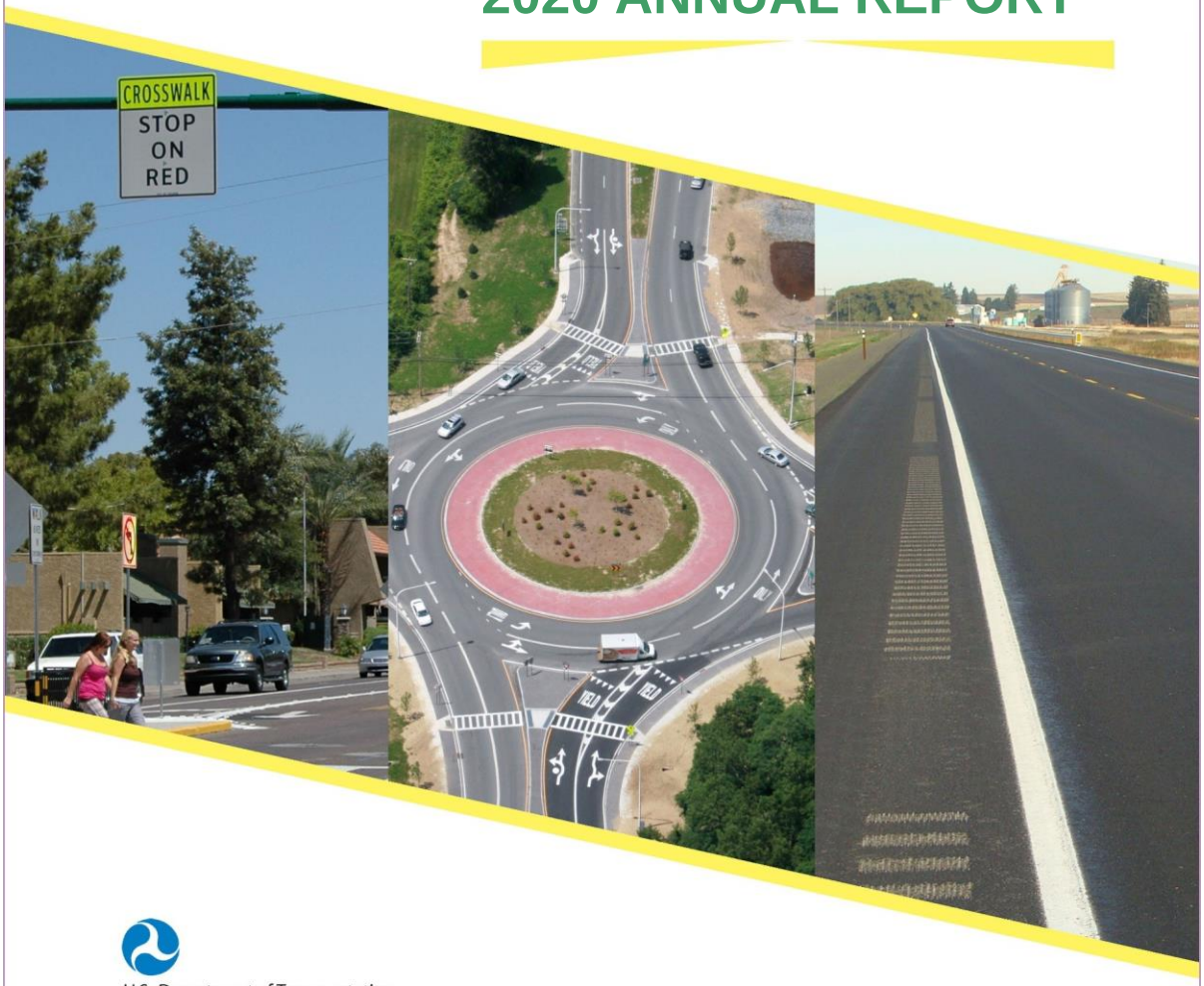
NEW MEXICO

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2020 ANNUAL REPORT



U.S. Department of Transportation
Federal Highway Administration

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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

The Highway Safety Improvement Program (HSIP) report is an annual update prepared by the Statewide Multimodal Planning and Programs Bureau (MPPB) of the New Mexico Department of Transportation (NMDOT) Planning Division (PD). The 2020 HSIP Annual Report is based on the best and most recent available transportation safety data and information, including projects contained in the Federal Fiscal Year (FFY) 2019 program. To facilitate a transparent stakeholder process, the NMDOT MPPB, for infrastructure-related and non-infrastructure-related improvements, coordinates with internal and external safety partners in New Mexico through a comprehensive communication process. In the preparation of the HSIP, the MPPB is consistent with the Strategic Highway Safety Plan (SHSP), efforts related to the Highway Safety Plan (HSP), and the Commercial Vehicle Safety Plan (CVSP). This coordination helps to provide consistency of data presented in this report, integrated safety initiatives, consistent identification of performance trends, implementation of sound, best safety practices, and facilitation of safety performance assessment. This coordinated safety planning effort allows NMDOT to allocate limited safety dollars to areas with the greatest safety needs and to effectively support NMDOT goals, safety strategies, and performance targets to reduce fatalities and serious injuries on the state transportation system.

Overall, in New Mexico from the year 2015 to the year 2019, there was a 42.3 percent increase in annual fatalities (298 to 424). It should be noted that 2015 had the lowest number of reported fatalities and 2019 had the highest number of fatalities from the span of 2010 to 2019. It should also be noted for this report that all 2019 data represents a preliminary estimate of the data for 2019 - FARS data was not available. The five-year moving (rolling) average for fatalities increased from 2015 to 2019. A comparison of values of the five-year moving average indicates an increase of 10.9 percent in 2019 to 379.6 fatalities, compared to 342.2 fatalities in 2015. While the actual count of fatalities increased significantly from 2015 to 2019, the rate of fatalities in New Mexico increased less in the same time period from 1.329 to 1.373 (preliminary estimate) fatalities per 100 million vehicle miles traveled (VMT) - an increase of 3.3 percent. Aiding to this smaller increase in the fatality rate is an increase in VMT over the same period.

Suspected serious injuries (A) on an annual basis declined by 20.8 percent from 1,329 to 1,053 during the same reporting period. The number of reported serious injuries has a steady overall decline from 2010 to 2019. Suspected serious injuries (A) are on a downward trend in New Mexico for the past five years (2015 to 2019) with a reduction in the five-year moving average from 1,445.0 to 1,145.0; a decrease of 20.8 percent. The annual rate of serious injuries in New Mexico declined from 2015 to 2019 from 4.844 to 3.792 (preliminary estimate) serious injuries per 100M VMT, or a reduction of 21.7 percent. The five-year moving average for serious injuries declined from 5.605 to 4.183 (preliminary estimate) serious injuries per 100M VMT, or a reduction of 25.4 percent.

Annual non-motorized fatalities and suspected serious injuries decreased between 2015 to 2019 (preliminary estimate) from 217 to 200, a decrease of 7.8 percent and an increase in the five-year rolling average of 11.7 percent (180.8 to 202.0).

In FFY 2020, NMDOT continued to make significant progress in successfully programming and obligating HSIP funds, as well as continued implementation of a process for funding and eliminating a backlog of projects for future years. This included programming of the completed Road Safety Audit (RSA) projects and countermeasure recommendations for projects that are in the HSIP annual program. In addition, NMDOT used results from the completed network screening efforts conducted for urban and rural NMDOT maintained non-interstate highways in FFY2018 to identify candidate projects with a high crash risk. The network screening effort, completed in 2019, also identified candidate sites for High Risk Rural Roads (HRRR), which will be programmed in future years. In 2020, NMDOT completed an initial version of a comprehensive HSIP Database which includes past HSIP funded projects. The next step in development of the database is to track current and future HSIP projects from inception to completion.

2020 New Mexico Highway Safety Improvement Program

The most recent update of the NM Strategic Highway Safety Plan (SHSP) was approved and distributed to safety stakeholders in March 2017. The next update is scheduled to start in late 2020 for completion in 2021.

In April 2020, the Federal Highway Administration (FHWA) completed a target achievement assessment of the five safety performance targets for the HSIP for New Mexico. FHWA advised NMDOT that New Mexico did not meet or make significant progress toward meeting at least four of the five safety performance targets to support the reduction of fatalities and serious injuries in the State. To address this issue, NMDOT developed an HSIP Implementation Plan, submitted to the FHWA in August 2020.

In the summer of 2020, NMDOT completed a report that stipulates 2021 performance targets for each of the five core performance measures for fatalities (K), suspected serious injuries (A), fatality rate, suspected serious injury rate, and non-motorized fatalities and suspected serious injuries.

NMDOT is developing an HSIP Manual, scheduled for completion in 2020. The HSIP Manual will provide a comprehensive roadmap for the execution of the NMDOT HSIP, safety management process, and participation by safety stakeholders. Other efforts to improve the delivery of HSIP projects include: improvements to the Linear Referencing System for roadway data; improved coordination with safety stakeholders and other agencies; and greater focus in identifying and developing initiatives to improve pedestrian and bicycle safety. To more effectively manage the NMDOT HSIP program in 2020, NMDOT continued to augment staff with consultant support.

Other accomplishments include continued improvements in crash data reporting and analysis, as evidenced by the improved level of detail and quality of data in this year’s report. Over the past several years, NMDOT, through its contract with the University of New Mexico (UNM) Geospatial and Population Studies Traffic Research Unit, made progress in the accuracy of location of crashes, an improved ability to identify crash occurrence by functional class and ownership, and an ability to calculate, on a statewide basis, crash rates to assess trends for safety performance targets.

Local safety road projects are a key component in the HSIP, with $1,661,329 programmed and obligated to five local projects, for the FFY 2019 reporting period. The NMDOT HSIP Safety Program includes a more detailed and extensive analysis of safety performance, Emphasis Areas, and strategies planned in HSIP projects. The intent of this is to effectively reduce fatalities and severe crashes on all roads in New Mexico.

