

MICHIGAN TRAFFIC SAFETY SUMMIT

The Rider and the Machine

DATA-DRIVEN APPROACHES TO REDUCING CYCLE CRASHES & INJURIES



*Major Daniel W. Lonsdorf
Director, Transportation Safety
Wisconsin DOT, State Patrol*



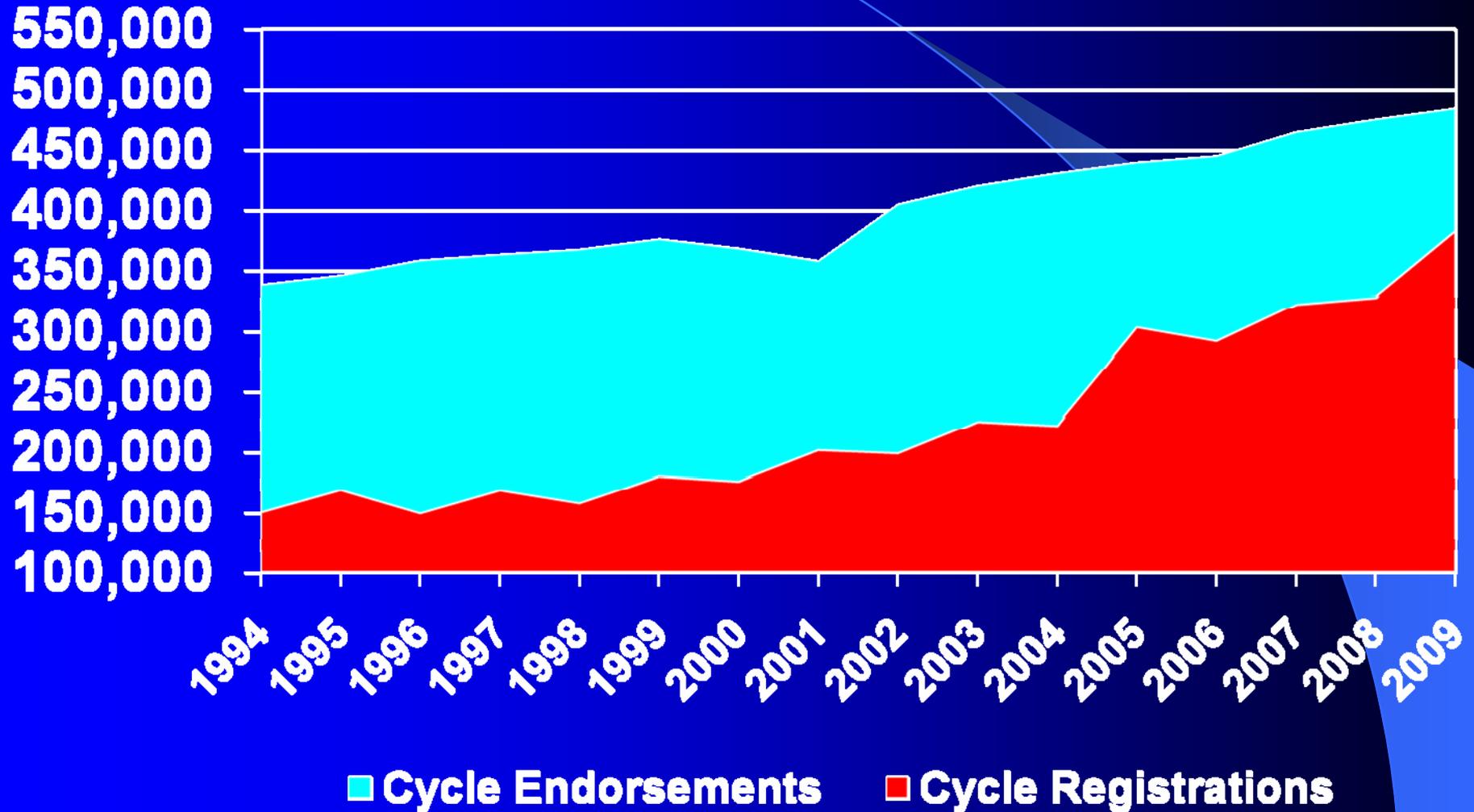
Who are These Biker People?



