



NEW YORK

HIGHWAY SAFETY IMPROVEMENT PROGRAM 2018 ANNUAL REPORT



U.S. Department of Transportation
Federal Highway Administration

Photo source: Federal Highway Administration

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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. 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

This report is intended to satisfy reporting requirements under Section 148 of the Title 23, United States Code (23 U.S.C. 148) regulated under 23 CFR 924. MAP-21 and the FastAct reinforce the importance of the Highway Safety Improvement Program (HSIP). The goal of the program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

Emphasis Areas

The New York State Department of Transportation continues to concentrate on the emphasis areas outlined in the 2017 Strategic Highway Safety Plan (SHSP). The emphasis areas in the plan include intersections, lane departures, driver behavior, vulnerable users, speed and older and younger drivers. The plan also emphasizes emergency response, data and automated/connected vehicles as cross cutting issues that affect all crash types. Site specific projects at high accident locations and systemic improvement projects to decrease lane departure crashes and improve pedestrian safety are being implemented to meet crash goals.

The first ever statewide New York Pedestrian Safety Action Plan (PSAP) was released in June 2016 and provides funds to improve pedestrian safety in urban areas. The PSAP adds pedestrian locations to the state's annual regional work program; implements pedestrian improvements systemically at approximately 2,400 signalized intersections and 1,350 uncontrolled crosswalks and provides for pedestrian improvements on 5 pedestrian corridors. The PSAP also includes statewide pedestrian education and enforcement initiatives.

The New York State Department of Transportation contracted with VHB to develop a new safety system called CLEAR (Crash Location Engineering and Analysis Repository). The CLEAR system will replace the existing legacy systems that are used to manage and analyze crash data. The systems to be replaced include: Safety Information Management Systems (SIMS), Accident Location Information System (ALIS) and the Post Implementation Evaluation System (PIES).

HSIP Fund Administration

NYSDOT is using a hybrid approach to manage the Highway Safety Improvement Program funds. Approximately half of the funds are provided to the NYSDOT regions according to a formula that includes crashes, population and center line miles. The remaining half of the funds are administered centrally by the NYSDOT Main Office and the Safety and System Optimization (SSO) team. These funds are primarily used to fund a statewide call for projects program as well as the statewide Pedestrian Safety Action Plan (PSAP). Since FFY13 the statewide call for projects program has funded 113 state and local projects for a total of approximately \$276M in HSIP funds. In 2018, the local call for PSAP projects funded 38 local projects for a total of approximately \$40M in HSIP funds. The Pedestrian Safety Action Plan includes approximately \$110M in HSIP funds to improve pedestrian safety at locations in New York State outside of New York City.

All Public Roads

The mandate to address the safety of all public roads has broadened the scope of work of the Department of Transportation and our partners, requiring a greater focus on emphasis areas in order to meet crash goals. The following initiatives support the "all public roads" mandate.

Projects on locally owned and state-owned roads are eligible for the call for projects programs. Crash data on the local system is available through New York's Safety Information Management Systems (SIMS). A local GIS route system is being developed. The new CLEAR application will enhance the state's ability to analysis crash data on the local system. Additional traffic counts are being taken on local roads.

2018 New York Highway Safety Improvement Program Performance Indicators

The FastAct further integrated performance into the HSIP program. States are required to report five annual safety performance targets. The 2019 safety targets for New York State are shown below.

Performance Targets for 2019 (5-year average)

Number of Fatalities 1,072

Fatality Rate 0.86

Number of Serious Injuries 10,987

Serious Injury Rate 8.62

Number of Non-motorized Fatalities and Serious Injuries 2,726

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.

Approximately 50% of HSIP funds in NYS are provided to the Regions according to a formula that includes crashes, miles and population. The other 50% of the funds are administered by the NYSDOT Main Office for the implementation of statewide safety programs.

Where is HSIP staff located within the State DOT?

Operations

Enter additional comments here to clarify your response for this question or add supporting information.

HSIP administrators are located in the Safety Program Management Bureau within the Office of Traffic Safety and Mobility in the Main Office. There are traffic offices in both the Main Office in Albany and in each of the 11 regional offices throughout New York State. The regional traffic offices are responsible for program delivery.

How are HSIP funds allocated in a State?

Central Office via Statewide Competitive Application Process
SHSP Emphasis Area Data
Formula via Districts/Regions

Enter additional comments here to clarify your response for this question or add supporting information.

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

All public roads in New York State are eligible for HSIP funds including local roads and roads on tribal lands. In FFY16 approximately 50% of the available HSIP funds were allocated to the 11 regions in New York state based on a formula that included miles, population and crashes. The regions work with the Metropolitan Planning Organizations to decide which projects to include in the capital program, including state and local

2018 New York Highway Safety Improvement Program

roads. Fifty percent of the Region 11 allocation was provided to New York City for safety projects on local roads owned by New York City. The statewide call for safety projects awarded HSIP funding to 16 local projects to be let between FFY16 - FFY20 for a total of about \$40.5M in HSIP funding. The pedestrian safety action plan also provided \$40M in HSIP funding for local municipalities to implement systemic treatments that improve safety for pedestrians.

All crashes on public roads, regardless of ownership are included in New York's crash data systems and are available for review and analysis. High crash locations on the state system are identified via an annual network screening process. Improvements to New York's data systems are underway that will provide similar analysis capabilities to identify high crash locations on local roads.

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

Traffic Engineering/Safety
Design
Planning
Maintenance
Operations
Districts/Regions
Local Aid Programs Office/Division

Enter additional comments here to clarify your response for this question or add supporting information.

Describe coordination with internal partners.

The New York State Department of Transportation formed a Statewide Safety System and Optimization team (SSO) with expertise in highway safety and system optimization. The multi disciplinary team is comprised of members from various Division and Regional Offices including Safety Programs Management and Coordination Bureau, System Optimization Bureau, Local Programs Bureau, Office of Modal Safety and Security, Policy and Planning Division, Office of Transportation Maintenance and Office of Design. The SSO team is responsible for the following:

- Providing long term guidance on safety and system optimization to ensure consistency with program update strategies;
- Providing clarification and guidance to the 11 NYSDOT regions;
- Developing technical guidance for safety strategies described in the program update;
- Developing support materials for NYSDOT Regions in preparing safety program proposals;
- Reviewing safety program proposals; and
- Monitoring regional programs over the life of the program to ensure safety and optimization goals are met.

Identify which external partners are involved with HSIP planning.

Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
Governors Highway Safety Office
Local Technical Assistance Program

2018 New York Highway Safety Improvement Program
Local Government Agency
Tribal Agency
Law Enforcement Agency
FHWA
Other-New York State Department of Health

Enter additional comments here to clarify your response for this question or add supporting information.

Describe coordination with external partners.

New York State coordinates regularly with external partners on safety initiatives. For example:

- New York's 2017 Strategic Highway Safety Plan was developed in coordination with local, state, federal, tribal and private organizations throughout the state.
- NYSDOT coordinated with the Governors Traffic Safety Committee, and the MPO's to define the 2018 and 2019 safety targets.
- Conference calls are regularly held with MPO Directors, an MPO Safety Working Group and a Safety Working Group to coordinate and communicate ongoing safety efforts.
- The core team that developed the statewide Pedestrian Safety Action Plan included members from NYSDOT, FHWA, GTSC, DOH and the MPOs.
- The GTSC, FHWA, MPO's, local agencies and law enforcement are participating in the requirements definition for the replacement of New York's safety systems.

Have any program administration practices used to implement the HSIP changed since the last reporting period?

No

Are there any other aspects of HSIP Administration on which the State would like to elaborate?

No

Program Methodology

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

Yes

To upload a copy of the State processes, attach files below.

File Name:

[RED BOOK Highway Safety Improvement Program Procedures Techniques.pdf](#)

Select the programs that are administered under the HSIP.

2018 New York Highway Safety Improvement Program

Intersection
Safe Corridor
Horizontal Curve
Bicycle Safety
Rural State Highways
Skid Hazard
Roadway Departure
Low-Cost Spot Improvements
Sign Replacement And Improvement
Local Safety
Pedestrian Safety
Right Angle Crash

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Bicycle Safety

Date of Program Methodology: 1/1/2010

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
All crashes	Volume	Functional classification
Other-Priority Investigation	Population	Roadside features
Locations (PILS)		

What project identification methodology was used for this program? [Check all that apply]

Crash frequency
Relative severity index
Crash rate
Excess proportions of specific crash types

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

Yes

2018 New York Highway Safety Improvement Program

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

No

Describe the methodology used to identify local road projects as part of this program.

Local road projects are typically identified via local municipalities and the MPO planning process.

How are projects under this program advanced for implementation?

selection committee

Other-The Priority Investigation Location process mentioned above.

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

Ranking based on B/C : 2

Available funding : 1

Cost Effectiveness : 2

Program: Horizontal Curve

Date of Program Methodology: 11/1/1989

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes

All crashes

Other-Priority Investigation

Locations

Exposure

Volume

Roadway

Median width

Horizontal curvature

Roadside features

What project identification methodology was used for this program? [Check all that apply]

2018 New York Highway Safety Improvement Program

Crash frequency

Relative severity index

Crash rate

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?

No

Describe the methodology used to identify local road projects as part of this program.

Local road projects are typically identified via local municipalities and the MPO planning process.

How are projects under this program advanced for implementation?

selection committee

Other-The Priority Investigation Location process mentioned above.

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

Ranking based on B/C : 2

Available funding : 1

Cost Effectiveness : 2

Program: Intersection

Date of Program Methodology: 11/1/1989

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes

Exposure

Roadway

2018 New York Highway Safety Improvement Program

All crashes
Other-Priority Investigation
Locations (PILS)

Volume

Functional classification

What project identification methodology was used for this program? [Check all that apply]

Crash frequency
Relative severity index
Crash rate
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?

No

Describe the methodology used to identify local road projects as part of this program.

Local road projects are typically identified via local municipalities and the MPO planning process.

How are projects under this program advanced for implementation?

selection committee
Other-The Priority Investigation Process mentioned above.

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

Ranking based on B/C : 2
Available funding : 1
Cost Effectiveness : 2

Program: Local Safety

Date of Program Methodology: 1/1/2013

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

2018 New York Highway Safety Improvement Program

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes

Exposure

Roadway

All crashes

Volume

What project identification methodology was used for this program? [Check all that apply]

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?

No

Describe the methodology used to identify local road projects as part of this program.

Local roads are always eligible for HSIP. Local roads are typically identified via local authorities or municipalities. A Pedestrian Safety Action Plan (PSAP) local call for projects was initiated in 2017. The program provided \$40M in HSIP for pedestrian improvements on local and county 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

Ranking based on B/C : 2

Available funding : 1

Cost Effectiveness : 2

Program:

Low-Cost Spot Improvements

Date of Program Methodology:

1/1/1999

What is the justification for this program? [Check all that apply]

2018 New York Highway Safety Improvement Program

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes

Exposure

Roadway

All crashes

Other-Priority Investigation

Locations (PILS)

Volume

Median width

Horizontal curvature

Functional classification

Roadside features

What project identification methodology was used for this program? [Check all that apply]

Crash frequency

Relative severity index

Crash rate

Excess proportions of specific crash types

Other-A project review and windshield survey is conducted as required by the SAFETAP program. Qualified staff decide upon the safety work to be done before, during and after construction to ensure safety is incorporated into maintenance projects.

Other-Low cost spot improvements are often recommended as a result of a highway safety investigation.

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?

No

Describe the methodology used to identify local road projects as part of this program.

Local road projects are typically identified via local municipalities or through the MPO planning process.

How are projects under this program advanced for implementation?

selection committee

Other- Many nominal safety improvements are incorporated into maintenance work

Other-The Priority Investigation Location process mentioned above.

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).

2018 New York Highway Safety Improvement Program

Rank of Priority Consideration

Ranking based on B/C : 2

Available funding : 1

Cost Effectiveness : 2

Program: Pedestrian Safety

Date of Program Methodology: 11/1/1989

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Funding set-aside

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
Other-Crashes involving pedestrians	Volume	Median width
Other-Priority Investigation	Population	Horizontal curvature
Locations (PILS)		Functional classification
		Roadside features
		Other-Intersection features;
		crosswalk features; pedestrian
		islands etc.

