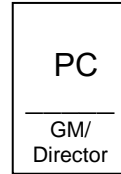
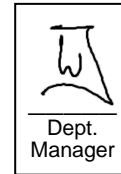


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Date:



The District of North Vancouver

INFORMATION REPORT TO COUNCIL

August 29, 2024

File: 16.8620.20/059.000.000

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SUBJECT: Lynn Valley Road Corridor - Safety and Capacity Improvement Opportunities

REASON FOR REPORT:

To inform Council of the proposed phasing strategy for safety, capacity, and mobility improvements to Lynn Valley Road that are envisioned over the next several years subject to future funding decisions.

SUMMARY:

Based on Council direction to prioritize certain routes within the District of North Vancouver (District), the Lynn Valley Road Active Transportation (LVRAT) corridor project was initiated in November 2020 and split into two phases (Phase 1, now complete and Phase 2, ready for delivery in sub-phases). Due to current funding constraints, delivery of all improvements is not possible within the near-term. As such, an updated phasing strategy is now being presented to best achieve incremental benefits relating to safety, connectivity, mobility, and capacity. This includes several intersection improvements along the Lynn Valley Road (LVR) corridor to be delivered in 2024 and 2025; and modest cycling improvements along the corridor, to be delivered in 2025, to best coordinate with the District's planned paving schedule and to maximize funding contributions from TransLink. The proposed improvements aim to create a more equitable and safer corridor and reduce greenhouse gas emissions.

BACKGROUND:

Lynn Valley Road (LVR) is an important corridor, providing access to regional and local parks, several schools, Lynn Valley Town Centre, and to Highway 1 for connections to the wider North Shore and beyond. Physical space is limited, and there are many travel needs to accommodate, including walking, rolling, cycling, taking transit, driving, and parking.

LVR is located on the Major Bikeway Network (MBN), a TransLink-proposed network of safe, direct, and comfortable cycling facilities connecting town/urban centres and other regionally significant destinations across Metro Vancouver. The completion of active transportation improvements on LVR also reflects Council direction to prioritize routes that connect town and

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village centres to one another, to high use parks, to the bridgeheads, and to our neighbouring municipalities.

As such, the Lynn Valley Road Active Transportation (LVRAT) corridor project was initiated to create a street design that is safer and more comfortable for people who live in the area, and for those who walk, cycle, roll, drive or take public transit, while also being mindful of the needs of road users and the local community. In November 2020, the LVRAT project was separated into two phases: Phase 1 (Mountain Highway to Peters Road, now constructed) and Phase 2 (Peters Road to Dempsey Road, now ready for delivery in additional sub-phases).

Staff are now proposing an updated phasing strategy for improvements to LVR that targets identified safety concerns, responds to community feedback, coordinates with paving requirements, and targets projects that maximize available external funding in light of internal funding constraints.

EXISTING POLICY:

Improvements to the LVR corridor align with the following plans and policies:

- Official Community Plan (2011),
- Transportation Plan (2011),
- OCP Action Plan (2021),
- Pedestrian Master Plan (2009),
- North Vancouver Bicycle Master Plan (2012),
- Lynn Headwaters Park Access and Parking Study (2018), and
- Community Energy and Emissions Plan (2019).

ANALYSIS:

Several transportation improvements have been identified on LVR to achieve safety, connectivity, mobility, and capacity benefits and to advance District objectives to increase sustainable transportation options and reduce transportation-related emissions. As the total cost to achieve all of these improvements is not possible for implementation within the District's near-term financial means, staff have worked to prioritize projects and reconsider the overall approach based on their relative benefits and what has been heard from community feedback. An updated phasing strategy is proposed to better respond to safety concerns, community desires, paving requirements and funding opportunities.

Intersection Safety Improvements:

Public engagement for the LVRAT Phase 2 project identified several intersections that posed safety concerns for all road users, and these concerns were validated by further technical analysis. Other key themes from public engagement included desires to retain on-street parking on LVR between Kilmer Road and Dempsey Road and concerns regarding high traffic speeds.

In response, localized intersection treatments are proposed that reinforce lower travel speeds and support a safer street environment for all road users. These localized solutions also help to preserve on-street parking – another key theme heard from the community. Once implemented, motor vehicle speeds can be monitored to determine whether an opportunity to

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further expand the current 30km/h speed limit along this section of LVR may help create additional safety improvements.

These changes could delay or potentially eliminate the need for constructing impactful separated cycling facilities between Kilmer Road and Dempsey Road. Staff believe that the proposed approach appropriately responds to the current fiscal environment, community feedback, best balances impacts, and supports the District's emerging active transportation goal of "incremental improvements" in the community.

