

Delete **FDM 240.2.1.2** and replace with the following:

### **240.2.1.2 Work Zone Speed**

Work zone speed is used with the [Standard Plans, 102 Series](#), and to select geometric elements within the project limits.

Work zone speed should be the existing posted speed. The existing posted speed is defined as the posted speed prior to the start of any work zone activity. A reduction from the existing posted speed should only be made when geometric constraints make it necessary, when implementing the Motorist Awareness System (MAS) in accordance with **FDM 240.2.2.12** and **Standard Plans, 102 Series**, or when including Smart Work Zone (SWZ) strategies following the guidance of **FDM 240.6**. Include the justification for reduction in existing posted speed in the project documentation (see **FDM 111.7**). The TTCP and the project documentation will suffice as a traffic and engineering investigation.

A work zone speed more than 10 mph below the existing posted speed requires the approval of the District Traffic Operations Engineer, and the District Director of Transportation Operations.

A work zone speed below the minimum statutory speed for the class of facility is prohibited.

For projects with interspaced work activities (such as interstate resurfacing), locate speed reductions in proximity to those activities which merit a reduced speed, and not “blanketed” for the entire project.

Delete **FDM 240.3** and replace with the following:

### **240.3 Transportation Operations Plan**

The Transportation Operations Plan (TOP) contains strategies to improve mobility, work zone access, and safety. Strategies will include items such as work zone Intelligent Transportation System (ITS) components, Smart Work Zone (SWZ) strategies (see **FDM 240.6**), and incident management. **Table 240.3.1** provides common TOP items.

A TOP should be considered for significant projects, as defined in **FDM 240.1**.

**Table 240.3.1 Transportation Operations Strategies**

Category			
Demand Management	Corridor/Network Management	Work Zone Traffic Management	Safety Management and Enforcement
Transit services improvements	Signal timing/ coordination improvements	Speed limits reduction or variable speed limits, Speed harmonization	ITS for traffic monitoring and Management
Transit incentives	Temp. traffic signals	Temp. traffic signal	Transportation Management Center (TMC)
Shuttle services	Intersection improvements	Temp. barrier	Aerial surveillance
Ridesharing/ carpooling incentives	Bus turnouts	Crash Cushions	Milepost markers
Park-and-Ride promotion	Turn restrictions	Automated flagger assistance devices (AFAD)	Service patrol
HOV lanes	Truck restrictions	On-site safety training	Local detour routes
Variable work hours	Dynamic lane close system	TMP inspection team meetings	Contract support for incident management
Telecommuting	Ramp closures	Dynamic lane merge	Incident/emergency response plan
	Railroad crossing controls	Dynamic queue detection and warning	Law enforcement
			Dynamic work zone intrusion detection and warning

Delete **FDM 240.4** and replace with the following:

## **240.4 Public Information Plan**

The Public Information Plan (PIP) describes how project information will be communicated to affected parties, traveling public, and project stakeholders prior to and during construction. The PIP will also describe the most efficient method of communicating this information (e.g., local media, business groups, message signs). The PIP should be integrated into the project's Community Awareness Plan (CAP) when the CAP is to include communication strategies.

A PIP should be considered for significant projects, as defined in **FDM 240.1**.

When Smart Work Zone (SWZ) strategies and technologies are included in the TTCP, incorporate a communication plan to inform the traveling public about the intent, features, and duration of the strategies included on the project.

See the following for additional information on public involvement and CAP requirements:

- (1) **FDM 104**
- (2) [Public Involvement Handbook](#)
- (3) [PD&E Manual](#)

Insert the following into **FDM 240**.

## **240.6 Smart Work Zones**

Smart Work Zones (SWZ) include a wide range of innovative technologies and coordination strategies that lead to safer and more operationally efficient work zones. SWZs use intelligent transportation systems to manage work zone traffic dynamically and provide advanced notification of work zone traffic conditions in real-time.

Reference the following documents when implementing SWZ strategies and technologies in the TTCP:

- (1) **Developmental Standard Specifications 102 and 900**
- (2) **Developmental Standard Plans (DSP)**
- (3) **FDOT Smart Work Zone Guidebook (under development)**
- (4) **FHWA Guidance on Using Intelligent Transportation Systems (ITS) in Work Zones**

## 240.6.1 SWZ Strategies and Technologies

The ***FHWA Guidance on Using Intelligent Transportation Systems (ITS) in Work Zones*** and the ***FDOT Smart Work Zone Guidebook*** provide guidance on selection and development of SWZ strategies and the various SWZ technologies included. Smart work zone strategies include the following:

- Work Zone Data Exchange (WZDx) SWZ Location Devices
- Dynamic lane merge (DLM)
- Dynamic end of queue detection and warning (DQW)
- Dynamic speed harmonization (DSH)

More complex projects may benefit from a combination of the various strategies listed above while more basic projects may benefit from implementing specific technologies to improve operational performance or driver awareness. For example, including SWZ Location Devices allows the work zone limits to be identified by third party traveler information service providers (i.e., onboard real-time vehicle navigation systems).

## 240.6.2 Smart Work Zone Criteria

The use of Smart Work Zone (SWZ) strategies and technologies is based on the following primary factors:

- Highway Functional Classification,
- Existing Posted Speed,
- Level of Service or anticipated work zone traffic congestion
- Work Zone Traffic Impacts (i.e., lane closures, diversions, and lane shifts), and
- Construction duration.

Additional consideration should be given to projects based on the following:

- Truck Volume,
- Speed compliance or variability,
- Crash History,
- Frequent changes in traffic conditions,
- Projects with sight distance, lateral offset, clear zone, or other geometric constraint; and,
- Emergency, special event, or traffic incident management.

Include SWZ strategies for all projects on limited access or high speed roadways with Level of Service E/F (existing or anticipated during construction), with work zone traffic

impacts lasting 5 days or more, and with a construction duration 6 months or greater. Consideration should also be given to implementing SWZ strategies on projects where work zone traffic impacts are anticipated to cause queuing or travel time delays.

Coordinate with District Construction and Traffic Operations for the implementation of SWZ strategies or technologies on all other projects. At a minimum WZDx SWZ Location Devices should be included in the TTCP.

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