

OVERVIEW OF THE NHDOT ROAD SAFETY AUDIT PROCESS



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Principal Transportation Planner



WHAT IS THE HIGHWAY SAFETY IMPROVEMENT PROGRAM?



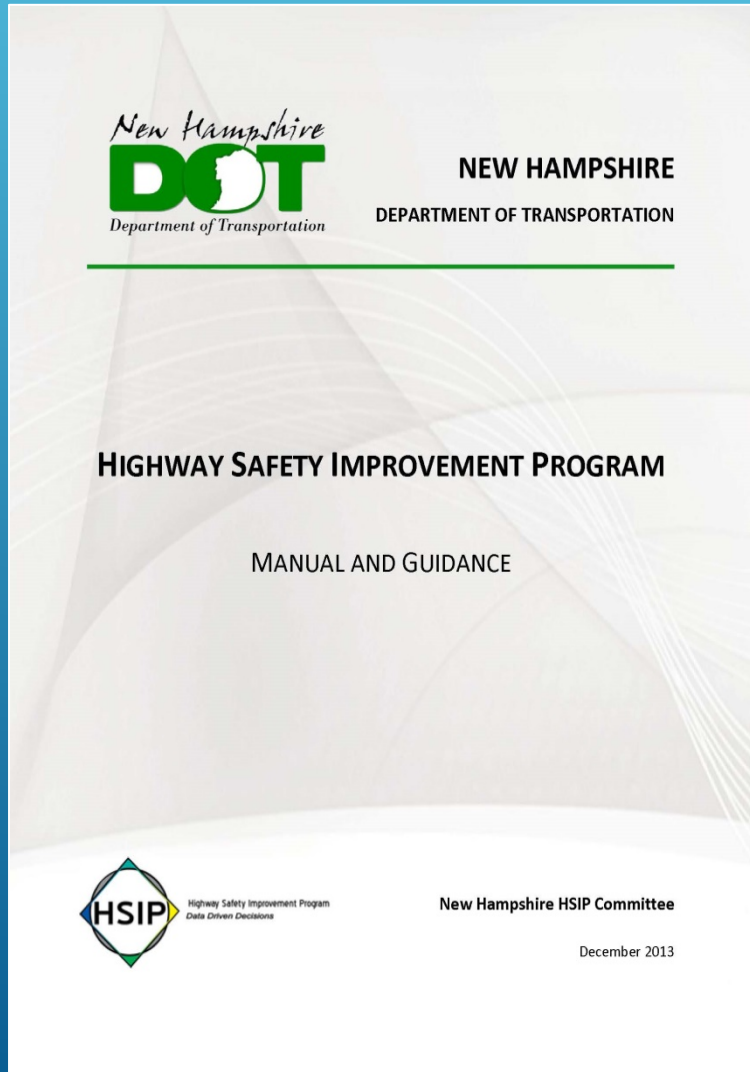
- Core Federal-aid Program established under SAFETEA-LU (2005) and continued under MAP-21 (2012) and the FAST Act (2015).
- New Hampshire apportionment is approximately **\$10 Million** per year for safety improvements.
- Program is intended to reduce traffic fatalities and serious injuries on all public roads.
- HSIP funds may not be used for non-infrastructure activities.

WHO OVERSEES HSIP IMPLEMENTATION IN NEW HAMPSHIRE?

- ▶ HSIP program implementation in New Hampshire is a **partnership** between local, regional, state, and federal partners.
- ▶ The program is overseen by a multi-agency HSIP Committee:
 - ▶ NHDOT Assistant Director of Project Development (Chair)
 - ▶ NHDOT Bureau of Highway Design
 - ▶ NHDOT Bureau of Highway Maintenance
 - ▶ NHDOT Bureau of Planning and Community Assistance
 - ▶ NHDOT Bureau of Traffic
 - ▶ FHWA Division Safety Engineer
 - ▶ Metropolitan Planning Organization
 - ▶ Rural Regional Planning Commission
 - ▶ Municipal Representative



THE RPC/MPO ROLE IN HSIP IMPLEMENTATION



In New Hampshire, three types of projects are eligible for HSIP funding.

- Locations identified by statewide network screening
 - NHDOT has historically used *Safety Analyst*
- Systemic projects that proactively address locations with conditions that correlate to certain crash types
 - e.g. Median Crossover Barriers
- Locally-identified projects justified by Road Safety Audits

THE RPC/MPO ROLE IN HSIP IMPLEMENTATION

How do New Hampshire's RPCs/MPOs assist in this process?

- For locations identified by statewide network screening
 - Work with municipalities to verify crash history.
 - Work with NHDOT and the affected municipality to facilitate consensus on project design.
 - Ensure that project funding is incorporated into TIP.
- For systemic projects that proactively address locations with conditions that correlate to certain crash types.
 - Coordinate with affected municipalities to identify and recommend appropriate locations to the NHDOT.
 - Ensure that project funding is incorporated into TIP.

