

## **LOUISIANA**

# HIGHWAY SAFETY IMPROVEMENT PROGRAM

**2021 ANNUAL REPORT** 

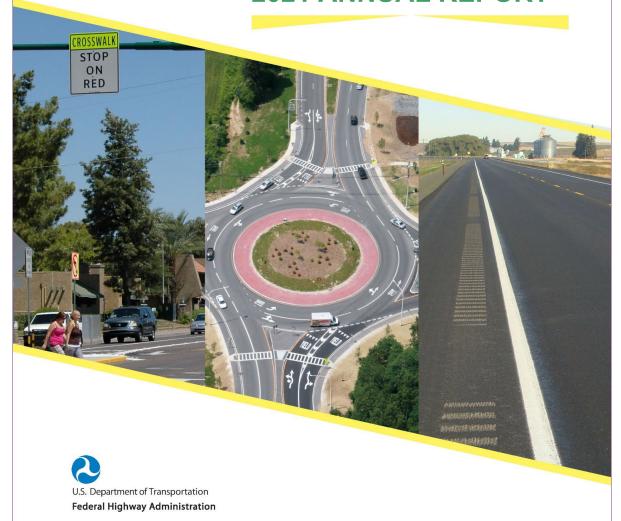


Photo source: Federal Highway Administration

## Table of Contents

Disclaimer	3
Protection of Data from Discovery Admission into Evidence	3
Executive Summary	4
Introduction	
Program Structure	10
Program Administration	10
Program Methodology	
Project Implementation	
Funds Programmed	18
General Listing of Projects	20
Safety Performance	25
General Highway Safety Trends	25
Safety Performance Targets	31
Applicability of Special Rules	34
Evaluation	36
Program Effectiveness	36
Effectiveness of Groupings or Similar Types of Improvements	37
Project Effectiveness	40
Compliance Assessment	41
Optional Attachments	44
Glossary	45

#### **Disclaimer**

#### Protection of Data from Discovery Admission into Evidence

23 U.S.C. 148(h)(4) states "Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section[HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data.

23 U.S.C. 148(h)(4) states "Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section[HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data.23 U.S.C. 409 states "Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data."

### **Executive Summary**

Louisiana has set an aggressive target for reducing death and injury on the roadways –Destination Zero Deaths. The 2017 Strategic Highway Safety Plan (SHSP) targets five emphasis areas: impaired driving, occupant protection, infrastructure and operations, crashes involving young drivers and distracted driving. Although preliminary, Louisiana is showing a significant increase in annual fatalities from 2019 to 2020. Like the rest of the Nation, Louisiana was faced with shutdowns and increased fatalities during the COVID-19 pandemic. Despite, dramatic drops in traffic during the shutdown in the spring of 2020 and reduction in total crashes, Louisiana is showing close to a 14% increase in fatalities at 828. That's up from 727 in 2019. It is unknown as to what specifically contributed to such an increase during those months. For the first time since in over 10 years, Louisiana fatalities are above the SHSP target of reducing fatalities in half by 2030. With this increase in fatalities, it is more important than ever that the state focuses on data driven strategies from SHSP and HSIP Implementation Plan as LA DOTD strives for improvement within each of the emphasis areas and begin the process of updating our SHSP for 2022. Although 2020 has been a difficult year for highway safety, LA DOTD has accomplished a number of successes in each emphasis area including the following:

#### Infrastructure and Operations (I/O):

Louisiana Department of Transportation and Development (LA DOTD) continue to use state specific safety performance functions to develop annual network screening lists for state owned segments and intersections. These Safety Performance Functions (SPFs) are integrated into our Crash Analysis Tool (CAT Scan) for engineers and planners across the state to use for project level safety analyses and our office provides technical support and training for this tool.

LA DOTD is continuing to use DOTD Districtwide Safety Investment Plans and Louisiana's updated Roadway Departure Implementation (RWD) Plan to identify future projects with high potential for safety improvement. This year LA DOTD completed another Districtwide Safety Investment Plan (District 05) by consultant contract. Of LA DOTD's nine District Offices, 3 Districtwide Safety Investment plans have been completed in last 2 years. These plans analyzed safety data for top locations on statewide network screening lists (also known as High Potential for Safety Improvement List) within the regional DOTD District area. The consultant in coordination with DOTD District office and DOTD Highway Safety Section performed high level planning safety analysis, countermeasure selection, and planning level cost estimates to recommend potential safety countermeasures. The final product includes a prioritized list of potential safety projects based on planning level safety benefit cost ratios. Advanced predictive methods for network screening of locations with potential for safety improvement on all public roads, including safety performance functions, were included in the RWD plan. Louisiana has received 3 Districtwide project applications recently from the RWD Implementation plan totaling \$6.6M. LA DOTD Highway Safety Section is also using the RWD plan to identify potential safety improvements which could be incorporated into other programs (e.g. Pavement Preservation Program).

The goal is to develop safety funded projects identified in these plans and streamline the HSIP project application process for the District Offices if no further traffic studies are needed. To date, the LA DOTD Highway Safety Section has programmed 6 projects within the HSIP which were originally investigated in the Districtwide Investment Plans or the Roadway Departure Implementation Plan.

LA DOTD continues to support Regional Safety Coalitions (RSCs) /Metropolitan Planning Organizations (MPOs) and Local Technical Assistance Program (LTAP) for developing local road safety plans targeted for the top 20 parishes, where over 90% of crashes are occurring on local roads, to better inform the data-driven process and target more data driven safety projects. Of the top 20 parishes, 12 local road safety plans have been finalized and are currently under development. There are 2 parishes not in the top 20 that have developed a LRS Plan for a total of 14 plans developed to date. Each of the nine (9) Regional Safety Coalition has a goal of completing at least one local road safety plan within each region as part of the SHSP Statewide

I/O Emphasis Area Action Plan and initiating implementation with the local road owners for the plans which are complete. Five of the RSCs have completed at least one local road safety plan. The remaining four are currently in development. LA DOTD continues to use crash frequency for network screening on local roads. Crash data profiles which were developed by LTAP are being used by non-top 20 parishes (remaining 10% of crashes are occurring on local roads) to determine potential safety projects for Local Road Safety Program (LRSP).

This year LA DOTD has also identified potential locations where Highway Safety Improvement Program (HSIP) could partner with Pavement Preservation Program to use High Risk Rural Roads (HRRR) funds using safety data and SHSP high risk rural road definition.

LA DOTD updated and resubmitted a HSIP Implementation Plan. As part of the planning and coordination for the Implementation Plan, our office conducted 9 highway safety road shows in conjunction with SHSP I/O Regional Emphasis Area (EA) team meetings. The purpose of these meetings was to give updates on crash data based on I/O EA subcategories (roadway departure, intersections, and non-motorized users), statewide safety performance measures, draft updated HSIP Implementation Plan, HSIP project selection guidelines for infrastructure projects, and goals for future HSIP funding allocations based on subcategories. These informational meetings have helped LA DOTD Highway Safety gain more interest in the HSIP and help communicate the types of HSIP projects LA DOTD Highway Safety is targeting for highest potential to reduce fatalities and serious injuries.

The MPO Safety Performance Target Setting web based portal continues to be updated for MPOs to use as part of the outreach at the regional level. Many of the MPOs are using this portal within their to present and discuss safety data and targets at the state and regional level;

LA DOTD is collaborating with local agencies to identify a process to review data items that have been collected as well as incorporate new construction of roads and their data elements. From 2015-2017, LA DOTD collected all known public roads during statewide efforts to satisfy FHWA requirements to report on all roads. At that time, it was approximated that 99% (90% of Fundamental Data Elements (FDE) are completed) of all local public roads were collected. All state owned roads and their data elements are actively maintained within LA DOTD's enterprise GIS system.

LA DOTD is working through Linear Referencing System (LRS) issues with the local road system in order to have them available within GIS system. Many efforts are underway to determine which elements are accessible and useable for ongoing safety studies through published GIS services. LA DOTD is also working on a process for obtaining updated data from local entities and incorporating it back into the statewide basemap. This statewide basemap will be used within the new eCrash software to assist in improving location information within the new crash report and streamline safety analyses on the back-end.

Louisiana is currently in the process of updating the Louisiana Uniform Motor Vehicle Traffic Crash Report to align with NHTSA's Model Minimum Uniform Crash Criteria (MMUCC) 5th Edition. LA DOTD has contracted with a Law Enforcement Expert to lead this effort between all lead agencies including Louisiana State Police (LSP), Louisiana Highway Safety Commission (LHSC), LSU/Center for Analytics and Research in Transportation Safety (CARTS), FHWA, and LA DOTD and to ensure crash data quality improvements are being tracked and data integration is optimized on the front end. Connecting systems on the back-end are also being planned for smooth transition to a new schema and updated data query tools for users. Coordination on this project has also involved the Office of Technology Services (OTS) Office of Motor Vehicle (OMV) for this data integration approach. A robust training program is underway in partnership with Traffic Records Coordinating Committee as well for local law enforcement agencies and outreach through the RSCs has begun.

LA DOTD Highway Safety Section worked with CARTS to refine a new Crash Data Query Tool for project level safety analysis. The purpose of this tool is to use more mapping features and tying directly to the electronic

captures of narratives and diagrams of the crash reports. The tool allows the engineer or planner to query a specific location and view crash data elements at summary level or at the crash level. Outputs of the tool include summary tables, detailed data tables, and collision diagrams. This tool is currently in demonstration mode and is being used by internal LA DOTD staff. Next steps include building in permissions for external users (local public agencies, MPOs, researchers and consultants) and roll out with the new crash report and data fields. LA DOTD and LSU/CARTS will be developing an outreach and training plan for engineers and planners as Louisiana transitions to these new query and analysis tools.

LA DOTD continues to implement cable barrier projects statewide based on a statewide systemic cable median barrier study which produced a prioritized list of candidate locations where median barrier would be considered for installation. High speed, controlled access facilities with a median width less than 100' were analyzed in the study. As of June 2021 the LA DOTD has installed approximately 530 miles of cable barriers throughout the State at an investment of approximately \$80 million. There are currently another 161 miles under construction along I-10, and I-49 and I-12 corridors for approximately \$33 million. Our staff will be working with Louisiana Transportation Research Center (LTRC) to perform a safety evaluation of the cable barrier projects which have been in operation for 3 + years.

