U.S. Department of Transportation
National Highway Traffic Safety Administration
NHTSA

Traffic Safety Facts
CRASH•STATS

DOT HS 813 633 | A Brief Statistical Summary | September 2024

Early Estimate of Motor Vehicle Traffic Fatalities for the First Half (January–June) of 2024

Summary

A statistical projection of traffic fatalities for the first half of 2024 shows an estimated 18,720 people died in motor vehicle traffic crashes, a decrease of about 3.2 percent compared to 19,330 fatalities projected for the first half of 2023 (*Early Estimate of Motor Vehicle Traffic Fatalities in 2023*, Report No. DOT HS 813 561), as shown in Table 1. The second quarter of 2024 represents the ninth 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 half of 2024 increased by about 13.1 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 half of 2024 decreased to 1.17 fatalities per 100 million VMT, down from the projected rate of 1.21 fatalities per 100 million VMT in the first half of 2023. For the NHTSA regional differences, 7 of the 10 regions are estimated to have had decreases in fatalities and fatality rate per 100 million VMT in the first half of 2024 as compared to the first half of 2023. Also, 31 States and Puerto Rico are projected to have experienced 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 available later this year, as well as when the Final File for 2023 and the Annual Reporting File for 2024 are available next year. These estimates will be further refined when the projections for the first 9 months of 2024 are released in late December.

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

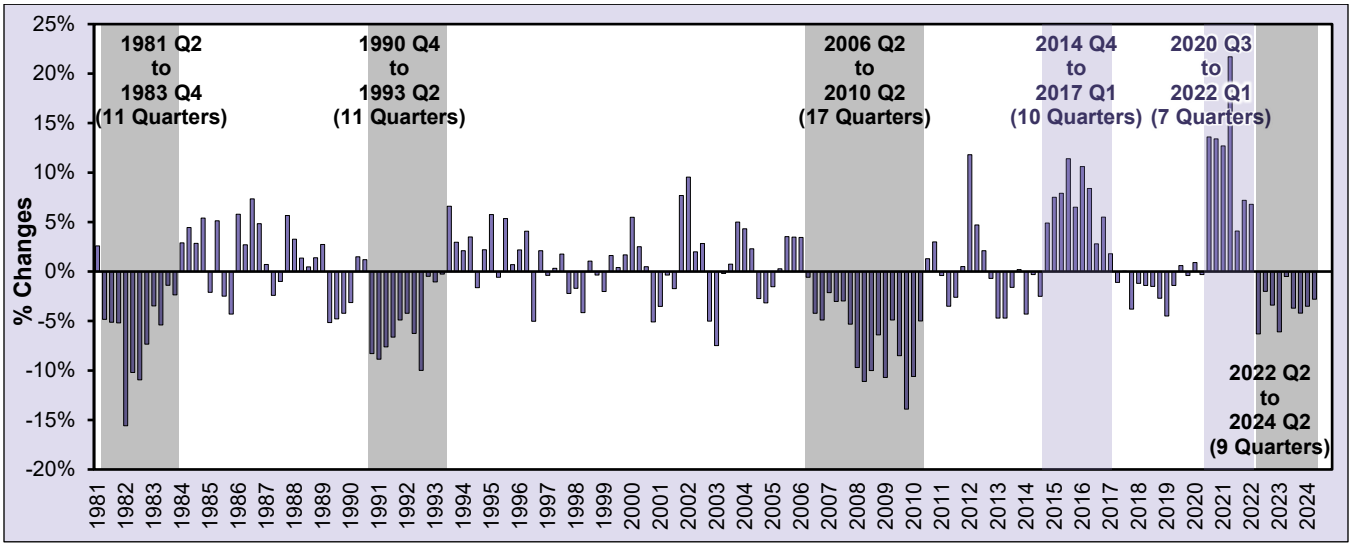
Year	1st Quarter (Jan–Mar)	2nd Quarter (Apr–Jun)	3rd Quarter (Jul–Sep)	4th Quarter (Oct–Dec)	Total (Full Year)	1st Half (Jan–Jun)
Fatalities and Percentage Change in Fatalities for the Corresponding Quarter and Total From the Previous Year						
2013	7,166 [-4.7%]	8,207 [-4.7%]	9,024 [-1.6%]	8,496 [+0.2%]	32,893 [-2.6%]	15,373 [-4.7%]
2014	6,856 [-4.3%]	8,179 [-0.3%]	8,799 [-2.5%]	8,910 [+4.9%]	32,744 [-0.5%]	15,035 [-2.2%]
2015	7,370 [+7.5%]	8,823 [+7.9%]	9,805 [+11.4%]	9,486 [+6.5%]	35,484 [+8.4%]	16,193 [+7.7%]
2016	8,154 [+10.6%]	9,563 [+8.4%]	10,078 [+2.8%]	10,011 [+5.5%]	37,806 [+6.5%]	17,717 [+9.4%]
2017	8,301 [+1.8%]	9,460 [-1.1%]	10,081 [+0.0%]	9,631 [-3.8%]	37,473 [-0.9%]	17,761 [+0.2%]
2018	8,203 [-1.2%]	9,323 [-1.4%]	9,934 [-1.5%]	9,375 [-2.7%]	36,835 [-1.7%]	17,526 [-1.3%]
2019	7,832 [-4.5%]	9,193 [-1.4%]	9,994 [+0.6%]	9,336 [-0.4%]	36,355 [-1.3%]	17,025 [-2.9%]
2020	7,901 [+0.9%]	9,164 [-0.3%]	11,358 [+13.6%]	10,584 [+13.4%]	39,007 [+7.3%]	17,065 [+0.2%]
2021	8,906 [+12.7%]	11,149 [+21.7%]	11,828 [+4.1%]	11,347 [+7.2%]	43,230 [+10.8%]	20,055 [+17.5%]
2022	9,515 [+6.8%]	10,450 [-6.3%]	11,588 [-2.0%]	10,961 [-3.4%]	42,514 [-1.7%]	19,965 [-0.4%]
2023†	8,935 [-6.1%]	10,395 [-0.5%]	11,160 [-3.7%]	10,500 [-4.2%]	40,990 [-3.6%]	19,330 [-3.2%]
2024†	8,620 [-3.5%]	10,100 [-2.8%]	—	—	—	18,720 [-3.2%]

