

CHAPTER

2

Signs

SECTION 2.1

SLIPPERY WHEN WET SIGNS

2.1.1 PURPOSE

This section provides guidance on when, where, and how to place *SLIPPERY WHEN WET* signs (W8-5).

2.1.2 CONDITIONS FOR USE

At locations where pavement is slippery, the ***District Traffic Operations Engineer (DTOE)*** requests that the District Maintenance Engineer install *SLIPPERY WHEN WET* signs (***W8-5***). Pavement is considered slippery when a standard friction test at 40 mph results in skid numbers less than 25.

DTOE also requests that the District Maintenance Engineer install *SLIPPERY WHEN WET* signs (***W8-5***) when the posted highway speed is above 45 mph, skid numbers are less than 30, and one of the following conditions is met:

(1) The actual crash rate divided by critical crash rate is greater than or equal to 1.

(2) There is a downgrade greater than 3 percent.

(3) The location includes intersections with traffic signals.

2.1.3 LOCATION AND PLACEMENT

Additional *SLIPPERY WHEN WET* signs (***W8-5***) may be needed at locations with the following conditions:

Horizontal Curves: Place *SLIPPERY WHEN WET* signs (***W8-5***) prior to a *CURVE WARNING* sign (***W1-1 through W1-15***) with an advisory speed plaque. The Ball-Bank Indicator Method allows for a reasonable speed through the curve, but consider setting a lower advisory speed if there are known extraordinary hazards, such as hydroplaning.

Hydroplaning: Generally, hydroplaning only occurs at speeds above 47 mph, but it can happen at lower speeds due to excessive stormwater runoff across travel lanes. Hydroplaning is a risk on roadways with multiple lanes, rutted lanes, built-up shoulders, or downgrades. If excessive water buildup cannot be corrected at these locations, *SLIPPERY WHEN WET* signs (***W8-5***) may be needed, regardless of the skid numbers.

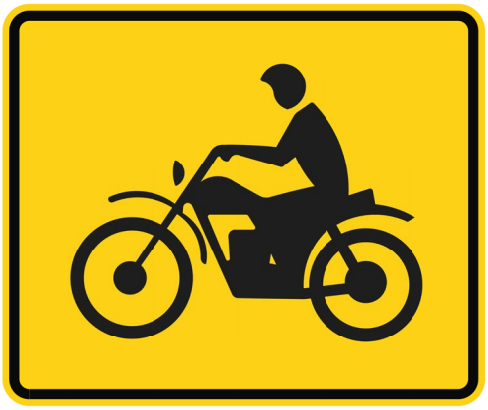
Ramp and Bridge Decks: Interchange exit or entrance ramps on sharp curves and downgrades can be dangerous if the pavement is slippery. Give special attention to ramps with compound curves. FDOT maintains a pavement friction inventory for interchange ramps, but engineers can request special tests at speeds less than 40 mph. *SLIPPERY WHEN WET* signs (***W8-5***) should be used with the following advisory exit or ramp speed signs: *EXIT RAMP XX MPH (**W13-2**)* or *RAMP XX MPH* (***W13-3***).

Place *SLIPPERY* WHEN *WET* signs (***W8-5***) in advance of all movable and non-movable steel deck bridges as directed in the ***Manual on Uniform Traffic Control Devices (MUTCD) Table 2C-3***.

2.1.4 ENHANCEMENT

Where wet roadway surface conditions might adversely affect motorcyclists' ability to control their vehicles, mount a *MOTORCYCLE* plaque (***W8-15aP***), shown in ***Figure 2.1-1***, below the warning sign. Place additional warning signs at appropriate intervals where this condition exists.

Figure 2.1-1. Motorcycle Plaque



2.1.5 NOTIFICATION

The District Maintenance Engineer will promptly notify the ***DTOE*** in writing when *SLIPPERY WHEN WET* signs (***W8-5***) have been installed.

The ***DTOE*** will direct the District Maintenance Engineer to remove *SLIPPERY WHEN WET* signs (***W8-5***) that are no longer warranted.

SECTION 2.2

OVERHEAD STREET NAME SIGNS

2.2.1 PURPOSE

This section defines guidelines for installing overhead street name signs at signalized intersections. Street name guide signs for most streets intersecting a road on the State Highway System are usually furnished, installed, and maintained by the appropriate local government. FDOT may, however, furnish and install larger overhead street name signs at signalized intersections.

2.2.2 STANDARDS

Use street name signs only to identify cross streets. They are not intended to identify destinations such as cities or facilities.

Abbreviate or delete the words "street," “boulevard,” “avenue,” etc., as needed to conserve sign panel length unless doing so would cause confusion. For example, if two streets in an area have similar names, like Seminole Street and Seminole Avenue, do not abbreviate the roadway name.

When a cross street is known by its route number and local name, use the local name on overhead street name signs. Route markers (***FTP-212-25***) identify the route number along the route.

When a cross street has more than one local street name designation—for example, NW 31 Avenue and Martin Luther King, Jr. Boulevard—engineers may place both names on overhead street name signs. FDOT is responsible for the primary designation (i.e., the name shown on the ***Florida Official Transportation Map***). If a secondary designation is approved by local resolution, the local government is responsible for installing signs with the secondary designation.

When a cross street has a different name on each side of an intersection, include both names on the overhead street name sign. Use two signs: one on the left and one on the right side of the intersection. Some signal span designs necessitate a single sign with both names. In those cases, separate the names and add directional arrows, with the left name above the right.

There is no need to display block numbers when two street names with arrows are provided on a single panel.

2.2.3 INSTALLATION

The location of the overhead street name sign on a signal strain pole or mast arm may vary. However, it must not interfere in any way with the motorist's view of the signal heads.

(a) For static signs, the preferred installation is shown in the ***Standard Plans, Index 659-010***.

(b) For internally-illuminated signs, the preferred installation is shown in the ***Standard Plans, Index 700-050***.

When separate street names are on each side of the intersection, place one sign to the right of the centerline and signal heads and the other to the left.

2.2.4 SIGN DESIGN

Design overhead street name signs according to ***MUTCD Section 2D.45***.

The sign panel for overhead street name signs is 24 inches high. The legend determines the width. An example of this design is shown in ***Figure 2.2-1***.

Block or house numbers may be used as a supplemental legend on a overhead street name sign to help emergency responders and motorists locate addresses, per ***MUTCD***. There is no need to display block numbers when two street names with arrows appear on a single panel.

Use at least 8-inch uppercase and 6-inch lowercase lettering for the street name, and 6-inch all-uppercase lettering for the block numbering text on the second line. Use Series E Modified font. Series E font may also be used to accommodate the legend if needed. An example of this design is shown in ***Figure 2.2-2***.

When structurally possible, design overhead street name signs in accordance with at least 12-inch uppercase and 9-inch lowercase lettering to comply with Federal Highway Administration (FHWA) recommendations for older motorists (***MUTCD Table 2D.6***) and Recommendation I-J-2 of the ***FHWA Design Handbook for Older Drivers and Pedestrians***.

Where sign panel dimensions, structural constraints, or the display of multiple street names limit these letter heights, use the largest practical lettering and font that can be accommodated while maintaining sign legibility and conforming to standard sign panel dimensions.

Use internally-illuminated signs whenever possible to improve nighttime visibility and benefit older motorists. Use devices from ***FDOT's Approved Products List (APL)*** and design them with white lettering and a white border (if used) on a green background.

Design overhead street name signs using standard panels with a white message and border on a green background. If not using internally-illuminated overhead street name signs, use high-intensity sheeting for added visibility at night.

If sign panels are visible from opposite approaches, make them double-sided so they are visible from both sides of each intersection approach.

Figure 2.2-1. Overhead Street Name Sign



Figure 2.2-2. Overhead Street Name Sign with Block Numbers



SECTION 2.3
SIGNS AND MARKINGS AT UNSIGNALIZED INTERSECTIONS ON DIVIDED HIGHWAYS

2.3.1 PURPOSE

This section offers guidance on the placement of *MOVEMENT LANE CONTROL* signs (***FTP-034-25*** and ***FTP-034A-25***) and *MANDATORY MOVEMENT LANE CONTROL* signs (***R3-7***) at unsignalized intersections.

FDOT's standards for signs and markings at unsignalized intersections on divided highways are shown in the ***FDOT Design Manual (FDM) 230*** and the ***Standard Plans, Index 711-001***.

2.3.2 MINOR STREET SINGLE LANE APPROACH

Install a post-mounted *INTERSECTION LANE CONTROL* sign (***FTP-034-25***) below the stop sign at driveways and side street connections where a turning movement is mandatory. Install the *INTERSECTION LANE CONTROL* sign (***FTP-034-25***) at intersections where increased emphasis, improved recognition, or increased legibility is needed, as determined by engineering judgment or study (speed, volume, crash frequency, or other factors).

2.3.3 MINOR STREET MULTILANE APPROACH

Install a post-mounted *MANDATORY MOVEMENT LANE CONTROL* sign (***R3-7***) at driveways and side streets that have multilane approaches with a dedicated turn lane. Mount the sign below the stop sign or in advance of the intersection. See ***MUTCD Section 2B.28*** for additional information.

SECTION 2.4

SYMBOL SIGNS ON THE STATE HIGHWAY SYSTEM

2.4.1 PURPOSE

This section provides guidance on the use of symbol signs on the State Highway System. Symbol signs are easier for the public to recognize and understand. Use them instead of word message signs whenever possible. The ***MUTCD*** encourages their use as the primary advisory or warning sign. With Florida's large tourist population, the broader use of symbol signs is a desirable and important step toward greater traffic safety and smoother operations.

2.4.2 DEFINITIONS

Educational Plaque: A word message sign used with a new symbol sign to familiarize motorists with the symbol's meaning.

Symbol Sign: A sign used to regulate, warn, advise, or inform of an impending situation. A pictorial or graphical representation of the approaching situation or applicable information.

Word Message Sign: A sign used as an alternative to a symbol sign that describes an approaching situation or applicable information in words.

2.4.3 CONDITIONS FOR USE

Use a symbol sign, if available, where a regulatory, warning, or advisory sign is warranted to depict an approaching situation. A word message sign is generally less effective but, in some circumstances, is more appropriate. The ***DTOE*** maintains documentation of these exceptions in district files.

FDOT and FHWA must approve any proposed new symbol, as noted in ***MUTCD Section 1B.05***. Send all requests for a new symbol to the ***State Traffic Operations Engineer (STOE)*** for review and processing with FHWA.

When a sign with a new symbol is installed, consider including an educational plaque that explains the new symbol in words, as advised by ***MUTCD Section 2A.09***.

SECTION 2.5
DESTINATION-DISTANCE SIGNS AT RURAL INTERSTATE AND FREEWAY EXIT RAMP TERMINALS

2.5.1 PURPOSE

This section sets standards for consistent design and placement of *DESTINATION* (***D1*** series) and *DISTANCE* (***D2*** series) signs.

2.5.2 BACKGROUND

DESTINATION signs (***D1*** series) display a destination name and direction. *DISTANCE* signs (***D2*** series) indicate the distance to the destination shown on the sign. *DESTINATION* and *DISTANCE* signs are especially valuable to motorists unfamiliar with a particular area.

2.5.3 CONDITIONS FOR USE

Use combined *DESTINATION-DISTANCE* signs (***D1-1a***, ***D1-2a***, and ***D1-3a***) at exit ramp terminals on rural interstates and freeways in lieu of *DESTINATION* signs (***D1-1***).

Install the combined *DESTINATION-DISTANCE* sign (***D1-1a***, ***D1-2a***, and ***D1-3a***) facing only exiting traffic from rural interstate and freeway ramps.

Replace existing *DESTINATION* signs (***D1-1***) at exit ramp terminals with the combination *DESTINATION-DISTANCE* signs (***D1-1a***, ***D1-2a***, and ***D1-3a***) during routine sign replacement activities.

Determine the distance using the best information available. Measure it from the ramp terminal to a control point at the named destination. The Transportation Data and Analytics Office maintains control points for all Florida cities. These are listed on the official ***Florida Official Intercity Highway Mileage*** web page.

For destinations not on the Florida Official Intercity Highway Mileage web page, the district may define a control point, usually at the junction of two main routes in the urban area.

Show distance figures just after the destination name. When a sign must accommodate destinations in different directions, divide the destinations with a line, as shown in ***MUTCD Figure 2D-9***.

DESTINATION-DISTANCE signs (***D1-1a***, ***D1-2a***, and ***D1-3a***) display a white legend on a green background. Detail the signs individually in plans and specify numerals and uppercase letters at least 8 inches high and lowercase letters at least 6 inches high.

SECTION 2.6
BRIDGE SIGNS AND MARKINGS

2.6.1 PURPOSE

This section offers guidance on the placement of bridge signs and markings.

2.6.2 BRIDGE AND SIGN STRUCTURE LOW CLEARANCE SIGNS

Place a *LOW CLEARANCE* advance warning sign (***W12-2***) at the stopping sight distance of every bridge or structure with a minimum vertical clearance of 14 feet 6 inches or lower. In urban areas, where advance signs could be blocked by traffic or rendered ineffective by competing advertising signs, place the *LOW CLEARANCE* advance warning sign (***W12-2***) on the bridge beam or equivalent structure.

Place *LOW CLEARANCE* overhead warning signs (***W12-2a or W12-2b***) on the bridge beam or equivalent of every bridge or structure with a minimum vertical clearance of 13 feet 6 inches or less.

Consider using additional *LOW CLEARANCE* advance warning signs (***W12-2***) at upstream decision points.

Follow the criteria for *LOW CLEARANCE* advance warning signing in ***MUTCD Section 2C.25***.

2.6.3 BRIDGE PIER MARKING

Mark bridge piers only when they are not protected by a guardrail or barrier and are less than 30 feet from the near pavement edge.

Use a Type 3 object marker 12 x 36-inch panel with alternating black and yellow stripes sloping downward at a 45-degree angle toward the side of the pier traffic will be passing.

For additional emphasis, treat a large surface bridge pier with sheeting that has diagonal stripes at least 12 inches wide and is similar in design and application to the Type 3 object marker.

2.6.4 CROSSROAD NAME SIGNS ON OVERPASSES

Do not install crossroad name signs on overpass signs, except as requested by law enforcement agencies or emergency rescue organizations. This guidance includes

signs mounted on the bridge beam or on a post. When installed, crossroad name signs must display 10.67-inch Series E Modified lettering.

2.6.5 NARROW BRIDGE TREATMENT

Design signs and markings on narrow bridge approaches per the current edition of the ***Standard Plans, Index 700-106***.

2.6.6 GUIDE SIGNS ON OVERPASSES

See the ***Structures Manual, Volume 3, Section 2.6*** for limitations using bridge-mounted signs.

2.6.7 SWING-STYLE PEDESTRIAN GATE SIGNS ON MOVABLE BRIDGES

Mount a *NO PEDESTRIANS OR BICYCLES BEYOND GATE* sign (***FTP-036-25***) as shown in ***Figure 2.6-1*** to the front of each swing-style pedestrian gate on movable bridges. This is illustrated in the ***Structures Manual, Volume 1, Section 8.1.9***. Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

Figure 2.6-1. Swing-Style Pedestrian Gate Sign on Movable Bridges



SECTION 2.7

PLACE NAME SIGNS ON THE STATE HIGHWAY SYSTEM

This section has been rescinded since it is now included in the ***Florida Administrative Code, Rule Chapter 14-51, Part IV***.

SECTION 2.8

MOVE VEHICLES FROM TRAVEL LANES SIGN

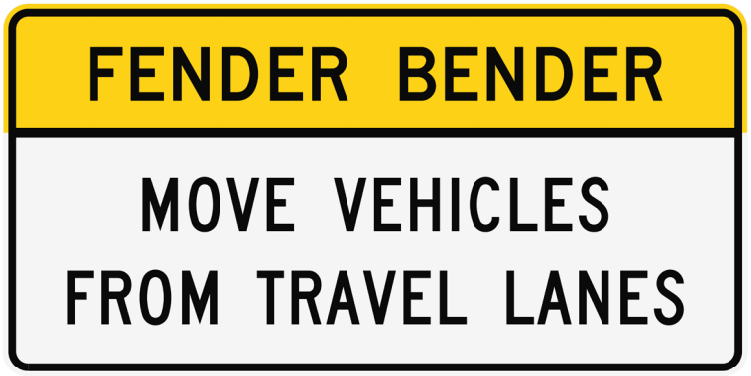
2.8.1 PURPOSE

This section guides the placement and design of the *MOVE VEHICLES FROM TRAVEL LANES* sign (***FTP-008-25***).

2.8.2 SIGN DESIGN

Use of the *MOVE VEHICLES FROM TRAVEL LANES* sign (***FTP-008-25***), shown in ***Figure 2.8-1***, is intended to encourage compliance with ***Section 316.061(2), F.S.***, which requires motorists involved in certain crashes to move vehicles from travel lanes when the vehicles can be safely driven or moved. Additional guidance on this sign type is provided in ***MUTCD Section 2B.70*** and Florida-specific sign details are available in ***FDOT's Sign Library***.

Figure 2.8-1. Move Vehicles from Travel Lane Sign



2.8.3 LOCATION AND PLACEMENT

Install a *MOVE VEHICLES FROM TRAVEL LANES* sign (***FTP-108-25***) on non-limited-access highways in urban areas when its use is expected to reduce queue lengths and delays, eliminate interference with traffic signal vehicle detectors, or enhance intersection capacity.

Place a *MOVE VEHICLES FROM TRAVEL LANES* sign (***FTP-108-25***) on the right side of limited-access highways, such as urban freeways, downstream from an entrance ramp when its use will improve motorist behavior related to unnecessary and unlawful constriction of freeway travel lanes due to traffic crashes.

MOVE VEHICLES FROM TRAVEL *LANES* sign details are available in ***FDOT's Sign Library***.

For permanent installations, specify a yellow retroreflective background for the *FENDER BENDER* enhancement.

Mounting heights and lateral clearances are specified in the ***Standard Plans, Index 700-101***. Use support systems that meet or exceed FDOT's frangibility standards. Meet or exceed the standards shown in ***Standard Specifications, Section 700*** for support systems.

SECTION 2.9
NO PASSING ZONE SIGNS

2.9.1 PURPOSE

This section guides placement and design for the use of *NO PASSING ZONE* pennant-shaped isosceles triangle signs (***W14-3***).

2.9.2 BACKGROUND

Use of the *NO PASSING ZONE* sign (***W14-3***) supports ***Section 316.0875, F.S.***

MUTCD Section 2C.53 establishes standards for installing *NO PASSING ZONE* signs (***W14-3***) on public roadways.

2.9.3 CONDITIONS FOR USE

Do not routinely install the *NO PASSING ZONE* sign (***W14-3***), shown in ***Figure 2.9-1***, at the beginning of all no passing zones.

Engineers may install the *NO PASSING ZONE* sign (***W14-3***) as a supplement to pavement markings that establish a no passing zone under the following circumstances:

(a) At locations, such as vertical or horizontal curves, where pavement markings indicating no passing zones are not visible far enough in advance to give motorists adequate warning.

(b) In other locations where an engineering study has determined such signs may enhance safety.

DTOEs must review and approve proposed uses of *NO PASSING ZONE* signs (***W14-3***) at locations meeting the above criteria prior to installation.

Figure 2.9-1. *NO PASSING ZONE* Pennant-Shaped Sign



SECTION 2.10
REST AREA PLAQUES

2.10.1 PURPOSE

This section guides the design and placement of supplemental rest area plaques.

2.10.2 PHYSICAL CHARACTERISTICS

The *VENDING MACHINES* plaque (***FTP-408-25***) and *VENDING FREE COFFEE* plaque (***FTP-410-25***) are 78 x 36 inches with two lines of legend in 8-inch Series D lettering. The legend and border are white on a blue background.

The SAFETY BREAK plaque (***FTP-411-25***) and *MACHINES* plaque (***FTP-412-25***) are 78 x 15 inches with one line of legend in 8-inch Series D lettering. The legend and border are white on a blue background.

Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

2.10.3 PLACEMENT

Append these plaques at the bottom and between the supports of *REST AREA* advance signs (***D5-1 series***). Do not impair the sign's breakaway characteristics with its placement.

