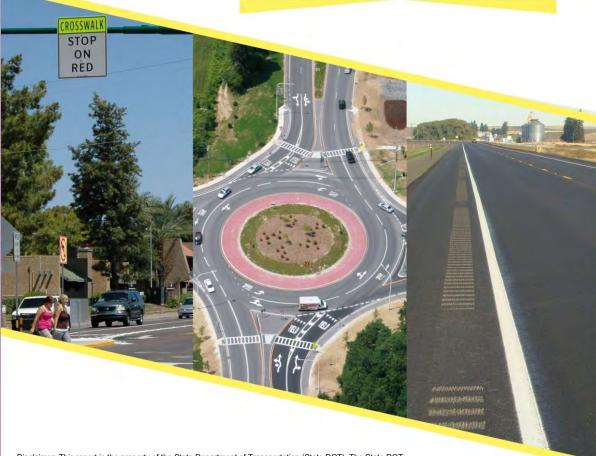


## **NEW YORK**

# HIGHWAY SAFETY IMPROVEMENT PROGRAM

**2023 ANNUAL REPORT** 



Disclaimer: This report is the property of the State Department of Transportation (State DOT). The State DOT completes the report by entering applicable information into the Federal Highway Administration's (FHWA) Highway Safety Improvement Program (HSIP) online reporting tool. Once the State DOT completes the report pertaining to its State, it coordinates with its respective FHWA Division Office to ensure the report meets all legislative and regulatory requirements. FHWA's Headquarters Office of Safety then downloads the State's finalized report and posts it to the website (https://highways.dot.gov/safety/hsip/reporting) as required by law (23 U.S.C. 148(h)(3)(A)).

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. 407 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**

#### 2.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. The Bipartisan Infrastructure (BIL) was enacted as the Infrastructure Investment and Jobs Act, Pub. L. 117-58 (Nov. 15, 2021) and continues the Highway Safety Improvement Program (HSIP) to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal land. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. Safety is the top priority at NYSDOT and we continue to enhance our methodology, data and processes to make progress towards the State's vision of Toward Zero Deaths.

#### **Emphasis Areas**

The New York State Department of Transportation will be releasing an updated Strategic Highway Safety Plan in 2023. That plan includes several new components focused on driving down crash numbers and trends that emerged during the Covid 19 pandemic. Many of the emphasis areas remain focused on crash types that remain a major portion of the fatal and severe injury crashes that occur on our roadways while others are focused on developing trends with increasing numbers of crashes. Of note is the addition of the Vulnerable Road User Assessment (VRUA) requirement in the Strategic Highway Safety Plan. The VRUA will support the inclusion of "Equity" in New York's transportation planning process.

Roadway departures continue to be an emphasis area in New York State for the next 5 years. To address this issue, NYSDOT has been developing a Roadway Departure Safety Action Plan to be released in early 2024. The analysis was completed prior to the release of our new Crash Location and Engineering Analysis Reporting (CLEAR) application but it is anticipated to be an essential tool in the tracking and evaluation of the plan. With statewide network and systemic screening capabilities, NYSDOT hopes to be able to streamline analysis to support future action plans to address crashes in additional emphasis areas.

#### **HSIP** Fund Administration

NYSDOT is currently 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 and locals get a portion of those regional funds or can submit projects to be prioritized among all projects. The remaining funds are administered centrally and used to fund a periodic call for projects program. Due to staffing and resource constraints, a local call for projects was not released this year however it is expected the unspent funds will be allocated to the upcoming Roadway Departure Safety Action Plan with a significant amount dedicated to local projects. Recent improvements in our ability to analyze the local system with parity to the State system analysis are driving a review of the formulas and methods used to distribute the funding. The goal is to have a new formula in place for the next apportionment.

#### 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 the HSIP funds in New York State are provided to the NYSDOT regions according to a formula that includes crashes, lane miles, and population. The remaining funds are administered by Main Office for the implementation of statewide safety programs.

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

**Operations** 

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

- Formula via Districts/Regions
- SHSP Emphasis Area Data
- Other-Periodic Call for Safety Projects

#### 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. The regions work with the Metropolitan Planning Organizations to determine which state and local HSIP projects to include in the capital program. A portion of the Region 11 allocation is provided to New York City for safety projects on local roads owned by New York City. The state is currently working on two separate Safety Action plans, Roadway Departures and a PSAP2 plan. These plans contain a call for local projects and represent around \$150M of HSIP funding for local roads. The plans also contain options for funding local road safety plans to further identify local safety issues.

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 crash data systems continue as the CLEAR system is used and additional feedback is received.

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

- Design
- Districts/Regions

- Local Aid Programs Office/Division
- Maintenance
- Operations
- Planning
- Traffic Engineering/Safety

#### Describe coordination with internal partners.

NYSDOT has a Safety System and Optimization team (SSO) with expertise in highway safety and system optimization. The multidisciplinary team is comprised of members from various areas within the Department. SSO teams are 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;
- Prioritize capital program projects; and
- Monitoring programs and projects to ensure safety goals are met.

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

- FHWA
- · Governors Highway Safety Office
- Law Enforcement Agency
- Local Government Agency
- Local Technical Assistance Program
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Tribal Agency
- Other-New York State Department of Health

#### Describe coordination with external partners.

NYSDOT could not do its work without support from its external safety partners. NYSDOT does the following coordination:

- · Update the Strategic Highway Safety Plan (SHSP) with guidance from local, state, federal, tribal, and private stakeholders.
- · Set annual safety performance targets in collaboration with the Governor's Traffic Safety Committee.
- · Participate as members in the NYS MPO Safety Working Group (SWG), the NYMTC Safety Advisory Working Group (SAWG), the New York State Partnership for Drowsy Driving (NYPDD), and the Traffic Records Coordinating Committee (TRCC).
- · Provide Crash Location and Engineering Analysis Repository (CLEAR) access, technical support, and training to all NYS government employees.

### Program Methodology

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

Yes

A revised manual was created to be consistent with the new Safety Management system called CLEAR. See attached document.

#### Select the programs that are administered under the HSIP.

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

## **Program: Bicycle Safety**

## Date of Program Methodology:1/1/2010

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

· Addresses SHSP priority or emphasis area

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

Competes with all projects

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

Crashes Exposure Roadway

- All crashes
- Other-Priority Investigations (PILS)
- Investigation Volume

- Functional classification
- Roadside features

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

- Crash frequency
- Crash rate
- Excess proportions of specific crash types

Relative severity index

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

Yes

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

Describe the methodology used to identify local road projects as part of this program. Local road projects are typically identified via local municipalities and the MPO planning process.

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

- Other-The Priority Investigation Location process mentioned above.
- 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: Horizontal Curve** 

Date of Program Methodology:11/1/1989

What is the justification for this program?

Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

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

Crashes Exposure Roadway

- All crashes
- Other-Priority Locations

Investigation

Volume

- Median width
- Horizontal curvature
- Roadside features

What project identification methodology was used for this program?

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

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

Yes

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

Describe the methodology used to identify local road projects as part of this program. Local road projects are typically identified via local municipalities and the MPO planning process.

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

- Other-The Priority Investigation Location process mentioned above.
- 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: Intersection** 

Date of Program Methodology:11/1/1989

What is the justification for this program?

Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes Exposure Roadway

All crashes
 Volume
 Functional classification

 Other-Priority Investigation Locations (PILS)

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

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

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

Yes

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

Describe the methodology used to identify local road projects as part of this program. Local road projects are typically identified via local municipalities and the MPO planning process.

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

- Other-The Priority Investigation Process mentioned above.
- 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: Local Safety** 

Date of Program Methodology:1/1/2013

What is the justification for this program?

Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

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

Crashes Exposure Roadway

All crashesVolume

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

Crash frequency

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

Yes

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

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

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?

Addresses SHSP priority or emphasis area

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

Competes with all projects

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

Crashes Exposure Roadway

- All crashes
- Other-Priority Investigation
   Volume Locations (PILS)

- Median width
- Horizontal curvature
- Functional classification
- Roadside features

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

- Crash frequency
- 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.
- Relative severity index

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

Yes

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

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

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

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

- Other- Many nominal safety improvements are incorporated into maintenance work
- Other-The Priority Investigation Location process mentioned above.
- 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: Pedestrian Safety**

Date of Program Methodology:11/1/1989

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

· Addresses SHSP priority or emphasis area

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

Funding set-aside

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

Crashes Exposure Roadway

- Other-Crashes involving pedestrians
- Other-Priority Investigation Locations (PILS)
- Volume

- Median width
  - Horizontal curvature
  - Functional classification
  - Roadside features
  - Other-Intersection features; crosswalk features; pedestrian islands etc.

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

- Crash frequency
- Crash rate
- Excess proportions of specific crash types
- Other-Risk factors
- Relative severity index

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

Yes

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

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

Local road projects are typically identified via local municipalities or through the MPO planning process. A local call for projects in 2018 provided \$40M in HSIP funding for pedestrian improvements under this program.

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

- Other-The Priority Investigation Location process mentioned above.
- · 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: Right Angle Crash**

Date of Program Methodology: 1/1/1989

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

Addresses SHSP priority or emphasis area

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

Competes with all projects

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

Crashes Exposure Roadway

- All crashes
- Other-Priority Locations (PILS)
- Investigation
- Volume

- Functional classification
- Other-Intersection features; speed limit etc.

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

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

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

Yes

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

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

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

How are projects under this program advanced for implementation?

- Other-The Priority Investigation Location process mentioned above.
- 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: Roadway Departure**

Date of Program Methodology: 1/1/1989

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

· Addresses SHSP priority or emphasis area

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

Competes with all projects

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

Crashes Exposure Roadway

- All crashes
- Other-Priority Investigation
   Volume Locations (PILS)

- Median width
  - Horizontal curvature
  - Functional classification
  - Roadside features

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

- Crash frequency
- 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 >=1500'; 3) the posted speed >=45 mph; 4) the AADT >=2,000; and 4) the roadway width >=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.
- Relative severity index

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

Yes

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

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

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

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

- Other-Centerline and shoulder rumblestrips (CARDS and SHARDS) are approved systemic treatments.
- Other-The Priority Investigation Location process mentioned above.
- 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: Rural State Highways** 

Date of Program Methodology:1/1/2010

### What is the justification for this program?

 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?

Competes with all projects

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

Crashes Exposure Roadway

- All crashes
- Other-Priority Investigation Volume Locations (PILS)

What project identification methodology was used for this program?

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

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

Yes

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

Describe the methodology used to identify local road projects as part of this program. Local road projects are typically identified via local municipalities and the MPO planning process.

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

- Other-The Priority Investigation Location process mentioned above.
- 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: Safe Corridor** 

Date of Program Methodology:1/1/2012

What is the justification for this program?

Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes Exposure Roadway

All crashes
 Volume
 Functional classification

 Other-Priority Investigation Locations (PILS)

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

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

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

Yes

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

Describe the methodology used to identify local road projects as part of this program. Local road projects are typically identified via local municipalities and the MPO planning process.

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

- Other-The Priority Investigation Location process mentioned above.
- · 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: Sign Replacement And Improvement**

Date of Program Methodology: 1/1/1995

What is the justification for this program?

Addresses SHSP priority or emphasis area

## What is the funding approach for this program?

Competes with all projects

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

Crashes Exposure Roadway

- All crashes
- Other-Priority Investigation
   Locations (PILS)
   Functional classification

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

- Crash frequency
- 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.
- Relative severity index

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

Yes

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

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

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

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

- Other-The Priority Investigation Location process mentioned above.
- 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: Skid Hazard** 

Date of Program Methodology:1/1/1995

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

Addresses SHSP priority or emphasis area

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

Competes with all projects

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

Crashes Exposure Roadway

- 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.
- Other-Priority Investigation Locations (PILS)
- Volume

Functional classification

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

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

## 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-Locations with >= 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

#### **Program: Vulnerable Road Users**

Date of Program Methodology: 1/1/2023

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

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

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

Funding set-aside

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

Crashes Exposure Roadway

All crashes

Other-PILS

Volume

Functional classification

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

- Crash frequency
- Crash rate
- Excess expected crash frequency with the EB adjustment
- Other-Climate Act Disadvantaged Communities
- Other-Climate and Economic Justice Screening Tool,
- Other-Federally Recognized Tribe

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

Yes

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

Describe the methodology used to identify local road projects as part of this program. Local road projects are typically identified via local municipalities and the MPO planning process.

