CITY OF Vancouver WASHINGTON

MEMORANDUM

Hearing Date: February 6, 2024

To: Transportation and Mobility Commission

Subject: Complete Streets – SE McGillivray Boulevard Safety and Mobility Project Final Design Public Hearing Materials

Report Date: February 6, 2024

Hearing Date February 6, 2024

Proposal:	Improve safety and mobility for all users on SE McGillivray Boulevard in alignment with the Complete Streets Policy and project goals.
Location:	McGillivray Boulevard between SE Chkalov Drive and SE 164th Avenue, and SE Chkalov Drive between McGillivray Boulevard and SE 7th Street
City Staff:	Emily Benoit, Senior Transportation Planner, Community Development Department
Recommendation:	Recommend Design Option #1: Curbside Mobility Lane, to repurpose a travel lane in each direction on McGillivray Boulevard to provide separated and protected mobility lanes as well as install vertical separators, high visibility mid-block crossing and crosswalks, modular bus platforms, and restripe parking to increase safety benefits.

Background

The McGillivray Safety and Mobility Project (Project) is evaluating potential changes to improve safety and mobility for all who travel on SE McGillivray Boulevard between SE Chkalov Drive and SE 164th Avenue and SE Chkalov Drive between SE 7th Street and SE McGillivray Boulevard. The Project evaluated potential striping changes that can be implemented in conjunction with planned pavement preservation scheduled to occur in Summer 2025 on this corridor. The Project also identified other safety improvements and upgrades needed for implementation outside of the paving program to improve McGillivray Boulevard for people walking, biking, using a mobility device, and driving.

Project Phases

The Project began in Fall 2022 and is planned to conclude in Spring 2024, with paving and implementation planned for 2025. The Project had three phases with opportunity for community members to review technical work, share their input, and provide feedback to inform the final design.

Phase 1: Analyze the Corridor (Fall 2022 to Winter 2023): The project team evaluated how McGillivray Boulevard operates and how people travel on the corridor today. Input was collected to understand where people want to use the corridor to travel, how they want to travel and barriers to traveling to key destinations.

Phase 2: Develop Design Options (Winter 2023 to Winter 2023): The project team used information gathered during the Phase 1 to develop project goals and evaluation

framework, preliminary and draft design options, and evaluation of how the design options met the project goals. Feedback was sought in community conversations and online on how well the design options addressed the needs and desires for traveling identified in Phase 1.

Phase 3: Design Improvements (Winter 2024 to Spring 2024): The project team used information gathered in Phase 1 and Phase 2 to recommend a final design option. The final design and implementation milestones will be shared with community members and key stakeholders.

Project Goals

The project has three goals[1], developed from community and Transportation and Mobility Commission input gathered in Phase 1.

Goal #1 - Lower Vehicle Speeds: 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 - Improve Safety & Comfort: 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 Intersections & Crossings: Improve safety and comfort at intersections and crossings on the corridor.

Technical Findings

The project team conducted technical analysis for the current existing and forecasted future conditions on McGillivray Boulevard.[2]

Existing Conditions: This focused on analyzing the corridor with an evaluation of the following topics:

- **Vehicles**: Existing traffic volume, intersection level of service (LOS), queueing, traffic signal warrants, and travel time
- **Safety**: Collision rate at intersections, collision hot spots, trends and contributing factors
- **Pedestrians**: Gaps in sidewalks and crossings, sidewalk width, location of marked crossings and curb ramps
- **Bicycles**: Existing facilities and Bicycle Level of Traffic Stress (BLTS) analysis

[1] For more information, see the McGillivray Boulevard Safety and Mobility Project – Phase 2 Update Memo from the Transportation and Mobility Commission meeting on December 5, 2023.

[2]For more information, see the Existing Conditions Report and Appendix and Future Conditions Report.

- **Transit**: Transit routes, location of stops, ridership, and dwell time
- **Illumination**: Identification of areas of the corridor that have poor lighting/visibility
- **Parking**: Capacity and utilization of the parking lane on McGillivray Boulevard

Key opportunities based on the current existing conditions include:

- Some space allocated to vehicles can be repurposed without increasing congestion.
- The most common types of collisions are likely to be reduced through traffic calming and improved channelization, which both help to reduce vehicle speeds.
- High utilization of on-street parking is limited to the segment between SE Talton and SE 136th Avenues.

