

REPORT

Engineering Services

To: Mayor Johnstone and Members of Council
Date: March 13, 2023

From: Lisa Leblanc
Director of Engineering Services
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Item #: 2023-180

Subject: **East Columbia at Brunette Intersection and Roadway Improvement Plans and Implications**

RECOMMENDATION

THAT Council direct staff to proceed with the next steps as outlined in this report.

PURPOSE

To provide Council with information about East Columbia Street at Brunette Avenue, including background information, planning history, crash history, and the steps being taken to address design, safety, and operational concerns.

BACKGROUND

On Sunday, February 19, 2023, a pedestrian was struck and killed in the roadway on East Columbia Street south of Brunette Avenue/Debeck Street by a commercial truck. It was determined by the Police Department, following an investigation, that there was no criminality in the actions of the involved truck driver.

The general location where the crash occurred has been of interest to the community and staff for a number of years, particularly for people walking or cycling, due to the constrained sidewalk along East Columbia Street, obstructions in the sidewalk, the lack of boulevard to serve as a buffer between the sidewalk and moving vehicles, and limited and uncomfortable crossings, combined with high motor vehicle volumes and a relatively high proportion of heavy trucks. The location is a long-standing 'missing link' in the regional Central Valley Greenway, which currently directs greenway users uphill one block (via Sapper Street) to get around this segment of East Columbia Street.

DISCUSSION

Existing Policy and Plans

The subject location has been raised, whether indirectly through policy, or directly, in the following plans:

Master Transportation Plan (MTP) (2015)

- Identifies East Columbia Street (including segment between Cumberland Street and Debeck Street/Brunette Avenue) as a Primary Bicycle Route, intended to be comfortable for people of all ages and abilities
- Subject location falls within ‘walkshed’ of SkyTrain
- Confirms aspiration for Major Road Network roads to have sidewalks/separated cycling paths buffered from road with boulevard

Sapperton-Massey Victory Heights Transportation Plan (SMVHTP) (2018)

- Recommends reconfiguration of East Columbia/Brunette intersection with two northbound lanes on to Brunette Avenue and turn lanes at reconfigured intersection
- Recommends completion of Central Valley Greenway along East Columbia Street between Cumberland Street and Debeck Street
- Recommends protected bicycle lanes along East Columbia Street north of Brunette Avenue

Brewery District and Royal Columbian Hospital transportation studies

- Incorporated designs for East Columbia ‘Great Street’, with protected bicycle lanes, reconfigured East Columbia/Brunette intersection with two northbound lanes on to Brunette Avenue

In all of these plans, it was acknowledged that the area is challenging for a variety of reasons, including due to limited existing road right of way, regulatory challenges, and challenges associated with the MTP policy regarding not increasing road capacity for motor vehicle through-movements.

Active Transportation Network Plan (ATNP) (2022)

- Recommends completion of ‘AAA’ active transportation route along East Columbia Street between Cumberland Street and Debeck Street and protected bicycle lanes north of Brunette Avenue (recommended for Year 4 implementation)

Safety studies

The City regularly completes statistical and technical reviews of all intersections in New Westminster based on five years of collision data and summarizes the findings in an *Intersection Safety Study*, with further analysis and improvement recommendations completed for the top 20 crash locations. The previous study was completed in 2016 and is available on the City’s website. Staff and consultants are currently completing the latest

study, and anticipate reporting the full findings to Council in the coming months. Key findings related to the previous study are summarized below, followed by preliminary findings from the ongoing study:

Intersection Safety Study (2016) key findings for intersection of East Columbia and Brunette:

- Average daily motor vehicle volume: 60,000
- Proportion of total volume that are trucks: 10%
- Total number of crashes (2010-2014)
 - o Crashes that did not involve a pedestrian or cyclist: 234 (0 fatal)
 - o Crashes that involved a pedestrian: 0
 - o Crashes that involved a cyclist: 0
- Overall city-wide ranking relative to other intersections: 7

Intersection Safety Study (2023) preliminary findings for intersection of East Columbia and Brunette:

- Average daily motor vehicle volume: 76,000 (estimate based on recent growth)
- Proportion of total volume that are trucks: 10% (estimate based on recent survey)
- Total number of crashes (2015-2019)
 - o Crashes that did not involve a pedestrian or cyclist: 203 (0 fatal)
 - o Crashes that involved a pedestrian: 0
 - o Crashes that involved a cyclist: 1
- Overall city-wide ranking relative to other intersections: Not in top 20, not ranked

NEXT STEPS

The process to be followed in the coming weeks and months will entail two aspects:

1. Study of safety factors and interim modifications to the midblock area of East Columbia Street between Cumberland Street and Brunette Avenue/Debeck Street to prevent similar occurrences.
2. Long-term improvement plan for the approaches to and intersection of East Columbia Street and Brunette Avenue/Debeck Street.