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

Competitive application process

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

Equity is a guiding principal of the SHSP. Vulnerable Road Users are one of the emphasis areas in the plan. A Vulnerable Road User Safety Assessment is complete and is awaiting approval from FHWA.

**Program: Wrong Way Driving** 

Date of Program Methodology:1/1/2023

What is the justification for this program?

Other-Benefit Cost Analysis > 1

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes Exposure Roadway

• All crashes

What project identification methodology was used for this program?

Crash frequency

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

No

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

How are projects under this program advanced for implementation?

Other-New minimum standards for exit ramp termini

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

**Rank of Priority Consideration** 

Available funding:1

Incremental B/C:2 Cost Effectiveness:2

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

17

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

- Add/Upgrade/Modify/Remove Traffic Signal
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing
- Other-Pedestrian Countdown Times
- Other-Pedestrian Improvements identified in Pedestrian Action Safety Plan
- Rumble Strips
- Wrong way driving treatments

The NYSDOT HSIP program supports both hot spot and systemic improvements on public roadways. The actual percentage of HSIP funding spent on systemic improvements varies from year to year based on existing action plans and local calls for projects. Last year, NYSDOT was between action plans and calls for projects so the total is less than previous years. Approximately 10% of the 2022 apportionment was spent on PSAP locations, CARDS and Countdown timers. NYSDOT regions spent an additional \$19.7 million on systemic treatments bringing the total to about 17% of the total HSIP spending in FFY2022. The soon to be released RwDSAP will include a considerable amount of funding for systemic treatments at Roadway Departure Crash hot spots. NYSDOT is also considering adding systemic sites to the Annual Regional Work Program as a formula similar to how the number of PIL locations are selected.

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

- Crash data analysis
- Data-driven safety analysis tools (HSM, CMF Clearinghouse, SafetyAnalyst, usRAP)
- Engineering Study
- Road Safety Assessment
- SHSP/Local road safety plan
- Stakeholder input

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

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. 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.
- 3. Support the development of national regulations for both light and heavy vehicles.
- 4. Continue the networking of existing traffic signals and other roadside systems in a flexible, standardized framework.
- 5. Improve and standardize GIS mapping and spatial capabilities using the New York State GIS platforms.
- 6. Continue to develop an understanding of the technology and short-term and long-term implications.
- 7. 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 State's new Crash Location and Engineering Analysis and Reporting (CLEAR) system is a faithful interpretation of the six-step HSM methodology.
- Site analysis and network screening utilize Safety Performance Functions (SPF) and Crash Modification Factors (CMF).

## Describe program methodology practices that have changed since the last reporting period.

Yes-CLEAR introduced new network screening methodology and site analysis is now being conducted in CLEAR that uses HSM methods over the use of crash rates and expected percentages used in the old system.

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

The New York State Strategic Highway Safety Plan for 2023, which is soon to be released, represents a historic decision to adopt the "Towards Zero Deaths" vision. To achieve this goal, NYSDOT and it's safety partners will utilize the Safe Systems Approach developed by FHWA.

The 2023 Strategic Highway Safety Plan includes the following emphasis areas and cross cutting issues that will be the focus of safety projects and analysis for the next 5 years: Intersections, Roadway Departures, Vulnerable Users, Road User Behavior, Age Related, Aggressive Driving, Emergency response, Improvements to Data and Automated and Connected Vehicles

#### Intersections

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 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. This plan could include priorities for Vulnerable Road Users or locations in special Equity areas as described in the SHSP.

#### **Roadway Departures**

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 Roadway Departure Action Plan which is currently under development, and the implementation of systemic improvements that decrease the number and severity of lane departure crashes. Implementation of a project or projects to update all State system curve warning signs is being considered.

#### **Centerline Audible Roadway Delineators (CARDS)**

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 0.75" 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 2022, approximately 5,101 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 2021 shows a decline in the number of sites requiring treatment, from 91 sites in 1996 to 4 sites in 2021.

#### **Safety Appurtenance Program (SAFETAP)**

The SAFETAP program 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. The State is currently running a pilot in one of the regions to change the methodology for SAFETAP reviews. The new CLEAR system incorporates the ability to track these reviews and any low cost maintenance improvements recommended to improve safety but this is new functionality and it will take some time to build sufficient data for review of the process.

#### **Vulnerable Users**

Vulnerable users include pedestrians, bicyclists, 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. NYSDOT included the Vulnerable Road User Assessment in the 2023 SHSP. That analysis will drive several efforts related to outreach and safety improvements. Coordination with the Governor's Traffic Safety Committee will be key for this effort.

#### **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.

#### **Active Transportation**

Development of the Active Transportation Strategic Plan is underway. The Safety programs will be working closely with this program to develop procedures that incorporate safety while improving facilities and access for all users.

#### **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 State has adopted the "Towards Zero Deaths (TZD)" vision to reflect this culture of safety in all future projects. New York will implement roadway improvements that decrease the incidence of distracted and drowsy driving such as flashing beacons, and center-line 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.

#### **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 10 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 continues to make improvements to the data and systems.

#### Improvements to Data

Status of Crash Data

This report is based on crash data from the Fatality Accident Reporting System (FARS), Crash Location and Engineering Analysis Repository (CLEAR) 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 10% of the state PILs annually. The new network screening analysis in CLEAR that produces the PIL list is now focused on fatal and severe Injury crashes.

CLEAR now provides the tools to perform the same analysis on local roads.

Local roads and HSIP funding

NYSDOT is currently engaged in discussions with the MPOs regarding the best approach to providing the funding in an equitable, data driven way. This includes possible set asides for proven safety countermeasures on local roads, annual pots of funding for the main SHSP emphasis areas to facilitate long term planning efforts, local road safety plans, or just increasing the percentage to each region but directing the additional amount to the locals. The main office is currently developing a term agreement, funded with HSIP that could potentially be used to provide needed engineering services for local projects. Project prioritization and

selection will depend on the type of project but would be based on B/c ratio, consideration of Equity, and Impact on safety.

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 crash and traffic violation records systems to address safety data information needs. Notable changes to data include:

#### Crash Records

The change in the MMUCC definition of serious injuries has affected the serious injury trend in New York State. New data values and data elements to be added when DMV upgrades their AIS database.

Traffic and Criminal Software (TraCS)

Use and Dissemination Agreements for use of the software have been signed by 524 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. New York State Troopers are currently testing a new crash reporting system to be used by the state police called Niche. Local agencies will continue to use Tracs.

CLEAR (Crash Location Engineering and Analysis Repository)

The Crash Location & Engineering Analysis Repository is now in production. A new safety data transfer process that transfers data from NYSDMV to NYSDOT is under development at DMV. The transfer process will incorporate new data elements from the updated police crash report (MV104P)

#### **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.

#### 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. The Department continues to identify roadways and reverse directions that can be added to the State LRS.

## **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     | %<br>OBLIGATED/PROGRAMMED |
|--|---------------|---------------|---------------------------|
| HSIP (23 U.S.C. 148)                           | \$117,210,643 | \$66,071,782  | 56.37%                    |
| HRRR Special Rule (23 U.S.C. 148(g)(1))        | \$0           | \$0           | 0%                        |
| VRU Safety Special Rule (23 U.S.C. 148(g)(3))  | \$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)      | \$82,124,236  | \$72,045,561  | 87.73%                    |
| State and Local Funds                          | \$47,754,594  | \$32,589,025  | 68.24%                    |
| Totals   | \$247,089,473 | \$170,706,368 | 69.09%                    |

NYSDOT changed from the SFY to the FFY reporting period, which affected the obligation rate. The SFY 2022 funding information is below:

| Funding Category                               | Programmed    | Obligated     | % Obligated/Programmed |
|--|---------------|---------------|------------------------|
| HSIP (23 U.S.C. 148)                           | \$94,242,266  | \$58,181,296  | 61.74%                 |
| 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)) | \$386,820     | \$386,820     | 100%                   |
| Other Federal-aid Funds (i.e. STBG, NHPP)      | \$47,701,298  | \$30,468,004  | 63.87%                 |
| State and Local Funds                          | \$34,447,429  | \$22,451,023  | 65.17%                 |
| Totals   | \$176,777,813 | \$11,1487,143 | 63.07%                 |

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

\$9,952,896

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

\$9,712,595

SFY 2022 funding information is below:

- 1. How much funding is programmed to local (non-state owned and operated) or tribal safety projects? \$12,416,904
- 2. How much funding is obligated to local or tribal safety projects? \$8,812,904

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

\$3,951,106

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

\$3,951,106

SFY 2022 funding information is below:

- 1. How much funding is programmed to non-infrastructure safety projects? \$550,106.00
- 2. How much funding is obligated to non-infrastructure safety projects? \$550,106.00

## 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

SFY 2022 funding information is below:

- 1. 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
- 2. How much funding was transferred out of the HSIP to other core program areas during the reporting period under 23 U.S.C. 126? \$0

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

Since the conclusion of the Pedestrian Safety Action Plan (PSAP), NYSDOT has been working on the Roadway Departure Safety Action Plan (RwDSAP). Difficulties with implementing contracts or projects with extensive design needs for a project such as replacing all curve warning signs on the state system has forced us to reevaluate the scope of that plan. NYSDOT is planning to complete the plan without the statewide curve warning sign component. Future action plans will focus on providing analysis and eligible sites and allow locals and the Regions to design and implement projects that meet their needs.

