

# Traffic and Safety Conference

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Romell W. Cooks

NHTSA

May 1, 2008



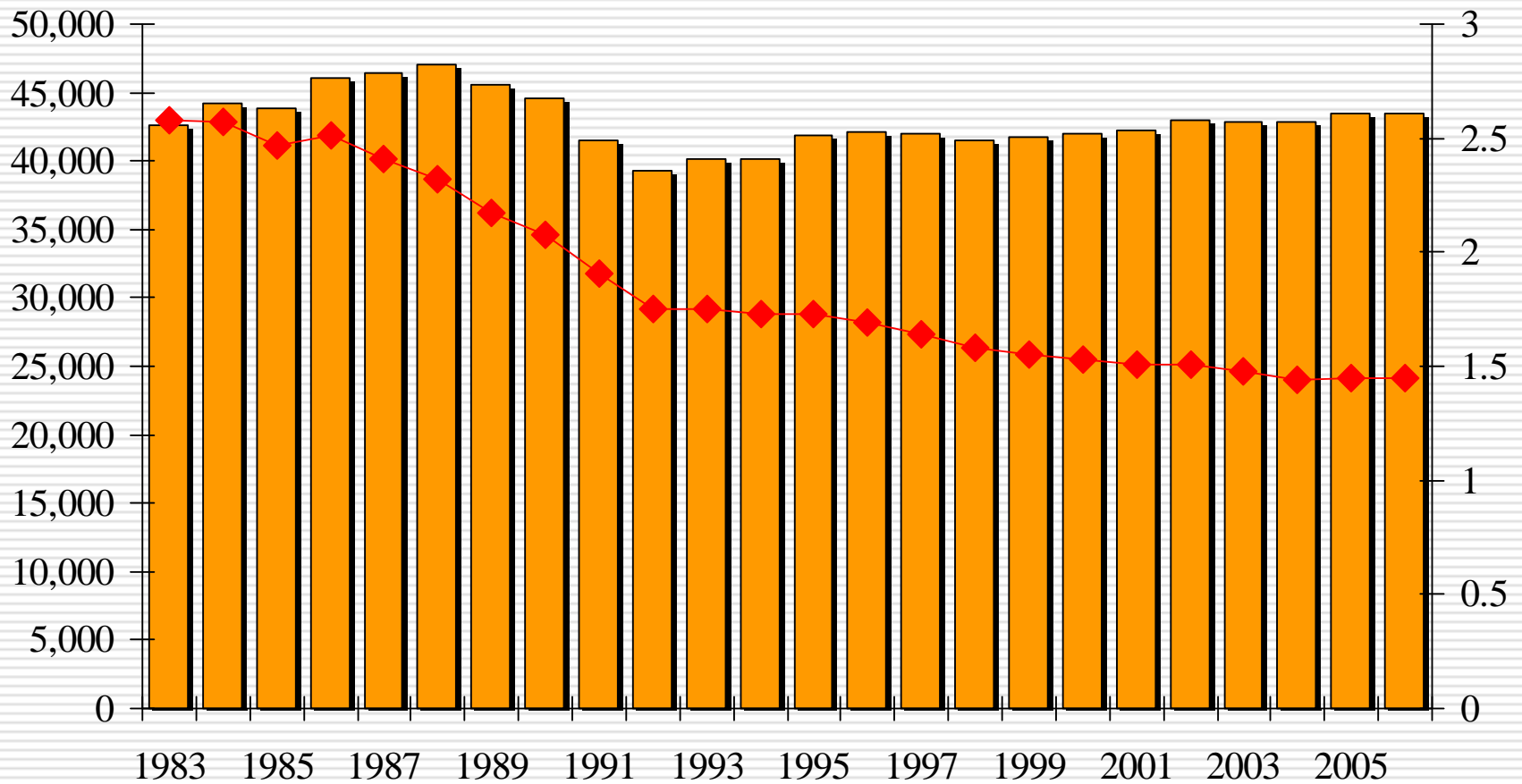


National Highway Traffic Safety Administration's  
National Center for Statistics and Analysis

## Top 10 Leading Causes of Death in the United States for 2003, By Age Group<sup>1</sup>

R A N K	Cause and Number of Deaths											Years of Life Lost <sup>2</sup>
	Young Children			Young Adults			Other Adults			Elderly 65+	All Ages	
	Infants Under 1	Toddlers 1-3	Children 4-7	Children 8-15	Youth 16-20	Young Adults 21-24	25-34	35-44	45-64			
1	Perinatal Period 14,254	Congenital Anomalies 480	<b>MV Traffic Crashes 478</b>	<b>MV Traffic Crashes 1,592</b>	<b>MV Traffic Crashes 6,988</b>	<b>MV Traffic Crashes 4,312</b>	<b>MV Traffic Crashes 6,675</b>	Malignant Neoplasms 15,609	Malignant Neoplasms 145,535	Heart Disease 563,390	Heart Disease 685,089	Malignant Neoplasms 23%(8,672,799)
2	Congenital Anomalies 5,621	Accidental Drowning 401	Malignant Neoplasms 444	Malignant Neoplasms 859	Homicide 2,489	Homicide 2,744	Suicide 5,065	Heart Disease 13,600	Heart Disease 102,792	Malignant Neoplasms 388,911	Malignant Neoplasms 556,902	Heart Disease 21%(8,027,887)
3	Heart Disease 439	<b>MV Traffic Crashes 385</b>	Congenital Anomalies 166	Suicide 412	Suicide 1,813	Suicide 2,012	Homicide 4,516	<b>MV Traffic Crashes 6,780</b>	Diabetes 16,389	Stroke 138,134	Stroke 157,689	<b>MV Traffic Crashes 6%(1,725,870)</b>
4	Homicide 341	Homicide 333	Accidental Drowning 149	Homicide 389	Accidental Poisoning 752	Accidental Poisoning 1,221	Malignant Neoplasms 3,741	Suicide 6,602	Stroke 16,073	Chronic Lwr. Resp. Dis. 109,139	Chronic Lwr. Resp. Dis. 126,362	Stroke 5%(1,641,883)
5	Influenza/ Pneumonia 322	Malignant Neoplasms 272	Exposure to Smoke/Fire 145	Congenital Anomalies 320	Malignant Neoplasms 749	Malignant Neoplasms 795	Accidental Poisoning 3,435	Accidental Poisoning 6,230	Chronic Lwr. Resp. Dis. 15,614	Alzheimer's 62,814	Diabetes 74,219	Chronic Lwr. Resp. Dis. 4%(1,486,130)
6	Septicemia 278	Exposure to Smoke/Fire 189	Homicide 113	Heart Disease 248	Heart Disease 460	Heart Disease 633	Heart Disease 3,250	HIV 5,340	Chronic Liver Disease 13,894	Influenza/ Pneumonia 57,670	Influenza/ Pneumonia 65,163	Perinatal Period 3%(1,110,448)
7	Nephritis/ Nephrosis 181	Heart Disease 159	Heart Disease 93	Accidental Drowning 209	Accidental Drowning 309	Accidental Drowning 223	HIV 1,568	Homicide 3,110	Suicide 10,324	Diabetes 54,919	Alzheimer's 63,457	Suicide 3%(1,104,339)
8	<b>MV Traffic Crashes 144</b>	Influenza/ Pneumonia 141	Influenza/ Pneumonia 79	Exposure to Smoke/Fire 140	Congenital Anomalies 241	Congenital Anomalies 171	Diabetes 657	Chronic Liver Disease 3,020	<b>MV Traffic Crashes 9,700</b>	Nephritis/ Nephrosis 35,254	<b>MV Traffic Crashes 43,340</b>	Diabetes 3%(1,067,600)
9	Stroke 101	MV Nontraffic Crashes <sup>4</sup> 101	MV Nontraffic Crashes <sup>4</sup> 43	MV Nontraffic Crashes <sup>4</sup> 120	MV Nontraffic Crashes <sup>4</sup> 106	HIV 131	Stroke 583	Stroke 2,460	Accidental Poisoning 6,804	Septicemia 26,445	Nephritis/ Nephrosis 42,453	Homicide 2%(827,103)
10	Meningitis 77	Septicemia 77	Septicemia 35	Chronic Lwr. Resp. Dis. 114	Accidental Falls 106	MV Nontraffic Crashes <sup>4</sup> 117	Congenital Anomalies 426	Diabetes 2,049	HIV 5,969	Hypertension Renal Dis. 18,657	Septicemia 34,069	Accidental Poisoning 2%(749,583)
ALL <sup>3</sup>	28,025	4,205	2,566	6,555	16,141	16,090	41,300	89,461	439,300	1,804,373	2,448,288	All Causes 100%(37,465,800)

