2020

DANGEROUS BY DESIGN

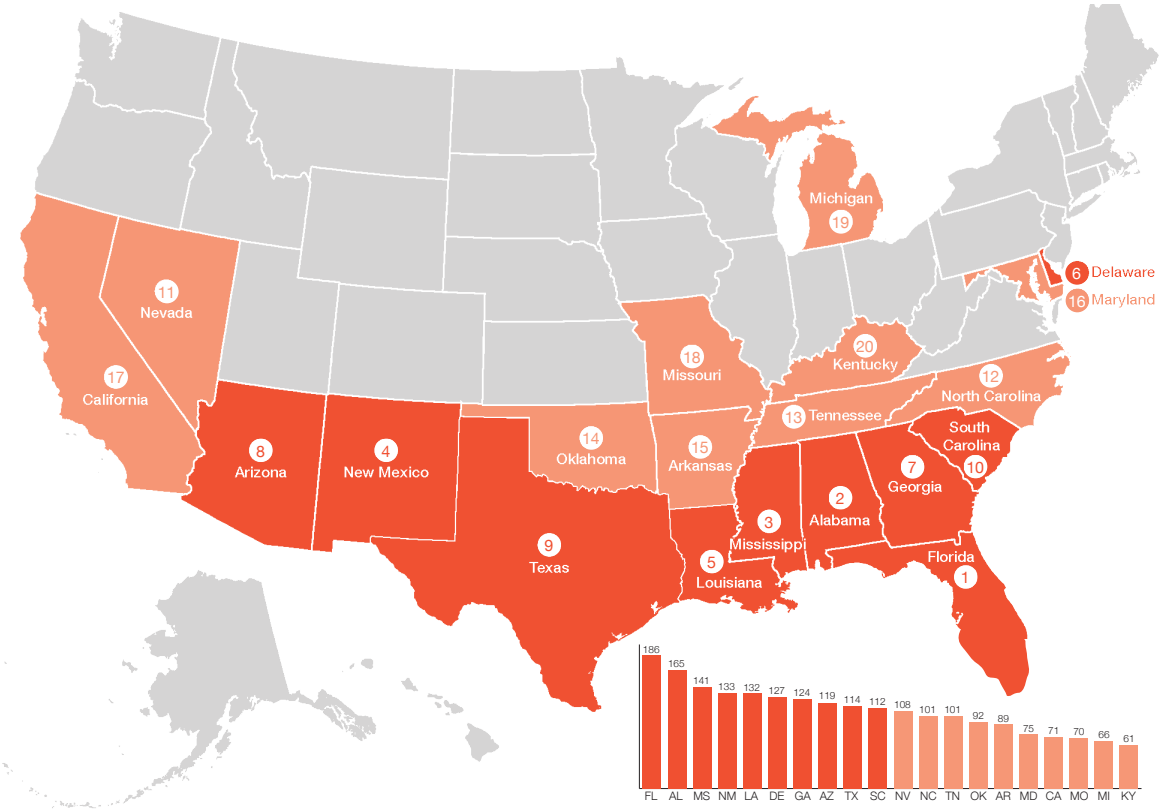
Traffic deaths for people walking, biking, and rolling continue to rise

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)



Smart Growth America
Improving lives by improving communities

National Complete Streets Coalition

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.

	States that set targets to **improve safety**	States that set targets to **increase deaths and serious injuries**
States that **achieved** their safety targets	**Delaware**, **Iowa**, **Kansas**, **Maine**, **Michigan**, **Minnesota**, **Vermont**, **Wyoming**	**Alabama**, **Massachusetts**, **New Mexico**, **New York**, **North Dakota**, **Oklahoma**, **Rhode Island**, **Utah**
States that **exceeded** their safety targets	**Alaska**, **Arizona**, **DC**, **Hawai'i**, **Idaho**, **Illinois**, **Kentucky**, **Louisiana**, **Maryland**, **Mississippi**, **Missouri**, **Montana**, **New Hampshire**, **New Jersey**, **North Carolina**, **Ohio**, **Oregon**, **Pennsylvania**, **South Carolina**, **Tennessee**, **Texas**, **Virginia**, **Washington**, **West Virginia**	**Arkansas**, **California**, **Colorado**, **Connecticut**, **Florida**, **Georgia**, **Indiana**, **Nebraska**, **Nevada**, **South Dakota**

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.

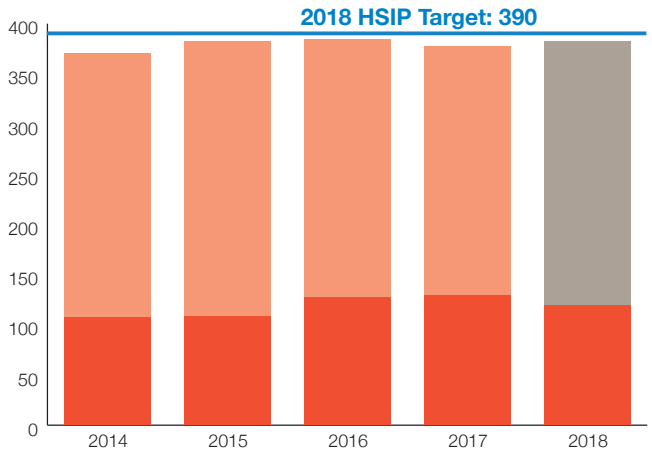
Legend

- 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

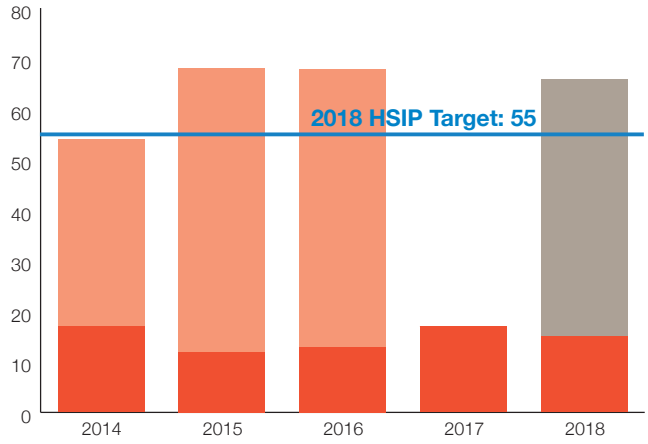
Alabama

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



Alaska

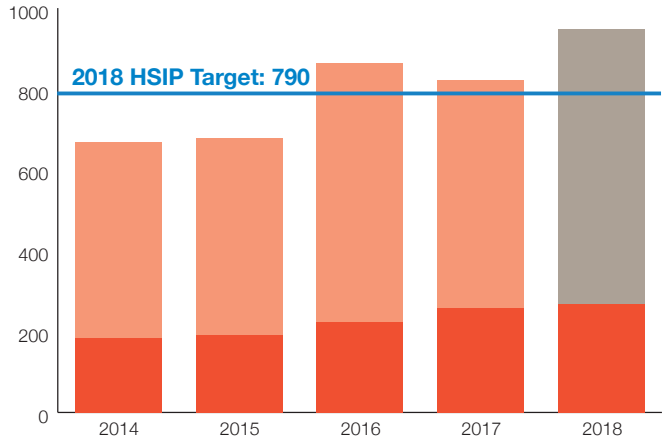
☑ Aimed to **reduce** non-motorized deaths and injuries
☒ **Exceeded** safety target for non-motorized users