## General Listing of Projects

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

| PROJECT NAME  | IMPROVEMENT<br>CATEGORY         | SUBCATEGORY                                | OUTPUTS | OUTPUT<br>TYPE | HSIP<br>PROJECT<br>COST(\$) | TOTAL<br>PROJECT<br>COST(\$) | FUNDING<br>CATEGORY                                   | LAND<br>USE/AREA<br>TYPE | FUNCTIONAL<br>CLASSIFICATION | AADT : | SPEED | OWNERSHIP                  | METHOD<br>FOR SITE<br>SELECTION | SHSP<br>EMPHASIS<br>AREA | SHSP<br>STRATEGY |
|---|---------------------------------|--|---------|----------------|-----------------------------|------------------------------|---|--------------------------|------------------------------|--------|-------|----------------------------|---------------------------------|--------------------------|------------------|
| PIN 108540: HSIP,<br>ROUTE 146, CARMAN<br>ROAD SAFETY<br>ENHANCEMENTS,<br>GUILDERLAND | Intersection<br>traffic control | Modify control –<br>Modern<br>Roundabout   |         |                | \$1077786                   | \$1197540                    | HSIP (23<br>U.S.C. 148)                               | Urban                    | Principal Arterial-<br>Other | 0      |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 108544: RT.146<br>SAFETY PROJECT,<br>TOWN OF CLIFTON<br>PARK, SARATOGA<br>COUNTY  | Roadway                         | Pavement surface - other                   |         |                | \$270000                    | \$300000                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Principal Arterial-<br>Other | 0      |       | State<br>Highway<br>Agency | Spot                            | Roadway<br>Departure     |                  |
| PIN 130682: EXIT 6<br>INTERCHANGE SAFETY<br>ENHANCEMENTS                              | Roadway                         | Pavement surface - other                   |         |                | \$1567004                   | \$1911116                    | HSIP (23<br>U.S.C. 148)                               | Urban                    | Principal Arterial-<br>Other | 0      |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 176057:<br>BRANDYWINE AVENUE<br>SAFETY<br>ENHANCEMENTS, CITY<br>OF SCHENECTADY    |                                 | Modify control –<br>new traffic signal     |         |                | \$1686538                   | \$1873931                    | HSIP (23<br>U.S.C. 148)                               | Urban                    | Minor Arterial               | 0      |       | Other Local<br>Agency      | Spot                            | Intersections            |                  |
| PIN 176092: PSAP CITY<br>OF ALBANY<br>PEDESTRIAN<br>ENHANCEMENTS                      | Pedestrians and bicyclists      | Pedestrian warning signs                   |         |                | \$219175                    | \$219175                     | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0      |       | Other Local<br>Agency      | Systemic                        | Pedestrians              |                  |
| PIN 176180: ALBANY<br>SHAKER ROAD<br>CORRIDOR<br>IMPROVEMENTS,<br>TOWN OF COLONIE, A  | Roadway                         | Pavement surface - other                   |         |                | \$81000                     | \$90000                      | HSIP (23<br>U.S.C. 148)                               | Urban                    | Principal Arterial-<br>Other | 0      |       | Other Local<br>Agency      | Spot                            | Roadway<br>Departure     |                  |
| PIN 181016: TRAFFIC<br>SIGNALS REBUILD<br>SFY22                                       | Intersection<br>traffic control | Modify control –<br>new traffic signal     |         |                | \$4500                      | \$2561860                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) |                          |                              | 0      |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 181057: DURABLE<br>PAVEMENT MARKING<br>SFY20                                      | Roadway<br>delineation          | Longitudinal pavement markings - remarking |         |                | \$234511                    | \$2502246                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) |                          |                              | 0      |       | State<br>Highway<br>Agency | Systemic                        | Roadway<br>Departure     |                  |
| PIN 181065: DURABLE<br>PAVEMENT MARKINGS<br>SFY21                                     |                                 | Longitudinal pavement markings - remarking |         |                | \$210301                    | \$3506861                    | State and<br>Local Funds                              |                          |                              | 0      |       | State<br>Highway<br>Agency | Systemic                        | Roadway<br>Departure     |                  |

| PROJECT NAME   | IMPROVEMENT<br>CATEGORY  | SUBCATEGORY  | OUTPUTS | OUTPUT<br>TYPE | HSIP<br>PROJECT<br>COST(\$) | TOTAL<br>PROJECT<br>COST(\$) | FUNDING<br>CATEGORY                                   | LAND<br>USE/AREA<br>TYPE | FUNCTIONAL<br>CLASSIFICATION | AADT | SPEED | OWNERSHIP                  | METHOD<br>FOR SITE<br>SELECTION | SHSP<br>EMPHASIS<br>AREA | SHSP<br>STRATEGY |
|--|--------------------------|--|---------|----------------|-----------------------------|------------------------------|---|--------------------------|------------------------------|------|-------|----------------------------|---------------------------------|--------------------------|------------------|
| PIN 193369: GRADE<br>CROSSING SIGNAL<br>UPGRADE: NY 144,<br>TOWN OF NEW<br>BALTIMORE, GREENE<br>COUNTY | Railroad grade crossings | Active grade crossing equipment installation/upgrade |         |                | \$32409                     | \$36010                      | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | Railroad                   | Spot                            | Intersections            |                  |
| PIN 193370: CP at NY<br>373 Crossing Upgrade,<br>Town of Chesterfield (Port<br>Kent)                   |                          | Active grade crossing equipment installation/upgrade |         |                | \$325000                    | \$325000                     | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | Railroad                   | Spot                            | Intersections            |                  |
| PIN 193371: CP at<br>Ushers Road Crossing<br>Upgrade   | Railroad grade crossings | Active grade crossing equipment installation/upgrade |         |                | \$340000                    | \$340000                     | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | Railroad                   | Spot                            | Intersections            |                  |
| PIN 193372: CSX at New<br>Scotland South Road<br>Crossing, Albany, County                              |                          | Active grade crossing equipment installation/upgrade |         |                | \$594300                    | \$594300                     | HSIP (23<br>U.S.C. 148)                               | Multiple/Varies          | Multiple/Varies              | 0    |       | Railroad                   | Spot                            | Intersections            |                  |
| PIN 193373: CP at 23rd<br>Street Crossing, City of<br>Watervliet, Albany County                        |                          | Active grade crossing equipment installation/upgrade |         |                | \$504000                    | \$504000                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Local Road or<br>Street      | 0    |       | Railroad                   | Spot                            | Intersections            |                  |
| PIN 193374: CP at 24th<br>Street Crossing, City of<br>Watervliet, Albany County                        |                          | Active grade crossing equipment installation/upgrade |         |                | \$504000                    | \$504000                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Local Road or<br>Street      | 0    |       | Railroad                   | Spot                            | Intersections            |                  |
| PIN 193375: CP at 25th<br>Street Crossing, City of<br>Watervliet, Albany County                        |                          | Active grade crossing equipment installation/upgrade |         |                | \$504000                    | \$504000                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Major Collector              | 0    |       | Railroad                   | Spot                            | Intersections            |                  |
| PIN 193376: CP at Main<br>Street Crossing, Town of<br>Ballston, Saratoga<br>County                     |                          | Active grade crossing equipment installation/upgrade |         |                | \$168005                    | \$168005                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Major Collector              | 0    |       | Railroad                   | Spot                            | Intersections            |                  |
| PIN 193377: Pan Am at<br>Eagle Bridge Road, Town<br>of Hoosick, Rensselaer<br>County                   |                          | Active grade crossing equipment installation/upgrade |         |                | \$1134                      | \$1134                       | HSIP (23<br>U.S.C. 148)                               | Rural                    | Local Road or<br>Street      | 0    |       | Railroad                   | Spot                            | Intersections            |                  |
| PIN 213458: SR 5 and<br>Truax Road Intersection<br>Safety Project                                      |                          | Intersection<br>geometry - other                     |         |                | \$-86000                    | \$-86000                     | HSIP (23<br>U.S.C. 148)                               | Rural                    | Minor Arterial               | 0    |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 280621: RTE 26 AND<br>26/365 OVERLAP:<br>SAFETY AND PM<br>PAVING, C/ROME                           | Roadway                  | Pavement surface - other                             |         |                | \$2157480                   | \$8115568                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Multiple/Varies          | Multiple/Varies              | 0    |       | State<br>Highway<br>Agency | Spot                            | Roadway<br>Departure     |                  |
| PIN 302235: RT 38 AND<br>RT 38A PEDESTRIAN<br>SAFETY   |                          | Modify existing crosswalk                            |         |                | \$667774                    | \$741972                     | HSIP (23<br>U.S.C. 148)                               | Rural                    | Minor Arterial               | 0    |       | State<br>Highway<br>Agency | Spot                            | Pedestrians              |                  |

| PROJECT NAME   | IMPROVEMENT<br>CATEGORY         | SUBCATEGORY  | OUTPUTS | OUTPUT<br>TYPE | HSIP<br>PROJECT<br>COST(\$) | TOTAL<br>PROJECT<br>COST(\$) | FUNDING<br>CATEGORY                                   | LAND<br>USE/AREA<br>TYPE | FUNCTIONAL<br>CLASSIFICATION                           | AADT | SPEED | OWNERSHIP                  |          | SHSP<br>EMPHASIS<br>AREA | SHSP<br>STRATEGY |
|--|---------------------------------|--|---------|----------------|-----------------------------|------------------------------|---|--------------------------|--|------|-------|----------------------------|----------|--------------------------|------------------|
| IMPROVEMENT<br>PROJECT   |                                 |  |         |                |                             |                              |   |                          |  |      |       |                            |          |                          |                  |
| PIN 303771: NYSDOT<br>HSIP 16-20, RT 31<br>PAVING AND<br>INTERSECTION<br>IMPROVEMENTS,<br>TOWN OF CICERO             | Roadway                         | Pavement surface - other                           |         |                | \$443280                    | \$443280                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Minor Arterial   | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 328723:<br>ONONDAGA LAKE<br>PARKWAY (RT 370)<br>SAFETY<br>IMPROVEMENTS   | Roadside                        | Roadside - other                                   |         |                | \$45000                     | \$50000                      | HSIP (23<br>U.S.C. 148)                               | Urban                    | Principal Arterial-<br>Other Freeways &<br>Expressways | 0    |       | State<br>Highway<br>Agency | Spot     | Roadway<br>Departure     |                  |
| PIN 360214: MBC RT<br>96A, N OF<br>WOODWORTH RD TO<br>RT 5/20, SENECA CO   | Roadway                         | Pavement surface - other                           |         |                | \$468915                    | \$8056757                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Multiple/Varies          | Multiple/Varies  | 0    |       | State<br>Highway<br>Agency | Spot     | Roadway<br>Departure     |                  |
| PIN 375610: PINE TREE<br>ROAD INTERSECTION<br>IMPROVEMENTS,TOWN<br>OF ITHACA   | Intersection traffic control    | Modify traffic signal timing – signal coordination |         |                | \$-63360                    | \$-70402                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Minor Arterial   | 0    |       | Other Local<br>Agency      | Spot     | Intersections            |                  |
| PIN 375649: CITY OF<br>SYRACUSE<br>INTERSECTION<br>PEDESTRIAN<br>IMPROVEMENTS  | Intersection<br>traffic control | Modify traffic signal timing — signal coordination |         |                | \$2068332                   | \$2135632                    | HSIP (23<br>U.S.C. 148)                               |                          |  | 0    |       | Other Local<br>Agency      | Systemic | Intersections            |                  |
| PIN 375679: CITY OF<br>SYRACUSE PSAP<br>PHASE 2  | Intersection traffic control    | Modify traffic signal timing – signal coordination |         |                | \$287100                    | \$319000                     | HSIP (23<br>U.S.C. 148)                               |                          |  | 0    |       | Other Local<br>Agency      | Systemic | Pedestrians              |                  |
| PIN 400575: Rt 5 & 20<br>Intersection Safety<br>Enhancements at Rt 247<br>and at Middle Cheshire<br>Rd Intersections | Intersection<br>traffic control | Modify traffic signal timing — signal coordination |         |                | \$66994                     | \$74438                      | HSIP (23<br>U.S.C. 148)                               | Multiple/Varies          | Multiple/Varies  | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 403377: Rt 33A/Rt<br>259 Intersection Safety<br>Enhancements   |                                 | Intersection<br>geometry - other                   |         |                | \$502560                    | \$558400                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Minor Arterial   | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 403633: Rt 36/Perry<br>Rd Intersection Safety<br>Enhancements  |                                 | Interchange improvements                           |         |                | \$881100                    | \$979000                     | HSIP (23<br>U.S.C. 148)                               | Multiple/Varies          | Multiple/Varies  | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 40C103: Rt 31, Rt<br>31A, and Redman Rd<br>Intersection Safety<br>Enhancements                                   | geometry                        | Intersection<br>geometry - other                   |         |                | \$459900                    | \$511000                     | HSIP (23<br>U.S.C. 148)                               | Multiple/Varies          | Multiple/Varies  | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |

