

Automotive Safety Themes in the U.S.A. 2008

Panel Session – Safety
FISITA 2008 World Automotive Congress

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INSURANCE INSTITUTE
FOR HIGHWAY SAFETY

Funded entirely by U.S. auto insurers

The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization dedicated to reducing the losses — deaths, injuries, and property damage — from crashes on the nation's highways.

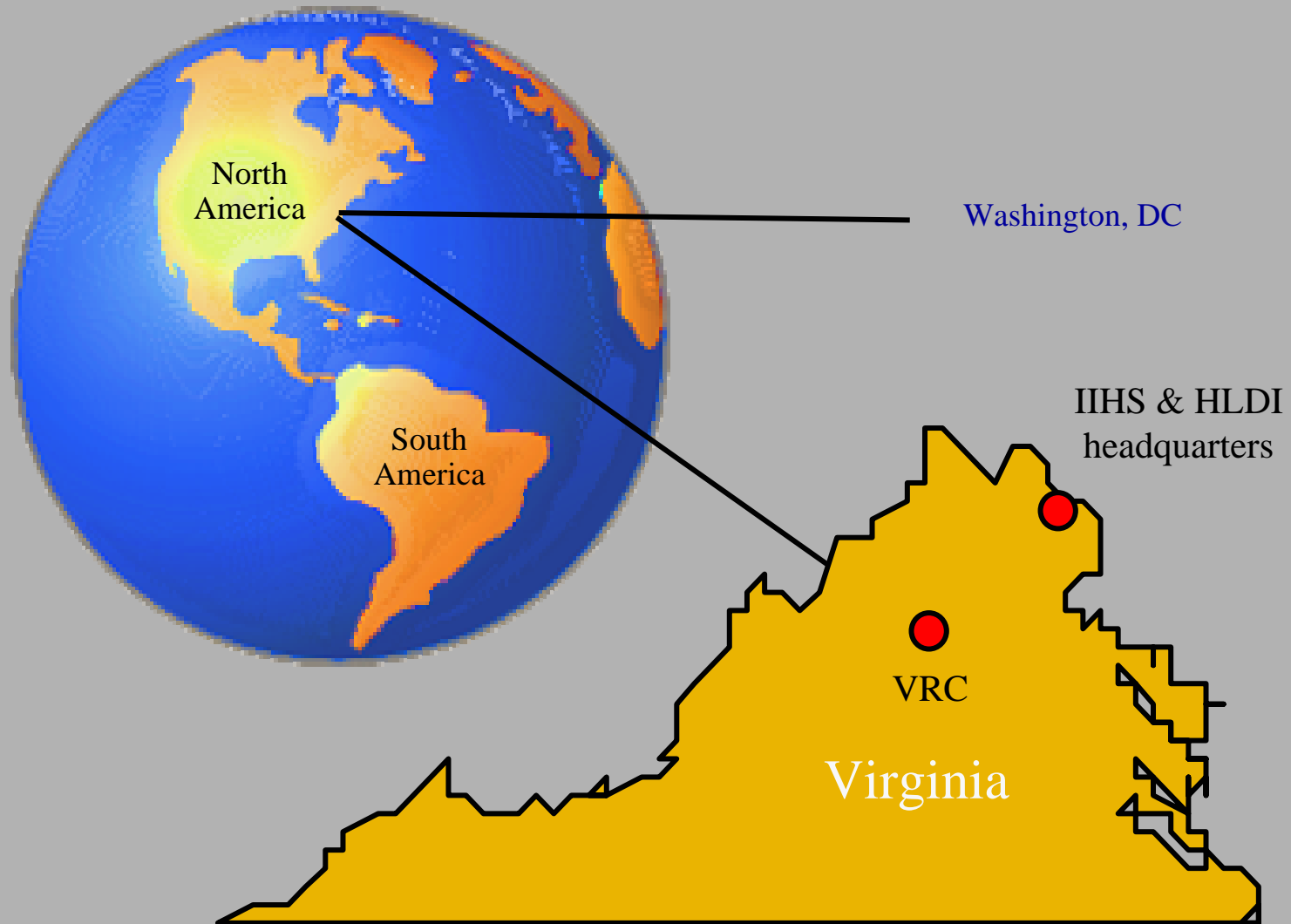
founded in 1959

The Highway Loss Data Institute shares and supports this mission through scientific studies of insurance data representing the human and economic losses resulting from the ownership and operation of different types of vehicles and by publishing insurance loss results by vehicle make and model.

founded in 1972

Where are we?