Note: Injury data not reported for 2017

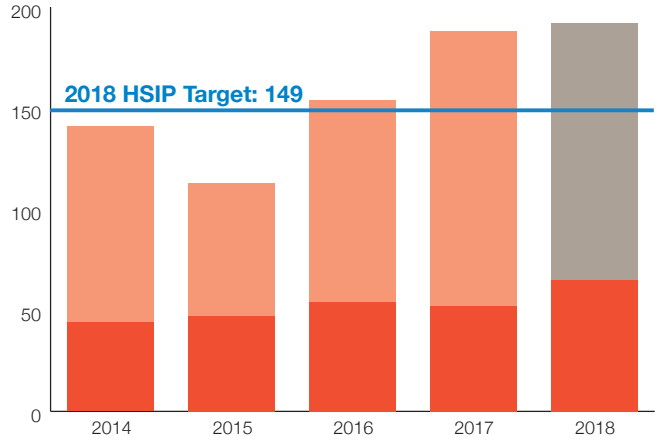
Arizona

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



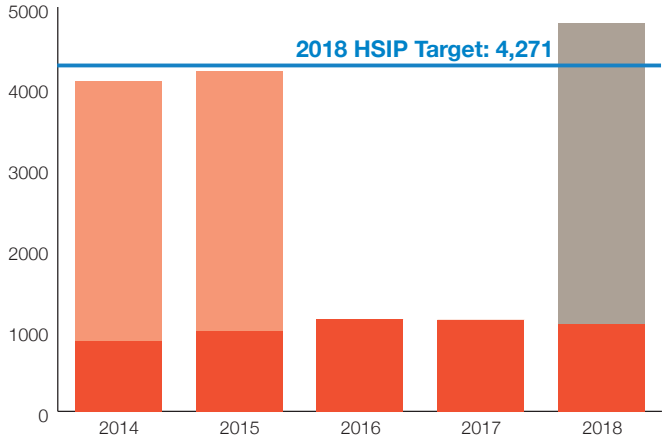
Arkansas

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



California

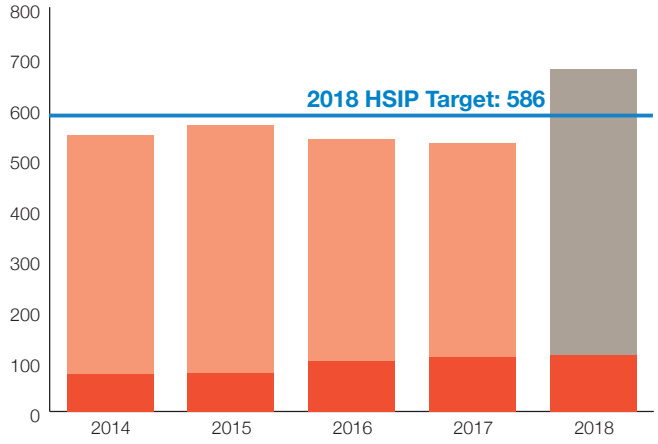
☒ Aimed to **increase** non-motorized deaths and injuries
☒ **Exceeded** "safety" target for non-motorized users



