**Portage Bay Bridge and Roanoke Lid Project**
**Neighborhood Q&A – November 2022**

## Purpose

This Q&A provides detailed information about the upcoming Portage Bay Bridge and Roanoke Lid Project and answers neighbors' questions about what to expect during construction. Specifically, this document responds to questions and feedback from the community about the draft Portage Bay Neighborhood Traffic Management Plan (NTMP) released in August 2022.

The Q&A addresses key themes and concerns related to neighborhood traffic (haul routes, work zone access, etc.), as well as broader construction-related topics. While certain details will not be determined until after the design-build contractor has been selected in late summer 2023, we've done our best to share what we know at this time.

## Topics covered

- Haul routes and neighborhood traffic
- Barges and marine construction
- Work bridge access
- Construction staging
- Contractor selection and incentives
- Contract requirements
- Health and environment
- Dust
- Noise
- Vibration
- Street closures, detours, parking and notification
- Bill Dawson Trail closure
- Neighborhood services
- Transit routes
- Community outreach and engagement

## Questions and answers

### *Haul routes and neighborhood traffic*

**Q: What will the designated haul routes be?**
To the maximum extent possible, the contractor will use **primary haul routes** – I-5, SR 520, and I-90 – for material hauling during construction to reduce impacts on local roads. Construction vehicles also will need to use some **secondary haul routes** (marked with the yellow dotted line on the map below) to go to and from the construction sites and staging areas, and back onto the primary haul routes. Secondary haul routes include some of the following arterial streets (designated by the city as truck routes) near the Portage Bay, Roanoke Park and Montlake neighborhoods:

- East Roanoke Street
- Delmar Drive East
- Boyer Avenue East
- Fuhrman Avenue East
- Lake Washington Boulevard East
- West Montlake Place East
- 19th Avenue East
- Harvard Avenue East

*Figure 1: Haul routes for the Portage Bay Bridge and Roanoke Lid Project*


**Q: Will there be construction hauling at night?**
Yes, there will be some nighttime hauling to reduce daytime traffic disruptions.

**Q: Will there be curfews or restrictions on when the contractor can haul materials?**
There will not be any curfews or time restrictions on when the contractor can haul materials. However, during nighttime work (between 10 p.m. and 7 a.m. Monday through Friday, or between 10 p.m. and 9 a.m. Saturdays, Sundays and legal holidays), the contractor will be required to perform mitigation measures to reduce nighttime noise. Some of these measures by the contractor include:

- Securely fastening truck tailgates.
- Using sand, rubber- or plastic-lined truck beds for all haul trucks to reduce noise, unless an exception is approved by WSDOT.
- Not using compression brakes.
- Not letting equipment idle for longer than five minutes.
- Not using pure-tone backup warning devices.

**Q: What commitments has WSDOT made to reduce the effects of truck traffic on designated haul routes?**
The SR 520 Program area includes a number of properties with designated historic status, as defined through Section 106 of the federal National Historic Preservation Act. This law requires WSDOT to work with affected stakeholders to collaboratively develop agreements to reduce a project's effects on historic properties. WSDOT made commitments related to truck traffic and haul routes in its final Section 106 Programmatic Agreement. Additional commitments are outlined in WSDOT's draft Community Construction Management Plan (CCMP). Some of these commitments include:

- Requiring that hauling on local streets occur on the designated secondary haul routes.
- Ensuring that roadway surfaces of the selected haul routes are repaired before construction begins and maintained throughout the duration of construction.
- Developing measures to minimize impacts or damage to street elements, like planters and traffic circles, from construction/hauling traffic.

Additionally, if the contractor proposes the use of haul routes outside of those outlined in the Section 106 agreement, additional coordination with stakeholders will be required.

**Q: What are the existing traffic counts in the neighborhood (on neighborhood arterials) and what is the expected increase in traffic from construction trucks?**
As part of the SR 520 Program's Final Environmental Impact Statement (FEIS) WSDOT developed a Transportation Discipline Report to study how SR 520 construction might affect transportation in and around project areas. As part of the report, WSDOT conducted a haul study assessing 20 locations along the proposed haul routes.

The chart below (Figure 2) summarizes the results of the haul study and the anticipated effects of construction trucks on local streets. The data shows the projected average daily volume and peak daily volume of construction trucks at given locations during construction. The data also shows existing average daily traffic volumes, including truck/bus volumes, at those locations.

In summary, this comparison chart shows how the project trucks would add to the overall traffic conditions in the project vicinity. The existing volume of trucks on typical urban arterial streets is in the range of 2% to 3% of total vehicles, which is reflected in the data for most locations in the project vicinity. During typical construction days, the number of project trucks would amount to less than 1% of total traffic at any location.

On days when peak construction activities occur, the volume of project trucks added to local streets would be similar to the existing volumes of trucks and buses at most locations. The additional trucks would range from 2% to 4% of existing vehicle volumes.

*Figure 2: Haul study results*

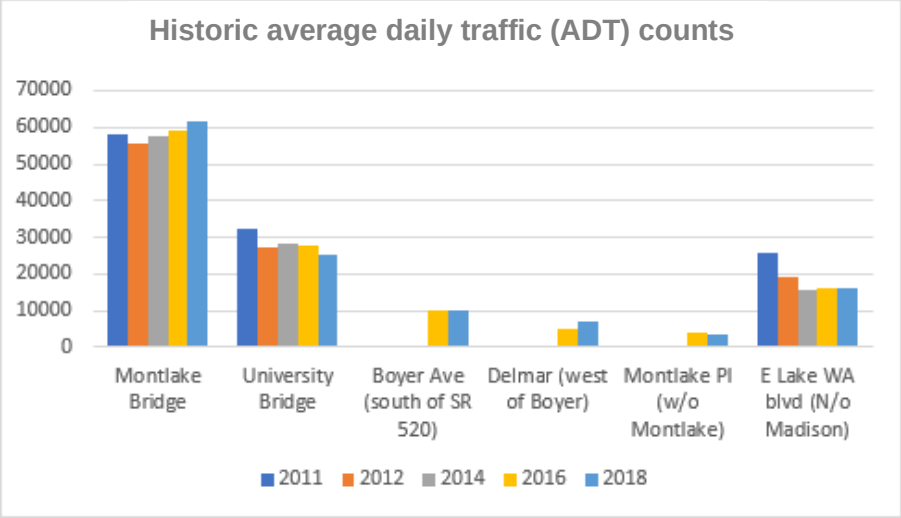
Exhibit 10-9. **Daily Construction Trucks on Local Streets**

