

AGENDA

COUNCIL WORKSHOP

Monday, December 6, 2021

7:00 p.m.

Council Chamber, Municipal Hall

355 West Queens Road

North Vancouver, BC

Watch at <https://dnv.org.zoom.us/j/65345321120>

Council Members:

Mayor Mike Little

Councillor Jordan Back

Councillor Mathew Bond

Councillor Megan Curren

Councillor Betty Forbes

Councillor Jim Hanson

Councillor Lisa Muri



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Watch at <https://dnv.org.zoom.us/j/65345321120>

AGENDA

1. ADOPTION OF THE AGENDA

1.1. December 6, 2021 Council Workshop Agenda

Recommendation:

THAT the agenda for the December 6, 2021 Council Workshop is adopted as circulated, including the addition of any items listed in the agenda addendum.

2. ADOPTION OF MINUTES

3. REPORTS FROM COUNCIL OR STAFF

3.1. Slow Streets Initiative

p. 7-20

File No. 16.8620.01/024.000

Report: Transportation Planner and Transportation Demand Management
Coordinator, November 1, 2021

Attachment A: Slow Street Pilot Examples

Attachment B: UBCM Resolution

Recommendation:

THAT the November 1, 2021 joint report of the Transportation Planner and Transportation Demand Management Coordinator entitled Slow Streets Initiative is received for information;

AND THAT staff are provided direction on whether to advance slow streets initiative to Phase 1 (Planning) in 2022 and report back to Council on findings.

3.2. 2021 Cycling Program & Lynn Valley Road Active Transportation Project

p. 21-29

File No. 16.8620.01/000.000

Report: Section Manager – Transportation and Transportation Planner, November
1, 2021

Attachment A: Council Priority Cycling Routes

Recommendation:

THAT the November 1, 2021 joint report of the Section Manager – Transportation and Transportation Planner entitled 2021 Cycling Program & Lynn Valley Road Active Transportation Project is received for information;

AND THAT Phase 1 of the Lynn Valley Road Active Transportation Project proceed to construction;

AND THAT Phase 2 of the Lynn Valley Road Active Transportation Project proceed to public engagement in early 2022.

4. PUBLIC INPUT

(maximum of ten minutes total)

5. ADJOURNMENT

Recommendation:

THAT the December 6, 2021 Council Workshop is adjourned.

REPORTS

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AGENDA INFORMATION	
<input checked="" type="checkbox"/> Council Workshop	Date: <u>November 8, 2021</u>
<input type="checkbox"/> Finance & Audit	Date: _____
<input type="checkbox"/> Advisory Oversight	Date: _____
<input type="checkbox"/> Other:	Date: _____



The District of North Vancouver REPORT TO COMMITTEE

November 1, 2021

File: 16.8620.01/024.000

AUTHOR: Ingrid Weisenbach, Transportation Planner
Brendon James, Transportation Demand Management Coordinator

SUBJECT: **Slow Streets Initiative**

RECOMMENDATION:

THAT this report be received for information;

AND THAT committee provide staff with direction on whether to advance slow streets initiative to Phase 1 (Planning) in 2022 and report out on findings.

REASON FOR REPORT:

The *Targeted Official Community Plan Review (OCP): Action Plan* includes a new supporting action for exploration: Adopt a 'Vision Zero' approach to increase travel safety. The transportation team are bringing forward high-level information for a proposed District of North Vancouver (DNV) approach. The purpose of this report provides initial scope, schedule and budget information and potential implications, setting the context for the November 8, 2021 transportation workshop on a slow street initiative.

Should Council support the slow streets initiative, staff will develop and bring forward to Council more comprehensive details in 2022 for consideration during the budgetary process. At present, this work is not included in the 2022 and beyond transportation work plan and will need resources reallocated to it if Council chooses to move forward with the initiative. For example, should this initiative proceed to implementation in 2023, work may be deferred to future years, including deferral of road safety, traffic calming, TDM or cycling projects.

SUMMARY:

One of the objectives outlined in the District of North Vancouver's Transportation plan, is to "employ a range of solutions and countermeasures to make its road network as safe as possible, for all road users." Council recently reconfirmed this with the inclusion of the supporting action to adopt a 'Vision Zero' approach in the OCP Action Plan.

Some members of Council have expressed interested in an initiative that focusses on slowing drivers on local streets to reduce injuries and fatalities. If the majority of Council support this initiative, staff propose to implement measures that slow speeds on local roads in two sample neighbourhoods. The initiative would include public engagement and would collect and analyse data to see what changes occur in driver behaviour. The findings would help inform staff and Council on the impacts and benefits of these types of initiatives.

It should be noted that there are over 160km of local streets in the District. Just the new speed limit regulatory signage necessary to designate slower limits than the 50km/h local street default in the motor vehicle act may ultimately result in upwards of 1,000 signs district wide.

Based on Council direction, staff would develop a slow streets initiative with the planning phase proposed to commence in 2022.

BACKGROUND:

"Vision Zero" is a global movement to end traffic-related fatalities and serious injuries by taking a systemic approach to road safety. This strategy is based on the premise that road deaths and injuries are unacceptable and preventable.

Vision Zero programs should generally consider the following focus areas¹:

