The Florida Senate

BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By:	The Professional Staff of the Appropriations Subcommittee on Transportation, Tourism, and Economic Development
BILL:	PCS/CS/SB 1000 (684990)
INTRODUCER:	Appropriations Subcommittee on Transportation, Tourism, and Economic Development; Infrastructure and Security Committee; and Senators Perry and Mayfield
SUBJECT:	Traffic and Pedestrian Safety
DATE:	February 20, 2020 REVISED:

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Price	Miller	IS	**Fav/CS**
2.	McAuliffe	Hrdlicka	ATD	**Recommend: Fav/CS**
3.			AP	

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

PCS/CS/SB 1000 requires that before a pedestrian crosswalk on a public highway, street, or road which is located at any point other than at an intersection with another public highway, street, or road (midblock crosswalk) can be installed, a traffic engineering study must be conducted by a Florida licensed profession engineer and the study must recommend installation of the midblock crosswalk.

A midblock crosswalk on a public highway, street, or road with a posted speed limit more than 20 miles per hour must be controlled by coordinated traffic control signal devices and pedestrian control signals that conform to the requirements of Chapters 4D and 4E of the most recent Manual on Uniform Traffic Control Devices (MUTCD) and other applicable Florida Department of Transportation (FDOT) specifications. Traffic control signal devices and pedestrian control signals at a midblock crosswalk must be coordinated with traffic control signal devices at intersections adjacent to the crosswalk.

All midblock crosswalks on public highways, streets, or roads, including any on a public street with a posted speed limit less than 20 miles per hour, must include pedestrian-facing signs informing the pedestrian of duties applicable to a pedestrian.

By October 1, 2026, the entity with jurisdiction over a public highway, street, or road with a described midblock crosswalk which is in existence on July 1, 2020, must ensure that the

crosswalk is controlled by coordinated traffic control signal devices and pedestrian control signals. Alternatively, the entity with jurisdiction may remove any the existing crosswalk.

The bill recites the Legislature's finding and declaration that the bill fulfills an important state interest.

The bill is expected to have a significant negative fiscal impact on state and local government expenditures. However, the extent of the impact is indeterminate because the number of midblock crosswalk locations and their current traffic control design treatments is unknown. Additionally, the number of locations that will be modified to comply with the bill's requirements and the number of midblock crosswalks to be removed is unknown. See Section V.

The bill takes effect July 1, 2020.

II. Present Situation:

The MUTCD and FDOT Specifications

Traffic control signal devices are for the control of vehicular and pedestrian traffic. They assign the right-of-way to various traffic movements and influence pedestrian and vehicle traffic flow. When properly designed such devices provide for the orderly movement of traffic, increase the traffic capacity of an intersection, reduce the frequency and severity of crashes, provide for predictable movement of traffic and pedestrians, and interrupt heavy traffic at intervals to permit vehicles and pedestrians to cross safely.[1]

The MUTCD "is a compilation of national standards for all traffic control devices, including road markings, highway signs, and traffic signals." States are currently required to adopt the 2009 edition of the MUTCD (which includes revisions and interim approvals) as the legal state standard for traffic control devices.[2] Section 316.0745, F.S., requires FDOT to adopt the MUTCD as the uniform system of traffic control devices for use on the streets and highways of this state.[3] The FDOT has additional specifications that apply to given roadway markings, highway signs, and traffic signals and that are recognized by the Federal Highway Administration.[4]

The MUTCD provides transportation engineers with information necessary to make appropriate decisions regarding the use of all traffic control devices. There are both provisions that are mandatory and provisions that require the use of engineering judgment. Part 4 of the MUTCD addresses highway traffic signals and recites a basic tenant found throughout the MUTCD: "The selection and use of traffic control signals should be based on an engineering study of roadway, traffic, and other conditions." Further, "[e]ngineering judgment should be applied in the review

[1] *See* Federal Highway Administration (FHWA), *Manual on Uniform Traffic Control Devices for Streets and Highways*, available at https://mutcd.fhwa.dot.gov/index.htm (last visited January 31, 2020).
[2] *Id.*
[3] *See* FHWA, *MUTCDs & Traffic Control Devices Information by State*, available at https://mutcd.fhwa.dot.gov/resources/state_info/index.htm (last visited January 31, 2020).
[4] *See* FHWA, *Florida, MUTCD State Information*, available at https://mutcd.fhwa.dot.gov/resources/state_info/florida/fl.htm (last visited January 31, 2020).

of operating traffic control signals to determine whether the type of installation and the timing program meet the current requirements of all forms of traffic."[5]

The MUTCD contains a series of "signal warrants," established following "careful analysis of traffic operations, pedestrian and bicyclist needs, and other factors at a large number of signalized and unsignalized locations, coupled with engineering judgment, that define the *minimum* conditions under which installing a traffic control signal might be justified."[6] The MUTCD directs transportation engineers to conduct an analysis of conditions related to operation and safety at a given location, the potential to improve those conditions, and the factors contained in any of those signal warrants.