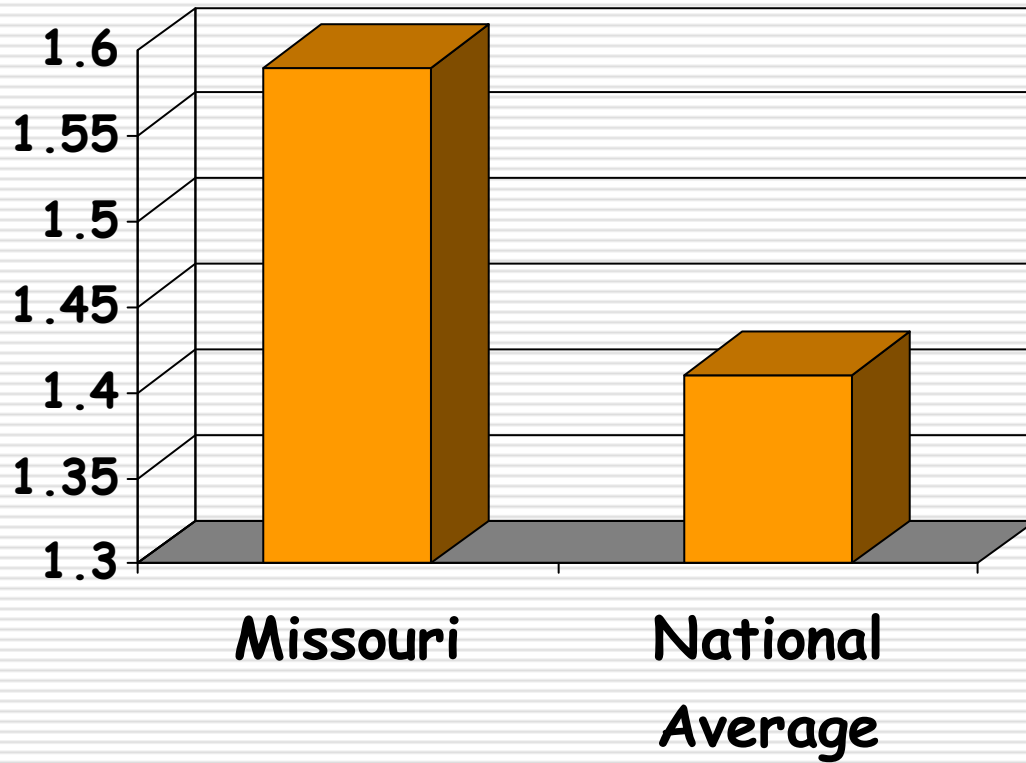
# U.S. Traffic Deaths 1983-2006



Number —◆— Rate/100 million vehicle miles

# Traffic Fatality Rates

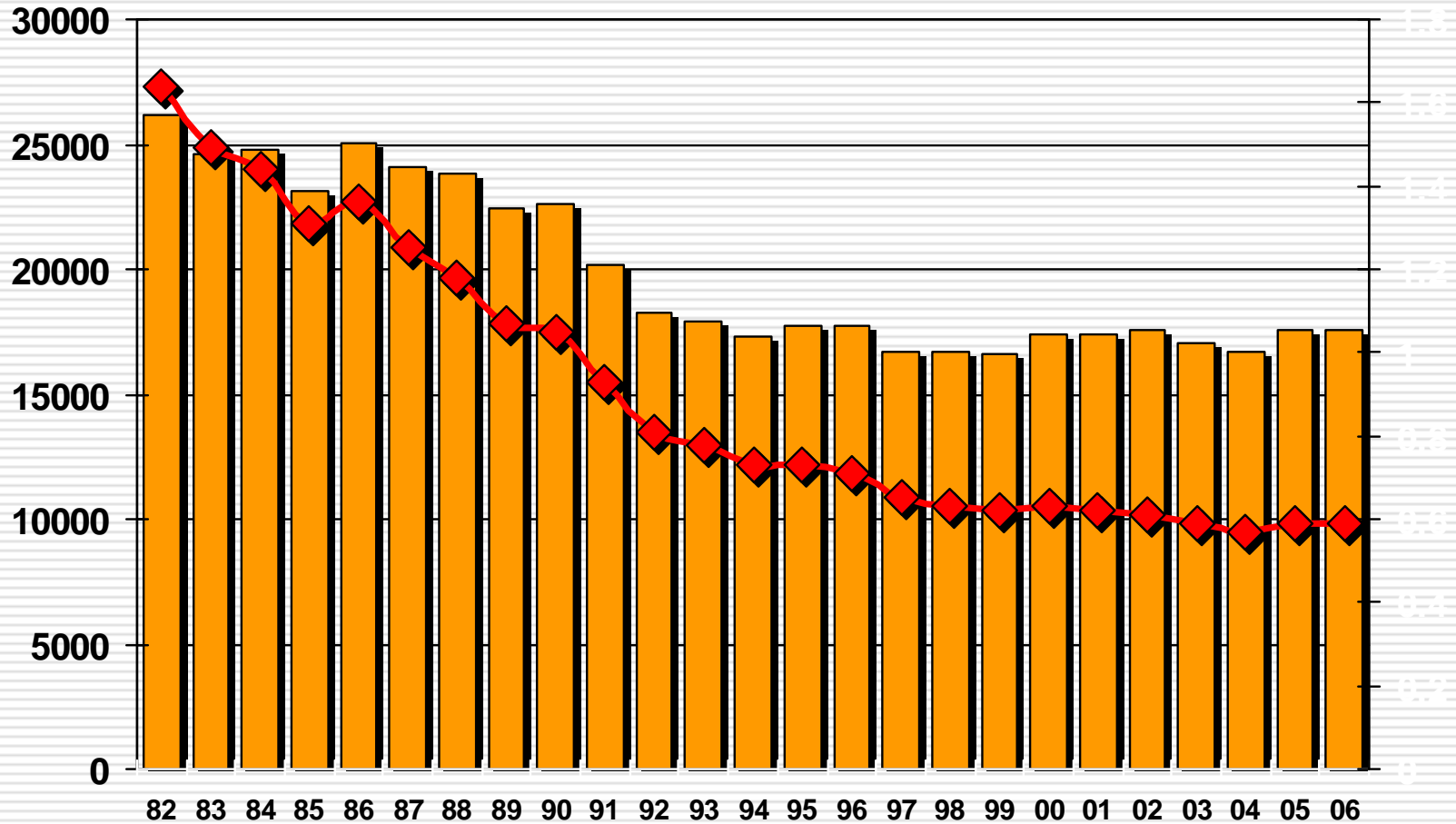
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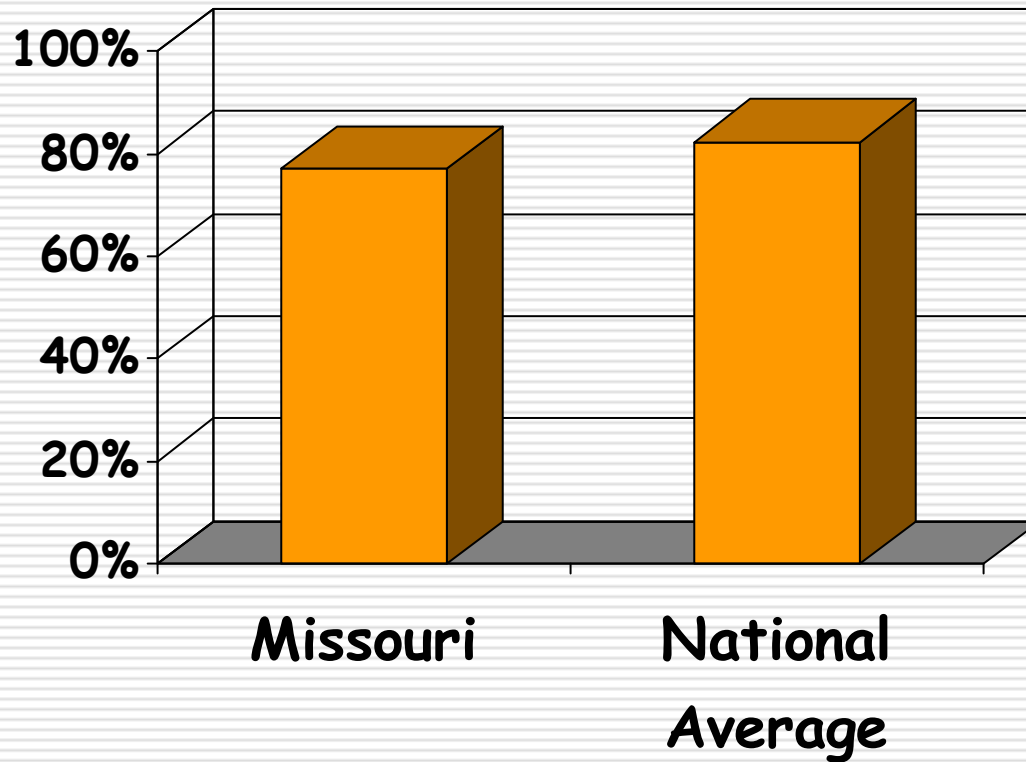