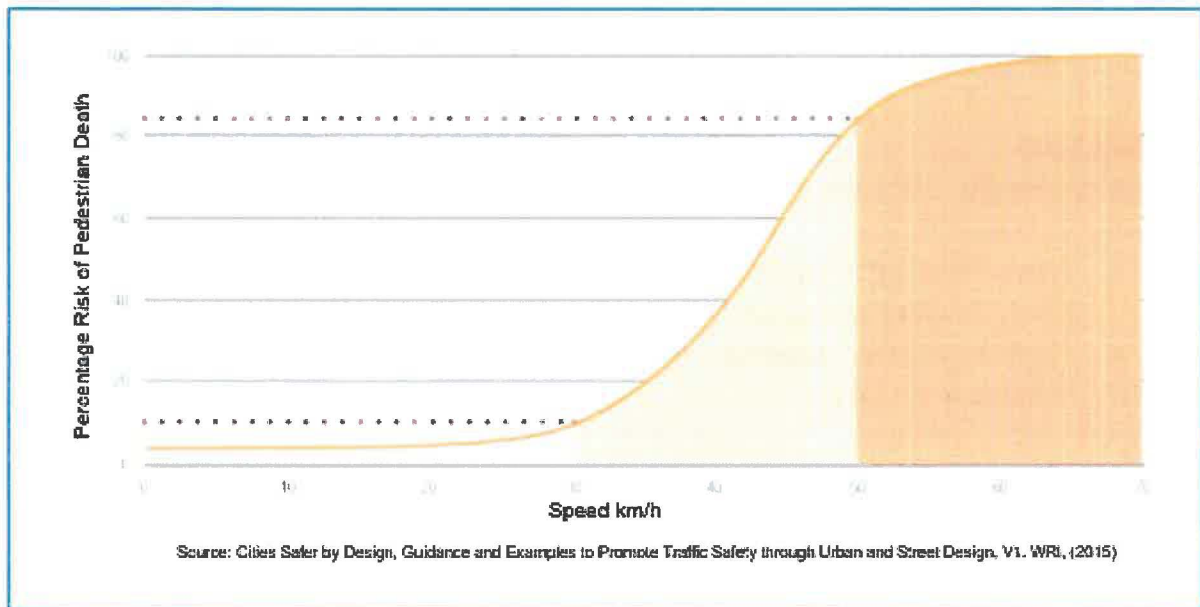
- Leadership & Commitment,
- Equity & Engagement,
- Safe Roadways & Safe Speeds, and
- Data-Driven Approach, Transparency & Accountability.

As noted, one focus area of Vision Zero is speed. Research has consistently demonstrated that driving speeds are strongly associated with the frequency of "Killed or Seriously Injured" (KSI) crashes. **Figure 1** illustrates this relationship between driving speeds and the risk of a vehicle-pedestrian collision resulting in a fatality. Relatively small changes in reduced travel speeds can greatly increase the chances of survival for those involved in a collision, particularly for those vulnerable road users such as pedestrians, cyclists, and motorcyclists.

¹ Source: [VZN CoreElements FINAL.pdf \(visionzeronetwork.org\)](#)

Initiatives to reduce motor vehicle volume and speeds to a minimum so that people can walk, roll or cycle safely have been introduced on a broader, neighbourhood-wide scale in a number of other municipalities within Canada, including the City of Surrey, City of North Vancouver, City of Edmonton and the City of Toronto. A more detailed summary of these programs can be referenced in **Attachment A**.

Figure 1. Vehicle Speed and Collision Severity Relationship



Speed reduction strategies are already being used successfully across the District in a variety of different contexts such as at schools, playgrounds, and construction zones. These zones are generally limited to small segments of road. The benefits of established ‘slow streets’ over District school, playground, and construction reduced speed zones are increased public awareness and compliance.

Although the District does not have a formal Vision Zero program at this time, staff work to minimize the risks to people walking, rolling, and driving through careful planning and design of our transportation network.

Many District projects focus on safety, such as new crosswalks, signals, curb extensions, and sidewalks. For example, safety improvements along W. 15th Street, E. 29th Street and additional 30km/hr speed signage introduced on neighbourhood bikeways such as W. 15th Street and Tatlow Avenue. These improvements support walking and cycling and are designed to benefit all road users.

A 2018 study found that protected or separated cycling facilities are “significantly associated with better safety for all road users”².

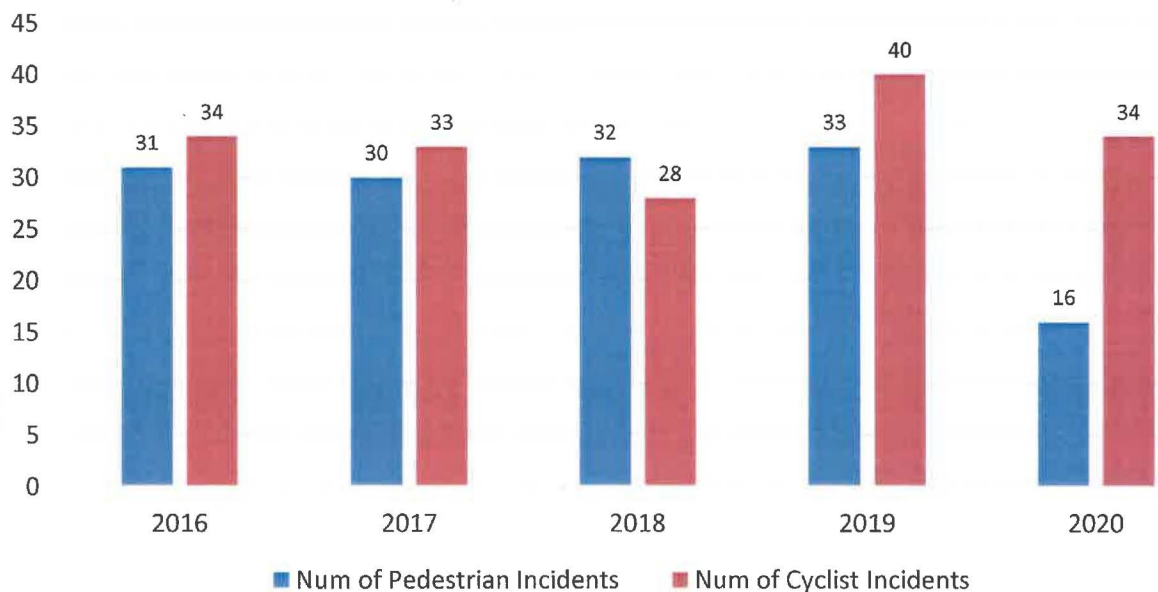
Motions have been brought to the Union of BC Municipalities by the City of Vancouver and other Lower Mainland municipalities requesting that the Minister of Transportation and Infrastructure consider an amendment to the Motor Vehicle Act that would allow incorporated municipalities to institute blanket speed zones in residential areas. Addressing this topic at a Provincial level is the most efficient way of implementing slow streets in a consistent manner. A more detailed summary of these motions can be referenced in **Attachment B**.