Could be Just About Anyone

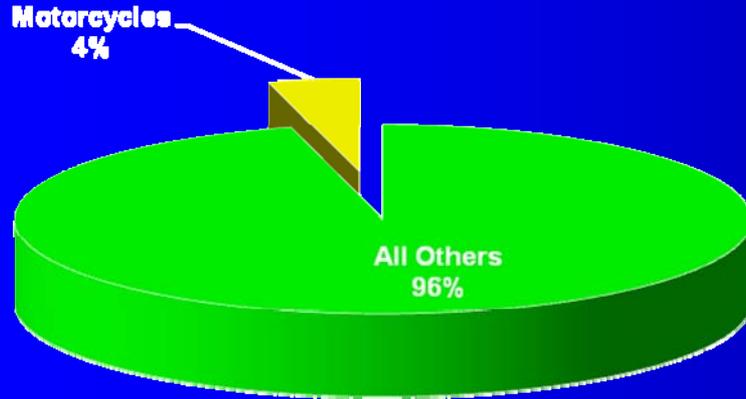


Motorcycle Popularity

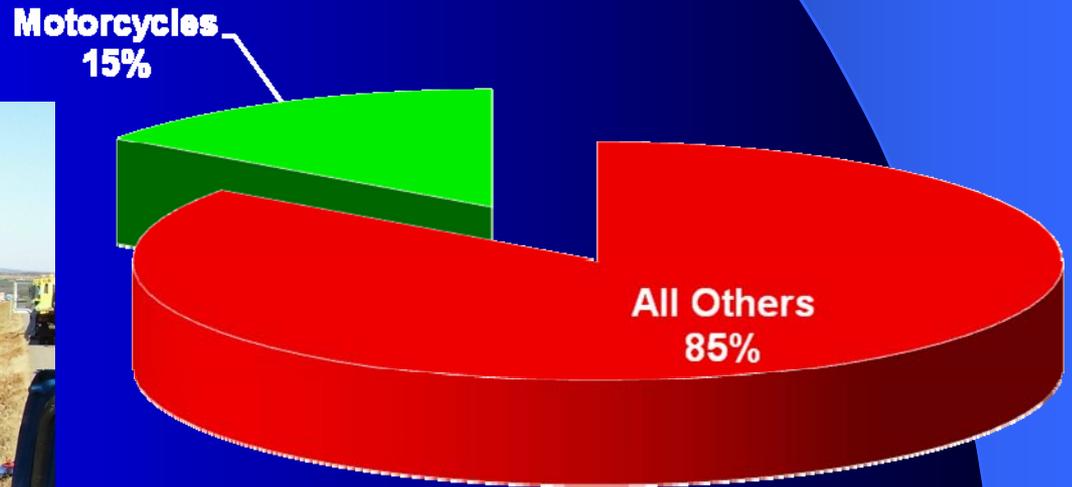


Motorcycle Exposure

Registrations



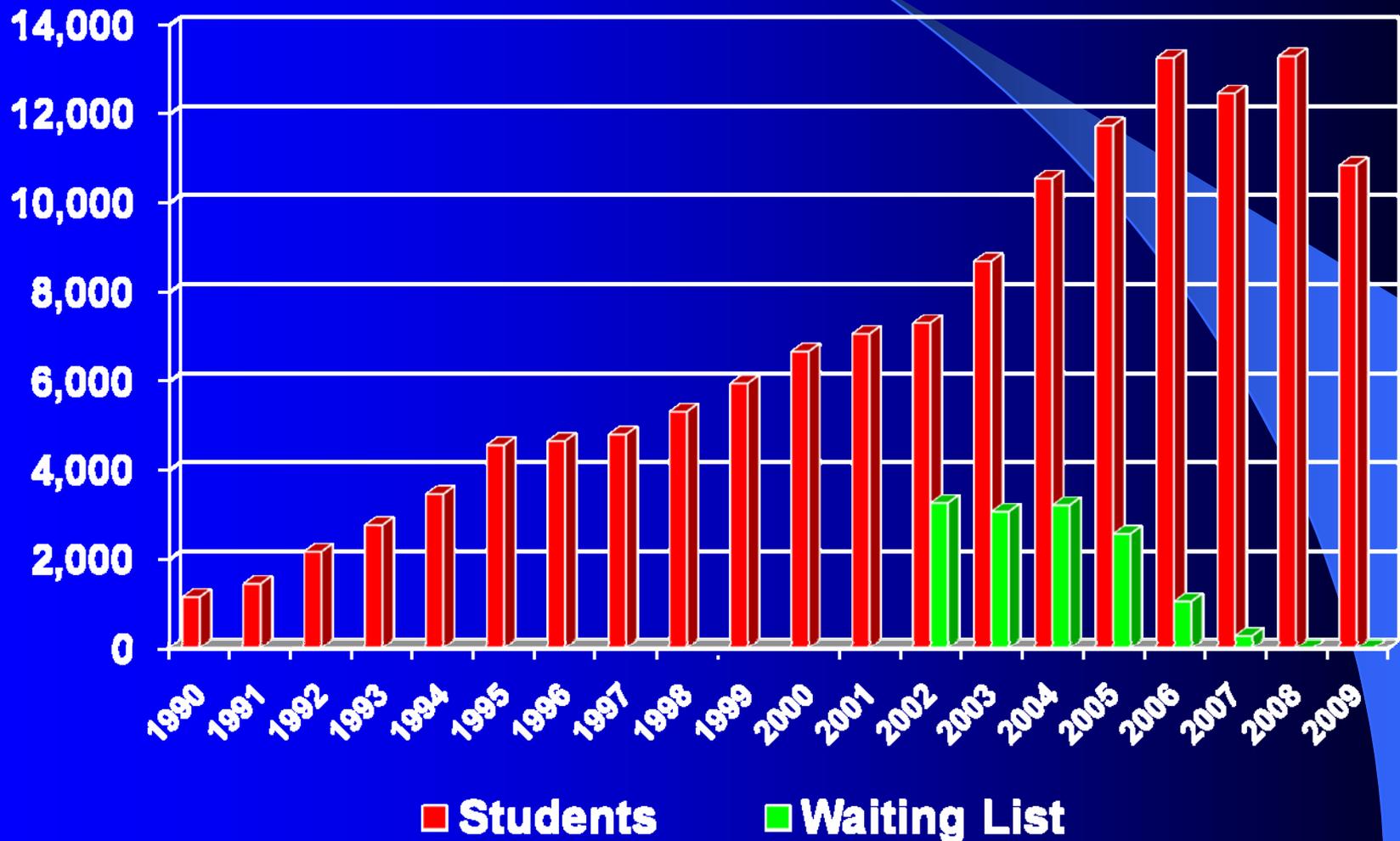
Highway Deaths



Letter to Registered Owners

- Notice of motorcycle ownership without record of a motorcycle rider endorsement
- Offer to obtain an endorsement
- Encourage Rider Education
- 33,000 in Wisconsin alone

Wisconsin Rider Education Enrollments



Rider Education

- Does it Work?
- Prove it

- With today's data, we can

While Training Continues at
Ever-increasing Rates,
78%
of all Riders Never have and
Never will Attend any kind of
Formal Rider Training Course

