



National Transportation Safety Board

ABA – BISC January 12, 2021 NTSB Fatigue-Related Crashes and Lessons Learned & Update

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Sr. Highway Crash Investigator

We Thank You!



Overview

- Who is the NTSB?
- Determining fatigue as causal
- Highlight crash investigations
- Fatigue management program
- Update on Board Products
 - Schoharie, NY
 - Randolph, NH

Who is the NTSB?

- Independent Federal Agency
- Aviation, Marine, Rail, and Highway
- Headquartered in Washington, DC
- About 400 staff nationwide





2019-2020 NTSB
**MOST
WANTED
LIST** OF
TRANSPORTATION
SAFETY
IMPROVEMENTS

Critical changes needed
to reduce transportation
accidents, injuries,
and fatalities.

Monday, February 4, 2019
The National Press Club • Washington, DC



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

2019-2020 NTSB
**MOST
WANTED
LIST** OF
TRANSPORTATION
SAFETY IMPROVEMENTS

Fatigue is a pervasive problem in transportation that degrades a person's ability to stay awake, alert, and attentive to the demands of safely controlling a vehicle, vessel, aircraft, or train. **We are calling for a comprehensive approach to combatting fatigue in transportation, focusing on research, education, and training; technology; sleep disorder treatment; hours-of-service regulations; and on- and off-duty scheduling policies and practices.**



**Reduce Fatigue-Related
Accidents**

NTSB

The Final Product

- Report Development
 - Follow-up trips
 - Testing / research
 - Report writing
- Report Types
 - Brief Report
 - Full Report Board Meeting





NTSB News

The National Transportation Safety Board is scheduled to conduct a board meeting Oct. 20, 2020, at 1 p.m. (EDT), to consider the agency's investigation of the fatal, Sept. 2, 2019, fire aboard the dive boat Conception off Santa Cruz Island, California.

[Read More](#)

Investigating Fatigue

- Physical evidence
- HOS - in compliance?
- 72- hour history
- Available rest periods
- Electronic record

Human Factors

- DOT medical certification
- Medical records
- Medications, toxicology
- BMI > 30
- Obstructive sleep apnea

Doswell, VA

May 31, 2011



Chattanooga, TN June 25, 2015



Laredo, TX

May 14, 2016



St. Marks Florida

July 2, 2016



Cranbury, NJ

June 7, 2014

- 1:00 am
- Work zone
- 1 fatal, 4 injured
- DE- GA -DE
- Awake 24 hours



Pre-Crash

- No restrictions on distance to terminal
- Did not analyze critical events
- Lacked a fatigue management program

Post Crash

- New fatigue policy
- Work Commute Plan
- Safety Alerts on Qualcomm
- Defensive driving training
- Implemented an FMP

Importance of FMP

- Failure to manage the risk can be deadly
- HOS compliance is not FMP
- People can't work 24/7
- Fatigue - poor decision making, slowed response, risky behavior, loss of situational awareness
- CMV drivers are most vulnerable

North American Fatigue Management Program (NAFMP)

- 4-year project (Canada & US)
- Collaboration between Government, carriers, insurance and researchers
- Fatigue management education for drivers, families, managers, shippers receivers and dispatchers
- Website: www.nafmp.org



North American Fatigue Management Program

A Comprehensive Approach for Managing Commercial Driver Fatigue

[Home](#)[About NAFMP](#)[Getting Started](#)[ROI Calculator](#)[Online Courses](#)[Downloads](#)[Contact Us](#)

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● Online

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Downloads

The following downloads are in English. To download these files in a different language, please select the appropriate website language.

The North American Fatigue Management Program offers its training in a number of formats, allowing users to select the one that best fits their individual needs. For the most comprehensive training experience, including online testing, you are encouraged to use the [NAFMP Online Courses](#). Once there, you can register as a user of the system, free of charge, and work through the training at your own pace. Commercial truck and bus fleets can encourage their drivers and other personnel to register and complete the appropriate courses.

The PowerPoint versions below are formatted in PowerPoint version 2010. A free PowerPoint reader is [available here](#) if you do not currently have PowerPoint version 2010. If you experience problems downloading files, please use our [alternate download site](#).

Powerpoint Versions (with audio narration)

This version of the NAFMP training allows users to view and hear the training but does not allow for knowledge testing and scoring. This option is best suited for users who simply want to step through the training at their computer without participation in any of the quizzes or other knowledge checks.

