The Oso Slide — WSDOT and FHWA Partnership Helps a Community Rebuild

On Saturday, March 22, 2014, a landslide a square mile in size raced downhill at 60 miles per hour, sending massive debris and concrete-thick mud through a neighborhood, across State Route (SR) 530, and into the North Fork of the Stillaguamish River near Oso, WA. Early LiDAR images indicated the debris to range from 15 to 75 feet thick.

Ultimately, the Oso slide killed 43 people, destroyed more than 40 homes, temporarily dammed the river, and cut off the main access to Darrington, Washington, to the east along SR 530. The slide changed the geography and hydrology of the area and the community of Oso forever.

What We Did

FHWA worked with WSDOT from the beginning. WSDOT, FHWA Washington Division, FHWA Headquarters in Washington, DC, and the U.S. Department of Transportation kept in touch with each other and with local, state, Tribal, and other federal agencies via routine communications – phone calls, texts, e-mails, meetings, site visits – that continued for weeks and months. Conversations evolved from search and rescue, to recovery, to finding detours and debris removal/handling to re-open SR 530.

Within 48 hours of the slide, the FHWA Division requested and USDOT Secretary Foxx released $1 million in “Quick Release” emergency relief (ER) funds for the road. Sensitivity to the disaster that shook the small community of Oso has been paramount. Ultimately, President Obama approved a major disaster declaration for the Oso mudslide and visited the site personally, offering condolences and support to the community of Oso. Debris removal became eligible for Federal Emergency Management Agency (FEMA) aid.

Funds from the FHWA ER program reimburse WSDOT for emergency work done in the immediate aftermath of the mudslide. FHWA will provide additional funds as permanent repairs are identified and cost estimates completed. FHWA’s ER program funds the repair or reconstruction of federal-aid roads and bridges damaged by natural disasters or catastrophic events.

Detours

Two SR 530 detours were established—the official one via I-5, SR 20, and SR 530 around the north side, and via Mountain Loop Highway (gravel road with 25 mph speed limit) around the south side, used for emergency and local access only.

WSDOT also established a debris removal contract, and FHWA Division staff helped the state understand the contract requirements. FHWA staff continues to be involved extensively in discussions with WSDOT, FEMA, Washington State Department of Emergency Management (WADEM), the FHWA’s Western Federal Lands Highway Division (WFLHD), and local officials on detours, debris removal/handling on SR 530, funding, liabilities, and environmental concerns.

WSDOT identified alternatives for creating a route through the area, including opening the Seattle City Light maintenance road, a one-lane power line gravel road along which pilot cars guide drivers through the route. WSDOT awarded a contract to maintain the roadway and establish traffic control on the Seattle City Light maintenance route, reducing travel time by 90 minutes for those living east of the debris field. Using the two official SR 530 detours. (continued…)
Approval of Emergency Relief Damage Inspection Reports

This chart shows the timeliness of approval for emergency relief (ER) damage inspection reports. Our goal is to approve 90% of these reports within 10 days of receipt. ER reports that exceed 16 days typically are delayed due to external permits and other factors. For example, delays in 2014 have been related to Oso Slide Rescue and Recovery efforts.

The Oso Slide — FHWA and WSDOT Partnership Helps a Community Rebuild (continued)

WSDOT sent out a request for qualifications for a design-build contract for the permanent repairs of the SR 530 on April 22, 2014. The goal: award the contract in late May, start work in early June, and have all work completed by early October 2014.

Permanent Repairs

Until permanent repairs can be complete, the SR 530 temporary bypass road, known as the “Seattle City Light Access Road” is open for local drivers, escorted by pilot car. This primitive, single-lane, temporary road with steep grades is open for passenger vehicles 24 hours a day. Washington State Patrol and private security staff assist with providing information to drivers and escorting vehicles on the route.

The Stillaguamish Tribe offered its assistance, informing FHWA that the damaged section of SR 530 is on BIA’s Tribal Transportation Program Facilities Inventory. This information increased the federal share of funding for permanent repairs to 100%.

Beginning in mid May, FEMA’s debris removal contractor will begin work along clearing the existing SR 530 roadway. The FHWA Washington Division continues to coordinate closely with WSDOT on the detour and permanent repairs.
The table above reflects the number of authorizations / modifications approved within certain timeframes since 2007. For FY 2013, our overall approvals within a two-week turnaround was 100%, exceeding our goal of 90%! 5-day FMIS approval turnaround is at 94% for 2013. (FY 2014 is in progress.)

