Spotlight on Highway Safety

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Pedestrian Traffic Fatalities by State

JANUARY - JUNE 2023 PRELIMINARY DATA

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2023 PRELIMINARY DATA

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INTRODUCTION

Each year, the Governors Highway Safety Association (GHSA) surveys the State Highway Safety Offices (SHSOs) across the country to obtain preliminary counts of pedestrian deaths for the previous year. GHSA uses this information to estimate changes in national pedestrian fatality numbers and rates.

For the third year in a row, GHSA is publishing this analysis of the data from the first six months of the year prior to its full-year analysis, which will be published later this year.

For 2023, ***GHSA projects 3,373 pedestrian fatalities occurred on U.S. roads between January and June***, an approximately 4% decrease from the same period the prior year and a welcome change from the tragic increases in recent years. However, despite the 4% year-over-year decrease, this is still a substantial increase over pre-pandemic years. In fact, looking back to the first half of 2019, 422 more pedestrians died in 2023 – a 14% increase. Between the first half of 2019 and 2023, pedestrian fatalities rose at a pace seven times higher than population growth (Figure 1).

The projection of 3,373 pedestrian deaths (for January to June) is based on state-provided data. The 2023 figures are still preliminary. Therefore, an adjustment factor of 1.01 was applied to the raw state-supplied data to account for the historical underreporting of fatalities in preliminary data. This factor is derived by comparing the final state data against the preliminarily reported numbers in prior years.

GHSA projects 3,373 pedestrian fatalities during the first six months of 2023.

This GHSA report provides a first look at the fatality trends months before the National Highway Traffic Safety Administration's (NHTSA) Fatality Analysis Reporting System (FARS) data are available. It presents individual data for all states as well as projected pedestrian fatality rates per population – at both state and national levels – and per vehicle miles traveled at the national level.

Figure 1 **Pedestrian fatalities increased at a pace seven times higher than population growth between the first half of 2019 and 2023.**

Later this year, GHSA will publish its full report analyzing the 2022 FARS data and preliminary 2023 full-year state data. This forthcoming report also will summarize the latest state and local work being done to stem the tide of pedestrian traffic fatalities, including public outreach campaigns, law enforcement efforts and legislative initiatives.

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EARLY ESTIMATES OF 2023 DATA

If GHSA's projection of 3,373 pedestrians killed in motor vehicle collisions in the first half of 2023 holds true, this represents 153 fewer pedestrian deaths when compared to the same period during the prior year (Table 1). That is an approximately 4% decrease.

As expected, the projected number of pedestrian deaths for the first half of 2023 varies significantly depending on state size. For example, California – the most populous state – reported the most deaths (498), while less populous South Dakota and Nebraska reported just three each. Meanwhile, there were no reported pedestrian deaths in Vermont during the first half of 2023.

An overview of state-level trends over the past five years is depicted in Table 1, which includes data for the first six months of 2019 through 2023. Note that 2020 was an atypical year due to the impact of the pandemic on travel patterns, particularly for the first half of the year. In 2023, eight states reported the second consecutive decline in pedestrian fatalities for the first half of the year. Six states had pedestrian deaths increase in the first half of both 2022 and 2023 compared to the prior year.

