



NTSB National Transportation Safety Board

Enhancing Motorcycle Safety: An NTSB Perspective

Motorcycle Industry Council
2010 Annual Communication Symposium

Mark R. Rosekind, Ph.D.
Board Member



1967

In 1967, the Congress created an independent NTSB within the newly formed Department of Transportation (DOT); expanded the NTSB's authority to include all modes of transportation.





In 1974, Congress made the NTSB completely independent of the DOT.

1974





**In 1996, the Aviation Disaster Family Assistance Act:
NTSB to coordinate victim and family assistance
following a major aviation accident.**

**This responsibility was extended to other modes
by Executive Order.**





UNITED STATES CODE, TITLE 49

CHAPTER 11—NATIONAL TRANSPORTATION SAFETY BOARD

SUBCHAPTER 1—GENERAL

Sec.
1101. Definitions.

SUBCHAPTER 2—ORGANIZATION AND ADMINISTRATIVE

1111. General organization.
1112. Special boards of inquiry on air transportation safety.
1113. Administrative.
1114. Disclosure, availability, and use of information.
1115. Training.
1116. Reports and studies.
1117. Annual report.
1118. Authorization of appropriations.

SUBCHAPTER 3—AUTHORITY

1121. General authority.
1122. Civil aircraft accident investigations.
1123. Review of other agency action.
1124. Inspections and audits.
1125. Secretary of Transportation's responses to safety recommendations.

SUBCHAPTER 4—ENFORCEMENT AND FINALITIES

1131. Aviation enforcement.
1132. Injunctive and intervention in aviation proceedings.
1133. Judicial review.
1134. Discovery and use of evidence and other material.
1135. Aviation penalties.

SUBCHAPTER 5—GENERAL

§1181. Definitions

Section 40102(a) of this title applies to this chapter.

SUBCHAPTER 6—ORGANIZATION AND ADMINISTRATIVE

§1183. General organization

(a) ORGANIZATION.—The National Transportation Safety Board is an independent establishment of the Executive Branch of the Government.

(b) APPOINTMENT OF MEMBERS.—The Board is composed of 5 members appointed by the President, by and with the advice and consent of the Senate. Not more than 3 members may be appointed from the same political party. The members shall be appointed on the basis of technical qualification, professional standing, and demonstrated knowledge of accident reconstruction, safety engineering, human factors, transportation safety, or transportation regulation.

(c) TERMS OF OFFICE AND REMOVAL.—The term of office of each member is 7 years. An individual may be reappointed to fill a vacancy occurring before the expiration of the term for which the predecessor of that individual was appointed for the remainder of that term. When the term of office of a member ends, the successor may be appointed if a statement is appointed and qualified. The President may remove a member for inefficiency, neglect of duty, or other cause in office.

(d) CHAIRMAN AND VICE CHAIRMAN.—The President shall designate, by and with the advice and consent of the Senate, a Chairman of the Board. The President also shall designate a Vice Chairman of the Board. The terms of both the Chairman and Vice Chairman are 2 years. When the Chairman is absent or unable to perform the duties of the office, the Vice Chairman shall act as Chairman.

Mission

The NTSB is charged with:

- 1) determining the probable cause of transportation accidents
- 2) making recommendations to prevent their recurrence



The NTSB is Responsible for Investigating:

- **All U.S. aviation accidents (except those of military and intelligence agencies).**





- **Highway accidents (including certain grade-crossing accidents) which involve issues of wide-ranging safety significance.**





- **Railroad accidents in which there is a fatality, substantial property damage, or which involve a passenger train.**





- Major marine accidents and accidents involving a public and a non-public vessel or accidents involving Coast Guard functions.





- Pipeline accidents in which there is a fatality, significant environmental or property damage.



- **Transportation accidents involving the release of hazardous materials, including fatal accidents or those causing major disruptions to a community.**





Major product: safety recommendations

Moral compass and industry conscience



- 130,000+ accident investigations
- 13,000+ safety recommendations
 - 82% acceptance rate



- Motorcycle accidents investigated by the NTSB:

0

NTSB Interest in Motorcycle Safety

- Past decade, motorcycle fatalities increased by over 100%
- Motorcycle non-fatal injuries increased by over 95%
- Motorcycle fatalities >2X # of deaths in aviation, rail, marine, pipeline — combined!
- < 1% of traffic but 13% of total fatalities

