

SR 520 Bridge Replacement and HOV Program



Montlake Project: Construction Effects FAQ

Noise

What to expect during construction

During SR 520 construction, our contractors perform a variety of construction activities. Each activity uses different types of equipment and creates different levels of noise. Most construction activities occur during the day and follow the city of Seattle daytime noise regulations.

Some construction activities require nighttime work. Working at night and on weekends eases weekday traffic congestion on SR 520, I-5, Montlake Boulevard and other local streets, particularly when lane closures or detours are required. We are always looking for ways to reduce nighttime effects on the neighborhood, and we schedule noisy activities during the day whenever possible.

Nighttime construction activities on the Montlake Project are monitored and controlled under a Major Public Projects Construction Noise Variance granted to WSDOT by the city of Seattle. The variance establishes the noise limits and regulations for nighttime construction work. Variances for nighttime work require specific notifications and restrict certain types of noisy activities. An independent noise specialist oversees noise monitoring and reports on compliance directly to the city. If noise exceedances occur, WSDOT works with its contractor and the city to determine the best course of action to mitigate the construction activity.

The city of Seattle granted WSDOT a five-year noise variance in April 2018 for Montlake Project construction. The variance established the noise limits and regulations for nighttime construction work during the project. Each week, we publish a report listing the most recent nighttime noise data and any complaints received.

Timing

- Crews may work 24 hours a day, seven days a week throughout construction.
- Typical work hours for the loudest (impact) work:
 - o 7 a.m. to 10 p.m. weekdays
 - o 9 a.m. to 10 p.m. weekends and holidays

Commitments

WSDOT and the contractor will meet all WSDOT, federal, state and local regulatory requirements, and any contract and permit requirements. The contractor will follow best management practices, WSDOT standard specifications, and local ordinances to minimize noise. The Montlake Project Community Construction Management Plan provides examples of noise mitigation strategies and best practices.

Vibration

What to expect during construction

WSDOT is committed to minimizing activities that cause noticeable vibrations, but some construction work unavoidably causes vibrations. Construction activities that may cause noticeable vibrations include pile driving, constructing drilled shaft foundations and demolishing existing structures.

Commitments

WSDOT and the contractor will meet all WSDOT, federal, local and statewide regulatory requirements, and any contract and permit requirements. The contract for the Montlake Project specifies threshold limits for vibration levels, which the contractor is obligated to follow. You can read the Montlake Project Vibration Monitoring Plan to learn how the contractor tracks the level of ground vibration.

Air quality and dust

What to expect during construction

Certain construction activities may affect air quality near the construction site. Some of these activities include truck traffic, asphalt paving, earthmoving and demolition.

Commitments

WSDOT and the contractor will meet all WSDOT, federal, local and statewide regulatory requirements, and any contract and permit requirements. The Montlake Project contractor, Graham, developed a Fugitive Dust Prevention and Control Plan that provides additional details on activities to mitigate air-quality impacts during construction. Graham also developed a Concrete Containment and Disposal Plan that identifies methods for controlling concrete dust, including dust from saw-cutting concrete.

Views, glare and lighting

What to expect during construction

SR 520 construction causes temporary, and in some instances, permanent changes to views and the visual context of the SR 520 roadway within the existing landscape. Montlake Project construction activities will affect views of and the visual context of the Montlake area and Lake Washington. Some nighttime construction work requires lighting to work safely. During the winter months (November through March), there may be increased work-zone lighting at the beginning and end of the workday due to decreased daylight hours.

Commitments

WSDOT and the contractor will adhere to all WSDOT, federal, local and statewide regulatory requirements and/or as required by the contract documents. This includes WSDOT standard specifications. Per our Section 106 Programmatic Agreement, the contractor is required to limit the use of construction lighting as much as possible and keep necessary lighting shielded, directed downward, and pointed away from residences and other sensitive areas to the maximum extent practicable.

Traffic and transportation

What to expect during construction

SR 520 construction activities at times will cause traffic and transportation disruptions due to adjustments in existing roadways, temporary closures, detours, and changes to pedestrian and bicycle access through the work area. Additionally, construction equipment and activities may occupy part of the roadway and construction truck traffic will be present on the highways and local roads.

Conditions on the SR 520 mainline during construction will remain similar to previous conditions, with two general-purpose lanes in each direction between Montlake and the floating bridge. The project will require some short-term closures of SR 520, as well as nearby on- and off-ramps. Construction activities on major city arterials like Montlake Boulevard and Lake Washington Boulevard will require lane shifts on those streets.