The first round of districtwide low cost safety improvement systemic projects targeted at curves for roadway departure were implemented within the last 3 years. LA DOTD Highway Safety is working with LTRC on an upcoming safety project to develop a process of determining methodology for evaluating these systemic projects.

The state continues to use High Friction Surface Treatment as a safety countermeasure on select routes with a high potential for safety improvement. This year Louisiana had our first HFST project planned to let as part of the Local Road Safety Program. LA DOTD Highway Safety Office and Traffic Office continue to partner on funding enhanced signing at curves on rural two-lane roads as we align with new MUTCD guidance. We are working with LTAP for a similar initiative on local roads in conjunction with Local Road Safety Plans and RWD Plan.

#### Local Roads:

Local Road Safety Program (LRSP): Louisiana continues to lead efforts in LRSP. The LRSP is allocated approximately \$3-5 million of HSIP funds per year. Eligible projects include those for roadways in transportation systems owned and operated by Parish and municipal road agencies. Specific funds are available for selected local safety data-driven projects and additional funding sources for resources may be available depending on the type of project. Funding for local road safety improvement projects is available through the LRSP. LA DOTD administers the LRSP in coordination with LTAP. LTAP coordinates activities and resources in conjunction with the LA DOTD to facilitate quarterly project submittals, review and scoring, and recommendation of qualifying project applications for the Local Road Safety Improvement projects. This year, LTAP with LA DOTD support has participated in webinars, meetings and peer exchanges with locals. LTAP continued working with the RSCs Coordinators with developing Local Road Safety Plans and determining next steps for implementation of completed Local Road Safety Plans.

#### Non-Motorized Users:

Louisiana has finalized a statewide pedestrian crash study to analyze crash trends and develop predictive models for pedestrian crashes. This analysis will influence future Safe Route to Public Places Program (SRTPPP) and HSIP programming by using state specific safety performance functions to identify potential project locations for implementation of pedestrian safety countermeasures, with a specific focus on STEP countermeasures. These efforts will also help address Louisiana's non-motorized safety performance measures and identify needs for training efforts. In 2021, Louisiana designated a full-time Pedestrian, Bicycle & Transit Design Expert, who has become a valuable resource for SRTPPP, pedestrian/bicycle safety initiatives, and projects statewide Complete Street efforts. This will also help Louisiana focus our safety funds and

determine which countermeasure Louisiana should target and where training should be focused. LA DOTD participated in various virtual meeting/peer exchanges focused on pedestrian safety which has helped generate ideas on best approach for implementing safety infrastructure projects.

The SRTPPP is allocated approximately \$3-5 million per year as part of the HSIP. Eligible projects include those roadways in transportation systems owned and operated State, Parish and municipal road agencies with an emphasis on reducing non-motorized fatalities and serious injuries. Specific funds are available for selected safety data-driven projects and additional funding sources for resources may be available depending on the type of project. Funding for these projects is available through the SRTPPP. LA DOTD administers the SRTPPP. LA DOTD coordinates activities and resources to facilitate a yearly project application submittal, review and scoring, and recommendation of qualifying project applications. LA DOTD announced a 2021 Call for Projects in May, with applications due June 30, 2021. Twenty-two applications were received and are currently being evaluated. LA DOTD prepared the annual statewide Complete Streets Performance Measures Report and is working towards action items listed in Complete Streets Implementation Plan. Safety considerations have been used for these efforts to help bring awareness to potential concerns and identify opportunities where improvements can be made on new projects. LA DOTD Highway Safety Section participates in LA DOTD Complete Streets Steering Committee and the Louisiana Complete Streets Advisory Council.

Under the FHWA Focused Approach for Pedestrians and Bicyclists, LA DOTD's consultant conducted Road Safety Assessments for the top 10 locations identified in the Baton Rouge Bicycle and Pedestrian Safety Action Plan. The comprehensive RSA report summarizes potential countermeasures and prioritizes infrastructure projects and enforcement and/or education strategies for the road owners and the Regional SHSP Pedestrian and Bicycle Emphasis Area Team as they move towards implementation.

#### **Distracted Driving**

Louisiana's Statewide Distracted Driving Emphasis Area Team continues to provide educational and statistical information to Legislators as the conversations regarding a hands-free law in Louisiana continue. Team members also continued to reach local organizations with education on the corporate benefits of implementing hands-free policies for employees operating fleet vehicles, which research has shown to carry over into operation of employees' personally owned vehicles also. Throughout the year, students throughout Louisiana were encouraged to participate in two different Distracted Driving Contests: Project Yellow Light, which is a national competition; and a regional contest, which was to be sponsored by a local company. Lastly, in an effort to improve Louisiana's quality of data pertaining to Distracted Driving, state and local law enforcement agencies were encouraged to conduct traffic enforcement within school zones as well as to implement pilot enforcement programs within their agencies. The school zone project was selected because "hand-held bans" in place within school zones that are properly identified, allow for easier enforcement.

#### **Occupant Protection**

The LHSC conducted observational surveys in 2018 and 2019, and will conduct observational surveys again in 2021. The 2019 usage rate was 87.5%. The planned 2020 survey was not conducted due to the COVID-19 pandemic and a federal waiver granted by the NHTSA.

The Louisiana Passenger Safety Task Force (LPSTF), a subgroup under the Occupant Protection Emphasis Area in the SHSP, is responsible for educating the community and other agencies on the benefit of restraint systems in motor vehicles. The LPSTF is hosted by the University Medical Center New Orleans and the LHSC. Louisiana's RSCs partner with LPSTF many efforts including education, enforcement, and legislation related to motor vehicle occupants, thus preventing unnecessary injuries, fatalities, and economic costs to society. Various groups work together to provide access to child passenger safety and adult occupant protection services at no cost to all citizens of Louisiana. During 2020, over 6,000 children were assisted among Louisiana's 100 fitting stations. During the 2020, the LPSTF, Statewide Emphasis Area Teams and RSCs

worked together to provide education on the new Child Passenger Safety Law to ensure that children are placed in the safest category while traveling in a vehicle.

Through the Occupant Protection SHSP Emphasis Area Team, the LPSTF began training technicians in CarFit to address the occupant protection needs of older drivers. In 2020, two technician's trainings were conducted with a total of 22 CarFit technicians receiving training. There were two additional technician trainings planned; however, they were cancelled due to COVID-19.

The Occupant Protection SHSP Emphasis Area Team worked with the RSCs to provide standardized educational materials regarding the replacement of seatbelts and child seats following a crash. These materials were distributed through traditional means and through social media. Law enforcement agencies placed the guidelines in their officers' ticket books to be distributed with information on obtaining a crash report. Informational flyers were distributed at various events throughout the year.

#### Young Drivers

Through the Young Driver SHSP Emphasis Area Team, LA DOTD partnered with Office of Motor Vehicles (OMV), LSP and LHSC to revise the State's 30-hour novice driver education curriculum and to deliver a complete comprehensive curriculum, with lesson plans, to the State. This effort was completed this year and has been handed over the OMV for implementation. Louisiana's Statewide Emphasis Area Teams and Regional Safety Coalitions work closely grant funded programs aimed at reducing fatal and serious injuries among drivers aged 15 to 24 years old. Risky behaviors that are included in the curriculum for these programs include occupant protection, alcohol- and drug-impaired driving, distracted driving, and graduated driver's licensing laws (GDL). Collectively, these programs reached nearly 110,000 students during Federal Fiscal Year 2020. Numerous parents and caregivers also had opportunities to receive education through these programs so that they may be aware of the laws and issues that these novice drivers face on Louisiana roadways.

#### Impaired Driving

LHSC continued to support DWI overtime enforcement in Tier One Alcohol Problem ID Parishes, corresponding with national and state mobilizations. No Refusal Programs were expanded to law enforcement agencies across the state, with assistance from LSP and the RSCs. The LSP Applied Technology division trained 52 additional law enforcement officers in Advanced Roadside Impaired Driving Enforcement (ARIDE).

The RSCs, Judicial Outreach Liaison (JOL) and Traffic Safety Resource Prosecutor (TSRP) educated all newly-elected criminal court judges in the state on the ignition interlock statutes. A total of 45 hours of training on impaired driving topics was presented by the TSRP, educating 795 prosecutors and 631 law enforcement officers and other traffic safety personnel.

A new DWI Court was established in St. Landry Parish, bringing the state total to nine DWI courts supported with LHSC grant funds. These courts served approximately 200 clients in twelve parishes throughout the state.

One of the nine RSCs hosted a two-part webinar, entitled DWIQ, for which there were 485 participants and 18,340 social media views, insights, and shares.

#### SHSP Planning

The SHSP Implementation Team oversees overall implementation of the Plan and is supported by an Executive Committee. The team consists of representatives from LA DOTD, LSP, LHSC, LTAP, Louisiana Planning Council (LPC), Louisiana Municipal Association (LMA), FHWA, Federal Motor Carrier Safety Administration (FMCSA), National Highway Traffic Safety Administration (NHTSA), in addition to the statewide

emphasis area team leaders and regional safety coalition coordinators. RSCs through a partnership with MPOs, Louisiana established nine regional transportation safety coalitions across the State. Led by safety coalition coordinators housed within each of the MPOs and championed by leaders from a range of agencies and organizations, each coalition comprises local experts and advocates working toward the development and implementation of regional safety plans based on the SHSP. This regional, grassroots, 4E approach (engineering, enforcement, education, and emergency response) to saving lives has proven to be highly effective.

Louisiana is using a two-tiered approach to implement the SHSP: Statewide Emphasis Area Teams create data-driven action plans and track implementation of SHSP strategies and action steps, and RSCs utilize data to identify regional safety needs and develop data-driven five-year regional safety plans which identify emphasis areas consistent with the SHSP.

In 2020, Louisiana continued utilizing the newly developed vision for implementing and evaluating progress of emphasis area action plans. LA DOTD collaborated with federal, state, regional, and/or local representatives in the implementation of new program content relating to the performance, quality and compliance monitoring of action plans, projects and/or processes that will further enhance and support the engagement, effectiveness, tracking, goals and objectives of the SHSP and its associated operative platforms. Strategies were implemented, outcomes were defined, performance indicators were identified, and action plans were implemented. Quarterly and annual reviews are conducted at the statewide and regional levels to evaluate attainment, ensure action plans are data driven and are enhancing effectiveness of overall goal achievement. In 2020, Louisiana's achieved 95% percent attainment for all emphasis areas (combined). The majority of action steps that were unattainable were related to COVID-19 restrictions and legislation.

