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NHTSA

Traffic Safety Facts CRASH-STATS

DOT HS 813 670

A Brief Statistical Summary

December 2024

Early Estimate of Motor Vehicle Traffic Fatalities for the First 9 Months (January–September) of 2024

Summary

A statistical projection of traffic fatalities for the first 9 months of 2024 shows an estimated 29,135 people died in motor vehicle traffic crashes, a decrease of about 4.4 percent compared to 30,490 fatalities projected for the first 9 months of 2023 (Early Estimate of Motor Vehicle Traffic Fatalities in 2023, Report No. DOT HS 813 561), as shown in Table 1. The third quarter of 2024 represents the 10th consecutive quarterly decline in fatalities beginning with the second quarter of 2022. Preliminary data reported by the Federal Highway Administration (FHWA) shows that vehicle miles traveled (VMT) in the first 9 months of 2024 increased by about 19.7 billion miles, or about a 0.8-percent increase. Also shown in Table 1 are the fatality rates per 100 million VMT, by quarter. The fatality rate for the first 9 months of 2024 decreased to 1.18 fatalities per 100 million VMT, down from the projected rate of 1.24 fatalities per 100 million VMT in the first 9 months of 2023. For the NHTSA regional differences, 8 of the 10 regions are estimated to have had decreases in fatalities and fatality rate per 100 million VMT in the first 9 months of 2024 as compared to the first 9 months of 2023. Also, 35 States and Puerto Rico are projected to have decreases in fatalities. The fatality counts for 2023 and 2024 and the ensuing percentage changes from 2023 to 2024 will be further revised when the Fatality Analysis Reporting System (FARS) Annual Reporting File for 2023 is made available in early 2025, as well as when the Final File for 2023 and the Annual Reporting File for 2024 are made available in early 2026. These estimates will be further refined when the projections for the whole of 2024 are released in late April 2025.

Year	1st Quarter (Jan–Mar)	2nd Quarter (Apr–Jun)	3rd Quarter (Jul–Sep)	4th Quarter (Oct–Dec)	Total (Full Year)	1st 9 Months (Jan–Sep)					
	Fatalities and Percentage Change in Fatalities for the Corresponding Quarter and Total From the Previous Yea										
2013	7,166 [-4.7%]	8,207 [-4.7%]	9,024 [-1.6%]	8,496 [+0.2%]	32,893 [-2.6%]	24,397 [-3.6%]					
2014	6,856 [-4.3%]	8,179 [-0.3%]	8,799 [-2.5%]	8,910 [+4.9%]	32,744 [-0.5%]	23,834 [-2.3%]					
2015	7,370 [+7.5%]	8,823 [+7.9%]	9,805 [+11.4%]	9,486 [+6.5%]	35,484 [+8.4%]	25,998 [+9.1%]					
2016	8,154 [+10.6%]	9,563 [+8.4%]	10,078 [+2.8%]	10,011 [+5.5%]	37,806 [+6.5%]	27,795 [+6.9%]					
2017	8,301 [+1.8%]	9,460 [-1.1%]	10,081 [+0.0%]	9,631 [-3.8%]	37,473 [-0.9%]	27,842 [+0.2%]					
2018	8,203 [-1.2%]	9,323 [-1.4%]	9,934 [-1.5%]	9,375 [-2.7%]	36,835 [-1.7%]	27,460 [-1.4%]					
2019	7,832 [-4.5%]	9,193 [-1.4%]	9,994 [+0.6%]	9,336 [-0.4%]	36,355 [-1.3%]	27,019 [-1.6%]					
2020	7,901 [+0.9%]	9,164 [-0.3%]	11,358 [+13.6%]	10,584 [+13.4%]	39,007 [+7.3%]	28,423 [+5.2%]					
2021	8,906 [+12.7%]	11,149 [+21.7%]	11,828 [+4.1%]	11,347 [+7.2%]	43,230 [+10.8%]	31,883 [+12.2%]					
2022	9,515 [+6.8%]	10,450 [-6.3%]	11,588 [-2.0%]	10,961 [-3.4%]	42,514 [-1.7%]	31,553 [-1.0%]					
2023†	8,935 [-6.1%]	10,395 [-0.5%]	11,160 [-3.7%]	10,500 [-4.2%]	40,990 [-3.6%]	30,490 [-3.4%]					
2024†	8,570 [-4.1%]	10,010 [-3.7%]	10,555 [-5.4%]	_		29,135 [-4.4%]					