Note: Injury data not reported for 2016-2017

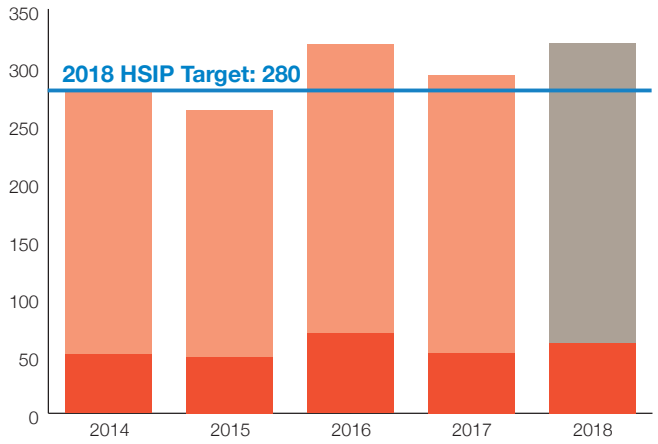
Colorado

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



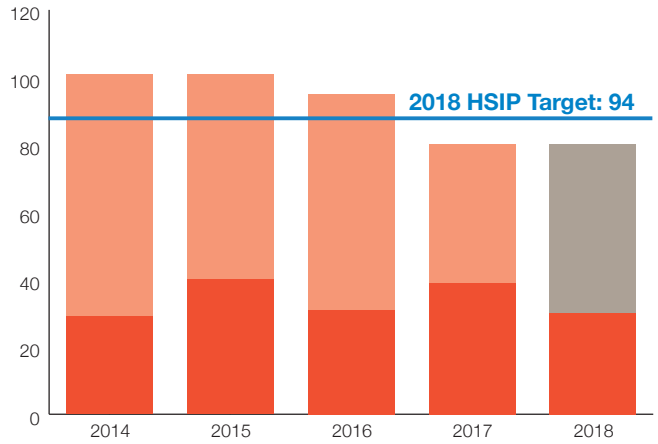
Connecticut

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



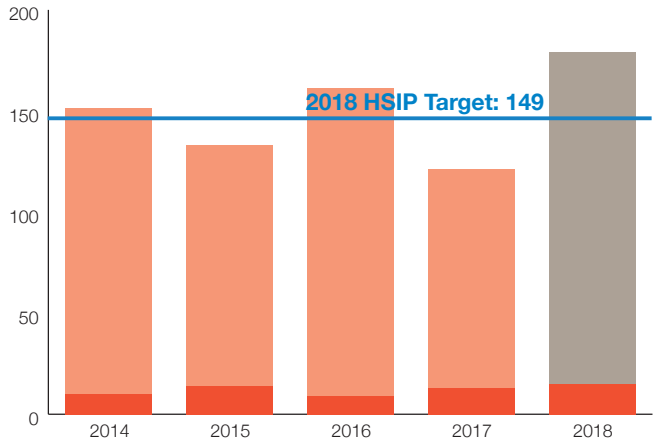
Delaware

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



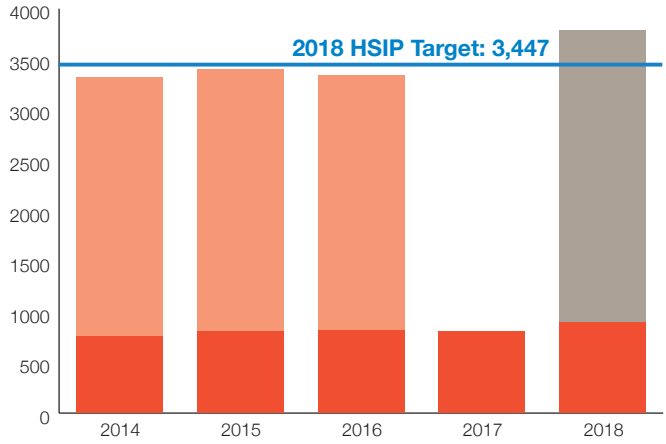
District of Columbia

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



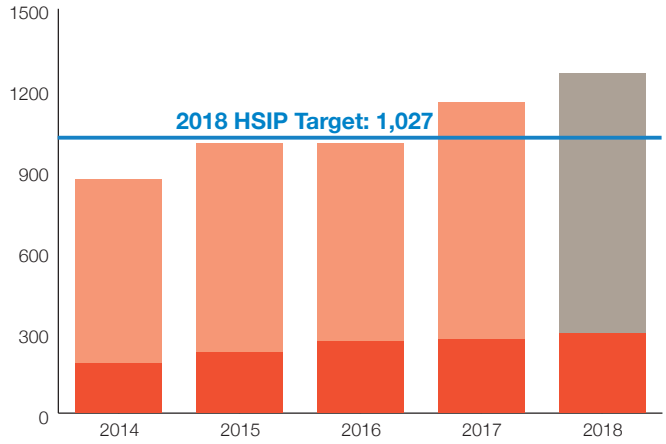
Florida

☒ 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

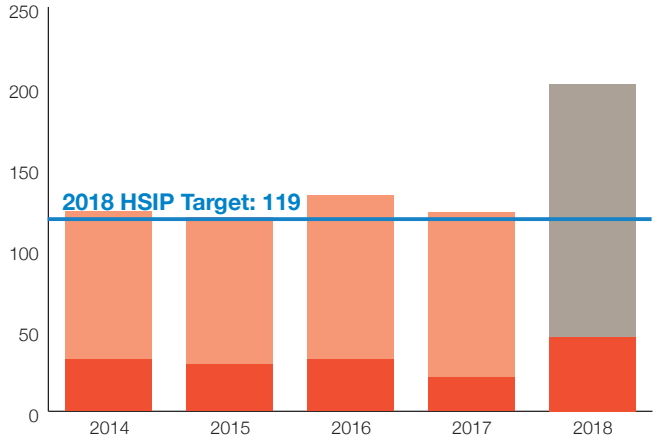
Legend

- 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

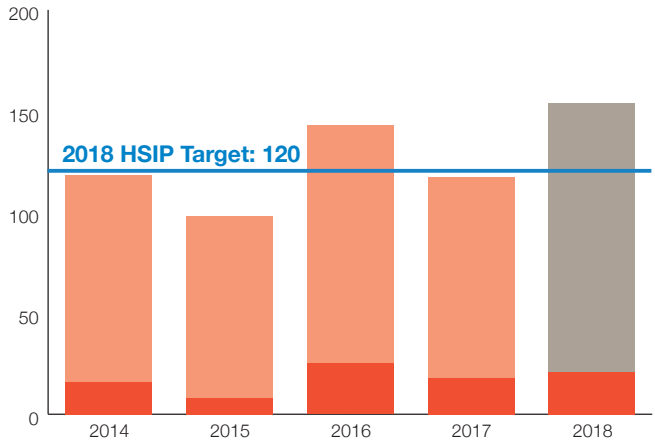
Hawai'i

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



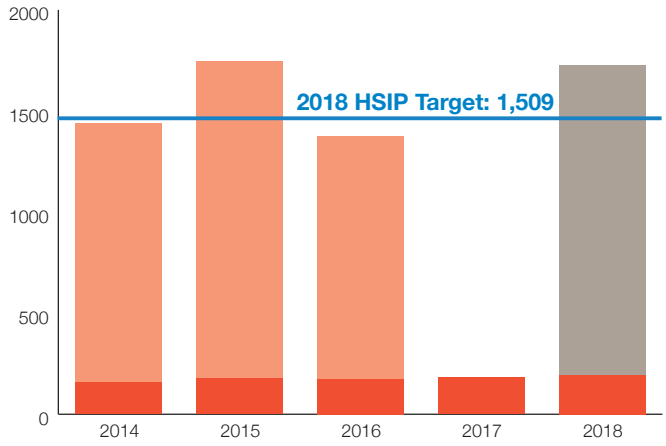
Idaho

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



Illinois

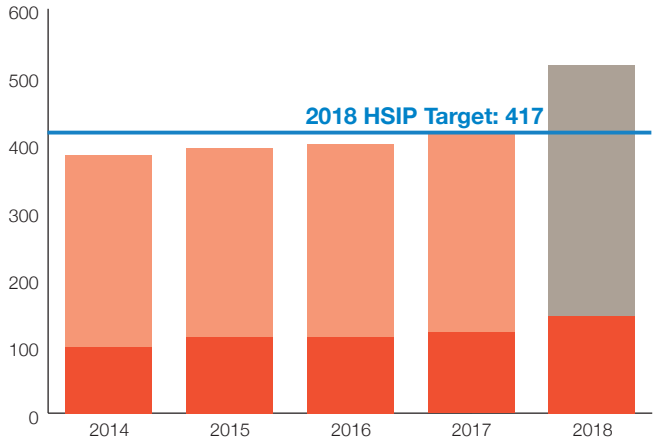
☑ Aimed to **reduce** non-motorized deaths and injuries
☒ **Exceeded** safety target for non-motorized users



