

The Center Line

Local Technical Assistance Program
North Dakota Transportation Technology Transfer Center

A Service for Local Transportation Agencies
North Dakota State University

Road Safety Audits: A Proactive Strategy for Making Your Roads Safer

Take the proactive, cost-saving approach to improving roadway safety by implementing road safety audits (RSA). An RSA is the formal safety performance examination of an existing or future road or intersection by an independent multidisciplinary team. RSAs can be used in any phase of project development, from planning to construction, and on initiatives ranging from minor maintenance activities to mega projects. The Federal Highway



A road safety audit is conducted on US 4 in Quechee, VT

Administration (FHWA) recently launched a new RSA Implementation Team that will be working with State and local transportation departments, tribal governments, and Federal land management agencies to provide guidance and assistance in implementing RSAs.

Under the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), States are required to report at least 5 percent of the

locations on their public roads that are exhibiting the most severe safety needs. This report must also include remedies, costs, and impediments to implementing improvements at each of these locations. "This requirement provides an excellent opportunity to incorporate RSAs into the process of identifying improvements," says Louisa Ward, FHWA's RSA Program Manager. "RSAs can identify comprehensive solutions to these severe safety problems beyond the

traditional design approach."

Several States have already started RSA programs. As part of a process to identify safety issues and countermeasures on roads in the

State, the Tennessee Department of Transportation now conducts one RSA every 2 weeks. The Arizona Department of Transportation, meanwhile, has incorporated RSAs into its new Strategic Highway Safety Plan and now has an RSA Manager on staff. And the New York State Department of Transportation is integrating RSAs within its pavement overlay program, while the Vermont Agency of Transportation is working with local planning organizations to conduct RSAs.

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Routing Slip

Don't file this newsletter too quickly. Read it, photocopy what you want, sign below, and please pass it on — especially to the front-line troops.

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Members of the FHWA's new Road Safety Audit Implementation Team.

“RSAs can identify comprehensive solutions to severe safety problems beyond the traditional design approach.”

The RSA Implementation Team is a joint effort of FHWA's Office of Safety, Division offices, Resource Center, Federal Lands Highway Division, and Highways for LIFE program. “This is a process and program that can and will make a difference,” said Beth Alicandri, Director of FHWA's Office of Safety Programs, at the implementation team kick-off meeting on September 27, 2006, in Alexandria, Virginia.

RSAs differ from traditional road safety review processes in that the audit typically is conducted by a larger multidisciplinary team that is independent of the project. The team may represent such disciplines as highway safety, traffic engineering, planning, design, construction, maintenance, human factors, and law enforcement. RSAs are also more comprehensive, considering all factors that may contribute to a crash, including driver error and visibility issues, as well as the needs of pedestrians and cyclists. Most importantly, safety audits are proactive, looking at locations before the development of crash patterns to correct safety issues before accidents happen.

- Typical improvements suggested during an RSA include:
- Removal of sight distance obstructions.
- Improvements in illumination.
- Median barrier placement.
- Roadway shoulder and lane width modifications.
- Drainage improvements.
- Realignment of intersection approaches.
- Improvement to acceleration / deceleration lane design.
- Modifications and improvements to signs and pavement markings.

These improvements can help produce roadway designs that reduce the number and severity of crashes. In New York State, for example, crash reductions have ranged from 20 to 40 percent depending on the type of RSA improvement implemented. An RSA can also reduce costs by identifying safety issues and correcting them before projects are built.

The RSA Implementation Team will be introducing tools to assist States in implementing RSAs, including a new software program. The program makes it easy for audit teams to record detailed information on site, as well as to quickly produce RSA reports. The software features comprehensive prompt lists that help users identify issues that may be overlooked in the RSA process. Users can link identified issues to user-defined locations in the study area and enter accompanying comments for each issue. The software also allows users to record suggestions for improvements that may be identified. The software groups the audit findings by issue and exports the results to a Microsoft Word® compatible file that allows for quick completion of a formal RSA report. To obtain a copy of the free software, contact Eloisa Raynault at 202-366-3499 (email: eloisa.raynault@dot.gov).

FHWA also offers a new Road Safety Audit Peer-to-Peer (RSA P2P) Program. The P2P program puts agencies in touch with transportation professionals across the country who can address questions that might arise when an agency is considering performing an RSA or is conducting an RSA for the first time. “The RSA P2P program offers State and local governments the opportunity to receive firsthand information and lessons learned from their peers who are successfully performing RSAs,” says Ward. Assistance can also include a site

visit as needed. The P2P program is provided at no cost to State, local, and tribal transportation agencies. For assistance, call 866-P2P-FHWA (866-727-3492), or send an email to SafetyP2P@fhwa.dot.gov.

