



# I-90 Snoqualmie Pass East - Hyak to Easton Corridor

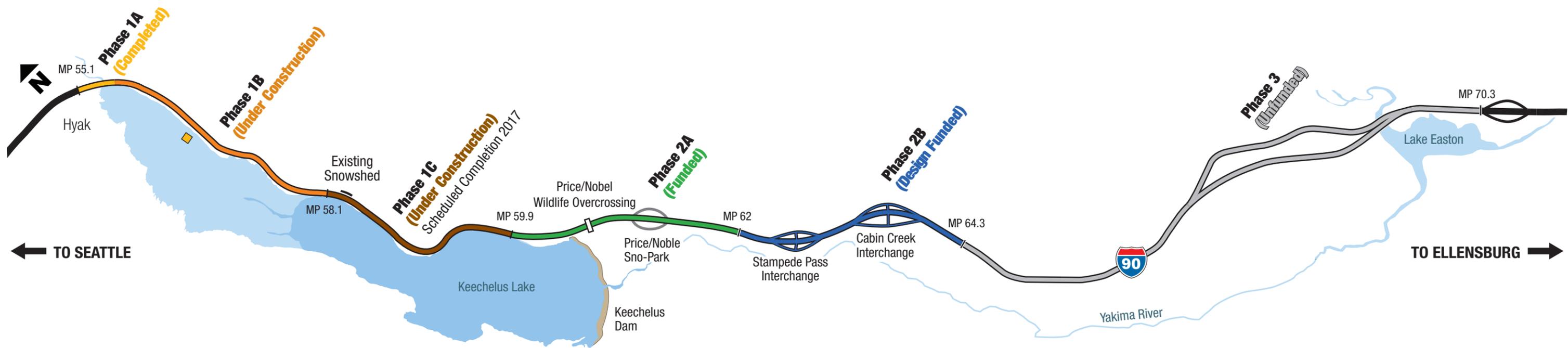
June 2012

## Add lanes & build bridges

### What is the purpose of the I-90 Snoqualmie Pass East Project?

Interstate 90 is a critical link connecting the large population and business centers of Puget Sound with the agricultural industries and recreational activities of eastern Washington. WSDOT will build a safer, more efficient and reliable interstate from Hyak to Easton, maintaining I-90 as a primary statewide transportation corridor. WSDOT plans to address project needs by reducing road closures due to avalanches, stabilizing slopes, replacing deteriorating concrete pavement, adding capacity and improving bridges and culverts to facilitate the movement of people, fish and wildlife.





## Phase 1 Hyak to Keechelus Dam

**Phase 1A** - Construction Budget: \$4.03 million

In 2009, KLB Construction (Mukilteo, WA) built a long-term detour bridge at Gold Creek for use during the next phase of construction. Crews also excavated over 250,000 cubic yards of material from Keechelus Lake to mitigate for the project's future impacts on the reservoir storage and to use in Phase 1.



Detour bridge at Gold Creek built to be used during Phase 1B construction.

**Phase 1B** - Construction Budget: \$112.5 million

In 2010, Max J. Kuney Company (Spokane, WA) started work on the first three miles of the five-mile improvement project from Hyak (milepost 55.1) to the Existing Snowshed (milepost 58.1). Crews are building a new six-lane highway to address project needs and extending chain-up and -off areas. Currently, drivers are using the new eastbound lanes, which opened fall 2011. This phase is scheduled to be complete in 2013.



The new expanded Gold Creek Bridges under construction of Phase 1B.

**Phase 1C** - Construction Budget: \$236.8 million

In September 2011, Guy F. Atkinson Construction (Renton, WA) started making improvements to the remaining two miles of the project from the Existing Snowshed to the Keechelus Dam vicinity (milepost 59.9). This work includes addressing project needs and replacing the Existing Snowshed. This phase is scheduled to be complete in 2017.

Atkinson Construction has proposed a design modification to replace the Existing Snowshed with avalanche bridges (Proposed Bridges) instead of the Proposed Snowshed as currently planned. Since the design modification was not evaluated in the 2008 Final Environmental Impact Statement (EIS), WSDOT is preparing a limited scope Supplemental EIS. The Supplemental EIS will compare and contrast the effects of the Proposed Bridges to those of the Proposed Snowshed (see insert).