| PROJECT NAME  | IMPROVEMENT<br>CATEGORY         | SUBCATEGORY  | OUTPUTS | OUTPUT<br>TYPE | HSIP<br>PROJECT<br>COST(\$) | TOTAL<br>PROJECT<br>COST(\$) | FUNDING<br>CATEGORY                                   | LAND<br>USE/AREA<br>TYPE | FUNCTIONAL<br>CLASSIFICATION | AADT | SPEED | OWNERSHIP                  |          | SHSP<br>EMPHASIS<br>AREA | SHSP<br>STRATEGY |
|---|---------------------------------|--|---------|----------------|-----------------------------|------------------------------|---|--------------------------|------------------------------|------|-------|----------------------------|----------|--------------------------|------------------|
| PIN 40N005: COUNTY<br>ROAD 4 & COUNTY<br>ROAD 20<br>INTERSECTION<br>IMPROVEMENTS                              | Intersection<br>traffic control | Modify control –<br>Modern<br>Roundabout           |         |                | \$-8541                     | \$-9490                      | HSIP (23<br>U.S.C. 148)                               | Multiple/Varies          | Multiple/Varies              | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 40PS02:<br>PEDESTRIAN SAFETY<br>ACTION PLAN PHASE II  | Pedestrians and bicyclists      | Pedestrians and bicyclists – other                 |         |                | \$56244                     | \$56244                      | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | State<br>Highway<br>Agency | Systemic | Pedestrians              |                  |
| PIN 410485: RT 104 MONROE CL TO FURNACE RD MBC AND RT 104 INTERSECTION SAFETY IMPROVEMENT - SIGNAL VISIBILITY | Intersection<br>traffic control | Modify traffic signal –other                       |         |                | \$1746428                   | \$8649873                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Urban                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 428606: NY 286 @ 5<br>MILE LINE RD<br>INTERSECTION<br>SAFETY<br>ENHANCEMENTS                              | Roadway                         | Pavement surface - other                           |         |                | \$481500                    | \$535000                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Minor Arterial               | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 433209: Rt 332<br>Corridor High Visibility<br>Signal Safety<br>Enhancements                               | Intersection traffic control    | Modify traffic signal –other                       |         |                | \$533592                    | \$592880                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 439096: I-390 AT RT<br>383 (SCOTTSVILLE RD)<br>INTERCHANGE SAFETY<br>ENHANCEMENTS                         | Roadway                         | Pavement surface - other                           |         |                | \$142695                    | \$158550                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 501924: NY 265;<br>KENMORE AVE -<br>TONAWANDA SCL & NY<br>324; DELAWARE -<br>FLORADALE                    | Pedestrians and bicyclists      | ADA curb ramps                                     |         |                | \$157591                    | \$1641050                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Urban                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot     | Pedestrians              |                  |
| PIN 504527: NY 104 @<br>NY 93 (LOCKPORT<br>JUNCTION-WARRENS<br>CRN) INTERSECTION                              | Intersection traffic control    | Modify traffic signal timing – signal coordination |         |                | \$68450                     | \$70500                      | HSIP (23<br>U.S.C. 148)                               | Multiple/Varies          | Multiple/Varies              | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 530834: RT 62 @ NY<br>429 INTERSECTION<br>IMPROVEMENTS  | Roadway                         | Roadway widening<br>- add lane(s) along<br>segment |         |                | \$126900                    | \$141000                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Minor Arterial               | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 530837: US 62 @ NY<br>429 & US 62 @ WITMER<br>RD; INTERSECTION<br>IMPROVEMENTS                            | Roadway                         | Pavement surface - other                           |         |                | \$3418679                   | \$8890560                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Urban                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |

| PROJECT NAME   | IMPROVEMENT<br>CATEGORY         | SUBCATEGORY  | OUTPUTS | OUTPUT<br>TYPE | HSIP<br>PROJECT<br>COST(\$) | TOTAL<br>PROJECT<br>COST(\$) | FUNDING<br>CATEGORY                                   | LAND<br>USE/AREA<br>TYPE | FUNCTIONAL<br>CLASSIFICATION | AADT | SPEED | OWNERSHIP                  |          | SHSP<br>EMPHASIS<br>AREA | SHSP<br>STRATEGY |
|--|---------------------------------|--|---------|----------------|-----------------------------|------------------------------|---|--------------------------|------------------------------|------|-------|----------------------------|----------|--------------------------|------------------|
| PIN 530838: US 62/950K;<br>KENMORE - ECL   | Pedestrians and bicyclists      | Pedestrians and bicyclists – other                 |         |                | \$360750                    | \$400833                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot     | Pedestrians              |                  |
| PIN 530839: US 62<br>(WALNUT & FERRY)<br>LANE<br>RECONFIGURATION                               | Roadway                         | Pavement surface - other                           |         |                | \$2309313                   | \$7453880                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Urban                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot     | Roadway<br>Departure     |                  |
| PIN 535001: NY 187<br>(TRANSIT RD) @<br>MILESTRIP RD<br>INTERSECTION                           | Intersection<br>traffic control | Modify control –<br>new traffic signal             |         |                | \$199800                    | \$1790053                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Urban                    | Minor Arterial               | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 539246: NY 400/NY<br>16 Roundabout; NY 400,<br>RT 16 to RT 20A                             | Intersection geometry           | Intersection<br>geometry - other                   |         |                | \$1710343                   | \$7195121                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Multiple/Varies          | Multiple/Varies              | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 576266: CITY OF<br>BUFFALO PEDESTRIAN<br>SAFETY ACTION PLAN                                | Intersection traffic control    | Modify traffic signal timing – signal coordination |         |                | \$1635303                   | \$1859303                    | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | Other Local<br>Agency      | Systemic | Pedestrians              |                  |
| PIN 581272: RT 20 @ RT<br>60; INTERSECTION<br>IMPROVEMENTS                                     | Access<br>management            | Access<br>management -<br>other                    |         |                | \$338489                    | \$376099                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot     | Intersections            |                  |
| PIN 581347: PMI - RT 39;<br>CLARK ST - NEWMAN<br>ST  | Roadway                         | Pavement surface - other                           |         |                | \$171987                    | \$191097                     | HSIP (23<br>U.S.C. 148)                               | Rural                    | Minor Arterial               | 0    |       | State<br>Highway<br>Agency | Spot     | Roadway<br>Departure     |                  |
| PIN 581352: PMI - NY<br>324; NY 78 - NY 5  | Roadway                         | Pavement surface - other                           |         |                | \$101149                    | \$112388                     | HSIP (23<br>U.S.C. 148)                               | Multiple/Varies          | Multiple/Varies              | 0    |       | State<br>Highway<br>Agency | Spot     | Roadway<br>Departure     |                  |
| PIN 581367: ADA RAMP<br>& PED SIGNAL<br>UPGRADES ; VARIOUS<br>LOCATIONS; ERIE &<br>NIAGARA COS | bicyclists                      | ADA curb ramps                                     |         |                | \$231760                    | \$901688                     | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) |                          |                              | 0    |       | State<br>Highway<br>Agency | Spot     | Pedestrians              |                  |
| PIN 581441: NY 61<br>(HYDE PARK BLVD);<br>LOCKPORT RD - NY 104                                 | Roadway                         | Pavement surface - other                           |         |                | \$47349                     | \$3198583                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Urban                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot     | Roadway<br>Departure     |                  |
| PIN 581450: NY 60; NY<br>83 - US 20  | Roadway                         | Pavement surface - other                           |         |                | \$1633180                   | \$11455921                   | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Multiple/Varies          | Multiple/Varies              | 0    |       | State<br>Highway<br>Agency | Spot     | Roadway<br>Departure     |                  |

| PROJECT NAME  | IMPROVEMENT<br>CATEGORY    | SUBCATEGORY                         | OUTPUTS | OUTPUT<br>TYPE | HSIP<br>PROJECT<br>COST(\$) | TOTAL<br>PROJECT<br>COST(\$) | FUNDING<br>CATEGORY                                   | LAND<br>USE/AREA<br>TYPE | FUNCTIONAL<br>CLASSIFICATION | AADT | SPEED | OWNERSHIP                  | METHOD<br>FOR SITE<br>SELECTION | SHSP<br>EMPHASIS<br>AREA | SHSP<br>STRATEGY |
|---|----------------------------|-------------------------------------|---------|----------------|-----------------------------|------------------------------|---|--------------------------|------------------------------|------|-------|----------------------------|---------------------------------|--------------------------|------------------|
| PIN 581453: NY 952Q<br>(WALDEN AVE); TN OF<br>LANCASTER;<br>OPERATIONAL<br>IMPROVEMENTS | Roadway                    | Pavement surface - other            |         |                | \$130762                    | \$3306824                    | State and<br>Local Funds                              | Urban                    | Minor Arterial               | 0    |       | State<br>Highway<br>Agency | Spot                            | Roadway<br>Departure     |                  |
| PIN 581528: ADA<br>RAMPS & PEDESTRIAN<br>SIGNAL UPGRADES;<br>CATT & CHAUT COS           | Pedestrians and bicyclists | ADA curb ramps                      |         |                | \$161953                    | \$1429822                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) |                          |                              | 0    |       | State<br>Highway<br>Agency | Spot                            | Pedestrians              |                  |
| PIN 609632: NY 36<br>HORNELL GATEWAY<br>CONNECTION<br>PROJECT                           | Roadway                    | Pavement surface - other            |         |                | \$230400                    | \$7335000                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Urban                    | Minor Arterial               | 0    |       | State<br>Highway<br>Agency | Spot                            | Roadway<br>Departure     |                  |
| PIN 675412: ACCESS<br>HORSEHEADS, NY 13<br>CONNECTOR ROAD<br>PHASE 2                    | Roadway                    | Pavement surface - other            |         |                | \$355000                    | \$18997000                   | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | Other Local<br>Agency      | Spot                            | Roadway<br>Departure     |                  |
| PIN 675521: ELMIRA<br>URBAN AREA<br>PEDESTRIAN SAFETY<br>PROJECT                        |                            | Pedestrians and bicyclists – other  |         |                | \$750044                    | \$798044                     | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | Other Local<br>Agency      | Spot                            | Pedestrians              |                  |
| PIN 675550: CHEMUNG<br>COUNTY LOCAL ROAD<br>SAFETY PROJECT -<br>PHASE 1                 | Miscellaneous              | Local road safety plans             |         |                | \$710000                    | \$710000                     | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | Other Local<br>Agency      | Spot                            | Roadway<br>Departure     |                  |
| PIN 680570: PAVEMENT<br>MARKINGS - SFY<br>2021/22                                       | Roadway                    | Rumble strips –<br>center           |         |                | \$91388                     | \$1690456                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) |                          |                              | 0    |       | State<br>Highway<br>Agency | Systemic                        | Roadway<br>Departure     |                  |
| PIN 780781: CARDS<br>PROJECT (SFY22)  | Roadway                    | Rumble strips – center              |         |                | \$382356                    | \$424840                     | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | State<br>Highway<br>Agency | Systemic                        | Roadway<br>Departure     |                  |
|   | Railroad grade crossings   | Railroad grade<br>crossings - other |         |                | \$315                       | \$350                        | HSIP (23<br>U.S.C. 148)                               | Urban                    | Local Road or<br>Street      | 0    |       | Railroad                   | Spot                            | Intersections            |                  |
| PIN 7SUP14: RT 190<br>INTERSECTION WITH<br>RT 374 & CR 24                               |                            | Modify traffic signal –other        |         |                | \$281000                    | \$281000                     | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 807419: ROUTE 45<br>COMPLETE STREETS<br>IMPROVEMENTS                                |                            | Install sidewalk                    |         |                | \$931500                    | \$1235000                    | HSIP (23<br>U.S.C. 148)                               | Multiple/Varies          | Multiple/Varies              | 0    |       | State<br>Highway<br>Agency | Spot                            | Pedestrians              |                  |

