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Welcome to our inaugural newsletter!

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FHWA Office of Safety

Welcome to the first edition of the Federal Highway Administration's RSA Newsletter. Our mission is to provide you with the most current information on Road Safety Audits (RSAs). Our regular features will include "RSA Snapshots," which provides an overview of State RSA programs, current resources to assist you in performing RSAs, and a compilation of RSA-related news stories.

If you would like to submit information on your RSA program, please contact me. We would love to share how RSAs are making your roads safer!

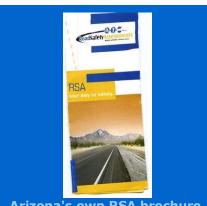
RSA Snapshots

A Highlight of RSA programs across the U.S.

Arizona

With Arizona's many road owners, the building of partnerships and agencies working together to address roadway safety is an essential component to reducing fatalities and serious injuries. Road Safety Assessments (RSAs) are a safety tool that Arizona identified as useful and RSAs are identified as an implementation strategy in the Arizona Strategic Highway Safety Plan (SHSP). The RSA Program is housed within the Arizona DOT's Highway Enhancements for Safety (HES) Section and is a resource available to all local, county, tribal, and federal agencies in the state to help improve traffic safety for all road users.

The Arizona RSA process closely follows the FHWA RSA Guidelines. The RSA is initiated by a request from a road owner through the submission of a one-page application describing the location to be considered for an RSA. The RSA is usually conducted within 2 to 3 months after receiving the application. The team is identified and recruited by the Arizona RSA Program Manager; the team typically consists of 4 to 6 members from various agencies and disciplines. The RSA team spends two full days on site conducting day and night field reviews, analyzing data, identifying safety issues and developing recommendations. A preliminary findings presentation is made the morning of the third day to discuss the safety issues and the team's recommendations. Three weeks after the RSA site visit, a written report of the RSA is submitted to the road owner agency. One month after receipt of the report, the road owner agency



Arizona's own RSA brochure.



A multidisciplinary RSA team in Arizona inspects a multilane intersection.

submits a response letter to the RSA Manager describing what action will be taken to address the RSA findings.

Highlights of the RSA Program since inception include conducting 17 RSAs, making 29 presentations, and conducting 8 workshops. The RSAs were conducted on city, county, state, tribal, and BIA roads. The RSA team members included engineering, enforcement, and education representatives from various city, county, state, and federal agencies and consultants.

Conducting RSAs for local and tribal agencies has provided an excellent opportunity for sharing best practices to address the safety concerns such as run-off-the-road, intersection and pedestrian crashes as well as improving driver behavior.

The requests for RSAs received by the RSA Program Manager reflect an improved understanding of the traffic safety problem plus an interest by agencies to identify and implement countermeasures to make Arizona roads safer.

If you would like additional information on the Arizona RSA program please contact Mike Blankenship, AZ RSA Program Manager at (602) 712-7601 or mblankenship@azdot.gov.

Nevada

In a continuing effort to reduce the severity of crashes and improve roadway safety, over 60 transportation and road safety experts have begun taking part in NDOT RSAs.

The audits begin when NDOT safety engineers coordinate with NDOT project managers to dispatch teams of three or more experts to evaluate certain existing roads or new transportation projects from a safety perspective. Performing both day and night field reviews, the teams look at how all users interact on a roadway, and review any potentially confusing road elements such as signs, trap lanes, skewed right-hand turn lanes and poor nighttime visibility.

Core safety audit members include a safety engineer, traffic or roadway design engineer and district engineering representative. The teams may also include engineers from local government agencies, law enforcement, emergency medical responders, NDOT bicycle and pedestrian experts and Federal Highway Administration (FHWA) personnel, all who work independently of road project design teams to assure numerous viewpoints.

The teams then submit specific safety recommendations to NDOT project managers for possible inclusion in the projects. Focusing only on safety-related issues, the audits are not technical reviews of project design compliance, and therefore can often provide low-cost safety recommendations. For instance, some safety enhancements can easily be put in place by NDOT maintenance professionals.

"The key to a successful safety audit is to capture the essential safety issues at the beginning of the project-planning phase. That way, we can incorporate recommended safety improvements in the project scoping process," Jaime Tuddao, NDOT Senior Road Safety Engineer, explained. "As design progresses, safety enhancements can be made by undertaking a RSA at the required design stages."

