

WORK ZONE MANAGEMENT PROGRAM

UTILIZING THE WORK ZONE CAPABILITY MATURITY FRAMEWORK DURING WORK ZONE PROCESS REVIEWS

Transportation agencies receiving federal-aid must conduct biennial Work Zone Process Reviews (WZ PRs) to analyze their current policies and procedures for managing work zone traffic operations (23 CFR 630). In an environment of constrained resources, agencies are pressed to find the time for comprehensive self-evaluation or to conduct broad reviews of agency practice. Escaping from a cycle of maintaining the status-quo can be a difficult challenge to overcome.

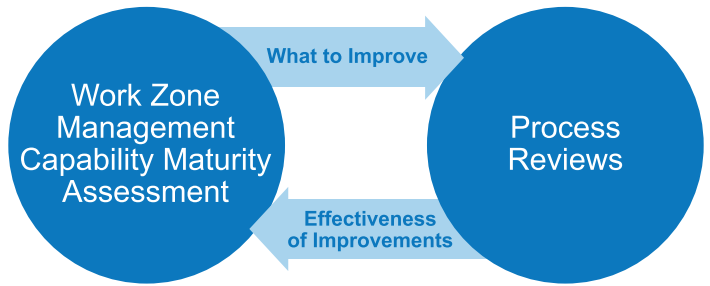
In response, the Federal Highway Administration (FHWA) has developed the Work Zone Capability Maturity Framework (WZ CMF), providing a structured approach for accomplishing WZ PR objectives.

Work Zone Capability Maturity Framework

Capability maturity frameworks (CMFs) promote a process driven approach to improve a State transportation agency's Transportation Systems Management and Operations (TSMO) program. The WZ CMF promotes the same approach to improve an agency's work zone management program capabilities across six process areas:



The framework provides a process to evaluate the effectiveness of work zone traffic management including assessing work zone impacts and implementing strategies for mitigating these impacts. Described as a matrix that defines process improvement areas and levels of capability the framework follows a self-assessment process and suggests specific actions to increase capabilities across the six process areas. A collaborative process is recommended for using the CMF and all stakeholders should be represented during the self-assessment.



The output of the WZ CMF is a consensus of current capabilities and a set of achievable goals and action items. More details on the CMFs and associated online tools can be found on the FHWA Office of Operations web site: <http://www.ops.fhwa.dot.gov/tsmoframeworktool/>.

Using the Framework in Work Zone Process Review

The use of the framework is recommended during an agency's biennial update of their WZ PR as the use of the framework provides a structured approach to review the complex institutional architectures and business processes required to make work zone management a success. By reviewing the "nontechnical" issues in detail and implementing the prioritized actions, agencies will increase the capability and sophistication of their work zone management program.

WZ PRs require agencies to analyze their current policies and procedures for managing work zone traffic operations. These Process Reviews involve a cyclical, continuous improvement approach that begins with identification of work zone management issues, follows with establishing goals for addressing those issues, and concludes with reviewing how well follow-up actions worked towards meeting goals. The integration of the WZ CMF into the Process Review cycle aids in an agency's efforts to continuously improve their work zone management efforts by creating a feedback loop involving the identification of needed improvements and an evaluation tool for implemented improvement actions.

Process Improvement Areas **Capability Levels**

Dimensions or Process Areas	What is it	Level 1 Ad-Hoc, Low Level of Capability	Level 2 Managed, medium Level of Capability	Level 3 Integrated, High Level of Capability	Level 4 Optimized, Highest Level of Capability
Business Process	Plans, Programs, Budgets	Statement of Capability			
Systems and Tech	Approach to Building Systems		Step 1 Self-Assessment. Work with our stakeholders to assess where you are in terms of the capabilities in each area		Step 2 Identify areas of improvement and the desired levels of capability to improve program effectiveness
Performance Measurement	Use of Performance Measure				
Workforce	Improving Capability of Workforce				
Culture	Changing Culture and Building Champions		Step 3 Identify actions that you need to take to move to the desired levels of capability		
Collaboration	Improving Working Relationships				

Using the WZ CMF During Process Reviews

- **Jumpstarts the improvement process**
 - Focus is on immediate weaknesses
 - Helps prioritize key organizational changes that can have major impacts
- **Provides justification for actions based on sound rationale and a consistent assessment of capability**
- **Improves consistency and collaboration**

The WZ CMF also provides agencies with insight on their weakest work zone management areas, helping agencies more easily determine where they should focus their Process Review efforts.

The WZ CMF combines an agency self-assessment with an action plan development tool for setting achievable goals based on an agency's identified capabilities in key performance areas. This process of proactive self-evaluation and goal-setting closely resembles the requirements for WZ PRs.

Get Involved

FHWA recognizes the benefits of combining the WZ CMF approach for self-assessment and goal-setting with the reporting requirements for the WZ PRs. Accordingly, FHWA is encouraging transportation agencies to regularly complete a WZ CMF self-assessment during their biennial Process Reviews.

While completing a WZ CMF self-assessment does not fulfill the requirement to conduct a Process Review, this self-assessment process presents an opportunity for direct and tangible benefits to participating agencies, including:

- **Reduced effort and improved results** from self-evaluation and goal-setting,
- **Productive discussion** between departments within an agency who do not regularly communicate with each other, but have shared objectives with respect to work zone management,
- **Tailored actions** to advance agency capabilities that can help guide future process review efforts and lead to quick successes.

FHWA has many successful examples of transportation agencies incorporating the WZ CMF into their WZ PR efforts, as well as examples of transportation agencies implementing the action items suggested in the WZ CMF.

Additional resources and information on work zone management and improving work zone safety and mobility can be found through FHWA's Work Zone Management Program: <https://ops.fhwa.dot.gov/wz>

For more information on the WZ CMF, please contact Jawad Paracha (Jawad.Paracha@dot.gov)