AGENDA INFORMATION	
☑ Regular Meeting	Date: May 27, 2019
☐ Other:	Date:

Dept. Manager	GM/ Director	CAO

The District of North Vancouver
REPORT TO COUNCIL

May 17, 2019
File: 16.8620.20/054.000
eDoc 3956619

AUTHOR: Steve Carney, PEng, PTOE – Transportation Section Manager

SUBJECT: **East 29th Street Corridor Safety and Mobility Improvements**

RECOMMENDATION:

THAT $972,000 additional funding for the East 29th Street Safety & Mobility project is approved.

AND THAT the 2019-2023 Financial Plan be amended prior to year-end to reflect the project.

REASON FOR REPORT:

In late 2017, Council directed staff to report back on safety improvements for the East 29th Street at William Avenue intersection. Given past safety concerns and future community needs such as Lynn Valley Town Centre implementation, an East 29th Street corridor review was undertaken. This report provides Council with information regarding the planning effort conducted for the East 29th Street corridor, informs Council of measures to improve safety related to motor vehicles, left turn movements, pedestrian crossings, cycling, and transit operations to be implemented along East 29th Street from Lonsdale Avenue to Lynn Valley Road in conjunction with the scheduled road repaving, and request approval of funding to complete the work.

On May 06th, 2019 staff presented to Council an initial concept for East 29th Street Safety and Mobility Improvements. To maintain on-street parking between William Avenue and Lynn Valley Road, this concept featured shared vehicle-bike lanes for both eastbound and westbound. The May 06th concept also featured a pedestrian/cyclist cross-walk on the west leg of East 29th Street/Tempe Crescent, which Council noted to be an undesirable crossing location for cyclists given the steep grades on this section of East 29th Street. As a result, Council directed staff to look at modifying the design to address these concerns, with general direction to improve the overall level of protection for cyclists in order to improve cyclist safety and appeal to a broader age and ability range.

SUMMARY:

Guided by transportation engineering best-practices, the District of North Vancouver (DNV) and the City of North Vancouver (CNV) have collaborated to develop an updated coordinated vision for East 29th Street corridor between Lonsdale Avenue and Lynn Valley Road. This work was done to improve safety and mobility for all modes of transportation, and to inform road markings and other safety-related improvements as part of the repaving of East 29th Street, scheduled for summer 2019.

BACKGROUND:

East 29th Street between Lonsdale Avenue and Lynn Valley Road is an east-west arterial, primarily fronted by single family homes with numerous direct driveway access onto the roadway. Between Lonsdale Avenue and Duchess Avenue, it borders CNV to the south and DNV to the north. East of Duchess Avenue, it is solely within DNV.

The corridor accommodates vehicular volumes that are generally associated with minor arterials per Transportation Association of Canada (TAC) while the design and access frequency are more typical of a residential collector road. This roadway serves a mix of local and regional vehicular traffic, which causes a tension in the use and vision of the corridor. When incidents occur on the Upper Levels section of Highway 1, East 29th Street defaults to an alternate east-west route for regional traffic, compounding existing safety and operational deficiencies.

The corridor is part of the frequent transit network as identified in the North Shore Area Transit Plan. The 10-Year Vision for Metro Vancouver Transit and Transportation (10-Year Vision) plan identifies this corridor for a new B-Line service to connect the SeaBus terminal to Lynn Valley Town Centre. Despite East 29th Streets current function as a transit corridor, and plans to increase transit frequency, there is a distinct lack of pedestrian crossing opportunities across East 29th Street with no formal crosswalks within the 1,500 m section between Lonsdale Avenue and William Avenue.

East 29th Street is also designated as a 'high priority bike improvement' in the Lynn Valley Town Centre Transportation Plan with a bypass along Tempe Crescent to route around the steep hill. Despite the designation, there are no formal cycling facilities (e.g. bike lanes, shared lane markings, or route signage).

This report includes information regarding the planning work completed to date (Corridor Planning Study) and the construction project planned for summer 2019 (East 29th Street Safety & Mobility Project).

Lynn Valley Town Centre Transportation Plan

In June 2011, the District of North Vancouver adopted a new Official Community Plan (OCP), with a vision of establishing a 'network of centres' to manage expected growth over the next 20 years. As identified within the OCP, the ability for the District to increase sustainable forms of transportation will result in a more liveable Town Centre. As a result, the transportation study has carefully considered the future needs of all modes (vehicles, pedestrians, cyclists, and transit) in order to establish a sustainable community, and enable a safer active transportation environment for all ages and skill levels.

The Lynn Valley Transportation study identified opportunities for enhanced traffic operations through better lane continuity and an improved grid network. With the planned improvements, the overall network is expected to experience minimal additional delay.

- The proposed land use changes enable improvements for active and healthy transportation. The study identified opportunities for new walkways and improved facilities for cyclists of all ages and abilities, including a separated two-way cycle track along East 27th Street and bike lanes on the High Street.
- The North Shore Area Transit Plan identifies future frequent transit corridors serving the Town Centre. To support these transit improvements, the study identifies a multi-modal on-street transit exchange on East 27th Street.
- Parking levels would be matched with demand and generally provided underground. On-street parking would also be available to support vibrant retail.

The Lynn Valley Town Centre Transportation Plan is based on a number of road network improvements, and gives careful consideration to transit, new road connections, bike routes, trails and pedestrian greenways. The Lynn Valley Town Centre Mobility Map is shown in **Figure 1**. The Lynn Valley Road network showing one-way bike lanes on High Street (a continuation of East 29th Street southeast of Lynn Valley Road and two-way cycle tracks on the south side of East 27th Street are shown in **Figure 2**.

The High Street cross-section from the Lynn Valley Transportation Plan shows that one-way bike lanes on East 29th Street will be compatible with future plans for High Street (a continuation of East 29th Street on the southeast side of Lynn Valley Road). This cross-section is shown in **Figure 3.**