Note: Injury data not reported for 2017

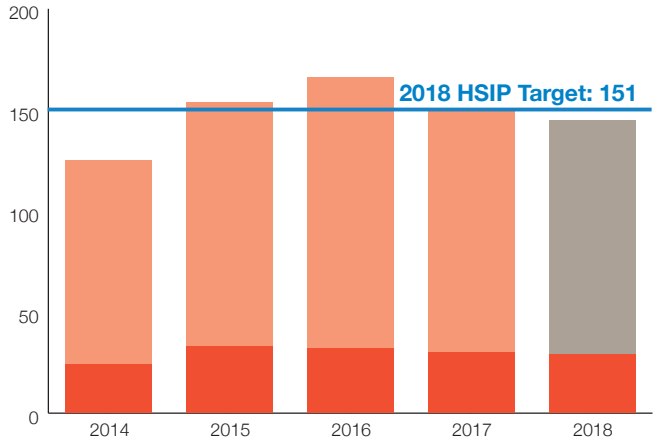
Indiana

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



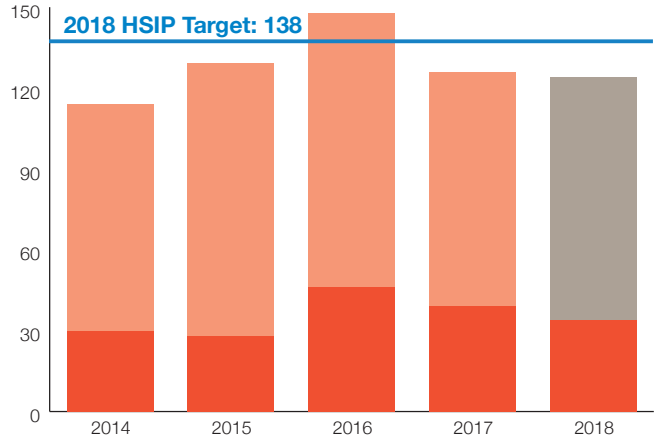
Iowa

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



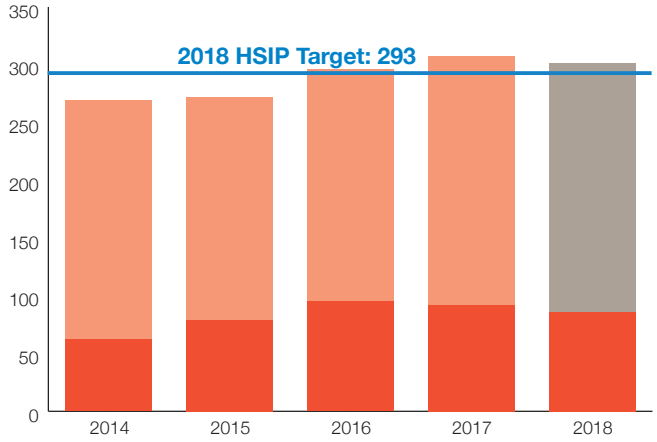
Kansas

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



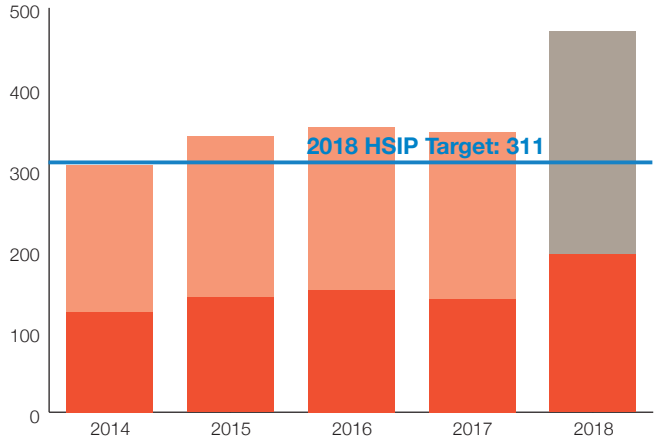
Kentucky

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



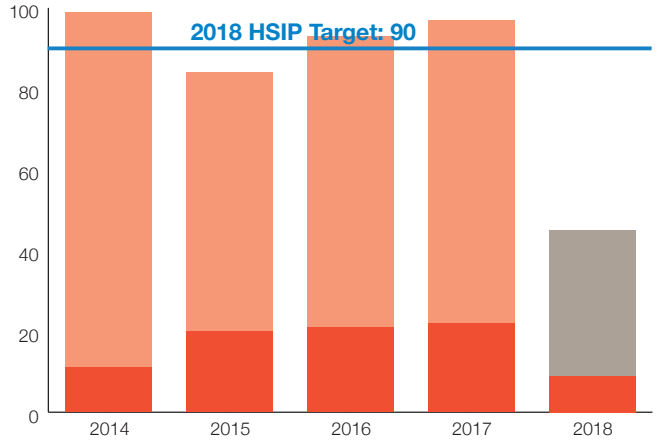
Louisiana

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



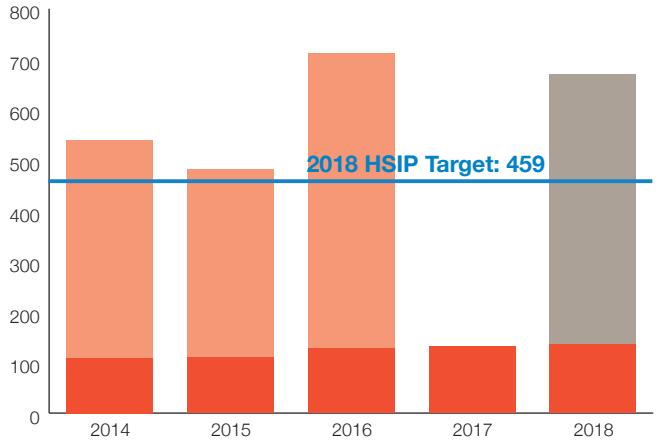
Maine

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



Maryland

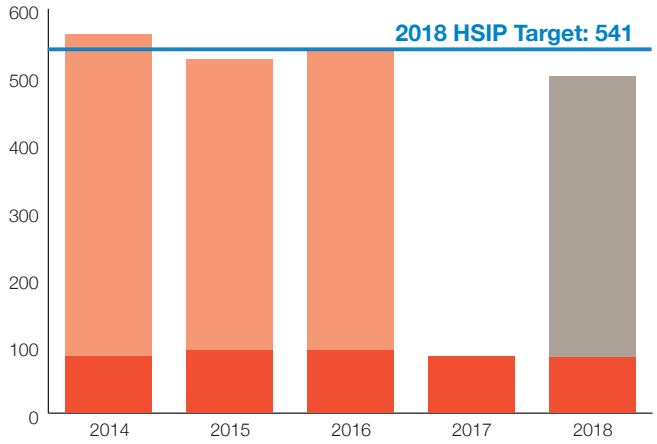
☑ Aimed to **reduce** non-motorized deaths and injuries
☒ **Exceeded** safety target for non-motorized users