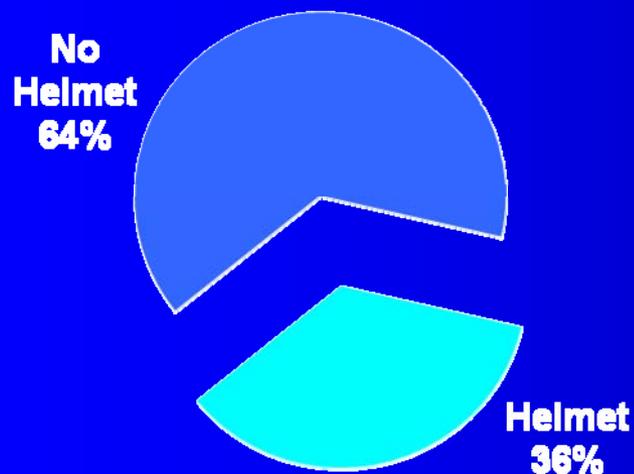
-And Here Come Mopeds & Scooters

Database Crosscheck

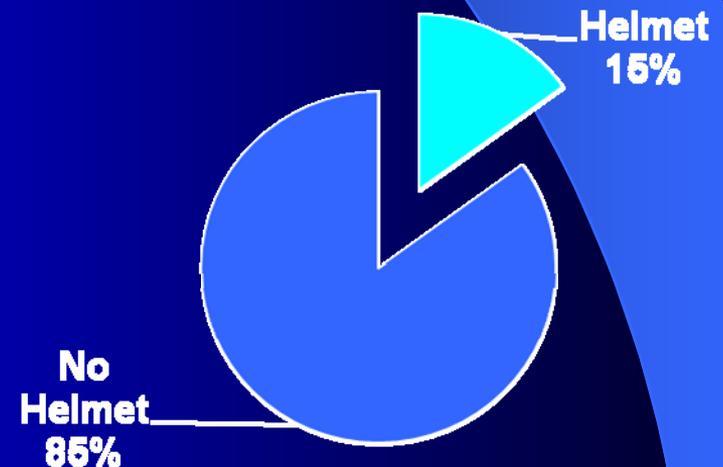
- Merge Rider Education graduates with the Crash Database
- Merge the Conviction Database
- *While Rider Education clearly makes people better riders, their likelihood of becoming involved in a motorcycle crash is less clear*

Wisconsin 2008 Motorcycle Fatalities (Alcohol Presence: 54% of all Deaths)

Non-Alcohol-Related

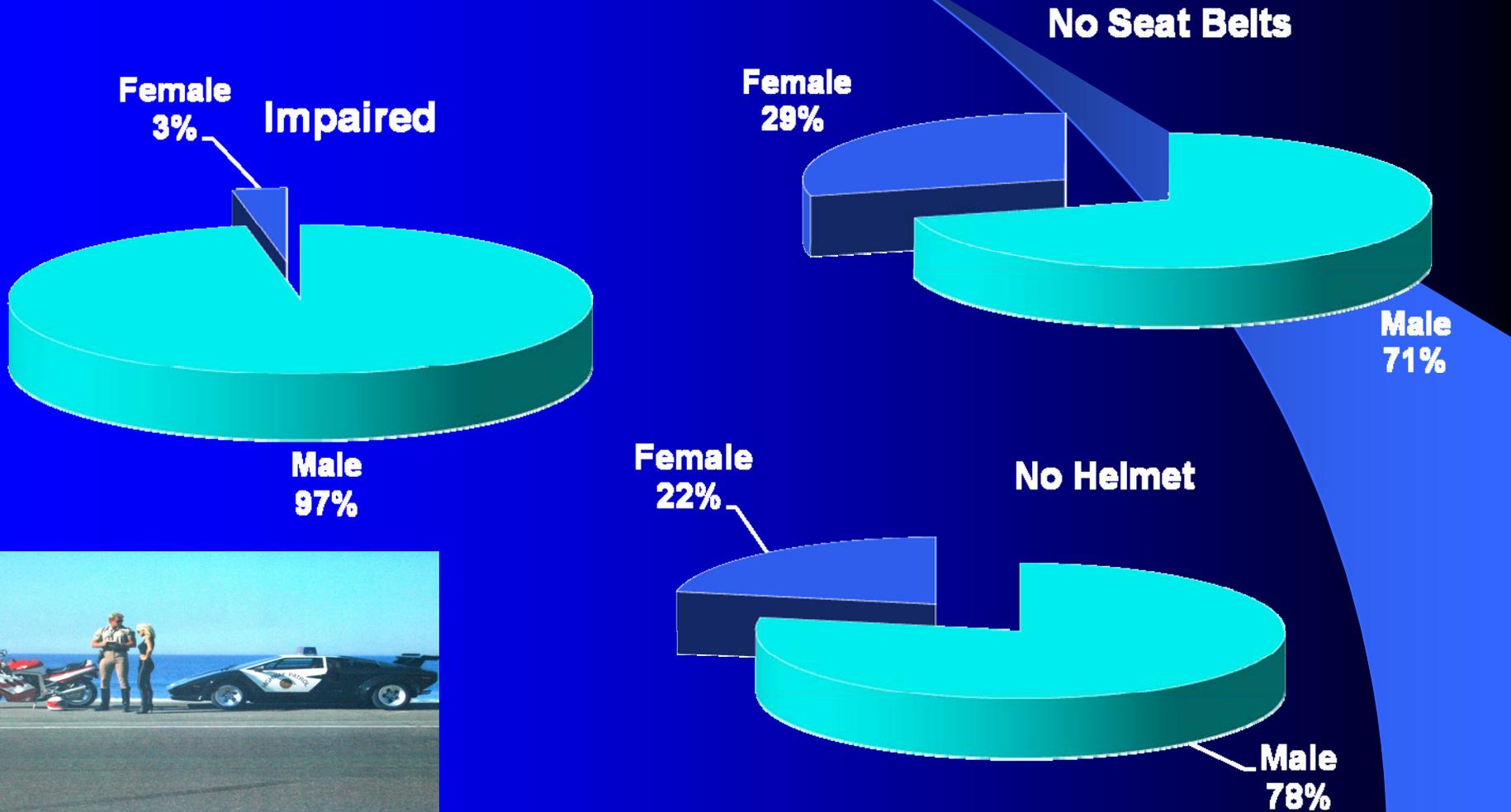


Alcohol-Related



Who Are They?

