

Trends in New Mexico Crash Death Rates

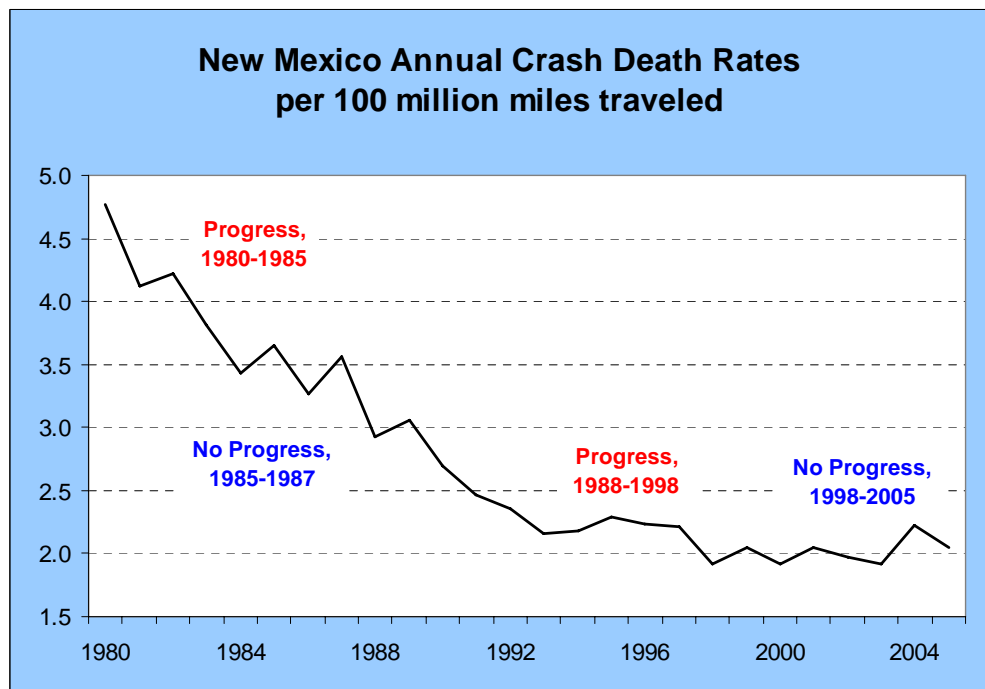
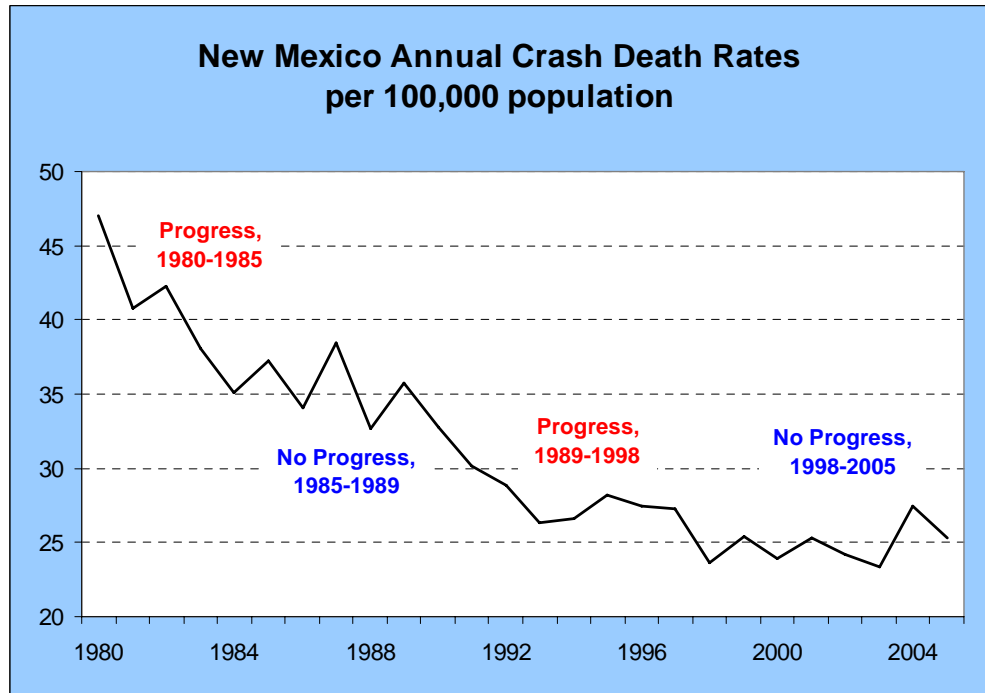
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DWI Resource Center, December, 2006

