

Importance of Diverse Stakeholder Engagement to Project Coordination Efforts

SMARTER WORK ZONES PROJECT COORDINATION

Project coordination is the proactive planning and management of construction projects to minimize work zone traffic impacts. Project coordination may involve a single project or multiple projects within a corridor, network, or region, and possibly across agency jurisdictions.

This fact sheet focuses on ways that stakeholders with right of way assets coordinate with other groups to minimize travel delays, improve safety, maintain access, and complete road work on time. Transportation agencies should have established business processes for engaging stakeholders early in the project development and transportation management planning process to ensure that a full range of possibilities can be considered. Although not all groups may have a direct interest in all objectives of a project, they may provide valuable feedback to agencies about reducing construction impacts, disseminate information to travelers, or make internal adjustments to their operations that could reduce traffic impacts in the work zone.

Beyond travelers and other transportation agencies, potential stakeholders to engage include:

- Service patrol
- Law enforcement
- First responders
- Local school districts
- Utility companies
- Taxi organizations
- Transit agencies
- Freight organizations

- Planning organizations
- Public officials
- Residents
- Media
- Local businesses
- Major event venues
- Major traffic generators

Example Benefits of Project Coordination

Law Enforcement. Federal regulations require state DOTs to have a policy regarding provision of law enforcement in work zones. Law enforcement should be engaged early during project planning to be aware of planned activities, and provide input based on their prior experiences.

During construction, law enforcement can help to slow travelers approaching the work zone or end of a queue. Project personnel should coordinate daily with law enforcement to ensure that enforcement is positioned in beneficial locations and effectively utilized. Failure to do so can create negative work zone safety or mobility impacts.



Figure 1: The presence of law enforcement can help to improve work zone safety.
(Source: FHWA)

- Positioning a law enforcement vehicle upstream of a shadow vehicle/truck-mounted attenuator places the enforcement officer in an unsafe location.
- Failure to coordinate law enforcement location during a switch from a left to a right lane closure during a work operation can create a situation where the officer is suddenly parked in an open lane of traffic.
- Failure to notify an officer about traffic sensor locations within and upstream of a project can result in them parking in front of a sensor and rendering that sensor unusable for traffic monitoring purposes.
- Coordinating enforcement use in conjunction with a dynamic late merge system is critical. States with a "move over law" require motorists to vacate the lane adjacent to where an officer is positioned. If the enforcement vehicle is located upstream of the work zone where motorists have been instructed to remain in their lane in queue to a lane closure merge point, the strategy is unlikely to have the intended effect due to motorists attempting to comply with the move over law by moving into the lane(s) away from the enforcement vehicle.

First Responders. Project coordination with fire departments and emergency medical services can provide valuable feedback to the agency and improve work zone safety.

 A bridge replacement project on I-376 near Pittsburgh from 2009-2011 would originally have required first responders to take a five-mile detour on the interstate, dramatically impacting response times. The Pennsylvania DOT worked with first responders to clarify responder needs about emergency access through the work zone and identify a viable technology solution. Temporary emergency turnarounds were placed in the median to reduce the detour to 2000 feet, and an Emergency Vehicle Conflict Warning System was developed and deployed specifically for this project to minimize concerns about limited sight distances. Siren-activated emergency preemption technology allowed responders to trigger portable dynamic message signs 43 times over the course of the deployment to alert travelers of slow-moving emergency vehicles entering the travel lane.

Local School Districts. Transportation agencies should be aware of local school schedules and try to minimize projects occurring near schools or with an excessive impact on school bus routes when scheduling seasonal construction. When this is not possible, engaging schools near work zones can reduce both safety and mobility impacts.



Figure 1: NCDOT collaborated with the Wake County Public School System to mitigate work zone mobility impacts (Source: NCDOT)

- The North Carolina DOT (NCDOT) met with the Wake County School System to discuss the impacts of a major project on I-40 and I-440 in Raleigh. As a result, bus routes and schedules were adjusted based on the work zone schedule to account for and minimize their delay, while also easing mobility within the work zone itself.
- Schools can communicate to staff, parents, and students about work zone safety and travel alternatives.

Table 1: NCDOT identified potential work zone impacts to local Wake County School System buses

School District	Simulation Findings
Apex	5 runs will have problem
Cary	No impact
Green Hope	4 runs will have problem

Freight Organizations. A number of states engage trucking and port associations to disseminate information about work zones. This allows truckers to plan accordingly and consider alternate routes to minimize impacts to freight movements, while also providing an opportunity for feedback that agencies can use to modify their approach.

- The Washington State DOT (WSDOT) informs trucking and port associations about planned construction activities and their impacts to freight movements at annual stakeholder project coordination meetings.
- The Massachusetts DOT engaged the state port authority to alert them of expected impacts to their airport bus shuttles and truck traffic for a major road closure in Boston. Realizing the value it would offer, the port authority was provided real-time data to help them manage their fleets and prevent unnecessary delays.
- The Pennsylvania DOT has involved State Motor Truck
 Association representatives to help identify, develop, and
 implement actions to reduce work zone crashes since
 1995, due to the high number of fatal crashes involving
 commercial vehicles in or near work zones.

Major event venues and other major traffic generators.

Agencies should track major planned special events, which may require engaging those venues. By coordinating with these venues, agencies and contractors can avoid lane or road closures during peak travel times to and from those events.

- WSDOT and the District of Columbia DOT document planned special events to assist project coordination.
- Major traffic generators near a planned work zone can share information with travelers in very visible ways at an event, e.g., a program or stadium scoreboard.

Agencies should have business processes in place about engaging a wide variety of stakeholders, recognizing that stakeholders can provide feedback, disseminate traveler information, or adjust operations to reduce work zone impacts.

Additional resources on SWZ project coordination strategies can be found at: https://www.workzonesafety.org/swz/project_coordination

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