



NTSB National Transportation Safety Board

Office of Highway Safety

**Truck-Tractor Semitrailer
Rollover and Motorcoach
Collision With Overturned
Truck, Interstate Highway 94
Near Osseo, Wisconsin
October 16, 2005**



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Office of Highway Safety

Introduction

David S. Rayburn

Investigative Team

- Robert Accetta – Forensic Mapping and Accident Reconstruction
- Dan Walsh – Highway Factors
- Jennifer Morrison – Vehicle Factors
- Burt Simon – Human Performance
- Hank Hughes – Survival Factors
- Jim LeBerte – Motor Carrier Operations

Investigative Team, Cont'd.

- Mitch Garber, M.D. – Medical Factors
- Chris Voeglie – Electronic Data Recorders
- Kris Poland, Ph.D.; Dan Horak, Ph.D.; and Shane Lack – Vehicle Simulation Study
- Jana Price, Ph.D. – Fatigue Technology Countermeasures
- David S. Rayburn – Investigator-in-Charge

Report Development Staff

- Gwynne O'Reagan – Editor
- Robert Molloy, Ph.D. – Audio Visuals
- Julie Perrot – Safety Recommendations
- Meg Sweeney, Ph.D. – Project Manager

Parties To The Investigation

- Federal Motor Carrier Safety Administration
- Wisconsin Department of Transportation
- Wisconsin State Patrol
- Whole Foods Market
- Chippewa Trails, Inc.
- Haldex Brake Products Corporation
- Bendix Commercial Vehicle Systems, L.L.C.
- Motor Coach Industries, Inc.
- Ryder Logistics and Transportation

Safety Issues

- Operator Fatigue
- Fatigue Technologies and Countermeasures
- Collision Warning Systems

View of Accident Scene



Accident Description

- 7:30 p.m., October 15, 2005
- 436-mile trip from Munster, Indiana, to Minnesota
- At 1:58 a.m., had completed 323 miles of trip

Tractor-Trailer Departure and Overturn



Accident Description

- 11:00 p.m., left University of Wisconsin near Whitewater on 225-mile trip
- Completed 195 miles
- In right-hand lane of I-94
- No precrash skidmarks but passengers felt deceleration