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.

The NMDOT Multimodal Planning and Programs Bureau continues to transition the HSIP into a more data- and analysis-based program. In late 2019, the MPPB worked with consultants to complete a Highway Safety Manual (HSM)-based network screening analysis of the NMDOT maintained non-interstate rural and urban roadway network. The screening effort included a review of roadway segments, intersections, and pedestrian sites, in order to identify and rank sites with a statistically high need, based on the potential to reduce fatal and serious injury crashes.

In summer 2020, the MPPB identified High-Risk Rural Road sites with high potential for safety improvements. After identifying these locations, the MPPB staff worked with the consultants to conduct a high-level, in-office, evidence-based diagnosis and countermeasure identification process. The next step is for the MPPB staff to work with NMDOT Districts and tribal and local public agencies to evaluate countermeasures for implementation in future projects.

Another work product nearing completion this year is the HSIP Manual. NMDOT anticipates finalizing the document by late 2020.

The structure of the HSIP program is multidisciplinary and at various levels includes NMDOT, tribal and local public agency stakeholders for those jurisdictions developing projects, with FHWA oversight and input as appropriate. The HSIP program is monitored by the NMDOT Safety Committee, which includes members from engineering, design, STIP, rail, and traffic from within NMDOT and the FHWA-NM Division office. The committee oversees project selection and allocation of funds to determine where the funds can be most efficiently utilized to optimize safety performance.

Where is HSIP staff located within the State DOT?

Other-Multimodal Planning and Programs Bureau

How are HSIP funds allocated in a State?

- Other-General Office review and approval from the NMDOT Safety Committee

This allocation process is gradually moving more and more towards a competitive-based evaluation process, as there is now the ability to objectively compare segments from the network screening analysis by using the potential for safety improvement (PSI) metric.

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

Under the NM HSIP program all public roadways are eligible for participation. For the HSIP program covered in this reporting period (FFY 2019), there were no NM HSIP funds obligated or programmed for tribal road projects. However, Ohkay Owingeh in Rio Arriba County requested funding for a project at NM 74/PoPay Avenue. The project was originally proposed several years ago but delayed by the Tribe. NMDOT used the network screening results to assess crashes and found the project did not qualify for HSIP funds as the intersection had two property damage only crashes in the area between 2008-2019. As there have been no fatal or serious injury crashes at the intersection, along with relatively low Annual Average Daily Traffic (AADT) counts at the intersection, the HSIP Coordinator deemed the project as not qualifying for HSIP funds under the current program requirements. NMDOT is assisting the tribe with identifying other funding sources to complete the project.

NMDOT programmed and obligated $1,661,329 to five local projects during the same reporting period. The project control number (CN) of each project, as listed in the Statewide Transportation Improvement Program (STIP) and the project's improvements are included in the list below.

- 2101660: upgrade of existing railroad crossings
- A302111: construct pedestrian crossing and multi-use path
- LC00110: reconfigure intersection to two separate T-intersections
- S100370: implement a roundabout at the intersection
- S100460: lane reductions, bike and pedestrian improvements, signalized intersection improvements, lighting, new signing/striping

In general, the NMDOT Safety Committee reviewed all project applications and prioritized funding independent of project jurisdiction. Proposed HSIP projects on local and tribal maintained roadways were considered in the same manner as proposed projects on NMDOT roads.

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

- Design
- Districts/Regions
- Governors Highway Safety Office
- Local Aid Programs Office/Division
- Maintenance
- Operations
- Planning
- Traffic Engineering/Safety
- Other-Multimodal Planning and Programs Bureau

Describe coordination with internal partners.

The NMDOT Safety Committee meets monthly to review the HSIP and confirm the program is meeting the goals and objectives of the NM SHSP and safety targets. The Safety Committee is composed of the following voting and advisory members:

Voting members:

- Design and Construction Director
- Planning Division Director

- Modals Division Director

Advisory members:

- HSIP Coordinator
- FHWA-NM Safety
- STIP Unit
- Technical Groups
- Rail Bureau Chief

The HSIP Coordinator also interacts closely with the three NMDOT Regional Design Centers to coordinate project tracking and oversight needs. In addition, the HSIP Coordinator, in overseeing the SHSP, liaisons closely with NMDOT Traffic Safety Division (in the Modals Division) which is responsible for the NMDOT Highway Safety Plan (HSP). The Modals Division Director is the NM representative to the Governor's Highway Safety Commission.

Identify which external partners are involved with HSIP planning.

- Academia/University
- FHWA
- Law Enforcement Agency
- Local Government Agency
- Local Technical Assistance Program
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Tribal Agency

Describe coordination with external partners.

All of the external partners listed in the previous question may be involved in the coordination process, particularly for conducting Road Safety Audits or Assessments (RSAs). Examples include data collection from local law enforcement and data management by academia, such as the University of New Mexico. Typically, as a part of RSAs, local partners are also involved in identifying location specific phenomena, lending their expertise and insights to safety related issues, as well as development of safety diagnosis and countermeasures. NMDOT finds local expertise invaluable when considering safety issues and needs, the identification of lessons learned related to the implementation of countermeasures, and identification of context sensitive issues whether they are cultural or behavioral.

Describe other aspects of HSIP Administration on which the State would like to elaborate.

The NMDOT made significant progress in 2019 to program and obligate HSIP funds and to provide a systematic process for funding a backlog of projects. This includes maintenance of a structured list of RSAs planned and performed that will be used for future projects. As described above, the MPPB implemented a comprehensive and organized process of communication with internal and external stakeholders.

Program Methodology

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

No

An HSIP Manual is currently undergoing its second review but is not finalized. This manual will serve as a guide for the implementation and administration of the HSIP program in the coming years to ensure consistency with the SHSP, best practices, and other safety initiatives.

Select the programs that are administered under the HSIP.

- HRRR
- Roadway Departure
- Sign Replacement And Improvement

Program: HRRR

Date of Program Methodology:9/30/2019

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

- Fatal crashes only

Exposure

- Traffic
- Volume

Roadway

- Functional classification
- Other-Rural area

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?

Yes

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

Yes

How are projects under this program advanced for implementation?

- Other-NMDOT Safety 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:100
Total Relative Weight:100

Program: Roadway Departure

Date of Program Methodology:9/30/2019

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

- All crashes
- Fatal and serious injury crashes only

Exposure

- Traffic
- Lane miles

Roadway

- Functional classification
- Roadside features

What project identification methodology was used for this program?

- Crash frequency
- Other-Crash severity

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?

- Other-NMDOT 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:100

Total Relative Weight:100

Program: Sign Replacement And Improvement

Date of Program Methodology:9/30/2019

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?

Other-Based on need to maintain minimum retroreflectivity for signs

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only	• Traffic	• Functional classification

What project identification methodology was used for this program?

- Other-Reduction in total crashes

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-NMDOT Safety 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:100
Total Relative Weight:100

What percentage of HSIP funds address systemic improvements?

3.9

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

- Other-Pedestrian projects

The TIP ID's that were considered pedestrian systemic projects are listed below:
1101800
A302111
S100620

What process is used to identify potential countermeasures?

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

Does the State HSIP consider connected vehicles and ITS technologies?

No

The NMDOT HSIP includes one ITS projects in the FFY 2019 program. The HSIP funds obligated for this project is $72,000.

At this time the HSIP program does not consider safety initiatives related to **both** connected vehicle technologies and ITS technologies - but it does consider 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.

Applying the full cycle of the Roadway Safety Management Process (RSMP) to NMDOT HSIP efforts is the goal (see the "Q19_HSM_use_2020AnnualReport.docx" figure is the attachment for this question). The NMDOT has finished the first round of the network screening process, diagnosis, and countermeasure selection and is preparing the data needed to incorporate the next steps of the RSMP.

The completed network screening effort focused on identifying sites with high potential for safety improvement using excess expected crash frequency with Empirical Bayes adjustment as a performance measure. A total of seven Safety Performance Functions (SPF) were developed for the most common urban and rural, non-freeway roadway facility types. Similar studies are completed for intersections and pedestrian corridors.

Diagnostic studies are completed to help identify the probable cause and possible countermeasures to improve the safety of the screened locations. A map of geo-tagged data visualizations is provided to show the distribution of crash types, crash severities, and other crash characteristics to help with diagnostics at each location.

The results of diagnostics are used to identify possible countermeasures on the top-tanked locations based on the network screening process. These locations are listed as candidates for future RSAs, HRRR locations, and/or future HSIP projects.

The NMDOT is also preparing a database for HSIP projects to enable a full outcome evaluation that can be used to better understand the actual results of the HSIP investments on number of fatalities and serious injuries.

Describe other aspects of the HSIP methodology on which the State would like to elaborate.

NMDOT is currently working on finalized an HSIP Manual, scheduled for completion in the second half of 2020. Over the past year, the NMDOT held internal discussions on the design and conduct of the HSIP, which helped create an awareness of safety needs and long-term goals.
Another HSIP effort the State started is the preparation of a dataset for HSIP investments. The purpose of this dataset is to track and evaluate the HSIP projects. Using this dataset, NMDOT can complete the Roadway Safety Management Process and use the evaluation results to prioritize the future investments. The HSIP dataset is prepared in a format that can easily be linked to crash data and roadway data to facilitate future evaluation studies.

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

Federal Fiscal Year

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	$21,074,471	$20,154,672	95.64%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$2,523,945	$2,460,945	97.5%
Penalty Funds (23 U.S.C. 154)	$0	$0	0%
Penalty Funds (23 U.S.C. 164)	$1,967,218	$1,841,687	93.62%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	$0	$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	$0	$0	0%
State and Local Funds	$0	$0	0%
Totals	$25,565,634	$24,457,304	95.66%

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

$1,661,329

How much funding is obligated to local or tribal safety projects?

$1,661,329

How much funding is programmed to non-infrastructure safety projects?

