



DISTRICT OF WEST VANCOUVER
750 17TH STREET, WEST VANCOUVER BC V7V 3T3

6.

COUNCIL REPORT

Date:	May 2, 2023
From:	Jenn Moller, Director of Engineering & Transportation Services
Subject:	2500 – 3100 Block Marine Drive Bike Lane
File:	1700.09

RECOMMENDATION

THAT the report regarding the 2500 – 3100 Block Marine Drive Bike Lane be received for information.

1.0 Purpose

The purpose of this report is to provide Council with an update on the 2500 – 3100 Block Marine Drive Bike Lane project planning and implementation.

2.0 Legislation/Bylaw/Policy

Council adopted the District’s Corporate Energy and Emissions Plan (Corporate EEP) in October 2016, which includes a series of actions to guide Green House Gas reduction through reducing auto dependency and increasing opportunities for transit and active travel.

The policy context for transportation planning is provided by the District’s Official Community Plan (OCP) Bylaw No. 4985, 2018 and the District’s Strategic Transportation Plan, 2010.

Regional Context

Translink’s Transport 2050 is the Regional Transportation Strategy for Metro Vancouver. Transport 2050 is the region’s roadmap for the next 30 years. It identifies projects, services, and policies with the objective to make transportation better for everyone. Transport 2050 includes a proposed Major Bikeway Network of approximately 850 kilometres, which builds on existing regional cycling networks, and connects urban centres and major destinations. A connection through West Vancouver connecting to Horseshoe Bay is envisioned as part of that network.

3.0 Council Strategic Objective(s)/Official Community Plan

Council Strategic Plan

This report aligns with Council’s Strategic Objective to:

- 4.0 Improve mobility and reduce congestion for people and goods.
- 4.3 Diversify, expand, and improve the safety and appeal of active transportation options.

As part of **Council’s approved Strategic Plan, 2021 – 2022**, there is an action to implement dedicated cycling infrastructure.

Official Community Plan

The Official Community Plan (OCP) Section 2.4 outlines a need to use existing [road] networks more efficiently and provide a range of safe and accessible transportation options within our community and across the region. The OCP seeks to enhance road network safety for all users.

Section 2.4 regarding “Mobility and Circulation” supports policies that encourage walking, cycling, and accessible transportation options within our community and across the region.

4.0 Background

The section of roadway between 25th Street and 31st Street along Marine Drive is roughly 1600 metres long with parking on either side. The eastbound and westbound travel lanes vary in width from approximately 5.7 m at the east end to approximately 4.6 m at the west end. This section of Marine Drive is an existing bike route identified by limited sharrow road markings and signage. Parking is permitted on both sides of the road for most of this section of Marine Drive. There are bus stops along the corridor at all the intersections except for 28th Street.

The 2500 – 3100 Block Marine Drive Bike Lane project is an important step forward in developing a major bike route for safe cycling access to and from Horseshoe Bay and beyond.

4.1 Previous Decisions

Not applicable.

4.2 History

In 2022, staff began investigating options to provide all ages and abilities bike lanes along Marine Drive between 25th Street and 31st Street to connect to the northbound bike lane on 31st Street and Westmount Road (construction underway).

A detailed survey of Marine Drive found that the existing roadway is not wide enough to accommodate protected eastbound and westbound bike lanes and the cost to widen the roadway would be very high.

With consideration to the skills and abilities of existing riders along this section of Marine Drive, vehicle speeds and volumes, and collision data, as well as the potential to attract new riders to the route, it was concluded

that, at this time, the most reasonable option would be to fit the best possible cycling lanes within the existing road width with minor roadway reconstruction at two locations. HUB North Shore Cycling has provided valuable input to staff as part of the design process.

Also forming part of this project, to be carried out in a subsequent phase, pedestrian safety and transit bus stop improvements at 29th Street are planned for implementation.

In 2024 the intent is to upgrade the Marine Drive/31st Street intersection to convert the existing pedestrian signal to a full traffic signal and to provide eastbound and westbound bicycles lanes on Marine Drive through the intersection. Work on the new civil and electrical design is currently underway. Once completed, the 2500 – 3100 block Marine Drive Bike Lane and Marine Drive and 31st Street intersection improvements will provide connection through the Westmount Bike Lane to the future Cypress Village lands as well as western connectivity to Horseshoe Bay through the Almondel and Eagleridge neighbourhoods.



