

# Bellevue Way SE HOV Design Options

## Frequently Asked Questions

Updated 4/18/2017

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### ***Background***

#### **1. Who decided to pursue these project options? How did it come to be?**

The Bellevue City Council added this project as a part of 2015-2021 Capital Investment Program (CIP) plan in December 2014. At programmed in the current CIP, the project is not funded for right way or construction. We are conducting an initial study to develop scope and preliminary engineering to help us choose a preferred design. In April of 2017, Council will decide whether to continue the preliminary design and complete the environmental documentation.

#### **2. This concept was looked at years ago and wasn't seen as viable. Why bring it up again?**

In the past, the HOV system on I-90 consisted of reversible express lanes to and from Seattle. In the afternoon commute, when southbound Bellevue Way SE is congested, the reversible express lanes were operating in the eastbound direction, so there was no HOV lane system to connect into. That has changed with recent WSDOT projects. By mid-2017, there will be HOV lanes in both directions of I-90 between Seattle and Bellevue that operate 24 hours-a-day. This project can now connect into an expanded HOV lane system.

#### **3. Why does the street need to be widened to the west?**

Widening Bellevue Way to the east is not possible due to the future light rail project and Mercer Slough. Sight lines, wall, and minimum buffer between the wall and traffic curb (as a planter) will determine the overall amount of widening needed to the west.

#### **4. Why is this being proposed as an HOV lane? Could it be changed to a general purpose lane in the future?**

WSDOT is currently expanding the HOV network on I-90 between Bellevue and Seattle, and Sound Transit is extending a southbound HOV lane on Bellevue Way from I-90 to the South Bellevue Station. Council has directed the study team to look at extending that southbound HOV lane further north. For comparison purposes and public feedback, the traffic study looked at an option where this extension would be a general purpose lane. This study will not look at changing the WSDOT direct access HOV ramp nor changing the future Sound Transit constructed HOV lane to the South Bellevue Station. As a result, the general purpose lane option merges into the two existing general purpose lanes at the South Bellevue Park and Ride, thereby creating a pinch point that makes this option perform poorly. There is not a viable way to add a third southbound general purpose lane to I-90 without significant modifications to the WSDOT interchange.

**5. How are you coordinating with other agencies implementing projects in the area (Sound Transit, WSDOT, King County)? Can you align your construction schedules?**

The [WSDOT](#) and [Sound Transit](#) project designs are complete, and we will connect this project into their design configurations. Since this is a study and not funded for right of way or construction, we will look at how potential construction windows would work with East Link construction if this project moves forward. Typically, projects with different contractors cannot both be constructed in the same area, at the same time. However, there is an opportunity that this project, if funded for construction, could directly follow the East Link heavy civil construction work on Bellevue Way to minimize the overall length of construction disturbance to the neighborhood. The East Link work along Bellevue Way is expected to be complete by 2021.

**6. Will the project even be needed after the light rail is operating?**

The traffic models indicate that even with light rail in operation, traffic growth in this corridor will continue to increase, thereby increasing vehicle travel times and delay. Implementing this HOV lane would help bus service access the South Bellevue station and light rail, as well as serve HOV and transit users trying to get to I-90.

***Process***

**7. How will public participation / input influence your decision?**

Bellevue City Council will make the final decision, and we are exploring concepts at their request. We will recommend a project to City Council working in collaboration with the local community, the Transportation Commission and other project stakeholders identifying the best option for the corridor. To date, we've given presentations to several neighborhood groups, held public open houses in June 2016 and January 2017, and shared project information and surveys online to ask the community to share their thoughts and perspectives. One project element where ultimately the staff recommendation will be different than the survey results was with respect to project width. The Jan 2017 open house survey results preferred a wider section, but staff selected the narrow section, this was in part due the narrow section providing equivalent traffic operations but with less impact to private property and critical areas, two very important criteria for most of the public.

**8. What factors will you consider when deciding how far the HOV lane will extend to the north?**

The council direction was to study an extension from the Park-and-Ride to the 112<sup>th</sup> Ave SE / Bellevue Way SE (Y-shaped) intersection. Factors that go into deciding the final configuration include:

- Comparing traffic operation performance (metrics like travel time savings and person throughput). See "Preferred Option Methodology" posted on the website for a more detailed discussion on this topic.
- Seeking public comments
- Obtaining Transportation Commission advice
- Asking direction from the City Council

Further factors like project cost and ability to secure funding for final design and construction would be used in determining whether or not the project construction would be phased.

