Traffic deaths for people walking, biking, and rolling continue to rise

2018 was the deadliest on record for people walking and riding bicycles in nearly three decades. In 2018, drivers in the United States struck and killed 6,283 people walking, and another 857 people were struck and killed while riding bicycles. Deaths among these vulnerable users continue to rise nationwide even as overall deaths stagnate or decline. Between 2009 and 2018, traffic deaths among motor vehicle occupants declined by one percent, but over the same decade traffic deaths among people walking increased by 53 percent. Similarly, traffic deaths among people bicycling increased by 36 percent during this time period.

Every two years, Smart Growth America releases Dangerous by Design, a national report that explores the pedestrian safety crisis. In this interim update, we reexamined the top 20 most dangerous states for people walking over the past decade based on our Pedestrian Danger Index, a metric that measures deadliness for people walking, controlling for the size of the population and the share of people who walk to work. Although rankings within the top 20 states shifted slightly, in 2020 the same states comprise the top 10 and top 20 most dangerous places for people walking compared to our Dangerous by Design 2019 report.

The top 20 most dangerous states for pedestrians (2009-2018)
Most states failed to meet their unambitious “safety” targets

Our federal and state governments are not doing nearly enough to address this safety crisis. Through the Highway Safety Improvement Program (HSIP), each state is required to set “safety” targets for the number of deaths and serious injuries on their roadways. In exchange, the federal government provides funding to implement safety projects and programming. Beginning in 2018, states set a target for the number of non-motorized deaths and serious injuries combined, which includes people walking, biking, using wheelchairs, and riding scooters and other non-motorized vehicles. Unfortunately, 18 states set targets for more non-motorized users to be killed and injured compared to the most recent year of data reported at the time.

Smart Growth America assessed how states fared compared to their 2018 HSIP targets for deaths and serious injuries among people walking, biking, and rolling. Although the National Transportation Safety Board issued official recommendations to create a nationwide database of all traffic injuries, these data are not yet available, so SGA projected serious injuries for 2018 based on recent trends in the share of fatalities versus serious injuries over recent years.

The results are uninspiring. A total of ten states aimed for more people to be killed or seriously injured while walking, biking, and rolling, and then exceeded that target. Another eight states set targets to increase deaths and serious injuries but fortunately remained below their goal. Among states that aimed to improve safety for non-motorized users, only eight states successfully achieved their goals while 24 states saw deaths and serious injuries exceed their targets.

<table>
<thead>
<tr>
<th>States that set targets to improve safety</th>
<th>States that set targets to increase deaths and serious injuries</th>
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<tbody>
<tr>
<td>Delaware</td>
<td>Alabama</td>
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<tr>
<td>Iowa</td>
<td>Massachusetts</td>
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<td>Kansas</td>
<td>New Mexico</td>
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<td>Maine</td>
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<td>North Dakota</td>
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<td>Oklahoma</td>
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<td>Rhode Island</td>
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<td>Utah</td>
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</tbody>
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Note: Injury data not reported in Wisconsin

The ensuing pages of this interim report explore the number of deaths and serious injuries among people walking, biking, and rolling state by state over the past five years.
Alabama
- **Aimed to increase** non-motorized deaths and injuries
- **Achieved** “safety” target for non-motorized users

Arkansas
- **Aimed to increase** non-motorized deaths and injuries
- **Achieved** “safety” target for non-motorized users

Alaska
- **Aimed to reduce** non-motorized deaths and injuries
- **Exceeded** safety target for non-motorized users

Arizona
- **Aimed to reduce** non-motorized deaths and injuries
- **Exceeded** safety target for non-motorized users

California
- **Aimed to increase** non-motorized deaths and injuries
- **Exceeded** “safety” target for non-motorized users

Non-motorized deaths reported in the Fatality Analysis Reporting System (FARS)
Non-motorized serious injuries reported in the Highway Safety Improvement Program (HSIP)
Non-motorized serious injuries projected based on the share of fatalities in recent years
2018 HSIP target for non-motorized deaths and serious injuries combined

Note: Non-motorized users include people walking, biking, riding scooters, using wheelchairs, or using other non-motorized modes

Note: Injury data not reported for 2016-2017
Colorado
- Aimed to increase non-motorized deaths and injuries
- Exceeded “safety” target for non-motorized users

Connecticut
- Aimed to increase non-motorized deaths and injuries
- Exceeded “safety” target for non-motorized users

Delaware
- Aimed to reduce non-motorized deaths and injuries
- Achieved safety target for non-motorized users