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Table 1

Pedestrian Fatalities by State, January-June, 2019-2023

Sources: State Highway Safety Offices and GHSA data analysis

State	2019 Final	2020 Final	2021 Final	2022 Final	2023 Preliminary (Adjusted)	Change from 2022 to 2023	
						#	%
Alabama	52	43	51	52	67	15	28.85
Alaska	3	4	7	5	4	-1	-20.00
Arizona	110	103	117	148	119	-29	-19.59
Arkansas	30	29	32	33	30	-3	-9.09
California	460	463	506	564	498	-66	-11.70
Colorado	31	38	42	42	61	19	45.24
Connecticut	21	28	16	27	20	-7	-25.93
Delaware	14	11	8	15	10	-5	-33.33
District of Columbia	6	6	11	11	9	-2	-18.18
Florida	385	339	414	400	397	-3	-0.75
Georgia	109	103	165	167	147	-20	-11.98
Hawaii	25	12	12	14	12	-2	-14.29
Idaho	4	5	8	4	10	6	150.00
Illinois	70	77	70	91	99	8	8.79
Indiana	35	45	47	50	37	-13	-26.00
Iowa	10	12	15	11	11	0	0.00
Kansas	7	25	20	18	19	1	5.56
Kentucky	34	30	32	45	51	6	13.33
Louisiana	59	73	81	85	71	-14	-16.47
Maine	7	3	9	7	4	-3	-42.86
Maryland	49	56	63	71	75	4	5.63
Massachusetts	32	18	35	46	33	-13	-28.26
Michigan	65	70	73	63	74	11	17.46
Minnesota	19	20	24	19	17	-2	-10.53
Mississippi	31	38	45	41	45	4	9.76
Missouri	48	50	41	52	40	-12	-23.08
Montana	8	6	9	11	7	-4	-36.36
Nebraska	7	9	3	10	3	-7	-70.00
Nevada	39	42	40	39	48	9	23.08
New Hampshire	4	8	2	6	10	4	66.67
New Jersey	79	80	80	81	77	-4	-4.94
New Mexico	42	42	38	42	42	0	0.00
New York	121	101	131	135	123	-12	-8.89
North Carolina	109	124	122	120	108	-12	-10.00
North Dakota	5	3	4	3	4	1	33.33
Ohio	60	64	76	68	67	-1	-1.47
Oklahoma	36	30	49	43	37	-6	-13.95
Oregon	39	31	35	55	55	0	0.00
Pennsylvania	77	64	65	85	76	-9	-10.59
Rhode Island	3	10	3	3	5	2	66.67
South Carolina	83	74	82	72	86	14	19.44
South Dakota	3	5	9	4	3	-1	-25.00
Tennessee	65	69	71	84	97	13	15.48
Texas	309	333	376	358	369	11	3.07
Utah	12	12	20	31	17	-14	-45.16
Vermont	1	1	3	3	0	-3	-100.00
Virginia	58	54	52	80	64	-16	-20.00
Washington	44	39	58	70	66	-4	-5.71
West Virginia	12	9	15	10	9	-1	-10.00
Wisconsin	13	21	23	28	34	6	21.43
Wyoming	6	2	5	4	6	2	50.00
Total	2,951	2,934	3,315	3,526	3,373	-153	-4.33

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A CLOSER LOOK AT THE CHANGES

There are 18 states in which the number of pedestrian fatalities went up, and 30 states, including the District of Columbia (D.C.), where they went down. In three states (Iowa, New Mexico and Oregon), the projected number of pedestrian deaths in the first half of 2023 was unchanged from 2022. Figure 2 illustrates which states had increases, decreases and were unchanged.

Figure 2 **Change in Pedestrian Traffic Fatalities in the First Half of 2023**

● Decrease ● Increase ● No change

Sources: State Highway Safety Offices and GHSA data analysis

Figures 3 and 4 sort the data by the change in the number of fatalities year-over-year and the percent changes those numbers represent, providing a useful visual reference.

California had the largest drop in total pedestrian fatalities, with 66 fewer, while Vermont had the largest percentage drop, falling from three deaths in the first half of 2022 to zero in 2023. Nebraska also had a notable percentage drop (-70%), from 10 deaths in 2022 to three in 2023.

In states with small populations, just a slight shift in the number of deaths can represent a large percentage change. For example, Maine and Florida both had three fewer pedestrian deaths during the first half of 2023 compared to the same period in 2022. However, this translated to a 43% decrease for Maine and just a 1% drop for Florida. For this reason, less populated states tend to dominate both extremes in Figure 4.

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Figure 3 **Difference in Total Pedestrian Fatalities, January-June, 2022-2023**

Source: State Highway Safety Offices and GHSA data analysis

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Figure 4 **Percentage Difference in Pedestrian Fatalities, January-June, 2022-2023**

Source: State Highway Safety Offices and GHSA data analysis

PEDESTRIAN FATALITY RATES

The pedestrian fatality rate per population is calculated by dividing the number of fatalities by every 100,000 of state population. For example, 10 fatalities in a state with 1,000,000 population would yield a rate of 1.00. For the first half of the year, the overall U.S. pedestrian fatality rate per population was 1.01 in 2023, a slight decrease from 1.04 in both 2021 and 2022. However, the rate is still higher than the 0.90 observed in 2019 and 2020. Figure 5 illustrates this change over the past five years.

