

Spotlight on  
Highway Safety



# Pedestrian Traffic Fatalities by State

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2023 PRELIMINARY DATA (JANUARY - DECEMBER)



# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

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## ACKNOWLEDGMENTS

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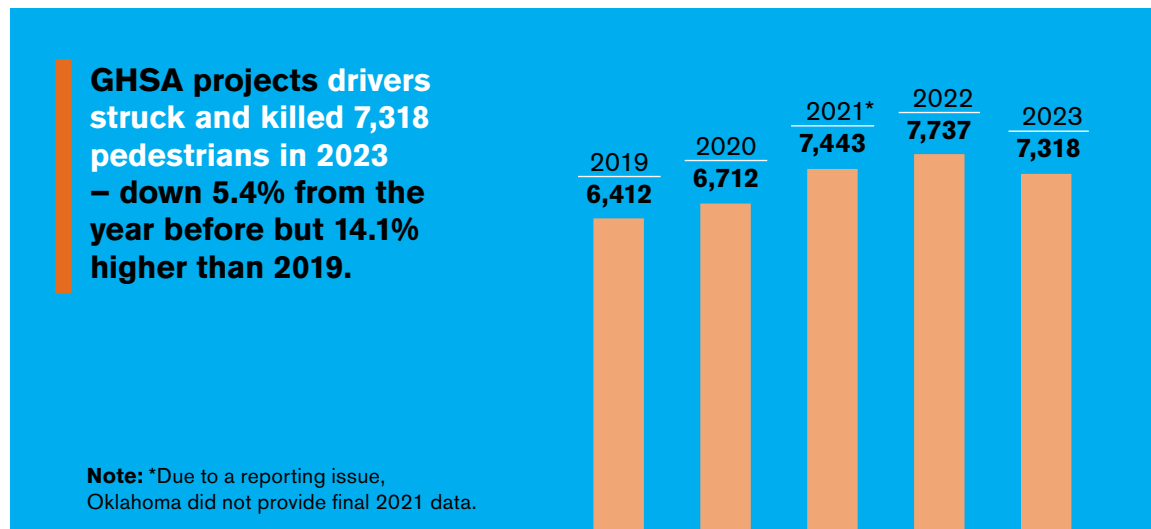
# Pedestrian Traffic Fatalities by State

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## EXECUTIVE SUMMARY

Each year, the Governors Highway Safety Association (GHSA) solicits preliminary pedestrian fatality data for the prior calendar year from the State Highway Safety Offices (SHSOs)<sup>1</sup> in all U.S. states and the District of Columbia (D.C.). GHSA uses this information to project the overall number of pedestrians killed in motor vehicle collisions.

This report is the latest in this series, providing a first look at 2023 pedestrian fatality data. As in previous reports, preliminary data have been adjusted slightly to account for historical underreporting. GHSA projects 7,318 pedestrians were killed in traffic crashes in 2023, a 5.4% decrease from the 7,737 reported in 2022. However, this annual projection is still 14.1% higher than the 6,412 reported pedestrian deaths in 2019.



The report also includes an in-depth analysis of 2022 pedestrian fatality data from the National Highway Traffic Safety Administration's (NHTSA) Fatality Analysis Reporting System (FARS). These are the most recent federal motor vehicle fatality data available. Specific demographic information and crash characteristics – alcohol involvement, speeding, lighting conditions, and roadway and vehicle types – were analyzed as well. These findings provide context on when, where and why pedestrians are killed on U.S. roads and identify trends over the past several years. For example, in 2022, approximately three-quarters (77%) of pedestrians killed in fatal crashes were struck at night and two-thirds (66%) of pedestrian fatalities happened where no sidewalk was present.

The report concludes with a discussion of proven and promising approaches to further reduce the number of pedestrian fatalities on U.S. roads. This will require leveraging a multi-disciplinary Safe System approach that emphasizes building an equitable transportation system that enables all road users to reach their destination safely.

<sup>1</sup> SHSOs are state-level agencies that leverage federal highway safety grants (under U.S.C. Title 23 Sections 402 and 405) – and sometimes state and/or private sector funding – to implement behavioral highway safety programs that address the choices that all road users make. Most SHSOs are also the state agencies that aggregate statewide crash data.

# Pedestrian Traffic Fatalities by State

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## INTRODUCTION

With few exceptions, U.S. pedestrian fatalities have increased steadily between 2010 and 2022, with only small decreases in 2013, 2017 and 2019 (Table 1). And the proportion of pedestrian deaths as a percentage of all traffic fatalities has grown every year except 2020.

The overall number of pedestrian fatalities based on FARS data increased from a final count of 7,470 in 2021 to an estimated 7,605 in 2022. This is a 1.8% increase, much smaller than the 13.8% increase observed between 2020 and 2021. Pedestrian fatalities accounted for nearly one in five traffic fatalities (17.8%) in the U.S. in 2022.

**Table 1** U.S. Pedestrian Fatalities and Percent of All Traffic Fatalities, 2010-2022

Year	Pedestrian Fatalities	All Other Traffic Fatalities Combined	Total Traffic Fatalities	Pedestrian Deaths as a Percentage of All Traffic Fatalities
2010	4,302	28,697	32,999	13.0%
2011	4,457	28,022	32,479	13.7%
2012	4,818	28,964	33,782	14.3%
2013	4,779	28,114	32,893	14.5%
2014	4,910	27,834	32,744	15.0%
2015	5,494	29,990	35,484	15.5%
2016	6,080	31,726	37,806	16.1%
2017	6,075	31,398	37,473	16.2%
2018	6,374	30,461	36,835	17.3%
2019	6,272	30,083	36,355	17.3%
2020	6,565	32,442	39,007	16.8%
2021	7,470	35,760	43,230	17.3%
2022 <sup>2</sup>	7,605	35,132	42,737	17.8%
% Change from 2010 to 2022	+77%	+22%	+30%	

Sources: FARS

<sup>2</sup> Adjusted for this table only using an adjustment factor of 1.011 for pedestrian fatalities and an adjustment factor of 1.004 for all other fatalities. Factors are based on averaging historical underreporting between FARS preliminary and final data.

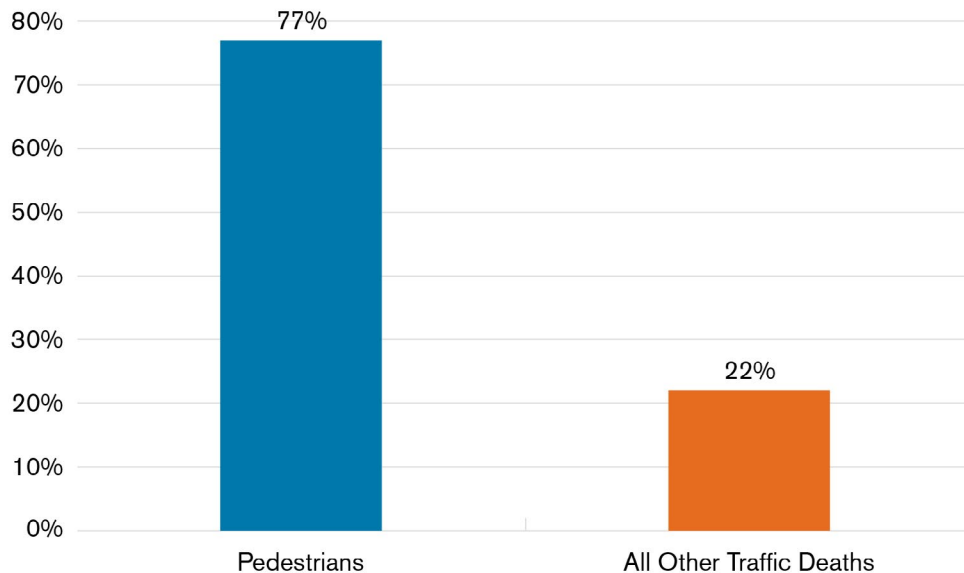
# Pedestrian Traffic Fatalities by State

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After a substantial increase from 2020 to 2021, the number of non-pedestrian traffic fatalities decreased between 2021 and 2022, from 35,760 to 35,132 (adjusted estimate). This is a decrease of 1.8%, but the number of other traffic fatalities remains an estimated 16.8% above 2019 pre-pandemic levels.

**Between 2010 and 2022, pedestrian deaths have gone up a shocking 77%, compared to a 22% increase for all other traffic fatalities** (Figure 1).

**Figure 1** Percent Increase in Number of U.S. Traffic Deaths, 2010 to 2022



Source: FARS

For more than a decade, GHSA has been analyzing pedestrian fatality data annually through a series of *Spotlight on Highway Safety* reports, drawing public attention to these tragic – and preventable – deaths.

Scrutinizing both state and national fatal pedestrian crash characteristics illuminates contributing factors and helps safety advocates and decision-makers better determine how to prevent motor vehicle/pedestrian collisions using a multidisciplinary approach.

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

The **7,318 projected pedestrian fatalities in 2023** is down **5.4%** from the year before, but **14.1% higher than 2019**.

## PART 1: PRELIMINARY 2023 STATE DATA

In early 2024, SHSOs reported preliminary full-year pedestrian fatality counts for 2023 to GHSA. All fifty states and D.C. provided data. The preliminary state data were adjusted by a factor of 1.036, based on historic differences between preliminary counts of pedestrian fatalities reported by SHSOs and final data provided by SHSOs approximately one year later.

Because of differences between SHSO-reported data and federal FARS data, this report does not make direct comparisons between the two sources. The numbers reported by SHSOs are generally higher than those reported by FARS (about 2% higher nationwide). This occurs because there are some variations between how deaths are classified under the FARS format and by certain states that use slightly different data analysis and classification processes.

FARS	Some States
Counts only traffic fatalities that occur within 30 days of the crash	May include deaths that occur more than 30 days after the crash
Only includes fatal crashes that occur on public roadways	May include deaths that occur on non-public roads such as parking lots
Does not classify people on e-scooters, skateboards or other personal conveyances as pedestrians	May classify these people as pedestrians
Only includes fatalities that involve a motor vehicle	May include pedestrian deaths that did not involve a motor vehicle, such as a pedestrian struck by a bicycle

The data presented in this section builds on [GHSA's prior analysis of state data for the first six months of 2023](#) released in February. That report predicted a 4% drop in pedestrian fatalities from January through June of 2022 and 2023.

Based on the state data, GHSA projects 7,318 pedestrians were killed in 2023 in the 50 states and D.C. This represents a projected 5.4% decrease from the 7,737 pedestrian fatalities reported in 2022, or 419 fewer lives lost. While it is encouraging to see fewer pedestrian fatalities, the predicted total remains 14.1% above the 6,412 deaths reported in 2019. Table 2 provides state-level pedestrian fatality numbers from 2019 through 2023.

### What is a State Highway Safety Office?

State Highway Safety Offices (SHSOs) are state-level agencies that leverage federal highway safety grants (under U.S.C. Title 23 Sections 402 and 405) – and sometimes state and/or other funding – to implement behavioral highway safety programs that address the choices that all road users make. Most SHSOs are also the state agencies that aggregate statewide crash data.

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

**Table 2**

**Pedestrian Fatalities by State, 2019-2023**

Sources: State Highway Safety Offices and GHSA data analysis

\*Due to a reporting issue, Oklahoma did not provide final data for 2021.

