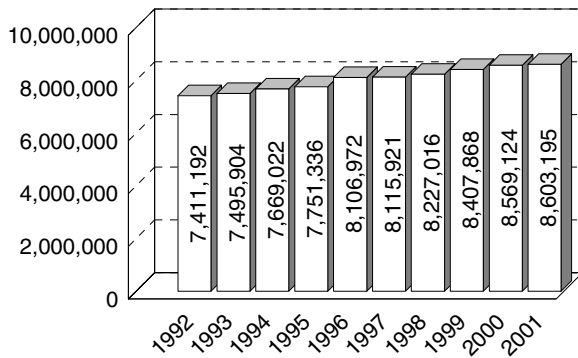


# 10 YEAR

## VEHICLE REGISTRATIONS

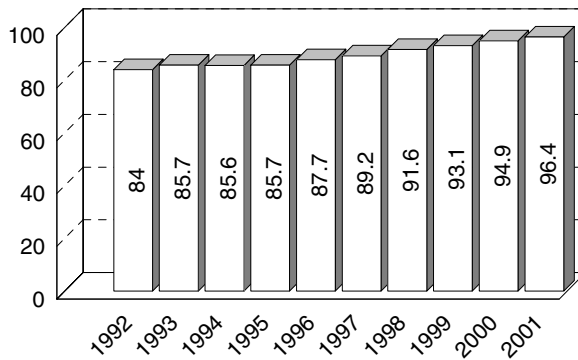
Number of Motor Vehicles



Vehicle registrations have been increasing steadily since 1992, reaching 8,603,195 in 2001.

## VEHICLE MILES TRAVELED

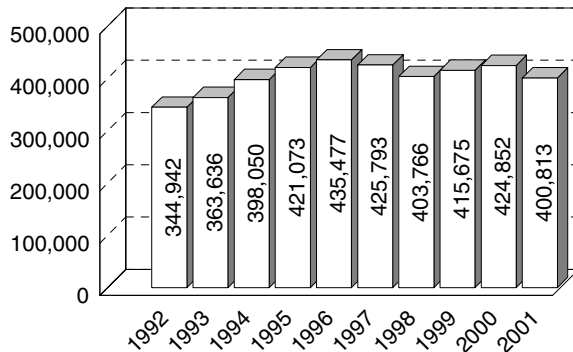
Billions of Miles



Vehicle miles of travel have increased 14.8 percent since 1992, reaching 96.4 billion miles in 2001.

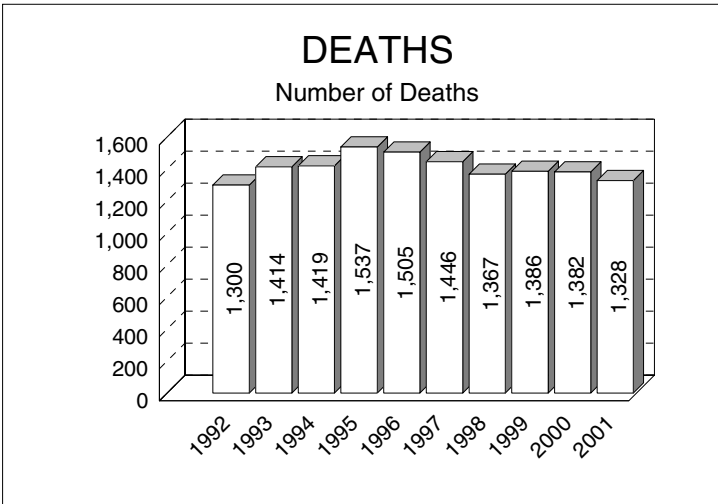
## CRASHES

Number of Crashes

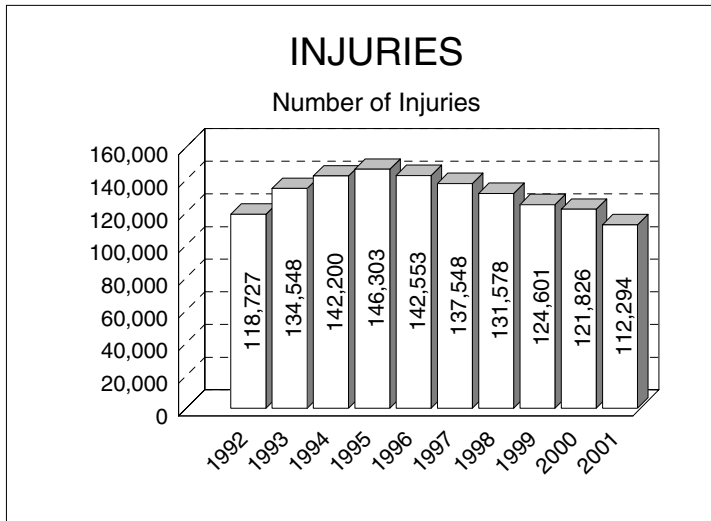


There were 400,813 total crashes statewide in 2001, a 5.7 percent decrease from 2000.

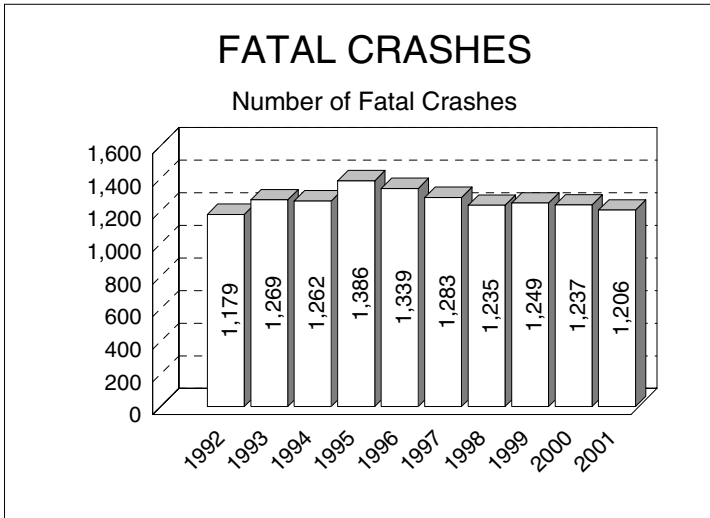
# 10 YEAR TRENDS (continued)



In 2001, 1,328 people died in motor vehicle crashes, a decrease of 3.9 percent from 2000.



112,294 people received nonfatal injuries in Michigan motor vehicle crashes in 2001, down 7.8 percent from 121,826 in 2000.

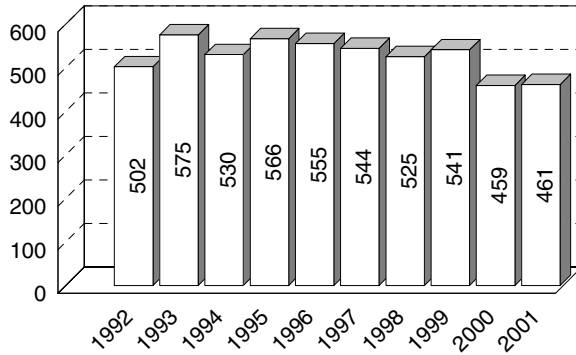


In 2001, there were 1,206 fatal crashes, down 13.0 percent from the high of 1,386 in 1995.

# 10 YEAR

## HBD FATALITIES

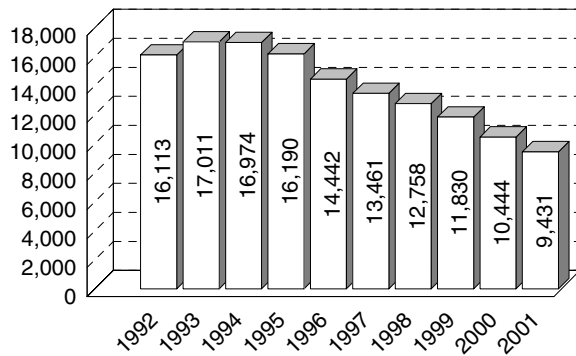
Number of HBD Fatalities



Deaths in alcohol-related crashes have decreased over the last ten years. There were 461 HBD fatalities in 2001.

