

Statement for the record of the Joint SR 530 Landslide Commission, Meeting of November 4, 2014

By John Niles, Founder
Public Interest Transportation Forum
4005 20th Ave West, Suite 111
Seattle, WA 98199
206-781-4475
jniles@alum.mit.edu

I commend and appreciate the efforts of the Commission to follow up on the Oso tragedy.

I understand your mission to include developing recommendations that bear on preventing other loss of life and property in landslides in the vicinity of Oso.

So in the public interest I offer you the following information that I have developed through independent, unpaid research about another landslide-prone environment in Washington State in the same wet climate and unstable landscape as Oso, a corridor that is 30 to 50 miles away.

Fourteen daily passenger trains are at risk of being hit by a severe landslide on any rain-soaked day along the Puget Sound shoreline just north of Seattle. The Burlington Northern Santa Fe (BNSF) rail corridor of single and double track has high, unstable bluffs along one side of the track and the water of Puget Sound on the other side. Both the Oso landslide location and the landslide prone track corridor are marked on an attached map.

There have been hundreds of landslides on these shoreline tracks over decades of past history. Here is a viral YouTube video of a freight train being hit in December 2012:

https://www.youtube.com/watch?v=UeT0m-hpD_4

As a former aviation safety professional, transportation analyst, and concerned citizen of the region, I have taken a position that these passenger trains are too dangerous for any passenger to ride in the fall-winter-spring rains along the coast of Washington. Here is *Transportation Issues Daily* coverage of my position that includes my justification:

<http://www.transportationissuesdaily.com/analyst-its-too-dangerous-to-ride-amtrak-in-seattle-in-winter/>

And here is the Washington State DOT “Landslide Mitigation Action Plan Final Report” prepared mostly prior to the Oso event <http://www.wsdot.wa.gov/NR/rdonlyres/85894B65-81D7-4DC7-A8DF-521D22BA011A/0/LandslideMitigationFinalDocument.pdf> that documents the landslide prone tracks with detailed maps, but underplays the hazard. Civil engineering work is underway on some parts of the route to attempt stabilization, but I understand it is limited in its coverage of the hazardous sections, and may not prevent slides reliably even where built.

BNSF is mostly freight, but is paid by Amtrak, Washington State DOT, and Sound Transit to accept passenger trains, under Congressional and Executive Federal pressure. BNSF makes most of its money with freight, not passengers. However, the railroad is well compensated by government and Amtrak to intermix the seven round-trip passenger trains, which are shorter and run on published daily schedules, unlike the much longer freight trains that roll at various changing hours of the day and night.

The current hazard mitigation process is to detect landslides with trip wires 24 hours per day connected to a BNSF train control center in Fort Worth, Texas, and then halt all subsequent

passenger trains for 48 hours following a slide, called by BNSF a moratorium for safety. If a passenger train is hit by a landslide, the passengers call 9-1-1.

Most of the landslides are small, and are called mudslides locally. But there have been some big ones. There was one a year ago that derailed a passenger train in a minor way without injuries, described in this front page from *The Seattle Times*:

<http://www.bettertransport.info/pitf/Everett,WA-Landslidefrontpage,April7,2013.pdf> The bloodless analysis of declining ridership on this particular train in the previously referenced WSDOT Mitigation Report is striking: “While this decline in ridership and revenues was observed in most of Amtrak’s national network during April 2013, customers may have chosen not to ride the trains due to concerns for their safety after Amtrak’s long-distance Empire Builder train was partially derailed by a landslide near Everett, specifically on April 7, 2013.”

In recent memory, landslides have put freight trains into Puget Sound, as in January 1997, the Woodway slide: http://www.ecy.wa.gov/climatechange/images/landslide_woodway.jpg

There have also been large landslides on similar nearby waterfront bluffs that didn't happen to have tracks at the base, such as <http://bigstory.ap.org/article/1-home-destroyed-washington-state-landslide-0>

The fourteen weekday passenger trains are considered important status symbols for the region, but their function is replaced easily with substitute buses on nearby Interstate 5 during the intermittent 48 hour landslide moratoriums. Commuter train customers are sometimes directed to simply use regularly scheduled buses.

I have more information, including names and titles of government officials responsible for authorizing the operations of the trains. I have emails from many of them, pre-Oso, with assurances that they care, but with no acknowledgment of the life-safety hazard that rail customers are exposed to in the wet season. I've no evidence post-Oso that the official government attitude has changed toward passenger trains running below unstable bluffs.

I urge the Commission to take strong action toward resolving the shoreline railroad landslide issue I have described here, as part of its follow up to absorb lessons learned and take appropriate follow up action after Oso.

One possibility for Commission action is simply to identify and publicize the names and titles of the local, regional, state and federal government officials who could be charged with criminal negligence if a train is knocked in the water by a landslide similar to the one that killed people in Oso.

Respectfully submitted,



John Niles