

Traffic Safety Data Fact Sheet
Presented by Jim Lynch
Revenue & Transportation Committee
February 16, 2006

Non-Voluntary Economic Loss Due to Traffic Crashes

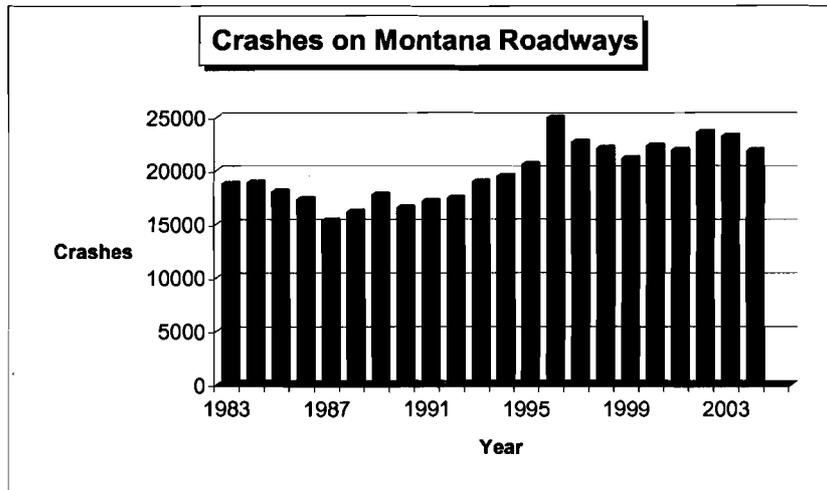
Economic Loss in Crashes (Millions of Dollars)	
Year	Economic Loss
1995	\$479
1996	\$476
1997	\$509
1998	\$591
1999	\$677
2000	\$712
2001	\$648
2002	\$757
2003	\$780
2004	\$806
Change 1 Year	+3.3%
Change 5 Year	+12.8%

Source: Montana Department of Transportation

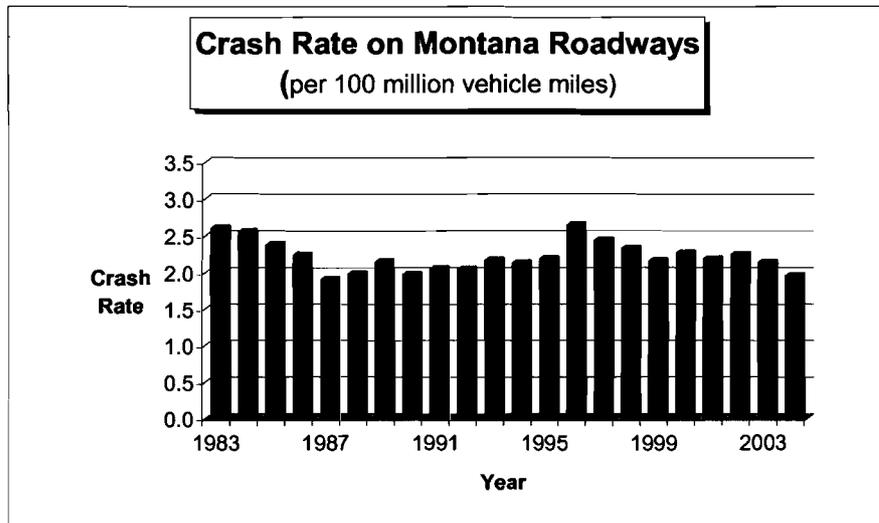
- Economic loss due to all traffic crashes in Montana during 2004 cost \$806 million.
 - This is up 68% from 1995.
- This estimate includes the following factors:
 - Wage & productivity loss
 - Medical expense
 - Motor vehicle damage
 - Uninsured employer costs
 - Administrative expenses
- Economic loss is expected to continue increasing every year especially due to rising medical costs.