$1,903,697

How much funding is obligated to non-infrastructure safety projects?

$1,820,897

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

$0

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

$6,157,877

- To National Highway Performance Program (NHPP) - $3,000,000
- To Surface Transportation Program-Flexible (STPF) - $3,157,877

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

In some instances, project development and delivery took longer than originally anticipated, which affected timing for obligation of funds for projects. Improvements in project scoping and improvements in crash data analysis can help mitigate this issue.

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

To augment efforts for the HSIP program and annual report preparation, NMDOT continues to add consultant support.

General Listing of Projects

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

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
I-10 Seed Project	Roadside	Roadside - other	134	Miles	$72000	$72000	HSIP (23 U.S.C. 148)	Multiple/Varies	Principal Arterial-Interstate	7,332	65	State Highway Agency	Spot	Weather-related	Install proven treatments to keep vehicles from encroaching on the roadside.
Santa Clara Multimodal Project	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists	2.5	Miles	$461269.39	$504000	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	9,164	45	State Highway Agency	Spot	Pedestrians	Implement street lighting to improve conspicuity and visibility of pedestrians
I-25 Signing Project	Roadway signs and traffic control	Roadway signs and traffic control - other	175	Miles	$403702.87	$405000	HSIP (23 U.S.C. 148)	Multiple/Varies	Principal Arterial-Interstate	3,643	65	State Highway Agency	Spot	Lane Departure	Install treatments to keep vehicles from encroaching on the roadside.
US 60 Sign Project	Roadway signs and traffic control	Roadway signs and traffic control - other	51	Miles	$268730.68	$270000	HSIP (23 U.S.C. 148)	Multiple/Varies	Principal Arterial-Other	597	30	State Highway Agency	Spot	Lane Departure	Install treatments to keep vehicles from encroaching on the roadside.
I-25 Guardrail Upgrades	Roadside	Barrier- metal	76	Miles	$1721730.7	$1721731	HSIP (23 U.S.C. 148)	Multiple/Varies	Principal Arterial-Interstate	3,643	65	State Highway Agency	Spot	Roadway Departure	Improve and upgrade the design of roadside hardware and application of barrier and impact attenuation systems.
NM 532 Phase II	Roadway	Roadway - other	0.25	Miles	$2664111.66	$2700000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	791	25	State Highway Agency	Spot	Lane Departure	Install treatments to keep vehicles from encroaching

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
															on the roadside.
BROADWAY, GRIMES, SANGER, BENDER, RR CROSSINGS IN HOBBS	Railroad grade crossings	Upgrade railroad crossing signal	4	Railroad Crossings	$270829	$270829	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	3,104	25	Railroad	Spot	Railroad Crossings	Enhance safety for public at-grade crossings.
ENTRANCE TO WHITE SANDS NATIONAL MONUMENT Safety Improvements	Intersection geometry	Auxiliary lanes - extend acceleration/deceleration lane	1	Miles	$463959.35	$396619	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	7,996	60	State Highway Agency	Spot	Lane Departure	Implement geometric improvements related to vehicle operations by providing improved storage.
Intersection of Indian Wells and White Sands Realignment	Intersection geometry	Intersection geometry - other	1	Intersections	$0	$450000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	7,592	35	State Highway Agency	Spot	Intersections	Implement geometric improvements related to vehicle operations by providing improved turn-lane channelization.
US 60/84 Sign Replacement	Roadway signs and traffic control	Roadway signs (including post) - new or updated	51	Miles	$186456	$186456	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	2,074	45	State Highway Agency	Spot	Lane Departure	Install treatments to keep vehicles from encroaching on the roadside.
NM 6563 and US 82 Sign Project	Roadway signs and traffic control	Sign sheeting - upgrade or replacement	15.6	Miles	$108000	$108000	HSIP (23 U.S.C. 148)	Rural	Major Collector	284	30	State Highway Agency	Spot	Lane Departure	Install treatments to keep vehicles from encroaching on the roadside.
NM 6563 and US 82 Sign Project	Roadway signs and traffic control	Sign sheeting - upgrade or replacement	15.6	Miles	$9520.68	$9521	Penalty Funds (23 U.S.C. 164)	Rural	Major Collector	284	30	State Highway Agency	Spot	Lane Departure	Install treatments to keep vehicles from encroaching

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
															on the roadside.
NM 518 - Holman Hill Guardrail, Signing & Striping Project	Roadside	Barrier- metal	8.23	Miles	$2460945.12	$2460945	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Major Collector	980	45	State Highway Agency	Spot	Lane Departure	Improve and upgrade the design of roadside hardware and application of barrier and impact attenuation systems.
NM 68- Taos Urban	Roadway signs and traffic control	Sign sheeting - upgrade or replacement	1.08	Miles	$3028620.22	$3497393	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	13,688	25	State Highway Agency	Spot	Roadway Departure	Install treatments to keep vehicles from encroaching on the roadside.
40 MILES NORTH OF GALLUP	Lighting	Lighting - other	0.86	Miles	$59189.62	$59190	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	4,587	45	State Highway Agency	Spot	Lane Departure	Implement roadway lighting to serve all modes/users
I-40	Roadside	Barrier- metal	8.8	Miles	$66032.52	$70713	HSIP (23 U.S.C. 148)	Multiple/Varies	Principal Arterial-Interstate	16,066	65	State Highway Agency	Spot	Roadway Departure	Improve and upgrade the design of roadside hardware and application of barrier and impact attenuation systems.
GUARDRAIL WEST OF GALLUP AND CUBERO TO TOHAJIILEE	Roadside	Barrier- metal	8.8	Miles	$6842342	$6842342	HSIP (23 U.S.C. 148)	Multiple/Varies	Principal Arterial-Interstate	16,066	65	State Highway Agency	Spot	Roadway Departure	Improve and upgrade the design of roadside hardware and application of barrier and impact attenuation systems.
NM 173 (Navajo Dam Rd) Safety Improvements	Roadway delineation	Roadway delineation - other	1.5	Miles	$0	$9450	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,471	55	State Highway Agency	Spot	Lane Departure	Install proven treatments to keep vehicles

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
															from encroaching on the roadside.
NM 173 (Navajo Dam Rd) Safety Improvements	Roadway delineation	Roadway delineation - other	1.5	Miles	$0	$63000	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Major Collector	1,471	55	State Highway Agency	Spot	Lane Departure	Install proven treatments to keep vehicles from encroaching on the roadside.
NM 314 & COURTHOUSE RD INTERSECTION IMPROVEMENTS	Intersection geometry	Auxiliary lanes - miscellaneous/other/unspecified	0.6	Miles	$319500	$319500	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	335	30	State Highway Agency	Spot	Intersections	Implement geometric improvements related to vehicle operations by providing improved turn-lane channelization.
RAIL CORRIDOR PEDESTRIAN SAFETY IMPROVEMENTS PHASE II	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists	1.25	Miles	$382500	$382500	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	8,168	35	Town or Township Highway Agency	Spot	Pedestrians	Implement measures to improve conspicuity and visibility of pedestrians
EL CAMINO REAL RD AT DONA ANA SCHOOL RD	Intersection geometry	Intersection geometrics - modify skew angle	2	Intersections	$472500	$472500	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	1,643	35	County Highway Agency	Spot	Intersections	Implement geometric improvements related to vehicle operations by realigning intx approaches to reduce or eliminate the intx skew angle
UNIVERSITY INTERCHANGE	Roadway	Roadway - other	1.5	Miles	$1719748.4	$1719748	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	3,085	65	State Highway Agency	Spot	Pedestrians	Implement measures to improve conspicuity and visibility of pedestrians

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
Agua Fria St./Cottonwood Drive Intersection	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Roundabout	$49500	$49500	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	335		City or Municipal Highway Agency	Spot	Intersections	Implement geometric improvements related to vehicle operations by providing special intersection designs.
Guadalupe St. Reconstruction Road Diet	Roadway	Roadway narrowing (road diet, roadway reconfiguration)	0.52	Miles	$486000	$486000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	6,625	25	City or Municipal Highway Agency	Spot	Pedestrians	Implement measures to improve conspicuity and visibility of pedestrians
Alta Vista Street Crosswalks	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists	0.37	Miles	$119218.96	$135000	HSIP (23 U.S.C. 148)	Urban	Major Collector	3,213	25	State Highway Agency	Spot	Pedestrians	Implement measures to improve conspicuity and visibility of pedestrians
STATEWIDE	Non-infrastructure	Data/traffic records	1	Data Records	$438300	$450000	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0		State Highway Agency	Data-related	Data	Data Improvement
TRACS Licensing	Non-infrastructure	Data/traffic records	1	Traffic Records	$0	$71100	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0		State Highway Agency	Data-related	Data	Data Improvement
TRAFFIC COUNT DATA COLLECTION	Non-infrastructure	Data/traffic records	1	Traffic Records	$482597.1	$482597	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0		State Highway Agency	Data-related	Data	Data Improvement
Safety Services	Non-infrastructure	Data/traffic records	1	Analysis Services	$450000	$450000	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0		State Highway Agency	Data-related	Data	Data Improvement
On-call EDC 5 STEP	Non-infrastructure	Transportation safety planning	1	Analysis Services	$450000	$450000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Data-related	Data	Data Improvement

The project listing for 2020 was uploaded into the Online Reporting Tool using the Microsoft Excel template. This project listing includes a project with project title “NM 173 (Navajo Dam Rd) Safety Improvements”. This project had both HRRR and HSIP funds awarded. In order to include all funds that were obligated for FY2019, this project was listed twice in the project list. One row represents the ‘HWY SAFETY IMPROV PROG (HSIP)’ funding category for $9,450, while another row represents the ‘HIGH RISK RURAL ROADS (HRRR)’ funding category for $63,000.