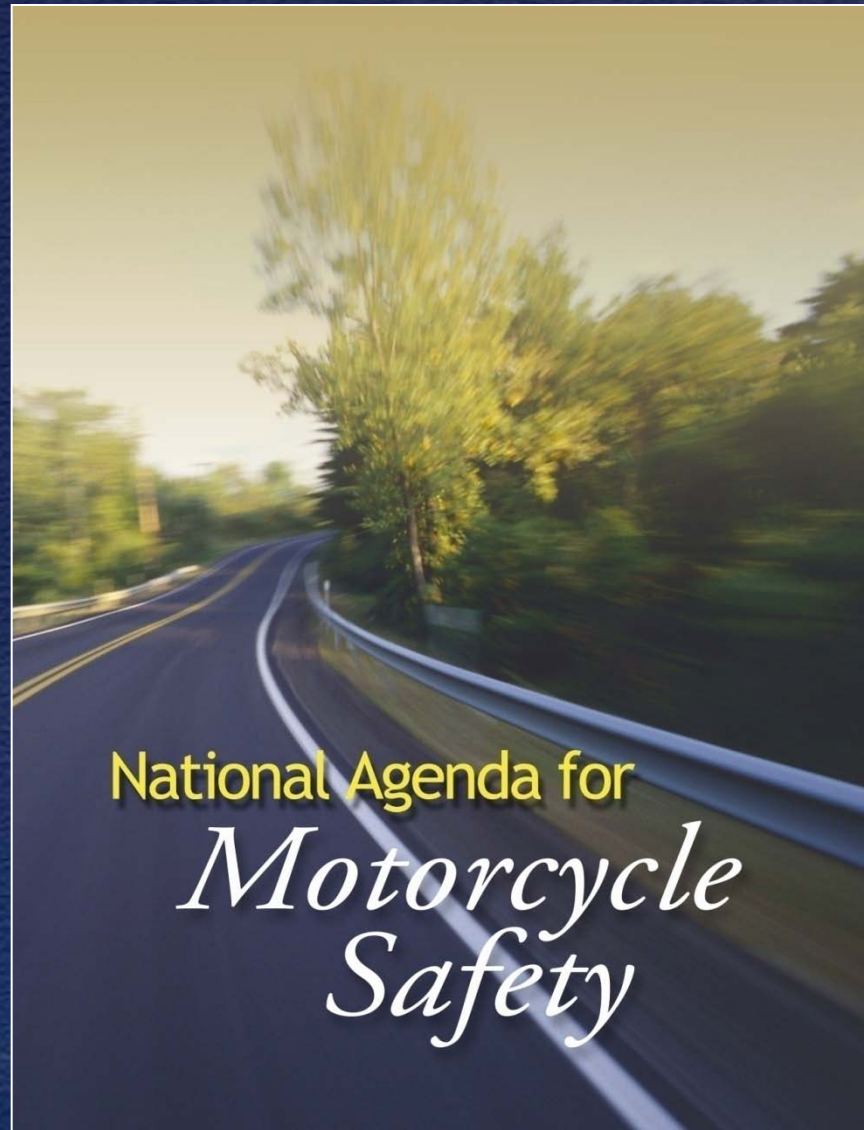
Motorcycle Fatalities: 2009

- 16% decrease!!
- 5,312 (2008) to 4,462 (2009)
- 850 lives
- 1st decrease in 12 years

Motorcycle Injuries: 2009

- 6.3% decrease!
- 96,000 (2008) to 90,000 (2009)
- 6,000 fewer injuries

NAMS - November 2000



NTSB



NAMS Recommendations

- 82 recommendations
- 3 categories:
 - urgent, essential, necessary
- No official mechanisms to:
 - track implementation
 - evaluate effectiveness

Example NAMS Action Items

- Education and training
- Motorcycle safety awareness
- Driving under the influence
- Distractions
- Graduated licensing requirements
- Improved safety equipment requirements (e.g.): gloves, leathers, shoes, armor

NTSB Comments on NAMS

- Reprioritize NAMS recommendations based on objective criteria; known safety outcomes
- NHTSA implement an action plan for states/others for high NAMS priorities
- Data collection needs



NTSB Public Forum

MOTORCYCLE SAFETY



September 12-13, 2006

NTSB Boardroom and Conference Center, Washington, DC

NTSB



NTSB Recommendation: Data

- NTSB recommendation to FHWA:
 - improve ridership data
 - # of registered motorcycles
 - # of miles traveled
- Data gathering is ad hoc
- Data critical to measuring success

More Motorcycle Safety Efforts

- FHWA and NHTSA co-hosted Motorcycle Travel Symposium (October 2007)
- FHWA 2008:
 - Traffic Monitoring Guide
 - travel data collection
 - reporting practices

Efforts. . .