Per 100m VMT 2006

# Alcohol-Related Fatalities and Rates 1982 - 2006



# Observed Safety Belt Use

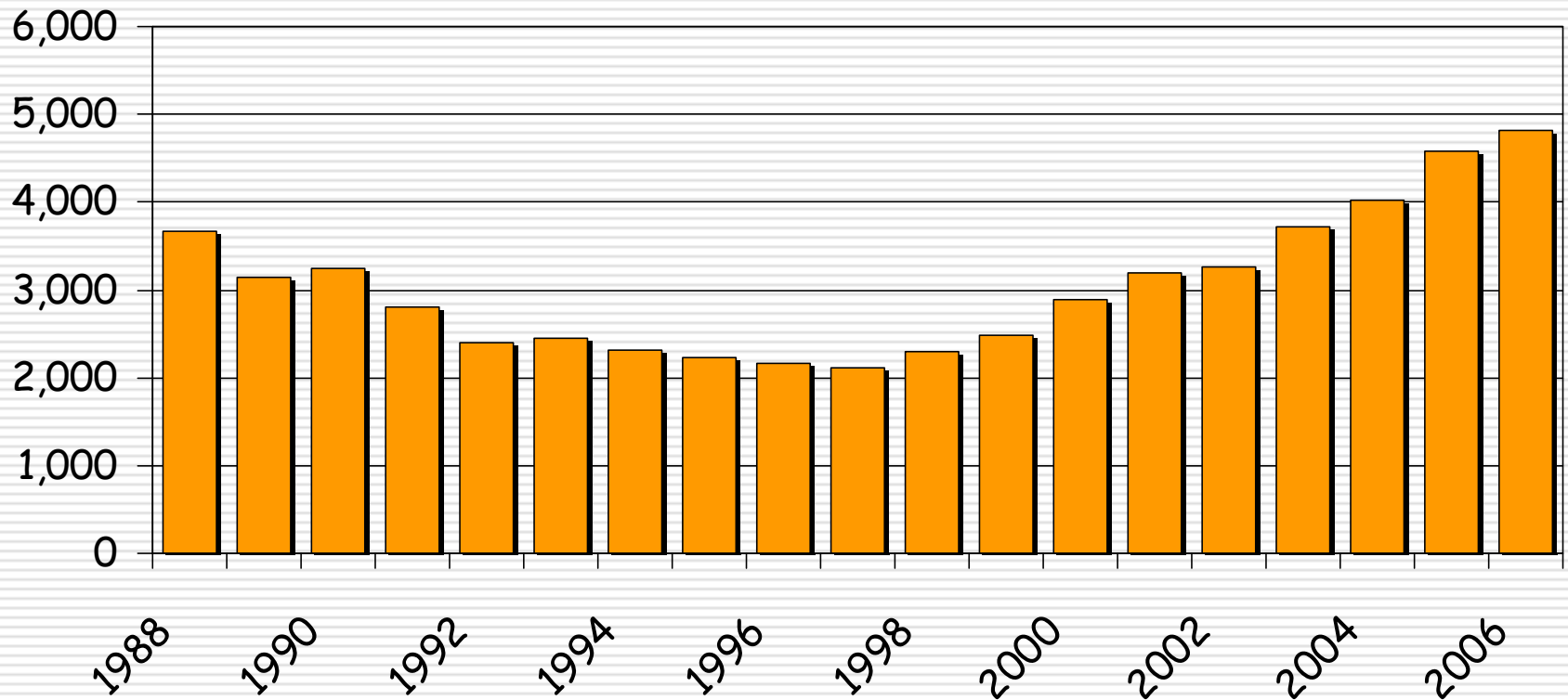
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Observed Use 2007