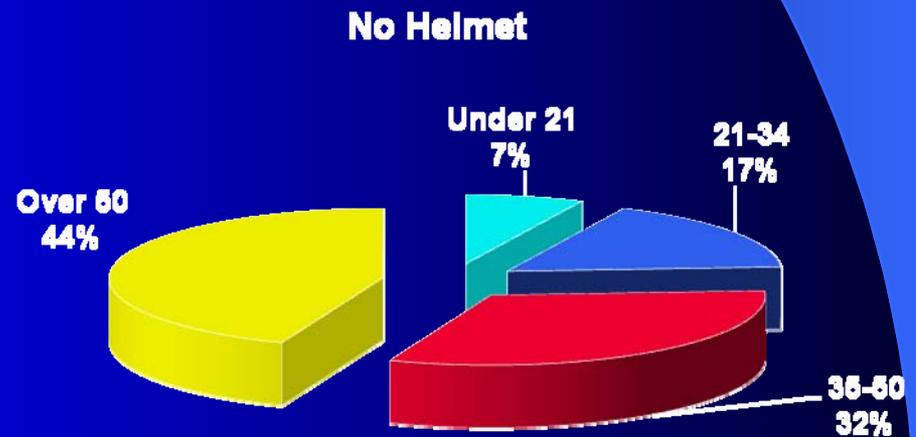
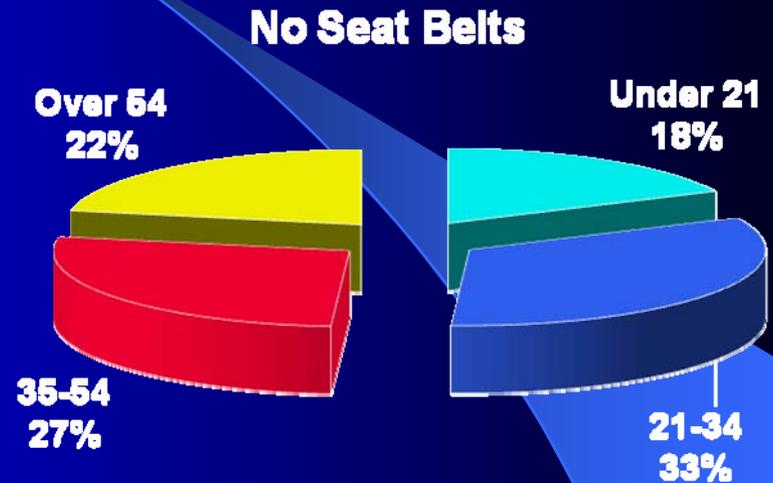
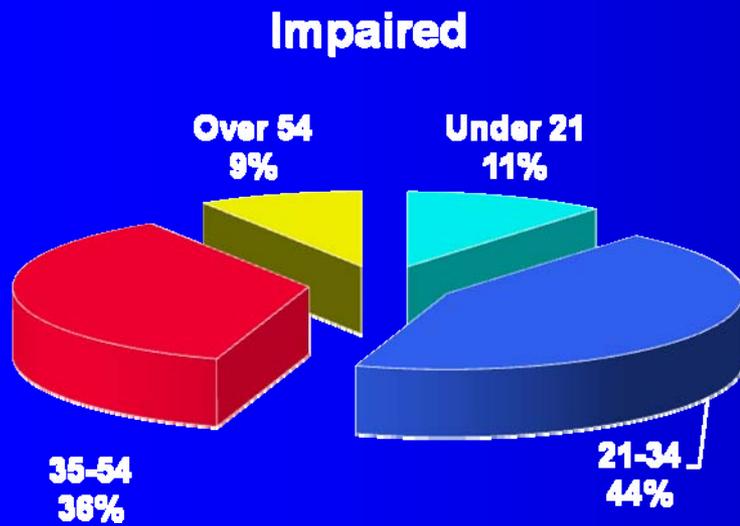
Drivers Killed: By Gender



LIFE IN THE FAST LANE

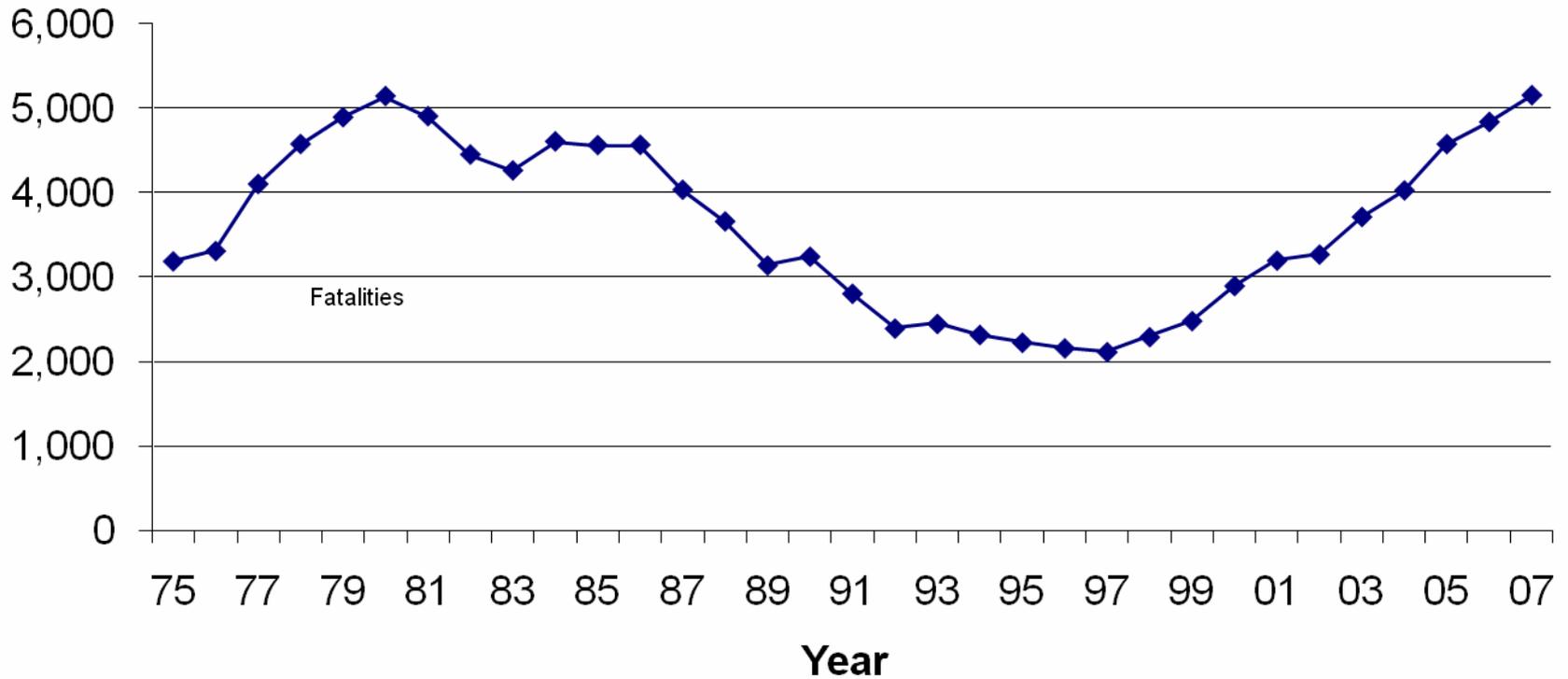
Who Are They?