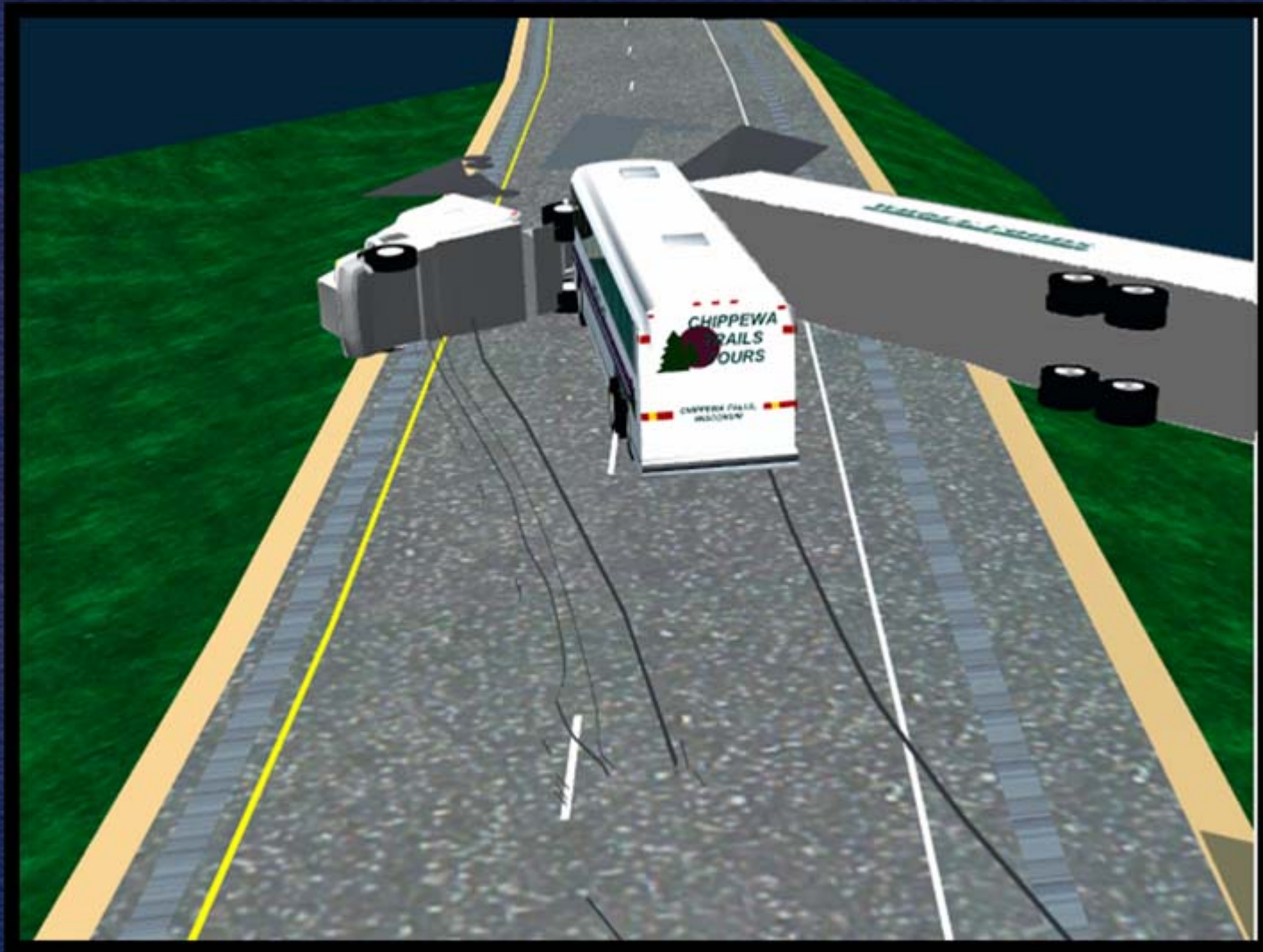
Motorcoach Collision Sequence (1)



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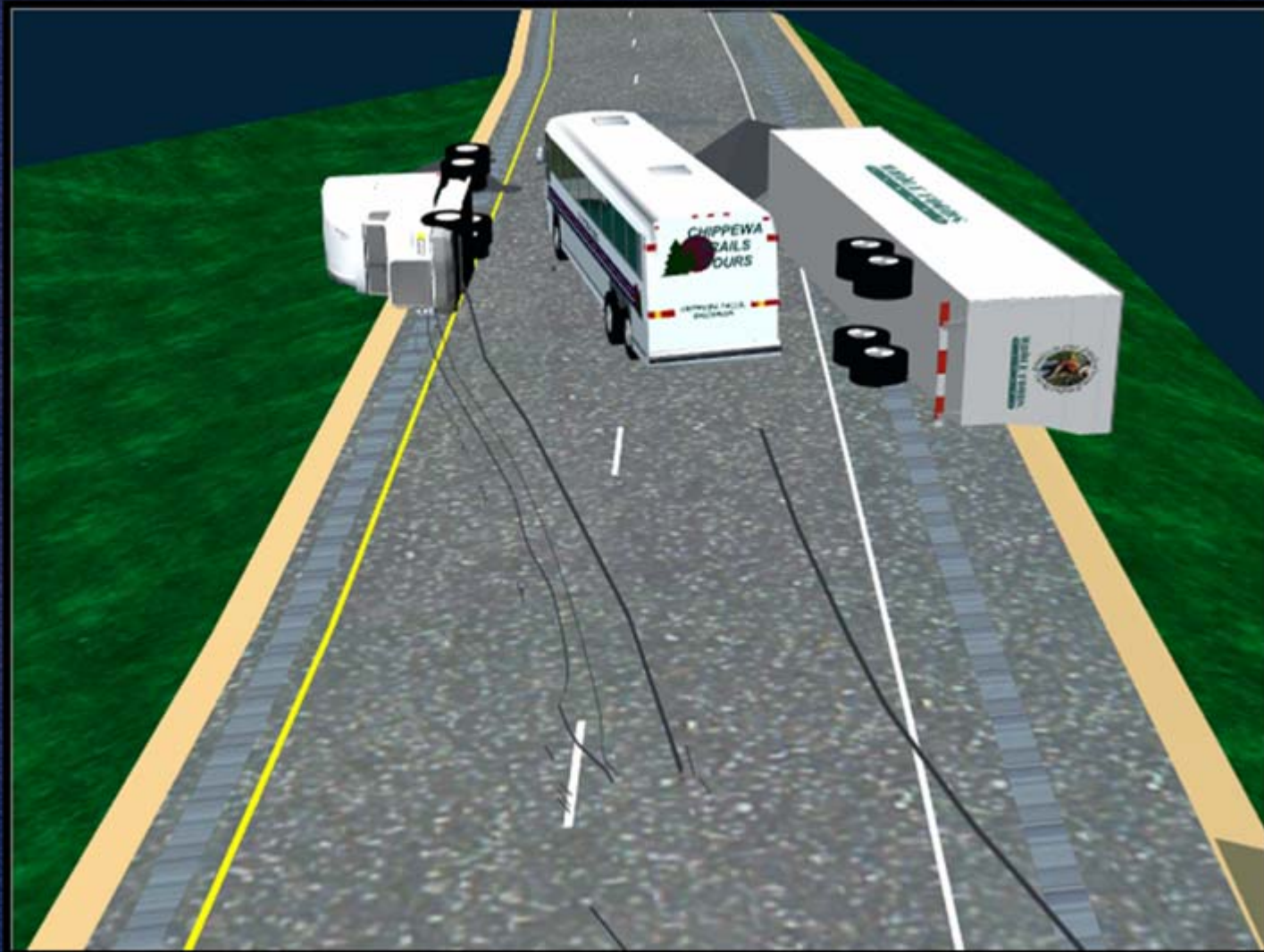
Motorcoach Collision Sequence (2)