However, "[t]he satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal."[7] Other engineering considerations are required with respect to midblock crosswalks.

Midblock Crosswalks

Crosswalks at any location other than at an intersection are referred to as "midblock" crosswalks, crossings, or locations in the MUTCD. The design treatment of traffic control and pedestrian signals take various forms and can range, for example, from a flashing yellow pedestrian crossing signal to use of full (red, yellow, and green displays) traffic control signals. Concerns have been raised over use of what are called pedestrian hybrid beacons[8] at midblock crossings, some of which display only flashing yellow lights to vehicular traffic when activated by a pedestrian crossing a highway, street, or road. Use of these hybrid beacons may result in confusion for drivers and for pedestrians.

The MUTCD contains a number of provisions relating to installing traffic control signals at midblock crosswalks. For example, these provisions direct the entity with jurisdiction over the crosswalk to consider detailed criteria related to:

- The distances to the nearest traffic control signal, side streets, and highways;[9] and
- The number of vehicles using and the number of pedestrians crossing the street per hour.[10]

The MUTCD contains other applicable provisions. However, the focus of the MUTCD is that installation of a traffic control signal at any location, including midblock locations, must be

[5] Section 4B.02 of Chapter 4B of Part 4 of the MUTCD at p. 434, available at https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf (last visited January 31, 2020).
[6] *Id*. (emphasis added).
[7] Section 4C.01 of Chapter 4C of Part 4 of the MUTCD at p. 436, available at https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf (last visited January 31, 2020).
[8] The MUTCD defines a pedestrian hybrid beacon as "a special type of hybrid beacon used to warn and control traffic at an unsignalized location to assist pedestrians in crossing a street or highway at a marked crosswalk," which "may be considered for installation…at a location that does not meet traffic signal warrants…or at a location that meets traffic signal warrants… but a decision is made not to install a traffic control signal." Section 4F.01 of Chapter 4F of Part 4 of the MUTCD at p. 509, available at https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf (last visited January 31, 2020).
[9] Section 4D.01 of Chapter 4D of Part 4 of the MUTCD at p. 449, available at https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf (last visited January 31, 2020).
[10] Section 4C.05 of Chapter 4C of Part 4 of the MUTCD at p. 442, available at https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf (last visited January 31, 2020).

based on an engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the particular location. The same focus is present in the MUTCD with respect to related pedestrian signals at any location, including midblock locations. "The design and operation of traffic control signals shall take into consideration the needs of pedestrians as well as vehicular traffic."[11]

III. Effect of Proposed Changes:

The bill requires the installation of a pedestrian crosswalk on a public highway, street, or road which is located at any point other than at an intersection with another public highway, street, or road to be preceded by a recommendation for installation of such a midblock crosswalk by a traffic engineering study conducted by a Florida licensed professional engineer.

A midblock crosswalk on a public highway, street, or road with a posted speed limit more than 20 miles per hour must be controlled by coordinated traffic control signal devices and pedestrian control signals that conform to Chapters 4D and 4E[12] of the most recent MUTCD and other applicable FDOT specifications. Traffic control signal devices and pedestrian control signals at a midblock crosswalk must be coordinated with traffic control signal devices at intersections adjacent to the crosswalk. Further, such traffic control signal devices at intersections adjacent to the crosswalk must be taken into consideration as provided in the most recent MUTCD and other applicable FDOT specifications.

All midblock crosswalks on public highways, streets, or roads, including those on a public street with a posted speed limit less than 20 miles per hour, must include pedestrian-facing signs informing the pedestrian of the duties applicable to pedestrians.

By October 1, 2026, the entity with jurisdiction over a public highway, street, or road with a described midblock crosswalk which is in existence on July 1, 2020, must ensure that the crosswalk is controlled by coordinated traffic control signal devices and pedestrian control signals, as required by the bill. Alternatively, the entity with jurisdiction may remove any existing midblock crosswalk.

The bill also includes a Legislative finding and declaration that the bill fulfills and important state interest.

The bill takes effect July 1, 2020.

[11] Section 4D.03 of Chapter 4D of Part 4 of the MUTCD at p. 450, available at https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf (last visited January 31, 2020).
[12] Figure 4D-2 of Chapter 4D of Part 4 of the MUTCD at p. 458 and Figure 4E-1 of Chapter 4E of Part 4 of the MUTCD at p. 496, available at https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf (last visited January 31, 2020). These are the traffic control signals with Red/Yellow/Green light displays and the Walk/Don't Walk pedestrian signals customarily seen at intersections.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

Article VII, s. 18(a) of the Florida Constitution provides that no county or municipality shall be bound by any general law requiring such county or municipality to spend funds or to take an action requiring the expenditure of funds unless the Legislature has determined that such law fulfills an important state interest and unless, among other exceptions, the expenditure is required to comply with a law that applies to all persons similarly situated, including the state and local governments. The bill applies to both state and local governments and includes a legislative determination that it fulfills an important state interest as required by the Florida Constitution.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

The total number of midblock crosswalks in Florida, whether under the jurisdiction of the FDOT or a local jurisdictional entity, is unknown. FDOT estimates that there are 4,900 midblock crosswalks without traffic signals or rectangular rapid flashing beacons on the state highway system. It also estimates that there are 191 midblock crosswalks on-system that have rectangular rapid flashing beacons.[13]

[13] FDOT, *2020 Agency Legislative Bill Analysis SB 1000*, January 30, 2002 (on file in the Senate Transportation, Tourism, and Economic Development Appropriations Subcommittee).