Drivers Killed: By Age

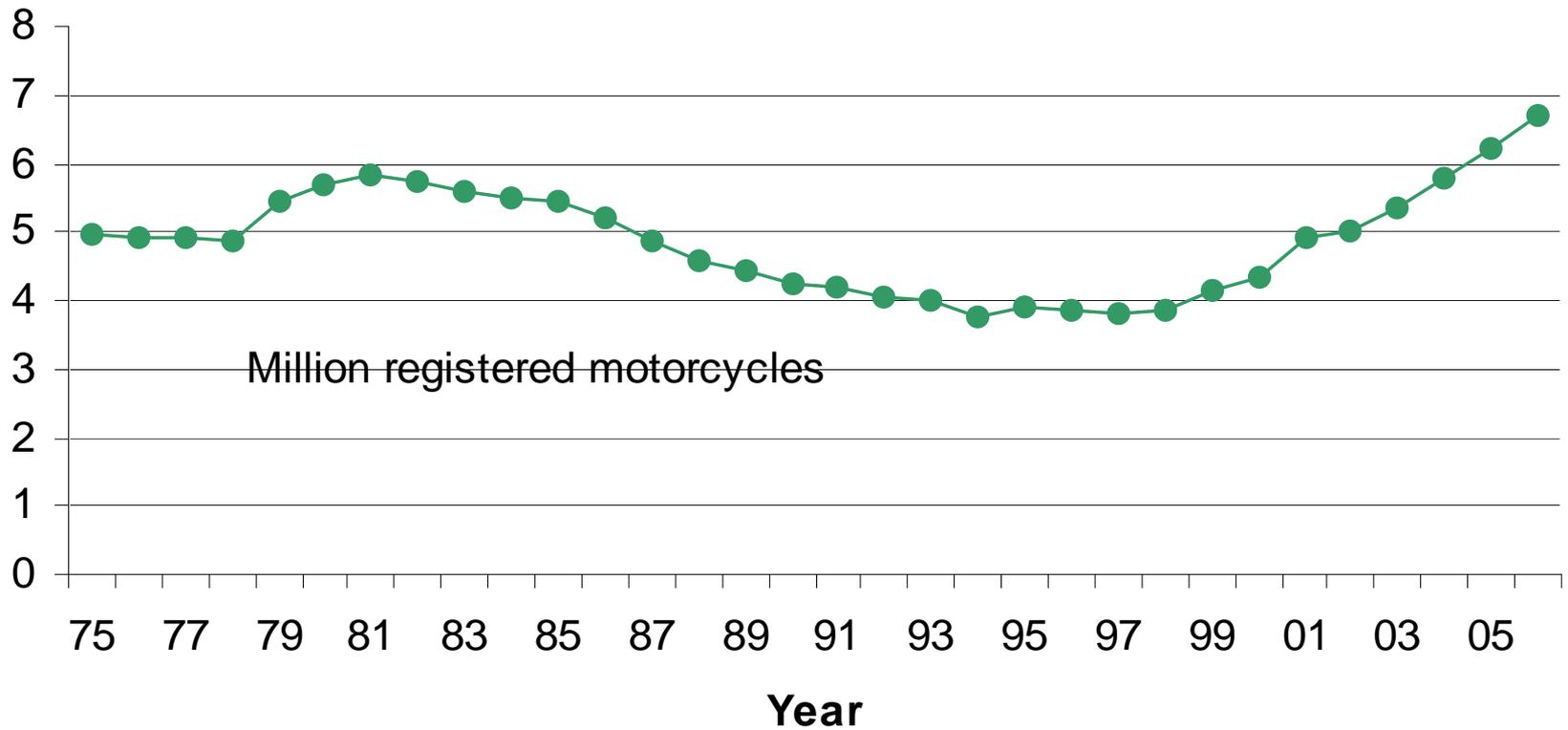


National Totals

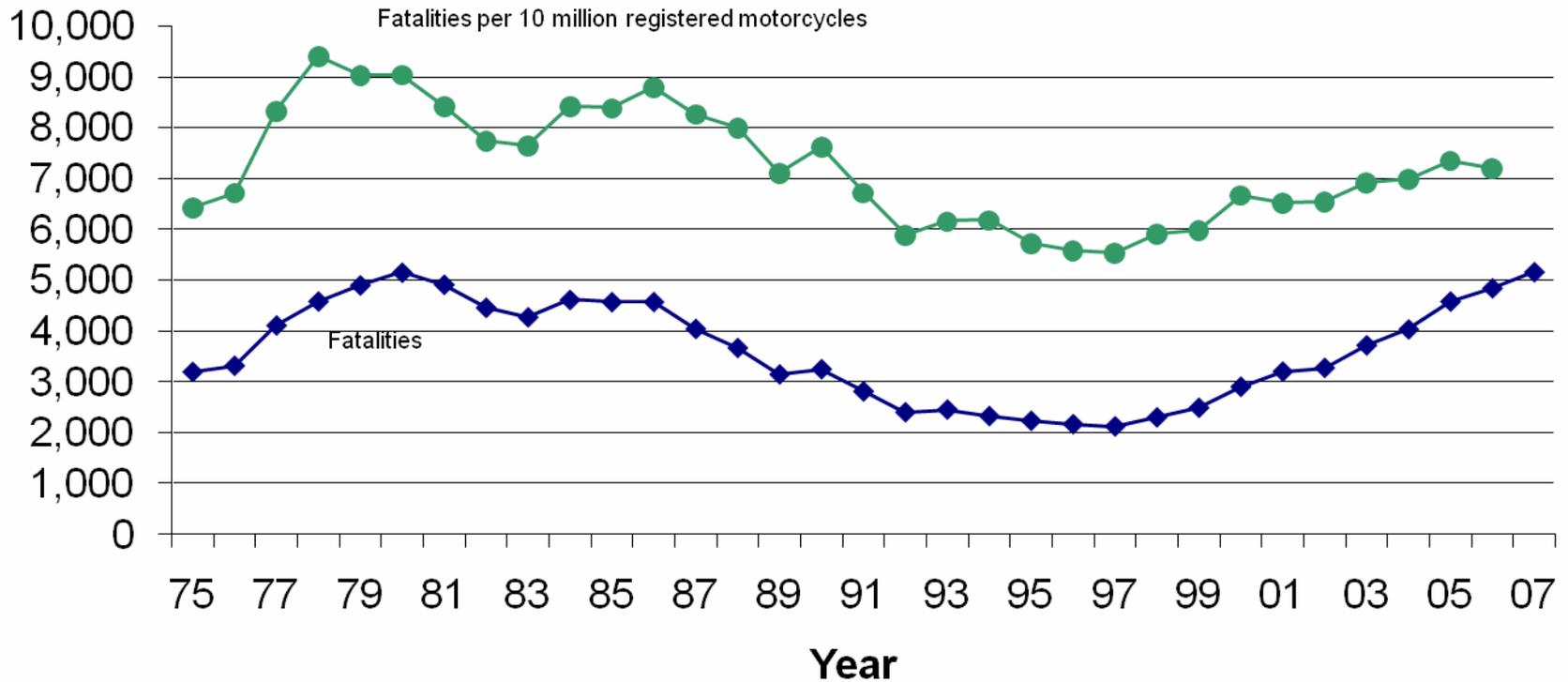
Motorcycle rider fatalities



Motorcycle registrations



Motorcycle rider fatalities and registrations



HELMETS

- Helmet effectiveness
 - reduce fatalities in a crash by 22-37%
 - reduce brain injuries in a crash by 41-65%
- Helmet law effectiveness
 - 83% helmet use in universal law States (2006)
 - 50% helmet use in other States

LOOKOUT FOR CYCLES

-2009-

- 46% of all fatal cycle crashes involved just the cycle
- 27% involved another vehicle failing to yield
- Visibility
- Driver distractions

WHAT ABOUT THE ROAD

- Curves, signage, & negative banks
- Median cable barriers
- Longitudinal pavement grooves
- Tar snakes (patches)
- Cattle grates
- Vegetation clearance
- Non-friction paint

WISCONSIN MOTORCYCLE FATALITIES IN 2009

- 87% Male
- 70% Rural
- 46% Single Vehicle
- 50% Age 45 and Older
- 44% Harley-Davidson
- 65% No Helmet
- 94% On Dry Pavement



MORE DETAILS, 2009

- 54% Involved Alcohol
- 43% Over .08%
- 62% Had Cycle Endorsement
- 25% With No DL, Suspended or Revoked
- 6% Involved Deer
- 56% Occurred in Home County

- *In all Motorcycle Crashes, 96% Result in an Injury to the Rider or Passenger*



LIFE

AMERICANS IN
HEIDELBERG



JULY 21, 1947 **15** CENTS
YEARLY SUBSCRIPTION \$5.50



CYCLIST'S HOLIDAY

He and friends terrorize a town

On the Fourth of July weekend 4,000 members of a motorcycle club roared into Hollister, Calif. for a three-day convention. They quickly tired of ordinary motorcycle thrills and turned to more exciting stunts. Racing their vehicles down the main street and through traffic lights, they rammed into restaurants and bars, breaking furniture and mir-

rors. Some rested awhile by the curb (above). Others hardly paused. Police arrested many for drunkenness and indecent exposure but could not restore order. Finally, after two days, the cyclists left with a brazen explanation. "We like to show off. It's just a lot of fun." But Hollister's police chief took a different view. Wailed he, "It's just one hell of a mess."