| PROJECT NAME  | IMPROVEMENT<br>CATEGORY         | SUBCATEGORY   | OUTPUTS | OUTPUT<br>TYPE | HSIP<br>PROJECT<br>COST(\$) | TOTAL<br>PROJECT<br>COST(\$) | FUNDING<br>CATEGORY                                   | LAND<br>USE/AREA<br>TYPE | FUNCTIONAL<br>CLASSIFICATION | AADT | SPEED | OWNERSHIP                  | METHOD<br>FOR SITE<br>SELECTION | SHSP<br>EMPHASIS<br>AREA | SHSP<br>STRATEGY |
|---|---------------------------------|---|---------|----------------|-----------------------------|------------------------------|---|--------------------------|------------------------------|------|-------|----------------------------|---------------------------------|--------------------------|------------------|
| PIN 80PS05: REGION 8 PEDESTRIAN SAFETY ACTION PLAN CONTRACT #5  |                                 | Modify traffic signal timing — signal coordination    |         |                | \$-247232                   | \$-247232                    | HSIP (23<br>U.S.C. 148)                               | Urban                    | Minor Arterial               | 0    |       | State<br>Highway<br>Agency | Systemic                        | Pedestrians              |                  |
| PIN 80PS06: REGION 8 PEDESTRIAN SAFETY ACTION PLAN CONTRACT #6  |                                 | Pedestrians and bicyclists – other                    |         |                | \$600000                    | \$600000                     | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | State<br>Highway<br>Agency | Systemic                        | Pedestrians              |                  |
| PIN 814168: ROUTE<br>44/55 AT BRUYNSWICK<br>ROAD (CR 7)<br>INTERSECTION<br>SIGNALIZATION, TOWN<br>OF GARDINER | Intersection<br>traffic control | Modify control –<br>new traffic signal                |         |                | \$103500                    | \$115000                     | HSIP (23<br>U.S.C. 148)                               | Rural                    | Major Collector              | 0    |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 848041: RTE 202:<br>ROSMAN ROAD TO<br>OAKLEY BOULEVARD  |                                 | Longitudinal pavement markings - remarking            |         |                | \$50000                     | \$50000                      | HSIP (23<br>U.S.C. 148)                               | Urban                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 881265: BIENNIAL<br>ACCIDENT<br>INVESTIGATION   | Miscellaneous                   | Data collection                                       |         |                | \$-898894                   | \$-998771                    | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | State<br>Highway<br>Agency | Not<br>applicable               | Data                     |                  |
| PIN 881349: ACCIDENT INVESTIGATION  | Miscellaneous                   | Data collection                                       |         |                | \$1350000                   | \$1500000                    | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | State<br>Highway<br>Agency | Not<br>applicable               | Data                     |                  |
| PIN 881527: SIGNAL IMPROVEMENTS: ROCKLAND AND WESTCHESTER   | Intersection<br>traffic control | Modify control –<br>new traffic signal                |         |                | \$405000                    | \$450000                     | HSIP (23<br>U.S.C. 148)                               | Multiple/Varies          | Multiple/Varies              | 0    |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 881545: WRONG<br>WAY DRIVING AND<br>LOW CLEARANCE<br>BRIDGE<br>COUNTERMEASURES                            | and traffic                     | Roadway signs<br>(including post) -<br>new or updated |         |                | \$11340                     | \$20000                      | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | State<br>Highway<br>Agency | Systemic                        | Roadway<br>Departure     |                  |
| PIN 901338: RT 42 AT COUNTY ROADS 52 & 53, SAFETY IMPROVEMENTS  | geometry                        | Intersection<br>geometry - other                      |         |                | \$990000                    | \$3168804                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Urban                    | Minor Arterial               | 0    |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 901339: RT 17<br>INTERCHANGE 105<br>RECONSTRUCTION<br>AND RT 42<br>IMPROVEMENTS                           | Pedestrians and bicyclists      | ADA curb ramps  |         |                | \$2134866                   | \$33613296                   | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Multiple/Varies          | Multiple/Varies              | 0    |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 906786: RT 17 EXIT<br>104-112, MEDIAN   | Roadside                        | Roadside - other                                      |         |                | \$5007097                   | \$5007097                    | HSIP (23<br>U.S.C. 148)                               | Multiple/Varies          | Multiple/Varies              | 0    |       | State<br>Highway<br>Agency | Spot                            | Roadway<br>Departure     |                  |

| PROJECT NAME  | IMPROVEMENT<br>CATEGORY         | SUBCATEGORY  | OUTPUTS | OUTPUT<br>TYPE | HSIP<br>PROJECT<br>COST(\$) | TOTAL<br>PROJECT<br>COST(\$) | FUNDING<br>CATEGORY                                   | LAND<br>USE/AREA<br>TYPE | FUNCTIONAL<br>CLASSIFICATION | AADT | SPEED | OWNERSHIP                  | METHOD<br>FOR SITE<br>SELECTION | SHSP<br>EMPHASIS<br>AREA | SHSP<br>STRATEGY |
|---|---------------------------------|--|---------|----------------|-----------------------------|------------------------------|---|--------------------------|------------------------------|------|-------|----------------------------|---------------------------------|--------------------------|------------------|
| BARRIER<br>INSTALLATION   |                                 |  |         |                |                             |                              |   |                          |                              |      |       |                            |                                 |                          |                  |
| PIN 930725: RT 7 / RT 23<br>/ MAPLE STREET, CITY<br>OF ONEONTA,<br>INTERSECTION<br>RECONSTRUCTION | Intersection<br>traffic control | Modify control –<br>Modern<br>Roundabout                         |         |                | \$405000                    | \$450000                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Minor Arterial               | 0    |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 975463:<br>PEDESTRIAN SAFETY<br>ACTION PLAN (PSAP),<br>CITY OF BINGHAMTON                     | Pedestrians and bicyclists      | Pedestrians and bicyclists – other                               |         |                | \$163665                    | \$272315                     | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | Other Local<br>Agency      | Systemic                        | Pedestrians              |                  |
| PIN 975464:<br>PEDESTRIAN SAFETY<br>ACTION PLAN (PSAP),<br>VILLAGE OF ENDICOTT                    | Pedestrians and bicyclists      | Pedestrians and bicyclists – other                               |         |                | \$515000                    | \$515000                     | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | Other Local<br>Agency      | Systemic                        | Pedestrians              |                  |
| PIN 975503:<br>COLESVILLE ROAD<br>SAFETY<br>IMPROVEMENTS  | Intersection<br>traffic control | Modify control –<br>Modern<br>Roundabout                         |         |                | \$126000                    | \$140000                     | HSIP (23<br>U.S.C. 148)                               | Rural                    | Major Collector              | 0    |       | Other Local<br>Agency      | Spot                            | Intersections            |                  |
| PIN 980679: ROUTE 28<br>SAFETY SHOULDER<br>WIDENING   |                                 | Widen shoulder –<br>paved or other<br>(includes add<br>shoulder) |         |                | \$945000                    | \$2568062                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) | Rural                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot                            | Roadway<br>Departure     |                  |
| PIN 001143: NY231<br>Safety Impvts @ NSP<br>Intchng   | Interchange<br>design           | Interchange improvements   |         |                | \$680642                    | \$756269                     | HSIP (23<br>U.S.C. 148)                               | Urban                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 001627: NY112<br>Recons I495 to Granny<br>Rd  |                                 | Intersection<br>geometry - other                                 |         |                | \$2620752                   | \$3628896                    | HSIP (23<br>U.S.C. 148)                               | Urban                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 004241: NY25<br>Pedestrian Improvements   | Pedestrians and bicyclists      | Pedestrians and bicyclists – other                               |         |                | \$-1327475                  | \$-1215140                   | HSIP (23<br>U.S.C. 148)                               | Multiple/Varies          | Multiple/Varies              | 0    |       | State<br>Highway<br>Agency | Spot                            | Pedestrians              |                  |
| PIN 005418: NY347<br>Reconst Terry Rd to<br>Gibbs Pond Rd   | Roadway                         | Roadway widening<br>- add lane(s) along<br>segment               |         |                | \$1364                      | \$1516                       | HSIP (23<br>U.S.C. 148)                               | Urban                    | Principal Arterial-<br>Other | 0    |       | State<br>Highway<br>Agency | Spot                            | Roadway<br>Departure     |                  |
| PIN 00PS02: Ped Safety<br>Action Plan - Phase 2   | Roadway<br>delineation          | Longitudinal pavement markings - remarking                       |         |                | \$92310                     | \$92310                      | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | State<br>Highway<br>Agency | Systemic                        | Pedestrians              |                  |
|   | Pedestrians and bicyclists      | Pedestrians and bicyclists – other                               |         |                | \$-1897983                  | \$-1897983                   | HSIP (23<br>U.S.C. 148)                               | Multiple/Varies          | Multiple/Varies              | 0    |       | State<br>Highway<br>Agency | Spot                            | Pedestrians              |                  |

| PROJECT NAME   | IMPROVEMENT<br>CATEGORY    | SUBCATEGORY                        | OUTPUTS | OUTPUT<br>TYPE | HSIP<br>PROJECT<br>COST(\$) | TOTAL<br>PROJECT<br>COST(\$) | FUNDING<br>CATEGORY                                    | LAND<br>USE/AREA<br>TYPE | FUNCTIONAL<br>CLASSIFICATION                           | AADT | SPEED | OWNERSHIP                  | METHOD<br>FOR SITE<br>SELECTION | SHSP<br>EMPHASIS<br>AREA | SHSP<br>STRATEGY |
|--|----------------------------|------------------------------------|---------|----------------|-----------------------------|------------------------------|--|--------------------------|--|------|-------|----------------------------|---------------------------------|--------------------------|------------------|
| PIN 051654: NSP Ramp<br>Safety Enhancement at<br>Glen Cove Rd/NY25   | Intersection geometry      | Intersection<br>geometry - other   |         |                | \$6431233                   | \$7200815                    | HSIP (23<br>U.S.C. 148)                                | Multiple/Varies          | Multiple/Varies  | 0    |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN 076149: SC - PSAP -<br>Ped Signal Safety Impvts  | Pedestrians and bicyclists | Pedestrian signal                  |         |                | \$11340                     | \$11340                      | HSIP (23<br>U.S.C. 148)                                |                          |  | 0    |       | Other Local<br>Agency      | Systemic                        | Intersections            |                  |
| PIN 076150: Brookhaven<br>Town - PSAP - Ped Safety<br>Signal Impvt   | Pedestrians and bicyclists | Pedestrians and bicyclists – other |         |                | \$1176000                   | \$1470601                    | HSIP (23<br>U.S.C. 148)                                |                          |  | 0    |       | Other Local<br>Agency      | Systemic                        | Intersections            |                  |
| PIN 076158: NC<br>Uncontrolled Crosswalks<br>Safety Impvts   | Pedestrians and bicyclists | Pedestrians and bicyclists – other |         |                | \$240300                    | \$267000                     | VRU Safety<br>Special Rule<br>(23 U.S.C.<br>148(g)(3)) |                          |  | 0    |       | Other Local<br>Agency      | Systemic                        | Pedestrians              |                  |
| PIN 081000: Safety<br>Improvements   | Miscellaneous              | Miscellaneous - other              |         |                | \$492305                    | \$547006                     | HSIP (23<br>U.S.C. 148)                                | Urban                    | Principal Arterial-<br>Other Freeways &<br>Expressways | 0    |       | State<br>Highway<br>Agency | Not<br>applicable               | Not<br>applicable        |                  |
| PIN 081002: Safety<br>Enhancements   | Miscellaneous              | Miscellaneous - other              |         |                | \$132660                    | \$147400                     | HSIP (23<br>U.S.C. 148)                                | Urban                    | Principal Arterial-<br>Other                           | 0    |       | State<br>Highway<br>Agency | Not<br>applicable               | Not<br>applicable        |                  |
| PIN 081009: Safety<br>Enhancements   | Miscellaneous              | Miscellaneous - other              |         |                | \$8090074                   | \$8988971                    | HSIP (23<br>U.S.C. 148)                                | Multiple/Varies          | Multiple/Varies  | 0    |       | State<br>Highway<br>Agency | Not<br>applicable               | Not<br>applicable        |                  |
| PIN 0BLK22: SFY22<br>Block Funds   | Miscellaneous              | Miscellaneous - other              |         |                | \$500000                    | \$12000000                   | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP)  |                          |  | 0    |       | State<br>Highway<br>Agency | Not<br>applicable               | Not<br>applicable        |                  |
| PIN X05172: SAFETY<br>IMPROVEMENTS ON<br>GCP B/W FRANCIS<br>LEWIS & 188TH ST   | geometry                   | Add/modify<br>auxiliary lanes      |         |                | \$660856                    | \$734284                     | HSIP (23<br>U.S.C. 148)                                | Urban                    | Principal Arterial-<br>Other Freeways &<br>Expressways |      |       | State<br>Highway<br>Agency | Spot                            | Roadway<br>Departure     |                  |
| PIN X22869: MOBILITY<br>IMPROVEMENT ON EB<br>LIE B/W CVE &<br>SPRINGFIELD BLVD &<br>REPLACEMENT OF<br>OCEANIA ST. BR | geometry                   | Add/modify<br>auxiliary lanes      |         |                | \$576921                    | \$4955501                    | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP)  | Multiple/Varies          | Multiple/Varies  | 0    |       | State<br>Highway<br>Agency | Spot                            | Intersections            |                  |
| PIN MHSI22: MAIN<br>OFFICE HIGHWAY<br>SAFETY<br>IMPROVEMENT BLOCK<br>SFY 22/23                                       | Miscellaneous              | Road safety audits                 |         |                | \$19750663                  | \$19662212                   | HSIP (23<br>U.S.C. 148)                                |                          |  | 0    |       | State<br>Highway<br>Agency | Not<br>applicable               | Not<br>applicable        |                  |
| PIN MHSI23: MAIN<br>OFFICE HIGHWAY<br>SAFETY   | Miscellaneous              | Road safety audits                 |         |                | \$28260922                  | \$28260922                   | HSIP (23<br>U.S.C. 148)                                |                          |  | 0    |       | State<br>Highway<br>Agency | Not<br>applicable               | Not applicable           |                  |