What project identification methodology was used for this program? [Check all that apply]

Crash frequency

Relative severity index

Crash rate

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?

No

2018 New York Highway Safety Improvement Program

Describe the methodology used to identify local road projects as part of this program.

Local road projects are typically identified via local municipalities or through the MPO planning process.

How are projects under this program advanced for implementation?

selection committee

Other-The Priority Investigation Location process mentioned above.

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

Ranking based on B/C : 2

Available funding : 1

Cost Effectiveness : 2

Program: Right Angle Crash

Date of Program Methodology: 1/1/1989

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
All crashes		Functional classification
Other-Priority Investigation Locations (PILS)	Volume	Other-Intersection features; speed limit etc.

What project identification methodology was used for this program? [Check all that apply]

Crash frequency

Relative severity index

Crash rate

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?

No

Describe the methodology used to identify local road projects as part of this program.

Local road projects are typically identified via local municipalities and the MPO planning process.

How are projects under this program advanced for implementation?

selection committee

Other-The Priority Investigation Location process mentioned above.

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

Ranking based on B/C : 2

Available funding : 1

Cost Effectiveness : 2

Program: Roadway Departure

Date of Program Methodology: 1/1/1989

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes

Exposure

Roadway

All crashes

Other-Priority Investigation

Locations (PILS)

Volume

Median width

Horizontal curvature

What project identification methodology was used for this program? [Check all that apply]

Crash frequency

Relative severity index

Crash rate

Excess proportions of specific crash types

Other- CARDS are recommended for projects that will put ≥ 40 mm of asphalt and meet the following: 1) there is no raised median or TWLTL, 2) the CARD quantity is $\geq 1500'$; 3) the posted speed ≥ 45 mph; 4) the AADT $\geq 2,000$; and 4) the roadway width $\geq 13'$.

Other-High risk factors for roadway departure crashes were identified in a statewide systemic analysis.

Additional systemic programs will be investigated in the upcoming years to decrease roadway departures.

Other-New York is currently working on a Lane Departure Action Plan. The plan will identify specific countermeasures for implementation under specific roadway conditions to decrease the number of lane departure crashes.

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?

No

Describe the methodology used to identify local road projects as part of this program.

Local road projects are typically identified via local municipalities and the MPO planning process

How are projects under this program advanced for implementation?

selection committee

Other-The Priority Investigation Location process mentioned above.

Other-Centerline Audible Roadway Delineators (CARDS) are an approved systemic treatment.

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

Ranking based on B/C : 2

Available funding : 1

Cost Effectiveness : 2

Program:

Rural State Highways

Date of Program Methodology: 1/1/2010

What is the justification for this program? [Check all that apply]

Other-The State of New York's evaluation of HRRR aligns with 23 USC 148 (a)(1) and defines significant safety risks as having 'an accident rate per mile above the average crash rate per mile established for the region'

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes

All crashes
Other-Priority Investigation
Locations (PILS)

Exposure

Volume

Roadway

What project identification methodology was used for this program? [Check all that apply]

Crash frequency
Relative severity index
Crash rate
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?

No

Describe the methodology used to identify local road projects as part of this program.

Local road projects are typically identified via local municipalities and the MPO planning process.

How are projects under this program advanced for implementation?

selection committee
Other-The Priority Investigation Location process mentioned above.

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

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Ranking based on B/C : 2

Available funding : 1

Cost Effectiveness : 2

Program: Safe Corridor

Date of Program Methodology: 1/1/2012

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes

Exposure

Roadway

All crashes

Other-Priority Investigation

Locations (PILS)

Volume

Functional classification

What project identification methodology was used for this program? [Check all that apply]

Crash frequency

Relative severity index

Crash rate

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?

No

Describe the methodology used to identify local road projects as part of this program.

Local road projects are typically identified via local municipalities and the MPO planning process.

How are projects under this program advanced for implementation?

selection committee

2018 New York Highway Safety Improvement Program
Other-The Priority Investigation Location process mentioned above.

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

Ranking based on B/C : 2
Available funding : 1
Cost Effectiveness : 2

Program: Sign Replacement And Improvement

Date of Program Methodology: 1/1/1995

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
All crashes		
Other-Priority Investigation Locations (PILS)	Volume	Functional classification

What project identification methodology was used for this program? [Check all that apply]

Crash frequency
Relative severity index
Crash rate
Excess proportions of specific crash types
Other-Signs needing improvement can be identified during a SAFETAP review or a Highway Safety Investigation. Some regions have implemented a replacement program where signs are replaced on a defined schedule.

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

Yes

2018 New York Highway Safety Improvement Program

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

No

Describe the methodology used to identify local road projects as part of this program.

Local road projects are typically identified via local municipalities and the MPO planning process.

How are projects under this program advanced for implementation?

selection committee

Other-The Priority Investigation Location process mentioned above.

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

Ranking based on B/C : 2

Available funding : 1

Cost Effectiveness : 2

Program: Skid Hazard

Date of Program Methodology: 1/1/1995

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes

All crashes

Other- Locations are identified where the percentage of wet road accidents is twice the normal proportion for the same county and facility type.

Exposure

Volume

Roadway

Functional classification

What project identification methodology was used for this program? [Check all that apply]

Crash frequency
Relative severity index
Crash rate
Excess proportions 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?

No

Describe the methodology used to identify local road projects as part of this program.

Local road projects are typically identified via local municipalities and the MPO planning process.

How are projects under this program advanced for implementation?

Other-Locations with \geq twice the normal percentage of wet road crashes are identified and friction tested.
Tested locations which demonstrate one or more low friction test numbers (FN40 of 32) are treated.

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

Other-Locations with low friction test numbers (FN40 of 32) require treatment. : 1

What percentage of HSIP funds address systemic improvements?

25

HSIP funds are used to address which of the following systemic improvements? Please check all that apply.

Rumble Strips
Install/Improve Signing
Install/Improve Pavement Marking and/or Delineation
Other-Pedestrian Countdown Timers
Other-Pedestrian Improvements identified in the Pedestrian Safety Action Plan

Enter additional comments here to clarify your response for this question or add supporting information.

The percent of HSIP spent on systemic improvements varies from year to year. \$110M of HSIP was set-aside for the Pedestrian Safety Action Plan in 2017. The plan includes the installation of systemic pedestrian treatments at over 3,700 uncontrolled crosswalks and signalized intersections on the state roadway system in urban areas outside of NYC. The plan also includes \$40M in HSIP funding for systemic pedestrian treatments on local and county roads in urban areas outside NYC.

What process is used to identify potential countermeasures? [Check all that apply]

Engineering Study

Road Safety Assessment

Crash data analysis

SHSP/Local road safety plan

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

Stakeholder input

Enter additional comments here to clarify your response for this question or add supporting information.

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

Describe how the State HSIP considers connected vehicles and ITS technologies.

The future vision is that Connected Vehicle and Automated Vehicle technology will provide the opportunity to dramatically improve safety by decreasing the number and severity of crashes caused by human error and environmental factors on New York State roads. While guidance, testing, standards, legislation and best practices continue to evolve, it is important for transportation operating agencies to be involved in the national issues and take advantage of the technology as it is deployed.

New York State strategies noted in the 2017 SHSP include:

1. Remain involved in national activities that support the development of CAV technologies, standards and best practices, including the National Pooled Fund Study Group.
2. Express support for the pending NHTSA Notice of Proposed Rule Making for V2V communications utilizing 5.9 GHz dedicated short range communications for light vehicles.
3. Urge NHTSA to follow up with a similar Notice of Proposed Rule Making for heavy vehicles.
4. Support, encourage and participate in the development of a New York State legislative and regulatory framework that allows for the testing and deployment of Connected and Autonomous Vehicles.
5. Support the development of national regulations for both light and heavy vehicles.
6. Continue the networking of existing traffic signals and other roadside systems in a flexible, standardized framework.
7. Improve and standardize GIS mapping and spatial capabilities using the New York State GIS Platforms.
8. Continue to develop an understanding of the technology and short term and long term implications.

2018 New York Highway Safety Improvement Program

9. Support the fusion of the latest generation of automobile based sensor systems that provide advanced safety features such as automated braking, driver attention detection, forward collision warning, blind spot warning, lane departure assistance, etc. with V2V real time communications between vehicles to increase the vehicle's situational awareness.

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 states Safety Information Management System (SIMS) is used to identify High Accident Locations on the state system every year. The regions use the Highway Safety Manual as an additional source of information when performing Highway Safety Investigations.

Have any program methodology practices used to implement the HSIP changed since the last reporting period?

No

Are there any other aspects of the HSIP methodology on which the State would like to elaborate?

Yes

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

The vision and mission statements as stated in the 2017 New York State Strategic Highway Safety Plan are:

Vision: Roads in New York will be safer to travel for all users.

Mission: New York safety partners will advocate for those who travel by any mode, and deliver data driven safety programs to decrease the number of injuries and fatalities that occur on public roads in New York state. Together we will work to ensure safety is a top priority in all engineering, education, enforcement and emergency medical service activities.

The 2017 Strategic Highway Safety Plan includes the following emphasis areas and cross cutting issues: Intersections, Lane Departures, Vulnerable Users, Age-related (older and younger drivers), Road User Behavior, Speed, Emergency response, Improvements to Data and Automated and Connected Vehicles

Intersections

From 2011-2015, 46 percent of fatalities and serious injuries in New York State were intersection-related. New York will take a multifaceted approach to solving intersection-related issues that considers the intersection design, accommodates users from all modes, and implements improvements both systemically and at intersections with a crash history. Examples of strategies include developing an Intersection Safety Action

2018 New York Highway Safety Improvement Program

Plan, implementing intersection treatments systemically, improving the enforcement of traffic laws at intersections and supporting the use of technology and traffic incident management to improve safety at intersections.

Travel Lane Departures

Lane departure fatalities and serious injuries made up almost one-fourth of the total fatalities and serious injuries in New York (24 percent) between 2011-2015. To address the wide array of contributing factors to lane departure crashes, New York will take an approach that considers both site-specific and systemic countermeasures, as well as opportunities for education and enforcement. Strategies include the development of a Lane Departure Action Plan, and the implementation of systemic improvements that decrease the number and severity of lane departure crashes.

Centerline Audible Roadway Delineators

Engineering Instruction EI-13-021 lays out the framework and criteria for installing centerline rumble-strips on eligible roads across the state. Any project that places at least .75" of asphalt and meets the geometric/operating criteria is required to install CARDS as part of the project. Because of the low cost and proven effectiveness of centerline rumble strips, this new policy is an important tool in reducing both head-on and run-off road crashes. As of March 2018, approximately 4,148 miles of CARDS have been installed.

Skid Accident Reduction Program (SKARP)

The SKARP program incorporates safety considerations into pavement maintenance activities. SKARP identifies sections of pavement experiencing an unusually high proportion of wet road accidents; friction tests them and schedules treatment for sections experiencing both high wet road accidents and low friction numbers. The frictional quality of NYSDOT owned pavements has improved since the program's inception. A summary of PIL testing from 1996 through 2014 shows a decline in the number of sites requiring treatment, from 91 sites in 1996 to 5 sites in 2017.

Vulnerable Users

Vulnerable users include pedestrians, bicyclists, motorcyclists, and those who work on the roadway. New York will consider infrastructure improvements, as well as opportunities to enhance education, enforcement, emergency response, and data processes in its approach to reduce fatalities and serious injuries of vulnerable users of the roadway network. In June of 2016, NYSDOT announced its first ever statewide Pedestrian Safety Action Plan. The plan includes Engineering, Education and Enforcement measures to improve pedestrian safety. Engineering improvements include the implementation of systemic countermeasures at thousands of signalized intersections and mid-block crosswalks in urban areas between 2016 and 2021.

Pedestrian locations were also added to NYSDOT's annual regional work program where the NYSDOT regions study 20% of the identified Priority Investigation Locations (PILs) each year to determine what improvements can be made to improve pedestrian safety.