At some rest areas, these plaques are designed into a sign with a flip panel that reveals the message when a safety break is in effect.

SECTION 2.11
BICYCLE SIGNS

2.11.1 PURPOSE

This section provides guidance on using bicycle signs when a documented need exists. The objective of using bicycle signs is to improve motorist awareness of people biking on state roadways.

2.11.2 GENERAL

MUTCD Chapters 9B, 9C, and 9D and ***Section 2C.54*** establish the standards for bicycle signs installed on public roadways. Review and consider the ***MUTCD*** when evaluating bicycle sign requests.

The use of bicycle signs as a warning is shown in ***MUTCD Section 9C.04*** and ***Section 2C.54***. The use of bicycle signs for regulatory purposes is shown in ***MUTCD Chapter 9B***.

The District Bicycle/Pedestrian Coordinator and District Bicycle/Pedestrian Safety Specialist provide recommendations for all bicycle sign requests and consider the following conditions in their review:

(a) Context classification

(b) Land use

(c) Volumes

(d) Crash data

(e) Geometric criteria

Mounting heights and lateral clearances are specified in the ***Standard Plans, Index 700-101***. Use support systems that meet or exceed FDOT's frangibility standards. Meet or exceed the standards shown in ***Standard Specifications, Section 700*** for support systems.

2.11.3 *BICYCLES ALLOWED USE OF FULL LANE* SIGN

Use the *BICYCLES ALLOWED USE OF FULL LANE* sign (***R9-20***) where it is important to inform motorists that bicyclists might occupy the full travel lane—for example, where commuter bicyclists are common motorists. The *BICYCLES ALLOWED USE OF FULL LANE* sign (***R9-20***) may be installed on roadways when a shared-lane marking (***Standard Plans, Index 711-002***) is present or when all of the following conditions exist:

(a) Travel lanes are less than 14 feet wide.

(b) A bicycle lane is not present.

(c) A rideable paved shoulder may be present but is narrower than 4 feet.

A shared-lane marking is not required for the use of the *BICYCLES ALLOWED USE OF FULL LANE* sign (***R9-20***).

Submit requests to install *BICYCLES ALLOWED USE OF FULL LANE* signs (***R9-20***) on multilane roadways to the ***DTOE***.

2.11.4 *BICYCLE PASSING CLEARANCE* SIGN

Florida Statute 316.083 requires motor vehicles to pass bicycles at a safe distance of not less than 3 feet. The *BICYCLE PASSING CLEARANCE* sign (***R4-19***) with a *FLORIDA LAW* plaque (***FTP-037-25***) reminds motorists of the law (***Figure 2.11-1***).

Install the *BICYCLE PASSING CLEARANCE* sign (***R4-19***) with a *FLORIDA LAW* plaque (***FTP-037-25***) on roadways with the following characteristics:

(a) There is a designated bicycle route.

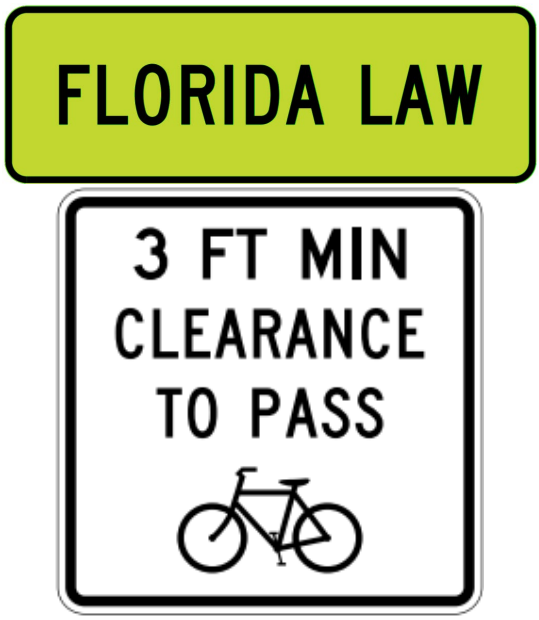
(b) *BICYCLES ALLOWED USE OF FULL LANE* (***R9-20***) signs are installed.

Install the *BICYCLE PASSING CLEARANCE* sign (***R4-19***) where there is a documented history of crashes or near misses. Documented history can include citizen complaints, field observations, or crash records.

Place the *BICYCLE PASSING CLEARANCE* sign (***R4-19***) where it does not interfere with the visibility of other regulatory or warning signs.

Plaque details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

Figure 2.11-1. BICYCLE PASSING CLEARANCE Sign



SECTION 2.12
RECYCLING COLLECTION CENTER SIGNS

2.12.1 PURPOSE

This section guides the design, location, and placement of *RECYCLING CENTER* signs (***FTP-607-25*** and ***FTP-608-25***).

2.12.2 DEFINITION

Recycling Collection Center: A facility open full-time to the general public that collects items for recycling, e.g., oil, aluminum, batteries, etc. The facility may operate as part of a recycling plant or as a collection center for distributing these items to a recycling center elsewhere.

2.12.3 SIGN DESIGN

The *RECYCLING COLLECTION CENTER* sign (***FTP-607-25****)* is 42 x 60 inches with white text and border on a green background. The lettering is 4 inches high, in Series C font.

The *RECYCLING COLLECTION CENTER (WITH MUNICIPALITY NAME)* sign *(**FTP-608-25**)* is 42 x 66 inches with white text and border on a green background. Lettering is 4 inches high, Series C font.

Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***. Attach a directional arrow (***M6 Series***) below the sign panel if desired.

2.12.4 SIGN INSTALLATION

Local governments must submit sign requests to the appropriate District Traffic Operations Office for review and approval.

Mounting heights and lateral clearances are specified in the ***Standard Plans, Index 700-101***. Use support systems that meet or exceed FDOT’s frangibility standards. Meet or exceed the standards shown in ***Standard Specifications, Section 700*** for support systems.

Do not place a *RECYCLING COLLECTION* sign (***FTP-607-25***) or a *RECYCLING COLLECTION CENTER* sign (***FTP-608-25***) where it might obscure traffic control devices or otherwise compete for the motorist's attention—for example, next to a *STOP* sign.

SECTION 2.13
SAFETY BELT USE AND CHILD RESTRAINT LAW SIGNS

2.13.1 PURPOSE

This section establishes uniform criteria for installing safety belt use and child restraint law signs.

2.13.2 BACKGROUND

The Florida Safety Belt Law (***Section 316.614, F.S.***) requires state agencies to conduct a continuing safety and public awareness campaign and adopt programs that encourage motorist compliance with the safety belt law. This procedure establishes guidance for implementing signing that supports the statute's purpose.

2.13.3 OUT-OF-STATE ENTRY POINTS TO THE STATE HIGHWAY SYSTEM

Install and maintain signing at all State Highway System entry points to the State of Florida to inform motorists of the statutory requirement for safety belt use.

On limited-access highways, install a *FLORIDA SAFETY BELT AND CHILD RESTRAINT LAW* sign (***FTP-004A-25***) downstream of existing *WELCOME TO FLORIDA* signs (***FTP-404-25***) and speed limit signs.

On non-limited-access highways, install a *FLORIDA SAFETY BELT AND CHILD RESTRAINT LAW* sign (***FTP-004-25****)* downstream of existing *WELCOME TO FLORIDA* signs (***FTP-404-25***) and speed limit signs.

2.13.4 REST AREAS AND INTERSTATE WELCOME CENTERS

When an existing *BUCKLE UP* sign at a rest area or Welcome Center exit needs to be replaced, replace it with the *FLORIDA SAFETY BELT AND CHILD RESTRAINT LAW* sign (***FTP-004A-06***).

Install and maintain a *REST AREA SAFETY BELT LAW* sign (***FTP-006-25***), shown in ***Figure 2.13-1***, in all rest areas and Interstate Welcome Centers, informing motorists of the specific requirements of Florida's safety belt and child restraint laws. Place the sign in a prominent location where pedestrians can easily see it.

Figure 2.13-1. Florida Rest Area Safety Belt Law



2.13.5 OTHER LOCATIONS

The ***DTOE*** may grant permission for the *FLORIDA SAFETY BELT AND CHILD RESTRAINT LAW* sign (***FTP-004-25*** and ***FTP-004A-25***) to be posted at other locations on the State Highway System at locations where:

(a) There is documented evidence of a high crash count; or

(b) A high percentage of traffic is tourists or visitors; and

(c) The sign will not interfere with or detract from regulatory, guide, or warning signs, or other traffic control devices.

2.13.6 *BUCKLE UP IT'S THE LAW* SIGN

Use the *BUCKLE UP IT'S THE LAW* sign (***FTP-005-25*** and ***FTP-005A-25***) for general educational purposes.

On limited-access facilities at county lines, install the 36 x 48-inch *BUCKLE UP IT'S THE LAW* sign (***FTP-005A-25***). ***DTOEs*** may also install this sign where a documented need exists.

On non-limited-access highways and in urban areas, install the 24 x 30-inch *BUCKLE UP IT'S THE LAW* sign (***FTP-005-25***) where there is a documented need.

2.13.7 SIGN DESIGN

Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

Mounting heights and lateral clearances are specified in the ***Standard Plans, Index 700-101***. Use support systems that meet or exceed FDOT's frangibility standards. Meet or exceed the standards shown in ***Standard Specifications, Section 700*** for support systems.

2.13.8 SIGN AVAILABILITY

Maintenance may obtain new or replacement signs by requisition from the Lake City Sign Shop. Coordinate with the Sign Fabrication Shop Supervisor. For current contact information, visit ***fdot.gov/maintenance/staffdirectory.shtm***.

SECTION 2.14
EMERGENCY MANAGEMENT SIGNS

2.14.1 PURPOSE

This section establishes a uniform basis for installing and maintaining emergency management signs on the State Highway System.

2.14.2 BACKGROUND

The Florida Division of Emergency Management (FDEM) plans for natural and man-made disasters. It also prepares and implements a statewide Comprehensive Emergency Management Plan (CEMP). FDEM serves as the State's liaison with federal and local agencies for emergencies of all kinds. It offers local governments technical assistance as they prepare emergency plans and procedures.

The FDEM requested that FDOT install and maintain signs along official evacuation routes on the State Highway System to educate motorists about available routes. FDOT is responsible for sign placement to guide motorists away from high-risk areas. Evacuation Route and Zone Maps are available on the ***FDEM website***.

2.14.3 PROCEDURE

At the County Emergency Management Director's request, the ***DTOE*** initiates the district-level actions needed to implement these guidelines and sign evacuation routes properly and promptly. The district maintenance office will install and maintain the signs in the field.

The ***DTOE*** is responsible for informing the FDEM of subsequent signing changes or additions upon a local agency's request through FDOT's Emergency Coordination Officer.

2.14.4 EVACUATION ROUTE SIGN

Use the 36 x 36-inch *EVACUATION ROUTE* sign (***FTP-415A-25***) on limited-access facilities and the 24 x 24-inch *EVACUATION ROUTE* sign (***FTP-415-25***) on non-limited-access facilities.

Use a vertical arrow pointing upward, a horizontal arrow pointing left or right, or a bent arrow pointing left or right to provide advance warning of a turn. Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

2.14.4.1 Sign Use

Use the *EVACUATION ROUTE* sign (***FTP-415A-25***) exclusively along regional evacuation routes designated on the approved statewide regional evacuation route plans recorded by the FDEM.

Use *EVACUATION ROUTE* signs (***FTP-415-25***) to guide motorists along regional evacuation routes and away from potential high-risk areas. Comply with the applicable provisions in ***MUTCD Section 2N.03***.

2.14.4.2 Evacuation Route Sign Placement

Place an *EVACUATION ROUTE* sign (***FTP-415A-25***) 150 to 300 feet before and at any turn on an approved evacuation route. Place additional *EVACUATION ROUTE* signs (***FTP-415-25***) along the route as needed.

2.14.5 SIGN INSTALLATION

FDOT furnishes, installs, and maintains signs along official evacuation routes on the State Highway System.

Install signs only at locations reviewed and approved by the ***DTOE*** so they do not interfere with existing traffic control devices.

Place signs according to existing FDOT standards and consistent with ***MUTCD Section 2N.03***. Mounting heights and lateral clearances are specified in the ***Standard Plans, Index 700-101***. Use support systems that meet or exceed FDOT's frangibility standards. Meet or exceed the standards shown in ***Standard Specifications, Section 700*** for support systems.

2.14.6 *SHELTER AND TRAVELER INFORMATION* SIGN

The ***STOE*** addresses operational concerns about evacuation route signing and related operational needs within FDOT and with the FDEM.

The ***DTOE*** coordinates districtwide evacuation shelter signing efforts. If shelters or evacuation traveler information require signing, include sign use in the CEMP area's regional evacuation plan.

Develop evacuation plans with *SHELTER* signs ***(see Section 2.14.7)*** posted along highways at locations determined by a joint effort between the ***DTOE*** and local agencies.

Install signs under the following conditions:

- The shelter location is part of the regional plan.
- The local agency purchases the signs.
- The local agency takes responsibility for flipping signs to the appropriate position.

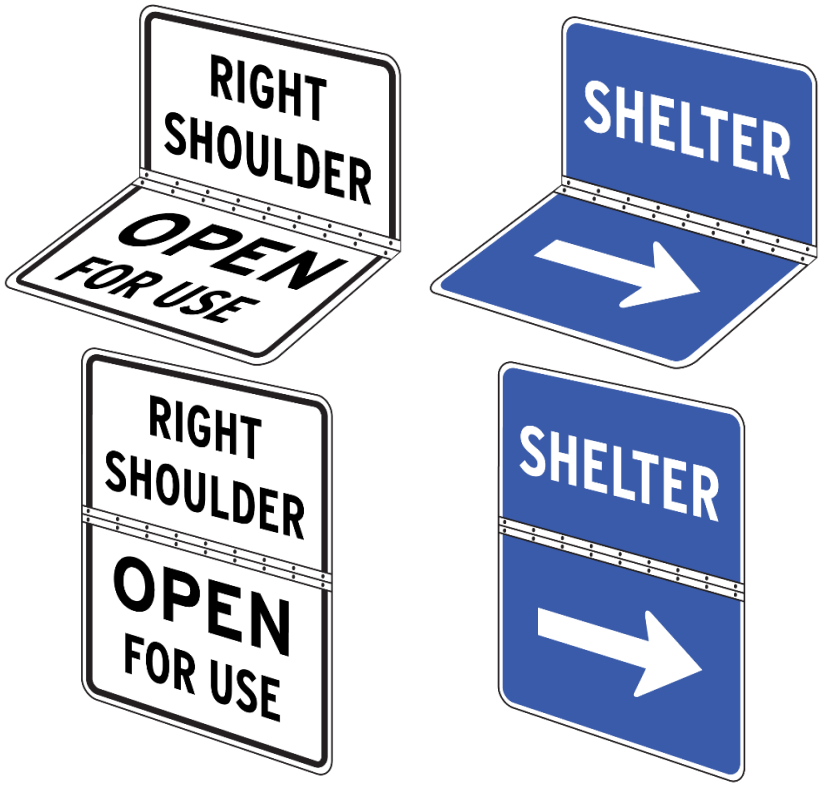
2.14.7 *SHELTER* SIGN DESIGN AND USE

Design *SHELTER* signs with a white background in accordance with ***MUTCD Section 2N.09***.

The ***DTOE*** determines the type of shelter signing support used on the State Highway System: portable (temporary) or permanent.

Shelter signs may be permanent or temporary. The permanent design uses a “flip-down” design, as shown in ***Figure 2.14-1***. This means the bottom panel flips down to reveal the shelter message or “Right Shoulder Open For Use” during Emergency Shoulder Use (ESU) operations. The sign is not a dual-purpose message sign, so maintain the undeployed sign face blank. The CEMP assigns responsibility for turning the flip-down signs during emergency conditions and back up when conditions return to normal.

Figure 2.14-1. Flip-Down Sign



2.14.8 *TRAVELER INFORMATION* SIGN DESIGN AND USE

Design the *TRAVELER INFORMATION* sign ***(D12 series)*** with a blue background and a white legend, as shown in ***Figure 2.14-2***, in accordance with ***MUTCD Standard Signs D12 series*** and ***MUTCD Section 2I.09***.

Figure 2.14-2. Traveler Information Sign



The CEMP may require evacuation information, local shelter information, and official traveler information stations. Local agencies may coordinate with FDOT through a written agreement to include the frequency for local radio stations that are official traveler information stations. This can be done with changeable message signs or by installing the *TRAVELER INFORMATION* sign ***(D-12 series)*** above the flip-down signs.

2.14.9 CONTINUOUS HINGE REQUIREMENTS

See ***Standard Plans, Index 700-010*** for continuous hinge requirements.

2.14.10 *RADIO FREQUENCY INFORMATION* SIGN

FDOT approved the addition of *RADIO FREQUENCY INFORMATION* (***FTP-422-25,*** ***FTP-422A-25,*** and ***FTP-422B-25***) signs along evacuation routes on the State Highway System as an important communication link for public safety during evacuation. These signs were added when Florida Public Radio Stations volunteered to partner with other State and local agencies in the State's evacuation efforts.

2.14.10.1 Sign Design

Design the *RADIO FREQUENCY INFORMATION* sign (***FTP-422-25***, ***FTP-422A-25,*** and ***FTP-422B-25***) with a blue background and a white legend in accordance with the ***MUTCD Standard Signs D12 series*** and ***MUTCD Section 2I.09***.

2.14.10.2 Sign Placement

Place the *RADIO FREQUENCY INFORMATION* sign (***FTP-422-25***, ***FTP-422A-25,*** and ***FTP-422B-25***), shown in ***Figure 2.14-3***, along the following qualifying links:

- All limited-access facilities designated as evacuation routes.
- Principal non-limited-access facilities where limited-access facilities are not the main evacuation routes.
- Principal non-limited-access facilities that are critical links leading to limited-access facilities.

On limited-access facilities, use an *EVACUATION ROUTE* sign (***FTP-415A-25***) and a 42 x 30-inch *RADIO FREQUENCY INFORMATION* sign (***FTP-422B-25***). Use the 36 x 24-inch *RADIO FREQUENCY INFORMATION* sign (***FTP-422A-25***) at locations with sign placement limitations.

On State Highway System non-limited-access facilities, use an *EVACUATION ROUTE* sign (***FTP-415-25***). Attach a 24 x 18-inch *RADIO FREQUENCY INFORMATION* sign (***FTP-422-25***) to the existing sign assembly.

Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

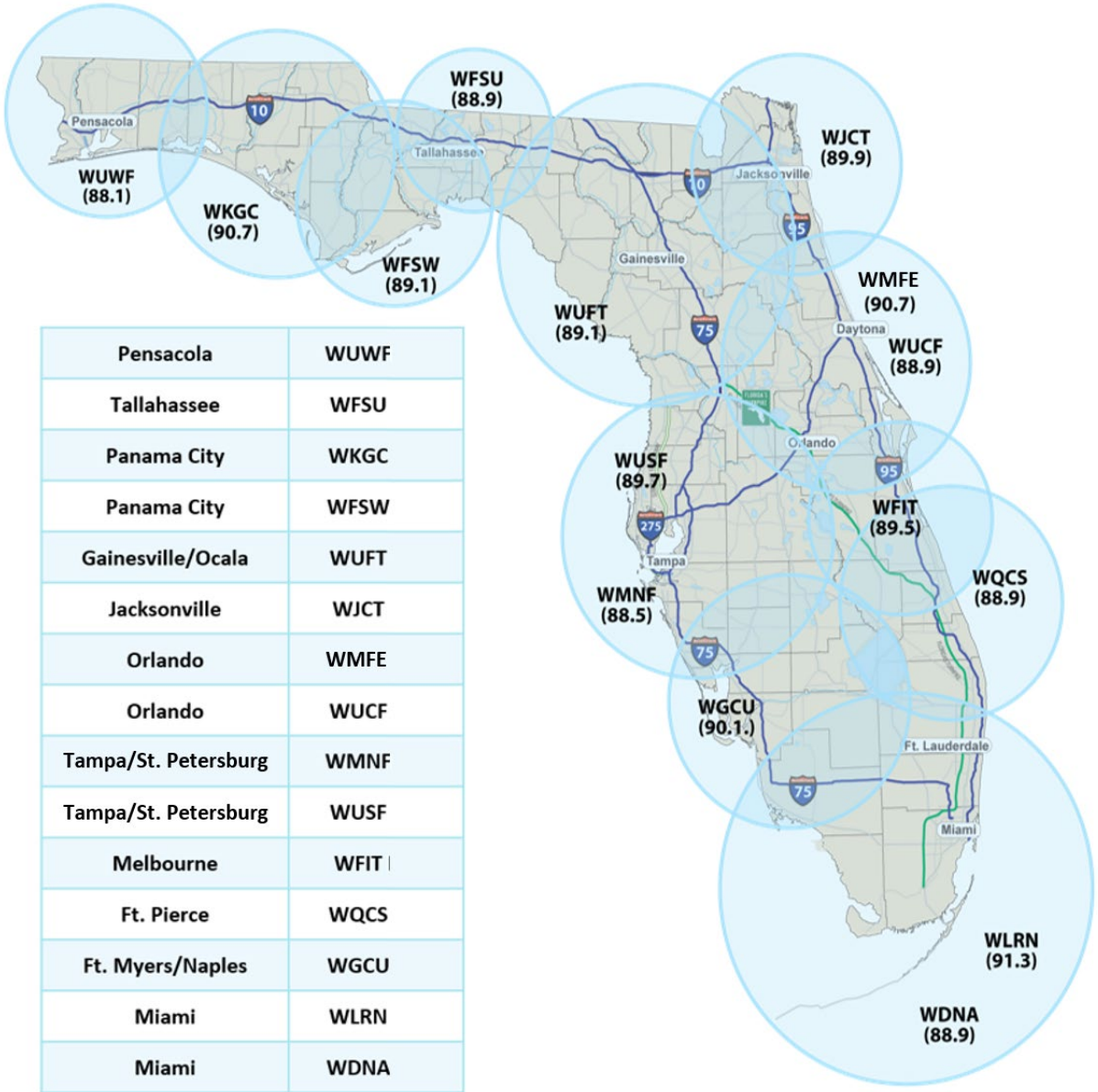
Position these sign assemblies near county lines where radio coverage is present and where radio frequency coverage changes. In areas of overlap, modify the *RADIO FREQUENCY INFORMATION* sign (***FTP-422-25***, ***FTP-422A-25***, and ***FTP-422B-25***) as appropriate to reflect the frequency motorists are driving into. The beginning and termination points of qualifying links are additional locations to consider for sign placement.

When long segments occur, on both limited-access and non-limited-access facilities, install confirmation *RADIO FREQUENCY INFORMATION* signs (***FTP-422-25***, ***FTP-422A-25***, and ***FTP-422B-25***) at 10-mile intervals. ***Figure 2.14-4*** represents the general statewide radio coverage area for this program.

Figure 2.14-3. Radio Frequency Information Sign



Figure 2.14-4. FM Radio Coverage Area



Pensacola	WUWF
Tallahassee	WFSU
Panama City	WKGC
Panama City	WFSW
Gainesville/Ocala	WUFT
Jacksonville	WJCT
Orlando	WMFE
Orlando	WUCF
Tampa/St. Petersburg	WMNF
Tampa/St. Petersburg	WUSF
Melbourne	WFIT
Ft. Pierce	WQCS
Ft. Myers/Naples	WGCU
Miami	WLRN
Miami	WDNA

Note: WXEL-FM call letters have changed to WPBI-FM
WFIT-FM has been added to the Florida Public Broadcasting network.

2.14.10.3 Sign Installation

DTOEs determine the locations for *RADIO FREQUENCY INFORMATION* signs (***FTP-422-25***, ***FTP-422A-25***, and ***FTP-422B-25***). Prepare work orders for installation using the district maintenance office's usual procedures. See ***Standard Plans, Index 700-101*** for mounting heights and lateral clearances.

In some cases, attaching an additional panel to an existing sign may result in a mounting height less than the standard 7 feet. On rural arterials and collectors, mount the secondary sign at least 5 feet above the traveled way. In urban areas with pedestrians, modify the support to maintain the required height.

SECTION 2.15
SMOKE ON HIGHWAY SIGNS

2.15.1 PURPOSE

This section provides guidance for the use of smoke- and fire-related warning signs on the State Highway System. Select a sign based on the condition being communicated to motorists.

The *REDUCE SPEED SMOKE AHEAD* (***TTC-019-25*** and ***TTC-019A-25***) signs are temporary traffic control devices used when smoke is affecting or is expected to affect roadway visibility and create a traffic hazard.

The *PRESCRIBED BURN AHEAD* (***FTP-207-25*** and ***FTP-207A-25***) signs provide advance notice of a planned prescribed burn operation that may produce smoke near the roadway.

The FIRE SMOKE AREA (***FTP-208-25*** and ***FTP-208A-25***) signs warn motorists that they are entering an area where smoke from wildfires may be encountered.

The Florida Department of Agriculture and Consumer Services (FDACS) Florida Forest Service (FFS) and Florida Highway Patrol (FHP) developed a cooperative agreement for response to and management of smoke intrusion on Florida highways, detailing a cooperative policy and process to warn and advise travelers about roadway visibility conditions resulting from wildfires and prescribed burns.

In the case of wildfires or controlled burns under prescribed conditions, the FDACS FFS is most knowledgeable about smoke conditions.

The use of temporary traffic control devices for incident management is addressed in ***MUTCD Chapter 6O***.

2.15.2 TEMPORARY *REDUCE SPEED SMOKE AHEAD* SIGN

Use the *REDUCE SPEED SMOKE AHEAD* (***TTC-019-25*** and ***TTC-019A-25***) signs, shown in ***Figure 2.15-1*** for incident management when smoke is affecting, or is expected to affect roadway visibility to the extent that temporary traffic control measures are warranted. The sign is not intended to provide advance notice of a prescribed burn or to identify areas where smoke may be encountered.

FDOT supplies temporary incident management signs for use during fire and smoke emergencies as needed.

FDOT has the authority to place the signs. FFS is authorized but has no duty to place the signs to warn motorists of an existing smoke hazard.

FFS will notify FHP whenever FFS has knowledge that smoke may impact traffic on the State Highway System. FDOT and FFS will assist when requested by FHP.

FFS will coordinate the removal of these signs with FHP or FDOT.

The signs and support hardware must comply with FDOT standards. Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

Figure 2.15-1. *REDUCE SPEED SMOKE AHEAD* Signs



2.15.3 *PRESCRIBED BURN AHEAD* SIGN

Consider using the PRESCRIBED BURN AHEAD (***FTP-207-25*** and ***FTP-207A-25***) signs, shown in ***Figure 2.15-2***, to provide advance notice of a scheduled prescribed burn operation near a roadway. These signs may be used regardless of whether smoke affects roadway visibility.

Prescribed burns are pre-planned and approved through the FFS authorization process.

These signs are optional and must be removed when prescribed burn activities are completed. The prescribed fire practitioner planning and executing the burn may supply, install, and remove precautionary warning signs on non-limited-access roadways. Prescribed fire practitioners require written approval from FDOT to place these signs on limited-access public roadways.

The signs and support hardware must comply with FDOT standards. Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

Choose sign materials that comply with the current edition of the ***Standard Specifications, Section 994***.

Mount signs in accordance with the current edition of the ***Standard Plans, Index 102-600***.

Adhere to mounting heights and lateral clearances specified in the current edition of the ***Standard Plans, Index 700-101***:

- Case II (rural locations): Sign edge 12-foot minimum from driving lane edge
- Case V (urban locations): Sign edge 2-foot minimum from curb face

Figure 2.15-2. *PRESCRIBED BURN AHEAD* Signs



2.15.4 *FIRE SMOKE AREA* SIGN

Consider using the *FIRE SMOKE AREA* (***FTP-208-25*** and ***FTP-208A-25***) signs, shown in ***Figure 2.15-3***, to warn motorists that smoke from wildfires may be encountered ahead. These signs communicate that visibility may be intermittently reduced.

Do not use this sign when incident management measures are warranted. The sign is not intended to provide advance notice of a specific prescribed burn activity or to serve as a temporary traffic control device when smoke creates an active visibility hazard. When smoke from a prescribed burn warrants temporary traffic control measures, use the *REDUCE SPEED SMOKE AHEAD* (***TTC-019-25*** and ***TTC-019A-25***) sign in accordance with ***TEM Section 2.15.2***.

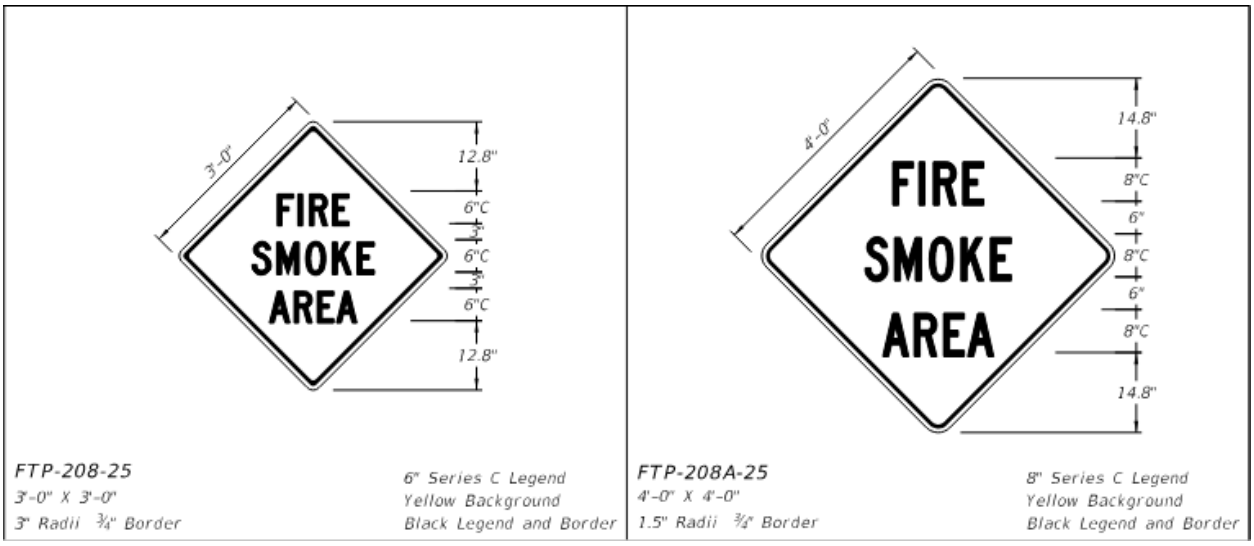
The signs and support hardware must comply with FDOT standards. Sign details are available in the ***Standard Plans, Index 700-102***.

Choose sign materials that comply with the current edition of the ***Standard Specifications, Section 994***.

Mount signs in accordance with the current edition of the ***Standard Plans, Index 102-600***.

Adhere to mounting heights and lateral clearances specified in the current edition of the ***Standard Plans, Index 700-101***.

Figure 2.15-3. *FIRE SMOKE AREA* Signs



SECTION 2.16

SUPPLEMENTAL GUIDE AND MOTORIST SERVICES SIGNS

This section has been rescinded since it was adopted as Florida's Highway Guide Sign Program in ***Rule 14-51, F.A.C.***

SECTION 2.17

EMERGENCY HIGHWAY TRAFFIC PLAN

This section has been rescinded and replaced with the ***Emergency Management Program (Topic Number 956-030-001)***, sponsored by the Emergency Management Office.

SECTION 2.18

*FHP HIGHWAY ASSISTANCE PROGRAM SIGNS

2.18.1 PURPOSE

This section sets standards for the use of Florida Highway Patrol (FHP) signs. *FHP (347) Highway Assistance Program is a statewide program that allows motorists to use their cellular phones to report highway-related information to the FHP or summon roadside assistance in a Road Ranger service area. **FHP* signs (***FTP-413-25***) are posted to inform motorists of the phone number. The signing program extends to all Interstate, Toll, U.S. Routes, and other major roadways on the State Highway System.

2.18.2 SIGN LOCATION

Install these signs where cellular service is available. Service is available in all Florida counties, but some areas are not covered.

2.18.3 SIGN DESIGN AND INSTALLATION

The **FHP* sign (***FTP-413-25***) has a white legend on blue background. Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

The **FHP* sign shows the numbers associated with the letters “FHP” (347) to enable quicker calls. Use this sign design for all installations and sign replacements.

Adhere to mounting heights and lateral clearances specified in the ***Standard Plans, Index 700-101***. Select support systems that meet or exceed FDOT standards of frangibility. The ***District Traffic Operations Offices*** use the following guidelines to determine specific sign placement details.

Table 2.18-1. *FHP Sign Placement Guidelines

Facility Type	Location	Frequency	Placement
Limited-Access	At state and county lines	30-mile intervals	Following major freeway-to-freeway interchanges
Major Arterial	At state and county lines	30-mile intervals	Downstream from junctions between major SHS facilities

SECTION 2.19
MOTORCYCLES USE CAUTION SIGNS

2.19.1 PURPOSE

This section guides the use, design, and installation of *MOTORCYCLES USE CAUTION* signs in both permanent (***FTP-206-25***, ***FTP-206A-25***, and ***FTP-206B-25***) and temporary (***TTC-020-25***, ***TTC-020A-25***, and ***TTC-020B-25***) traffic control settings.

The sign alerts all motorists to roadway conditions or work zone hazards that may pose increased risk to motorcyclists.

2.19.2 BACKGROUND

The *MOTORCYCLES USE CAUTION* sign is a Florida-specific word message sign that supplements ***MUTCD*** guidance. ***MUTCD Sections 2A.06 and 6F.02*** permit the use of word message signs for conditions not addressed by existing symbols when supported by engineering judgment. These signs are intended for conditions that present a heightened risk to motorcyclists beyond the warning given by standard hazard signs.

2.19.3 CONDITIONS FOR USE

Permanent/Warning Conditions

Install the *MOTORCYCLES USE CAUTION* sign (***FTP-206-25***, ***FTP-206A-25***, ***FTP-206B-25***) in advance of locations with permanent conditions to reduce motorcyclist risks. Such conditions include, but are not limited to:

- Metal grates on bridges
- Unsigned or unexpected surface condition changes
- Locations where motorcycle crashes are more likely to occur (e.g., horizontal or vertical curves, high-friction-demand sites)

Temporary Traffic Control (TTC)

Use the *MOTORCYCLES USE CAUTION* sign (***TTC-020-25***, ***TTC-020A-25***, ***TTC-020B-25***) in advance of temporary hazards to reduce motorcyclist risks in work zones. Such hazards include, but are not limited to:

- Loose material on the roadway
- Linear/longitudinal pavement cuts (utility work, lane rerouting, lane edge milling)

- Metal plates
- Slippery or wet conditions
- Chicaning traffic patterns or other temporary alignments

Remove TTC signs after the hazard or work operation ceases. Do not leave motorcyclist warning signs in place when there is no longer a hazard or motorists could become desensitized to them.

2.19.4 SIGN DESIGN

MOTORCYCLES USE CAUTION signs, whether for permanent or temporary traffic control conditions, have black text and a border and can be installed in three sizes (18 x 18, 36 x 36, or 48 x 48).

However, the permanent *MOTORCYCLES USE CAUTION* signs (***FTP-206-25***, ***FTP-206A-25***, ***FTP-206B-25***) have a yellow background.

The temporary *MOTORCYCLES USE CAUTION* signs (***TTC-020-25***, ***TTC-020A-25***, ***TTC-020B-25***) have an orange background.

Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

2.19.5 PLACEMENT AND INSTALLATION

Mount the sign on the right-hand side of the roadway unless conditions justify supplemental placement. Place the sign far enough in advance of the hazard to allow adequate reaction time for motorcyclists, using spacing from ***MUTCD Part 2C*** and ***MUTCD Part 6*** (advance warning sign spacing).

Use supplemental plaques (e.g., "*NEXT XX FEET*") where the hazard extends for some distance. Repeat the sign if needed after intersections or over long approach distances.

Mounting heights and lateral clearances are specified in the ***Standard Plans, Index 700-101***. Use support systems that meet or exceed FDOT's frangibility standards. Meet or exceed the standards shown in ***Standard Specifications, Section 700*** for support systems.

SECTION 2.20

CALL BOX/MILE MARKER SIGNS

This section has been rescinded in accordance with the Department's ***DME Memo 13-05***, Call Box Removal Plan. Information on the use of reference markers can be found in ***TEM Section 2.28***.

SECTION 2.21
FLORIDA LITTER LAW SIGNS

2.21.1 PURPOSE

This section guides the use of the *FLORIDA LITTER LAW* sign (***FTP-015-25*** or ***FTP-015A-25***), in compliance with ***Section 403.413(4), F.S***.

2.21.2 SIGN DESIGN AND PLACEMENT

Install the *FLORIDA LITTER LAW* sign (***FTP-015-25*** or ***FTP-015A-25***), shown in ***Figure 2.21-1*** on interstate off-ramps as required by ***Section 403.4131(2), F.S.*** Install these signs a minimum of 100 feet in advance of the first motorist services sign, or a minimum of 100 feet in advance of directional signs on off-ramps without motorist service signs.

Figure 2.21-1. *FLORIDA LITTER LAW* Sign



At off-ramps, install the 30 x 36-inch *FLORIDA LITTER LAW* sign (***FTP-015-25***) with a white background and black legend.

On interstate stretches where littering is a concern, districts may install the 42 x 48-inch *FLORIDA LITTER LAW* sign (***FTP-015A-25***) with a white background and black legend.

Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

2.21.3 SIGN INSTALLATION

The District Maintenance Office coordinates with the Sign Shop and installs the *FLORIDA LITTER LAW* sign once the District Traffic Operations Office confirms the need for these signs.

Adhere to the mounting heights and lateral clearances specified in the ***Standard Plans, Index 700-101*** and select support systems that meet or exceed FDOT frangibility standards .

Local government may request to install the *FLORIDA LITTER LAW* sign (***FTP-015-25*** or ***FTP-015A-25***) on the State Highway System through FDOT's permit process.

SECTION 2.22

FUTURE SECTION

SECTION 2.23
FLORIDA'S TURNPIKE AND TOLL ROAD NUMBERING AND SIGNING PROGRAM SIGNS

2.23.1 PURPOSE

This section establishes standards for systematic numbering and signing of Florida's toll road system.

2.23.2 BACKGROUND

Florida's toll road system was originally made up of a complex network of locally-developed expressways and the Florida Turnpike in accordance with ***Section 338.01, F.S.*** Local expressway authorities developed toll roads to serve regional needs, seldom extending service into adjacent counties. The expressway authorities developed a sense of community ownership for the toll roads and gave them locally pleasing names. They are still best known by these names even though they now have assigned state road numbers.

FDOT uses a systems approach when connecting with other roadway systems. These include local streets, county roads, state system routes, and other limited-access facilities. An integral part of this interconnected system is the road numbering and signing program.

2.23.3 SIGN DESIGN

For guide sign needs and the use of regulatory and warning signs, the toll system functions as an access-controlled roadway with corresponding criteria for clear zones, letter height, sign placement, and other items (see ***MUTCD Section 2E.02***). Toll road signing is purposely kept simple, using large lettering and concise messages motorists can comprehend and act on while traveling at high speeds.

Use supplemental guide signs for traffic generators as directed by ***Rule 14-51.020, F.A.C.***

2.23.4 ROAD NUMBERING PROGRAM

As the toll system has expanded, identifying toll roads only by local names has become confusing for tourists and other motorists unfamiliar with the area. Where one expressway joins another, a roadway's route name can suddenly change. Similar to

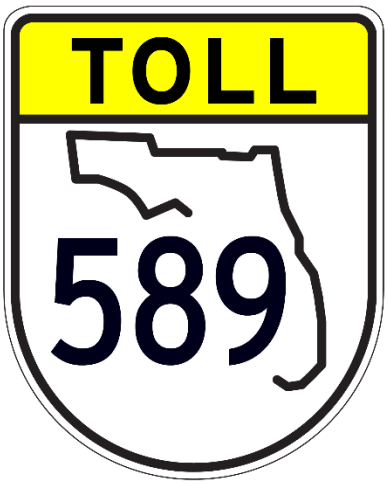
interstate routes, U.S. routes, and other state highways, using a route numbering system prevents confusion.

