

TRAFFIC ENGINEERING AND OPERATIONS BULLETIN 20-03

DATE: November 2, 2020

TO: District Traffic Operations Engineers, District Design Engineers, District Maintenance Engineers, District Program Management Engineers and Administrators

FROM: Trey Tillander
Director, Traffic Engineering and Operations

COPIES: Will Watts, Tim Lattner, Rudy Powell, Stefanie Maxwell, State Traffic Engineering and Operations Office, Khoa Nguyen (FHWA)

SUBJECT: **Traffic Engineering Manual**

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This bulletin announces release of the 2021 Traffic Engineering Manual (TEM) which is available on the State Traffic Engineering and Operations website:

<https://www.fdot.gov/traffic/trafficservices/studies/tem/tem.shtm>

SUMMARY OF REVISIONS

- **Chapter 2 Signs**
 - **Section 2.11 – Guidelines for Use of Bicycle Signs:** Added guidance for the use of a bicycle passing clearance sign for driver awareness and safety.
 - **Section 2.14 – Signing for Emergency Management:** Updated the FTP number in **Section 2.14.4 (4)** from “FTP-78-07” to “FTP-78-06”. Deleted the requirements for continuous hinge and added a link to the **FDOT Standard Plans** to avoid duplication.
 - **Section 2.21 – Florida Litter Law Signs:** Added a reference and linked to the related Florida statute in **Section 2.21.2(2)**.
 - **Section 2.32 – 511 Telephone Service Sign:** Updated the graphic on the Travel Info Call 511 sign.
 - **Section 2.39 – Warning, Stop, and Yield Sign Sizes:** Updated the STOP sign size in Table 2.39-3 to 30 inches for the 20 mph POSTED SPEED to remain in compliance with the MUTCD. The update impacts the Maintenance Office.

Chapter 3 Signals

- **Section 3.6 – Standardization of Yellow Change and Red Clearance Intervals:** Added guidance for calculating the yellow change interval to improve safety and made minor editorial updates.
 - **Section 3.8 – Traffic Signal Preemption Time Calculation:**
 - Moved previous **Section 3.8 “Marked Pedestrian Crosswalks at Midblock and Uncontrolled Approach Locations”** to **Section 5.2** as a new section and changes Section Title to **“Treatments for Pedestrian Crosswalks at Midblock and Unsignalized Intersections”**.
 - New **Section 3.8** provides guidance for determining the required preemption time for traffic signals adjacent to highway at grade rail crossings equipped with an active warning system to improve operation and safety. The new section impacts the Rail Office.
 - **Section 3.9 – Installing Signal Backplates on Existing Structures:** Incorporated the section into TEM in accordance with requirements issued under Traffic Operation Bulletin 20-02. The new policy will reduce structural analysis criteria when flexible backplates are added to existing signal structures. The new section impacts the Structures Office.
 - Rescinded **Section 3.9 “Countdown Pedestrian Signal Head Applications”** has been removed from the TEM.
 - **Section 3.10 – Flashing Yellow Arrow Signal Application:** Updated guidance on yellow left turn trap and added language referencing Traffic Operation Bulletin 20-02 for reducing wind load requirements. Provided guidance on left-turn phasing for locations with history of non-compliant driver yielding behavior to pedestrians to further improve safety.
 - **Section 3.11 – Leading Pedestrian Interval Signal Application:** Revised criteria for leading pedestrian interval (LPI) signal applications requiring engineers to consider LPI for all new traffic signal installations. Provided guidance on LPI applications for protected and permissive left-turn movements to improve pedestrian safety.
- **Chapter 4 Markings**
 - **Section 4.5 – Express Lanes Markings:** Section updated to replace “express lanes marker” with “Tubular marker”.
 - **Chapter 5 Specialized Operational Topics**
 - **Section 5.2 – Treatments for Pedestrian Crosswalks at Midblock and Unsignalized Intersections**
 - **Section 5.2** contains restructured standards and guidance changed from the previous **Section 3.8 “Marked Pedestrian Crosswalks at Midblock and Uncontrolled Approach Locations”** to clarify and introduce new pedestrian crossing treatments for improving pedestrian safety. New **Section 5.2** gives guidance for pavement markings, signs, beacons, signals, and other treatments

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for midblock and unsignalized intersections. The new Section will impact Roadway Design Office and Safety Office.

COMMENTARY

The non-editorial revisions and additions to the TEM in this bulletin will advance Vital Few Safety and Mobility throughout the State. All sections have been reviewed by FHWA and Districts counterparts and all comments from reviewers have been addressed accordingly. All revisions in this bulletin will ensure accurate and consistent implementations with no shift of risk issues.

IMPLEMENTATION

These changes are effective on projects beginning design on or after January 1, 2021 and on projects currently in the design phase where implementation will not adversely impact production schedules.

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