Future Conditions: This analysis focused on forecasting traffic conditions in the mid-term (2035) and long-term (2045). The key takeaways below were considered when developing the design options:

- The Average Daily Traffic (ADT) or number of vehicles that use the corridor over a 24-hour period is well below the capacity for a two-lane roadway at just over 10,000 vehicles per day based on traffic counts collected in late 2022.
- The ADT is not forecast to exceed 13,000 before 2045, which is well below volumes needed to justify two travel lanes in each direction.
- In the near-term, a lane can be repurposed without substantially increasing delay or queueing at intersections or the time it takes a driver to travel between SE Chkalov Drive and SE 164th Avenue. Travel time through this segment is anticipated to increase by less than 30 seconds in the AM peak and approximately a minute in the PM peak.
- In the mid-term (2035), repurposing a lane would result in very little change for drivers during the morning commute hours (about 30 seconds in the AM peak). During evening commute hours, increasing congestion would result in a small increase of travel time (about a minute eastbound and less than two minutes westbound) due mainly to congestion at the SE Village Loop Drive intersection.
- Delays during the evening commute hours would increase in 2045 due to key intersections of SE Chkalov Drive and SE Village Loop Drive (about a minute eastbound and less than three minutes westbound).
- In addition to the SE 136th Avenue intersection, which was found to meet signal warrants under Existing Conditions, the SE Village Loop Drive intersection is forecast to meet signal warrants by 2035.

Community Engagement

Community engagement occurred in both Phase 1 and Phase 2[3]. A summary of the activities and key takeaways are in the tables below. Community engagement in Phase 3 begins with a final design option recommendation from the Transportation and Mobility Commission. In Phase 3, the Project team will share the final design option and expected implementation timelines with the community.

Table 1: Community Engagement Activities

Phase 1: Analyze the Corridor	Phase 2: Develop Design Options
Walk and Bike Audits	Community Conversations (small meetings)
Online Community and School Surveys and Interactive Map	Online Community Survey
In-person Open House	Tabling at Community Events
Presentations to Neighborhood Associations	Presentations to Neighborhood Associations

Table 2: Community Engagement Key Takeaways

Phase 1: Analyze the Corridor	Phase 2: Develop Design Options
Vehicle speeding is impacting all users.	Preference for enhanced separation between mobility lane and vehicle lane.
Intersection improvements are needed.	Preference for separation of space for people walking and riding bicycles.
People walk, bike, and roll today, but it's not comfortable for everyone.	Support for more space for people walking, riding bicycles and small mobility devices.
	Concern about driver education required for new roadway configuration.

[3] For more information, see Phase 1 Engagement Summary and Phase 2 – Milestone One Engagement Summary and Phase 2 – Milestone Two Engagement Summary.

Design Options

In the beginning of Phase 2, three preliminary design options were developed.

Option #1: Curbside Mobility Lane

Option 1 would repurpose one vehicle travel lane in each direction to provide a 10-foot mobility lane next to the curb, intended for use by people walking and biking that would be separated from vehicle traffic by a parking lane and painted buffer with vertical delineators.

Option #2: Center Running Mobility Lane

Option 2 would repurpose one vehicle travel lane in each direction to provide a 10-foot mobility lane next to the center median allowing for consistent vertical delineators separating the vehicle travel lane from the mobility lane. Option 2 also features a 5-foot walking lane next to the curb in areas where there are no sidewalks.

Option #3: Shared Mobility Lane/Residential Access

Option 3 proposed the use of a residential access lane, separated from the vehicle travel lane by a four-foot concrete median, with access to this lane for vehicles only being provided at the beginning of the block and at one location mid-block. The lane would be intended for use by vehicles accessing residential driveways or parking, and people walking, bicycling, or using other small mobility devices. The residential access road would operate similar to how a frontage road serves residences and commercial areas adjacent to a higher-speed roadway.

Option 3: Shared Mobility Lane/Residential Access was removed in the beginning of Phase 2 due to community member and stakeholder concerns about driver education needs, confusion about the new roadway configuration and long-term maintenance.

Later in Phase 2, the two draft design options, Option 1: Curbside Mobility Lane and Option 2: Center Running Mobility Lane, were further refined and brought back to the community and stakeholders. Both draft design options would include intersection treatments to improve crossings for people walking and biking, including:

- High-visibility crosswalks to enhance visibility of pedestrians.
- Use of green paint to indicate where people biking should wait and cross at intersections.
- Addition of Rectangular Rapid Flashing Beacon (RRFB) at existing mid-block crossing.
- Use of vertical delineators to tighten turning radii, specifically for right-turning vehicles, to reduce vehicle speed in conflict areas with pedestrians.

Evaluation

Two design options were evaluated on their alignment with project goals and the corresponding evaluation criteria developed at the beginning of Phase 2.