Year	1st Quarter (Jan–Mar)	2nd Quarter (Apr–Jun)	3rd Quarter (Jul–Sep)	4th Quarter (Oct–Dec)	Total (Full Year)	1st Half (Jan–Jun)
Fatality Rate per 100 Million VMT						
2013	1.04	1.07	1.17	1.16	1.10	1.05
2014	0.99	1.03	1.11	1.17	1.08	1.01
2015	1.03	1.08	1.20	1.21	1.15	1.06
2016	1.11	1.16	1.23	1.27	1.19	1.14
2017	1.12	1.13	1.21	1.20	1.17	1.13
2018	1.10	1.11	1.18	1.15	1.14	1.11
2019	1.05	1.09	1.18	1.14	1.11	1.07
2020	1.08	1.43	1.44	1.42	1.34	1.25
2021	1.28	1.38	1.41	1.42	1.38	1.33
2022	1.29	1.28	1.38	1.37	1.33	1.28
2023†	1.18	1.25	1.30	1.29	1.26	1.21
2024†	1.13	1.20	—	—	—	1.17

†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 June 2024 Traffic Volume Trends (TVT) for 2023 and 2024 VMT.

Figure 1 shows the historical trend of the percentage change 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 quarter of 2020 and the first and especially the second quarter of 2021 showed significant increases in fatalities as compared to the corresponding quarters of 2019 and 2020. The percentage increase in the second quarter of 2021 is actually the highest quarterly percentage increase in FARS data recorded history. As shown in the rightmost shading in the chart, the second quarter of 2024 represents the ninth consecutive quarterly decline in fatalities beginning with the second quarter of 2022.

