Attachment 4



166th Avenue NE Rechannelization Project Frequently Asked Questions

Question: Why is the City of Redmond restriping 166th Avenue NE from four to three lanes plus two bike lanes?

Answer: The 166th Avenue NE corridor has a safety problem. There have been 104 collisions on the four lane section of 166th from just south of NE 85th Street to just north of NE 100th Street in the past ten years, including one pedestrian fatality at NE 95th Street. Previous conversions from four to three lanes within the City have resulted in a measureable decrease in collisions and improved sense of safety for both cyclists and pedestrians.

Question: Is there a particular reason for the collisions and side street delay on 166th Avenue NE?

Answer: Many of the side street intersections do not meet current intersection sight distance standards. The reduced sight distance makes it difficult to see traffic when entering 166th Avenue NE. Cars are speeding uphill between NE 95th and NE 97th Street, and downhill between NE 85th and NE 87th Street. Higher speeds require longer sight distances. The restriping will help reduce speeding and create more consistent speeds along the corridor. Several collisions were a result of drivers creeping into the travel lane to see conflicting traffic. Some drivers weren't able to make right or left turns because they could not see the available gaps. The restriping will move vehicles farther away from the curb (with the addition of 5.5-foot bike lanes on both sides) improving visibility for side street traffic trying to cross or enter onto 166th Avenue NE.

Question: How will the restriping help pedestrians?

Answer: The three lane section allows for safer pedestrian crossings because there are fewer lanes for a pedestrian to cross - only one lane of through traffic in each direction and a center turn lane area that can provide additional pedestrian refuge. The proposed project includes the addition of two flashing beacon crossings for pedestrians. These beacons cannot be installed on a four lane roadway. Additionally, bike lanes separate pedestrians from vehicles, improving pedestrian safety along the entire corridor.

Question: The City keeps talking about complete streets. What is a complete street?

Answer: A complete street provides space for all roadway users including motor vehicles, bicycles, pedestrians, and transit. Providing separate travel lanes dedicated for each mode of travel improves safety and efficiency. Complete streets safely move more people. The City's current street standards are based upon Redmond's <u>Complete Streets Ordinance</u> (Ordinance 2359 adopted on Sept 4, 2007). All new roadways are built to a complete streets standard.

Question: Why doesn't the four to three lane rechannelization include bus pull-outs along the corridor?

Answer: Bus pull-outs would require the City to purchase right-of-way along the corridor, which would dramatically increase the cost of this project. During peak hours of the day, there are a total of four buses per hour using the 166th Avenue NE corridor, northbound and southbound. Given the low frequency of buses and limited ridership it was determined that bus pull-outs are not necessary for this section of 166th Avenue NE. The City will work with Metro Transit to consolidate existing stops to improve the overall operation of the corridor.

Question: Will the City of Redmond make 166th Avenue NE a snow-plow/de-icing route to reduce issues with a three lane roadway?

Answer: 166th Avenue NE is already a "first priority" roadway for plowing and de-icing. Converting 166th Avenue NE from a four to three lane roadway will not impact the prioritization of 166th during snow events. Refer to <u>www.redmond.gov/Transportation/StreetOperations/SnowandIceRemoval/</u> to see the City of Redmond's Snow and Ice Removal protocol and mapping.

Question: If there is an accident, how does an emergency vehicle respond on a three lane roadway?

Answer: During an emergency, the traveling public is required to pull over and stop, allowing emergency vehicles to pass. Police, Fire, and/or EMT vehicles are allowed to travel in any lane necessary to reach an accident including the two-way left turn lane or opposing lanes, if necessary.

Question: How will three lanes make it easier to turn onto 166th Avenue NE, compared to the existing four lane roadway?

Answer: Although all the traffic will be consolidated to one lane in each direction (minus those in the two-way turn lane), vehicles on side streets will find it easier to turn onto 166th Avenue NE because there will be a clearer line of sight to oncoming traffic. By improving the sight distance, the turning vehicle can better judge speeds of oncoming traffic. Additionally, the two-way left turn lane can be used as a refuge location, allowing vehicles to cross one conflicting flow of traffic at a time.

Below is an example of how gaps remain in the traffic flow after a conversion:



Question: How will community comments from the public meeting get incorporated into the project?

Answer: The public provided a variety of comments and suggestions, many of which will be incorporated into the project:

- High friction pavement markings will be investigated to address the sliding that occurs on the plastic arrows and crosswalk markings, particularly at NE 85th Street.
- Sight distance corrections will be investigated at all intersections and may include vegetation management, fence relocations, or minor grading.
- Strong neighborhood support for a roundabout or traffic signal at NE 95th Street will be shared with the City Council.
- The City will work with Metro Transit to reduce the impact of bus operations and improve pedestrian safety on 166th Avenue NE by re-evaluating the location and number of bus stops on the corridor.
- The operation of the existing signals at NE 85th, NE 100th and NE 104th Street will be reevaluated to improve efficiency and safety.

Question: I'm concerned about being stuck behind slower moving vehicles going up 166th Avenue NE. Did the City consider a passing lane?

Answer: In general, less than 10 % of the traffic on 166th Avenue NE is going slower than 25 MPH. The number of vehicles exceeding the 30 MPH speed limit by more than 5 MPH is close to 50%. What appears to be a slow moving vehicle is often a vehicle going the speed limit. For this reason a passing lane has not been recommended. Trucks with more than three axles comprise only 0.3% of the traffic on 166th Avenue NE, which averages to about 2 trucks an hour. This low volume of trucks does not support a climbing lane.

Question: I'm concerned about being trapped behind buses going up 166th Avenue NE. Did the City consider the impacts of buses on traffic congestion?

Answer: Buses account for less than 1% of the traffic volume on 166th Avenue NE. Data does show that bus speeds are low near the stops. This is not a high enough proportion of traffic to recommend a passing lane. The City will work with Metro Transit to re-evaluate the number of bus stops on 166th Avenue NE to reduce the impact of accelerating buses on uphill traffic.

Question: Won't reducing 166th Avenue NE from two lanes to one lane in each direction cause more congestion?

Answer: Significant PM peak queuing was observed northbound at NE 104th Street. This queuing is a result of through traffic turning right at the signal and is controlled by signal timing. The queuing is of relatively short duration, peaking for about 20 minutes. Signal timing changes could be made to favor that movement and reduce the queuing, but improved conditions could attract more cut-through traffic caused by drivers who want to avoid other more congested routes. The changes proposed at NE 85th Street will continue to provide a southbound through lane and a northbound right turn lane so the southbound capacity at the intersection will not be changed. No changes are proposed at NE 104th Street as part of this project and the queues that extend south from the signal will not be impacted by the lane conversion project.

Question: Why are bike lanes being added to 166th Avenue NE?

Answer: The primary purpose of the 166th Avenue NE rechannelization project is to improve safety for vehicles, bicycles, and pedestrians. Providing three vehicle lanes, one in each direction and a two-way left turn lane separates through vehicles from turning vehicles, which significantly improves vehicle safety. The remaining pavement is being used for bike lanes. <u>Marking bike lanes has multiple benefits</u>, including separating pedestrians from traffic, providing significant sight distance improvements for vehicles entering 166th Avenue NE from side streets and providing emergency parking for stalled vehicles or during snow conditions. Bike lanes also keep slower moving bikes out of traffic and faster moving bikes off of the sidewalks.