ROAD SAFETY AUDITS IN NEW HAMPSHIRE

For locations not identified through network screening or systemic projects, municipalities may apply for a **Road Safety Audit** to gain eligibility for HSIP funding.

- Road Safety Audit locations must have a **fatal (K) or severe injury (A) crash history**.
- Supporting crashes need to be located at and **related to the location of interest**.
- Crashes should be correctable and show a pattern indicative of an **infrastructure-related problem** rather than a single isolated incident, caused by a **behavioral issue**, such as **distracted or impaired driving**.

ROAD SAFETY AUDITS IN NEW HAMPSHIRE


Example Safety Issues:

- Roadway issues, i.e. surface, curvature, other geometric issues
 - Poor surface conditions
 - Unusual intersections e.g. a Y along a curve
- Limited Sight Distance
 - Intersection Sight Distance
 - Stopping Sight Distance
- Driver Behavior Issues
 - Speeding
 - Running Stop Sign
- Lack of Lighting



APPLYING FOR A ROAD SAFETY AUDIT IN NEW HAMPSHIRE (APPLICATIONS ARE DUE TO SNHPC OCTOBER 15TH, NHDOT ON DECEMBER 1ST)

Revised 9/2017



ROAD SAFETY AUDIT APPLICATION

Specific location of proposed RSA project (intersection, spot location, road segment or project, or new facility):

City/Town/County: _____
RPC/MPO: _____
Route(s): _____ Intersecting Road: _____
AADT: _____ Speed Limit: _____ AADT: _____ Speed Limit: _____
Name, Position/Title, Address of Contact Person: _____
Phone Number: _____ Fax: _____ Email: _____

RSA Criteria check list:
☐ Crash reports for the fatal or serious injury crashes (in the past 10 years)

- Number of Fatalities _____ and Number Incapacitating Injuries _____

State source for the above numbers _____

- Attach list of Total crashes
- Include Crash Diagram for fatal crashes & injury crashes

☐ No project completed in last 5 years to address safety concerns
☐ No previous studies indicating desired countermeasures too expensive for this location
☐ The Average Daily Traffic (ADT) volume for road(s) and turning movements for intersections are attached.
☐ Signature of NHDOT District Engineer
☐ Signature of Municipal Official
☐ Signature of RPC/MPO Official

1. Reasons for requesting RSA: _____

2. Please list month and/or days of week when safety issues are most prevalent, if applicable: _____
3. Does your agency have a method to identify and prioritize road safety issues? If yes, where does this location rank within your agency's problem locations _____

List Municipal Official with Authority to Respond To/Implement the RSA Findings (include job title):

Signatures:
NHDOT District Engineer: _____

Municipal: _____

RPC/MPO: _____

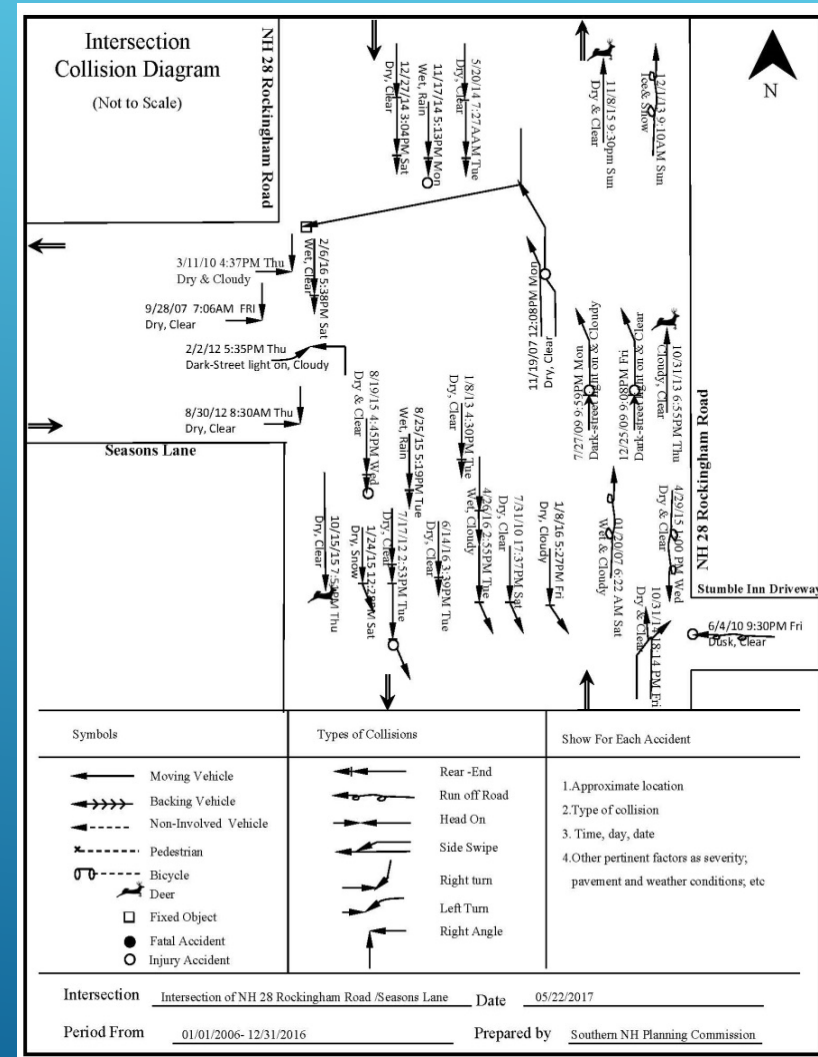
Submit Application to: Michael Dugas
Deadline Dec. 1st Highway Design
7 Hazen Drive, PO Box 483
Concord, NH 03302-0483
Phone: 603-271-2604
Fax: 603-271-7025
Email: michael.dugas@dot.nh.gov

