

# HIGHWAY SAFETY IMPROVEMENT PROGRAM

## **IMPLEMENTATION PLAN**



AUGUST 2024

# HSIP Implementation Plan Guidance

## Date Issued

October 13, 2017  
FHWA Office of Safety

## Background

The Highway Safety Improvement Program (HSIP) is a core Federal-aid highway program, the purpose of which is to achieve a significant reduction in fatalities and serious injuries on all public roads. The HSIP is a federally-funded, State-administered program under 23 U.S.C. 148, 23 U.S.C. 150, and 23 U.S.C. 130 and regulated by 23 CFR Parts 924 and 490. Under 23 CFR Part 490, each State is required to establish annual safety performance targets for five measures: 1) number of fatalities, 2) number of serious injuries, 3) fatality rate (per hundred million vehicle miles traveled (HMVMT)), 4) serious injury rate (per HMVMT), and 5) number of non-motorized fatalities and serious injuries.

If the State does not meet or make significant progress towards meeting its annual safety performance targets, the State must comply with the provisions set forth in 23 U.S.C. 148(i) for the subsequent fiscal year. The State must: 1) use obligation authority equal to the HSIP apportionment for the year prior to the year for which the targets were not met or significant progress was not made, only for HSIP projects; and 2) submit an annual HSIP Implementation Plan that describes actions the State will take to meet or make significant progress toward meeting its subsequent targets. Under 23 U.S.C. 148(i), the HSIP Implementation Plan must:

- Identify roadway features that constitute a hazard to road users;
- Identify highway safety improvement projects on the basis of crash experience, crash potential, or other data-supported means;
- Describe how HSIP funds will be allocated, including projects, activities, and strategies to be implemented;
- Describe how the proposed projects, activities, and strategies funded under the State HSIP will allow the State to make progress toward achieving the safety performance targets; and
- Describe the actions the State will undertake to achieve the performance targets.

While the HSIP Implementation Plan has specific requirements as listed above, the State also must meet all HSIP planning requirements [23 U.S.C. 148(c)(2)(B) & (E) and 23 CFR Part 924.9] and consider those requirements as part of its HSIP Implementation Plan development efforts.

## Purpose

The purpose of this guidance is to clarify the requirements of 23 U.S.C. 148(i). Specifically, this guidance addresses the requirements for the HSIP Implementation Plan. The HSIP Implementation Plan is a key component of the State's Decision Support System (DSS) and is used to track and report on the State's progress toward meeting its annual safety performance targets.

*The HSIP Implementation Plan was developed to demonstrate Florida's progress toward meeting its annual safety performance targets as required by the Federal Highway Administration (FHWA) under 23 U.S.C. 148(i). The HSIP Implementation Plan will help the state continue to focus limited resources on reducing the number of fatalities and serious injuries on the transportation system with the understanding that no death is acceptable on Florida's transportation system.*

# TABLE OF CONTENTS

---

<b>List of Tables</b> .....	<b>4</b>
<b>List of Figures</b> .....	<b>4</b>
<b>Executive Summary</b> .....	<b>5</b>
<b>Overview</b> .....	<b>6</b>
Florida’s Focus on Target Zero.....	6
Federal Performance Requirements.....	9
How We Are Doing.....	10
How We Got Here.....	11
<b>Highway Safety Improvement Program (HSIP) Overview</b> .....	<b>14</b>
Florida’s HSIP Update Process.....	14
HSIP Funding Eligibility and Use of Funding.....	15
<b>What We Will Do Next</b> .....	<b>17</b>
Improve Partner Coordination and Align Safety Activities.....	17
Collaboration with Florida’s MPOs to Prioritize Safety Targets.....	17
Local Road Safety Plans.....	17
Training Opportunities.....	18
Maximize HSIP Infrastructure Investments.....	18
Systemic Improvements.....	18
Current High Crash Location Analysis.....	18
Systematic Improvements.....	18
Enhance Safety Data Systems and Analysis.....	19
Improved Data Integration.....	19
SAFETY Systems.....	19
Safety Related Research.....	19
Implement Key Safety Countermeasures.....	20
Safety Corridors Pilot Project.....	20
Florida Rail Safety Coalition.....	21



Separated Bike Lanes .....	21
Raised Intersections .....	21
Target Speeds .....	21
Leading Pedestrian Intervals .....	22
Channelizing Curb Devices .....	22
Rumble Strips to Prevent Lane Departures on Rural Roadways .....	<b>Error! Bookmark not defined.</b>
Focus Safety Marketing and Education on Target Audiences .....	22
Vulnerable Road User Safety Assessment .....	22
Target Zero Campaign .....	23
Capitalize on New and Existing Opportunities .....	23
Triennial Highway Safety Plan.....	24
Engaging Local Stakeholders on Federal Grant Opportunities .....	24
<b>Tracking Progress .....</b>	<b>25</b>
Federal Performance Tracking and Reporting.....	25
Evaluating Effectiveness of Safety Investments .....	26

## LIST OF TABLES

Table 1: Federal Performance Targets (2016-2020).....	10
Table 2: HSIP Summary Table.....	16

## LIST OF FIGURES

Figure 1: Florida’s Alignment with the National Safety Goal .....	8
Figure 2: HSIP Program Roles .....	15
Figure 3: HSIP Funding Allocation .....	16
Figure 4: Florida's Total Annual Fatalities (2018-2022) .....	25
Figure 5: Florida's Total Annual Serious Injuries (2018-2022) .....	26
Figure 6: Florida's Non-motorized Fatalities and Serious Injuries (2018-2022) .....	26
Figure 7: Summary of HSIP Investment Monitoring - Dashboard .....	27
Figure 8: Summary of HSIP Investment Monitoring – Project List .....	27
Figure 9: Rail Crossing Countermeasure Monitoring .....	28



# EXECUTIVE SUMMARY

---

Florida adopted a vision of zero fatalities and serious injuries on its transportation system and identified this vision as the highest priority. The Florida Department of Transportation (FDOT) set zero as the target for all safety performance measures required by the Federal Highway Administration (FHWA), including fatalities, fatality rate, serious injuries, serious injury rate, and non-motorized fatalities and serious injuries.

Florida's traffic safety fatalities, like much of the nation, are expected to remain high, and it is clear additional more must be done to reverse this alarming trend. In response to these trends, this document identifies the activities FDOT will undertake with its partners in federal fiscal year (FFY) 2025 to make progress toward achieving its target of zero fatalities and serious injuries. This plan goes beyond specific FHWA requirements following the assessment that Florida has not met or made significant progress toward achieving its safety performance targets. This plan also provides an opportunity for FDOT and its partners – metropolitan planning organizations, local governments, and educational, law enforcement, emergency management, and other safety professionals – to recommit to the vision and target of zero, as well as additional actions each organization can take to help make this target a reality.

Consistent with FHWA requirements, this plan focuses specifically on implementation of the Highway Safety Improvement Program (HSIP) as a core federal-aid highway program focused on the mission of reducing fatalities and serious injuries. The plan documents the continued enhancements planned for Florida's HSIP to better leverage the benefits of this program. However, recognizing that FDOT already allocates all HSIP funding to safety programs - and building on the integrated approach that underscores FDOT's safety strategy - this plan also documents how additional FDOT and partner activities may contribute to progress toward zero.

Key FFY 2025 commitments identified in the HSIP Implementation Plan include the following:

- Improve Partner Coordination and Align Safety Activities
- Maximize HSIP Infrastructure Investments
- Enhance Safety Data Systems and Analysis
- Implement Key Safety Countermeasures
- Focus Safety Marketing and Education on Target Audiences
- Capitalize on New and Existing Funding Opportunities



# OVERVIEW

---

## Florida's Focus on Target Zero

FDOT and its traffic safety partners are committed to eliminating fatalities and serious injuries with the understanding that the death of any person is unacceptable. Under Secretary Jared Perdue, FDOT has realigned priorities to align with the five pillars of the FDOT Compass – Safety, Resiliency, A Robust Supply Chain, Technology, and Workforce Development, all built around our Communities. Safety remains Florida's "true north" and the state's top priority while our communities remain the focus and the center of everything we do.

Therefore, the state's safety vision and performance target is zero deaths. With the update of the [Florida Transportation Plan](#) (FTP) Policy Element in late 2020 and [Florida's Strategic Highway Safety Plan](#) (SHSP) in early 2021, Florida recommitted to the target of zero traffic fatalities and serious injuries and refreshed its vision of "Target Zero." This target is consistent throughout the FTP, SHSP, [Highway Safety Improvement Program](#) (HSIP), and [Highway Safety Plan](#) (HSP). Florida's Target ZERO vision is documented for each of the statewide transportation performance measures in the Florida HSIP Annual Report. Florida's SHSP aligns with the Federal Highway Administration's Safe System approach.



