

# Project Environmental Mitigation Costs – Executive Summary



**Fourth Edition**

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## Executive Summary

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The Washington State Department of Transportation (WSDOT) is committed to maintaining the existing infrastructure and improving the operations and safety of our transportation system. One of the integral parts of our project development and construction program is WSDOT's environmental policy and implementation efforts. As a part of being a good steward of the environment, WSDOT conducts all of its activities in accordance with the most current environmental protection practices. The department also meets or exceeds its commitments by avoiding, minimizing, or appropriately mitigating adverse environmental impacts. Fulfilling these commitments requires considerable effort during all phases of a project, including planning, development, construction, maintenance, and operation of our transportation systems and facilities. Strategic measures are taken in order to integrate the built and natural environments, which protects our state's environmental assets and resources. These measures are the "mitigation" we do to facilitate successful projects and meet our agency's environmental objectives and commitments.

The environmental documentation on our projects (such as an Environmental Impact Statement) communicates to the public and other agencies exactly how impacts will be *avoided, minimized, and/or mitigated*. Specific mitigation features and related costs are project specific and vary considerably based on the proposed work and location. Plans for mitigation generally take shape as WSDOT works with other agencies at federal, state, tribal, and local levels to develop specific conditions that projects can incorporate to ameliorate adverse impacts on the environment and other public values. Often, these conditions are expressly written into the project's legally required permits; for example, under the Clean Water Act or the Shoreline Management Act. Permit conditions might include wetland restoration, stormwater runoff treatment and flow control facilities, conservation of historic properties, and noise walls.

Three previous studies were conducted: one in 2003 that evaluated 14 projects, a second in 2006 that evaluated 7, and the third in 2009 that evaluated 14. This 2013 study evaluates another 11 projects and follows that same methodology in its development, including the cost items listed on page 11. Each case study has included one or more projects with features for the specific purpose of avoiding an impact, such as the placement of a retaining wall adjacent to a stream or wetland.

The projects selected for this study are more diverse than those evaluated in prior studies. Specifically, we attempted to include a range of projects that typify WSDOT's "Moving Washington" strategies: operate efficiently, manage demand, and strategically add capacity.

Context Sensitive Solutions are aspects of a project that are included to respond to community concerns and interests. Examples include treatments on retaining walls that mimic or emulate natural or cultural features of the area, different pavement patterns or colors, and unique signs at entrances to communities. They are incorporated into the other associated mitigation categories as applicable. This study attempts to highlight only those Context Sensitive Solutions

that were a significant part of the projects' mitigation costs. In addition, temporary (construction) mitigation efforts are included with the particular mitigation category as applicable. As with the previous studies, this one is intended to quantify the mitigation efforts associated with our highway projects and identify any significant findings.

Environmental mitigation costs on WSDOT highway projects are considered by some to be too costly, while others believe that WSDOT doesn't spend enough on mitigation. This presents the challenge of striking a balance between costs and providing the appropriate amount and type of mitigation. The case studies presented herein illustrate mitigation features provided for specific projects, their costs, and the drivers behind their incorporation into the projects.

Following are some of the key findings from this study:

- The percent of a project's cost spent on mitigation varies greatly with the project type and location.
- Projects west of the Cascade Mountains typically have higher levels of mitigation and related costs.
- 20% of the stormwater mitigation costs for this study are related to temporary mitigation efforts.
- Right of way costs associated with mitigation for this study are a relatively minor portion of the total costs for mitigation.