

Where is the 145th Street & I-5 Interchange Project located? The project is located on N/NE 145th Street between 5th Avenue NE and the on and off-ramps on the west side of Interstate 5 (I-5).

Why are improvements needed at the interchange?

Today, the 145th Street corridor is significantly congested, particularly during peak hours. The corridor right-of-way is narrow, making it challenging to accommodate the needs of pedestrians, transit users, cyclists, and people with disabilities, as well as the high volume of vehicles that use 145th Street every day. The 145th Street corridor and I-5 interchange need significant upgrades to improve mobility, safety, and efficiency for all transportation modes and all users. If left unaddressed, current challenges will become even more pronounced with the opening of Sound Transit's Shoreline South/148th Link light rail station in 2024.

What are the benefits of the project?

The 145th Street & I-5 Interchange Project will improve safety and multimodal access along the 145th Street corridor and help connect to the future Sound Transit Shoreline South/148th station, planned to open in 2024. The interchange improvements will alleviate traffic congestion and enhance transportation mobility, reliability, and safety for all users, including pedestrians, bicyclists, transit, and freight.

How are the 145th Street and I-5 Interchange and 145th Street Corridor projects related? The 145th Street and I-5 Interchange Project replaces the signalized intersections on both sides of I-5 with two roundabouts. The roundabout west of I-5 connects to the Phase 1 boundary of the 145th Street Corridor Project, as illustrated in the below diagram.

Together, the 145th Street and I-5 Interchange and 145th Street Corridor Projects will improve safety for drivers, pedestrians, and bicyclists while also promoting better traffic flow along the corridor.





Are any existing houses or businesses expected to be purchased by the City to make room for improvements to 145th Street?

Yes, some properties that border or are located next to 145th Street will be impacted to make room for improvements. Right-of-way plans for both the interchange and corridor projects were developed during the design stage of the projects to determine necessary property acquisitions, obtain estimate of property fair market values, and assess relocation requirements that apply to affected properties.

The City of Shoreline began working with property owners on acquisitions for Phase 1 of the 145th Street Corridor Project in early 2021, and in early 2022 for the 145th Street and I-5 Interchange Project. Property acquisitions for Phase 2 of the 145th Street Corridor Project are scheduled to begin in 2025, and in 2027 for Phase 3.

What is eminent domain and how does it impact property acquisitions for the projects on 145th Street? On April 4, 2022, the City of Shoreline adopted <u>Ordinance No. 957</u>, which gives the City authority to move forward with the use of eminent domain on certain properties affected by the 145th Street and I-5 Interchange project. Similarly, on May 24, 2021, the City of Shoreline adopted <u>Ordinance No. 931</u>, giving the City authority to move forward with the use of eminent domain on certain properties affected by the 145th Street Corridor project. Eminent domain is a power granted to political subdivisions, such as the City of Shoreline, through Title 8, Chapter <u>8.12</u> of the Revised Code of Washington (RCW) to acquire private property for a public use.

Although the ordinances were adopted, it does not mean eminent domain will be used. The project team will continue normal negotiations with property owners to acquire the properties needed for the improvements to 145th Street at fair market value. An independent appraisal and separate professional appraisal review are conducted to determine fair market value. These ordinances are a precautionary step and eminent domain will only be used as a last resort in cases where a settlement agreement cannot be reached between the City and property owner.

Will the I-5
Interchange and
145th Street
Corridor and
145th Street
projects be built
at the same time?

Yes, construction of the 145th Street and I-5 Interchange project and Phase 1 of the 145th Street Corridor project will begin in 2023 and are expected to be complete by the middle of 2024.



How will construction of the two projects impact traffic along 145th Street? Construction of the 145th Street and I-5 Interchange and 145th Street Corridor projects are expected to significantly impact traffic along 145th Street. To complete the necessary work, 145th Street will be reduced to one lane in each direction. The I-5 interchange will remain open throughout construction. Taking an alternate route to your destination is encouraged to avoid congestion and delays, especially during peak commuting hours.

When will construction of the 145th Street Corridor project start and how long will it take? Construction will be completed in three phases as illustrated in the following diagram, beginning with Phase 1 in 2023. The 145th Street and I-5 Interchange project will be constructed at the same time as Phase 1. Construction of all three phases is expected to be complete by 2030.



Will there be construction during nights and weekends?

We don't know yet. Once the contractors are hired to build the projects in early 2023, we will receive a work schedule. The City of Shoreline will approve the schedule and share that information with the public. To stay informed on upcoming construction activities, follow us on Facebook and Twitter or visit the 145th Street and I-5 Interchange and 145th Street Corridor project webpages.

What other projects are happening nearby?