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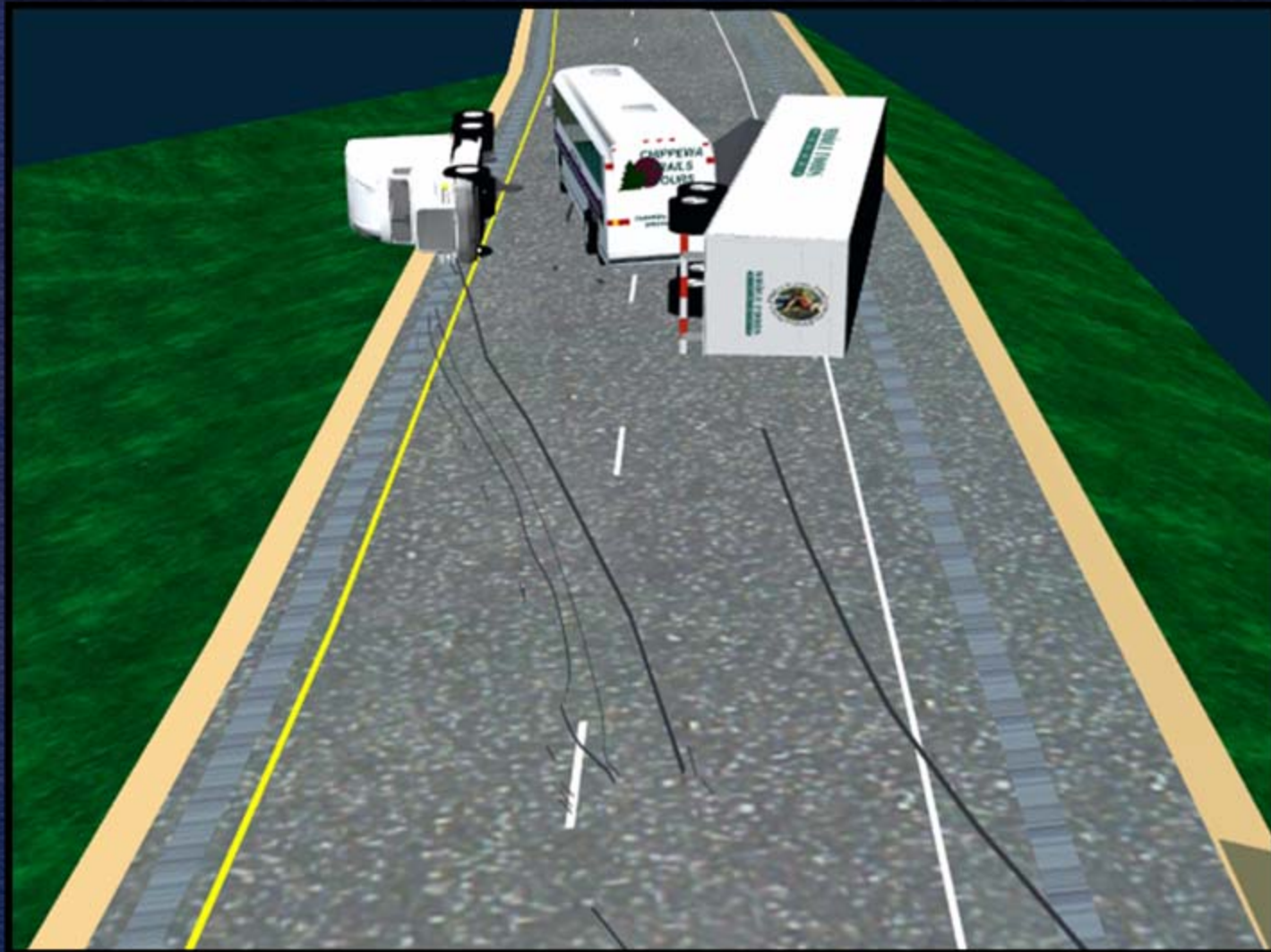
Motorcoach Collision Sequence (3)