ANALYSIS:

District-specific ICBC data show that from 2016 to 2020:

- There have been approximately **142** vehicle incidents involving pedestrians, **119** of which resulted in an injury.
- There have been approximately **169** vehicle incidents involving cyclists, **146** of which resulted in an injury.

DNV Incidents Involving Pedestrians and Cyclists



An initiative to slow driving speeds on local residential streets could be implemented for the District. Similar to projects in other nearby municipalities, staff propose that two neighbourhoods be selected for the initiative; one area would post 30 km/h speed limits while

² Source: [Why Are Bike-Friendly Cities Safer for All Road Users? \(MPC-18-351\) \(ugpti.org\)](#)

the other would post 40 km/h speed limits. A third area would be designated as a control area, with similar characteristics to the test areas but no changes to the speed limit.

Since the initiative is intended to inform the District's approach to speed limits in residential areas more broadly, if approved it will be designed in a way that allows for comprehensive evaluation. This data-driven approach would be incorporated into all phases. Speed reduction would only apply to the roads classified as local roads; arterial and collector roads would remain at their existing speed limits. Speed limit enforcement would need to be performed by the RCMP.

Staff propose a three-year timeline to plan, implement, and analyse such an initiative.

Phase 1 (Planning): Staff would undertake the planning phase which may include, but not be limited to, activities such as a siting analysis, site selection, development of a monitoring and evaluation plan, baseline data collection, amendments to bylaws and developing a strategy to engage the public. During this phase, staff would develop a proposed timeline and estimated budget for additional phases. This planning work would allow staff to gather sufficient information to make recommendations for Phase 2.

Phase 2 (Engagement, Implementation & Monitoring): At a high level, staff would implement strategies developed in Phase 1, which may include such items as new speed signage and other supporting infrastructure. Staff would collect data, and implement the engagement plan developed in Phase 1. The initiative would be launched in conjunction with a communications campaign to notify residents impacted by speed reduction measures.

Implementing this initiative requires involvement from many internal stakeholders, including but not limited to, Transportation, Design, Streets, Bylaws and Communication.

Phase 3 (Evaluation & Reporting): Staff would analyse and report out findings and/or recommendations.

EXISTING POLICY:

This initiative is supported by the Road Safety Plan, Transportation Plan, Pedestrian Master Plan, Community Energy and Emissions Plan (CEEP).

The District's Official Community Plan Review Action Plan includes the following supporting action: Adopt a 'Vision Zero' approach to increase travel safety.³

Timing/Approval Process:

If endorsed, Year 1 (planning) of the initiative would commence in 2022. As part of this initial phase, staff would develop timelines for implementation, monitoring, evaluation and reporting.

³ Source: [District of North Vancouver Official Community Plan - Action Items \(Page 48\)](#)

Stakeholders

Staff would work with internal stakeholders to execute this initiative which include Transportation Planning, Engineering, Streets, Communications and Finance. Staff would also engage with external stakeholders, including residents, TransLink and the City of North Vancouver.

Financial Impacts

Subject to the fiscal budget process, staff have requested \$40,000 to complete the planning phase (Phase #1) in 2022. These funds would be used to collect baseline data, determine site selection, development of a public engagement plan and other activities to support the initiative.

Additional budget would be requested for implementation, monitoring, evaluation and reporting tasks. Based on initial information from other municipalities and for estimating purposes only, this work could cost approx. \$150,000 - \$200,000 (inclusive of year 1 tasks). Costs would potentially include:

- Design, produce and deploy street signage, including speed signs,
- Implement education and communications plan, and
- Collect data, including vehicle data and resident surveys, and
- Evaluate and report out findings.

On-going resourcing and operational/maintenance costs, which are currently unknown, would be developed during the planning phase.

It should be noted that there are over 160km of local streets in the District. Therefore, operational impacts would be significant if this program is ultimately adopted District-wide. Just the new speed limit regulatory signage necessary to designate slower limits than the 50km/h local street default in the motor vehicle act may result in upwards of 1,000 signs district wide.

Accordingly, if the trial is successful, and results in a desire to expand the program to other neighbourhoods, there will be a need to prioritise the neighbourhoods objectively and then develop a program to implement gradually district wide.

Conversely, if the trial is not successful and there is a desire to remove the slow streets measures, there may be some members of the public left dissatisfied with the removal.

Social Policy Implications:

The District strives to provide an equitable approach to active transportation, supporting community health, social wellness and promote overall liveability in our area. Creating safer road space supports the adoption of active transportation alternatives over single occupancy vehicles. By slowing driving speeds, the initiative may see additional benefits (besides safety) to making the road more comfortable to walk, roll and cycle – thereby benefiting all road users.

Environmental Impact:

By slowing driving speeds, this initiative may see additional environmental benefits by reducing fuel consumption and emissions. People may be more comfortable adopting active transportation modes, and reducing the need for single occupancy vehicles. A reduction in vehicle use benefits the surrounding residential area, with reduced noise and a reduction in GHG emissions compliments goals set in the District's CEEP.

Public Input:

A robust community engagement plan would be developed and conducted throughout the initiative. This could include communications and engagement tactics to inform, educate, and collect feedback from residents and other stakeholders.

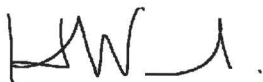
Conclusion:

There is significant research to support slowing drivers to increase safety for vulnerable road users. Speed reduction measures increase the chances of survival for those involved in collisions, particularly for vulnerable road users such as pedestrians, cyclists and promote overall liveability in our neighbourhoods. Through this initiative, the District could demonstrate corporate leadership by taking actions to create safer road spaces for all users.

Options:

1. THAT the Committee provide direction to advance slow streets initiative to Phase 1 (Planning) in 2022 and report out on findings.
2. THAT no further action is taken.

