Awakening a Nation: A Call to Action

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1) determining the probable cause of transportation accidents

2) making recommendations to prevent their recurrence
The Most Wanted List represents the NTSB's advocacy priorities. It is designed to increase awareness of, and support for, the most critical changes needed to reduce transportation accidents and save lives.

Eliminate Substance-Impaired Driving

A generation ago, the NTSB investigated the nation's deadliest impaired driving crash, which killed 27 and injured dozens. Since then, more than 300,000 people have perished at the hands of impaired drivers. Much more must be done to address the senseless deaths of more than 10,000 people every year.
2011 FATALITIES
(the most recent government statistics available)

9,878 in impaired driving crashes
800 in marine accidents
759 in rail accidents
494 in aviation accidents
REACHING ZERO
Actions to Eliminate Substance-Impaired Driving
Challenges of a 24/7 Society
MOST WANTED LIST

A program to increase the public's awareness of, and support for, action to adopt safety steps that can help prevent accidents and save lives.

The following are ten of the current issues:

- Addressing Human Fatigue
- General Aviation Safety
- Safety Management Systems
- Runway Safety
- Bus Occupant Safety
- Pilot & Air Traffic Controller Professionalism
- Recorders
- Teen Driver Safety
- Addressing Alcohol-Impaired Driving
- Motorcycle Safety
NTSB Recommendations

• MOST WANTED 1990 - 2011

• >200 fatigue recommendations
Complex Issue:

Requires Multiple Solutions

- Scheduling Policies and Practices
- Education/Awareness
- Organizational Strategies
- Healthy Sleep
- Vehicle and Environmental Strategies
- Research and Evaluation
Overcoming the Dangers of Drowsy Driving
National Transportation Safety Board Forum
The Panels

- Scope of the problem
- Workplace issues
- Novice drivers
- Health issues
- In-vehicle/roadway issues
- Countermeasures/future directions
Scope of the Problem (Dinges and Tefft)

> 1M crashes?

100K crashes?

1,000 lives lost?

7-24% of crashes

7,500 lives lost?

400K crashes?

5,000 lives lost?

~40% drivers fallen asleep

Grossly underestimated
Workplace Issues (Pratt, Flower, Violanti)

- Driving at work
- Commuting to/from work
- Work hours
- Shift/irregular schedules
- Insufficient/poor sleep
- Work force to resources
- Combined with air travel
- Training/education
- Investigations
- Communications
- In-vehicle cameras
- Industry demands
- “Just-in-time” commuting
- Requirements outside work
Novice Drivers
(Carskadon and Watson)

- Teen crashes
- Education
- Teen sleep
- Consistency
- Graduated licensing
- Teen biology
- School start times
- Technology
- Psychosocial context
- Teen driving
Health Issues
(Ohayon, Gurubhagavatula, Farkas)

- 13.4M Americans sleepy while driving
- Sleepy drivers ~2X more likely to crash
- Multiple medical conditions cause sleepiness
- Diagnosis/treatment of sleep disorders
- 85% sleep apnea cases undiagnosed
- Treatments effective
- Crash risk with other sleep disorders less known
- Risks associated with prescription/OTC medications
- Risks associated with med combinations/interactions
- Fewer ‘crash’/driving safety studies
In-vehicle/Roadway Issues (Sgambati, Monk, Savolainen)

Impairment

Rest stops

Warning vs. action

Driver monitoring

Vehicle monitoring

Rumble strips

NHTSA: 6 sec predict!

Roadway design

Feedback?
Countermeasures/Future Directions (Czeisler, Nelson, Pack, Popkin)

- Outstanding
- Thoughtful
- Provocative

ntsb.gov
C-SPAN
Drowsy Driving . . .

Surrogate & Symbol

• Safety, health, performance, and mood risks created by our sleep-deprived society
Societal Barriers: Attitudes and Actions

“I’ll sleep when I’m dead.”
The Challenges

- Scope/cost of the problem
- Workplace/school issues
- Developmental/age changes
- Health issues
- Design/technology (+/-)
- Countermeasures/future directions
Good sleep will enhance:

- safety
- health
- performance
- mood