LA DOTD began the process of updating the SHSP in 2020. A consultant has been selected and the contract was executed in 2021. The final update of the SHSP is due July 2022.

#### Introduction

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. As per 23 U.S.C. 148(h) and 23 CFR 924.15, States are required to report annually on the progress being made to advance HSIP implementation and evaluation efforts. The format of this report is consistent with the HSIP Reporting Guidance dated December 29, 2016 and consists of five sections: program structure, progress in implementing highway safety improvement projects, progress in achieving safety outcomes and performance targets, effectiveness of the improvements and compliance assessment.

### **Program Structure**

#### **Program Administration**

#### Describe the general structure of the HSIP in the State.

Projects that are identified through the Highway Safety Improvement Program (HSIP) have the overall goal of reducing the number of fatalities and serious injuries on all public roads. LADOTD performs HSIP components of planning, implementation, and evaluation to accomplish requirements of the program. These components involve the following: data-driven identification of crash locations, development and implementation of an annual program of projects and report annually to the FHWA on progress and effectiveness. FHWA is involved in all three components, both formally and through informal technical assistance. LADOTD has developed SRTPPP Guidelines, LRSP Guidelines and HSIP Infrastructure Project Selection Guide for State Routes. Please see the attached documents that explain how HSIP projects are identified, selected, designed, implemented and evaluated.

#### Where is HSIP staff located within the State DOT?

**Planning** 

#### How are HSIP funds allocated in a State?

- Central Office via Statewide Competitive Application Process
- SHSP Emphasis Area Data

#### Describe how local and tribal roads are addressed as part of HSIP.

Local Road Safety Program (LRSP) LRSP is allocated approximately \$3-5 million per year. Eligible projects include those for roadways in transportation systems owned and operated by Parish and municipal road agencies. Tribal lands are also eligible. Specific funds are available for selected local safety data-driven projects and additional funding sources for resources may be available depending on the type of project. Funding for local road safety improvement projects is available through the LRSP.

LADOTD administers the LRSP in coordination with LTAP. LTAP coordinates activities and resources in conjunction with the LADOTD to facilitate quarterly project submittals, review and scoring, and recommendation of qualifying project applications for the Local Road Safety Improvement projects. LADOTD is responsible for managing project delivery once a project is accepted into the LRSP. LTAP provides technical support to the Regional Safety Coalition Coordinators on Local Road Safety Plans. LTAP continued working with the Regional Safety Coordinators with developing and/or implementing Local Road Safety Plans in at least one parish per Coalition. LADOTD has bundled similar types of LRSP projects within the same region to increase efficiency and reduce costs.

Safe Routes to Public Places Program (SRTPPP)

SRTPPP is allocated approximately \$3-5 million per year as part of the HSIP to focus on improving safety of non-motorized users. Eligible projects include those roadways in transportation systems owned and operated State, Parish and municipal road agencies. Specific funds are available for selected safety data-driven projects and additional funding sources for resources may be available depending on the type of project. Funding for these projects is available through the SRTPPP.

LADOTD administers the application process and project delivery for SRTPPP. LADOTD coordinates activities and resources to facilitate project application submittals, review and scoring, and recommendation of qualifying project applications. A call for new projects was held between May 2021 and June 2021.

## Identify which internal partners (e.g., State departments of transportation (DOTs) Bureaus, Divisions) are involved with HSIP planning.

- Design
- Districts/Regions
- Operations
- Planning
- Traffic Engineering/Safety

#### Describe coordination with internal partners.

LADOTD Design Engineers assists with HSIP by providing quality reviews of scope, budgets, and design alternatives considered during feasibility stage as needed. LADOTD pavement preservation group assists with prioritizing HRRR funds using safety data. LADOTD Districts perform an annual review of High Potential Safety Improvement List (HPSI List) and prioritizes potential safety projects within each district. Once locations are identified, they perform crash data analysis to select appropriate countermeasures and prepare scope and budget for proposed alternatives, including economic evaluation. LADOTD Planning unit assists with feasibility studies which in turn provides guidance as to whether or not a project is a good fit for the safety program. LADOTD Traffic Engineering unit provides input and feedback regarding safety intersection or corridor improvements such as traffic signals and roundabouts. LADOTD Operations Unit's guidance and feedback is sought when a statewide, systemic approach has been identified as a safety improvement and will require long-term commitment to maintain (guardrail upgrades, cable barrier, etc.).

### Identify which external partners are involved with HSIP planning.

- Academia/University
- FHWA
- Governors Highway Safety Office
- Law Enforcement Agency
- Local Government Agency
- Local Technical Assistance Program
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Other-State Police

### Describe coordination with external partners.

About 25 percent of roadway deaths and 40 percent of all crashes in Louisiana occur on the local road system. LADOTD partnered with the Louisiana LTAP to manage the LRSP to provide training, technical assistance, and outreach to local jurisdictions through an application process. LHSC is actively involved in the development of the SHSP particularly the emphasis area plans. As such, the projects and activities funded by the Highway Safety Plan (HSP) are reflected in these emphasis area action plans. The second goal in Louisiana's Statewide Transportation Improvement Plan (STIP) is coordinated with the HSIP and SHSP to

provide safe and secure travel conditions across all transportation modes through physical infrastructure improvements, operational controls, programs, and public education and awareness. One of the ways to achieve this goal is through the objective of reducing the number and rate of highway-related crashes, fatalities, and serious injuries, which corresponds to the performance targets for the HSIP and HSP and the measurable objectives in the SHSP. A review of the Commercial Vehicle Safety Plan (CVSP) found several areas that link to the SHSP including removing alcohol- and drug-impaired commercial vehicle operators from the road and outreach and education on seat belt use. LADOTD works closely with FHWA division office on statewide and regional initiatives related to SHSP strategies and HSIP, in particular those related to safety data and planning and HSIP infrastructure projects. LADOTD has also been in contact with one of the state's tribes for information on HSIP funding opportunities in Louisiana. Regional Safety Coalitions are providing support as needed for these tribal grants. Local and state law enforcement agencies actively participate in the statewide SHSP emphasis area teams and the regional safety coalitions. Their involvement is critical as SHSP strategies are initiated and achieved at the regional level. Their participation is also key for statewide safety initiatives/campaigns and data improvement projects. In addition, the law enforcement agencies participate in the Road Safety Assessments (RSAs). LADOTD also employs two law enforcement experts to lead crash report update project and to assist with trainings and outreach to the various law enforcement agencies statewide to increase the quality of data. Additional duties include Traffic Incident Management and Work Zone law enforcement training. Regional Metropolitan Planning Organizations (MPO) are actively engaged within the regional safety coalitions. Each MPO employs a safety coalition coordinator to oversee the activities of each coalition. The planning organizations also work with the LADOTD planners to use safety and roadway data for their internal analyses and assist with their internal prioritization of projects. Many of the MPOs have committed to developing local road safety plans at parish level and reaching out to local entities to discuss implementation. LSU/CARTS provides assistance to LADOTD for Fatal Accident Reporting System (FARS), crash report software support and training, crash database management, data quality reviews, and real-time reporting tools for stakeholders. LSU/CARTS also conducts specialized crash data analysis studies as requested by LHSC, LADOTD, or LSP.

### Program Methodology

Does the State have an HSIP manual or similar that clearly describes HSIP planning, implementation and evaluation processes?

Yes

Select the programs that are administered under the HSIP.

- HRRR
- HSIP (no subprograms)
- Local Safety
- Other-Safe Routes to Public Places

**Program: HRRR** 

Date of Program Methodology:7/31/2017

What is the justification for this program?

• FHWA focused approach to safety

What is the funding approach for this program?

Funding set-aside

#### What data types were used in the program methodology?

Crashes Exposure Roadway

- Fatal and serious injury crashes only
- Volume

Functional classification

#### What project identification methodology was used for this program?

Crash rate

Are local roads (non-state owned and operated) included or addressed in this program?

No

Are local road projects identified using the same methodology as state roads?

#### How are projects under this program advanced for implementation?

Other-Identified through Planning

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

#### Rank of Priority Consideration

Available funding:1

### Program: HSIP (no subprograms)

Date of Program Methodology:6/30/2017

### What is the justification for this program?

- · Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

### What is the funding approach for this program?

Funding set-aside

### What data types were used in the program methodology?

Crashes Exposure Roadway

All crashes
 Volume
 Functional classification

 Fatal and serious injury crashes only

#### What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Excess expected crash frequency using SPFs
- Excess expected crash frequency with the EB adjustment
- Excess proportions of specific crash types
- · Expected crash frequency with EB adjustment
- Level of service of safety (LOSS)
- Probability of specific crash types

Are local roads (non-state owned and operated) included or addressed in this program?

No

Are local road projects identified using the same methodology as state roads?

#### How are projects under this program advanced for implementation?

selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

#### **Rank of Priority Consideration**

Available funding:2 Cost Effectiveness:1

**Program: Local Safety** 

Date of Program Methodology:12/20/2016

#### What is the justification for this program?

- · Addresses SHSP priority or emphasis area
- Other-Allows LA DOTD to address crashes on all public roads.

### What is the funding approach for this program?

Funding set-aside

#### What data types were used in the program methodology?

Crashes Exposure Roadway

All crashes

#### What project identification methodology was used for this program?

Crash frequency

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Describe the methodology used to identify local road projects as part of this program. Top 20 parish crash data profiles were developed.

#### How are projects under this program advanced for implementation?

- Competitive application process
- selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

#### **Relative Weight in Scoring**

Available funding:2 Cost Effectiveness:1 Total Relative Weight:3

**Program: Other-Safe Routes to Public Places** 

Date of Program Methodology:2/1/2017

What is the justification for this program?

· Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes Exposure Roadway

- All crashes
- Fatal and serious injury crashes
   Other-Demand only

#### What project identification methodology was used for this program?

- Crash frequency
- · Excess proportions of specific crash types

## Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?
Yes

#### How are projects under this program advanced for implementation?

- Competitive application process
- selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

#### **Rank of Priority Consideration**

Available funding:2 Cost Effectiveness:1

### What percentage of HSIP funds address systemic improvements?

38

## HSIP funds are used to address which of the following systemic improvements?

- Add/Upgrade/Modify/Remove Traffic Signal
- Cable Median Barriers
- Install/Improve Pavement Marking and/or Delineation
- Rumble Strips

### What process is used to identify potential countermeasures?

- Crash data analysis
- Data-driven safety analysis tools (HSM, CMF Clearinghouse, SafetyAnalyst, usRAP)

- Engineering Study
- Road Safety Assessment
- SHSP/Local road safety plan
- Stakeholder input

## **Does the State HSIP consider connected vehicles and ITS technologies?**

## **Does the State use the Highway Safety Manual to support HSIP efforts?** Yes

#### Please describe how the State uses the HSM to support HSIP efforts.

The Highway Safety Manual (HSM) was consulted for determining better methodologies for network screening and project level data analysis. Louisiana has developed state-specific safety performance functions and excel-based diagnostic tools for better targeting HSIP funds where potentially severe injury crashes are occurring. Additionally, LADOTD utilizes the HSM spreadsheets and CMF Clearing House for project level safety analysis.

## **Project Implementation**

#### Funds Programmed

#### Reporting period for HSIP funding.

State Fiscal Year NA

#### Enter the programmed and obligated funding for each applicable funding category.

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	\$35,744,000	\$39,357,834	110.11%
HRRR Special Rule (23 U.S.C. 148(g)(1))	\$3,085,174	\$3,085,174	100%
Penalty Funds (23 U.S.C. 154)	\$9,636,500	\$12,323,203	127.88%
Penalty Funds (23 U.S.C. 164)	\$9,636,500	\$18,038,492	187.19%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	\$0	\$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	\$22,918,000	\$9,530,935	41.59%
State and Local Funds	\$0	\$1,500,404	0%
Totals	\$81,020,174	\$83,836,042	103.48%

## How much funding is programmed to local (non-state owned and operated) or tribal safety projects?

\$5,737,808

How much funding is obligated to local or tribal safety projects? \$11,861,577

**How much funding is programmed to non-infrastructure safety projects?** \$6,731,626

How much funding is obligated to non-infrastructure safety projects? \$740,574

How much funding was transferred in to the HSIP from other core program areas during the reporting period under 23 U.S.C. 126?

How much funding was transferred out of the HSIP to other core program areas during the reporting period under 23 U.S.C. 126?

\$0

Discuss impediments to obligating HSIP funds and plans to overcome this challenge in the future.

LADOTD has no impediments to obligating funds at this time.

Describe any other aspects of the State's progress in implementing HSIP projects on which the State would like to elaborate.

The reason for the difference between our programmed and obligated amounts is that our programmed projects is a snapshot at the beginning of the state fiscal year and throughout the year project schedules move due to unforeseen issues. Obligated amounts are for projects authorized within the current year and are programmed prior to the current year. Also, cost tend to increase once design begins and leads to higher obligations closer to construction.

## General Listing of Projects

## List the projects obligated using HSIP funds for the reporting period.

PROJECT NAME	IMPROVEMEN T CATEGORY	SUBCATEGOR Y	OUTPUT S	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGOR Y	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATIO N	AADT	SPEE D	OWNERSHI P	METHOD FOR SITE SELECTIO N	SHSP EMPHASIS AREA	SHSP STRATEG Y
H.003459 I-49 Interch:LA726/LA98/Pon t Des Mounton	Interchange design	Interchange design - other	3	Interchange s	\$5234294.76	\$5815883.07	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Interstate	58,70 0	70	State Highway Agency	Spot	Intersection s	Pages 3-12
H.006499 Westdale & Bernard Terrace Sidewalks	Pedestrians and bicyclists	Install sidewalk	1	Miles	\$116836.08	\$929364.21	Penalty Funds (23 U.S.C. 164)	Urban	Local Road or Street	0		City or Municipal Highway Agency	Spot	Pedestrians	Pages 3-8
H.009175 St. Bernard Signing & Striping	Roadway delineation	Roadway delineation - other	13.1	Miles	\$517992.52	\$542089.83	Penalty Funds (23 U.S.C. 154)	Urban	Local Road or Street	0		County Highway Agency	Spot	Roadway Departure	Pages 3- 11/12
H.009308 New Orleans DPW SRTS Sidewalk Proj.	Pedestrians and bicyclists	Pedestrians and bicyclists – other	17	Locations	\$1995046.96	\$2470846.95	Penalty Funds (23 U.S.C. 154)	Urban	Multiple/Varies	0		City or Municipal Highway Agency	Spot	Pedestrians	Pages 3-8
H.010865 I-210: Ryan St Intg-E Jct I-10	Roadside	Barrier – cable	12	Miles	\$1385686.5	\$1385686.5	Penalty Funds (23 U.S.C. 164)	Multiple/Varie s	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	Pages 3- 11/12
H.010909 LA 44:Widening and Roundabout @LA 941	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	\$3324864.57	\$3324864.57	Penalty Funds (23 U.S.C. 164)	Urban	Multiple/Varies	13,80 0	45	State Highway Agency	Spot	Intersection s	Pages 3-12
H.010962 I-10: Cable Barrer(Lafayette/Acadia)	Roadside	Barrier – cable	37	Miles	\$17698606.7 5	\$17698606.7 5	HSIP (23 U.S.C. 148)	Multiple/Varie s	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	Pages 3- 11/12
H.011260 US 190B @ Jefferson Ave. Roundabout	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	\$1981877.9	\$1981877.9	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	13,30 0	25	State Highway Agency	Spot	Intersection s	Pages 3-12
H.011495 US 90: Ramps @ LA 88 Roundabouts	Interchange design	Interchange design - other	6	Intersections	\$8395030.85	\$8907637.37	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	6,000	45	State Highway Agency	Spot	Intersection s	Pages 3-12
H.011895 City of Monroe Guardrail Installation	Roadside	Barrier - other	2	Locations	\$77884.36	\$151800.8	Penalty Funds (23 U.S.C. 164)	Urban	Multiple/Varies	0		City or Municipal Highway Agency	Systemic	Roadway Departure	Pages 3- 11/12
H.011937 US 90: Cable Barrier in Assump & St. Mary	Roadside	Barrier – cable	7	Miles	\$1029552.85	\$1029552.85	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other Freeways & Expressways		50	State Highway Agency	Systemic	Roadway Departure	Pages 3- 11/12

PROJECT NAME	IMPROVEMEN T CATEGORY	SUBCATEGOR Y	OUTPUT S	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGOR Y	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATIO N	AADT	SPEE D	OWNERSHI P	METHOD FOR SITE SELECTIO N	SHSP EMPHASIS AREA	SHSP STRATEG Y
H.011949 RWD Signing Plaquemines Parish	Roadway delineation	Roadway delineation - other	50	Miles	\$1116931.14	\$2241558.15	Penalty Funds (23 U.S.C. 164)	Urban	Local Road or Street	0		County Highway Agency	Spot	Roadway Departure	Pages 3- 11/12
H.012052 LA 3092: Gauthier Rd @ Lake St Roundabout	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	\$67030.3	\$67030.3	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	6,376	50	State Highway Agency	Spot	Intersection s	Pages 3-12
H.012279 Endom Bridge Approach Realignment	Intersection geometry	Intersection realignment	1	Intersections	\$1309664.8	\$1309664.8	Penalty Funds (23 U.S.C. 164)	Urban	Local Road or Street	0		City or Municipal Highway Agency	Spot	Intersection s	Pages 3-12
H.012393 LA 98: Roundabout @ Mills Street	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	\$1733031.65	\$1733031.65	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	7,419		State Highway Agency	Spot	Intersection s	Pages 3-12
H.012473 Marconi Dr Shared-Use Path	Pedestrians and bicyclists	Pedestrians and bicyclists – other	0.6	Miles	\$875942.9	\$1104575.6	Penalty Funds (23 U.S.C. 154)	Urban	Local Road or Street	0		Local Park, Forest or Reservation Agency	Spot	Pedestrians	Pages 3-8
H.012527 Local Roads Safety Upgrades (W Feliciana)	Roadway delineation	Roadway delineation - other	47	Miles	\$1676941.31	\$1676941.31	Penalty Funds (23 U.S.C. 164)	Rural	Local Road or Street	0		County Highway Agency	Spot	Roadway Departure	Pages 3- 11/12
H.012676 I-10 Ramps @ LA 3019 Int Imp	Pedestrians and bicyclists	Install sidewalk	0.4	Miles	\$40666.03	\$40666.03	Penalty Funds (23 U.S.C. 154)	Urban	Multiple/Varies	38,70 0	40	State Highway Agency	Spot	Pedestrians	Pages 3-8
H.012682 Pedestrian Crosswalk Enh. (NO PH2)	Pedestrians and bicyclists	Pedestrian signal	52	Intersections	\$3065574.33	\$3592103.95	Penalty Funds (23 U.S.C. 164)	Urban	Multiple/Varies	0		City or Municipal Highway Agency	Spot	Pedestrians	Pages 3-8
H.012798 LA 594: Roundabout at Rowland Rd.	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	\$1697838.45	\$1697838.45	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	4,800	50	State Highway Agency	Spot	Intersection s	Pages 3-12
H.012800 Local Roads (Lafayette)	Roadway delineation	Roadway delineation - other	0.8	Miles	\$380610.39	\$380610.39	Penalty Funds (23 U.S.C. 164)	Multiple/Varie s	Multiple/Varies	0		Town or Township Highway Agency	Spot	Roadway Departure	Pages 3- 11/12
H.012918 LA 3139: Dickory Ave Orleans P/L	Roadway	Pavement surface – high friction surface	0.4	Miles	\$333125.93	\$333125.93	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial- Other Freeways & Expressways		50	State Highway Agency	Spot	Roadway Departure	Pages 3- 11/12
H.013101 Constitution Dr Signing & Striping	Roadway delineation	Roadway delineation - other	1.6	Miles	\$288158.69	\$288158.69	Penalty Funds (23 U.S.C. 154)	Urban	Multiple/Varies	0		City or Municipal Highway Agency	Spot	Roadway Departure	Pages 3- 11/12