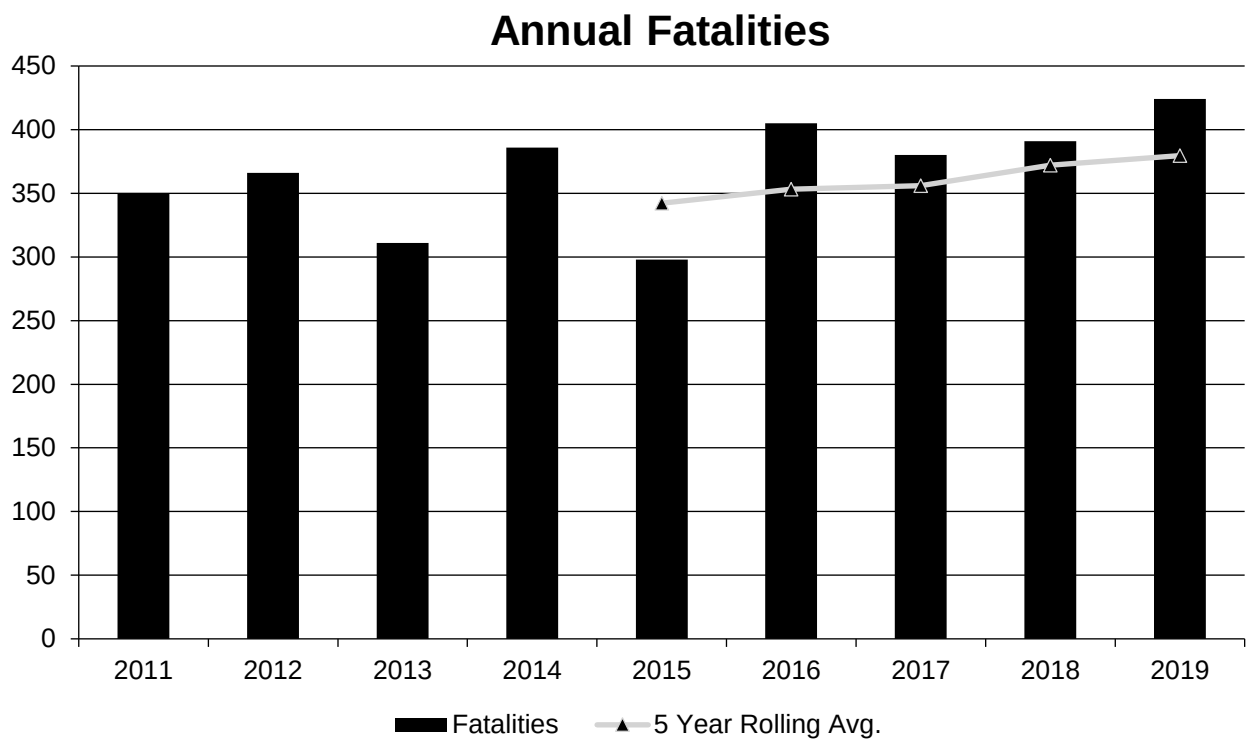
An additional project with project title “NM 6563 and US 82 Sign Project” has also been listed twice: once for ‘HWY SAFETY IMPROV PROG (HSIP)’ with a cost of $108,000 and again for ‘SEC 164 PEN -HSIP MAP-21 EXT (H164)’ with a cost of $9,521.