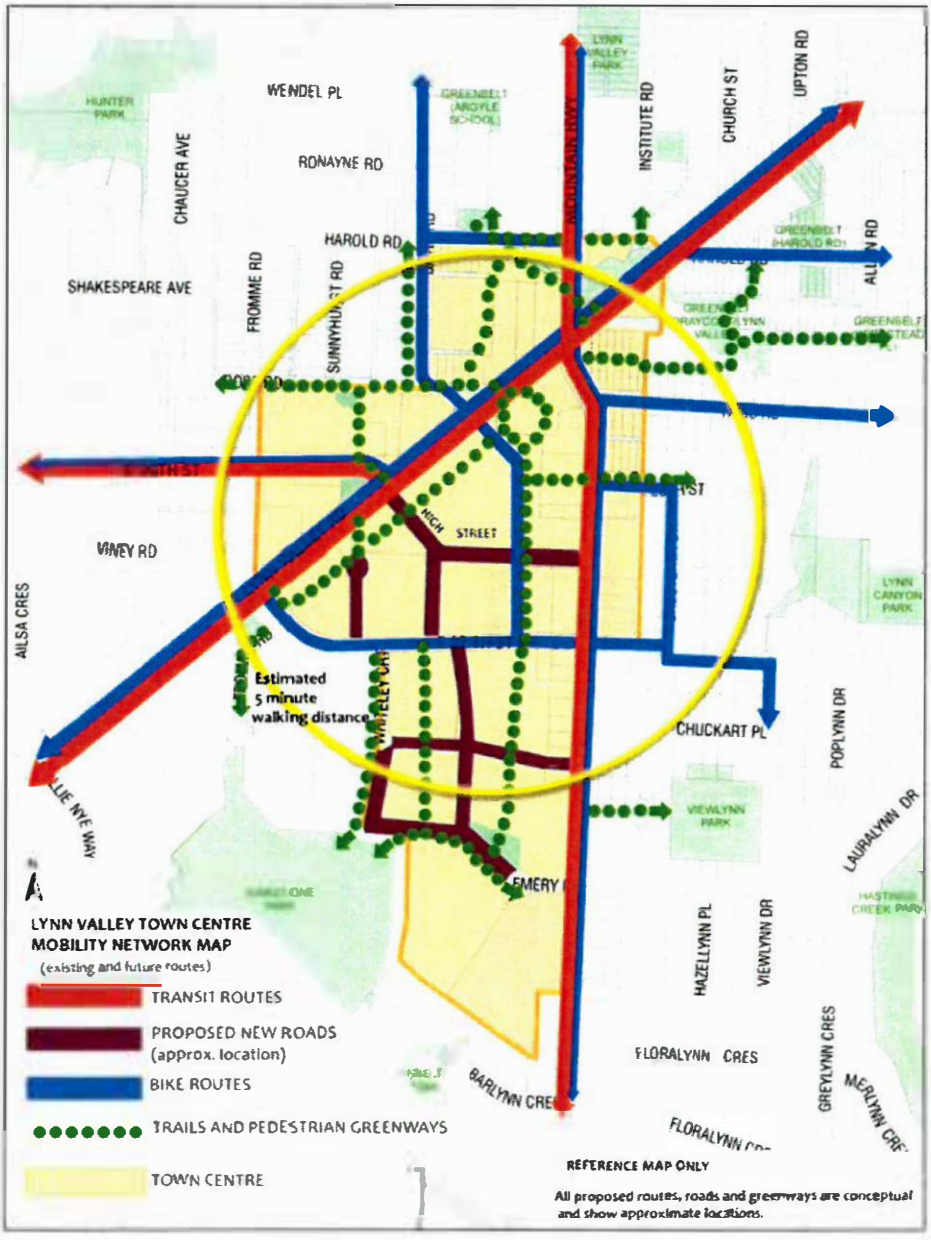

Figure 1. Lynn Valley Town Centre Mobility Map *(source: DNV Official Community Plan)*