Commitments

WSDOT requires the contractor to adhere to all WSDOT, federal, local and statewide regulatory requirements and/or other regulations as required by the contract. This includes WSDOT standard specifications and coordination with the city of Seattle. The contractor will minimize short-term road closures and limit necessary closures to non-peak traffic periods.

The SR 520 Montlake Project Neighborhood Traffic Management Plan includes more information about traffic-related concerns, traffic management during the construction period, and traffic-calming measures planned by WSDOT and the city of Seattle to minimize traffic impacts during and after SR 520 construction.

Utilities and services

What to expect during construction

SR 520 construction will require the relocation of some sewer lines and other utility lines along the SR 520 and I-5 corridor, including in the Montlake area. WSDOT and the contractor will notify potentially affected residents of work that may result in service interruptions or closures. One notable project was the replacement of a 54-inch-diameter city water line that runs under SR 520 just east of Montlake Boulevard.

Commitments

WSDOT and the contractor will adhere to all WSDOT, federal, local and statewide regulatory requirements and/or as required by the contract documents. WSDOT and the contractor will coordinate with the city of Seattle prior to any service interruption. We provide advance notice to potentially affected residents and other stakeholders before conducting work that may affect utilities or services.

Vegetation management and erosion control

What to expect during construction

Some trees and vegetation will be removed from the project area near SR 520 due to a number of activities, including building permanent project features and preparing staging areas for construction activities.

Commitments

WSDOT and the contractor will adhere to all WSDOT, federal, local and statewide regulatory requirements and/or as required by the contract. WSDOT has developed a Montlake Project Tree and Vegetation Management and Protection Plan to mitigate project effects to trees and vegetation. The plan identifies specific areas where trees may be removed or disturbed. WSDOT has also prepared a Temporary Erosion and Sediment Control Plan to reduce water quality effects from construction.

Over-water and in-water work (boating restrictions)

What to expect during construction

Construction of a new eastbound bridge (the West Approach Bridge South) requires an extensive amount of in- and over-water work. The contractor uses temporary work bridges and barges to remove the old bridge and install the drilled shaft foundations, bridge columns and bridge deck in and over Lake Washington.

Commitments

WSDOT and the contractor will adhere to all WSDOT, federal, local, and statewide permits and approvals, including but not limited to:

- Section 401 and 404 of the Clean Water Act
- Hydraulic permit approval
- Coast Guard permit requirements
- Seattle shoreline permit

In addition to requirements of the permits listed above, the contractor will adhere to a Water Quality Monitoring and Protection Plan that outlines a number of best management practices.

Boating restrictions: ensuring the safety of watercraft users on Lake Washington

To receive updates about boating activities and navigation restrictions on Lake Washington, email us at SR520Bridge@wsdot.wa.gov and ask to be added to the boater-notification list. Notification emails will be on an as-needed basis.

To stay safe around over-water work trestles, barge-mounted cranes and other heavy equipment, boaters, canoeists and kayakers should stay at least 100 feet away from all in-water construction equipment and structures.

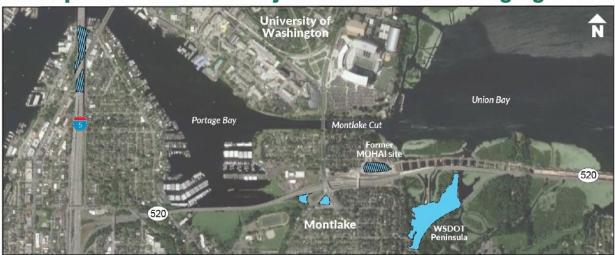
Construction staging and haul routes

What to expect during construction

The contractor stages equipment and materials both on land and on barges near the construction areas. Staging areas vary in size and function and are available for use by the contractor 24 hours per day, 7 days per week.

To build the new eastbound bridge, the Montlake Project contractor built a temporary work bridge. The "WSDOT Peninsula," next to the Washington Park Arboretum, is the primary staging area during Montlake Project construction, though crews also use other staging areas.

Anticipated Montlake Project construction staging areas



Staging areas available for entire Montlake Project

Staging areas available with limited use for Montlake Project

NOT TO EXACT SCALE

Haul routes and staging areas for SR 520 Montlake Project



Commitments

WSDOT and the contractor will adhere to all WSDOT, federal, local and statewide regulatory requirements and/or as required by the contract. SR 520 project contractors will work to limit the community effects of hauling and staging construction materials. Additional Section 106 coordination will be required if the contractor proposes to use haul routes outside of those previously identified in the Section 106 Programmatic Agreement (PDF 3.9MB)) coordination process.