Safer Corridors for Pedestrians:

In 2012 NYSDOT developed a process to evaluate corridors to improve pedestrian safety. To maximize effectiveness, the process emphasizes coordination among the Department and other local, state and federal partners. Solutions involve not only engineering measures, but also enforcement campaigns and educational efforts. The PSAP also includes pedestrian improvements at the following 5 pedestrian corridors:

- 1) Erie Boulevard, City Syracuse and Town DeWitt, Onondaga county
- 2) US 62 Niagara Falls Boulevard, Town of Amherst, Town of Tonawanda, Erie county

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- 3) US 11, Village of Malone, Franklin county
- 4) Route 59/45, Spring Valley, Rockland county
- 5) Route 25A, Town of Huntington, Town of Brookhaven, Suffolk county

Complete Streets

On a statewide basis, the New York State Department of Transportation continues to apply Complete Street provisions in its project planning, programming and delivery processes.

Pedestrian/Bicycle Unit

The Pedestrian Bicycle Unit has been working to develop a strategic planning dialogue with the Pedestrian and Bicycle Coordinators in 11 Regions. The Unit provides coordination and staff support for the pedestrian safety initiatives and is managing an over-haul of the NY bicycle map. The project will integrate the existing bicycle network information in a single data layer and engage stakeholders in defining specific data and system requirements that will enable a more flexible and efficient management of bicycle travel options. The Unit also provides coordination/facilitation and technical/management support for the Pedestrian Safety Action Plan and the Empire State Trail statewide project.

Empire State Trail

Under a Governor Cuomo initiative NYSDOT is partnering with the Hudson River Valley Greenway to progress the Empire State Trail. The trail when completed in 2020 will be the largest statewide multi-use trail in the nation. The state will develop 350 miles of new trail to create a 750 mile trail spanning from the New York Harbor to the Canadian Border and from Lake Erie along the Erie Can to Albany. The trail will involve work by 6 NYSDOT Regions 1, 2, 3, 4, 5, 7, and 8 and cover over 220 miles of on-road connections. NYSDOT will also be issuing highway work permits for certain trail crossings throughout the State.

Pedestrian Countdown Timers

Pedestrian crashes account for about 25% of all fatal crashes in New York and remain an emphasis area in New York State's Strategic Highway Safety Plan. The goal for pedestrian countdown timers is to ensure that they are installed at all eligible state-owned signals. As of the end of March 2018, countdown timers have been installed at approximately 2,697 (82.3%) of the 3,179 eligible signals.

Age Related

The SHSP identifies young drivers as those that are 20 and younger. Drivers that are 65 and older represent the older driver group. From 2011-2015, 7,881 drivers in both age groups were killed or seriously injured in a motor vehicle crash. During the 5-year period, 28 percent of fatal and serious injury crashes involved a young or older driver. Decreasing the number of age-related fatalities and serious injuries will be achieved through a multidisciplinary approach incorporating engineering designs to accommodate users of all ages as well as education and enforcement initiatives.

Road User Behavior and Speed

As advancements in vehicle and roadway design continue to improve safety, human behavior continues to be the biggest variable in crash risk. Creating a culture of responsible road users is essential to making a significant impact in the reduction of crashes, fatalities, and injuries. New York will implement roadway improvements that decrease the incidence of distracted and drowsy driving such as flashing beacons, and centerline and edge-line rumble strips as well as improvements that influence driver speed such as signing and speed feedback devices, roundabouts, complete streets and road diets. Education and Enforcement efforts are most important to build awareness and promote safer driving habits.

2018 New York Highway Safety Improvement Program Emergency Response and Traffic Incident Management

A traffic incident is any non-recurring event (such as a vehicle crash, a vehicle breakdown, work zone, or a special event) that causes a reduction in roadway capacity or an abnormal increase in traffic demand that disrupts the normal operation of the transportation system. Traffic incidents are an important concern in New York State because they can result in a safety issue and are a significant cause of congestion delays. In response to this problem, NYSDOT has fostered the development of a Statewide Traffic Incident Management (TIM) Program. A TIM Steering Committee was formed to guide the advancement of the statewide TIM Program in New York State. This Committee has been meeting regularly for 9 years to foster relationships among agencies, determine issues of statewide significance relating to TIM, and to develop training and guidelines for the emergency responder community to use in their everyday efforts to keep themselves and the public safe. The TIM Steering Committee assisted in the advancement of the Move Over law and also provided education on the law to executives and safety stakeholders. The Committee will continue to support similar efforts in the future.

Improvements to Data

Status of Crash Data

This report is based on crash data from the Fatality Accident Reporting System (FARS), NYSDOT's Safety Information System (SIMS) and NYSDMV's Accident Information System (AIS). Crash records and roadway characteristics are analyzed to identify Priority Investigation Locations (PILs). A highway safety investigation is conducted at 20% of the state PILs annually. Crash data has traditionally included fatal, injury, property damage crashes over \$1,000 (reportable PDO) and property damage accidents under \$1,000 (non-reportable). Additional factors used in developing the Priority Investigation Locations list are traffic volumes, divided or undivided and the number of travel lanes. All PIL's studied are on the State System with the exception of some New York City locations.

The Department continues to partner with the NYS Department of Motor Vehicles (NYSDMV), the Governor's Traffic Safety Committee, State Police and other key stakeholders to mutually re-engineer the accident and traffic violation records systems to address safety data information needs. The State continues to use a strategic planning approach to improve its various information systems as articulated in the Traffic Safety Information Systems Strategic Plan. The status of improvements that directly affect the Safety Information Management System (SIMS) are:

Crash Records

The fatal, injury, and electronically submitted Property Damage Only (PDO) crash data is complete through 12/31/17. The policies surrounding the processing of PDO crashes have changed from year to year. Therefore, it is not possible to compare PDO crash data from year to year.

Traffic and Criminal Software (TraCS)

New York State continues as an active participating state in the development and further refinement of the nationally developed software for electronic collection of ticket and traffic records. Use and Dissemination Agreements for use of the software have been signed by more than 492 different police agencies across the state in 57 counties. This represents more than one-third of all law enforcement agencies in NYS who have committed to using the software. As of March 31, 2018, 492 agencies are transmitting data through the TraCS system. The software reduces the workload at NYSDMV decreasing the time it takes to process each crash report.

CLEAR (Crash Location Engineering and Analysis Repository)

2018 New York Highway Safety Improvement Program

A new safety data transfer process that transfers data from NYSDMV to NYSDOT has been designed and is in development. The transfer process is phase one of a project to replace NYSDOT's legacy safety data systems with a new system called CLEAR. CLEAR will utilize the new safety data warehouse, integrate with the other NYSDOT enterprise systems, and enhance NYSDOT's ability to perform safety planning, analysis and evaluation on all public roads. A CLEAR RFP was released in September 2017. A vendor was selected; a kickoff meeting was held in February 2018, and the first series of requirements workshops were held in May 2018.

Enterprise Linear Referencing System (ELRS)

The roads and highways implementation contract was approved in July 2013. The goal of the project is to build a statewide linear referencing network with maintenance workflows that are sustainable and integrate NYS business systems with the Enterprise Linear Referencing System. This will enhance the ability to perform crash analysis on all public roads. This has been moved to production with the Federal Aid Eligible roads built in the LRS.

Traffic Counts

Traffic count AADTs are required to develop crash rates for the state and local system. The Department has complete traffic volume data for almost 44,000 miles of the approximately 117,000 miles of highway in New York. The remaining 73,000 miles are primarily local streets. The Department and counties continue to partner in a statewide county traffic count program designed to capture traffic volume data on county owned roads. In 2017, the Department took 2,438 traffic counts on 2,963.97 miles of non-federal aid roads.

Local Highway Route System

The local roads LRS build was completed and included in its entirety to the FHWA with the June 2018 HPMS submission.

Other

Safety Appurtenance Program (SAFETAP)

The SAFETAP, based on a Road Safety Audit approach, is designed to ensure that roadside safety considerations are incorporated in the Departments Preventive Maintenance single course overlay projects. Under SAFETAP, a team of agency experts conduct a project review of Preventive Maintenance Paving project sites to decide upon simple, low cost safety improvements to be implemented at the time of construction, or soon after construction. Over 9,800 safety recommendations have been made since SFY13/14 and approximately 59% the recommendations were completed by the end of SFY16-17.

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

State Fiscal Year

Enter additional comments here to clarify your response for this question or add supporting information.

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	\$153,582,000	\$150,540,000	98.02%
HRRR Special Rule (23 U.S.C. 148(g)(1))	\$0	\$0	0%
Penalty Funds (23 U.S.C. 154)	\$0	\$0	0%
Penalty Funds (23 U.S.C. 164)	\$0	\$0	0%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	\$0	\$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	\$83,802,000	\$83,802,000	100%
State and Local Funds	\$76,390,000	\$68,900,000	90.2%
Totals	\$313,774,000	\$303,242,000	96.64%

Enter additional comments here to clarify your response for this question or add supporting information.

Data Source is NY PSS System.

Obligation amounts include status of actual and approved.

Programmed Funds include status of actual, approved and planned.

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

\$29,125,781

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

\$24,056,781

Enter additional comments here to clarify your response for this question or add supporting information.

Source: NY PSS System

Funds reported include fund source Code E09 - local government unit with a safety worktype and HSIP on

2018 New York Highway Safety Improvement Program
locally let projects.

Programmed includes transactions with a status of planned, actual and approved. Obligated includes transactions with a status of actual and approved.

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

\$6,325,200

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

\$4,975,200

Enter additional comments here to clarify your response for this question or add supporting information.

Source is NY PSS

SubworkType Projects Include:

Corridor Studies and
Highway Safety Investigations

Programmed includes actual, planned and approved fund status's.

Obligated includes actual and approved fund status's.

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?

\$0

Enter additional comments here to clarify your response for this question or add supporting information.

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

Impediments to obligating HSIP funds include project delays for reasons not limited to safety projects such as environmental approvals, right of way/easement issues, community issues, other funding needs, resource issues, historic issues, NYS permit issues etc. In addition, the Federal Obligation Limitation that exists on all Federal funding also serves as an impediment to obligating safety funds. The following describes some of the approaches used to overcome those obstacles for HSIP projects.

Statewide Call for Projects

2018 New York Highway Safety Improvement Program

The application process for the statewide HSIP call for projects requires an applicant to identify all potential barriers to a timely implementation. The barriers are one of the factors taken into consideration during the project selection process. Thus, a project with good safety benefits but significant impediments to a timely implementation may be denied funding in favor of another safety project with less risk.

Design Services Agreement

Design resources are sometimes limited at the regional level especially for larger projects. The department implemented a statewide regional design services agreement that can be used to fund contract services to assist with design or other urgent safety project needs. The contract is funded via HSIP dollars specifically set aside for that purpose. Design services agreements are also being used for PSAP field assessments and design.

Marchiselli

The department will continue to support programs such as the Marchiselli Highway Improvement Program which provides funding assistance to local municipalities for approved projects. The Marchiselli program requires state and local governments to share in the cost of approved local projects. The projects are typically funded in shares of 80% Federal, 15% State and 5% local.

Low Cost Counter Measures

The NYSDOT is encouraging and implementing more low cost and systemic safety counter measures which typically have less impediments to a timely implementation and are often easier for local municipalities to implement.

Toll Credits

Toll credits have been used for the local match for many HSIP projects. Using toll credits can assist local governments that don't have access to funds for the required match.

Does the State want to elaborate on any other aspects of it's progress in implementing HSIP projects?

No

General Listing of Projects

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

													RELATIONSHIP TO SHSP	
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	EMPHASIS AREA	STRATEGY
See uploaded file									0					

Enter additional comments here to clarify your response for this question or add supporting information.

Project list was uploaded via the General Listings of Project.