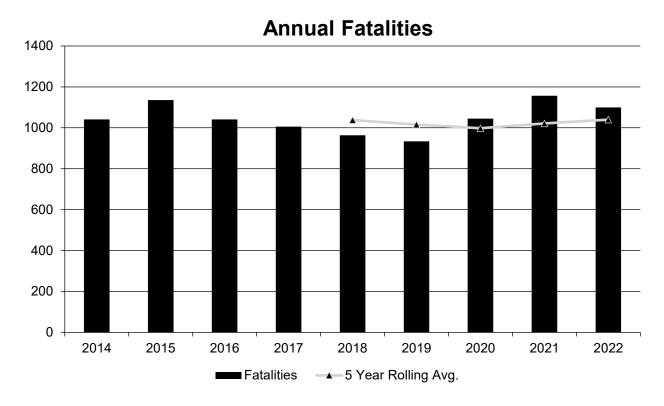
| PROJECT NAME  | IMPROVEMENT<br>CATEGORY | SUBCATEGORY           | OUTPUTS | OUTPUT<br>TYPE | HSIP<br>PROJECT<br>COST(\$) | TOTAL<br>PROJECT<br>COST(\$) | FUNDING<br>CATEGORY                                   | LAND<br>USE/AREA<br>TYPE | FUNCTIONAL<br>CLASSIFICATION | AADT | SPEED | OWNERSHIP                  | METHOD<br>FOR SITE<br>SELECTION | SHSP<br>EMPHASIS<br>AREA | SHSP<br>STRATEGY |
|---|-------------------------|-----------------------|---------|----------------|-----------------------------|------------------------------|---|--------------------------|------------------------------|------|-------|----------------------------|---------------------------------|--------------------------|------------------|
| IMPROVEMENT BLOCK<br>SFY 23/24  |                         |                       |         |                |                             |                              |   |                          |                              |      |       |                            |                                 |                          |                  |
| PIN MTSM22: MAIN<br>OFFICE TSMO<br>VARIOUS BLOCK SFY<br>22/23                                 | Miscellaneous           | Miscellaneous - other |         |                | \$-153000                   | \$12485109                   | Other<br>Federal-aid<br>Funds (i.e.<br>STBG,<br>NHPP) |                          |                              | 0    |       | State<br>Highway<br>Agency | Not<br>applicable               | Not<br>applicable        |                  |
| PIN SESS19: REGIONAL<br>DESIGN SERVICES<br>AGREEMENT,<br>STATEWIDE TRAFFIC<br>SAFETY PROJECTS |                         | Miscellaneous - other |         |                | \$3500000                   | \$3500000                    | HSIP (23<br>U.S.C. 148)                               |                          |                              | 0    |       | State<br>Highway<br>Agency | Spot                            | Roadway<br>Departure     |                  |

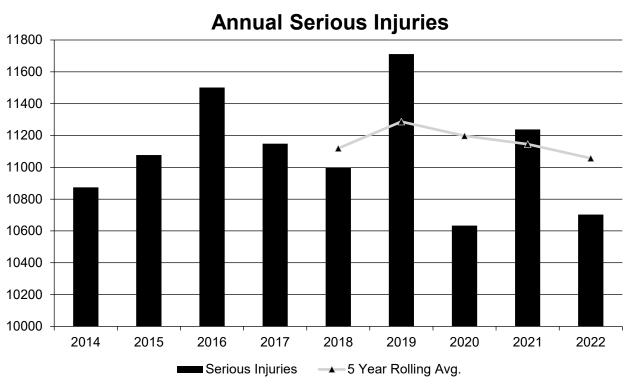
## **Safety Performance**

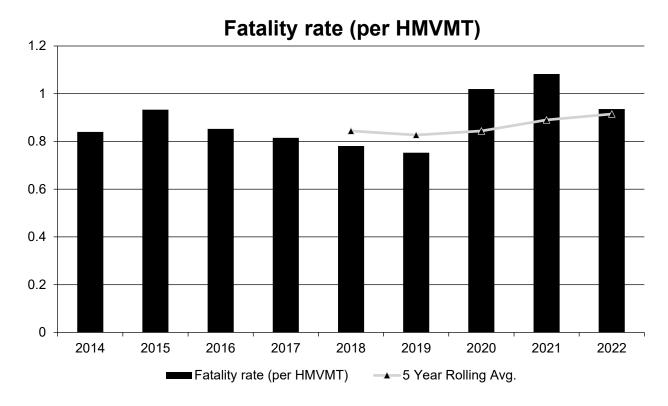
## General Highway Safety Trends

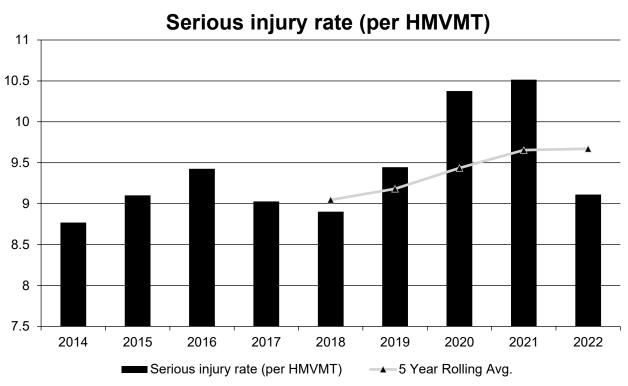
# Present data showing the general highway safety trends in the State for the past five years.

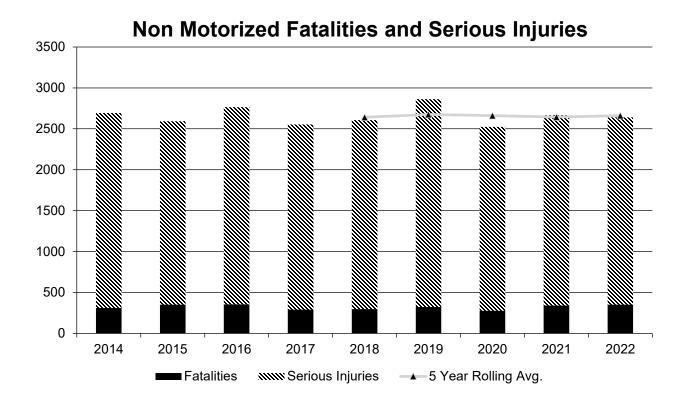
| PERFORMANCE<br>MEASURES                         | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2021   | 2022   |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Fatalities                                      | 1,041  | 1,136  | 1,041  | 1,006  | 964    | 934    | 1,045  | 1,157  | 1,100  |
| Serious Injuries                                | 10,874 | 11,077 | 11,501 | 11,148 | 10,996 | 11,712 | 10,634 | 11,238 | 10,703 |
| Fatality rate (per HMVMT)                       | 0.840  | 0.933  | 0.853  | 0.815  | 0.781  | 0.753  | 1.020  | 1.083  | 0.936  |
| Serious injury rate (per HMVMT)                 | 8.770  | 9.102  | 9.427  | 9.028  | 8.903  | 9.446  | 10.377 | 10.516 | 9.112  |
| Number non-<br>motorized fatalities             | 314    | 353    | 357    | 292    | 298    | 322    | 278    | 340    | 353    |
| Number of non-<br>motorized serious<br>injuries | 2,378  | 2,240  | 2,407  | 2,261  | 2,309  | 2,540  | 2,247  | 2,328  | 2,287  |











#### Describe fatality data source.

**FARS** 

The fatalities data source for 2017 through 2021 is FARS

The fatalities data source for 2022 is the New York State Traffic Safety Statistical Repository (TSSR) system.

FARS data for 2022 is not available at the time this report was written.

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

#### Year 2022

| Functional<br>Classification   | Number of Fatalities<br>(5-yr avg) | Number of Serious<br>Injuries<br>(5-yr avg) | Fatality Rate<br>(per HMVMT)<br>(5-yr avg) | Serious Injury Rate<br>(per HMVMT)<br>(5-yr avg) |
|--|------------------------------------|---|--|--|
| Rural Principal<br>Arterial (RPA) -<br>Interstate                        | 11.6                               | 107   | 0.01                                       | 0.09   |
| Rural Principal<br>Arterial (RPA) - Other<br>Freeways and<br>Expressways | 4                                  | 30.8  | 0  | 0.03   |
| Rural Principal<br>Arterial (RPA) - Other                                | 42.4                               | 336   | 0.04                                       | 0.29   |

| Functional<br>Classification   | Number of Fatalities<br>(5-yr avg) | Number of Serious<br>Injuries<br>(5-yr avg) | Fatality Rate<br>(per HMVMT)<br>(5-yr avg) | Serious Injury Rate<br>(per HMVMT)<br>(5-yr avg) |
|--|------------------------------------|---|--|--|
| Rural Minor Arterial   | 45.2                               | 327.4                                       | 0.04                                       | 0.29   |
| Rural Minor Collector  | 48.2                               | 287.6                                       | 0.04                                       | 0.25   |
| Rural Major Collector  | 55.6                               | 417.4                                       | 0.05                                       | 0.36   |
| Rural Local Road or<br>Street  | 47.4                               | 388   | 0.04                                       | 0.34   |
| Urban Principal<br>Arterial (UPA) -<br>Interstate                        | 77.2                               | 758.4                                       | 0.07                                       | 0.66   |
| Urban Principal<br>Arterial (UPA) - Other<br>Freeways and<br>Expressways | 89.8                               | 673.2                                       | 0.08                                       | 0.59   |
| Urban Principal<br>Arterial (UPA) - Other                                | 246                                | 2,651.6                                     | 0.22                                       | 2.32   |
| Urban Minor Arterial   | 187.6                              | 2,164.2                                     | 0.16                                       | 1.9  |
| Urban Minor Collector  | 1.6                                | 19.6  | 0  | 0.02   |
| Urban Major Collector  | 66.6                               | 865.8                                       | 0.06                                       | 0.76   |
| Urban Local Road or<br>Street  | 95.2                               | 1,474.8                                     | 0.08                                       | 1.29   |