| | | Existing Weekday | | | Project Average (Typical Day) | | Project Peak Activities (Infrequent) | |
|---|---|---|---|---|---|---|---|---|
| Map Location | Study Street | Total Vehicle Volume | Daily Trucks and Buses | Trucks Percentage of Total Vehicles | Daily Trucks | Trucks Percentage of Total Vehicles | Daily Trucks | Trucks Percentage of Total Vehicles |
| 1 | NE 45th Street | 36,700 | 1,430 | 3.9 | 15 | < 0.1 | 220 | 0.6 |
| 2 | Boylston Avenue East | 13,360 | 250 | 1.9 | 25 | 0.2 | 240 | 1.8 |
| 3 | Boylston Avenue East | 10,330 | 240 | 2.3 | 7 | 0.1 | 60 | 0.6 |
| 4 | Boylston Avenue East | 13,700 | 340 | 2.5 | 25 | 0.2 | 240 | 1.8 |
| 5 | Harvard Avenue East | 8,000 | 310 | 3.9 | 6 | 0.1 | 110 | 1.4 |
| 6 | Harvard Avenue East | 17,640 | 690 | 3.9 | 15 | 0.1 | 70 | 0.4 |
| 7 | East Roanoke Street | 7,050 | 160 | 2.3 | 30 | 0.4 | 170 | 2.4 |
| 8 | Fuhrman Avenue East | 7,240 | 170 | 2.3 | 20 | 0.3 | 230 | 3.2 |
| 9 | Boyer Avenue East | 5,940 | 130 | 2.2 | 20 | 0.4 | 230 | 3.9 |
| 10 | Boyer Avenue East | 6,180 | 140 | 2.3 | 15 | 0.2 | 210 | 3.4 |
| 11 | Delmar Drive East | 4,910 | 100[a] | 2.0 | 20 | 0.4 | 160 | 3.3 |
| 12 | East Lynn Street | 5,270 | 110[a] | 2.1 | 15 | 0.3 | 120 | 2.3 |
| 13 | East Roanoke Street | 4,630 | 140 | 3.0 | 20 | 0.4 | 290 | 6.3 |
| 14 | Montlake Boulevard East | 57,350 | 1,410 | 2.5 | 10 | < 0.1 | 100 | 0.2 |
| 15 | Montlake Boulevard East | 33,180 | 920 | 2.8 | 25 | 0.1 | 280 | 0.8 |
| 16 | Lake Washington Boulevard | 7,230 | 90 | 1.2 | 30 | 0.4 | 290 | 4.0 |
| 17 | NE 24th Street | 3,500 | 70 | 2.0 | 20 | 0.5 | 100 | 2.9 |
| 18 | 84th Avenue NE | 7,790 | 220 | 2.8 | 2 | < 0.1 | 10 | 0.1 |
| 19 | NE 28th Street | 4,390 | 60 | 1.4 | 5 | 0.1 | 20 | 0.5 |
| 20 | 92nd Avenue NE | 5,000 | 90 | 1.8 | 20 | 0.4 | 100 | 2.0 |

*Source: Fig.10-9 in the Final Transportation Discipline Report, included as part of the 2011 FEIS*

**Q: Have there been significant changes to average daily traffic volumes since 2011?**
Because the original haul study was completed in 2011, the Neighborhood Traffic Management Plan team recently reviewed the city of Seattle's annual traffic flow maps from 2011 through 2018. The team found that traffic volumes on several of the designated haul routes – Delmar Drive East, Boyer Avenue East, University Bridge, Montlake Boulevard East and East Lake Washington Boulevard – have remained consistent. Major changes in daily traffic volumes are highly correlated with changes in land use, infrastructure and zoning. There have been no significant traffic changes in the SR 520 project areas, as reflected in the chart below.

*Figure 3: Historic average daily traffic counts on neighborhood streets*




*Data source: City of Seattle's annual traffic flow maps*

**Q: Will existing traffic-calming measures on Boyer Avenue (e.g., curb bulbs and traffic circles) remain in place?**
Currently WSDOT and the Seattle Department of Transportation (SDOT) expect all existing traffic-calming measures on Boyer Avenue East to remain in place during construction. Because large garbage and delivery trucks regularly navigate this route, we do not anticipate any major changes required for construction vehicles. If temporary modifications are required, SDOT will need to review and approve the changes in advance. The contractor will also be required to restore the roadway after temporary modifications, if any, are no longer needed.

**Q: Would uniformed police officers help at certain locations? Will traffic police be directing drivers and ticketing as needed?**
Yes, occasionally uniformed officers or flaggers will assist with traffic flow and safely direct traffic through or around active construction areas. For example, flaggers will be stationed intermittently, as needed, at the five-way roundabout on Boyer Avenue East, East Lynn Street, and 16th Avenue East to safely direct larger construction vehicles through the intersection. Uniformed officers will also be on site during any traffic signal interruptions. Uniformed officers' primary role is to direct traffic and help ensure the safety of crews and the travelling public. However, if they observe illegal traffic movements, they are permitted to cite violators.

### *Barges and marine construction*

**Q: Is WSDOT going to dredge and remove the sediment in Portage Bay?**
To avoid disturbing sediment, WSDOT will not dredge or excavate large areas of the bay's bottom. WSDOT will disturb the smallest area possible within Portage Bay and will test and dispose of any contaminated material.

Sediment in the bay comes from many sources around the shoreline. Seattle Public Utilities maps show approximately 20 stormwater and combined-sewer outfalls that discharge into Portage Bay. Stormwater runoff from the Portage Bay Bridge represents a relatively small percentage of the basin's overall stormwater and sediment discharge. Runoff from city streets, public parkland, and commercial and residential properties surrounding the bay are significant contributors to sediment in the bay. The good news is that the new Portage Bay Bridge, like the rest of the reconstructed SR 520 corridor, will capture and treat the highway's runoff rather than let it flow directly into local waterways.

**Q: Why doesn't the SR 520 Program have a permit to dredge in Portage Bay?**
Dredging would introduce a substantial impact to the aquatic environment at the bottom of Portage Bay and WSDOT is committed to reducing or, where possible, avoiding impacts altogether. For these reasons, WSDOT is not proposing or applying for permits to dredge the bay.

**Q: Why isn't WSDOT applying now for a permit to dredge?**
As noted above, federal and state laws require WSDOT to limit our projects' environmental impacts as much as possible. Dredging would have significant environmental impacts relative to other potential construction methods. Additionally, the purpose of dredging is to improve depth and navigation. Because the project's goals and purpose do not include navigation, and because we already have permits for construction activities that minimize harm to the environment, a dredging permit would be difficult to justify to permitting agencies.