Retain local names and logos for identification and a local sense of ownership. Motorists unfamiliar with the local system rely on the consistent numbering system to navigate the statewide facilities.

The statewide numbering system is consistent for all state and county roads. In most cases, toll roads adopt the existing state road numbers. For new toll roads, the Transportation Data and Analytics Office assigns a number consistent with the official numbering program. In cases where future facilities complete a loop or beltway, connecting a series of shorter toll road segments, a single road number is retained, often requiring a change of road numbers on older links.

Toll routes are identified by a toll route marker sign (***FTP-611-25, FTP-611A-25, FTP-611B-25***), shown in ***Figure 2.23-1***, depicting the route number on a unique sign shape. This sign resembles an interstate shield and is part of the trailblaze assembly. The toll route marker indicates a roadway's membership in the statewide toll system and provides a consistent method of identification throughout the state.

Figure 2.23-1. Toll Route Marker Sign



2.23.5 SIGNING PROGRAM

The toll route marker sign (***Figure 2.23-1***) is available in three sizes, depending on the application. Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

Mainline Application: Use a 48 x 60-inch toll route marker sign (***FTP-611B-25***). Post this sign in view of motorists leaving the toll plaza to confirm the route and periodically

along the mainline. Use trailblazing confirmation assemblies beyond junctions with numbered routes.

A combination of route number signs and expressway names or logos may be used to maintain the toll road's local identity and aid local area motorists, but the principal identification is the toll route marker sign (***FTP-611B-25***). The local toll road name or logo may be installed on a confirmation guide sign downstream from the mainline toll plazas. Logo panels, if used, are furnished by the local expressway authority. Local name or logo signs are for identification purposes only. Do not use only the local toll road name or logo in guide signing, direction signing, or trailblazing to the facility.

Freeway-to-Freeway Interchange Application: Use the 40 x 48-inch toll route marker sign (***FTP-611A-25***) as both the advance guide sign and exit direction guide sign. This sign size is also available as an overlay. Apply it to other freeway-type guide signs and overhead direction sign applications. Local agencies may add the local toll road name or 36-inch logo panel as a guide or direction sign. Logo panels are furnished by the local expressway authority.

Toll Facility Differentiation from a Conventional Road: Use a 24 x 30-inch toll route marker sign (***FTP-611-25***) along state, county, or local roads with the appropriate cardinal direction information, directional arrows, and junctions. Local agencies may install the local toll road name or a 24-inch logo panel in conjunction with the toll route marker sign. The local expressway authority furnishes these logo panels.

2.23.6 TRAILBLAZE ASSEMBLY PLACEMENT

Trailblaze signing's purpose is to guide motorists. Consider the following guidelines as maximum distances to install trailblaze sign assemblies from a toll facility to parallel routes for rural and urban density development.

Rural density	5 miles
Urban density	2 miles

Use engineering judgment in locating these sign assemblies to avoid overloading the motorist with information and incurring unnecessary expenses. Acceptable locations are along major parallel routes and at the junction of roadways with exits on the toll road.

SECTION 2.24

CRIME WATCH SIGNS ON THE STATE HIGHWAY SYSTEM

2.24.1 PURPOSE

This section establishes guidelines to evaluate and respond to requests to install *CRIME WATCH* signs within the State Highway System. A *CRIME WATCH* sign is commonly used to identify a neighborhood, community, or other geographical area with a Crime Watch program.

CRIME WATCH signs are not official traffic control devices and are not governed by the ***MUTCD***. However, they do aid law enforcement and contribute to public safety.

2.24.2 REQUESTS FOR SIGNING

The ***DTOE*** reviews requests submitted by local government traffic engineering or law enforcement agencies for permission to install *CRIME WATCH* signs within the State Highway System. Refer other requests to the corresponding local governmental traffic engineering or law enforcement agencies.

2.24.3 SIGN LOCATIONS

The DTOE may approve *CRIME WATCH* signs along a state highway only in the vicinity of residential or commercial development directly and exclusively accessed from the state highway.

Exercise judgment in reviewing signing strategies with respect to the spacing of successive signs. For example, on highways passing through isolated small rural or suburban communities, single signs at the community limits may be appropriate. In heavily developed areas, moderately spaced additional signs may be needed.

Do not block the view of existing traffic control devices or place *CRIME WATCH* signs where they might otherwise compete for the motorists' attention.

2.24.4 SIGN DESIGN AND PLACEMENT

Since *CRIME WATCH* signs do not control traffic, FDOT does not design or establish standards for them. However, the ***DTOE*** reviews sign designs proposed for use on the State Highway System. FDOT does not approve the installation of *CRIME WATCH* signs resembling ***MUTCD***-established signage or that motorists may misunderstand or find confusing.

Design signs to be simple, devoid of advertising, and legible under anticipated environmental conditions, both day and night.

Adhere to the mounting heights and lateral clearances specified in the ***Standard Plans, Index 700-101*** and meet or exceed FDOT standards of frangibility for support systems.

Do not affix *CRIME WATCH* signs to any sign support maintained by FDOT.

2.24.5 INSTALLATION AND MAINTENANCE

A local governmental agency must assume full responsibility for the installation and maintenance of *CRIME WATCH* signs permitted by FDOT for installation on the State Highway System.

FDOT reserves the right to remove any *CRIME WATCH* signs that do not conform to these instructions or are not properly installed or maintained.

2.24.6 SPECIAL CONSIDERATIONS

Discuss unusual requests, designs, or problems associated with *CRIME WATCH* signs on the State Highway System with the DTOE, who will coordinate with the ***STOE*** prior to permitting.

SECTION 2.25

DISTANCE SIGNING FOR NON-LIMITED-ACCESS HIGHWAYS

2.25.1 PURPOSE

This section establishes a consistent distance signage system for all non-limited-access highways in accordance with ***MUTCD Sections 2D.35, 2D.43, and 2D.44***.

2.25.2 PROCESS

Distance signs are intended to provide route guidance using communities, significant geographic locations, route junctions, and control cities on non-limited-access highways.

The statewide distance signing system is not intended to identify tourist attractions, recreational destinations, individual facilities, businesses, or other special-interest destinations.

Distance signing on non-limited-access highways is implemented through normal construction projects. The ***DTOE*** oversees and approves corridor distance signage plan development for inclusion into existing work program projects. FDOT does not require or desire stand-alone distance signage projects.

2.25.3 SIGN DESIGN

Include the names of up to three cities, towns, significant geographic locations, routes, or communities on distance signs, and the distance (to the nearest mile) to those places.

At the top, list the next place on the route having a post office or railroad station; a route number (name) of an intersecting highway; or another significant geographic location.

Name a community along the route or an important route junction as the middle destination. This name may be varied on successive distance signs to give motorists maximum information concerning communities along the route to the next control city.

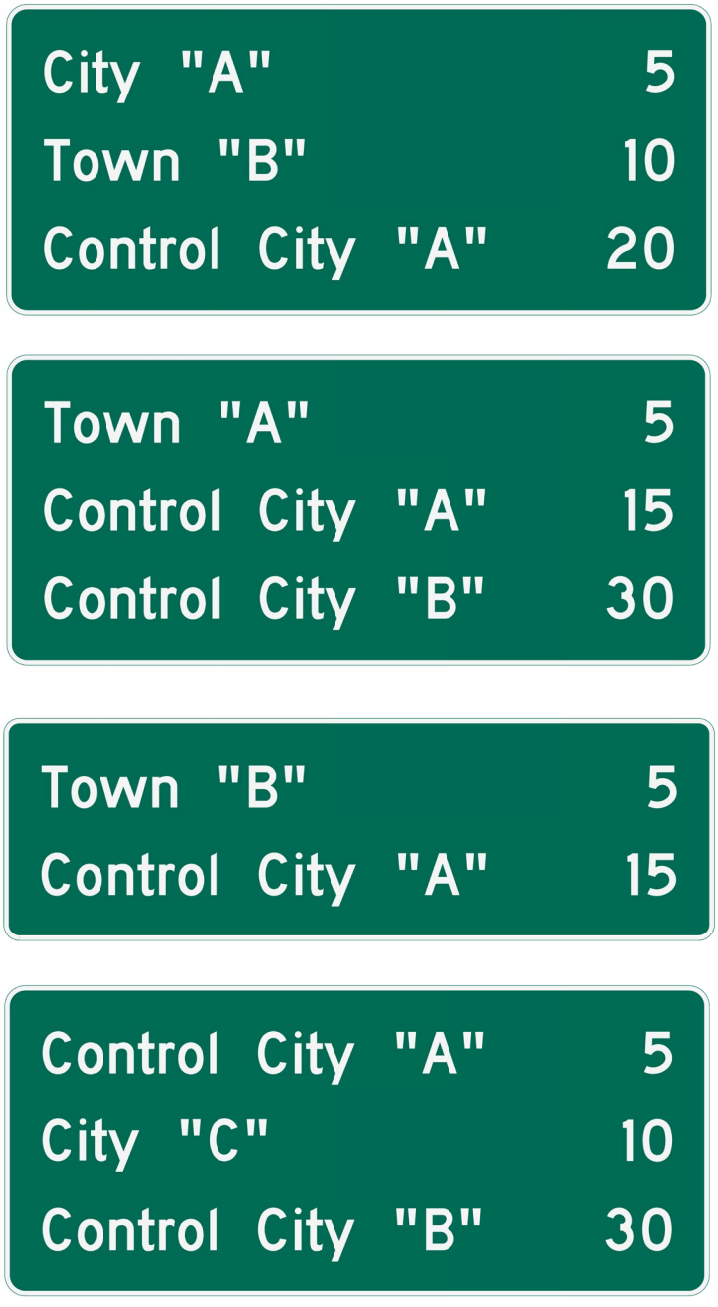
Always name a major destination control city in the bottom destination. Maintain the control city on all successive distance signs throughout the length of the route until that destination qualifies to be the top or middle name on the distance sign. Once the control city moves up, show the next control city as the bottom name.

Control cities have a minimum population of 10,000 and include county seats. A matrix that includes the centroid defined for each municipality on the list can be found on the

Intercity Mileage Spreadsheet maintained by the Transportation Data and Analytics Office.

Figure 2.25-1 provides examples of distance signs for non-limited-access highways. See ***MUTCD Section 2D.44*** for the placement of distance signs.

Figure 2.25-1. Distance Signs for Non-Limited Access Highways



SECTION 2.26
ADVANCE GUIDE SIGNS ON LIMITED-ACCESS FACILITIES

2.26.1 PURPOSE

This section sets uniform statewide advance guide sign applications to give motorists advance notification of interchange exits on limited-access facilities.

2.26.2 BACKGROUND

According to FDOT's ***International Signing Practices Study***, the problem most frequently cited by international visitors navigating Florida is the lack of information about exits. This issue extends to every motorist in unfamiliar territory and to older motorists. See ***MUTCD Section 2E.21*** for the application of interchange guide signs

2.26.3 DEFINITIONS

The following ***MUTCD Section 2E.23*** definitions apply to this section:

Intermediate Interchange: An interchange with urban and rural routes not in the category of major or minor interchanges.

Major Interchange: Major interchanges are subdivided into two categories: (a) interchanges with other expressways or freeways, or (b) interchanges with high-volume multi-lane highways, principal urban arterials, or major rural routes where the volume of interchanging traffic is heavy or includes many motorists unfamiliar with the area.

Minor Interchange: An interchange where traffic is local and very light, such as interchanges with land service access roads; where the sum of the exit volumes is estimated to be lower than 100 vehicles per day in the design year.

2.26.4 PROCEDURE

For urban areas, two advanced guide signs are required for every major and intermediate interchange on the Interstate Highway System, Florida's Turnpike System, and other limited-access facilities.

Place the two advance guide signs 1/2 mile and 1 mile upstream of the exit. If interchange spacing prohibits the placement of these two advance guide signs, use the interchange sequential series signs (***MUTCD Section 2E.24***). For left-hand exit interchanges, use diagrammatic signs.

For major and intermediate interchanges, mount the two advance guide signs overhead in urban areas. For rural interchanges, either cantilever or ground-mounted signs are adequate.

For major interchanges in the rural area and freeway-to-freeway interchanges, provide three advance guide signs located approximately 1/2 mile, 1 mile, and 2 miles upstream of the exit. For rural intermediate interchanges, install two advance guide signs.

The advance guide sign program is implemented through construction projects scheduled in the work program. The ***DTOE*** develops a list of interchanges to be included in work program projects. FDOT does not require stand-alone advance guide sign projects to comply with this standard.

SECTION 2.27
COMMUTER ASSISTANCE SIGNS

2.27.1 PURPOSE

This section sets consistent statewide sign design standards for FDOT's Commuter Assistance Program, ***Topic Number 725-030-008***.

2.27.2 BACKGROUND

The State's Commuter Assistance Program fosters a public/private partnership to provide carpool, vanpool, express bus service, subscription transit service, group taxi service, heavy and light rail, and other systems that can increase vehicle occupancy services to employers and individuals.

The Commuter Assistance Program focuses on reducing single-occupant commuter trips, which are the greatest cause of peak-hour highway congestion. A coordinated effort to provide alternatives to these commuters, using existing or low-cost resources, can be beneficial to the development of a transportation demand management program and public transit statewide. Coordinating the use of existing transportation resources is also a low-cost way to alleviate highway congestion and improve air quality, reducing the frequency of highway maintenance projects.

2.27.3 SIGN DESIGN AND INSTALLATION

MUTCD Section 2I.14 offers guidance for installing a carpool information sign.

FDOT's Public Transit Office or local transit agencies must send signing requests to ***DTOEs*** for approval. District Traffic Operations determines sign placement based on field review and available space.

FDOT's Commuter Assistance Program also has vanpooling and transit services, which each have different signs.

There are two different sizes for each sign design. The arterial sign is 36 x 24 inches. The interstate sign is 78 x 48 inches. All signs have a blue reflective background and white lettering.

Details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library*** for the *TRY CARPOOLING* (***FTP-418-25*** and ***FTP-418A-25***), *TRY VANPOOLING* (***FTP-419-25*** and ***FTP-419A-25***),*TRY TRANSIT* (***FTP-420-25*** and ***FTP-420A-25***) signs.

Adhere to the mounting heights and lateral clearances specified in the ***Standard Plans, Index 700-101*** and use support systems that meet or exceed FDOT frangibility standards.

SECTION 2.28

REFERENCE LOCATION SIGNS (MILE MARKERS)

2.28.1 PURPOSE

The section establishes consistent criteria and signing methods for reference location signs (mile markers) on both limited-access and non-limited-access facilities.

2.28.2 STANDARDS

Reference location signs are described in ***MUTCD Sections 2H.11 and 2H.12***. The sign is a vertical panel with a green reflective background and the mile marker number in 6-inch-high white letters. Place reference location signs on the right side of the roadway at 1-mile or 1/2-mile intervals, as described in Sections ***2.28.3*** and ***2.28.4***.

Set the zero distance at the southern or western state line or at the junction where the route begins. Follow ***MUTCD*** standards for overlap routes.

2.28.3 CRITERIA FOR LIMITED-ACCESS FACILITIES

Use reference location signs and enhanced reference location signs on limited-access roadways with the following criteria:

- Place reference location signs (***MUTCD Section 2H.11***) every 1 mile on limited-access roadways outside urban boundaries.
- Use enhanced reference location signs (***MUTCD Section 2H.12***) every half mile on limited-access roads within urban boundaries.

2.28.4 CRITERIA FOR NON-LIMITED-ACCESS FACILITIES

While reference location signs are helpful on many roadways, those with good building numbers, adequate landmarks, signed cross streets, or other positioning systems will not benefit significantly. Use the following criteria to determine where to use reference location signs:

- The roadway crosses at least two municipalities or two county jurisdictions within three miles.
- The roadway has relatively few named landmarks, cross streets, or building addresses that would help motorists navigate the area.

- The roadway can be identified by local emergency medical services (911) programs to assist in address location.
- The proposed reference location sign will not interfere in any way with other traffic control devices.

In all cases, local jurisdictions must initiate requests to the ***DTOE*** for reference location signing that meet all the criteria listed above.

Local jurisdictions install and maintain reference location signs on state system roadways through the permit process, but the ***DTOE*** is responsible for the route signing plan.

SECTION 2.29

USE OF FLUORESCENT YELLOW-GREEN SIGN SHEETING

This section was rescinded on 11/1/18 and is now included in ***Standard Specifications, Section 700***.

SECTION 2.30

ONE-STOP CAREER CENTER SIGNS

2.30.1 PURPOSE

This section guides the installation of *ONE-STOP CAREER CENTER* signs (***FTP-606-25***). These signs help Floridians locate full-service, One-Stop Career Centers statewide.

2.30.2 BACKGROUND

Since 1995, Florida has committed significant resources to the growth and integration of its workforce development system. The One-Stop Career Centers are the keystone of this system. These centers offer universal services to all Floridians, not just those eligible for specific programs.

2.30.3 DEFINITIONS

Full-Service One-Stop Career Center: A physical location designated by the Regional Workforce Development Board that provides public access to legislatively-mandated partner agencies delivering core services on site. Services include job search, placement assistance, skills assessment, and information on supportive resources.

2.30.4 SIGN DESIGN AND INSTALLATION

The *ONE-STOP CAREER CENTER* sign (***FTP-606-25***) is 36 x 36 inches with a green background and white lettering. Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

Sign requests must be submitted by a local representative of the ***Workforce Regional Development Boards*** to the appropriate ***DTOE***. FDOT will only sign for full-service, One-Stop Career Centers as defined in ***Section 2.30.3***.

FDOT installs and maintains *ONE-STOP CAREER CENTER* signs (***FTP-606-25***) on non-limited-access highways only.

FDOT places a sign, based on available, suitable space, at the State Highway System intersection nearest to the One-Stop Career Center.

Adhere to the mounting heights and lateral clearances specified in the ***Standard Plans, Index 700-101***, and select support systems that meet or exceed FDOT frangibility standards.

SECTION 2.31
UNIQUE TRANSPORTATION SYMBOL SIGNS

2.31.1 PURPOSE

This section sets standards for using FHWA-approved transportation symbol signs on the State Highway System.

2.31.2 BACKGROUND

Because of the many domestic and international tourists in Florida, an unusually high number of motorists using our roadways are not familiar with them.

FDOT's ***International Signing Study*** found that motorists unfamiliar with an area respond well to symbol signs.

FDOT enhanced its signing program by adding the following symbol signs representing transportation-related services or destinations.

2.31.3 SIGN DESIGN

Adhere to the criteria for motorist services signing established in ***Rule Chapter 14-51, F.A.C., Florida's Highway Guide Sign Program***; more specifically, ***Rule 14-51.021(1)(f), F.A.C.*** for limited-access highways and ***Rule 14-51.031(1)(f), F.A.C.*** for non-limited-access highways to use of the symbol signs in this section.

For unique transportation symbol signs, use a 30 x 30-inch sign panel on limited-access facilities and a 24 x 24-inch panel on non-limited-access facilities.

Sign details are available in ***FDOT's Sign Library***.

2.31.4 INSTALLATION AND PLACEMENT

Where these signs are approved for trailblazing use, adhere to the mounting heights and lateral clearances specified in the ***Standard Plans, Index 700-101***, and select support systems that meet or exceed FDOT frangibility standards.

Where these signs are approved as general service signs appended to freeway guide signs, conform to the ***Standard Plans, Index 700-104***.

2.31.5 *PASSENGER SHIP* SIGN

Passenger ships are an important destination for Florida residents and visitors. The *PASSENGER SHIP* symbol sign (***FTP-616-25*** and ***FTP-616A-25***), shown in ***Figure 2.31-1***, is used throughout Florida to trailblaze routes to passenger seaports and cruise ship ports that meet the criteria specified in ***TEM Section 2.31.3***.

The *PASSENGER SHIP* sign has a white symbol on a green background.