Respectfully submitted,



Ingrid Weisenbach,
Transportation Planner



Brendon James,
TDM Coordinator

Attachment A: Slow Street Pilot Examples

Attachment B: UBCM Resolution

REVIEWED WITH:					
<input type="checkbox"/> Community Planning	_____	<input type="checkbox"/> Clerk's Office	_____	External Agencies:	
<input type="checkbox"/> Development Planning	_____	<input type="checkbox"/> Communications	_____	<input type="checkbox"/> Library Board	_____
<input type="checkbox"/> Development Engineering	_____	<input type="checkbox"/> Finance	_____	<input type="checkbox"/> NS Health	_____
<input type="checkbox"/> Utilities	_____	<input type="checkbox"/> Fire Services	_____	<input type="checkbox"/> RCMP	_____
<input type="checkbox"/> Engineering Operations	_____	<input type="checkbox"/> ITS	_____	<input type="checkbox"/> NVRC	_____
<input type="checkbox"/> Parks	_____	<input type="checkbox"/> Solicitor	_____	<input type="checkbox"/> Museum & Arch.	_____
<input type="checkbox"/> Environment	_____	<input type="checkbox"/> GIS	_____	<input type="checkbox"/> Other:	_____
<input type="checkbox"/> Facilities	_____	<input type="checkbox"/> Real Estate	_____		
<input type="checkbox"/> Human Resources	_____	<input type="checkbox"/> Bylaw Services	_____		
<input type="checkbox"/> Review and Compliance	_____	<input type="checkbox"/> Planning	_____		
<input type="checkbox"/> Climate and Biodiversity	_____				

Attachment A: Slow Street Pilot Examples

Below are examples of other municipalities across Canada that have successfully implemented reduced speed limit pilot projects as part of their speed management efforts.

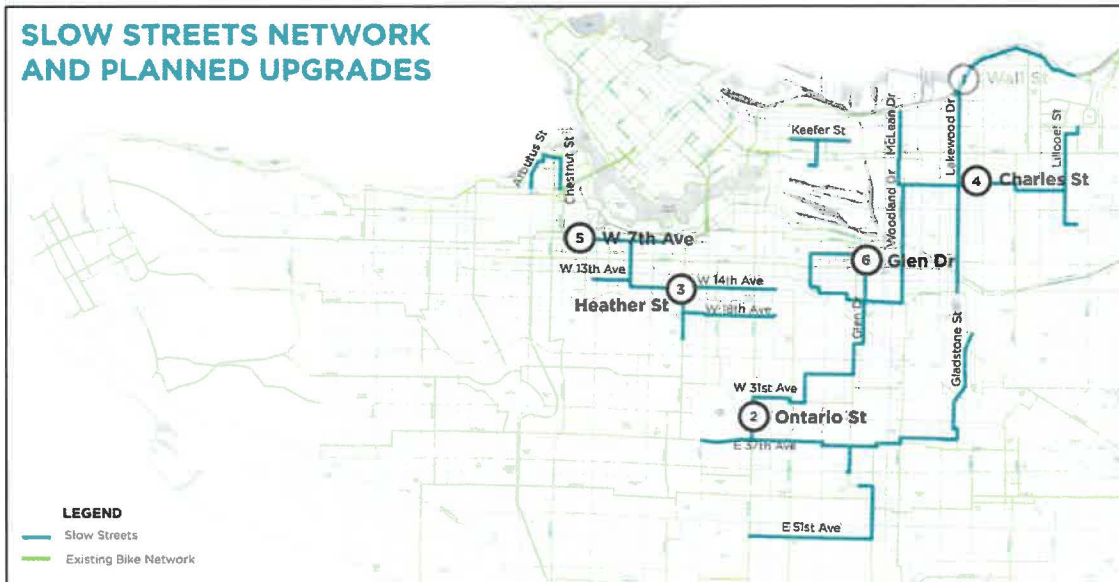
City of Vancouver

The Slow Streets project began as a project to help residents to physically distance and mitigate the risks of Covid-19. Slow Streets are on existing greenways and local streets where light interventions are introduced to reduce and slow down traffic

In July 2020, Vancouver City Council approved a 30 km/h residential area speed limit demonstration project with measures to implement reduced speed limits using a zone-based approach, with busier roads forming the boundaries of each of their 6 zones. The zones for their pilot project were selected through a data driven framework that prioritizes areas where data shows the reduced speed limits are most needed.

Currently the City of Vancouver is in Phase 2 of the project which includes monitoring of speed reduction measures and gathering feedback from the general public. The public can provide feedback through an Online Survey or direct email to the project team.

More information can be found on the following [web page](#).



City of Surrey

in November of 2020, The City of Surrey Commenced planning for their slow streets pilot

project. The purpose was project is to study how lower speed limits affect driver behaviour, and ultimately the safety on local roads.

The project will compare the impacts that 30 km/h verses 40 km/h speed limits have in neighbourhoods. Following the lowering of speed limits in the pilot project areas, the project teams will monitor vehicle speeds, crashes and perceptions of safety among residents

The city setup two different pilot speeds, in 6 different zones around the city. Using a data-driven approach, neighbourhoods were selected based on demographics, speeding issues, safety issues, community amenities and equity, to ensure a broad representation of issues on the cities roads.



As a part of the community outreach plan, the City Communications team held a Design the Sign contest in March 2020. This spring break activity involved children 5-18yrs and their families who live and work in Surrey. 50 sign designs were submitted from children and youth across the City. Six designs were chosen and have been made into street signs that are now in the six Slow Streets Neighbourhoods.

The project is currently in its monitoring phase until June 2022. More information can be found at the following [web page](#).

City of North Vancouver

The City conducted public consultation through the Ridgeway School Zone Safety Review in order to address traffic and safety concerns around the school. Staff worked with neighbourhood residents and the school community to understand key concerns and gather feedback on possible actions.

Through this process, some of the issues documented include crossing safety, speeding, and traffic queuing and poor driver behaviour.

Beginning in January 2021, the City of North Vancouver has implemented a 30km/h zone in the neighbourhood surround Ridgeway Elementary school.

This compliments the existing school zone, playground zone (on 13th street) and the speed calming measures implemented in 2020 on St Andrews Ave. Phase one of this project has been completed which included new painted crossings, addition of curb bulges, changes to no stopping zones and the expansion of the 30km/h speed limit zone.

Phase 2 of the project is currently underway and includes monitoring and data collection through the use of speed measurement devices.

