

Chapter 8: Other Considerations

The National Environmental Policy Act (NEPA) requires agencies responsible for highway projects to analyze a number of "big-picture" effects of these projects that extend beyond the immediate confines of the roadway right-of-way. These include:

- *Adverse effects that cannot be mitigated*
- *Irreversible decisions that would be made, or irretrievable resources committed, to building the project*
- *Tradeoffs between the short-term use of environmental resources and long-term benefits from the project*
- *Areas of controversy remaining to be resolved*

This chapter discusses each of these topics for the SR 520, I-5 to Medina: Bridge Replacement and HOV Project.

8.1 Are there any adverse effects that cannot be mitigated?

Many infrastructure projects—even projects that provide substantial public benefit, like this one—have some unavoidable negative effects on the natural and/or the human environment. WSDOT is strongly committed to avoiding, minimizing, and mitigating such effects whenever possible; previous chapters of this document include information about how project design has avoided and minimized impact and about the mitigation measures that could be used when avoidance is not feasible. Nevertheless, the SR 520, I-5 to Medina project would have several adverse effects that are not possible to mitigate completely. These include:

- Destruction of the existing Evergreen Point Bridge, which is eligible for the National Register of Historic Places and the Washington State Historic Register. Although WSDOT would mitigate the removal of the

bridge through photo documentation and other measures, it would no longer exist after completion of the project.

- Additional fill and shading in and over habitat in Portage Bay and Lake Washington. These effects would be greater under Options K and L, which would involve wider structures within the nearshore aquatic environment to construct the new SPUI. Option K would have the largest in-water effect: a 2.7-acre wedge of fill in the nearshore area of Union Bay, just east of the Montlake shoreline. While these effects would be mitigated, the existing habitat would be altered.
- The visual effects of the wider roadway, larger structures, and potential noise walls. With the build alternatives, SR 520 would be considerably wider throughout the corridor and somewhat higher across and east of Washington Park Arboretum (except under Option K). Option L, and potentially Option A, would be lined with noise walls in most locations other than the Evergreen Point Bridge. SR 520 would look considerably different than it does today. While the new structures would include architectural treatments to enhance their aesthetics, some people would likely consider at least some of the visual changes created by the new structures adverse. Options K and L would have greater visual effects than other alternatives in the Montlake and Arboretum areas because of the new interchanges.
- The need to pay tolls to cross the Evergreen Point Bridge. If the SR 520 project is built, drivers would have to pay to use the Evergreen Point Bridge—a crossing that is free today. While drivers would be receiving the benefit of a new, safer bridge and a more reliable commute in return for the payment, the toll would be a hardship for some lower-income people who are unable to use transit or take other routes.
- Construction and operation of the project would affect access to usual and accustomed fishing areas of the Muckleshoot Indian Tribe. The multi-year construction period would also affect fish habitat in the project area. WSDOT is working with the Muckleshoot Tribe on avoidance, minimization, and mitigation of effects on tribal fishing.
- Foster Island and other nearby areas have a high probability for the discovery of archaeological sites. WSDOT has conducted geoarchaeological research and investigation to determine the historic footprint of the island. Preliminary findings indicate that the new SR 520 alignment would likely run between the historic north and south islands, reducing the potential for encountering cultural resources; however, the area still holds considerable importance in light of its historic and prehistoric use, and the potential exists to encounter an unidentified site. WSDOT is working with DAHP and the affected tribes to develop mitigation measures to be taken if cultural resources are discovered during project construction. WSDOT is also conducting

ethnographic research to determine whether Foster Island could be determined eligible for the NRHP as a traditional cultural property.

- Effects from construction that would span a period of years, with Option K having the longest construction time frame and Option A the shortest. The primary adverse construction effects include work bridges in Portage Bay and Union Bay, closure of the Lake Washington Boulevard ramps during construction, closure of a portion of Pacific Street under Options K and L, and closure of the Delmar Drive East bridge. Construction of the Options K and L could add cumulative construction effects to those of Sound Transit's University Link light rail station and projects proposed under the University of Washington's master plan. Early action projects that may help improve traffic flow during construction will be considered during final design. WSDOT will work with Metro Transit and Sound Transit to find ways to avoid or minimize adverse effects on transit service.
- Multiple periods of construction disruption under the Phased Implementation scenario. The Montlake neighborhood would experience especially severe effects from phased implementation, with at least two distinct periods of intense construction activity—perhaps separated by years—directly affecting the community. Aquatic resources in Union Bay would also be affected more severely by phased construction, with in-water work lasting longest under Option K. Construction sequencing planned for the full-build scenario, which would overlap construction activities to reduce the total length of construction, would not be possible with phased implementation.
- More restricted navigation on Lake Washington. If the floating span of the Evergreen Point Bridge is replaced, the new bridge would not include a drawbridge. Thus, vessels taller than 70 feet would no longer be able to travel south of SR 520. This would be about the same as the current restriction on navigation south of the I-90 bridge across Lake Washington. Based on the extremely infrequent use of the SR 520 drawspan during recent years, this should not be a substantial hardship on people using the lake for recreational or commercial activities.