## HBD INJURIES

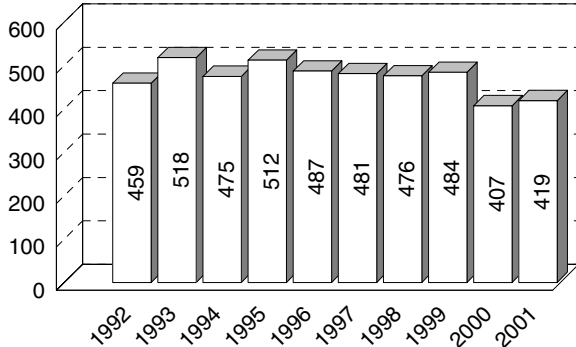
Number of HBD Injuries



Mirroring the trend in deaths, HBD injuries have decreased over the last ten years. There were 9,431 injuries in 2001.

## HBD FATAL CRASHES

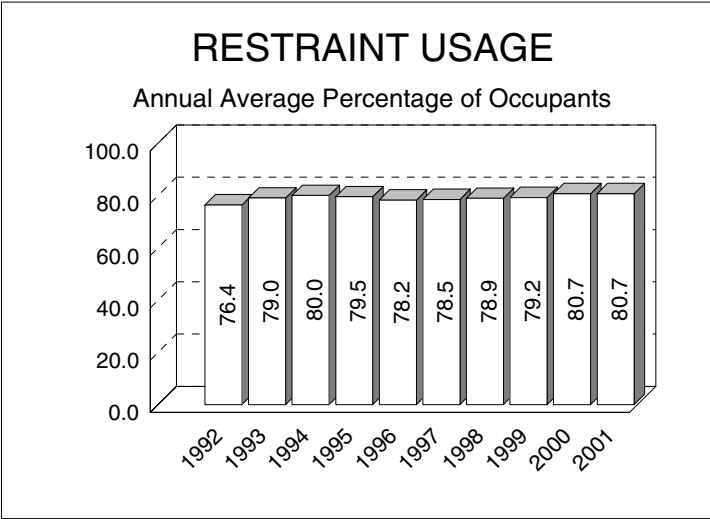
Number of HBD Fatal Crashes



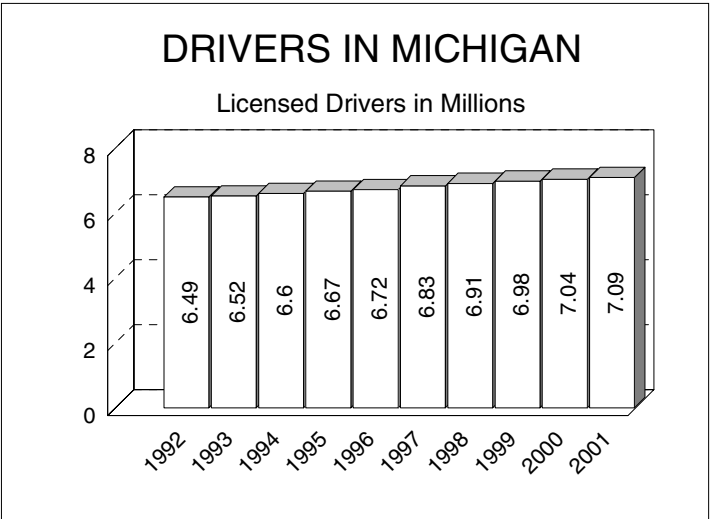
Alcohol involvement in fatal crashes has decreased 19.1 percent from the highest count of 518 in 1993. In 2001, there were 419 HBD fatal crashes.

**Note:** The 2001 information provided for alcohol contains data for alcohol-related crashes only. This figure DOES NOT include the combined number for alcohol- and drug-related crashes as had been reported prior to 2000.

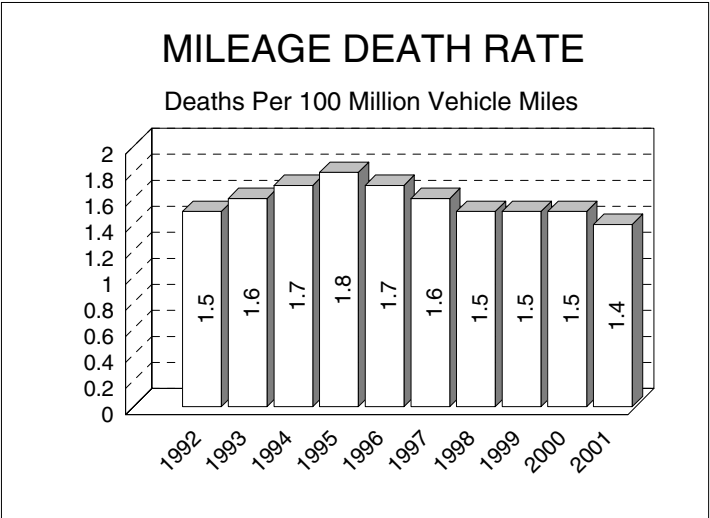
# 10 YEAR TRENDS (continued)



The percentage of motor vehicle occupants using restraints as reported by police in traffic crashes increased dramatically following implementation of Michigan's safety belt use law in July 1985. The ten-year average percentage is 79.1.

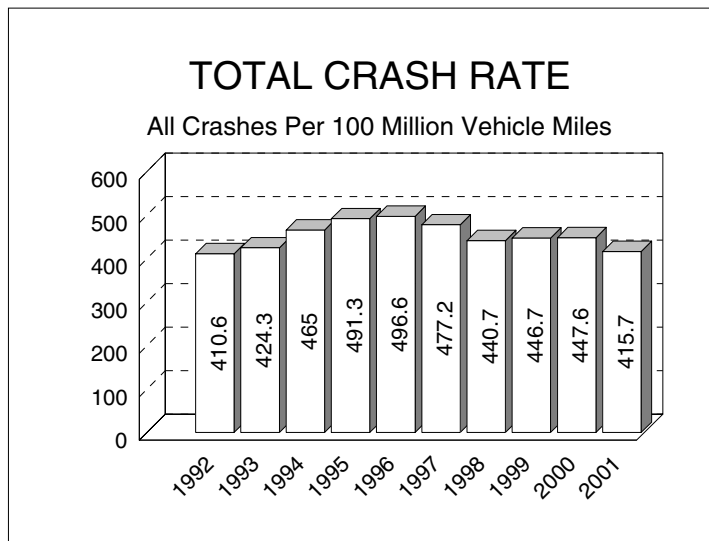


There were 7,090,899 licensed drivers on Michigan roadways in 2001.

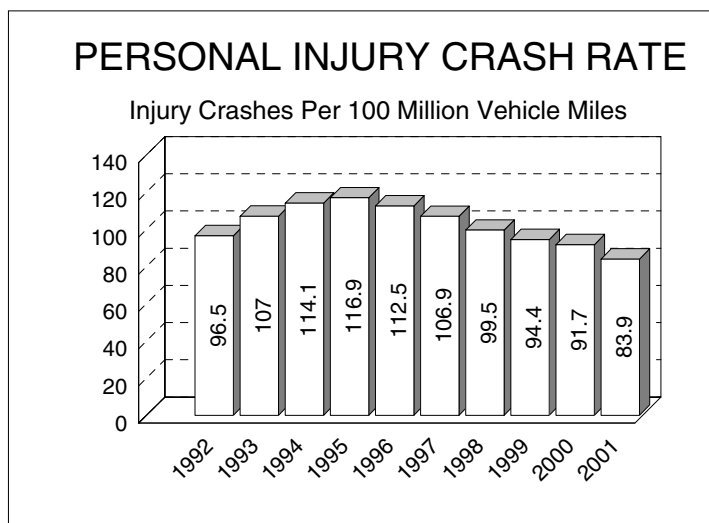


The 1.4 death rate in 2001 is a 6.7 percent decrease from 1992.