Figure 2.31-1.
***PASSENGER SHIP* Sign**



2.31.6 AMTRAK SIGN

The *AMTRAK* symbol sign (***FTP-614-25*** and ***FTP-614A-25***), shown in ***Figure 2.31-2***, is approved for use on guide signs and trailblazing to Amtrak stations that meet the criteria specified in ***TEM Section 2.31.3***.

The *AMTRAK* sign is a white symbol on a green background.

Figure 2.31-2.
***AMTRAK* Sign**

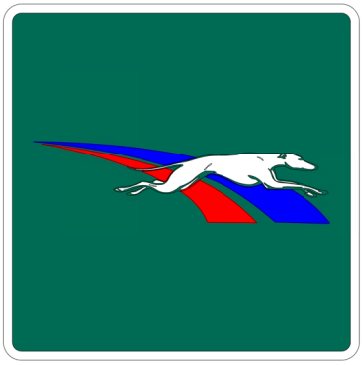


2.31.7 *GREYHOUND* SIGN

The *GREYHOUND* symbol sign (***FTP-615-25*** and ***FTP-615A-25***), shown in ***Figure 2.31-3***, is used as a motorist service sign and to trailblaze to intracity bus stations. This symbol sign will make it easier to trailblaze to small bus stations in a shared building that meets the criteria specified in ***TEM Section 2.31.3***.

The GREYHOUND sign is a three-color symbol with a white border on a green background.

Figure 2.31-3.
***GREYHOUND* Sign**



SECTION 2.32

Florida Travel Info Call 511 Sign

2.32.1 PURPOSE

This section defines criteria and guidelines for installing *FLORIDA TRAVEL INFO CALL 511* signs (***FTP-414-25*** and ***FTP-414A-25***) (***Figure 2.32-1***). The *511 Telephone Service* is part of a nationwide program that provides motorists with access to traffic and transportation information by dialing 511 from their cellphones or landlines, where the service is available. The sign extends to all major roadways on the State Highway System with 511 Telephone Service.

2.32.2 SIGN DESIGN

The *TRAVEL INFO CALL 511* sign, as shown in ***MUTCD Section 2I.12***, comes in two standard sizes. On limited-access highways, install the 66 x 72-inch *FLORIDA TRAVEL INFO CALL 511* signs (***FTP-414A-25***). On non-limited-access highways, install the 48 x 60-inch *FLORIDA TRAVEL INFO CALL 511* signs (***FTP-414-25***).

Figure 2.32-1. FLORIDA TRAVEL INFO CALL 511 Sign



The *FLORIDA TRAVEL INFO CALL 511* signs (***FTP-414-25*** and ***FTP-414A-25***) have a white legend and border on a blue background. Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

When the 511 Telephone Service becomes available in an area, specific sign placement details are reviewed by the corresponding ***District Traffic Operations Office*** using the guidelines shown in ***TEM Section 2.32.3***.

2.32.3 SIGN PLACEMENT

Use the following guidelines for sign placement:

- At state and county lines
- At approximately 10 mile-intervals in urban/metro areas
- At approximately 30-mile intervals in rural areas
- **On limited-access facilities:** preceding major freeway-to-freeway interchanges
- **On major arterial routes:** recommend locations upstream from intersections formed by junctions of U.S./major State Highway System roadways at the ***DTOE's*** discretion.

SECTION 2.33
NATURE-BASED TOURISM AND HERITAGE TOURISM TRAIL SIGNS

2.33.1 PURPOSE

This section informs prospective sponsors of nature-based or heritage trails about the type of support FDOT can offer and the appropriate signs to install along public roadways.

2.33.2 BACKGROUND

Nature-based and heritage tourism is best described as a statewide effort to promote Florida's natural and historic resources. These resources include state parks, lakes, rivers, beaches, and woodlands, as well as the rich historical and cultural sites across Florida.

FDOT actively participates in the effort to promote Florida's natural assets through nature-based tourism and heritage tourism programs by providing a mechanism to use public right-of-way for the needed signs. FDOT also provides engineering guidance to create effective signing plans.

Some examples of approved trails are the Historic Heritage Trail sponsored by the Department of State, the Birding Trail sponsored by the Fish and Wildlife Conservation Commission, and the Gulf Coast Heritage Trail sponsored by the Sarasota Bay National Estuary Program.

2.33.3 PILOT PROGRAM

The Gulf Coast Heritage Trail was the first regional nature-based tourism trail program in Florida, and FDOT approved its signing plan as a pilot program. It is a true trail system in that trailblazing signs identify the route to follow to access the sites, which are also described in the auto tour map and brochure. The program was pioneered and coordinated by the Sarasota Bay National Estuary Program in Sarasota and Manatee Counties.

The pilot was a success, and FDOT is using the Gulf Coast Heritage Trail as a model for other regional plans to follow.

2.33.4 CRITERIA FOR SIGNING PROGRAM

The sponsor of a proposed nature-based or heritage tourism trail must follow several criteria in developing a trail system:

(a) The sponsor must develop grassroots support, including local input into establishing routes.

(b) The program must use a land-based brochure with an auto tour map—the signs are not to be the primary guidance method.

(c) Attractions are to be publicly owned and not for profit. If there's an admission fee, the attraction's purpose needs to be primarily educational (this includes museums and art galleries).

(d) Promotional posters, website, social media presence, and promotional campaigns are strongly recommended.

2.33.5 FDOT PARTICIPATION

FDOT will participate in developing nature-based and heritage tourism programs by advising as the programs are proposed, offering preliminary route recommendations, and approving routes along which signs may be installed.

Contact the ***State Traffic Engineering and Operations Office*** early in the process to promote proper coordination with all districts affected by the proposed trail.

Upon final route selection, the District Traffic Operations Office determines appropriate locations for trailblazing signs and marks the locations so a sign contractor can install the signs. The sponsor takes responsibility for having the signs manufactured and installed through FDOT's general use permitting process. FDOT staff can provide the names of sign manufacturers and contractors experienced in providing these services.

2.33.6 Sign Approval and Design

Sign designs must receive ***STOE*** approval prior to use for this program. Logo signs are encouraged for this program, and several criteria apply:

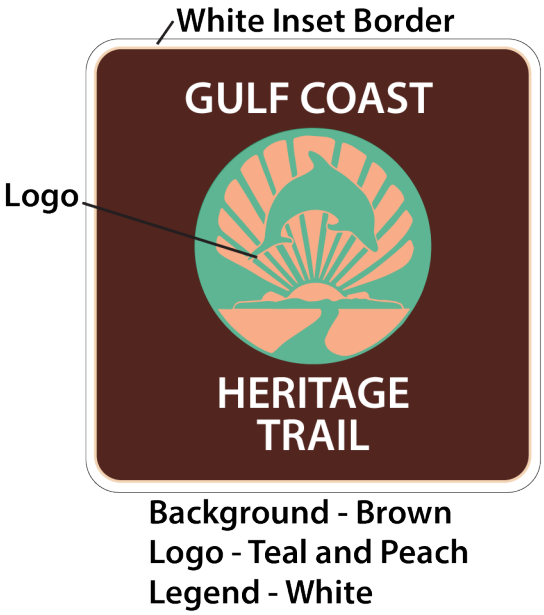
(a) On non-limited-access highways, install 24x24-inch signs. Print the name of the trail in white highway sign type, uppercase lettering (Helvetica). A sample logo is shown in ***Figure 2.33-1***.

(b) No advertising on logo signs.

(c) Sign logos may use colors, but must have a brown background of Type III retro-reflective sheeting, per ***Standard Specifications, Section 994***. Inks must be transparent highway sign types.

(d) Install signs along the State Highway System route with an arrow pointing toward cross streets that access the attraction. Post confirmation signs with straight-ahead arrows at appropriate intervals to let motorists know they are on the right path (usually 3 to 5 miles, depending on route segment length).

Figure 2.33-1. Logo for Gulf Heritage Trail



2.33.7 Sign Maintenance

The sponsors of proposed nature-based or heritage trails are responsible for maintaining all signs directing users to access points.

Sponsors must have a contract with a private sign installation contractor or a maintenance agreement with local government for signs on the State Highway System.

Present the contract or agreement to the corresponding ***District Traffic Operations Office*** before installing the signs.

SECTION 2.34
FLORIDA SCENIC HIGHWAYS PROGRAM AND NATIONAL SCENIC BYWAYS PROGRAM SIGNS

2.34.1 PURPOSE

This section establishes statewide signing standards for designated Florida Scenic Highways and National Scenic Byways.

2.34.2 BACKGROUND

The intent of both the Florida Scenic Highways Program (FSHP) and the National Scenic Byways Program (NSBP) is to designate paved public roads as scenic corridors and preserve, enhance, and maintain their intrinsic resources for the enjoyment of the traveling public.

For a roadway to be designated under either or both programs, it must possess at least one of the following intrinsic resources:

(a) **Cultural Resources:** The traditions, values, customs, and arts of social groups

(b) **Historical Resources:** Sites or structures that reflect human actions evident in past events

(c) **Archaeological Resources:** The physical evidence or remains of human life, activities, or cultures

(d) **Recreational Resources:** Sites for activities dependent upon the natural elements of the landscape

(e) **Natural Resources:** Landscapes showing little or no disruption by humans

(f) **Scenic Resources:** Combinations of natural and manmade features that give the visual landscape remarkable character and significance

Benefits of designation as a Florida Scenic Highway or a National Scenic Byway include:

(a) **Resource Protection:** FSHP/NSBP designation allows preservation and enhancement of the significant intrinsic resources along public roads.

(b) **Community Recognition:** The FSHP/NSBP logo signage along designated highways identifies the corridors as special places with important resources worth noting.

(c) **Economic Development/Tourism:** Designation invites the millions of tourists traveling by car in Florida to visit the communities along a designated highway corridor.

(d) **Community Visioning:** The FSHP/NSBP designation can complement and support a community's vision, instilling a sense of pride.

(e) **Partnering:** Cooperation between public agencies and private corporate sponsors provides support to the community and the overall corridor's focus.

2.34.3 PROGRAM COORDINATION

FDOT's ***Office of Environmental Management*** oversees the Statewide FSHP.

Each FDOT district office has a designated District Scenic Highways Coordinator who represents the district in all matters pertaining to the FSHP or NSBP. The coordinators are the initial point of contact for questions about the program and serve as a link between FDOT and the community.

2.34.4 SIGN CRITERIA

When signing a designated Florida Scenic Highway (FSH) or National Scenic Byway (NSB), use the following criteria:

(a) Install signs where they will not interfere with or distract from adjacent traffic control devices or the area's resources.

(b) Design signs that conform with the ***MUTCD***, which is incorporated by reference in ***Rule 14-15.010, F.A.C.***

(c) Highways that lose designation under the FSHP or the NSBP will have all FSH and NSB signs removed.

Sign designated FSHs and NSBs (as applicable) at entrance points to a route. Install signing along a designated highway approximately every five miles in both directions. The ***District Traffic Operations Office*** can make exceptions based on intersection frequency or directional needs during their review.

Install signs for both FHS and NSB according to the approved sign standards in ***TEM Sections 2.34.5*** and ***2.34.6***.

2.34.5 FLORIDA SCENIC HIGHWAY SIGNS

2.34.5.1 Coordination

FDOT advises local agencies when highway corridors are proposed for eligibility or designation to the FSHP. Once the highway corridor is designated, the District Scenic Highways Coordinator(s) coordinate the sign implementation process.

The proper sign coordination process for an FSH is detailed below:

(a) The district coordinator(s) will coordinate the preferred location(s) for the FSHP signs with the ***District Traffic Operations Office***, along with the Corridor Management Entity.

(b) The ***District Traffic Operations Office*** will finalize the sign location(s) and send a work request to the appropriate district maintenance yard for installation.

(c) Order one additional sign along with the others. This sign is to be used as a display at the ceremony and is not to be placed along the corridor.

(d) The Corridor Management Entity and its partners may host a dedication ceremony to celebrate the designation of a particular corridor as an FSH.

2.34.5.2 Sign Detail

The standard sign design to designate an FSH is shown in ***Figure 2.34-1***. There are two sign sizes available, to be used as specified in ***TEM Section 2.34.5.3***.

Sign details are available in ***FDOT's Sign Library***.

2.34.5.3 Sign Installation and Maintenance

FDOT is responsible for installing and maintaining *FSH* signs (***FTP-802-25*** and ***FTP-802A-25***) on the State Highway System, and the local government is responsible for installing and maintaining FSH signs on its system.

Install the 36 x 24-inch *FSH* sign (***FTP-802A-25***), shown in ***Figure 2.34-1***, at the entrance points to a designated Florida Scenic Highway route, along with a supplemental panel with the scenic highway's name.

Figure 2.34-1. Florida Scenic Highway Sign Design



When appropriate, co-locate the *FSH* sign with existing route confirmation signs. Install the 24 x 16-inch sign panel (***FTP-802-25***) or on top of the route confirmation sign, as shown in ***Figure 2.34-2***.

Figure 2.34-2. Co-Location on Route Confirmation Marker



When the designated scenic highway intersects with another state road, install the 16 x 24-inch sign panel on the existing route directional sign, as shown in ***Figure 2.34-3***.

Figure 2.34-3. Co-location on Route Direction Marker



2.34.6 NATIONAL SCENIC BYWAY SIGNS

2.34.6.1 Coordination

FDOT advises local agencies proposing highway corridors for eligibility or designation to the NSBP. Once a highway corridor is designated, the District Scenic Highway Coordinator(s) initiates the sign implementation process. This is similar to the FSH process outlined in ***TEM Section 2.34.5.1***, but in this case, no extra *NSB* sign (***D6-4*** or ***D6-4a***) is needed for the dedication ceremony.

The District Scenic Highways Coordinator(s) work with the Statewide Scenic Highways Coordinator to submit applications for NSB or All-American Road designation to FHWA.

Once the corridor is designated as an NSB or All-American Road, the District Scenic Highway Coordinator(s) facilitate the following process:

(a) The District Scenic Highway Coordinator(s) coordinate *NSB* (***D6-4*** or ***D6-4a***) sign locations with the ***District Traffic Operations Office***.

(b) The District Traffic Operations Office identifies sign placement and sends a work request to the appropriate district maintenance yard to install them.

(c) The District Scenic Highway Coordinator(s) contact the respective District Maintenance Office or local government to coordinate installing the signs along the corridor.

2.34.6.2 Sign Detail

FHWA developed and approved the *AMERICA'S BYWAYS* (***D6-4*** and ***D6-4a***) sign shown in ***MUTCD Section 2D.57***. This sign is approved for use on NSBs.

See FHWA's ***Standard Highway Signs Manual*** for exact details for the *NSB* sign.

2.34.6.3 Installation and Maintenance

Install the *NSB* sign at the entrance points to a designated byway. When possible, mount the sign below the *FSH* sign on a standard sign pole. See ***Standard Plans, Index 700-010*** for single-column ground sign design requirements.

When an FSH becomes an NSB, the District Traffic Operations Office reviews the signing on the designated roadway for possible ways to accommodate both designations on the corridor. If it's not possible to place both, the *FSH* signs (***FTP-802-25*** and ***FTP-802A-25***) take priority.

FDOT is responsible for installing and maintaining *NSB* (***D6-4*** or ***D6-4a***) signs on the State Highway System, and local governments are responsible for installing and maintaining *NSB* signs (***D6-4*** or ***D6-4a***) on their systems.

SECTION 2.35

MEMORIAL ROADWAY DESIGNATION SIGNS

2.35.1 PURPOSE

This section provides FDOT districts with guidance on installing signs when a road on the State Highway System is designated as a memorial roadway by the Florida Legislature.

2.35.2 BACKGROUND

Over the years, the Florida Legislature has dedicated, named, and otherwise titled roadways in Florida. The designated roads can be under the jurisdiction of either FDOT or the local government.

The earliest dedicated roadway is the W.W. Clark Memorial Bridge on State Road 580 between Safety Harbor and Oldsmar. It was dedicated by the State Road Board on July 6, 1922, according to Department of Systems Implementation records. The ***FDOT Map Viewer*** provides a GIS layer of memorial roadway designations; select *Add Layer* and search for the "*Memorial Roadway Designations*" layer.

2.35.3 SIGNING PROCESS

The Florida Legislature designates memorial roadways based on recommendations by city or county commissions, individual state agencies, or civic groups.

Once the Florida Legislature officially designates a memorial roadway on the State Highway System, legislative sponsors must obtain a local resolution in accordance with ***Section 334.071(3), F.S.***

After receiving a copy of the local resolution, FDOT begins the process of installing appropriate memorial roadway designation signs on the State Highway System.

The sign installation process involves the following FDOT offices:

(a) State Traffic Engineering and Operations Office

(b) Transportation Data and Analytics Office

(c) District Traffic Operations Office

(d) District Maintenance Office

(e) District Public Information Office

Each district has its own signing process, so the district office that initiates the process varies. However, all offices listed above must be kept informed of the status of roadway designations within their districts after each legislative session.

Each district coordinates sign installation with the designation's legislative sponsor.

Do not show memorial names on guide signs or any other sign other than the standard sign, as directed by ***MUTCD Section 2M.10***.

2.35.4 SIGN INSTALLATION AND MAINTENANCE

Install one *MEMORIAL HIGHWAY* sign (***FTP-800-25*** or ***FTP-800A-25***) per direction in accordance with ***MUTCD Section 2M.10***. FDOT maintains signs installed on the State Highway System.

2.35.5 SIGN DESIGN

The memorial roadway designation signs (***FTP-800-25*** or ***FTP-800A-25***) are brown panels with yellow lettering, as shown in ***Figure 2.35-1***.

Sign details are available in the ***Standard Plans, Index 700-102*** and ***FDOT's Sign Library***.

Figure 2.35-1. Memorial Roadway Designation Sign



SECTION 2.36

COMMUNITY WAYFINDING GUIDE SIGNS

2.36.1 PURPOSE

This section describes the process for approving community wayfinding guide signs on the State Highway System for the districts.

2.36.2 BACKGROUND

FDOT, in cooperation with the Florida League of Cities, has developed statewide criteria for community wayfinding guide signs on the State Highway System. These standards give local governments the flexibility to design their own community wayfinding guide sign systems while still maintaining federal and state sign standards to safely guide motorists to their destinations. The criteria are laid out in ***Rule 14-51, Part V, F.A.C.*** (Florida's Highway Guide Sign Program).

The standards shown in ***Rule 14-51, Part V, F.A.C.*** offer local governments a better understanding of what FDOT will and will not approve for use on the State Highway System based on ***MUTCD*** requirements.

2.36.3 STANDARDS

All community wayfinding guide signs must conform to ***Rule 14-51, Part V, F.A.C.*** to be installed on the State Highway System.

Local governments are responsible for designing, installing, and maintaining community wayfinding guide signs on the State Highway System per ***Rule 14-51.051(8), F.A.C.***

2.36.4 REVIEW PROCESS

FDOT recommends a pre-planning meeting between the District Traffic Operations Office and the local government to help the local government comply with ***Rule 14-51, Part V, F.A.C.***

After a local government completes its community wayfinding guide sign system plan, it must provide a copy of the plan to the appropriate ***District Traffic Operations Office***.

The ***District Traffic Operations Office*** reviews the community wayfinding guide sign system plan for compliance with ***Rule 14-51, F.A.C.***

If the plan is not compliant, the District Traffic Operations Office will contact the local government with the changes it needs to make to meet the criteria shown in ***Rule 14-51, F.A.C.***

Once the community wayfinding guide sign system plan is approved, the ***District Traffic Operations Office*** issues a letter of compliance signed by the ***DTOE*** to the local government.

SECTION 2.37
ADVANCE STREET NAME SIGNS

2.37.1 PURPOSE

The section describes the design, placement, and installation criteria for advance street name signs on the State Highway System.

2.37.2 BACKGROUND

FDOT recommends advance street name signs to improve roadway safety in the ***FDOT Safe Mobility for Life Program***. These signs give motorists advance notification to help them make safer roadway decisions. FDOT recommends this improvement based on ***FHWA's Handbook for Designing Roadways for the Aging Population***.

In 2002, FDOT conducted an effectiveness study on the roadway improvements implemented through its aging road user program, including advance street name signs. Data from that study show that advance street name signs with larger lettering were read farther from the signed intersection, giving motorists more time to make a decision. This research supports FDOT's decision to continue using advance street name signs as part of its ***Safe Mobility for Life Program***.