More information can be found on the following [web page](#).



City of Toronto

The City of Toronto used a blanket approach and reduced the posted speed limit from 40 km/h to 30 km/h on all local roads within 12 Municipal Wards in the Toronto and East York District. Speed limits were lowered from 40 km/h to 30 km/h in residential areas resulting in a 28 percent decrease in pedestrian motor vehicle collisions.

Notably, these results were achieved solely with changes to the posted speed limit, and without the implementation of traffic calming or other supporting infrastructure. More information can be found on the following [web page](#).

City of Edmonton

Speed limits were lowered from 50 km/h to 40 km/h on most residential and downtown streets. This resulted in a 45 percent reduction in fatal and injury crashes, and a 55 percent reduction in injury and death to vulnerable road users. The main contributor to this reduction in serious collisions was an observed average 12 km/h reduction in actual vehicle operating speeds.

Analysis from other municipalities has also demonstrated that in urban areas, changes to speed limits in residential areas has a negligible impact on people's travel times. For example, in order to track the possibility of delays caused by reduced speed limits, the City of Edmonton developed a web application combining their City data with Google maps.

Results show that reduced speed limits on residential roads near schools added less than one minute to most trips. More information can be found on the following [web page](#).

Attachment B: UBCM Resolution

There is growing momentum for reduced residential area speed limits among municipalities in British Columbia and across Canada. In 2019, a UBCM resolution called for amendments to the Motor Vehicle Act to allow municipalities the ability to institute blanket speed limits applying to all residential area roads.

B7 Safer Slower Streets: 30 km/h Residential Street Pilot Vancouver

Whereas currently, the Motor Vehicle Act (MVA) stipulates a speed limit of 50 kilometers per hour (km/h) within city limits;

And whereas the probability of pedestrian survival is about 90 per cent if struck by a motor vehicle travelling at 30 km/h, while survival is reduced to 20 per cent if struck by a motor vehicle travelling at 50 km/h;

And whereas lower speed limits are more compatible with active transportation, and create safer, better engaged, healthier and more inclusive communities;

And whereas in 2015, the BC Road Safety Strategy set out the goal of zero traffic fatalities and serious injuries and discussed safe speeds. In 2016, the Provincial Health Officer's Annual Report also recommended a 30 km/h speed limit in urban areas;

And whereas in June 2016, as part of its position paper, Modernizing the BC Motor Vehicle Act, the British Columbia-based Road Safety Law Reform Group recommended: "A default provincial speed limit of 30 km/h for local (no centre line) streets should be included in the Motor Vehicle Act, with municipalities enabled to increase speed limits on local streets in a case by-case basis by by-law and posted signage.":

Therefore be it resolved that the Minister of Transportation and Infrastructure be asked to consider an amendment to the Motor Vehicle Act that would allow incorporated municipalities to institute blanket speed zones in residential areas.

108 UBCM 2019 Resolutions Book

And be it further resolved this resolution be presented at the UBCM. Not presented to the Lower Mainland Local Government Association

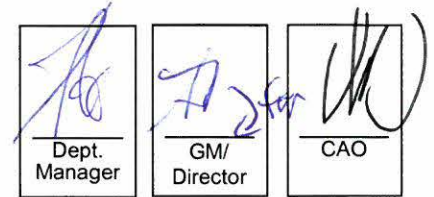
UBCM Resolutions Committee recommendation: Endorse with Proposed Amendment

Therefore be it resolved that the Minister of Transportation and Infrastructure be asked to consider an amendment to the Motor Vehicle Act that would allow incorporated municipalities to institute blanket speed zones in residential areas. And be it further resolved this resolution be presented at the UBCM. UBCM Resolutions Committee comments:

The Resolutions Committee notes that UBCM membership has consistently endorsed resolutions calling for amendments to the Motor Vehicle Act to enable municipalities to implement blanket speed limits (2009-B19, 2006-B14, 2003-LR9, and 1999-B44) within their municipal boundaries. In response to 2009-B19, the Province cited concerns with the potential development of a patchwork of speed limits, and motorists challenging speeding tickets on the basis that they could not reasonably know the applicable speed limit in a particular jurisdiction

The Committee also notes that the membership endorsed resolution 2015-B12 which called for rural communities to be able to lower the speed limit on certain highways that pass through their communities; and, 2011-B18 which called for communities to be able to, in part, regulate speed on arterial highways within municipal boundaries.

AGENDA INFORMATION	
<input checked="" type="checkbox"/> Council Workshop	Date: <u>November 8, 2021</u>
<input type="checkbox"/> Finance & Audit	Date: _____
<input type="checkbox"/> Advisory Oversight	Date: _____
<input type="checkbox"/> Other:	Date: _____



The District of North Vancouver

REPORT TO COMMITTEE

November 1, 2021
File: 16.8620.01/000.000

AUTHOR: Steve Carney, P.Eng., PTOE - Transportation Section Manager
Ingrid Weisenbach, Transportation Planner

SUBJECT: 2021 Cycling Program & Lynn Valley Road Active Transportation Project

RECOMMENDATION:

THAT Committee receive this Report for information,

THAT Phase 1 of the Lynn Valley Road Active Transportation Project proceed to construction,

AND THAT Phase 2 of the Lynn Valley Road Active Transportation Project proceed to public engagement in early 2022.

REASON FOR REPORT:

This report provides context for the Transportation workshop on November 8, 2021. The purpose of this report is to provide Council with a status update on the cycling program and seek direction regarding timing of the Lynn Valley Road Active Transportation (LVR AT) project phases:

- Phase 1 construction and
- Phase 2 planning & engagement.

SUMMARY:

Staff continue to make cycling improvements in the District of North Vancouver (District), from the rollout of the electric bicycle (e-bike) share program, to the cycling facilities opening up in and around the Lower Lynn interchanges. Collectively, these changes are making cycling safer, more comfortable and accessible.

Cycling projects often involve difficult trade-offs within the road right-of-way. While the District's 2020 cycling survey garnered one of the highest response rates for a District survey

and showed high support for separated type cycling facilities (e.g., cycle-tracks), these projects face often significant opposition. As outlined in the June 2021 transportation workshop, staff are adjusting timelines and budgets to build more time for consultation into the process.

