Transportation Commission

TRANSMITTAL

August 5, 2019

RE: Main Street and NE 2nd Street Bike Lane Projects

Honorable Mayor Chelminiak and City Councilmembers:

Transportation Commission members are honored by your trust and confidence in selecting us to oversee the implementation of the 2009 Pedestrian and Bicycle Transportation Plan. In this capacity, we have been guided by Council's direction as we collaborate with staff and the community to "advance the implementation of Bellevue's planned Bicycle Priority Corridors to facilitate continuous bicycle travel along a connected grid of safe facilities throughout the city and the region."

This transmittal letter responds to the City Council's May 13 direction to have the Transportation Commission evaluate alternatives to fill the gap in the existing bicycle lanes on Main Street between Bellevue Way and 108th Avenue NE. Documented in this letter is a path forward to: (i) implement a rapid build bicycle lane on Main Street in Summer 2019; (ii) employ monitoring systems for evaluation and post-implementation refinement purposes for the Main Street bike lane project between Summer 2019 and Spring 2020; and, (iii) evaluate a potential bicycle lane on NE 2nd Street between Summer 2019 and Spring 2020.

Main Street Bike Lane

The Commission reviewed relevant policies, planning context/development trends, community input, and mobility data analysis during four meetings including March 28, May 23, July 11, and July 24. Our review and discussions indicate that Alternative 2.1 – when compared against the other two alternatives, which would provide more robust bicycle facilities but may also have greater impact to motor vehicle travel times and intersection delay – serves as a reasonable compromise for a rapid-build interim facility in providing a continuous east-west connection on Main Street to the 108th Avenue bikeway. At our July 24 meeting, with a vote of _ in favor and _ opposed, the Commission approved the implementation of bicycle facilities as follows:

- In the eastbound direction, Alternative 2.1 extends the eastbound buffered bike lane on Main Street from 105th Avenue NE to 107th Avenue NE by repurposing one eastbound travel lane. At 107th Avenue NE, the eastbound buffered bike lane begins tapering away from the curb, becoming a striped bike lane (no buffer) for about 200 feet between the eastbound travel lane and a new right turn lane being added for eastbound-to-southbound turns onto 108th Avenue SE.
- In the westbound direction, Alternative 2.1 extends the existing striped bike lane on Main Street from 106th Avenue NE to 108th Avenue NE. Alternative 2.1 maintains two westbound travel lanes.

Alternative 2.1 will also include modifications to the east leg of the intersection of Main Street and 108th Avenue SE to ensure safe lane alignment through the intersection. This may include repurposing

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approximately 250 feet of the eastbound curb lane east of 108th Avenue SE to reinforce the lane revisions on the west leg.

Specific items that we discussed include:

- How existing policy, project, and development context shape the role of the Main Street segment and how the Main Street bike facilities align with the planning and development context including the East Main TOD, Grand Connection, Eastside Rail Corridor Trail, Wilburton Commercial Area visioning process, Downtown development, transit circulation, and I-405 access projects.
- Detailed analysis on the existing Main Street bike lanes and the neutral impacts to traffic operations at the Bellevue Way intersection.
- Modified proposal to reduce projected vehicle delay experienced at the 108th Avenue NE intersection.
- Assessment of NE 2nd Street as an alternative east-west bicycle connection through Downtown as compared to Main Street.
- The timing of this project does not seem to interfere with other relevant projects such as WSDOT's I-405 Bellevue to Renton project.
- Bellevue staff will conduct a limited before-and-after assessment of the Main Street bike lane project.
- The implications of the new Vulnerable user/Safe passing legislation on vehicle capacity.
- The city is legally allowed to repurpose travel lanes for bicycle lane purposes without being required to reimburse Washington State for any constitutional trust funds it might have received when it originally constructed Main Street.