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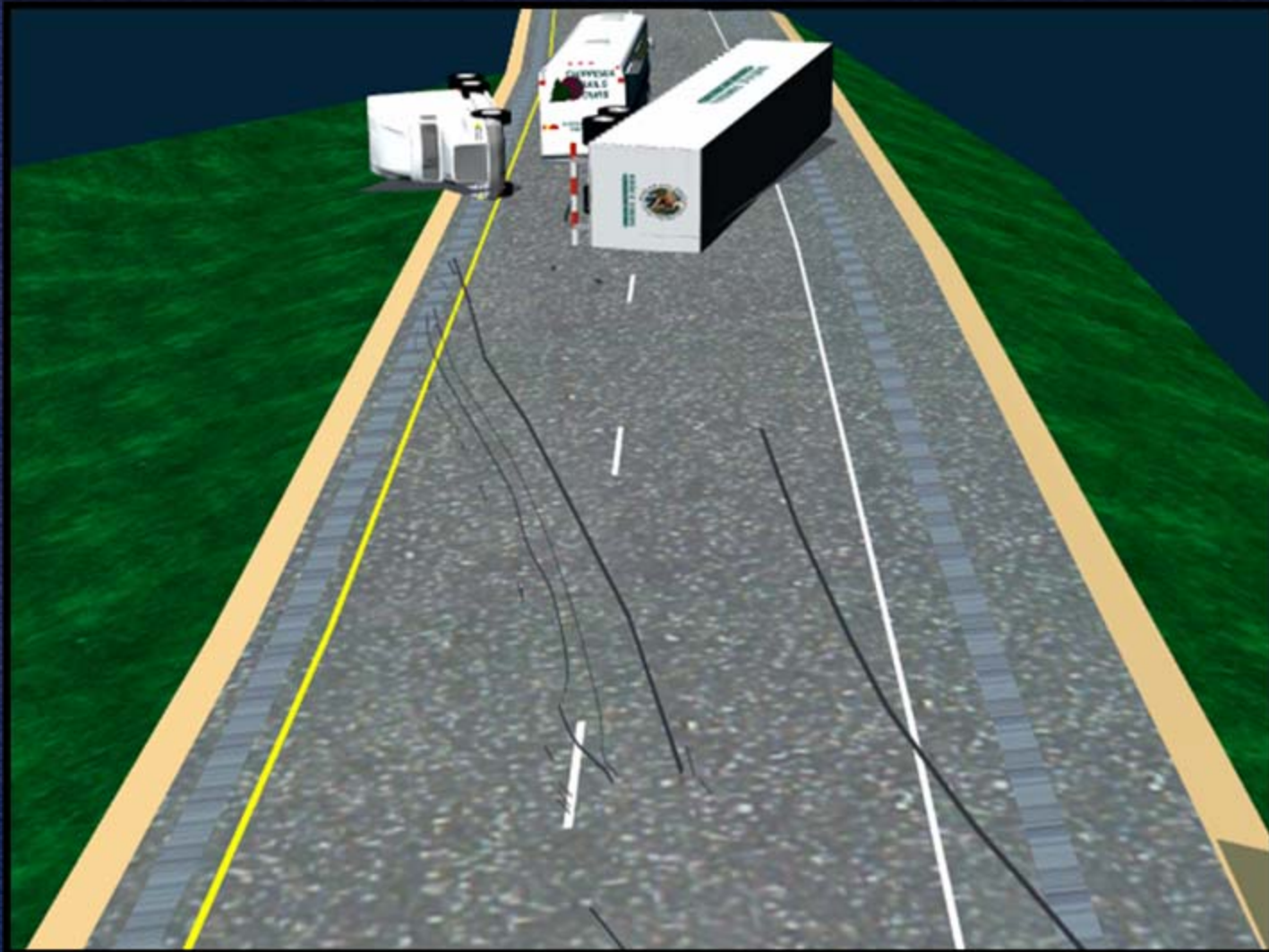
Motorcoach Collision Sequence (4)