Table 3: Design Option Evaluation Summary

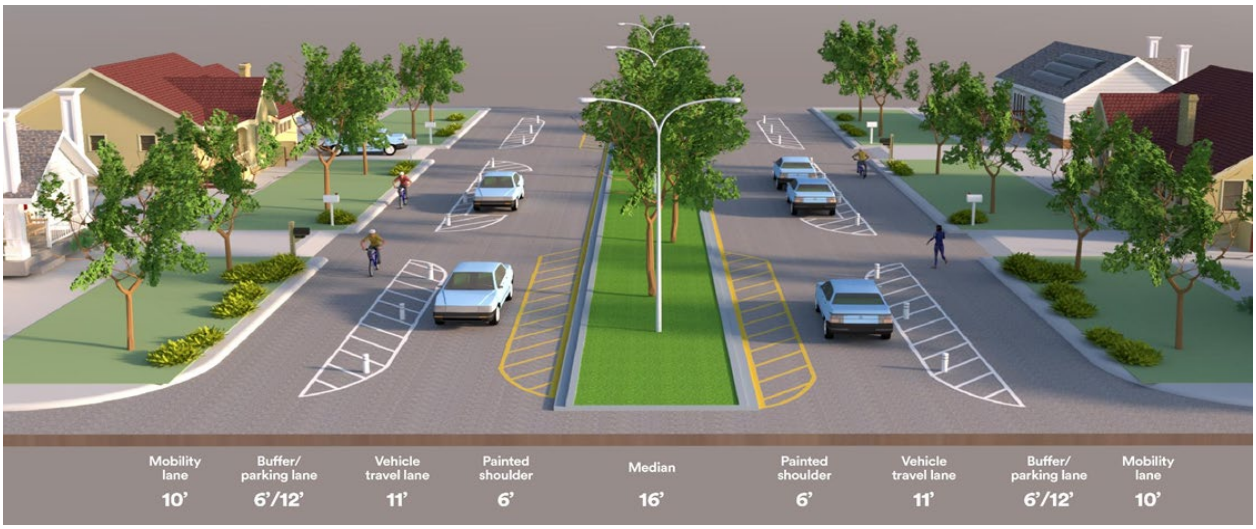
Project Goal	Option 1: Curbside Mobility Lane	Option 2: Center Running Mobility Lane
Lower Vehicle Speeds	◑	◑
Improve Safety & Comfort	◕	◕
Improve Intersections & Crossings	◕	◑

Significant Improvement ● ◕ ◑ ◔ ○ No Improvement

From this evaluation[4], **Option #1: Curbside Mobility Lane better achieves the project goals overall compared to Option #2: Center Running Mobility Lane**. Feedback from the community and stakeholder reflects an overall level of comfort and preference towards Option #1 as well.

[4] For more information, see McGillivray Boulevard Safety and Mobility Project – Phase 2 Update Memo from the Transportation and Mobility Commission meeting on December 5, 2023.

Figure 1: Design Option# 1: Curbside Mobility Lane



Longer Term Recommendations

The Project has identified design options with striping changes and other interim 'quick-build' safety improvements to be implemented in coordination with upcoming planned pavement work. Other identified improvements that fall outside the scope and timeline of this Project, are longer term in nature and have additional funding needs are identified for inclusion in the Transportation Improvement Plan[5] This includes potential changes to intersection controls (a traffic signal or roundabout) at the SE 136th Avenue and SE Village Loop Drive intersections if vehicle traffic increases in line with 10- and 20-year forecasts.

Prior Commission Review

In 2023, the project team met with the TMC seven times (February, April, May, June, August, October, December) to discuss the project goals, traffic analysis and findings, community engagement process and input, proposed design elements and evaluation of design options.

On March 6, 2023, the project team had a workshop with City Council to share about the project phases and community engagement. The project team also presented on the Project to City Council during the May 23, 2023 and October 16, 2023 Complete Streets Quarterly Update workshops.

[5] The City's detailed transportation improvement six-year work program that shows all future projects listed with detailed project sheets and funding status. For more information: Transportation Improvement Program -The City of Vancouver, WA

Recommendation

Project staff recommend TMC endorse Design Option #1: Curbside Mobility Lane, to repurpose a travel lane in each direction on McGillivray Boulevard to provide separated and protected mobility lanes as well as install vertical separators, high visibility mid-block crossing and crosswalks, modular bus platforms, and restripe parking to increase safety benefits.

Emily Benoit, Senior Transportation Planner, Community Development, 360-487-7944, Emily.Benoit@cityofvancouver.us