



City of Bellevue Transportation Department

Proposal: 116th Ave NE from NE 12th St to Northup Way Overlay & Rechannelization

Frequently Asked Questions

1. What is the proposal?

The pavement on 116th Avenue NE, between NE 12th St and Northup Way, is deteriorating and is scheduled for pavement overlay in the summer of 2015. For most of this ¾-mile roadway section, there are two through travel lanes in the northbound direction, one through travel lane in the southbound direction and a center two way left turn lane - but no bike lanes. This proposal would reconfigure the street as a three-lane roadway (one travel lane in each direction and a center turn lane) with bike lanes on both sides of the street, as part of the pavement overlay. This would eliminate one of the two northbound through lanes and mirror the current southbound configuration. The new configuration would maintain current lane approaches at the traffic signals at NE 12th St (to the south) and at Northup Way (to the north) to preserve traffic flow in the area.

2. What are the benefits of doing this work?

Changing the lanes and facilitating this proposal as part of the overlay project has several benefits:

- The proposal will improve safety for all users:
 - Motorists will find entering and exiting driveways to be more convenient and safer when turning across a single through travel lane;
 - Pedestrians will find it safer and more convenient to cross the street with reduced exposure to multiple through travel lanes while crossing.
 - Bicyclists will have a designated space for travel, improving safety and reducing the friction that exists now with slower traveling cyclists occupying the through lanes and causing drivers to maneuver around them.
- 116th Avenue NE provides a key connection between the SR 520 Trail, planned Northup Way bike facilities, and Bellevue's downtown. This linkage is currently well used by cyclists and use is expected to grow with completion of the Northup Way project (in 2016) and this proposal on 116th Avenue NE. Implementing bike lanes in this corridor is a need identified in the City's adopted Pedestrian and Bicycle Plan.
- Reconfiguring the channelization as part of the paving operations allows for the implementation of the changes at minimal cost.

3. How will reducing the number of lanes not make congestion worse?

It can seem counter-intuitive at first. However, traffic flow and congestion are largely a function of the intersections at the end of a roadway segment. There is one traffic signal at the north end of the corridor and one at the south end of the corridor with none in between. These signals are where stop delay occurs as they cycle around to serve each cross street. This proposal aims to preserve capacity at these constraining points in the network so as to not significantly affect traffic flow or congestion. With each signal located at the end of the corridor segment the number of travel lanes entering the intersection would be unchanged thus allowing a comparable amount of traffic to pass through the intersection. About 600 feet north of the NE 12th St and 116th Ave NE intersection, there will be a merge area where the two northbound through travel lanes transition to one lane. Other locations around the city and elsewhere have shown that this type of merge area can function very well. This merging aspect has been field-tested and computer modeled, with both showing that there would be minimal effect on operating levels for the intersections and roadway.

4. Won't it be more difficult to turn in and out of driveways?

Similar projects have shown it to be safer and easier to turn in and out of driveways. This is because turning across a single through lane, as compared to two through lanes, is an easier maneuver with less exposure to conflicting traffic, resulting in a safer condition. A review of collisions for the corridor suggests that the driveways on the west side of the street, and their associated movements turning across a single lane now, have fewer collisions than driveways on the east side where it is necessary to turn across two travel lanes.

5. There are hospitals in the area. Will this proposal impact emergency response?

Transportation Department staff have consulted with area hospitals and the City Fire Department to identify any operational or response concerns. The analysis of street system operations shows minimal effect on delay as a result of the proposal and is not expected to have a measurable effect on emergency service providers or their ability to serve the community.

6. How many cyclists travel 116th Ave NE in this area?

The Transportation Department conducted a bicycle count in May 2014 using a traffic signal video camera. It was observed that there were 163 cyclists in the corridor (96 southbound; 67 northbound) on a midweek day (Wednesday, May 15th). This is a relatively high level of cyclist usage for a street that provides no specific accommodation for bicycles. It reflects the importance of this connection between the SR 520 trail and the downtown area. If bike lanes were provided in the corridor, we expect that the number of cyclists would increase, and the regional bicycle network would be better linked to downtown Bellevue.

7. Would it be possible to test the proposal under real traffic conditions to see how it might work?

Yes, in fact, it's already been done. The Transportation Department set up a temporary traffic zone on 116th Ave NE, north of NE 12th St, to simulate the removal of one of the two northbound through lanes as proposed by the project. This simulation ran continuously over three consecutive days in May 2014 and covered periods of rush hour traffic. Video cameras from nearby intersections recorded conditions on the surrounding street network and provided the means for observing traffic flow or other operational influences. The street network continued to perform well under the test condition and supports the proposal as an achievable implementation plan.

8. Adding new travel lanes requires thorough analysis. Will the city do a similar analysis in considering the removal of a travel lane?

The Transportation Department has performed an investigation into the feasibility of the proposal. A number of analysis areas have been considered including the following:

- Collision history in the corridor and effects on safety.
- Traffic volume reviews; both daily traffic and peak hour assessments.
- Forecast Modeling that includes year 2024 updated land use and street network forecasts and assessing the extent of potential diversion to other streets.
- Level of Service Analysis that includes intersection SYNCHRO analysis for peak hour operations under several varied scenarios.
- Consultation with area hospitals and the Bellevue Fire Department on assessing any emergency response impacts.
- Bicycle count information and video observations of activity.
- A merge zone was created under real traffic condition and located on the far side of NE 12th St to simulate the proposal. Observations using nearby cameras mounted on signals were utilized to evaluate and observe any changes in street network performance.
- Review of consistency to City Plans and Policies.
- Design plan development of channelization changes.

The investigation into the feasibility and operation of the proposal is supportive of its implementation and goals of better addressing the range of user needs in the corridor.

9. Can the City widen the road to add bike lanes while still maintaining vehicle travel lanes as they are today?

It is certainly possible to widen a roadway and add bike lanes, but doing so would involve significant right-of-way acquisition, impacts on adjacent property owner parking areas and access, and would require major capital investment that is not budgeted nor supported by the traffic volumes on this roadway.

10. How has the city involved the community in considering this proposal, and how can the public comment?

There has been a fairly extensive public outreach effort to get the word out about the proposal. Staff has received comments and interest from many varied stakeholders including businesses and owners along the corridor, hospitals in the area, and individuals that ride, walk, drive or take transit. Staff continues to reach out and seek public comment. The following are key efforts to date:

- Council Meeting introducing topic – Sept 15, 2014
- Transportation Commission – Sept 25, 2014
- Transportation Commission – Nov 13, 2014
- Media Release – Dec 3, 2014
- Informational Flyer to neighborhood – Nov 2014
- Open House – Dec 11, 2014
- Web Site on Project – Nov 2014
- Social Media Postings - Ongoing
- Email/Phone/person correspondence – Ongoing

These efforts will continue in the coming weeks as the Transportation Commission considers their recommendation to the City Council. We appreciate your interest and welcome any comments you may have. We can be reached at:

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