- The 145th Street Corridor project will add safety and operational improvements between Linden Avenue and Interstate 5 (I-5), including left turn lanes, street lighting, relocated utilities, a shared-use path in some sections, and sidewalk improvements with off-corridor bicycle facilities.
   Please visit the 145th Street Corridor project page for additional information on project phasing and construction.
- Sound Transit is designing improvements on the 145th Street corridor from Lake City Way to the I-5 interchange to support the <u>bus rapid transit (BRT)</u> <u>project</u>, which will begin service in 2026.
- Sound Transit is building a <u>light rail station</u> at the intersection of 148th Street and I-5. The Shoreline South/148th Station is anticipated to open in 2024.



- The <u>145th Street Off-Corridor Bike Network</u> is a collection of quieter, slower-paced streets intended to provide bicyclists and pedestrians with alternate, parallel routes to 145th Street as well as key connections to the future Shoreline South/148th light rail station, Interurban Trail, and Burke-Gilman Trail.
- Visit the City's <u>Destination 2024</u> webpage to learn about all transportation projects occurring in the area.

Why is this project building roundabouts instead of intersections with traffic lights?

In 2018 and 2019, in collaboration with WSDOT, Sound Transit, City of Seattle, and King County Metro, the City of Shoreline evaluated several alternative design concepts. Through this process, the City and our partners worked to identify a design that would increase safety and efficiency for all travel modes, including cars, freight, transit, pedestrians, and bicyclists. Working in collaboration with multiple stakeholders, the City conducted digital modeling of traffic flows and intersection performance, and even tested a full-scale mockup of the roundabout design using Metro buses.

Initially, the City and our partners considered widening the 145th Street bridge to accommodate people walking and biking, constructing a new northbound I-5 button-hook on-ramp, and installing new traffic lights at the intersections at 5th Avenue NE and the I-5 ramps on the west side of the freeway. However, our analysis showed that multi-lane roundabouts would offer a greater improvement in safety and roadway capacity. Compared to signalized intersections, roundabouts will:

- Improve safety for drivers by decreasing speeds and routing traffic in the same direction, reducing the severity of crashes.
- Improve safety for pedestrians and bicyclists by separating them from vehicle traffic at well-marked and lighted crosswalks and reducing crossing distances.
- **Promote continuous traffic flow**, reducing overall travel times and minimizing delays along the 145th Street corridor.
- Eliminate the need for left-turn lanes on the bridge, creating space for a two-way, protected bike lane and a 6-foot sidewalk along the north side of the bridge.
- Eliminate the need to widen the existing bridge, substantially reducing construction costs.
- Reduce lifecycle operating and maintenance costs for the two intersections.

These improvements will address today's and future transportation needs and improve safety and access along the corridor for decades to come.



What are the benefits to roundabouts?

The City of Shoreline's redesign of the 145th Street and I-5 interchange is based on data that shows the benefits of roundabouts for safety, traffic flow, efficiency, and cost. According to <a href="WSDOT traffic studies">WSDOT traffic studies</a>, roundabout intersections can provide lasting benefits in many ways, including:

- Roundabouts reduce the rate and severity of collisions. Roundabouts reduce the likelihood of collisions by 37%, injury crashes by 75%, fatality collisions by 90%, and pedestrian-car collisions by 40%. Roundabouts also significantly reduce the likelihood of T-bone and head-on collisions.
- Roundabouts calm traffic. Roundabout speeds are usually about 20 mph. Drivers must slow down and yield before entering the roundabout and they are less likely to feel the need to speed up to try to "beat the light."
- Roundabouts are more efficient. Roundabouts improve traffic flow and reduce waiting time. They facilitate a continuous flow of traffic and can accommodate higher traffic volumes with fewer lanes on the approaching streets.
- Roundabouts are cost-effective. Long-term costs for roundabouts are lower because traffic signal maintenance and electrical costs are not needed. Roundabouts are also more effective during power outages. The cost of building a roundabout is comparable to that of a signal-controlled intersection.
- Roundabouts accommodate all sizes of vehicles. Large trucks, buses, and oversize vehicles can straddle both lanes when driving in a roundabout. Most roundabouts have a truck apron, a raised section of pavement near the center of the roundabout that gives large vehicles extra room to navigate the roundabout.
- Roundabouts are safer for pedestrians and bicyclists. Crosswalks are set back from the intersection, allowing drivers more time to react to pedestrians. Roundabout islands also provide refuge for crossing pedestrians and bicyclists.



# How do I drive through the new roundabouts?

#### How to navigate multi-lane roundabouts

- Check the signs to choose the correct lane for your destination.
- Yield to traffic already in the roundabout (all lanes).
- Stay in your lane through the roundabout.
- Give buses and large vehicles space when approaching and traveling. through the roundabout, as they may take more than one lane.
- Yield to people in crosswalks, as in any intersection.

# How will people walking and biking cross the bridge and use the new roundabouts?

The existing bridge over I-5, which will connect the two roundabouts, will have accessible sidewalks on either side, allowing a seamless crossing for pedestrians. The pedestrian crossings will also include rapid flashing beacons to increase safety.