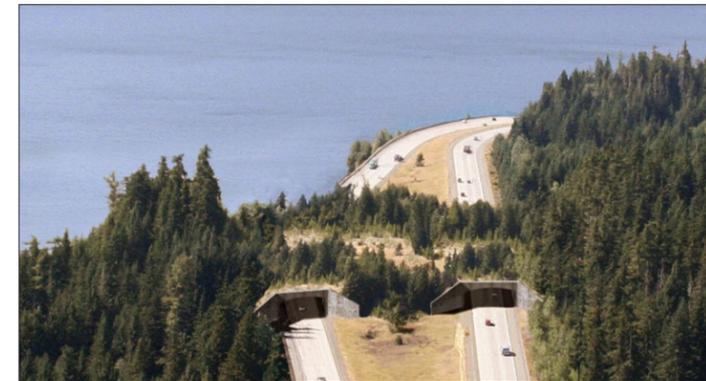
The Existing Snowshed will be replaced during construction of Phase 1C. Avalanche paths are shown in blue

## Phase 2 Keechelus Dam to Cabin Creek Interchange

Design Budget: \$9 million

**Phase 2A** - Construction Budget: \$95.6 million

WSDOT is using funding allocated by the 2012 Transportation Budget to design and build the next two miles of the I-90 corridor from the Keechelus Dam to the Stampede Pass interchange (milepost 62). This phase is consistent with the evaluation in the 2008 Final EIS. Phase 2A presents challenges with adding chain-up areas, constructing the first wildlife overcrossing and balancing impacts and mitigation to complex habitat such as wetlands and mature forest.



Design concept of wildlife overcrossing near Price/Nobel Creek for Phase 2A.

## Phase 2B

Construction Budget: \$131 million (unfunded)

WSDOT is using funding allocated by the 2012 Transportation Budget to design the next three miles of the I-90 corridor from the Stampede Pass interchange to the Cabin Creek interchange (milepost 64.3) and complete environmental review and permitting. Phase 2B presents challenges with constructing a highway over a shallow water table and rebuilding two outdated interchanges. WSDOT anticipates preparing a Supplemental EIS for Phases 2B and 3.

## Phase 3 Cabin Creek Interchange to Easton Vicinity

**Phase 3 - Cabin Creek Interchange to Easton Vicinity**

Design & Construction Budget: \$297 million (unfunded)

This phase of the project is unfunded. After the Supplemental EIS is complete, WSDOT plans to improve the next six miles of the corridor from the Cabin Creek interchange to Easton (milepost 70.3). Phase 3 addresses project needs and extends truck-climbing lanes.



Design concept of bridges at Hudson Creek proposed in Phase 3.

## Why is the I-90 Project area unique?

The I-90 Project area is located within the Snoqualmie Pass Adaptive Management Area, which is managed by the US Forest Service (USFS) to protect forest habitats, restore watersheds, and enhance fish and wildlife connectivity. To implement planned improvements in this area, WSDOT and its partners developed solutions that are compatible with the Snoqualmie Pass Adaptive Management Area Plan and meet the needs of people and wildlife. For example, as WSDOT removes existing bridges and culverts to accommodate additional lanes, it will rebuild these structures using proven designs to reconnect habitats and facilitate the movement of fish and wildlife. These measures will also increase safety by reducing wildlife/vehicle collisions. When complete, the I-90 Project will help create a healthier ecosystem in the central Cascades and provide a safer, more reliable transportation system.

While the I-90 Project has proceeded from preliminary concept through design and construction, organizations such as the Cascades Conservation Partnership, Mountains-to-Sound Greenway Trust, and the US Fish and Wildlife Service led a concerted effort to protect and enhance the surrounding forests. These efforts added approximately 75,000 acres of conservation lands within the central Cascades. WSDOT and FHWA continue to strive to align the I-90 Project with these conservation efforts.

## Who are I-90 Project partners?

The I-90 Project team has formed cooperative partnerships with county, state and federal agencies, tribes, conservation organizations, and universities. These partnerships allow WSDOT to coordinate closely with land managers, perform wildlife monitoring activities, and identify possible mitigation sites that align with project objectives.



