

City of  
Bellevue



# Transportation Commission Study Session

**DATE:** September 19, 2019  
**TO:** Chair Wu and Members of the Transportation Commission  
**FROM:** Chris Long, PE, PTOE, Traffic Engineering Manager  
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**SUBJECT:** 2019 Neighborhood Congestion Reduction Studies

## DIRECTION REQUESTED

Action (Endorsement)  
 Discussion  
 Information

At the September 26, 2019 Transportation Commission meeting, staff seeks the Commission's endorsement of the staff recommended approach to allocating Neighborhood Congestion Reduction Levy funds to the final design and construction of projects that were identified through 10 traffic studies completed in 2019.

## BACKGROUND

The [Neighborhood Safety, Connectivity and Congestion Levy](#) was approved by voters in 2016 as a means to address backlogged projects in existing programs for neighborhood safety improvements, new sidewalks, maintenance of sidewalks and trails, bicycle facilities and intelligent transportation systems. The levy generates approximately \$5.5 million a year to support these five existing programs. The Bellevue City Council also asked staff to create a new program under the levy that would specifically target projects that reduce congestion for Bellevue residents traveling to and from their neighborhoods. A separate \$2.0 million per year is funded through the levy for this program.

Work to develop this program began in 2017 with the compiling of potential candidate projects. Staff solicited input from residents during three open houses on the overall levy program and collected project ideas from the Comprehensive Transportation Project List, the [2016-2027 Transportation Facilities Plan](#) and the [2017 Concurrency Update Report](#). Once this list was compiled, a process was needed to evaluate these projects and determine which projects should move forward first into final design and construction.

In October 2017, staff met with the Transportation Commission and presented a summary of the program and a proposed process to select projects. Through the course of three

Commission meetings, staff and the Commission developed a process to select projects for an initial traffic study and to use the results of the traffic studies to score projects to support the allocation of budget for design and construction. The third and final meeting was held on January 25<sup>th</sup>, 2018 (see [Memo](#) and [Presentation](#)).

Nine locations were ultimately selected for the initial round of traffic studies, in addition to the analysis that had already been selected for the broader Eastgate area. Through the remainder of 2018, staff drafted scopes of work for each of these analyses and created a consultant on-call roster for performing the work.

## INFORMATION

The traffic studies for the nine locations were divided amongst three consultants. A different consultant team completed the [Eastgate Transportation Study](#) that was closely coordinated with the Commission. Each of these traffic studies included input from the public through either open-houses near the project site or informational mailers with an open comment period. Results from each study and a summary of the outreach can be found on the Neighborhood Congestion Reduction [website](#).

Below is a summary of the proposed improvements at each site:

Location	Study	Proposed Improvement
Factoria Blvd/SE 38 <sup>th</sup> St	Eastgate Transportation Study	Re-channelize the westbound approach to add a second westbound left turn lane.
150 <sup>th</sup> Ave SE/SE Eastgate Way	Eastgate Transportation Study	Widen the west leg of the intersection and re-channelize the bridge over I-90 to accommodate a northbound dual left and four lanes southbound over I-90 (including the existing ramp merge lane).
150 <sup>th</sup> Ave SE/SE 37 <sup>th</sup> St	Eastgate Transportation Study	Widen the north, west and east legs to accommodate a second eastbound right turn lane, a third southbound lane and a second westbound left turn lane.
156 <sup>th</sup> Ave SE/Lake Hills Blvd	Intersections Study on 156 <sup>th</sup> Ave SE *	Remove all-way stop and add a traffic signal.
Lake Washington Blvd/SE 60 <sup>th</sup> St	Lake Washington Blvd/SE 60 <sup>th</sup> St Intersection Study	Remove the all-way stop and add a traffic signal.
SE 8 <sup>th</sup> St/Lake Hills Connector	SE 8 <sup>th</sup> St/Lake Hills Connector Intersection Study	Widen the south leg to accommodate a second northbound left turn pocket.