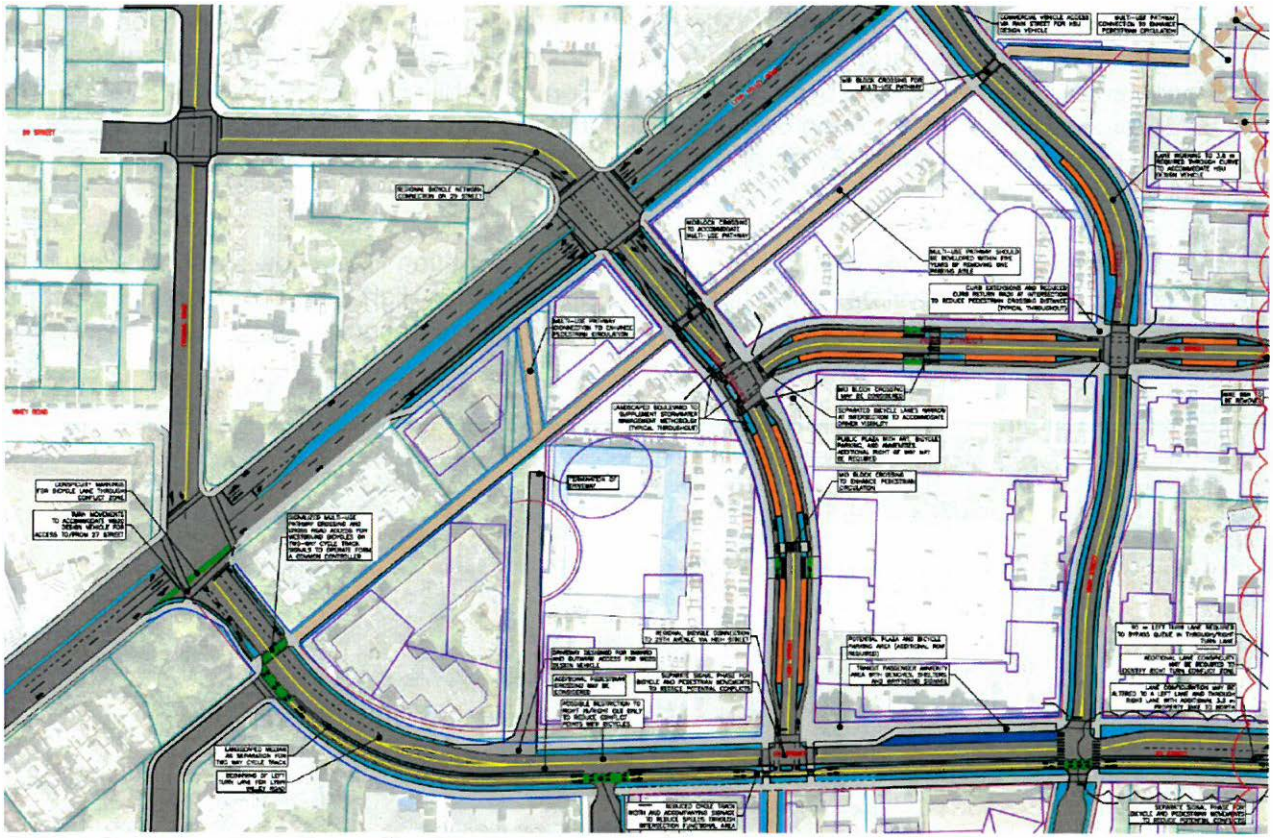

Figure 2 Lynn Valley Town Centre Road Network

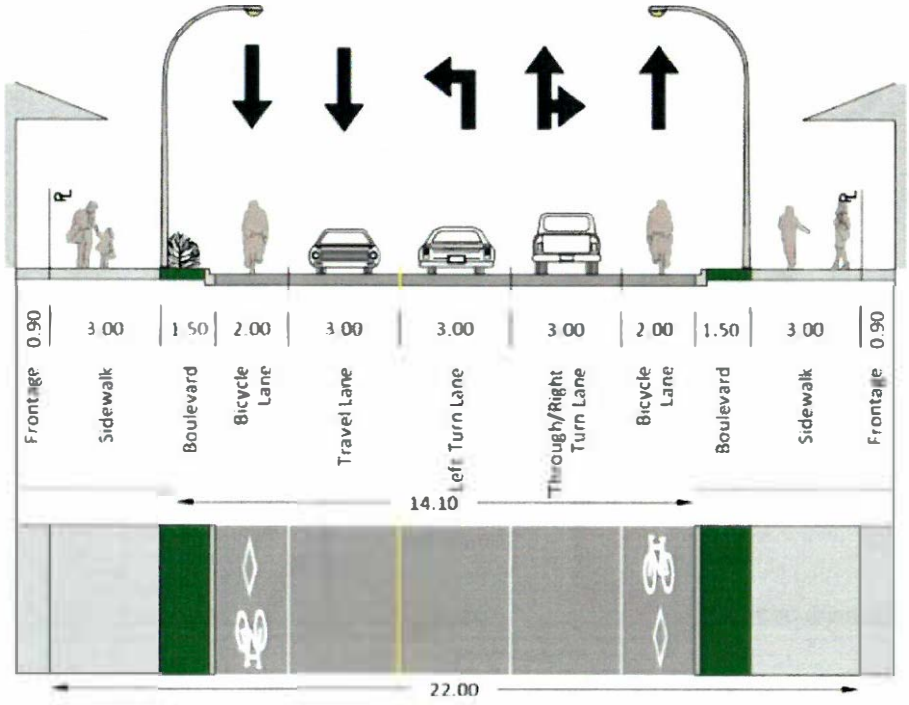

Figure 3. High Street Cross-Section

Corridor Planning Study

From early 2018, DNV has been collaborating with the CNV to collect data, perform analysis and develop intersection options within the larger context of the East 29th Street Corridor planning study to support all users. This work builds off of previous studies which include the Transportation Plan, Bike Master Plan and the North Shore Area Transit Plan and considers the safety and operations for all people travelling along and across this corridor.

This work is intended to inform design for a segment of East 29th Street from Lonsdale Avenue to Lynn Valley Road, with implementation scheduled for summer 2019 to opportunistically take advantage of scheduled asphalt repaving.

The project team, consisting of representatives from CNV and DNV, completed a technical study of the safety and operations and surveyed the public for their views and concerns in 2016. General themes were identified from the public feedback and the study and shared online. Site specific issues were also noted and shared online. Opportunities to improve safety and comfort for people driving, walking and cycling were identified. In 2017, the project team developed a concept for the corridor with options at specific intersections, using findings from the technical analysis and public survey. This information was shared with the community and was then used to further refine the corridor concept.

EXISTING POLICY:

Transportation Plan: East 29th Street was identified as a major arterial and as a future frequent transit network corridor between Lonsdale Avenue and Lynn Valley Road. The plan also identified East 29th Street for high priority bike improvement, excluding the segment over the hill (from western intersection of Tempe Crescent to the eastern intersection of Tempe Crescent).

Mobility Network Policies – DNV Official Community Plan

- Support a safe and integrated transportation network that includes all modes of transportation with an emphasis on walkability and strong pedestrian connections and plan road, transit, bike and pedestrian routes in accordance with the Lynn Valley Town Centre Mobility Network Map
- Connect the Town Centre to outside destinations and explore opportunities to establish a north-south pedestrian/cycle route east of Mountain Highway
- Maintain Lynn Valley Road and Mountain Highway as primary vehicular routes for Lynn Valley
- Establish a pedestrian and vehicle oriented High Street in the core of the Town Centre to include generous sidewalks, weather protection, bike facilities and on-street parking
- Encourage the majority of parking to be located underground, and explore opportunities for reduced parking standards and shared residential/commercial parking in concert with enhanced pedestrian, cycling and transit facilities
- Work with the regional transportation authority to support the provision of frequent transit service to and from the Town Centre and support transit service with appropriately located lay-by areas and accessible, safe and attractive transit stops
- Provide accessible and comfortable sidewalks in the Town Centre and provide safe and attractive pedestrian crossings of Lynn Valley Road, Mountain Highway and East 27th Street at strategic locations
- Continue to explore innovative transit choices in the long-term

INSTPP: Endorsed by DNV Council on Feb 04, 2019 INSTPP priorities for the District of North Vancouver include: *"invest in pedestrian and cycling related improvements and prioritize road space for the movement of people."*

Bicycle Master Plan: The plan, through public feedback, added East 29th Street to the on-street bike routes.

North Shore Area Transit Plan: The plan shows East 29th Street corridor as supporting rapid transit as part of the 2040 Network Vision. (*Note: TransLink has identified this route, connecting Lynn Valley to downtown Vancouver, as one of five new B-lines they are considering in Phase III Mayor's Vision funding.)*

Development Servicing Bylaw: Major arterials should provide the following:

- (Road) Function: Person Mobility
- Pedestrian Access: Sidewalk on both sides
- Bicycle Access: Separated facility
- Transit Service: Permitted
- Parking: Strongly Discouraged

ANALYSIS:

Bike Lanes and Cycle Tracks

A bike lane is defined as a portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. Buffered bike lanes are conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane. The benefit of a buffered bike lane is that greater shy distance between motor vehicles and bicyclists is provided. As a result this type of bike facility appeals to a greater cross-section of bicycle users. A bike lane is distinguished from a cycle track in that it has no physical barrier (bollards, medians, raised curbs, etc.) that restricts the encroachment of motorized traffic. A typical buffered bike lane is illustrated in **Figure 4**.

A cycle track is physically separated from motor traffic and distinct from the sidewalk. Cycle tracks have different forms but all share common elements—they provide space that is intended to be exclusively or primarily used for bicycles, and are separated from motor vehicle travel lanes, parking lanes, and sidewalks. Two-way cycle tracks (also known as protected bike lanes, separated bikeways, and on-street bike paths) are physically separated cycle tracks that allow bicycle movement in both directions on one side of the road. Cycle tracks appeal to a wide range of bicyclists at all levels and ages. Also, cycle tracks reduce the risk of 'dooring' compared to conventional bike lanes, and eliminates the risk of a doored bicyclist being run over by a motor vehicle. A typical one-way cycle track is provided in **Figure 5**, while a typical two-way cycle track is illustrated in **Figure 6**.