The SR 520 Program's final environmental impact statement incorporated design and construction methods that were the most cost-effective, time-efficient and environmentally friendly. Dredging did not meet those standards. Moreover, if WSDOT applied now for a permit to dredge, the process would significantly delay the project schedule and increase costs to taxpayers.

WSDOT would first need to update our National Environmental Policy Act (NEPA) evaluation and our Endangered Species Act consultation to reflect the impacts of dredging, including its effects on maritime traffic, aquatic life and water quality. This process could take anywhere from four months to three years, depending on whether the lead federal agency required a NEPA environmental impact statement.

We would also need new or updated local, state and federal permits, including from the city of Seattle, the Washington Department of Fish and Wildlife, the state Department of Ecology, the U.S. Army Corps of Engineers and the U.S. Coast Guard. The various permits would require WSDOT to do additional assessments of contaminated sediment, water quality, lakebed levels, lakebed impacts, and impacts to aquatic life. They would also involve additional public comment and review, potentially pushing the project back by two more years. More funding for mitigation to offset dredging's environmental effects would likely be required.

The Corps of Engineers' permit would require a plan for sampling, identifying, analyzing and handling contaminated sediments. The plan would show how and where our project could dredge and where dredged spoils would be disposed. This process could take up to a year or more to complete. All in all, delaying the Request for Proposal (RFP) to apply for the required permits and do the additional assessments to dredge Portage Bay could set the project back by one year, minimally, and up to five years, potentially. This would increase the project's costs with no guarantee the permits would be granted.

**Q: Is there soil contamination in the bay?**
Geotechnical testing was done in Portage Bay to help determine the foundation design for the new bridge. At that time, a portion of soil samples were analyzed for contaminants to determine proper land-based disposal of that material. Contaminant concentrations in the analyzed samples, if applied to sediment management under Washington Administrative Code 173-204-563, would not exceed sediment-cleanup levels for protection of freshwater benthic (bottom-dwelling) plants and animals.

During construction, the contractor will be required to dispose of contaminated soils in accordance with regulatory requirements. They will also be required to implement best management practices, such as those identified in their Water Quality Management and Monitoring Plan, to limit sediment disturbance and its associated turbidity.

**Q: Will the contractor be allowed to use barges in lieu of constructing work bridges?**
Because this is a design-build project, the prime contractor will propose the specific construction methods. We will not preclude the use of barges, and we expect that contractors will use them to the extent feasible.

In some cases – like delivering and removing materials or building smaller temporary structures – barges can be very effective. For example, in September 2022, we installed an in-water test pile in Portage Bay and used barges to deliver, install and remove the temporary pile. However, based on the water depth, proximity of the yacht clubs and other vessel traffic, extensive use of barges could negatively affect the surrounding area.

**Q: The current bridge was constructed using barges. Why can't WSDOT replicate the same process today?**
There are several key differences between construction of the original 1960s bridge and the upcoming Portage Bay Bridge. First and foremost, crews in the 1960s only needed to construct a new bridge. The new project will require crews to demolish the existing bridge while maintaining SR 520 traffic as they simultaneously construct two new bridges. The new bridges will be significantly larger, wider, and heavier. They will be more substantial structures built to modern seismic and environmental standards.

Additionally, parts of Portage Bay are very shallow, so heavy use of barges would require dredging, which currently is not permitted due to environmental considerations. Depths in the southern portions of Portage Bay range between marshland to a maximum of 6 feet of depth. Most of the area under the existing bridge is 3 feet deep or less. (*Source: National Oceanic and Atmospheric Administration nautical chart 18447*)

Two other significant changes in the last 60 years constrain our ability to use barges: the increase in marinas and boating traffic, and environmental permitting requirements (e.g., the Clean Water Act and the National Environmental Policy Act) that didn't exist when the original bridge was built.

**Q: Will construction alter the current navigational channels within Portage Bay?**
WSDOT plans to maintain a navigation channel during construction. The channel will provide approximately 10 feet of vertical clearance under the temporary work bridge throughout construction and allow small boat access to south Portage Bay. This clearance will be provided when the lake is at its highest level in the summer and will exceed 10 feet when lake levels drop in the winter. There will be some temporary closures of the navigational channel for safety reasons.

At the end of the project, the contractor will be required to show that its work did not affect the depth of existing navigational channels. Additionally, the new Portage Bay Bridge will have fewer in-water piers, allowing for wider horizontal clearance and improved vertical clearance.

**Q: Was a cost/benefit analysis done for using barges to build the bridge and haul material vs. building work bridges and using trucks?**
Since the Portage Bay Bridge and Roanoke Lid Project will be a design-build project, the design-build contractor will determine the construction approach, means and methods. WSDOT will award the design-build contract based on our assessment of the **best value**, which is determined by combining the contractor's **technical proposal** (how the project will be built) and the **price proposal** (how much the project will cost). Ultimately, it will be up to the design-builder to use a cost-benefit analysis to determine the most cost-effective approach.

### *Work bridge access*

**Q: Where will construction activities take place? How will the contractor access the work bridge?**
Construction activities for the Portage Bay Bridge and Roanoke Lid Project will occur at several locations along SR 520, from the Montlake Boulevard interchange west across Portage Bay to the SR 520/I-5 Interchange. The construction area also includes the westbound SR 520 on-ramp from Montlake Boulevard and the eastbound off-ramp to Montlake. The project's construction activities also will occur on surface streets near the Montlake interchange and SR 520/I-5 interchange, including East Roanoke Street and the Boyer Avenue East to Boylston Avenue East area. The work will include replacement of the bridges at 10th Avenue East and Delmar Drive East, as well.

The contractor will be able to access the Portage Bay work bridge from five different locations (see map below):

1. From the western shore of Portage Bay via the WSDOT-owned property on Boyer Avenue East, referred to as the Frolund property.
2. From the eastern shore of Portage Bay via property next to the current National Oceanic and Atmospheric Administration (NOAA) facility.
3. From barges or work platforms in Portage Bay.
4. From the eastbound SR 520 off-ramp to Montlake Boulevard.
5. From SR 520 itself.