The annual count of motor vehicle crash deaths in New Mexico has declined dramatically since 1980, but it has changed very little in recent years. An argument is sometimes made that the annual death toll has not declined recently because the population is increasing or because more vehicles are traveling. These hypotheses can be reviewed using rates of death per population, or per vehicle miles traveled, as these two graphs show [numeric values can be found in the appendix].

The graphs of rates closely mirror the graph of death counts, which is predictable since the rate of population growth and vehicle mile growth is relatively small and steady. Both graphs illustrate exactly the same trends visible in the counts. Death rates declined in the early 1980's, with action against DWI, and the early 1990's, with effective DWI measures and rising safety belt and air bag use. The rises in rural speed limits in the mid 1980's and the mid 1990's halted progress for a time, in each case.

Unfortunately, both graphs show no progress since 1998. New Mexico's crash death rates remain far above those of its neighbor states, and research points to some very effective strategies that can return the state's rates to their past downward trends. However, New Mexico's recent efforts have not been well-chosen to select those most likely to reduce bottom-line deaths.



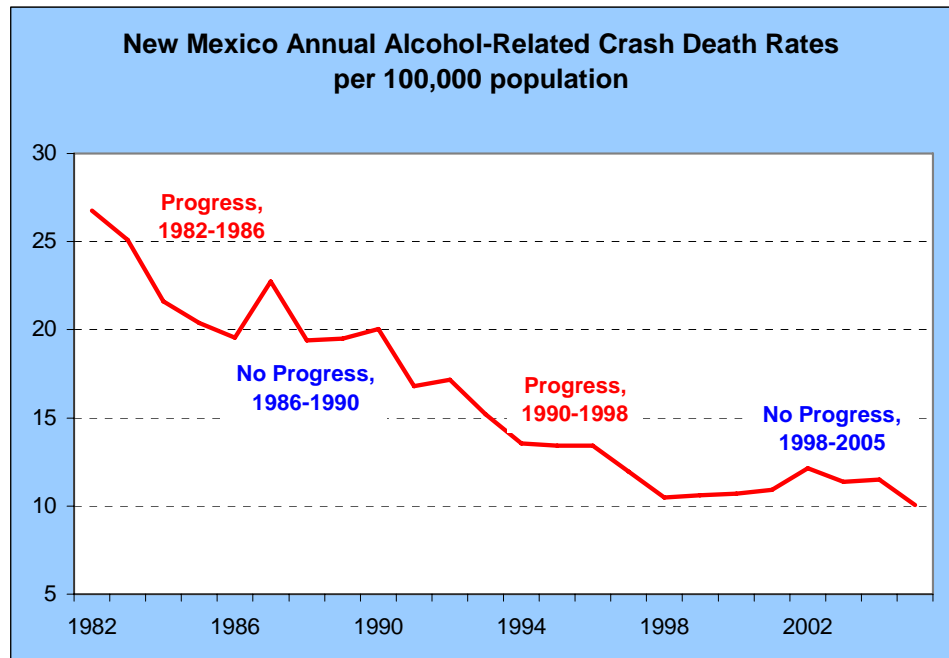
Alcohol-Related Crash Death Rates in New Mexico

Alcohol-related crash deaths in New Mexico have declined dramatically since good counting started in 1982. As with total deaths, the rates of crash deaths per population and per mile traveled have declined as well. The trend lines for alcohol-related deaths and for rates closely mirror each other, and the same trends affect each kind of measure [numeric values can be found in the appendix].

Alcohol-related crash death rates declined in the early 1980's with vigorous action against DWI, particularly the advent of widely available breath test equipment and training in 1982-1984, resulting in a major rise in DWI arrests, and the administrative revocation of driver licenses starting in July, 1984. No progress was made in 1986-1990, when the only major further initiative was Governor Carruther's 1987 provision for mandatory vehicle immobilization or impoundment for second or third DWI offenses; judges largely ignored it, as did drunk drivers.