The teams have already provided safety recommendations on some



NDOT recently hosted the FHWA 'RSA for Local Agencies' training in Las Vegas in July 2008.

important Nevada roadways, such as I-15 from I-215 to Sahara Avenue in Las Vegas and road construction on U.S. 95 from Washington Avenue to Ann Road. In District 2, future safety audits will evaluate U.S. 395 in Reno and other roads. And in District 3, I-80 near Battle Mountain has been evaluated and an audit of U.S. 93 in Ely between the Cherry Creek and Lages junctions has led traffic signs to be repositioned to convey a clearer meaning to motorists.

"One of the primary focuses is being proactive in finding what we can do immediately to improve the level of safety, as well as developing long-term recommendations for safety enhancements," NDOT Principal Safety Engineer Chuck Reider explained. "The audits are one tool in the NDOT project manager's toolbox to further enhance safety for the traveling public."

If you would like additional information on the NDOT RSA program please contact Meg Ragonese, NDOT Public Information Officer, at (775) 888-7172 (phone) or mragonese@dot.state.nv.us.

South Carolina

South Carolina has included the use of RSAs in their Strategic Highway Safety Plan as a strategy that will aid in fatality reduction. "We view RSAs as a proactive low-cost approach to improve safety," said Terecia Wilson, Director of Safety for SCDOT. "The RSAs helped our engineering team develop a number of solutions incorporating measures that were not originally included in the projects. The very first audit saved SCDOT thousands of dollars." Ms. Wilson is now responsible for everything related to the development and implementation of the state's Strategic Highway Safety Plan.

Beginning early in 2000, after noting the success of the RSA Program in other countries, Ms. Wilson and her staff embarked on a campaign to emulate that success in South Carolina. First, SCDOT researched RSA programs in the UK and elsewhere to determine best methods to develop its own program. Funding was secured through the federal safety set-aside, creating the position of a full-time RSA Program Coordinator to implement and manage the Program.

The staff attended RSA training classes in Kentucky and Kansas, and learned how to look at every aspect of a project with safety in mind from the beginning rather than the end. The interdisciplinary nature of the South Carolina team allowed them to bring different perspectives to the project.

The next step in SCDOT's process was the development of formal, standard operational procedures for the RSA program. The procedures outline responsibilities for everyone involved in the RSA program, including project selection and program evaluations. Then SCDOT established an RSA Advisory Committee, which consists of the Deputy State Highway Engineer; the Directors of Construction, Pre-construction, Maintenance, Traffic Engineering, Planning, and Safety; and two District Engineering Administrators. The committee's role is to monitor and provide guidance over the RSA Program. Project approval and annual report approval are also within the committee's purview.

Teams consisting of four to six auditors were sent to selected sites to apply their newly acquired techniques to real problems. They evaluated geometry, sight distance obstructions, turn lane design,

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The second FHWA/AASHTO TIG RSA Peer to Peer Exchange was held in Little Rock, Arkansas from April 29-30, 2008. Information and presentations from the Exchange can be found at: tig.transportation.org, click on Road Safety Audits.

Several materials were posted to the FHWA RSA website: safety.fhwa.dot.gov/rsa

- o A sample RSA Policy document from the Tennessee Department of Transportation.
- Several sample RSA reports, including Trunk Highway from Minnesota Department of Transportation; Virginia Route 29 Highway.

acceleration/deceleration lane design, illumination, median barrier placement, pedestrian accessibility, superelevation, drainage, shoulder and lane widths, access management, driveway consolidation, and intersection approaches.

All operating environments—day, night, overcast, rain, summer, winter, spring and fall—as well as times of day and lighting conditions, were carefully evaluated in the Audit process. Probable use patterns and traffic densities also were considered and evaluated.

The results have been promising. In 2003, an RSA was conducted on I-585 in Spartanburg County, South Carolina. Of the eight recommendations made by the audit, four were implemented. In 2004, there was a reduction in the total number of crashes on I-585 from 36 to 32, a decrease of 12.5 percent, resulting in an economic savings of \$40,000.