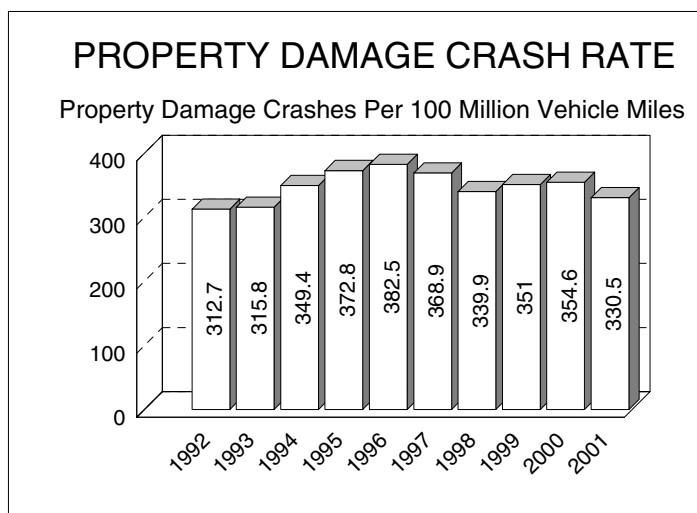
# 10 YEAR



The total crash rate peaked in 1996 at 496.6, then decreased by 16.3 percent to 415.7 in 2001.

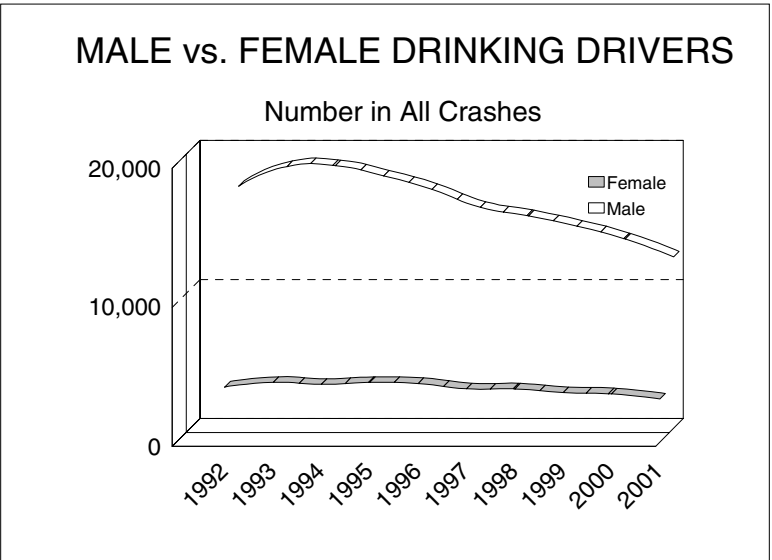
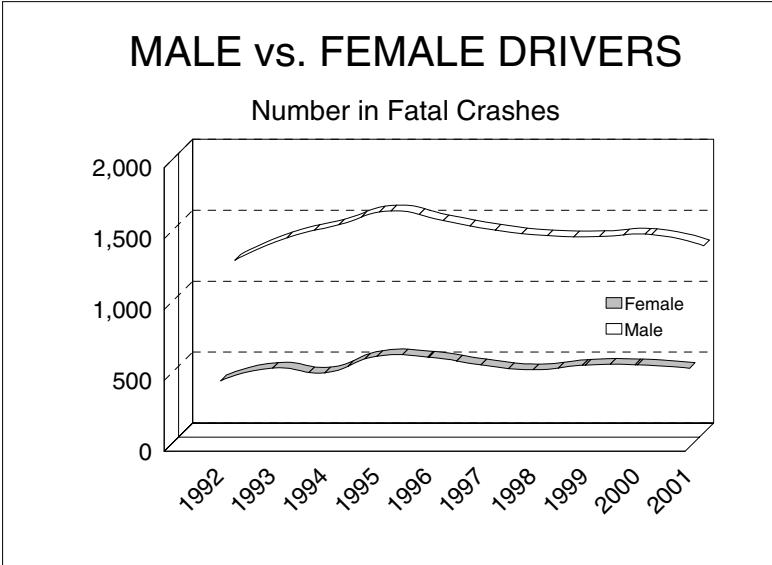
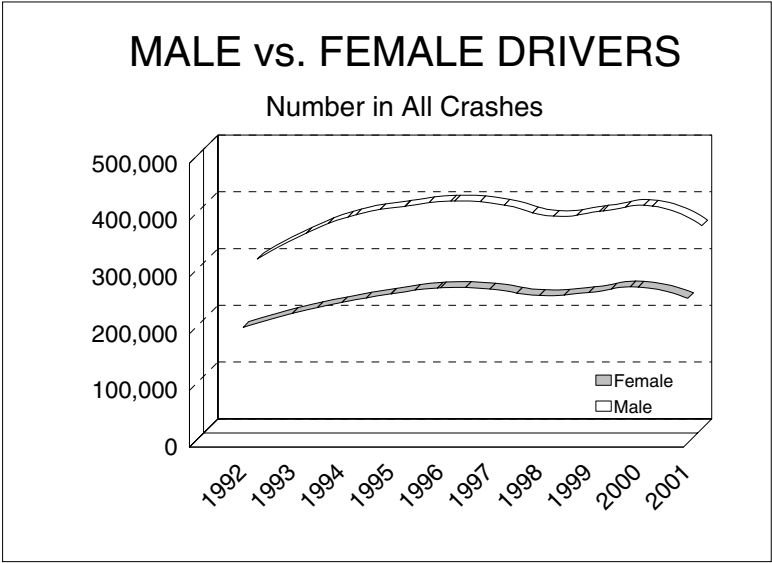


The personal injury crash rate has been steadily decreasing since 1995. The 83.9 personal injury crash rate in 2001 is a 8.5 percent decrease from 2000, and a 13.1 percent decrease from 1992.



The 330.5 property damage crash rate in 2001 is a 6.8 percent decrease from 2000, and a 5.7 percent increase from 1992.

# 10 YEAR TRENDS (continued)



# 10 YEAR

DRIVERS IN ALL CRASHES		
	Male	Female
1992	299,006	203,795
1993	344,859	228,287
1994	377,212	247,333
1995	392,103	262,577
1996	401,350	273,361
1997	394,044	271,131
1998	374,505	259,843
1999	383,733	264,985
2000	392,347	274,675
2001	357,684	254,636

The crash data collection form (UD-10) was changed in 1992. Prior to 1992, drivers whose gender was not identified were coded as male. 11 percent of all drivers were coded as unknown gender in 2001.

DRIVERS IN FATAL CRASHES		
	Male	Female
1992	1,219	468
1993	1,376	557
1994	1,468	524
1995	1,566	640
1996	1,497	634
1997	1,430	580
1998	1,391	545
1999	1,385	578
2000	1,399	580
2001	1,320	556

Male drivers make up 66.6 percent of all drivers in fatal crashes.

Female driver involvement in fatal crashes generally follows overall fatal crash trends.

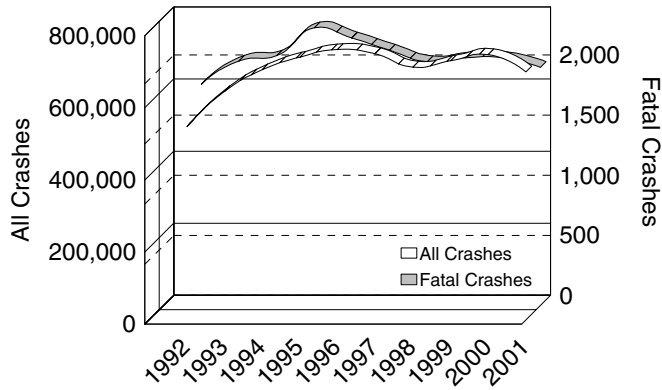
DRINKING DRIVERS IN ALL CRASHES		
	Male	Female
1992	17,414	3,976
1993	18,831	4,308
1994	18,889	4,163
1995	18,153	4,300
1996	17,186	4,225
1997	15,901	3,842
1998	15,280	3,833
1999	14,541	3,569
2000	13,609	3,474
2001	12,331	3,112

**Note:** The 2001 information provided for alcohol contains data for alcohol-related crashes only. This figure DOES NOT include the combined number for alcohol- and drug-related crashes as had been reported prior to 2000.

Males drivers have always accounted for the majority of all drinking drivers.

