Importance of Safety-Focused Highway Crash Investigations

Don Karol
Office of Highway Safety

Personal Journey

“Learning from Tragedy”
“Learning from Tragedy”

The NTSB is an independent federal agency, charged by Congress to investigate transportation accidents, determine the probable cause, and issue safety recommendations to prevent their recurrence.

Mission: Prevention of Future Crashes

The NTSB is an independent federal agency, charged by Congress to investigate transportation accidents, determine the probable cause, and issue safety recommendations to prevent their recurrence.

Aviation Investigations Aimed Toward Prevention of Future Crashes

“The sole purpose of the investigation of an accident or incident shall be the prevention of accidents and incidents.”

ICAO Annex 13, Paragraph 3.1
Finding: “... Accident investigations conducted by State and local authorities are enforcement oriented, and on that account fail to develop data necessary to support accident prevention activities.”

Recommendation to FHWA: Develop corps of investigators whose focus is prevention.
Purpose of Accident Investigations: Prevention

What’s Happening with Most Highway Crash Investigations?
Documenting? or Investigating?
Checking the Box? or Solving the Puzzle?

Why Investigate?
Without understanding the cause, how can you fix the problem? How can you learn from it?
• Prevent a repeat of the same type of crash
• Identify and eliminate hazards (human, vehicle and environment)
• Affect necessary changes to safety programs
• Improve the quality of data
• Determine the truth for victims and families
• Restore public confidence
Crash Investigators Need to Ask Why?

Driver Fatigue
Excessive Work Hours
Motor Carrier Failure to Monitor Hours of Service
Ineffective Oversight
Brake Failure
Poor Company Maintenance
Lack of Safety Culture at Company
Insufficient Oversight by Federal and State Agencies

Crash Investigators Need to Ask Why?

Crash Investigators Need to Ask Why?
Crash Investigators Need to Ask Why?

OR

Challenges to Safety- Focused Investigations

Vision Zero

International Safety-Focused Investigations

Sweden: Detailed investigations of all fatal crashes
Germany: German In-Depth Accident Study (GIDAS)
Norway: NPRA Accident Study Groups Notification of all fatal crashes
Ireland: Collision Prevention Program Traffic Safety Teams
Vision Zero Action Plans
U.S. Safety-Focused Investigations

- Multi-disciplinary Rapid Response Team responds to every fatal crash
- Task force studies the crash and recommends:
  - Street design changes
  - Judicial or legislative follow-up
  - Required community outreach

Vision Zero Action Plans
U.S. Safety-Focused Investigations

- County Traffic Safety Commission
- Required by WI statute (83.013)
- Public meetings held quarterly
- Membership: LE, DOT, Medical, Legal, Education, etc.
- Review of traffic crash spot maps
- Review of serious/fatal crash reports
- Safety recommendation development


Presentation Summary

- Crash investigation is an underutilized safety tool
- Crash investigations need to be more safety-focused
- Crash investigations should look beyond the “human”
- Some jurisdictions use crash investigation effectively as part of their local Vision Zero strategy
- All Vision Zero Action plans should incorporate safety-focused crash investigations into strategy
Crash Investigators = Lifesavers

“From Tragedy We Draw Knowledge to Improve the Safety of Us All”

E-mail: donald.karol@ntsb.gov

National Transportation Safety Board