## SAFE SYSTEM APPROACH

Safe System emphasizes that traffic deaths and serious injuries are unacceptable and, while understanding no crash is desirable, the fatal and serious injury crashes take the highest priority. Safe System principles also recognize humans will make mistakes and are susceptible to serious injury or even death if the transportation system is not designed and operated to accommodate the common mistakes humans make.

Florida understands one agency alone cannot solve the state's safety challenges. The responsibility must be shared with all partners taking proactive steps to identify and mitigate risks in the transportation system so they do not lead to fatal and serious injuries.

Following guidance from the Federal Highway Administration (FHWA), Florida prioritizes Safe Road Users, Safe Vehicles, Safe Speeds, Safe Roads, and Post-Crash Care to support a Safe System approach.

The Safe System approach expands on traditional traffic safety planning and implementation activities by considering a more holistic approach. Florida's HSIP will build on this holistic approach to evaluate and prioritize new and emerging countermeasures and infrastructure solutions that proactively address multiple elements of the Safe System approach, where possible. Going forward, Florida's HSIP will continue to evaluate qualifying projects to consider their impact toward achieving not only safe roads but also consider the way these solutions encourage behaviors of safe road users, anticipate human error, consider human injury tolerance, accommodate new vehicles and technologies that make vehicles safer, encourage safer speeds, and support the needs of first responders engaging in post-crash care.

FDOT's vision is to "provide a transportation network that is well planned, supports economic growth, and has the goal of being congestion and fatality free." Figure 1 highlights the alignment between key safety-related plans and Target Zero.

To achieve its target of a fatality-free transportation system, FDOT coordinates with metropolitan planning organizations (MPO) and local governments to align safety priorities at the regional and local levels. Transportation projects are identified and prioritized with Florida's 27 MPOs as well as local governments in non-metropolitan areas. Data are analyzed for each potential project, using traffic safety data and traffic demand modeling, among other data. MPOs and local governments consider safety data analyses when determining project priorities.

Florida's transportation decisions are guided by several documents including the FTP, the [Strategic Intermodal System \(SIS\) Policy Plan](#), the [Statewide Transportation Improvement Program \(STIP\)](#), SHSP, HSIP, and HSP. Other activities that help the state achieve the safety target include the Program Planning Workshops and FDOT's Development, Design, and Construction Standards.



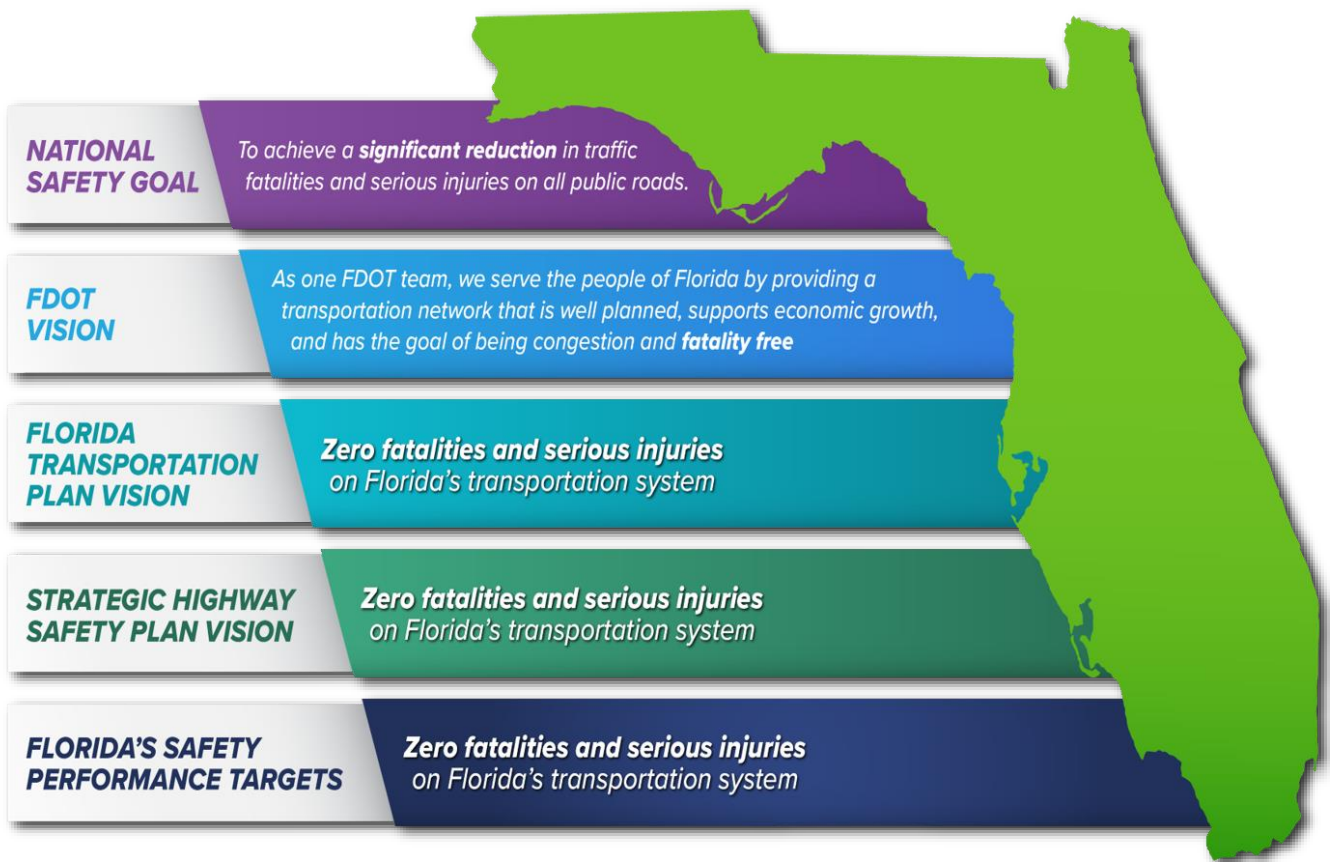


Figure 1: Florida's Alignment with the National Safety Goal



## Federal Performance Requirements

Federal rule (23 CFR 490.209(a)) requires state DOTs to establish targets and report performance on five safety performance measures, including:

- » Number of fatalities;
- » Rate of fatalities per 100 million vehicle-miles traveled (VMT);
- » Number of serious injuries;
- » Rate of serious injuries per 100 million VMT; and
- » Number of non-motorized fatalities and number of non-motorized serious injuries.

In the 2017 HSIP Annual Report, FDOT established statewide 2018 safety targets, which set the target at “0” for each safety performance measure to reflect the vision of zero deaths. These targets were reaffirmed for each subsequent calendar year through 2025.

As part of this process, FDOT worked with Florida’s 27 MPOs to establish both the state and MPO safety targets. A total of 21 MPOs adopted the state’s safety targets of zero. The remaining six MPOs established MPO-specific targets for their planning area committing to gradual progress toward zero, while still supporting the state’s vision of zero traffic fatalities and serious injuries.

According to the Code of Federal Regulations (CFR), 23 CFR 490.211(c)(2) specifies that a state department of transportation (DOT) has met or made significant progress toward meeting its safety performance targets when at least four of the five safety performance targets are met or the actual outcome is better than the baseline performance for the year prior to the establishment of the target.

On April 15, 2024, FHWA reported the results of its calendar year 2022 safety performance target assessment. FHWA concluded that Florida did not meet or make significant progress toward its safety targets, noting that zero was not achieved for any measure and that only three out of five measures (number of serious injuries, serious injury rate, and number of non-motorized fatalities and serious injuries) were better than baseline.

Table 1 summarizes the findings of the most recent assessment.



<i>PERFORMANCE MEASURE</i>	<i>2018-2022 TARGET</i>	<i>2018-2022 ACTUAL</i>	<i>2016-2020 BASELINE</i>	<i>MET TARGET?</i>	<i>BETTER THAN BASELINE?</i>	<i>MET OR MADE SIGNIFICANT PROGRESS?</i>
Number of Fatalities	0	3,384	3,188.2	No	No	No
Rate of Fatalities per 100 million vehicle miles traveled (VMT)	0	1.538	1.462	No	No	
Number of Serious Injuries	0	17,127.8	18,979.6	No	Yes	
Rate of Serious Injuries per 100 million vehicle miles traveled (VMT)	0	7.770	8.694	No	Yes	
Number of Non-Motorized Fatalities and Serious Injuries	0	3,173.6	3,188.8	No	Yes	

**Table 1: Federal Performance Targets (2016-2020)**

Based on this assessment and consistent with 23 U.S.C. 148(i), FHWA requested that FDOT develop and submit an HSIP Implementation Plan for FFY 2025. Based on FHWA’s HSIP Implementation Plan Guidance, this plan must:

- Identify roadway features that constitute a hazard to road users;
- Identify highway safety improvement projects on the basis of crash experience, crash potential, or other data-supported means;
- Describe how HSIP funds will be allocated, including projects, activities, and strategies to be implemented;
- Describe how the proposed projects, activities, and strategies funded under the HSIP will allow Florida to make progress toward achieving the safety performance targets; and
- Describe the actions Florida will undertake to achieve the performance targets.