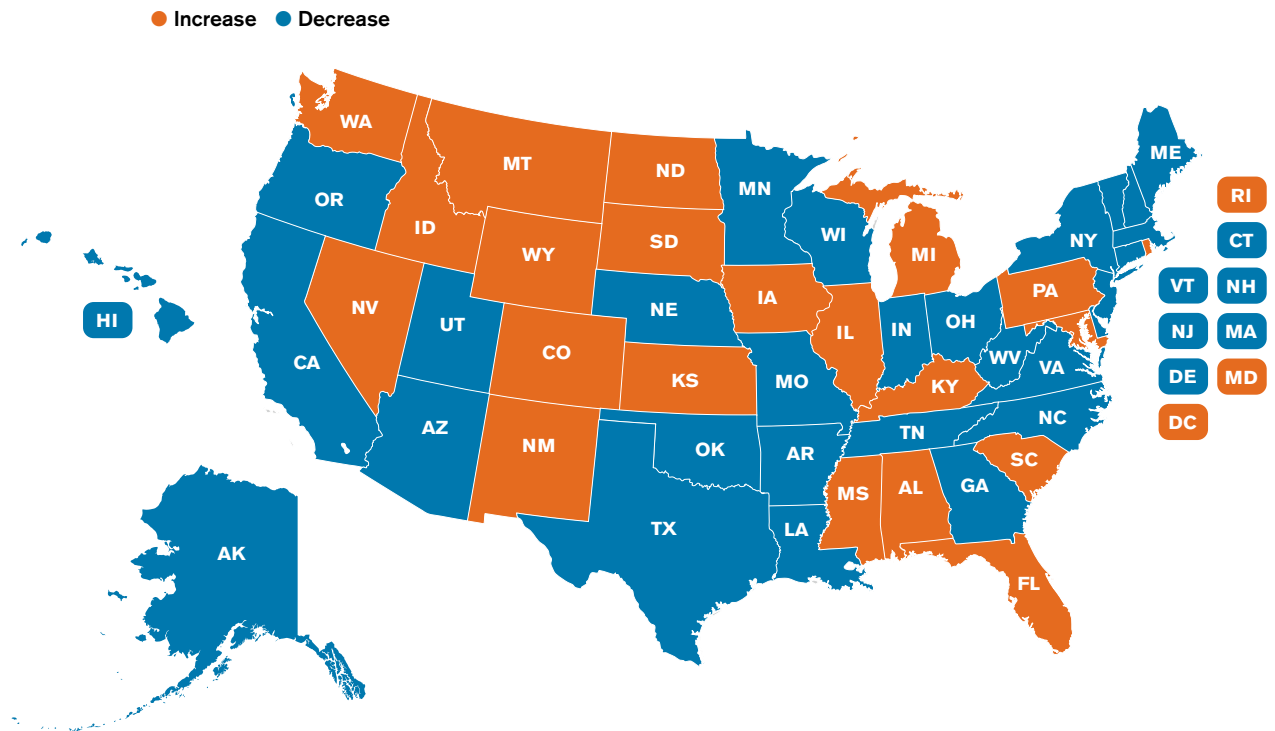
State	2019 Final	2020 Final	2021 Final	2022 Final	2023 Preliminary (adjusted)	Change from 2022 to 2023	
						#	%
Alabama	114	101	126	111	118	7	6.3
Alaska	6	13	16	13	10	-3	-23.1
Arizona	220	235	260	312	220	-92	-29.5
Arkansas	61	81	76	77	68	-9	-11.7
California	1,020	1,026	1,120	1,208	1,057	-151	-12.5
Colorado	76	87	88	107	136	29	27.1
Connecticut	53	61	56	73	48	-25	-34.3
Delaware	32	25	29	33	28	-5	-15.2
District of Columbia	9	10	17	19	20	1	5.3
Florida	745	716	833	780	801	21	2.7
Georgia	239	281	321	335	321	-14	-4.2
Hawaii	37	21	25	28	22	-6	-21.4
Idaho	14	14	22	16	36	20	125.0
Illinois	171	175	212	197	205	8	4.1
Indiana	75	123	125	114	92	-22	-19.3
Iowa	22	30	32	18	30	12	66.7
Kansas	18	46	45	45	49	4	8.9
Kentucky	77	96	76	96	120	24	25.0
Louisiana	122	149	182	181	145	-36	-19.9
Maine	17	9	20	21	20	-1	-4.8
Maryland	125	131	128	137	161	24	17.5
Massachusetts	76	55	76	98	69	-29	-29.6
Michigan	149	175	183	173	181	8	4.6
Minnesota	50	45	56	45	44	-1	-2.2
Mississippi	67	104	94	80	87	7	8.8
Missouri	111	128	120	130	126	-4	-3.1
Montana	17	17	24	21	23	2	9.5
Nebraska	20	19	15	23	14	-9	-39.1
Nevada	69	82	84	89	109	20	22.5
New Hampshire	10	15	9	17	15	-2	-11.8
New Jersey	175	179	217	192	171	-21	-10.9
New Mexico	83	81	103	93	99	6	6.5
New York	286	241	304	329	283	-46	-14.0
North Carolina	236	228	256	265	248	-17	-6.4
North Dakota	5	8	10	6	10	4	66.7
Ohio	128	151	171	165	151	-14	-8.5
Oklahoma	88	86	*	96	72	-24	-25.0
Oregon	85	76	90	127	108	-19	-15.0
Pennsylvania	154	146	182	184	192	8	4.4
Rhode Island	8	17	7	7	11	4	57.1
South Carolina	164	187	194	173	182	9	5.2
South Dakota	8	14	14	13	15	2	15.4
Tennessee	148	172	177	210	187	-23	-11.0
Texas	661	714	826	816	804	-12	-1.5
Utah	38	36	46	54	40	-14	-25.9
Vermont	3	6	8	6	5	-1	-16.7
Virginia	124	114	125	171	133	-38	-22.2
Washington	101	111	144	131	146	15	11.5
West Virginia	32	18	37	22	20	-2	-9.1
Wisconsin	53	50	50	72	55	-17	-23.6
Wyoming	10	7	12	8	11	3	37.5
<b>TOTAL</b>	<b>6,412</b>	<b>6,712</b>	<b>7,443</b>	<b>7,737</b>	<b>7,318</b>	<b>-419</b>	<b>-5.4%</b>

# Pedestrian Traffic Fatalities by State

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In 2023, pedestrian fatalities are projected to have decreased in 29 states and increased in 21 states and D.C., as illustrated in Figure 2.

**Figure 2** U.S. Pedestrian Traffic Fatality Change from 2022 to 2023



Sources: State Highway Safety Offices and GHSA data analysis

The majority of the 5.4% decrease in projected pedestrian fatalities in 2023 was concentrated in two states – Arizona and California. These two states accounted for 243 (or 58%) of the 419 fewer deaths last year. Figure 3 illustrates the year-to-year difference in the raw number of fatalities, while Figure 4 presents and sorts the information based on percentage change.

States with smaller populations tend to see larger percentage shifts and smaller changes in the raw number of fatalities. For example, Idaho had 20 additional fatalities in 2023, a 125% increase from 2022.

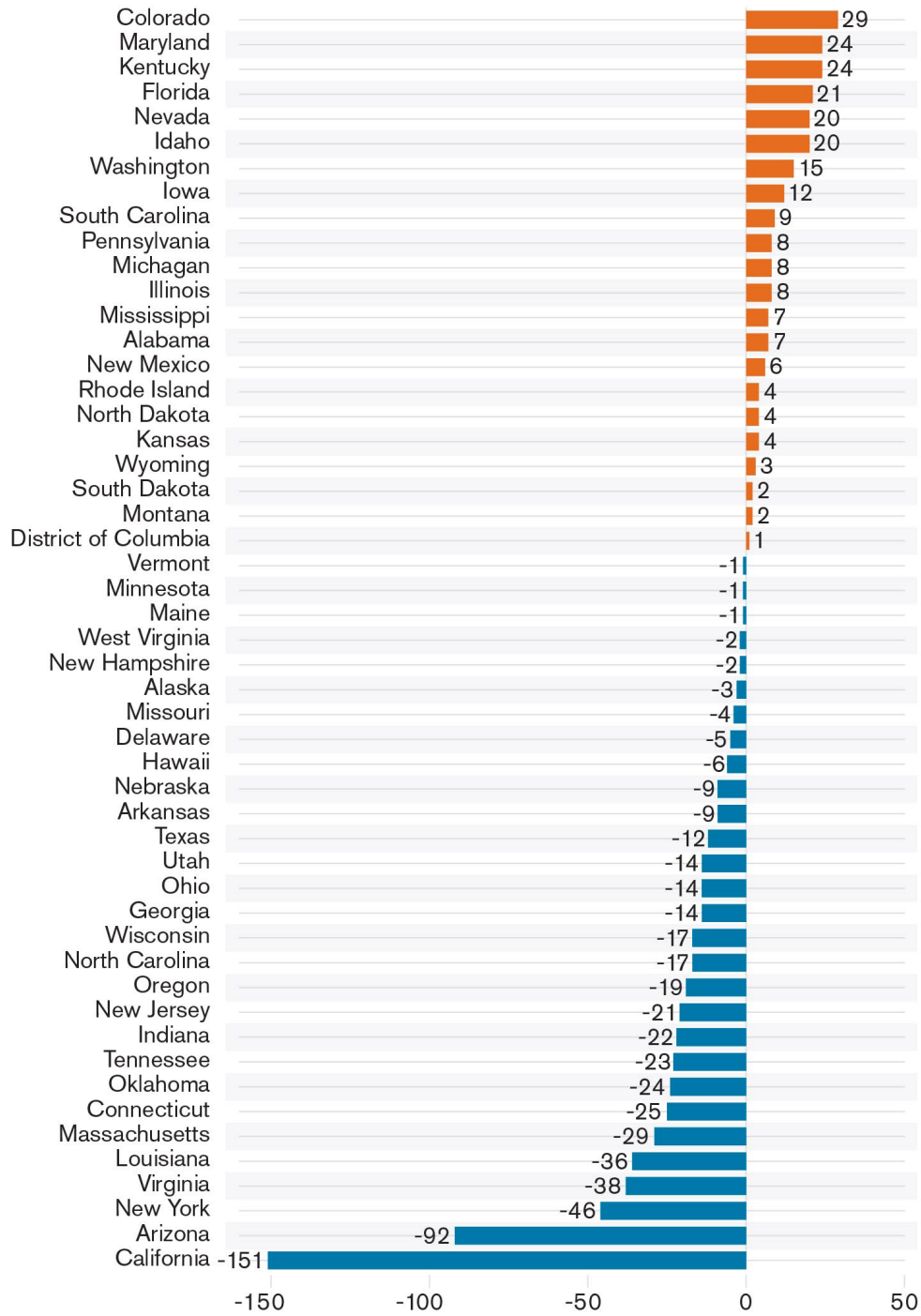
On the other hand, states with larger populations have greater raw number changes but smaller percentage shifts. California is a prime example. The state had, by far, the largest reduction in pedestrian fatalities (151 fewer than the prior year), which translates to a 12.5% reduction.



# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

**Figure 3** Difference in Pedestrian Fatalities, 2022 to 2023

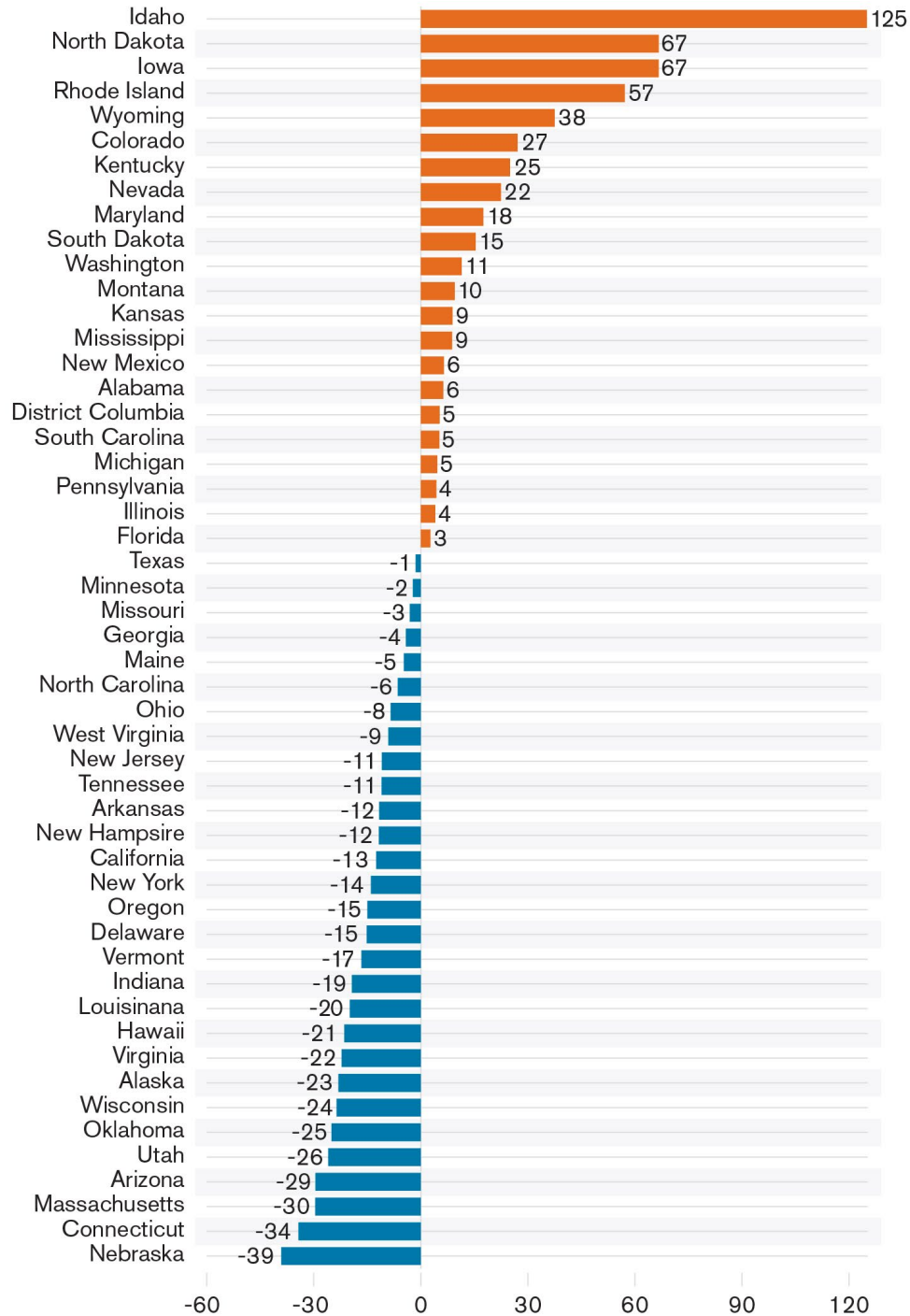


Sources: State Highway Safety Offices and GHSA data analysis

# Pedestrian Traffic Fatalities by State

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**Figure 4** Percentage Difference in Pedestrian Fatalities, 2022 to 2023



Source: State Highway Safety Offices and GHSA data analysis

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

**Table 3**

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

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

Table 3 presents the 2023 rate of pedestrian fatalities per 100,000 people for all 50 states and D.C. This rate is calculated by multiplying the number of each state's fatalities by 100,000 and dividing that by the state population. The result is the number of pedestrian deaths per 100,000 people who reside in the state.

