

NCAR

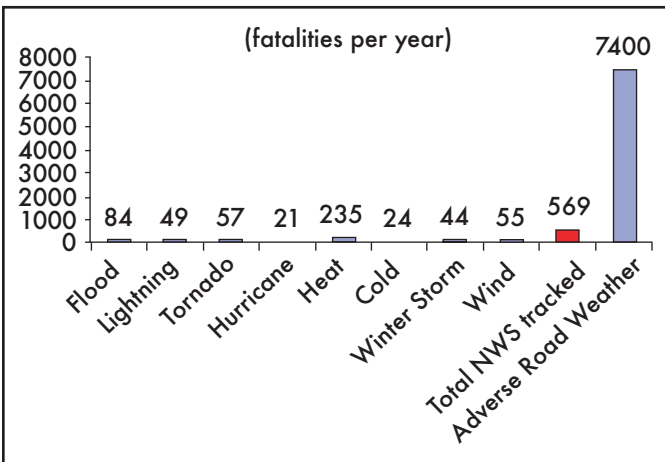
Surface Transportation Weather Research & Development

"An improved strategy for addressing the impacts of weather on surface transportation has the potential to help mitigate roadway congestion, save lives, and improve the environment."

National Research Council

Societal & Environmental Impacts

In the U.S. each year, more than 7,000 highway deaths and 470,000 injuries are associated with poor weather-related driving conditions. The economic toll of these deaths and injuries is estimated at \$42B per year! Weather plays a role in about 28% of the total crashes and 19% of the total fatalities. Drivers endure over 500 million hours of delay per year due to poor weather. State and local agencies spend more than \$2B on snow and ice control alone. The societal and economic impacts of adverse weather on the highway system are huge and the inefficient use of anti-icing chemicals negatively affects the environment.



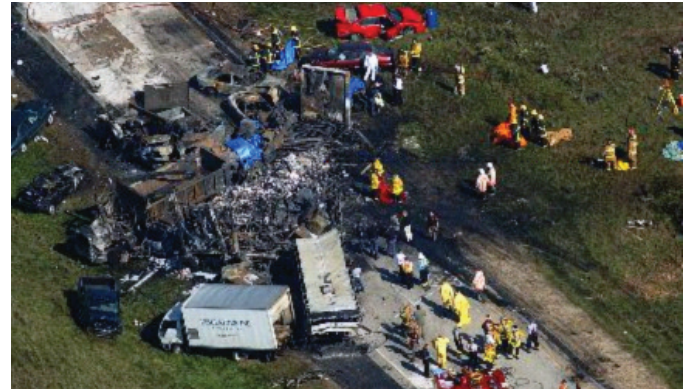
The national toll of adverse road weather

Investment

According to the 2004 National Research Council's report titled "Where the Weather Meets the Road: A Research Agenda for Improving Road Weather Services", the investment required to satisfy the unmet needs for improved road weather information is at least \$25M per year.

Opportunity

The current transportation reauthorization bill (SAFETEA-LU) provided initial funding (authorized at \$5M/year) to establish a Road Weather Research & Development Program (Sec. 5308) to begin developing solutions that will lead to new technologies aimed at improving the utilization of advanced weather and road condition information by transportation system users and operators. New decision



Fog related crash

support systems focused on traveler information, traffic and incident management, winter maintenance, highway operations, and emergency management are required to significantly improve highway system safety, capacity and efficiency. The initial limited funding has been utilized successfully as it has provided opportunities to define requirements, develop operational concepts, and demonstrate advanced surface transportation weather and road condition products in dozens of states; however, an increase in funding is required to develop, test, and expedite the implementation of solutions nationally - solutions that will save lives, reduce congestion, and improve the environment.

"The motoring public demands passable roadways everyday no matter what the weather brings!"

Tony Kane, American Association of State Highway and Transportation Officials (AASHTO)

Benefits

Improved safety, capacity, efficiency and mobility, of the national roadway system will benefit the general public, commercial trucking industry, State DOT traffic, incident and emergency managers, operators and maintenance personnel. Environmental benefits will be realized due to improved efficiency in the use of anti-icing and deicing chemicals for winter maintenance, reduced congestion, and improved mobility.

For More Information, Contact:

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