Figure 1. Percentage Change in Fatalities in Every Quarter as Compared to the Fatalities in the Same Quarter During the Previous Year



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 June, 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

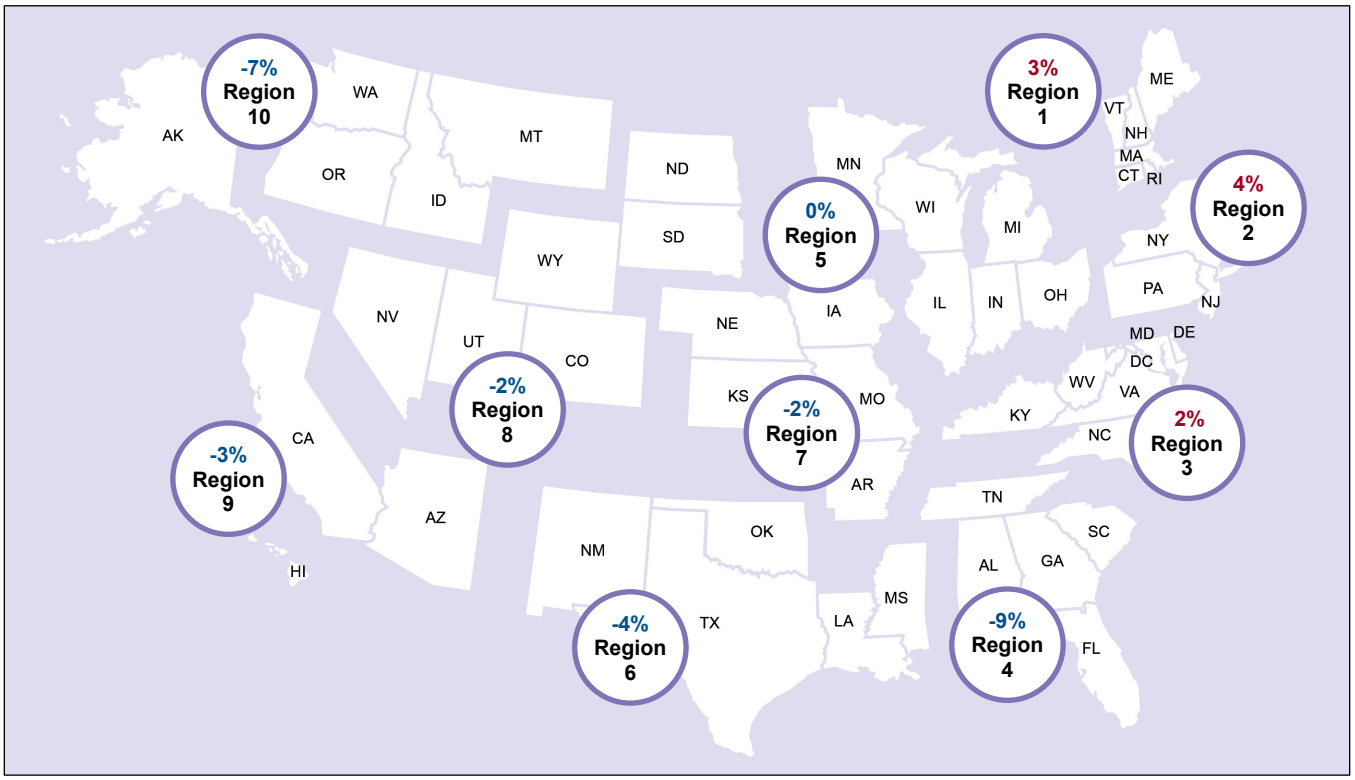
Year	1st Quarter				2nd Quarter				3rd Quarter				4th Quarter			
	Jan	Feb	Mar	Total	Apr	May	Jun	Total	Jul	Aug	Sep	Total	Oct	Nov	Dec	Total
Fatalities in 2024 and Percentage Change in Fatalities for the Corresponding Month and Quarter From 2023																
2023†	3,035	2,875	3,025	8,935	3,365	3,550	3,480	10,395	3,685	3,760	3,715	11,160	3,815	3,330	3,355	10,500
2024†	2,740 -9.7%	2,730 -5.0%	3,150 4.1%	8,620 -3.5%	3,180 -5.5%	3,490 -1.7%	3,430 -1.4%	10,100 -2.8%	—	—	—	—	—	—	—	—
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†	1.11 247.0 -0.9%	1.14 240.2 2.0%	1.14 275.5 0.7%	1.13 762.7 0.6%	1.21 263.9 2.2%	1.19 293.5 1.3%	1.21 284.5 -0.4%	1.20 841.9 1.0%	—	—	—	—	—	—	—	—

†2023, and 2024 statistical projections and rates based on these projections.
Sources: VMT: FHWA June 2024 TVT for 2023 and 2024 VMT.