Bicyclists can use crosswalks to navigate the roundabouts and a two-way protected bike lane, separated from motorized traffic, to safely cross the bridge.

Without signals, how will people walking and biking cross the streets that approach the roundabouts?

Crosswalks will be clearly marked and safely set back from the intersection, making the roundabout easy to navigate for pedestrians and allowing drivers more time to react. Roundabout islands will provide refuge for crossing pedestrians, and crosswalks will also include rapid flashing beacons to increase visibility.

How will drivers entering and exiting using I-5 be prepared to yield to bicyclists pedestrians? Pedestrian and bicyclist crossings will be set back from the lanes and clearly marked to notify drivers. The pedestrian crossings will also include rapid flashing beacons to increase visibility. Landscaping will be designed to minimize visual obstructions.

Will large trucks and buses be able to fit and navigate the roundabout? Large trucks, buses, and oversize vehicles can straddle both lanes when driving through a roundabout. Some roundabouts have truck aprons, a raised section of pavement that give large vehicles extra room to navigate the roundabout.

To ensure that buses will be able to safely navigate the roundabouts, the Washington State Department of Transportation (WSDOT) Regional Transit Coordination Division assisted King County Metro in organizing a "Roundabout Rodeo" with Seattle Department of Transportation (SDOT) and the City of Shoreline. This exercise is a proven method for testing the functionality of a proposed roundabout design. The design was laid out on the ground using paint and traffic cones. Metro operators were able to successfully drive in, around, and out of the roundabouts.



Will this project change the I-5 northbound onramp? The I-5 northbound on-ramp will remain in its current location on 5th Avenue NE, just north of NE 145th Street. A new signalized three-way intersection will be installed on 5th Avenue NE near the northbound on-ramp. This new intersection will be built before the opening of Sound Transit's Shoreline South/148th Station.

How does this project connect with other projects?

The City of Shoreline is designing two projects along the 145th Street Corridor simultaneously: this interchange project is being designed in coordination with Phase 1 of the N 145th Street project. The N 145th Street project will widen 145th Street to accommodate design elements that will improve traffic operations, safety, and mobility throughout the corridor. Both project teams are coordinating closely to minimize construction impacts.

This project is one of eight different transportation projects linked to the opening of the Shoreline South/148th Station in 2024. The goal for all these projects is to ensure pedestrians, bicyclists, transit, and auto traffic can get to and from the light rail station as safely and efficiently as possible.

The projects below, including the 145th Street & I-5 Interchange Project, are linked on the <u>Destination 2024 website</u>, which includes an interactive map illustrating how all the projects fit together.

- N 145th Street: Linden to Aurora Project
- 145th/I-5 Interchange Project
- 148th Street Non-Motorized Bridge
- 1st Avenue NE Sidewalks (145th to 155th Streets)
- 5th Avenue Rechannelization
- Off-Corridor Bike Network
- SR 522/523 BRT Project (Bothell/Lake City Way and 145th Street Bus Rapid Transit)
- Trail Along the Rail

Is the City coordinating the project with regional agencies? The City of Shoreline is working closely with WSDOT, Sound Transit, SDOT, and King County Metro.

How will the City manage environmental impacts and The City is committed to protecting natural areas and mitigating any environmental impacts. The interchange improvements will be balanced with the City's commitment to protect mature trees and environmentally sensitive areas. The improvements also provide the City with an opportunity to improve



preserve mature trees in the project area?	local water system health by enhancing area stormwater management and flood control.
What type of environmental analysis will the project team be completing?	In order to understand the potential impacts of the project on the surrounding environment, WSDOT will conduct analysis in compliance with local, state, and federal regulations. Permitting will follow the State Environmental Policy Act (SEPA) and National Environmental Policy Act (NEPA) processes.
When is the Sound Transit Shoreline South/148th Link light rail station scheduled to open?	It is scheduled to open in 2024.
How have community members been involved with the project thus far? What elements will the public be able to provide input on?	The City of Shoreline conducted the 145th Street Multimodal Corridor Study in 2015-2016 to evaluate current conditions for all users, while considering transportation demands from the new Link light rail station. Through an extensive public process, the City tailored the planned improvements to maximize benefit while keeping community impacts to a minimum.  In fall 2020, the City hosted a virtual open house and an online presentation to share information about the project, answer questions and hear comments. Over 680 people viewed the virtual open house and 99 people attended the online presentation.
What is the project schedule?	The City expects to complete the final design and permitting by the end of 2022 and begin construction in April 2023.  2021 to 2022: Final design and permitting 2023 to 2024: Construction
How will the project be funded?	In November 2021, the State Transportation Improvement Board awarded the project a \$5 million grant, which provided the last amount needed to fully fund the \$30 million project.
Who will be responsible for maintaining the roundabouts?	The existing intersections and the bridge over I-5 are currently maintained by WSDOT. The City anticipates that the roundabouts and other facilities within this area will continue to be maintained by WSDOT.