8.2 What irreversible decisions or irretrievable resources would be committed to building the project?

Some resources would be irretrievable after the project was completed, including the physical materials used to build the project: aggregate to make concrete and asphalt, steel to make rebar and structures, oil to make asphalt, and fill material. These are finite resources, but they are not currently in short supply. Some excavated soils not reused for the new roadway would be disposed of at landfills, and the space used for these soils would not be available for other wastes. However, there is adequate landfill space

available to accommodate all wastes that project-area communities will dispose of for the foreseeable future.

The energy used to build the project and keep it operating would not be retrievable. Energy that would be consumed includes the gasoline used by cars to drive on the roadway; the electricity needed to keep lights and electrical systems running; and gasoline, oil, and electricity needed for construction. Project construction is not expected to have a substantial effect on energy sources or fuel available in the region or the state.

8.3 What are the tradeoffs between the short-term uses of environmental resources and long-term gains (or productivity) from the project?

Another way of phrasing the question above is to ask whether the project's long-term benefits make it worth the short-term disruption and resource use involved in building it. In the case of the SR 520, I-5 to Medina Bridge Replacement and HOV Project, the answer is clear. The short-term cost of replacing the bridge and improving the nearby roadway would be a number of years of construction, which would create some level of noise, dust, and traffic congestion, even with the most careful planning and the most diligent use of mitigation measures. The long-term cost of not replacing the bridge, however, would be much greater: higher traffic congestion, regional economic losses, reduced quality of life in project area neighborhoods, and—most important of all—the ever-present likelihood that high winds or an earthquake could suddenly cripple the Portage Bay and/or Evergreen Point bridges. The potential consequences range from severe regional traffic disruption to injury and loss of life.

For more than 45 years, SR 520 has been a vital artery in the Puget Sound region's transportation system, carrying tens of thousands of vehicles across Lake Washington each day. It connects the major commercial centers on the Eastside with downtown Seattle, a connection that takes on increasing importance as Eastside businesses play larger roles in the state's economy. The importance of SR 520 to this area comes into focus when we think of its recent closures due to windstorms. When this occurs during peak commute hours, traffic seeking alternate routes sends the rest of the transportation system into a tailspin, creating gridlock up and down I-5 and I-405 as well as across I-90. Building safe, reliable, well-designed replacement bridges now will allow us to avoid the prospect of losing the existing bridges to an act of nature—a moment that will inevitably come if they are not replaced. For this project, the No Build Alternative is not a viable choice.

8.4 Do any areas of controversy remain to be resolved?

Like most projects of its magnitude, the SR 520, I-5 to Medina project has generated controversy in several areas. WSDOT is actively working with agencies, elected officials, and members of the public to resolve these issues. The Final EIS will identify how each of these areas has been resolved. They include:

- The SR 520 mediation process did not result in a single preferred design option for Seattle, as intended, but three separate design options. Each option represents a different set of choices and priorities for moving traffic and minimizing effects on neighborhoods. Although the legislative workgroup convened under ESHB 2211 has identified Option A+ as its preferred design for the corridor, some residents of communities adjacent to SR 520 are strongly opposed to this choice.
- Several resource agencies and tribes have identified concerns with the effects of the design options considered in this SDEIS. Some of the key issues they have raised are the effects of low bridge profiles through the west approach and the amount of in-water filling that would be required for Option K. These design features may result in difficulties with permitting the design options if modifications are not made to address agency concerns. Agency representatives worked with the legislative workgroup established under ESHB 2211, and WSDOT will continue to seek their input to ensure that their areas of concern are accounted for in project decision-making.
- Despite the findings of the Governor and State Legislature that the 6-Lane Alternative is the best solution for the region, some controversy still exists regarding the optimum number of lanes in the SR 520 corridor. Some groups advocate for a 4-lane corridor to replace only the existing number of lanes, while others support an 8-lane corridor that would expand general-purpose as well as HOV capacity.