## How We Are Doing

Florida’s traffic fatalities increased every year from 2018 to 2021, where fatalities were at an all-time high before decreasing slightly in 2022. Florida’s rate of fatalities per 100 million vehicle miles traveled (VMT) has experienced a similar pattern, with the peak rate of 1.72 in 2021 and declining to 1.56 in 2022. This fluctuating trend reflects the national trend of traffic fatalities and illustrates the need for new and innovative approaches to safety in Florida and across the United States.



In contrast to the trend in traffic fatalities, Florida's serious injury trends are improving at a steadier pace. Between 2018 and 2022, the number of serious injuries in Florida declined by 17 percent while the serious injury rate (per 100 million VMT) declined by 19 percent. Florida will continue to build on the successes of reducing serious injuries while focusing on countermeasures to mitigate and eliminate crash situations and dangerous behaviors that lead to fatalities and serious injuries.

## How We Got Here

Prior HSIP Implementation Plans have identified key activities Florida continues to prioritize in efforts to address rising fatalities and build on the progress made in reducing serious injuries. The accomplishments listed below represent critical ongoing activities that help strengthen Florida's safety foundation and create a framework for prioritizing and implementing safety activities in the future. Florida will continue to:

### *Fully Implement Florida's Strategic Highway Safety Plan*

Florida's Strategic Highway Safety Plan (SHSP) is the state's safety roadmap, guiding traffic safety-related decision making for all of Florida. The 2021 SHSP recognizes the need to approach safety differently and embraces the Safe System approach by introducing the 4Is (Information Intelligence, Innovation, Insight Into Communities, and Investments and Policies) to strengthen that alignment. The 2021 SHSP also introduces Evolving Emphasis areas to create opportunities for new pilot projects and educational messaging on previously underrepresented safety challenges such as work zones, roadway transit, rail crossings, drowsy and ill driving, connected and automated vehicles, and micromobility.

### *Enhance HSIP Funding Allocation Processes*

FDOT enhanced coordination both internally (between FDOT Central Office and FDOT Districts) and externally (specifically, with MPOs and local governments) to help identify and advance HSIP projects that are anticipated to deliver a significant reduction in fatalities and serious injuries. FDOT provides technical assistance to local jurisdictions for the development of local road safety plans (LRSP) and uses those priorities to identify actionable projects eligible for HSIP funding.

### *Integrate Safety into Florida's Family of Plans*

The Florida Transportation Plan (FTP) is a plan for all of Florida. It is the single overarching statewide plan that guides Florida's transportation future. The FTP Policy Element was adopted in 2020 and continues to prioritize safety, establishing Vision Zero as a top priority.

The Strategic Intermodal System (SIS) Policy Plan addresses Florida's high priority network of transportation facilities important to the state's economy and mobility. The SIS focuses the state's limited transportation resources on the facilities most significant for interregional, interstate, and international travel. The SIS Policy Plan was updated in 2022 and includes an expanded emphasis on safety, including recommendations to give greater priority to SIS projects that are anticipated to improve safety.

Each of Florida's modal plans (aviation, seaports, waterways, rail, motor carrier, spaceports) along with others like the Freight Mobility and Trade Plan, TSM&O Strategic Plan, and Electric Vehicle Infrastructure Master Plan



consider safety as it relates to their specific topic, each with the perspective that zero fatalities and serious injuries is the only acceptable goal.

### *Support Florida's Traffic Safety Coalitions and Community Traffic Safety Teams*

Florida manages implementation of much of its safety program through statewide coalitions that are organized based on the SHSP emphasis areas. This structure helped institutionalize safety throughout the state and ensure that all aspects of safety are addressed by a broad group of safety stakeholders at quarterly coalition meetings. Several of these traffic safety coalitions have conducted program assessments and updated their strategic plans following the update of the SHSP. The updated strategic plans give new direction to each coalition and ensure continued alignment with the SHSP, the Safe System approach, and national best practices.

Florida's Community Traffic Safety Teams (CTSTs) also provide consistent input into the highway safety planning process. CTSTs are locally based groups of highway safety advocates that are committed to solving traffic safety problems through a comprehensive, multi-jurisdictional, multi-disciplinary approach. Members include city, county, state, and occasionally federal agencies, as well as private industry representatives and local citizens. Community boundaries are determined by the organizations comprising a CTST: a city, an entire county, a portion of a county, multiple counties, or some other jurisdictional arrangement may be the basis for a CTST. CTSTs provide a valuable local perspective in identifying potential HSIP projects and monitoring the implementation of these projects.

### *Predictive Analysis Tools*

FDOT's System Analysis and Forecast Evaluation (SAFE) is a subprogram under the State Traffic Roadway and Intersection Data Evaluation System (STRIDES) 2 Zero program. SAFE STRIDES 2 Zero was established to leverage FDOT data, roadway characteristics, and crash data to screen roadway sites for improving safety and mobility. This program uses predictive analytics for business decisions on roadway and operational improvement projects while tracking and documenting the return on investment. Phase I of the SAFE subprogram included the development of a network screening tool that strictly follows the network screening guidelines in the Highway Safety Manual and focused on signalized intersections on the State Highway System. Phase II has started and will expand that analysis to include roadway segments and non-signalized intersections.

This enhanced predictive network screening program relies on a quantitative evaluation of Florida-specific crash models and analytical tools. Eventually, FDOT will be able to rely on this network screening methodology to identify potential high-crash locations before they become a safety concern and apply life-saving countermeasures.

### *Targeted Education through Geofencing*

FDOT has begun to incorporate geofencing into their public engagement toolbox to more effectively deliver safety education messaging to the right audience. Geofencing allows FDOT to connect with regular users of a specific transportation facility, in some cases, down to a specific intersection, to deliver important information about upcoming construction activities or new safety countermeasures. Many of Florida's education and outreach efforts rely on geofencing to target messaging to specific audiences or locations, including Target Zero.



FDOT District 5, for example, has relied on geofencing and targeted social media marketing strategies to deliver information on roundabouts to road users in an area where roundabout construction was proposed. This allowed FDOT to create short, informative social media posts about the use, safety, and efficiency benefits of a roundabout and ensure they were delivered directly to the people most likely to use them.

Florida also partners with local law enforcement to coordinate high visibility enforcement activity with targeted education through geofencing to maximize resources while addressing key safety challenges in a specific location.

### *Transportation Alternatives Program and Safe Routes to School (SRTS)*

The Transportation Alternatives Program (TAP) is intended to fund a variety of small-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity. The Infrastructure Investment and Jobs Act (IIJA) increased TAP funding by 60 percent to allow states to better address bicycle and pedestrian projects, Safe Routes to Schools programs, and recreational trails.

### *Strategic Intermodal System (SIS) Safety Emphasis*

Among the SIS Policy Plan's five focus areas for implementation strategies is a commitment to a vision of zero fatalities and serious injuries on SIS facilities. To achieve this vision the SIS will change its needs and prioritization process to have a greater emphasis on safety. In addition to a emphasizing safety in capacity project prioritization, the SIS will further increase coordination of safety feature inclusion in SIS capacity and enhancement projects. SHSP emphasis areas overrepresented on the SIS such as lane departure crashes and commercial vehicle crashes will be addressed in SIS investments through engineering and operational solutions. Lastly, the SIS will provide safe alternatives to highways for interregional travel through investments in passenger rail and transit.

The SIS Policy Plan implementation will further the commitment to safety through increased planning and collaboration to support the aggressive deployment of in-vehicle and roadside safety technologies, and working with partners to identify targeted strategies to improve safety on SIS facilities.



# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) OVERVIEW

---

The HSIP is a state-administered federal-aid highway program with the purpose of achieving a significant reduction in traffic fatalities and serious injuries on all public roads. Funding is apportioned to Florida per Fixing America's Surface Transportation (FAST) Act formulas as explained on the [FHWA website](#). In recent years, Florida received over \$150 million annually for the HSIP. Florida continues to allocate all available HSIP funding to safety projects.

## Florida's HSIP Update Process

FDOT's State Safety Office works closely with FDOT Districts and regional and local traffic safety partners to update the HSIP annually. Historic, risk-based, and predictive safety analyses are conducted to identify appropriate proven countermeasures to reduce fatalities and serious injuries associated with Florida's SHSP emphasis areas, resulting in a list of projects that reflect the greatest needs and are anticipated to achieve the highest benefit. While these projects and the associated policies and standards may take years to implement, they are built on proven countermeasures for improving safety and addressing serious crash risks or safety problems identified through a data-driven process.

Florida's HSIP focuses on highway safety improvement projects that are:

- Low cost (typically under \$1,000,000);
- Shorter-term, with concept to construction in under three years;
- Implemented on a public road; and
- Address a problem known to result in fatalities and serious injuries.