2.37.3 DEFINITIONS

Critical or Significant Cross Street: A signalized or unsignalized intersection or cross street classified as a minor arterial or higher that gives access to a traffic generator or has other physical or traffic characteristics that make it critical or significant. This type of street has an average annual daily traffic (AADT) rate greater than 2000.

2.37.4 STANDARDS

The standards in this section apply to each of the three different application types for advance street name signs. Specific criteria for installing advance street name signs at signalized intersections (*NEXT SIGNAL*) are shown in ***TEM Section 2.37.5***, for non-signalized intersections (*NEXT INTERSECTION*) in ***TEM Section 2.37.6***, and for advance street name plaques on intersection warning signs in ***TEM Section 2.37.7***.

Use advance street name signs and plaques only to identify critical or significant cross streets. They are not intended to identify destinations such as cities, facilities, or residential neighborhoods.

Whenever possible, abbreviate the roadway type (e.g., Blvd rather than Boulevard), reduce letter height to conserve sign panel length, or delete the roadway type altogether. Do not delete the roadway type if doing so would cause confusion. For example, if an area has both an Orange Street and an Orange Avenue, or when a subdivision or community in the area goes by the same name as the street, do not delete the roadway type.

When a cross street is known by both a route number and a local name, use the local name on the advance street name sign. The route number is identified on markers along the route.

When minor cross streets intersect a state highway between the advance street name and the intersection, consider adding a legend such as *NEXT SIGNAL* or *XX FEET* to the advance street name sign.

Make the legend on the advance street name sign or plaque consistent with the legend on either the overhead street name or post-mounted street name sign.

Sign sheeting materials must comply with the current edition of the ***Standard Specifications, Section 994***.

For mounting heights and lateral clearances, adhere to those specified in the ***Standard Plans, Index 700-101***. Support systems must meet or exceed FDOT's standards of frangibility.

Install signs in advance of the intersection at the distances shown in the ***MUTCD***, ***Table 2C-3, "Condition A"***. Consider these distances the minimum for a single lane change maneuver and measure from the begin taper point for the longest auxiliary lane designed for the intersection. Also, consider the degree of traffic congestion and the potential number of lane change maneuvers that may be required when determining the advance placement distance.

2.37.5 Advance Street Name Signs at Signalized Intersections

The District Traffic Operations Office initiates requests to install advance street name signs (***Figure 2.37-1***). The local agency with jurisdiction over the approaching cross street may submit such requests to the District Traffic Operations Office. The ***DTOE*** reviews and approves these requests.

Advance street name signs have white lettering on a green background and are designed according to ***MUTCD Section 2D.04*** and ***Section 2D.46***.

Figure 2.37-1. Advance Street Name Sign at a Signalized Location



FDOT recommends installing advance street name signs at signalized intersections as a safety countermeasure under any of the following conditions:

(a) Documented history of sideswipe or rear-end crashes

(b) High-volume approaches

(c) High population of people 65 and older

(d) Roadways with four or more lanes

(e) Rural high-speed roadways (50 mph or greater)

(f) Intersections located in a ***Safe Mobility for Life Priority County***.

Minimum letter heights (legend) are shown in ***Table 2.37-1***. When street name legends are lengthy or there is limited right-of-way, modify the sign font from ***Table 2.37-1*** using the standard font sizes shown in ***Figure 2.37-4***.

Table 2.37-1. Design Guidelines for Advance Street Name Signs

Posted Speed Limit	STREET NAME LEGEND	NEXT SIGNAL or NEXT INTERSECTION
	Letter Size (inches) Upper/Lower Case Letters	Letter Size (inches) Upper Case Letters
35 mph or less	8EM	6D
40 mph or greater	10.67EM	8E

Install a single post sign (***Figure 2.37-2***) on roadways posted at 35 mph or less or when limited right-of-way is available.

Figure 2.37-2. Advance Street Name Sign Design (Single Post)

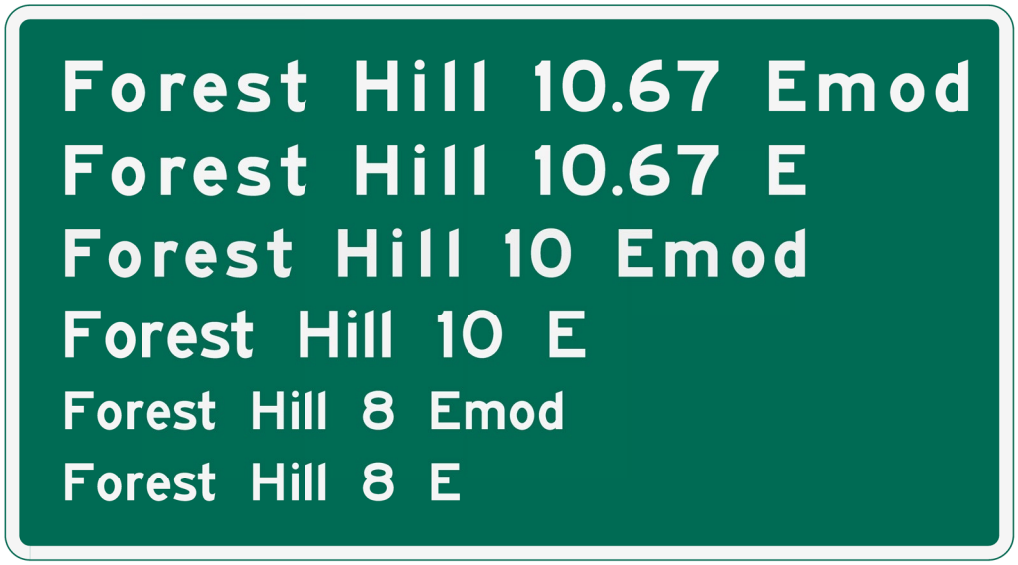


Install a double post design (***Figure 2.37-3***) on roadways posted at 40 mph or greater where right-of-way is not limited.

Figure 2.37-3. Advance Street Name Sign Design (Double Post)



Figure 2.37-4. Standard Font Sizes for Advance Street Name Sign Legends



When a cross street has a different name on each side of the intersection, show both names on the advance sign with an arrow beside each name to designate direction (***Figure 2.37-5***).

Figure 2.37-5. Advance Street Name Sign Using Different Names



2.37.6 ADVANCE STREET NAME SIGNS AT NON-SIGNALIZED INTERSECTIONS

The District Traffic Operations Office initiates requests to install advance street name signs (***Figure 2.37-6***) at non-signalized intersections. The local agency with jurisdiction over the approaching cross street may submit such requests to the District Traffic Operations Office. The ***DTOE*** reviews and approves these requests.

Consider installing these signs on multi-lane divided highways with a posted speed of at least 45 mph and a dedicated left-turn lane, not just a median opening for the approaching critical or significant cross street.

Design advance street name signs in accordance with ***MUTCD Section 2D.04*** and ***Section 2D.46*** and the ***Standard Highway Signs Manual***.

Use the minimum legend letter heights shown in ***Table 2.37-1, Design Guidelines for Advance Street Name Signs.***

Figure 2.37-6. Advance Street Name Signs at Non-Signalized Locations



2.37.7 ADVANCE STREET NAME PLAQUES ON INTERSECTION WARNING AND ADVANCE TRAFFIC CONTROL SIGNS

Install *INTERSECTION WARNING* signs (***W2*** series) (***Figure 2.37-7***) and *ADVANCE TRAFFIC CONTROL* signs (***W3*** series) (***Figure 2.37-8***) when there is a documented need based on sight restriction, crash history, or engineering judgment. Sign details are available in ***FDOT's Sign Library***.

Install advance street name plaques (***MUTCD Section 2C.65***) on these warning signs under the following conditions:

(a) A minimum of 2000 AADT

(b) No street lighting along the main arterial

(c) A documented history of turning, entering, or side-swipe crashes

(d) Limited sight distance due to horizontal or vertical curves

(e) A high population of people 65 and older

(f) The intersection is in a ***Safe Mobility for Life Priority County***.

When installing a new or replacement *INTERSECTION WARNING* sign (***W2*** series) on a rural roadway, accompany it with an advance street name plaque designed in accordance with this section.

Requests can be initiated by the District Traffic Operations Office or the local agency with jurisdiction over the approaching cross street.

Advance street name plaques have black lettering on a yellow background. Use 8-inch D series lettering mounted below a 48-inch warning sign panel with upper/lowercase lettering in accordance with the FHWA's ***Handbook for Designing Roadways for the Aging Population***. If this is not structurally possible, decrease lettering size to a minimum of 5-inch D series.

The DTOE may consider roads not currently signed with an advance route marker for an *INTERSECTION WARNING* sign (***W2*** series) and an advance street name plaque when they meet the criteria referenced in this section.

On roads with an advance route marker (JCT shield) (***Figure 2.37-9***), the designer may place the street name plaque below to better identify the roadway to travelers unfamiliar with the area. Match the panel color to the route marker and make the lettering on the street name plaque no smaller than 4-inch C series. Sign details are available in ***FDOT's Sign Library***.

Figure 2.37-7. Advance Street Name Plaque on Intersection Warning Sign



Figure 2.37-8. Advance Street Name Plaque on Advance Traffic Control Warning Sign



Figure 2.37-9. Advance Street Name Plaque on Advance Route Marker



SECTION 2.38
GENERATORS AND PORTABLE STOP SIGNS AT NON-FUNCTIONING SIGNALIZED INTERSECTIONS

2.38.1 PURPOSE

This section sets guidelines for deploying generators and portable (folding) stop signs at non-functioning signalized intersections after an emergency event. FDOT's guiding principles for this conform to ***Section 316.1235, F.S.*** and the ***MUTCD***.

2.38.2 CONDITIONS FOR USE

The ***DTOE*** requests that generators be deployed or portable stop signs placed after an emergency event at locations where a signalized intersection is not functioning. A non-functioning signalized intersection is one equipped with traffic signals that are damaged or without power after an emergency event.

When the signalized intersection is without power, and it is not possible to restore power using a generator, place portable stop signs as directed by the ***DTOE***.

When using portable stop signs at a signalized intersection that is not functioning due to a power outage, disconnect the power to avoid traffic control conflicts when power is restored.

When power is restored at a signalized intersection using generators, traffic signals must continue to function in the same operating mode. If the traffic signals were in flashing operation, they must continue in flashing operation. If they were in normal cycle and phasing operations, they must continue in normal operation.

2.38.3 LOCATION AND PLACEMENT

The ***DTOE*** determines the locations for placement of generators or portable stop signs. in coordination with local agencies, the ***DTOE*** develops and maintains a list of critical signalized intersections to establish a priority for generator or portable stop sign installation.

Place portable stop signs in accordance with ***Figures 2.38-1*** through ***2.38-6***. If signs need to be placed for any intersection design not represented in ***Figures 2.38-1*** through ***2.38-6,*** place them as directed by the ***DTOE*** in accordance with the ***Standard Plans, Index 102*** and the ***MUTCD***.

Wire each critical signalized intersection control cabinet with a transfer switch so it can be switched to an alternate generated power source in the event of a power outage. Install as directed in the ***Standard Specifications, Section 676***.

2.38.4 STORAGE AND DISTRIBUTION

Each district has access to and is able to deploy portable generators to provide an alternate power source to 12 percent of the signalized intersections on the State Highway System within its boundaries. The District Maintenance Office determines the deployment locations.

The District Maintenance Office maintains and stores the generators.

Each district has access to and can deploy portable stop signs to non-functioning signalized intersections on the State Highway System within its boundaries that are not equipped with a generator.

2.38.5 REMOVAL AND RECOVERY

Remove the generators when power and proper signal operation are restored. Remove portable stop signs before normal traffic control signal operations resume. Deploy district emergency response teams or emergency contractors to recover generators and portable stop signs by doing one of the following:

(a) Completely remove them from each intersection

(b) Stockpile the portable stop signs in one corner of the intersection for removal later

Each district determines the recovery method and develops a recovery plan for its intersections.

Figure 2.38-1. Temporary Signing for Power Outage—Left and Right Turn Lanes Intersection