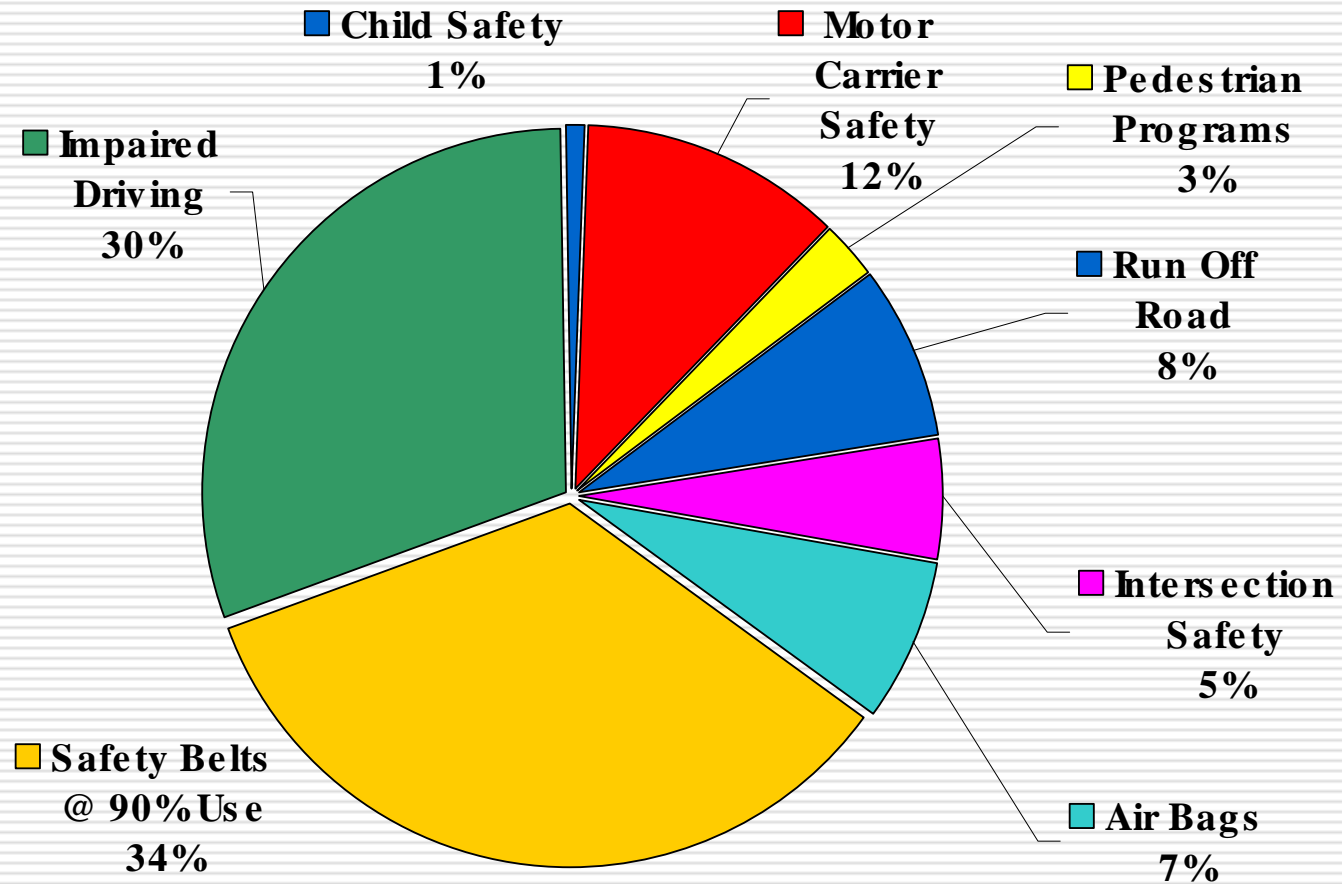
# Motorcyclist Fatalities



Source: FARS

# Lives Savable by Countermeasure

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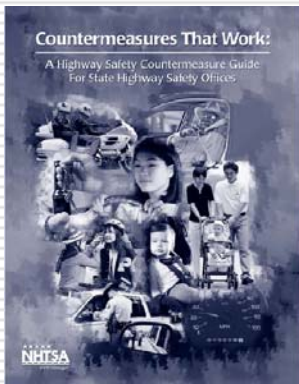


# What Works ?

## Impaired Driving/ Belt Use

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- Strong laws
- High visibility enforcement
- Strategic communications



# USE EACH DAY

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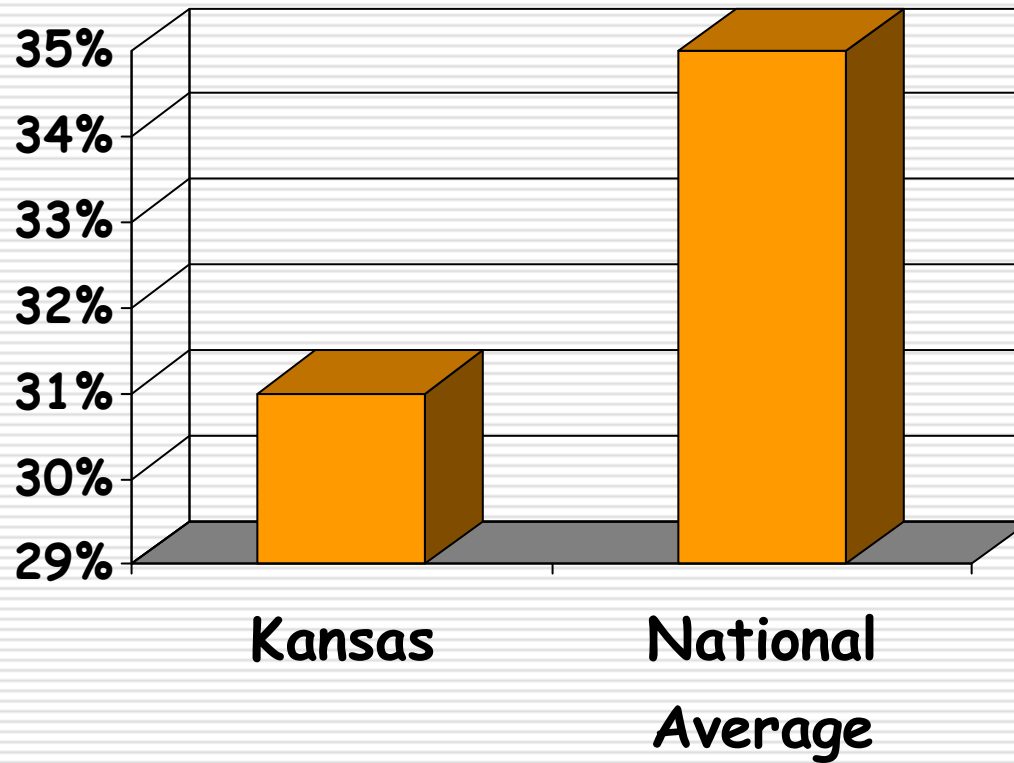
- This is the beginning of a new day. God has given it to us to use as we will. We can waste it or use for good, but what we do today is important because we are exchanging a day of our lives for it. When tomorrow comes, this day will be gone forever leaving in its place something we have traded for it. ... For me, I want it to be gain and not loss. I want it to be for good and not evil. I want it to be for success not failure. Hartsill Wilson