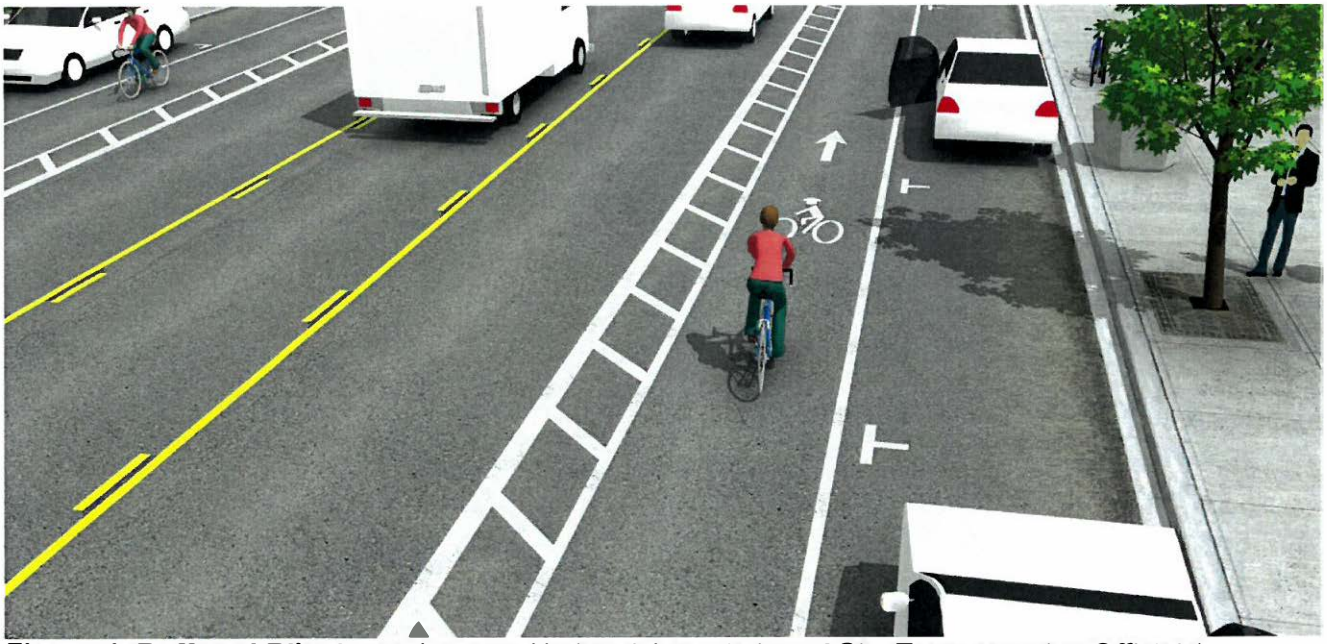

Figure 4. Buffered Bike Lane *(source: National Association of City Transportation Officials)*

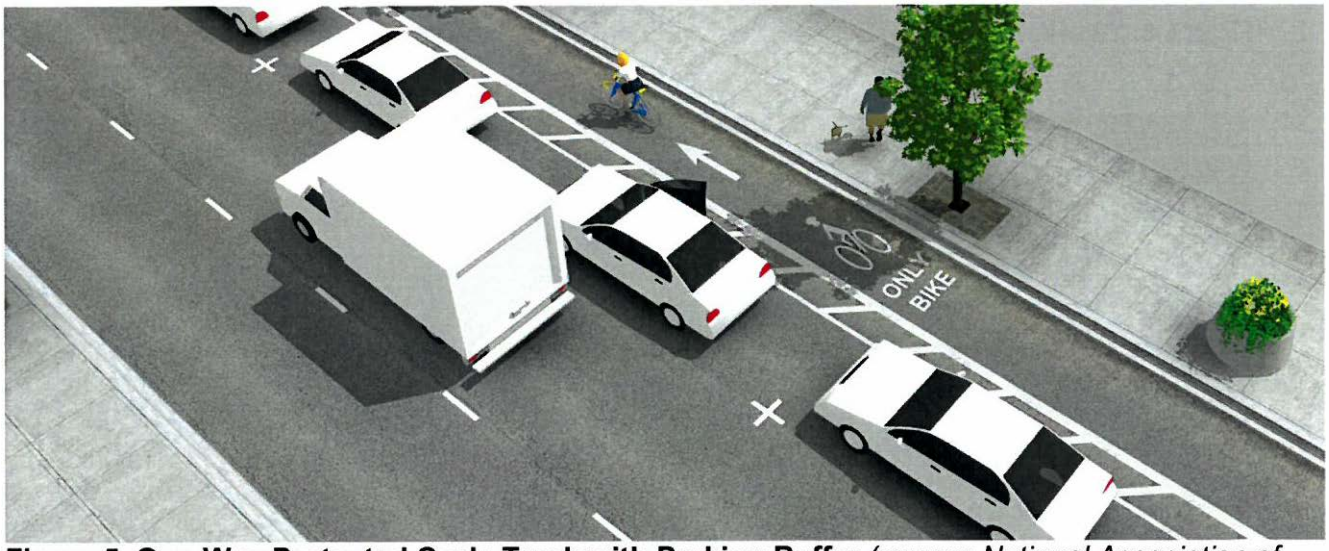

Figure 5. One-Way Protected Cycle Track with Parking Buffer *(source: National Association of City Transportation Officials)*

Cycling usage in the Lynn Valley area based on Strava heat map data was reviewed to identify high-frequency cycling routes. This data confirms the use of Tempe Crescent as an attractive link along the East 29th Street corridor to avoid steep grades. Tempe Crescent roughly follows the elevation contours and is a preferred cycling route, both in terms of avoiding the steepest grades on East 29th Street, and to utilize a low-volume / low-speed local road connection along the cycling route. DNV and CNV staff intend to amend the Bike Master Plan to reflect this preferred routing. The Strava heat map also shows high demand for cycling along the Lynn Valley Road corridor. This information is shown in **Figure 7**.

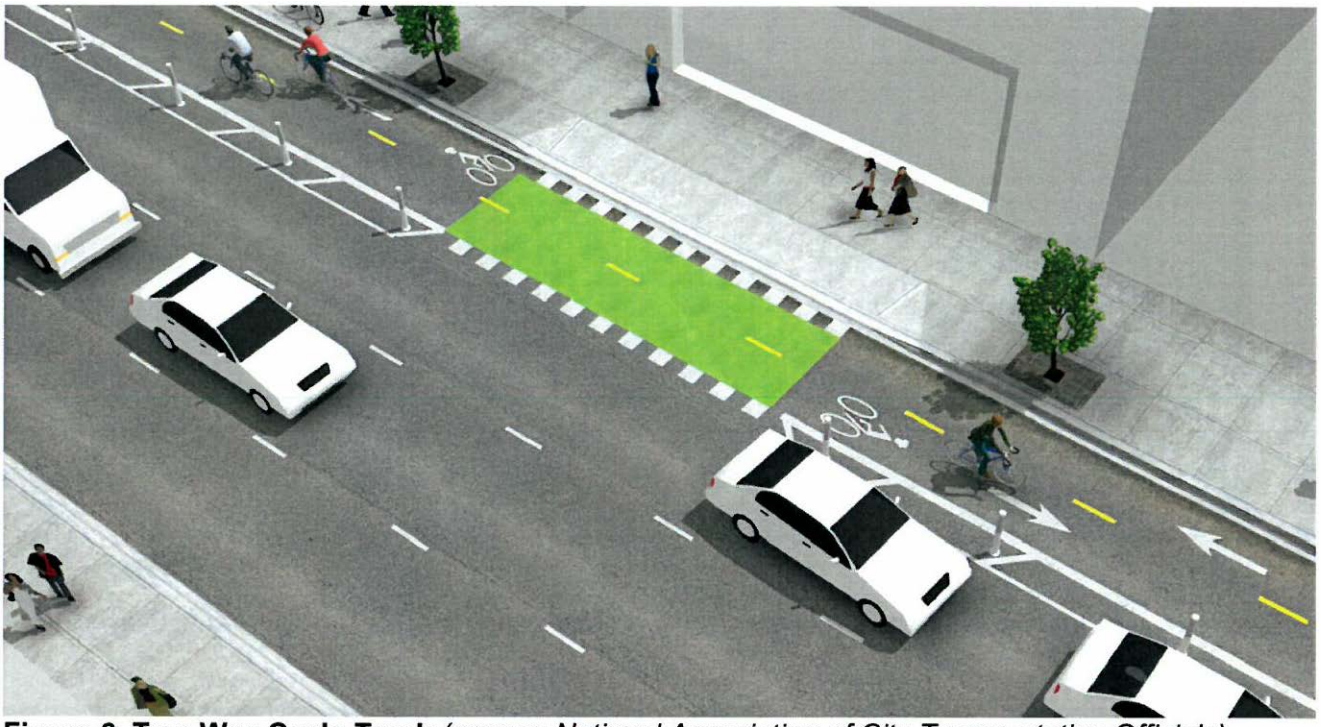

Figure 6. Two-Way Cycle Track *(source: National Association of City Transportation Officials)*