CONSIDER OBSERVATIONAL SURVEYS

- Is travel done in groups or alone
- What are they riding
- What are they wearing
- Gender
- Riding single or two-up
- Commuting, touring, or pleasure
- Speed



FOCUS GROUPS

Target Demographic: Impaired Drivers

- Over-estimate the amount they can drink
- Self assess based on how they feel
- Most drink with friends
- Most drink while out
- Reasons for ending the evening:
 - Closing time
 - Out of money
 - Domestic Obligations



CHALLENGES

- Separating Riders from Their Bike
- The Ride is the Reason they Ride
 - Consider the Ride, not the Destination
 - Not so much a Means to Arrive
 - But, rather a Way to get There



CHALLENGES

- Developing Viable Alternatives
- Social Marketing
 - The Alternative Must be more Appealing than the Mainstay
- Breaking Product Loyalty Toward Riding & Alcohol
 - Organized Rides
 - Watering Holes/Event Destinations



**Are we willing to
accept the
carnage on our
highways as
collateral damage
to foster a free &**

Strategies

-Social Marketing-

- Target Rider Events and Gathering Places
- Festivals, Fairs, Open Houses & Rides
 - Poker Runs – Alternatives to tavern stops
 - Non-alcoholic options, sponsorship
 - Casual restaurants instead of taverns
 - Convenience stores instead of taverns
 - Develop incentives to patronize – discounts
 - Must feel welcome
 - Zero-Tolerance Hog Chapter Rides



Strategies

-Alternative Ride Home-

- Extremely Difficult to Separate the Rider from Their Bike
- The Choice Must be More Appealing than the Alternative
 - Stress Risk of Crash & Risk of Arrest
 - Will Leave Bike Behind if:
 - Assurance of security
 - Dignified alternative transportation home
 - Accessible transportation back to pick up bike
 - Towing only as a last resort – (trailer or enclosed only)



