CITY OF Vancouver WASHINGTON

MEMORANDUM

DATE: February 6, 2024

TO: Chair Ramos and Transportation and Mobility Commission members

FROM: Emily Benoit, Senior Transportation Planner, Community Development Department

RE: **Complete Streets – SE McGillivray Boulevard Safety and Mobility Project Phase 2 Engagement and Analysis Summary**

CC: Rebecca Kennedy, Deputy Director, Community Development Department; Kate Drennan, Principal Transportation Planner, Community Development Department; Ryan Lopossa, Transportation Division Manager, Public Works

Introduction

This memorandum summarizes the technical findings for analysis completed during Phase 2 of the McGillivray Boulevard Safety & Mobility Project and the key takeaways from community engagement completed during Phase 2.

Phase 2, Develop Design Options, focused on developing a set of design options which were presented to the community at two different touchpoints, refined based on community, stakeholder, and Transportation and Mobility Commission (TMC) input, and evaluated for alignment with the project goals. The three project goals are:

- **Goal 1:** Lower vehicle travel speeds on the corridor to improve safety for all users regardless of how they travel and to reduce cut-through traffic to support the local road context.
- **Goal 2:** Make the corridor safe and comfortable for people of all ages and abilities to walk, bike, roll, use small mobility devices, and access transit.
- **Goal 3:** Improve safety and comfort at intersections and crossings on the corridor.

The following sections summarize the future conditions technical analysis and the community engagement completed during Phase 2.

Future Conditions Summary

During Phase 2, the project team evaluated future roadway conditions on McGillivray Boulevard to understand how much growth is expected to occur over the next 20 years and how travel time along the corridor would change with and without the project. The McGillivray Boulevard Safety and Mobility Project is considering repurposing one vehicle travel lane in each direction to enhance the space allocated for people walking, bicycling, using small mobility devices or accessing transit.

Two future year scenarios were evaluated:

- **Mid-Term (2035)**: This scenario which reflects approximately 10 years of growth, was used to understand how McGillivray Boulevard would function in 2035, which is expected to be the life of the planned paving project.
- **Horizon Year (2045)**: This scenario reflects 20-years of growth on the corridor and was used to understand what additional improvements may be needed to maintain operations on McGillivray Boulevard beyond the life of the planned paving project.

In addition to evaluating operations under the two future year scenarios, analysis was also completed to understand how repurposing a lane would change drivers' experience under Existing, Mid-Term, and Horizon Year conditions.

To quantify changes, intersection level of service (LOS), travel time between SE 164th Avenue and SE Chkalov Drive, and queueing at major intersections on the corridor were compared under a "No Build" scenario, which maintains the existing four-lane cross-section and a "With Project" scenario, which repurposes one travel lane in each direction.

A summary of findings for each scenario is provided below, while the full technical documentation is provided in the *McGillivray Boulevard Safety & Mobility Project – Future Conditions Technical Memorandum*.

Existing Conditions

Under Existing Conditions, McGillivray Boulevard operates with minimal congestion and queueing as documented in the *McGillivray Boulevard Existing Conditions Report*. Under "With Project" conditions, there are minimal changes to vehicle operations on the corridor.

During the morning peak hour under "With Project" conditions:

- There are no changes to intersection LOS at any of the study intersections.
- The eastbound and westbound left-turns at SE Chkalov Drive, which exceed available storage under "No Build" conditions, are only extended by five-feet. The

southbound left-turn is the only movement where the queue would be extended past available storage.
- There are no other substantial changes in queueing at SE 136th Avenue, Village Loop Drive, or SE 164th Avenue.
- Repurposing a travel lane adds less than 30 seconds to travel time in both directions.

During the evening peak hour under "With Project" conditions:

- While there are several intersections where LOS changes, the proposed changes do not degrade any study intersections below LOS D. The SE 164th Avenue intersection operates at LOS D under "No Build" conditions due to congestion on SE 164th Avenue; however, there are no changes to delay at this intersection with the project in place.
- Queueing for left-turn movements at SE Chkalov Drive, most of which exceed available storage under "No Build" conditions, is increased under the "With Project" scenario. The changes also cause the eastbound left-turn at SE 136th Avenue to exceed available storage by approximately two vehicles.
- Travel time increases by 40 seconds in the eastbound direction and one minute and 10 seconds in the westbound direction.