PROJECT NAME	IMPROVEMEN T CATEGORY	SUBCATEGOR Y	OUTPUT S	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGOR Y	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATIO N	AADT	SPEE D	OWNERSHI P	METHOD FOR SITE SELECTIO N	SHSP EMPHASIS AREA	SHSP STRATEG Y
H.013204 LA 6: LA 504 to LA 1	Access management	Change in access - close or restrict existing access	4	Intersections	\$254045.4	\$282272.66	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other	18,60 0	45	State Highway Agency	Spot	Intersection s	Pages 3-12
H.013211 LA 46: LA 39 - St. Bernard P/L	Pedestrians and bicyclists	Pedestrian signal	1	Intersections	\$466678.53	\$466678.53	Penalty Funds (23 U.S.C. 154)	Urban	Principal Arterial- Other	16,25 5	35	State Highway Agency	Spot	Pedestrians	Pages 3-8
H.013344 LA 14 @ LA 397 Roundabout	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	\$787304.4	\$787304.4	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	6,096	55	State Highway Agency	Spot	Intersection s	Pages 3-12
H.013420 Dist. 04 FYA Part 1	Intersection traffic control	Modify traffic signal – add flashing yellow arrow	68	Approaches	\$3393625.84	\$3393625.84	Penalty Funds (23 U.S.C. 164)	Multiple/Varie s	Multiple/Varies	0		State Highway Agency	Systemic	Intersection s	Pages 3-12
H.013422 Dist. 61 FYA Part 2	Intersection traffic control	Modify traffic signal – add flashing yellow arrow	82	Approaches	\$2643716.96	\$2643716.96	Penalty Funds (23 U.S.C. 154)	Multiple/Varie s	Multiple/Varies	0		State Highway Agency	Systemic	Intersection s	Pages 3-12
H.013533 LRSP/SR2PP Engineer 2 2020-2025	Miscellaneous	Transportation safety planning			\$156500	\$156500	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0			Planning	Data	Pages 3-8
H.013763 LRSP Signs & Striping (Vernon, Sabine)	Roadway delineation		65.3	Miles	\$170026.8	\$170026.8	Penalty Funds (23 U.S.C. 164)	Multiple/Varie s	Multiple/Varies	0		County Highway Agency	Spot	Roadway Departure	Pages 3- 11/12
H.013766 Local Road Signs & Striping (Caddo)	Roadway delineation		48.3	Miles	\$123616.69	\$123616.69	Penalty Funds (23 U.S.C. 154)	Multiple/Varie s	Multiple/Varies	0		County Highway Agency	Spot	Roadway Departure	Pages 3- 11/12
H.013822 Dist. 03 Rumblestrips (North)	Roadway	Rumble strips – edge or shoulder	86	Locations	\$4443041.36	\$4443041.36	Penalty Funds (23 U.S.C. 154)	Multiple/Varie s	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	Pages 3- 11/12
H.013927 LA 500: Grant P/L - US 84	Alignment	Vertical alignment or elevation change	9	Miles	\$3085174	\$4302272	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Major Collector	1,008		State Highway Agency	Spot	Roadway Departure	Pages 3- 11/12
H.014060 LA 511: Turn Lanes @ Walker & Kennedy		Add/modify auxiliary lanes	2	Intersections	\$1530219.6	\$3239049.83	Penalty Funds (23 U.S.C. 164)	Urban	Minor Arterial	7,640	40	State Highway Agency	Spot	Intersection s	Pages 3-12
H.014092 LA 3152: Lane Modifications	Roadway	Pavement surface – high friction surface	1	Locations	\$479220.23	\$532466.92	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	39,50 0	35	State Highway Agency	Spot	Roadway Departure	Pages 3- 11/12

PROJECT NAME	IMPROVEMEN T CATEGORY	SUBCATEGOR Y	OUTPUT S	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGOR Y	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATIO N	AADT	SPEE D	OWNERSHI P	METHOD FOR SITE SELECTIO N	SHSP EMPHASIS AREA	SHSP STRATEG Y
H.014305 US 61: Cardinal Drive -Bert Street	Miscellaneous	Transportation safety planning	2	Miles	\$197916.69	\$197916.69	Penalty Funds (23 U.S.C. 154)	Urban	Principal Arterial- Other	20,75 5	50	State Highway Agency	Planning	Data	Pages 3-8
H.014579 FYA Signal Improvement (LCG)	Intersection traffic control	Modify traffic signal – add flashing yellow arrow	28	Locations	\$146350.73	\$146350.73	Penalty Funds (23 U.S.C. 154)	Urban	Multiple/Varies	0		City or Municipal Highway Agency	Spot	Intersection s	Pages 3-12
H.972384 Section 33 LTAP 10/1/2020- 9/30/2021	Miscellaneous	Transportation safety planning			\$359266	\$359266	Penalty Funds (23 U.S.C. 154)	N/A	N/A	0			Planning	Data	Pages 3-8
H.972419 SHSP Development & Planning 2022	Miscellaneous	SHSP Development			\$224808.86	\$224808.86	Penalty Funds (23 U.S.C. 154)	N/A	N/A	0			Planning	Data	Pages 3-8
H.012053 LA 378: SB RT Turn Lane @ Phillips Rd	Intersection geometry	Add/modify auxiliary lanes	1	Intersections	\$335344.25	\$419180.32	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Principal Arterial- Other	13,43 6		State Highway Agency	Spot	Intersection s	Pages 3-12
H.012073 LA 20: Improvement @ LA 3127	Intersection geometry	Add/modify auxiliary lanes	1	Intersections	\$351155.5	\$438944.38	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Major Collector	4,367		State Highway Agency	Spot	Intersection s	Pages 3-12
H.012595 LA 3154: Right Turn Lane at Dock St.	Intersection geometry	Add/modify auxiliary lanes	1	Intersections	\$324734.75	\$324734.75	State and Local Funds	Urban	Minor Arterial	37,63 4		State Highway Agency	Spot	Intersection s	Pages 3-12
H.013387 D61 FYA Part 1	Intersection traffic control	Modify traffic signal – add flashing yellow arrow		Signal heads	\$1922735.79	\$3845471.58	Other Federal-aid Funds (i.e. STBG, NHPP)	Multiple/Varie s	Multiple/Varies	0		State Highway Agency	Systemic	Intersection s	Pages 3-12
H.013420 D04 FYA Part 1	Intersection traffic control	Modify traffic signal – add flashing yellow arrow		Signal heads	\$2661590.09	\$5323180.18	Other Federal-aid Funds (i.e. STBG, NHPP)	Multiple/Varie s	Multiple/Varies	0		State Highway Agency	Systemic	Intersection s	Pages 3-12
H.013422 Dy1 FYA Part 2	Intersection traffic control	Modify traffic signal – add flashing yellow arrow		Signal heads	\$2073443.32	\$4146886.65	Other Federal-aid Funds (i.e. STBG, NHPP)	Multiple/Varie s	Multiple/Varies	0		State Highway Agency	Systemic	Intersection s	Pages 3-12
H.014081 US 371 Turn Lane Ext. at US 80	Intersection geometry	Add/modify auxiliary lanes	1	Intersections	\$298653.12	\$298653.12	Other Federal-aid Funds (i.e.	Multiple/Varie s	Minor Arterial	4,874		State Highway Agency	Spot	Intersection s	Pages 3-12

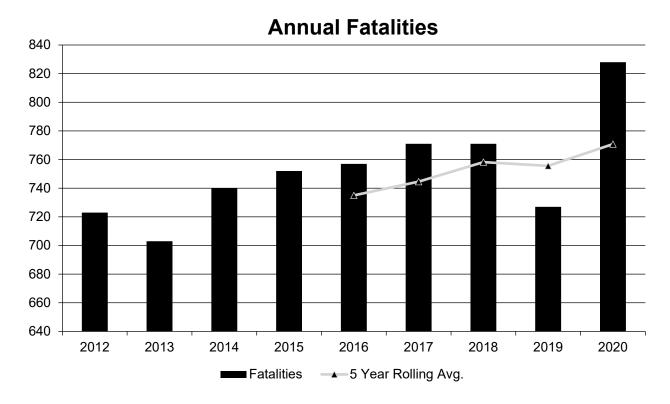
PROJECT NAME	IMPROVEMEN T CATEGORY	SUBCATEGOR Y	OUTPUT S	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGOR Y	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATIO N	AADT	SPEE D	OWNERSHI P	METHOD FOR SITE SELECTIO N	SHSP EMPHASIS AREA	SHSP STRATEG Y
							STBG, NHPP)								
H.014094 LA 397 Left Turn Lane @ McNeese Ext	Intersection geometry	Add/modify auxiliary lanes	1	Intersections	\$313749.68	\$313749.68	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Minor Arterial	9,356		State Highway Agency	Spot	Intersection s	Pages 3-12
H.014474 US 61 Turn Lane Impr @ LA 3038	Intersection geometry	Add/modify auxiliary lanes	1	Intersections	\$395360.4	\$395360.4	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Principal Arterial- Other	16,38 5		State Highway Agency	Spot	Intersection s	Pages 3-12
H.014487 LA 406: Lt. Turn Lane @ Green Trails Dr	Intersection geometry	Add/modify auxiliary lanes	1	Intersections	\$1178900	\$1178900	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Minor Arterial	10,62 5		State Highway Agency	Spot	Intersection s	Pages 3-12

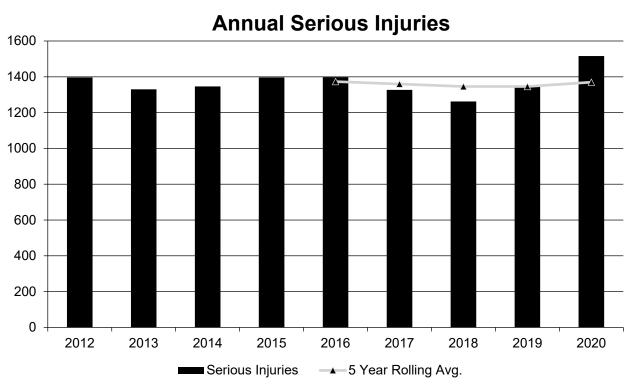
## **Safety Performance**

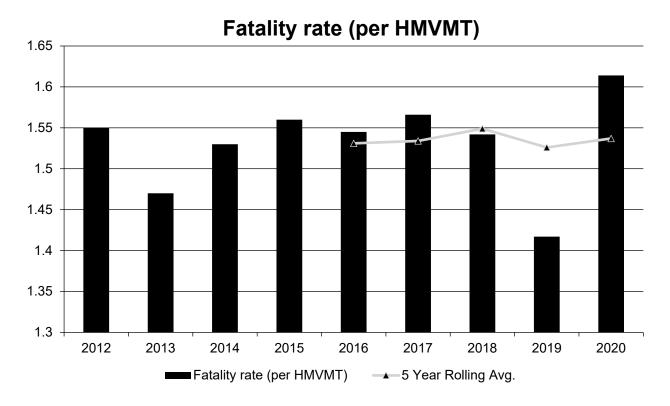
## General Highway Safety Trends

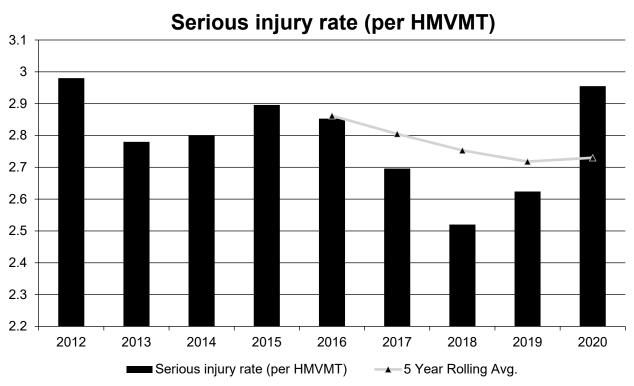
## Present data showing the general highway safety trends in the State for the past five years.