Table 1. Fatalities and Fatality Rate by Quarter, First 9 Months, Full Year, and the Percentage Change From the Corresponding Quarter, First 9 Months or Full Year in the Previous Year

Year	1st Quarter (Jan–Mar)	2nd Quarter (Apr–Jun)	3rd Quarter (Jul–Sep)	4th Quarter (Oct–Dec)	Total (Full Year)	1st 9 Months (Jan–Sep)							
	Fatality Rate per 100 Million VMT												
2013	1.04	1.10	1.09										
2014	0.99	1.03	1.11	1.17	1.08	1.05							
2015	1.03	1.08	1.20	1.21	1.15	1.11							
2016	1.11	1.16	1.23	1.27	1.19	1.17							
2017	1.12	1.13	1.21	1.20	1.17	1.16							
2018	1.10	1.11	1.18	1.15	1.14	1.13							
2019	1.05	1.09	1.18	1.14	1.11	1.11							
2020	1.08	1.43	1.44	1.42	1.34	1.32							
2021	1.28	1.38	1.41	1.42	1.38	1.36							
2022	1.29	1.28	1.38	1.37	1.33	1.32							
2023†	1.18	1.25	1.30	1.29	1.26	1.24							
2024†	1.12	1.19	1.22	—	—	1.18							

[†]2023, 2024 statistical projections and rates based on these projections.

Sources: Fatalities: 2013-2021 FARS Final File, 2022 FARS Annual Report File (ARF).

VMT: FHWA September 2024 Traffic Volume Trends (TVT) for 2023 and 2024 VMT.

Figure 1 shows the historical trend of the percentage changes every quarter from the same quarter in the previous year, going back to 1981 (NHTSA has fatality data since 1975). The shading in the chart shows the years when there were significant numbers of consecutive quarters with increases/declines as compared to the corresponding quarters of the previous years. The declines during the early 1980s and 1990s lasted 11 consecutive quarters, while the most recent decline occurred over 17 consecutive quarters ending in the second quarter of 2010. More recently, the significant increases in fatalities occurred over 10 consecutive quarters ending after the first half of 2017. In addition, fatalities increased 7 consecutive quarters beginning with the third quarter of 2020, until the 6.3-percent decline seen in the second quarter of 2022. The third and fourth quarters of 2020 and the first and especially the second quarters of 2021 showed significant increases in fatalities as compared to the corresponding quarters of 2019 and 2020. The percentage increases in the second quarter of 2021 are the highest quarterly percentage increases in FARS data recorded history. As shown in the rightmost shading in the chart, the third quarter of 2024 represents the 10th consecutive quarterly decline in fatalities beginning with the second quarter of 2022.





Sources: 1981-2021 FARS Final File, 2022 FARS ARF, 2023 and 2024 statistical projections.

The quarterly projections of fatalities, fatality rates, and VMT are further split into monthly estimates for 2023 and 2024, as shown in Table 2. In 2024 both fatalities and the fatality rate per 100 million VMT show decreases in all months from January to September, except in March, as compared to the corresponding month in 2023.