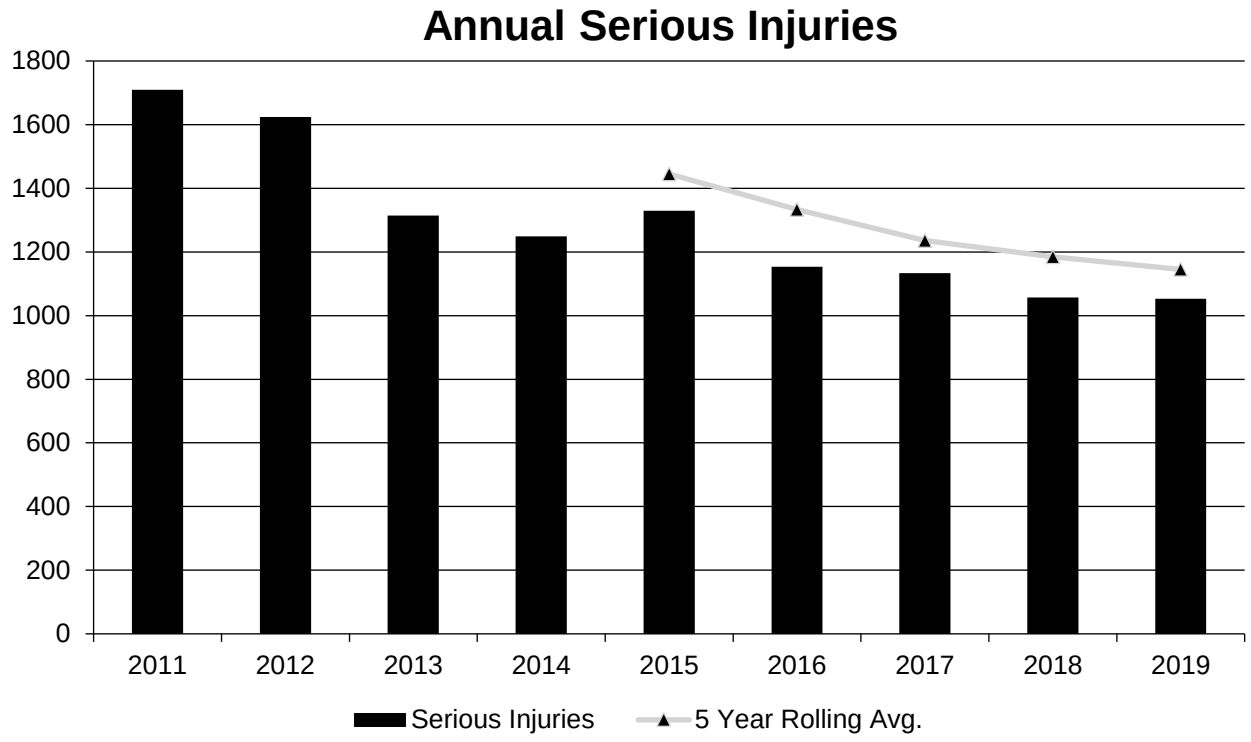
Safety Performance

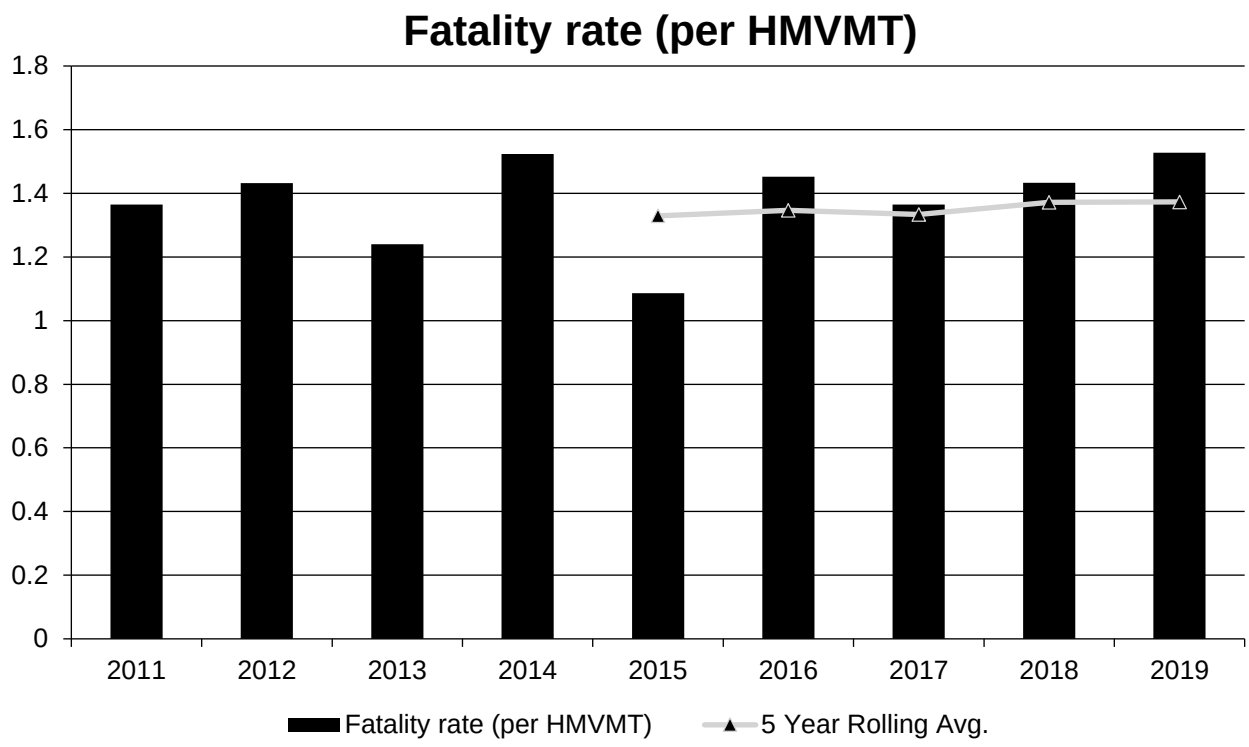
General Highway Safety Trends

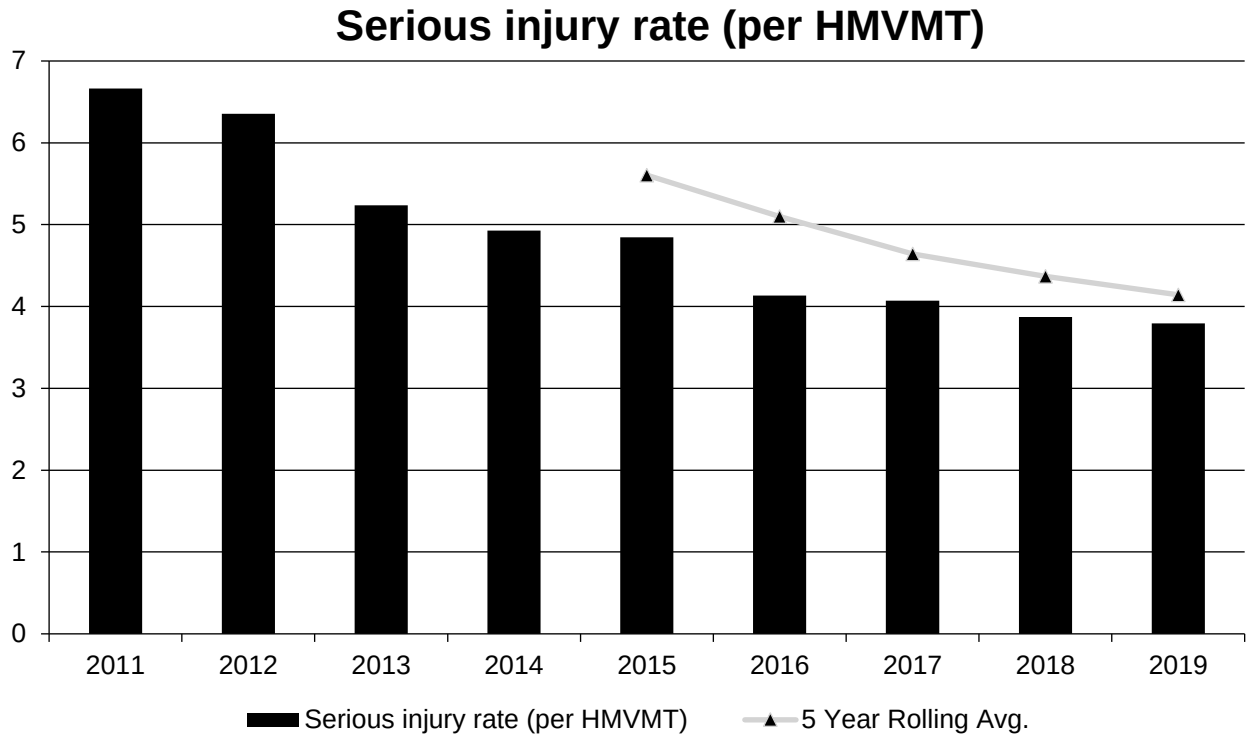
Present data showing the general highway safety trends in the State for the past five years.

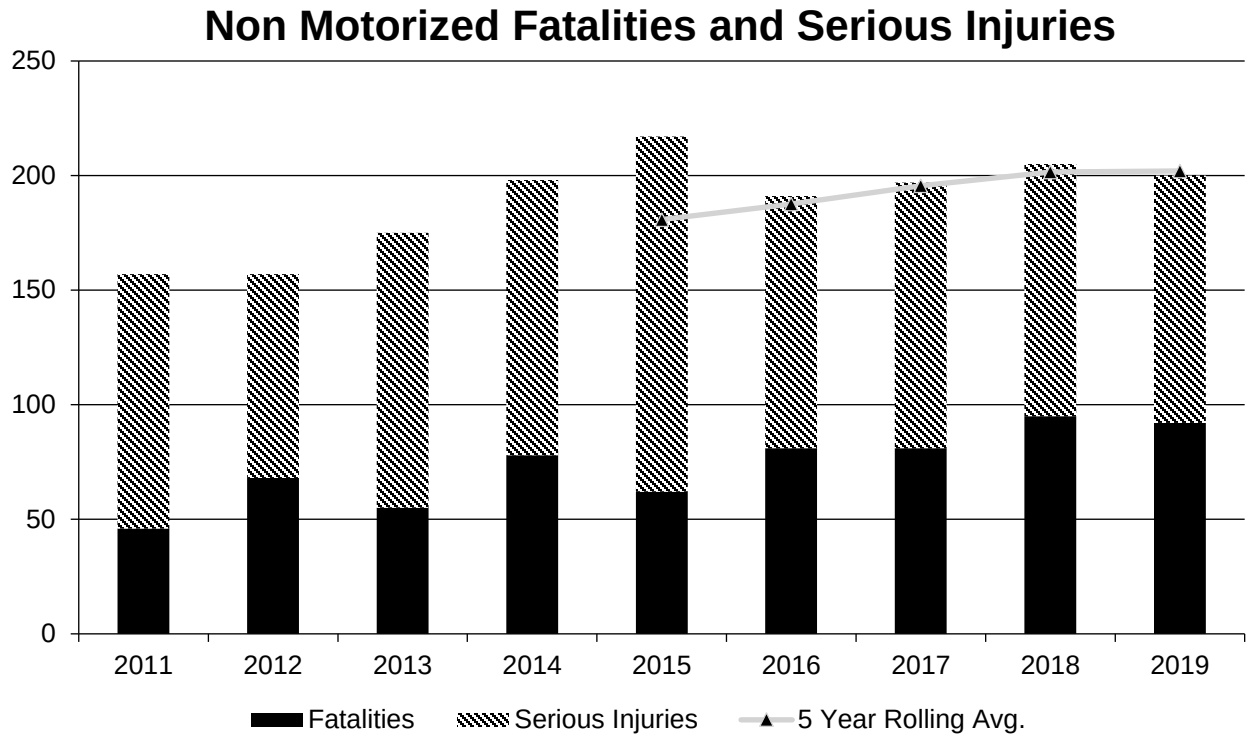
PERFORMANCE MEASURES	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fatalities	350	366	311	386	298	405	380	391	424
Serious Injuries	1,709	1,624	1,314	1,249	1,329	1,153	1,133	1,057	1,053
Fatality rate (per HMVMT)	1.365	1.432	1.240	1.523	1.086	1.452	1.365	1.433	1.527
Serious injury rate (per HMVMT)	6.663	6.353	5.238	4.928	4.844	4.135	4.070	3.873	3.792
Number non-motorized fatalities	46	68	55	78	62	81	81	95	92
Number of non-motorized serious injuries	111	89	120	120	155	110	116	110	108
non-motorized fatalities and serious injuries	157	157	175	198	217	191	197	205	200

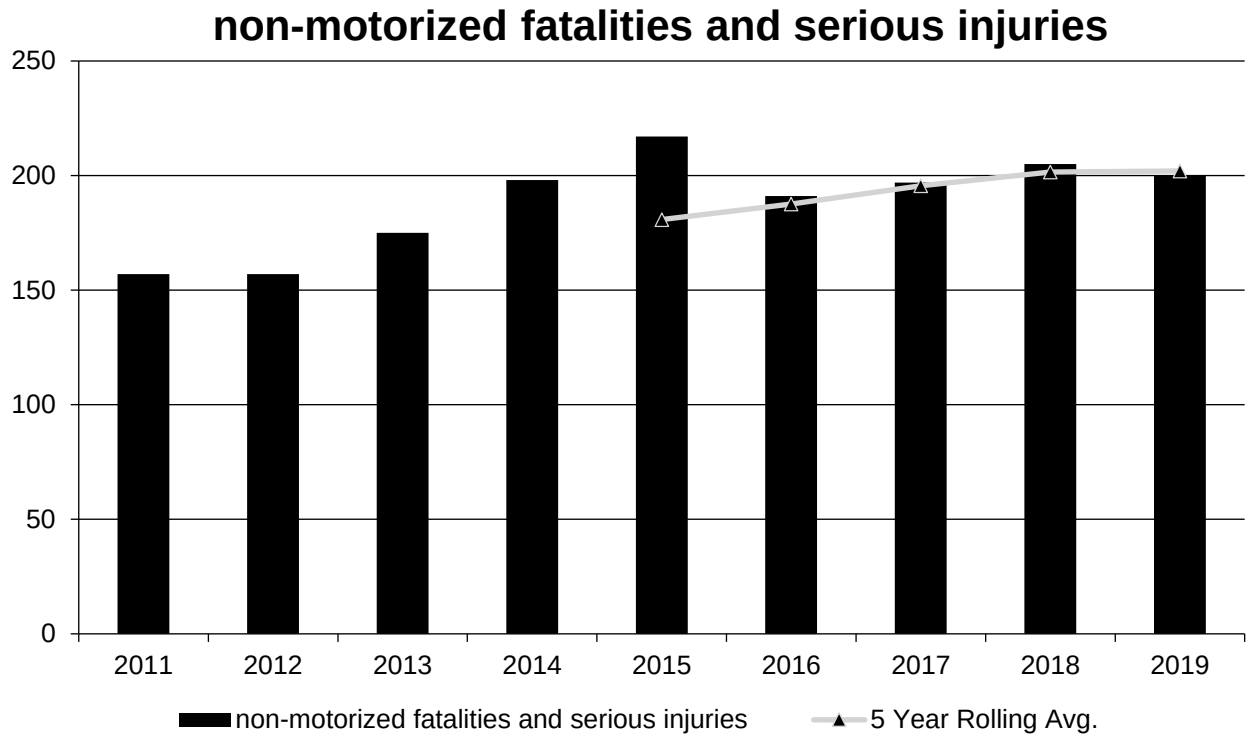

Annual Fatalities
450
400
350
300
250
200
150
100
50
0
2011
2012
2013
2014
2015
2016
2017
2018
2019
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
1800
1600
1400
1200
1000
800
600
400
200
0
2011
2012
2013
2014
2015
2016
2017
2018
2019
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2011
2012
2013
2014
2015
2016
2017
2018
2019
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
7
6
5
4
3
2
1
0
2011
2012
2013
2014
2015
2016
2017
2018
2019
Serious injury rate (per HMVMT)
5 Year Rolling Avg.





The value for 2017 fatalities was listed as 379 for the 2019 Annual Report. Since then, that number has changed to 380 fatalities.
The value for 2018 A-Injuries was listed as 1,069 for the 2019 Annual Report. Since then, that number has changed to 1,057 A-Injuries.
The value for 2018 non-motorized fatalities was listed as 93 for the 2019 Annual Report. Since then, the number has changed to 95.