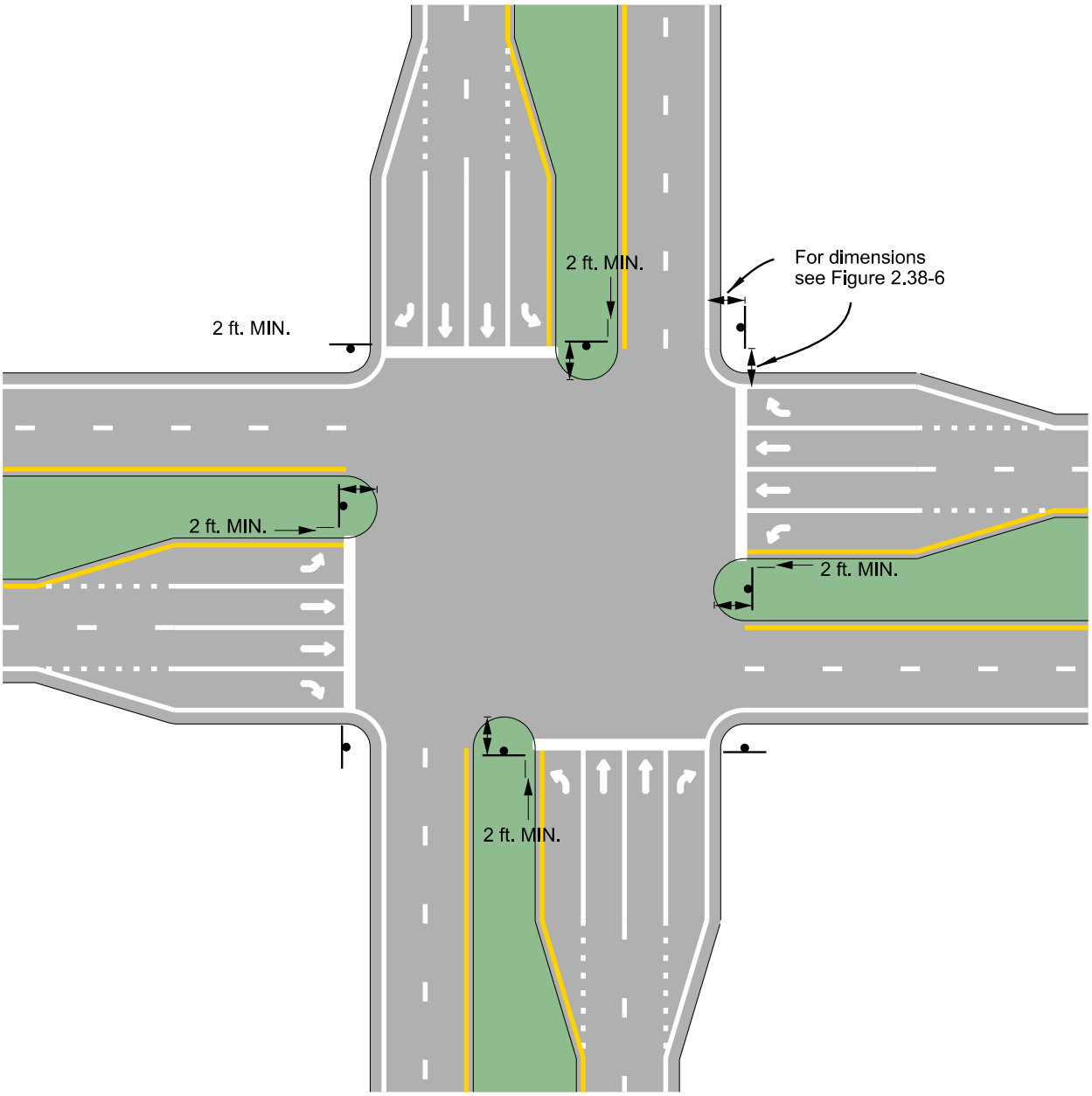


Figure 2.38-2. Temporary Signing for Power Outage—Major Single Left Intersection

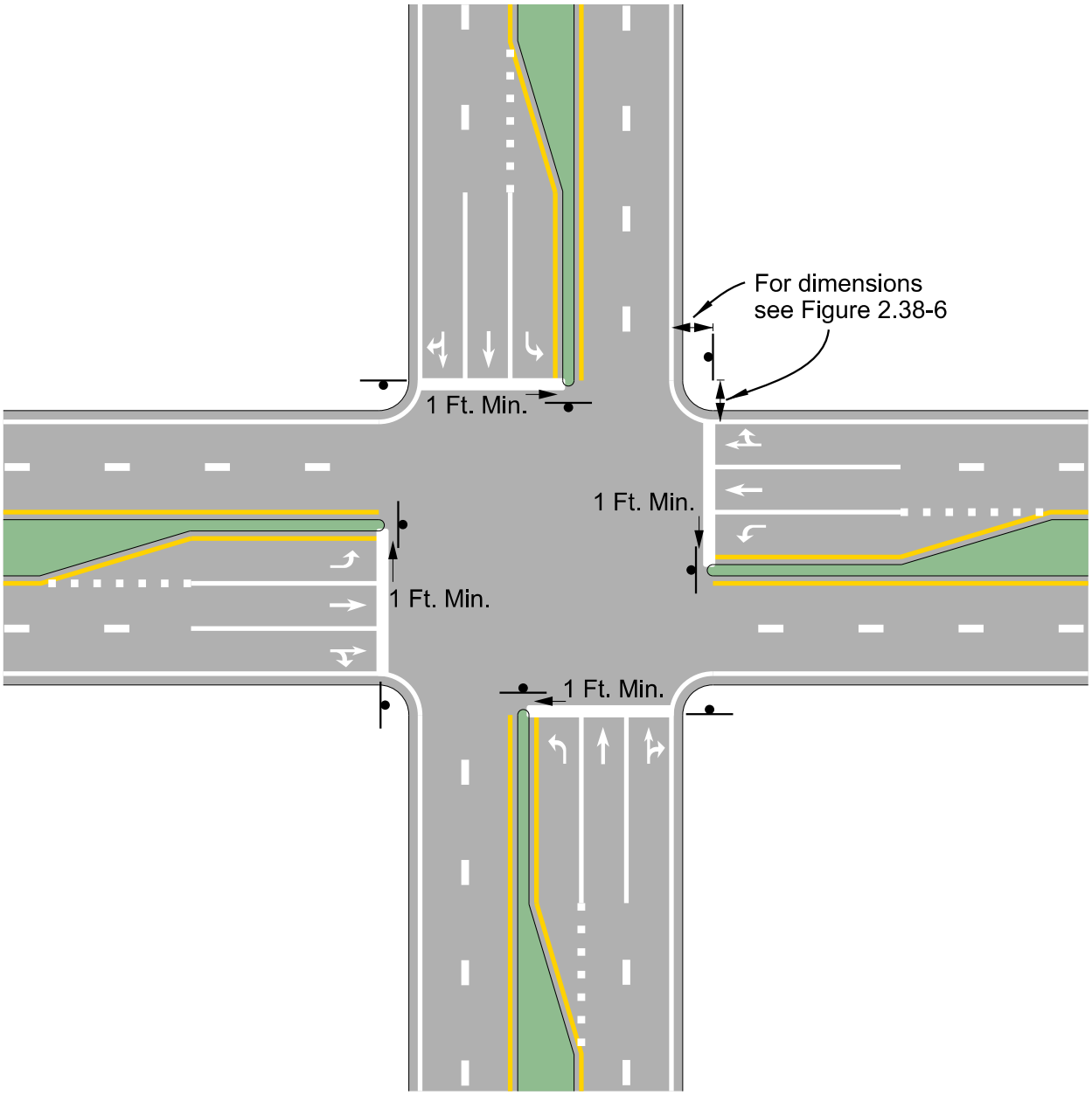


Figure 2.38-3. Temporary Signing for Power Outage—Major Through Intersection

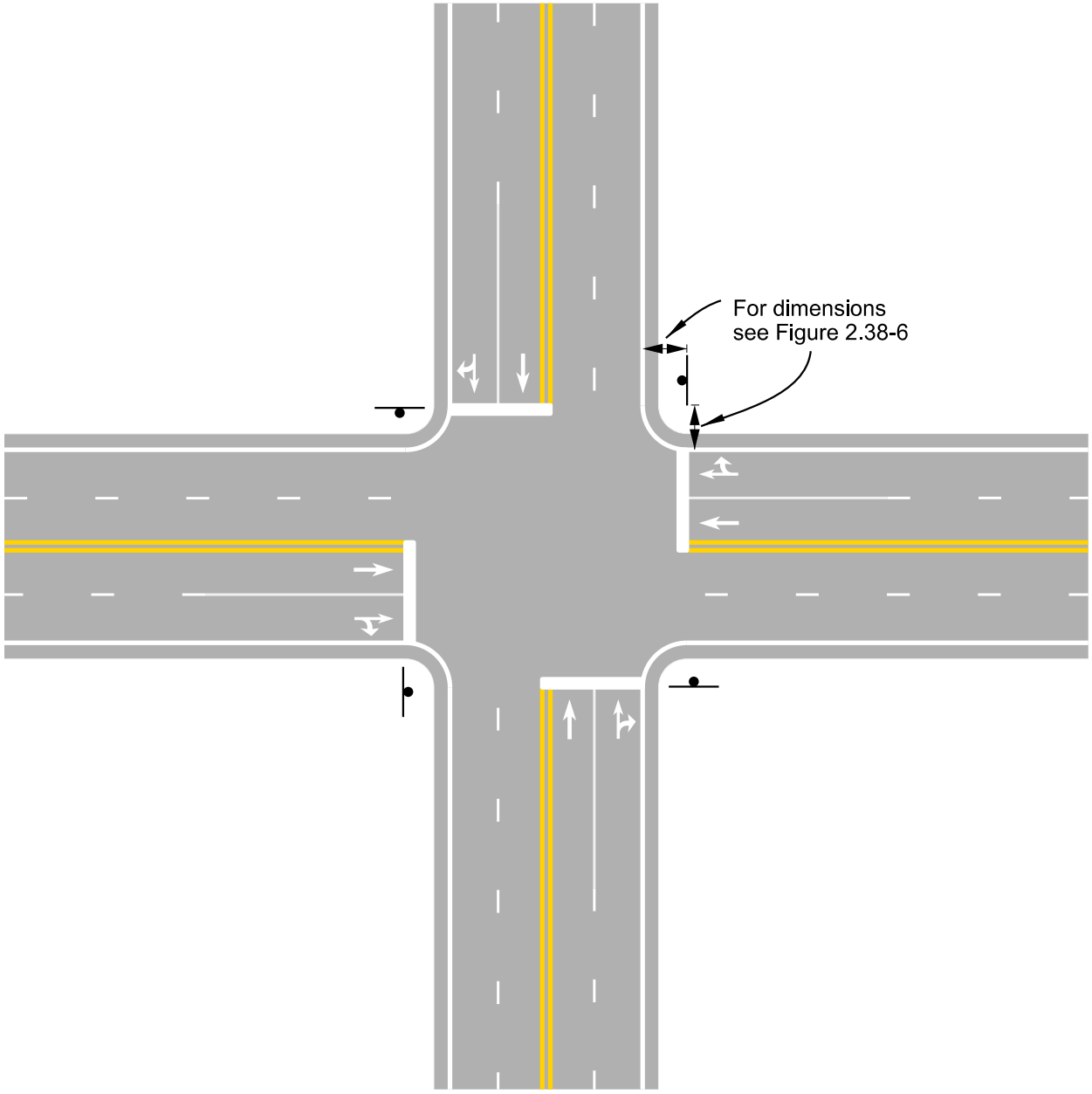


Figure 2.38-4. Temporary Signing for Power Outage—Major to Minor Intersection

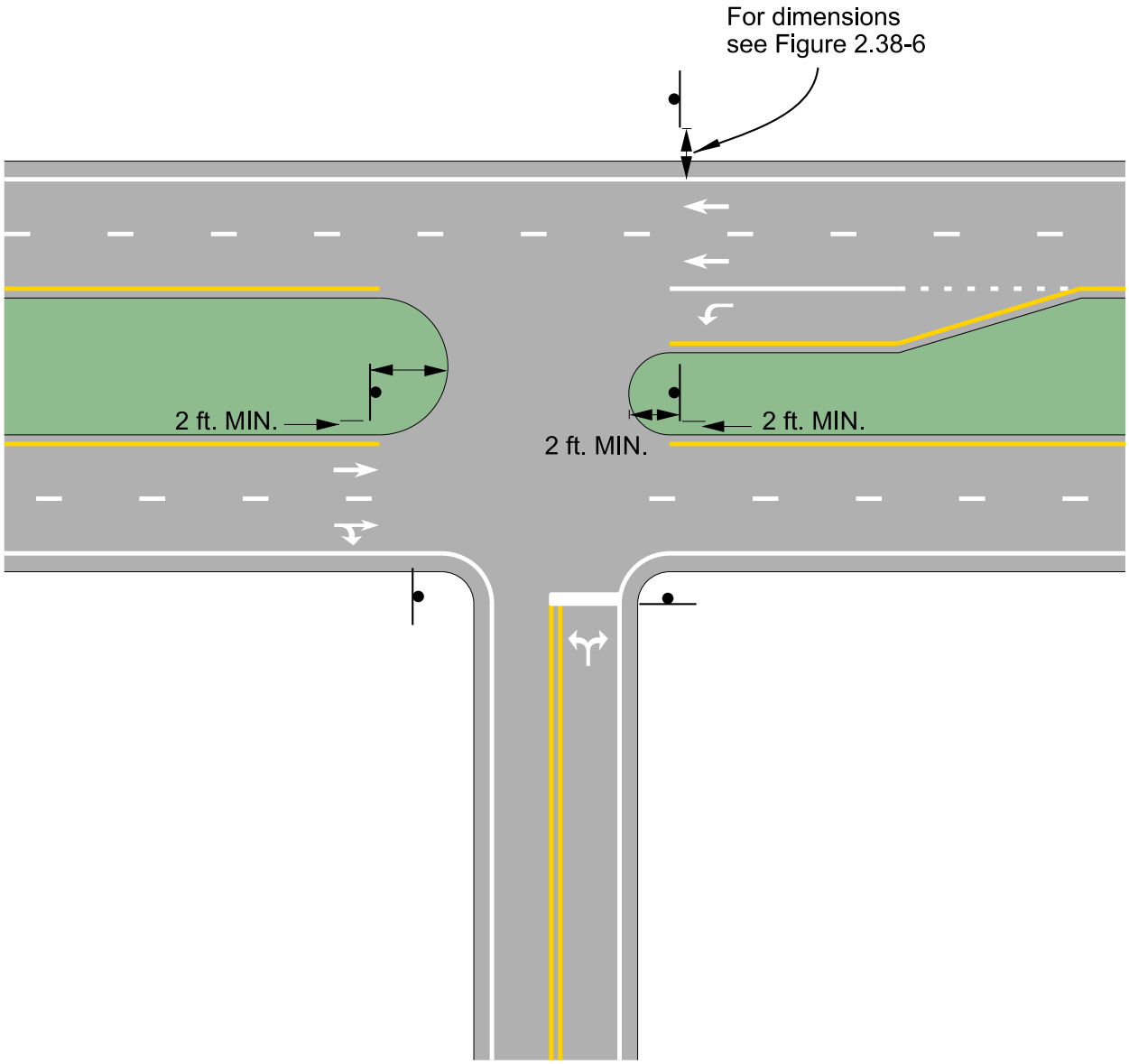


Figure 2.38-5. Temporary Signing for Power Outage—Minor Intersection

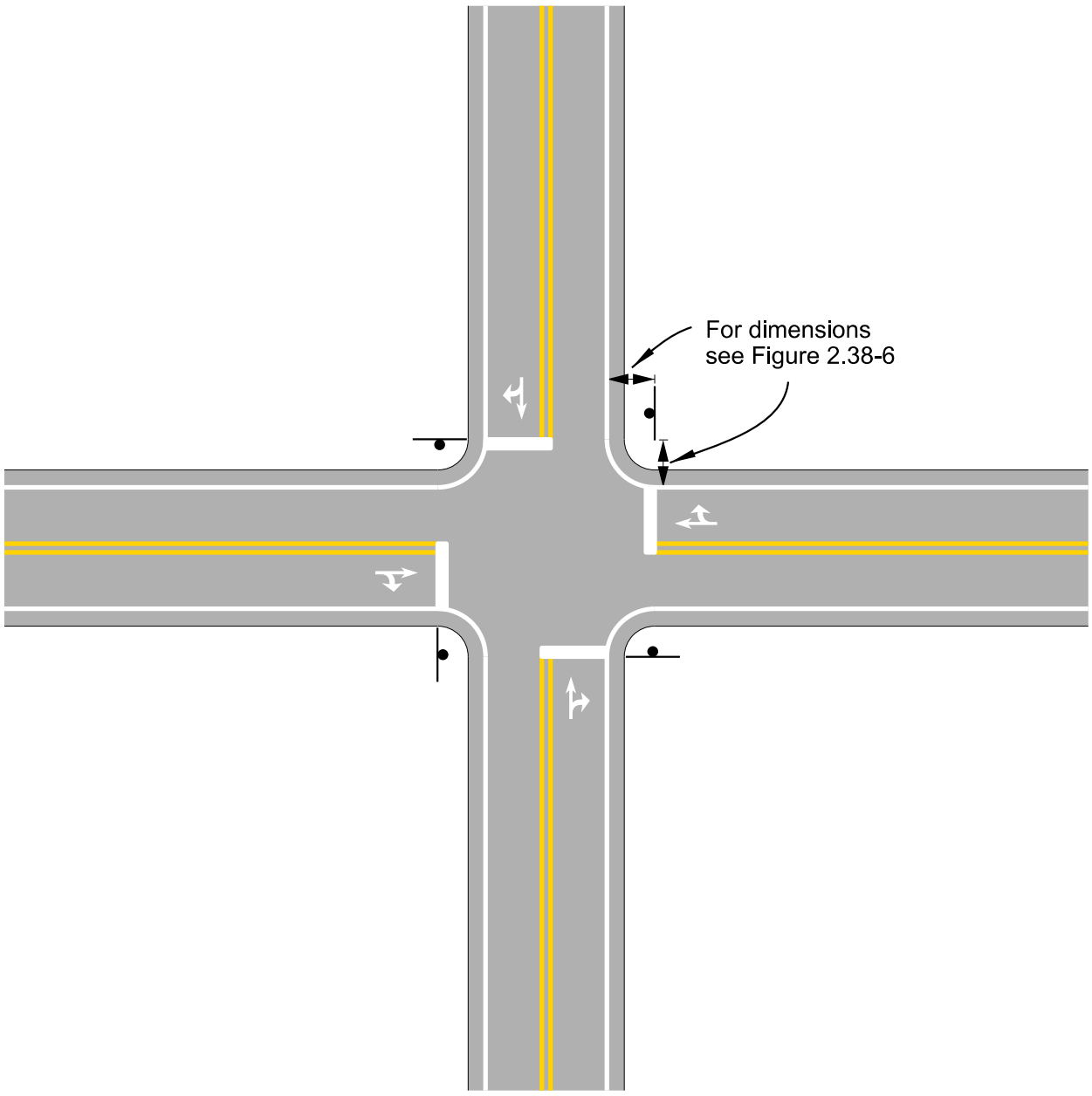
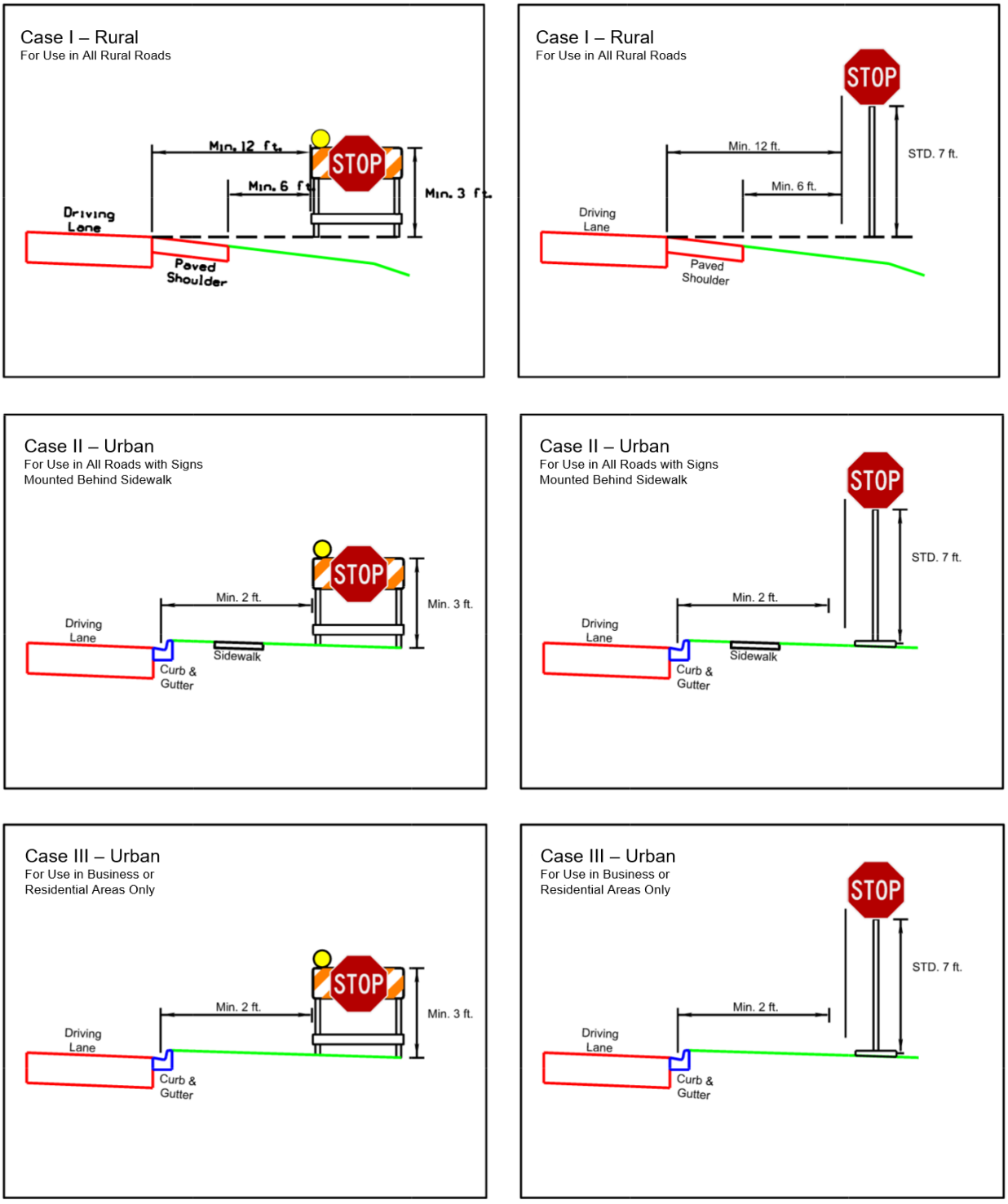


Figure 2.38-6. Temporary Signing for Power Outage—Sign Dimensions



The above sign offset distances and height measurements are from the ***MUTCD***. During a Governor's emergency declaration, these distances may vary at the ***DTOE's*** discretion.

SECTION 2.39

WARNING, STOP, AND YIELD SIGN SIZES

2.39.1 PURPOSE

This section provides guidance on sizing warning (***W Series***), *STOP (**R1-1**)*, and *YIELD* (***R1-2***) signs. Older adult motorists (65 years and older) may experience declining vision and slower reaction time. Reduced visual acuity is associated with higher crash rates. Warning, *STOP*, and *YIELD* signs are critical to the safe operation of motor vehicles by all motorists.

2.39.2 BACKGROUND

The ***State Traffic Engineering and Operations Office*** conducted a study to determine the appropriate sizes for warning (***W Series***), *STOP (**R1-1**)*, and *YIELD (**R1-2**)* signs.

To obtain a Florida driver's license, corrected visual acuity must be at least 20/70. Warning (***W Series***), *STOP (**R1-1**)*, and *YIELD (**R1-2**)* signs are sized to reflect that requirement.

The minimum sign sizes referenced in this section are to be used for all future projects and when replacing signs that have been damaged or worn out.

2.39.3 RECOMMENDED WARNING SIGN SIZES

Follow the symbol warning sign sizes in ***Table 2.39-1*** to meet the design goal for 20/70 visual acuity.

Table 2.39-1. Recommended Symbol Warning Sign Sizes

SIGN SYMBOL	SIGN CODE	SIGN SIZE (inches)
Stop AHEAD	W3-1	36
Yield AHEAD	W3-2	36
Signal AHEAD	W3-3	36
Speed Reduction	W3-5	36
TRUCK CROSSING	W11-10	36

For word message warning signs, follow the sign sizes shown in ***Table 2.39-2*** to meet either the minimum design goal of 20/70 visual acuity or the greatest acuity available by using a 48-inch diamond-shaped sign.

Table 2.39-2. Recommended Word Message Warning Sign Sizes

SIGN MESSAGE	SIGN CODE	SIGN SIZE (Inches)	LETTER SERIES	PRIMARY LETTER HEIGHT (Inches)	MINIMUM REQUIRED ACUITY 20/x
ROAD NARROWS	W5-1	48	D	8	64
NARROW BRIDGE	W5-2	48	D	8	64
ONE LANE BRIDGE	W5-3	48	C	8	54
BUMP	W8-1	36	D	10	80
DIP	W8-2	36	E	10	88
PAVEMENT ENDS	W8-3	48	C	8	54
SOFT SHOULDER	W8-4	48	C	8	54
TRUCK CROSSING	W8-6	48	C	8	54
LOOSE GRAVEL	W8-7	48	D	8	64
ROUGH ROAD	W8-8	48	D	8	64
LOW SHOULDER	W8-9	48	C	8	54
RIGHT LANE ENDS	W9-1	48	D	8	64
LANE ENDS MERGE LEFT	W9-2	48	D	8	64
35 MPH	W13-1	24	E	10	88
EXIT 25 MPH	W13-2	36 x 48	E	12	106
RAMP 30 MPH	W13-3	36 x 48	E	12	106
DEAD END	W14-1	48	D	9	72

A *NO PASSING ZONE* sign (***W14-3***) is 48 x 36 inches with 5-inch Series D lettering for the words *NO* and *PASSING* and 5-inch Series C lettering for the word *ZONE*.

Right-of-way constraints may limit warning sign size. When this occurs, use the largest sign that will fit.

Any sign not designed for 20/70 visual acuity will be legible to most motorists at a shorter distance, allowing less time for them to perceive and understand the message before passing the sign. However, by adding the following additional distances to the sign placement distances shown in ***MUTCD Table 2C-4***, the same total distance from the point where the sign is just legible to the condition must be maintained.

Add 25 feet for 8-inch Series C and 8-inch Series D letters; 50 feet for 5-inch Series D, 6-inch Series C, and 6-inch Series D letters; and 75 feet for 5-inch Series C letters.

2.39.4 RECOMMENDED STOP SIGN SIZES

The 48-inch *STOP* sign requires a minimum visual acuity of 20/45, and using the larger *STOP* signs in areas with restricted right-of-way may present problems. Installing the *STOP AHEAD* symbol warning sign alleviates both problems.

Follow ***Table 2.39-3*** to determine the required size for the *STOP* (***R1-1***) and *STOP AHEAD* (***W3-1***) signs and the sign placement distance for the *STOP AHEAD (**W3-1***) sign.

Table 2.39-3. *STOP* and *STOP AHEAD* Sign Sizes and Placement

POSTED SPEED (mph)	STOPPING SIGHT DISTANCE (feet)	STOP SIGN SIZE[1] (inches)	STOP SIGN RECOGNITION DISTANCE (20/70) (feet)	STOP AHEAD SYMBOL SIGNS[2] (inches)	STOP AHEAD SIGN PLACEMENT DISTANCE (feet)
20	150	30	178	–	–
25	200	30	222	–	–
30	250	36	267	36*	125*
35	300	36	267	36*	175*
45	450	36	267	36	325
50	550	48	356	36	425
55	625	48	356	36	500

*If needed for urban locations with restricted sight distance.