Location of IIHS/HLDI and Vehicle Research Center



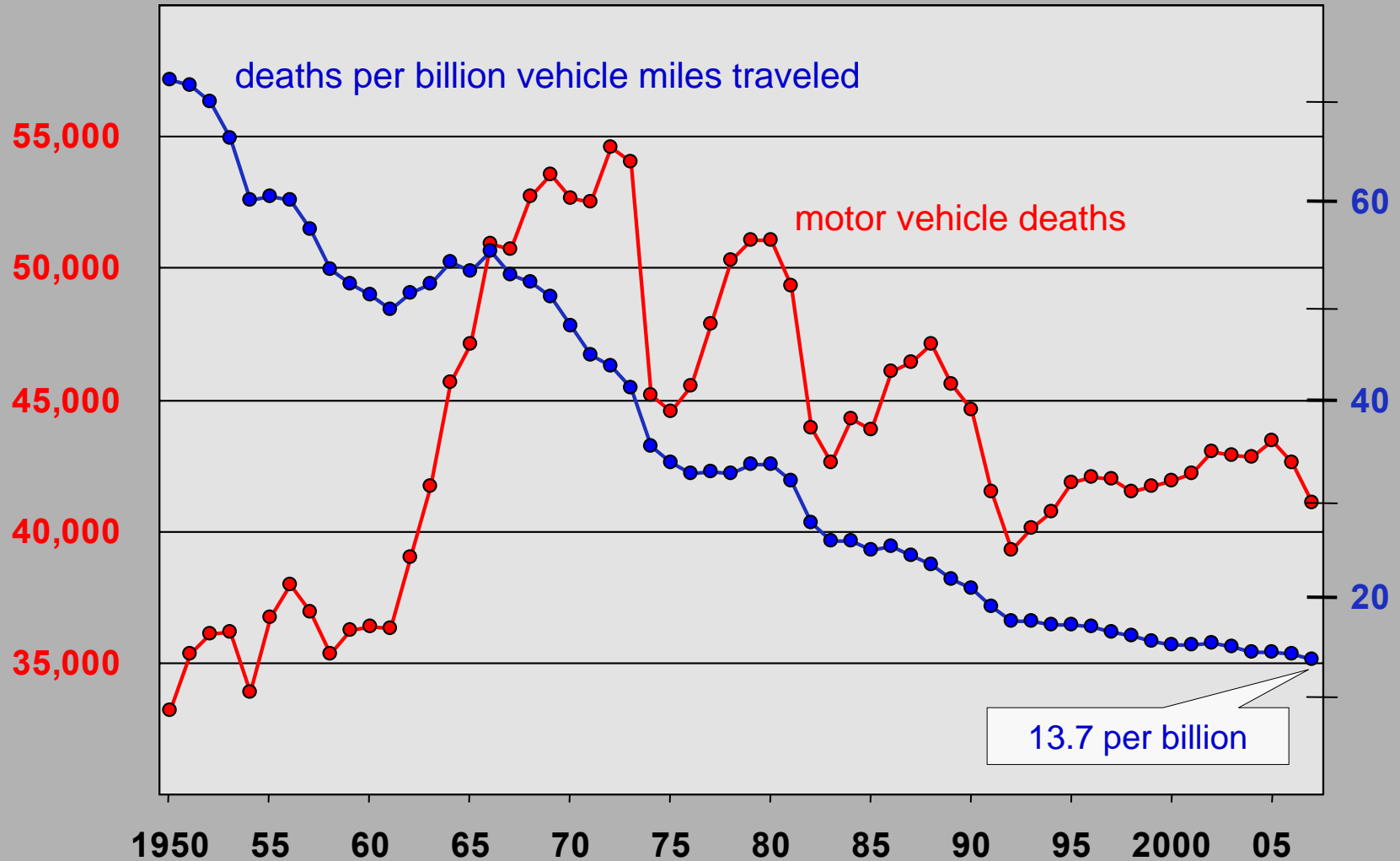
IIHS vehicle research center



Outside car companies, few facilities in the world are equipped to conduct the range of crash tests and other research the Vehicle Research Center can accommodate.