Note: Injury data not reported for 2017

Massachusetts

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



Note: Injury data not reported for 2017

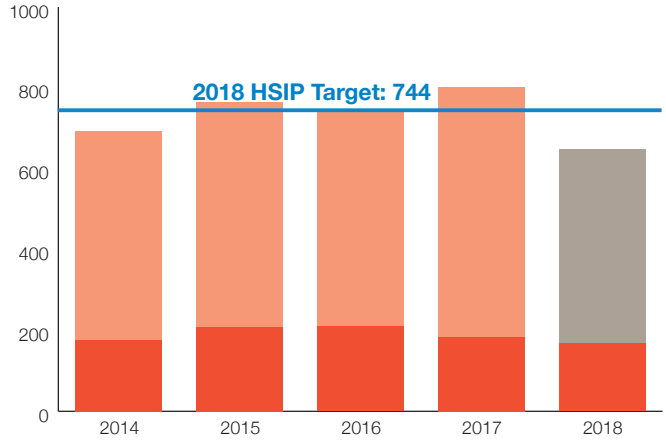
Legend

- 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

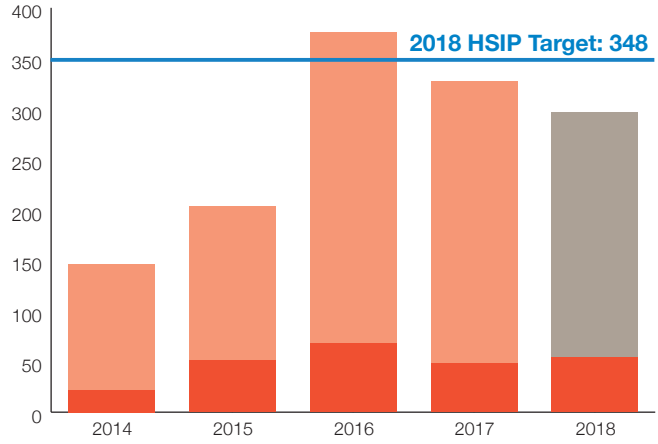
Michigan

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



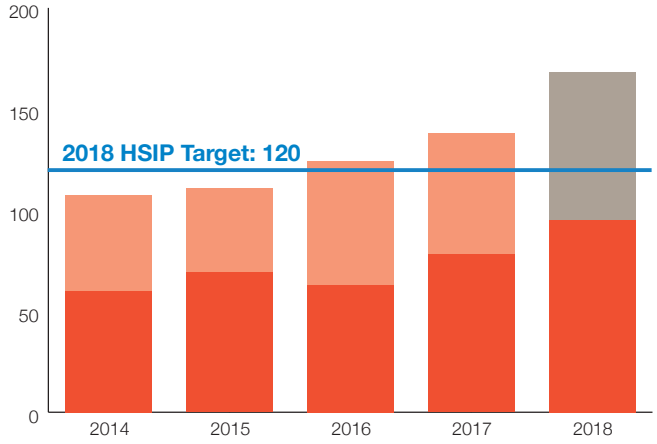
Minnesota

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



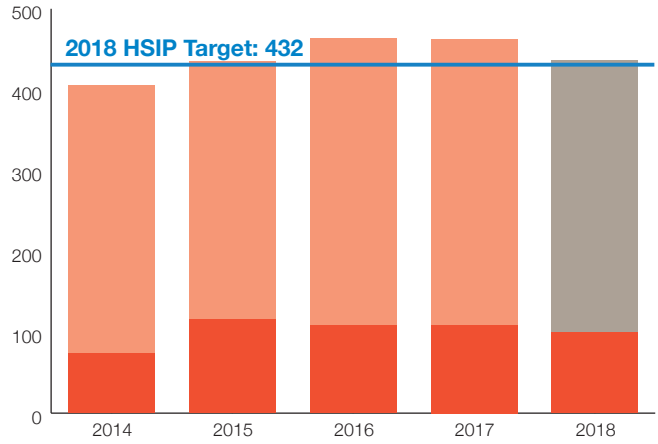
Mississippi

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



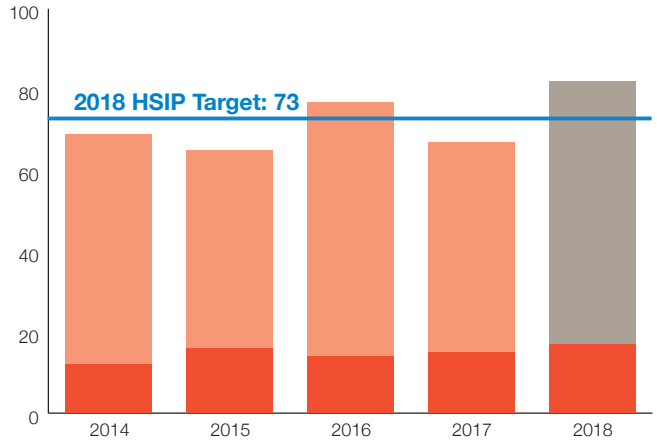
Missouri

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



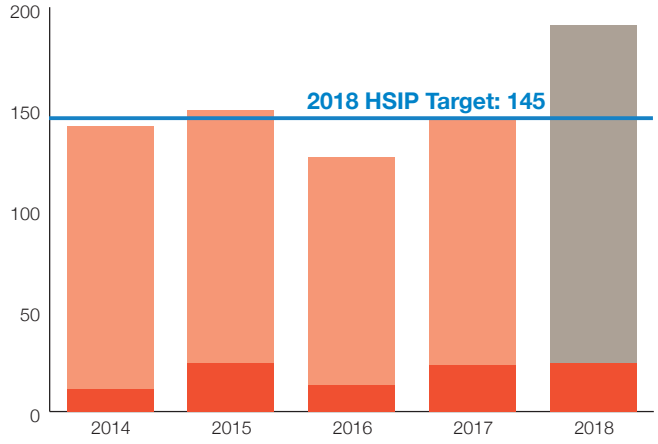
Montana

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



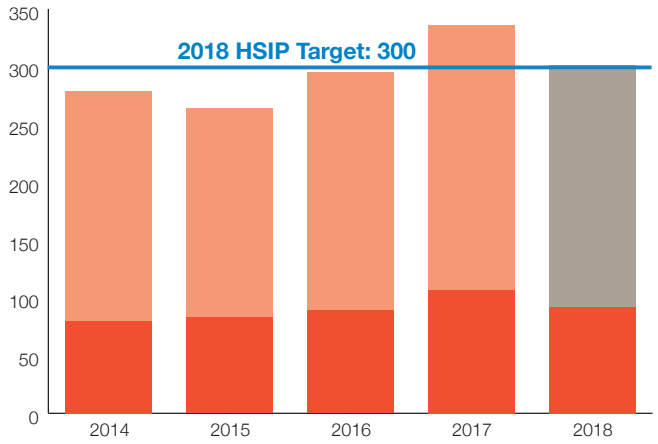
Nebraska

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



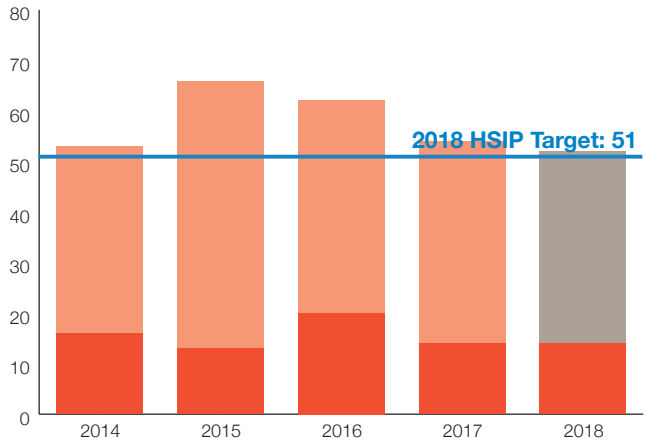
Nevada

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



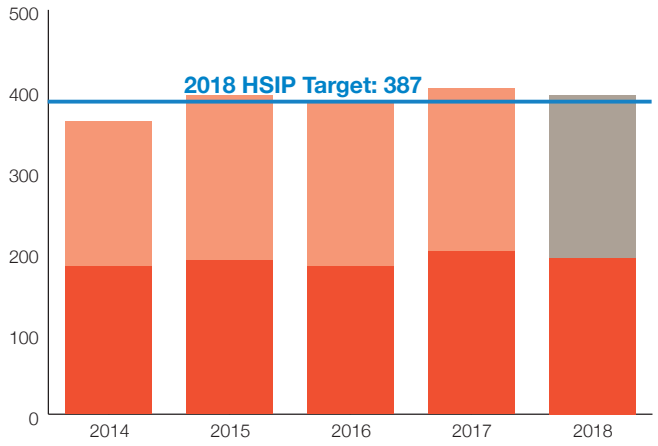
New Hampshire

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



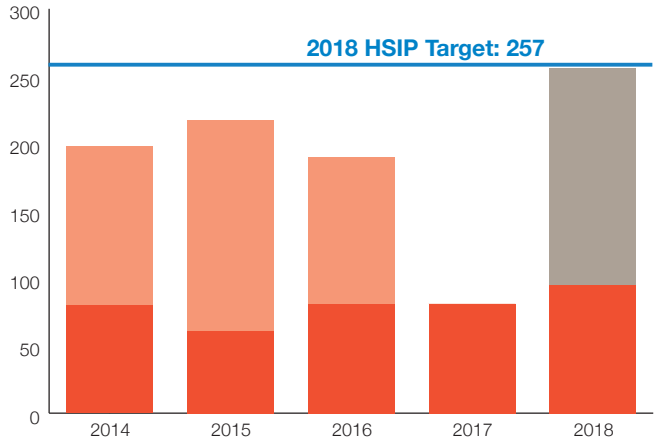
New Jersey

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



New Mexico

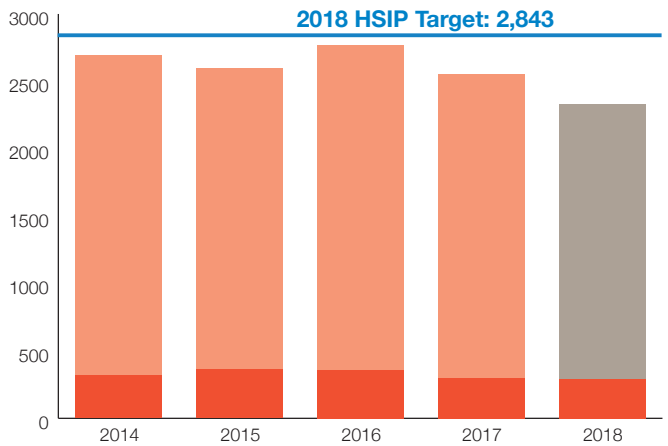
☒ Aimed to **increase** non-motorized deaths and injuries
☑ **Achieved** "safety" target for non-motorized users