District of Columbia
- Aimed to reduce non-motorized deaths and injuries
- Exceeded safety target for non-motorized users

Florida
- Aimed to increase non-motorized deaths and injuries
- Exceeded “safety” target for non-motorized users

Georgia
- Aimed to increase non-motorized deaths and injuries
- Exceeded “safety” target for non-motorized users

Note: Injury data not reported for 2017
**Legend**

- Red: Non-motorized deaths reported in the Fatality Analysis Reporting System (FARS)
- Pink: Non-motorized serious injuries reported in the Highway Safety Improvement Program (HSIP)
- Gray: Non-motorized serious injuries projected based on the share of fatalities in recent years
- Blue: 2018 HSIP target for non-motorized deaths and serious injuries combined

*Note: Non-motorized users include people walking, biking, riding scooters, using wheelchairs, or using other non-motorized modes*

**Hawai’i**

- Aimed to **reduce** non-motorized deaths and injuries
- **Exceeded** safety target for non-motorized users

**Idaho**

- Aimed to **reduce** non-motorized deaths and injuries
- **Exceeded** safety target for non-motorized users

**Indiana**

- **Exceeded** “safety” target for non-motorized users

**Iowa**

- Aimed to **reduce** non-motorized deaths and injuries
- **Achieved** safety target for non-motorized users

**Illinois**

- Aimed to **reduce** non-motorized deaths and injuries
- **Exceeded** safety target for non-motorized users

Note: Injury data not reported for 2017

Non-motorized deaths reported in the Fatality Analysis Reporting System (FARS)
Non-motorized serious injuries reported in the Highway Safety Improvement Program (HSIP)
Non-motorized serious injuries projected based on the share of fatalities in recent years
2018 HSIP target for non-motorized deaths and serious injuries combined

Legend

Note: Non-motorized users include people walking, biking, riding scooters, using wheelchairs, or using other non-motorized modes.
**Kansas**

- Aimed to **reduce** non-motorized deaths and injuries
- **Achieved** safety target for non-motorized users

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**Kentucky**

- Aimed to **reduce** non-motorized deaths and injuries
- **Exceeded** safety target for non-motorized users

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**Louisiana**

- Aimed to **reduce** non-motorized deaths and injuries
- **Achieved** safety target for non-motorized users

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**Maine**

- Aimed to **reduce** non-motorized deaths and injuries
- **Achieved** safety target for non-motorized users

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**Maryland**

- Aimed to **reduce** non-motorized deaths and injuries
- **Exceeded** safety target for non-motorized users

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**Massachusetts**

- Aimed to **increase** non-motorized deaths and injuries
- **Achieved** “safety” target for non-motorized users

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**Notes:**

- Injury data not reported for 2017
Non-motorized deaths reported in the Fatality Analysis Reporting System (FARS)
Non-motorized serious injuries reported in the Highway Safety Improvement Program (HSIP)
Non-motorized serious injuries projected based on the share of fatalities in recent years
2018 HSIP target for non-motorized deaths and serious injuries combined

Legend

Note: Non-motorized users include people walking, biking, riding scooters, using wheelchairs, or using other non-motorized modes

Michigan
- Aimed to reduce non-motorized deaths and injuries
- Achieved safety target for non-motorized users

2018 HSIP Target: 744

Missouri
- Aimed to reduce non-motorized deaths and injuries
- Exceeded safety target for non-motorized users

2018 HSIP Target: 432

Minnesota
- Aimed to reduce non-motorized deaths and injuries
- Achieved safety target for non-motorized users

2018 HSIP Target: 348

Mississippi
- Aimed to reduce non-motorized deaths and injuries
- Exceeded safety target for non-motorized users

2018 HSIP Target: 120

Montana
- Aimed to reduce non-motorized deaths and injuries
- Exceeded safety target for non-motorized users

2018 HSIP Target: 73
Nebraska
- Aimed to increase non-motorized deaths and injuries
- Exceeded “safety” target for non-motorized users

Nevada
- Aimed to increase non-motorized deaths and injuries
- Exceeded “safety” target for non-motorized users

New Hampshire
- Aimed to reduce non-motorized deaths and injuries
- Exceeded safety target for non-motorized users

New Jersey
- Aimed to reduce non-motorized deaths and injuries
- Exceeded safety target for non-motorized users

New Mexico
- Aimed to increase non-motorized deaths and injuries
- Achieved “safety” target for non-motorized users

New York
- Aimed to increase non-motorized deaths and injuries
- Achieved “safety” target for non-motorized users