*\* The all way stops on 156<sup>th</sup> Ave SE at SE 16<sup>th</sup> St and SE 24<sup>th</sup> St were also evaluated for capacity improvements, but through the public process, pedestrian safety improvement projects were ultimately selected instead of congestion reduction improvements. These two locations are no longer eligible for funding under the Neighborhood Congestion Reduction program.*

Location	Study	Proposed Improvement
Lakemont Blvd SE/Forest Drive SE	Lakemont Blvd SE/Forest Drive SE Intersection Study	Widen the south leg to accommodate a left turn pocket and add a traffic signal.
Lakemont Blvd SE/SE Newport Way	Lakemont Blvd SE/SE Newport Way Intersection Study	Re-channelize the north leg of the intersection to provide two dedicated southbound left turn lanes and widen the east leg to accommodate a second left turn lane onto the I-90 on-ramp.
140 <sup>th</sup> Ave NE/NE 8 <sup>th</sup> St	140 <sup>th</sup> Ave NE and 148 <sup>th</sup> Ave NE Intersections Study	Widen the south leg of the intersection to accommodate the merging of two southbound lanes through the intersection.
148 <sup>th</sup> Ave/Main St	140 <sup>th</sup> Ave NE and 148 <sup>th</sup> Ave NE Intersections Study	Add traffic signal at the south driveway of the Kelsey Creek Shopping Center to relieve congestion at the 148 <sup>th</sup> Ave/Main St intersection.
148 <sup>th</sup> Ave SE/Lake Hills Blvd	140 <sup>th</sup> Ave NE and 148 <sup>th</sup> Ave NE Intersections Study	Widen east leg of the intersection to add a second dedicated left turn lane.
148 <sup>th</sup> Ave SE/NE 8 <sup>th</sup> St	140 <sup>th</sup> Ave NE and 148 <sup>th</sup> Ave NE Intersections Study	Widen each approach to create dual left turn lanes in each direction.

The ranking of these projects based on the evaluation criteria developed with the Transportation Commission is provided in Attachment A.

## RECOMMENDATION

The majority of these projects will cost between \$1.5 and \$5.0 million to complete. Attachment A provides the estimated cost in current dollars for the design and construction of each project. The \$2.0 million per year for this program was enhanced in the 2019/2020 budget cycle to include an additional \$5.0 million spread out over five years to help get more projects built. Staff have estimated there is roughly \$3.5 million available in 2020 and \$2.5 million in 2021 to design and construct projects from this list.

Two projects have already been identified to move forward to final design and construction:

1. Factoria Blvd/SE 38<sup>th</sup> St: This project was identified as an early win in the Eastgate Transportation Study because of the high impact and extremely low cost (less than \$300,000). Commission endorsed moving forward on this project at the final meeting to review the Eastgate Transportation Study on June 27, 2019.
2. 148<sup>th</sup> Ave SE/Lake Hills Blvd: This project was deemed necessary by staff to address a concurrency issue in the East Bellevue Mobility Management Area (MMA) in the [2019 Concurrency Update](#). Programming this project into the CIP allowed this MMA to meet concurrency.

These two projects will consume roughly \$1.6 million of the \$6.0 million available over two years.

Through the first three years of the levy we have learned that complications associated with right-of-way procurement, “scope creep” and impacts to Washington State Department of Transportation (WSDOT) Limited Access can significantly influence the schedule and cost of a project. To address this concern, and to assure a more expeditious deployment of much needed congestion relief, staff is proposing to not select just one or two additional projects to move to final design and construction, but to carry multiple projects forward to 60%. At the 60% level, a significantly more accurate cost estimate can be developed, and a better estimation right-of-way costs and potential issues can be identified. Working to the 60% level can also provide time for WSDOT to accept a proposed design concept. The following additional projects are proposed to carry forward to 60%. These projects all scored in the top five as shown in Attachment A.

3. 150<sup>th</sup> Ave SE/SE Eastgate Way: 148<sup>th</sup> Ave SE will be overlaid in 2022 to the edge of the bridge over I-90. Staff would like to shop this project, along with the 150<sup>th</sup> Ave SE/SE 37<sup>th</sup> project, for grant funding that could be paired with existing overlay funding. These combined projects are the most likely candidates for grant funding out of the current project list.
4. 150<sup>th</sup> Ave SE/SE 37<sup>th</sup> St: 60% design was already done at this intersection as part of the first set of projects contracted to 60% design under the Neighborhood Congestion Reduction Program (the other being improvements at Newport Way/150<sup>th</sup> Ave SE). Minor modifications would be needed to update this design and the associated cost estimate to account for the changes proposed in the Eastgate Transportation Study.
5. 156<sup>th</sup> Ave SE/Lake Hills Blvd: The conversion from an all-way stop to a traffic signal results in one of the highest delay savings of projects considered. This operational change should also improve the safety at this intersection, which has the highest collision history in Bellevue for all-way stops.
6. SE 8<sup>th</sup> St/Lake Hills Connector: The proposed channelization improvements at this intersection will provide a near-term solution that will significantly reduce congestion under current conditions at a much lower cost than the long-term solution of a multi-lane roundabout.

## **ATTACHMENTS**

- A. 2019 Traffic Studies Project Scoring