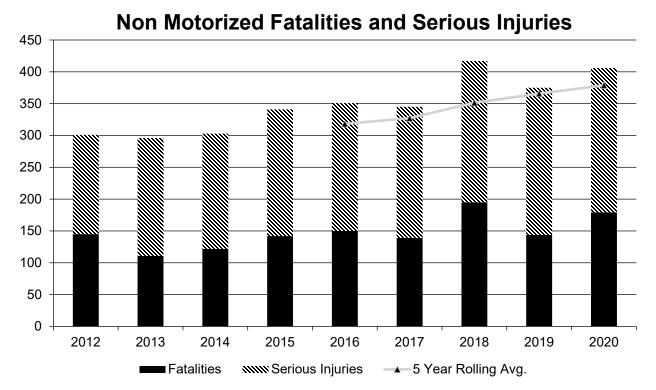
PERFORMANCE MEASURES	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fatalities	723	703	740	752	757	771	771	727	828
Serious Injuries	1,396	1,330	1,346	1,396	1,398	1,327	1,262	1,346	1,516
Fatality rate (per HMVMT)	1.550	1.470	1.530	1.560	1.545	1.566	1.542	1.417	1.614
Serious injury rate (per HMVMT)	2.980	2.780	2.800	2.896	2.853	2.696	2.520	2.624	2.955
Number non-motorized fatalities	145	111	122	142	150	139	195	144	179
Number of non- motorized serious injuries	156	185	181	199	201	206	222	231	227











2020 actuals based on vehicle miles traveled as reported in 2019 HPMS submittal.

#### Describe fatality data source.

**FARS** 

## To the maximum extent possible, present this data by functional classification and ownership.

#### Year 2020

Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Principal Arterial (RPA) - Interstate	42.2	33	0.67	0.52
Rural Principal Arterial (RPA) - Other Freeways and Expressways				
Rural Principal Arterial (RPA) - Other	42	24.4	1.51	0.88
Rural Minor Arterial	68	47.4	2.15	1.5
Rural Minor Collector	28.6	20.2	2.59	1.84
Rural Major Collector	87.4	49.4	2.68	1.51

Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Local Road or Street	9.6	8.4	2.99	2.79
Urban Principal Arterial (UPA) - Interstate	71.8	140.2	0.75	1.46
Urban Principal Arterial (UPA) - Other Freeways and Expressways	5.6	4.4	0.6	0.42
Urban Principal Arterial (UPA) - Other	128.2	287.6	1.77	3.96
Urban Minor Arterial	88.6	127.8	2	2.88
Urban Minor Collector				
Urban Major Collector	37.4	45	2.69	3.23
Urban Local Road or Street	1	1.2	3.32	3.09

#### Year 2020

Roadways	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
State Highway Agency	617	830.6	1.49	2
County Highway Agency	72.6	170.8	3.87	9.12
Town or Township Highway Agency				
City or Municipal Highway Agency	77.8	360.2	1.3	6.01
State Park, Forest, or Reservation Agency				
Local Park, Forest or Reservation Agency				
Other State Agency				
Other Local Agency				
Private (Other than Railroad)				
Railroad				
State Toll Authority				
Local Toll Authority	1	2.2	0.29	0.63
Other Public Instrumentality (e.g. Airport, School, University)				
Indian Tribe Nation				

Table 1 (Functional Classification) reflects data captured on state-owned roadways. We are working closely with LADOTD Data Collection Section to develop a process for integrating local road data. Table 2 (Roadway Ownership) includes data captured on state-owned and local-owned roadways.

Safety Performance Targets

**Safety Performance Targets** 

Calendar Year 2022 Targets \*

Number of Fatalities:755.0

Describe the basis for established target, including how it supports SHSP goals.

The overall goal is to reduce fatal and serious injury crashes on Louisiana roadways. As mentioned previously, LHSC and LADOTD teamed up to identify consistent goals to be adopted by both agencies. The two agencies agreed to adopt the American Association of State Highway and Transportation Officials (AASHTO) goal of halving fatalities by 2030. Louisiana's SHSP, which the LADOTD oversees, reflects this overall goal as well. Despite an increasing trend in fatalities and serious injuries over the last few years, it was decided to renew the commitment to saving lives and continue to set decreasing targets. LADOTD reviewed the actual and linear trend of fatalities, fatality rate, serious injuries, serious injury rate and the statewide non-motorized fatalities and serious injuries over 5 year moving periods dating back to 2005. Trends were evaluated to determine if a linear trend could be established and carried through 2022. In most cases, a linear trend-derived target was adopted. These targets are less aggressive than in years past and represent a 1% annual decrease from the most current 5-year average. Based on historical data, 2020 was the first year with more than 800 fatalities since 2009, although we saw a significant decrease in 2019. A steady percentage based reduction was chosen as the most practical justification for determining the 2022 target. To achieve the 2022 target, fatalities will have to be reduced by two percent from 771 (2016 to 2020 average) to 755.0 in 2022.

Number of Serious Injuries:1343.0

Describe the basis for established target, including how it supports SHSP goals.

The overall goal is to reduce fatal and serious injury crashes on Louisiana roadways. As mentioned previously, LHSC and the LADOTD teamed up to identify consistent goals to be adopted by both agencies. The two agencies agreed to adopt the AASHTO goal of halving fatalities by 2030. The SHSP, which the LADOTD oversees, reflects this overall goal as well. Despite a relatively steady number of suspected serious injuries over the last few years, it was decided to renew the commitment to saving lives and continue to set decreasing targets. LADOTD reviewed the actual and linear trend of fatalities, fatality rate, serious injuries, serious injury rate and the statewide non-motorized fatalities and serious injuries over 5 year moving periods dating back to 2005. Trends were evaluated to determine if a linear trend could be established and carried through 2022. In most cases, a linear trend-derived target was adopted. These targets are less aggressive than in years past and represent a 1% annual decrease from the most current 5-year average. Serious injuries have fluctuated over the last five years, however, 2020 showed a significant increase in serious injuries similar to fatalities for 2020. This could be in part due to the new serious injury code definitions adopted by the state in 2019 and the impacts to COVID. A five-year average trend line was chosen as the most practical justification for determining the 2022 target. To achieve the 2022 target, serious injuries will have to be reduced by two percent from 1370 (2016 to 2020 average) to 1343.0 in 2022.

Fatality Rate: 1.506

Describe the basis for established target, including how it supports SHSP goals.

The overall goal is to reduce fatal and serious injury crashes on Louisiana roadways. As mentioned previously, LHSC and the LADOTD teamed up to identify consistent goals to be adopted by both agencies. The two

agencies agreed to adopt the AASHTO goal of halving fatalities by 2030. The SHSP, which the LADOTD oversees, reflects this overall goal as well. Despite an increase in fatalities and serious injuries over the last few years, it was decided to renew the commitment to saving lives and continue to set decreasing targets. LADOTD reviewed the actual and linear trend of fatalities, fatality rate, serious injuries, serious injury rate and the statewide non-motorized fatalities and serious injuries over 5 year moving periods dating back to 2005. Trends were evaluated to determine if a linear trend could be established and carried through 2022. In most cases, a linear trend-derived target was adopted. These targets are less aggressive than in years past and represent a 1% annual decrease from the most current 5-year average. The 1% decrease was chosen despite the steady overall increase in vehicle miles driven for the state. To achieve the 2022 target, the fatality rate per 100 MVMT will have to be reduced by 2.0 percent from 1.537 (2016 to 2020 average) to 1.506 in 2022.

#### Serious Injury Rate: 2.676

#### Describe the basis for established target, including how it supports SHSP goals.

The overall goal is to reduce fatal and serious injury crashes on Louisiana roadways. As mentioned previously, LHSC and the LADOTD teamed up to identify consistent goals to be adopted by both agencies. The two agencies agreed to adopt the AASHTO goal of halving fatalities by 2030. The SHSP, which the LADOTD oversees, reflects this overall goal as well. Despite an increase in fatalities and serious injuries over the last few years, it was decided to renew the commitment to saving lives and continue to set decreasing targets. LADOTD reviewed the actual and linear trend of fatalities, fatality rate, serious injuries, serious injury rate and the statewide non-motorized fatalities and serious injuries over 5 year moving periods dating back to 2005. Trends were evaluated to determine if a linear trend could be established and carried through 2022. In most cases, a linear trend-derived target was adopted. These targets are less aggressive than in years past and represent a 1% annual decrease from the most current 5-year average. 2020 showed an increase in serious injury crash rate compared to 2019 but there was an overall slightly downward trend due to the slight increase in traffic volumes over the past 5 years. To achieve the 2022 target, the serious injury rate per 100 MVMT will have to be reduced by 2.0 percent from 2.730(2016 to 2020 average) to 2.676 in 2022.