Mid-Term (2035)

Future traffic volumes developed for 2035 conditions found that the maximum number of vehicles forecast to use McGillivray Boulevard in a 24-hour period is 12,300 vehicles. This is well below the typical capacity of a two-lane road.

During the morning peak hour under "With Project" conditions:

- The SE Blairmont Drive intersection operates at LOS D, while all other intersections operate at LOS C or better indicating there would be little congestion at intersections on McGillivray Boulevard.
- The westbound and southbound left-turn at SE Chkalov Drive would be extended to exceed available storage by one and two vehicle lengths, respectively.
- Travel time increases compared to "No Build" conditions are approximately 30 seconds for vehicles traveling west and 20 seconds for vehicles traveling east.

During the evening peak hour under "With Project" conditions:

- Two intersections, SE 119th Avenue and SE 19th Street operate at LOS E due to an increase in delay as vehicles wait to make left-turns from the side streets onto McGillivray Boulevard.

- Queueing increases for the eastbound, westbound, and southbound left-turns at SE Chkalov Drive, which exceed available storage under "No Build" conditions. The westbound left-turn at SE 136th Avenue would also exceed available storage.
- Travel time increases compared to "No Build" conditions are approximately one minute for vehicles traveling east and approximately one minute and 45 seconds for vehicles traveling west.

Horizon Year (2045)

Future traffic volumes developed for 2045 conditions found that the maximum number of vehicles forecast to use McGillivray Boulevard in a 24-hour period is 13,500 vehicles. This is well below the typical capacity of a two-lane road.

During the morning peak hour under "With Project" conditions:

- The SE Blairmont Drive intersection operates at LOS D, while all other intersections operate at LOS C or better indicating there would be little congestion at intersections on McGillivray Boulevard.
- Project changes would result in the southbound left-turn queue at SE Chkalov Drive exceeding available storage by two vehicle lengths and the eastbound left-turn at SE 136th Avenue would exceed available storage by one vehicle length.
- Travel time increases compared to "No Build" conditions are approximately 20 for vehicles traveling east and 40 seconds for vehicles traveling west.

During the evening peak hour under "With Project" conditions:

- Additional improvements may be needed at SE 136th Avenue to maintain operations as delays at this intersection would also result in delays at the nearby SE 19th Street intersection. SE 119th Avenue would also operate at LOS D, as would SE 164th Avenue, which is also observed and consistent with "No Build" conditions.
- The largest increase in queuing for a movement expected to exceed available storage is the eastbound left-turn at SE Chkalov Drive. There is a large forecasted increase in queues at SE 136th Avenue if no additional improvements are made by the horizon year.
- Travel time increases compared to "No Build" conditions are approximately one minute and 15 seconds for vehicles traveling east and approximately two minutes and 45 seconds for vehicles traveling west.

Bicycle and Pedestrian Improvements

Repurposing a vehicle travel lane will lower vehicle travel speeds, provide additional roadway space for people walking and biking, and provide a buffer between the mobility lane and vehicle travel lane. Combined, these factors serve to lower the level of stress experienced and improve comfort for users of all ages and abilities.

Under “No Build” conditions, McGillivray Boulevard was found to have a Bicycle Level of Traffic Stress (BLTS) of three and four, meaning that only enthused and confident riders or strong and fearless riders are likely to feel comfortable on this corridor.

The proposed changes under “With Project” conditions would lower the BLTS along the entire corridor to 2 and 3, meaning that interested and concerned riders would be more likely to feel comfortable utilizing McGillivray Boulevard between SE Chkalov Drive and SE Village Loop.

Community Engagement Summary

There were two touchpoints with community members during Phase 2 of the Project. The first, which focused on community conversations was conducted during July and August 2023, while the second, which focused on an online survey and neighborhood presentations was completed between September and November 2023.

Community Touchpoint #1

During this touchpoint, community members were presented with three design options:

- **Option #1: Parking Separated Mobility Lane:** This option would repurpose one vehicle travel lane in each direction to create a 10’ mobility lane, located next to the curb and separated from the vehicle travel lane by a parking lane and painted buffers.
- **Option #2: Center Running Mobility Lane:** This option would repurpose one vehicle travel lane in each direction to create a mobility lane, intended for use by people riding a bicycle, which would be located next to the median and separated from the vehicle travel lane with a physical barrier. People walking would be expected to use the walking lane, which would be located next to the curb, or existing sidewalks.
- **Option #3: Shared Mobility/Residential Access Lane:** This option would repurpose one vehicle travel lane in each direction to create a shared mobility lane/residential access lane which would be used by people walking, riding a bicycle, or driving a car to access their driveway. This lane would be separated from the vehicle travel lane by a four-foot concrete barrier and an eight-foot parking lane.