The FDOT provided the following approximate costs:[14]

- $300,000 to replace an uncontrolled midblock crosswalk with a traffic signal or pedestrian hybrid beacon.
- $7,000 to remove an uncontrolled midblock crosswalk.
- $3,200 per year to maintain a traffic signal.
- $10,000 per location to conduct a signal warrant engineering study.

The FDOT provided two examples of the cost of installation of traffic control lights and pedestrian signals at midblock crosswalks:[15]

- Monroe Street at Lake Ella in Tallahassee: $386,658.
- 5 midblock crosswalks along U.S. 98 in Destin between Airport Road and Stahlman Avenue: $1,035,661.

The bill is expected to have a significant negative fiscal impact on state and local government expenditures. The FDOT estimates that if 20 percent of the current locations warrant a traffic signal or pedestrian hybrid beacon, then the construction costs for conversion could be $11.4 million, with a recurring annual maintenance cost of $122,000 per year. The estimated cost to remove the midblock crosswalks is $35.4 million.[16]

However, the extent of the impact to governments is indeterminate because the number of midblock locations and their design and treatment is unknown. Additionally, the number of locations that will be modified to comply with the bill's requirements and the number of local midblock crosswalks to be removed is unknown. The number of pedestrian information signs and cost to install such signs at all midblock crosswalks is also unknown.

The bill allows for governments to bring any midblock crosswalks on public highways, streets, and roads that are in existence on July 1, 2020, into compliance with the requirements of the bill by October 1, 2026.

VI. Technical Deficiencies:

None.

VII. Related Issues:

The FDOT notes that the bill would prohibit some important pedestrian midblock crossing countermeasures that are proven to reduce vehicle-pedestrian crashes, serious injuries, and fatalities, while minimizing vehicle and pedestrian delay. These include marked crosswalks,

[14] *Id*.
[15] *See* the FDOT email to the Senate Infrastructure and Security Committee staff, October 22, 2019 (on file in the Senate Infrastructure and Security Committee).
[16] FDOT, *2020 Agency Legislative Bill Analysis SB 1000*, January 30, 2002 (on file in the Senate Transportation, Tourism, and Economic Development Appropriations Subcommittee).

flashing beacons, rectangular rapid flashing beacons, in-roadway warning lights, and in-street pedestrian signs.[17]

VIII. Statutes Affected:

This bill creates section 316.0756 of the Florida Statutes.

IX. Additional Information:

A. Committee Substitute – Statement of Substantial Changes:
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

Recommend CS/CS by Appropriations Subcommittee on Transportation, Tourism, and Economic Development on February 18, 2020:
The committee substitute removes the requirement for midblock crosswalk locations to include signals that require vehicular traffic approaching the crosswalk to come to a complete stop before pedestrians are permitted to enter the crosswalk. Instead, the committee substitute provides:

- Before a midblock crosswalk can be installed, a traffic engineering study must be conducted which recommends such installation.
- A midblock crosswalk on a public street with a posted speed limit more than 20 miles per hour must:
  - Conform to Chapters 4D and 4E of the most recent Manual on Uniform Traffic Control Devices (MUTCD) and other applicable FDOT requirements.
  - Be coordinated with traffic control signal devices at intersections adjacent to the crosswalk. Such traffic control signal devices at intersections adjacent to the crosswalk must be taken into consideration as provided in the most recent MUTCD and other applicable FDOT requirements.
- All midblock crosswalks, including those on a public street with a posted speed limit less than 20 miles per hour, must include a pedestrian-facing sign informing the pedestrian of duties applicable to pedestrians.

The committee substitute also increases the time to comply with the requirements of the bill from October 2024 to October 2026.

CS by Infrastructure and Security on January 27, 2020:
The committee substitute:

- Specifies the type of traffic control signals (Red/Yellow/Green lights) and pedestrian control devices (Walk/Don't Walk) required for midblock pedestrian crossings by including references to the specific chapters of the MUTCD.
- Includes a Legislative finding and declaration that the bill fulfills an important state interest.

[17] *See* the FDOT email to the Senate Infrastructure and Security Committee staff, October 18, 2019 (on file in the Senate Infrastructure and Security Committee).

B. Amendments:

None.