In the early 1990's funding for community DWI prevention in 1991 and 1993's enactment of .08 and launch of statewide coordinated DWI checkpoints brought results, as did checkpoints' further expansion in 1997. Since 1998, DWI arrests are down from their early 1990's highs, and the State's initiatives on DWI have concentrated on ignition interlocks, a provision, like Gov.

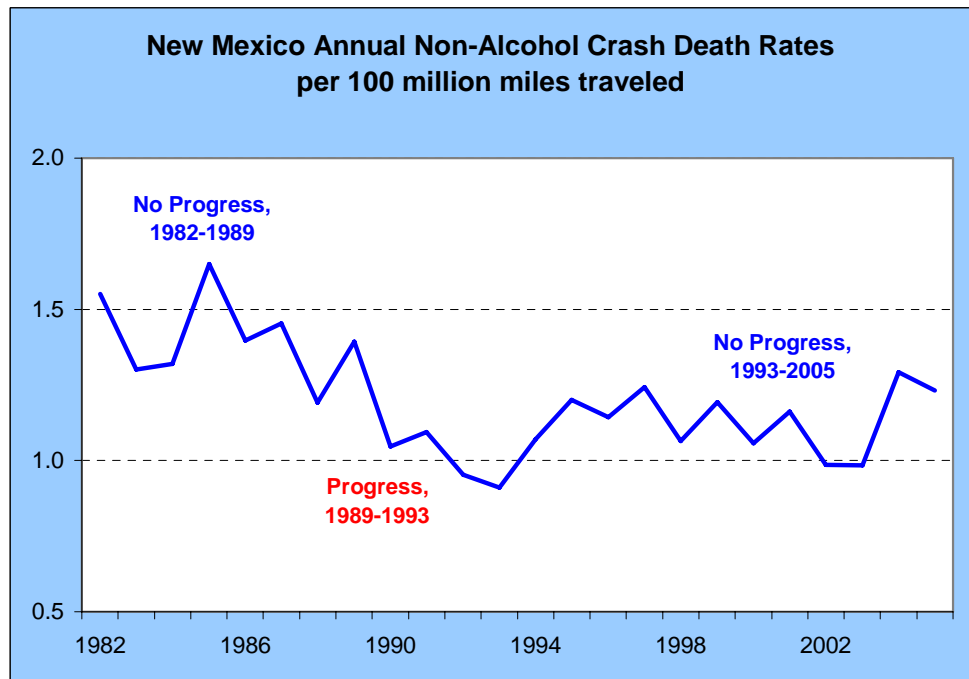
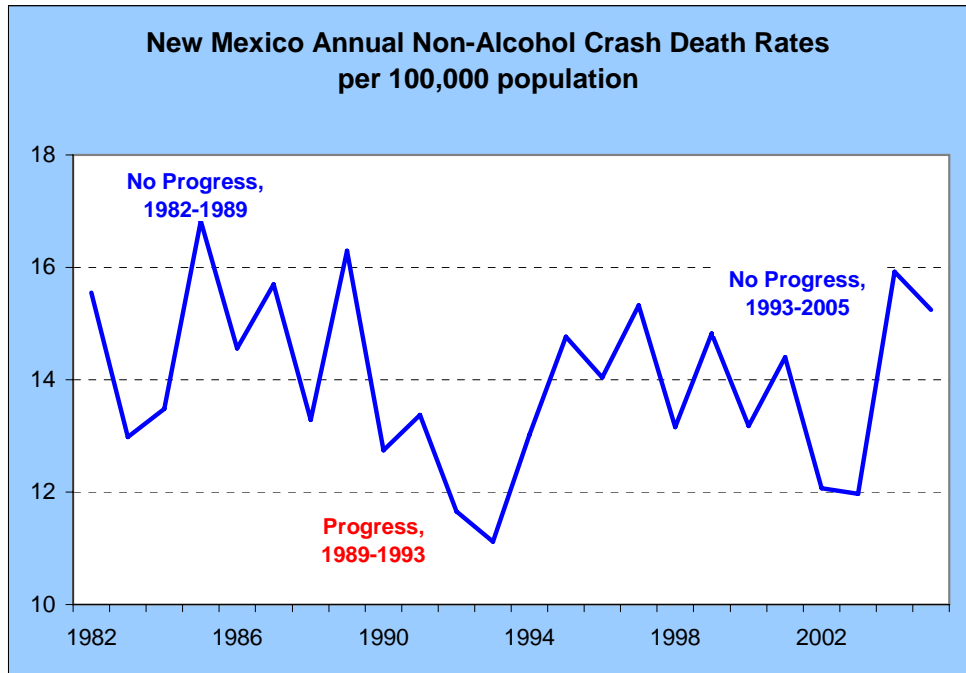
Carruthers', that judges widely ignore, but also one which even if followed universally would have little effect on crash deaths: Most drunk drivers in fatal crashes have never been arrested for DWI before. Even among prior offenders, in those crashes, the crash on average occurs several years since their prior offense. Non-interlock vehicles are readily available to offenders even when interlocks are installed. While research shows that interlocks reduce recidivism somewhat among drunk drivers, the effect applies only to those drivers themselves and lasts only while they are installed. No research anywhere shows reduced crash deaths due to a State's ignition interlock policies. **Bottom line:** DWI crash deaths are not declining because we as a state are not doing the things that would make them decline. To lower them by the next step, we need to return to former high levels of highly visible DWI enforcement, and we need to match other western states' success with dramatic further increases in safety belt use.