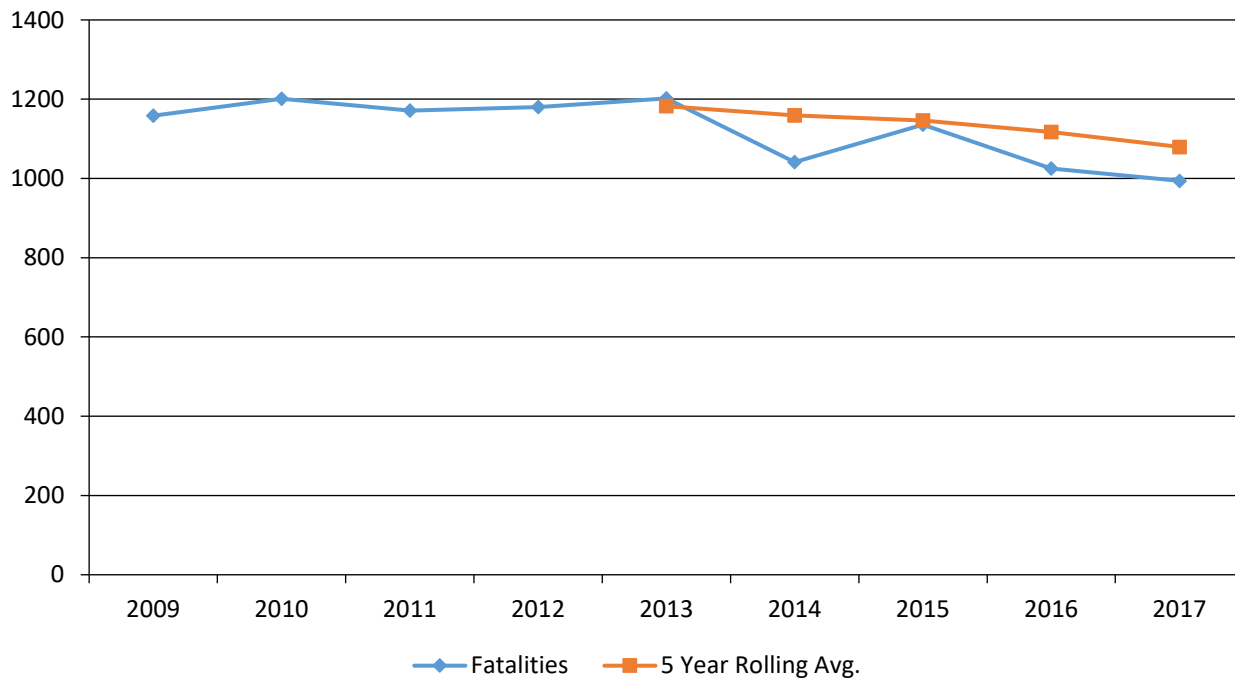
Safety Performance

General Highway Safety Trends

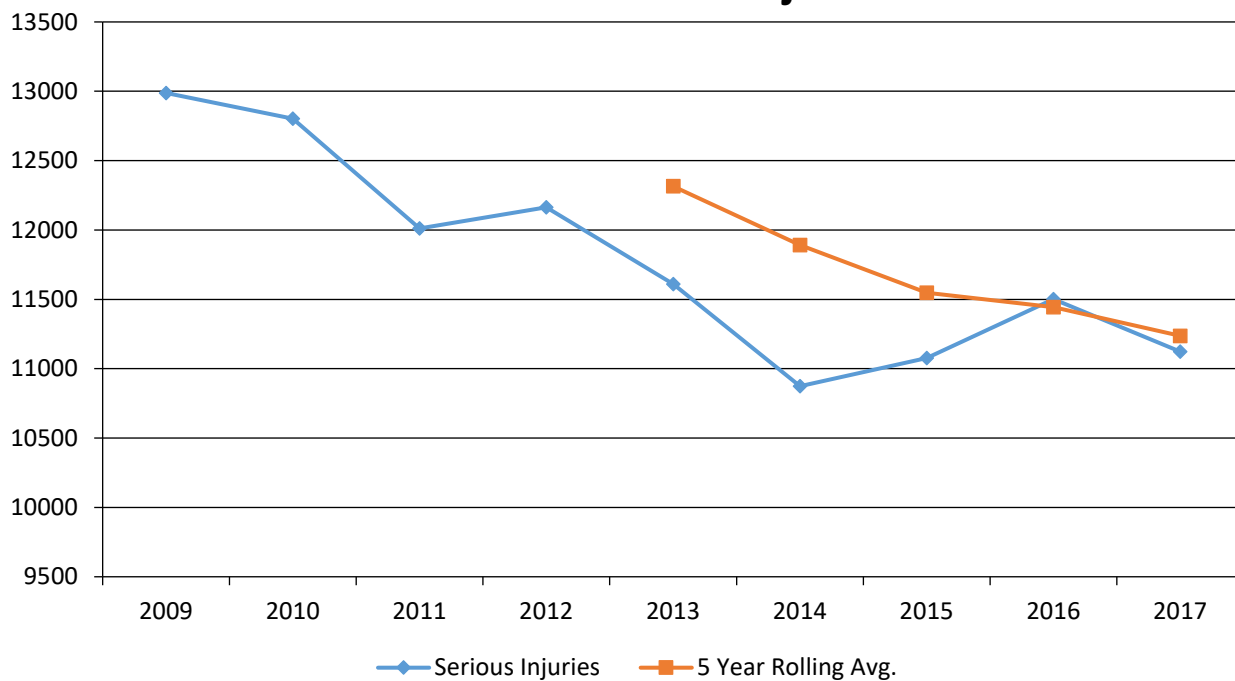
Present data showing the general highway safety trends in the State for the past five years.

PERFORMANCE MEASURES	2009	2010	2011	2012	2013	2014	2015	2016	2017
Fatalities	1,158	1,201	1,171	1,180	1,202	1,041	1,136	1,025	994
Serious Injuries	12,988	12,802	12,012	12,163	11,609	10,874	11,077	11,501	11,124
Fatality rate (per HMVMT)	0.870	0.920	0.920	0.920	0.930	0.810	0.890	0.830	0.803
Serious injury rate (per HMVMT)	9.729	9.754	9.405	9.486	8.948	8.412	8.706	9.356	8.990
Number non-motorized fatalities	338	347	350	353	382	314	353	351	297
Number of non-motorized serious injuries	2,572	2,656	2,599	2,725	2,696	2,378	2,240	2,407	2,256