- [Module 1 \(MS Powerpoint\)](#)
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Notice: A session had already been started - ignoring session_start() in /home/nafm12/public_html/modules/m on line 20

Are you human?

Complete Module Overview (Reference Only)

| Module | Title | Target Audience | Estimated Duration |
|--------|---|--|--------------------|
| 1 | FMP Introduction and Overview | Motor Carrier Executives and Managers | 45 minutes |
| 2 | Safety Culture and Management Practices | Motor Carrier Executives and Managers | 1.5 hours |
| 3 | Driver Education | Commercial Drivers | 3 hours |
| 4 | Driver Family Education | Driver Spouses and Family | 45 minutes |
| 5 | Train-the-Trainer for Driver Education and Family Forum | Carrier Safety Managers and other Trainers | 3.5 hours |
| 6 | Shippers and Receivers | Freight Shippers and Receivers | 30 minutes |
| 7 | Motor Carrier Sleep Disorders Management | Carrier Executives and Managers | 1.5 hours |
| 8 | Driver Sleep Disorders Management | Commercial Drivers | 1.25 hours |
| 9 | Driver Scheduling and Tools | Dispatchers and Driver Managers | 1 hour |
| 10 | Fatigue Monitoring and Management Technologies | Motor Carrier Executives and Managers | 1 hour |

Safety Culture



Source: NAFMP

Policies and Procedures

- Written SOPs
- Fatigue policy
- Distance to terminal
- Acknowledged
- Driver handbook
 - Adverse driving
 - Sleep apnea
 - Driver wellness

Training & Education

- Initial & recurrent
- Post-accident
- HOS compliance
- Off duty hours
- Family members
- Shippers
- Documented

Evaluation

- Accident register
- Loss runs
- Insurance
- Technology
 - Critical events
 - Analyze the data