#### **Year 2022**

| Roadways   | Number of Fatalities<br>(5-yr avg) | Number of Serious<br>Injuries<br>(5-yr avg) | Fatality Rate<br>(per HMVMT)<br>(5-yr avg) | Serious Injury Rate<br>(per HMVMT)<br>(5-yr avg) |
|--|------------------------------------|---|--|--|
| State Highway<br>Agency  | 466.8                              | 4,150.8                                     | 0.41                                       | 3.62   |
| County Highway<br>Agency   | 189.2                              | 1,464                                       | 0.17                                       | 1.28   |
| Town or Township<br>Highway Agency                                       | 85.2                               | 835.4                                       | 0.07                                       | 0.73   |
| City or Municipal<br>Highway Agency                                      | 246.8                              | 3,754.6                                     | 0.22                                       | 3.29   |
| State Park, Forest, or Reservation Agency                                | 4.2                                | 32  | 0  | 0.03   |
| Local Park, Forest or<br>Reservation Agency                              | 0.4                                | 1.4   | 0  | 0  |
| Other State Agency   | 0.4                                | 5.2   | 0  | 0  |
| Other Local Agency   | 0.2                                | 3.2   | 0  | 0  |
| Private (Other than Railroad)  | 0.4                                | 6.2   | 0  | 0.01   |
| Railroad   | 0                                  | 0   | 0  | 0  |
| State Toll Authority   | 18                                 | 210   | 0.02                                       | 0.18   |
| Local Toll Authority   | 2.6                                | 20.8  | 0  | 0.02   |
| Other Public<br>Instrumentality (e.g.<br>Airport, School,<br>University) | 5.8                                | 65  | 0.01                                       | 0.06   |
| Indian Tribe Nation  | 3                                  | 8   | 0  | 0.01   |

## Safety Performance Targets

**Safety Performance Targets** 

Calendar Year 2024 Targets \*

Number of Fatalities:1016.1

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

A key factor in setting the targets for the common measures (number of fatalities, number of serious injuries and rate of fatalities (fatalities per 100M VMT)) used in the HSP and in the HSIP and SHSP prepared by the

NYSDOT was the need for consistency in the targets across the plans. A 1.5% reduction goal for these common measures was set for 2026, with annual reduction benchmarks of 0.5% by 2024 and 1.0% by 2025.

#### Number of Serious Injuries:11089.9

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

A key factor in setting the targets for the common measures (number of fatalities, number of serious injuries and rate of fatalities (fatalities per 100M VMT)) used in the HSP and in the HSIP and SHSP prepared by the NYSDOT was the need for consistency in the targets across the plans. A 1.5% reduction goal for these common measures was set for 2026, with annual reduction benchmarks of 0.5% by 2024 and 1.0% by 2025.

#### Fatality Rate: 0.886

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

A key factor in setting the targets for the common measures (number of fatalities, number of serious injuries and rate of fatalities (fatalities per 100M VMT)) used in the HSP and in the HSIP and SHSP prepared by the NYSDOT was the need for consistency in the targets across the plans. A 1.5% reduction goal for these common measures was set for 2026, with annual reduction benchmarks of 0.5% by 2024 and 1.0% by 2025.

#### Serious Injury Rate:9.606

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

A key factor in setting the targets for the common measures (number of fatalities, number of serious injuries and rate of fatalities (fatalities per 100M VMT)) used in the HSP and in the HSIP and SHSP prepared by the NYSDOT was the need for consistency in the targets across the plans. A 1.5% reduction goal for these common measures was set for 2026, with annual reduction benchmarks of 0.5% by 2024 and 1.0% by 2025.

#### Total Number of Non-Motorized Fatalities and Serious Injuries:2628.4

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

A key factor in setting the targets for the common measures (number of fatalities, number of serious injuries and rate of fatalities (fatalities per 100M VMT)) used in the HSP and in the HSIP and SHSP prepared by the NYSDOT was the need for consistency in the targets across the plans. A 1.5% reduction goal for these common measures was set for 2026, with annual reduction benchmarks of 0.5% by 2024 and 1.0% by 2025.

## 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 Governor's Traffic Safety Committee. NYSDOT produces a fact sheet for the MPOs that identifies the safety performance targets and describes the process used to set them.

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

No

Describe progress toward meeting the State's 2022 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                          | 1005.4  | 1040.0  |
| Number of Serious Injuries                    | 11173.9 | 11056.6 |
| Fatality Rate                                 | 0.818   | 0.915   |
| Serious Injury Rate                           | 9.084   | 9.671   |
| Non-Motorized Fatalities and Serious Injuries | 2644.1  | 2660.4  |

New York State did not make significant progress towards meeting the Number of fatalities, Rate of fatalities and Rate of Serious Injury targets in 2021. The State submitted the FFY24 HSIP Implementation Report.

An update to the Strategic Highway Safety Plan this year has highlighted several areas where the state feels it can make improvements to the number and rate of fatalities and the rate of serious injuries. The state will be making a number of enhancements to its safety system to improve the accuracy of the network screening process and incorporate additional AADT for the local system. The state is also planning to reevaluate the distribution of HSIP funds between the state and local system to better target fatal and severe crashes. For example, as NYSDOT continues the PSAP effort, additional funding will be available for off-system projects in Focus Communities. Also the Roadway Departure Safety Action Plan will include systemic treatments that will include both on and off-system improvements. The main office will be meeting with the Regions in October for the Annual SEE meeting. Regional allocations and funding for locals will be discussed to determine the most efficient way for the distribution and programming of funds. The plan also highlighted the large percentage s of fatal or serious injury crashes that result from Roadway departures or involve a pedestrian. These crashes will be targeted through 2 separate Action Plans which will be released in 2024.

### Applicability of Special Rules

**Does the VRU Safety Special Rule apply to the State for this reporting period?** Yes

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

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

| PERFORMANCE<br>MEASURES                          | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|--|------|------|------|------|------|------|------|
| Number of Older Driver and Pedestrian Fatalities | 217  | 200  | 213  | 213  | 200  | 181  | 209  |

| PERFORMANCE<br>MEASURES                                | 2015  | 2016  | 2017  | 2018  | 2019  | 2020 | 2021  |
|--|-------|-------|-------|-------|-------|------|-------|
| Number of Older Driver and Pedestrian Serious Injuries | 1,090 | 1,095 | 1,068 | 1,208 | 1,246 | 944  | 1,081 |

Fatalities is from FARS data and Serious Injuries is form ITSMR (TSSR Database)

#### **Evaluation**

#### Program Effectiveness

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

- Change in fatalities and serious injuries
- Other-target crashes

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

New York State Department of Transportation reviewed the trends for all the safety performance targets included in the state's HSIP Program as part of the Strategic Highway Safety Plan update. This year was the first complete year that CLEAR was in production and crash analysis performed using the new HSM based network screening. A "Main Office Program" field was added to the Capital Project information to allow for automated tracking of any Main Office Program going forward. It will take time to accumulate statistically significant data using the new program codes to perform program level analysis. PSAP projects that had been delayed are near completion and NYSDOT is collecting the data needed to evaluate the overall program effectiveness. Other ongoing programs include SKARP and SAFETAP. These programs were also affected by the cutover to CLEAR and new evaluation procedures are being developed for all programs.

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

- # miles improved by HSIP
- # RSAs completed
- HSIP Obligations
- Increased awareness of safety and data-driven process
- More systemic programs

The state uses multiple sources to determine the effectiveness of the HSIP program. The main indicator is obviously crash data and the 5 year rolling averages of our emphasis area crash types and additional crash types we track in our Bi-Annual Report. Preliminary reports on pedestrian and Bicycle trends are received from ITSMR and help identify trends early on. Social media is often a good source of qualitative feedback on safety projects or specific treatments and helps understand how the public views the safety enhancements that are implemented. With the introduction of CLEAR and many new processes and data sets, we are developing additional metrics that can be tracked over time including average PSI, number of Wet Road PIL sites, # of investigations resulting in recommendations. CLEAR also has an Evaluation module that allows for post evaluation of a site, a safety recommendation, a project, or a program. This process is reliant on some of the new data elements in CLEAR so it will not have sufficient data for a while. There is an additional task in upcoming contracts to recalibrate the Safety Performance Functions used in CLEAR to ensure they accurately reflect the crash frequencies on New York State roads. This will potentially improve the sites identified in the network screening process and would confirm the effectiveness of the treatments being implemented.

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

Yes. While CLEAR Safety launched earlier this year, the cutover began the previous year with the data conversion and migration. There were changes to the data structure, data analysis procedures as well as Page 49 of 58

changes to the definitions of some categories such as intersection crashes. Intersection crashes now include three values; at intersection, near intersection (within 100 ft of an intersecting street), and not at intersection.

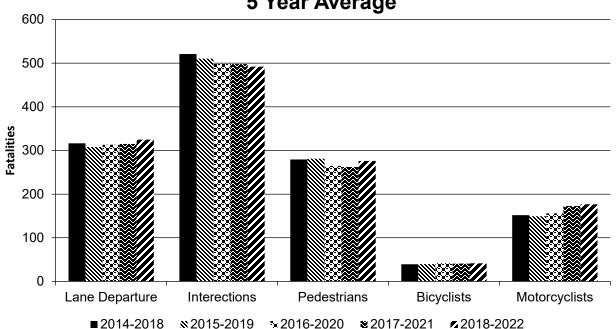
### Effectiveness of Groupings or Similar Types of Improvements

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

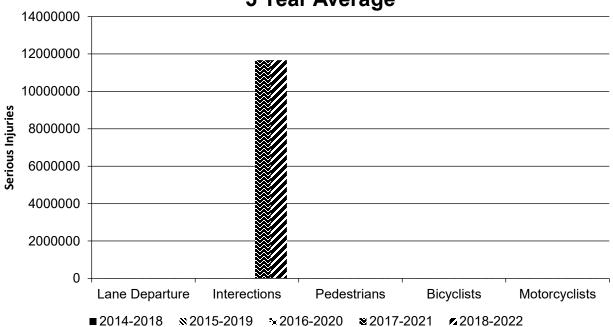
#### Year 2022

| SHSP Emphasis Area | Targeted Crash<br>Type | Number of<br>Fatalities<br>(5-yr avg) | Number of<br>Serious Injuries<br>(5-yr avg) | Fatality Rate<br>(per HMVMT)<br>(5-yr avg) | Serious Injury<br>Rate<br>(per HMVMT)<br>(5-yr avg) |
|--------------------|------------------------|---------------------------------------|---|--|---|
| Lane Departure     |                        | 324.8                                 | 2,488.2                                     | 0.29                                       | 2.19  |
| Interections       |                        | 491.8                                 | 11,664,690                                  | 0.43                                       | 5.86  |
| Pedestrians        |                        | 276.2                                 | 1,750.2                                     | 0.24                                       | 1.52  |
| Bicyclists         |                        | 41.6                                  | 650   | 0.04                                       | 0.57  |
| Motorcyclists      |                        | 176.6                                 | 1,064.6                                     | 0.16                                       | 0.94  |

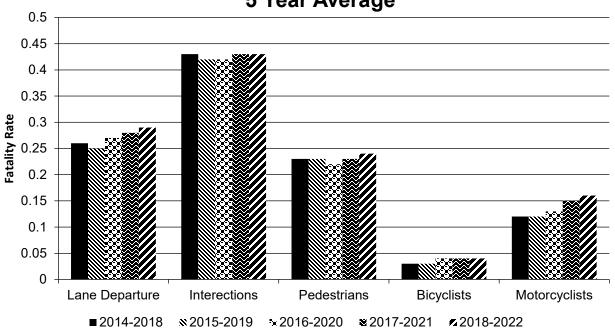
# Number of Fatalities 5 Year Average



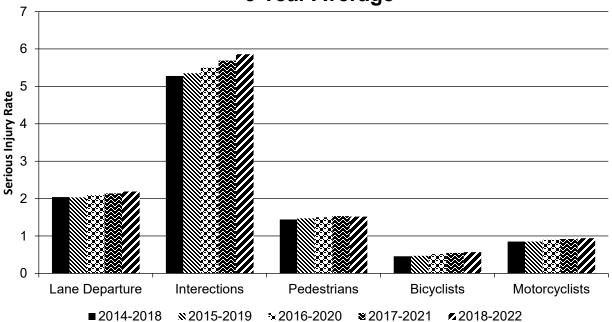
# Number of Serious Injuries 5 Year Average