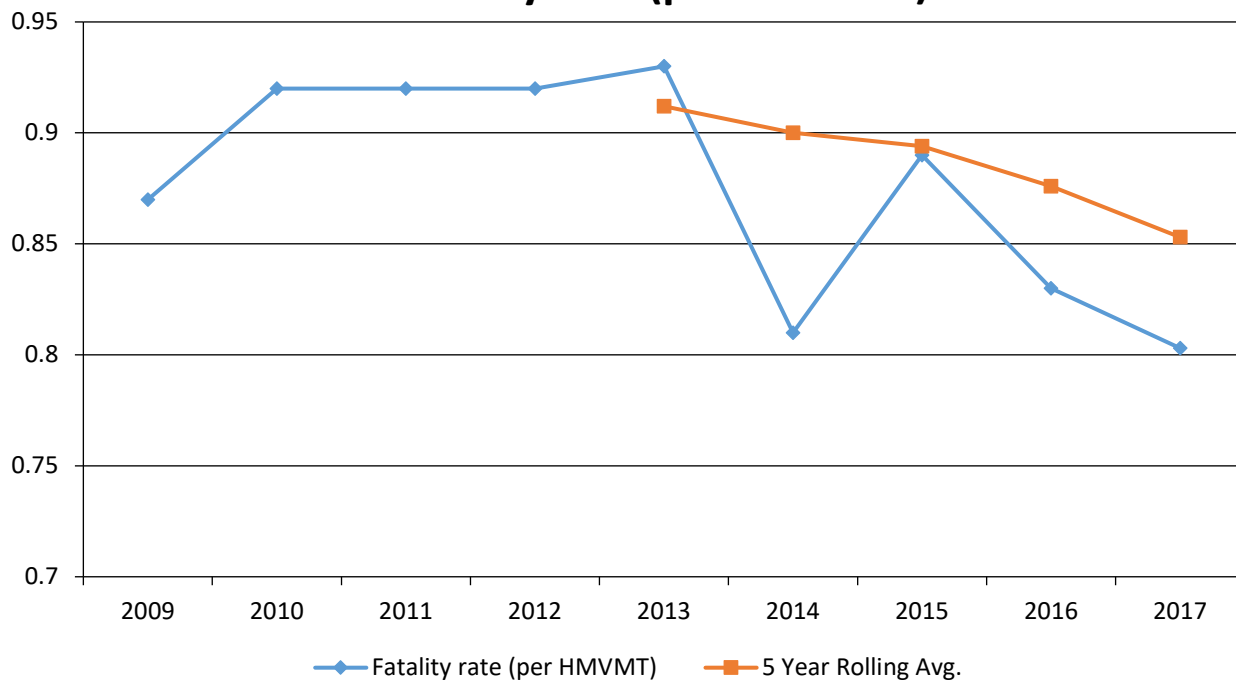
Annual Fatalities



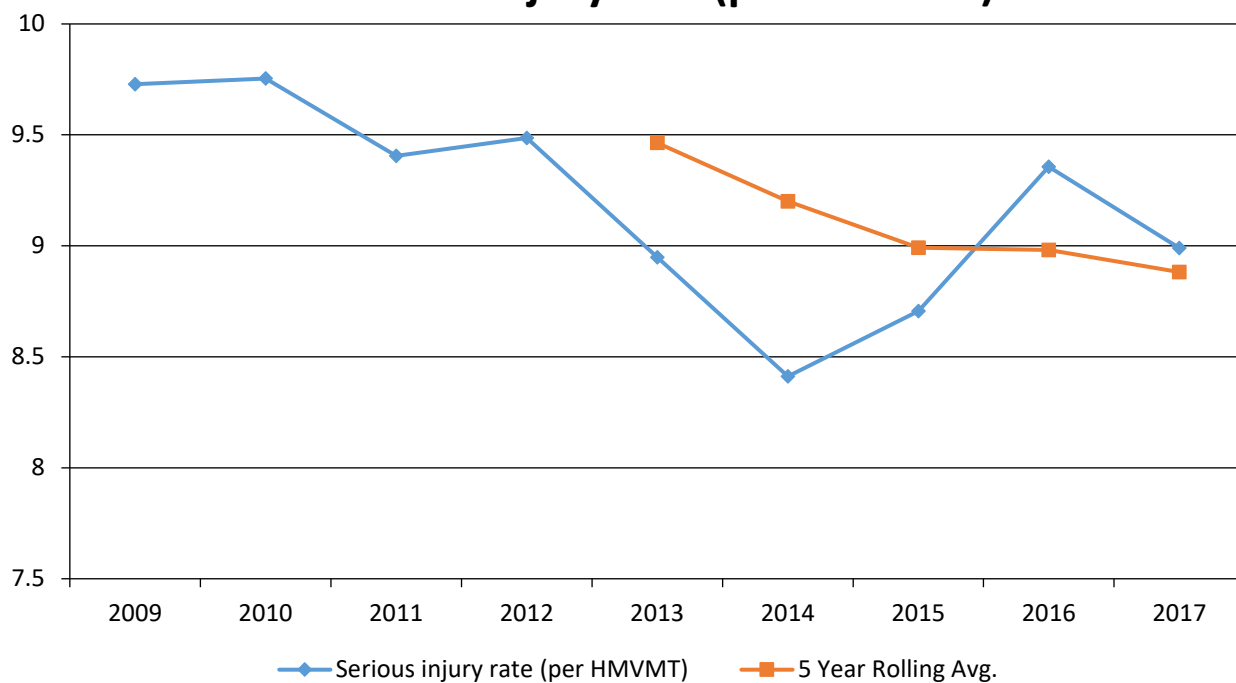
Annual Serious Injuries



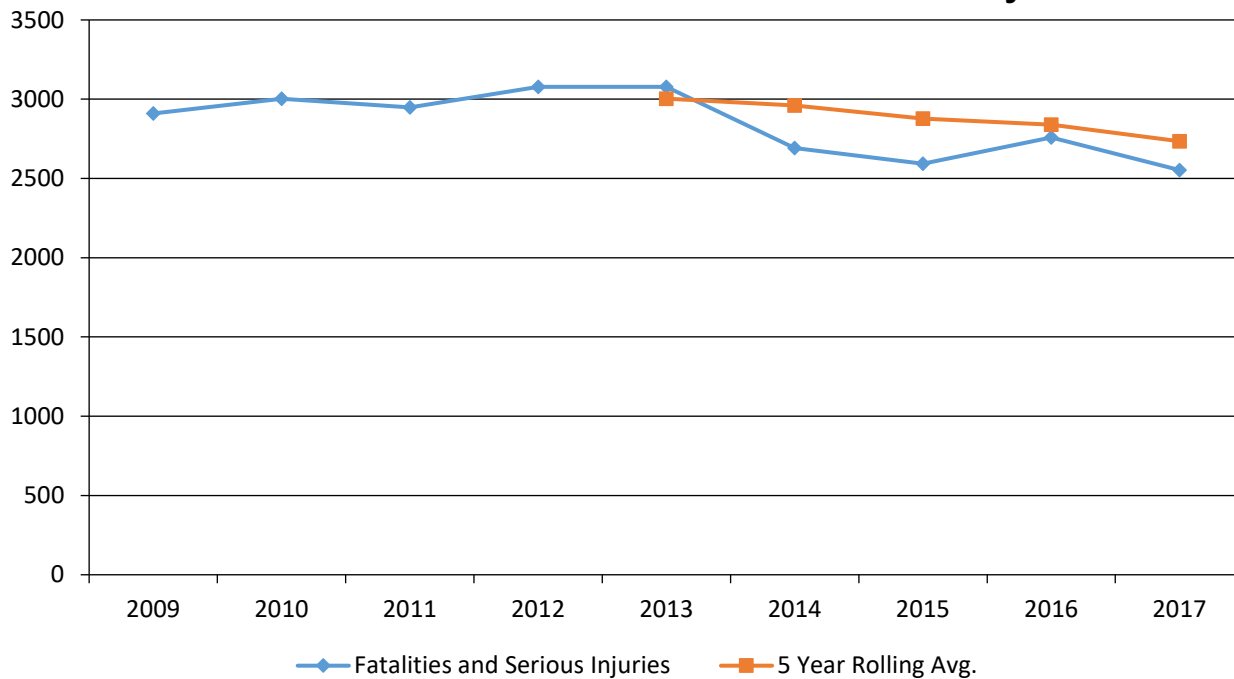
Fatality rate (per HMVMT)



Serious injury rate (per HMVMT)



Non Motorized Fatalities and Serious Injuries



Enter additional comments here to clarify your response for this question or add supporting information.

Describe fatality data source.

FARS

Enter additional comments here to clarify your response for this question or add supporting information.

Data Sources:

2009-2016 Fatalities: FARS

2017 Fatalities: TSSR preliminary

2009-2016 Serious Injuries: TSSR

2017 Serious Injuries: TSSR preliminary

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

Year 2017

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	17.8	115.2	0.01	0.09

2018 New York Highway Safety Improvement Program

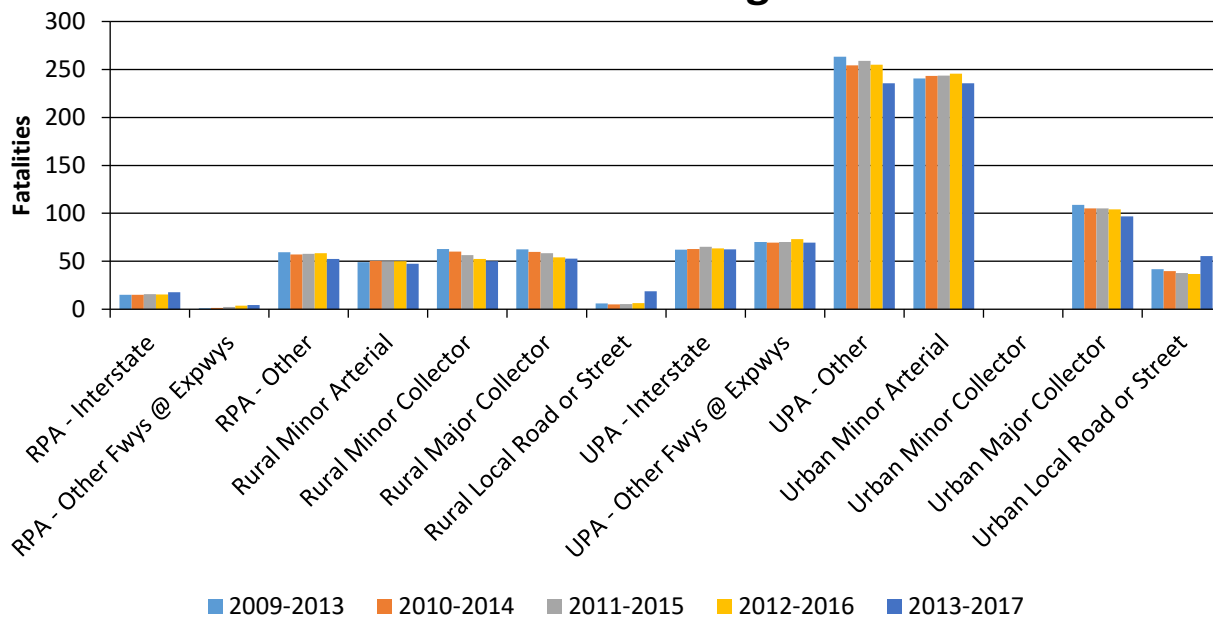
Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Principal Arterial (RPA) - Other Freeways and Expressways	4.4	18	0	0.01
Rural Principal Arterial (RPA) - Other	52.4	312.2	0.04	0.25
Rural Minor Arterial	47.4	313	0.04	0.25
Rural Minor Collector	50.2	381.2	0.04	0.3
Rural Major Collector	52.6	418.8	0.04	0.33
Rural Local Road or Street	18.6	140.2	0.02	0.11
Urban Principal Arterial (UPA) - Interstate	62.4	599.2	0.05	0.47
Urban Principal Arterial (UPA) - Other Freeways and Expressways	69.6	524.6	0.05	0.41
Urban Principal Arterial (UPA) - Other	235.6	2,374.6	0.19	1.88
Urban Minor Arterial	235.6	2,550.6	0.19	2.02
Urban Minor Collector				
Urban Major Collector	96.8	1,061	0.08	1.01
Urban Local Road or Street	55.4	800.8	0.04	0.64

2018 New York Highway Safety Improvement Program

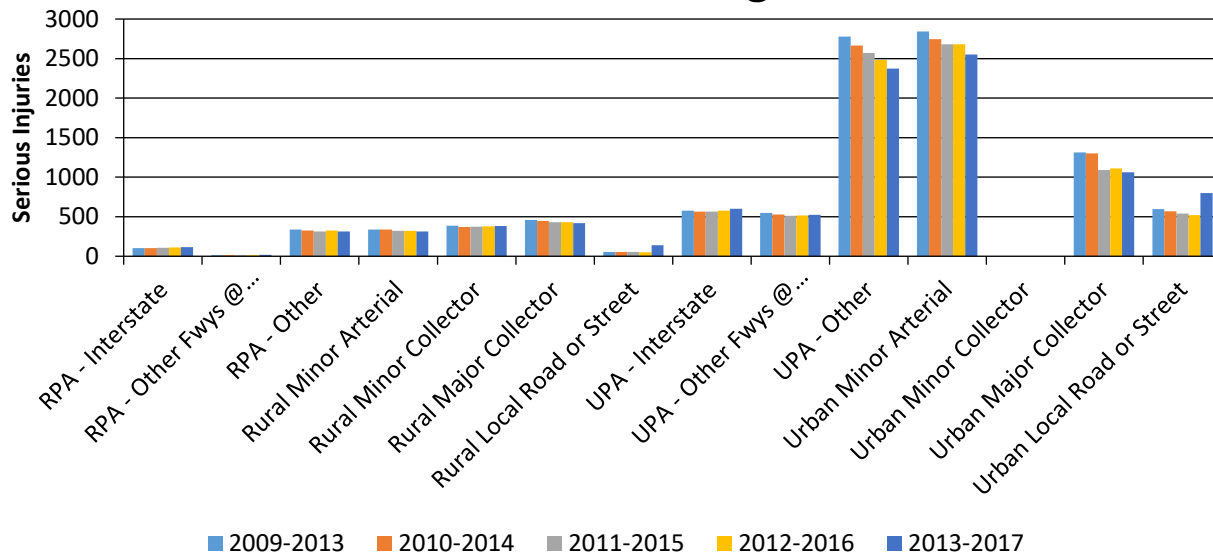
Year 2017

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	432.4	3,481.8	0.34	2.75
County Highway Agency	206.2	1,650.6	0.16	1.31
Town or Township Highway Agency	67.8	623	0.06	0.5
City of Municipal Highway Agency	268	3,830.2	0.21	3.03
State Park, Forest, or Reservation Agency	0.6	5		0
Local Park, Forest or Reservation Agency				
Other State Agency		1.8		
Other Local Agency	0.2	1.8		
Private (Other than Railroad)				
Railroad				
State Toll Authority	22.8	203.6	0.02	0.16
Local Toll Authority	0.4	18.6		0.02
Other Public Instrumentality (e.g. Airport, School, University)				
Indian Tribe Nation	1.2	9.4		0.01

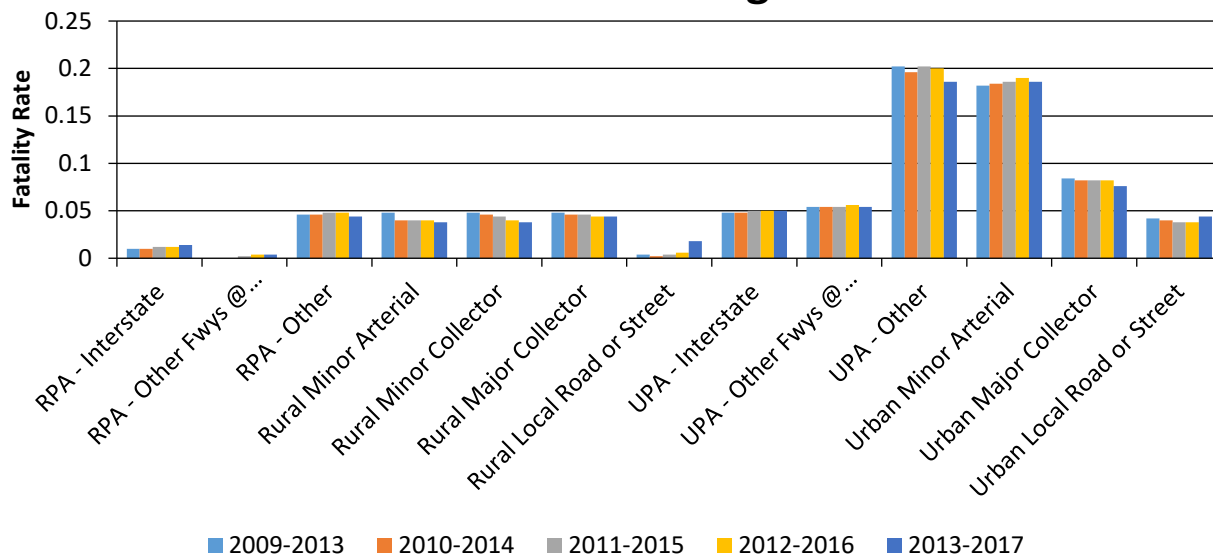
Number of Fatalities by Functional Classification 5 Year Average



