

### **Safety (Subprogram I2)**

In 1999, over 600 lives were lost on Washington State highways. The objective of this subprogram is to reduce and prevent; deaths, the frequency and severity of disabling injuries, and the societal costs of accidents. Therefore, safety projects on Washington State highways have two primary focuses.

The Accident Reduction Category of the safety program has two elements. The High Accident Location (HAL) program address spot locations. The High Accident Corridor (HAC) program addresses sections of highway greater than a mile in length for accident and severity reduction.

The Accident Prevention Category address locations that exhibit near misses or high risk of collision occurrence. It allows WSDOT to address potentially hazardous situations before they become a problem. This sub-category has four separate strategies for prevention of accidents. Risk identifies corridors with geometric and roadside elements that contribute to accident probability and increased accident severity respectively. The Signal and Channelization sub-category allows WSDOT to install signals and channelization at locations that would benefit from new traffic control devices. The At-Grade intersection sub-category is used to target high-speed multi-lane divided highway intersections that exhibit high accident potential. The interstate safety matrix targets improvement on the state's interstate system.

### **Economic Initiatives (Subprogram I3)**

The economic initiative subprogram targets highway improvements to support state, regional, and local economies. The improvements also support the tourism sector of the economy through Heritage Corridors, safety rest areas, bicycle touring routes, and traveler support services. Economic development is also addressed in this program through highway improvements that have direct benefits to local economies, especially in rural communities, supporting the creation and retention of jobs and increasing economic vitality.

### **Environmental Retrofit (Subprogram I4)**

This subprogram seeks to retrofit elements of the existing highway system to meet environmental requirements that have emerged since the highways were built. The environmental retrofit subprogram is in addition to WSDOT's ongoing commitment to avoid and minimize environmental impacts as a part of all highway system improvement, preservation, and operations projects.

#### **Stormwater Runoff Retrofit**

This strategy is used for implementing stormwater treatment and outfall improvements on prioritized segments of state highways that will not see corrective action through other WSDOT preservation and improvement programs. The purpose of retrofitting for stormwater is to lessen the adverse affects on nearby water bodies from the quantity or quality of roadway runoff. This strategy also includes maintaining an inventory and priority list of all WSDOT outfalls within designated areas.

### Fish Barrier Removal

State law (RCW 77.55.060) requires that an owner remove stream obstructions that prevent the free passage of fish. For the state highway system, these obstructions are typically culverts that convey a stream under a roadway.

Removing obstructions allows fish to migrate upstream and access habitat areas for spawning and other life cycle needs. The Washington State Department of Fish and Wildlife has surveyed or is surveying all WSDOT-owned culverts on the state's highway system to determine those that impede fish passage. These surveys characterize the habitat upstream from each obstruction; specific projects are then prioritized and scheduled based upon this information.



*Salmon sometimes appear within weeks of opening up a new culvert.*

### Noise Reduction

This strategy strives to reduce unacceptably high traffic noise levels on nearby residential neighborhoods that were built before mid-1976. Noise reduction is typically achieved by the construction of a noise barrier located between the highway and the neighborhood. This strategy does not address noise impacts created by new improvement projects. WSDOT evaluates noise impacts, conducts on-site inspections, and determines priorities. Project locations are prioritized based on a benefit/cost ratio. The ratio is calculated by dividing the noise mitigation benefits by the cost of the mitigation. This program is administered under Federal Highway Administration (FHWA) and WSDOT policies.



*Textured noise walls provide barriers to neighborhoods that have been impacted by highway traffic noise.*

### Air Quality

This strategy provides for the implementation of transportation control measures specifically identified in the Statewide Implementation Plan (SIP) for Air Quality or the Highway System Plan. Only projects located in areas where National Ambient Air Quality Standards are exceeded are eligible.

### Chronic Environmental Deficiency

This strategy provides for highway improvements to specific locations where repeated maintenance and preservation activities create unacceptable environmental impacts. Projects identified as chronic environmental deficiency problems are prioritized using an environmental retrofit index, which gives special weight to protection of fish habitat.