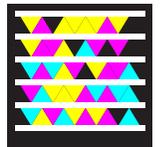
## Contact Information

**Brian White**  
WSDOT - Project Development  
PO Box 12560  
Yakima, Washington 98909

**Jason Smith**  
WSDOT - Environmental Manager  
PO Box 12560  
Yakima, Washington 98909

**Meagan McFadden**  
WSDOT - I-90 Project Communication  
PO Box 12560  
Yakima, Washington 98909

For more information visit:  
[www.wsdot.wa.gov/projects](http://www.wsdot.wa.gov/projects)



Toll-free: 1-888-535-0738  
E-mail: [i90Snoq@wsdot.wa.gov](mailto:i90Snoq@wsdot.wa.gov)  
[www.wsdot.wa.gov/projects/i90/SnoqualmiePassEast](http://www.wsdot.wa.gov/projects/i90/SnoqualmiePassEast)  
[www.wsdot.wa.gov/projects/i90/whats happening](http://www.wsdot.wa.gov/projects/i90/whats happening)

[www.wsdot.wa.gov/projects/i90/snoqualmiepass east](http://www.wsdot.wa.gov/projects/i90/snoqualmiepass east)



Americans with Disabilities Act (ADA) Information: Materials can be provided in alternative formats: large print, Braille, cassette tape, or on computer disk for people with disabilities by calling the Office of Equal Opportunity (OEO) at (360) 705-7097. Persons who are deaf or hard of hearing may contact OEO through the Washington Relay Service at 7-1-1.

Title VI Notice to Public: WSDOT assures full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination based on race, color, national origin and sex in the provision of benefits and services. For information on the Department's Title VI Program, please contact the Title VI Coordinator at 360-705-7098.



An expanded six-lane, 1,100-foot-long Snowshed was included in the alternative selected in 2008. Avalanche paths are shown in blue.



The design modification would replace the Existing Snowshed with eastbound and westbound, 1,200-foot-long bridges. Avalanche paths are shown in blue.

### What is the proposed design modification?

- The Existing Snowshed would be replaced by eastbound and westbound avalanche bridges (Proposed Bridges), instead of the Proposed Snowshed WSDOT included in the 2008 Final EIS.
- The design modification separates the highway from the hillside, and stabilizes loose materials.
- The design modification allows avalanches and debris to pass beneath the Proposed Bridges through a series of chutes that direct sliding snow, rock and debris away from the bridge piers.

### How do the Proposed Bridges meet the purpose and need for the I-90 Project?

- Reducing road closures and risks due to avalanches and rockfall is the primary need addressed by the I-90 Project improvements at this location. The Proposed Bridges are designed to allow avalanches and debris to flow under the highway, thereby reducing the number of road closures.
- The Proposed Bridges are required to meet the other project needs at the same level as the Proposed Snowshed.

### What are the benefits of the Proposed Bridges?

- The Proposed Bridges would be constructed using standard engineering designs and approved construction practices, reducing risk compared to the non-standard techniques and components required for the Proposed Snowshed.
- The Proposed Snowshed would require fire suppression, ventilization and lighting. By replacing the Existing Snowshed with the Proposed Bridges, WSDOT will not have to operate and maintain these systems resulting in a cost savings.

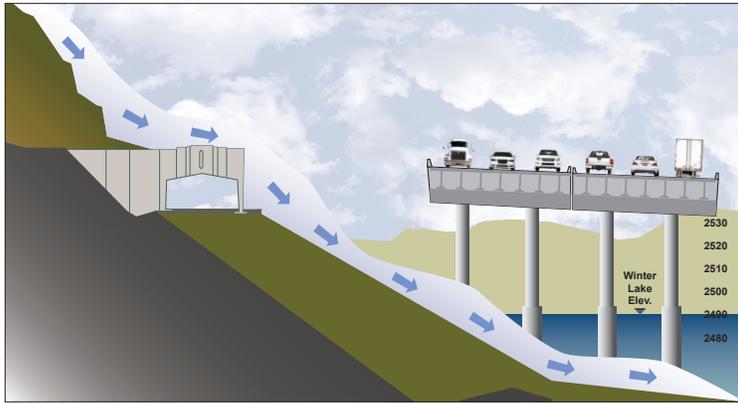
### What is a limited scope Supplemental EIS?

- The proposed design modification is limited to the area directly affected by the Proposed Bridges and associated rock work between milepost 57.9 and milepost 58.4.
- The scope of the Supplemental EIS is limited to the social, economic, and environmental effects of constructing and operating the Proposed Bridges instead of the Proposed Snowshed at milepost 58.1.
- The Supplemental EIS will be developed using the same process as the original EIS (Draft EIS, Final EIS, and Record of Decision), except that public scoping will not be conducted. WSDOT will seek feedback on the Draft and Final Supplemental EIS.