From 2022 to 2023, the overall rate decreased slightly, from 2.32 in 2022 to 2.19 in 2023. At the state level, GHSA projects that 22 states had a fatality rate above 2.0 in 2023, down from 23 states in 2022. Arizona (from 4.24 to 2.96) and Louisiana (from 3.95 to 3.17) had the most substantial drops in fatality rates per population.

State	2022	2023
Alabama	2.19	2.31
Alaska	1.77	1.36
Arizona	4.24	2.96
Arkansas	2.53	2.22
California	3.09	2.71
Colorado	1.83	2.31
Connecticut	2.02	1.33
Delaware	3.24	2.71
District of Columbia	2.83	2.95
Florida	3.51	3.54
Georgia	3.07	2.91
Hawaii	1.95	1.53
Idaho	0.83	1.83
Illinois	1.57	1.63
Indiana	1.67	1.34
Iowa	0.56	0.94
Kansas	1.53	1.67
Kentucky	2.13	2.65
Louisiana	3.95	3.17
Maine	1.51	1.43
Maryland	2.22	2.61
Massachusetts	1.40	0.99
Michigan	1.72	1.80
Minnesota	0.79	0.77
Mississippi	2.72	2.96
Missouri	2.10	2.03
Montana	1.87	2.03
Nebraska	1.17	0.71
Nevada	2.80	3.41
New Hampshire	1.22	1.07
New Jersey	2.07	1.84
New Mexico	4.40	4.68
New York	1.67	1.45
North Carolina	2.48	2.29
North Dakota	0.77	1.28
Ohio	1.40	1.28
Oklahoma	2.39	1.78
Oregon	3.00	2.55
Pennsylvania	1.42	1.48
Rhode Island	0.64	1.00
South Carolina	3.27	3.39
South Dakota	1.43	1.63
Tennessee	2.98	2.62
Texas	2.72	2.64
Utah	1.60	1.17
Vermont	0.93	0.77
Virginia	1.97	1.53
Washington	1.68	1.87
West Virginia	1.24	1.13
Wisconsin	1.22	0.93
Wyoming	1.38	1.88
<b>NATIONAL RATE</b>	<b>2.32</b>	<b>2.19</b>

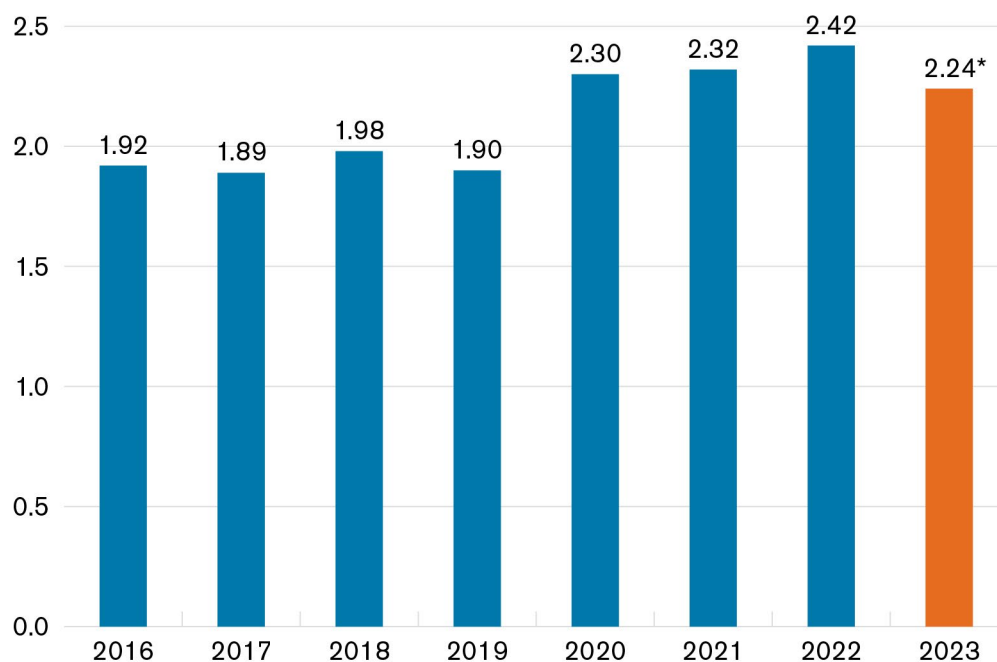
# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

The Federal Highway Administration (FHWA) estimates a total of 3,263.7 billion vehicle miles traveled (VMT) in 2023, an increase of 67.5 billion VMT (or 2.1%) compared to 2022.

Applying the projected 7,318 pedestrian fatalities in 2023 yields a projected pedestrian fatality rate of 2.24 per one billion VMT. The decrease in pedestrian fatalities combined with the increase in VMT, contributed to a fatality rate that is lower than the 2.42 for 2022. Figure 5 presents the rate for the past eight years.

**Figure 5** U.S. Pedestrian Fatality Rate Per One Billion VMT, 2016-2023



\*Projected  
Sources: FHWA and GHSA analysis of SHSO data

There is no equivalent VMT data for “pedestrian miles walked,” but research points to a drop in overall walking behavior since the onset of the COVID-19 pandemic. A recent report found that between 2019 and 2022, annual average daily walking trips fell by 36% nationwide.<sup>3</sup> The fact that pedestrian fatalities have been trending upward between 2019 and 2022 despite a drop in pedestrian exposure should raise alarm bells among traffic safety advocates.

<sup>3</sup> Lewis, C., O'Higgins, E., & Adler, E. (2023). Walking in America: Metro & statewide pedestrian activity & mode share trends. Streetlight. Retrieved from <https://learn.streetlightdata.com/ranking-us-pedestrian-activity-mode-share>

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA



## PART 2: 2022 NATIONAL DATA

The preliminary 2023 state pedestrian fatality data presented in Part 1 provide raw numbers only. However, it is also instructive to explore other information, including the demographics of the pedestrians killed and other crash characteristics such as speeding, alcohol involvement, light condition and roadway factors. For this reason, GHSA also examined the most recent national pedestrian fatality data available from FARS, for calendar year 2022, which was released in April 2024.

Unless otherwise indicated, the following analyses are based on the raw (unadjusted) total number of 2022 pedestrian fatalities (7,522) reported in the recent FARS release.

### National and State Fatality Rates

Using the same formula as in Table 3 (multiplying the number of pedestrian fatalities by 100,000 and dividing the result by the population), the total U.S. fatality rate in 2022 was 2.28, a small increase from the 2.25 observed in 2021. Table 4 and Figure 6 present state and national fatality rates from 2018 through 2022.

Key findings include:

- About half of the states had increases in their fatality rate between 2021 and 2022, with the other half experiencing decreases.
- There were 23 states with fatality rates greater than 2.0, which is the same number as in 2021 and more than the 19 states with fatality rates greater than 2.0 in 2020.
- New Mexico had the highest rate for the third year in a row, at 4.45. The next two highest rates were in Arizona (4.05) and Louisiana (3.99).
- Rhode Island (0.64) and Iowa (0.50) had the lowest fatality rates.

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

**Table 4**

**Pedestrian Fatality Rate by State Per 100,000 Population, 2018-2022**

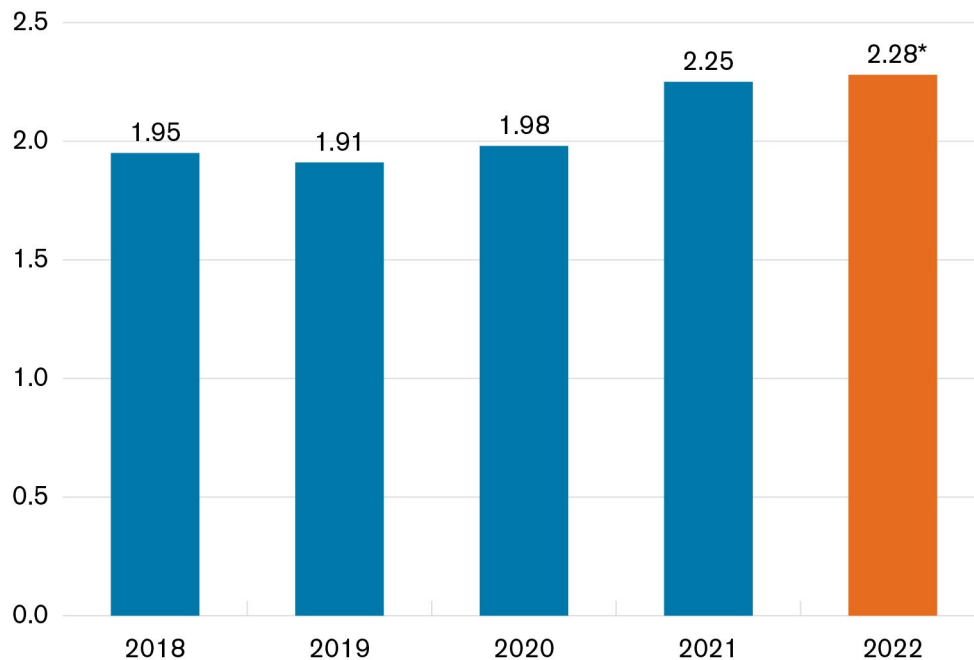
Source: FARS and U.S. Census Bureau

State	2018	2019	2020	2021	2022
Alabama	2.19	2.43	2.01	2.51	2.27
Alaska	1.90	0.82	1.77	2.31	1.77
Arizona	3.30	2.89	3.09	3.44	4.05
Arkansas	2.06	2.05	2.72	2.58	2.63
California	2.48	2.56	2.56	3.01	3.00
Colorado	1.56	1.27	1.50	1.58	1.87
Connecticut	1.65	1.51	1.65	1.53	1.91
Delaware	2.38	3.29	2.52	2.89	3.04
District of Columbia	1.57	1.28	1.49	2.69	2.38
Florida	3.32	3.32	3.22	3.75	3.52
Georgia	2.49	2.22	2.60	2.85	3.20
Hawaii	2.96	2.54	1.45	1.73	1.95
Idaho	0.97	0.67	0.76	1.10	0.83
Illinois	1.30	1.37	1.37	1.65	1.53
Indiana	1.70	1.08	1.37	1.63	1.68
Iowa	0.70	0.67	0.91	0.94	0.50
Kansas	0.96	0.55	1.57	1.46	1.09
Kentucky	1.64	1.63	2.02	1.66	2.08
Louisiana	3.52	2.54	3.10	3.98	3.99
Maine	0.45	1.19	0.66	1.38	1.51
Maryland	2.17	2.05	2.17	2.09	2.09
Massachusetts	1.12	1.12	0.74	1.06	1.36
Michigan	1.42	1.41	1.71	1.74	1.70
Minnesota	0.75	0.83	0.79	0.87	0.75
Mississippi	2.99	2.18	3.55	3.15	2.79
Missouri	1.55	1.78	2.08	1.90	2.09
Montana	1.41	1.50	1.56	1.63	1.60
Nebraska	1.25	1.03	0.92	0.76	1.17
Nevada	2.61	2.01	2.60	2.54	2.64
New Hampshire	0.66	0.74	1.16	0.58	1.14
New Jersey	1.95	1.96	1.88	2.28	2.00
New Mexico	3.97	3.96	3.73	4.82	4.45
New York	1.37	1.41	1.14	1.48	1.56
North Carolina	2.16	2.11	2.20	2.40	2.43
North Dakota	0.79	0.66	1.03	1.29	0.77
Ohio	1.09	1.06	1.35	1.43	1.38
Oklahoma	1.52	2.15	2.17	2.66	2.41
Oregon	1.84	1.94	1.67	2.02	2.92
Pennsylvania	1.54	1.15	1.10	1.35	1.40
Rhode Island	0.66	0.76	1.55	0.64	0.64
South Carolina	3.25	3.17	3.66	3.66	3.29
South Dakota	1.14	0.79	1.58	1.56	1.21
Tennessee	2.01	2.17	2.48	2.54	3.01
Texas	2.15	2.24	2.35	2.76	2.68
Utah	1.14	1.19	1.00	1.29	1.33
Vermont	0.96	0.48	1.24	1.24	0.93
Virginia	1.39	1.44	1.29	1.42	2.02
Washington	1.32	1.34	1.36	1.85	1.63
West Virginia	1.22	1.73	1.00	2.02	1.18
Wisconsin	0.96	1.01	0.85	0.82	1.24
Wyoming	1.04	1.90	1.04	1.90	1.20
<b>NATIONAL RATE</b>	<b>1.95</b>	<b>1.91</b>	<b>1.98</b>	<b>2.25</b>	<b>2.28</b>