Non-Alcohol-Related Crash Death Rates in New Mexico

Since the mid 1990's more than half of New Mexico crash deaths do not involve alcohol, yet policymakers give little attention to this area. No progress per mile traveled nor per population in this category has been observed in two decades, despite dramatic rises in safety belt use, air bag prevalence, and crash-tolerant vehicle designs, and despite major New Mexico public investment in highway improvements. The period of most dramatic rise in safety belt use in the early 1990's produced a decline in the death rate, but much of that safety bonus has been undermined by the increases in rural travel speeds (crash severity rises as the square of speed).

The lack of progress on rates corresponds to a dramatic increase in non-alcohol-involved deaths, since populations have risen and more vehicles on the roads are traveling more miles. New Mexico in 2004 suffered its highest non-alcohol crash death toll since good records started in 1982, a dramatic increase in the major killer of New Mexicans under age 45. Yet no task forces were formed, no major hearings were held, no big studies were launched, and no policy changes have yet been initiated to address this major killer. Predictably then, no progress has been made.



Year	New Mexico Traffic Deaths			NM Population	Deaths per 100,000 pop.			100 million vehicle miles traveled in NM		Deaths per 100 million miles traveled		
	Total	Alcohol Related	Not Alc.-Related		Total	Alcohol Related	Not Alcohol Related	Adjusted Series	Raw Series	Total	Alcohol Related	Not Alcohol Related
1980	613			1,303,303	47.03			128.38	110.37	4.78		
1981	544			1,332,747	40.82			131.95	113.44	4.12		
1982	577	365	212	1,363,822	42.31	26.76	15.54	136.65	117.48	4.22	2.67	1.55
1983	531	350	181	1,394,362	38.08	25.10	12.98	139.08	119.57	3.82	2.52	1.30
1984	497	306	191	1,416,719	35.08	21.60	13.48	144.79	124.48	3.43	2.11	1.32
1985	535	293	242	1,438,360	37.20	20.37	16.82	146.70	126.12	3.65	2.00	1.65
1986	499	286	213	1,462,728	34.11	19.55	14.56	152.58	131.18	3.27	1.87	1.40
1987	568	336	232	1,478,519	38.42	22.73	15.69	159.51	137.14	3.56	2.11	1.45
1988	487	289	198	1,490,336	32.68	19.39	13.29	166.21	166.21	2.93	1.74	1.19
1989	538	293	245	1,503,901	35.77	19.48	16.29	175.78	175.78	3.06	1.67	1.39
1990	499	305	194	1,521,574	32.79	20.05	12.75	185.28	185.28	2.69	1.65	1.05
1991	469	261	208	1,555,305	30.15	16.78	13.37	190.16	190.16	2.47	1.37	1.09
1992	460	274	186	1,595,442	28.83	17.17	11.66	195.01	195.01	2.36	1.41	0.95
1993	431	249	182	1,636,453	26.34	15.22	11.12	200.01	200.01	2.15	1.24	0.91
1994	447	228	219	1,682,398	26.57	13.55	13.02	204.79	204.79	2.18	1.11	1.07
1995	485	231	254	1,720,394	28.19	13.43	14.76	211.50	211.50	2.29	1.09	1.20
1996	481	235	246	1,752,326	27.45	13.41	14.04	215.10	215.10	2.24	1.09	1.14
1997	484	212	272	1,774,839	27.27	11.94	15.33	218.97	218.97	2.21	0.97	1.24
1998	424	188	236	1,793,484	23.64	10.48	13.16	221.72	221.72	1.91	0.85	1.06
1999	460	192	268	1,808,082	25.44	10.62	14.82	224.51	224.51	2.05	0.86	1.19
2000	435	195	240	1,821,526	23.88	10.71	13.18	227.10	227.10	1.92	0.86	1.06
2001	464	200	264	1,832,608	25.32	10.91	14.41	227.09	227.09	2.04	0.88	1.16
2002	449	225	224	1,855,400	24.20	12.13	12.07	227.30	227.30	1.98	0.99	0.99
2003	439	214	225	1,879,252	23.36	11.39	11.97	228.60	228.60	1.92	0.94	0.98
2004	522	219	303	1,903,006	27.43	11.51	15.92	234.40	234.40	2.23	0.93	1.29
2005	488	194	294	1,928,384	25.31	10.06	15.25	238.70	238.70	2.04	0.81	1.23