Note: Injury data not reported for 2017

New York

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



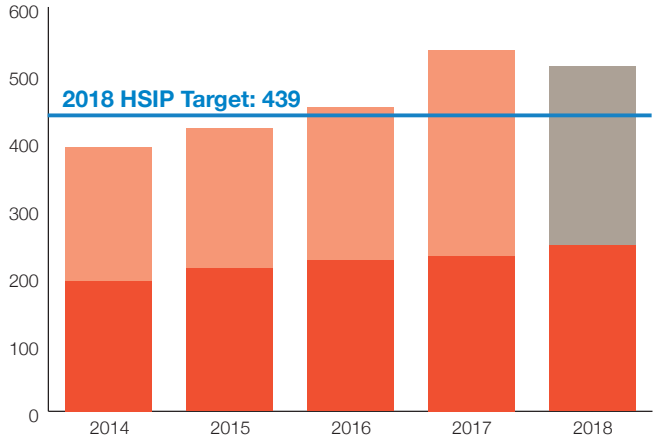
Legend

- 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

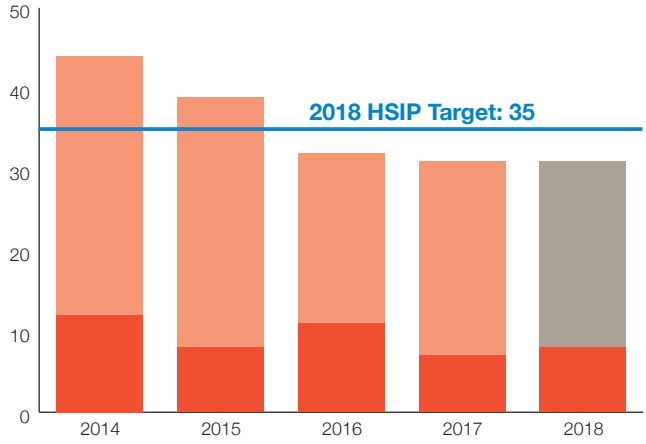
North Carolina

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



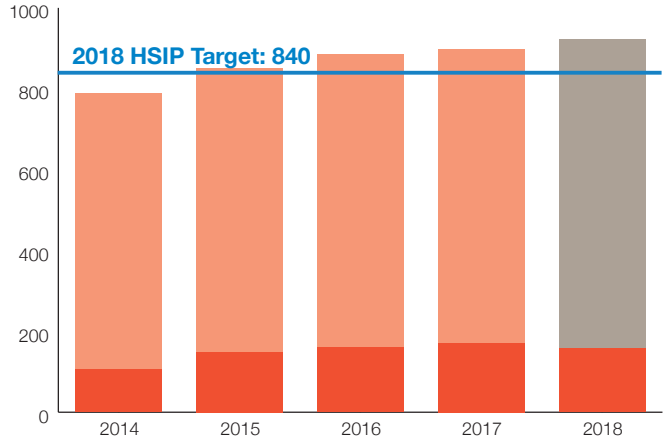
North Dakota

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



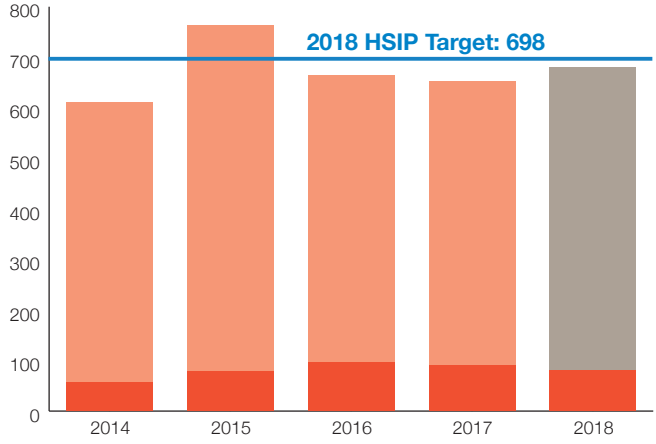
Ohio

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



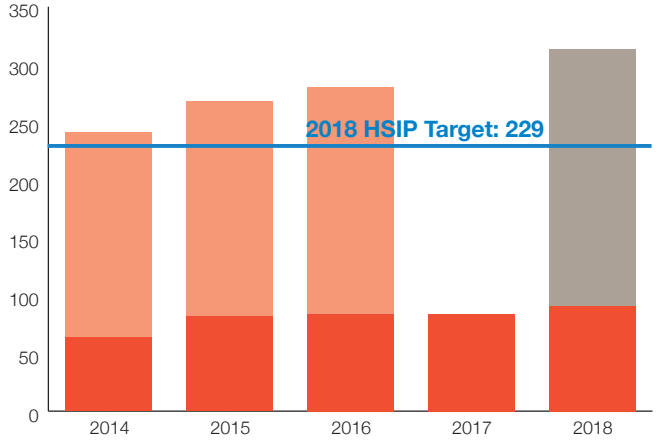
Oklahoma

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



Oregon

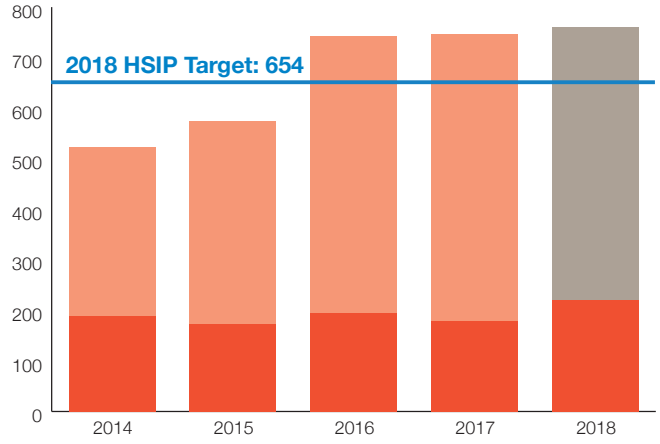
☑ Aimed to **reduce** non-motorized deaths and injuries
☒ **Exceeded** safety target for non-motorized users