#### Total Number of Non-Motorized Fatalities and Serious Injuries:371.0

### Describe the basis for established target, including how it supports SHSP goals.

The overall goal is to reduce fatal and serious injury crashes on Louisiana roadways. This goal is especially critical for our most vulnerable non-motorized users, a population that has seen rapid growth in recent years. As mentioned previously, LHSC and the LADOTD teamed up to identify consistent goals to be adopted by both agencies. The two agencies agreed to adopt the AASHTO goal of halving fatalities by 2030 for all road users. The SHSP, which the LADOTD oversees, reflects this overall goal as well. Despite an increase in fatalities and serious injuries over the last few years, it was decided to renew the commitment to saving lives and continue to set decreasing targets. LADOTD reviewed the actual and linear trend of fatalities, fatality rate, serious injuries, serious injury rate and the statewide non-motorized fatalities and serious injuries over 5 year moving periods dating back to 2005. Trends were evaluated to determine if a linear trend could be established and carried through 2022. In most cases, a linear trend-derived target was adopted. These targets are less aggressive than in years past and represent a 1% annual decrease from the most current 5-year average. Non-motorized user fatalities and serious injuries increased in 2020 from 2019 with 406. This is just shy of an all-time high (since tracking began in 2005) of 417 in 2018. However, as practical solutions are planned, initiated, and implemented and as awareness is heightened we feel confident that a 1% decrease annually can be realized. To achieve the 2022 target, the non-motorized users fatalities and serious injuries will have to be reduced by 2.0 percent from 378 (2016 to 2020 average) to 371.0 in 2022.

2020 actuals based on vehicle miles traveled as reported in 2019 HPMS submittal.

## Describe efforts to coordinate with other stakeholders (e.g. MPOs, SHSO) to establish safety performance targets.

With guidance from LADOTD, LSU/CARTS has developed a web-based dashboard to support safety performance management and target setting and state and regional levels. This dashboard calculates the five vear averages for the performance measures and provides estimated VMT data, all of which can be broken down by state or MPO area. They can also be used to calculate a linear trend forecast. Although, the regional safety coalitions represent larger geographic areas than the MPOs, they are implementing consistent target setting for the entire region. As evidence, statewide emphasis area teams are using the performance measures as outputs on their statewide emphasis area action plans. The teams are tracking performance measure targets as output measures for fatalities and serious injuries by specific emphasis area and subcategories. These output measures are directly correlated to the State's overall performance measure targets (e.g. the output measure for impaired driving serious injuries is a 1% reduction, which aligns with the statewide serious injuries target). The regional safety coalitions are using the same output measures for their regional emphasis area action plans as the statewide plans. By all emphasis area action plans, both state and regional, using the performance measure targets as output measures, specific areas of need by both problem and geographic area can be identified and addressed. Louisiana has chosen this methodology to reach their annual targets of reducing fatalities and serious injuries on Louisiana's highways, as well as their overall goal of halving fatalities by 50% by 2030. LADOTD and LHSC have been working together for the past several years to obtain agreement on targets. They have reviewed trends using three and five year averages and chosen targets based on the trend line that seems most reasonable based on the R-squared and the annual percentage reduction required to meet the target. Once LADOTD and LHSC agree on targets, they are communicated to SHSP State and Regional Leaders. According to the Planning Final Rule (Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning Final Rule issued May 27, 2016) Metropolitan Transportation Plans (MTPs) will need to discuss how the plan will achieve safety targets. The MPOs Transportation Improvement Program (TIP) and the Statewide Transportation Improvement Program (STIP) also must discuss how they will achieve targets. Every MTP update will include development of a System Performance Report, which will state what targets are and whether the region achieved targets. Safety performance management happens annually. However, for other performance measures it will not be reported annually. The review of MPO target achievement will be part of FHWA planning process reviews. Any needed changes will happen within the planning process review. There is no consequence for MPOs in the Federal legislation. MPOs will report their targets (either targets specific to the region or support of the five State safety targets, or a combination of the two) to the LADOTD in writing. A formal memo is issued to MPO Directors from LADOTD each Fall with details on state targets, link to web-based dashboard and requirements for MPO target setting.

## Does the State want to report additional optional targets?

No

Describe progress toward meeting the State's 2020 Safety Performance Targets (based on data available at the time of reporting). For each target, include a discussion of any reasons for differences in the actual outcomes and targets.

PERFORMANCE MEASURES	TARGETS	ACTUALS
Number of Fatalities	743.0	770.8
Number of Serious Injuries	1319.0	1369.8
Fatality Rate	1.518	1.537
Serious Injury Rate	2.696	2.730

Non-Motorized Serious Injuries	Fatalities	and	345.0	378.8
Serious injuries				

Louisiana did not achieve the 2020 safety performance targets for total fatalities, serious injuries, fatality rate, serious injury rate, or non-motorized users. We attribute the increase in fatal and serious injury types of crashes due to the impacts of COVID pandemic and changes in driving behavior. Overall, total crashes decreased in 2020 due to reduction in overall motor vehicle traffic during the COVID pandemic. Also, less people were in vehicles when crashes occurred in 2020 compared to previous years. This was expected because less people were traveling overall and people were not traveling together due to social distancing, people working from home, and many schools were being conducted virtually. Regarding, number of people killed or seriously injured the opposite was true for 2020 with more people killed and seriously injured compared to previous years. Based on the fatal/serious injury data by emphasis area, roadway departure was an outlier for 2020 with a significantly higher number of fatalities and serious injuries in 2020. We believe this could primarily be due to high speeds with less traffic on the roads with COVID restrictions and riskier drivers on the road and perhaps there was less law enforcement presence during the shutdown in the spring of 2020. It is noted, 2020 VMT for Louisiana has not been finalized in HPMS and therefore, 2019 VMT from HPMS was used as baseline for 2020 traffic to establish targets.

We are continuing to focus our HSIP funds toward the Infrastructure and Operations subcategories of Roadway Departure, intersections, and non-motorized users as outlined in our HSIP Implementation Plan. Fortunately, in Louisiana we have the continued executive level support to obligate all HSIP dollars towards safety improvement projects regardless of how we aligned with the 2020 targets set back in 2018. With this commitment, we continue to make progress towards our short term and long term goals and action items identified in most recent HSIP Implementation Plan. As identified in the plan, we aim to program a balance of hot spot and systemic type projects. We continue to look for opportunities to partner with other funding sources to address as many sites as possible within a given year. We also continue to split our funding between local and state routes with a goal of increasing the split for local routes to match the crash data if the support is there from local municipalities. It is noted, infrastructure and operations projects take 3-5 years on average to implement from time of programming so any modifications to programming can take multiple years to see the impacts, Also, it is noted that the driver behavior has a major impact on roadway departure, intersection related, and non-motorized crashes. Impairment, distractions, and occupant protection can have a major influence on the result of the injury.

LADOTD also continues to work with SHSP statewide leaders, LHSC, and LSP on SHSP strategies to reduce the potential for fatal/serious injury crashes related to the behavioral emphasis areas. These are a bit more challenging especially in 2020 with less opportunities for enhanced enforcement and education/outreach opportunities. We continued to strive towards influential policy/legislation to improve safe driving behaviors. Overall, we have made steady progress with educating law makers on issues surrounding distracted driving. however, a statewide hands free bill has not gained enough support for full passage.

### Applicability of Special Rules

#### Does the HRRR special rule apply to the State for this reporting period? Yes

LA DOTD looked at State routes using 2018 ADT, 5yrs crash data (2014-2018), functional classification of

Rural Major Collector or Minor Collector where the crash rate for fatalities and severe injuries exceed the statewide average. It can also be roadways where traffic volumes are likely to increase creating a crash rate for fatalities and severe injuries that exceed the statewide average. The HRRR project is identified in the project listing (Q29) and in the funding summary table (Q23).

## Provide the number of older driver and pedestrian fatalities and serious injuries 65 years of age and older for the past seven years.

PERFORMANCE MEASURES	2014	2015	2016	2017	2018	2019	2020
Number of Older Driver and Pedestrian Fatalities	67	84	75	78	94	106	113
Number of Older Driver and Pedestrian Serious Injuries	87	101	100	99	82	110	122

#### **Evaluation**

#### Program Effectiveness

#### How does the State measure effectiveness of the HSIP?

- Change in fatalities and serious injuries
- Other-Change in fatals and serious injuries crashes at locations in the HSIP

## Based on the measures of effectiveness selected previously, describe the results of the State's program level evaluations.

Based on 2020 statewide crash data, we have observed an increase in total roadway fatalities and an increase in serious injuries. We attribute the increase in these types of crashes due to the impacts of COVID-19. Overall, total crashes decreased in 2020 due to reduction in overall motor vehicle traffic during the COVID-19 pandemic. Also, less people were in vehicles when crashes occurred in 2020 compared to previous years. This was expected because less people were traveling overall and people were not traveling together due to social distancing, people working from home, and many schools were being conducted virtually. Regarding number of people killed or seriously injured, the opposite was true for 2020 with more people killed and seriously injured compared to previous years. Based on the fatal/serious injury data by emphasis area, roadway departure was an outlier for 2020 with a significantly higher number of fatalities and serious injuries in 2020. We believe this could primarily be due to high speeds with less traffic on the roads with COVID-19 restrictions and riskier drivers on the road and less law enforcement presence.

We continued to see an increasing trend in non-motorized fatalities and serious injuries. We have completed a crash data assessment on non-motorized users over the last 5 years to gain insight into potential causes and strategies to address this and align more future HSIP projects with emphasis on non-motorized users. Based on the data analysis using SPFs for state routes, a network screening list has been developed using LOSS and expected number of pedestrian crashes. Overrepresentation analysis of potential risk factors related to pedestrian crashes on state routes was also produced. Data used to prepare the SPFs included observed pedestrian crashes (2015-2019), highway classification, ADT, population density, percentage of households below poverty line, percentage of households with no vehicle, percentage of unemployed, median income, proximity to park and school, and shoulder type.

Also, before/after crash rate evaluations were calculated for 21 completed HSIP Safety Projects with Final Inspection dates in 2017 and where traffic data was available and area of focus was roadway departure and intersection related. The 21 projects were broken down into 27 sites; 12 intersections and 15 segments. Overall, we saw a combined crash rate reduction of 27% for fatal and serious injury crashes and crash rate reduction of 26% for all crashes. The five performance measures are tracked by SHSP emphasis area and documented on the annual statewide and regional action plans.

## What other indicators of success does the State use to demonstrate effectiveness and success of the Highway Safety Improvement Program?

- HSIP Obligations
- Increased awareness of safety and data-driven process
- Increased focus on local road safety
- More systemic programs
- Policy change

## Describe significant program changes that have occurred since the last reporting period.

The annual Louisiana Performance Accountability System (LAPAS) has been adjusted since the last reporting period for statewide safety performance measures. These performance measures have been modified to focus more on changes in fatal and serious injury crash rate for completed HSIP projects. In previous years, we were focusing our evaluations on changes in total crash rate for completed HSIP projects. We feel this better aligns with the goals and mission of the SHSP and HSIP. However, this creates some challenges for us because the number of sites/projects we can evaluate each year is somewhat small (typically less than 20) and the number of fatalities and serious injuries for these sites/projects creates an even smaller sample size. This will be the first year we will report using this new methodology. We are working towards developing an internal process for evaluating local road safety projects and non-motorized user safety projects funded with HSIP and limited exposure data.