Sources:

Death counts are from *New Mexico Traffic Crash Information*, Traffic Safety Bureau, New Mexico Dept. of Transportation

Populations are from the US Census, Adjusted Population Estimates 1980-1990, 1990-2000, and 2000-2005, from the University of New Mexico Bureau of Business and Economic Research

Raw Series for vehicle miles traveled is from *New Mexico Traffic Crash Information*, Traffic Safety Bureau, New Mexico Dept. of Transportation

Adjusted Series for vehicle miles traveled is derived from the Raw Series to correct for the NMDOT methodology change in 1988. The 1987 value is set to the 1988 value less the average 1988-1990 change amount, and 1980-1986 values are set to correspond to the same annual percentage change by year observed in the raw values.

Rates per 100 million miles traveled are calculated using the Adjusted Series, for comparability across years.

Comparing Governors by Progress at Lowering Record Lows for NM Crash Deaths

Governor	Term of office	Total Crash Deaths		Alc. Rel. Crash Deaths		Non-Alc Crash Deaths	
		Year of record low	% Change from prior record low	Year of record low	% Change from prior record	Year of record low	% Change from prior record
Anaya	1983-1986	1984	-8.6%	1986	-21.6%	1983	-14.6%
Carruthers	1987-1990	1988	-2.0%	None	+1.1%	None	+7.2%
King	1991-1994	1993	-11.5%	1994	-20.3%	None	+0.6%
Johnson	1995-2002	1998	-1.6%	1998	-17.5%	None	+23.8%
Richardson	2003-	None	+3.5%	None	+3.2%	None	+7.7%

Comparing Governors by Progress at Lowering Record Lows for NM Crash Death Rates Per 100,000 Population

Governor	Term of office	Total Crash Death Rate		Alc. Rel. Crash Death Rate		Non-Alc Crash Death Rate	
		Year of record low	% Change from prior record low	Year of record low	% Change from prior record	Year of record low	% Change from prior record
Anaya	1983-1986	1986	-16.4%	1986	-26.9%	1983	-16.5%
Carruthers	1987-1990	1988	-4.2%	1988	-0.8%	1990	-1.8%
King	1991-1994	1993	-19.4%	1994	-30.1%	1993	-12.8%
Johnson	1995-2002	1998	-10.2%	1998	-22.7%	None	+8.6%
Richardson	2003-	2003	-1.2%	2005	-4.0%	None	+7.7%

Comparing Governors by Progress at Lowering Record Lows for NM Crash Death Rates Per 100 million Miles Traveled

Governor	Term of office	Total Crash Deaths		Alc. Rel. Crash Deaths		Non-Alc Crash Deaths	
		Year of record low	% Change from prior record low	Year of record low	% Change from prior record	Year of record low	% Change from prior record
Anaya	1983-1986	1986	-20.7%	1986	-29.8%	1983	-16.1%
Carruthers	1987-1990	1990	-17.7%	1990	-12.2%	1990	-19.6%
King	1991-1994	1993	-20.0%	1994	-32.4%	1993	-13.1%
Johnson	1995-2002	1998	-11.3%	1998	-23.8%	None	+8.3%
Richardson	2003-	None	+0.4%	2005	-4.2%	None	+8.2%