Figure 5 **Pedestrian Fatalities per 100,000 Population, January-June, 2019-2023**

* Projected

Sources: State Highway Safety Offices and U.S. Census Bureau

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At the state level, 18 states had fatality rates above 1.0, compared to 20 states in 2022 and a return to 18 states with a rate above 1.0 in 2021. Many of these states are in the Sun Belt, which has both warmer climates (which can prompt more people to walk) and urban areas that were often developed and expanded after the automobile was invented (which tend to have more car-centric designs).

The highest pedestrian fatality rates per 100,000 population were in Florida (1.99) and New Mexico (1.94). Rhode Island (0.27) and Idaho (0.31) had the lowest rates.

Figure 6 illustrates the 18 states with rates above 1.0. Table 2 provides the actual rates for 2022 and 2023 and the differences in these rates.

Figure 6 ● **States with Pedestrian Fatality Rates per 100,000 Population >1.0, January-June 2023**

Sources: State Highway Safety Offices and U.S. Census Bureau

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Table 2

Pedestrian Fatality Rate by State Per 100,000 Population January-June, 2022-2023

Sources: State Highway Safety Offices and U.S. Census Bureau

State	2022	2023	Change from 2022 to 2023
Alabama	1.02	1.31	0.29
Alaska	0.68	0.55	-0.13
Arizona	2.01	1.60	-0.41
Arkansas	1.08	0.98	-0.10
California	1.44	1.28	-0.16
Colorado	0.72	1.04	0.32
Connecticut	0.75	0.55	-0.20
Delaware	1.47	0.97	-0.50
District of Columbia	1.64	1.33	-0.31
Florida	1.80	1.76	-0.04
Georgia	1.53	1.33	-0.20
Hawaii	0.97	0.84	-0.13
Idaho	0.21	0.51	0.30
Illinois	0.72	0.79	0.07
Indiana	0.73	0.54	-0.19
Iowa	0.34	0.34	0.00
Kansas	0.61	0.65	0.04
Kentucky	1.00	1.13	0.13
Louisiana	1.85	1.55	-0.30
Maine	0.50	0.29	-0.21
Maryland	1.15	1.21	0.06
Massachusetts	0.66	0.47	-0.19
Michigan	0.63	0.74	0.11
Minnesota	0.33	0.30	-0.03
Mississippi	1.40	1.53	0.13
Missouri	0.84	0.65	-0.19
Montana	0.98	0.62	-0.36
Nebraska	0.51	0.15	-0.36
Nevada	1.23	1.50	0.27
New Hampshire	0.43	0.71	0.28
New Jersey	0.87	0.83	-0.04
New Mexico	1.99	1.99	0.00
New York	0.69	0.63	-0.06
North Carolina	1.12	1.00	-0.12
North Dakota	0.39	0.51	0.12
Ohio	0.58	0.57	-0.01
Oklahoma	1.07	0.91	-0.16
Oregon	1.30	1.30	0.00
Pennsylvania	0.66	0.59	-0.07
Rhode Island	0.27	0.46	0.19
South Carolina	1.36	1.60	0.24
South Dakota	0.44	0.33	-0.11
Tennessee	1.19	1.36	0.17
Texas	1.19	1.21	0.02
Utah	0.92	0.50	-0.42
Vermont	0.46	0.00	-0.46
Virginia	0.92	0.73	-0.19
Washington	0.90	0.84	-0.06
West Virginia	0.56	0.51	-0.05
Wisconsin	0.48	0.58	0.10
Wyoming	0.69	1.03	0.34
National Rate	**1.04**	**1.01**	**-0.03**

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Consistent with prior years, California, Florida and Texas had the most pedestrian fatalities. Together, these three states accounted for more than one third (37%) of all pedestrian deaths during the first half of 2023. However, they collectively comprise only 27% of the U.S. population. The fact that all three tend to have warmer climates (which can prompt more people to walk) and large urban centers (leading to more potential vehicle-pedestrian conflicts) may help explain this disparity. Figure 7 illustrates these data.

Figure 7 **Highest Pedestrian Fatalities vs. Population, 2023**

California, Florida and Texas accounted for 37% of all pedestrian deaths in the first six months of 2023...

but only 27% of the U.S. population.