Note: Injury data not reported for 2017

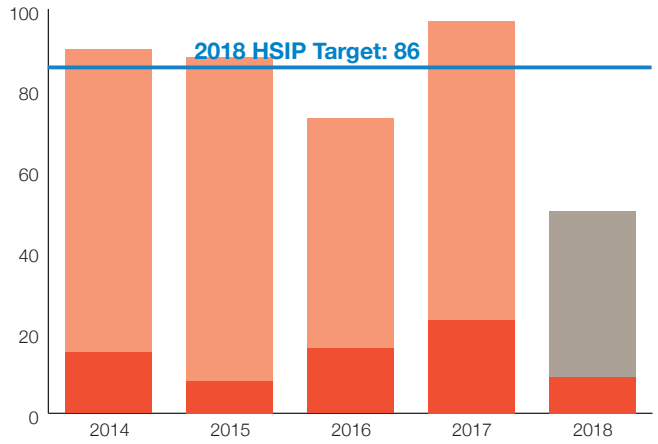
Pennsylvania

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



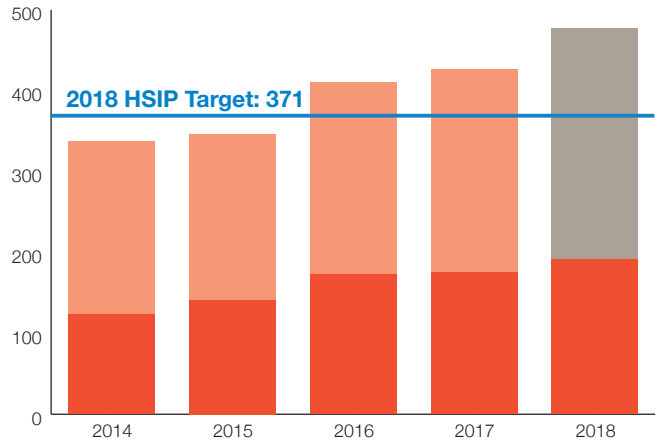
Rhode Island

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



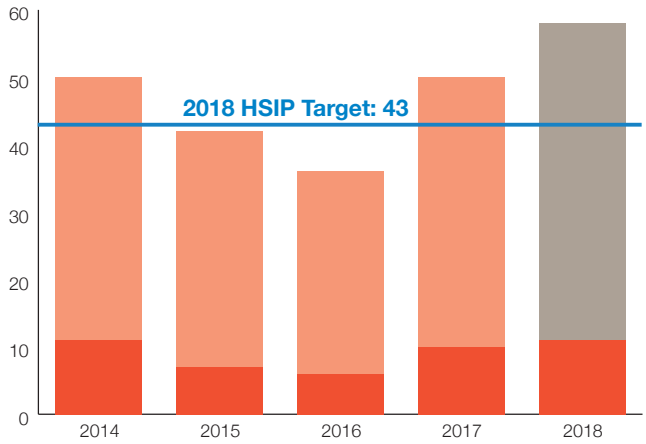
South Carolina

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



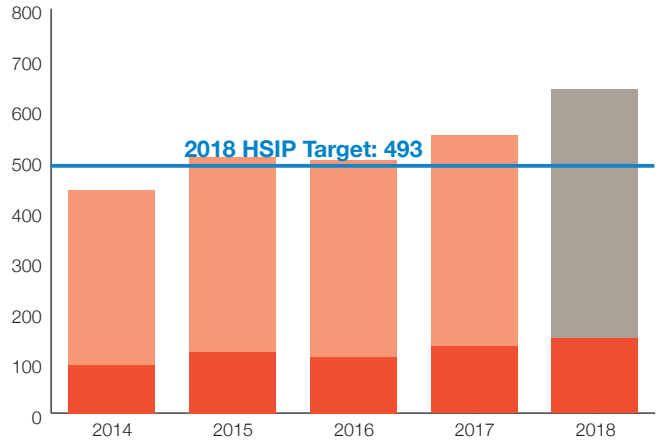
South Dakota

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



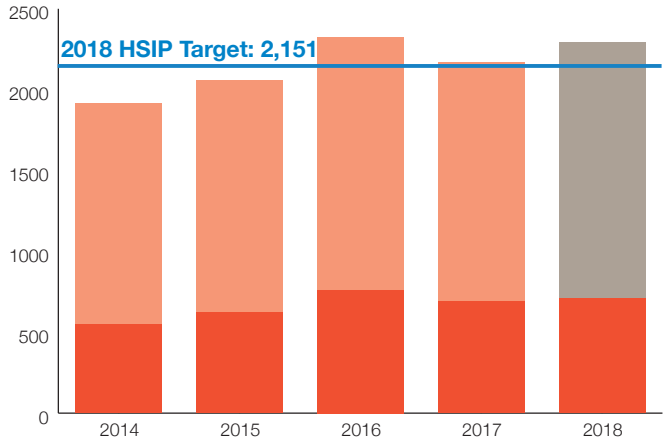
Tennessee

☑ 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



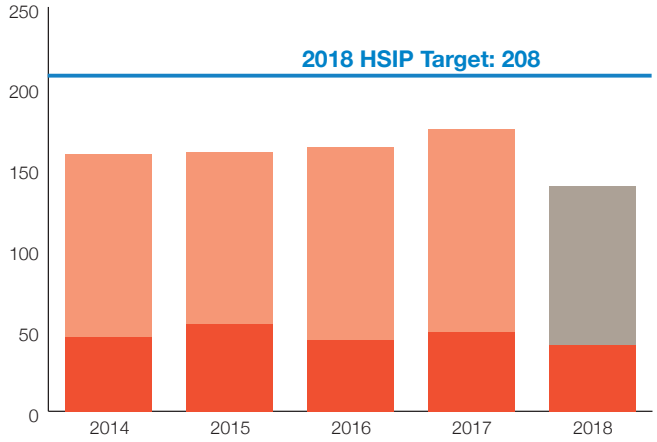
Legend

- 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

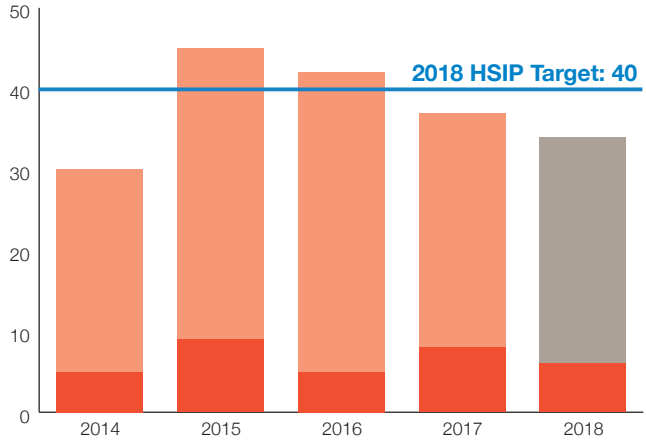
Utah