The primary intent of the HSIP is to implement engineering safety improvements. However, the Safe System and the integrated approach for the SHSP covering the 4 Es and 4 Is of safety should be considered in developing HSIP projects. Safety studies should determine whether engineering is an effective way to improve safety at each location. Comprehensive strategies pairing engineering projects in the HSIP with supplementary efforts from other disciplines is a proven way to increase the effectiveness of safety improvements.

A list of projects representing the greatest safety needs anticipated to achieve the highest benefit is maintained by each District. Proposed HSIP projects are authorized and funded based on assessments of District-level and statewide needs. Beginning in fiscal year 2024, HSIP funding is now distributed among FDOT Districts based on statutory formula to allow the Districts to more clearly define funding levels for which they can better plan to select and fund projects. FDOT Central Office will continue to provide guidance and support. Strong coordination with MPOs, local governments, and community traffic safety teams by the Districts is encouraged to identify needs and potential projects. **Error! Reference source not found.** summarizes roles in the HSIP program.





Figure 2: HSIP Program Roles

## HSIP Funding Eligibility and Use of Funding

23 U.S.C. 148(a) provides a sample listing of eligible highway safety improvement project types. Any project meeting all the following requirements is potentially eligible for funding in the HSIP:

- Implements safety infrastructure countermeasures or improves safety data collection, integration, and analysis such that HSIP stakeholders can better plan, implement, and evaluate highway safety improvement projects in the future;
- Consistent with an emphasis area, strategy, or activity identified in the Florida SHSP;
- Estimated benefit-cost ratio (BCR) of 1.0 or greater;
- Addresses a serious crash risk or safety problem identified through a data-driven process; and
- Likely to result in a reduction of fatalities and serious injuries.

[FDOT's HSIP Guidelines](#) provide detailed information on this data-driven process and funding eligibility.

Florida received an allocation of approximately \$156 million in HSIP funds for use during the 2023 state fiscal year from July 1, 2023 through June 30, 2024, and fully allocated those funds to safety projects. FDOT used these HSIP funds to complete projects, which address intersections, lane departure, pedestrian and bicyclist safety, and other programs representing the remaining SHSP emphasis areas. The emphasis areas (Lane Departures, Intersection, and Pedestrians and Bicyclists) account for 90 percent of fatal crashes and 75 percent of injury crashes and also account for 59 percent of HSIP funding. Florida projects to invest more than 18 percent of HSIP funds toward programs, strategies, and activities directly related to the state's pedestrians and bicyclists,

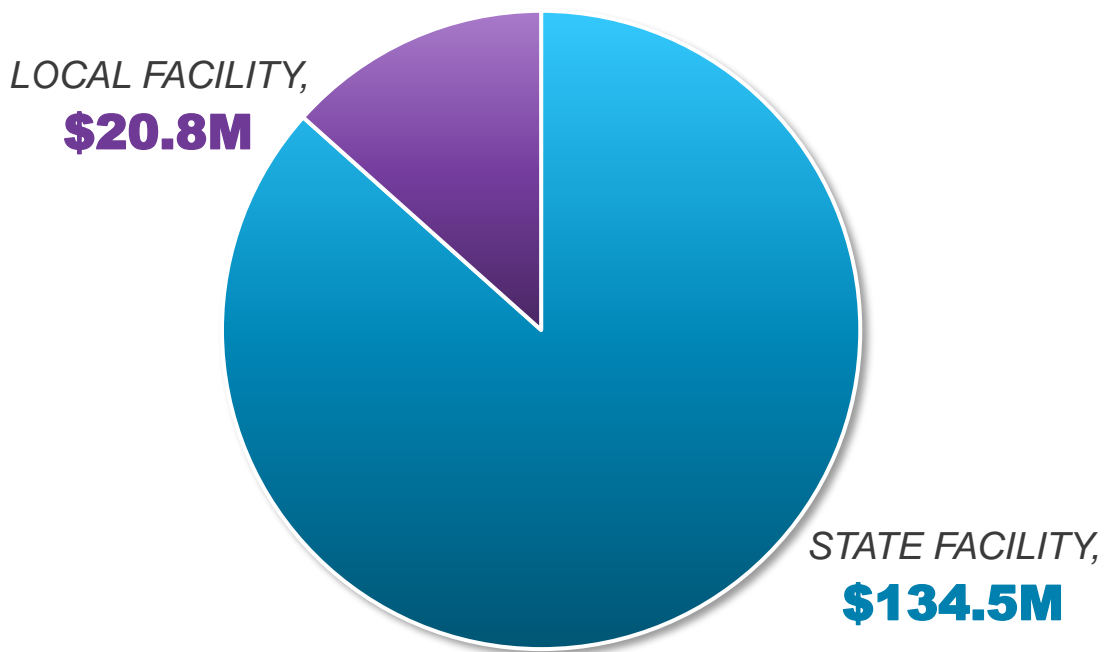


while many of the activities listed in remaining categories include countermeasures that benefit the state’s most vulnerable road users. Table 2 summarizes the estimated number of projects and funding goals by program, strategy, or activity.

**Table 2: HSIP Summary Table**

Program, Strategy, or Activity	Estimated Funding	Percent of Total (approximate)
Data	\$0.5 Million	0.3%
Intersections	\$52.7 Million	33.7%
Lane Departure	\$10.6 Million	6.8%
Multiple	\$53.7 Million	34.3%
Pedestrian and Bicyclist	\$28.4 Million	18.1%
Rail	\$10.5 Million	6.7%
Speeding and Aggressive Driving	\$58 Thousand	0.04%
<b>Grand Total</b>	<b>\$156.3 Million</b>	

Florida’s HSIP allocated \$134.5 million in infrastructure investments on state-maintained roadways and \$20.8 million in infrastructure investments on local roadways. Figure 3 illustrates the breakdown of HSIP funding.



**Figure 3: HSIP Funding Allocation**

The latest list of HSIP projects can be found in the [HSIP Annual Report](#).



# WHAT WE WILL DO NEXT

---

Florida recently updated existing efforts guiding safety planning and project implementation and established new approaches to prioritizing safety. FDOT will continue to program all HSIP funding to safety projects and continue to support the HSIP with additional safety investments through the FDOT Work Program and the state's committed safety partners.

Building on the success of ongoing HSIP and supporting safety investments, in FFY 2025, Florida is committing to:

- Improve Partner Coordination and Align Safety Activities
- Maximize HSIP Infrastructure Investments
- Enhance Safety Data Systems and Analysis
- Implement Key Safety Countermeasures
- Focus Safety Marketing and Education on Target Audiences
- Capitalize on New and Existing Funding Opportunities

## Improve Partner Coordination and Align Safety Activities

### Collaboration with Florida's MPOs to Prioritize Safety Targets

FDOT continues to collaborate with Florida's 27 MPOs on setting and monitoring safety performance targets. To build on this target setting, FDOT continues to encourage Florida's MPOs to give greater attention to actionable steps toward improving safety within their planning, project identification, and project prioritization processes. FDOT is updating Florida Planning Emphasis: A Resource Guide to Notable Practices, which includes a range of both Florida and national best practice examples for improving safety, mobility, equity, and resilience. These examples are intended to provide Florida's MPOs with the tools needed to adapt and replicate effective solutions in their own regions.

FDOT continues to provide technical assistance to MPOs in their federally required safety performance setting process. FDOT has worked closely with the Florida Metropolitan Planning Organization Advisory Council (MPOAC) and all of Florida's MPOs to share important planning, target setting, and performance monitoring resources, such as the [Signal Four Analytics Traffic Safety Dashboard](#).

### Local Road Safety Plans

A local road safety plan (LRSP) is a valuable tool providing a framework for identifying, analyzing, and prioritizing roadway safety improvements, specifically on local roads. The LRSP development process and content are tailored to local issues and needs and result in a list of challenges, risks, actions, and solutions aligned with the needs of a specific community or local roadway.



Because almost half of traffic fatalities and serious injuries occur on local roadways, LRSPs are critical in helping Florida achieve Target Zero. FDOT understands the importance of LRSPs and provides technical assistance to local governments to support their development. From 2020 through 2022, FDOT identified six rural counties in Florida and collaborated with them to develop County Road Safety Plans with a focus on addressing fatal and serious injury crashes in high-crash locations and in locations that present a high crash risk. Safety improvements that are low-cost and high-benefit were identified to maximize the reduction of fatal and serious injury crashes on local roadways.

FDOT is expanding the program of LRSPs to include counties in Florida with significant opportunities to improve traffic safety. Local representatives will manage their respective safety plans in coordination with FDOT district representatives.

## Training Opportunities

FDOT uses its Florida Local Technical Assistance Program (LTAP) to improve the skills and increase the knowledge of local and transportation workforces on roadway safety via training and technical assistance. Florida LTAP provides no-cost safety-related trainings to all attendees and is comprised of Safety, Infrastructure Management, Workforce Development, and Organizational Excellence focus areas. FDOT will continue to expand its LTAP to ensure transportation professionals from across the nation have access to this critical safety training.