Table 2. Fatalities, VMT, Fatality Rate by Month or Quarter in 2024, and the Percentage Changes
in Fatalities and VMT From the Corresponding Month or Quarter in 2023

	1st Quarter				2nd Quarter				3rd Quarter				4th Quarter			
Year	Jan	Feb*	Mar	Total	Apr	Мау	Jun	Total	Jul	Aug	Sep	Total	Oct	Nov	Dec	Total
F	Fatalities in 2024 and Percentage Change in Fatalities for the Corresponding Month and Quarter From 2023															
2023†	3,035	2,875	3,025	8,935	3,365	3,550	3,480	10,395	3,685	3,760	3,715	11,160	3,815	3,330	3,355	10,500
2024†								10,010 -3.7%								-
	Fatality Rate per 100 Million VMT/VMT (in Billion) and Percentage Changes in VMT															
2023†	1.22 249.2	1.22 235.4	1.11 273.7	1.18 758.3	1.30 258.2	1.23 289.6	1.22 285.6	1.25 833.4	1.27 289.8	1.29 290.9	1.34 278.0	1.30 858.7	1.34 284.0	1.26 265.1	1.27 263.6	1.29 812.7
2024†	1.10 247.0 -0.9%	1.13 240.2 2.0%	1.14 275.5 0.7%		1.20 263.9 2.2%	1.17 293.5 1.3%	1.21 284.5 -0.4%		1.14 293.4 1.2%	1.24 294.2 1.1%	1.28 277.8 -0.1%	1.22 865.4 0.8%				

[†] 2023, 2024 statistical projections and rates based on these projections.

*2024 was a leap year (i.e., February 29, 2024, was a leap day).

Sources: VMT: FHWA September 2024 TVT for 2023 and 2024 VMT.

Regional Differences

The statistical procedures used in these projections were generated for each NHTSA administrative region and were collated to create the national estimate. This allows for the comparison of regional estimates in 2024 with the projected 2023 counts. As of 2024, Connecticut was moved from Region 2 to Region 1. In order to directly compare 2024 to 2023, estimates for Figures 2 and 3 were computed having Connecticut as part of Region 1 for both 2023 and 2024. Figure 2 shows the percentage changes in estimated fatalities in the first 9 months of 2024 from the projected fatalities in the first 9 months of 2023 by NHTSA region; 8 of the 10 regions experienced decreases. Figure 3 shows the comparison of the estimated fatality rate per 100 million VMT in the first 9 months of 2024 with the projected fatality rate per 100 million VMT in the first 9 months of 2023, by NHTSA region; 8 of the 10 regions presented decreases. These estimates by NHTSA region shown in Figures 2 and 3 are subject to small changes as the FARS fatality counts for 2023 and 2024 are reported.

Figure 2. Percentage Changes in Estimated Fatalities in First 9 Months of 2024 From Projected First 9 Months of 2023 Fatality Counts, by NHTSA Region



Sources: 2023 and 2024 statistical projections. Puerto Rico is not included in Region 2.







State Differences

Given the significant interest in the traffic safety community in estimated changes at the State level to assess emerging trends, NHTSA has developed a methodology in the third quarter of 2022 to generate such State-level estimates based on the most recent distribution of the fatalities by State in a NHTSA Region and the month (see *Data and Methodology* section for more details). Table 3 shows the comparison of each State's estimate in the first 9 months of 2024 with the projected fatality counts in the first 9 months 2023 and the percentage change in 2024 from 2023; 35 States and Puerto Rico are projected to have experienced decreases in fatalities in 2024 compared to 2023, while 15 States and the District of Columbia are projected to have had increases in fatalities. Also, the estimates of the fatality rates per 100 million VMT by State in 2023 and 2024 are presented in Table 3 of this report. These estimates by State shown in Table 3 are subject to change slightly as fatality counts in FARS for 2023 and 2024 are reported, and as FHWA finalizes the State VMT estimates for 2023 and 2024.