Strategies

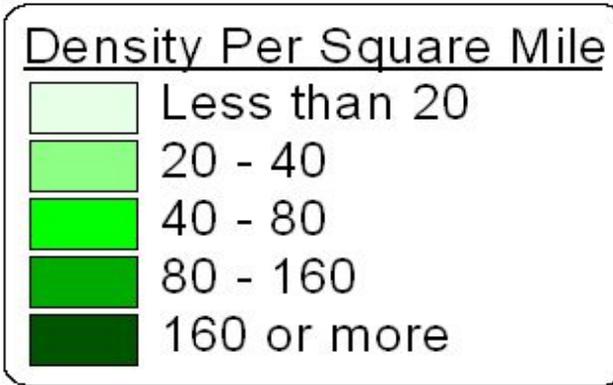
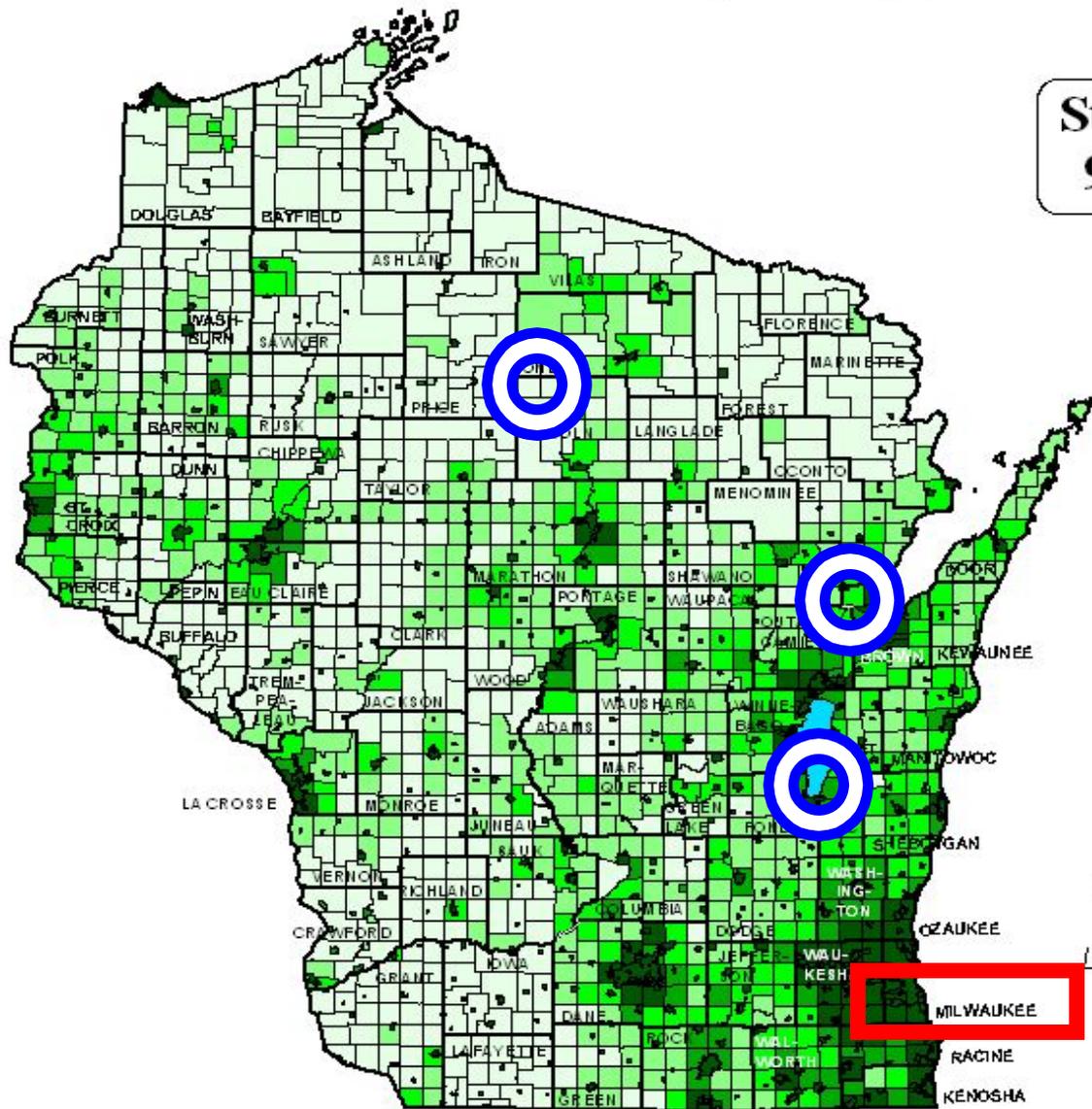
-Education & Enforcement-

- Go to Where They Gather (events)
- Utilize Trained Police Motor Officers
 - Use Partnerships to Obtain an Invitation
 - Provide Onsite Demonstrations
 - Safety Tips – Open Dialogue
 - Interactive Audience Participation
 - What is a “Legal” Muffler



Estimated Population Density in Wisconsin, by Municipality, January 2000

**State Estimated Density, 2000:
97.7 persons per square mile**



Sources of data: WI Demographic Services Center, January 2000 Population Estimates; WI Office of Land Information Services, 1998 Land Area by Municipality

Map prepared by WI Demographic Services Center, October 2000

Strategies

-Education & Enforcement-



Stress Partnerships in
Survival, not You
Verses Them



A RIDER'S 4 UNIVERSAL TRUTHS

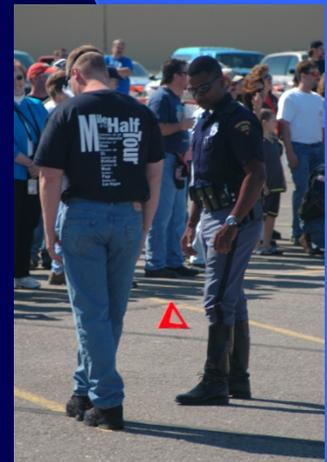
- Look Where you Want to Go
- Never Assume They See You
- Countersteer
- Never Stop Driving the Motorcycle



Strategies

-Education & Enforcement-

- Combine the Education with Enforcement
- Utilize Trained Police Motor Officers
- Along with Regular Police Patrols
 - Saturate the Event Area with Aggressive Patrols
 - Establish Nearby and Secure Lodging for Officers
 - Heavily Promote & Advertise the Patrols
 - Encourage all earned media
 - Media will find you
 - Follow-up to media with total event contacts & activities