## How do the Proposed Bridges differ from those evaluated in the Draft EIS?

The alternatives considered in the 2005 Draft EIS included a design for bridges at this location that were aligned farther from the hillside and spanned a portion of Keechelus Lake. A Value Engineering Study conducted by WSDOT identified several serious concerns with this bridge design and it was eliminated in the Final EIS. These concerns included:

- The lake in this location is very deep, with a steep sloping bottom and poor quality bedrock. Support structures in the previous design would be more than 170 feet tall in some locations, making it impractical to build. This is addressed in the design modification by constructing the Proposed Bridges on roughly the same horizontal alignment as the existing highway.
- The previous bridge design was considered at risk from avalanche powder blast because the geometry of the Existing Snowshed and highway directed snow from avalanches toward the bridge deck. The design modification addresses this issue by removing the Existing Snowshed and material from the hillside to create sufficient clearance under the Proposed Bridges.



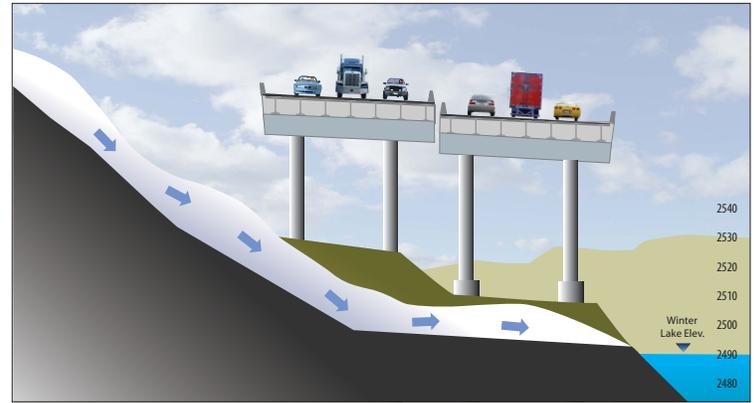
In 2005, WSDOT proposed a six-lane viaduct bridge at milepost 58.1. This design was eliminated in the Final EIS due to the characteristics of the lake bottom at this location and the risk from avalanche powder blast deflecting off the Existing Snowshed, toward the bridge deck.

## Why is this limited scope Supplemental EIS being prepared and who is involved?

- The Phase 1C contractor, Guy F. Atkinson Construction (Renton, WA), proposed a design modification that differs from the alternative selected in the Record of Decision for the I-90 Project.
- FHWA and WSDOT reviewed the 2008 Final EIS conducted for the I-90 Project and determined that a limited scope Supplemental EIS is required for the proposed modification to be considered.
- FHWA and WSDOT will be lead agencies for preparation of the limited scope Supplemental EIS. The US Forest Service and US Bureau of Reclamation will be cooperating agencies.

## Will the public have an opportunity to comment on the Supplemental EIS?

- A 45-day public comment period will begin when the Notice of Availability for the Draft Supplemental EIS is filed in the Federal Register.
- WSDOT will host three open houses during the comment period to solicit feedback from the public.



The design of the Proposed Bridges will raise the highway and excavate the adjacent hillside. This provides additional clearance and creates avalanche chutes which direct debris and avalanches away from the bridge piers.

## Contact Information

**Brian White**  
WSDOT - Project Development  
PO Box 12560  
Yakima, Washington 98909

**Jason Smith**  
WSDOT - Environmental Manager  
PO Box 12560  
Yakima, Washington 98909

|             |  |  |
|-------------|--|--|
| <b>2011</b> | <ul style="list-style-type: none"> <li>● <b>Summer</b></li> <li>● <b>Fall</b></li> </ul>   | <p>August – Contract awarded to Guy F. Atkinson</p> <p>Contractor proposed Avalanche Bridges</p>   |
| <b>2012</b> | <ul style="list-style-type: none"> <li>● <b>Winter</b></li> <li>● <b>Spring</b></li> <li>● <b>Summer</b></li> <li>● <b>Fall</b></li> </ul> | <p>January – WSDOT approved conceptual design</p> <p>March – FHWA filed Notice of Intent to prepare limited scope Supplemental EIS</p> <p>WSDOT initiates public involvement</p> <p>Continue NEPA analysis</p> <p>Late September-early November – Draft Supplemental EIS public comment period and open houses</p> |
| <b>2013</b> | <ul style="list-style-type: none"> <li>● <b>Winter</b></li> </ul>  | <p>Publish Final Supplemental EIS and issue Record of Decision</p>   |