Reducing speed and speeding recidivism: lessons from NTSB investigations

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Office of Highway Safety
NTSB: Who We Are and What We Do

• Independent federal agency
• Investigate civil aviation accidents and surface transportation events
• Determine probable cause and issue safety recommendations
• No regulatory authority
• Five Board Members nominated by the President and confirmed by the Senate to serve 5-year terms
• A staff of more than 400 investigators, analysts, researchers, and others support the mission
Our Mission: *Making Transportation Safer*

We focus solely on safety. We make recommendations that could improve safety across all modes of transportation.

- We do not determine blame or liability
- We do not investigate intentional criminal acts
Speeding: Critical Highway Safety Issue

- 30% of fatalities involve excessive speed
- Comprehensive strategies are needed
- NTSB has issued numerous recommendations regarding speeding

Source: Department of Transportation, National Roadway Safety Strategy
North Las Vegas, Nevada Crash

- January 29, 2022, 3:12 p.m.
- Intersection of North Commerce St. and West Cheyenne Ave.
- Primary collision between Dodge Challenger and Toyota Sienna
- Six vehicles containing 15 occupants involved
- Nine fatalities
Crash Vehicles

2013 Toyota Sienna

2018 Dodge Challenger
Dodge Driver’s Actions

- Dodge Challenger ran stop sign and passed slow truck
- Increased speed until impact
- Red traffic signal for 29 seconds prior to entering intersection
- Did not apply brakes
- Impact at 103 mph
- Driver was impaired by effects of cocaine and PCP
Driving History

• History of risky driving behavior
• Multiple convictions between 1984 and 2017
• Seven speeding violations in past 5 years
  • Only one appeared on his official 10-year driving record (April 2017)
  • Four pled down to illegal parking

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Probable Cause and Safety Issues

- Dodge driver was impaired and was a repeat speeder (risky driver)
- Traditional countermeasures for speeding less effective
- Need for technology to prevent speeding
- Need for countermeasures for repeat speeding offenders
Technology to Prevent Speeding

- **Speed Safety Cameras (Automated Speed Enforcement, ASE)**
  - Proven countermeasure
  - Since 2017, NTSB has recommended states remove all ASE restrictions

- **Intelligent Speed Assistance, ISA**
  - Speed limits determined using onboard cameras and map databases
  - In-vehicle technology and/or aftermarket device
  - Can be passive or active – both have safety benefits
  - NTSB recommendations on ISA since 2012; new recommendations issued in 2024
Recommendations: Speed-Prevention Technology

To NHTSA:

• Require ISA systems that, at a minimum, warn the driver when speed limit is exceeded
• Educate the public about the benefits of ISA to mitigate speeding

To Automakers:

• Install as standard ISA systems that, at a minimum, warn the driver when speed limit is exceeded
Speeding Recidivism

- Dodge driver was a repeat speeding offender, but his driving record was inaccurate.
- Inaccurate driver records limit state’s ability to accurately identify repeat offenders.
- Identification critical because repeat speeding offenders more likely to cause fatal crashes.
- Traditional countermeasures less effective for repeat offenders.

Adapted from: National Academies 2023
Countermeasures for Repeat Speeding Offenders

- ISA has potential to reduce speed among repeat speeding offenders
- Programs using aftermarket ISA devices could be beneficial

Source: van der Pas et al., 2014
Recommendations: Speeding Recidivism

To NHTSA:

• Update guidelines for state highway safety programs to identify and track repeat offenders
• Develop countermeasures to reduce speeding recidivism
• Develop guidelines for states to implement pilot ISA interlock programs

To States, D.C., and Puerto Rico:

• Implement programs to identify and deter repeat speeding offenders

To Insurance Institute for Highway Safety:

• Study the effect of automobile marketing showing risky behaviors, such as speeding
Current State Action on ISA

- New York: legislation proposed to require ISA devices on repeat speeders’ vehicles
- Washington, DC: plans to allow installation of ISA on cars of drivers convicted for reckless driving
- California: legislation proposed to require ISA on all vehicles
- Other cities and local governments are embracing ISA in fleets
What We Encourage States To Do

• Ensure traffic records capture driver’s complete history

• Consider countermeasures such as restricting access to diversion programs or plea agreements for repeat speeders

• Consider a “speed interlock” program using ISA devices
  • Similar to an alcohol ignition interlock program

• Remove restrictions for speed safety cameras
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