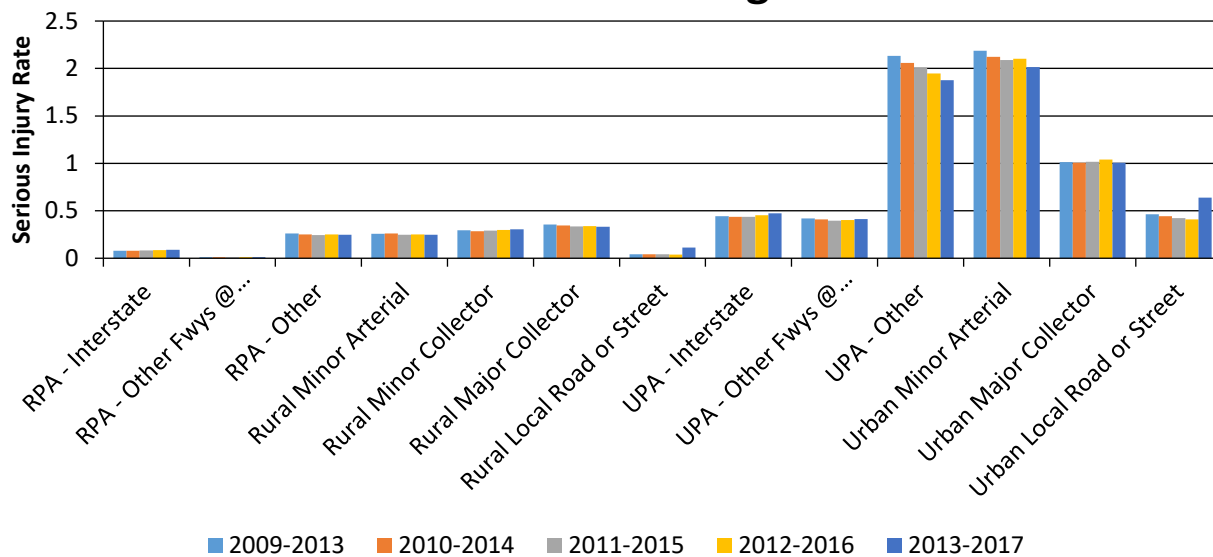
Number of Serious Injuries by Functional Classification 5 Year Average



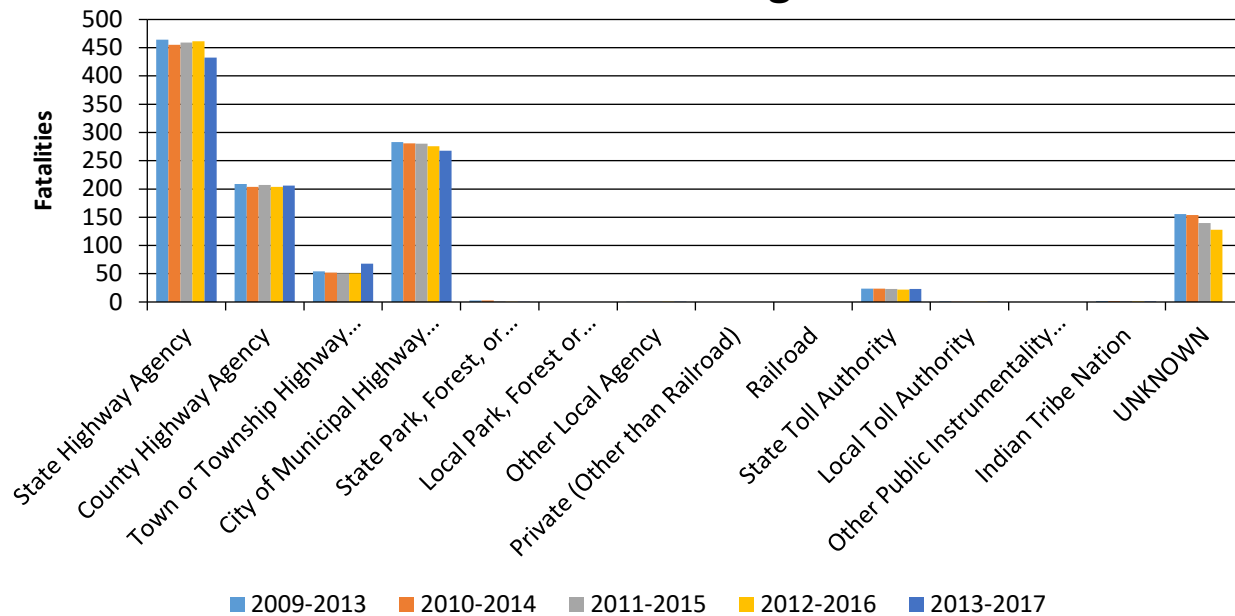
Fatality Rate (per HMVMT) by Functional Classification 5 Year Average



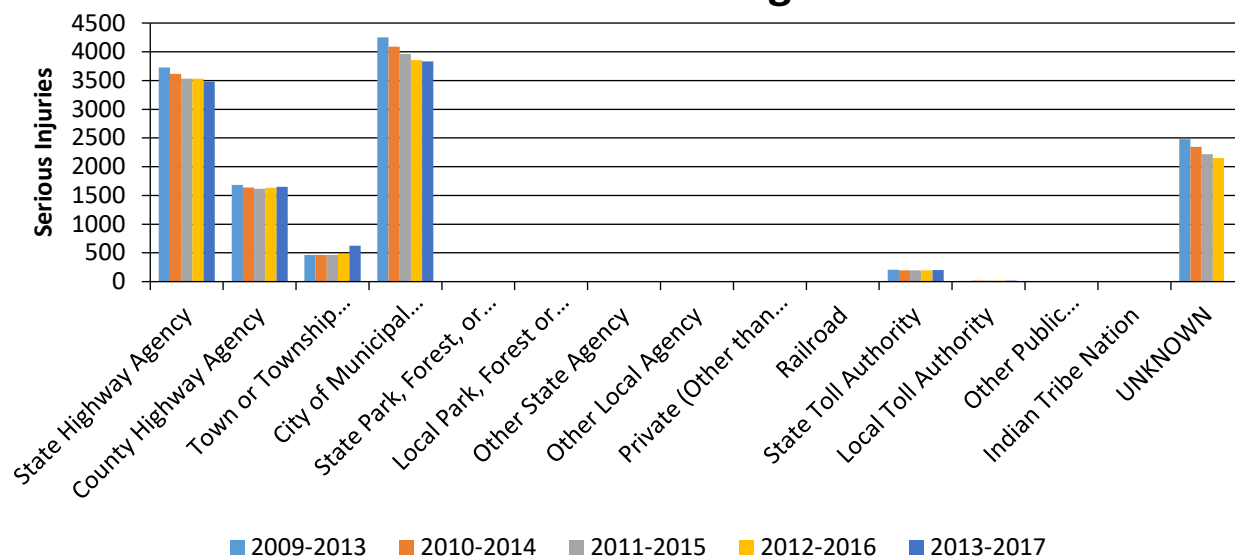
Serious Injury Rate (per HMVMT) by Functional Classification 5 Year Average



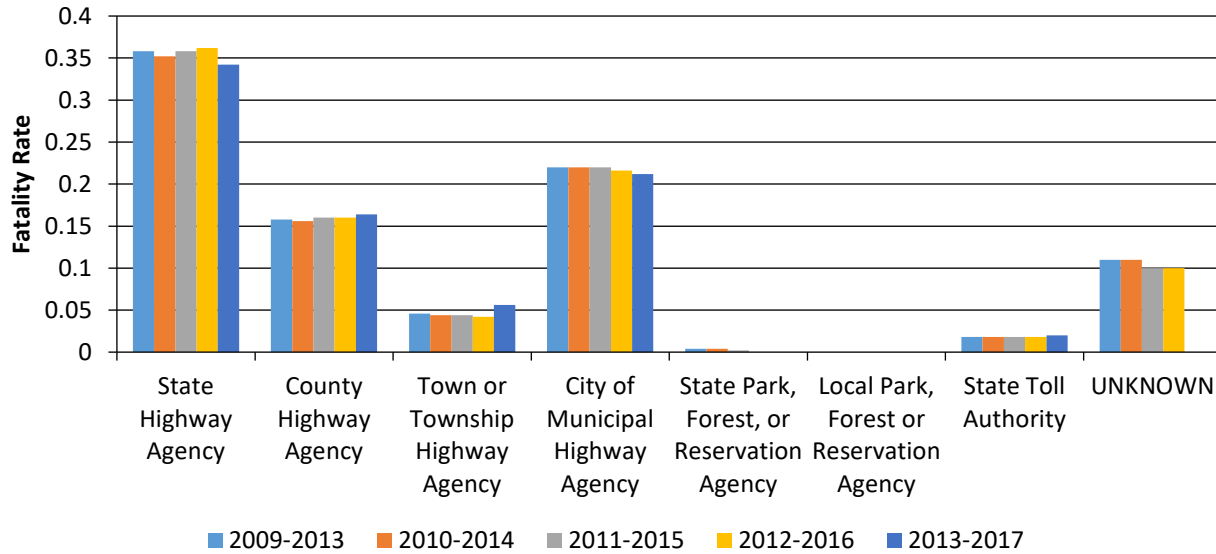
Number of Fatalities by Roadway Ownership 5 Year Average



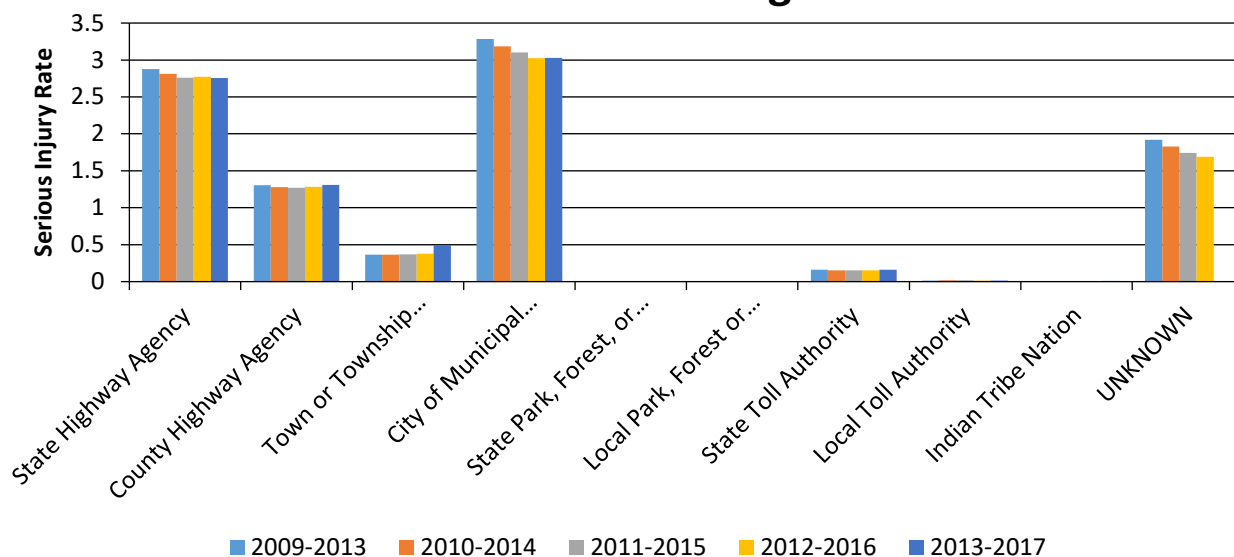
Number of Serious Injuries by Roadway Ownership 5 Year Average



Fatality Rate (per HMVMT) by Roadway Ownership 5 Year Average



Serious Injury Rate (per HMVMT) by Roadway Ownership 5 Year Average



Enter additional comments here to clarify your response for this question or add supporting information.

An Unknown category contains 6 Fatalities and 91 Serious Injuries

NYSDOT's Highway Data Services Bureau continues to build the linear referencing system to cover a greater proportion of the road network. The number of fatalities and number of serious injuries for the functional class "Urban Local Road or Street" increased substantially in 2017 because more miles of those roads have been built in the linear referencing system.

Are there any other aspects of the general highway safety trends on which the State would like to elaborate?

No

Safety Performance Targets

Safety Performance Targets

Calendar Year 2019 Targets *

Number of Fatalities

1072.1

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

The following method was used to define the target: 1) Estimated the existing trend by using a linear trend line which is a clear, straightforward method and recommended by FHWA. The 5 year moving average (current year plus four preceding years) was used as the data point for each year. 2) The 2019 forecast was generated using the FORECAST function in Excel. 3) The forecast was adjusted for reasonability by reviewing external factors and applying a 4% cap. The targets are consistent with the goals identified in the 2017 Strategic Highway Safety Plan.

