Recap

More people are traveling to the District. Cycling is a key tool in our multi-prong approach to manage congestion.



Cycling is more space-/cost-efficient than expanding space for driving



Trip lengths show high potential to shift motor vehicle trips to cycling

Separation of modes is essential to maximize safety and ridership

E-bikes (hills) and micromobility offer new opportunities to increase cycling

East 29th Street

Safety and Mobility Project

DISTRICT OF NORTH VANCOUVER

Policy Direction & Outcomes

Outcomes:	Modes
New sidewalk	
Two new crosswalks	
Full traffic signal	
New cycling facilities	
New left turn bays	
Some parking maintained	

Goal To find a balanced approach to prioritize safety improvements and increase mobility for everyone travelling along East 29th Street

Background

Oct 2016 | First public engagement

Mar 2018 | Second public engagement & open house

May 6, 2019 | Staff present design retaining some on-street parking

→ | Council direction to fully separate cycling facilities

May 27, 2019 | Enhanced concept approved by Council

June 11, 2019 | Project website updated

June 12, 2019 | Letters delivered to immediately impacted residents

June 17, 2019 | 2,000 postcards sent to residents from initial engagement

June 18, 2019 | On-street project information signage installed

To completion | updates via social media, website and on-street signage

Street Characteristics

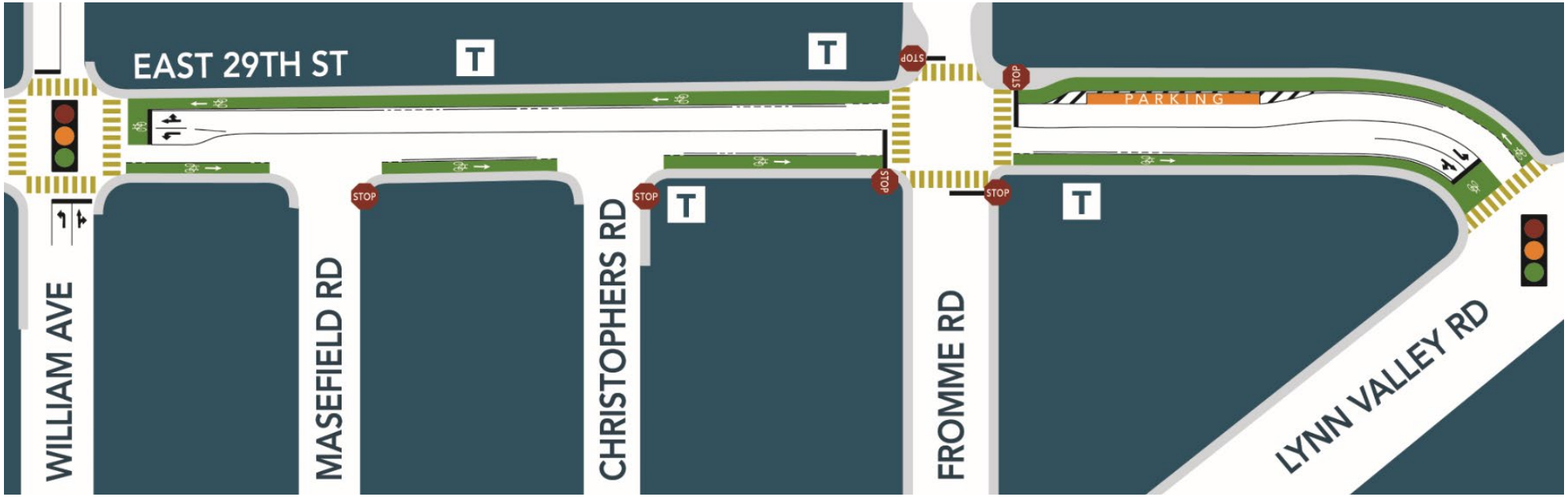
- 9,500 vehicles per day, major arterial
- Transit route, designated cycling route, school route
- 50 bikes per day (spring 2020 data collection)

