



**Rock slide debris pre-ODOT blasting and clean-up.** The rock slide occurred on the northern end of a hill that extends along the east side of north-bound I-35 at approximately mile marker 50.



**Rock slide debris pre-ODOT blasting and clean-up.** Historic rainfall in 2015 is considered to be a major cause for this event. Mesonet data reported 6.5 to 7 inches of rain fell on June 17<sup>th</sup> and 18<sup>th</sup>, mainly the result of the remnants of Tropical Storm Bill.

## Fast Facts: I-35 Rock slide

**Date:** June 18<sup>th</sup> 2015

**Location:** I-35 north bound lanes near mile marker 50

**Rock Formation:** Pooleville and Mountain Lake Members of the Bromide Formation

**Rainfall amount on June 17<sup>th</sup> and 18<sup>th</sup>, 2015:** 6.5 to 7 inches

**Oklahoma Department of Transportation (ODOT) initiates blasting to remove loose rocks:** July 8<sup>th</sup>, 2015

**Total amount of rock removed from outcrop (initial fall and blasting):** approximately 12,820 tons

**Amount of explosives used by the ODOT in initial blast:** 400 lbs

**Current cost for clean-up:** \$1.4 million





**Rock slide debris pre-ODOT blasting and clean-up.** The strata in this area strike in a northwesterly direction and dip approximately 30° to the southwest. Inclined rock layers and the ledges they produce are more prone to falling than layers that are near vertical.



**Top of roadcut pre-ODOT blasting and clean-up.** This ledge near the top of the roadcut began to shift precariously after the initial rock slide. This was greatly accentuated by recent rainfall, and the original slope angle of the roadcut. ODOT used explosives in an effort to remove loose rocks, like those seen here.



**Rock slide debris post- ODOT blasting.** This particular section of rocks is in the Ordovician Pooleville and Mountain Lake Members of the upper Bromide Formation of the Simpson Group. It is comprised primarily of limestone with some shale beds and echinoderm fossils.



**Rock slide debris pile at the Dolese quarry.** About 13,000 tons of rock fell total, including the initial rock slide, blasting, and clean-up efforts. The debris was transported to the Dolese quarry and rock processing facility near Davis. The debris is located across the bottom of the hill in this photo, with OGS geologist David Brown for scale.



Google Earth image of the rock slide locality prior to June 18<sup>th</sup>, 2015.



Initial rock slide debris before subsequent ODOT blasting and loose rock removal.



Rock slide debris after ODOT's initial blasting.



Rock slide locality after all blasting and subsequent clean-up.