*Figure 4: Work bridge access*

**Q: Could trucks access the work bridge using the WSDOT-owned property near Seattle Prep, which includes an existing gravel road connecting Delmar Drive to the Boyer/Roanoke intersection? Is it feasible for WSDOT to construct a temporary on/off ramp to I-5 to move trucks with materials to relieve pressure on neighborhood arterials?**
WSDOT has made educated assumptions about how the contractor might access work areas. However, it is ultimately up to the design-builder to determine the means and methods to construct their proposed design. Before construction begins, the contractor will be required to outline their finalized approach, including haul routes and work bridge access. The approach will be included in the updated Community Construction Management Plan and be subject to community review.

### *Construction staging*

**Q: Where will the contractor stage materials and equipment?**
We believe the contractor will stage equipment and materials on land near the SR 520 Program construction areas, including WSDOT right of way along and adjacent to SR 520, the WSDOT Peninsula, and WSDOT right of way under the Ship Canal Bridge (see map below). The former Montlake Market property will not be used for staging.

Staging areas will vary in size and function but will be available for use by the contractor 24 hours per day, seven days per week. WSDOT anticipates that the contractor will load and unload materials and equipment at work areas. In addition, the contractor will be able to store equipment and materials at identified construction staging locations, as shown on the figure below.

*Figure 5: Project construction and staging areas*


**Q: How will WSDOT minimize impacts to neighbors living near construction staging areas?**
WSDOT and the contractor will follow all WSDOT, federal, local and statewide regulatory requirements and/or regulations, as required by the contract. Required best management practices used on the project will include but are not limited to:

- Locating construction sheds, barricades, and material storage away from private properties, and avoid obscuring views of and from private properties.
- Avoiding short-term construction features where they would damage or require removal of mature trees.

- Installing temporary noise-barrier and visual fencing around the Roanoke lid construction area.
- During nighttime hours, prohibiting the use of pure-tone backup warning devices and limiting equipment idling to five minutes.

**Q: Will parking on Boyer Avenue East next to the Frolund property (located under the bridge on the western shore of Portage Bay) need to be removed to allow truck access?**
The contractor may restrict parking on Boyer Avenue East between East Roanoke Street and Everett Avenue East to accommodate construction.

**Q: When will construction staging at the WSDOT Peninsula along Lake Washington Boulevard end? What about at the Montlake Market property?**
Staging at the WSDOT Peninsula will end after all SR 520 improvements in Seattle are complete. This includes construction of the Portage Bay Bridge and Roanoke Lid Project, which we expect to finish in 2030 or 2031.

Staging on the former Montlake Market and gas station property will end when we complete construction on the Montlake Project in 2024. At that point, WSDOT plans to put the property up for sale. It is important to note that the Department of Ecology will need to determine that the current cleanup of contaminated soil from the previous gas station has been successful before the property can be sold. Regardless, the area will no longer be used for staging after Montlake Project construction is complete.

**Q: What will happen to the WSDOT Peninsula after the SR 520 Program is complete?**
Once the SR 520 Program is complete, Seattle Parks and Recreation will use the peninsula property to implement park improvements, known as the North Entry Project. Conceptual design options for Parks' North Entry project were presented at a June 2011 public meeting. Timing for the project is currently undetermined.

### *Contractor selection and incentives*

**Q: What are the benefits and drawbacks of a design-build contract?**
Design-build is a contracting method in which WSDOT completes a preliminary design, or a "conceptual design," as well as the contract requirements for the design and construction of the project. WSDOT then selects a contractor to complete the final design and build the project. Design-build contracting enables close collaboration between the designer and builder, which produces greater innovation and efficiency, and often allows the project to be completed faster and cheaper. However, the process can be challenging for the local community because of the lag time between WSDOT's conceptual design and the contractor's final design. In addition, the project's construction approach, means and methods are not completed until a design-builder (the prime contractor) is selected.

**Q: How is the contractor selected? Is WSDOT focused only on choosing the lowest bidder?**
WSDOT has five project goals that will be prioritized when reviewing proposals and selecting a contractor (see Figure 6 below). These include:

1. Minimize construction impacts to the community, such as noise, dust and vibration.
2. Minimize impacts to mobility: Consider all modes of travel – vehicular, bicycle and pedestrian traffic.
3. Project management collaboration: Through effective project management, provide a successful design-build project by collaborating with WSDOT and third parties to efficiently resolve issues at the project level.

4. Manage geotechnical conditions: Successfully manage challenging geotechnical conditions during design and construction to minimize risk to the project.
5. Urban design and landscape architecture: Improve the visual aesthetics and functionality of the project design, consistent with values established through community and agency outreach.

*Figure 6: Project goals*


When bidders submit their proposals to WSDOT, they are required to submit both a **price proposal** and a **technical proposal**. The technical proposal outlines how the contractor will build the project based on the project goals. The technical proposal is not the final design, but it details the contractor's design approach as well as any commitments that exceed WSDOT's contract requirements for the project. Those contractor commitments are then incorporated into the final contract.

For example, on the Montlake Project, which is also a design-build project, the contractor, Graham, included in its technical proposal a smaller work trestle than WSDOT had included in the conceptual design. Graham also included in its technical proposal the temporary eastbound SR 520 on-ramp from Lake Washington Boulevard, which significantly helped local traffic flow during the past several years of construction. When WSDOT awarded Graham the contract, those proposals were incorporated into the final contract.

Technical proposals are scored against the project goals and have a maximum number of technical credits. For any design-build project, WSDOT awards the contract based on the **best value**, which is determined by subtracting a proposal's technical score from the proposed price.

**Q: Are there restraints and/or incentives for the contractor to guide its work in a way that benefits both the state and the neighborhood?**
Yes. The contract will include general incentives for the contractor to go above and beyond the contract requirements to reduce construction effects on the community. Incentive payments are awarded on a quarterly basis throughout the duration of construction. Payments are based on the contractor's performance in avoiding or reducing impacts on the surrounding community, such as noise, vibration, traffic, potential hazards for people walking and biking, etc. Public feedback – whether complaints about impacts or praise for exceptional responsiveness – helps determine the incentive awards. Community members will have an opportunity to share and shape the contractor's strategies to limit construction impacts through the Community Construction Management Plan both before and during construction.

**Q: What type of experience will WSDOT require from project proposers?**
Qualified bidders must have experience on other projects of similar size and scope to the Portage Bay Bridge and Roanoke Lid Project. Both their experience and their approach will be considered in the selection process.

### *Contract requirements*

**Q: What requirements will be put on the contractor to help ensure work is conducted safely and in a way that minimizes impacts to the community?**
After the design-builder is awarded, the Request for Proposal serves as the project contract. Within the contract, WSDOT has multiple requirements that constrain what the contractor is or is not allowed to do. The first set of requirements comes from the project's various permits. For example, the Major Public Project Construction Noise Variance (MPPCNV) issued by the city of Seattle sets limits for the allowable nighttime construction noise levels.