2.2x increase in Strava trips

Comparing 2021 and 2018

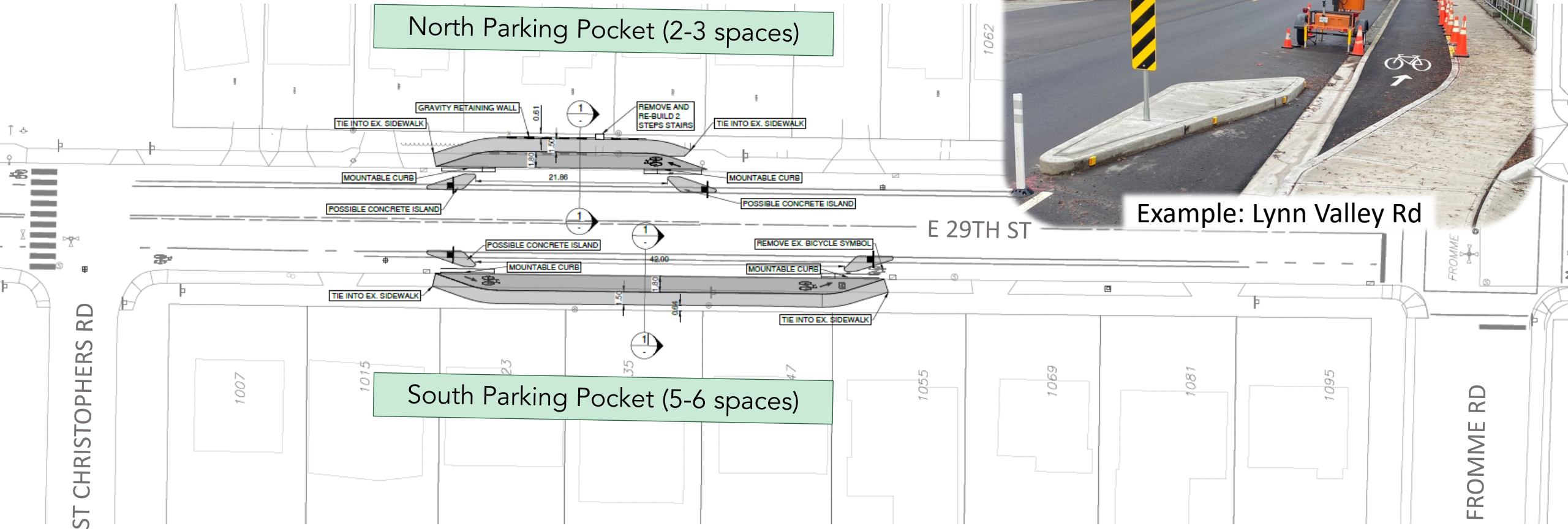
Period	Eastbound Speed	Westbound Speed	Collisions Reported
2018 (before construction)	55 km/hr	58 km/hr	23
2021 (after construction)	48 km/hr	51 km/hr	15