Revenue & Transportation Committee Meeting
February 16 & 17, 2006

Crash Information

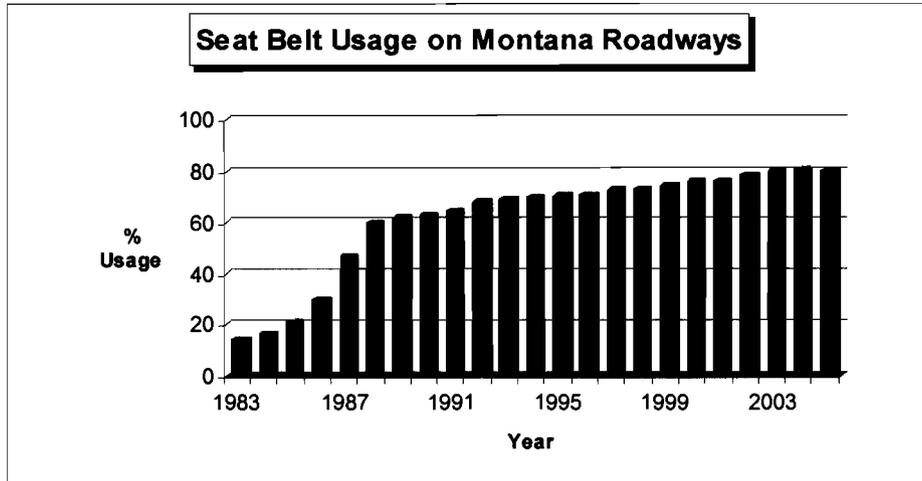


- Crashes were up 63% from 1987 to 1996.
- Crashes are down 12% from 1996 to 2004.

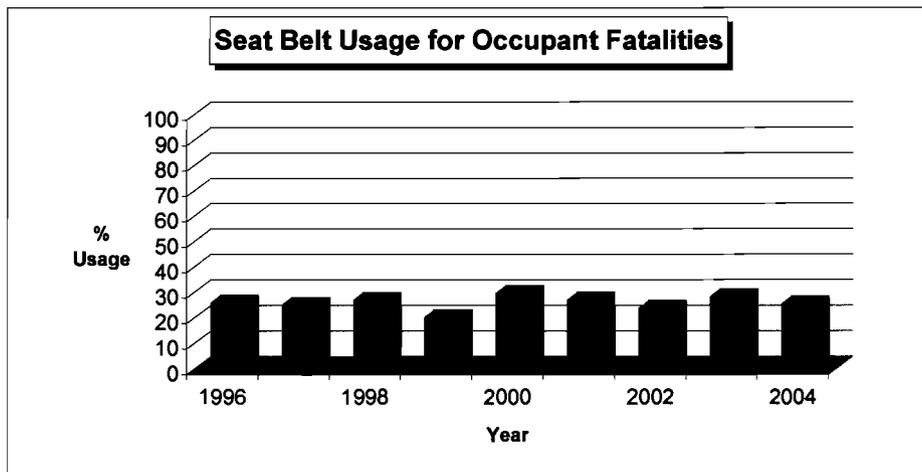


- The 2004 crash rate was the lowest in the last 17 years.

Seatbelt Information



- Have very limited growth in seatbelt usage in Montana.
- Usage rates on all roadway types peaked in 2004 but decreased during 2005.



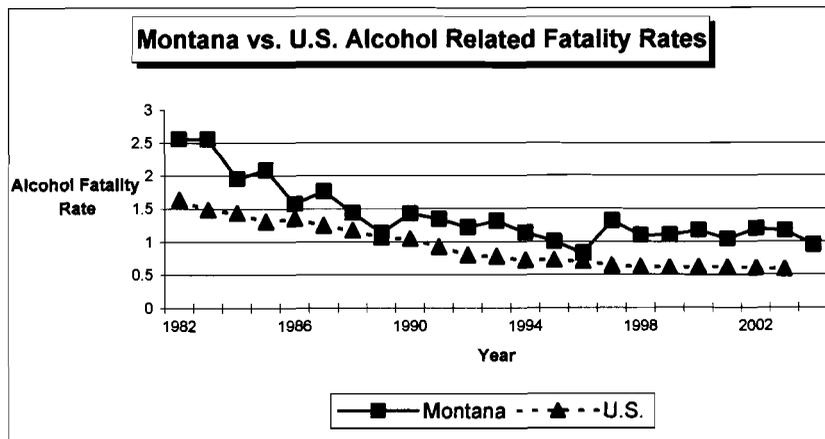
- 80% of Montanans wear their seatbelts, yet only 25% of the fatalities are wearing seatbelts.
- Over 44% of unrestrained fatal occupants are ejected.
- Although we do not have the percentages, unrestrained occupants can kill restrained occupants during a vehicle crash.
- The risk of a fatal injury is 5 times higher if ejected than not ejected.
- Seatbelt usage is much lower for pickups than other types of vehicles.

