

Project Title: Toxic Transportation Spills: Invisible or Ignored?

Principal Investigator:

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Project Summary

The risk of transportation-related toxic spills increases the challenges and potential costs of operating the intermodal network of highways, rails, waterways, airports, and shipping terminals in the U.S. These risks are exacerbated by traffic congestion and aging infrastructure, ultimately jeopardizing American competitiveness in the global economy. In the 10-year period between 2003 and 2012, there were 161,079 hazardous waste transport incidents in the U.S., totaling more than \$701 billion in cleanup/mitigation costs.

This research project is a follow-up of a larger NCITEC project. After extensive vetting of 5,555 U.S. serious transportation spills in a decade, it was discovered that only 3% of the accidents were communicated to the public through social media or news media. This unexpected finding requires explanation and further exploration. The earlier project systematically analyzed the social media presence and online influence of 2,782 transportation companies and U.S. newspaper coverage of all 5,555 spills. Most companies had no social media presence; no company communicated directly about any spill.

A national survey of stakeholders will explore whether, how and why serious transportation spills are communicated to the public. The survey will be sent to two samples: reporters in the first sample, and other stakeholders in the second sample (DOT and transportation company representatives and transportation researchers).

This project seeks to identify reasons why the most serious commercial transportation spills are rarely communicated to the public, communication gaps in the cleanup/mitigation process, and stakeholder recommendations for improving the transportation industry and public safety. The findings will also highlight how the public learns about transportation toxic spills. The project will shed light on how communities and professional communicators could improve emergency preparedness based on shared information about past transportation spills. Communication improvements in a coordinated response to spills could reduce damaging impacts including health threats.