## ALL DRIVERS

Number in All and Fatal Crashes

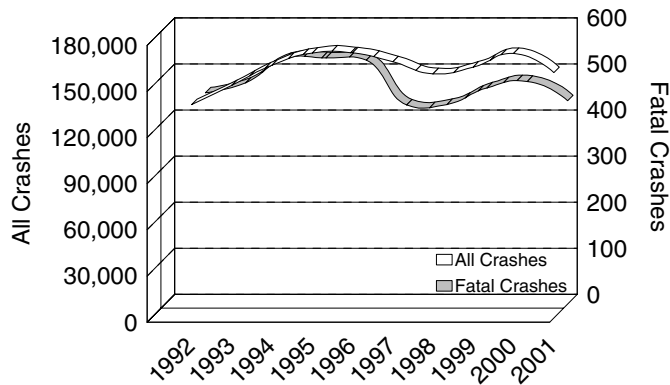


## 10 YEAR TRENDS (continued)



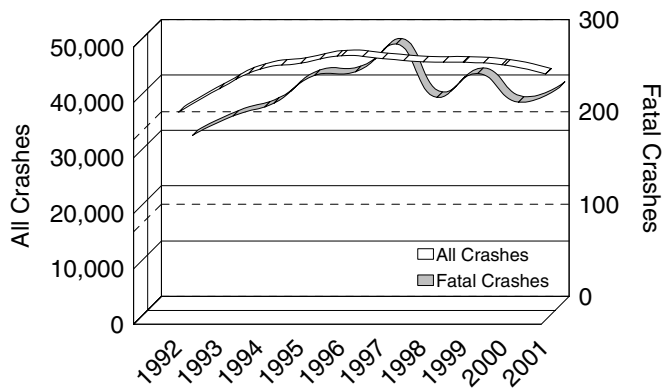
## TEEN/YOUNG ADULT DRIVERS

Age 16-24: Number in All and Fatal Crashes



## ELDERLY DRIVERS

Age 65-101: Number in All and Fatal Crashes



# 10 YEAR

ALL DRIVERS		
	All Crashes	Fatal Crashes
1992	536,279	1,841
1993	633,930	2,035
1994	693,575	2,078
1995	729,050	2,311
1996	750,103	2,226
1997	737,939	2,124
1998	701,056	2,029
1999	718,639	2,061
2000	735,664	2,062
2001	687,836	1,981

Driver involvement in all crashes increased 28.3 percent over the ten-year period.

Driver involvement in fatal crashes increased 7.6 percent over the ten-year period.

TEEN/YOUNG ADULT DRIVERS		
	All Crashes	Fatal Crashes
1992	138,781	458
1993	151,284	480
1994	164,421	533
1995	172,373	534
1996	172,442	529
1997	166,693	432
1998	158,887	433
1999	163,239	469
2000	172,059	483
2001	159,597	441

Teen/young adult drivers (age 16-24) represent 14.9 percent of the licensed drivers in 2001.

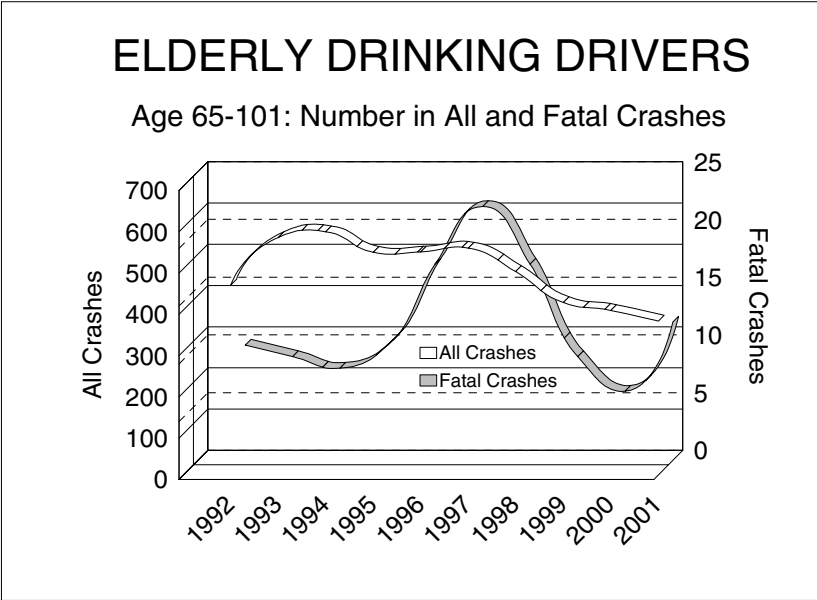
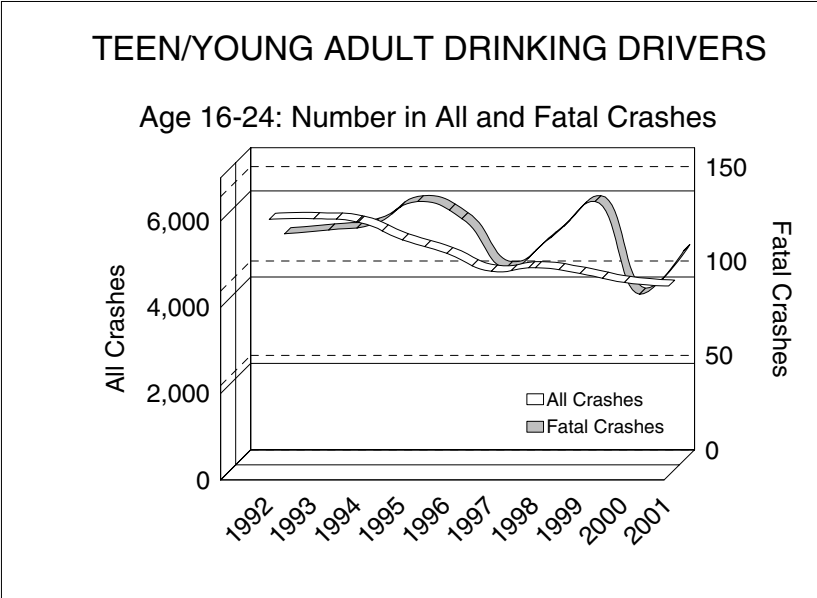
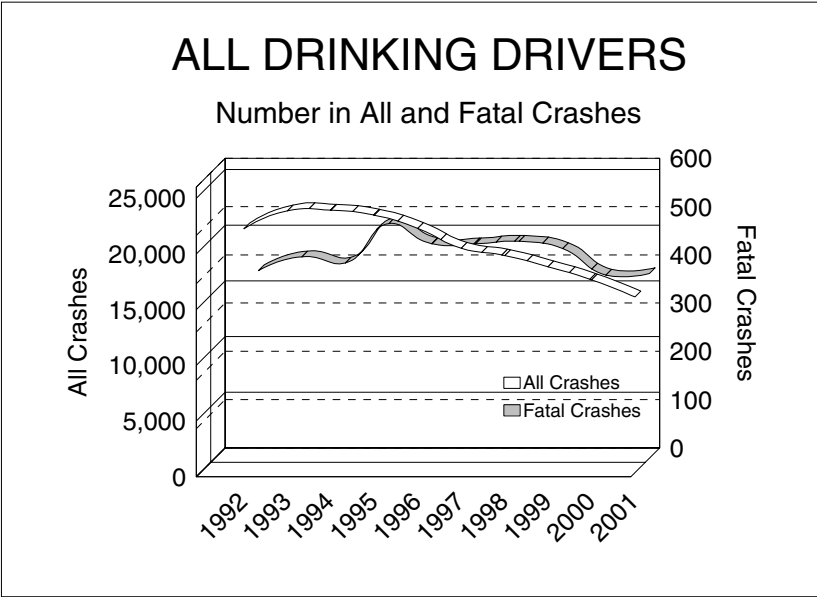
The number of teen/young adult drivers in all crashes has increased by 15.0 percent since 1992. Their involvement in fatal crashes decreased 3.7 percent during the same time period.