Current Form and What We've Heard



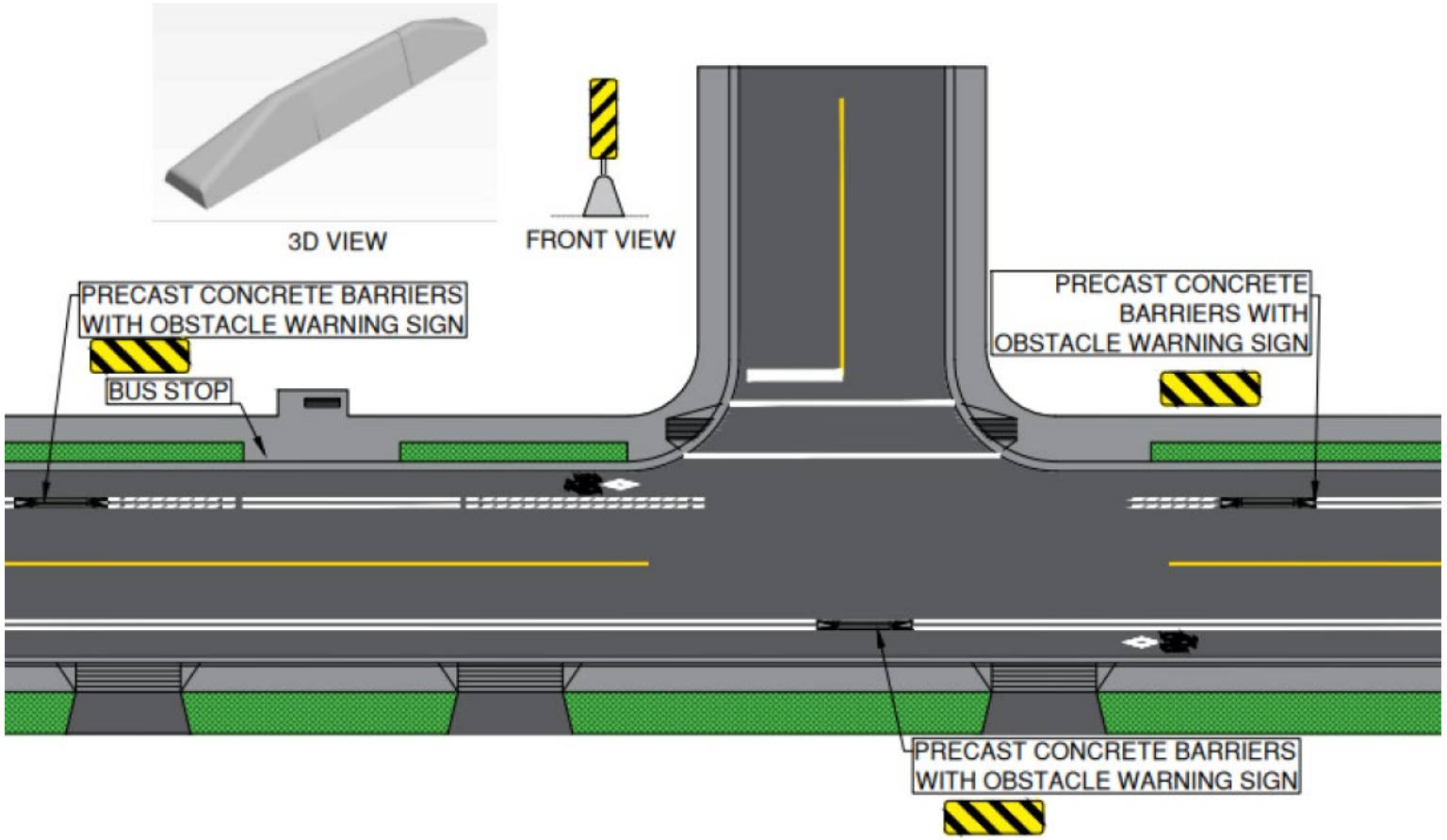
- Short term parking
- Laneway accessibility
- Solid waste and recycling collection

Parking Pocket Location



Example: Lynn Valley Rd

Cycle Lane Protection



East 29th St – Side Street Loading Zones

Side street loading zones not recommended for the following reasons:

- Requires extension of sidewalks
- Impacts boulevard and property frontages
- Decreases on-street parking space
- Not convenient for mid-block properties

East 29th St – Laneway Extension

Due to cost, impacts to trees, and existing snow removal policy, this option is not recommended

East 29th St Recommendations

- THAT staff deliver 'parking pocket' solutions on both the north and south sides of E 29th St that retain the existing cycling and sidewalk facilities while addressing accessibility needs of adjacent residents (RECOMMENDED)
- THAT flexible delineator posts are removed and replaced with non-continuous precast concrete barrier assemblies strategically placed (RECOMMENDED)
- THAT side-street loading zones are further investigated (NOT RECOMMENDED)
- THAT laneway extension is further investigated (NOT RECOMMENDED)

