

Using HSIP to Improve Vulnerable Road User Safety

Helping Keep Pedestrians and Bicyclists Safe

Serious injuries and fatalities among pedestrians and bicyclists have increased in recent years. According to the most recent National Highway Traffic Safety Administration report, 7,388 pedestrians and 966 bicyclists were killed in traffic crashes in 2021.¹

Pedestrians and bicyclists are just two types of vulnerable road users (VRUs)—people who are more susceptible to impact forces because they lack the protection of a vehicle. HSIP can help support a Safe System and keep all road users safe by funding improvements that enhance safety, visibility, and accessibility for people traveling by foot, bicycle, scooter, skateboard, or mobility aid on all public roadways.

In 2022, States obligated more than \$208 million of HSIP funds for projects specifically aimed to improve VRU safety.

HSIP in 2022—Vulnerable Road Users



Nearly 10% of all HSIP-funded projects were for bicycle and pedestrian safety improvements.



Nearly 450 HSIP-funded projects focused explicitly on either bicycle or pedestrian safety.

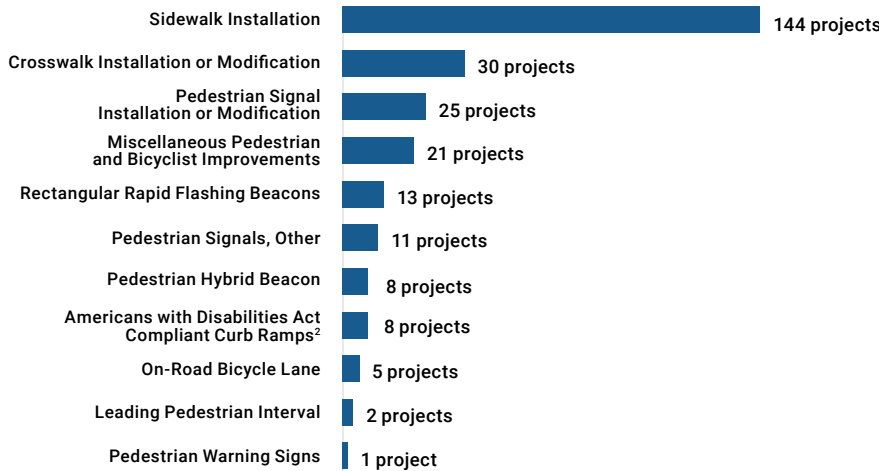


With 198 projects, Florida had the highest number of bicycle- or pedestrian-focused projects.



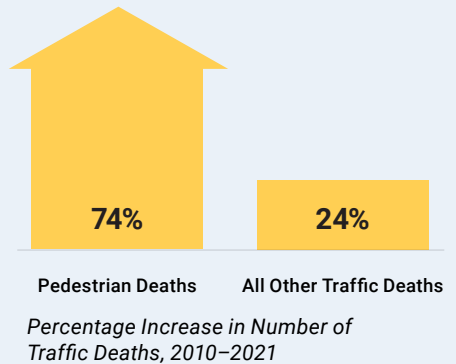
34 States used HSIP funds for VRU-focused projects.

What Project Types Helped Vulnerable Road Users?



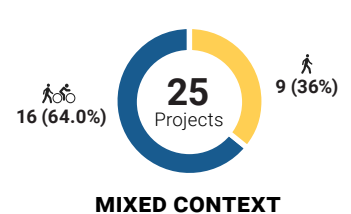
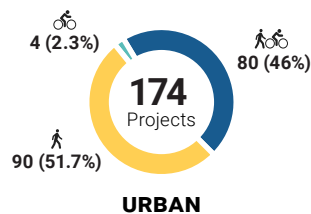
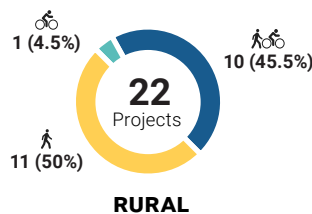
Pedestrian Deaths Are Increasing Faster than All Other Traffic Fatalities

FHWA is committed to addressing the increase in pedestrian fatalities on America's roads.



Where Were Bicycle or Pedestrian Projects Located?*

Pedestrian
 Bicycle
 Shared-Use



*Includes only projects with reported classifications.

This information comes from 2022 State HSIP reports. For individual reports, visit <https://highways.dot.gov/safety/hsip/reporting>.