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

**Figure 6** U.S. Pedestrian Fatality Rate Per 100,000 Population, 2018-2022



\*Projected  
Sources: FARS and U.S. Census Bureau

## Race and Ethnicity

Complete race and ethnicity data for 2022 pedestrian fatalities are not yet available from FARS due to delays in processing death certificates, but studies show that people of color continue to be disproportionately represented in pedestrian fatalities. In fact, one research paper found non-Hispanic Black persons have a pedestrian death rate 118% higher than non-Hispanic white individuals. More alarmingly, when looking at rates for pedestrian deaths occurring at night, the rate for non-Hispanic Black persons was 236% higher than non-Hispanic white persons. Hispanic or Latino pedestrians are also much more vulnerable at night, experiencing a fatality rate 84% higher than non-Hispanic white individuals.<sup>4</sup>

A recent Centers for Disease Control and Prevention study provides further evidence of racial disparity among people on foot. The proportion of visits to U.S. emergency rooms for pedestrian injuries was 1.53 to 2.47 times higher for six racial and ethnic minority groups than among non-Hispanic white people.<sup>5</sup>

4 Raifman, M. A., & Choma, E. F. (2022, June 7). Disparities in activity and traffic fatalities by race/ethnicity. *American Journal of Preventative Medicine*. Retrieved from [https://www.ajpmonline.org/article/S0749-3797\(22\)00155-6/fulltext](https://www.ajpmonline.org/article/S0749-3797(22)00155-6/fulltext)

5 Barry, V., Van Dyke, M. E., Nakayama, J. Y., et al. Emergency department visits for pedestrians injured in motor vehicle traffic crashes — United States, January 2021–December 2023 (2024, May 2). *MMWR Morb Mortal Wkly Rep* 2024; 73:387–392. Retrieved from <http://dx.doi.org/10.15585/mmwr.mm7317a1>

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

Looking at the latest three years of available FARS data that include demographic information (2019 to 2021), the proportion of fatally injured pedestrians whose race and ethnicity were reported as Hispanic or white (Non-Hispanic) on their death certificate has decreased, while the proportion reported as Black (Non-Hispanic) and American Indian (Non-Hispanic/Unknown) has risen (Table 5).

**Table 5 U.S. Pedestrians Killed in Fatal Crashes by Race and Ethnicity, 2019-2021**

Race and Ethnicity (Using Office of Management and Budget Guidelines)	Crash Year					
	2019		2020		2021	
	Count	%	Count	%	Count	%
Hispanic	1,355	21.6%	1,367	20.8%	1,416	19.0%
White, Non-Hispanic	2,725	43.4%	2,662	40.5%	3,008	40.3%
Black, Non-Hispanic	1,178	18.8%	1,340	20.4%	1,571	21.0%
American Indian, Non-Hispanic/Unknown	121	1.9%	114	1.7%	146	2.0%
Asian, Non-Hispanic/Unknown	142	2.3%	132	2.0%	151	2.0%
Pacific Islander, Non-Hispanic/Unknown	1	0.0%	3	0.0%	9	0.1%
Multiple Races, Non-Hispanic/Unknown	30	0.5%	26	0.4%	42	0.6%
All Other Non-Hispanic or Other Race	324	5.2%	564	8.6%	701	9.4%
Unknown Race and Unknown Hispanic	396	6.3%	357	5.4%	426	5.7%
<b>Total</b>	<b>6,272</b>	<b>100.0%</b>	<b>6,565</b>	<b>100.0%</b>	<b>7,470</b>	<b>100.0%</b>

Source: FARS

## Speeding

There was a sharp increase in speeding and other risky driving behaviors during the onset of the COVID-19 pandemic and associated lockdowns. The most recent AAA Foundation for Traffic Safety *Traffic Safety Culture Index* (for 2022) suggests that while some of these behaviors are improving, trends remain above pre-pandemic levels. Drivers are more likely to engage in speeding as compared to other risky driving behaviors:

***With respect to speeding, about half of respondents indicated having driven 15 mph over the speed limit on a freeway at least once in the past 30 days before the survey. Additionally, 35% of drivers reported having driven 10 mph over the speed limit on a residential street. In contrast, fewer reported having driven through a red light (25%) or driven aggressively by switching lanes quickly and/or following very closely behind another vehicle (22%) in the past 30 days.<sup>6</sup>***

According to the National Safety Council's analysis of FARS data, in 2022 speeding-related deaths decreased by 2.8%, following two consecutive years of increases. However, the percent of deaths involving speeding in 2022, at 29%, was still above the pre-pandemic low of 26% in 2019.<sup>7</sup>

6 AAA Foundation for Traffic Safety. (2023, November). *2022 traffic safety culture index*. Retrieved from <https://aaafoundation.org/wp-content/uploads/2023/09/202311-AAAFTS-Traffic-Safety-Culture-Index-2022.pdf>

7 National Safety Council. (2023, May 5). *Speeding – Injury facts*. Retrieved from <https://injuryfacts.nsc.org/motor-vehicle/motor-vehicle-safety-issues/speeding/>



# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

These trends are reflected in pedestrian fatality data as well. In 2020, the percentage of pedestrian fatalities due to speeding increased by about 20%, from 7.2% in 2019 to 8.6%. The 2022 rate of 7.8% continues the downward trend of the past two years but remains more than half a percentage point higher than the pre-pandemic rates (Table 6).

**Table 6 U.S. Pedestrian Fatalities in Which Speeding Was Indicated as a Factor, 2016-2022**

Year	Speeding Indicated	Total	% with Speeding Indicated
2016	442	6,080	7.27
2017	413	6,075	6.80
2018	412	6,374	6.46
2019	451	6,272	7.19
2020	580	6,565	8.83
2021	618	7,470	8.27
2022	585	7,522	7.78

Source: FARS

In 2022, deaths where speeding was cited as a factor varied by roadway type, ranging from about 6% on interstates to nearly 11% on local roads. Table 7 shows 2022 pedestrian fatalities by roadway type and explains what percentage of these fatalities included speeding as a factor. These percentages are similar to those reported in 2021.

**Table 7 U.S. Speeding-Related Pedestrian Fatalities by Roadway Type, 2022**

Type of Roadway	Speeding Indicated?		Total	% with Speeding Indicated
	Yes	No		
Interstate, principal arterial	53	899	952	5.57
Freeway and expressway, principal arterial	34	335	369	9.21
Principal arterial, other	194	2,605	2,799	6.93
Minor arterial	138	1,604	1,742	7.92
Collector	84	791	875	9.60
Local	77	637	714	10.78
Unknown	5	66	71	7.04
<b>Total</b>	<b>585</b>	<b>6,937</b>	<b>7,522</b>	<b>7.78</b>

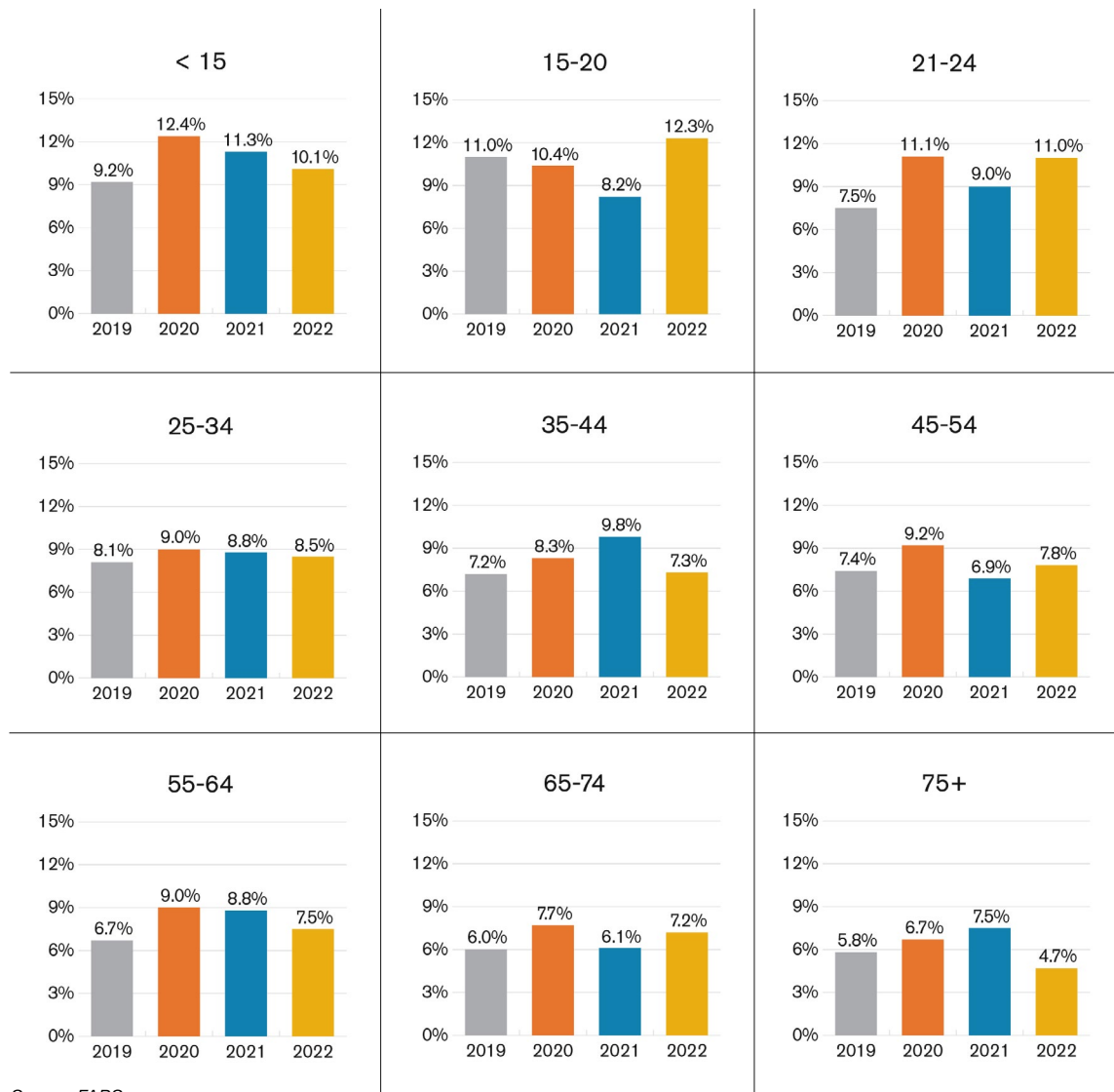
Source: FARS

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

Looking at the proportion of pedestrian fatalities where speeding is indicated as a factor by age (Figure 7), for most groups the proportion was highest in 2020 and decreased in 2021 and/or 2022. Notably, the proportion for pedestrians ages 75+ dropped from 7.5% in 2021 to 4.7% in 2022. However, during that time there were increases in the number of pedestrian deaths with speeding as a factor among younger fatally injured pedestrians in both the 15-20 and 21-24 age groups. In fact, speed was cited as a factor in more than 12% of fatalities involving pedestrians aged 15-20.

**Figure 7** U.S. Speeding-Involved Pedestrian Fatalities by Age Group, 2019-2022



Source: FARS

# Pedestrian Traffic Fatalities by State

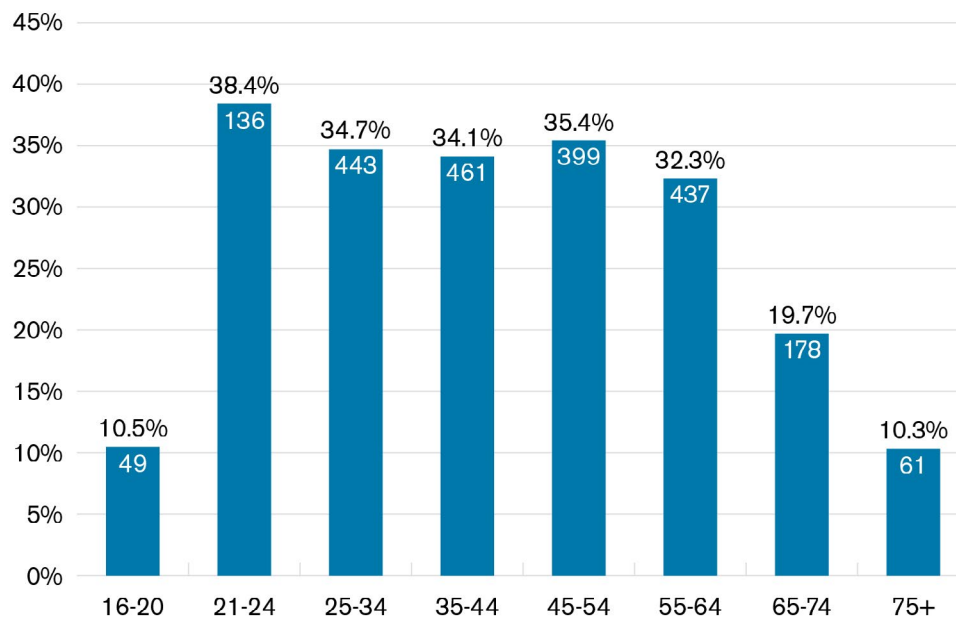
2023 PRELIMINARY DATA

## Alcohol Impairment

Alcohol impairment is a factor in many pedestrian fatalities and can be on the part of the driver and/or the pedestrian.