The value for the 2017 VMT has changed since the summer of 2019. For this reason, the rates for both fatalities and A-Injuries have changed.
The data used for 2019 is provisional.

Describe fatality data source.

FARS

The source for the 2019 fatality values is the NMDOT crash dataset since FARS does not have 2019 fatality data published at the time of filling out this report.

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

Year 2019

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	54.8	80.2	1.17	1.7
Rural Principal Arterial (RPA) - Other Freeways and Expressways	0	0	0	0
Rural Principal Arterial (RPA) - Other	54.8	86.4	1.37	2.11
Rural Minor Arterial	27.4	48.4	1.35	2.34
Rural Minor Collector	7.8	9.8	1.34	1.7
Rural Major Collector	35.4	67.2	2.08	3.94
Rural Local Road or Street	24.4	44.4	0.55	0.99
Urban Principal Arterial (UPA) - Interstate	30	105.2	1.1	3.83
Urban Principal Arterial (UPA) - Other Freeways and Expressways	1.2	4.6	0.98	3.89
Urban Principal Arterial (UPA) - Other	91.8	418.2	2.63	12.2
Urban Minor Arterial	21.4	126.4	1.39	8.21
Urban Minor Collector	1.8	9.8	0.76	4.26
Urban Major Collector	12.2	64.8	1.26	6.69

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)
Urban Local Road or Street	9.6	68.8	1.1	8.66

Year 2019

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	258	609.4	1.53	3.62
County Highway Agency	37.8	117.4	1.06	3.35
Town or Township Highway Agency	0	0	0	0
City or Municipal Highway Agency	71.2	402.8	1.33	7.53
State Park, Forest, or Reservation Agency	0	0	0	0
Local Park, Forest or Reservation Agency	0	0	0	0
Other State Agency	0	0	0	0
Other Local Agency	0	0	0	0
Private (Other than Railroad)	0.2	0.8	0	0.14
Railroad	0	0	0	0
State Toll Authority	0	0	0	0
Local Toll Authority	0	0	0	0
Other Public Instrumentality (e.g. Airport, School, University)	0	0	0	0
Indian Tribe Nation	4.8	2.8	0.62	0.39

Provide additional discussion related to general highway safety trends.

See inputs in the comments section for each performance target in Question #34.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2021 Targets *

Number of Fatalities:411.6

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

Although five-year average fatalities rose by a moderate 5.5 percent between 2014 and 2018, preliminary and projected data indicate that fatalities will increase by about 10.6 percent between 2018 and 2021. In 2019, fatalities involving large, personal vehicles (SUVs/Pick-up Trucks/ Vans/4-Wheel Drives) or involving pedestrians have increased and accounted for 53.3 percent of all crash fatalities. Given the prevalence of large, personal vehicle ownership, and projected increase in fatalities overall, the five-year average projection of 411.6 is determined to be the 2021 target.The basis for projecting the safety performance targets are based on a linear best fit line that is reliant on actual New Mexico data from prior years. The projection of linear best fit lines was used to obtain the FFY2021 targets. These targets are supported by the 2016 New Mexico SHSP goals since they are data-driven and generated with a collaborative approach.

Number of Serious Injuries:1030.5

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

Five-year average serious injuries are projected to fall by about 13.2 percent between 2018 and 2021, and the State anticipates a continued reduction in serious injuries in 2020. The five-year average projection of 1,030.5 is the 2021 target. The basis for projecting the safety performance targets are based on a linear best fit line that is reliant on actual New Mexico data from prior years. The projection of linear best fit lines was used to obtain the FFY2021 targets. These targets are supported by the 2016 New Mexico SHSP goals since they are data-driven and generated with a collaborative approach.

Fatality Rate:1.486

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

Five-year average fatalities are expected to increase in 2021 from 2017, thus the projected five-year average of 1.486 is the 2021 target. Due to the uncertainty of the COVID-19 pandemic’s impact on VMT, the preliminary 2019 VMT value is also used for the 2020 and 2021 VMT values.The basis for projecting the safety performance targets are based on a linear best fit line that is reliant on actual New Mexico data from prior years. The projection of linear best fit lines was used to obtain the FFY2021 targets. These targets are supported by the 2016 New Mexico SHSP goals since they are data-driven and generated with a collaborative approach.

Serious Injury Rate:3.722

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

Five-year average serious injury rates are projected to continue falling, thus the five-year average projection of 3.722 is the 2021 target.The basis for projecting the safety performance targets are based on a linear best fit line that is reliant on actual New Mexico data from prior years. The projection of linear best fit lines was used to obtain the FFY2021 targets. These targets are supported by the 2016 New Mexico SHSP goals since they are data-driven and generated with a collaborative approach.

Total Number of Non-Motorized Fatalities and Serious Injuries:200.0

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

Five-year average non-motorized fatalities and serious injuries are projected to remain relatively constant over the next two years from 2020 to 2021. The five-year average projection of 200.0 is the 2021 target.The basis for projecting the safety performance targets are based on a linear best fit line that is reliant on actual New Mexico data from prior years. The projection of linear best fit lines was used to obtain the FFY2021 targets. These targets are supported by the 2016 New Mexico SHSP goals since they are data-driven and generated with a collaborative approach.

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

Development of improved data quality can help all safety stakeholders to identify and establish more realistic and well-defined safety targets. Communicating these to other stakeholders also facilitates improved safety initiatives. For example, the NMDOT Tribal Safety Summit held late in 2019 brought tribal and NMDOT stakeholders together to discuss safety needs and targets, steps to improve stakeholder input, case studies on how to develop projects to improve safety on tribal lands, and, last but very important, tribal stakeholders provided comments and suggestions on their perspective related to tribal safety. This type of stakeholder interaction is a good example of HSIP program coordination with safety stakeholders and coordination in target setting.

On May 12, 2020, the NMDOT Safety Division held a meeting with stakeholders representing law enforcement agencies, emergency medical services, the courts, public health agencies, Bureau of Indian Affairs, and Metropolitan Planning Organizations, among others, to discuss and adopt the targets required in the HSP. The targets were revised following the meeting, to reflect the revised 2017 VMT, approved by FHWA, and the updated 2018 and 2019 crash datasets provided by UNM.

Does the State want to report additional optional targets?

No

Consistent with the SHSP, the NMDOT will continue to focus on reducing fatalities and serious injuries in New Mexico, with consideration of guidance provided by the FHWA, and federal legislation.

Describe progress toward meeting the State's 2019 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	375.0	379.6
Number of Serious Injuries	1100.0	1145.0
Fatality Rate	1.318	1.373
Serious Injury Rate	3.825	4.143
Non-Motorized Fatalities and Serious Injuries	220.6	202.0

NMDOT's safety targets were established based on a series of meetings with the Multimodal Planning and Programs Bureau and other stakeholders. The state set annual targets for five performance measures listed below:

1. Number of Total Fatalities
2. Number of Serious Injuries
3. Fatalities per 100 million vehicle miles travelled (VMT) or fatality rate
4. Serious Injuries per 100 million VMT or serious injury rate
5. Number of Non-motorized Fatalities and Serious Injuries

Progress in terms of meeting the forecasted targets is described. The measure used to describe progress is the Five-Year Moving Average.

1. Number of Total Fatalities. The 2019 forecast target for fatalities was 375.0 and the actual Five-Year Moving Average for 2019 (based on preliminary NMDOT data) is 379.6. The actual 2019 value compared to the forecast target in 2018 was an increase of 1.2 percent. Although this is a relatively small increase, the increase can likely be attributed to an increase in travel, which has occurred statewide. NMDOT uses a linear best fit model of crash data as the primary tool to plot data for future years and this does not consider travel changes.
2. Number of Serious Injuries. The 2019 forecast target for total serious injuries was 1,100.0 and the actual Five-Year Moving Average for 2019 (based on preliminary NMDOT data) is 1,145.0. The actual value for 2019 compared to the forecast target in 2018 is an increase of 4.1 percent. Even though the actual value did not meet the target value, New Mexico continued to experience a very steady decrease in total serious injuries in 2019. The year-over-year decreasing trend in serious injuries spans back to 2013.
3. Fatalities per 100 million vehicle miles travelled (VMT) or fatality rate. The 2019 forecast target for the rate of fatalities was 1.318 and the actual Five-Year Moving Average for 2019 (based on preliminary NMDOT data) is 1.373. The actual value for 2019 compared to the forecast target in 2018 was an increase of 4.2 percent. This increase is again partially susceptible, to some extent, to the effect of increased travel and the uncertainty to predict VMT with exact accuracy.
4. Serious Injuries per 100 million VMT or serious injury rate. The 2019 forecast target for the rate of serious injuries was 3.825 and the actual Five-Year Moving Average for 2019 (based on preliminary NMDOT data) was 4.143. The actual value for 2019 compared to the forecast target in 2018 was an increase of 8.3 percent. This increase in serious injury rate again should not be overshadowed by the very positive trend that continues for total serious injuries in New Mexico.
5. Number of Non-motorized Fatalities and Serious Injuries. The 2019 forecast target for number of non-motorized fatalities and serious injuries was 220.6 and the actual Five-Year Moving Average for 2019 (based on preliminary NMDOT data) is 202.0. The actual value for 2019 compared to the forecast target in 2018 is a decrease of 8.4 percent. Potential contributors to this decrease include NMDOT becoming a Pedestrian Focus State, designating both pedestrian and bicycle crashes as SHSP Emphasis Areas, and recently conducting network screening of pedestrian crashes to identify high risk locations.

Applicability of Special Rules

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

Yes

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	2012	2013	2014	2015	2016	2017	2018
Number of Older Driver and Pedestrian Fatalities	50	30	29	29	44	45	50
Number of Older Driver and Pedestrian Serious Injuries	98	104	108	80	83	101	90

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Change in fatalities and serious injuries

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

To date NMDOT has evaluated programs on a limited basis and has instead focused on developing a more robust safety management process based on guidance from HSM Part B. A key step in the HSM Part B Roadway Safety Management Process is evaluating the effectiveness of countermeasures and projects. Recent progress in improving crash data quality will support this effort in the future.