Benefits of a Primary Seat Belt Law

- A primary seatbelt law would help decrease fatalities on Montana's roadways by 25 lives per year according to the National Highway Traffic Safety Administration (NHTSA).
- A primary seatbelt law would also help reduce the number of serious injuries by 183 per year.
- Passage of a primary seat belt law during the next legislative session in 2007 will result in over \$5 million in additional federal funding to the state of Montana.
 - Funding is only available from 2006 to 2009.
 - Intended for highway improvements and traffic safety behavioral programs.

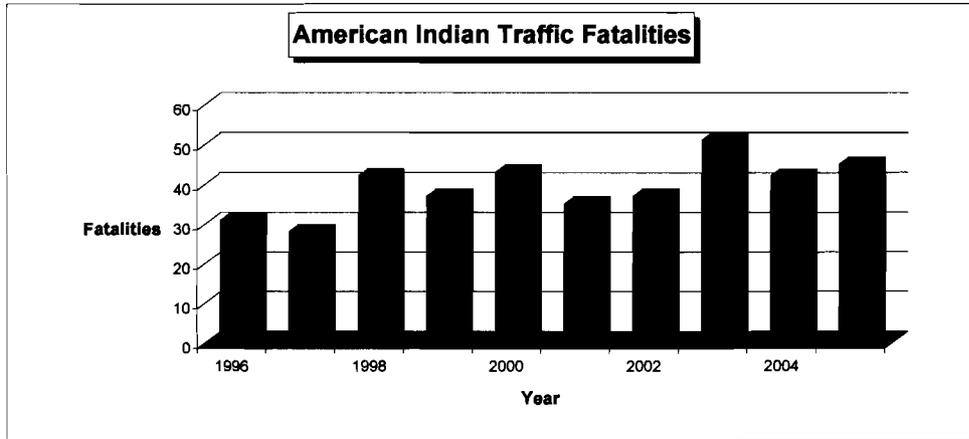
Alcohol Information

In 2004 over \$170 million dollars of the \$806 million dollars in economic loss to Montana is specifically attributed to alcohol related crashes.

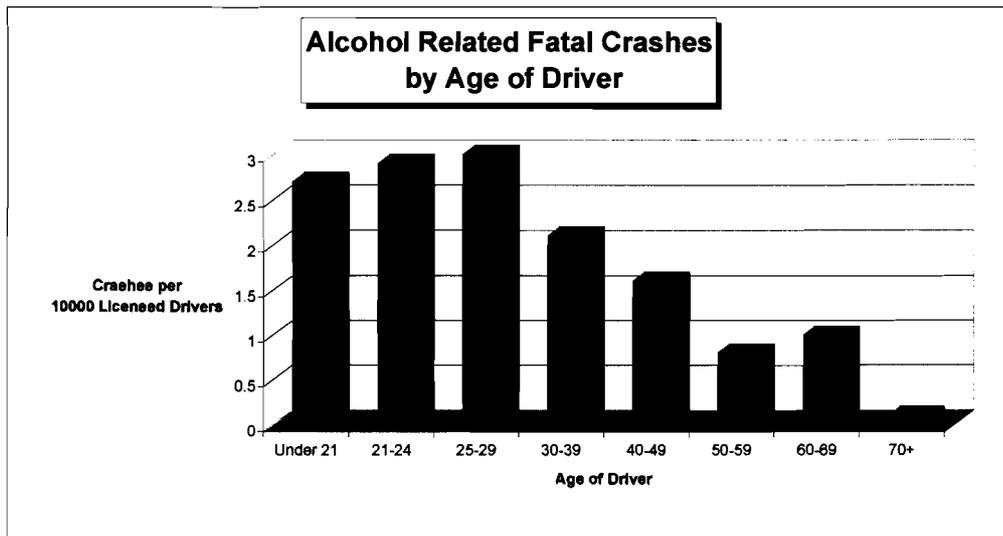


- Montana has the highest alcohol related fatality rate per 100 million vehicles miles traveled compared to the rest of the nation according to NHTSA.

High Risk Groups



- American Indians make up 6.2 percent of the population in Montana.
- From 1995 to 2004 American Indian traffic fatalities have been as low as 14 percent and as high as 20 percent.
- In 2004 over 30 percent of the alcohol related fatalities in Montana were American Indians.
- Preliminary data shows Indian fatalities may be down in 2005.