**THANK YOU**



# Alcohol Involvement Rate .08

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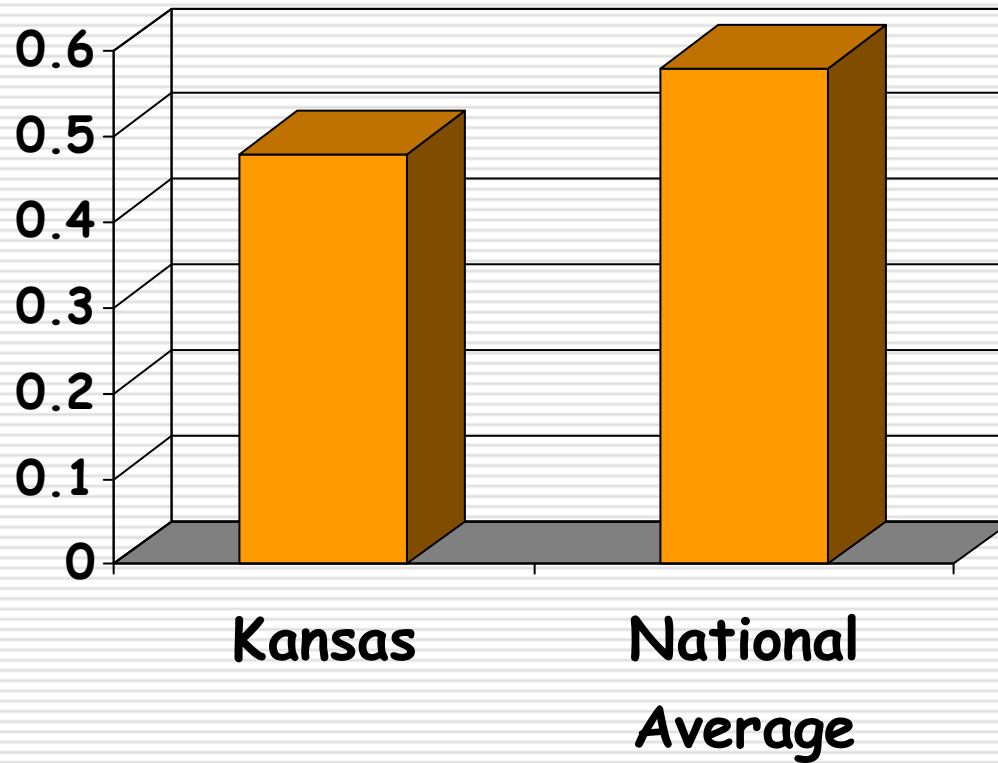


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Percent of all fatalities .08+BAC 2006

# Alcohol Involvement Rate VMT

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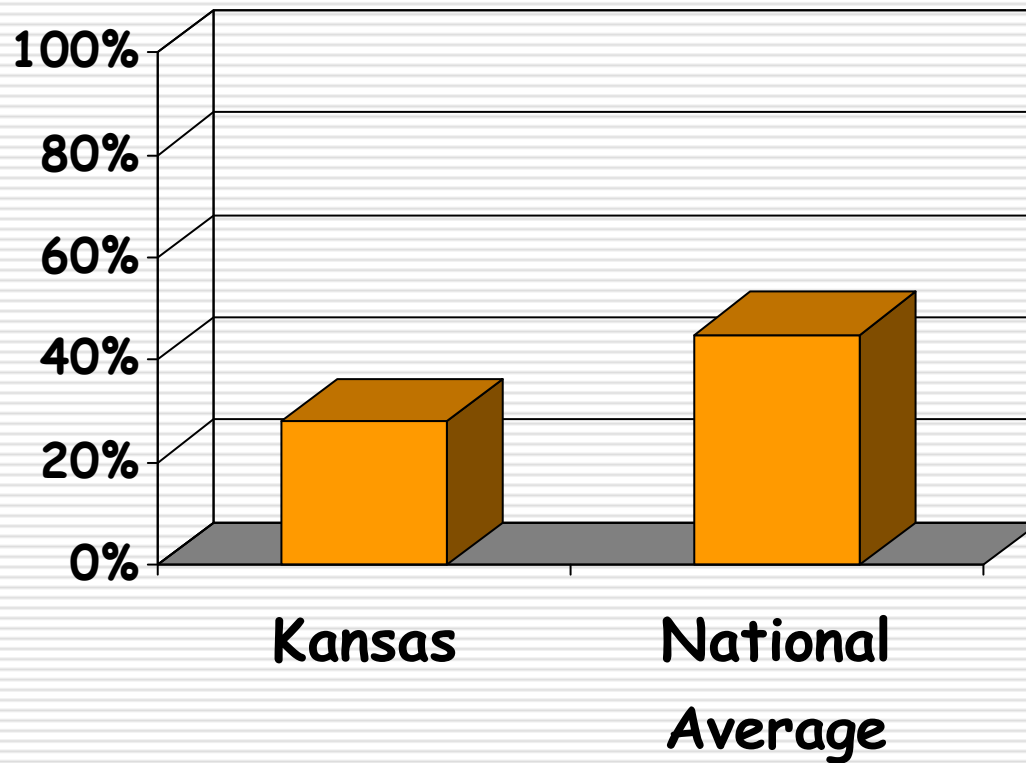


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alcohol-related fatalities per 100m VMT 2006