Intersection improvement #1: Dempsey Road raised intersection

Installation of a raised intersection at the LVR and Dempsey Road intersection is recommended to reinforce the existing stop control in this area with heavy pedestrian traffic. A raised intersection is an extended speed table that encompasses the whole intersection, raising it above the level of the surrounding roadways. This safety improvement creates a safe, slow-speed crossing by reinforcing slower vehicle speeds before entering the intersection and encouraging motorists to better yield to pedestrians at crosswalks.

Construction of the raised intersection is planned for completion by the end of this year, in order to maximize TransLink funding that must be exhausted by the end of 2024. Nearby residents will be notified in the coming weeks. All permanent impacts will be retained within the District's road allowance, and staff will continue to work closely with the owners of 'End of the Line' to ensure any temporary impacts on District lands in front of their business can be mitigated and restored as much as possible.

Intersection improvement #2: Kilmer Road raised crossing

Introduction of a new raised crossing at LVR and Kilmer Road is recommended to achieve similar safety improvements as the Dempsey Road raised intersection while also increasing pedestrian connectivity. There are currently no controlled crossings on LVR between Peters Road and Dempsey Road, which are more than 800m apart. Together, the Kilmer Road and Dempsey Road speed tables will function as gateways in this area around Kilmer Park, reducing vehicle speeds and alerting motorists that they have entered an area of elevated pedestrian activity. It is recommended that the raised crossing be implemented in 2025.

Intersection improvement #3: Hoskins Road and Dovercourt Road

The skewed intersection of Lynn Valley Road and Hoskins Road/Dovercourt Road experiences a high number of collisions, with a collision analysis identifying challenges for multiple movements. Two design options to improve safety at this intersection were presented to the public and received comparable levels of support. The option to realign the intersection was preferred by emergency services over the option that prevented vehicles on Lynn Valley Road from accessing Dovercourt Road. The preferred design uses changes to the curbs around the intersection to slow turning vehicles, improve safety, and better distinguish the intersection of Dovercourt Road and Hoskins Road from the intersection with Lynn Valley Road and Hoskins Road.

To allow opportunities for further public feedback and to make revisions, it is recommended that the curb changes be implemented using low-cost and flexible materials in 2025. Staff will observe the impacts of these changes before proceeding with a more permanent installation.

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A summary of the three proposed intersection improvements is illustrated in Figure 1 below.