The LVR AT project involves changes to the walking and cycling environment by including crossing improvements, filling in gaps in the sidewalk, bus stop accessibility upgrades and separated cycling facilities. The project was split into two phases in order to enable more in-depth discussion in the northern section, where the cycling components are most controversial and parking pressures are greatest, allowing for the southern portion to be potentially delivered earlier.

Staff seek input regarding the next steps for each phase. Phase 1 segment has been designed and the tender-ready package compiled. Phase 2 of LVR AT has three stages with each stage having its own public engagement plan. Based on operational concerns and public feedback, the one-block (Kilmer to Dempsey) one-way motor vehicle option has been eliminated from further consideration. The first (concept) stage is expected to take approximately six to nine months, resulting in one preferred option to be brought forward into the design stage. To date, staff have developed options to take forward to public engagement. Each phase of the LVR AT project is well positioned to move ahead when Council is ready.

BACKGROUND:

Safe and comfortable walking and cycling infrastructure is central to the District's ability to meet its transportation, economic, and environmental goals, including reducing greenhouse gas emissions. The Targeted OCP Review Action Plan, which was approved by Council on July 26, 2021 included eight Priority Actions to move the District towards the OCP Vision. Priority Action 6 focused on the need to deliver walking and cycling infrastructure, as follows:

Create a continuous and connected network of walking and cycling routes to encourage more people of all ages and abilities to walk and cycle

Cycling facilities benefit all road users. A 2018 study, which looked at 13 years of data from 12 large US cities and over 90,000 injuries/fatalities, found that improving cycling infrastructure with more protected/separated bike facilities is significantly associated with fewer fatalities and better road safety outcomes¹. The infrastructure calms traffic, minimizing conflict between people driving/parking and people cycling. Cycling infrastructure is also a cost-effective way of moving more people².

This year, new cycling facilities are coming online as the Ministry of Transportation and Infrastructure (MOTI) completes work in and around the Lower Lynn interchanges. Staff also worked with MOTI to develop concepts at the Capilano Road and Lynn Valley Road/Boulevard Crescent interchanges. A major section of the Lions Gate Village – City of

¹ Source: [Why Are Bike-Friendly Cities Safer for All Road Users? \(MPC-18-351\) \(ugpti.org\)](#)

² Paving two arterial travel lane costs approx. \$410/m compared to reallocating parking to cycling costs approx. \$100/m (for road markings, signs and barriers).

North Vancouver (CNV) border cycling route was also introduced this fall. This project installed 30km speed signage, wayfinding, and road markings along a portion of Tatlow Avenue and W. 15th Street to support the neighbourhood bikeway.

2021 saw the start-up of the North Shore's new e-bike share program. As noted in the recent Information Report to Council (dated September 1, 2021), this service is seeing strong ridership. As of September 30, 2021 Lime reports 12,992 trips taken on the North Shore and six Lime Groves (parking locations) with more on the way within the District.

Another issue staff are investigating are cyclists' speeds on multiuse paths. Staff are collecting and analysing pedal and electric cycle speed data from the Spirit Trail across the North Shore. Using the results of the investigation, staff can gain greater understanding of the issues and if necessary, develop ways to address the issue.

Lastly, the District, in partnership with TransLink, installed a permanent counter on the Spirit Trail in Welch Strip Park. This new counter will allow staff to collect pedestrian and cyclist volumes for this popular section of the Spirit Trail.

Delivering Lynn Valley Road Active Transportation Project

In 2019, the stretch of Lynn Valley Road from Mountain Highway to Dempsey Road was endorsed by Council as one of their priorities for advancing a cycling network that connected town and village centres to one another and key destinations such as popular local and regional parks.

FIGURE 1: LVR AT Project Phases



In 2020, Council endorsed the phasing of the LVR AT project: Phase 1: Mountain Hwy – Peters Road and Phase 2: Peters Road – Dempsey Road. This allowed the Phase 1 segment to progress while more concept work and public engagement occurred for Phase 2.

On July 26, 2021 Council approved the OCP Action Plan. This plan contains Action 6: “Create a continuous and connected network of walking and cycling routes to encourage more people of all ages and abilities to walk and cycle.” The plan further identifies Phase 1 of LVR AT as an implementing activity but also as a “Quick Win” (defined as activities that can be implemented within the first 18 months of the Action Plan)³.

EXISTING POLICY:

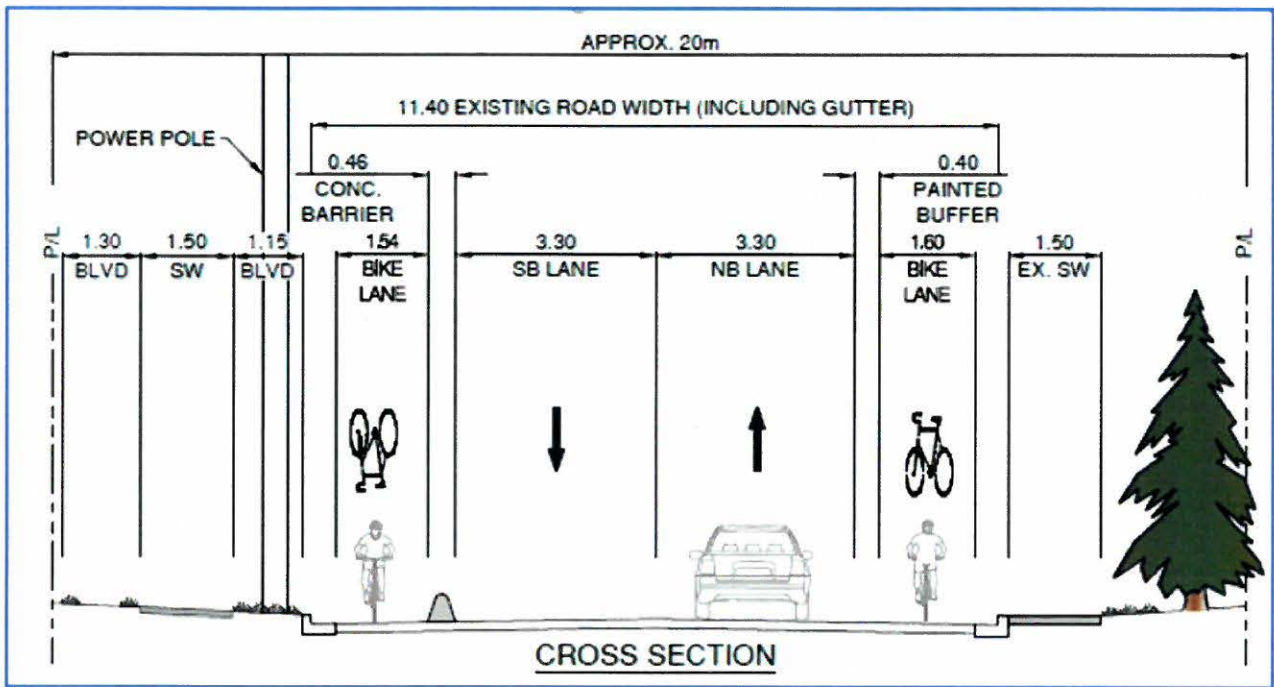
The District’s cycling program is supported by the Official Community Plan and the Action Plan, Transportation Plan, Bicycle Master Plan, Priority Cycling Routes, Community Energy and Emissions Plan (CEEP), and INSTPP.