In 2022, 30% (or 2,194) of the 7,304 pedestrian fatalities involved a pedestrian 16 years of age or older with a blood alcohol concentration (BAC) of 0.08 or higher (Figure 8). This is comparable to the 30.5% in 2021 and the 30.6% in 2020. This analysis is limited to pedestrians 16 and older because higher BACs are very rare among pedestrians younger than 16.

**Figure 8** U.S. Pedestrian Fatalities with Pedestrian BAC  $\geq$  0.08 by Age Group, 2022



Source: FARS

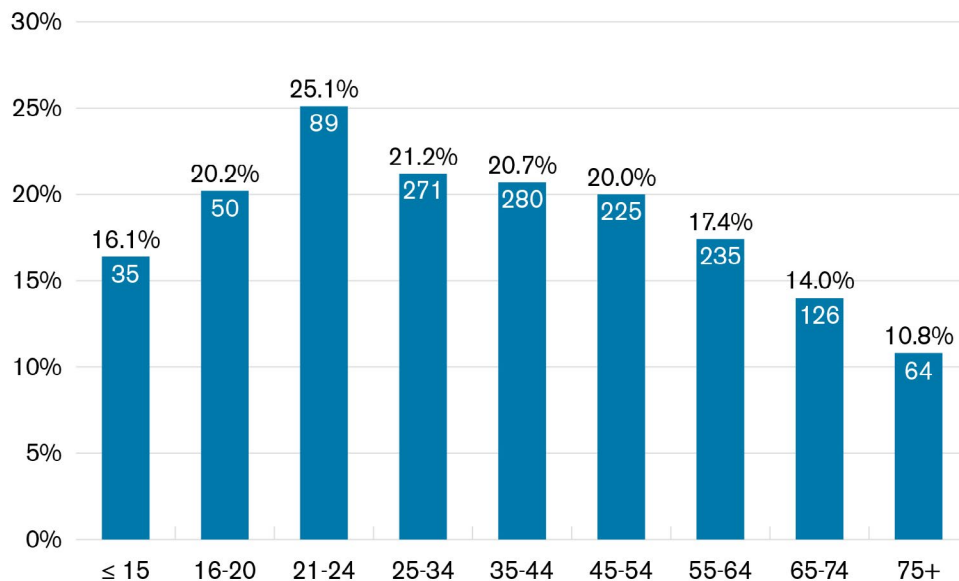
Note: Counts within each bar denote the number of pedestrian deaths involving a pedestrian with a BAC  $\geq$  0.08 within each age range.

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

Looking at driver alcohol impairment in 2022, there were 1,394 pedestrian fatalities (18.5%) involving a driver with a BAC of 0.08 or higher (Figure 9). This includes pedestrian fatalities for individuals younger than 16. The comparable percentages for 2021 and 2020 were 19% and 17%, respectively.

**Figure 9** U.S. Pedestrian Fatalities with Driver BAC  $\geq$  0.08 by Age Group, 2022



Source: FARS

Note: Counts within each bar denote the number of pedestrian deaths involving a driver with a BAC  $\geq$  0.08 within each age range.

Alcohol and/or drug impairment puts a pedestrian at greater risk while walking near vehicle traffic. But motor vehicle drivers bear the brunt of responsibility as the operators of machines with the kinetic potential to fatally injure pedestrians and other vulnerable road users. Nevertheless, public safety professionals can implement countermeasures to keep impaired pedestrians out of harm's way on the road. These include investing in safer roadways, separating pedestrian and vehicle traffic and identifying transportation alternatives for inebriated pedestrians.

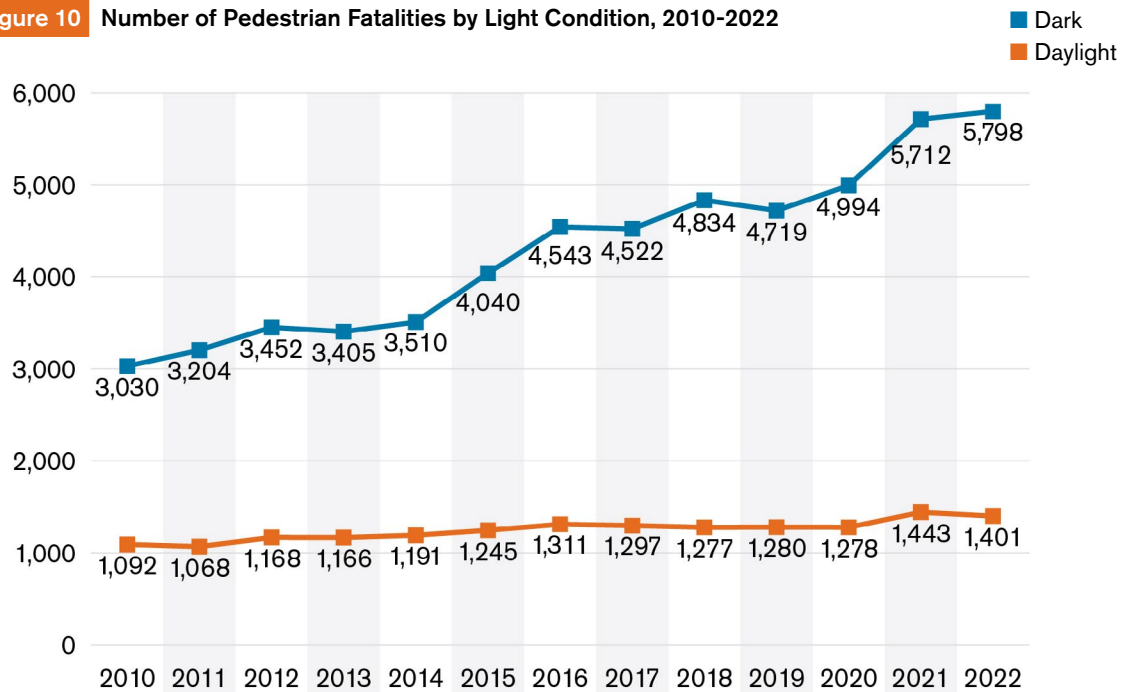
# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

## Light Condition

As in previous years, the vast majority of pedestrian fatalities occurred at night. In 2022, 77.7% of fatal pedestrian crashes with known light conditions occurred after dark (regardless of whether there was artificial lighting), compared to 18.8% during daylight hours and 3.6% during dawn or dusk. Figure 10 illustrates the disparity between deaths during daylight hours and at night. (Dawn or dusk are excluded considering the small share of fatalities they represent.)

**Figure 10** Number of Pedestrian Fatalities by Light Condition, 2010-2022



Source: FARS

About half (51.7%) of fatalities between dusk and dawn occurred where artificial lighting (such as streetlights) was present. This is consistent with the 51.2% observed in 2021.

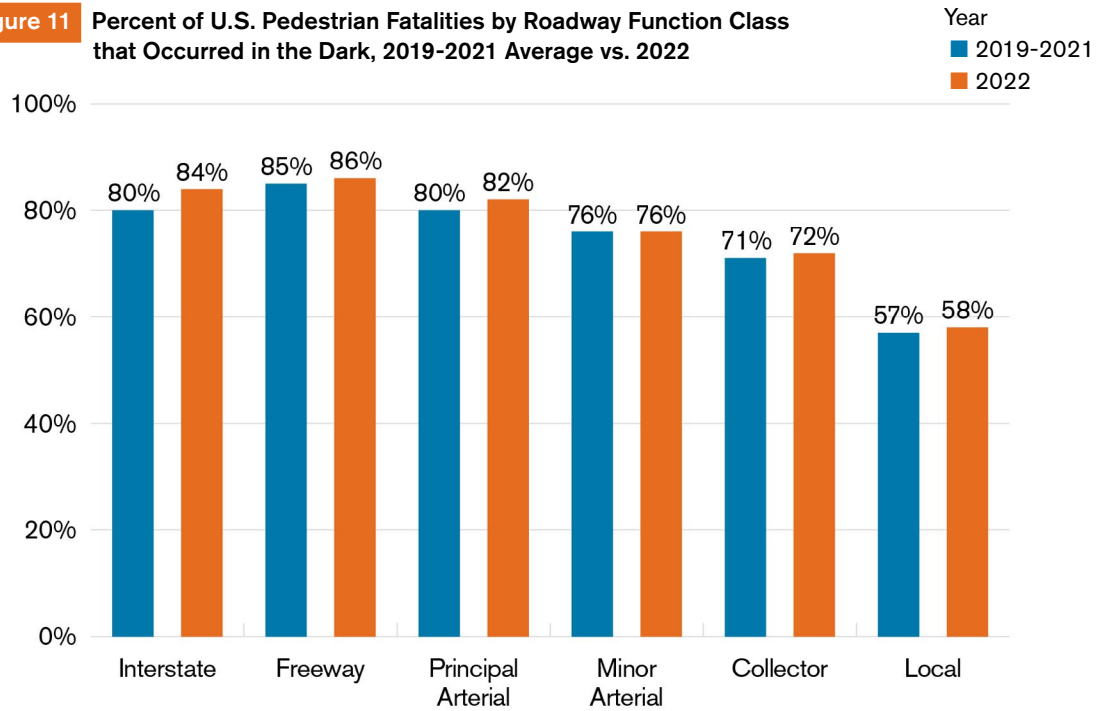
Freeways and expressways are particularly dangerous after dark, with 86% of all 2022 pedestrian fatalities on these roads taking place after dark. Interstates (84%) and principal arterials (82%) also see high percentages of pedestrian fatalities in the dark. Drivers tend to be traveling at higher speeds on these roads and do not expect to see pedestrians in their path. ([See page 23](#) for more information on different road types.)

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

Consistent with prior years, pedestrian fatalities on local roads were less likely to occur in the dark. Even so, nearly three-fifths (58%) of fatal pedestrian crashes on local roads took place at night. Figure 11 compares 2022 data to the prior three-year average, showing consistent trends over time.

**Figure 11** Percent of U.S. Pedestrian Fatalities by Roadway Function Class that Occurred in the Dark, 2019-2021 Average vs. 2022



Source: FARS

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

## Roadway Factors

Roadway factors include whether sidewalks were present, whether the crash occurred at an intersection and the type of roadway where the crash occurred. Understanding these dynamics can help inform infrastructure countermeasure selection to improve future safety outcomes.

### Sidewalks

In 2022, 66% of pedestrian fatalities occurred where there was no sidewalk, a slight drop from 68.3% in 2021. This small decrease follows four years of increases, from 59.2% in 2017 (Table 8).

**Table 8** U.S. Pedestrian Fatalities by Sidewalk Presence, 2017-2022

Year	Sidewalk Present?			Total	% None Noted
	None Noted	Yes	Unknown		
2017	3,598	2,341	136	6,075	59.2
2018	3,973	2,306	95	6,374	62.3
2019	3,976	2,247	49	6,272	63.4
2020	4,381	2,138	46	6,565	66.7
2021	5,105	2,326	39	7,470	68.3
2022	4,965	2,503	54	7,522	66.0

Source: FARS

### Intersections

In 2022, most pedestrian fatalities were not at an intersection (5,719 or 76.0%). This is on par with the proportion of non-intersection pedestrian fatalities in 2021 and 2020 – 76.5% and 75.8%, respectively.

### Functional Class

Roads can be divided into three major functional classes:

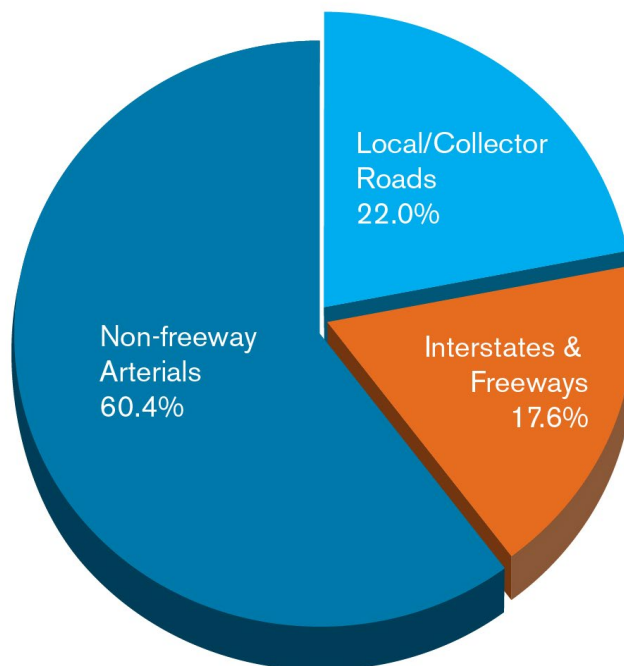
- Non-freeway arterials: High-capacity roads without controlled access but with more traffic flow and higher speeds than local roads; used primarily to connect collector roads with interstates and freeways.
- Collectors and local streets: Roads with slower speed limits that connect local areas to arterials or with the primary function of providing access to residential areas or businesses.
- Interstates and freeways: Controlled access highways with high volumes of traffic traveling at higher speeds.