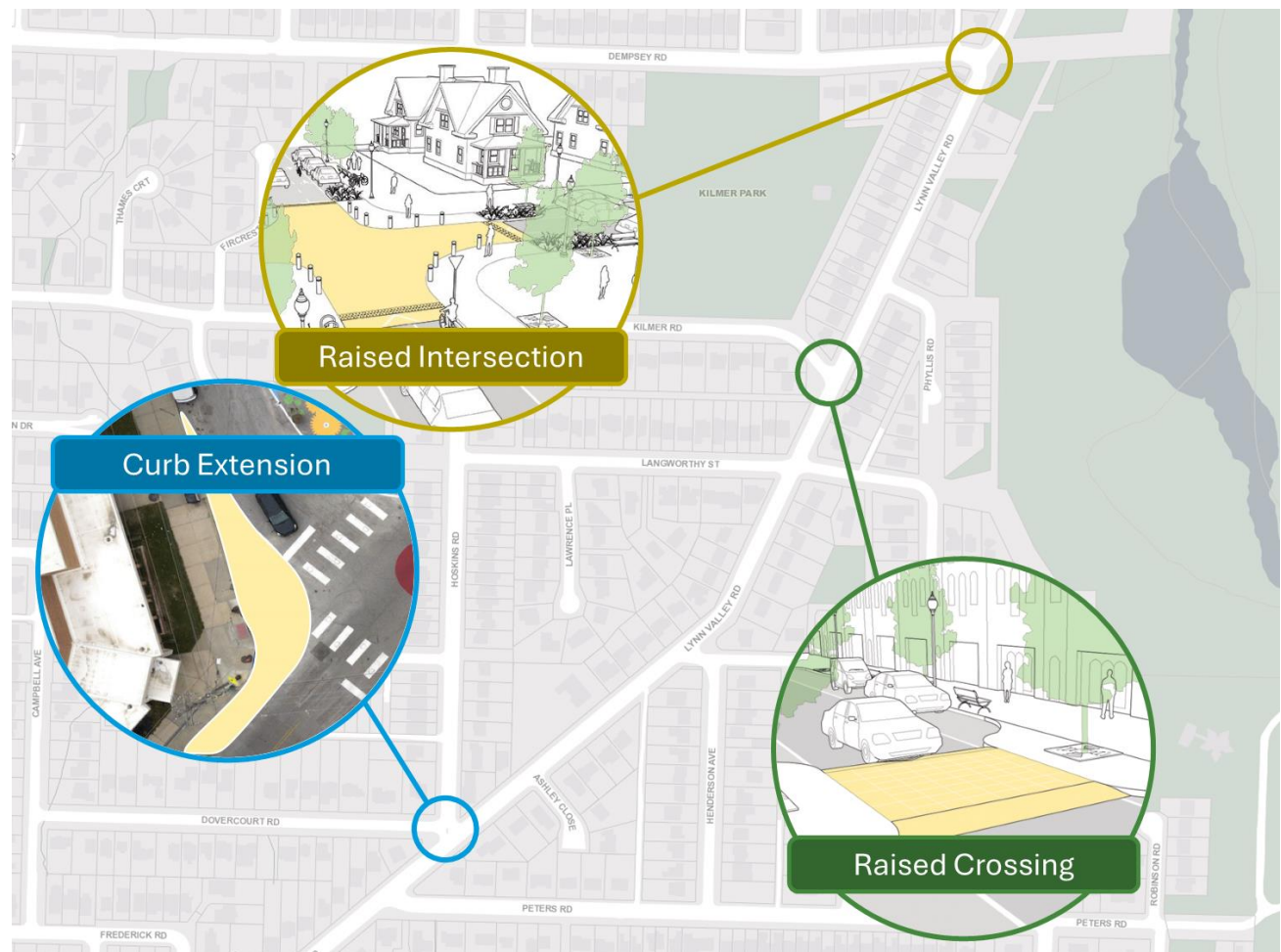


Figure 1. Location and concepts of proposed intersection improvements on LVR north of Peters Road

Separated Cycling Lanes:

Public engagement for the LVRAT Phase 2 project proposed three protected cycling route options to achieve full separation of motorists, cyclists and pedestrians, and improve safety. Unidirectional cycles lanes on both sides of LVR between Peters Road and Kilmer Road were generally preferred. No clear public preference was determined between the cycling route continuing on LVR between Kilmer Road and Dempsey Road or continuing as a multi-use pathway through Kilmer Park.

However, constructing separated cycling lanes requires a significant financial investment and may have large impacts (such as the removal of on-street parking). As outlined, staff propose to defer considering separated cycling lanes on LVR north of Peters Road and instead, propose the aforementioned intersection improvements. Future implementation of cycling infrastructure can be achieved once the financial environment improves and improvements that better respond to community feedback are identified.

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Notwithstanding staff's recommendations for cycling infrastructure on LVR north of Peters Road, open responses from the community expressed concerns regarding the gap in the cycling network further west on LVR close to Highway 1, where the network serves more users. This required staff to look further into what near-term opportunities may exist.

Near-term LVR improvements: Mollie Nye Way to Valley Centre Avenue/E 29th Street

Currently, there are intermittent cycling facilities on LVR between the CNV border at Highway 1 and Lynn Valley Town Centre. For much of the route, cyclists share the road with drivers. To best consider District investment, establishing cycling facilities between E 29th Street and Mountain Highway requires further coordination with redevelopment. However, a near-term opportunity has been identified by staff through modest cycling infrastructure improvements on LVR between Mollie Nye Way to Valley Centre Avenue/E 29th Street (illustrated in Figure 2). The scale and type of improvements would be similar to those recently implemented on Mount Seymour Parkway.

Separating cyclists from motor vehicles and transit brings safety improvements for our more vulnerable road users. Importantly, it can also unlock potential roadway capacity improvements in this important section of the LVR corridor – something that we have heard being desired by members of Council and community. Through reutilization of the existing median on this stretch of the LVR corridor, the same number of general-purpose travel lanes can be retained.

Removing cyclists from vehicle lanes will result in improved bus speeds and better transit reliability, reducing overall travel delays. Note that staff will include budget in the project for opportunities to still maintain a gateway-style effect that the existing median creates along this corridor between Highway 1 and Lynn Valley Road Town Centre – such as new plantings and landscaping along the edges of the street. Staff consider the proposed improvements on LVR between Mollie Nye Way and Valley Centre Avenue/E 29th Street a unique opportunity to deliver both safety and capacity-improvement benefits to the community, that can be delivered in a cost-effective manner in the near-term.