The second set comes from constraints WSDOT writes into the contract. For example, the project team conducted test pile installations in summer 2022 to collect noise and vibration data. The data was then used to inform the noise and vibration limits in the contract.

The third set comes from the project agreements and plans included in the RFP as appendices; they become part of the contract. These include commitments made under Section 106 of the federal Historic Preservation Act, which mitigate adverse impacts to historic properties, as well as those made in the Tree and Vegetation Management and Protection Plan, the Community Construction Management Plan and the Neighborhood Traffic Management Plan. Lastly, any commitments the contactor makes in its proposal become part of the final contract.

Additionally, the contract includes a unique feature: an "incentive pool" for limiting construction effects. The incentive pool offers extra funding for the contractor going above and beyond what is required in the contract, such as reducing traffic disruptions in the neighborhood or maintaining bike and pedestrian paths. For example, on the Montlake Project, Graham – the project's contractor – added an additional screening fence around the previous Montlake Market and gas station to increase safety and make the area more visually appealing. This went above and beyond the contract requirements and was done with the community in mind. WSDOT reimbursed Graham using the incentive program, which further encouraged Graham to think creatively about ways to benefit the neighborhood in the future.

### *Health and environment*

**Q: What is WSDOT doing to mitigate environmental impacts from the SR 520 Program?**
WSDOT has done extensive work with communities and regulatory agencies to mitigate the environmental and recreational effects of our projects by restoring wetlands, improving creeks and ponds, building and enhancing trails, rehabilitating shorelines and restoring fish-migration corridors. We list many of the SR 520 Program's environmental mitigation and enhancement projects on our program website.

WSDOT also has contributed to the King County Mitigation Reserves Program, which allows participants to pool financial resources for larger restoration projects with greater environmental benefits. WSDOT is contributing to the county's program to mitigate a portion of the SR 520 program's impacts to wetlands.

**Q: How is WSDOT improving sustainability on SR 520 projects?**
WSDOT prioritizes design approaches that reduce steel and concrete requirements. For example, the Portage Bay Bridge's preliminary design substantially reduced the number of in-

water columns and the amount of concrete needed to build them. WSDOT also includes sustainability provisions to ensure that our selected contractor reduces emissions with sustainable construction practices, such as reducing, reusing and recycling construction materials.

Additionally, WSDOT evaluated greenhouse gas emissions in the 2011 Final Environmental Impact Statement. A detailed analysis is available in the Energy Discipline Report Addendum and Errata. The selected conceptual design, called the preferred alternative, will reduce congestion and increase transit use, leading to an estimated 5% to 10% reduction in vehicle miles traveled on SR 520 and a nearly 10% reduction in vehicles' greenhouse gas emissions when compared to a no-build option with no highway improvements.

**Q: How do you balance the health and wellbeing of the people against the needs of construction?**
Our various permit requirements and the requirements we place on our contractor help promote the health and wellbeing of the surrounding neighbors and environment. We also give financial incentives to our contractors to encourage them to exceed the requirements in the contract. Our goal is to build the project as safely and efficiently as we can while limiting the impact on neighbors.

Once the project is complete, several design features will improve the health and wellbeing of the nearby community, including:

- Reduced noise levels in the surrounding neighborhoods due to:
  - A reduced, 45 mph speed limit and quieter pavement that will lower the noise caused by tires on bridge pavement.
  - Special encapsulated expansion joints.
  - Higher-than-standard, four-foot solid barrier along the edge of the bridge.
- A community-connecting highway lid between 10th Avenue East and Delmar Drive East, with landscaped open space on top. The lid will also help reduce highway noise and reconnect the North Capitol Hill and Roanoke neighborhoods.
- Improved water quality from a new system for capturing and treating SR 520 stormwater runoff.
- Greater transportation options for those who walk, bike and roll from an extension of the regional SR 520 Trail across Portage Bay, a new bicycle and pedestrian crossing over I-5, and connections to the city of Seattle's nonmotorized trail network.

### *Dust*

**Q: How will increased dust near construction areas and along the haul routes be mitigated?**
Construction activities such as mobilization, general construction (particularly earthmoving operations and construction truck traffic), and demolition may cause air quality issues and generation of fugitive dust. Air quality can also be negatively affected by construction truck traffic and the hauling of materials over large distances.

WSDOT and the contractor will follow all WSDOT, federal, local and statewide regulatory requirements as well as the contract's requirements. A Fugitive Dust Prevention and Control Plan will be prepared by the contractor that provides additional details on activities to mitigate air quality impacts during construction. The contractor will also identify the methods for controlling concrete dust and saw-cutting residue in the Concrete Containment and Disposal Plan, which will be completed before performing any dust generating activities.

WSDOT will also require the contractor to implement the following best management practices to help prevent, control and manage fugitive dust and reduce short-term impacts to air quality:

- Apply water to active, dust-generating construction work areas as needed (and, if applicable, to other areas of the work site) to keep the soil damp and reduce fugitive dust without creating unnecessarily muddy areas.
- Use a water spray to reduce fugitive dust during the demolition of concrete structures, as well as the loading of construction trucks with demolition debris.
- Limit idling of equipment to reduce emissions.

Additional practices may be identified after the contractor is selected, including:

- When appropriate, installing tarpaulins on trucks to cover their loads before leaving the site to control the loss of material while the trucks are moving.
- Using efficient and modern equipment with appropriate emission-control devices (where applicable) to reduce exhaust emissions.
- Using low-sulfur diesel when possible.
- When possible, using cleaners with low hazardous air pollutant and volatile organic compound content such as water-based alkaline or microbial cleaners.
- Immediately containing spent material from construction activities such as sandblasting and disposing at an appropriate facility.
- Implementing methods for efficient paint application to reduce over-spraying, including proper training for painters.

The Puget Sound Clean Air Agency is the primary agency overseeing air quality and fugitive dust issues in the Seattle area. More information about their operations and enforcement authority can be found at the Puget Sound Clean Air Agency website.

### *Noise*

**Q: Will there be noise during the day and night, and will there be limits on the amount of noise?**
Construction of the new Portage Bay Bridge and Roanoke lid will happen during the day and sometimes at night. Daytime and nighttime construction hours will follow the Seattle Noise Control Ordinance (SMC 25.08.410). This ordinance defines nighttime hours as between 10 p.m. and 7 a.m. on weekdays and between 10 p.m. and 9 a.m. on weekends and legal holidays.