		Fatalitie	s	Fatality Rate				Fatalitie	Fatality Rate		
			Percent		<u> </u>				Percent		Í –
State	2023	2024	Change	2023	2024	State	2023	2024	Change	2023	2024
Alabama	708	689	-2.7%	1.30	1.27	Nebraska	155	194	25.2%	0.95	1.17
Alaska	52	53	1.9%	1.21	1.21	Nevada	288	294	2.1%	1.38	1.39
Arizona	947	936	-1.2%	1.63	1.58	New Hampshire	97	102	5.2%	0.94	0.98
Arkansas	441	473	7.3%	1.49	1.59	New Jersey	424	493	16.3%	0.73	0.85
California	3,052	2,824	-7.5%	1.27	1.16	New Mexico	317	289	-8.8%	1.52	1.38
Colorado	554	527	-4.9%	1.33	1.27	New York	843	813	-3.6%	0.94	0.89
Connecticut	234	249	6.4%	1.04	1.08	North Carolina	1,175	1,207	2.7%	1.28	1.33
Delaware	109	97	-11.0%	1.49	1.31	North Dakota	82	71	-13.4%	1.13	0.96
D.C.	32	39	21.9%	1.19	1.46	Ohio	943	898	-4.8%	1.11	1.06
Florida	2,491	2,290	90 -8.1% 1.42 1.31 Oklahoma		Oklahoma	514	451	-12.3%	1.51	1.32	
Georgia	1,184	4 1,065 -10.1% 1.21 1.09 Oregon		Oregon	445	392	-11.9%	1.58	1.40		
Hawaii	74	72	-2.7%	0.97	0.95	Pennsylvania	900	866	-3.8%	1.17	1.12
Idaho	191	181	-5.2%	1.28	1.19	Rhode Island	56	36	-35.7%	0.95	0.60
Illinois	943	913	-3.2%	1.18	1.14	South Carolina	772	758	-1.8%	1.70	1.66
Indiana	677	635	-6.2%	0.91	0.84	South Dakota	110	105	-4.5%	1.43	1.34
Iowa	286	258	-9.8%	1.15	1.03	Tennessee	1,002	897	-10.5%	1.57	1.40
Kansas	285	259	-9.1%	1.19	1.07	Texas	3,196	3,049	-4.6%	1.44	1.34
Kentucky	604	543	-10.1%	1.63	1.46	Utah	211	218	3.3%	0.81	0.82
Louisiana	593	540	-8.9%	1.38	1.26	Vermont	52	42	-19.2%	0.95	0.77
Maine	98	137	39.8%	0.87	1.18	Virginia	699	707	1.1%	1.11	1.12
Maryland	473	443	-6.3%	1.10	1.04	Washington	604	538	-10.9%	1.31	1.16
Massachusetts	257	270	5.1%	0.59	0.61	West Virginia	196	193	-1.5%	1.66	1.62
Michigan	845	789	-6.6%	1.15	1.07	Wisconsin	440	427	-3.0%	0.86	0.82
Minnesota	296	340	14.9%	0.67	0.75	Wyoming	110	77	-30.0%	1.53	1.05
Mississippi	541	547	1.1%	1.78	1.81	U.S. Total*	30,490	29,135	-4.4%	1.24	1.18
Missouri	747	690	-7.6%	1.24	1.15	Puerto Rico	230	208	-9.6%	-	_
Montana	145	159	9.7%	1.36	1.48						

Table 3. Estimated Fatalities in the First 9 Months of 2024, and the Percentage Changes in Estimated Fatalities From the Projected Fatalities in the First 9 Months of 2023, by State. The States' Estimates of the Fatality Rate per 100 VMT in the First 9 Months of 2023 and 2024 Are Also Presented

*Puerto Rico is not included.

Sources: 2023 and 2024 statistical projections.

VMT: FHWA September 2024 TVT for 2023 and 2024 VMT. Traffic Volume Trends for Puerto Rico are not available.

