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16. Abstract <p>Faced with growing number of work zones, the challenge for transportation agencies is to effectively manage the impacts of work zones to alleviate congestion and maintain the safety of motorists without disrupting project schedules. Coordinating work zone activities and improving communication among agencies have already been practiced by various State DOTs and transportation agencies. The main objective of this study is to understand the types of projects that can be coordinated and to evaluate the effectiveness of coordinating short and long-term projects using a cost-benefit analysis approach to measure the efficiency of various combinations of projects relative to each other and the status quo.</p> <p>For this purpose the research team conducted an extensive literature review, determined the state of practice in other State DOTs and conducted interviews with NJDOT staff to investigate the types of projects undertaken by NJDOT and if there were already any practice of work zone coordination on NJ roadways. The team, after consulting with the project panel and the NJDOT Mobility and Systems Engineering division, devised a work zone coordination framework that utilizes one common work zone database, including OpenReach and Capital Program Management (CPM) Project Reporting System (PRS) databases.</p> <p>Work Zone Coordination Spreadsheet (WCS) tool was developed for providing NJDOT with an easy-to-use tool to evaluate the feasibility and effectiveness of coordinating short and long term work zones and measure the benefits of various combinations of projects relative to each other and the status quo. This on-line tool is implemented with a web-based user interface. It integrates all scheduled and active construction projects from the OpenReach database and planned CPM projects from project reporting system (PRS) database. It then identifies conflicts between work zone projects and estimates the benefits of conflict mitigation.</p>			
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