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

In 2022, 4,541 (60.4%) of pedestrian fatalities occurred on non-freeway arterials. An additional 1,660 (22.0%) occurred on local/collector roads or roads of unknown functional class, and the remaining 1,321 (17.6%) occurred on interstates and freeways. Figure 12 illustrates this distribution. These proportions are comparable to 2021 and the five-year trend.

**Figure 12** Percentage of U.S. Pedestrian Fatalities by Roadway Class, 2022



Source: FARS

The number of pedestrians killed on interstates and freeways annually is alarming. In 2022 alone, 1,321 “pedestrians” were killed on roadways designed exclusively for people traveling in motor vehicles. These fatalities included stranded motorists who exited their vehicle, construction workers, first responders and tow truck drivers. Vehicle speeds can be so high on these roadways that impact with pedestrians is much more likely to result in fatal injuries.

All states have “Move Over” laws that require drivers to slow down and change lanes, if possible, when they see a stopped vehicle. However, the sheer number of fatalities on interstates and freeways suggest additional countermeasures are needed.



# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

## Vehicle Type

The type of vehicle (passenger car, SUV, van, pickup, etc.) can make a significant difference in survivability for a struck pedestrian. A general rule is the larger and heavier the vehicle, the lower the chances a person on foot will survive a crash. A recent Insurance Institute for Highway Safety study found that vehicles with higher front ends and blunt profiles are 45% more likely to cause fatalities in crashes with pedestrians than smaller cars and trucks.<sup>8</sup> Another study examining both fatality and injury crash data from 2016 to 2020 concluded that the fatality risk ratio was highest when pedestrians and cyclists were struck by larger vehicles, such as trucks and buses.<sup>9</sup>

In 2022, of all pedestrian fatalities where the striking vehicle body type was known, approximately 40% involved a passenger car as the striking vehicle, while 30% involved an SUV and 18% involved a pickup (Table 9).

**Table 9** U.S. Pedestrian Fatalities by Striking Vehicle Type for All Crashes with Known Vehicle Type, 2022

Vehicle Type	Count	Percent
Passenger Cars	2,591	39.66%
SUVs	1,912	29.27%
Pickups	1,188	18.18%
Large Trucks	469	7.18%
Vans	288	4.41%
Motorcycles	42	0.64%
Buses	42	0.64%

Source: FARS

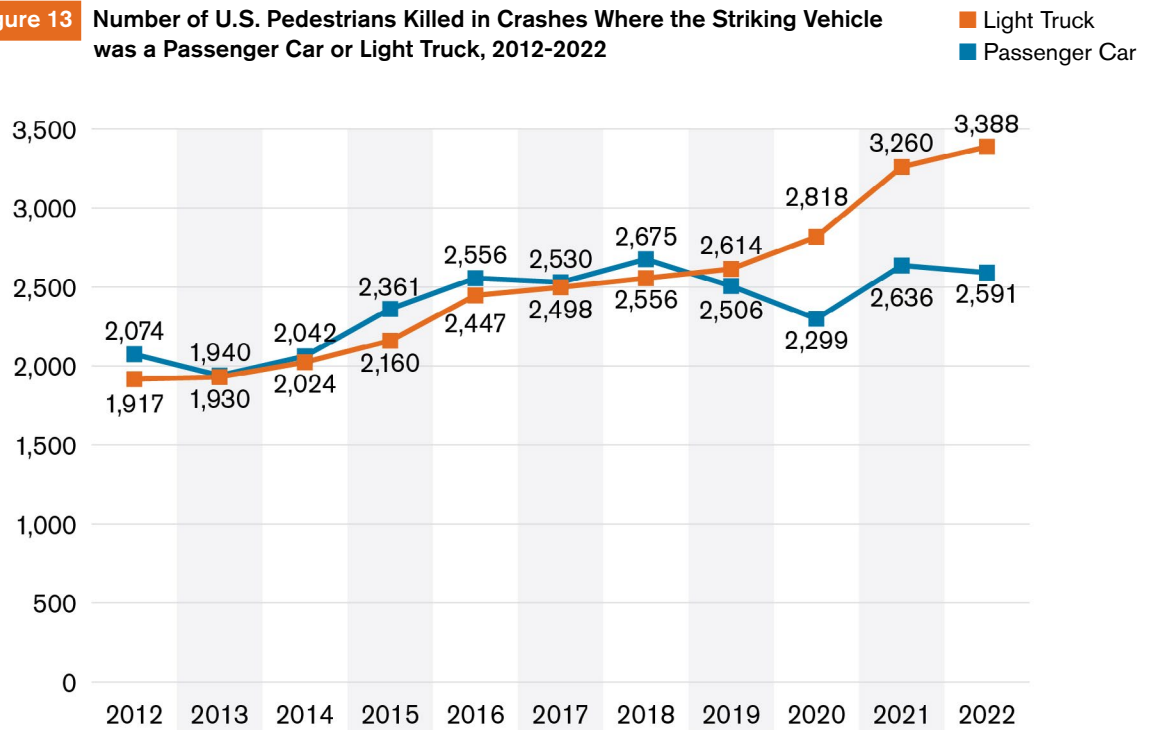
- 8 Hu, W., Monfort, S. S., & Cicchino, J. B. (2023, November). The association between passenger-vehicle front-end profiles and pedestrian injury severity in motor vehicle crashes. Insurance Institute for Highway Safety. Retrieved from <https://www.iihs.org/api/datastore/document/bibliography/2294>
- 9 Swedler, D.I., Ali, B., Hoffman, R. et al. (2024, April 11). Injury and fatality risks for child pedestrians and cyclists on public roads. *Inj. Epidemiol.* 11, 15. <https://doi.org/10.1186/s40621-024-00497-2>

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

The 2022 rates are comparable to the prior two years, but a longer lookback paints a different picture. The number of deaths involving light trucks (which includes SUVs, pickups and vans) rose 76.7% since 2012, compared to a 24.9% increase for passenger cars (Figure 13). **In 2022, pedestrian deaths involving light trucks represented more than half (51.9%) of all fatalities with a known striking vehicle type, up from 43.8% in 2012.**

**Figure 13** Number of U.S. Pedestrians Killed in Crashes Where the Striking Vehicle was a Passenger Car or Light Truck, 2012-2022



Source: FARS

# Pedestrian Traffic Fatalities by State

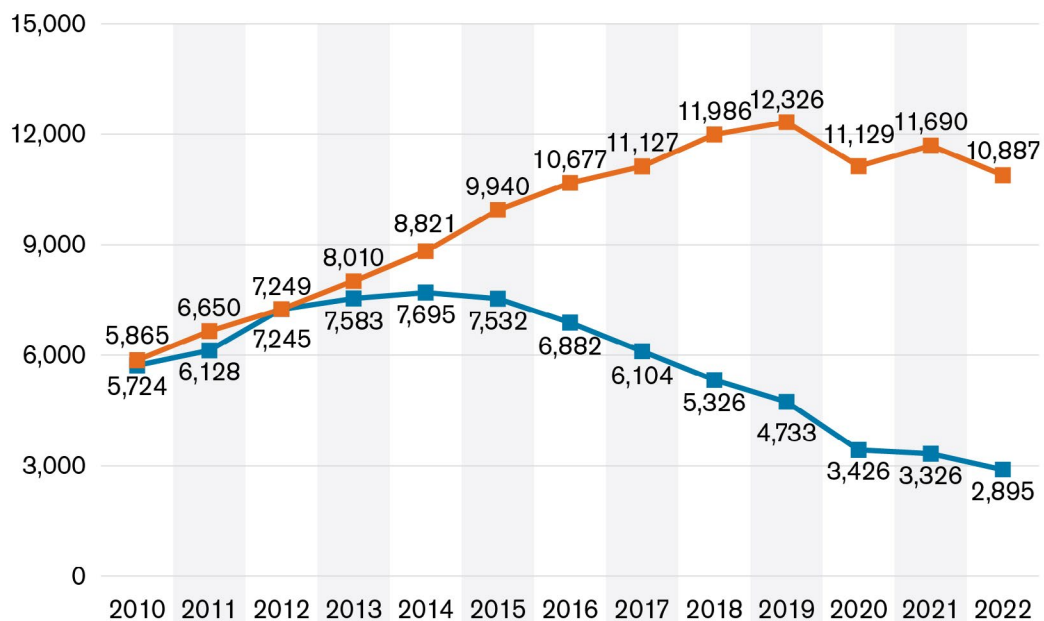
2023 PRELIMINARY DATA

The slowed integration of newer (safer) vehicles on the road may continue to put pedestrians at greater risk.

The 2022 new vehicle market still tracks well below pre-pandemic levels for both light trucks and passenger cars (Figure 14). Newer vehicles tend to be safer than older vehicles. They generally have better crash avoidance technology, and some even have pedestrian detection as a standard feature. Fewer new vehicles entering the vehicle mix means pedestrians – and all road users – were less protected than they could have been if there were more new vehicles on the road.

**Figure 14** Light Truck and Passenger Car Sales & Leases (in Thousands), 2010-2022

- Light Trucks
- Passenger Cars



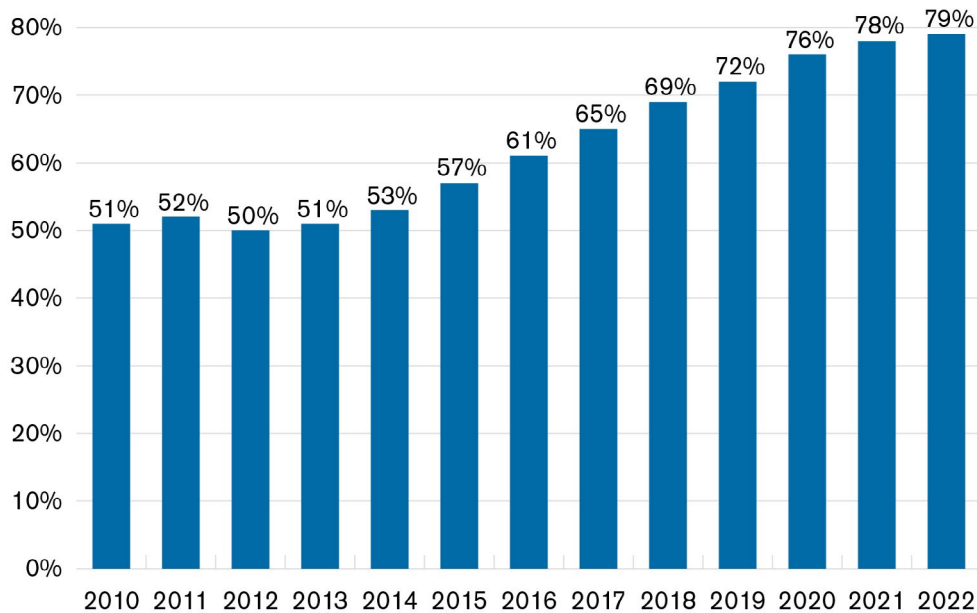
Source: Bureau of Transportation Statistics

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

The percentage of new vehicle sales/leases that are classified as light trucks continues to rise (Figure 15). As mentioned above, light trucks tend to result in more severe injuries when a pedestrian is struck by one of these vehicles.

**Figure 15** Light Trucks as a Percent of Total U.S. Vehicle Sales, 2010-2022



Source: Bureau of Transportation Statistics

## A Closer Look at Cities

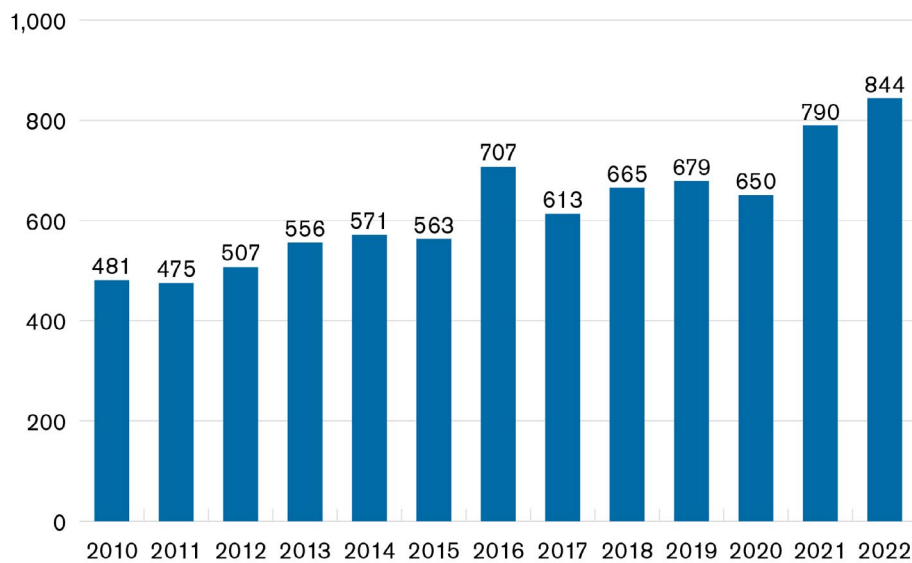
Most pedestrian fatalities occur in urban areas, where people on foot and people in motor vehicles are more likely to be sharing the same roads. Because of this, researchers analyzed data for the 10 most populous U.S. cities: Austin, Chicago, Dallas, Houston, Los Angeles, New York, Philadelphia, Phoenix, San Antonio and San Diego. For the purposes of this report, cities are defined as the areas within the city limits, versus larger Metropolitan Statistical Areas (MSA) within which cities are located.