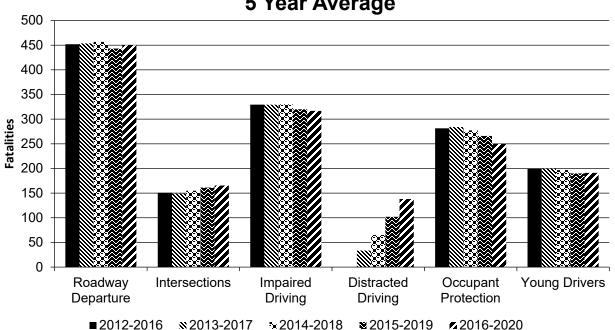
## Effectiveness of Groupings or Similar Types of Improvements

### Present and describe trends in SHSP emphasis area performance measures.

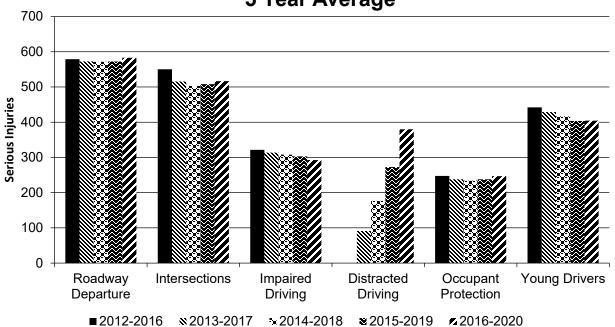
#### **Year 2020**

SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Roadway Departure		450	583	0.9	1.17
Intersections		165.4	516.6	0.46	0.92
Impaired Driving		316.8	292.4	0.64	0.59
Distracted Driving		138	380	0.28	0.76
Occupant Protection		249.8	246.8	0.5	0.49
Young Drivers		191	404.4	0.38	0.81

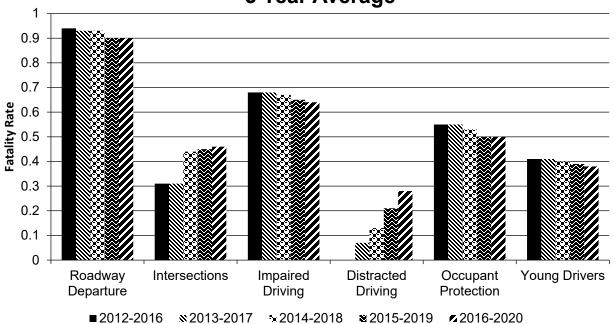
## Number of Fatalities 5 Year Average



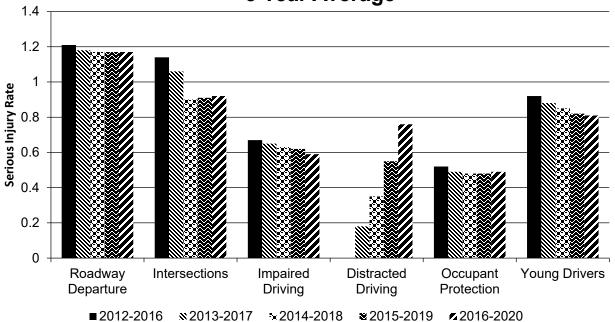
## Number of Serious Injuries 5 Year Average



## Fatality Rate (per HMVMT) 5 Year Average



## Serious Injury Rate (per HMVMT) 5 Year Average



2020 actuals based on vehicle miles traveled as reported in 2019 HPMS submittal.

## Project Effectiveness

Provide the following information for previously implemented projects that the State evaluated this reporting period.

## **Compliance Assessment**

What date was the State's current SHSP approved by the Governor or designated State representative? 07/27/2017

What are the years being covered by the current SHSP?

From: 2017 To: 2021

When does the State anticipate completing it's next SHSP update?

2022

Provide the current status (percent complete) of MIRE fundamental data elements collection efforts using the table below.

\*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
ROADWAY SEGMENT	Segment Identifier (12) [12]	1	1					1	1	1	1
	Route Number (8) [8]	1	1								
	Route/Street Name (9) [9]	1	1								
	Federal Aid/Route Type (21) [21]	1	1								
	Rural/Urban Designation (20) [20]	1	1					1	1		
	Surface Type (23) [24]	1	1					1	1		
	Begin Point Segment Descriptor (10) [10]	1	1					1	1	1	1
	End Point Segment Descriptor (11) [11]	1	1					1	1	1	1
	Segment Length (13) [13]	1	1								
	Direction of Inventory (18) [18]	1	1								
	Functional Class (19) [19]	1	1					1	1	1	1

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
	140.)	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Median Type (54) [55]	1	1								
	Access Control (22) [23]	1	1								
	One/Two Way Operations (91) [93]	1	1								
	Number of Through Lanes (31) [32]	1	1					1	1		
	Average Annual Daily Traffic (79) [81]	0.85	0.35					0.8	0.35		
	AADT Year (80) [82]	0.85	0.35								
	Type of Governmental Ownership (4) [4]	1	1					1	1	1	1
INTERSECTION	Unique Junction Identifier (120) [110]										
	Location Identifier for Road 1 Crossing Point (122) [112]										
	Location Identifier for Road 2 Crossing Point (123) [113]										
	Intersection/Junction Geometry (126) [116]			1	1						
	Intersection/Junction Traffic Control (131) [131]			1	1						
	AADT for Each Intersecting Road (79) [81]			0.85	0.35						
	AADT Year (80) [82]			0.85	0.35						
	Unique Approach Identifier (139) [129]										
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]										
	Location Identifier for Roadway at					1	1				

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
	NO.)	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Beginning of Ramp Terminal (197) [187]										
	Location Identifier for Roadway at Ending Ramp Terminal (201) [191]					1	1				
	Ramp Length (187) [177]			,		1	1				
	Roadway Type at Beginning of Ramp Terminal (195) [185]					1	1				
	Roadway Type at End Ramp Terminal (199) [189]					1	1				
	Interchange Type (182) [172]			1							
	Ramp AADT (191) [181]					0.35	0.15				
	Year of Ramp AADT (192) [182]					0.35	0.15				
	Functional Class (19) [19]					1	1				
	Type of Governmental Ownership (4) [4]					1	1				
Totals (Average Percer	nt Complete):	0.98	0.93	0.46	0.34	0.70	0.66	0.98	0.93	1.00	1.00

<sup>\*</sup>Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number] Intersection/Junction Geometry (126) [116]--Items collected but with slightly different domains

### Describe actions the State will take moving forward to meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026.

Between 2012 and 2016, DOTD collected roadway attribute data for all public roads including those that are locally classified. This process involved the use of a Data Collection Vehicle that captured video imagery. MIRE FDEs that could be captured from video were included in the data delivery. A large majority of FDE's were collected under this collection effort. Since the collection, DOTD has implemented an Enterprise GIS software known as Roads and Highways and all data has been loaded, published and made available internally and externally through an Open Portal site that can be shared and used for collaboration purposes: https://data-ladotd.opendata.arcgis.com/. In order to manage, improve and update the data, DOTD is coordinating an effort with the Acadiana Planning Commission to establish standards and protocols for obtaining updates from local agencies. DOTD has also participated in a FHWA MIRE FDE Pilot Project in which tools were created as to help with the data sharing processes.

Lacking items outside of the field collection scope include traffic volume information as well as unique identifiers for intersection and interchanges. While DOTD has an extensive Traffic Monitoring Program for State Highways, it continues to study the use of vehicle probe data in order to acquire satisfy AADT coverage on all public paved roads. DOTD is currently under contract with Consultant to help to establish intersection and interchange identification and create unique identifiers for attaching related data items and expect to have this database within the next couple years.

## **Optional Attachments**

**Program Structure:** 

2021 SRTPPP Application.docx

2021 Safe Routes to Public Places Program Guidelines 1-1.pdf

13.docx

2016 LRSP App Jan.pdf

LRSP 2018 Application Evaluation Form.xlsx

LRSP 2018 Guidelines & Policies.docx

FINAL REVISED HSIP Infrastructure State Routes Project Selection Guide v17 REV.pdf

LRSP 2018 Project Application.docx

Project Implementation:

Safety Performance:

**Evaluation:** 

Compliance Assessment:

## **Glossary**

**5 year rolling average:** means the average of five individuals, consecutive annual points of data (e.g. annual fatality rate).

**Emphasis area:** means a highway safety priority in a State's SHSP, identified through a data-driven, collaborative process.

**Highway safety improvement project:** means strategies, activities and projects on a public road that are consistent with a State strategic highway safety plan and corrects or improves a hazardous road location or feature or addresses a highway safety problem.

**HMVMT:** means hundred million vehicle miles traveled.

**Non-infrastructure projects:** are projects that do not result in construction. Examples of non-infrastructure projects include road safety audits, transportation safety planning activities, improvements in the collection and analysis of data, education and outreach, and enforcement activities.

**Older driver special rule:** applies if traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65 in a State increases during the most recent 2-year period for which data are available, as defined in the Older Driver and Pedestrian Special Rule Interim Guidance dated February 13, 2013.

**Performance measure:** means indicators that enable decision-makers and other stakeholders to monitor changes in system condition and performance against established visions, goals, and objectives.

**Programmed funds:** mean those funds that have been programmed in the Statewide Transportation Improvement Program (STIP) to be expended on highway safety improvement projects.

**Roadway Functional Classification:** means the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide.

**Strategic Highway Safety Plan (SHSP):** means a comprehensive, multi-disciplinary plan, based on safety data developed by a State Department of Transportation in accordance with 23 U.S.C. 148.

**Systematic:** refers to an approach where an agency deploys countermeasures at all locations across a system.

**Systemic safety improvement:** means an improvement that is widely implemented based on high risk roadway features that are correlated with specific severe crash types.

**Transfer:** means, in accordance with provisions of 23 U.S.C. 126, a State may transfer from an apportionment under section 104(b) not to exceed 50 percent of the amount apportioned for the fiscal year to any other apportionment of the State under that section.