[1] On state highways with a speed limit of 45 mph or greater, consider the 48-inch *STOP* sign (***R1-1***). *STOP* signs (***R1-1***) on roads intersecting the state highway are usually replaced as needed during FDOT construction projects. The sizes in this section are recommended for the replacement signs. Motorists traveling on local roads in urban areas expect to encounter *STOP* signs (***R1-1***). Use a *STOP* sign (***R1-1***) larger than 36 inches when greater emphasis or visibility is needed.

[2] On state highways in rural areas, motorists may not expect to encounter a *STOP* sign (***R1-1***). As an enhancement, use the *STOP AHEAD* sign *(**W3-1***) for speeds equal to or greater than 45 mph. On rural local roads, motorists usually expect to stop before crossing a state highway. Where sight distance restrictions exist, use a *STOP AHEAD* sign *(**W3-1***).

The stopping sight distances shown in ***Table 2.39-3*** were calculated using the equation on Page 113 of AASHTO's ***A Policy on Geometric Design for Highways and Streets*** (Green Book, 2004 edition), and are for level, wet pavement. The brake reaction time was increased from 2.5 to 3.5 seconds to accommodate motorists 65 years and older.

Increase both the stopping sight distance and the *STOP AHEAD* sign (***W3-1***) placement distance to compensate for longer stopping sight distance on downgrades.

The results in ***Table 2.39-3*** do not change for downgrades as steep as 6 percent at speeds up to and including 35 mph. ***Table 2.39-4*** gives the required additional distance due to downgrade. Add this increase to both the stopping sight distance and the *STOP AHEAD* sign (***W3-1***) placement distance in ***Table 2.39-3***.

Place the *STOP AHEAD* symbol sign according to ***Table 2.39-3***, rather than ***MUTCD Table 2C-4*** for Condition B (Stop). The 36-inch sign is legible at 141 feet for people with at least 20/70 visual acuity, which is greater than the required 125 feet.

If restricted right-of-way requires a *STOP* sign (***R1-1***) smaller than shown in this table, use the largest possible size and place a 36-inch *STOP AHEAD* symbol sign according to ***Table 2.39-3*** and ***Table 2.39-4***.

If restricted right-of-way demands a *STOP AHEAD* symbol sign smaller than 36 inches, the 30-inch sign is legible at approximately 117 feet. Place this sign 10 feet further from the *STOP* (***R1-1***) sign than the distance shown in ***Table 2.39-3*** and ***Table 2.39-4***.

Table 2.39-4. Additional Stopping Sight Distance and *STOP AHEAD* Sign Placement Distance Due to Downgrade

POSTED SPEED (mph)	ADDITIONAL DISTANCE (3% GRADE) (feet)	ADDITIONAL DISTANCE (6% GRADE) (feet)
45	25	50
50	50	75
55	50	100

When flashing beacons are used on the *STOP* (***R1-1***) sign, the *STOP AHEAD* (***W3-1***) sign is optional unless required because of restricted sight distance.

2.39.5 RECOMMENDED YIELD SIGN SIZES

The sizes for *YIELD* (***R1-2***) signs are shown in ***MUTCD Table 2B-1***.

SECTION 2.40
APPROVED SAFETY MESSAGES FOR PERMANENTLY MOUNTED DYNAMIC MESSAGE SIGNS

2.40.1 PURPOSE

This section lists approved standard safety messages that can be displayed on permanently-mounted dynamic message signs.

2.40.2 DEFINITIONS

Dynamic Message Sign (DMS): Dynamic, changeable, or variable message signs are programmable traffic control devices that electronically display messages composed of letters, symbols/graphics or both. DMS are used to convey timely and important en route and roadside information to motorists and travelers about changing highway conditions to improve operations and reduce crashes. DMS may inform motorists to change travel speed, change lanes, divert to a different route, or be aware of a change in current or future traffic conditions.

2.40.3 APPROVED STANDARD SAFETY MESSAGES FOR DISPLAY ON PERMANENTLY MOUNTED DMS

Approved standard safety messages for display on a permanently mounted DMS can be found on ***FDOT's Highway Signing Program*** website.

SECTION 2.41
RETROREFLECTIVE STRIPS

2.41.1 PURPOSE

This section specifies how to use retroreflective strips on signposts or sign columns when required or when there is a documented need to draw attention to the sign, especially at nighttime. Retroreflective strips can make signs more visible and conspicuous.

2.41.2 CONDITIONS FOR USE

Retroreflective strips are required for the following static signs:

(a) *DO NOT ENTER* signs (***R5-1***) per ***FDM 230.4***

(b) *WRONG WAY* signs (***R5-1a***) ***per FDM 230.4***

(c) *ONE WAY* signs (***R6-1***) per ***FDM 230.4***

(d) Crossbuck sign blades at rail crossings and posts at passive rail crossings

Use retroreflective strips on signposts where there is a documented need or their application has proven to significantly reduce crashes for a given condition. Consider using retroreflective strips on the following sign types based upon engineering judgement:

(a) *CURVE WARNING* signs (***W1-1 through W1-15***) (***MUTCD Section 2C.05***)

(b) *STOP* (***R1-1***), *YIELD* (***R1-2***), or other regulatory signs

For critical signs that are placed in undesirable locations (on curves where headlamps don't align optimally, etc.), engineering evaluations may lead to the sign being upgraded with retroreflective strips. Engineering judgment includes considering high-crash locations where the use of retroreflective strips on sign supports could improve sign visibility and provide better guidance to motorists.

2.41.3 SIGN DESIGN

Refer to the specifications for retroreflective requirements in ***Standard Specifications, Section 700***.

SECTION 2.42
EXPRESS LANES SIGNING

2.42.1 PURPOSE

This section establishes a uniform basis for designing express lanes signing.

2.42.2 BACKGROUND

Design express lanes signs in compliance with ***MUTCD Section 2G***. Express lanes are referred to as *Priced Managed Lanes* in the ***MUTCD***.

2.42.3 CRITERIA

Express lanes signs include the following sign types:

(1) Regulatory Signs

- **(a)** Vehicle Eligibility sign
- **(b)** Express Lanes Termination sign
- **(c)** Toll Amount sign
- **(d)** Priced Managed Lane Operation sign *(**R3-44**)*

(2) Advanced Guide Signs

- **(a)** Point of Entry/Ingress signing
- **(b)** Point of Exit/Egress signing

2.42.3.1 Vehicle Eligibility Sign

This sign conveys the vehicle eligibility criteria established in ***Rule 14-100.003, F.A.C.***, regarding the number of axles and vehicle types permitted to use the express lanes. Mount this sign overhead above the applicable lane. An example of the vehicle eligibility sign is shown in ***Figure 2.42-1***.

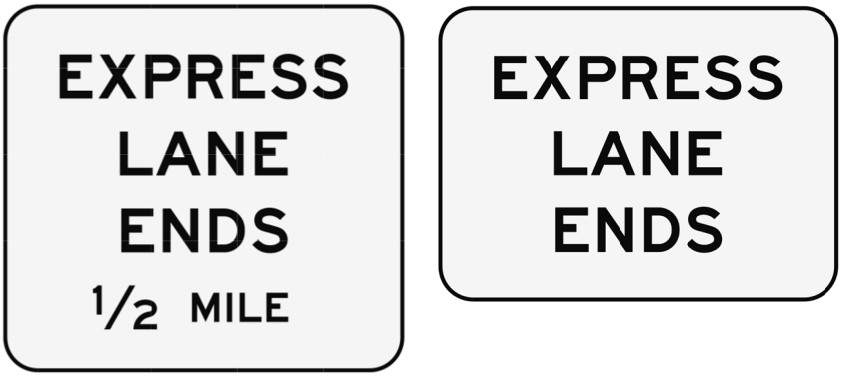
Figure 2.42-1. Vehicle Eligibility Sign



2.42.3.2 Express Lanes Termination Sign

This sign informs motorists that the express lanes are ending. Mount this sign overhead above the applicable express lane. Mount three signs at sequential spacing if space permits. Use an increased 15-inch letter height to improve visibility for motorists 65 and older. Examples of the Express Lane Termination sign are shown in ***Figure 2.42-2***.

Figure 2.42-2. Express Lane Termination Signs



2.42.3.3 Toll Amount Sign (TAS)

The Toll Amount sign (TAS) displays real-time toll amount information, identifying the cost of using the express lanes to a specific destination and the fee for toll violations, as required by ***Rule 14-100.003, F.A.C***. Since the TAS posts information that influences motorist decisions to use the express lane, it is important that the sign be clear, legible, and straightforward. Examples of the TAS are shown in ***Figure 2.42-3***.

Do not display more than three destinations on the TAS.

The toll violation message is black on white and displayed on the TAS.

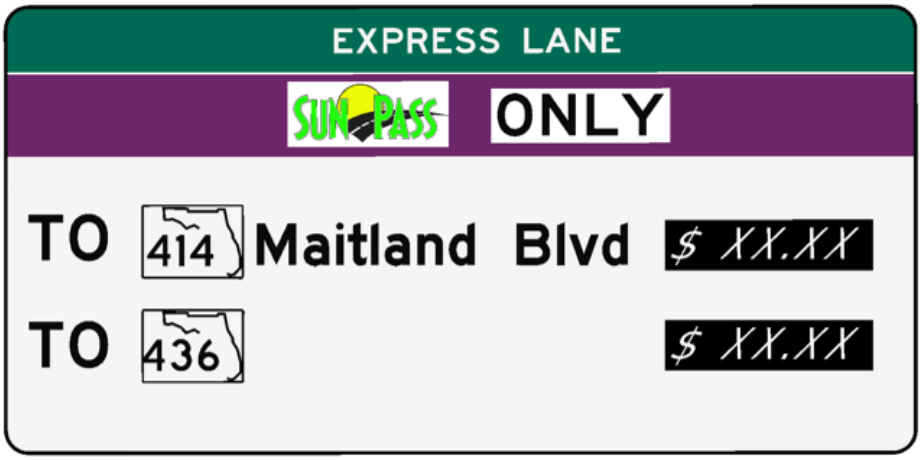
Mount the TAS overhead above the applicable lane. See ***TEM Section 2.42.4*** for TAS sign placement and sequencing.

Design the TAS sign structures to hold the maximum-size panel of three destinations.

Do not repeat destinations on any TAS within the express lanes.

Install two TASs (space permitting) indicating the toll amounts for the next set of toll destinations over the express lanes prior to the last point of egress to the general-purpose lanes before beginning the new sequence of tolling trips.

Figure 2.42-3. Toll Amount Sign



2.42.3.4 Priced Managed Lane Operation Sign

The Priced Managed Lane Operation sign (***R3-44***) informs motorists of the beginning or entry point of an access-restricted express lane. Install this sign at the beginning or entry point to the express lane in accordance with ***MUTCD Section 2G.18***. An example of the Periods of Operation sign is shown in ***Figure 2.42-4***.

Use the physical gore as the point of reference for the distance message on advance guide signs except when the physical gore and theoretical gore are separated by more than 500 feet. Use the theoretical gore as the point of reference when the physical gore and theoretical gore are separated by more than 500 feet.

Figure 2.42-4. Priced Managed Lane Operation Sign



2.42.3.5 Advance Guide Signs

If the entry/ingress or exit/egress is on the left side of the roadway, add a *LEFT* plaque to the top left edge of the advance guide signs, as shown in ***MUTCD Section 2G.10***. If the entry/ingress or exit/egress is a lane drop situation, install the *ONLY* panel with a down arrow.

Add a *NO TRUCKS* black-on-white panel to the top of the advance guide signs as shown in ***Figure 2.42-5***.

SunPass and other interoperable transponders are the only forms of payment for the express lane. Include the *SUNPASS ONLY* panel with purple background on advance guide signs.

2.42.3.6 Point of Entry/Ingress Signs

The access types for managed lanes are defined in ***FDM 211***. Install point-of-entry/ingress signs at each access point. Examples of point of entry/ingress signs are shown in ***Figure 2.42-5***.

When the point of entry is the initial entrance to the express lane network, start the advance overhead signing two miles before the express lane entrance, space permitting. In addition to the initial entry/ingress express lane signing, locate sequential overhead guide signs at one mile, half a mile, and at the express lane point of entry. For intermediate express lane entry/ingress points, begin advance signing one mile before the express lane ingress and continue with the remaining sequence of signs.

Figure 2.42-5. Examples of Ingress Signing



2.42.3.7 Point of Exit/Egress Signs

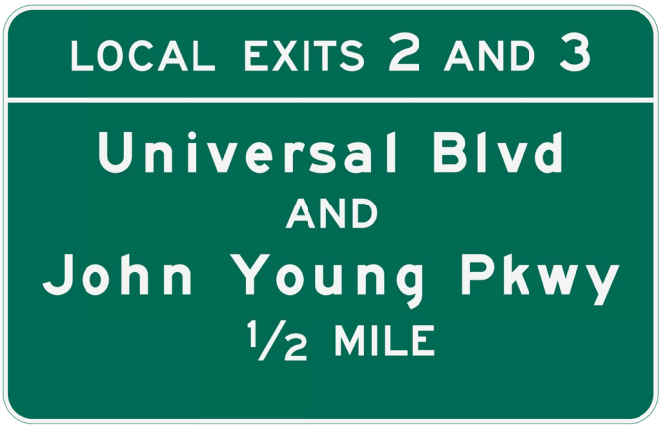
Intermediate point of exit/egress guide signs, or local exit signs, inform express lane users which express lane egress ramp serves their destination. Mount local exit signs overhead and over the lanes to which they apply.

Display the destinations on the general use exit sign the same as on the corresponding TASs.

If there are three or more general-purpose lane exits before the next opportunity to exit the express lane, indicate this on the egress signing, as shown in ***Figure 2.42-6***.

Figure 2.42-6. Examples of Egress Signing





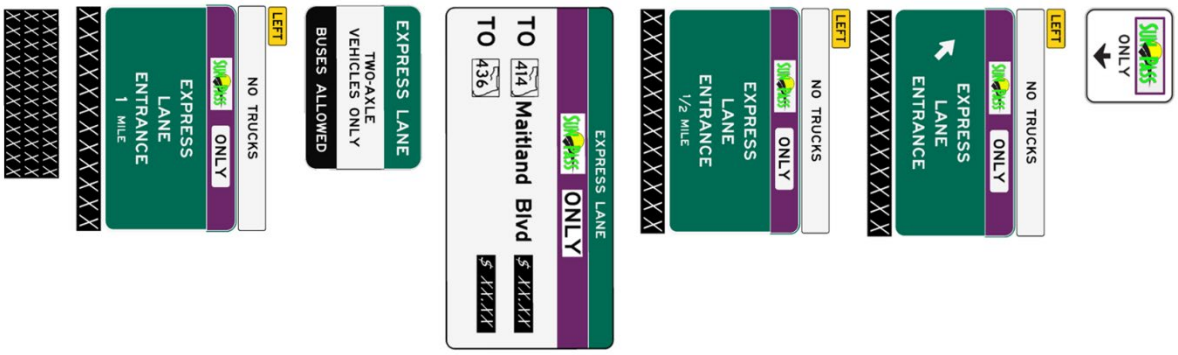


2.42.4 SIGN SEQUENCE

There are seven signs that need to be installed at an express lane entrance: three advance guide signs, two TASs, one vehicle eligibility sign, and one regulatory Priced Managed Lane Operation sign (***R3-44)*** (*MUTCD Section 2G.18*). Include one three-line full-matrix dynamic message sign (DMS) if space is available. Install the signs in the order shown in ***Figure 2.42-7.***

Install the Priced Managed Lane Operation sign (R3-44) last in the sequence. Install the DMS, if included, first in the sequence.

Figure 2.42-7. Express Lanes Entrance Sign Sequence



Install a minimum of two TASs with the legend showing the destination and price before the express lane entrance. The *MUTCD* gives minimum spacing requirements for express lane signs, including TASs.

If the sign information is intended for the general use lanes, install the sign above the general use lanes. If it is intended for the express lane, install the sign above it.

2.42.5 SPECIAL CONSIDERATION FOR ARTERIAL ENTRANCE/INGRESS CONNECTIONS WITH EXPRESS LANES

For direct entrance/ingress access into the express lanes from an arterial road, one TAS for each travel direction is acceptable, provided the sign includes a one-line DMS to serve as a backup with separate power and separate communication.

The letter height for arterial signs may be reduced per the ***MUTCD***.

If there are right-of-way constraints and the vehicle eligibility sign cannot be placed on multi-post supports, mount it on a single post.

SECTION 2.43

RAMP ONLY SIGN PANEL

2.43.1 PURPOSE

This section establishes a uniform basis for incorporating the *RAMP ONLY* sign panel. Use this guidance for signing a lane drop on an arterial approaching an interchange onto a limited-access facility.

2.43.2 BACKGROUND

MUTCD Section 2E.28 provides signing guidance for when an expressway and freeway lane drops at an interchange exit that does not have an optional exit lane. ***MUTCD Section 2D.49*** encourages consistent sign application for conventional road approaches to freeway or expressway interchanges. Using the *RAMP ONLY* sign panel supports consistency for motorists on an arterial with a through lane drop that carries an interchange entrance ramp.

Apply the design details for the *EXIT ONLY* (down arrow) (***E11-1***) sign panel provided in the ***FHWA Standard Highway Signs Manual*** to design *RAMP ONLY* sign panels. The number of arrows displayed on the sign panel corresponds to the number of terminated lanes at each sign's location. Place the down arrow as directed by ***MUTCD Section 2E.18***.

2.43.3 CONDITIONS FOR USE

Install the *RAMP ONLY* sign panel (***Figure 2.43-1***) when it is important to inform motorists on an arterial that the through lane is being dropped at the interchange entrance ramp. Mount this sign overhead and above the lane to which it applies.

Coordinate use of the *RAMP ONLY* sign panel with the ***DTOE***.

Figure 2.43-1. *RAMP ONLY* Sign Panel



SECTION 2.44

TURNING VEHICLES STOP FOR PEDESTRIANS SIGN

2.44.1 PURPOSE

This section has guidelines for using the *TURNING VEHICLES STOP FOR PEDESTRIANS* sign (***R10-15a***) on the State Highway System.

Use of these signs supports ***Section 316.130(7), F.S.***, which requires a motorist to stop before entering the crosswalk to allow pedestrians to cross at a signalized intersection or a free-flow channelized turn lane. The *TURNING VEHICLES STOP FOR PEDESTRIANS* sign (***R10-15a***) is designed to reduce the potential for vehicle-pedestrian conflicts by increasing motorist awareness.

2.44.2 GENERAL

Per ***MUTCD Section 2B.59***, use the *TURNING VEHICLES STOP FOR PEDESTRIANS* sign (***R10-15a***) at signalized intersections where turning motorists might face pedestrian conflicts that are not immediately apparent.

2.44.3 GUIDANCE

Install the *TURNING VEHICLES STOP FOR PEDESTRIANS* sign (***R10-15a***) at signalized intersections with a dedicated turn lane or at intersections with a free-flow channelized turn lane.

Use a fluorescent yellow-green background for the ***R10-15a*** sign in accordance with ***FDOT Standard Specifications Table 700-2***. Use a yellow background when the sign is installed as part of an existing pedestrian-related signing application that uses yellow-background signs. Do not mix fluorescent yellow-green and yellow pedestrian-related signs at the same intersection or within the same signing application.

Replace existing *TURNING VEHICLES YIELD TO PEDESTRIANS* signs (***R10-15***) with the *TURNING VEHICLES STOP FOR PEDESTRIANS* signs (***R10-15a***) during routine sign replacement activities. Examples from the ***R10-15*** sign series are shown in ***Figure 2.44-1***. ***R10-15a*** sign details are available in ***FDOT's Sign Library***.

Figure 2.44-1. R10-15 Sign Series



R10-15
(replace with ***R10-15a***)



R10-15a for left turns *



R10-15a for right turns *

* R10-15a signs can use fluorescent yellow-green sheeting in accordance with the Standard Specifications for pedestrian-related signing.