Number of Serious Injuries 10987.0

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

The following method was used to define the target: 1) Estimated the existing trend by using a linear trend line which is a clear, straightforward method and recommended by FHWA. The 5 year moving average (current year plus four preceding years) was used as the data point for each year. 2) The 2019 forecast was generated using the FORECAST function in Excel. 3) The forecast was adjusted for reasonability by reviewing external factors and applying a 4% cap. The targets are consistent with the goals identified in the 2017 Strategic Highway Safety Plan.

Fatality Rate 0.858

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

The following method was used to define the target: 1) Estimated the existing trend by using a linear trend line which is a clear, straightforward method and recommended by FHWA. The 5 year moving average (current year plus four preceding years) was used as the data point for each year. 2) The 2019 forecast was generated using the FORECAST function in Excel. 3) The forecast was adjusted for reasonability by reviewing external factors and applying a 4% cap. The targets are consistent with the goals identified in the 2017 Strategic Highway Safety Plan.

Serious Injury Rate 8.620

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

The following method was used to define the target: 1) Estimated the existing trend by using a linear trend line which is a clear, straightforward method and recommended by FHWA. The 5 year moving average (current year plus four preceding years) was used as the data point for each year. 2) The 2019 forecast was generated using the FORECAST function in Excel. 3) The forecast was adjusted for reasonability by reviewing external factors and applying a 4% cap. The targets are consistent with the goals identified in the 2017 Strategic Highway Safety Plan.

**Total Number of Non-Motorized
Fatalities and Serious Injuries** 2726.0

2018 New York Highway Safety Improvement Program

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

The following method was used to define the target: 1) Estimated the existing trend by using a linear trend line which is a clear, straightforward method and recommended by FHWA. The 5 year moving average (current year plus four preceding years) was used as the data point for each year. 2) The 2019 forecast was generated using the FORECAST function in Excel. 3) The forecast was adjusted for reasonability by reviewing external factors and applying a 4% cap. The targets are consistent with the goals identified in the 2017 Strategic Highway Safety Plan.

Enter additional comments here to clarify your response for this question or add supporting information.

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

NYSDOT communicates regularly with the Metropolitan Planning Organizations and the Governors Traffic Safety Committee during the target setting process. NYSDOT produces a fact sheet for the MPOs that identifies the targets and describes the process used to set them.

Does the State want to report additional optional targets?

No

Enter additional comments here to clarify your response for this question or add supporting information.

Applicability of Special Rules

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

No

Enter additional comments here to clarify your response for this question or add supporting information.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	Source	
VMT rural collectors and rural local (in millions)	18,264	18,268	18,168	18,094	18,058	17,795	17,469	17,293	11,101	HPMS	The method to estimate local VMT changed for rural roads in 2016 making 2014 vs

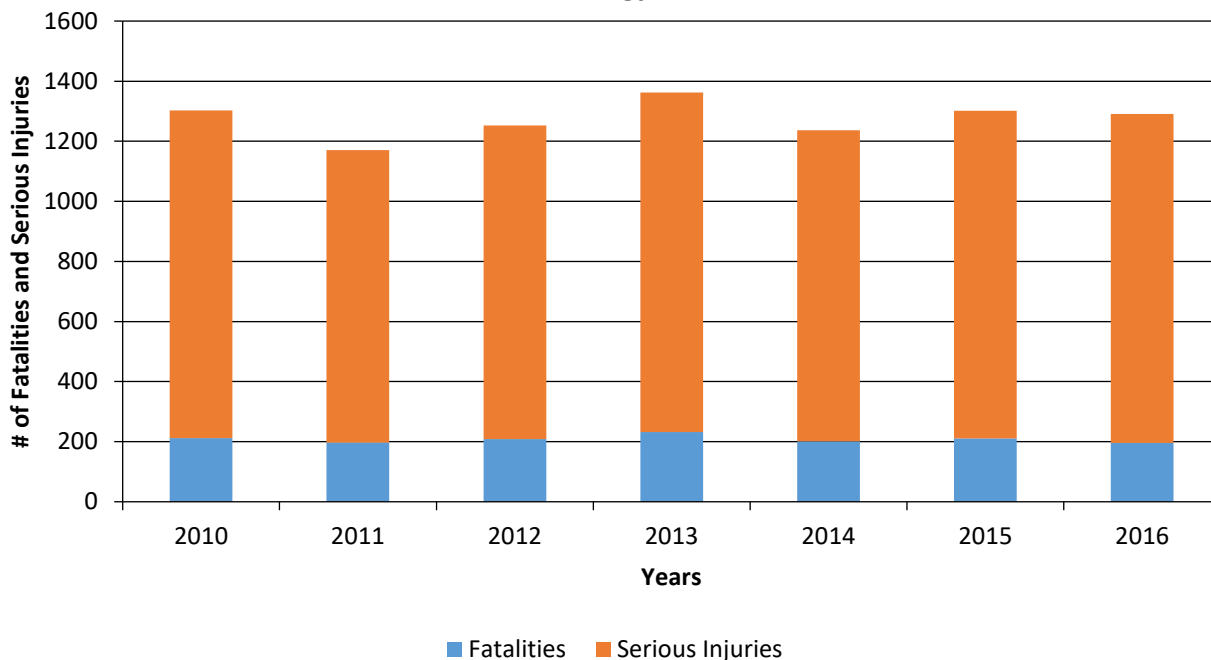
2018 New York Highway Safety Improvement Program

											2016 rates not comparable.
Fatalities	214	208	244	256	252	250	173	197	158	FARS	
Fatalities/100M VMT	1.171704	1.138603	1.343021	1.414834	1.395503	1.404889	0.990326	1.139189	1.423295		
5 year average				1.013632	1.292733	1.33937	1.309714	1.268948	1.270641		Rule does not apply since the rate for 2016

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	2010	2011	2012	2013	2014	2015	2016
Number of Older Driver and Pedestrian Fatalities	212	197	209	232	201	211	196
Number of Older Driver and Pedestrian Serious Injuries	1,091	973	1,043	1,130	1,036	1,090	1,095

Number of Older Driver and Pedestrian Fatalities and Serious Injuries by Year.



Enter additional comments here to clarify your response for this question or add supporting information.

2018 New York Highway Safety Improvement Program

For purposes of this calculation, the terms "Annual rate, year XXXX" (or AR, year XXXX") means the following

F + SI for drivers and pedestrians 65 years of age and older, year XXXX/Pop. of drivers and pedestrians 65 years of age and older, year XXXX

1. Calculate Rate for 2016

Calculate the following to two decimal places, then round to the nearest tenth:

AR 2016 + AR 2015 + AR 2014 + AR 2013 + AR 2012

2. Calculate Rate for 2014:

Calculate the following to two decimal places, then round to the nearest tenth:

AR 2014 + AR 2013 + AR 2012 + AR 2011 + AR 2010

3. Compare Rates for 2016 to Rate for 2014

If the rate for 2016 (under step #1) exceeds the rate for 2014 (under step #2), the Special Rule applies.

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

Change in fatalities and serious injuries

Enter additional comments here to clarify your response for this question or add supporting information.

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

The fatality rate in New York has been below 1.0 per 100M VMT since 2007. The number of fatalities and the fatality rate have continued on a downward trend in New York at a time when many states are experiencing an increase. The number of serious injuries and the serious injury rates have been on a downward trend although the annual numbers were up in 2015 and 2016.

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

miles improved by HSIP

More systemic programs

RSAs completed

Policy change

Increased awareness of safety and data-driven process

Increased focus on local road safety

HSIP Obligations

Enter additional comments here to clarify your response for this question or add supporting information.

Are there any significant programmatic changes that have occurred since the last reporting period?

No

Effectiveness of Groupings or Similar Types of Improvements

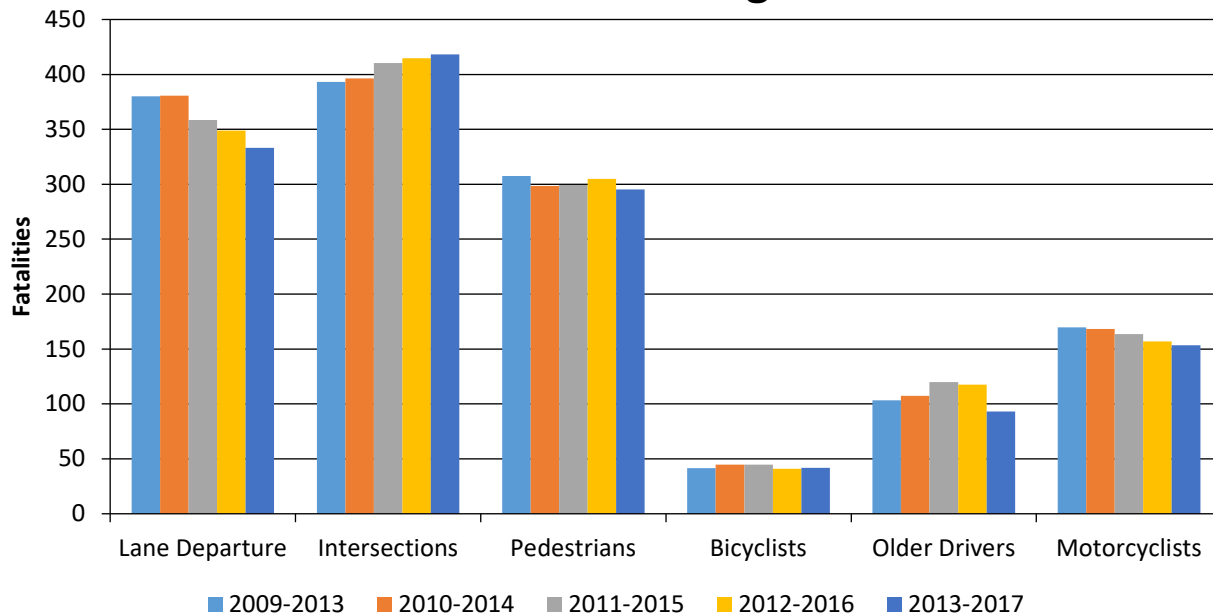
Present and describe trends in SHSP emphasis area performance measures.

Year 2017

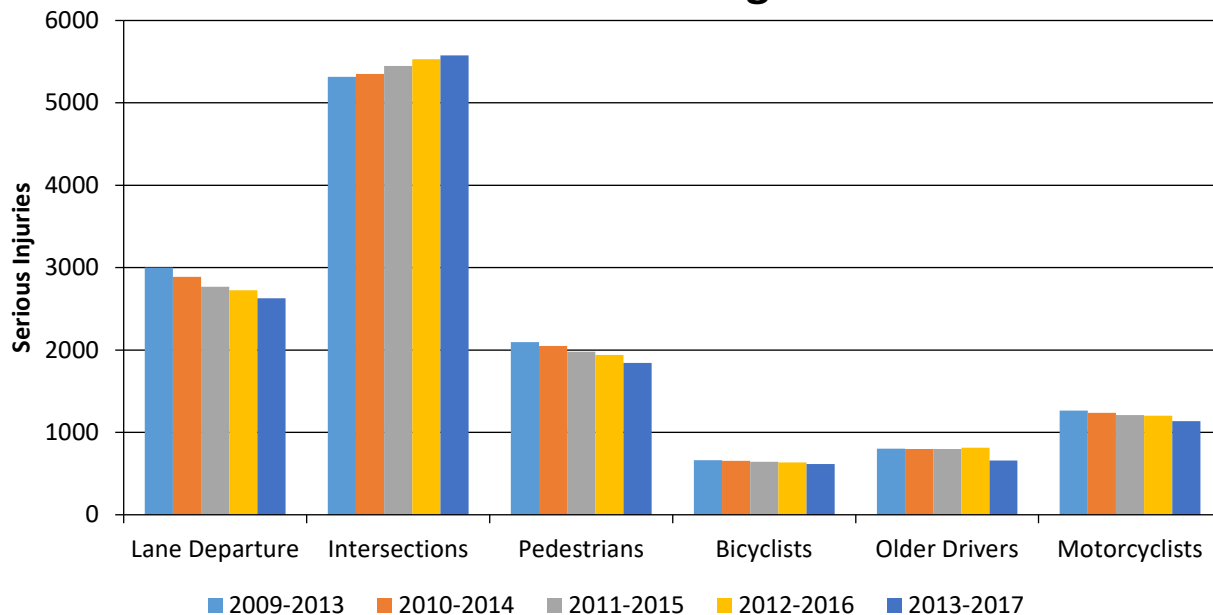
2018 New York Highway Safety Improvement Program