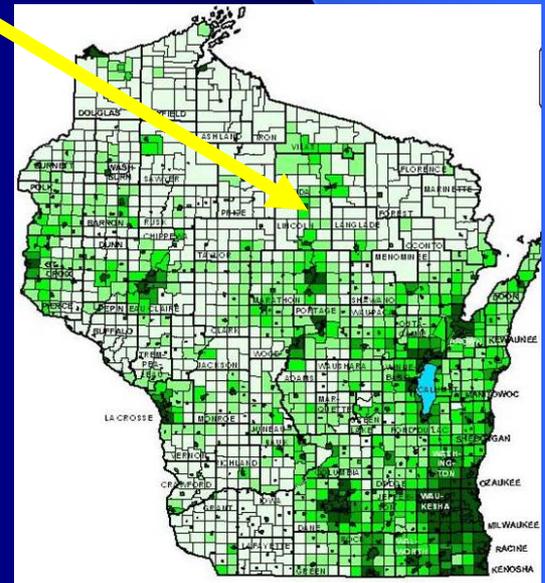
OUTCOMES

Tomahawk Fall Color Rally Lincoln County, Wisconsin

- 2001 – Single Base Year
 - 15 Cycle Crashes
 - 4 Fatalities
 - 20 Injuries (6 serious)
- Average per Year, 2006-09
 - 6 Cycle Crashes
 - 1 Fatality in 4 Years
 - 6 Injuries (1 serious)

Average
Attendance: 58,000

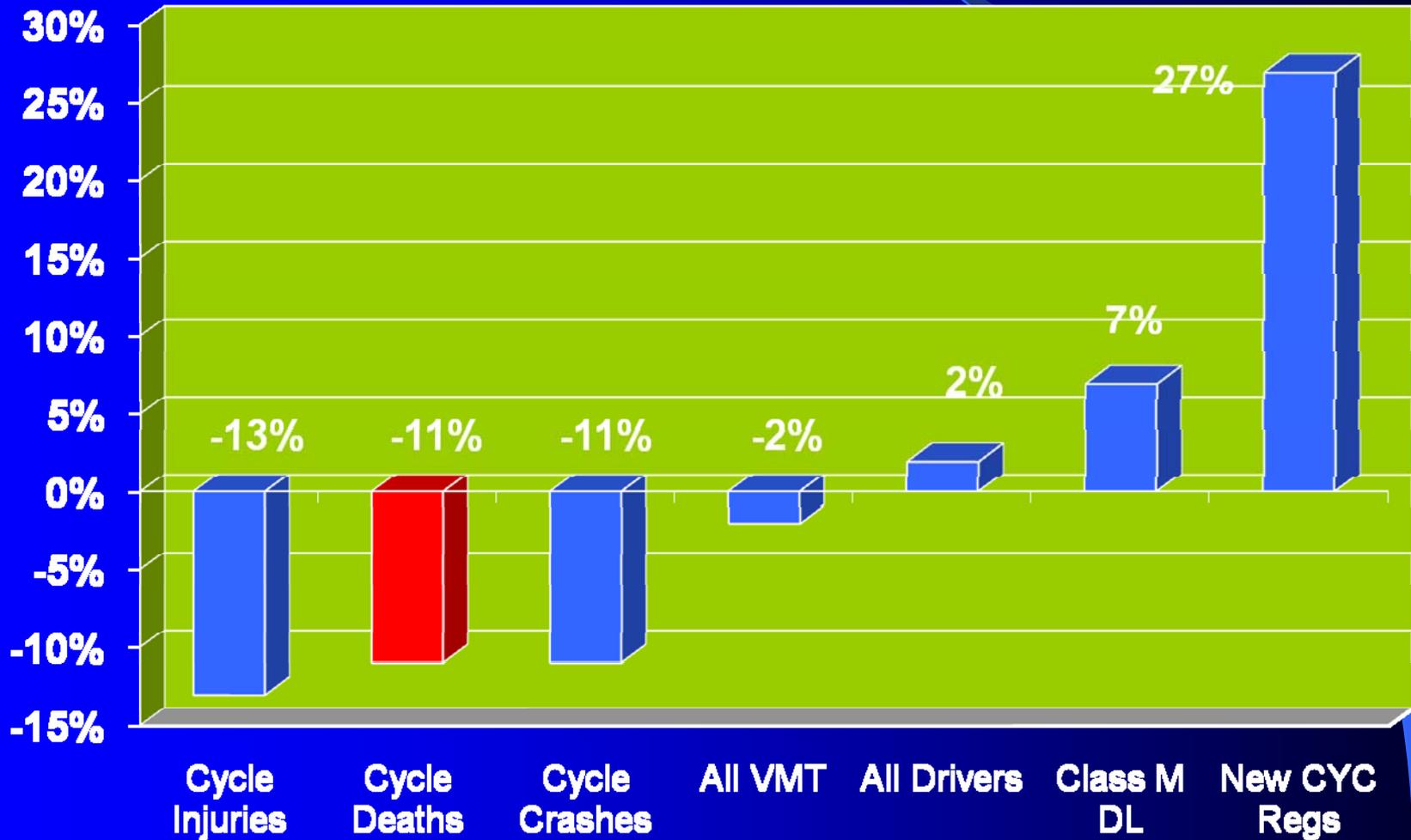
Mid-September
Event



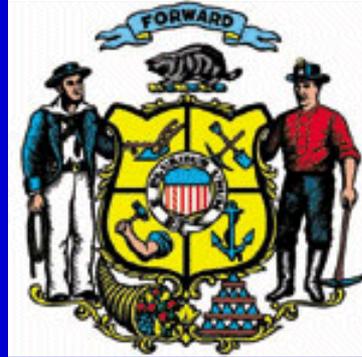
2009 OUTCOMES (Statewide)

-Five Year Trends-

2004-08 Baseline



Thank You



*Major Daniel W. Lonsdorf, Director, Transportation Safety
Wisconsin Department of Transportation,
State Highway Patrol, 4802 Sheboygan Avenue Room 551
Madison, WI 53707
608-266-3048
daniel.lonsdorf@dot.wi.gov*