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
- Policy change
- Other-Development of improved HSIP internal and external procedures

The options from the checkboxes are expanded upon below.

1. Use of HSIP fund Obligations for only HSIP projects.
2. Increased awareness of safety and data-driven process to identify candidate projects.
3. Policy change – development of policy guidance documents such as the HSIP Manual which is soon to be completed.
4. Other-Development of improved HSIP internal and external procedures such improved data bases.

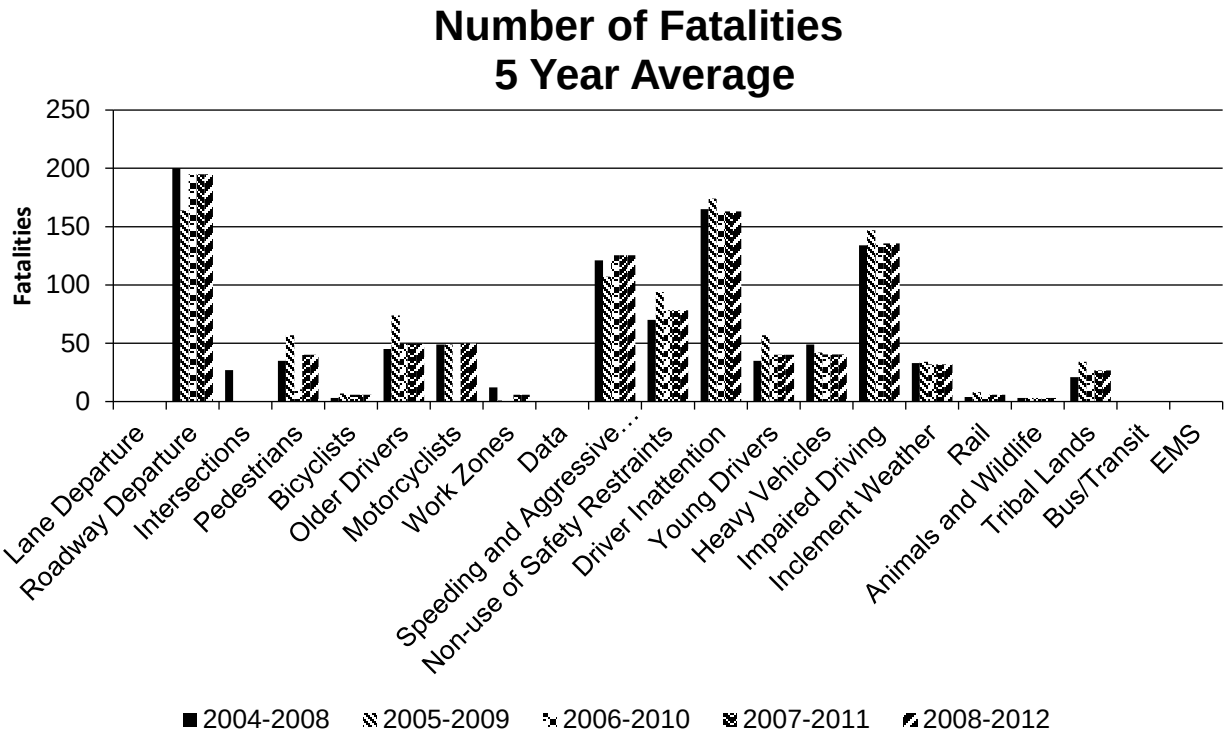
Effectiveness of Groupings or Similar Types of Improvements

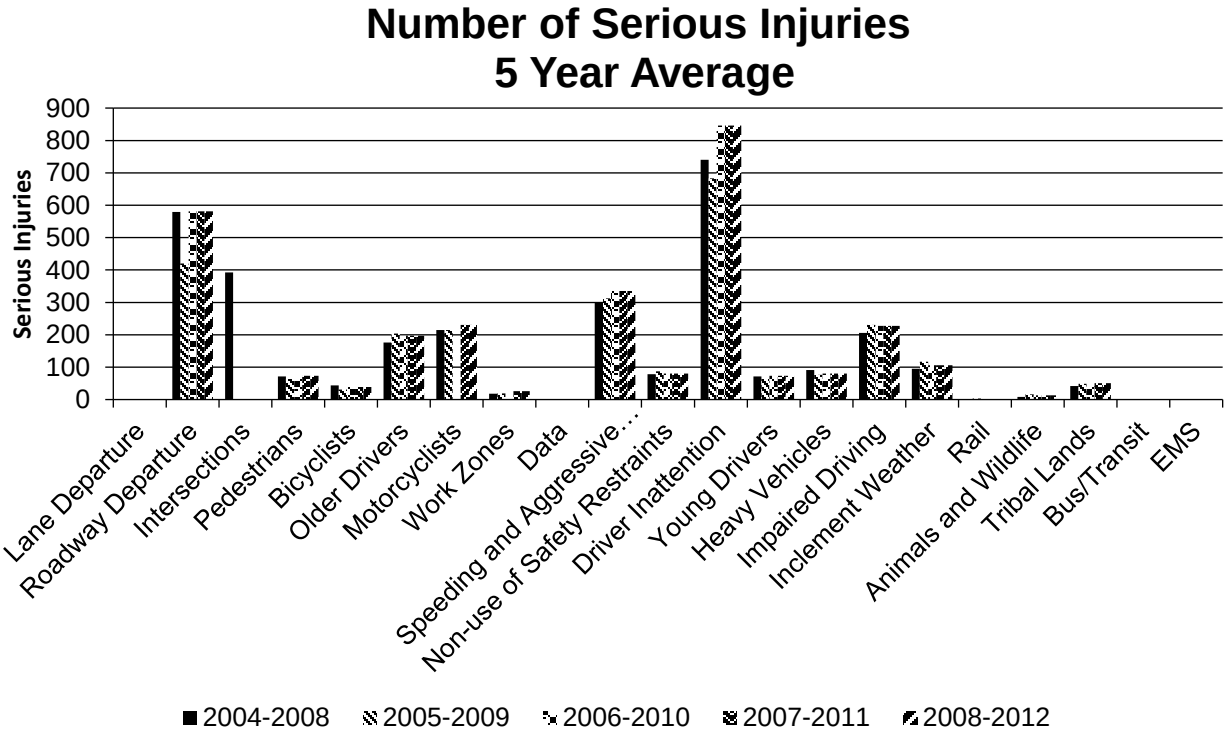
Present and describe trends in SHSP emphasis area performance measures.