5.0 Analysis

5.1 Discussion

Retrofitting existing roadways to add or improve active transportation facilities can be a challenge that often involves working within constrained conditions. Also of consideration, there are minimum design criteria (such as travel lane widths for specific roadway classifications), that need to be met for each transportation mode to function safely and efficiently.

As part of development, planning, and analysis for the 2500 – 3100 Block Marine Drive bike facility, BC Active Transportation Design Guidelines have been followed. Design, analysis, and retrofit strategies considered included: cost, maintenance, land use context, vehicle speeds and volumes, reduction of lane width, removal of on street parking, and roadway widening.

The project limits are roughly 1.6 km in length, and generally includes a uni-directional eastbound and westbound buffered curbside cycling facility separating the vehicle lane from the bike lane. At strategic locations such as approaches to intersections or potential conflict points, intermittent vertical flexible delineator posts will be installed to increase driver awareness of the bike lanes; intersection crossings will include green traffic markings. Vehicular travel lanes will be narrowed with edge lines painted to create consistent 3.5 m laning; east west travel lanes will be separated by a double yellow centre line with recessed pavement reflectors.

On street parking will largely be prohibited on both the north and south side of Marine Drive between 26th Street to 31st Street and on the north side of the street between 25th and 26th Street. On street utilization was recorded on a random sampling basis on five occasions over the course of the last 10 months, three on a weekday and two on a Sunday. Between 26th Street and 31st Street, typically two or fewer vehicles were observed parked per block except near the West Vancouver Presbyterian Church located at 28th Street, where up to 11 vehicles were observed. Staff observed that while there were vehicles parked on Marine Drive, there were parking spots available in the Church parking lot. Between 25th Street and 26th Street, which is the first block west of Dundarave Village, up to 16 parked vehicles were observed. Parking will still be permitted on the south side of Marine Drive between 25th and 26th Streets and will provide up to 15 parking spaces.

Parking along a bike route can present a safety concern because cyclists must move into the vehicle lane to go around a parked vehicle or because of the risk of a vehicle door opening and hitting the door or suddenly pulling into the vehicle lane.

Implementation of the 2500 – 3100 block Marine Drive bike lane is planned for early summer 2023.

The pedestrian safety and transit bus stop improvements to the 29th Street intersection will include the following and are anticipated to be implemented this fall, with design currently underway:

- sidewalk improvements between the two bus stops and the 29th Street intersection
- upgrades to the letdowns on the west side of the intersection

- installation of rapid flashing beacons
- bus shelter replacement.

5.2 Sustainability

Emissions related to on road commuting currently make up 39% of all community greenhouse gas emissions in the District. Encouraging mode shift to non auto oriented travel can help to reduce emissions associated with commutes within the District and to other areas of the North Shore.

5.3 Public Engagement and Outreach

Staff from Community Relations & Communications will develop and execute a communications strategy to ensure residents and visitors are informed of the construction works and new bike facility and pedestrian safety and transit bus stop improvements the project will provide for.

6.0 Financial Implications

In 2022, Council approved District funding of \$75,000 towards this project, in addition to receiving a \$112,500 Translink Bicycle Infrastructure Cost Share grant. Through the design process carried out in 2022, detailed cost estimates were developed, a Class B construction cost for this project indicated a construction cost of roughly \$300,000; the additional funding required for the project has been approved as part of the phase one 2023 Transportation Infrastructure Capital program. Funding for the pedestrian safety and transit bus stop improvements at 29th Street will be funded by a grant of \$69,850, received through the Transit Related Road Infrastructure Program (TRRIP).

2500 – 3100 Block Marine Drive Bike Lane	
Class B Construction Cost	\$300,000
Design	\$ 55,000
Funding Sources:	
External:	
Translink Bicycle Infrastructure Cost Share Grant	\$112,500
Internal:	
2022 Council Approved	\$ 75,000
2023 Transportation Infrastructure Capital Program	\$167,500
Pedestrian Safety Enhancements	
Funding Sources:	
External:	
TRRIP Grant	\$69,850
<ul style="list-style-type: none"> • sidewalk and let down improvements • rapid flashing beacons • bus shelter replacement 	

7.0 Options

7.1 Recommended Option

THAT the report regarding the 2500 – 3100 Block Marine Drive Bike Lane be received for information.

8.0 Conclusion

This report provides an update on the design and implementation of the 2500 – 3100 Block Marine Drive Bike Lane project as an important step forward in developing a major bike route for safe cycling access to and from Horseshoe Bay and beyond.

Author:



Jenn Moller, Director of Engineering & Transportation Services