Recent Board Products

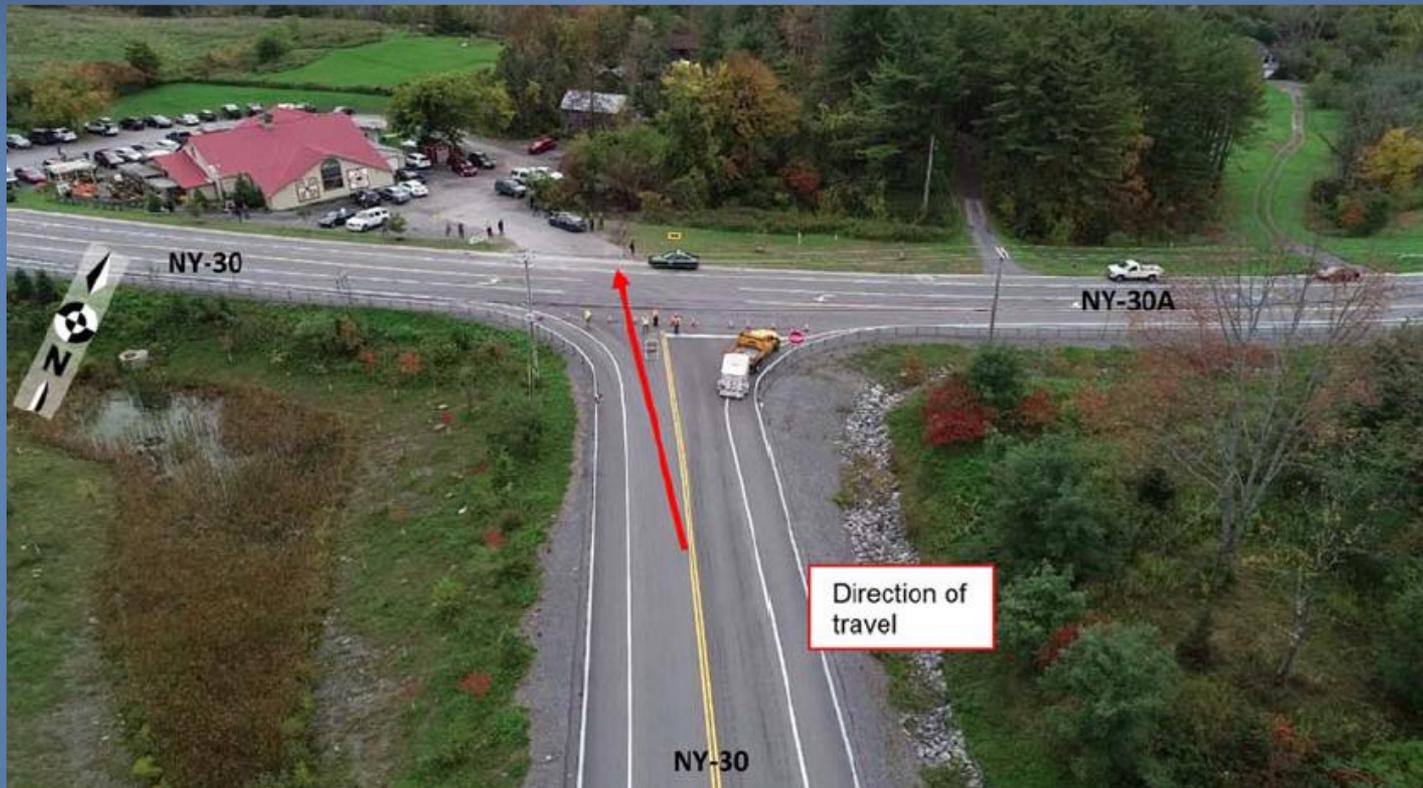
Schohaire, NY



Randolph, NH



Schoharie, New York October 6, 2018



NYSP

Limo at Final Rest



Probable Cause

- Prestige's egregious disregard for safety, dispatched an OOS limousine
- NY DOT ineffective oversight of Prestige despite knowledge
- NY DMV inadequate oversight of state inspection stations

Schohaire, NY Rec's

- **To FMCSA-** provide guidance to states to enforce compliance with state out of service orders
- **NY State** – DOT to implement rec's from Comptroller Report for repair certification and improve carrier compliance with OOS violations

Schoharie, NY Rec's cont.

- **To NY DMV** – review policies on the inspection of stretch limousines to ensure that state-controlled inspection stations do not inspect limousines with seating 10 or more
- State inspection stations **may not** inspect limousines with seating 10 +

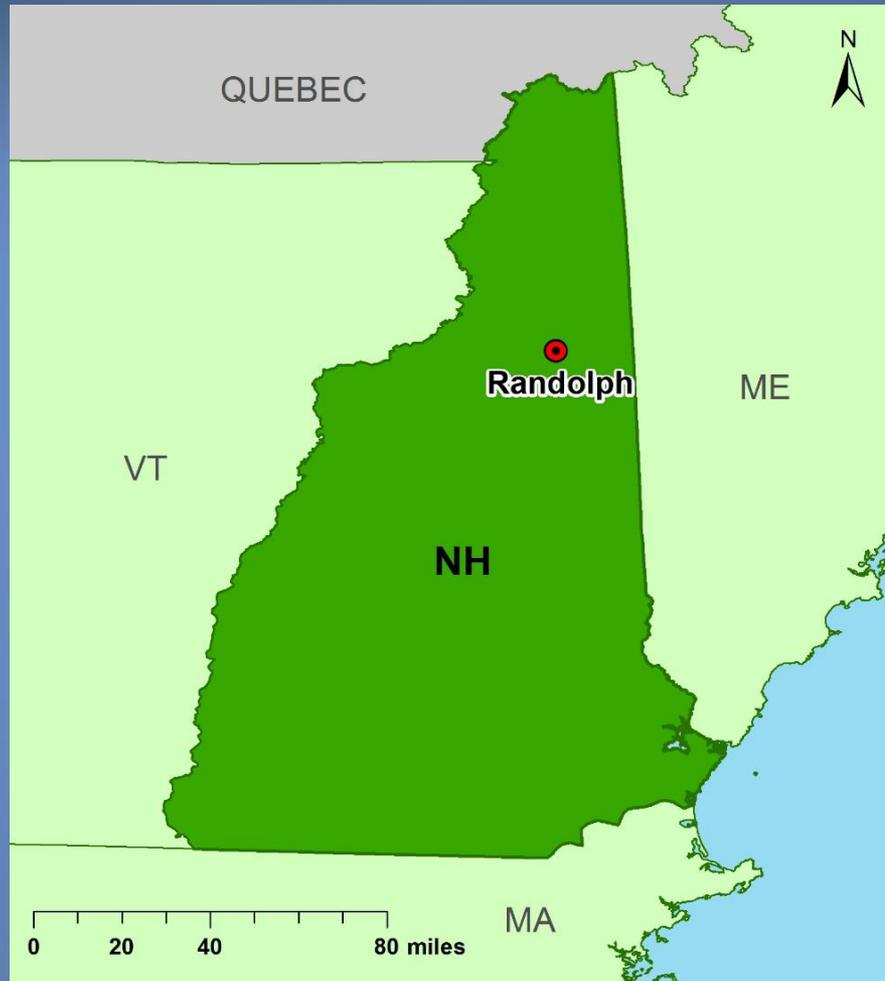
Schoharie, NY Rec's cont.

