Work Zone Impacts Considerations	Project Design Notes
Project Characteristics	
<ul> <li>Project type.</li> <li>Project size, extent, duration, and complexity.</li> <li>Roadway classification.</li> <li>Area type (urban, suburban, rural).</li> </ul>	
Travel and Traffic Characteristics	
Traffic demand and volumes.	
<ul> <li>Seasonal and temporal variations in demand (hourly, daily, or weekly).</li> </ul>	
Occurrence of special events.	
<ul> <li>Percentages of different vehicular volumes (autos – Single-Occupancy Vehicle, High- Occupancy Vehicle; trucks; or buses).</li> </ul>	
<ul> <li>Type of travel (commuter or tourist), freight corridor, transit corridor.</li> </ul>	
<ul> <li>Public and private facility access issues.</li> </ul>	
<ul> <li>Potential impacts of weather.</li> <li>Other such similar characteristics.</li> </ul>	
Corridor, Network, and Community Issues	
<ul> <li>Impacts of the project at both the corridor and network levels including parallel corridors, alternate routes, the transportation network, other modes of transportation, and impacts of other work zones in the vicinity of the project, either at the corridor level or the network level.</li> </ul>	
<ul> <li>Impacts on nearby transportation infrastructure such as key intersections and interchanges, railroad crossings, public transit junctions, and other junctions in the transportation network.</li> </ul>	
<ul> <li>Impacts on evacuation routes in the vicinity of critical transportation or other infrastructure.</li> </ul>	
<ul> <li>Impacts on affected public properties, including parks, recreational facilities, fire stations, police stations, and hospitals.</li> </ul>	
<ul> <li>Impacts of the project on affected private properties, including businesses and residences.</li> </ul>	

### Design, Procurement and Construction **Options** Temporal alternatives for work performance such as season, month, day of week (weekend versus weekday), and time of day (night time versus day, off-peak versus peak). Alternative lane closure strategies such as full closure, partial closure, crossovers, multiple lane closure, single lane closure, and impact of alternative traffic management strategies on lane-closure decisions. Alternative design solutions that address the durability and economy of maintenance of the roadway. Alternative design solutions and strategies that impact decision-making on right-of-way (ROW) acquisition. Alternative construction staging plans, and construction techniques and methodologies (e.g., accelerated construction techniques) that may have varying types and severity of work zone impacts. Alternative contracting methodologies such as design-build, A+B bidding, and incentive/disincentive contracting. Work Zone Design and Safety Issues Cross-sectional issues such as lane widths, shoulder availability and widths, and number of lanes available for travel. Longitudinal issues such as taper widths, taper lengths, and stopping sight distance. Horizontal and vertical sight distance. Project signing and advance warning. Roadside devices and safety. Work area separation, channelization, and protection (e.g., positive separation, barrels, cones, clear zone considerations, construction zone intrusion detection). Work area and worker delineation (visibility, retroreflectivity, etc.). Work site access and access points. Visibility issues (e.g., night-time work, lighting, fog). Curvature and gradient – vertical and horizontal. Speed – posted speed limits, speed zoning, etc. Work zone enforcement (e.g., use of uniformed police officers and/or patrol cars, active enforcement using radar guns and/or automated enforcement).

## T.T.C. Strategy Considerations Traffic safety and capacity requirements. Alternate route scenarios. Potential impacts on other corridors, nearby intersections/interchanges, and the larger transportation network. Lane closure types and strategies (full-closure, lane-width restrictions, cross-overs, positive separation, etc.). Work zone and work area configurations. Traffic safety and control checklists for developing a TMP. T.O. Strategy Considerations Deployment of ITS technologies for work zone traffic monitoring and management. Provision of real-time traveler information to the public, including web-based information. Application of transportation systems management (TSM) and corridor management strategies, including mitigation treatments for alternate routes (e.g., traffic signal timing adjustment on affected corridors), and alternate modes (e.g., public transit subsidies, incentives, and special programs). Coordination of transportation management with existing regional transportation management centers (TMCs). Conduct of mobility and safety reviews and Speed enforcement and management in work zones using either police officers or automated techniques. Traffic incident management plans for work Policies on work zone traffic management during emergencies (e.g., hurricane evacuations). P.I. Strategy Considerations Provision of project and work zone information prior to the commencement of the work in order to make the public aware of the expected work zone impacts and the State's actions to mitigate the impacts. Recommendations to the public on commuter alternatives, such as information on alternate routes and/or modes. Provision of information on changing conditions on the project during implementation (e.g., changes in lane closure scenarios, construction staging, construction times, or alternate routing).

- Obtaining public input for the development of appropriate work zone impacts management strategies during the planning and design phases of the project; refinement of work zone management strategies during project implementation; and feedback on performance of the work zone and the project following the completion of the project.
- Dissemination of information through brochures, pamphlets, and media sources including newspapers, television, radio channels, and web sites.
- Public meetings and hearings.
- Coordination and cooperation with affected public and private parties.