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



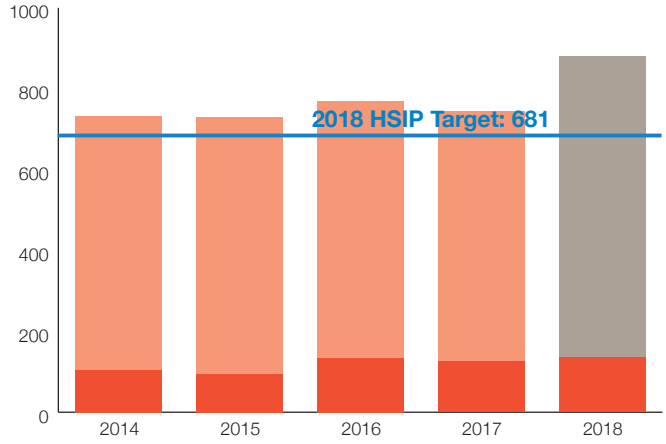
Vermont

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



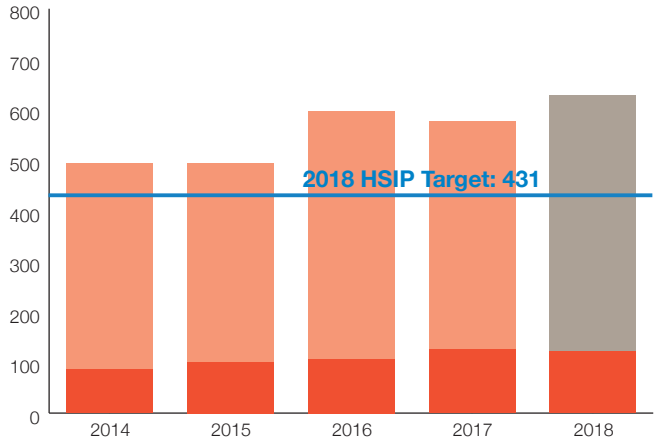
Virginia

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



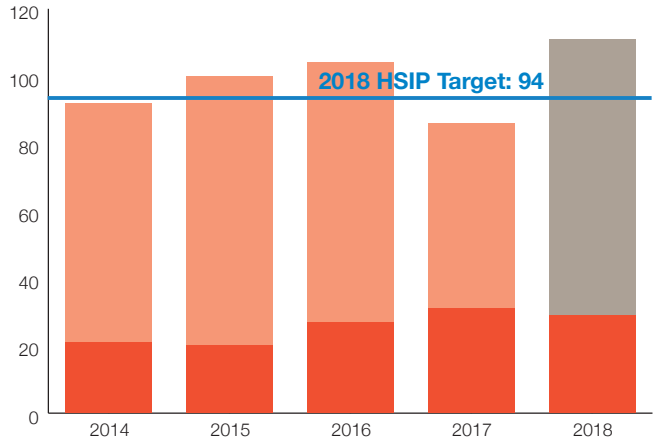
Washington

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



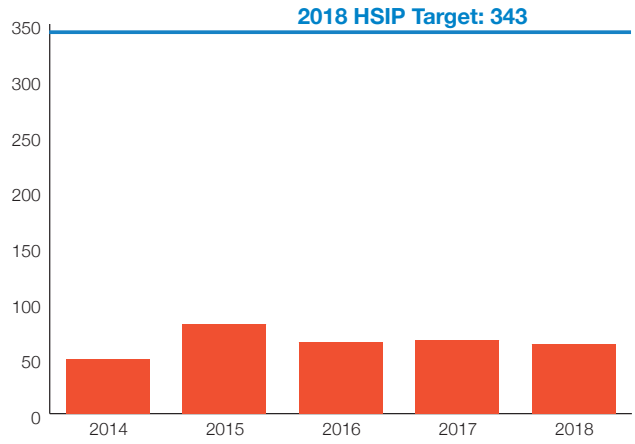
West Virginia

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



Wisconsin

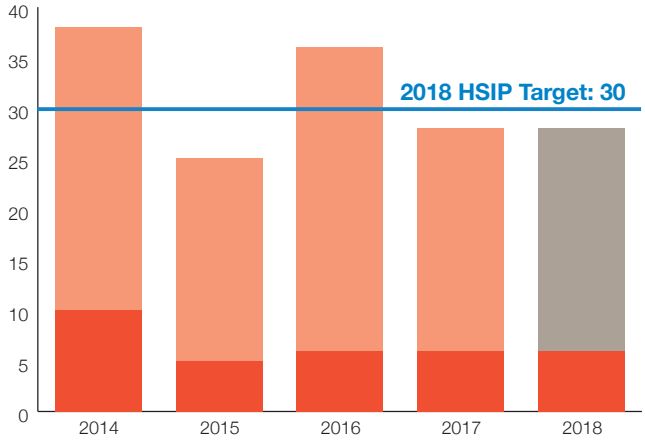
☐ Cannot compare target to recent trends
☐ Cannot assess achievement of target



Note: Injury data not reported for 2014-2017

Wyoming

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



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.