## ***Impacts***

### **9. How is the city addressing neighborhood traffic impacts as a result of East Link construction?**

The city is committed to working with residents in Beaux Arts Village, Bellecrest, Enatai, and Surrey Downs to help mitigate potential neighborhood traffic impacts as result of East Link construction along Bellevue Way SE and 112<sup>th</sup> Ave SE. A geographically broad and balanced volunteer committee from the aforementioned neighborhoods is working closely with city staff to identify key areas of neighborhood traffic concerns and ways to mitigate them. The goal of the committee is to develop a plan that takes into account the perspectives of all impacted South Bellevue neighborhoods. Staff will then work with Sound Transit's contractors to implement the plan—based on a demonstrated need—following the start of construction, expected to begin in spring/summer of 2017. The foundation of the traffic committee work stems from a public meeting held April 27, 2016, at City Hall. Information on the committee and a comprehensive meeting summary can be found online at this link: [South Bellevue Neighborhood Traffic Mitigation Committee](#).

### **10. You're proposing to turn a beautiful corridor surrounded by greenery and natural views into a corridor bordered by a light rail line and retaining walls (very different character). How will you retain the natural aesthetics that we value?**

Part of the design analysis process is to hear from you about what you value. We have heard that maintaining the natural aesthetics is important. On the west side of the corridor, there are several types of retaining walls that incorporate plantings, and we will be looking at planter options that can incorporate trees, plantings and vegetation in an attractive way. The project team includes landscape architects who will help us integrate the community's preferences into design options. The open house materials from January 2017 show renderings of how a new wall could be screened with vegetation and trees.

### **11. Traffic noise is a major concern, and your project will just bring more cars and buses through the corridor. How will you address noise impacts? Will it be even worse because you propose removing trees?**

Part of our early fieldwork included taking noise readings from several properties adjacent to Bellevue Way so that existing noise levels could be modeled for all properties along the project corridor. We then used noise modeling to predict changes related to the HOV widening options being considered. We also used the model to look at how effective it would be to add noise walls or other measures to reduce noise levels. (Trees are not an effective noise barrier, so tree removal on this project will not contribute to an increase in noise levels.)

**Existing noise levels:**

- The noise study indicated that existing noise levels along this corridor are between 64 and 69 decibels (dB). These measurements were in the areas of frequent use like backyards and decks.
- General traffic growth in the area by 2030 will increase the noise level by between 0 and 1 dB.
- The dB scale is logarithmic, not linear, so people would:
  - Not notice a difference if a noise level increased by up to 3 dB
  - Perceive a 5 dB change as significant
  - Perceive a 10 dB increase or decrease as twice or half as loud (respectively)

**Expected (modeled) changes to noise levels with the project:**

- If we construct the HOV lane project, some homeowners will experience a noise increase of up to 2 dB while others will experience a decrease of up to 2 dB.
- The decrease in noise for some properties would be due to new retaining walls built as part of the project, which would reflect some noise away from private properties.

**Noise walls:**

- Noise walls of varying height (between 10- and 20-feet high) could be constructed along the top of the 5' to 20' high proposed retaining walls to further decrease noise levels for all properties.
- These noise walls would reduce noise levels by between 2 dB and 7 dB, depending on the property location.
- Noise walls for this project would cost approximately \$2,000,000.
- This project does not qualify for federal noise wall funding because it fails the WSDOT reasonableness criteria for noise walls (the cost per benefitted receiver is too high).
- For noise walls to be effective, they must be continuous (no gaps), and walls on some properties would block territorial views over Mercer Slough. This was noted as a concern to some residents along the corridor.

**12. Cut-through traffic is a huge concern during construction. How will you minimize those effects?**

East Link construction activity along Bellevue Way SE will reveal a lot about how people travel through South Bellevue, including whether motorists are cutting through the neighborhood. The city will be working with neighborhood residents to help minimize the amount of traffic diversion and to ensure that if motorists use neighborhood streets, they are driving responsibly. Lessons learned from East Link construction, including traffic data during construction, will be shared with the Bellevue Way HOV team because the impacts from the two projects will likely be similar.