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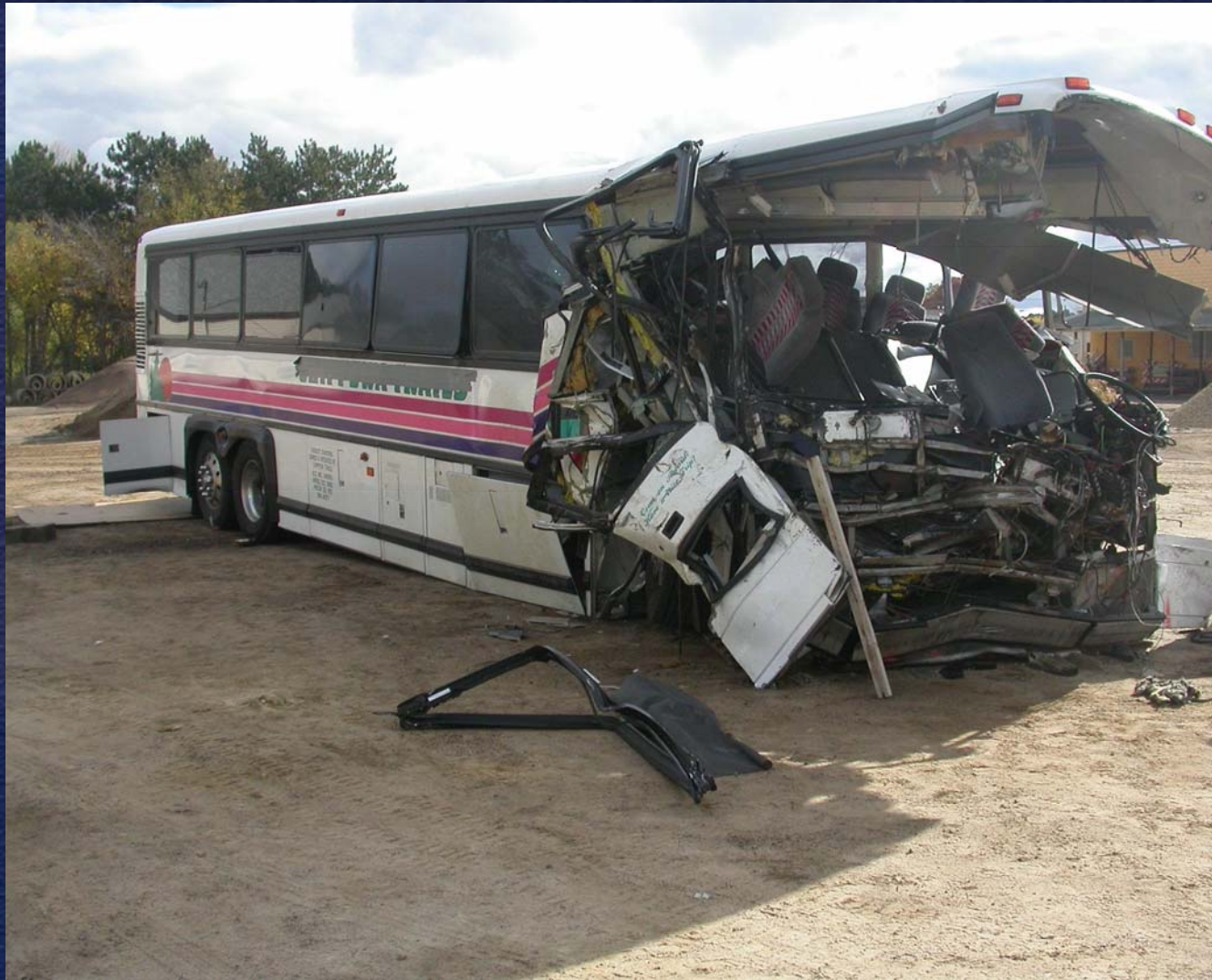
Motorcoach Collision Sequence (5)