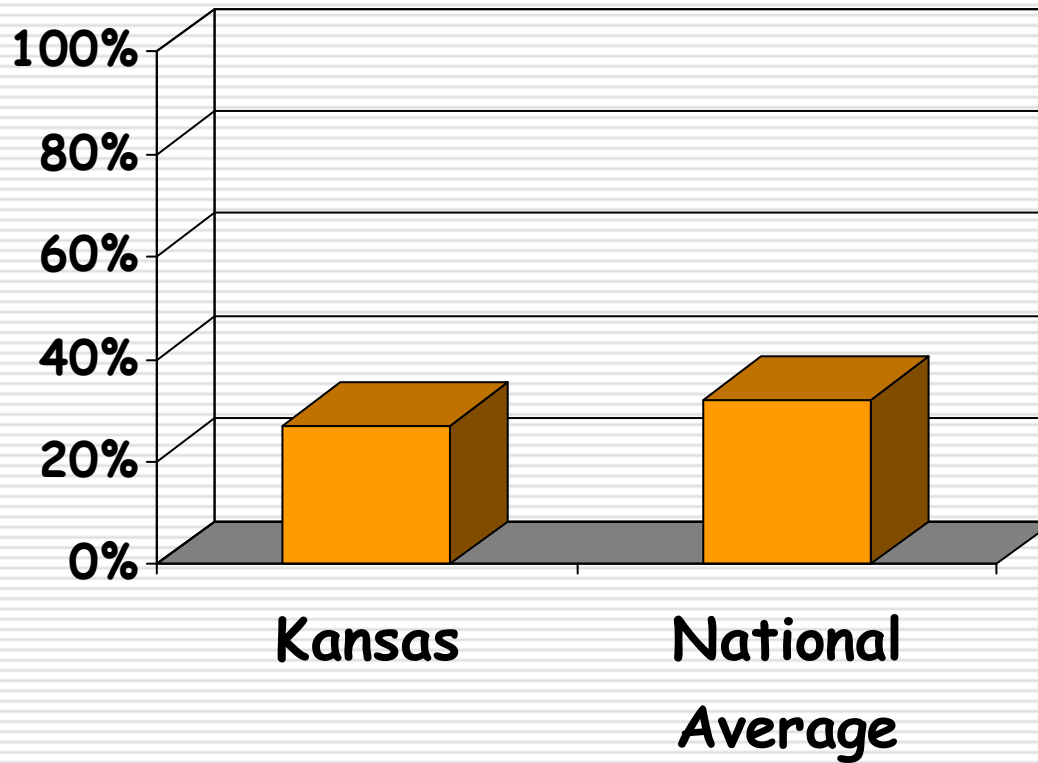
# Safety Belt Use Among Fatalities

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# Speed-Related Crashes

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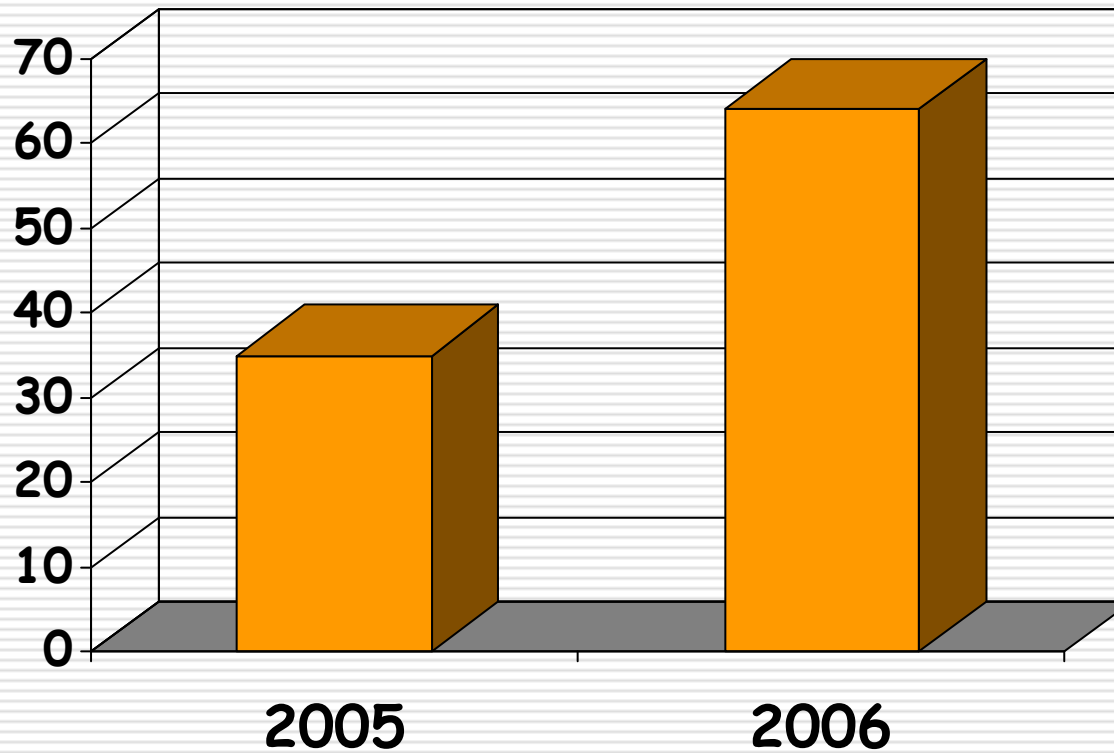


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percent fatal crashes speed related 2006

# Kansas Motorcycle Fatalities

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# A Multi-Faceted Approach Works to Reduce Impaired Driving

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**High-  
Visibility  
Enforcement**