As this section of LVR is located on the MBN, this project is considered a high priority by TransLink and eligible for up to \$1M (at 100% cost share) in funding through TransLink's Bicycle Infrastructure Capital Cost Share (BICCS) Rapid Implementation Program. Staff plan to apply to this funding stream for construction next year in order to align with the District's paving schedule which plans to repave this section of the road in 2025. By applying to a high-yielding funding stream and coordinating with repaving, staff are able to maximize external funding and minimize costs to the District when completing this project. Such an improvement should bring notable improvements to all road users in this corridor, while potentially being delivered cost-effectively for District taxpayers.

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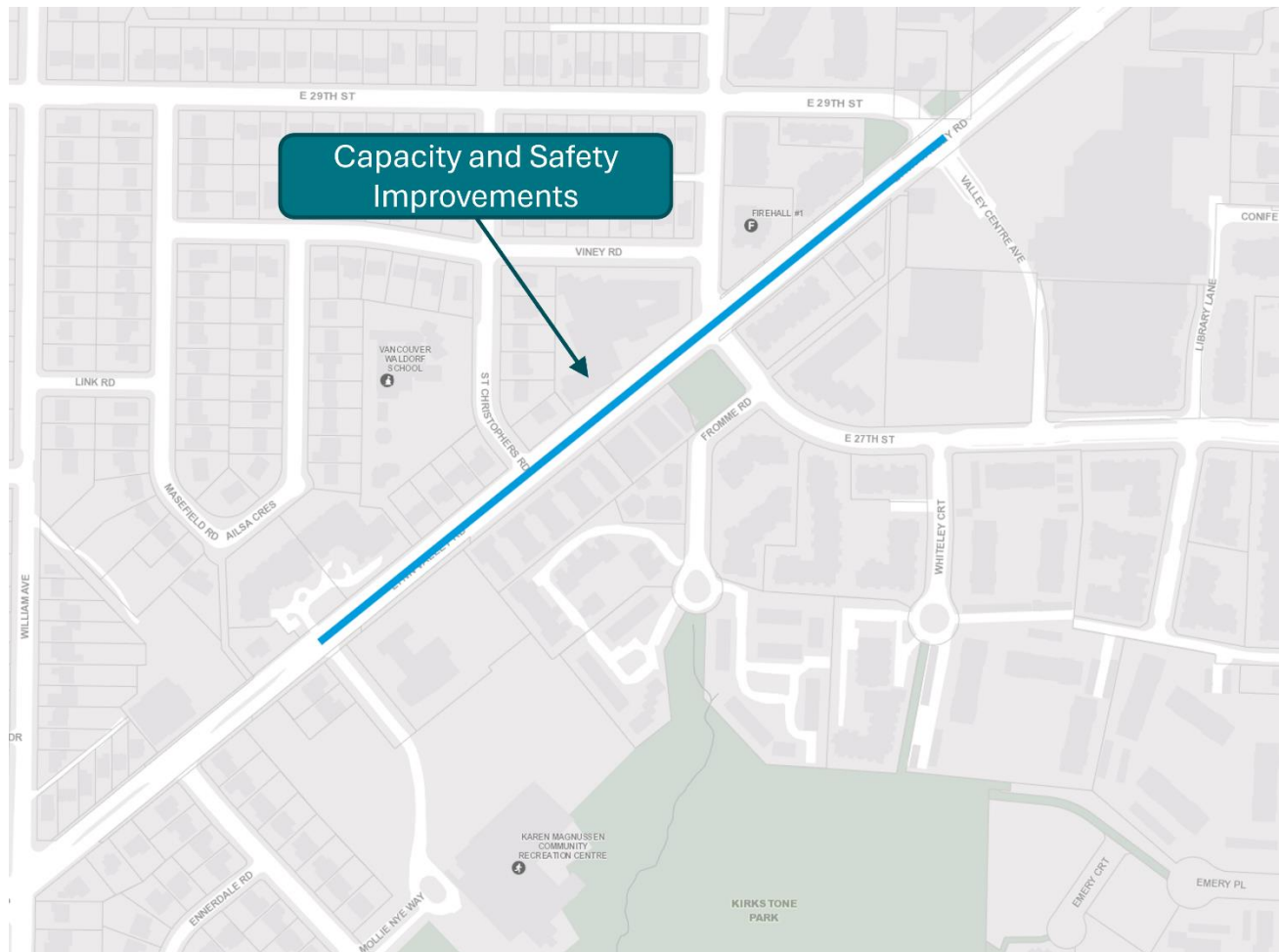


Figure 2. Location of capacity and safety improvements on LVR from Mollie Nye Way to Valley Centre Avenue/E 29th Street

Financial Impacts:

The District currently has up to \$113,000 (at 50% cost share) in TransLink funding from the Walking Infrastructure to Transit (WITT) Program to deliver the raised intersection project at LVR and Dempsey Road. The project must be completed in 2024 to be eligible to receive TransLink funding. Construction costs are currently estimated to be approximately \$200,000.