- NAMS, FHWA, NHTSA, NTSB . . .
- Industry groups/efforts!
 - Motorcycle Industry Council
 - Motorcycle Safety Administrators
 - Motorcycle Safety Foundation
 - Manufacturers
 - Distributors
 - Allied vendors
 - Many others
- Reduce ongoing toll of motorcycle crashes, injuries, and deaths

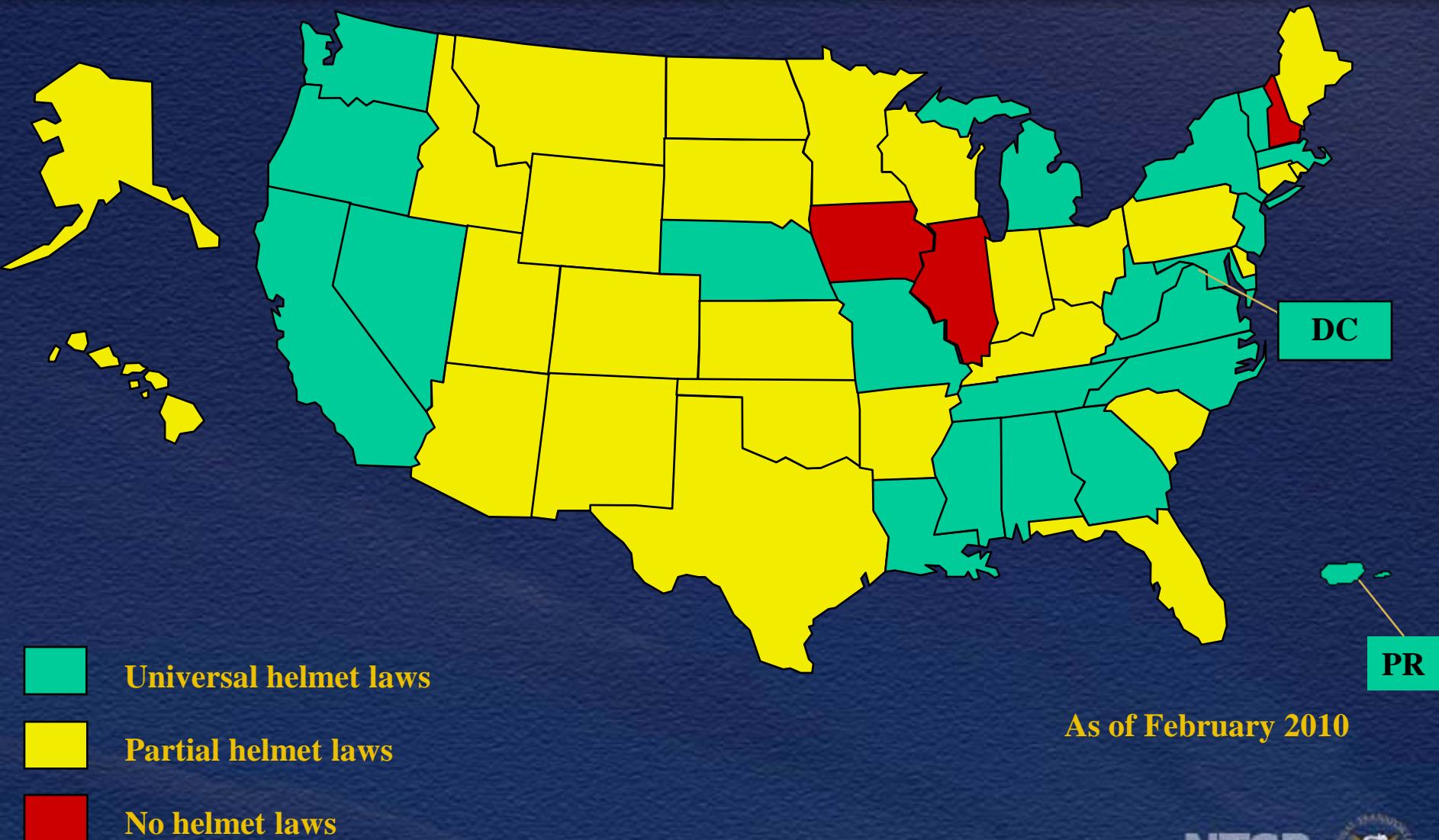
Helmets Save Lives

- DOT-compliant helmets:
 - reduce overall risk of dying in a crash by 37%
 - reduce the need for ambulance, hospitalization, intensive care, rehabilitation, long-term care

Helmets Affect Everyone

- Family and friends (death/injury)
- \$12+ billion economic costs
- \$310,000 cost/crash for
unhelmeted riders
 - helmeted riders $< \frac{1}{4}$ this cost

Helmet Law Status for the United States



As of February 2010

NTSB



Repeal or Weaken Mandatory Laws

- Helmet use declines
- Dramatic increase in deaths
- Increase in traumatic head injuries
- Re-enact law: reduce deaths/injuries

NTSB Recommendation

- All states require all motorcycle operators and passengers to wear a helmet that meets federal standards
- One of the most controversial issues
 - in transportation safety
 - addressed by the NTSB

Success requires . . .

A culture change that supports
different attitudes and behavior



NTSB