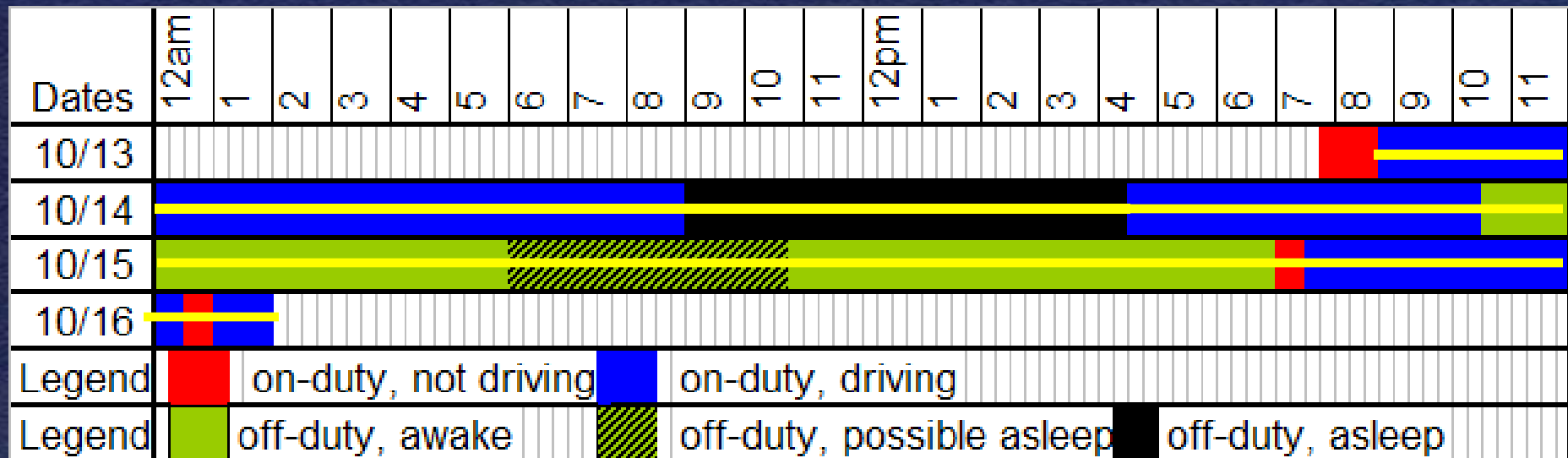
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View of Motorcoach



Truck Driver Activities



Truck Driver Fatigue

- At most, the truck driver obtained 12.5 hours of sleep in the 2 days before the accident
- Less than 5 hours of sleep in last sleep period
- Was awake for at least 15 hours before the accident
- Sleep was disrupted by alcohol use
- Accident occurred at 1:58 a.m.

Truck Driver Fatigue, Cont'd.

- Driver said he was “pulling over”
- Truck traveling about 66-70 mph
- Roadway departure was at 3 degrees
- Witnesses observed truck drifting
- Driver was asleep



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