ELDERLY DRIVERS		
	All Crashes	Fatal Crashes
1992	37,539	185
1993	41,753	206
1994	45,280	220
1995	46,371	250
1996	47,695	254
1997	47,190	284
1998	46,582	226
1999	46,519	252
2000	46,023	221
2001	44,393	237

Elderly drivers (age 65-101) represent 14.2 percent of the licensed drivers in 2001.

The number of drivers age 65 and older in all crashes has increased 18.3 percent since 1992. Their involvement in fatal crashes increased 28.1 percent during the same time period.

# 10 YEAR TRENDS (continued)



# 10 YEAR

DRINKING DRIVERS		
	All Crashes	Fatal Crashes
1992	21,879	388
1993	23,500	417
1994	23,546	404
1995	23,097	486
1996	21,919	444
1997	20,139	444
1998	19,483	449
1999	18,469	434
2000	17,295	379
2001	15,760	382

Drinking driver involvement in all crashes continues to decrease. Drinking driver involvement in fatal crashes increased by 0.8 percent from 2000.

TEEN/YOUNG ADULT DRINKING DRIVERS		
	All Crashes	Fatal Crashes
1992	5,934	120
1993	5,947	122
1994	5,868	125
1995	5,461	137
1996	5,142	128
1997	4,731	102
1998	4,812	118
1999	4,676	137
2000	4,470	88
2001	4,386	111

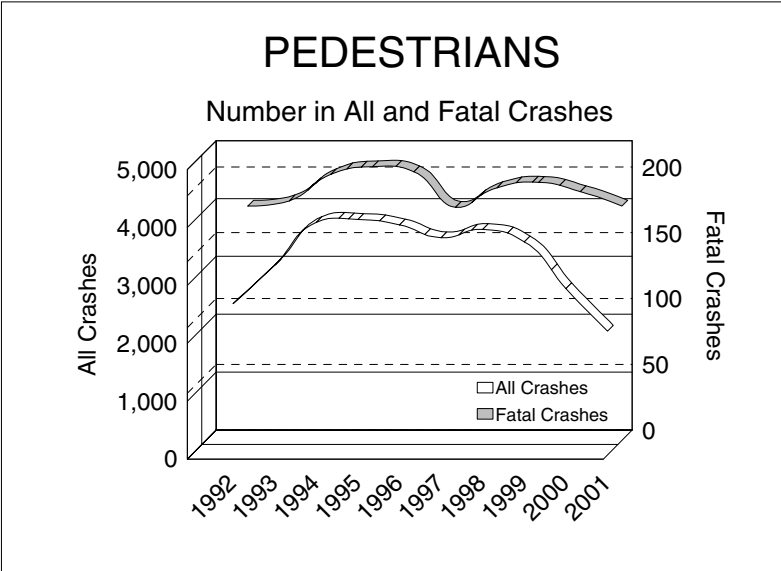
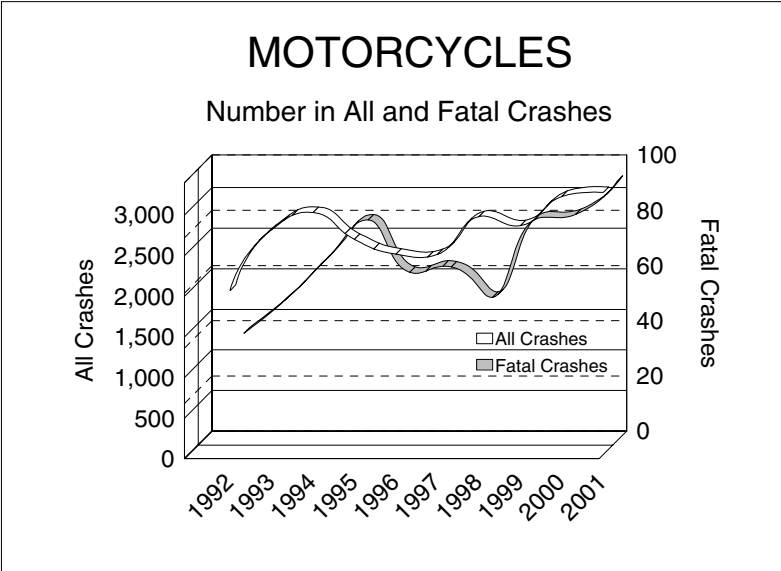
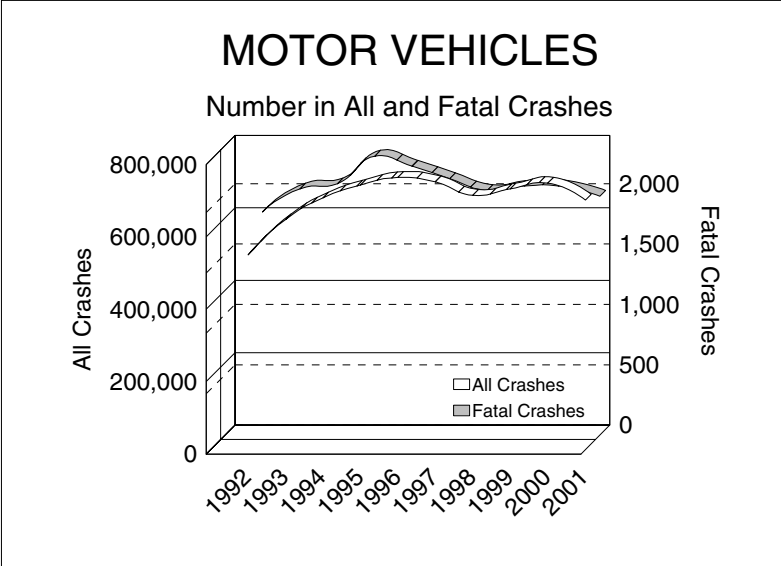
Following the trend for all drinking drivers, the number of teen/young adult drinking drivers in all crashes continues to decrease, and their involvement in fatal crashes increased by 26.1 percent from 2000.

ELDERLY DRINKING DRIVERS		
	All Crashes	Fatal Crashes
1992	461	10
1993	576	9
1994	590	8
1995	540	10
1996	541	17
1997	550	22
1998	493	17
1999	418	9
2000	399	6
2001	373	12

Following the trend for all drinking drivers, the number of elderly drinking drivers in all crashes continues to decrease, and their involvement in fatal crashes increased by 100.0 percent from 2000.

**Note:** The 2001 information provided for alcohol contains data for alcohol-related crashes only. This figure DOES NOT include the combined number for alcohol- and drug-related crashes as had been reported prior to 2000.

# 10 YEAR TRENDS (continued)



# 10 YEAR

MOTOR VEHICLES		
	All Crashes	Fatal Crashes
1992	538,025	1,851
1993	635,711	2,042
1994	695,423	2,084
1995	730,952	2,313
1996	751,804	2,229
1997	739,538	2,126
1998	702,680	2,029
1999	720,393	2,066
2000	736,219	2,062
2001	689,122	1,981

There were 1,981 motor vehicles involved in fatal crashes in 2001, down 3.9 percent from 2000.