Our study has considered at a high level how the project will be constructed and how traffic would be impacted or maintained for each design option. Maintaining traffic during construction will be further advanced during preliminary engineering. Techniques that communicate traveler options/times along with tools that discourage cut-through traffic will be explored for technical feasibility while considering community desires.

**13. I've heard the water table in the hillside is very high. How will you handle this? Will the project impact groundwater?**

A geotechnical analysis will be part of the project. This analysis will help the engineers understand and address potential impacts to the hillside and groundwater. Past geotechnical information in the project area has not indicated abnormal water table situations. Typical retaining wall design will allow groundwater to continue to flow and migrate without significant changes or impacts.

## ***Operations/Benefits***

**14. It seems like you are proposing a project that won't help congestion because of other pinch points. Will this project be a benefit?**

This project fits into a larger context of projects that will affect how the Bellevue Way corridor operates. Today, during the peak afternoon commute on southbound Bellevue Way, traffic regularly backs up when the I-90 ramp meters are on. High occupancy vehicles, transit, and general purpose traffic are all stuck in that backup until they reach I-90.

In the future, when there are HOV lanes on I-90 between Bellevue and Seattle in both directions (mid-2017), the HOV lane extension we're exploring would provide an opportunity for HOV and transit to bypass the ramp meter backup, thereby improving transit and HOV speed and reliability. Benefits are going to be most apparent for HOV and transit users, and the traffic analysis helps quantify that benefit. This project will not benefit travel times or traffic congestion north of the wye intersection of Bellevue Way SE and 112<sup>th</sup> Ave SE. Those corridors remain congested during many PM peak commutes and that congestion is expected to continue. There are future projects identified in the City's Transit Master Plan to address congestion in that corridor.

**15. Will the HOV lane improve the delay people experience trying to get onto I-90, which is metered and would not change as part of this project?**

Corridor travel times today generally increase significantly when the I-90 ramp meters are on during the afternoon commute, as the two southbound general purpose lanes back up along Bellevue Way. Adding a southbound HOV lane on Bellevue Way allows HOV and transit traffic to bypass the ramp meter backup, as the HOV lane feeds into an unmetered direct access ramp to westbound I-90. This project will primarily benefit users of the HOV lane, but will also increase overall traffic capacity because those transit and HOV vehicles will not be occupying space in the general purpose lanes.

**16. Have you considered making this a reversible lane?**

The study addressed the feasibility and challenges of making this lane reversible in the future, but did not look at this option in detail. If the lane were to be reversible, its function and operation

would need to be coordinated with WSDOT and Sound Transit. The major challenges to a reversible lane concept are the southbound left turn lanes into the Park and Ride that cross the HOV lane and the existing WSDOT interchange configuration at I-90. The current forecast traffic models for 2030 still show adequate northbound traffic operations, making the need for a northbound HOV lane a low priority.

**17. Will left turns be permitted across the HOV lane?**

Yes, single-occupant vehicles can cross the HOV lane to get to left-turn lanes that access the future South Bellevue Station and parking garage.

***Costs / Phasing***

**18. How will the project be funded?**

The project is not currently funded beyond design and environmental permitting. The city will be looking at all available options to fund right away and construction, including federal or state grants and partnerships opportunities with other agencies.

**19. Project estimates presented at the open house for the full project length range from 30 to 40 million dollars. Why so expensive?**

The primary project expense is the retaining walls needed to widen the roadway into the hillside to protect private homes and property along Bellevue Way. The walls will be up to 20 feet tall in the narrower roadway section being considered, and up to 25 feet tall for the wider roadway section. Portions of private property will also need to be purchased from most property owners along Bellevue Way.

**20. The traffic studies have analyzed building only partial lengths of the overall project, called phased projects. Why? When would the second phase be built?**

The phased approach is being considered primarily for project funding availability limitations. If the full project cannot be funded at once, the study team wanted to determine what the traffic benefits would be for the first phase of a two-phased implementation project. It assumes the completion of the second phase of implementation in the future. The corridor is short enough that staff would not recommend it be constructed in more than two phases.