## Maximize HSIP Infrastructure Investments

Florida is improving on the existing three-prong approach to safety infrastructure funded by HSIP to optimize resources for maximum effectiveness.

## Systemic Improvements

Incorporating safety countermeasures in various updates to engineering criteria give the ability to improve safety with every project in the FDOT Work Program. Criteria updates made in 2014 are now being reflected in recently completed construction projects.

## Current High Crash Location Analysis

Florida conducts a statewide analysis on historic crash patterns to identify locations where the crash rate is highest, and gather requests for safety improvements from the public and safety partners. Safety analyses are conducted in those specific locations and improvements are prioritized and implemented through the HSIP process.

## Systematic Improvements

To address safety performance across all public roadways, FDOT also addresses safety systemically statewide utilizing a risk-based data-driven analysis. A statewide risk-based analysis was performed to identify the roadway characteristic risk factors associated with fatal and serious injury crashes. FDOT then invests in the deployment of proven effective safety countermeasures statewide on the roadway network where those risk factors exist. In fiscal year 2024, FDOT addressed systemic safety improvements with a with about \$26 million in HSIP funds.



# Enhance Safety Data Systems and Analysis

## Improved Data Integration

FDOT continues to make progress toward integrating the state's numerous traffic safety data resources and making them widely available for both FDOT staff and the state's transportation partners. The FDOT Crash Analysis and Reporting (CAR) System has undergone a rewrite to improve the accuracy of crash locations in the Signal Four Analytics Database, the statewide interactive web-based geospatial crash analytical tool developed and hosted by the University of Florida. This rewrite serves to consolidate data and support the integration of the street network used by the Safety Office and the University of Florida. CAR and Signal Four Analytics are now seamlessly integrated, providing improved data quality, and available for all traffic safety partners.

FDOT is building on the Safety Data Integration Space (SDIS) as an internal web tool that collects Florida's various data analyses, evaluations, tools, and products, and provides access to them in a one-stop-shop for the state's traffic data needs. The SDIS is a critical tool for improving data availability and reducing unnecessary redundancy, and gives FDOT a range of resources and tools to better identify projects for prioritization in the HSIP process. There is also a [public facing version of the SDIS](#) that includes all publicly available data included on the internal FDOT SDIS that has been made available for Florida's MPOs, local governments, and other safety partners to further improve consistency and support the state's data-driven decision making process.

FDOT continues to integrate the linear reference system for state roads, roadway data elements, and commercial geospatial data into the All Roads Base Map (ARBM) and Florida All Roads Intersections and Streets (FLARIS). Traffic safety analyses, location verification of crashes, and strategic planning for systematic safety improvements across all public roads (i.e., state and local) are enhanced by the ARBM and FLARIS. FDOT is refining the development processes to achieve annual update cycles with model inventory of roadway elements (MIRE) fundamental data elements (FDE).

FDOT is further refining and innovating to focus on the most significant factors accounting for the most fatal or serious injuries. FDOT applies root cause analysis with the Pareto principle for outcomes, whereby nearly 80 percent of consequences come from 20 percent of causes. This practice helps to concentrate resources, countermeasures, and improvement initiatives on factors with the most significant impact on traffic safety.

## SAFETY Systems

**Safety Analysis and Financial Evaluation Technology Systems**, or SAFETY Systems, is a process that includes network screening for historic- and risk-based approaches to analyses, to countermeasure selection, economic analysis and prioritization, programming projects, tracking their implementation, and evaluating their effectiveness. The SAFETY Systems initiative will bring together data such as crash data, traffic volumes, roadway characteristics, and Work Program together in one location will help drive analysis tools and dashboards used in each step of this process.

## Safety Related Research

Florida continues to search for new innovations and establish best practices to implement safety countermeasures. Research and pilot applications have led to the discovery of many of Florida's recent safety best practices and improvement of already effective countermeasures. Some examples of ongoing and recently



completed safety research include crashes related to type and location of driveway access; characteristics of curve crashes in Florida; operational and safety impacts of disabled vehicles; safety performance and crash modification factors for managed lanes separation treatments; behavior of Florida's aging road users; Safe System approach to understanding the changing nature of transportation; secondary crash mitigation; application of dynamic crash prediction methodologies to safety and TSM&O programs; context classification applications for developing safety performance functions and determining traffic operational effects for intersections; evaluation of intelligent school zone beacon and vehicle-cyclist detection and warning systems; wrong-way driving mitigation.

## Implement Key Safety Countermeasures

### Pedestrian Safety Intersection Lighting

Over 80 percent of Florida's pedestrian fatalities occur in dark conditions. The \$100M multi-year statewide pedestrian safety intersection lighting retrofit initiative addresses pedestrian safety at 2,500 intersections statewide and is almost complete. Fatal and serious injury crashes of all types were significantly reduced in these locations, and FDOT continues to monitor the reductions over the useful life of this countermeasure.

### Rumble Strips to Prevent Lane Departures on Rural Roadways

A significant proportion of fatal and serious lane departure crashes occur on Florida's rural 2-lane roadways with posted speeds of 55 mph and higher. To address this, the statewide rumble strip initiative was funded over 2 years with \$60M to address lane departure safety on over 3,000 centerline miles of roadways and began construction in FY 24. This initiative is projected to prevent over 150 fatalities over the useful life of this countermeasure.

### Median Barriers

A significant proportion of fatal and serious lane departure crashes occur on Florida's rural high-speed limited access roadways. To address this, the statewide median barrier initiative was funded over 2 years with \$130M (comprised of \$70M HSIP and \$60M state funds) to address lane departure safety on over 300 centerline miles of roadways and will begin construction in FY 26. This initiative is projected to prevent over 430 fatalities over the useful life of this countermeasure.

### Safety Corridors Pilot Project

FDOT is implementing a Safety Corridors pilot where specific roadway segments will receive a multidisciplinary application of safety countermeasures that include engineering, education, enforcement, and evaluation, deployed at the same time for a duration of 6-12 months. Four corridor segments have been identified in areas where FDOT Districts have already prioritized and funded proven countermeasures. FDOT will fund coordinated education, enforcement, and evaluation efforts on those corridors.



## Florida Rail Safety Coalition

The Florida Rail Safety Coalition is FDOT's new effort to help engage and collaborate with technical stakeholders, subject matter experts, public road agencies, railroads, the Federal Railroad Administration, law enforcement, universities, and communities. The coalition embodies Florida's rail safety vision to be a national leader in rail safety by eliminating fatalities and injuries involving Florida's railroads.



## Separated Bike Lanes

In 2022 and 2023, FDOT began developing revised criteria for separated bike lanes, based on anticipated guidance in the AASHTO Bicycle Facilities Guide update. The updated criteria is now included in the 2024 FDOT Design Manual (FDM) and provides design and planning support for protected intersections (conventional and roundabout) as well as a variety of other roadway conflict points. Separated bike lanes are becoming recognized as a highly effective safety countermeasure for bicycle crashes, and FDOT has engaged national-level experts to develop context classification-appropriate separated bicycle lane criteria.

## Raised Intersections

In 2023, FDOT began preparation of criteria for raised intersections. While raised intersections have been permitted in the FDM since its release in 2018, they have recently been recognized as an alternative to the raised crosswalk, which is used at the midblock condition. A new raised intersection conceptual drawing and accompanying design guidance are now shown in the 2024 FDM. This provides engineers and designers with the basic elements of an effective and safe, context-appropriate raised intersection.

## Wrong Way Driving Warnings

A form of rapidly increasing lane departure crash is wrong way driving on Florida's interstates. The statewide wrong way driving initiative was funded over 3 years with \$32M to prevent occurrences and warn motorists with signing, pavement markings, and advanced detection and warning systems at interstate interchanges, and this work began in FY 23.

## Detecting Pedestrians on Moveable Bridges

Florida has many intracoastal waterway bridges that frequently open and have high volumes of pedestrian traffic. Technology solutions improve pedestrian safety by detecting their presence and preventing bridge movement that could cause them harm. The statewide moveable bridge initiative was funded over 2 years with \$14M to install advanced detection systems to address bicyclist and pedestrian safety and began in FY 23.

## Target Speeds

In July 2021, revisions to the FDM and Project Development and Environment Manual (PD&E Manual) were introduced to implement target speeds on projects where a design speed is required. These revisions include new requirements for multidisciplinary participation in the target speed selection process. The use of target speed will be used to influence design speed selection and is based on definitions and best practices outlined in the FDOT Context Sensitive Classification Guide and the FDOT Speed Zoning Manual.



FDOT understands that pedestrians and bicyclists have a much higher risk of being seriously injured or killed at speeds above 35 miles per hour, yet until this change in the FDM, three of the five context classifications where pedestrians and bicyclists were most often present include a range of speeds in excess of 35 miles per hour. Aligning target speeds with context classification has helped FDOT achieve a better understanding of how to appropriately deliver projects and implement countermeasures that ensure design speeds reflect the desired target speed.