# Fatality Rate (per HMVMT) 5 Year Average



# Serious Injury Rate (per HMVMT) 5 Year Average



## Project Effectiveness

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

| LOCATION  | FUNCTIONAL<br>CLASS                    | IMPROVEMENT<br>CATEGORY         | IMPROVEMENT<br>TYPE   |        | PDO<br>AFTER | FATALITY<br>BEFORE | FATALITY<br>AFTER | SERIOUS<br>INJURY<br>BEFORE | SERIOUS<br>INJURY<br>AFTER | ALL OTHER<br>INJURY<br>BEFORE | ALL OTHER<br>INJURY<br>AFTER | TOTAL<br>BEFORE | TOTAL<br>AFTER | EVALUATION<br>RESULTS<br>(BENEFIT/COST<br>RATIO) |
|---|--|---------------------------------|---|--------|--------------|--------------------|-------------------|-----------------------------|----------------------------|-------------------------------|------------------------------|-----------------|----------------|--|
| PIN 4ON0.02:<br>County Road<br>23 at McIvor<br>Road and Fort<br>Hill Road                               |  | Intersection traffic control    | Modify control –<br>Modern<br>Roundabout                    | 2.00   | 1.00         |                    |                   | 3.00                        |                            |                               |                              | 5.00            | 1.00           |  |
| PIN 1085.33:<br>Rt 146<br>(Hamburg<br>Street), Rt 7 to<br>Schenectady<br>South City<br>Line             | Principal<br>Arterial (UPA) -<br>Other | Access<br>management            | Access<br>management -<br>other                             | 50.00  | 42.00        |                    |                   | 16.00                       | 9.00                       |                               |                              | 66.00           | 51.00          |  |
| PIN 3076.21:<br>Rt 5 West of<br>Chamberlin<br>Drive to East<br>of Sunview<br>Drive, Town of<br>Elbridge |  | Intersection geometry           | Add/modify<br>auxiliary lanes                               | 19.00  | 14.00        | 1.00               |                   | 2.00                        | 3.00                       |                               |                              | 22.00           | 17.00          |  |
| PIN 8017.30:<br>NY 172 and<br>NY 177 in<br>Town of Mount<br>Kisco                                       | Principal<br>Arterial (UPA) -          | Intersection geometry           | Intersection realignment                                    | 91.00  | 72.00        |                    |                   | 23.00                       | 11.00                      |                               |                              | 114.00          | 83.00          |  |
| Church Ave to   | Principal<br>Arterial (UPA) -          | Intersection<br>traffic control | Modify traffic<br>signal timing –<br>signal<br>coordination | 58.00  | 72.00        |                    |                   | 207.00                      | 178.00                     |                               |                              | 265.00          | 250.00         |  |
| PIN 0011.43:<br>NY 231 and<br>Northern State<br>Parkway<br>Interchange,<br>Town of<br>Huntington        | Principal<br>Arterial (UPA) -<br>Other | Interchange<br>design           | Interchange improvements                                    | 212.00 | 127.00       |                    |                   | 106.00                      | 44.00                      |                               |                              | 318.00          | 171.00         |  |

## **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: 2022

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

2022

The Strategic Highway Safety Plan update will be available by the end of September 2023. The delay was due to extensive public outreach done for the Vulnerable Road User Safety Assessment. Time was spent scheduling and holding twenty-five stakeholder meetings with representatives from universities, non-profit organizations, tribes, other state agencies, etc. from every geographic region in the state.

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<br>NO.)                       | NON LOCAL PAVED<br>ROADS - SEGMENT |           | NON LOCAL PAVED ROADS - INTERSECTION |           | NON LOCAL PAVED<br>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                                  | 0.997     |                                      |           |                                  |           | 1                 | 1         | 1             | 1         |
|                 | Route Number (8) [8]                           | 1                                  | 0.997     |                                      |           |                                  |           |                   |           |               |           |
|                 | Route/Street Name (9) [9]                      | 0.362                              | 0.997     |                                      |           |                                  |           |                   |           |               |           |
|                 | Federal Aid/Route<br>Type (21) [21]            | 0.428                              | 0.028     |                                      |           |                                  |           |                   |           |               |           |
|                 | Rural/Urban<br>Designation (20) [20]           | 1                                  | 1         |                                      |           |                                  |           | 1                 | 1         |               |           |
|                 | Surface Type (23) [24]                         | 1                                  | 1         |                                      |           |                                  |           | 1                 | 1         |               |           |
|                 | Begin Point<br>Segment Descriptor<br>(10) [10] | 1                                  | 1         |                                      |           |                                  |           | 1                 | 1         | 1             | 1         |
|                 | End Point Segment<br>Descriptor (11) [11]      | 1                                  | 1         |                                      |           |                                  |           | 1                 | 1         | 1             | 1         |
|                 | Segment Length (13) [13]                       | 1                                  | 1         |                                      |           |                                  |           |                   |           |               |           |
|                 | Direction of Inventory (18) [18]               |                                    |           |                                      |           |                                  |           |                   |           |               |           |

| ROAD TYPE        | *MIRE NAME (MIRE<br>NO.)  | NON LOCAL PAVED<br>ROADS - SEGMENT |           | NON LOCAL PAVED<br>ROADS - INTERSECTION |           | NON LOCAL PAVED<br>ROADS - RAMPS |           | LOCAL PAVED ROADS |           | UNPAVED ROADS |           |
|------------------|---|------------------------------------|-----------|---|-----------|----------------------------------|-----------|-------------------|-----------|---------------|-----------|
|                  |   | STATE                              | NON-STATE | STATE                                   | NON-STATE | STATE                            | NON-STATE | STATE             | NON-STATE | STATE         | NON-STATE |
|                  | Functional Class (19) [19]                                      | 1                                  | 1         |   |           |                                  |           | 1                 | 1         | 1             | 1         |
|                  | Median Type (54) [55]   | 0.889                              | 0.979     |   |           |                                  |           |                   |           |               |           |
|                  | Access Control (22) [23]  | 0.358                              | 0.013     |   |           |                                  |           |                   |           |               |           |
|                  | One/Two Way<br>Operations (91) [93]                             | 0.095                              | 0.04      |   |           |                                  |           |                   |           |               |           |
|                  | Number of Through<br>Lanes (31) [32]                            | 0.906                              | 0.999     |   |           |                                  |           | 1                 | 1         |               |           |
|                  | Average Annual Daily Traffic (79) [81]                          | 0.811                              | 0.832     |   |           |                                  |           | 0.172             | 0.169     |               |           |
|                  | AADT Year (80) [82]   | 0.811                              | 0.832     |   |           |                                  |           |                   |           |               |           |
|                  | Type of<br>Governmental<br>Ownership (4) [4]                    | 1                                  | 1         |   |           |                                  |           | 1                 | 1         | 1             | 1         |
| INTERSECTION     | Unique Junction<br>Identifier (120) [110]                       |                                    |           | 0.9                                     | 0.8       |                                  |           |                   |           |               |           |
|                  | Location Identifier<br>for Road 1 Crossing<br>Point (122) [112] |                                    |           | 0.9                                     | 0.8       |                                  |           |                   |           |               |           |
|                  | Location Identifier<br>for Road 2 Crossing<br>Point (123) [113] |                                    |           | 0.9                                     | 0.8       |                                  |           |                   |           |               |           |
|                  | Intersection/Junction<br>Geometry (126)<br>[116]                |                                    |           | 0.9                                     | 0.8       |                                  |           |                   |           |               |           |
|                  | Intersection/Junction<br>Traffic Control (131)<br>[131]         |                                    |           | 0.9                                     | 0.8       |                                  |           |                   |           |               |           |
|                  | AADT for Each<br>Intersecting Road<br>(79) [81]                 |                                    |           | 0.9                                     | 0.8       |                                  |           |                   |           |               |           |
|                  | AADT Year (80) [82]   |                                    |           | 0.9                                     | 0.8       |                                  |           |                   |           |               |           |
|                  | Unique Approach Identifier (139) [129]                          |                                    |           | 0.9                                     | 0.8       |                                  |           |                   |           |               |           |
| INTERCHANGE/RAMP | Unique Interchange<br>Identifier (178) [168]                    |                                    |           |   |           | 0.9                              | 0.8       |                   |           |               |           |

| ROAD TYPE                          | *MIRE NAME (MIRE<br>NO.)   | NON LOCAL PAVED<br>ROADS - SEGMENT |           | NON LOCAL PAVED ROADS - INTERSECTION |           | NON LOCAL PAVED<br>ROADS - RAMPS |           | LOCAL PAVED ROADS |           | UNPAVED ROADS |           |
|------------------------------------|--|------------------------------------|-----------|--------------------------------------|-----------|----------------------------------|-----------|-------------------|-----------|---------------|-----------|
|                                    |  | STATE                              | NON-STATE | STATE                                | NON-STATE | STATE                            | NON-STATE | STATE             | NON-STATE | STATE         | NON-STATE |
|                                    | Location Identifier<br>for Roadway at<br>Beginning of Ramp<br>Terminal (197) [187] |                                    |           |                                      |           | 0.9                              | 0.8       |                   |           |               |           |
|                                    | Location Identifier<br>for Roadway at<br>Ending Ramp<br>Terminal (201) [191]       |                                    |           |                                      |           | 0.9                              | 0.8       |                   |           |               |           |
|                                    | Ramp Length (187) [177]  |                                    |           |                                      |           | 0.9                              | 0.8       |                   |           |               |           |
|                                    | Roadway Type at<br>Beginning of Ramp<br>Terminal (195) [185]                       |                                    |           |                                      |           | 0.9                              | 0.8       |                   |           |               |           |
|                                    | Roadway Type at<br>End Ramp Terminal<br>(199) [189]                                |                                    |           |                                      |           | 0.9                              | 0.8       |                   |           |               |           |
|                                    | Interchange Type (182) [172]   |                                    |           |                                      |           | 0.9                              | 0.8       |                   |           |               |           |
|                                    | Ramp AADT (191)<br>[181]   |                                    |           |                                      |           | 0.9                              | 0.8       |                   |           |               |           |
|                                    | Year of Ramp AADT (192) [182]  |                                    |           |                                      |           | 0.9                              | 0.8       |                   |           |               |           |
|                                    | Functional Class (19) [19]   |                                    |           |                                      |           | 0.9                              | 0.8       |                   |           |               |           |
|                                    | Type of<br>Governmental<br>Ownership (4) [4]                                       |                                    |           |                                      |           | 0.9                              | 0.8       |                   |           |               |           |
| Totals (Average Percent Complete): |  | 0.76                               | 0.76      | 0.90                                 | 0.80      | 0.90                             | 0.80      | 0.91              | 0.91      | 1.00          | 1.00      |

<sup>\*</sup>Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]

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 New York State Department of Transportation is currently assessing the availability of data for the MIRE fundamental data elements. This process was delayed due to the Department's transition to a new enterprise application for roadway data called SEE. The new application allows the program area to manage data for dual carriageways and will improve the workflow of integrating with the milepoint linear referencing system (LRS). Additional local roads are being built to help the Safety program locate crashes and meet Federal requirements to map all public roads. Once data entry is mostly complete, the data will be processed to produce the CLEAR Safety data layers and a gap analysis will be performed to determine the remaining MIRE needs. A separate task has been added to a consultant contract under development to provide the data processing needed to develop this data.

## **Optional Attachments**

Program Structure:

HSIP Manual Red Book.pdf Project Implementation:

NYSDOT HSIP Project List April 1, 2021 – September 30, 2021.xlsx NYSDOT HSIP Project List FFY 2022.xlsx Safety Performance:

**Evaluation:** 

Historical Project Performance to upload question 46.docx 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.