Interim Safety Measures

Staff will proceed with a detailed, objective study of the area to identify interim measures that could be implemented relatively quickly in the section of East Columbia Street between Cumberland Street and Brunette Avenue/Debeck Street to better protect pedestrians from the possibility of falling or stepping off the sidewalk, or from motor vehicles crossing into the sidewalk, and to support cycling on East Columbia Street.

With the assistance of road safety specialists, staff will identify interim measures that could be considered for implementation in the near term, including various types of barrier between the road and sidewalk, operational changes (e.g., lane closures, traffic signal operations), and regulatory changes.

Given that East Columbia Street and Brunette Avenue are designated as Major Road Network and regional truck route, any changes that affect people and goods movement capacity are subject to TransLink and potentially Ministry of Transportation and Infrastructure (MoTI) approval. It will also be important to assess the potential for unintended safety consequences from any interim measures.

Long-Term Improvement Plan for Intersection and Approaches

In response to the MTP, SMVHTP, ATNP, Brewery District, Royal Columbian Hospital and intersection safety studies, staff have developed various conceptual designs for improvements to the intersection, and have been exploring the implications and requirements, potential third-party funding, and other considerations to advance a major project to achieve the desired design. It is anticipated that any change to the intersection would result in a modest increase in the people-moving capacity of the intersection, primarily due to wider lanes and improved turning movements. Staff will need to come back to Council with estimated costs, as these will depend on the outcome of further safety review and the final intersection configuration.

The key steps to undertake this process include:

1. Engage a consultant to serve as project manager.
2. Bring all of the studies and concept designs together and formulate a plan for addressing safety issues and improving conditions for walking and cycling, including the provision of protected cycling facilities separated from the pedestrian facilities.
3. Conduct an objective safety assessment, including road design, and taking into account the needs, patterns and behaviour of motorists and of pedestrians and cyclists.
4. Recommend a complete intersection improvement program, including:
 - a. preparation of a project charter to serve as a project definition and business case to advance the project for consideration in the 2024-28 Financial Plan,
 - b. a design with sufficient detail to understand the property, utility, railway, and other major implications,
 - c. a Class C cost estimate, and
 - d. identification of approving authorities, approval processes and timelines, key stakeholders and other interests, anticipated funding partners.
5. Liaise with TransLink staff (and MoTI staff, as necessary) on long-term design and potential funding requirements.

For both aspects of this process, staff will report back to Council intermittently with updates, and may advance a request for funding through future quarterly budget review processes.

SUSTAINABILITY IMPLICATIONS

The Master Transportation Plan and subsequent neighbourhood and development plans identify the need for roadway improvements to support walking, cycling and transit.

FINANCIAL IMPLICATIONS

The proposed 2023 Capital Budget and Five-Year Financial Plan does not have sufficient funding for the major intersection works suggested above, including interim measures. However, staff will use funds from the existing Transportation Capital Budget to advance the studies outlined above. Staff are estimating this work to cost at minimum \$75,000; it will need to be externally delivered to avoid slowing other priority works for the Transportation Division.

Subsequent reports to Council will provide additional detail, and it is anticipated that, depending on scope, implementation of interim improvements may require budget adjustments through a forthcoming quarterly review.

Longer-term improvements will require additional capital funds beyond those which are already included in the Financial Plan. However, given the nature of the road as Major Road Network and a key regional trucking route, it is expected that cost-sharing from external agencies will be available. It is staff's expectation that TransLink, MoTI, and/or other agencies will support the long-term capital improvements that address intersecting goods movement, safety, and active transportation needs.

INTERDEPARTMENTAL LIAISON

Engineering staff have engaged with Police to understand the crash and potential causes, and will work with Finance to identify funding.

OPTIONS

1. That Council direct staff to proceed with the next steps as outlined in this report, and;
2. That Council provide different direction to staff.

Staff recommend Option 1.

CONCLUSION

On February 19, 2023, a pedestrian was struck and killed in the roadway on East Columbia Street just south of Brunette Avenue. The location has been the subject of numerous complaints, and staff have prepared plans and concept designs for advancement. An updated review will be conducted in the coming months, including

seeking recommendations for interim improvements until such time as a more permanent solution can be achieved. Staff will report back to Council as the review advances.

APPROVALS

This report was prepared by:
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