

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. <u>Speed harmonization</u>	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	<u>Dynamic lane merge</u>	Incident/emergency response plan
	Railroad crossing controls	<u>Dynamic queue detection and warning</u>	Law enforcement

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)

Projects should include SWZ Location Devices which allow the work zone to be identified by third party traveler information service providers (i.e., onboard real-time vehicle navigation systems). Typically, only one additional SWZ strategy or MAS should be used in conjunction with the WZDx SWZ Location Devices in order to simplify the design and deployment of devices in the field.

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.