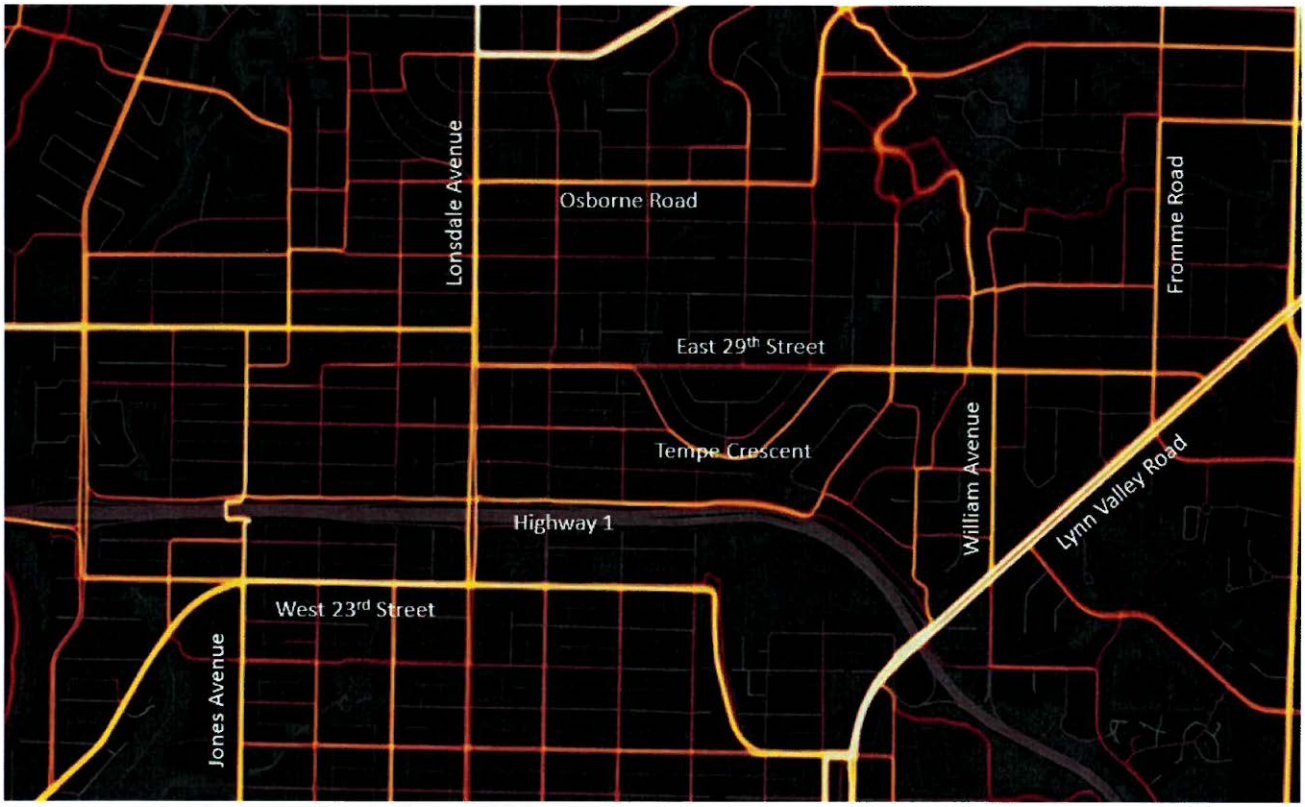

Figure 7. Cycling Usage in Lynn Valley *(source: Strava)*

East 29th Street Safety & Mobility Project - Corridor Design
Overall, the corridor design approach has been to improve vehicle safety through the creation of designated vehicle left turn lanes (to reduce the frequency of rear-end and side-impact collisions), to improve pedestrian crossing safety and sidewalk infrastructure, and to better accommodate cyclists and transit users. Pedestrian crossings are situated opposite left turn lanes wherever possible to incorporate pedestrian refuges, and pedestrian activated rapid flashing LED beacons are used where sight distance is constrained by the road's profile. Parking is maintained in high demand areas adjacent to Lonsdale Avenue and Lynn Valley Road. West of Tempe Crescent, the cycling route will follow East 27th Street.

When possible, staff strategically coordinate capital works into holistic projects, including all renewal and expansion infrastructure work planned for a given location to promote efficient delivery of work and minimize the potential impact on users. Staff have designed this project with this philosophy in mind. The project is timed to occur in the summer 2019, with the intent to have the safety upgrades installed prior to school starting in September.

Segment A - Lonsdale to Tempe Crescent (West): The District of North Vancouver and City of North Vancouver project team reviewed the cycling route linking Lynn Valley Town Centre to Queensdale and Edgemont Village, and recommend designating East 27th Street as the primary cycling route in this area from Tempe Crescent to Queensdale. East 27th Street is a desirable link due to its lower traffic volume and lower speed characteristics relative to East 29th Street. This allows for the majority of on-street parking to remain along East 29th Street in this area. Some parking will be removed to make space for transit stops and the creation of left turn bays at key intersections. Segment A is shown in **Figure 8**.

Figure 8. Segment A - Lonsdale to Tempe Crescent (West)

New pedestrian crosswalks at St Georges Avenue and St Andrews Avenue will improve safety for pedestrians, especially for people getting to and from the bus stops. The St Andrews Avenue crossing includes pedestrian activated rapid flashing LED beacons to signal to drivers that someone

is using the crossing. This crosswalk is also located opposite the left turn lane which provides an opportunity for a pedestrian refuge, further increasing pedestrian safety. The laning design features designated left turn lanes at both St Georges Avenue and St Andrews Avenue to improve traffic safety and operations. There are no changes to the Lonsdale Avenue/East 29th Street intersection.

Segment B - Tempe Crescent (West) to Tempe Crescent (East): New sidewalks on the north side of East 29th Street (St Kilda Avenue to Regent Avenue and Princess Avenue to Connaught Avenue) will provide a continuous sidewalk between Lonsdale Avenue and Lynn Valley Road. A new crosswalk equipped with pedestrian-activated overhead flashing beacons at Regent Avenue will further improve pedestrian safety and access to transit stops on East 29th Street. The crosswalk at Regent Avenue also features a pedestrian refuge opposite the eastbound left turn lane further improving pedestrian safety and comfort. Segment B is shown in **Figure 9**.