Construction of the remaining improvements is not funded by the current budget and additional funding will be requested as part of the 2025-2029 Financial Plan, with a goal of maximizing contributions from TransLink.

Timing/Approval Process:

The ultimate timeline to deliver the safety, connectivity, mobility, and capacity improvements along LVR will be influenced by available internal and external funding. However, several sub-phases are recommended for near-term construction to better align with paving needs and existing grant funding deadlines.

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Construction of the raised intersection at LVR and Dempsey Road is planned for completion by the end of this year, in order to receive TransLink funding that must be exhausted by the end of 2024. Nearby residents will be notified in the coming weeks.

Additional priority safety improvements will be delivered in 2025. These include realigning the intersection of LVR and Hoskins Road/Dovercourt Road, introducing a raised crosswalk at the intersection of LVR and Kilmer Road.

It is anticipated that the separated cycling lanes on LVR between Mollie Nye Way and E29th Street/Valley Centre Avenue will be delivered in 2025 to align with the current paving schedule. Staff will apply for funding through the TransLink BICCS Rapid Implementation program this fall to secure up to \$1M in external funding.

Staff recommend deferring further cycling and sidewalk improvements on LVR between Peters Road and Dempsey Road, as originally envisioned by the LVRAT Phase 2 project, in response to the currently evolving fiscal environment. Staff will continue to seek external funding for projects as they proceed through delivery and construction to reduce the District's financial obligations.

Liability/Risk:

These improvements aim to increase safety for users along this corridor, lowering liability and risk of collisions. An extension of existing cycling lanes will improve safety for active transportation users by providing separated facilities for walking, rolling and cycling, decreasing the risk of conflict with motor vehicle drivers. Intersection improvements were identified and prioritized due to an elevated percentage of motor vehicle collisions involving pedestrians and cyclists on LVR compared to the District as a whole. Potential conflicts and incidents will be reduced by shortening crossing distances for pedestrians, slowing turning vehicles, improving site lines, and clarifying stopping locations for vehicles.

Social Policy Implications:

Providing safer crossings and separated cycling facilities will create a more equitable and safer corridor, enabling people from differing abilities, backgrounds, and experiences to travel safely and comfortably. This is aligned with the District's Accessibility Plan's goal of improving the physical accessibility of public infrastructure and spaces within our community. This project also increases safe connections to town centres, helping promote social connectedness amongst community members by providing access to a wide range of opportunities to shop, work, and gather.

Environmental Impact:

Emissions related to the transportation sector currently make up 52% of all emissions in the District; passenger vehicles are responsible for 96% of transportation-related emissions. The District's Community Energy and Emissions Plan outlines key strategies to reduce greenhouse gas emissions in the transportation sector.

Separated cycling lanes on LVR between Mollie Nye Way and E29th Street/Valley Centre Avenue target emission reductions by reducing travel delays for buses and motorists and by increasing comfort for cyclists and pedestrians. Ultimately, this encourages more road users

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to shift to sustainable modes and decreases emissions from congestion, while continuing to build complete, connected communities.

Conclusion:

This report comprehensively updates Council on the progress to date on the LVRAT project, identifies preferred design concepts, and outlines a phasing strategy for incremental safety, connectivity, mobility, and capacity improvements along the LVR corridor while being mindful of financial constraints. This phasing strategy is based on community feedback obtained during community engagement for the LVRAT Phase 2 project and better responds to safety concerns, paving requirements, and funding opportunities. Staff will focus on the delivery of intersection improvements from 2024 to 2025; with construction of separated cycling lanes anticipated to begin in 2025 onwards (subject to external funding). Ultimately, these improvements will move the District closer to a street design that is safer and more comfortable for everyone using the corridor.

Respectfully submitted,



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Transportation Planner



Mac Fitzgerald
Transportation Planner

REVIEWED WITH:

<input type="checkbox"/> Sustainable Community	_____	<input type="checkbox"/> Clerk's Office	_____	External Agencies:	
<input type="checkbox"/> Development Services	_____	<input type="checkbox"/> Communications	_____	<input type="checkbox"/> Library Board	_____
<input type="checkbox"/> Utilities	_____	<input type="checkbox"/> Finance	_____	<input type="checkbox"/> NS Health	_____
<input type="checkbox"/> Engineering Operations	_____	<input type="checkbox"/> Fire Services	_____	<input type="checkbox"/> RCMP	_____
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<input type="checkbox"/> Human Resources	_____	<input type="checkbox"/> Real Estate	_____		_____