The Project Team held seven community conversations during which more than 50 community members reviewed the design options and provided their input. These design options were also presented to the TMC for feedback and further design input.

The following takeaways were identified during the first touchpoint with community members and TMC:

- Community members preferred preliminary design options that inluded enhanced separation between the mobility lane and vehicle travel lanes.
- Many community members appreciated the separation of space for people walking and riding bicycles that is included in Design Option #2.
- Community members from all community conversation sessions shared concern about the amount of driver education that would be required, specifically for Design Option #2 and #3, which are different from any existing facilities in Vancouver.
- Some community members expressed concern with the idea of repurposing a vehicle travel lane in each direction, and other community members were supportive of having more space for people walking, riding bicycles and other small mobility devices within the existing roadway.
- Exploration of the addition and incorporation of concrete, specifically at large intersections to decrease pedestrian crossing distance, for Design Option #1 and Design Option #2.
- Direction to the Project Team to explore opportunities to "right-size" on-street parking. The existing on-street parking is not utilized equally along the corridor. Much of the utilized on-street is near the intersection of SE 136th Avenues, but other existing on street parking remains highly underutilized elsewhere on the corridor.

Based on the feedback gathered during the first touchpoint, Design Option #3 was eliminated, and the remaining two design options were refined prior to being shared with community members during the second touchpoint. For more information about Community Touchpoint #1, see the Phase 2: Design Options Community Engagement Summary – Touchpoint One Report.

Community Touchpoint #2

The second touchpoint with community members presented the two refined design options (Option 1: Curbside Mobility Lane and Option 2: Center Running Mobility Lane) through a series of neighborhood association presentations and an online survey.

The Design Option Survey opened on the Project's Be Heard Vancouver website (www.beheardvancouver.com/mcgillivray-safety) on September 15, 2023 and remained open until November 30, 2023. As of November 30, 2023, the survey received 680 complete responses and over 300 optional open-ended comments.

To promote the survey, postcards were sent to 8,580 households and businesses in the neighborhoods surrounding McGillivray Boulevard and the opportunity to view the design options and complete the survey was shared on the City's social media pages, in public forums with and materials for the TMC, and the Project listserv which includes

neighborhood associations and community members who signed up to received Project updates and information.

Key takeaways from the second touchpoint with community members include:

- Many community members are concerned that repurposing one vehicle travel lane would not slow vehicle speeds and will increase traffic on the corridor.
- Many community members would like to see additional law enforcement on the corridor or the use of radar or video enforcement to enforce traffic laws.
- Of the more than 680 responses received, 25% of respondents believe that the two design options align with the project goals extremely or very well.
- About half of respondents did not believe either design option would meet the project goals. Open ended comments instead reflect desire to have more enforcement and maintain the existing roadway configuration.
- More community members expressed support for Design Option 1: Curbside Mobility Lane as they believe it is less complex and more consistent with existing roadway design in Vancouver than Design Option 2: Center Running Mobility Lane.
- There is a desire for more robust improvements, including the installation of traffic signals or roundabouts at large intersections on the corridor, concrete barriers, and filling existing sidewalk gaps.

For more information about Community Touchpoint #2, see the Phase 2: Design Options Community Engagement Summary – Online Outreach report.

Design Recommendation

Based on the analysis from the Existing Conditions and Future Conditions Reports and input provided in the Engagement Summaries for Phase 1, Phase 2: Touchpoint 1 and Phase 2: Touchpoint 2, there is confirmation and support to repurpose a travel lane in each direction that maintain acceptable levels of service on the corridor and achieve the project goals. From the community, stakeholder and TMC input received, there is more support for Design Option 1: Curbside Mobility Lane, so this is the design option that will be recommended for Public Hearing with the TMC.

Referenced Reports

- McGillivray Boulevard Safety & Mobility Project – Future Conditions Report
- McGillivray Boulevard Safety & Mobility Project – Phase 2: Design Options Community Engagement Summary Touchpoint 2 – Online Outreach

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