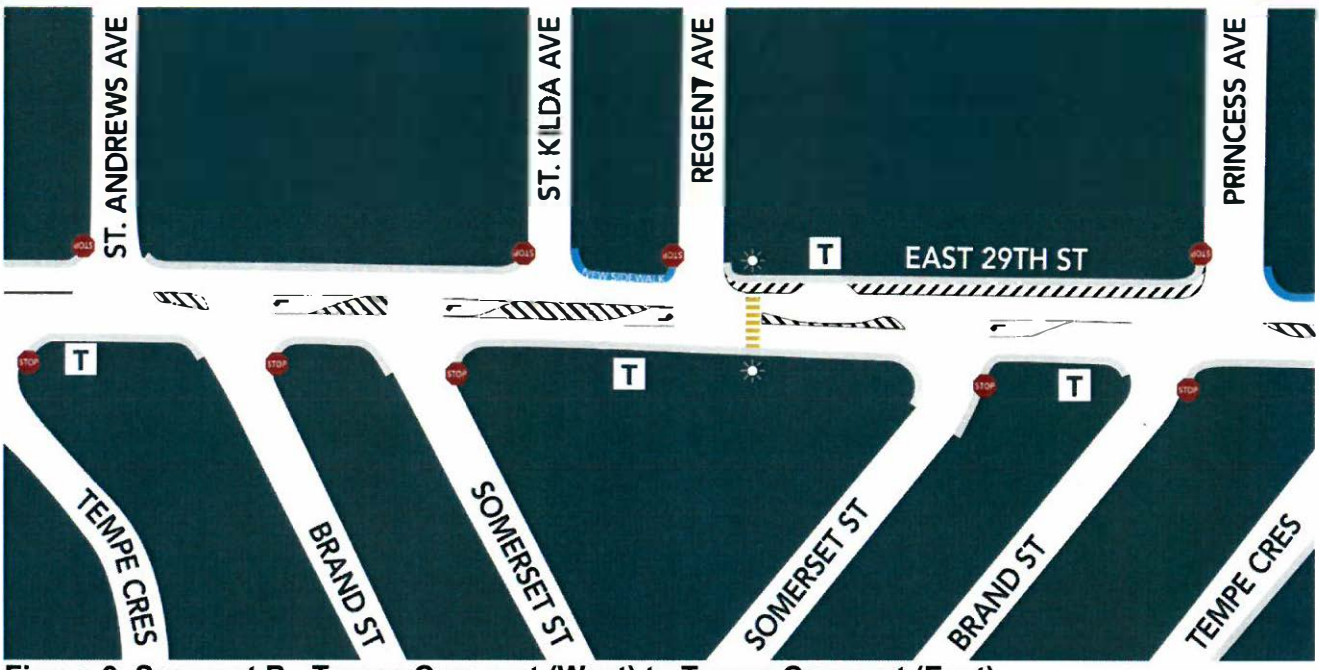

Figure 9. Segment B - Tempe Crescent (West) to Tempe Crescent (East)

Providing a safe space for drivers to wait until turning left at Brand Street, Regent Avenue, and Somerset Street by providing new left turn bays is another key safety improvement. Left turn movements at St Kilda Avenue are restricted due to poor intersection sight distances. These measures will help to address safety concerns for all users and overall corridor operations. Note that all medians will be pavement markings only and will not restrict access for emergency service vehicles.

Segment C - Tempe Crescent (East) to William Avenue: This section of East 29th Street features a two-way protected cycle track on the south side of East 29th Street, extending from Tempe Crescent to Royal Avenue. This cycle track avoids the need for a cyclist crossing at Tempe Crescent (for westbound cyclists), which is a safety improvement over the previous concept presented to Council on May 06, 2019. This two-way cycle track would resemble what is shown in **Figure 6**. Protection could be in the form of concrete low barrier, or a painted buffer with delineator posts, or a combination of both. This treatment is ideal between Tempe Crescent and Royal Avenue due to the absence of driveways and transit stops. A new pedestrian/cyclists crosswalk is provided at Royal

Avenue complete with pedestrian activated rapid flashing LED beacons. Segment C is shown in **Figure 10**.

East of Royal Avenue, the cycling facility transitions to one-way buffered bike lanes (eastbound on the south side, westbound on the north side) in order to better accommodate transit stops, driveways, and solid waste and recycling collection. Curbs and sidewalks generally remain undisturbed, with the exception of some localized modifications at Royal Avenue and William Avenue.

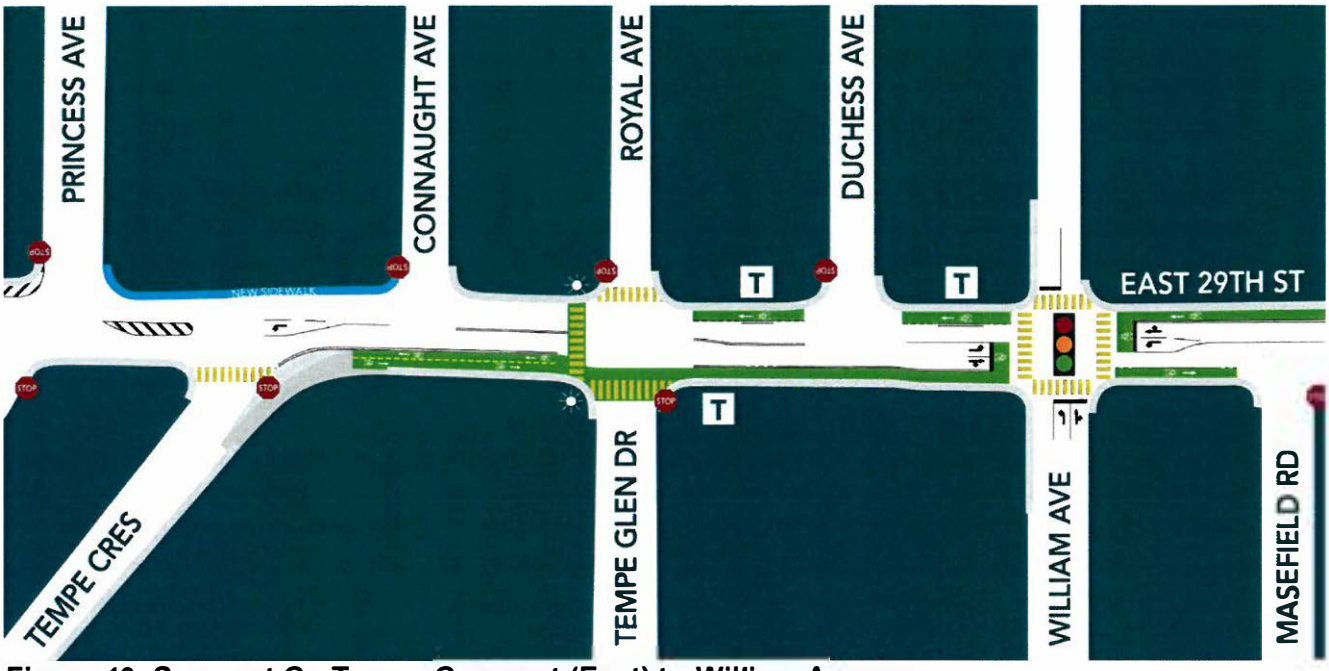

Figure 10. Segment C - Tempe Crescent (East) to William Avenue

The design also addresses the vehicle operational and pedestrian safety concerns well documented at the East 29th Street/William Avenue intersection through signalization. The following is a summary of key decisions, actions, and findings related to this intersection.