1 National Highway Traffic Safety Administration, Quick Facts 2021, report no. DOT HS 813 454 (July 2023, revised), <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813454>.
 2 Americans with Disabilities Act of 1990, Pub. L. No. 101-336, 104 Stat. 327 (1990).

Building a Safe System with VRU Safety Assessments



Each State must develop a VRU safety assessment as part of its SHSP and HSIP.³ These safety assessments use data to identify high-risk areas with higher crash risk for VRUs.⁴ To find these areas, analysts compile crash data (e.g., roadway functional classification, design speed, speed limit, crash type, and time of day) and crash location data (e.g., neighborhood demographics on race, ethnicity, income, and age).⁵ VRU safety assessments reveal where and what kind of crashes happen, helping States prioritize projects and strategies that improve pedestrian and bicyclist safety and consider the Safe System Approach.

To read more about VRU safety assessments and the HSIP, check out https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-10/VRU%20Safety%20Assessment%20Guidance%20FINAL_508.pdf.

HSIP funds can be used as a credit toward the non-Federal share of Transportation Alternatives (TA) projects.⁶ The TA program supports a variety of smaller-scale transportation projects, such as pedestrian and bicycle facilities, recreational trails, and Safe Routes to School projects.

For more on the TA program, visit <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/ta.cfm>.

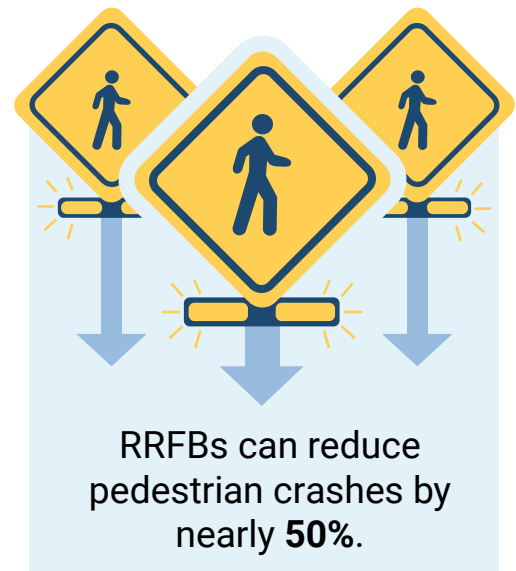
Speed is a major factor in fatal and serious injury pedestrian crashes. A pedestrian is five times more likely to die if struck by a vehicle going 42 miles per hour than if struck by a vehicle moving at 23 miles per hour.⁷

HSIP in Action

Pedestrian Crosswalk Improvements in the City of Bellevue, Washington

As part of its Local Road Safety Plan, the City of Bellevue analyzed citywide crash data and risk factors in 2020 to identify areas in need of systemic safety improvements. This analysis revealed that 145th Avenue—a corridor with high pedestrian activity, two elementary schools, frequent transit services, but few signalized crossing opportunities—had factors that can contribute to higher crash rates. The corridor also had a fatal pedestrian crash in 2019.

To prevent fatal and severe injury crashes, the city used HSIP funds to install rectangular rapid flashing beacons (RRFBs) at three crosswalks along the corridor. These beacons help make drivers more aware of crossing pedestrians and increase the visibility of crosswalk locations along the roadway. RRFBs are an FHWA Proven Safety Countermeasure and can reduce pedestrian crashes by nearly 50%.



3 23 U.S.C. 148(a)(13)(G) and 23 U.S.C. 148(I).

4 23 U.S.C. 148(I)(2).

5 Memorandum, "ACTION: Vulnerable Road User Safety Assessment Guidance (Due date: November 15, 2023)," (Washington: Federal Highway Administration, October 21, 2022), https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-10/VRU%20Safety%20Assessment%20Guidance%20FINAL_508.pdf.

6 Federal Highway Administration, "Bipartisan Infrastructure Law Fact Sheets: Transportation Alternatives (TA)", <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/ta.cfm> and 23 U.S.C. 133(h)(7).

7 U.S. Department of Transportation, "Safer Speeds" (October 2023), <https://www.transportation.gov/NRSS/SaferSpeeds>.

To find out how HSIP can help save lives in your community, contact your State DOT: <https://www.fhwa.dot.gov/about/webstate.cfm>



U.S. Department of Transportation
Federal Highway Administration



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