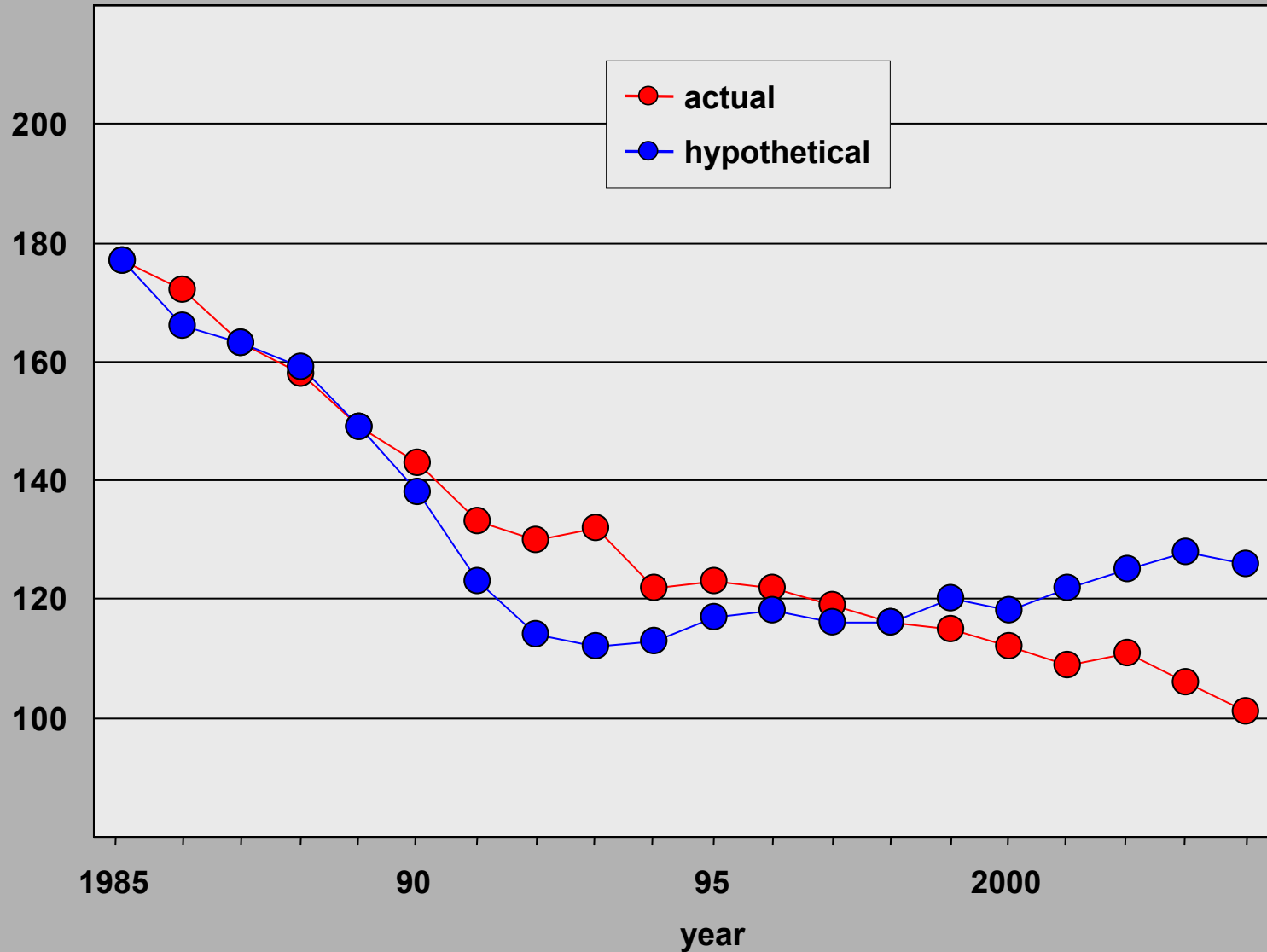
Motor vehicle crash deaths and deaths per billion vehicle miles traveled

