

HSIP SPURS INNOVATION

HSIP FUNDS INNOVATIVE SAFETY PROJECTS

The future of transportation is already here, and States are using HSIP funds to improve traditional countermeasures with cutting-edge, connected technologies. In 2023, 25 States reported that their HSIP programs incorporated projects with intelligent transportation system (ITS) and connected vehicle elements.

Innovative approaches—whether new technology, more advanced data collection methods, or creative ways to deliver projects—play a crucial role in advancing transportation safety by getting timely and accurate data to transportation agencies and stakeholders who use this information to identify areas of concern and implement countermeasures. HSIP supports these efforts by funding advanced technology and ITS projects, such as systems for adaptive signal control, dynamic message signs, intersection conflict warning systems, and wrong-way driving detection.

In addition to using HSIP to fund innovative projects, States have found innovative ways to deliver HSIP projects. Rethinking project tracking and delivery methods can help States remove barriers to funding access and expand HSIP's impact on highway safety. Strategies States have used include design-build contracting, force accounts, and innovative approaches to material procurement. For more on innovative project delivery, check out <https://highways.dot.gov/safety/hsip/hsip-noteworthy-practices>.

THINKING AHEAD

States across the United States are considering new and innovative ways to implement connected vehicle (CV), automated vehicle (AV), and ITS technologies. HSIP supports the National Roadway Safety Strategy's safer road objective of advancing technology use and deployment, such as Vehicle-to-Everything (V2X), to further roadway safety. For more information on V2X, visit https://www.its.dot.gov/research_areas/emerging_tech/htm/ITS_V2X_CommunicationSummit.htm.



The Pennsylvania Department of Transportation developed an AV Incident Response Plan Field Guide, an app that improves how emergency responders handle automated vehicle crashes.



With the Florida Department of Transportation's SunGuide® Software System, operators can manage incidents, get vehicle detection data, view roadside camera video, and alert motorists via dynamic message signs and highway advisory radio or the Florida 511 advanced traveler information system.¹



To reduce crashes and improve visibility for AV sensors, the Michigan Department of Transportation has been widening edge lines to 6 inches on all roadways and extending dotted lines on entrance and exit ramps.²

This information comes from 2023 State HSIP reports. For individual reports, visit <https://highways.dot.gov/safety/hsip/reporting>.

1 FDOT, "SunGuide Software," <https://www.fdot.gov/traffic/its/projects-arch/sunguide.shtm>.

2 FHWA, "Proven Safety Countermeasures: Wider Edge Lines," FHWA-SA-21-055. https://highways.dot.gov/sites/fhwa.dot.gov/files/Wider%20Edge%20Lines_508_0.pdf.

HSIP FUNDED

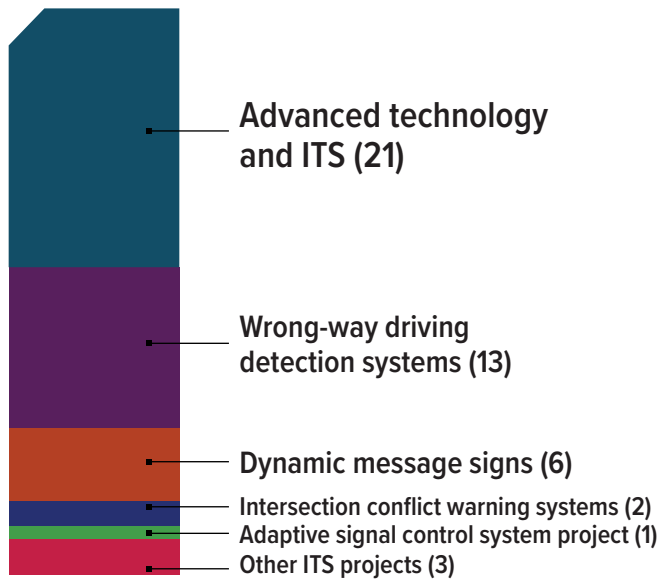
46 ADVANCED TECHNOLOGY AND ITS PROJECTS WITH A TOTAL COST OF **\$36.4 MILLION**



ILLINOIS SPENT MORE THAN **\$13 MILLION**

ON ADVANCED TECHNOLOGY AND ITS PROJECTS, including projects focused on work zone technologies and technology to assist older drivers. **THAT'S THE MOST OF ANY STATE!**

INNOVATIVE TECHNOLOGY PROJECTS BY TYPE



INNOVATIVE INTERSECTION PROJECTS

Innovative intersections incorporate design elements and signal technology to redirect movements and reduce conflicts, which improves safety, efficiency, and mobility for all users. Common innovative intersection types funded through HSIP include roundabouts, median U-turn intersections (MUT), restricted crossing U-turn intersections (RCUT), and quadrant roadway intersections. For more on innovative intersections, visit <https://highways.dot.gov/safety/intersection-safety>.

HSIP FUNDED

36 INNOVATIVE INTERSECTION PROJECTS WITH A TOTAL HSIP COST OF **\$33.9 MILLION**



INNOVATIVE INTERSECTION PROJECTS HAD AN AVERAGE PROJECT COST OF **\$1.3 MILLION**

HSIP IN ACTION

TEXAS WRONG-WAY DRIVING PREVENTION



With many freeway lane miles and frontage roads, Texas has a long, complex highway system, which can lead to wrong-way driving crashes. These crashes are often head-on, occur at night, involve intoxicated drivers, and have severe or fatal outcomes. TxDOT adopted wrong-way driving prevention as a statewide initiative in 2015 and, since then, has used HSIP funds for 34 wrong-way driving prevention projects. TxDOT approaches wrong-way driving prevention proactively: locations do not need to have a history of wrong-way driving crashes to be considered for wrong-way driving improvements.

TxDOT's HSIP-funded wrong-way driving prevention projects help prevent wrong-way drivers, notify law enforcement, and alert the public to out-of-direction travel. Solutions include lowering wrong-way driving signs because intoxicated drivers tend to look down rather than at the road ahead. More high-tech solutions include radar, thermal cameras, and infrared monitoring systems that are fully integrated into the transportation management center (TMC). When a wrong-way driver is detected, these systems relay images and other data to the TMC and alert the police department.

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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U.S. Department of Transportation
Federal Highway Administration

ZERO IS OUR GOAL
A SAFE SYSTEM IS HOW WE GET THERE

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