Potential Liability Associated with Unstable Slope Management Programs

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NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

Potential Liability Associated with Unstable Slope Management Programs

This digest was prepared under NCHRP Project 20-06, "Legal Problems Arising Out of Highway Programs," for which the Transportation Research Board (TRB) is the agency coordinating the research. Under Topic 24-02, Timothy R. Wyatt, Conner Gwyn Schenck PLLC, Greensboro, NC, prepared this digest. The opinions and conclusions expressed or implied in this digest are those of the researchers who performed the research and are not necessarily those of the Transportation Research Board; the National Academies of Sciences, Engineering, and Medicine; or the program sponsors. The responsible program officer is Gwen Chisholm Smith.

Background

State highway departments and transportation agencies have a continuing need to keep abreast of operating practices and legal elements of specific problems in highway law. The NCHRP Legal Research Digest and the Selected Studies in Transportation Law (STI) series are intended to keep departments up-to-date on laws that will affect their operations.

Forewor

Slope failures pose serious risks for state transportation agencies and federal agencies that own or maintain roads, highways, and/or adjacent property. These entities may be subject to liability for unstable slope related incidents involving administrative and judicial claims for personal and property damage. Many transportation agencies have adopted unstable slope management programs and standards as part of a larger effort to provide an efficient and effective methodology to prevent or control landslides or rockfalls. These programs typically use a ranking or rating scale to help determine which slopes should receive preventive or corrective maintenance.

This digest provides a detailed description of several specific unstable slope management programs, including the type of data collected and rating systems that are utilized. The digest presents an analysis of governmental immunity and discretionary waviers of immunity and the application of such to transportation activities and employees, especially in the context of highway slope failures. Pertinent cases are analyzed, with special attention given to expert testimony elicited to support or defend a claim.

This digest would be useful to federal and state transportation agency personnel particularly in the areas of street and highway construction, planning, maintenance, asset management, and attorneys practicing transportation law.

The National Academies of SCIENCES • ENGINEERING • MEDICINE TRANSPORTATION RESEARCH BOARD



"Unstable Slope Management Programs"

- Slope Hazard Rating/Ranking Systems
 - Rockfall Hazard Rating System (RHRS) Oregon DOT
 - Unstable Slope Management System (USMS) WSDOT
 - GEM-15 Rock Slope Rating Procedure NYSDOT
- Geotechnical Asset Management Programs
 - Unstable Slope Management Program (USMP) Alaska DOT&PF
 - Rock Slope Asset Management Program (RAMP) Montana DOT



State DOT Liability and Immunity

- State Tort Claims Acts waive immunity from liability for State DOT negligence
 - UNLESS performing a "discretionary function" that involves "balancing risks and advantages"
- Decreasing likelihood of discretionary immunity:
 - Planning
 - Design
 - Construction
 - Maintenance

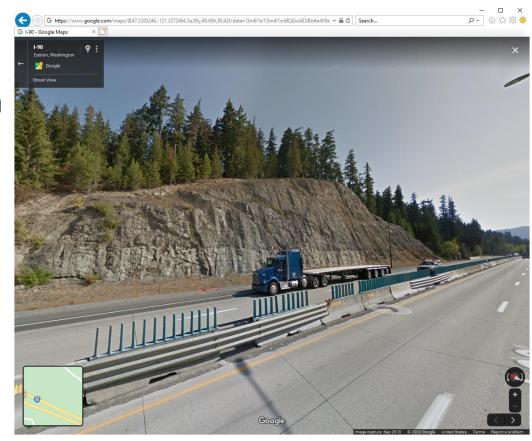


State DOT Duty to Maintain

- Long-recognized duty to maintain highway reasonably safe for travel
 - Duty extends to slopes adjacent to highway
- Not required to ensure absolute safety at a prohibitive or impractical cost
 - BUT notice of dangerous condition may give rise to duty to warn or close

Helm v. State, Dep't of Transportation (Washington Court of Appeals, 2014)

- Personal injury due to rockfall on I-90, milepost 58, through Snoqualmie Pass
- Slope scored slightly above threshold for full slope remediation in WSDOT USMS



Helm v. State, Dep't of Transportation (Washington Court of Appeals, 2014)

Pre-trial:

- Court ruled USMS qualified
- Left for jury to determine where excludes from evidence risks and advantages in defected

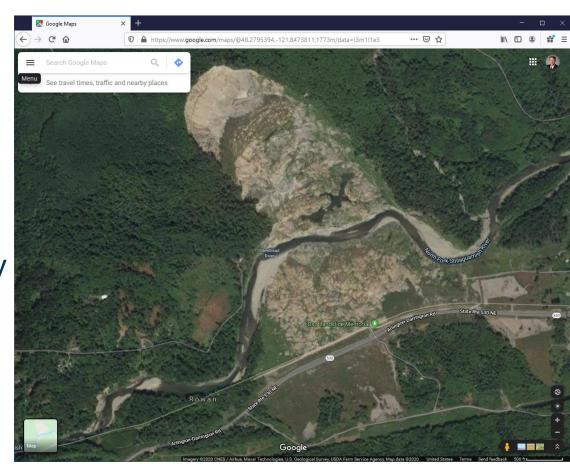
At trial:

- Court adopted broad definition of remediation to encompass "all work that relates to the slope"
- Effectively immunized WSDOT for slope maintenance
- On appeal: Rulings within discretion of trial court

23 U.S.C. § 407 (2018) excludes from evidence certain data collected for highway safety

Pszonka v. Snohomish County (Washington Supreme Court, 2019)

- Oso landslide buried mile-long stretch of SR 530
- Slope was not in USMS inventory, and had never caused a highway maintenance problem



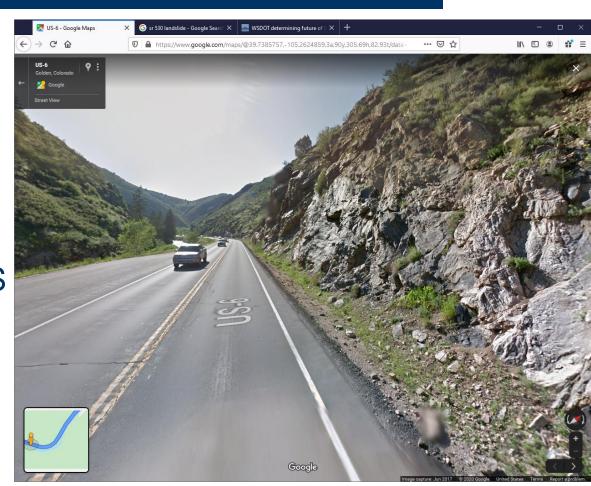
Pszonka v. Snohomish County (Washington Supreme Court, 2019)

Pre-trial:

- WSDOT moved to dismiss based on USMS discretionary immunity (duplicate *Helm* strategy)
- Plaintiff conceded that WSDOT did not negligently design or maintain highway
- Plaintiff argued that WSDOT had broader duty to proactively manage landslide risk (based on USMS)
- State of Washington consented to \$50M judgment to resolve all claims against State



- Rockfall injured bus passengers on U.S. Hwy 6
- Slope ranked 381st out of 700 slopes in Colorado RHRS





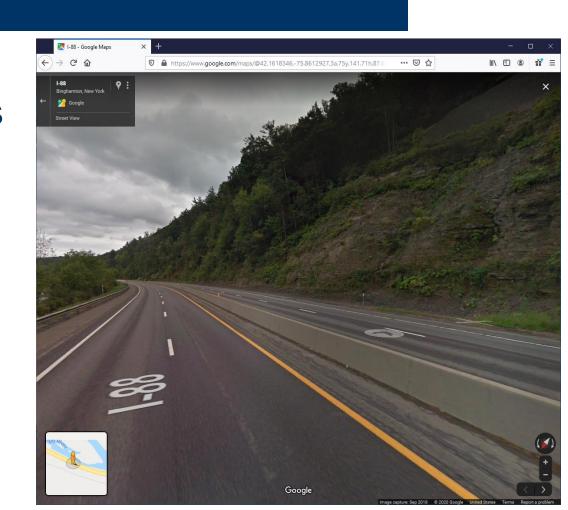
Medina v. State (Colorado Supreme Court, 2001)

Pre-trial:

- RHRS program manager testified that highway was designed in a dangerous condition—no duty to install protective measures not included in design
- Trial court disagreed: Injuries resulted from CDOT's failure to maintain highway
- Colorado Supreme Court remanded:
 - CDOT only has a duty to maintain slope in the as-designed "state of repair"
 - But failure to warn could be a design defect

Gray v. State (New York Court of Appeals, 2018)

- Mudslide injured travelers on I-88
- Slope ranked 361st in NYSDOT rockfall hazard ranking



Gray v. State (New York Court of Appeals, 2018)

- Plaintiffs argued:
 - Rockfall hazard rating put NYSDOT on notice of dangerous slope
 - NYSDOT failed to perform routine rockfall maintenance
- NYSDOT argued:
 - Rockfall hazard rating did not provide notice of "soil veneer failure"
 - Rockfall mitigation measures would not prevent mudslide
- Court: Plaintiffs failed to show that NYSDOT had notice of soil slope failure hazard



O'Grady v. State (Hawai`i Supreme Court, 2017)

- Personal injury due to rockfall on Route 11
- Injury site was "Class A" in RHRS
- "Minimal integration" between State RHRS program and maintenance district





O'Grady v. State (Hawai`i Supreme Court, 2017)

Trial court :

- Using RHRS to decide on large-scale rockfall projects could be subject to discretionary immunity
- Does not excuse maintenance district's failure to undertake "routine rockfall mitigation at operational level"
- BUT plaintiffs failed to prove resources available for rockfall mitigation
- Supreme Court remanded:
 - Rockfall mitigation at the operational level is not a discretionary function



Conclusions

- As project ranking tools, unstable slope management programs may be entitled to discretionary immunity for decisions re: capital-intensive slope remediation projects
- Not true immunity:
 - State DOT must demonstrate that discretion was actually employed—"balancing of risks and advantages" given limited funds



Conclusions (cont'd)

- Unstable slope management program will not excuse failure to perform routine maintenance
- State DOT has a duty to maintain highway and slopes—reasonably safe for travel
 - Same general state of repair (safety) as designed
- Geotechnical asset management programs that consider a range of maintenance measures can help demonstrate the State DOT is not negligent

Questions?

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