## Leading Pedestrian Intervals

Leading Pedestrian Intervals (LPIs) are used to aid pedestrians crossing intersections by delaying the green interval from timing at the beginning of the walk interval. This advanced walk time provides a buffer to allow pedestrians a “head start” to traverse across an intersection prior to vehicles entering the green interval. LPIs are being introduced at intersection locations with high occurrences of fatal and serious injury crashes involving pedestrians. LPIs allow pedestrians to better establish their presence within the crosswalk and provide increased visibility and reduced conflicts between pedestrians and turning vehicles.

## Channelizing Curb Devices

In 2020, FDOT added the Channelizing Curb Device as a Developmental Specification. The modular, configurable devices can be combined to create separated bike lanes, curb extensions, hardened centerlines, or other semi-temporary speed management and safety tools. Over the past two years, FDOT has received a number of requests to use these devices on low-speed projects. These projects are being carefully monitored under the Developmental Specification program to ensure they perform as intended. If successful, the Channelizing Curb Devices will offer a relatively low-cost, low-investment opportunity to provide additional safety through bicycle separation and speed management.

## Focus Safety Marketing and Education on Target Audiences

### Vulnerable Road User Safety Assessment

The Florida Vulnerable Road User (VRU) Safety Assessment evaluates the safety performance of vulnerable road users in Florida and outlines the state’s strategies to enhance their safety through data-driven analysis, community outreach, and targeted programs. A VRU is considered to be a person walking, biking, rolling, or a highway worker on foot in a work zone, given they are considered a pedestrian. Florida is required to conduct an assessment of vulnerable road user safety as a part of the state’s SHSP, and this VRU Safety Assessment serves as an extension of Florida’s 2021-2025 Strategic Highway Safety Plan (SHSP) and aligns with 23 U.S.C. 148(I). Florida’s initial VRU Safety Assessment is being developed as an amendment to the existing SHSP and will be included as a foundational component in the development of Florida’s next SHSP.

The VRU Safety Assessment included a review of the state’s existing efforts to eliminate VRU risks, including Florida’s 25 priority counties for pedestrian and bicycle crashes and the High Visibility Enforcement (HVE) segments identified by the Florida Pedestrian and Bicycle Safety Coalition. It implemented a network screening process to identify potential high-crash locations. A review of these previous analyses grounded the early steps of the safety assessment and supported identifying high-priority areas for VRUs based on roadway data, including location, roadway functional classification, context classification, design speed, speed limit, and time of day. Following the VRU Safety Assessment Guidance, the quantitative analysis also considered demographics of the



location of fatalities and serious injuries, including race, ethnicity, income, and age. One-mile segments were created along all state-owned and major non-state-owned roads associated with the VRU crashes. The segments with the most crashes were prioritized into three tiers (described in the table below), with each tier based on the number of crashes per segment. An [interactive dashboard](#) summarizes the quantitative analysis. The dashboard includes all the data examined during the analysis and selection of the tiered segments.

The 22 one-mile segments in Tier 1 represent the highest priority for VRU safety investments. Focusing on eliminating VRU fatalities and serious injuries in these locations will significantly impact progress toward zero.

## Target Zero Campaign

Target Zero is Florida's statewide initiative to reduce traffic fatalities and serious injuries with an ultimate goal of zero. On average, eight people are killed and 49 are seriously injured on Florida's roads every day. In the majority of those serious and fatal crashes, driver behavior is a contributing factor. This initiative focuses on connecting, interacting, and designing our transportation system to specifically relate to those road users that are most involved in crashes that resulted in serious injuries and fatalities.

The National Highway Traffic Safety Administration (NHTSA) reports the vast majority of crashes nationally involve driver error as a contributing factor, including recognition errors, decision errors, and performance and non-performance errors. Previous safety campaigns in Florida have focused on educating the public about laws and rules, however they have been unsuccessful in changing behaviors. Conducting focus groups with drivers around the state revealed the traffic safety challenges in Florida are actually due to larger overarching societal challenges which lead to dangerous behaviors behind the wheel. For example, the need for constant connection leads to distraction, making up time on the road, and thrill-seeking leads to speeding, and stress and lack of empathy leads to aggression. Florida is taking education efforts to the next level by employing a human-factors marketing approach to address these life challenges and influence safer driving behavior to prevent crashes before they occur. This supports the 'Safe Road Users' component of our Safe System Approach to implementing Florida's SHSP. Utilizing human-factors research and the results of data analysis, the paid, earned, shared, and owned media and marketing efforts are focusing on specific target audiences and their interests, in specific regions, regarding specific behaviors, and are accompanied by a robust performance evaluation plan.

FDOT will continue to align and commit HSIP, NHTSA, and other available resources to the Target Zero Campaign, building an immediately recognizable brand in Florida that will eventually become the umbrella for all of Florida's traffic safety messaging, like Click It or Ticket and Drive Sober or Get Pulled Over. More information about Target Zero can be found on the [Target Zero website](#).

## Capitalize on New and Existing Opportunities

The Infrastructure Investment and Jobs Act (IIJA) is a reauthorization of the FAST Act and provides \$973 billion in funding over five years from FFY 2022 through FFY 2026, including \$550 billion for new investments for all modes of transportation, water, power and energy, environmental remediation, public lands, broadband, and resiliency. The IIJA is estimated to bring \$16.7 billion in transportation formula funds to Florida among FDOT, transit agencies, airports, and other partners. FDOT is estimated to receive \$13.5 billion under the IIJA in formula funds. This is \$3.5 billion and 35 percent more than provided by the FAST Act.



## Triennial Highway Safety Plan

Every three years, Florida must submit a Triennial HSP (previously an annual plan) to NHTSA for approval describing its highway safety program and planned countermeasures that will drive down serious injuries and fatalities on Florida's highways with grant applications to be submitted annually. Florida's Triennial HSP includes a greater emphasis on meaningful public engagement that includes early and continuous opportunities for Florida's communities to influence the state's highway safety program, particularly those communities most significantly impacted by traffic crashes resulting in fatalities and serious injuries.

Florida has leveraged the VRU Safety Assessment to conduct targeted engagement in support of the update of the Florida Triennial Highway Safety Plan. The FDOT State Safety Office is leading a targeted engagement effort to the communities surrounding the top corridors identified through the VRU Safety Assessment. FDOT State Safety Office staff are meeting community members where they live and work to engage them on how to capture their needs in the Triennial HSP.

## Engaging Local Stakeholders on Federal Grant Opportunities

One of the greatest challenges all states face revolves around the allocation and management of limited resources among competing priorities and Florida is no exception. The Infrastructure Investment and Jobs Act (IIJA) is the reauthorization of the federal surface transportation act and was signed in November 2021. IIJA extends and increases formula funding for transportation while increasing potential grant funds in new and existing grant opportunities.

Existing programs, such as HSIP, HSP, Transportation Alternatives Program, and Safe Routes to School, are beneficiaries of additional funding availability and flexibility while new programs such as Safe Streets and Roads for All (SS4A) Grant program, will present additional opportunities to deliver measurable safety improvements on Florida's transportation system. To date, 78 jurisdictions and agencies in Florida have been awarded an SS4A Grant. FDOT is committed to providing technical assistance to regional and local agencies seeking support in applying to these new and updated grant opportunities.



# TRACKING PROGRESS

## Federal Performance Tracking and Reporting

Under 23 CFR Part 490, each state is required to establish annual safety performance targets for five measures:

- Number of fatalities;
- Number of serious injuries;
- Fatality rate (per 100 million VMT);
- Serious injury rate (per 100 million VMT); and
- Number of non-motorized fatalities and serious injuries.

FHWA requires states to analyze safety performance targets using five-year rolling averages to support the forecasting of long-term trends. This methodology calculates the average number of fatalities occurring over a five-year period, considering data from 2017-2021 to report the performance metric for 2021, for example.

While Florida has not met or made significant progress toward meeting the target of zero for each of the federally identified performance targets, the state remains committed to these targets and will continue to prioritize projects that advance the vision of zero traffic fatalities and serious injuries. Florida acknowledges that zero is a difficult target but when considering that each fatality or serious injury on the state's transportation system involves someone's husband, wife, father, mother, brother, sister, son, daughter, friend, co-worker, or business partner – it is clear that zero is the only target Florida can strive to achieve.

The following figures show Florida data for each of these five measures between 2018 and 2022.

