Effective Post Construction Evaluation Practices for Work Zone Management Strategies

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Abstract

State Departments of Transportation (DOTs) invest a significant amount of efforts to develop and implement Transportation Management Plans (TMPs) in order to effectively manage the traffic flow of work zones and secure the safety of workers and the traveling public during construction of highway projects. State DOTs typically spend on average 3 to 5 percent of the total construction cost for TMP development and implementation, but some urban projects in highly congested area may require up to 30% of the total construction cost. For continuous improvement of TMP development and implementation, it is critically important to monitor the performance of work zone management strategies during construction and evaluate it at the conclusion of construction. However, most state DOTs significantly lack structured policies and/or work processes to ensure the implementation of these important monitoring and evaluation components as part of TMP. A working feedback loop must be established in the project delivery process to document lessons learned, successes and failures, any potential changes to TMP and transfer them back to the early TPM development stage. This research extensively reviews existing literature and evaluates the current practices of monitoring and evaluating work zone management strategies via a national survey of DOTs and interviews with DOT engineers and contractors. This study identifies and presents effective practices for continuous improvement of TMP development and implementation through creating a working feedback loop.

Keywords: Work Zone Safety, Post Construction Evaluation, Transportation Management Plan,

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