- 25 – 29 year olds have the highest involvement in alcohol related fatal crashes.
- 21 - 24 year olds are a very close second in alcohol related fatal crashes followed by 18 – 20 year olds.

Open Container – Per Jim Lynch's discussion.

Speed Information

Comparison Between No Speed Limit vs Speed Limit In Montana		
	Average Fatalities	Fatalities Per 100 Million Vehicle Miles Traveled
No Speed Limit (1996 – 1998)	233	2.48
Speed Limit (2000 – 2004)	245	2.34

- Fatalities are up 12 per year since the speed limit was enacted because of increased traffic volumes (vehicle miles traveled).
- Fatality rates are down 0.14, which is a 6% decrease since the enactment of the speed limit law.

Speeding vs Alcohol

Speeding vs Alcohol Involvement in Fatal Crashes	
	Percent Speeding
Alcohol Related	58.5%
No Alcohol	31.7%

- There is a correlation between alcohol related crashes and exceeding the speed limit in fatal crashes.
- In 2004, vehicles were speeding in 58.5% of alcohol related crashes.
- Only 31.7% of vehicles speeding were involved in non-alcohol related crashes.

Corridor Speed Study of US 191 – Gallatin Canyon

- Vehicular travel speeds were re-sampled at five locations on US 191 in November 2005.
- The following table lists the 85th percentile speeds and the pace of the traffic stream by milepost location, beginning with the northbound speed statistics first and the southbound statistics second.

60 mph – Speed Limit 2005		70 mph – Speed Limit 1999	
MP 52.0	59 mph (49 mph – 59 mph) 59% 54 mph (43 mph - 53 mph) 70%		
		MP 52.5	61 mph (49 mph – 59 mph) 58% 58 mph (46 mph – 56 mph) 56%
MP 55.0	65 mph (55 mph – 65 mph) 66% 64 mph (55 mph – 65 mph) 67%	MP 55.0	65 mph (55 mph – 65 mph) 59% 63 mph (55 mph – 65 mph) 67%
MP 59.0	52 mph (43 mph – 53 mph) 75% 54 mph (43 mph – 53 mph) 68%	MP 59.0	57 mph (49 mph – 59 mph) 61% (southbound not available)
MP 64.0	64 mph (52 mph – 62 mph) 64% 62 mph (52 mph – 62 mph) 62%	MP 64.0	64 mph (55 mph – 65 mph) 64% 62 mph (52 mph – 62 mph) 62%
MP 70.0	67 mph (58 mph – 68 mph) 64% 66 mph (55 mph – 65 mph) 59%	MP 70.0	67 mph (58 mph – 68 mph) 57% 67 mph (55 mph – 65 mph) 52%

- Our most recent investigation indicated that the 85th percentile speeds ranged between 54 mph and 67 mph, and the pace of the traffic stream ranged between (43 mph – 53 mph) to (58 mph – 68 mph).
 - We attribute this variation in the travel speeds to the roadway’s horizontal alignment and its winding nature.
 - There are numerous curvilinear segments intermixed with short tangent segments.
 - Today’s results are quite similar to those identified back in 1999, as indicated in the second portion of the table, where the 85th percentile speeds ranged between 57 mph to 67 mph.
- We were able to directly compare the travel speeds at four exact locations.
 - Three of those four locations (mileposts 55, 64 & 70) had virtually the same results for travel speeds.
 - There was a 5-mph difference in the northbound 85th percentile speed and similar difference in the pace at milepost 59 northbound.

Speed Limit Comparison on US 191 – Gallatin Canyon

	AADT	Rate	# of Accd.	Fatal Accd.	AADT- Average Annual Daily Traffic
55 mph Speed Limit <i>June 1991 to May 1994</i>	28 34	1.77	121	5	
Basic Rule (no daytime limit) <i>June 1996 to May 1999</i>	35 14	1.76	149	4	
60 mph Speed Limit <i>June 2002 to May 2005</i>	50 52	1.28	156	2	

- The crash history was reviewed for a three-year period from June 1, 2002 to May 31, 2005 and two other three-year periods having different speed limits.
 - During this period there were 156 crashes reported within the study area.
 - The crash rate is 1.28 accidents per million vehicle miles traveled.
 - The crash rate was lower for the 60 mph limit than the two previous periods.
 - The statewide average for rural National Highway System (NHS) routes is 1.24 crashes per million vehicle miles traveled.