MOTORCYCLES		
	All Crashes	Fatal Crashes
1992	2,022	39
1993	2,768	51
1994	2,982	66
1995	2,651	80
1996	2,468	61
1997	2,465	63
1998	2,931	52
1999	2,820	80
2000	3,180	82
2001	3,228	94

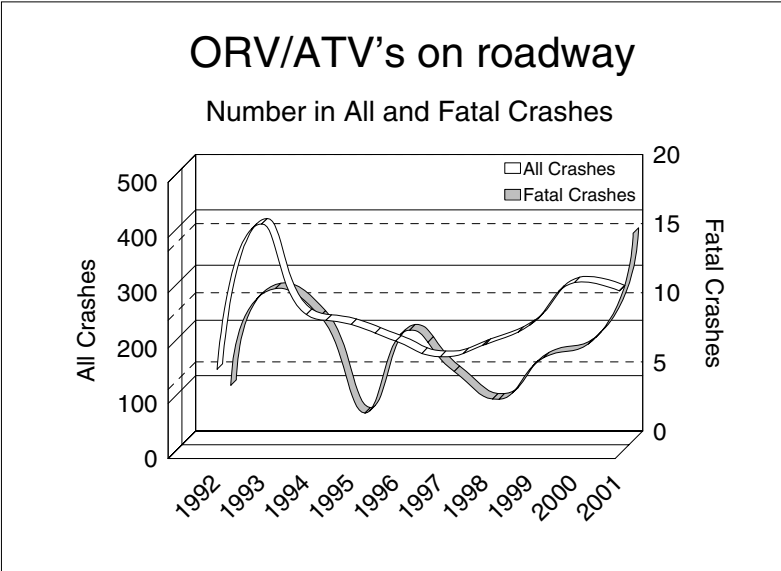
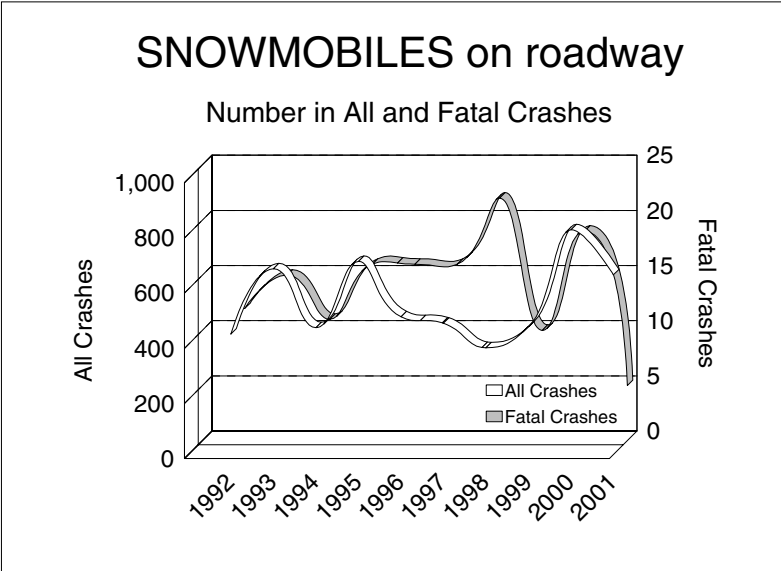
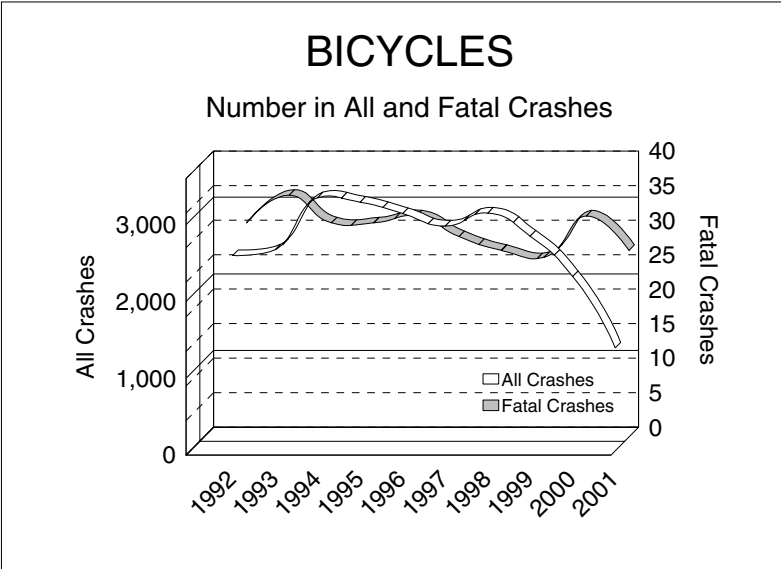
The number of motorcycles involved in fatal crashes has fluctuated over the ten-year period with a high of 94 in 2001.

PEDESTRIANS		
	All Crashes	Fatal Crashes
1992	2,609	178
1993	3,275	182
1994	4,014	202
1995	4,064	208
1996	3,971	204
1997	3,749	177
1998	3,891	192
1999	3,677	196
2000	2,868	189
2001	2,135	178

**Due to data processing errors ~1,600 pedestrians and ~1,600 bicyclists are incorrectly identified as drivers. Comparison to prior years of pedestrian and bicyclist data must take this into account.**

There were 178 pedestrians involved in fatal crashes in 2001, down 5.8 percent from 2000.

# 10 YEAR TRENDS (continued)



# 10 YEAR

<b>BICYCLES</b>		
	All Crashes	Fatal Crashes
1992	2,544	31
1993	2,620	35
1994	3,298	31
1995	3,239	31
1996	3,091	32
1997	2,929	29
1998	3,097	27
1999	2,797	26
2000	2,271	32
2001	1,342	27

**Due to data processing errors ~1,600 pedestrians and ~1,600 bicyclists are incorrectly identified as drivers. Comparison to prior years of pedestrian and bicyclist data must take this into account.**

There were 27 bicycles involved in fatal crashes in 2001, down 15.6 percent from 2000.

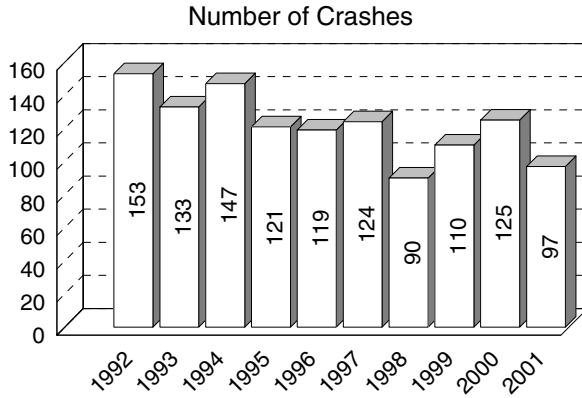
<b>SNOWMOBILES on Michigan roadways</b>		
	All Crashes	Fatal Crashes
1992	437	12
1993	673	15
1994	460	11
1995	700	16
1996	499	16
1997	476	16
1998	387	22
1999	463	10
2000	815	19
2001	651	5

There were 5 snowmobiles involved in fatal crashes on Michigan public roadways in 2001, a ten-year low.

<b>ORV/ATV's on Michigan roadways</b>		
	All Crashes	Fatal Crashes
1992	154	4
1993	417	11
1994	253	9
1995	235	2
1996	205	8
1997	177	5
1998	199	3
1999	234	6
2000	311	7
2001	296	15

There were 15 ORV/ATV's involved in fatal crashes on Michigan public roadways in 2001, a ten-year high.

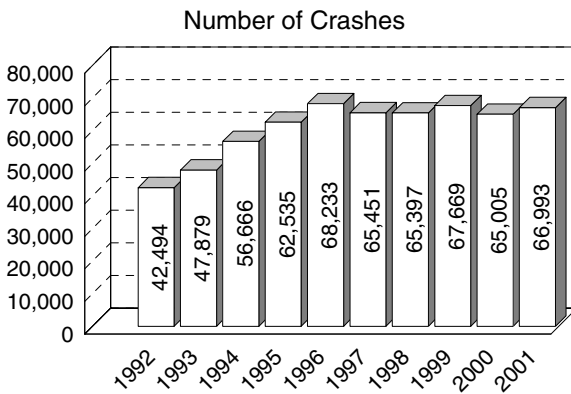
## VEHICLE-TRAIN CRASHES



## 10 YEAR TRENDS (continued)

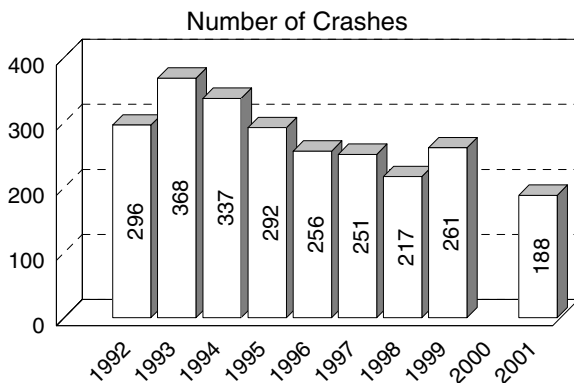
97 vehicle-train crashes occurred in 2001, a decrease of 36.6 percent in the ten-year period.