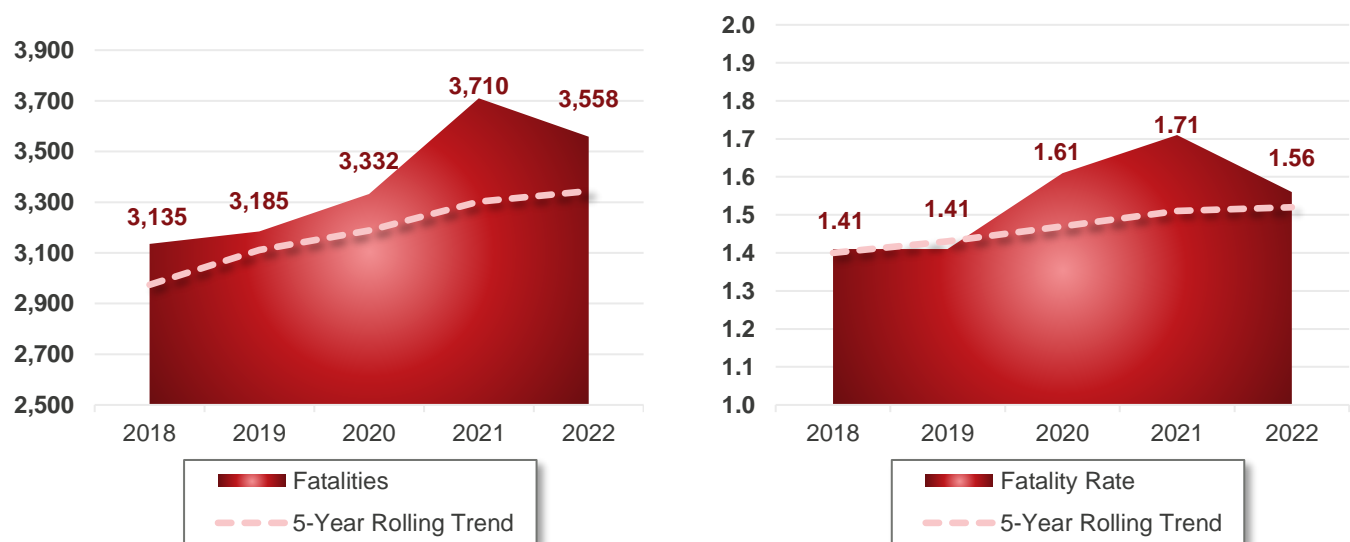


Figure 4: Florida's Total Annual Fatalities (2018-2022)



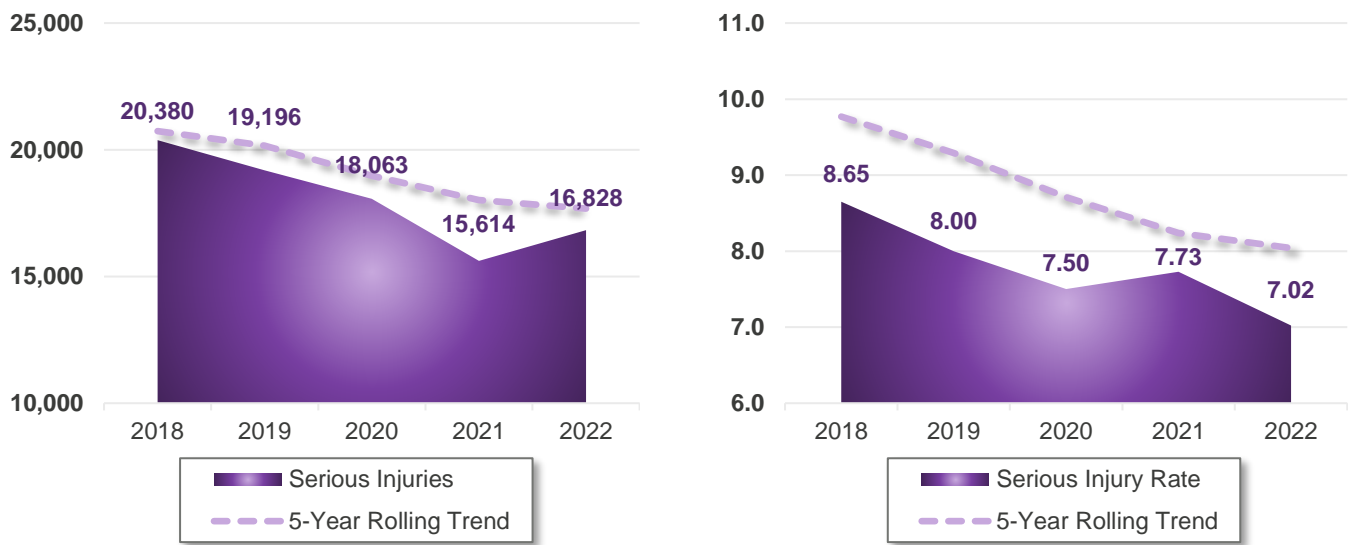


Figure 5: Florida's Total Annual Serious Injuries (2018-2022)

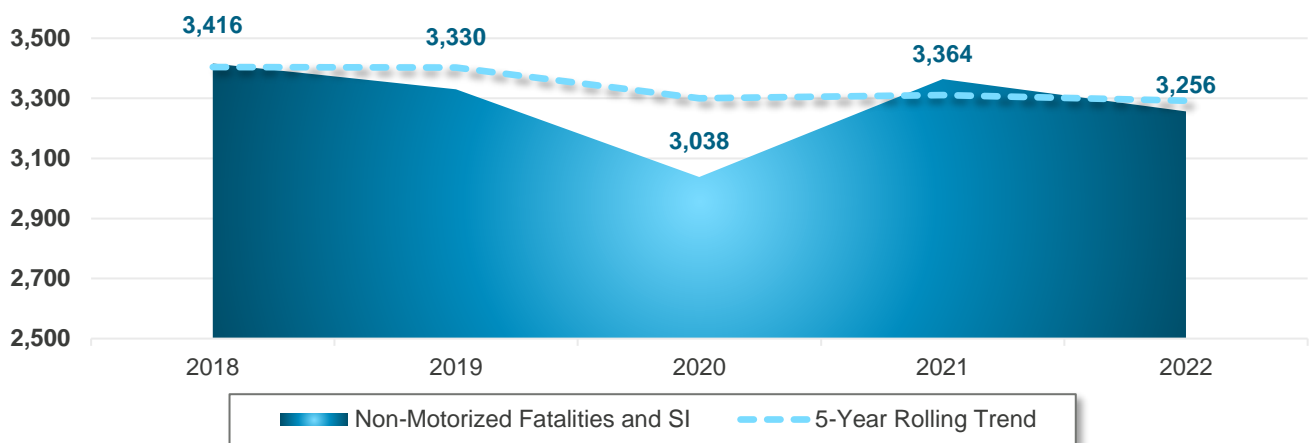


Figure 6: Florida's Non-motorized Fatalities and Serious Injuries (2018-2022)

## Evaluating Effectiveness of Safety Investments

Florida is analyzing and evaluating the effectiveness of safety investments by linking the HSIP Work Program to the state's traffic crash data. Figure 7 and Figure 8 provide a sample snapshot of FDOT's 2016-2019 construction projects funded by HSIP. Florida experienced a 19 percent reduction in fatal and serious injury crash rates for a total of 682 fewer fatal and serious injury crashes specifically on those corridors.



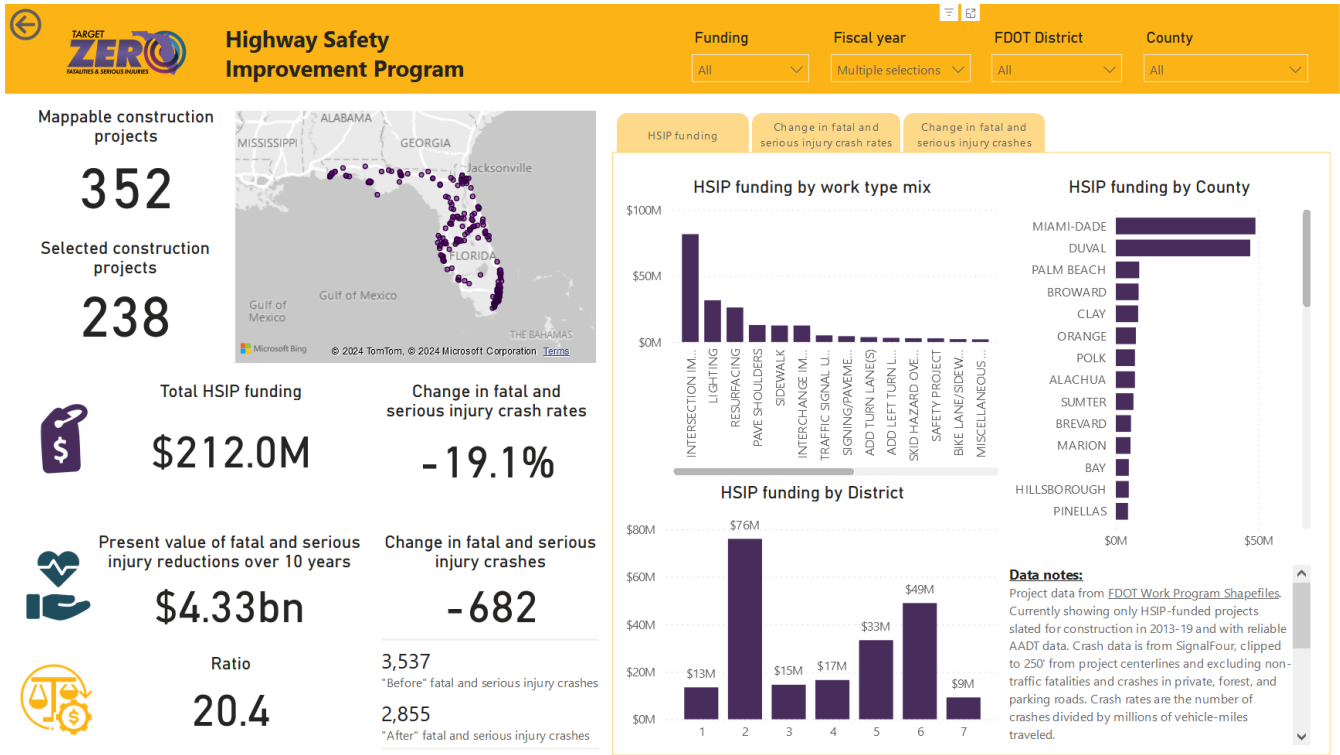


Figure 7: Summary of HSIP Investment Monitoring - Dashboard

**Highway Safety Improvement Program**

Project type: All | Funding: All | Fiscal year: All | FDOT District: All | County: All

