

Road Safety Audits

Did You Know?

In New York State, crash reductions occurred at over 300 high crash locations treated with low cost improvements following RSAs. Crash reductions ranged from 20% to 40%, depending on the type of improvement implemented.

Source: FHWA Office of Safety

Background

The [Federal Highway Administration](#) defines a [Road Safety Audit \(RSA\)](#) as the formal safety examination of an existing or future road or intersection by an independent, multidisciplinary team. The purpose of an RSA is to identify potential safety issues and opportunities for safety improvements taking into account all roadway users. The overarching goal of an RSA is to improve safety along either an existing roadway or a new roadway in the planning, design, or construction stages. RSA's have been employed in other countries for some time, and are currently being fully embraced across the United States as a cost-effective opportunity to make significant safety improvements at any number of stages, ranging from project development and planning through existing operation. Furthermore, it is worth noting that RSA's have proven to be effective on projects of all shapes and sizes.

Purpose of Road Safety Audits

Road safety audits identify potential safety problems for road users and ensure that measures to eliminate or reduce the problem are taken into consideration. The aim of an RSA is to answer the following questions:

- What elements of the road may present a safety concern: to what extent, to which road users, and under what circumstances?
- What opportunities exist to eliminate or alleviate identified safety concerns? Additionally, road safety audits can result in the increased application of safe design practices.



Considering the Benefits and Costs

Deciding what countermeasures to consider will often depend on how much you have to spend and what the anticipated benefits are. One important aspect of the decision should be the expected benefit-to-cost ratio. Ideally, any selected improvements have benefits that outweigh the associated costs. Fortunately, RSA's frequently result in the identification of countermeasures that are low cost, can be implemented in a short timeframe, and improve safety.

EOT

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U.S. Department of Transportation
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The Audit Team

The first step in the RSA process is the selection of the multidisciplinary team, usually consisting of two to five people. The value of an audit team is a result of the varied perspectives, experience, and expertise of the team members. The audit team must be independent and unbiased. In addition to good communication, audit team members should have qualifications and experience in one or more of the following areas: crash investigation, traffic engineering, road design, traffic enforcement, roadway maintenance, EMS, or human factors.

Road Safety Audit Process

Once the audit team has been identified, background information on the roadway is assembled and an initial meeting is held. At this preliminary meeting, project information and drawings are customarily reviewed. Other valuable information such as traffic volumes or crash data for existing roadways should also be considered. Additionally, multiple field reviews can be completed to garner sufficient information. For example, site visits may be made in both day and night to adequately assess roadway conditions. Following review of this information the actual audit is conducted, and an audit report is prepared. The audit report must record all identified issues, along with the level of risk and potential countermeasures for each issue. It is important to make sure that all recommended countermeasures are practical and will address identified safety issues. RSAs typically provide an opportunity for proactive safety measures, and it is important to consider all possible resources in the development of countermeasures. For suggestions on possible countermeasure please see the low cost safety fact sheets within this toolbox series. Any countermeasures that are implemented should be evaluated in order to examine their effectiveness, which may prove useful in identifying effective countermeasures that may be employed on other roadways.

Resources

Federal Highway Administration Office of Safety

The Office of Safety works to reduce both the number and severity of crashes along U.S. roadways. The Office of Safety supports the development, testing, and implementation of technologies and procedures to improve the physical safety of the Nation's roadway infrastructure, and can be found at <http://safety.fhwa.dot.gov>

Massachusetts Traffic Safety Toolbox Series

This series of fact sheets provides information on safety improvements that can be implemented at the local level. Information on problem areas, possible countermeasures, and implementation considerations is included in each fact sheet which can be found at www.mass.gov/mhd/safetytoolbox/

Massachusetts Traffic Safety Toolbox Series

Select & Invite
Audit Team



Compile
Background Info



Conduct RSA
Meeting



Inspect the Site



Document Findings



Implement Changes



Evaluate

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