Another Spartanburg County road audited by SCDOT in 2003, SC-296, had a 23.4 percent reduction in crashes in 2004. Twenty-five of the 37 safety recommendations were adopted. The average economic impact in savings was \$147,000. William Bloom, Director of Research and Statistics for SCDOT, said, "It's too early to directly attribute these reductions to the audit-induced changes. Accumulating data over time is the only way to evaluate the success of a program, and since the RSA Program in South Carolina is basically in its infancy, we don't yet have the information on which to base meaningful conclusions," Bloom said. "However, the numbers do appear to be very promising."

RSA Coordinator Chris Brown adds, "I'm excited by the huge potential benefits of RSAs and I'm eager to prove the Program can work just as effectively in South Carolina as it does in the United Kingdom and Australia."

In recent news, South Carolina conducted an RSA of the project submitted for FHWA's Rural Safety Initiative. The audit findings were utilized to prepare the grant application and to determine the strategies that will be implemented for the location is funding is received. South Carolina has made the "first cut" for the program, and is now preparing a Phase II application for funding.

If you would like additional information on the SCDOT RSA program please contact Terecia Wilson at (803) 737-0403 (phone) or wilsontw@scdot.org.

To submit your program for RSA Snapshots, please email <u>Eloisa.Raynault@dot.gov</u>.

FHWA Pedestrian RSA Guidelines and Prompt Lists

The Federal Highway Administration Office of Safety has released Pedestrian RSA Guidelines and Prompt Lists. All RSAs should include a review of pedestrian safety; however, some RSAs may be conducted to improve an identified pedestrian safety problem.

The Pedestrian RSA Guidelines and Prompt Lists provides transportation agencies and teams conducting an RSA with a tool to better understand pedestrian needs, identify concerns, and address safety problems.

The Guide has two primary sections: Knowledge Base and the Field Manual. The Knowledge Base section discusses the use of the Guide and basic concepts that RSA team should understand before conducting an RSA, such as characteristics of pedestrians, pedestrian crash data analysis tools, and pedestrian components in the eight-step RSA process. The Field Manual section includes the prompt lists and guidelines for their use. The guidelines provide detailed descriptions of potential pedestrian safety issues while the prompt lists identify potential pedestrian safety issues that should be considered during a RSA.

The guidelines and prompt lists will help familiarize RSA teams with potential pedestrian issues and help them identify specific safety concerns throughout the RSA process. To access the document, please visit http://www.walkinginfo.org/library/details.cfm?id=3955.



An RSA underway by a signalized intersection.

FHWA RSA Peer-to-Peer Program (RSA P2P)

In order to provide assistance to agencies either considering the use of or actually conducting RSAs, FHWA's Office of Safety has established a peer-to-peer (P2P) program. The RSA P2P program is provided at no cost to State, local and Tribal transportation agencies and it's easy to access the support of a knowledgeable peer.

The RSA P2P program can help agencies address the questions that might arise when they consider performing a RSA or provide help when conducting a RSA for the first time. Agency personnel can tap the programmatic and technical expertise of transportation professionals across the country to help address these questions.

Benefits to agencies include:

- Free and convenient access to professionals experienced in RSAs.
- Increased understanding of the RSA process.
- Expert assistance to help ensure successful completion of your first RSA.

A State, local or Tribal agency can request assistance either by email or by calling the toll-free number describing their needs to the FHWA-sponsored P2P coordinator. The coordinator will match the agency with a transportation professional that is experienced and knowledgeable in RSAs including expertise with particular issues or types of RSAs.

Upcoming Events

Registration is now open for the Mid-Atlantic Safety Team (MAST) Road Safety Audit (RSA) Forum and the Road Safety Audits for Local Governments Workshop on September 3-5, 2008 in Williamsburg, Virginia.

The RSA Forum will focus on common emphasis areas among the states including current progress, success stories, and ways to advance implementation of RSAs. This Forum will also serve as a peer exchange to facilitate discussion regarding RSAs.

All prospective attendees must register by August 22, 2008. The registration form is available on the FHWA RSA website:

http://safety.fhwa.dot.gov/rsa



The matched peer will then contact the agency to work out the details of the assistance to be provided within the program framework which can include a site visit as needed.

To contact the RSA Peer-to-Peer Program call (866) P2P-FHWA or email SafetyP2P@fhwa.dot.gov.

Contact Us

http://safety.fhwa.dot.gov/rsa Rebecca.Crowe@ dot.gov