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)	Other 1	Other 2	Other 3
Lane Departure		333.2	2,628	0.22	1.66	0	0	0
Intersections		418.2	5,577.2	0.26	3.52	0	0	0
Pedestrians		295.2	1,845.2	0.19	1.18	0	0	0
Bicyclists		41.8	615.6	0.03	0.4	0	0	0
Older Drivers		93.2	658.2	0	0	0	0	0
Motorcyclists		153.4	1,137.4	0.1	0.72	0	0	0

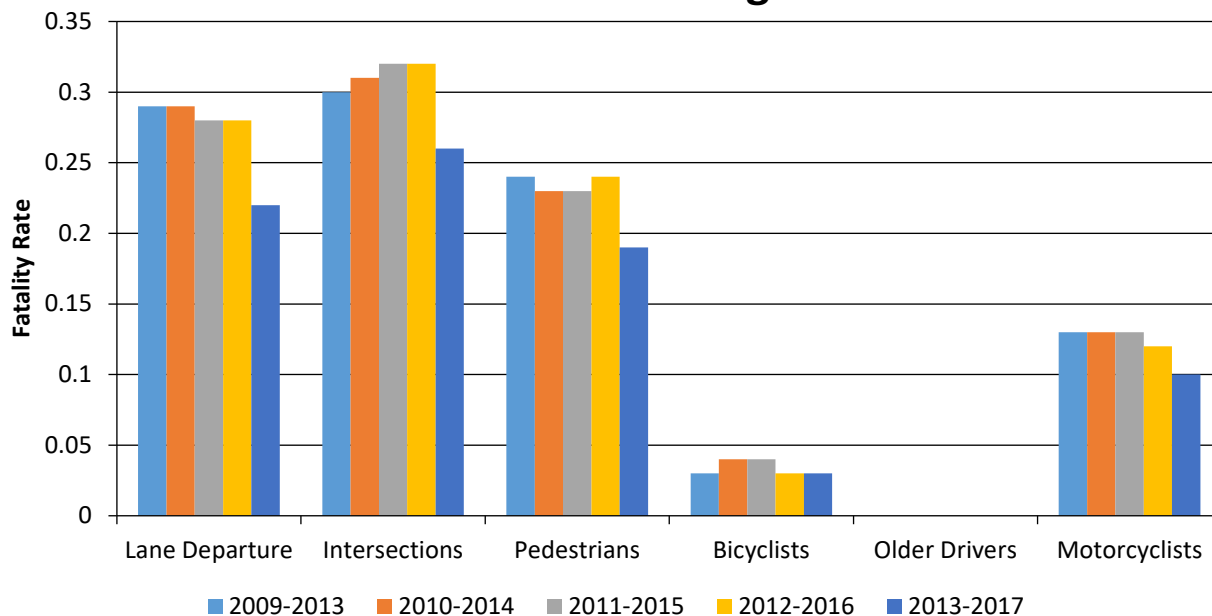
Number of Fatalities 5 Year Average



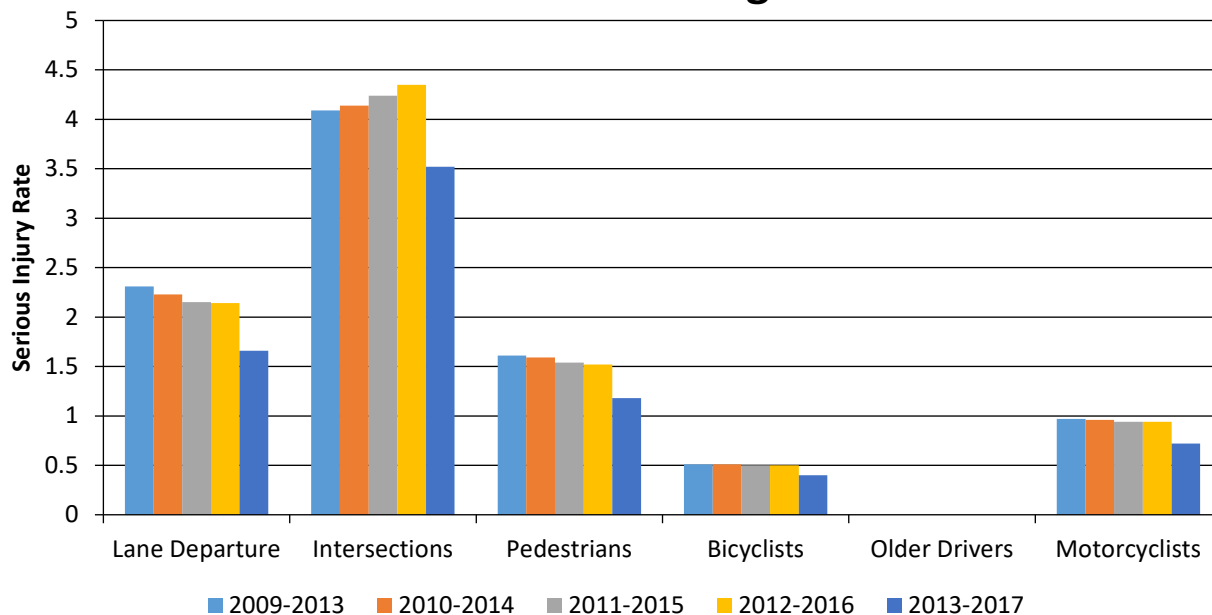
Number of Serious Injuries 5 Year Average



Fatality Rate (per HMVMT) 5 Year Average



Serious Injury Rate (per HMVMT) 5 Year Average



Enter additional comments here to clarify your response for this question or add supporting information.

Has the State completed any countermeasure effectiveness evaluations during the reporting period?

No

Enter additional comments here to clarify your response for this question or add supporting information.

NYSDOT has a Post Implementation Evaluation System (PIES) that provides information such as crash modification factors and before and after crash statistics on safety projects. Reports can be run at the project level or for specific countermeasures to see before and after the crash modification factors. Regions review the information on a regular basis.

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)
Question is optional														

Enter additional comments here to clarify your response for this question or add supporting information.

Are there any other aspects of the overall HSIP effectiveness on which the State would like to elaborate?

No

Compliance Assessment

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

06/13/2017

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

Enter additional comments here to clarify your response for this question or add supporting information.

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

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)	100	100					100	100	100	100
Route Number (8)	100	100								
Route/Street Name (9)	100	100								
Federal Aid/Route Type (21)	100	100								
Rural/Urban Designation (20)	100	100					100	100		
Surface Type (23)	100	99.8					31.4	99.5		
Begin Point Segment Descriptor (10)	100	100					100	100	100	100
End Point Segment Descriptor (11)	100	100					100	100	100	100
Segment Length (13)	100	100								
Direction of Inventory (18)	100	100								
Functional Class (19)	100	100					100	100	100	100
Median Type (54)	99.8	98.7								
Access Control (22)	100	100								

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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
One/Two Way Operations (91)	100	100								
Number of Through Lanes (31)	100	100					100	100		
Average Annual Daily Traffic (79)	99.1	84.3					24.9	16.8		
AADT Year (80)	99.1	84.3								
Type of Governmental Ownership (4)	100	100					100	100	100	100
INTERSECTION										
Unique Junction Identifier (120)			100	100						
Location Identifier for Road 1 Crossing Point (122)			0	0						
Location Identifier for Road 2 Crossing Point (123)			0	0						
Intersection/Junction Geometry (126)			100	100						
Intersection/Junction Traffic Control (131)			100	100						
AADT for Each Intersecting Road (79)			40.4	40.4						
AADT Year (80)			40.4	40.4						
Unique Approach Identifier (139)			0	0						
INTERCHANGE/RAMP										
Unique Interchange Identifier (178)					100	100				
Location Identifier for Roadway at Beginning of Ramp Terminal (197)					100	100				
Location Identifier for Roadway at Ending Ramp Terminal (201)					100	100				
Ramp Length (187)					100	100				
Roadway Type at Beginning of Ramp Terminal (195)					100	100				
Roadway Type at End Ramp Terminal (199)					100	100				

2018 New York Highway Safety Improvement Program

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
Interchange Type (182)					100	100				
Ramp AADT (191)					80.4	59.7				
Year of Ramp AADT (192)					80.4	59.7				
Functional Class (19)					100	100				
Type of Governmental Ownership (4)					100	100				
Totals (Average Percent Complete):	99.89	98.17	47.60	47.60	96.44	92.67	84.03	90.70	100.00	100.00

*Based on Functional Classification

Enter additional comments here to clarify your response for this question or add supporting information.

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.

NYSDOT currently has counts and year of count on approximately 4,456 out of 5,433 ramps. The plan to count the remaining ramps in the next two rounds of three-year traffic counting contracts starting in 2019.

Provide the suspected serious injury identifier, definition and attributes used by the State for both the crash report form and the crash database using the table below. Please also indicate whether or not these elements are compliant with the MMUCC 4th edition criteria for data element P5. Injury Status, suspected serious injury.

CRITERIA	SUSPECTED SERIOUS INJURY IDENTIFIER(NAME)	MMUCC 4TH EDITION COMPLIANT *	SUSPECTED SERIOUS INJURY DEFINITION	MMUCC 4TH EDITION COMPLIANT *	SUSPECTED SERIOUS INJURY ATTRIBUTES(DESCRIPTORS)	MMUCC 4TH EDITION COMPLIANT *
Crash Report Form	several fields - see comments	No	N/A	No	N/A	No
Crash Report Form Instruction Manual	several fields - see comments	No	see comments	No	see comments	No
Crash Database	several fields - see comments	No	N/A	No	N/A	No
Crash Database Data Dictionary	several fields - see comments	No	see comments	No	see comments	No

Please describe the actions the State is taking to become compliant by April 15, 2019.

The Suspected Serious injury definition includes two injury types (crush injuries and paralysis) that do not exist on the Police Accident Report. Including those injuries in the definition requires that they be added to the Police Accident Report paper form as well as to the electronics TraCS form and the Accident Information SYstem (AIS). There are 3 fields in the Police Accident Report that are used to identify whether an injury is a serious injury of type A. The fields are Location of Most Serious Complaint, Type of Physical Complaint and Victims Physical and Emotional status. Because of the process involved and the IT resources needed to add the additional injury types, it will be problematic for New York to fully comply with the MMUCC 4th Edition definition of "suspected serious injury (A)" by April 15, 2019. The state is currently investigating methods that will make it easier to upgrade and change the NY crash application as requirements change. For example, New York is currently working on a project to replace the Safety Information Management Systems (SIMS), the Accident Locations Information System (ALIS) and the Post Implementation Evaluation System (PIES). DMV is preparing to create and RFP to replace the AIS (Accident Information System).

Enter additional comments here to clarify your response for this question or add supporting information.

Did the State conduct an HSIP program assessment during the reporting period?

Yes

Describe the purpose and outcomes of the State’s HSIP program assessment.

The HSIP program goals and outcomes are assessed regularly:

- The state produces a report quarterly that reports the progress on statewide and regional goals and outcomes.
- \$150M in HSIP funds were obligated in SFY 17/18 (Source: NY PSS System)
- 341 Highway Safety Investigation were completed in SFY 16/17.
- 50 HSIP projects were let in FFY17.
- CARDS were installed at 68% of the eligible segments as of the end of 2017.
- Countdown timers were installed at 82% of the eligible intersections as of the end of 2017.
- Approximately 280 safety improvements were completed as a result of the SAFETAP program in SFY 16/17.
- HSIP projects completed in 2015 and entered into the Post Implementation Evaluation System (PIES) showed a 19% reduction in fatal and serious injuries.

Optional Attachments

Program Structure:

[RED BOOK Highway Safety Improvement Program Procedures Techniques.pdf](#)

Project Implementation:

[HSIP-HRRR 2006 through 3-31-18.xlsx](#)

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.