Regional Differences

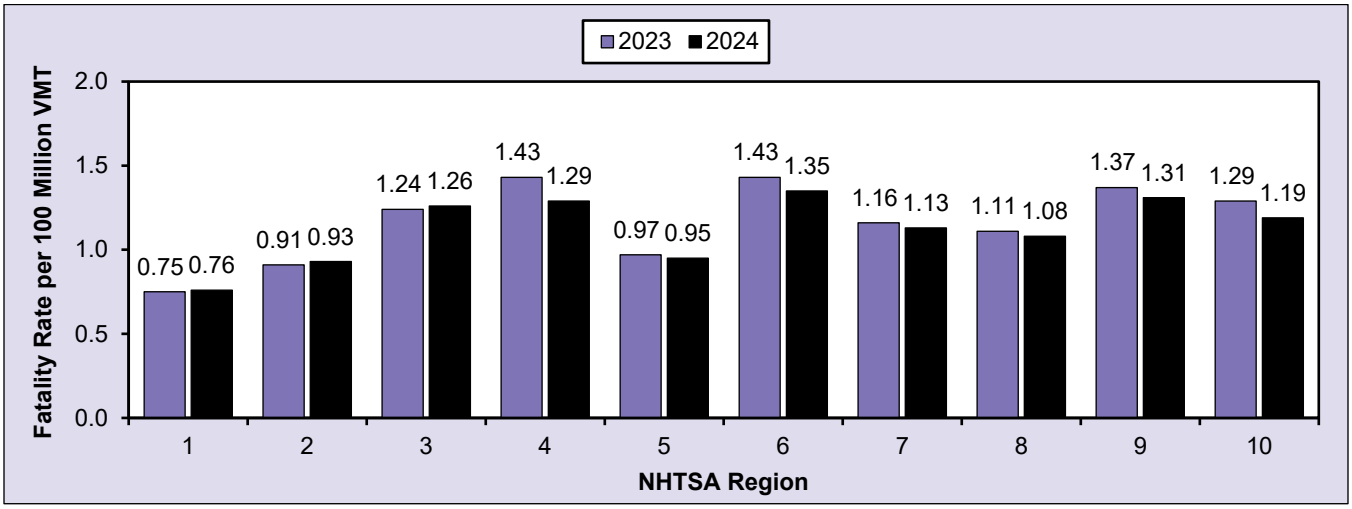
The statistical procedures used in these projections were generated for each NHTSA administrative region and were collated to create the national estimate. This allows for the comparison of regional estimates in 2024 with the projected 2023 counts. As of 2024, Connecticut was moved from Region 2 to Region 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 half of 2024 from the projected fatalities in the first half of 2023 by NHTSA region; 7 of the 10 regions experienced decreases. Figure 3 shows the comparison of the estimated fatality rate per 100 million VMT in the first half of 2024 with the projected fatality rate per 100 million VMT in the first half of 2023, by NHTSA region; 7 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 Half of 2024 From Projected First Half of 2023 Fatality Counts, by NHTSA Region



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

Figure 3. Comparison of Estimated Fatality Rate in First Half of 2024 With Projected Fatality Rate In the First Half of 2023, by NHTSA Region



Source: FHWA June 2024 TVT for 2023 and 2024 VMT. 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 half of 2024 with the projected fatality counts in the first half 2023 and the percentage change in 2024 from

2023; 31 States and Puerto Rico are projected to have experienced decreases in fatalities in 2024 compared to 2023, while 1 State remained unchanged and 18 States and the District of Columbia are projected to have had increases in fatalities. Also, the estimates of the fatality rate 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.