- A Road Safety Audit application form is required and should include the following:

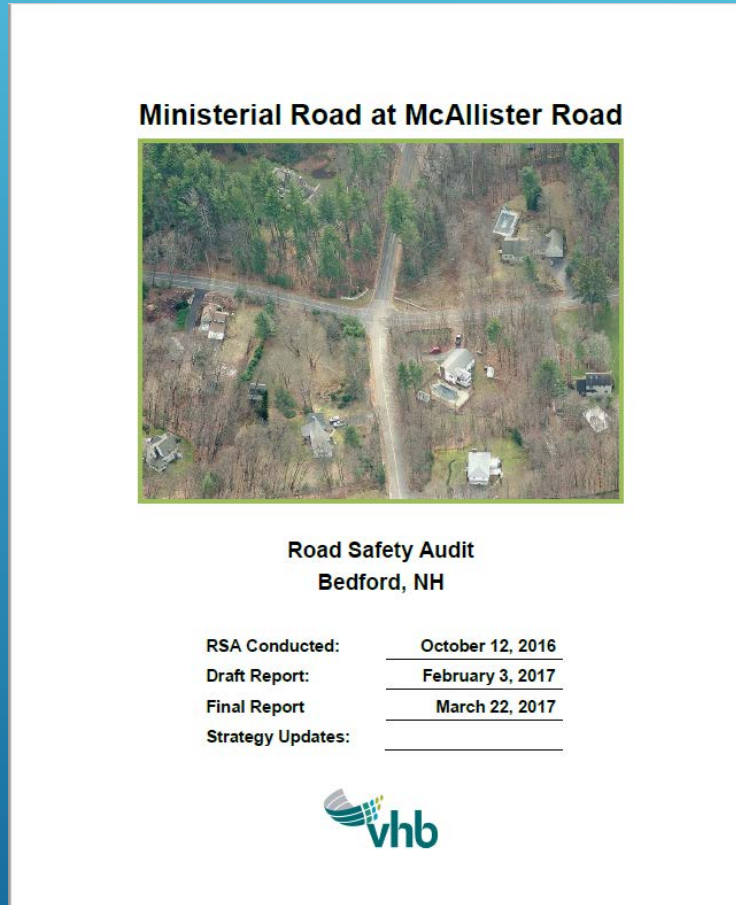
- Crash Reports (for fatal and serious injury crashes at the location for the past 10 years)
- Average Daily Traffic (ADT)
- Turning Movement Count (if applicable)
- Crash Diagram
- Signature of NHDOT District Engineer
- Signature of RPC/MPO
- Signature of Municipal Official

RPC/MPO ASSISTANCE WITH ROAD SAFETY AUDIT APPLICATIONS

- SNHPC can provide technical assistance in developing a Road Safety Audit application by:
 - Working with municipal staff to compile crash records.
 - Collecting location-specific traffic volume data and/or turning movement data.
 - Developing crash diagrams.
 - Participating as a stakeholder in the Road Safety Audit.
 - Ensuring that project funding is incorporated into TIP.