### APPROVALS / ACTIONS

#### Approvals
- Approved TIGER 3 JBLM Phase IV PS&E and concurred in award of contract
- Approved I-90 Snoqualmie Pass East DDP supplement CRIP and Phase 2A Design
- SR 224/225 Intersection — Construct roundabout Benton City temp access break
- Approved Meyers Road Bridge replacement—time extension (BRS-D392[001 and 002])

#### Design Deviations
- I-5 Mobility Improvements SR 510 to SR 512. Tiger III project.
- I-405 SE 8th Street to SR 530 — Concrete Rehabilitation, MP12.38 to MP14.56
- Approved I-90 Two-Way Transit Deviation 26 HOV bypass

### Timeliness of Authorizations / Modifications

<table>
<thead>
<tr>
<th>Number of Days</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 5 Days</td>
<td>1936</td>
<td>1791</td>
<td>1655</td>
<td>2129</td>
<td>1167</td>
</tr>
<tr>
<td>6 to 10 Days</td>
<td>131</td>
<td>41</td>
<td>35</td>
<td>122</td>
<td>97</td>
</tr>
<tr>
<td>11 to 15 Days</td>
<td>18</td>
<td>7</td>
<td>1</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>16 to 20 Days</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20 + Days</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTALS</td>
<td>2089</td>
<td>1841</td>
<td>1691</td>
<td>2258</td>
<td>1273</td>
</tr>
</tbody>
</table>

The table above reflects the number of authorizations / modifications approved within certain timeframes since 2007. For FY 2013, our overall approvals within a two-week turnaround was 100%, exceeding our goal of 90%! 5-day FMIS approval turnaround is at 94% for 2013. (FY 2014 is in progress.)

### Inactive Percentages and Total Number of Projects

<table>
<thead>
<tr>
<th>State Inactive % Trend</th>
<th>2014 2nd Qtr</th>
<th>0.80%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014 1st Qtr</td>
<td>3.30%</td>
</tr>
<tr>
<td></td>
<td>2013 4th Qtr</td>
<td>2.90%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total # Projects / Trend</th>
<th>2014 1st</th>
<th>2013 4th</th>
<th>2013 3rd</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

FHWA’s quarterly target is to have under 2% inactivity on obligated Federal Funds. The quarterly inactive percentage is found by dividing all projects inactive (no expenditures processed) for 12 months or more by each state’s annual apportionments. For Fiscal Year 2014 Washington Division’s total annual apportionment is $654,304,963, divided by the un-expended balance $5,246,890.42 of our current obligated Federal Funds gives Washington Division a 0.8% un-expended obligation percentage. This percentage is down from over 3% starting off the year and is the lowest Washington’s inactive percentage has ever been!
Environmental Programmatic Agreements Streamline Project Delivery — A Success Story

- As has been reported previously, the Washington State Department of Transportation (WSDOT) and Federal Highway Administration (FHWA) Washington Division office implemented a statewide programmatic Endangered Species Act (ESA) consultation with the National Marine Fisheries Service (NMFS) in 2013. It addressed 24 NMFS-listed species and 18 critical habitats.

- Since January 2013, 15 WSDOT highway projects that would have required ESA consultation with NMFS used the programmatic. So far, the programmatic has a 100 percent use rate, significantly greater than the expected 70 percent use rate.

- Many of the projects would have required individual formal consultation. Seven of the 15 projects qualified for the Fast Track process—an expedited no-NMFS-approval pathway for projects with certain ecological benefits. This process allows NMFS five days to identify concerns with the project’s classification. If no concerns are identified, the project can proceed.

- The expedited review timelines since the program began are significant, and represent a phenomenal success story. The targeted timeframe is 30 days or less; 95 percent of the reviews were completed within two days. The remaining project review was completed within 10 days.

- The expedited review timelines since the program began are significant, and represent a phenomenal success story. The targeted timeframe is 30 days or less; 95 percent of the reviews were completed within two days. The remaining project review was completed within 10 days.

- What does this mean as a practical matter? This success represents a significant time saving compared to consultation time before the programmatic’s implementation, which averaged 30 days for informal consultation and more than 200 days for formal consultation. Cost savings of about 50 percent are associated with permitting (reduced staff time at both WSDOT and NMFS and a streamlined process for project delivery). Increased predictability for environmental considerations in design further adds to the cost savings. Half of the projects were fish passage barrier removals and stormwater retrofits, providing ecological benefit to NMFS-listed species and critical habitat.

- FHWA recently submitted a request to reinitiate formal consultation with NMFS on the programmatic. This re-initiation primarily occurred to increase the allowed fish passage replacement projects to accommodate a significant increase in these projects as a result of the court injunction on the culvert implementation case. We anticipate the current volume of projects using the programmatic could quadruple in the years ahead, significantly increasing time and cost savings.