In 2022, these 10 cities accounted for a combined 844 pedestrian fatalities. This is a 7% increase from the previous count of 790 in 2021, and a 21% increase from the 679 recorded in 2019 (before the pandemic). For comparison, the national FARS counts increased by 2% over 2021 and 18% over 2019. **This means that pedestrian fatality counts are rising more quickly in these large cities compared to the country at large.** Figure 16 shows the total number of fatalities in the 10 most populous U.S. cities over the past 13 years.

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

**Figure 16** Pedestrian Deaths in the 10 Largest U.S. Cities, 2010-2022



Source: FARS

Looking at each city individually (Figure 17), the pattern is mixed. However, except for New York City (which experienced a slight decrease), the other nine cities have 2022 fatality counts that are above 2019 levels.

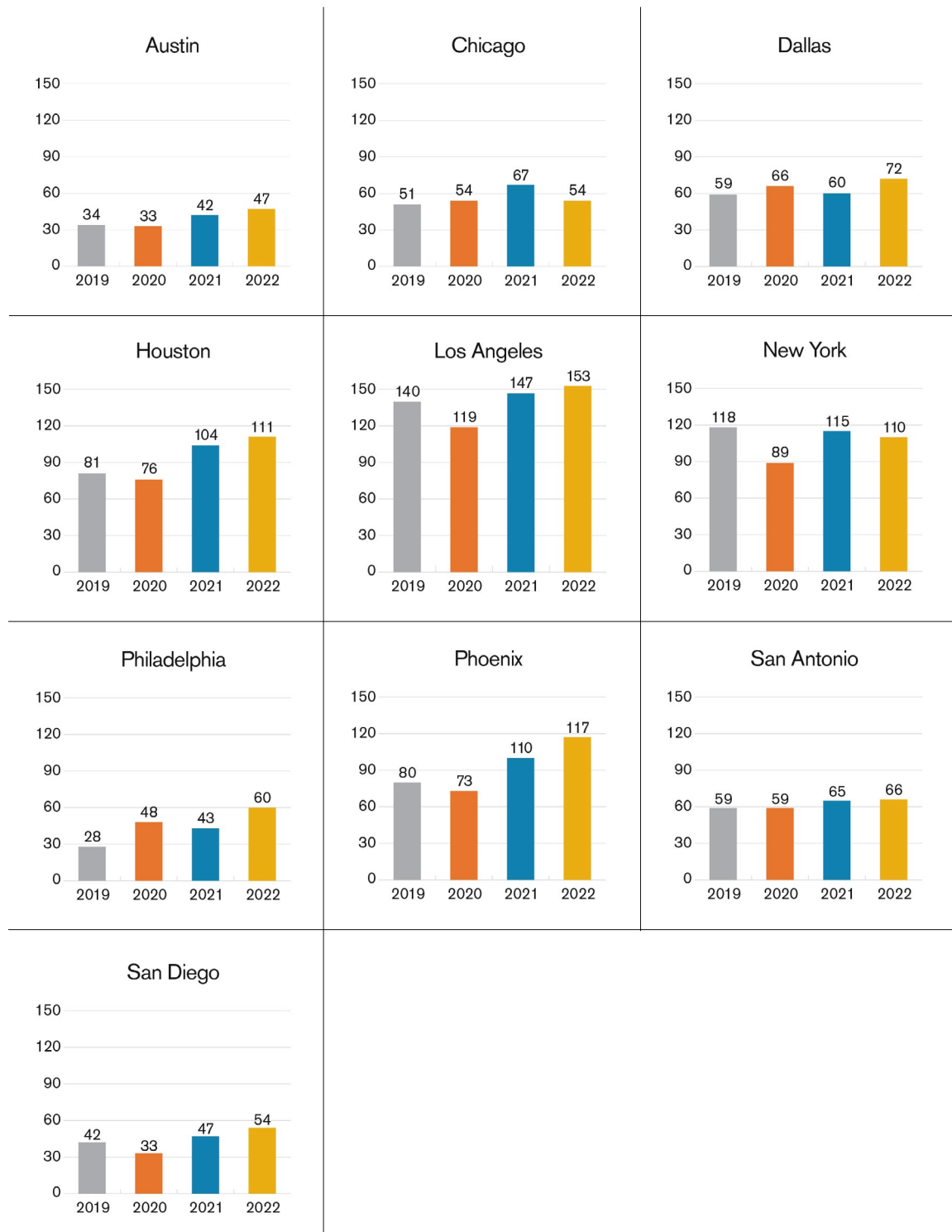
- Austin, Houston, Los Angeles, Phoenix, San Antonio, and San Diego have trended upward for two consecutive years. The increase in Phoenix is particularly large – a 60% increase from 73 fatalities in 2020 to 117 in 2022.
- Chicago and New York City experienced fewer fatalities between 2021 and 2022, returning to near – or below – 2019 numbers.
- Dallas and Philadelphia both saw pedestrian deaths decrease between 2020 and 2021, followed by an increase in 2022. Of note, Philadelphia had a concerning 39.5% increase between 2021 and 2022 (from 43 to 60).

While 2020 and 2021 fatality counts may reflect different city- and state-level reactions to the pandemic, and length/impact of any restrictions, 2022 is likely to reflect the “new normal” in these cities. It is, therefore, troubling to see increases in eight of the 10 cities and in some cases (such as in Phoenix and Philadelphia) relatively large increases.

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

**Figure 17** Pedestrian Deaths in the 10 Largest U.S. Cities, 2019-2022



Source: FARS

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA



## PART 3: HOW TO REDUCE PEDESTRIAN FATALITIES AND INJURIES

After three straight years of increased pedestrian fatalities, GHSA predicts fewer people on foot died in motor vehicle crashes in 2023 – a 5.4% decrease. But what will it take to sustain that downward trajectory, so that every U.S. city and state eliminates pedestrian traffic fatalities?

The U.S. Department of Transportation (U.S. DOT)'s National Roadway Safety Strategy is centered around the Safe System approach, which emphasizes establishing redundant layers of protection to not only prevent motor vehicle crashes from occurring but also reduce the chances of an injury when a crash does take place. This comprehensive approach prioritizes the safety of people over the rapid movement of vehicles and goods.<sup>10</sup>

Pedestrians stand to benefit greatly from this approach, which has improved traffic safety in Sweden, the Netherlands, Australia, New Zealand and other countries. In Sweden, for example, pedestrian fatalities declined by 50% between 2009 and 2014.<sup>11</sup>

Part 3 of this report examines some of the ways states and communities are working to improve pedestrian safety through implementation of the core Safe System approach principals:

- 1. Death and serious injuries are unacceptable.**
- 2. Humans make mistakes.**
- 3. Humans are vulnerable.**
- 4. Responsibility is shared.**
- 5. Safety is proactive.**
- 6. Redundancy is crucial.**

The following examples include anecdotal information on pedestrian safety programs shared by states during the collection of preliminary 2023 pedestrian fatality data. While they are not intended to be a complete picture of all state level pedestrian safety activity, they are some of the many ways states are working more holistically to better protect people on foot.

<sup>10</sup> U.S. Department of Transportation (2022). National roadway safety strategy. Retrieved from <https://www.transportation.gov/NRSS>

<sup>11</sup> North Carolina Governor's Highway Safety Program (2018, June 28). Safe systems synthesis: An international scan for domestic application. Retrieved from [https://www.roadsafety.unc.edu/wp-content/uploads/2018/08/SafeSystemsSynthesis-FinalReport\\_3.pdf](https://www.roadsafety.unc.edu/wp-content/uploads/2018/08/SafeSystemsSynthesis-FinalReport_3.pdf)

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA



## Building a Safer Environment

The Safe System approach does not aim to eliminate every fender bender, but rather focuses on preventing motor vehicle crashes that result in human loss of life or serious injury. As such, it is critical to design and build transportation systems with the safety of the most vulnerable road users in mind.

The first three tenets of the Safe System approach (deaths and serious injuries are unacceptable, humans make mistakes, and humans are vulnerable) all focus on designing a built environment that both minimizes pedestrians' exposure to motor vehicles and mitigates any injuries resulting from crashes, largely by slowing vehicle speeds around pedestrians. These efforts include, but are not limited to, the following:

- 🚶 **Road diets** reduce vehicle speeds and the number of lanes pedestrians have to cross.
- 🚶 **Pedestrian refuge islands** provide walkers a safe place to stop at the midpoint of the roadway before crossing the remaining distance. This is particularly helpful for individuals who may need more time to cross the road safely.
- 🚶 **Rectangular Rapid Flashing Beacons (RRFB)** are active (user-actuated) or passive (automated detection) amber light-emitting diodes (LEDs) that use an irregular flash pattern at mid-block or uncontrolled crossing locations. They significantly increase driver yielding behavior.
- 🚶 **Pedestrian Hybrid Beacons (PHBs)** are a beneficial intermediate option between RRFBs and a full pedestrian signal. They allow pedestrians to activate a series of warning and stop beacons for drivers in areas without the high pedestrian traffic volumes that typically warrant full traffic signal installation.
- 🚶 **Lighting improvements** help drivers detect pedestrians, particularly at night, when most pedestrian fatalities occur.
- 🚶 **Leading Pedestrian Intervals (LPIs)** at signalized intersections allow pedestrians to walk, usually three to four seconds, before vehicles get a green signal to turn left or right. The LPI increases visibility, reduces conflicts and improves motorists' propensity to yield to people crossing the road on foot.
- 🚶 **Sidewalks** separate people on foot from motor vehicle traffic, yet many roadways, particularly in rural areas, still lack them.
- 🚶 **Banning right turns on red lights** is being considered by a growing number of cities and localities to improve pedestrian safety. Drivers turning right on red can be so focused on oncoming vehicle traffic that they do not see people in the crosswalk.



# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA



Several states shared examples of completed, ongoing or future pedestrian safety infrastructure projects utilizing a number of these strategies:

- The **California** Department of Transportation (Caltrans) Highway Maintenance-4 Safety Pilot Program brings countermeasures such as high visibility crosswalks, PHBs and pedestrian refuge islands to locations identified as having the highest crash risk to pedestrians.
- The **Hawaii** Department of Transportation is installing more than 80 raised crosswalks, and improving road design.
- The **Minnesota** Department of Transportation's Active Transportation Program includes infrastructure grants, planning help and quick build/demonstration project technical assistance to help local communities build a safer transportation network for pedestrians.
- The **Pennsylvania** Department of Transportation (PennDOT) identified pedestrian countdown signals as a proven safety countermeasure that would improve accessibility and safety for pedestrians. PennDOT invested \$14 million to place these signals at 779 intersections across the state. They are expected to reduce all crashes at these signalized intersections by nearly 9%.<sup>12</sup>

Some states are educating the public about how specific infrastructure changes will benefit pedestrian safety:

- The **Maryland** Highway Safety Office will conduct community outreach on improvements being implemented through the state's recently completed Pedestrian Safety Action Plan.
- The **Iowa** Department of Transportation developed educational videos for public educational campaigns addressing RRFBs, PHBs, four to three lane conversions and roundabouts.
- The **District of Columbia** Vision Zero Office uses local funds to fuel education that addresses infrastructure improvements such as road diets.

Education efforts such as these not only help the public understand how to engage with new engineering changes, but also helps build public buy-in for additional safety enhancements. As D.C. put it, "Helping the community understand the benefits of these efforts helps to frame the whole approach the District is using to achieve Vision Zero."

<sup>12</sup> Pennsylvania Department of Transportation (2024, May 7). PennDOT focuses on enforcement, education in effort to improve traffic safety. Retrieved from <https://www.pennDOT.pa.gov/pages/all-news-details.aspx?newsid=1127>

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

## Legislation and Enforcement

A key tenet of the Safe System approach is that responsibility is shared. This means all participants in the transportation system – including the government leaders who create traffic safety laws and the officers who enforce them – are critical players in preventing deaths and serious injuries on our roads.