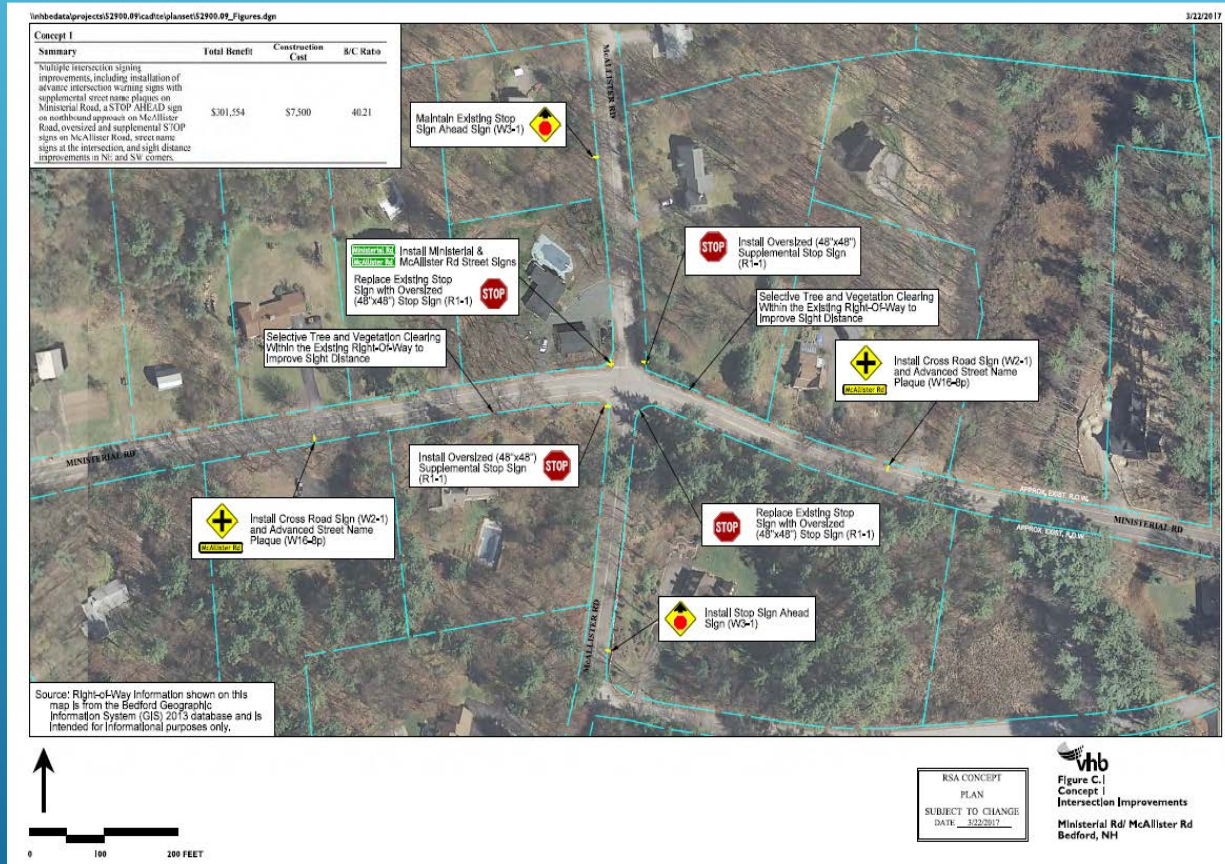
THE ROAD SAFETY AUDIT PROCESS



Above: Intersection RSA Report for the Town of Bedford, NH organized by the SNHPC and NHDOT.

- If the HSIP Committee approves the application, a Road Safety Audit will be conducted.
 - Audit team typically includes NHDOT staff, municipal stakeholders, abutters, and RPC/MPO staff.
 - Typically lasts a half-day and involves: Initial Meeting, Field Review, and Recap Meeting.
 - Goal is to reach consensus on short, medium, and long-term improvements to pursue.

MOVING FROM A ROAD SAFETY AUDIT TO CONSTRUCTION



- To be eligible for HSIP construction funding the Benefit/Cost ratio of improvements must be greater than 1.0.
- Projects exceeding \$1 Million may be encouraged to pursue funding in the Ten-Year Plan.

Above: Conceptual improvements detailed in a Road Safety Audit of Ministerial Road/McAllister Road in Bedford, NH (2017).

EXAMPLE OF HSIP-FUNDED SAFETY IMPROVEMENT PROJECT



Before Construction



After Construction

Above: Before and after pictures of a locally-identified HSIP project in Lyme, New Hampshire. Photos courtesy of the NHDOT Bureau of Highway Design.



Applications Due October 15th to SNHPC, and December 1st to NHDOT

Any Questions?

Revised 9/2017

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Signatures:

NHDOT District Engineer: _____

Municipal: _____

RPC/MPO: _____

Submit Application to: **Deadline Dec. 1st**

Michael Dugas
 Highway Design
 7 Hazen Drive, PO Box 483
 Concord, NH 03302-0483

Phone: 603-271-2604
 Fax: 603-271-7025
 Email: michael.dugas@dot.nh.gov