Nov 20, 2017 Council Resolution

At a Regular Meeting of Council on November 20th, 2017 the recommendations of a Report to Council regarding safety improvements at the East 29th Street/William Avenue intersection were reviewed along with public input. The eastbound right turn volume is relatively high at approximately 150-200 vehicles/hr, and serves as an alternate major east-west route connecting the Lonsdale and Delbrook areas to Lynn Valley, while William Avenue is a direct route to Boundary Elementary. As a result there has been considerable public concern expressed over eastbound right turners rolling the stop and the potential for conflicts with crossing school-aged pedestrians. The recommendations of the Report to Council and resolutions were as follows:

1. "THAT the District reinstate the temporary bump-out on the southwest corner of the East 29th Street/William Avenue intersection (for East 29th Street eastbound traffic) as soon as possible to address ongoing pedestrian safety concerns." This resolution was carried.
2. "AND THAT the District make the bump-out permanent as soon as sufficient funds are available through the annual budget process." This resolution was defeated.

As a result, the temporary post delineators were subsequently reintroduced on the two western corners of the intersection, shortening the distance across East 29th Street. Staff were also directed to report back on alternatives and options to improve pedestrian safety and traffic operations at the intersection.

Intersection Options

Intersection options were developed based on technical analysis and public feedback. Public consultation conducted in February/March 2018 by DNV/CNV concluded a high level of support for signalization as a way to reduce vehicle delays without compromising pedestrian safety. Intersection capacity analysis confirmed that the existing 4-way stop control intersection operates at a very poor level of service with excessive delays and queues. Under traffic signalization with left turn lanes, the intersection would perform at a very high level of service with minimal delays. A traffic signal is warranted based on recent traffic count data.

Pedestrian safety concerns at William Avenue/East 29th Street are addressed by physically combining the eastbound through and right turn movements in a shared lane, and by also formally prohibiting right turns on red. Prior to Nov 20th, 2017 the free-flow right turn condition (where motorists informally used the parking lane as a right turn lane) resulted in considerable public concern related to vehicle-pedestrian conflicts). A bike box will also be considered at William Avenue/East 29th Street to further enhance pedestrian and cyclist safety.

William Avenue Sidewalk (East 29th Street to Lynn Valley Road)

At the direction of Council, construction of a sidewalk along the east side of William Avenue from East 29th Street to Lynn Valley Road was completed in 2018 as part of a utility upgrade project in order to enable pedestrians to cross East 29th Street on the east side of William Avenue and minimize pedestrian-vehicle conflict with eastbound right turning traffic at the East 29th Street intersection. While this sidewalk does provide an alternate route to Boundary Elementary, pedestrian volumes collected in fall 2018 concluded that the west cross walk is still heavily used at approximately 40 pedestrians/hr 8:00am to 9:00pm, and approximately 25 pedestrians/hr from 3:00pm to 4:00pm. As the school is located to the west of William Avenue and the sidewalk on the west side of William Avenue provides a more direct path to the school, pedestrians are expected to continue using the west leg of the intersection to cross East 29th Street.

Segment D William Avenue to Lynn Valley Road: East of William Avenue buffered one-way bike lanes are provided to Lynn Valley Road. On the north side of East 29th Avenue between Fromme Road and Lynn Valley Road, parking is maintained and used to create a protected one-way cycle track. The intersection of Fromme Road/East 29th Street is maintained as a 4-way stop control, however it is anticipated that signalization of this intersection will be warranted within 1-5 years based on expected growth in corridor traffic associated with build-out of the Lynn Valley Town Centre. It is anticipated the signals at William Avenue and Fromme Road would be coordinated to better facilitate corridor mobility. Segment D is shown in **Figure 11**.

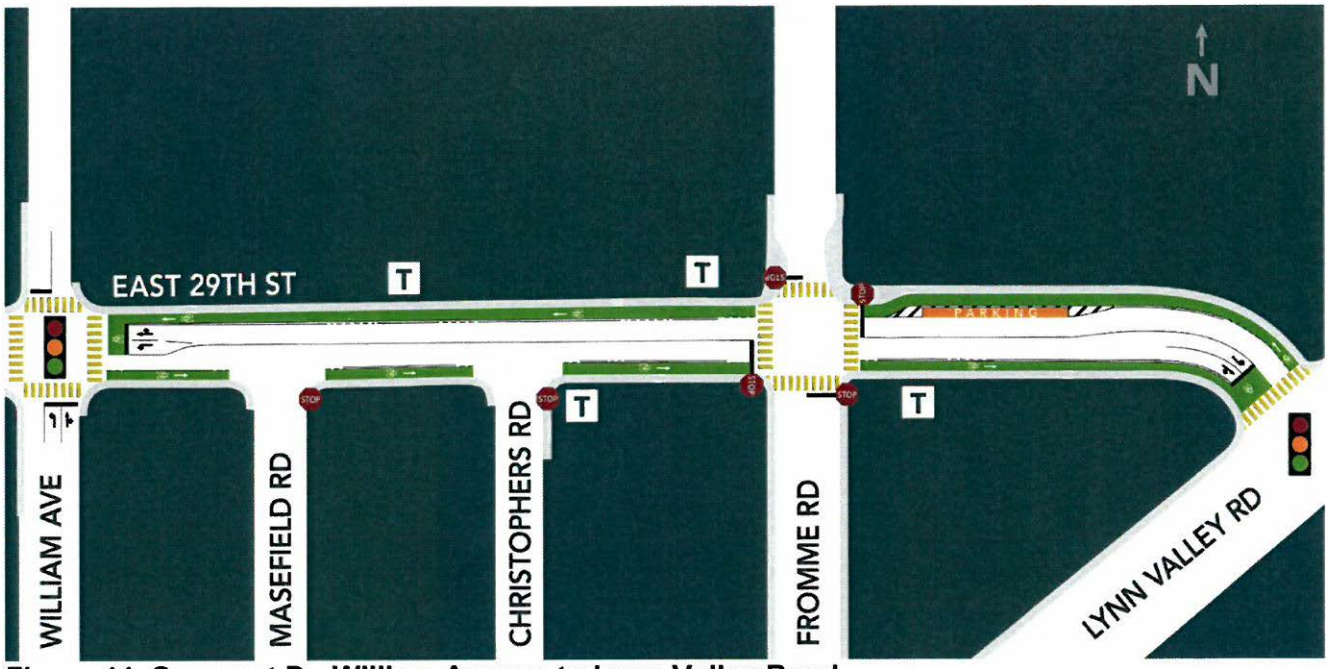

Figure 11. Segment D - William Avenue to Lynn Valley Road

At Lynn Valley Road, a bike box is provided. A bike box is a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase. Bike box benefits include Increases visibility of bicyclists, facilitates bicyclist left turn positioning at intersections during red signal indication, and helps prevent 'right-hook' conflicts with turning vehicles at the start of the green indication. Bike boxes also benefit pedestrians from reduced vehicle encroachment into the crosswalk. A typical bike box is illustrated in **Figure 12**. In conjunction with the bike box at Lynn Valley Road/East 29th Street, a no right-turn on red restriction is anticipated to further improve pedestrian and cyclist safety.