Night work is necessary for construction activities that affect traffic and safety. Nighttime is often the only feasible time to close lanes or ramps. WSDOT is committed to following noise regulations and using best practices to reduce noise. Daytime construction activities will be done within the daytime noise limits set by the city of Seattle. However, because nighttime work will also be needed to complete the project, WSDOT has applied for a Major Public Project Construction Noise Variance from the city. This will set the limit for the allowable level of noise at night.

**Q: Why will construction be done at night?**
WSDOT is committed to completing the project with as little disruption to our neighbors as possible while finding a balance with the traveling public. While we aim to do most construction during the daytime, some activities must be done overnight for the safety of the public and our crews, and to avoid causing major daytime traffic congestion and delays.

In some cases, round-the-clock work can shorten a period of higher disruption and lower the impacts to neighbors and the traveling public. When work does happen at night, WSDOT will require the contractor to use the quietest methods and equipment as possible, monitor noise levels with electronic noise meters, and offer hotel stays to those likely to be most affected. Additionally, no impact work – such as auger shaking, striking pavement with an excavator bucket, jack hammering, and impact pile driving – will be allowed during nighttime hours (10 p.m. to 7 a.m. on weekdays and 10 p.m. to 9 a.m. on weekends and legal holidays).

To the extent it keeps people safe, reduces periods of disruption, and shortens the duration of construction, limited use of night work can reduce overall impacts and costs to taxpayers, commuters, delivery drivers and nearby neighbors.

**Q: What is a Major Public Project Construction Noise Variance?**
The city of Seattle defines a "major public project" as a project for a public facility that has a substantial effect on public safety, health and welfare, and the provision of public services, including transportation. The Major Public Project Construction Noise Variance sets limits for the allowable nighttime noise for the duration of a construction project. The process is designed specifically for major public construction projects and is administered by the Seattle Department of Construction and Inspections (SDCI). This variance will apply only to the Portage Bay Bridge and Roanoke Lid Project.

WSDOT hosted an online public meeting regarding its draft noise variance application in January 2022. We updated the draft application based on public feedback and submitted the final application to SDCI in May 2022. SDCI held a public hearing on Aug. 14. SDCI issued a decision on Aug. 30 granting the variance with conditions. The decision received two appeals before the Sept. 16 deadline. A city hearing examiner has consolidated the two appeals and has scheduled a hearing for Feb. 6-9, 2023.

**Q: What is a temporary noise variance (TNV)?**
There will be limited occasions during project construction when an activity can be performed only overnight. These occasions require a “temporary noise variance” for the duration of that particular work activity. A temporary noise variance, which is granted by the city of Seattle, allows for work that cannot be performed under the limits of the Major Public Project Construction Noise Variance. One example is impact work for demolition. Temporary variances are granted when construction activities – say, over a weekend – may exceed the noise levels allowed under the Major Public Project Construction Noise Variance but nonetheless are necessary to complete the project.

Whenever the work to be done under a temporary noise variance could be disruptive to nearby neighbors, WSDOT and our contractor will offer short-term hotel accommodations to affected residents. The contractors handle hotel bookings and costs while residents are responsible for transportation to the hotel. Hotels generally will be located close to the neighborhood.

**Q: How will WSDOT ensure that the contractor stays within the allowable nighttime noise limits?**
Under the ongoing nighttime noise variance – the Major Public Project Construction Noise Variance – the city requires WSDOT to provide an onsite inspector to serve as an independent noise monitor anytime construction work occurs at night. The noise monitor may be an individual, firm or contracted SDCI staff member. The noise monitor is independent from the contractor and oversees the monitoring of construction sound levels as set by the Major Public Project Construction Noise Variance. Data from electronic noise meters is reported directly to the SDCI coordinator for noise abatement. In essence, the noise monitor’s key responsibilities are to monitor noise levels in real-time, ensure compliance, investigate complaints, and to stop

work in the event of extreme disruption. WSDOT plans to dedicate the resources needed to have a WSDOT-trained inspector on site to perform the duties of the independent noise monitor.

**Q: What is WSDOT doing to help homeowners who live near noisy construction?**
In 2018, the Washington state Legislature included grant funding to help homeowners who are affected by construction noise from the Montlake Project. Residents near noisy construction can use the funding for noise-reducing items, such as window inserts, headphones or air conditioning units. WSDOT has extended the program to the remaining Rest of the West projects, including the Portage Bay Bridge and Roanoke Lid Project. In the 2022 legislative session, lawmakers provided $1.1 million for noise-reducing measures on the Portage Bay project. This investment will expand the amount of noise-shielding fencing around the construction area and provide for other noise-reducing measures for eligible neighbors.

### *Vibration*

**Q: What methods does WSDOT use to protect homes from the potential effects of vibration during construction?**
WSDOT offers pre- and post-construction inspections of adjacent homes and affected historic properties located close to construction areas. The initial inspections will be performed before construction begins to capture a dwelling's existing conditions and create a baseline against which any changes from construction-related vibration can be measured. WSDOT will reach out to property owners within the construction area to schedule inspections in advance of construction.

The construction contract will establish vibration limits the contractor must adhere to. These limits were developed based on a 2013 analysis to identify properties most vulnerable to vibration effects. Data gathered from August and September 2022 test pile installations supplement the 2013 analysis. Before construction begins, the contractor will be required to submit a vibration monitoring plan. The plan must identify how construction activities will be carried out in a way that stays within the contract's vibration limits. The plan will also show the locations of the digital vibration monitors. The vibration monitoring plan will be an element included in the updated Community Construction Management Plan.

**Q. What happens if my home is damaged due to construction activities?**
WSDOT has created a vibration damage fund for construction-related damages under $15,000. This fund streamlines the insurance process and allows WSDOT to directly reimburse homeowners. If construction activities cause building damages over $15,000, WSDOT will provide reimbursement through the tort claim process. That process determines liability and compensates for damages and losses accordingly. Participation in preconstruction inspections will help speed up the tort claim process and help WSDOT confirm any potential damages caused from construction.

**Q: How will WSDOT make sure that extreme vibrations won't adversely influence hillside geology for those of us with houses built on the hillsides?**
Our geotechnical design team has been studying this issue for a long time to ensure our construction processes – including the use of heavy vehicles and the modification of the hillside for bridge-related structures – do not place unnecessary stresses on the area. Because of the area's history of landslides, the design and construction requirements will protect the new bridge (and nearby buildings and infrastructure) from damage. In addition, we will continually monitor the site for disturbances with instrumentation, surveys and inspections throughout construction.