Commissioners voting in favor of the Main Street bike lanes determined that Alternative 2.1 should move forward for implementation in Summer 2019. The following considerations informed Commission's decision to support the Alternative 2.1 Main Street bike lane alternative:

- Policy: 2009 Pedestrian and Bicycle Transportation Plan identifies Main Street as a component of the Lake-to-Lake Trail, a bicycle priority corridor that completes a continuous east-west route between Lake Washington and Lake Sammamish.
- Bike network connectivity: Together with the 108th Avenue NE bike lane project, the Main Street bike lane will create a direct east-west connection across Downtown Bellevue with links to the I-90 Trail and SR 520 Trail.
- Bike facility comfort: With a speed limit of 30 mph and traffic volumes exceeding 15,000 daily vehicles, Alternative 2.1 results in an improved Bicycle Level of Traffic Street (LTS) rating of 3 (note: this type of facility is designed for people who are "enthused and confident" cyclists who can tolerate some stress even though they may prefer to ride with a lower level of traffic stress) as compared to its current LTS 4 rating (note: this type of facility is designed for people who are "strong and fearless" cyclists who are comfortable riding in a mixed-traffic environment).
- Bicycle route grade: Traveling west to east, Main Street climbs gradually from 88 feet to 144 feet, a 43-foot gain.
- Travel lanes repurposed: One eastbound lane would be repurposed along these blocks to provide bike lanes on both sides of Main Street.
- Parking impacts: Main Street does not have any on-street parking within the project limits.
- Construction activity: Along Main Street, construction of Alamo Manhattan II (10655 Main Street, east of 106th Avenue on the south side) is approaching completion, and construction will begin on Main Street

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Apartments (10777 Main Street, west of 108th Avenue on the south side) is expected to begin later in 2019.

- Community input: Among the four candidate corridors considered during the 2017-2018 Downtown Bicycle Rapid Implementation Program engagement process, Main Street stood out as the second highest ranked bike lane improvement after 108th Avenue NE.
- Intersection delay: Increased delay is limited to the 108th Avenue NE intersection where each vehicle is projected to experience an additional 4.9 seconds of delay in the PM Peak Hour. Decreases in PM Peak Hour delay are observed at both the Bellevue Way and 106th Avenue NE intersection where each vehicle is projected to experience reductions of 2.8 seconds and 2 seconds respectively (results from SimTraffic).
- Motor vehicle travel time: Compared to existing conditions, the overall travel time along Main Street from just west of Bellevue Way to just east of 108th Avenue – in both the eastbound and westbound directions – stayed the same (results from SimTraffic).

Monitoring Systems

Although a formal before-after assessment report is not recommended for the Main Street bike lane project, staff informed the Commission that they intend to employ the following monitoring systems for evaluation and post-implementation refinement purposes:

- Bluetooth collection devices to monitor motor vehicle travel time along the corridor.
- Traffic cameras to inform traffic signal adjustments in response to travel demand.
- Bicycle counts (either manual or permanent) to monitor usages.
- Review of onboard system data from King County Metro Transit to assess impacts to Route 249.
- Video intelligence road safety conflict detection to inform Vision Zero improvements.
- Police collision report monitoring to inform Vision Zero improvements.

These Main Street monitoring systems will be in place between Summer 2019 and Spring 2020 and will – when paired with results from NE 2nd Street bike lane analysis reflected below – inform additional Downtown Bellevue bicycle network improvements.

NE 2nd Street Bike Lane

The Transportation Commission remains committed to implementing a connected bicycle network in Downtown Bellevue that links to the broader regional network. It is in this context that the Transportation Commission voted _ in favor and _ opposed to analyze an additional bike lane project on NE 2nd Street. The potential NE 2nd Street bike lane project – paired with the Main Street bike lane project implemented in Summer 2019 – has the potential to bring about a more complete network of safe bicycle facilities in Downtown Bellevue. This potential NE 2nd Street bicycle lane project would be evaluated concurrent with findings from the Main Street monitoring systems between Summer 2019 and Spring 2020.

Conclusion

In the final analysis, the Alternative 2.1 Main Street bike lane project is a modest improvement relative to the ultimate vision for the corridor (both in scale and length). In the future, people riding bicycles on Main Street will benefit from an off-street path in the eastbound direction and a separated bike lane in the westbound direction. As such, today's Main Street bike lane project should be regarded as an interim quick-build bicycle facility that delivers improved safety and connectivity in the near-term – per Council direction through the Bicycle Rapid Implementation Program and more recently at the briefing on May 13 - while

larger scale land use and transportation projects gradually come to fruition. Over time there will be opportunities for both the public sector (in the form of capital projects) and the private sector (in the form of conditions of development approval) to improve/upgrade the Main Street bike lanes – enhancing the facility to promote Downtown Bellevue's high-density, mixed use urban environment.

Sincerely,

Lei Wu
Chair, Transportation Commission

Khek Teh
Vice Chair, Transportation Commission

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