Discussion

During the COVID-19 pandemic there were marked increases in fatalities and the fatality rates per 100 million VMT in 2020. The increased trend of fatalities in 2020 continued into 2021 and the first quarter of 2022. However, the second, third, and fourth quarters of 2022, all four quarters of 2023, plus the first three quarters of 2024, have experienced 10 consecutive quarterly declines in fatalities after 7 consecutive quarters of year-to-year increases in fatalities, since the third quarter of 2020. The increased trend of the fatality rates per 100 million

VMT in 2020 continued into the first quarter of 2021, decreased in the second and the third quarters of 2021, and increased again in the first quarter of 2022. The second, third, and fourth quarters of 2022, all four quarters of 2023, plus the first three quarters of 2024, also experienced 10 consecutive quarterly decline in fatality rate per 100 million VMT. NHTSA is continuing to gather and finalize data on crash fatalities for 2022 and 2023 using information from police crash reports and other sources. The FARS Final File for 2022 as well as the Annual Report File and the Final File for 2023 will be available within the next 2 years that usually result in the minor revision of fatality totals and the ensuing fatality rates and percentage changes.

Data and Methodology

The data used in this analysis comes from several sources: NHTSA's FARS, Early Notification (EN) data, and Monthly Fatality Counts (MFC) (the EN and MFC data are not available to the public); and from FHWA's VMT estimates. FARS is a census of fatal traffic crashes in the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a trafficway and must result in the death of at least one person (occupant of a vehicle or a nonoccupant) within 30 days of the crash. FARS Final Files from 2003 to 2021 and the FARS Annual Report File in 2022 are used to obtain the monthly fatality counts. The EN program is designed as an Early Fatality Notification System to capture fatality counts from States more rapidly and provide near-real-time notification of fatality counts from all jurisdictions reporting to FARS. The MFC data provide monthly fatality counts by State through sources that are independent from the EN or FARS systems. MFCs from January 2003 up to September 2024 are used. MFCs are reported midmonth for all prior months of the year. To estimate the traffic fatality counts for 2024, the time series cross-section regression procedure was applied to analyze the data with both cross-sectional values (by NHTSA Region) and time series (by month), to model the relationship among FARS, MFC, and EN, the details of which are available in a Research Note (Statistical Methodology to Make Early Estimates of Motor Vehicle Traffic Fatalities, Report No. DOT HS 811 123). Furthermore, after the projected fatality counts for NHTSA Region r and the month m (F Est_{mr}) are obtained, the estimated fatality counts for a State st in Region r and the month m (F Est_{stimr}) are calculated. Each State receives a proportion of the projected fatality counts for the Region using the most recent relative proportion of fatalities in each State st for Region r and month m found in the Early Notification data. This can be expressed as $F_Est_{st|mr} = (F_{st|mr} / \sum_{all \ States \ in \ r} F_{st|mr}) \times F_Est_{mr}$, where $F_{st|mr}$ is the latest fatal count in the Early Notification data for State st in Region r and month m. That is, the inflation rate for all States within a Region is assumed to be the same as the inflation rate of that Region. For example, the estimated motor vehicle traffic fatalities for Arizona in Region 9 (Arizona, California, Hawaii) and the month m is: $F Est_{AZ|m9} = (F_{AZ|m9})$ $/(F_{AZ|m9} + F_{CA|m9} + F_{HI|m9})) \times F \ Est_{m9}.$

The methodology used to generate the national, regional, and State-level estimates for the first 9 months of 2024 is the same as the one used by NHTSA to project the motor vehicle traffic fatalities for the first half of 2024 (*Early Estimates of Motor Vehicle Traffic Fatalities for the first half (January–June) of 2024*, Report No. DOT HS 813 633).

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National Highway Traffic Safety Administration For questions regarding the information presented in this report, please contact <u>NCSARequests@dot.gov</u>. This Crash•Stats and other general information on traffic safety can be found at <u>https://crashstats.nhtsa.dot.gov/</u>.