1950-2007



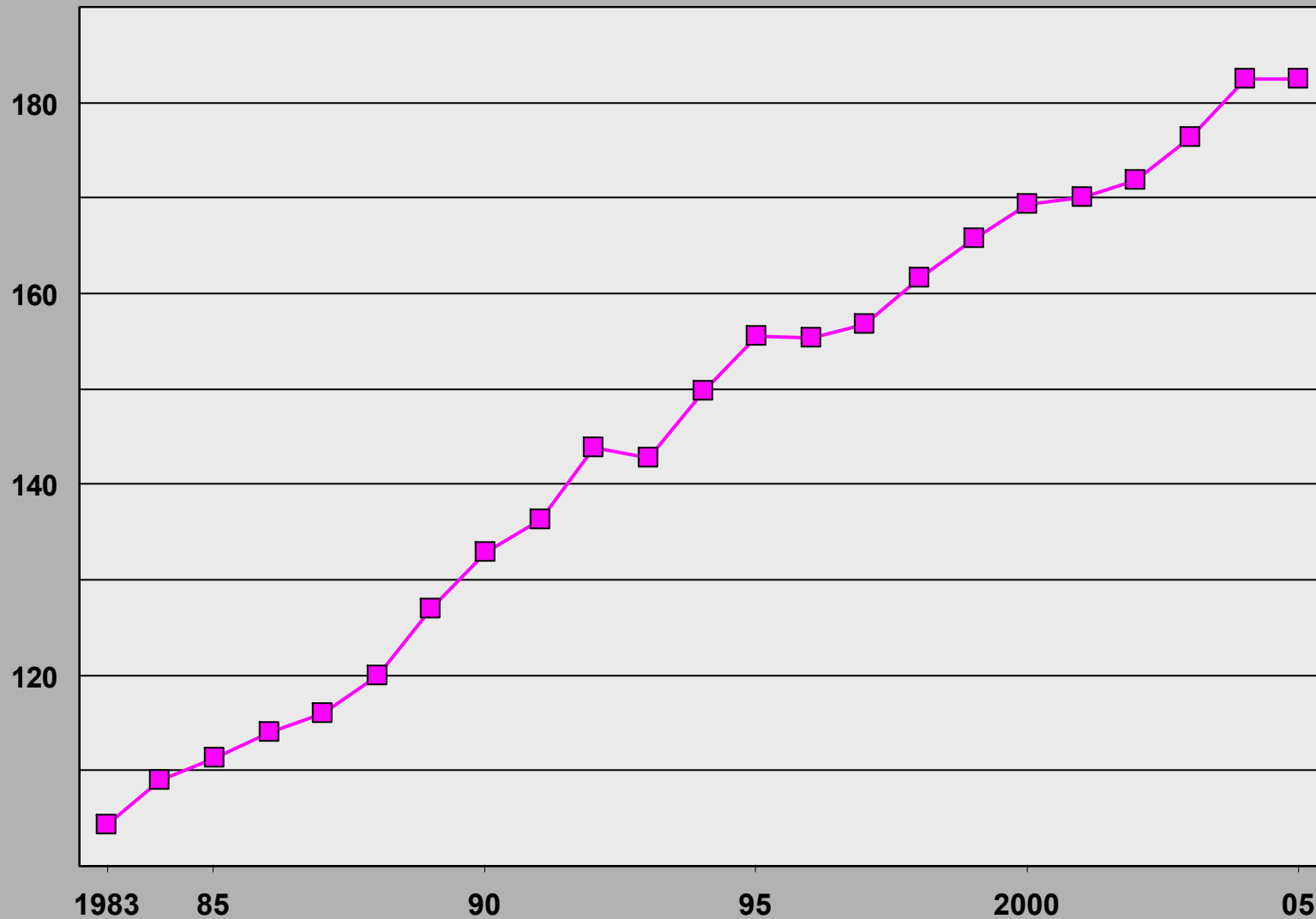
Driver death rates per registered vehicle

Actual vs. hypothetical, 1985 fleet



Average horsepower

By model year for all cars





Increasing speed is only one of
several different trends in USA
and Europe

Lincoln Town Car and Smart ForTwo

To scale comparison



"3-wheeled Aptera aspires to car-pool lane"