### *Street closures, detours, parking and notification*

**Q: How will the contractor limit traffic impacts for those who drive, walk and roll in the neighborhood?**
During construction, the contractor will have limitations regarding the frequency and duration of lane and road closures. The contractor will be required to perform work within a limited number of weekend or nighttime closures of SR 520 – in one or both directions. The contractor will also be required to follow established best management practices for detours and closures. These include:

- Coordinating local street closures with the city of Seattle through city-issued street use permits.
- Coordinating closures/detours in advance with transit providers.
- Providing adequate signing for detours and closures.
- Having all detours, including all signage, in place before the closure of any road or lanes, and acquiring all detour agreements with the affected local jurisdiction. WSDOT will provide advance notices to neighbors regarding closures and/or detours.

**Q: How will those who walk, bicycle and roll through the project area be protected?**
The contractor will be required to maintain safe access for nonmotorized movement through the project area. The focus of bicycle and pedestrian routes during construction will include:

- Advance notification prior to any street or trail closures.
- Adequate signage (e.g., supplemental signage to traffic detour signage).
- Constrained and reasonable distances for bike/pedestrian detours.
- Creative solutions depending on severity of the impact.

If neighbors have concerns about bicycle or pedestrian routes during construction, they're encouraged to call the 24/7 construction hotline.

**Q: Will there be full closures of some streets near the work area?**
Yes, during construction there will be intermittent closures on local streets near SR 520, including Boyer Avenue East, Delmar Drive East, East Roanoke Street, 11th Avenue East and 10th Avenue East. The community will be notified in advance of planned road closures.

**Q: Will there be dedicated parking area(s) for the construction team's personal vehicles? What resources has WSDOT dedicated to monitor and ensure compliance?**
The contractor and its employees will not be allowed to use on-street parking in the project area for their personal vehicles. The contractor will provide its own parking spaces for employee vehicles. If certain vehicles require special access to the project, temporary exceptions may be made. However, if this happens, neighbors will receive notification in advance. We encourage neighbors to call the 24/7 construction hotline if they observe employees parking personal vehicles on neighborhood streets.

**Q: Is the contractor required to coordinate with the city of Seattle?**
Yes. For any type of traffic impact on streets, highways or trails in Seattle, the contractor is required to submit a traffic control plan. The plan is a safety plan for work in the public right of way. It must be reviewed and approved by WSDOT and SDOT before a road or street closure begins.

**Q: Are special events in the surrounding area (e.g., Husky football games, Seafair, UW graduation, etc.) taken into account when planning street closures and detours?**
Yes. Major events in the surrounding neighborhoods will be considered when planning for major road closures. Additionally, the contract includes some restrictions for specific events, including Seafair, UW graduation, large sporting events and the opening day of boating season.

**Q: How will neighbors be notified of planned street closures, detours and/or parking restrictions?**
WSDOT is committed to keeping the community informed of any planned and unexpected traffic effects, access closures and detours. This commitment will be affirmed as a requirement within the project contract. The project team will use the following tools to communicate with neighbors and the traveling public during construction:

- **SR 520 "Construction Corner" website**: WSDOT will post project information about road or access closures on the existing SR 520 Construction Corner website at sr520construction.com. The Construction Corner's construction map provides detailed information on current or upcoming construction activities that could affect nearby residents or travelers. The Construction Corner website is intended to be a dynamic resource for the community to receive the latest project information.
- **Project notifications**: WSDOT will provide advance notice to affected neighbors before the start of any closure or detour. Notification may be delivered by phone, email, door-to-door outreach, SR 520's Twitter account, SR 520's Rest of the West e-newsletter subscriber list, or other relevant methods.
- **24-hour construction hotline**: A hotline will be established by the project team before construction begins. The hotline will provide a 24/7 contact for community members with questions or concerns related to construction.
- **Regular construction update meetings**: The contractor will host regularly scheduled construction update meetings (likely to be held online) for members of the public to learn about upcoming construction activities, anticipated construction effects, and to ask project-related questions. These meetings may also cover topics such as upcoming street or trail closures, design changes, upcoming public involvement opportunities, etc.

### *Bill Dawson Trail closure*

**Q: Will the Bill Dawson Trail be closed during construction? What will the route alternative be for those who walk, bicycle and roll?**
A: The Bill Dawson Trail will be temporarily closed for public safety during construction. It will be improved and reconnected with new features once the project is completed. A well-signed detour route, likely via East Roanoke Street, Montlake Boulevard East and West Montlake Place, will be in place while it is closed.

Completion of the Montlake Project in 2024 will also improve pedestrian and bicycle connections through this area, and include 14-foot sidewalks on top of the new Montlake lid. These improvements will support nonmotorized movement while the trail is closed.

### *Neighborhood services*

**Q: How will construction affect local services, such as package deliveries, trash collection and emergency access?**
The contractor will follow established best management practices to reduce impacts to public and emergency services, including:

- Limiting access interruptions to public facilities affected by the project unless there is a public/construction safety risk.
- Cooperating with law enforcement and other emergency response agencies if accidents, fires, spills, or other emergencies happen in an area affected by the project.
- Working with emergency service providers to address their concerns about emergency access to and through the project corridor.
- Ensuring that access to all historic properties is maintained. Except for emergency situations, this includes providing 24 hours advance notice to affected property owners before any unavoidable interruptions of access.
- Consulting with affected property owners to address their needs, which may include the development of an alternate access strategy for short-term interruptions of access and longer-term detours.

### *Transit routes*

**Q: Will there be any effects on bus service in the area due to project construction?**
Project construction will cause some temporary bus service disruptions or detours. WSDOT coordinates with King County Metro and the city on any potential service changes and will provide advance notification when service changes occur.

### *Community outreach and engagement*

**Q: Why didn't the draft Portage Bay Neighborhood Traffic Management Plan include more specific details about project construction and anticipated impacts?**
The Neighborhood Traffic Management Plan is based on the **conceptual design** of the project. It is primarily intended to identify actions WSDOT and the city of Seattle can take before construction to mitigate traffic and mobility effects in and around the project area (for example, adding a raised crosswalk and flashing beacon at an intersection to help improve pedestrian safety and visibility). The plan also provides an outline of the project's major design elements and how, once the project is complete, they will improve safety and mobility in the neighborhood.