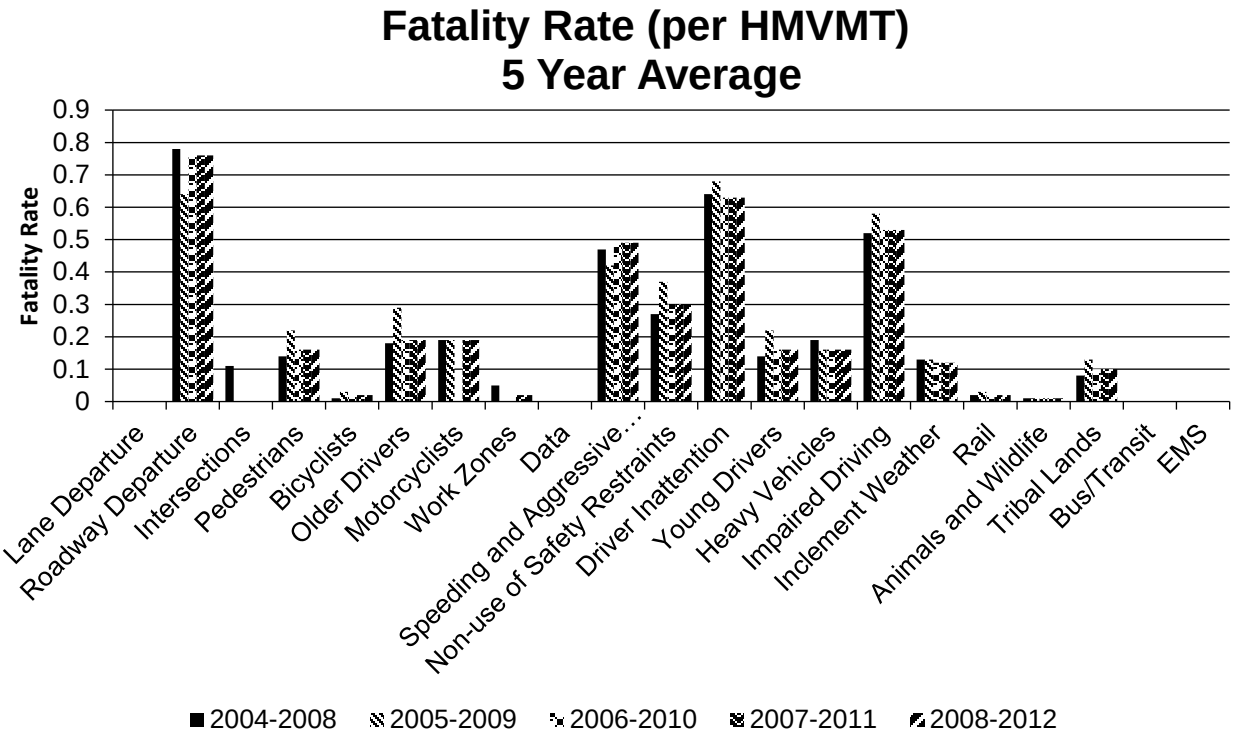
Year 2011

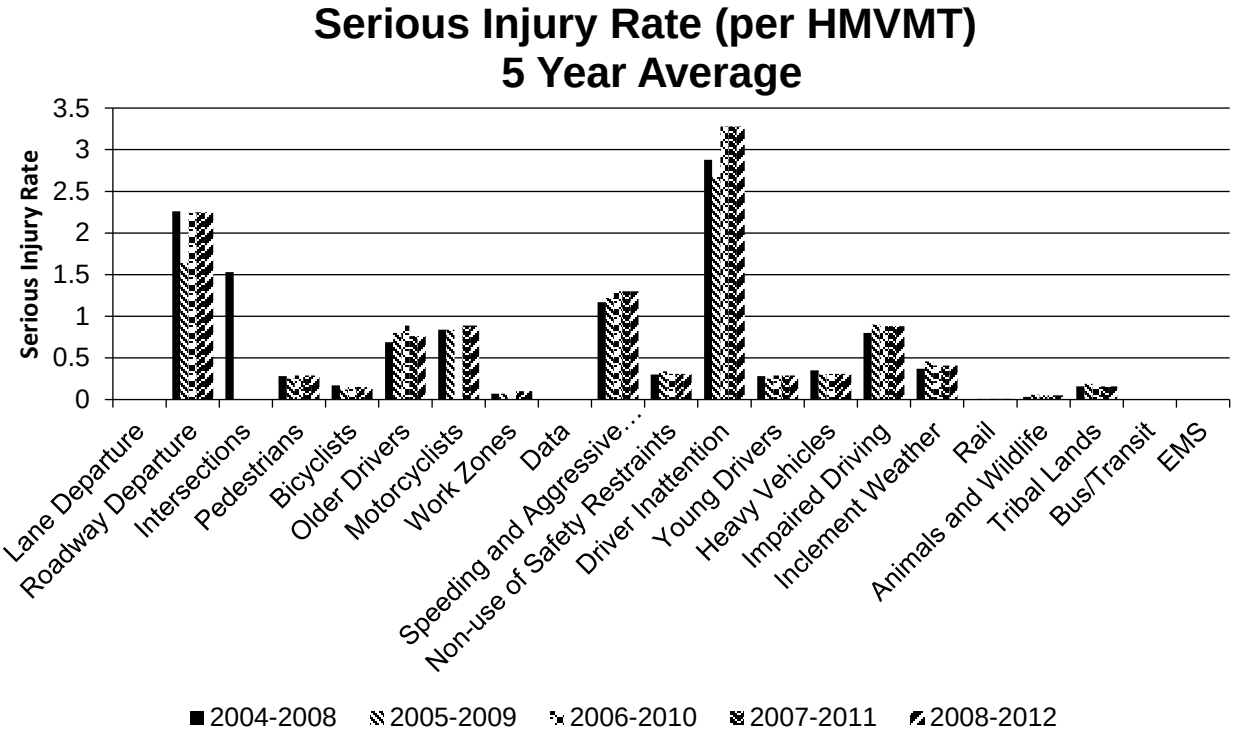
SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Lane Departure					
Roadway Departure	All	194.8	581.2	0.76	2.25
Intersections					
Pedestrians	Vehicle/pedestrian	40.2	73.8	0.16	0.29
Bicyclists	Vehicle/bicycle	5.8	38.6	0.02	0.15

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)
Older Drivers	All	49.4	196.8	0.19	0.76
Motorcyclists	All	49.6	230	0.19	0.89
Work Zones	All	5.8	26.2	0.02	0.1
Data					
Speeding and Aggressive Driving	All	125.4	335.2	0.49	1.3
Non-use of Safety Restraints	All	78.4	80.4	0.3	0.31
Driver Inattention	All	163	845.6	0.63	3.28
Young Drivers	All	40.2	73.8	0.16	0.29
Heavy Vehicles	All	40.4	80.6	0.16	0.31
Impaired Driving	All	135.6	227.8	0.53	0.88
Inclement Weather	All	32	105.6	0.12	0.41
Rail	Crossings and Train-Pedestrians	5.8	1.6	0.02	0.01
Animals and Wildlife	Vehicle/animal	3	13	0.01	0.05
Tribal Lands	All	26.6	51	0.1	0.16
Bus/Transit					
EMS					


Number of Fatalities
5 Year Average
Fatalities
250
200
150
100
50
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
Speeding and Aggressive…
Non-use of Safety Restraints
Driver Inattention
Young Drivers
Heavy Vehicles
Impaired Driving
Inclement Weather
Rail
Animals and Wildlife
Tribal Lands
Bus/Transit
EMS
2004-2008
2005-2009
2006-2010
2007-2011
2008-2012


Number of Serious Injuries
5 Year Average
Serious Injuries
900
800
700
600
500
400
300
200
100
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
Speeding and Aggressive…
Non-use of Safety Restraints
Driver Inattention
Young Drivers
Heavy Vehicles
Impaired Driving
Inclement Weather
Rail
Animals and Wildlife
Tribal Lands
Bus/Transit
EMS
2004-2008
2005-2009
2006-2010
2007-2011
2008-2012





The 2019 HSIP Annual Report data is also used for the 2020 HSIP Annual Report - both of the last two HSIP Annual Reports us Emphasis Area data from the current 2016 NM SHSP. Emphasis Area data/trends have not been analyzed in 2020. NMDOT intends to update the Emphasis Area trends and performance measures as part of the SHSP update scheduled for 2021.

Project Effectiveness

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

LOCATION	FUNCTIONAL CLASS	IMPROVEMENT CATEGORY	IMPROVEMENT TYPE	PDO BEFORE	PDO AFTER	FATALITY BEFORE	FATALITY AFTER	SERIOUS INJURY BEFORE	SERIOUS INJURY AFTER	ALL OTHER INJURY BEFORE	ALL OTHER INJURY AFTER	TOTAL BEFORE	TOTAL AFTER	EVALUATION RESULTS (BENEFIT/COST RATIO)
None														

None evaluated.

Compliance Assessment

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

03/01/2017

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?

2021

The years 2007-2012 that are covered by the current 2016 NM SHSP represent the crash data years; see the following link, page vii (8 of 136) - https://dot.state.nm.us/content/dam/nmdot/planning/NMDOT_2016_SHSP.pdf

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	0.5	1	0.5
	Route Number (8) [8]	1	0.75								
	Route/Street Name (9) [9]	0.99	0.1								
	Federal Aid/Route Type (21) [21]	1	1								
	Rural/Urban Designation (20) [20]	1	1					1	1		
	Surface Type (23) [24]	0.95	0.95					0.95			
	Begin Point Segment Descriptor (10) [10]	1	1					1	0.5	0.99	0.5
	End Point Segment Descriptor (11) [11]	1	1					1	0.5	0.99	0.5
	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	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Median Type (54) [55]	0.8	0.5								
	Access Control (22) [23]	1	1								
	One/Two Way Operations (91) [93]	0.99	0.99								
	Number of Through Lanes (31) [32]	0.9	0.9					0.99	0.85		
	Average Annual Daily Traffic (79) [81]	1	1					1	1		
	AADT Year (80) [82]	1	1								
	Type of Governmental Ownership (4) [4]	1	0.8					1	0.2	1	0.2
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]										
	Intersection/Junction Traffic Control (131) [131]										
	AADT for Each Intersecting Road (79) [81]			0.8	0.8						
	AADT Year (80) [82]			1	1						
	Unique Approach Identifier (139) [129]										
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]					1	1				
	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	
		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]										
	Ramp AADT (191) [181]					1	1				
	Year of Ramp AADT (192) [182]					1	1				
	Functional Class (19) [19]					1	1				
	Type of Governmental Ownership (4) [4]					1	1				
Totals (Average Percent Complete):		**0.98**	**0.89**	**0.23**	**0.23**	**0.91**	**0.91**	**0.99**	**0.62**	**1.00**	**0.54**

*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]
None

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.

The NMDOT has an Advanced Linear Referencing System using Esri's Roads and Highways database platform. When developing this system the NMDOT incorporated many of the MIRE FDE's as feature classes in the schema. This new database is known as the Roadway Inventory System (RIS). Although the current schema was based on MIRE 1.0, NMDOT's database is agile enough to update features as necessary.

The NMDOT has a very robust data collection process on all of the State Owned routes as well as Non-State owned roads that are on the Federal Aid System. This accounts for 12,321 miles of New Mexico's total road mileage of 71,827 miles. As such the NMDOT stands very well on MIRE roadway segment data on the non-local roads.

Current Projects:

1. NMDOT's Roadway Inventory Program is currently collecting data for the Interchange Type (MIRE element 182) on both State and Non-State ramps. This is expected to be completed by December 31, 2020.

2. In 2019 the NMDOT joined FHWA's pooled fund study "Applications of Enterprise Geographic Information Systems for Transportation (AEGIST)." This is a five year study with multiple components. One of the deliverables from this pooled fund study is the creation of an "Intersection Module." This module will be able to take all of the intersection data and create a table of at least eight intersection features as required for safety analysis. The implementation of the

module in New Mexico is currently scheduled to start in early 2022.

3. NMDOT did a pilot project in 2019 collecting MIRE Intersection geometry and MIRE Intersection control where there were HPMS sample sections. The results are still being evaluated.

4. NMDOT is nearing completion of the eGIS project. Part of this project will make the Roadway Inventory System data accessible to everyone within the NMDOT. This will be a first step in making MIRE data readily available to anyone who wants it. Currently anyone can request any MIRE type data that the NMDOT has but, that is a manual process involving large geodatabase files. The eGIS project is scheduled for completion in the summer of 2020.

5. NMDOT's Roadway Inventory Program is currently updating the Ownership of many NMDOT's roads focusing on County owned and Federally owned roads. 2020 marks the first time that FHWA has provided a geodatabase of Federally owned roads to the states. This update is expected to be completed by December 31, 2020.

6. A Data Dictionary that includes the MIRE FDE definitions is currently under development and will be added to NMDOT's public facing website. Initial deployment is expected in 2020.

Optional Attachments

Program Structure:

Q19_HSM_use_2020AnnualReport.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.