## VEHICLE-DEER CRASHES



There has been a 57.7 percent rise from 42,494 vehicle-deer crashes in 1992 to 66,993 in 2001.

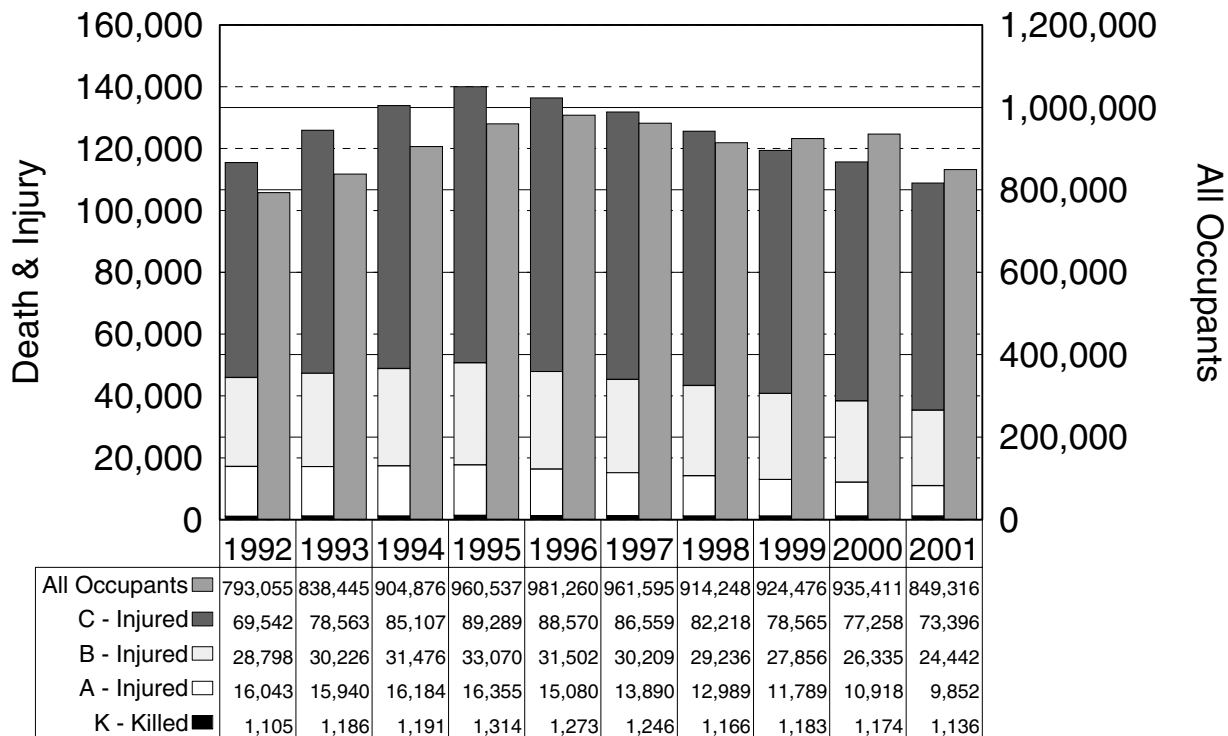
## FARM EQUIPMENT CRASHES



Data not available for calendar year 2000 farm equipment crashes. Please refer to last year's book for details.

The 188 farm equipment crashes in 2001 marks a 48.9 percent decrease from the ten-year high of 368 farm equipment crashes in 1993.

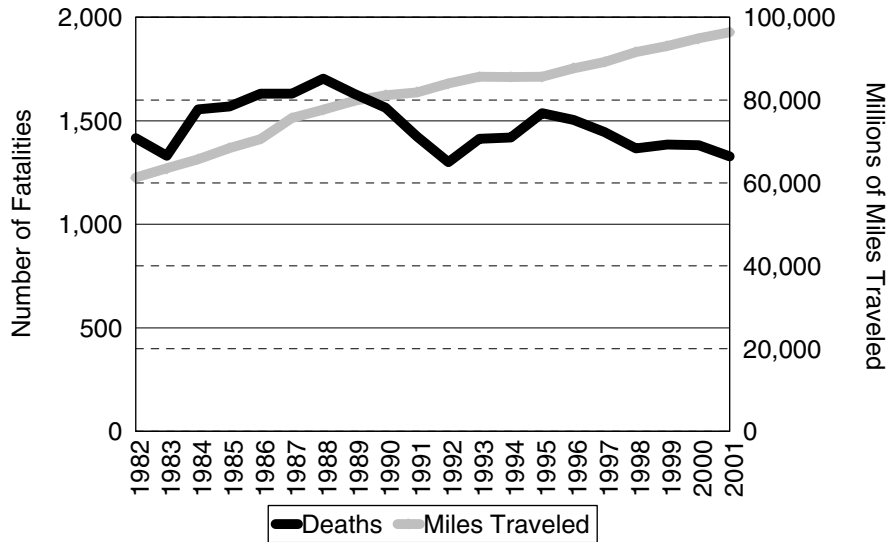
## DEATH AND INJURY PER CRASH-INVOLVED OCCUPANT



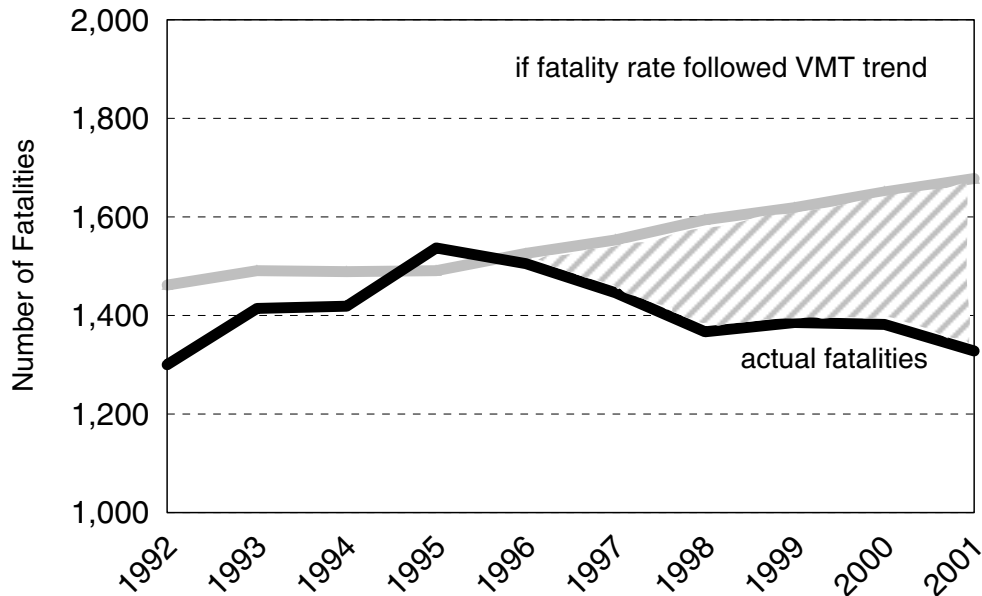
The proportion of death and injury to crash-involved occupants has decreased over the last ten years. In 2001, 1,136 occupants of motor vehicles were fatally injured, 9,852 suffered an A (incapacitating) injury, 24,442 sustained a B (nonincapacitating) injury, and 73,396 sustained a C (possible) injury.