USA Today, January 11, 2008



September, 2007

SPECIAL ISSUE: MOTORCYCLES

STATUS REPORT

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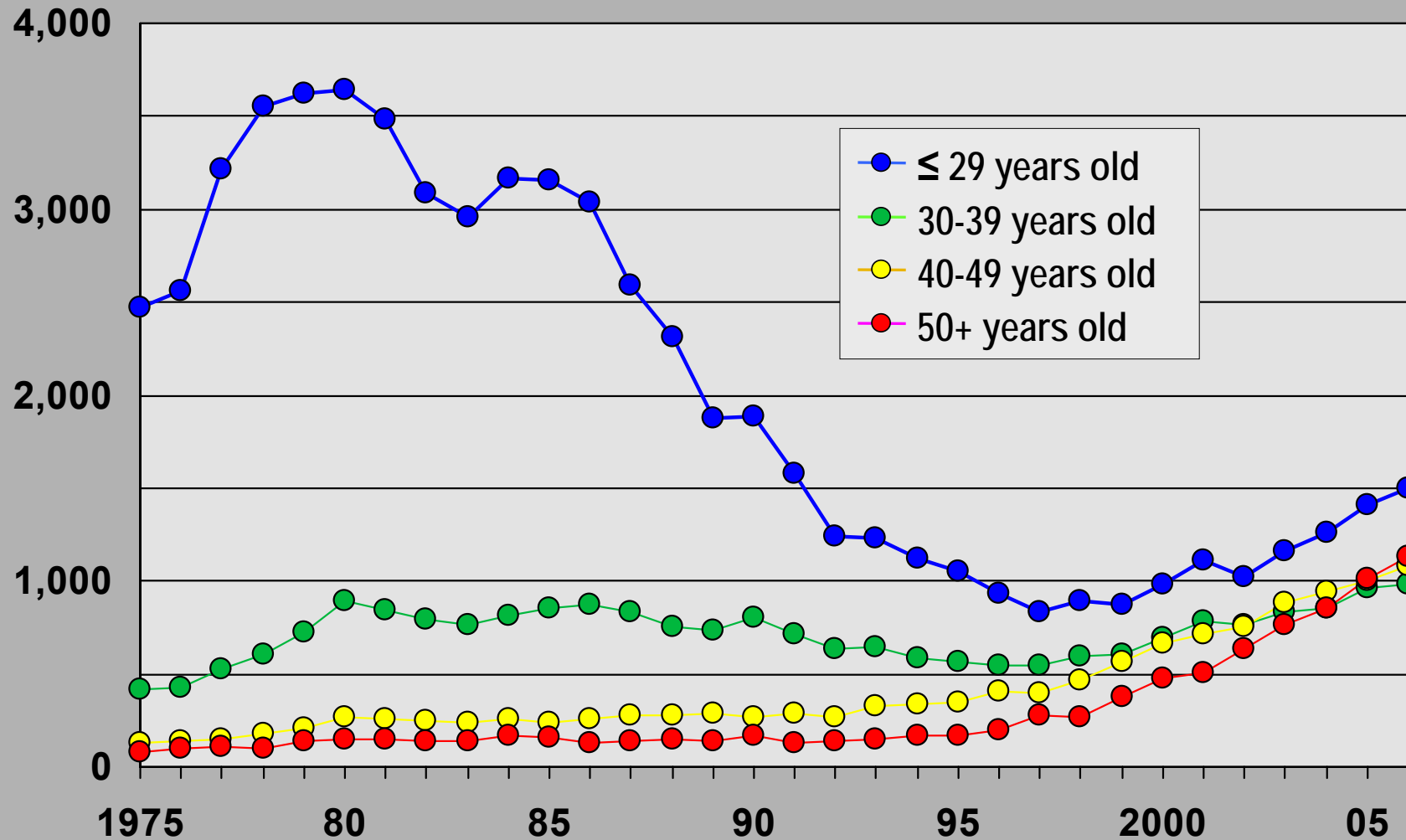
Vol. 42, No. 9, Sept. 11, 2007

THESE MACHINES ARE DESIGNED FOR THE
RACETRACK

but you'll only find one of them on the highway. Supersport motorcycles have engines that deliver more horsepower per pound than a typical NASCAR vehicle, reaching speeds of nearly 190 miles per hour, and some of their riders treat public roads like private racecourses. The result is that motorcyclists who ride supersports have driver death rates per 10,000 registered motorcycles nearly 4 times higher than rates for motorcyclists who ride all other types of

Motorcyclist deaths

By age, 1975-2006



Targets of opportunity in the vehicle

- ◆ Compatibility
 - Structures of vehicles still don't match geometrically
 - Problem for low speed damageability as well as injuries
- ◆ Finish protecting the occupant compartment
 - Frontal crashes still kill ~14,000 occupants per year (US)
 - Evaluate effectiveness of side crash countermeasures in the real world
 - Roof strength in rollover crashes

Targets of opportunity in the vehicle

- ◆ Crash avoidance
 - Electronic stability control
 - Will other technologies have similar effects
 - ESC is driver assistance (helps driver drive)
 - Many others are driver information (lane departure, adaptive head lamps – give additional info, warnings)
- ◆ Motorcycles
 - Crashworthiness – airbags, designs to keep riders on
 - Crash avoidance – antilock brake systems

For more information:

www.iihs.org

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