**DWI Courts  
& Special  
Prosecutors**



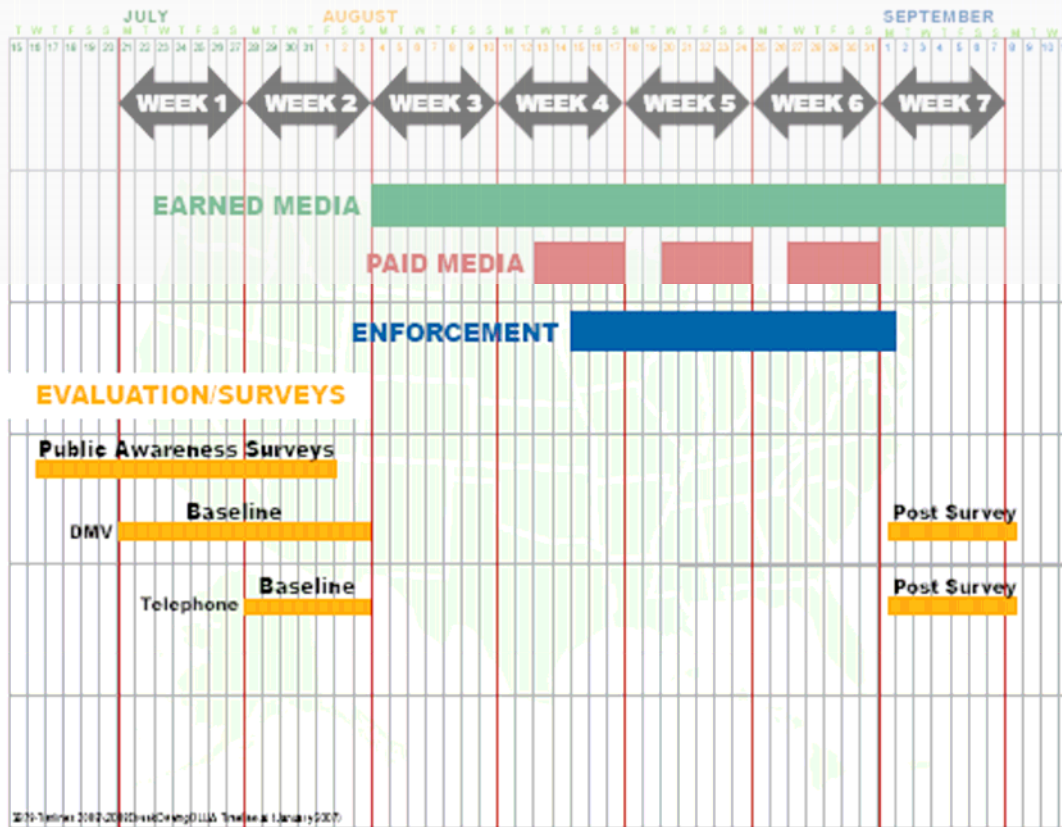
**Screening  
& Brief  
Intervention**



**Ignition  
Interlocks**

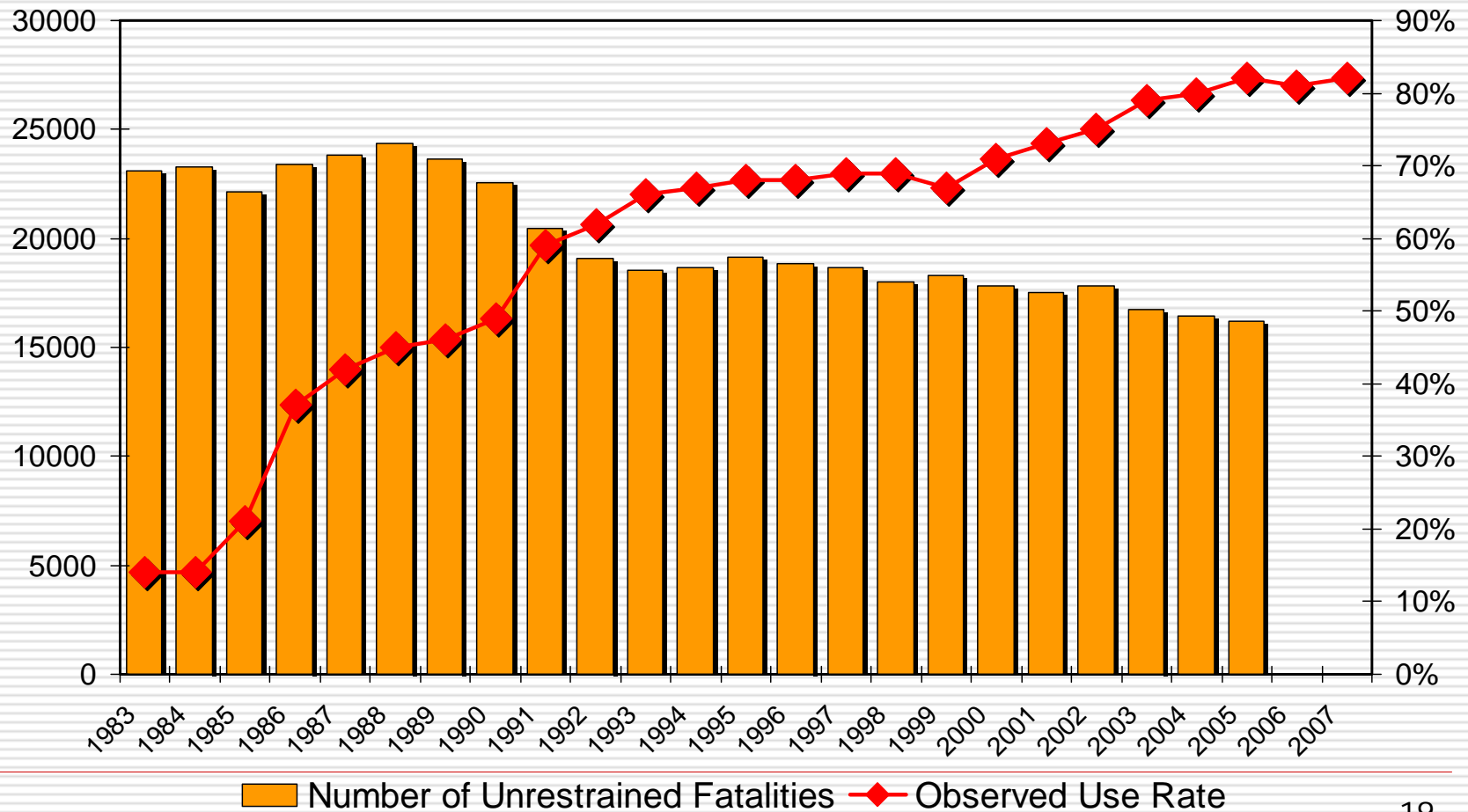


### Labor Day 2008 *Drunk Driving. Over the Limit. Under Arrest.* Timeline



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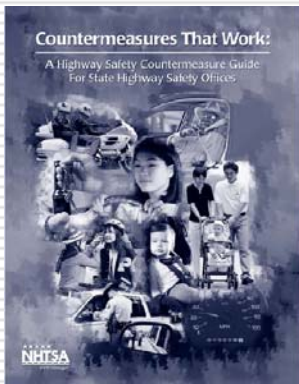
# Observed Use Rates and Use Among Fatalities 1983-2006



# What Works to Increase Seat Belt Use?

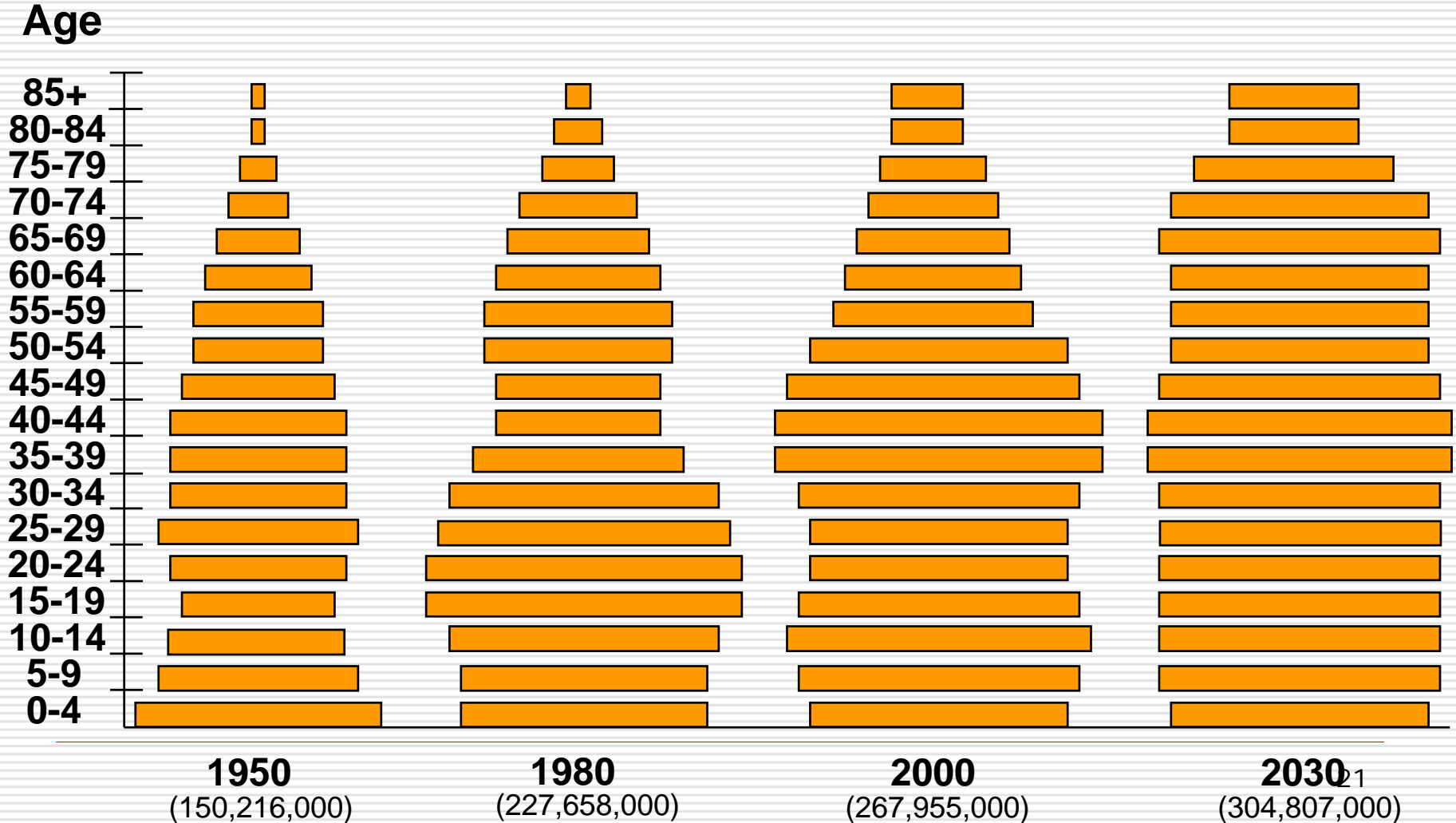
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- Primary belt laws
- High visibility enforcement
- Strategic communications



