Crash Prevention Technologies

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Overview

- NTSB history advocating crash prevention technologies
- Technologies could have prevented or mitigated these crashes
- School bus exclusion from federal safety standards
History

• NTSB has advocated for collision avoidance systems for more than 22 years

• Crash prevention technologies can prevent crashes in both passenger and commercial vehicles

• Despite proven benefits, NHTSA has no requirement for collision avoidance systems
Collision Avoidance Systems

• Mitigate or prevent crashes by detecting vehicles ahead

• Automatic emergency braking intervenes regardless of driver vigilance

• If Baltimore school bus was equipped
  – Impact with car would likely have been mitigated
  – Impact with transit bus would not have occurred
Electronic Stability Control

- Ensures benefits of automatic emergency braking
- Monitors speed, acceleration, driver input, yaw
- Evaluates and intervenes with impending rollover or loss of control events
- If Chattanooga school bus was so equipped
  - Could have assisted driver in maintaining control and mitigated crash severity
Safety Standards

• In 2015, NHTSA introduced FMVSS 136: *Electronic Stability Control Systems for Heavy Vehicles*
  – Requires electronic stability control in truck-tractors and most buses
  – Excludes school buses

• In 2017, Canada incorporated FMVSS 136
  – Includes school buses
Summary

• Technologies can prevent or mitigate crash severity

• Had Baltimore and Chattanooga school buses been so equipped, crashes could have been prevented or mitigated

• Requirement is long overdue: looking to industry to adopt ahead of a mandate