



Hooskanaden Slide Update

May 16, 2019

Current funding

An estimated \$4 million in repair costs have been submitted to FHWA for Emergency Relief (ER) funding. This includes all recent and ongoing repair work as well as the planned reconstruction of the highway to its original alignment this summer and fall. FHWA funds are typically limited to repairing damaged sections of highway to their original condition and alignment.

Size and cost of past Hooskanaden slides

Annual maintenance

- Typical movement is about 1-4 feet
- Able to keep all lanes of roadway open
- Maintenance involves profiling edges and keeping pavement smooth
- Average annual cost of about \$75,000

Small slides

- Road surface drops 6-10 feet in elevation
- Able to keep at least one lane of highway open
- Small slides occur every 5-10 years (most recently 2006 and 2016)
- Cost per event \$1.26 million

Major slides

- Road surface may move about 100 feet west and 30 feet down
- U.S. 101 closed 1-2 weeks, traffic detoured onto Carpenterville Highway
- Major slides occur every 15-20 years (in 1977, 1995 and 2019)
- Estimated total cost per event of \$5-7 million

Concepts for Alternative Solutions & Costs

1. **Hooskanaden slide mitigation:** Improve drainage, increase slide-plane shear strength (by drilling and installing deep rock columns throughout the slide area), place jetty-sized riprap to protect toe of slide from ocean erosion. These measures would slow the movement, not stop the slide. Estimated cost: \$302,629,500.
 2. **Hooskanaden viaduct:** Construct a two-lane suspension bridge to span the slide area and rebuild the roadway to align with the bridge. The bridge would extend a total of 3,500 feet, including three spans (750 feet, 2,450 feet and 300 feet). Estimated cost: \$350,000,000.
 3. **Carpenterville Highway upgrades:** Widen the roadway, provide curve corrections, and repair a total of 98 slides along the highway. Estimated cost: \$439,880,000.
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The Hooskanaden Slide is located in Curry County along U.S. 101 at milepoint 344, about 12 miles north of Brookings. This area has seen several large and small slides over the past 50 years.

Following several days of rain, the hillside began moving again on Feb. 25. ODOT crews closed U.S. 101 later that day and detoured traffic over Carpenterville Highway for nearly two weeks. The slide dropped U.S. 101 about 50-60 feet in elevation and shifted the roadway more than 90 feet to the west, with most of that movement occurring in the first few days.



On Feb. 27, Tidewater Contractors Inc. began hauling rock to the slide location. Later that week, as the slide movement decreased, Tidewater began construction on a temporary road alignment. On March 9, after a 13-day closure, a single gravel lane was opened, with flaggers providing 24-hour traffic control. On May 6, two paved travel lanes were opened, with a reduced speed limit of 45 mph. A soil nail wall is currently under construction at the south end of the slide, and is scheduled for completion in late May. A total of \$1.12 million has been spent as of May 6.



During the closure, District 7 staff provided daily updates to community leaders, legislators, county commissioners, hospitals and others. Although Carpenterville Highway is not designed for truck traffic, ODOT helped coordinate fuel deliveries by piloting large trucks through the detour.

Next steps

ODOT plans to return U.S. 101 its original alignment, including three travel lanes, later this year. The project is currently in design and is scheduled for completion in October.