ANALYSIS:

Phase 1

To deliver Phase 1 of LVR AT project, staff completed the design and engaged with internal and external stakeholders to ensure the project is safe, accessible, and can support all users, in particular vulnerable road users, while balancing operational lessons learned from similar projects. For details regarding the design, please refer to the June 4, 2021 Information Report to Council. Phase 1 segment is now tender-ready.

FIGURE 2: LVR AT Phase 1 Cross-section



³ Source: [OCP-review-action-plan.pdf \(dnv.org\)](https://dnv.org/OCP-review-action-plan.pdf)

Two project timeline options are illustrated in Figure 3. Option A would maintain the current pace of implementation. Option B would defer construction to 2023.

FIGURE 3: LVR AT Phase 1 Project Stages & Possible Delivery Timelines



Given that Phase 1 is ready to be packaged for tender and a quick win in the OCP Action Plan, staff recommend Option A timeline.

Phase 2

Phase 2 of LVR AT has three stages: concept, design, and construction. Each stage will have its own public engagement plan. The concept stage is expected to take approximately six to nine months, resulting in one preferred option to be brought forward into the design stage. This section of road has its own unique characteristics and local needs. In response, the District has engaged a consultant to develop road design options for this area that meet the goals and address concerns such as parking and vehicle flow. The project team is developing options that will all include sidewalks, bus stop upgrades, a new pedestrian crossing at Kilmer Road, and intersection safety upgrades.

Phase 2 has been split into two segments for analysis:

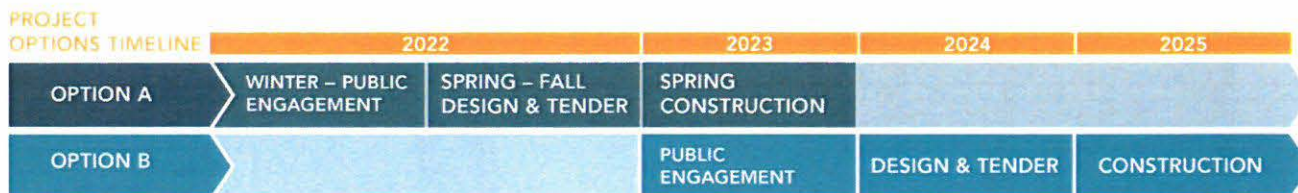
- Segment A extends north from Peters Road to Kilmer Road. This segment generally has low parking demands throughout the day, with ample excess supply available.
- Segment B extends north of Kilmer Road to Dempsey Road. This segment regularly experiences constrained parking conditions and reaches full capacity at peak times, primarily due to high utilization by visitors to surrounding destinations and trails.

The following Segment B options have been identified options that fall into two main streams: in-street and off-street. In-street options include trade-offs between motor vehicle parking and cycling in the existing space between the curb. Off-street options include trade-offs between cycling facilities, utilities and trees.

In Segment B, Option 5 was generated through initial discussions with Parks to provide a new paved pathway connecting Kilmer Road to Dempsey Road within the District right-of-way between Kilmer Park and the residential lots along the west side of Lynn Valley Road. This option allows the existing conditions along Lynn Valley Road to remain unchanged, while providing an additional connection to Kilmer Park and the surrounding amenities. Option 5 would be compatible with any of the other concept options south of Kilmer Road.

The three stages and two project timeline options are illustrated in Figure 4. Option A would maintain the current pace of concept development, public engagement, and design, targeting construction in 2023. Option B would defer construction to 2024 or beyond.

FIGURE 4: LVR AT Phase 2 Project Stages & Possible Delivery Timelines



The first stage – concept stage has started and is expected to extend approximately four to six months. The concept stage would end with public engagement with the objective of identifying the preferred option.

The overarching goal of the concept stage is to select a preferred concept that:

- Includes dedicated facilities for people walking and cycling.
- Defines the space between the curbs in a way that best balances the competing demands for the space,
- Meets the Council priority and community vision in completing the priority active transportation connection to key parks.

The design stage would start once a preferred option has been presented and endorsed by Council; in Option A this would occur in spring 2022. Construction is the final stage and in Option A it would occur in 2023. Under Option B, the public engagement planned to occur as part of the completion of concept development could be deferred to 2023, with design and construction pushed to 2024 and beyond.

Concurrence:

The cycling project team consists of representation from Transportation, Design Engineering, Project Delivery Office, Streets, Fleet & Solid Waste, Parks, and Communications.

Financial Impacts:

LVR AT Phase 1 class ‘C’ cost estimate is \$1.4M and includes a 25% contingency.

LVR AT Phase 2 costs for the initial concept stage are estimated at \$180,000. These funds are targeted to develop and evaluate the concepts and conduct meaningful public engagement. Costs for the planning and construction phases would be developed once a preferred option is selected.