WPITEM_SEG	YEAR	DESCRIPTION	COUNTY	TYPE	Combined Fatal and Serious Injury Crashes			Fatal Crashes			Serious Injury Crashes							
					Before FSI	After FSI	Difference in FSI crashes	Before FSI Rate	After FSI Rate	Difference in FSI crash rate	Before F	After F	Before F Rate	After F Rate	Before SI	After SI	Before SI Rate	After SI Rate
4398851	2019	OSCEOLA COUNTY PEDESTRIAN LIGHTING BUNDLE A	OSCEOLA	LIGHTING	166	81	-85	0.19	0.10	-0.10	19	17	0.02	0.02	147	64	0.17	0.08
4330651	2019	SR 50 FROM FORSYTH ROAD TO OLD CHENEY HIGHWAY	ORANGE	LIGHTING	167	91	-76	0.36	0.20	-0.16	17	10	0.04	0.02	150	81	0.32	0.18
4401871	2019	SR 7/NW 7 AVE SIGNALIZED INTERSEC.LIGHTING FROM NW 63 ST TO NW 215 ST	MIAMI-DADE	LIGHTING	130	93	-37	0.20	0.15	-0.04	26	26	0.04	0.04	104	67	0.16	0.11
4398806	2019	ORANGE COUNTY PEDESTRIAN LIGHTING BUNDLE F	ORANGE	LIGHTING	64	32	-32	0.28	0.16	-0.12	1	4	0.00	0.02	63	28	0.28	0.14
4363411	2019	SR-834/SAMPLE RD. FROM ROCK ISLAND RD TO SR-5/US-1	BROWARD	MISCELLANEOUS CONSTRUCTION	66	34	-32	0.14	0.07	-0.07	6	12	0.01	0.02	60	22	0.12	0.04
4398811	2019	VOLUSIA COUNTY PEDESTRIAN LIGHTING BUNDLE A	VOLUSIA	LIGHTING	137	108	-29	0.30	0.25	-0.06	23	18	0.05	0.04	114	90	0.25	0.20
4365461	2019	SR 70 FROM US 41 TO 540' EAST OF US 41	MANATEE	INTERSECTION IMPROVEMENT	33	8	-25	3.07	0.78	-2.30	2	0	0.19	0.00	31	8	2.89	0.78
4401181	2019	CLARK RD (SR 72) INTERSECTION LIGHTING RETROFIT	SARASOTA	LIGHTING	56	31	-25	0.27	0.16	-0.12	3	5	0.01	0.03	53	26	0.26	0.13
4363641	2018	US192 FROM BRADLEY DRIVE TO SAPLING LANE	OSCEOLA	SIGNING/PAVEMENT	52	27	-25	0.19	0.09	-0.10	10	13	0.04	0.04	42	14	0.15	0.04
4398801	2019	ORANGE COUNTY PEDESTRIAN LIGHTING BUNDLE A	ORANGE	LIGHTING	98	76	-22	0.22	0.21	-0.01	14	8	0.03	0.02	84	68	0.19	0.19
4308081	2018	SR 5/BISCAYNE BLVD FROM NE 151 STREET TO NE 196 STREET	MIAMI-DADE	RESURFACING	48	26	-22	0.21	0.12	-0.09	1	2	0.00	0.01	47	24	0.21	0.11
2331662	2018	SR-808/GLADES ROAD FROM SR-7 TO SR-5	PALM BEACH	PD&E/EMO STUDY	55	34	-21	0.12	0.08	-0.04	5	3	0.01	0.01	50	31	0.11	0.07
4398832	2019	BREVARD COUNTY PEDESTRIAN LIGHTING BUNDLE B	BREVARD	LIGHTING	47	27	-20	0.08	0.06	-0.02	11	4	0.02	0.01	36	23	0.06	0.05
<b>Total</b>					<b>4,427</b>	<b>4,048</b>	<b>-379</b>	<b>0.14</b>	<b>0.12</b>	<b>-0.01</b>	<b>670</b>	<b>720</b>	<b>0.02</b>	<b>0.02</b>	<b>3,757</b>	<b>3,328</b>	<b>0.12</b>	<b>0.10</b>

Figure 8: Summary of HSIP Investment Monitoring – Project List



As statewide systematic projects are programmed, work program codes are used to track those investments so the effectiveness of that specific countermeasure can be monitored.

Figure 9 is a sample snapshot of Florida’s statewide systematic rail crossing safety countermeasure implementation for the additional pavement markings to denote the foul zone approaching the tracks. Not only does Florida track the status of implementation, changes in vehicles observed stopping within that zone are also tracked. Eventually, changes in the number of crashes occurring in these zones will be able to be monitored.

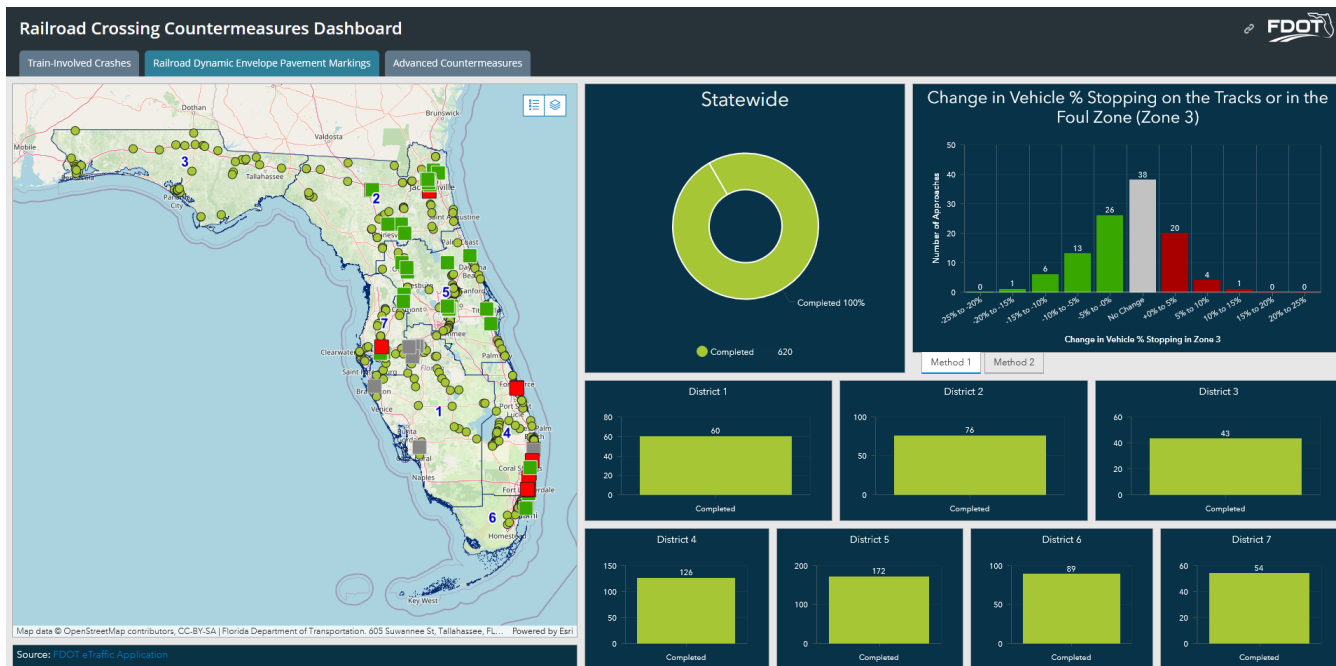


Figure 9: Rail Crossing Countermeasure Monitoring

Florida is also monitoring trends in train-involved crashes and the application of railroad crossing countermeasures to eliminate these crashes in Florida.