The Road Safety Audit Peer-to-Peer Program offers State and Local governments the opportunity to receive firsthand information and lessons learned from their peers.

Also available are two RSA training courses for State and local transportation agencies and tribal governments. FHWA's National Highway Institute (NHI) offers a 2-day course, Road Safety Audits and Road Safety Audit Reviews (Course No. FHWA-NHI-380069). For details on the course or scheduling information, visit www.nhi.fhwa.dot.gov. The second course, RSA for Locals, is designed for local agencies, tribal governments, and Federal land management agencies. This free FHWA course can be presented in 1- or 2-day formats, with the longer course including information on low-cost safety improvements and a field exercise RSA. To schedule the RSA for Locals course, contact Eloisa Raynault at 202-366-3499 (email: eloisa.raynault@dot.gov).

For more information on RSAs, contact Louisa Ward at FHWA, 202-366-2218 (email: louisa.ward@fhwa.dot.gov). For technical assistance with conducting RSAs, contact Craig Allred at the FHWA Resource Center, 720-963-3236 (email: craig.allred@fhwa.dot.gov), or visit the Road Safety Audit Web

site at safety.fhwa.dot.gov/rsa. The site includes information on how to conduct RSAs, case studies, and reference materials. *Reprinted from the FHWA November 2006 Focus, which is also available online at www.tfhr.gov/focus/focus.*



Program Overview

Highway Watch® is the roadway sector's national safety and security program that utilizes the skills, experiences, and "road smarts" of America's transportation workers to help protect the nation's critical infrastructure and the transportation of goods, services, and people. Highway Watch® has recently added a new component to its program, [School Bus Watch](#), which is specifically targeted to the needs of school bus drivers.

Highway Watch® participants - transportation infrastructure construction, maintenance and operations personnel workers, commercial and public truck and bus drivers, truck drivers, transit personnel, buses drivers, and other highway sector professionals - are specially trained to recognize potential safety and security threats and avoid becoming a target of terrorists. The Highway Watch® effort seeks to prevent terrorists from using large vehicles or hazardous cargoes as weapons.

Highway Watch® training provides Highway Watch® participants with the observational tools and the

opportunity to exercise their expert understanding of the transportation environment to report safety and security concerns rapidly and accurately to the authorities. In addition to matters of homeland security - stranded vehicles or accidents, unsafe road conditions, and other safety related situations are reported eliciting the appropriate emergency responders. Highway Watch® reports are combined with other information sources and shared both with federal agencies and the roadway transportation sector by the Highway ISAC.

There are three major components of the Highway Watch® program:

- [Training, Recruitment, and Outreach](#)
- [The Highway Information Sharing and Analysis Center](#) (Highway ISAC);
- [The Emergency Planning and Education Center](#) (EPEC).

Highway Watch® is administered by the [American Trucking Associations](#) (ATA) under a Cooperative Agreement with the [U.S. Department of Homeland Security](#) (DHS). All interested Roadway transportation sector professionals are welcome to join Highway Watch®. For additional information, see the [Highway Watch® FAQ](#).

Training For Organizational Leaders and Training Managers

Highway Watch® is seeking companies and organizations interested in training blocks of employees and/or organizational members as Highway Watch®. Please contact [Sam Garza](#), 703-838-1929, to discuss how to join the growing list of companies and organizations that have committed to training 100% of their workforce and/or members.

Transportation Technology Transfer Center

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The Transportation Technology Transfer Program is a nationwide partnership under the Local Technical Assistance Program (LTAP) of the Federal Highway Administration, state departments of transportation, universities, and others. The program's purpose is to translate into understandable terms the latest transportation research and technologies. This information is made available to local officials transportation personnel in towns, cities, counties and townships.

Federal support for operation of the North Dakota TTT Center at North Dakota State University (NDSU) is matched by the North Dakota Department of Transportation, NDSU, the North Dakota Insurance Reserve Fund and the ND TTT Center. Guidance for the ND TTT Center is provided by an Advisory Board composed of members representing the federal, state, local and private sector transportation community. This newsletter is designed to keep you informed about new publications, videos, innovative technologies and training opportunities that will be helpful to you and your local unit of government.

The use of product brand names in newsletter articles does not constitute any endorsement of those products by the ND TTT Center.

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