Sources: State Highway Safety Offices and U.S. Census Bureau

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Another ratio to explore is pedestrian fatalities in relation to total vehicle miles traveled (VMT). According to the Federal Highway Administration (FHWA), there were an estimated 1,578.9 billion seasonally adjusted VMT from January through June 2023, a 2.3% increase over the final seasonally adjusted estimate for January through June 2022. This translates to a rate of 2.1 pedestrian fatalities per 1 billion VMT, a small decrease from 2.2 in 2022 and 2.3 in 2021. Figure 8 shows the projected 2.1 rate compared with the six previous years. Unfortunately, there are no equivalent "pedestrian miles traveled" data that would illuminate the rate of pedestrian fatalities compared with the miles people traveled on foot, as we are currently able to calculate for VMT.

Figure 8 **Pedestrian Fatalities per 1 Billion Vehicle Miles Traveled (VMT), January-June, 2017-2023**

* Projected

Sources: State Highway Safety Offices, GHSA data analysis and FHWA

WHAT CAN WE DO

The good news is that GHSA projects 153 fewer pedestrian deaths during the first half of 2023 compared to 2022. However, this still means an estimated 3,373 people walking perished due to crashes with motor vehicles during this six-month period. That is 3,373 too many. How can we capitalize on the progress made in the first half of 2023 to continue to improve pedestrian safety and keep people who walk safer on our roads?

There are proven strategies to improve pedestrian safety. The U.S. Department of Transportation's (U.S. DOT) National Roadway Safety Strategy *(NRSS)* calls for a Safe System approach grounded in a multi-layered system that prevents crashes from occurring but also minimizes harm when a crash does occur.

A recent U.S. DOT publication cites three systemic changes that can improve pedestrian safety: safer crossings, appropriate driving speeds and improved visibility.[1] Unsafe crossings, high vehicle speeds and low visibility are contributing factors in many pedestrian fatalities, so it only makes sense that improving these conditions will result in fewer crashes, injuries and fatalities for people on foot.

Most pedestrian fatalities do not happen at an intersection (in 2021, just 22% of pedestrian fatalities were at intersections).[2] Increasingly, states and localities are creating more areas for pedestrians to safely cross the road by installing mid-block crossings, hybrid beacons and other infrastructure improvements.

It is evident that higher vehicle speeds will lead to a greater likelihood of pedestrian fatalities. The faster a vehicle is going, the longer it will take to stop, and the more kinetic energy it will produce wreaking havoc on the human body. In areas where vehicles share the road with pedestrians, speed limits should be set at reasonable levels and enforced equitably, including through the use of automated enforcement, where appropriate.

Improved visibility will certainly improve pedestrian safety. A disproportionate number of pedestrian fatalities take place between sunset and sunrise.[3] Simple lighting improvements can help. Some vehicles have blind spots which make it difficult to see pedestrians crossing the street, so more automakers are building blind spot detection into their vehicles. Continued vigilance to make sure pedestrians are seen by drivers is critical to further reduce pedestrian deaths.

1 U.S. Department of Transportation (2023, December 11). Our nation's pedestrian safety crisis. ArcGIS StoryMaps. https://storymaps.arcgis.com/stories/5bc0894a99ea4259aea2d9a2d2c92a65

2 Macek, K. & Petraglia, E. (2023). Spotlight on highway safety: Pedestrian traffic fatalities by state, 2022 preliminary data (January – December). Washington, DC: Governors Highway Safety Association.

3 Ibid.

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CONCLUSION

GHSA projects 3,373 pedestrians died in the U.S. during the first six months of 2023 based on preliminary state data reported by all 50 states and D.C. ***This is a 4% decrease from 2022 and the first decline since the onset of the pandemic, which saw a small drop largely explained by fewer people on the road in early 2020***.

More reporting states (30, including D.C.) saw decreases than increases (18), with three states' fatality numbers remaining unchanged from the previous year. States with warmer climates tended to have higher fatality rates per population. Less populous, rural states had lower rates in general. The national pedestrian fatality rates per population went down slightly, as did the rate per VMT.

Building a safer system is essential for improving pedestrian safety. This includes more protective infrastructure for pedestrians that enables them to safely cross roadways, lower vehicle speeds that better protect people on foot, and better visibility. Reducing dangerous driving behaviors that threaten everyone on the road and other critical changes are also essential to creating a safer system. GHSA will examine these and other strategies in a forthcoming publication, which will also project full-year 2023 pedestrian fatalities based on preliminary state data and provide an analysis of the final national 2022 pedestrian fatality data.