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

State	Fatalities			Fatality Rate		State	Fatalities			Fatality Rate	
	2023	2024	Percent Change	2023	2024		2023	2024	Percent Change	2023	2024
Alabama	463	441	-4.8%	1.29	1.23	Nebraska	92	122	32.6%	0.89	1.15
Alaska	28	32	14.3%	1.05	1.18	Nevada	178	211	18.5%	1.32	1.54
Arizona	667	582	-12.7%	1.75	1.50	New Hampshire	54	52	-3.7%	0.83	0.79
Arkansas	282	286	1.4%	1.46	1.48	New Jersey	266	327	22.9%	0.71	0.87
California	1,987	1,992	0.3%	1.29	1.27	New Mexico	202	190	-5.9%	1.47	1.37
Colorado	323	301	-6.8%	1.22	1.14	New York	509	482	-5.3%	0.88	0.82
Connecticut	147	169	15.0%	1.02	1.13	North Carolina	757	818	8.1%	1.27	1.37
Delaware	78	64	-17.9%	1.56	1.26	North Dakota	41	36	-12.2%	0.90	0.77
D.C.	23	25	8.7%	1.25	1.37	Ohio	599	566	-5.5%	1.09	1.03
Florida	1,761	1,597	-9.3%	1.50	1.36	Oklahoma	314	282	-10.2%	1.39	1.25
Georgia	762	696	-8.7%	1.18	1.08	Oregon	274	235	-14.2%	1.54	1.33
Hawaii	46	46	0.0%	0.91	0.92	Pennsylvania	537	551	2.6%	1.08	1.10
Idaho	94	103	9.6%	0.99	1.07	Rhode Island	39	18	-53.8%	1.06	0.48
Illinois	576	599	4.0%	1.10	1.13	South Carolina	522	460	-11.9%	1.72	1.51
Indiana	420	407	-3.1%	0.89	0.85	South Dakota	51	57	11.8%	1.07	1.17
Iowa	170	136	-20.0%	1.06	0.84	Tennessee	636	563	-11.5%	1.52	1.35
Kansas	187	159	-15.0%	1.21	1.03	Texas	2,065	1,997	-3.3%	1.41	1.33
Kentucky	363	360	-0.8%	1.50	1.49	Utah	124	114	-8.1%	0.74	0.66
Louisiana	373	348	-6.7%	1.30	1.22	Vermont	33	29	-12.1%	0.96	0.83
Maine	45	77	71.1%	0.65	1.08	Virginia	439	450	2.5%	1.07	1.09
Maryland	295	279	-5.4%	1.05	1.00	Washington	365	328	-10.1%	1.27	1.14
Massachusetts	159	147	-7.5%	0.56	0.51	West Virginia	124	118	-4.8%	1.61	1.52
Michigan	513	482	-6.0%	1.10	1.03	Wisconsin	262	257	-1.9%	0.81	0.79
Minnesota	159	211	32.7%	0.56	0.73	Wyoming	66	49	-25.8%	1.52	1.10
Mississippi	354	356	0.6%	1.79	1.80	**U.S. Total***	**19,330**	**18,720**	**-3.2%**	**1.21**	**1.17**
Missouri	426	430	0.9%	1.10	1.12	Puerto Rico	150	144	-4.0%	–	–
Montana	80	83	3.8%	1.22	1.26						

*Puerto Rico is not included.
Sources: 2023 and 2024 statistical projections.
VMT: FHWA June 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 rate 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 two quarters of 2024, have experienced nine consecutive quarterly declines in fatalities after seven consecutive quarters of year-to-year increases in fatalities, since the third quarter of 2020. The increased trend of the fatality rate 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 two quarters of 2024, also experienced nine 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 Final File for 2022 as well as the Annual Report File for 2023 will be available in the early part of 2025 which usually results 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 June 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* ($F\_Est_{st|mr}$) 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 half of 2024 is the same as the one used by NHTSA to project the motor vehicle traffic fatalities for the first quarter of 2024 (*Early Estimates of Motor Vehicle Traffic Fatalities for the first quarter of 2024*, Report No. DOT HS 813 598).

The suggested APA format citation for this document is:

National Center for Statistics and Analysis. (2024, September). *Early estimate of motor vehicle traffic fatalities for the first half (January–June) of 2024* (Crash•Stats Brief Statistical Summary. Report No. DOT HS 813 633). National Highway Traffic Safety Administration.

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