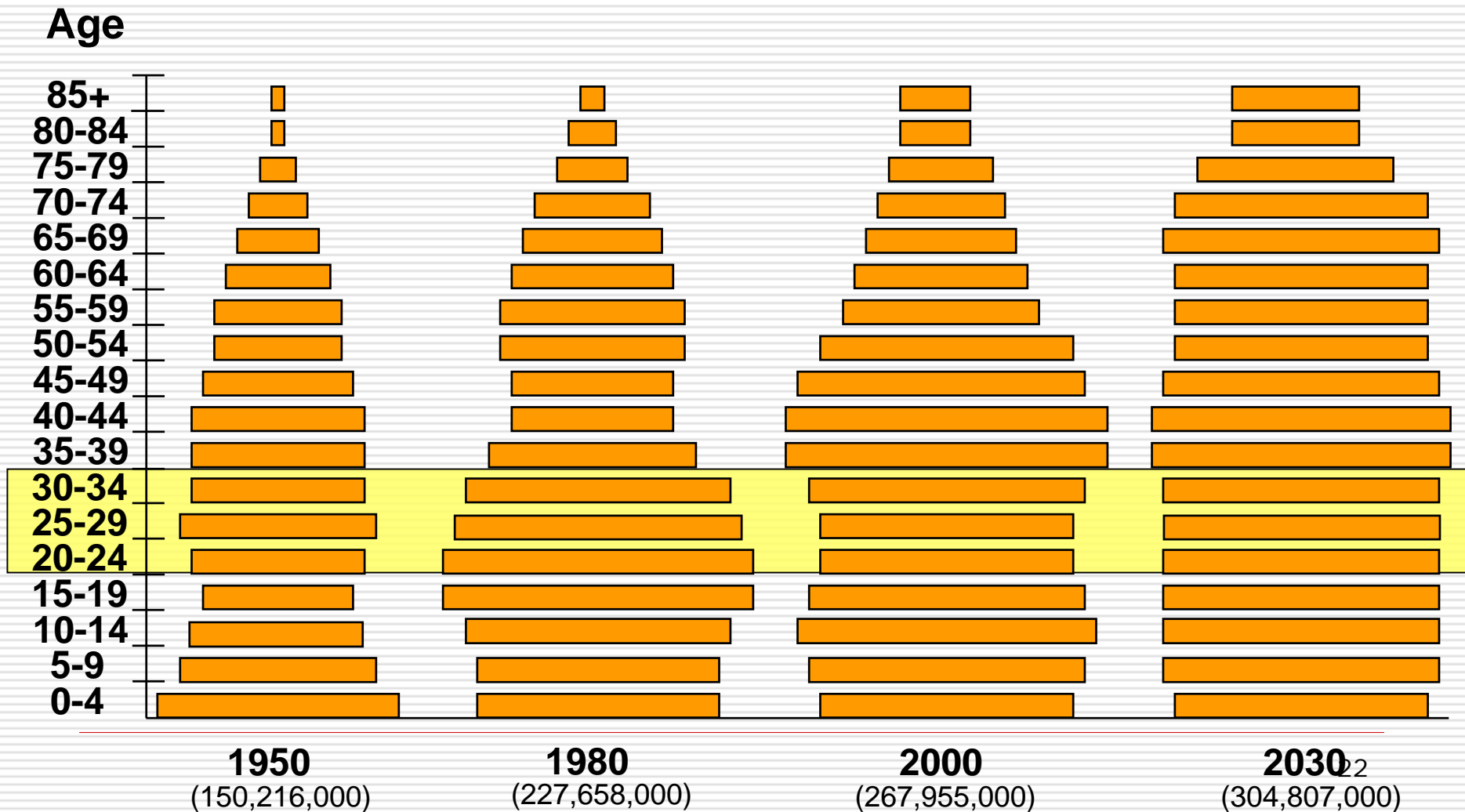
# US Population By Segment

(Squaring the U.S. Population Pyramid 1950-2030)



# US Population By Segment

## (Squaring the U.S. Population Pyramid 1950-2030)



# ITS TECHNOLOGY

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- ❑ ALCOHOL IMPAIRED DRIVERS
- ❑ INEXPERIENCED TEEN DRIVERS
- ❑ UNBUCKLED FREE TO CHOOSE DRIVERS
- ❑ 18-34 MALE INVINCIBLE DRIVERS
- ❑ OLDER DRIVERS

# ADVANCED OP TECHNOLOGY

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- ❑ ADVANCED AIR BAG SYSTEMS
- ❑ ADAPTIVE AIR BAG SYSTEMS
- ❑ SEAT BELT REMINDER SYSTEMS
- ❑ ELECTRONIC STABILITY CONTROL

# ADVANCED IMPAIRED DRIVING TECHNOLOGY

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- IGNITION INTERLOCK DEVICES
- TISSUE SPECTROGRAPHY
- OCCULAR MEASURES
- ETHANOL VAPOR DETECTOR
  - TRANSDERMAL
  - ENVIRONMENTAL

# OLDER DRIVER TECHNOLOGY

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## □ COLLISION AVOIDANCE SYSTEMS

- AUDITORY, VISUAL, BRAKE PULSE SIGNALS TO WARN DRIVER

## □ HEADS UP DISPLAYS

- DASH DISPLAYS WITH INFORMATION

## □ VISION ENHANCEMENT SYSTEMS

# OTHER ADVANCED TECHNOLOGY

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- ❑ INTERSECTION DETECTION SYSTEMS
- ❑ PAVEMENT LIGHTING TO ALERT DRIVERS OF PEDESTRIANS
- ❑ ANIMAL WARNING SYSTEMS – USE RADAR TO DETECT LARGE ANIMALS APPROACHING ROADWAY-

# ITS & SAFETY

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- IT'S ALL ABOUT IMPACTING BEHAVIORS IN ORDER TO SAVE LIVES AND PREVENT INJURIES, THAT IS OUR MISSION AT NHTSA.
  
- WE HAVE USED UP ALL THE EASY COUNTERMEASURES. TECHNOLOGY IS IT.