

R09 helps you create better estimates and budgets – enhancing project delivery and generating cost and schedule savings

Unmanaged risks can lead to project delays and increased costs—on projects of any size and scope. R09, also known as Managing Risk in Rapid Renewal Projects, can improve project outcomes by allowing teams to anticipate, assess, and plan up front, helping agencies mitigate risks (threats) and seize opportunities.

R09 is designed to help transportation agencies apply risk management in-house. A spreadsheet-based template guides project teams through the risk management process, which includes confirming project scope, strategy, and conditions; identifying, assessing, and prioritizing risks; and ultimately developing a strategy to mitigate and proactively manage risks. An accompanying [Guidebook](#) provides tools to assist with each step.

R09 in Action – Managing Risk

How Was R09 Implementation Measured?

FHWA evaluated the experiences of three lead adopter State transportation agencies—Florida, Oregon, and Pennsylvania departments of transportation. Evaluators also reviewed an R09 project completed by the Arizona Department of Transportation, a user-incentive grant recipient. The evaluation used data from planning documents and interviews to measure:

Dissemination:

The level of exposure that States had to R09 concepts and processes



Adoption:

The extent to which States institutionalized R09



Project Delivery:

The effect that R09 had on project cost and timeline estimates



The Benefits

The evaluation found that R09:

- Reduced project costs and shortened project timelines
- Helped agencies adopt risk management in their State agencies
- Allowed States to identify a more comprehensive and project-specific set of risks

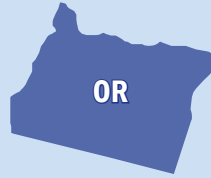
Address Risk throughout Project Lifecycle

Risk management in general has well-documented benefits, however it can be difficult to adopt agency-wide. R09 helped lead adopter States assess and address risk throughout the project lifecycle by:

- Empowering agencies to expose more of their staff to risk management
- Enabling agencies to host their own risk management training/education events
- Incorporating risk management into their standard policies, processes and procedures

Who Is Using R09?

FHWA offered SHRP2 Implementation Assistance Program (IAP) grants to fourteen States over three IAP rounds. Three lead adopter States and one user incentive State were considered for this evaluation. For additional details on some of these projects see [R09 case studies](#).



1 Florida Trained Many Staff Across Their Agency

Project: Widening of Florida's Turnpike (SR91) from SR 50/ Clermont to Minneola Interchange (MP 273-279)

Staff trained: 32 potential risk workshop facilitators and 150 project managers

Key Benefit: FDOT is incorporating R09 concepts into their policies and procedures.

2 Oregon Customized the R09 Template

Project: Ochoco Creek Bridge Replacement using Accelerated Bridge Construction (ABC)

Cost savings: \$600,000

Schedule savings: 0.9 months

Staff trained: 25 potential risk workshop facilitators

Key Benefit: ODOT engaged a broad set of stakeholders, which resulted in a better collective understanding of project decisions.

3 Pennsylvania Adopted a Risk Management Policy

Project: Historic Cementon Bridge Replacement

Staff trained: 50 potential risk workshop facilitators

Key Benefit: R09 helped PennDOT make the decision to avoid ABC for this project, due to constructability concerns, potential public opposition to temporary bridge closure, and minimal agency experience with ABC.

4 Arizona Identified Opportunities

Project: US-60/Bell Road Interchange Improvement

Cost Savings: \$10.9M

Schedule Savings: 10 months

Key Benefit: Identified and seized opportunity to close Bell Road to expedite construction and save money.

How Can Agencies Use R09 Effectively?

The evaluation reported the following best practices for effectively using R09.

- Connect with [FHWA staff](#) to stay up-to-date with the R09 tool use
- [Connect](#) with current R09 users to learn from their experiences
- Use R09 frequently to familiarize staff and master the use of the tool
- Select the right risk management tool for the project. While R09 can be adapted to fit projects of any size, agencies reported the best outcomes when using the tool on projects complex enough to benefit from a workshop, yet not large enough to justify hiring outside consultants.

- Engage agency leadership and staff, as well as local stakeholders, on the importance and adoption of risk management.
- It is easier to adopt new processes, like R09 risk management, with strong support from upper management.
- Actively engaging staff and leadership will help combat obstacles such as skepticism or staff turnover.

Learn More

Visit the R09 website to learn more about SHRP2 solutions in the field.

<https://www.fhwa.dot.gov/GoSHRP2/Solutions/Renewal/R09>



Implementing SHRP2

The second Strategic Highway Research Program (SHRP2) is a national partnership of the Federal Highway Administration, the American Association of State Highway and Transportation Officials, and the Transportation Research Board. Together, these partners conducted research and are deploying resulting products to help the transportation community enhance productivity, boost efficiency, increase safety, and improve the reliability of the Nation's highway system.