Note: Injury data not reported for 2017
North Carolina
- Aimed to reduce non-motorized deaths and injuries
- Exceeded safety target for non-motorized users

North Dakota
- Aimed to increase non-motorized deaths and injuries
- Achieved “safety” target for non-motorized users

Ohio
- Aimed to reduce non-motorized deaths and injuries
- Exceeded safety target for non-motorized users

Oklahoma
- Aimed to increase non-motorized deaths and injuries
- Achieved “safety” target for non-motorized users

Oregon
- Aimed to reduce non-motorized deaths and injuries
- Exceeded safety target for non-motorized users

Note: Injury data not reported for 2017

Non-motorized deaths reported in the Fatality Analysis Reporting System (FARS)
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2018 HSIP target for non-motorized deaths and serious injuries combined

Legend

Note: Non-motorized users include people walking, biking, riding scooters, using wheelchairs, or using other non-motorized modes

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2018 HSIP target for non-motorized deaths and serious injuries combined

Note: Non-motorized users include people walking, biking, riding scooters, using wheelchairs, or using other non-motorized modes
Pennsylvania
- Aimed to **reduce** non-motorized deaths and injuries
- **Exceeded** safety target for non-motorized users

Rhode Island
- Aimed to **increase** non-motorized deaths and injuries
- **Achieved** "safety" target for non-motorized users

South Carolina
- Aimed to **reduce** non-motorized deaths and injuries
- **Exceeded** safety target for non-motorized users

South Dakota
- Aimed to **increase** non-motorized deaths and injuries
- **Exceeded** "safety" target for non-motorized users

Tennessee
- Aimed to **reduce** non-motorized deaths and injuries
- **Exceeded** safety target for non-motorized users

Texas
- Aimed to **reduce** non-motorized deaths and injuries
- **Exceeded** safety target for non-motorized users
Non-motorized deaths reported in the Fatality Analysis Reporting System (FARS)
Non-motorized serious injuries reported in the Highway Safety Improvement Program (HSIP)
Non-motorized serious injuries projected based on the share of fatalities in recent years
2018 HSIP target for non-motorized deaths and serious injuries combined

Utah
- Aimed to increase non-motorized deaths and injuries
- Achieved “safety” target for non-motorized users

Vermont
- Aimed to reduce non-motorized deaths and injuries
- Achieved safety target for non-motorized users

Virginia
- Aimed to reduce non-motorized deaths and injuries
- Exceeded safety target for non-motorized users

Washington
- Aimed to reduce non-motorized deaths and injuries
- Exceeded safety target for non-motorized users

West Virginia
- Aimed to reduce non-motorized deaths and injuries
- Exceeded safety target for non-motorized users

Legend
Note: Non-motorized users include people walking, biking, riding scooters, using wheelchairs, or using other non-motorized modes
#### Wisconsin

- Cannot compare target to recent trends
- Cannot assess achievement of target

![Graph showing pedestrian fatalities in Wisconsin from 2014 to 2018]

**2018 HSIP Target: 343**

*Note: Injury data not reported for 2014-2017*

#### Wyoming

- Aimed to reduce non-motorized deaths and injuries
- Achieved safety target for non-motorized users

![Graph showing pedestrian fatalities in Wyoming from 2014 to 2018]

**2018 HSIP Target: 30**

#### Methodology

To calculate the Pedestrian Danger Index (PDI), Smart Growth America first determined the average annual pedestrian fatalities per 100,000 population using fatality data from the Fatality Analysis Reporting System (FARS) between 2009 and 2018 and population data from the American Community Survey’s (ACS) 2017 5-year estimates, which was the most recent year of data available at the time of this report. These data were then normalized by walking rate by dividing the average annual fatality rate by the percentage of the population in each state that walks to work, also from the ACS 2017 5-year estimates.

The 2018 Highway Safety Improvement Program (HSIP) targets were recorded in each state’s 2017 HSIP report. Injury data between 2014 and 2017 were similarly reported in each state’s 2018 HSIP report. To project the number of serious injuries among non-motorized users in 2018, Smart Growth America calculated the average share of fatalities as a percentage of all serious injuries between 2014 and 2017, excluding years where states failed to report injury data. The number of non-motorized serious injuries in each state was then extrapolated based on this percentage and 2018 fatality data from FARS.

Each state’s 2018 HSIP target was then compared to the projected number of deaths and serious injuries combined in 2018, as well as to the most recent year of complete data reported at the time the target was adopted in 2017.