

Using RSAs to Improve Highway Safety

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Safety is a major concern for road owners across the country, and while the number of fatalities on our Nation's highways has decreased in past years, the number of deaths remains unacceptable to the Federal Highway Administration (FHWA), State and local transportation agencies, and partners such as the American Public Works Association (APWA). Road Safety Audits (RSAs) are a tool that agencies can use to improve safety on their roadways. An RSA is defined as a formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team.

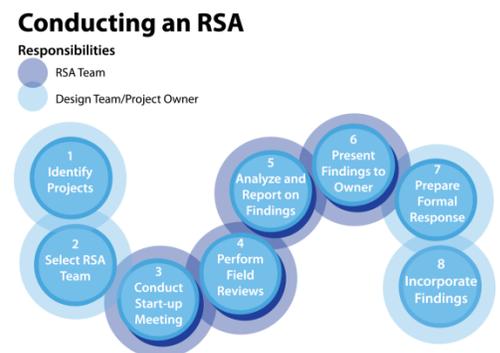
The eight step RSA process qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users (e.g., motorists, pedestrians, bicyclists, etc.). RSAs involve the following basic steps.

- Step 1: Identify the project or road to be audited.
- Step 2: Select an independent/multidisciplinary RSA team.
- Step 3: Conduct a pre-audit meeting to review project information.
- Step 4: Perform field reviews under various conditions.
- Step 5: Conduct an audit analysis and prepare a report of findings.
- Step 6: Present the audit findings to the Project Owner/Design Team.
- Step 7: Project Owner/Design Team prepares a formal response.
- Step 8: Incorporate findings into the project when appropriate.

Most of the improvements suggested in a typical RSA are low cost and can be implemented quickly such as signing, pavement markings, and vegetation control. Medium-cost options might include increasing paved shoulders, using the Safety EdgesSM, and installing rumble strips.

The following two examples illustrate how agencies are making their roads safer using RSAs.

An RSA performed on Purcell Road in Prince William County, Virginia documented significant elevation differences between the edge of the pavement and the roadside. Drop offs were several inches deep. The Virginia DOT addressed this safety issue immediately after the RSA through shoulder improvements. The before and after photographs





Purcell Road before the RSA



Purcell Road after the RSA

An RSA was performed at the intersection of State Road and Old County Road in West Tisbury, Massachusetts (on Martha's Vineyard) due to a number of severe injury crashes. The alignment of the intersection was confusing to the traveling public. Short term fixes included the installation of delineators and enhanced pavement markings, which were installed one week after the RSA and cost less than \$4,000.



State Road and Old County Road after RSA recommendations implemented

To assist agencies with conducting RSAs, FHWA has developed multiple resources including RSA Guidelines and Prompt Lists, RSA Case Studies, an RSA video, and RSA Toolkit CD. To view or download these materials, visit <http://safety.fhwa.dot.gov/rsa/>.

FHWA also operates an RSA Peer Assistance Program to provide technical assistance to agencies conducting their first RSA. Agencies requesting assistance will be linked with an FHWA sponsored peer with expertise in RSAs. The peer can provide guidance, and when necessary, on-site support during the RSA. This program is free of charge to public agencies. To request peer assistance, email safetyp2p@dot.gov, call the help line at (866) 727-3492, or submit a request for assistance online at <http://rspcb.safety.fhwa.dot.gov/technical.aspx>.

For more information on the FHWA RSA Program, contact Rebecca Crowe at rebecca.crowe@dot.gov.