Research backs this up. While the Safe System approach stresses the importance of the built environment to a greater degree than the traditional line of thinking about traffic safety, getting to zero pedestrian deaths will require more than engineering solutions alone. A recent University of Minnesota study explored how engineering solutions could improve the rate of drivers yielding to pedestrians, comparing the effects at signalized and unsignalized intersections with and without engineering treatment. Researchers concluded “...while localized safety treatments can effectively increase yielding at high-risk intersections, a more general cultural shift in drivers will likely require an enforcement component.”<sup>13</sup>

Automated speed cameras have been proven to be particularly effective in reducing driver speeds. One community in Washington state recently saw a 70% reduction in speeding after the installation of speed cameras near an elementary school.<sup>14</sup>

States are taking action on traffic safety enforcement. Fourteen SHSOs reported that their state recently enacted or considered enacting new legislation to address pedestrian safety. Below are a few examples of new legislative efforts:

- A new **California** law mandates the state’s transportation commission convene a task force to study the relationship between vehicle weight and injuries to people biking and walking. A new state regulation prohibits a driver from parking within 20 feet of a crosswalk. Known as “daylighting,” this practice will improve visibility for both pedestrians and drivers.
- **Connecticut** has expanded the circumstances under which drivers must yield the right-of-way to pedestrians at marked and unmarked crosswalks not controlled by traffic signals or police officers.
- **Massachusetts** and **New Jersey** both now require drivers to maintain a minimum of four feet passing distance between their vehicle and any non-motorized road user, including bicyclists or pedestrians.
- In Indianapolis, **Indiana**, the city has begun rolling out a new “no turn on red” policy for drivers in many downtown intersections, despite pushback from some state lawmakers. **Hawaii** is also instituting no turns on red signals.
- **Florida**, **Georgia** and **Virginia** have authorized the use of speed cameras in school zones. A New York state law signed in 2022 allows **New York City** to expand the use of its speed cameras in school zones.

<sup>13</sup> Morris, N. University of Minnesota (2023, March). Multi-city study of an engineering and outreach program to increase driver yielding at signalized and unsignalized crosswalks. Retrieved from <https://cts-d8resmod-prd.oit.umn.edu/pdf/mndot-2023-11.pdf>.

<sup>14</sup> Hansen, J. (2024, May 11). After traffic cameras went in, Everett saw 70% decrease in speeding. *HeraldNet*. Retrieved from <https://www.heraldnet.com/news/after-traffic-cameras-went-in-everett-saw-70-decrease-in-speeding/>.

# Pedestrian Traffic Fatalities by State

2023 PRELIMINARY DATA

- **Pennsylvania** has instituted permanent automated speed enforcement systems in active work zones. During the pilot program, the state saw a 47% reduction in excessive speeding in work zones.
- A new **Maryland** law requires pedestrian safety improvements be implemented more quickly on certain larger infrastructure projects.
- **Washington** has extended the ability for all local authorities to establish a maximum 20 mph speed limit. Previously only cities and towns could make this change. The eligible areas have also expanded. Previously only non-arterial highways in residential and business districts were eligible, but now any non-arterial highway may qualify. In addition, the state Department of Transportation now has discretion to set a 20 mph speed limit without conducting an engineering and traffic study.

FHWA recommends that pedestrian enforcement operations focus on driver rather than pedestrian behavior.<sup>15</sup> Further, police officers must enforce traffic laws equitably, particularly considering the compelling evidence of historical racial bias in traffic stops.<sup>16</sup>

Some states, such as **California, Maine, Massachusetts, Maryland, New Jersey, South Carolina,** and **Washington,** as well as **D.C.,** have instituted “decoy” enforcement efforts, where trained police officers put themselves in harm’s way by crossing at a crosswalk and identifying drivers who do not yield the right of way. Another officer stationed ahead then stops and issues a warning or citation to the driver.

Many SHSOs reported programs to train law enforcement personnel on traffic laws designed to enhance safety for pedestrians and other non-motorized road users:

- **Washington** is improving its training on pedestrian and bicyclist laws for law enforcement officers at the state, tribal and local levels, that includes training on equity issues.
- **Florida** offers law enforcement training to increase officers’ knowledge of pedestrian safety laws, procedures and best practices.
- In **D.C.,** Howard University Public Safety officers will receive advanced training in outreach and education and conduct on-campus activities to raise pedestrian safety awareness.
- Other states that specifically cited law enforcement training activities included **Alaska, Louisiana, New Mexico, North Carolina, Rhode Island, South Carolina** and **Texas,** although this list is likely not comprehensive.

15 Federal Highway Administration (2013). Pedestrian Safety Guide and Countermeasure Selection System. Retrieved from [http://www.pedbikesafe.org/pedsafe/countermeasures\\_detail.cfm?CM\\_NUM=62](http://www.pedbikesafe.org/pedsafe/countermeasures_detail.cfm?CM_NUM=62)

16 Pierson, E., Simoiu, C., Overgoor, J. et al. (2020, May 4). A large-scale analysis of racial disparities in police stops across the United States. *Nat Hum Behav* 4, 736–745 (2020). Retrieved from <https://doi.org/10.1038/s41562-020-0858-1>

# Pedestrian Traffic Fatalities by State

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## ***Incorporating Community Input***

States and localities are engaging with communities to identify and address pedestrian safety concerns before crashes occur. This is tantamount to both the safety is proactive and responsibility is shared principles of the Safe System approach.

Several states reported working with people experiencing homelessness to better understand their safety concerns and develop programming to improve safety. **Washington** is partnering with a local nonprofit in Clark County to conduct strategic outreach to people currently experiencing homelessness or those who had previously been unhoused. They gathered information on the population's pedestrian safety experiences, including identifying specific roads and intersections they thought were the most dangerous. Efforts engaging with people experiencing homelessness are also underway in **California, Delaware, D.C.** and **Hawaii**, among other states.



Through its public participation and engagement efforts, **South Carolina** is meeting with underserved populations in areas with high pedestrian and bicyclist collision rates. Feedback gathered during these meetings is being used to inform and develop future pedestrian and bicyclist safety strategies.

Similar efforts in **Kansas** led to the discovery that the state's Native Americans felt there was a lack of traffic safety messaging and educational material within their communities. Native Americans are overrepresented in Kansas pedestrian crashes. The state is continuing to explore more engagement opportunities to understand and address this trend. The SHSO also applied for a U.S. DOT Native American Pedestrian Safety Demonstration project grant.

## ***Technology***

Technologies both in and out of vehicles can help build a safer system for pedestrians.

Cellular vehicle-to-everything, or C-V2X for short, is a wireless technology that allows vehicles to communicate directly with each other, roadside infrastructure and pedestrians. C-V2X can promote safe driving and walking behaviors through real-time information sharing. For example, a camera can detect a pedestrian intending to step into an intersection before the pedestrian signal is displayed and broadcast an alert to nearby drivers.

Chattanooga, Tennessee, recently received a \$2 million federal grant to improve pedestrian safety through C-V2X at mid-block crossings, with a focus on a stretch of road that connects underserved communities with transit services, schools and medical facilities.<sup>17</sup>

<sup>17</sup> Retrieved from <https://www.mayor.chattanooga.gov/chattanooga-earns-4-million-in-federal-grants-to-improve-pedestrian-safety-walkability-and-connectivity/>

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At the federal level, U.S. DOT's Intelligent Transportation Systems (ITS) Joint Program Office has launched a new [ITS for Pedestrian Safety Data Story](#) that includes an interactive national map showing fatalities across the country. The data set can help transportation professionals explore the challenges of pedestrian safety and how ITS technologies can be deployed to help address them.

Other promising technical innovations include in-vehicle crash avoidance technologies such as automatic emergency braking (AEB) and pedestrian detection systems. Technology enhancements such as these build redundancy into the transportation system, adding another circuit breaker to help prevent a motor vehicle/pedestrian crash from taking place.

NHTSA recently finalized a new Federal Motor Vehicle Safety Standard that will require vehicle manufacturers to include AEB, including pedestrian AEB, as a standard feature on all passenger cars and light trucks sold in the U.S. by September 2029. While this new standard is anticipated to reduce pedestrian crashes, some have criticized the timeline as too slow.

## **State Trends in Pedestrian Fatality and Crash Data**

GHSA asked states to report on any trends in pedestrian crash data in recent years and speculate on the reasons behind them. By and large, most state-level trends echoed the national trends presented in Part 2 of this report: a disproportionate number of people of color are killed in pedestrian/motor vehicle collisions, a preponderance of fatal pedestrian crashes are occurring in the dark, and a large percentage of these fatal crashes involve alcohol impairment on the part of the pedestrian and/or driver.

Several states commented on racial or economic disparities in their pedestrian crash data. In **Arizona**, areas with lower socioeconomic status experience higher mortality rates compared to wealthier regions. **Arkansas** reported that Black/African American individuals accounted for 28% of non-motorist fatalities and serious injuries but only 16% of the population. In **California** (for 2021), Black persons accounted for 15% of all pedestrians killed despite representing less than 6% of the overall population. Black/African American non-Hispanic individuals had the highest pedestrian fatality rate compared to other racial/ethnic groups in **Georgia**. **Kansas** reported its Native American and Black populations are also overrepresented in pedestrian fatalities.

**Michigan** reported its urban areas, with larger concentrations of poverty and many people relying on walking, biking or public transportation to get around, experience the most pedestrian crashes.

Notably, eight states mentioned homelessness as a growing pedestrian safety concern. Alarming, in **Hawaii**, nearly half of all non-motorized traffic fatalities in 2022 involved an unhoused individual.

As with national trends, understanding the data at the state and local level will help policymakers hone their countermeasure strategies to reach the right people, in the right places at the right time. For example, **Indiana** found that college and university campuses experienced higher incidences of pedestrian crashes and fatalities, which led to more pedestrian safety activations in these areas. **Pennsylvania** reported a sizable proportion of its pedestrian fatalities involved older adults, which is helping to inform educational outreach and enforcement planning.

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## Federal Grant Programs

SHSOs have access to federal grants to improve pedestrian safety, though federal regulations limit how this money can be spent. The State and Community Highway Safety Grant Program under 23 U.S.C. Section 402 (also known as Section 402) provides funding to all states and territories for a wide range of highway safety purposes, including pedestrian safety, though this competes with all other safety needs.

The National Priority Safety Program under 23 U.S.C. Section 405 (also known as Section 405) includes subsections and funding streams specifically dedicated to improving non-motorized safety. The most notable is Section 405(g), which is allotted 7% of overall Section 405 funding and distributed annually to qualifying states. States are eligible if their annual combined pedestrian and bicyclist fatalities exceed 15% of their total crash fatalities.

Unfortunately, states encountered roadblocks in finding eligible uses for the funds. The law required any programming be connected to training or education about existing state bicycle and pedestrian safety laws, but not every state has such laws in place. Thanks to the efforts of GHSA and other safety partners, beginning in Federal Fiscal Year (FFY) 2024 (Oct. 1, 2023 through Sept. 30, 2024), the program was expanded to allow states to use the funds for a wider range of nonmotorized safety purposes, including public education and awareness about speed, safety equipment and safety infrastructure, police training and enforcement, and research and data analysis.

Another new Section 405 program that began in FFY 2024 earmarks 1% of funds for incentive grants to prevent roadside crashes and deaths, particularly those involving first responders, construction workers and other motorists that need to make emergency stops on roadways. Section 405(h) enables states to fund both traditional education and enforcement efforts as well as purchase digital alerting technology. The latter provides first responders, tow truck operators, DOT workers and other authorized users the ability to notify drivers of a disabled vehicle, roadway incident or work zone ahead through a message display on vehicle dashboards and navigation apps.

When responding to the survey for this report, 36 states and D.C. reported using Section 405 funds for pedestrian safety projects. The bulk of these efforts include public awareness and law enforcement efforts. Several states are conducting training for law enforcement to educate them on state laws pertaining to pedestrian safety. A few states are using funds for data systems to capture and analyze pedestrian crash data. In addition, seven states are using Section 405 funding for digital alerting technology, which warns drivers of vehicles stopped on the roadside, with the goal of preventing collisions involving first responders, tow truck drivers and others.

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## CONCLUSION

State data indicate that 2023 has experienced a welcome drop in the number of pedestrian fatalities after several years of significant increases. Specifically, GHSA projects a 5.4% decrease in the overall number of pedestrians struck and killed by drivers, from 7,737 in 2022 to 7,318 in 2023. More states saw fewer pedestrian fatalities (29 states) than had increases (21 plus D.C.).

The most currently available federal data (from 2022) provides critical information on factors involved in pedestrian fatalities, with most findings consistent with recent trends. Alcohol impairment, excessive speed, dark conditions and vehicle type continue to play a role in many crashes involving a fatally injured pedestrian. And most pedestrian deaths continue to occur in urban, metropolitan areas where people on foot and people in vehicles are more often sharing the same roadways.

States have been embracing the Safe System approach in their work to prevent pedestrian fatalities and serious injuries. A central element of this approach is creating built environments that prevent crashes from happening or minimize bodily harm when they do. SHSOs are supporting these changes through education campaigns that explain the benefits of infrastructure improvements and reinforce the idea that we all share responsibility for keeping people on foot safe.

In addition, states are developing educational materials with community input and delivering them within a culturally appropriate context. The enhancement and equitable enforcement of traffic safety laws, focusing on the most dangerous driving behaviors such as speeding, impairment and distraction, also is shown to positively impact pedestrian safety.

Hopefully, a continued emphasis on the holistic Safe System approach will lead to a further reduction of pedestrian fatalities in 2024 and beyond until we reach the ultimate goal of zero traffic deaths.