#### THE HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) 2022

# **Enhancing Nighttime Safety for All Roadway Users**

# **Funding Nighttime Visibility Improvements**

Although fewer vehicles are on the roads at night, 23,050 people died in nighttime crashes (occurring between 6 p.m. and 5:59 a.m.) in 2021, according to the most recent National Highway Traffic Safety Administration (NHTSA) data.¹ That's more than half of traffic fatalities that year.² A prior NHTSA study found that a higher proportion of nighttime fatalities are speeding related.³ Insufficient lighting and visibility also contribute to nighttime crashes.

Improving lighting and visibility for nighttime road users—while minimizing environmental impacts and light pollution—helps make travel safer for everyone, but particularly vulnerable road users like pedestrians and bicyclists. For example, well-designed lighting can help reduce nighttime crashes at rural and urban intersections. Sufficient intersection lighting and enhanced crosswalk visibility can help reduce pedestrian crashes and fatalities. Addressing nighttime visibility also helps create a more equitable transportation network because pedestrians of color experience higher rates of fatal crashes in dark conditions.<sup>2</sup> The HSIP can help fund lighting or other visibility improvements that create redundant layers of nighttime protections for all road users traveling on all public roadways.

In 2022, States obligated more than \$119 million in HSIP funds for nighttime safety projects.

## HSIP in 2022—What Facility Types Were Nighttime Safety Implemented On?



HSIP funded 481 lighting or nighttime visibility projects, for a total cost of \$119 million.



More than 10% of all HSIP projects were lighting related.

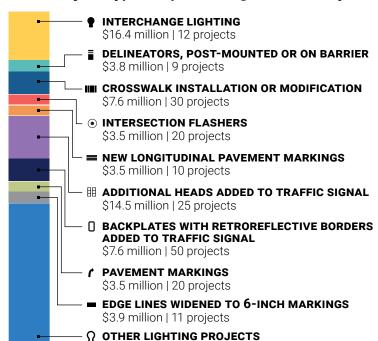


HSIP lighting projects illuminated 2,483 miles of roadway—that's the distance from Atlanta, Georgia, to Seattle, Washington!



With 240 projects, Florida had the highest number of lighting projects.

#### **What Project Types Improved Nighttime Safety?**



\$53.9 million | 294 projects

#### Nighttime Projects by Facility Type\*

<b>LOCAL ROAD</b>	MINOR COLLECTOR
\$1.2 million total	\$480,000 total
MAJOR COLLECTOR	MINOR ARTERIAL
\$350,000 total	\$7.3 million total
PRINCIPAL ARTERIAL, INTERSTATE \$16.71 million total	PRINCIPAL ARTERIAL, FREEWAYS AND EXPRESSWAYS \$3.9 million total

#### PRINCIPAL ARTERIAL, OTHER

\$30.3 million total

This information comes from 2022 State HSIP reports. For individual reports, visit  $\frac{https://highways.dot.gov/safety/hsip/reporting}{https://highways.dot.gov/safety/hsip/reporting}.$ 

<sup>\*</sup>Includes only projects with reported facility type.

<sup>1</sup> NHTSA, Overview of Motor Vehicle Traffic Crashes in 2021, report no. DOT HS 813 435 (April 2023), https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813435.

<sup>2</sup> Federal Highway Administration, Lighting for Pedestrian Safety (2022), report no. FHWA-SA-22-062, https://safety.fhwa.dot.gov/roadway\_dept/night\_visib/docs/Lighting\_for\_Pedestrian\_Safety\_2pager.pdf.

<sup>3</sup> NHTSA, Passenger Vehicle Occupant Fatalities by Day and Night – A Contrast, report no. DOT HS 810 637 (May 2007), https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/810637.

## **Helping Make Every Day Count**



The Federal Highway Administration's Every Day Counts (EDC) program is dedicated to integrating and rapidly deploying innovative technologies for ongoing or planned roadway projects. While the primary goal of EDC is to modernize America's roads, it also plays a role in many HSIP projects. The HSIP requires that States study their existing transportation networks for safety issues, and EDC encourages States to apply market-ready, innovative equipment and technologies that can make travel safer for all roadway users.<sup>4</sup> Some of these innovations are safety improvements that are eligible for HSIP funds.

EDC 7 promotes nighttime visibility for safety, especially near high-activity locations such as schools, parks, transit stops, sports complexes, and entertainment venues. EDC 7 encourages implementing lighting and visibility improvements, such as light-emitting diode luminaries, rectangular rapid flashing beacons, and horizontal curve delineation, all of which may be eligible for HSIP funds.

To learn more about the EDC 7 initiative, visit <a href="https://www.fhwa.dot.gov/innovation/everydaycounts/edc\_7/">https://www.fhwa.dot.gov/innovation/everydaycounts/edc\_7/</a>.

### **HSIP** in Action

# Shining a Light on Nighttime Roadway Safety with the Florida Department of Transportation (FDOT)

One corridor along SR 30 near Pensacola Bay produced 14 bicyclist and pedestrian fatalities in 6 years. In response, FDOT used HSIP funds to increase the number of lights present at crosswalks. It also replaced sodium lighting for LED lighting, which more effectively amplifies a wider range of colors. Along Busch Boulevard near Tampa Bay, preliminary data suggests that changing light types may have reduced nighttime injuries and fatalities by more than 5%. District 7 improved lighting at over 400 locations, and one study of 60 of these locations showed an average nighttime crash reduction of 40%. Fatalities along this stretch of SR 30 near Pensacola Bay have been reduced by 71% in 6 years.<sup>5</sup>



- 4 23 U.S.C. 148(c)(2) and FHWA, Every Day Counts: Innovation for a Nation on the Move (2021), https://www.fhwa.dot.gov/innovation/everydaycounts/everydaycounts\_overview.pdf.
- 5 Federal Highway Administration, "Lighting A Florida Case Study on a Proven Safety Countermeasure" (December 2021), https://www.youtube.com/watch?v=E0A6Ha5eQmo.

To find out how HSIP can help save lives in your community, contact your State DOT:

https://www.fhwa.dot.gov/about/webstate.cfm





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