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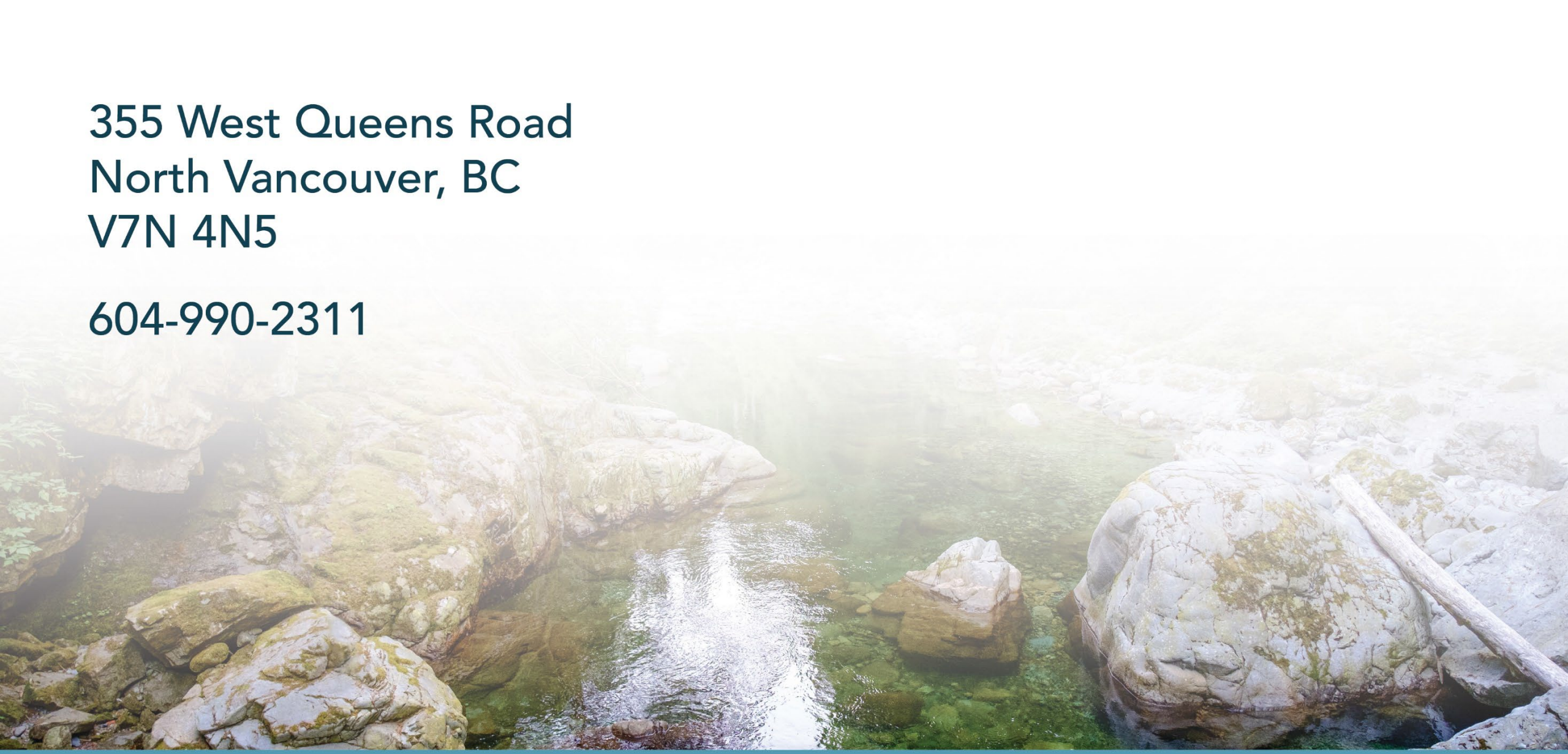

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