- **To the National Limousine Ass.** – inform your members to verify the safety of altered limousines
 - Pass a structural & mechanical inspection that meets FMVSS
 - Secondary certification label is affixed to the limousine before purchase

Randolph, NH June 21, 2019



Randolph, NH



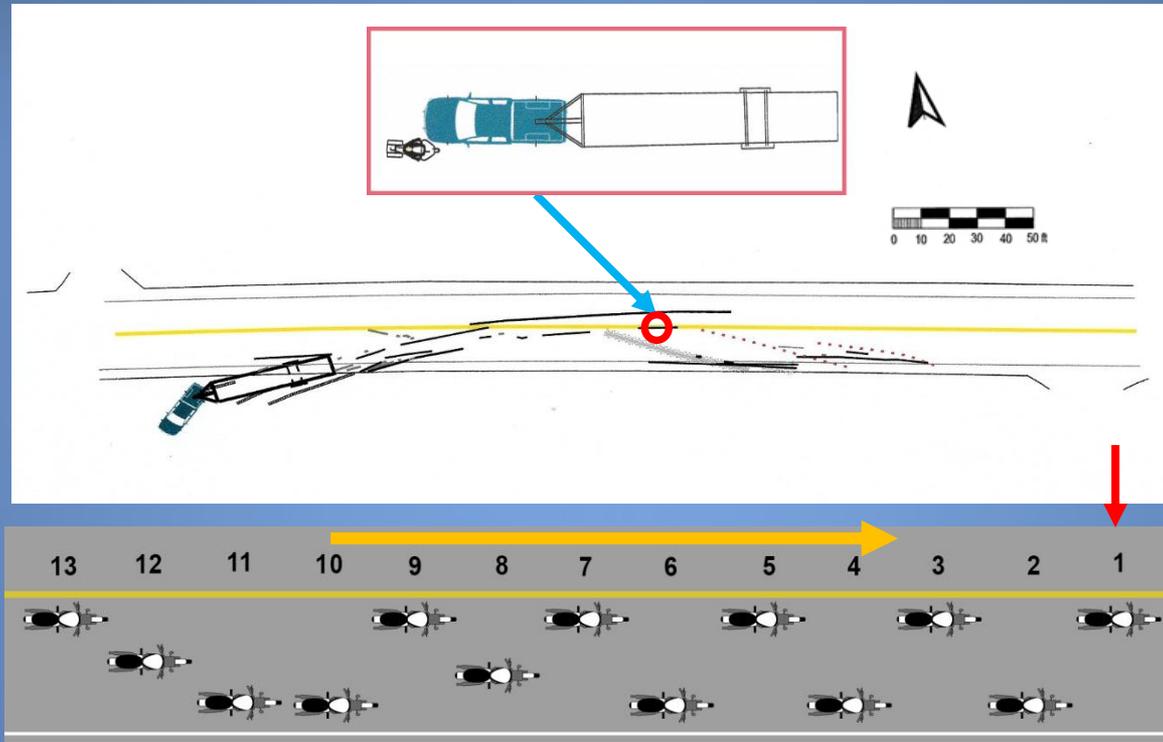
Motor Carrier = Westfield Transport



Crash Location



Crash Sequence



Final Rest



Probable Cause

- The pickup truck driver's crossing the centerline because of impairment from multiple drugs
- Westfield Transports substantial non-compliance with the regulations
- MA RMV failure to revoke the pickup truck drivers CDL

Recommendations to FMCSA

- Establish a layer of oversight for recent graduates of the new entrant program
- Remove KeepTruckin electronic logging device from the approved list
- Review and revise the certification process by which ELDs are approved

Randolph, NH Rec's

To all states, DC and Puerto Rico:

Direct your licensing agencies to review existing procedures or develop new ones to:

- Process notifications from other states about infractions and suspensions

Summary

- Fatigue should be on everyone's "Most Wanted List"
- North American Fatigue Management Program
- FMP – safety culture, polices / procedures, training & education, and evaluation
- NTSB Reports – www.nts.gov



National Transportation Safety Board

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