Parking Analysis

In order to cost-effectively achieve the desired safety and mobility improvements on East 29th Street, a reduction in the supply of on-street parking is necessary. However, parking is maintained on East 29th Street near both Lonsdale Avenue (both north and south sides) and Lynn Valley Road (north side only) where the observed parking demand is highest. Parking utilization along East 29th Street was documented in June 2016, both on a weekday and a weekend during the hours of 10:00am to 2:00pm and 8:00pm to midnight. From Lonsdale Avenue to Lynn Valley Road, a total of 137 parking spaces are available. Data collection showed that parking utilization is low at approximately 37%. The proposed design is expected to largely meet parking demand. It is noted that with the exception of the 200 block of East 29th Street (where on-street parking is maintained) all single family homes have driveways and/or rear lane access suitable for parking. Multi-family developments between Fromme Road and Lynn Valley Road have designated off-street parking structures for residents.

Timing/Approval Process:

Paving along portions of the corridor have been delayed in order to deliver a holistic project, minimizing impacts on neighbouring residents and corridor users. However, in order to maintain the existing road sub-base, paving must occur summer 2019. The safety upgrades, including new road markings, crossing upgrades and signalization will be installed during this same construction window, prior to school starting in September.

Figure 12. Typical Bike Box Treatment at Signalized Intersection *(source: National Association of City Transportation Officials)*

The District's asphalt paving contractor Eurovia (BA Blacktop) requires confirmation of project status immediately following the May 27, 2019 Regular Council meeting to ensure project delivery in 2019. Due to the existing asphalt pavement condition on East 29th Street, paving is critical in 2019 to avoid full depth (asphalt plus underlying base gravels) road reconstruction. Should full-depth reconstruction be required, paving related costs could be expected to double.

Concurrence:

The project team consists of DNV staff from Major Projects, Streets, Engineering Design and Transportation and CNV staff.

Financial Impacts:

The total estimated cost for East 29th Safety and Mobility project is $1,454,000. Costs include standard allowances for contingency and project management costs. Funding approved and already allocated to the project is $482,000. Due to the holistic nature of this project, funds come from a variety of sources, including pavement renewal program and active transportation funding. An additional $972,000 capital funds is required to complete scope as part of a single upgrade. New funding will be obtained through Road DCC's ($156,000), Infrastructure Reserve ($376,000) and New Capital fund ($440,000) based on the project components.

Liability/Risk:

East 29th Street was designed and built to the standard of the day, but over time, traffic volumes have increased, along with increased usage by all transportation modes. The technical review identified a

need for road safety improvements based on traffic volume and crash data, and opportunities for improved pedestrian, cycling, and transit related safety and access. The addition of designated left turn lanes is expected to reduce the risk of rear-end and side-impact type collisions. The District should consider the purchase of a street sweeper for maintenance of the bike lane during the next budget cycle.

Social Policy Implications:

Improving access to multiple transportation modes and improving safety along the corridor is beneficial socially and from a health and well-being perspective.

Environmental Impact:

By providing safe and comfortable walking, cycling and transit facilities along the corridor, people can choose alternatives to driving alone, and thus help reduce greenhouse gas emissions.

Public Input:

DNV engaged with the public twice during this process; early during the data gathering phase in fall 2016 and later in February/March 2018, seeking input on improvement options. During the first phase of engagement the project team received nearly 400 responses. In some cases, design plans were modified to address concerns. DNV residents along the corridor were notified by flyers hand delivered each property fronting the corridor. **Table 1** summarizes the general themes from the public feedback and technical study.

Walking	Limited marked crossings and uncomfortable to cross at some locations
	Gaps in the sidewalk network
Cycling	No dedicated on-street cycling accommodations
	Miminal signage to guide cyclists to the bike route
	Uncomfortable for people to bike to and from the Tempe Crescent route
Driving	85% of westbound drivers were measured travelling at or below 57 km/h at St. Andrews and 66 km/h at Tempe Crescent (speed limit 50km/h)
Driveways	Sight line issues
	Conflicts between drivers reversing out of driveways and people walk, cycling or driving along the corridor
Parking	On-street parking near Lonsdale Avenue and Lynn Valley Road is well used
	On-street parking in the central section of trhe corridor is generally underused

Table 1. General Themes from Public Feedback and Technical Study

During the second phase of engagement, an on-line survey was created alongside detailed web content and we received over 500 responses. In addition, DNV and CNV held a joint open house in February 2018. At the open house, 70 residents signed the attendance sheet. Attendees were able to provide survey responses via paper versions or later using the online version. DNV residents along the corridor and in the vicinity were notified by mail. Additional notification was provided using social media and pedestrian level street signage along the corridor and an advertisement in the North Shore News. DNV and CNV are coordinating to provide an update on the project and planned construction work to residents along and in the vicinity of the corridor via letter drops and website updates.

Conclusion:

The corridor mobility and safety project is a result of three years of work, carefully considering policies, adopted plans, traffic data and public input. Throughout the process, DNV and CNV staff

have collaborated closely. The concept carefully balances the needs of the travelling public and the people living along the corridor.

Options:

- Fund and construct the East 29th Street Safety & Mobility project for the full length from Lonsdale Avenue to Lynn Valley Road with an additional $972,000 through the Infrastructure Reserve, DCC, and New Capital Fund, and amend the Financial Plan for this change prior to year-end (staff recommendation).
- Construct the project as proposed from Lonsdale Avenue to Masefield Road only (not recommended).

Respectfully submitted,

Steve Carney, P.Eng, PTOE
Transportation Section Manager

REVIEWED WITH:

❑ Community Planning	____	❑ Clerk's Office	____	External Agencies:	
❑ Development Planning	____	❑ Communications	____	❑ Library Board	____
❑ Development Engineering	____	❑ Finance	____	❑ NS Health	____
❑ Utilities	____	❑ Fire Services	____	❑ RCMP	____
❑ Engineering Operations	____	❑ ITS	____	❑ NVRC	____
❑ Parks	____	❑ Solicitor	____	❑ Museum & Arch.	____
❑ Environment	____	❑ GIS	____	❑ Other:	____
❑ Facilities	____	❑ Real Estate	____		
❑ Human Resources	____	❑ Bylaw Services	____		