# 10 YEAR

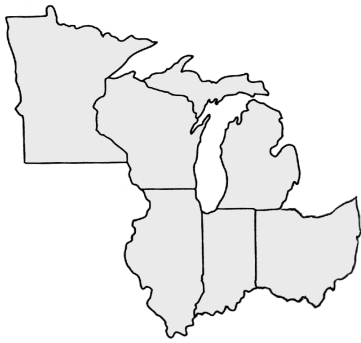
## FATALITIES AND VMT TRENDS



## 10 Year Highlight



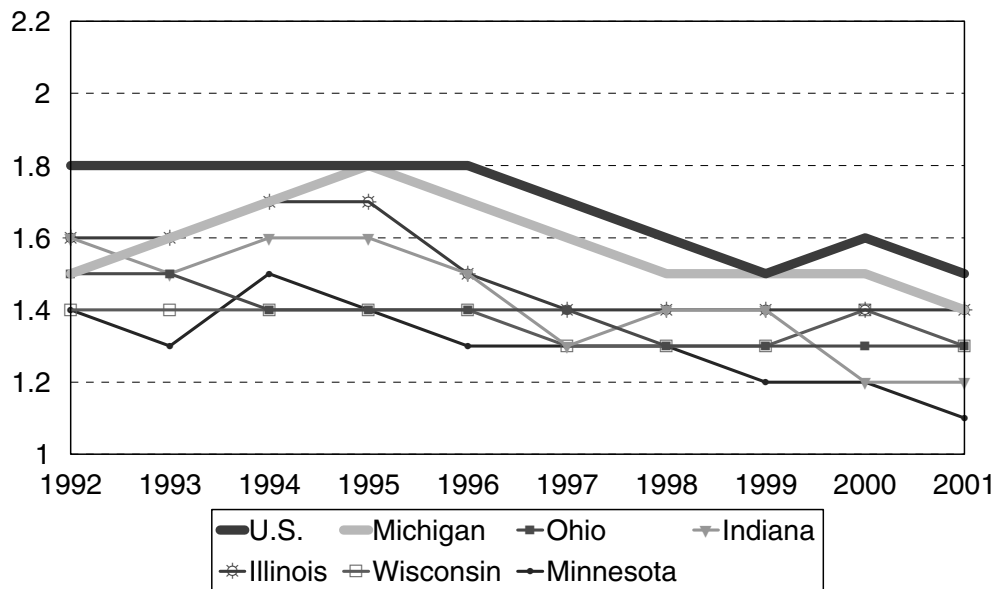
In the 1980's, the number of fatalities had been steadily increasing, following the VMT trend. A reversal in the fatality rate began in 1989, with actual fatalities remaining near or below the VMT trend. A projection of losses that would have been incurred if the fatality rate had continued to follow the VMT trend is provided above.



# 10 YEAR

## MILEAGE DEATH RATES 1992 - 2001

Comparison - Michigan to U.S. and Surrounding States

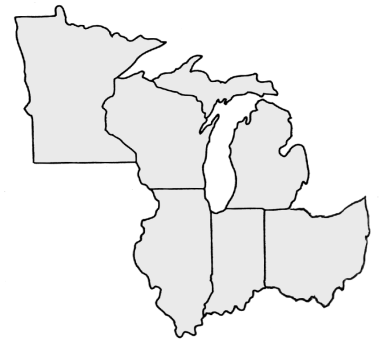


The chart above shows the reduction in mileage death rates (motor vehicle traffic deaths per 100,000,000 vehicle miles) for Michigan, its neighboring states and the U.S. over the last ten years.

	U.S.	Michigan	Ohio	Indiana	Illinois	Wisconsin	Minnesota
1992	1.8	1.5	1.5	1.6	1.6	1.4	1.4
1993	1.8	1.6	1.5	1.5	1.6	1.4	1.3
1994	1.8	1.7	1.4	1.6	1.7	1.4	1.5
1995	1.8	1.8	1.4	1.6	1.7	1.4	1.4
1996	1.8	1.7	1.4	1.5	1.5	1.4	1.3
1997	1.7	1.6	1.4	1.3	1.4	1.3	1.3
1998	1.6	1.5	1.3	1.4	1.4	1.3	1.3
1999	1.5	1.5	1.3	1.4	1.4	1.3	1.2
2000	1.5	1.5	1.3	1.2	1.4	1.4	1.2
2001	1.5	1.4	1.3	1.2	1.4	1.3	1.1

U.S. data for this table and tables on the following page were provided by the National Safety Council [3] and the U.S. Department of Transportation [4]. State data for this table and tables on the following page were provided by Ohio [5], Indiana [6], Illinois [7], Wisconsin [8], and Minnesota [9].

# 10 YEAR



## MICHIGAN AND SURROUNDING STATES COMPARISON OF FATALITIES AND VMT

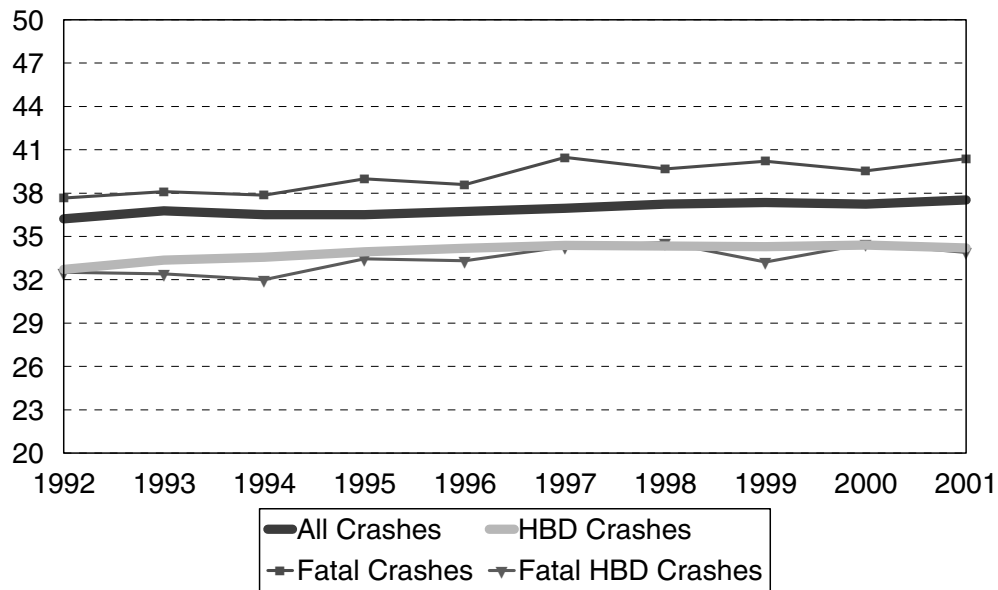
Year	U.S. Persons Killed	Michigan Persons Killed	Ohio Persons Killed	Indiana Persons Killed	Illinois Persons Killed	Wisconsin Persons Killed	Minnesota Persons Killed
1992	40,982	1,300	1,440	901	1,384	645	581
1993	41,893	1,414	1,484	901	1,392	703	538
1994	42,700	1,419	1,368	974	1,554	706	644
1995	43,900	1,537	1,357	960	1,586	739	597
1996	43,300	1,505	1,395	982	1,477	759	576
1997	43,200	1,446	1,439	936	1,393	721	600
1998	41,200	1,367	1,423	978	1,393	709	650
1999	41,300	1,386	1,430	1,017	1,456	744	626
2000	41,945	1,382	1,361	875	1,418	801	625
2001	42,116	1,328	1,379	895	1,414	764	568

The U.S. Department of Transportation estimates a national increase in traffic fatalities of 0.4 percent between 2000 (41,945) and 2001 (42,116).

Year	U.S. VMT	Michigan VMT	Ohio VMT	Indiana VMT	Illinois VMT	Wisconsin VMT	Minnesota VMT
1992	2,240	84.0	95.2	57.1	87.9	47.5	41.3
1993	2,289	85.7	97.5	60.5	89.8	48.8	42.3
1994	2,347	85.6	99.0	62.1	92.1	50.3	43.4
1995	2,405	85.7	99.7	62.0	94.3	51.4	44.1
1996	2,467	87.7	102.8	66.0	96.9	52.6	45.2
1997	2,531	89.2	104.8	70.4	98.7	53.7	46.9
1998	2,618	91.6	106.0	70.7	100.9	56.0	48.5
1999	2,679	93.1	106.4	71.5	101.8	57.0	50.7
2000	2,750	94.9	106.5	72.3	102.9	57.3	52.4
2001	2,778	96.4	107.0	74.1	103.1	57.3	53.2

VMT described in billions of miles

## AVERAGE AGE OF DRIVERS IN CRASHES 1992 - 2001



Reflecting the demographic trend of increasing age in the general population, the average age of crash-involved drivers has also increased. An aging driving population has implications for law enforcement prioritizing, highway design, traffic signing considerations, and Emergency Medical System procedures.