Social Policy Implications:

Investment in active transportation networks have been shown to promote community health and social wellness, address equity concerns and provide benefit to local economies, and

overall liveability. Integrated land use and transportation planning also presents opportunity for higher levels of transit, reduced car-dependency and housing diversity.

Environmental Impact:

Emissions related to the transportation sector currently make up 52% of all emissions in DNV and passenger vehicles are responsible for 96% of transportation-related emissions. Sidewalks, cycling facilities and accessible bus stops are needed to support this shift and to encourage safe travel by active modes. Increased active transportation supports health-related benefits and reduced air pollution.

Public Input:

The project team recognizes the importance of the public participation process for this project and its role in ensuring that the preferred concept addresses the concerns of stakeholders and the local community. Public engagement for the LVR AT project will build on significant community input that has already occurred for Phase 1. Phase 1 engagement involved an inform approach, focused on local impacted residents and businesses. To date, the LVR AT Phase 1 project team delivered letters, hosted an online community meeting, posted detailed web content and Q&A documents, and held one-on-one conversations to answer questions and address concerns. Outreach to residents and stakeholders for LVR AT Phase 2 has not commenced. The draft engagement plan will be finalized once the scope of work and timing is confirmed.

Conclusion:

Staff continue to advance cycling in the District through a variety of studies and infrastructure projects. We continue to work with partner agencies such as TransLink or MOTI on initiatives that benefit cycling in the District. The Lynn Valley Active Transportation project can extend the District's cycling network along a vital corridor, addresses a number of intersection safety concerns, while providing important upgrades to the pedestrian and transit network. These improvements will help the District achieve their active transportation, road safety, and greenhouse gas emission reduction goals.

Options:

- 1) Endorse the recommendations as outlined in this report (Recommended), or
- 2) Refer back to staff.

Respectfully submitted,



Steve Carney, PEng, PTOE
Transportation Section Manager

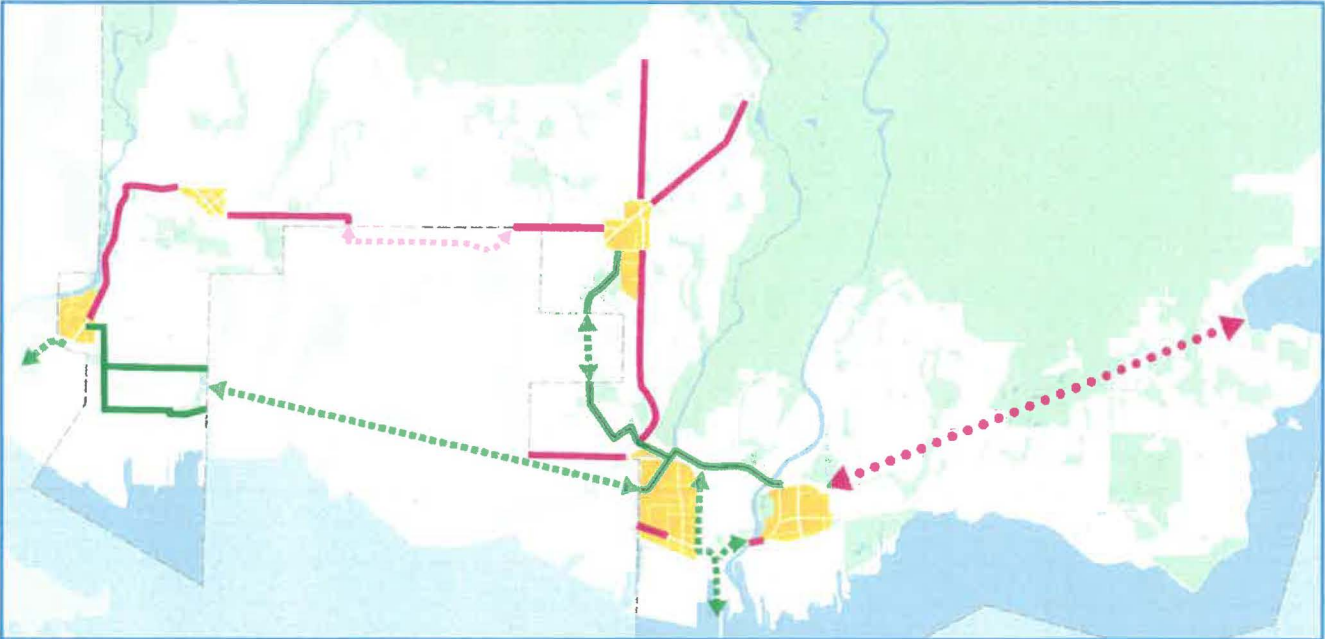


Ingrid Weisenbach
Transportation Planning

Attachment A: Council Priority Cycling Routes

REVIEWED WITH:		
<input type="checkbox"/> Community Planning _____	<input type="checkbox"/> Clerk's Office _____	External Agencies:
<input type="checkbox"/> Development Planning _____	<input type="checkbox"/> Communications _____	<input type="checkbox"/> Library Board _____
<input type="checkbox"/> Development Engineering _____	<input type="checkbox"/> Finance _____	<input type="checkbox"/> NS Health _____
<input type="checkbox"/> Utilities _____	<input type="checkbox"/> Fire Services _____	<input type="checkbox"/> RCMP _____
<input type="checkbox"/> Engineering Operations _____	<input type="checkbox"/> ITS _____	<input type="checkbox"/> NVRC _____
<input type="checkbox"/> Parks _____	<input type="checkbox"/> Solicitor _____	<input type="checkbox"/> Museum & Arch. _____
<input type="checkbox"/> Environment _____	<input type="checkbox"/> GIS _____	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Facilities _____	<input type="checkbox"/> Real Estate _____	
<input type="checkbox"/> Human Resources _____	<input type="checkbox"/> Bylaw Services _____	
<input type="checkbox"/> Review and Compliance _____	<input type="checkbox"/> Planning _____	
<input type="checkbox"/> Climate and Biodiversity _____		

Attachment A: Council Priority Cycling Routes



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