A lot of the information the neighborhood is looking for, such as the nuts and bolts for how the contractor will do its work, will be outlined in the Community Construction Management Plan. This plan is an **evolving document** that addresses overall construction effects to the neighborhood (e.g., noise, vibration, dust, lighting, and construction-related traffic). The Community Construction Management Plan also provides greater detail about hauling and staging.

The current draft plan is written to incorporate the project's permit requirements, WSDOT best management practices, and assumptions regarding the design-builder's potential means and methods for construction. Once the contractor has been selected, we require the contractor to update the plan based on the intended approach to building the project. We also require the contractor to solicit feedback on the plan from the community. The Community Construction Management Plan is a living document that will be updated based on your experience and feedback throughout the project's construction. You can view the current draft on our Construction Corner page.

**Q: What outreach has been done for this project already?**
Public involvement on the future of the SR 520 corridor began in 1997 with the Legislature's funding of the Trans-Lake Washington Study. As the decade proceeded, WSDOT developed draft (2006), supplemental (2010) and final (2011) environmental impacts statements on reconstructing the SR 520 corridor. The studies involved extensive public outreach and

engagement, including recurring engagement with more than 4,600 individuals, over 60 neighborhood councils, and myriad community groups, businesses, associations, and municipalities. Subsequent key community engagement processes include:

- **2011- 2012:** WSDOT worked with Seattle officials, design professionals and the public to refine the conceptual design for SR 520 in Seattle. This process included seven public workshops, thousands of public comments, and extensive coordination with the public and key partner agencies. After this, WSDOT published a Seattle Community Design Process final report (PDF 31MB). This report summarized design refinements incorporated into the SR 520 conceptual design.
- **2014 – 2015:** Following a legislative directive, WSDOT continued working with the city of Seattle and design professionals. Together, they recommended further analysis of elements that weren't resolved in the 2012 process. This led to several design refinements, such as a recommended bridge type for the Portage Bay Bridge. Another refinement was the addition of a biking and walking path on the future Portage Bay Bridge. This was part of a plan for more bicycle and pedestrian connections to existing and planned city networks. They also recommended improved open space on the Montlake lid.
- **2016:** WSDOT and the city of Seattle finalized a West Side Design Refinements final report (PDF 61.9MB). This report summarized the 2014-2015 outreach and analysis and contained the final concept design for future SR 520 elements in Seattle. WSDOT also worked with city of Seattle agencies and the Seattle Design Commission to refine the conceptual design of the Montlake Project elements.
- **2019**: The Portage Bay Bridge team conducted a six-month outreach process that included two public open houses, monthly public meetings, three community stakeholder workshops, and a June through November online open house. Participants in this process included residents living near the project area, local community councils, city of Seattle staff and city advisory groups, biking and pedestrian advocates, and other interested parties. The Community and Stakeholder Outreach report (PDF 4.2MB) summarized the outreach and the public's design ideas for key project elements. The report includes how WSDOT incorporated those ideas into a refined design concept and the verbatim comments from the community.
- **2022:** The Portage Bay Bridge team hosted an online public meeting in January focused on noise, two online public meetings for frontline neighbors in April focused on construction impacts, one online public meeting in August focused on local traffic, a three-month online open house and November in-person meeting focused on construction impacts.

**Q: What is a frontline neighbor?**
WSDOT defines a frontline neighbor as a neighbor who lives close to the project construction area and will likely be affected by construction impacts such as noise, vibration, air quality, and lighting. Because of the project area's unique geography, and the fact that noise travels across the Portage Bay, the Portage Bay Bridge and Roanoke Lid Project will include a larger span of frontline neighbors than previous SR 520 projects.

**Q: How will community concerns about construction be heard?**
WSDOT values feedback and open communication with the public. One of the ways WSDOT works with the community to help address construction effects is through the Community Construction Management Plan. The Portage Bay project's Request for Proposal will require the design-build contractor to update the existing draft management plan before construction starts. The plan outlines how the public can provide ongoing input into construction decisions to help avoid, reduce or mitigate the effects of construction activities on historic properties,

neighborhood residences and businesses. The Community Construction Management Plan will be shared with the neighborhood before construction starts.

Additionally, WSDOT plans to require the contractor to hold regular meetings with the neighborhood as construction progresses.

**Q: What is WSDOT doing to work with stakeholders to protect historic properties adjacent to construction?**
Since the start of the SR 520 Program, WSDOT has regularly consulted with stakeholders in compliance with Section 106 of the National Historic Preservation Act. A Programmatic Agreement was executed in 2011 that outlines the measures WSDOT and contractors must take to avoid, reduce and mitigate for project effects to adjacent properties that are eligible for listing on the National Register of Historic Places. One of these measures was the development of the Community Construction Management Plan to address construction effects such as traffic, noise, vibration and dust.

Other measures, including the 2013 Construction Noise and Vibration Report, analyzed the likely effects of planned activities so that appropriate limits and monitoring requirements for protecting neighborhood properties could be incorporated into contract documents. WSDOT continues to consult with the state Department of Archaeology and Historic Preservation, Section 106 consulting parties and members of the public to ensure compliance with the Programmatic Agreement for protecting historic properties.

**Q: Why does WSDOT ask for demographic information?**
Title VI of the Civil Rights Act of 1964 requires the Washington State Department of Transportation to ensure that everyone living in WSDOT project areas or relying on our services has the opportunity to be heard. To help WSDOT ensure that *all* community members can have meaningful, effective interactions with us, we ask them to *voluntarily* provide us demographic information. The information we receive helps us improve our community outreach to provide more inclusive access and engagement opportunities. For more information, contact the Title VI Coordinator with the WSDOT Office of Equity and Civil Rights at 360-705-7090.

**Q: How can I stay informed about the project?**

- **Visit** the SR 520 Program website for general information about the project.
  - https://wsdot.wa.gov/construction-planning/major-projects/sr-520-bridge-replacement-and-hov-program
- **Visit** the SR 520 Construction Corner website for the most up-to-date information on road closures and construction impacts.
  - http://sr520construction.com/
- **Sign up** to receive our *Rest of the West* email updates.
  - https://service.govdelivery.com/accounts/WADOT/subscriber/new
- **Follow** us on Twitter @wsdot_520 to get key news and updates.
  - https://twitter.com/wsdot_520

**Q: Who should I contact if I have questions?**
For questions about the SR 520 Program, including current and upcoming construction, please call the SR 520 Program information line at 206-770-3554 (M-F, 8 a.m. to 5 p.m.) or email us at SR520bridge@wsdot.wa.gov.