

PART 2. SIGNS
Chapter 2F. Toll Road Signs
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PART 2. SIGNS

Chapter 2F. Toll Road Signs

2F.1 Scope

SUPPORT:

Toll highways are typically limited-access freeway or expressway facilities. A portion of or an entire route might be a toll highway, or a bridge, tunnel, or other crossing point might be the only toll portion of a highway. A toll highway might be a conventional road. The general signing requirements for toll roads will depend on the type of facility and access (freeway, expressway, or conventional road). The provisions of Chapters 2D and 2E will generally apply for guide signs along the toll facility that direct road users within and off the facility where exit points and geometric configurations are not dependent specifically on the collection of tolls. The aspect of tolling and the presence of toll plazas or collection points necessitate additional considerations in the typical signing needs. The notification of the collection of tolls in advance of and at entry points to the toll highway also necessitate additional modifications to the

typical signing.

The scope of this Section applies to a route or facility on which all lanes are tolled. Chapter 2G contains provisions for the signing of managed lanes within an otherwise non-toll facility that employ tolling or pricing as an operational strategy to manage congestion levels.

STANDARD:

Except where specifically provided in this Chapter, the provisions of other Chapters in Part 2 shall apply to toll roads.

2F.2 Sizes of Toll Road Signs

STANDARD:

Except as provided in Section 2A.11, the sizes of toll road signs that have standardized designs shall be as shown in Table 2F-1.

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
Toll Rate	R3-28	2F.5	---	---	114 x 48	114 x 48	---	---
Pay Toll (plaque)	R3-29P	2F.5	---	---	24 x 18	24 x 18	---	---
Take Ticket (plaque)	R3-30P	2F.5	---	---	24 x 18	24 x 18	---	---
Pay Toll XX Miles Cars (price)	W9-6	2F.6	96 x 66	96 x 66	96 x 66	96 x 66	---	---
Pay Toll XX Miles Cars (price) (plaque)	W9-6P	2F.7	288* x 36	288* x 36	288* x 36	288* x 36	---	---
Stop Ahead Pay Toll Cars (price)	W9-6a	2F.8	114 x 66	114 x 66	114 x 66	114 x 66	---	---
Stop Ahead Pay Toll (plaque)	W9-6aP	2F.9	252* x 36	252* x 36	252* x 36	252* x 36	---	---
Last Exit Before Toll (plaque)	W16-16P	2F.10	---	---	252* x 26	252* x 26	---	---
Toll	M4-15	2F.11	24 x 12	24 x 12	36 x 18	36 x 18	24 x 12	36 x 18
No Cash	M4-16	2F.12	24 x 12	24 x 12	36 x 18	36 x 18	24 x 12	36 x 18
Toll Collector Symbol	M4-17	2F.13	---	---	48 x 48	48 x 48	---	---
Exact Change Symbol	M4-18	2F.13	---	---	48 x 48	48 x 48	---	---
ETC Only	M4-20	2F.12	24 x 24	24 x 24	36 x 36	36 x 36	24 x 24	36 x 36

* The width shown represents the minimum dimension. The width shall be increased as appropriate to match the width of the guide sign.

Notes:

1. Larger signs may be used when appropriate
2. Dimensions in inches are shown as width x height

Table 2F-1 Toll Road Sign and Plaque Minimum Sizes

SUPPORT:

Section 2A.11 contains information regarding the applicability of the various columns in Table 2F-1.

OPTION:

Signs larger than those shown in Table 2F-1 may be used (see Section 2A.11).

2F.3 Use of Purple Backgrounds and Underlay Panels with ETC Account Pictographs

STANDARD:

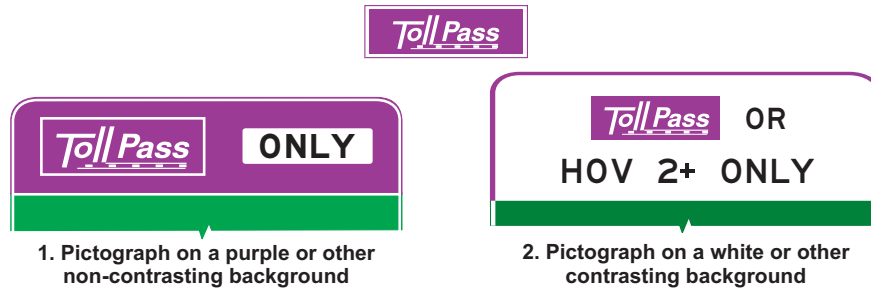
Use of the color purple on any sign shall comply with the provisions of Sections 1A.12 and 2A.10. Except as provided in Sections 2F.12 and 2F.16, purple as a background color shall be used only when the information associated with the appropriate ETC account is displayed on that portion of the sign. The background color of the remaining portion of such signs shall comply with the provisions of Sections 1A.12

and 2A.10 as appropriate for a regulatory, warning, or guide sign. Purple shall not be used as a background color to display a destination, action message, or other legend that is not a display of the requirement for all vehicles to have a registered ETC account.

If only vehicles with registered ETC accounts are allowed to use a highway lane, a toll plaza lane, an open-road tolling lane, or all lanes of a toll highway or connection, the signs for such lanes or highways shall incorporate the pictograph (see Chapter 2A) adopted by the toll facility's ETC payment system and the regulatory message ONLY. Except for ETC pictographs whose predominant background color is purple, if incorporated within the green background of a guide sign, the ETC pictograph shall be on a white rectangular or square panel set on a purple underlay panel with a white border. For rectangular ETC pictographs whose predominant background color is purple, a white border shall be used at the outer edges of the purple rectangle to provide contrast between the pictograph and the sign background color.

If an ETC pictograph is used on a separate plaque with a guide sign or on a header panel within a guide sign, the

A - PICTOGRAPH DESIGN WITH A PURPLE BACKGROUND AND A WHITE CONTRASTING BORDER



B - PICTOGRAPH DESIGN WITH A BACKGROUND COLOR OTHER THAN PURPLE, SHOWN ON A PURPLE UNDERLAY PANEL WITH A WHITE CONTRASTING BORDER



Figure 2F-1 Examples of ETC Account Pictographs and Use of Purple Backgrounds and Underlay Panels

plaque or the header panel shall have a purple background with a white border and the ETC pictograph shall have a white border to provide contrast between the pictograph and the background of the plaque or header panel.

Purple underlay panels for ETC pictographs or purple backgrounds for plaques and header panels shall only be used in the manner described in the previous three paragraphs to convey the requirement of a registered ETC account on signs for lanes reserved exclusively for vehicles with such an account and on directional signs to an ETC account-only facility from a non-toll facility or from a toll facility that accepts multiple payment forms.

SUPPORT:

Figure 2F-1 shows examples of ETC account pictographs, their use with various background colors, and modifications involving underlay panels.

Section 2F.4 contains provisions regarding the size of pictographs for ETC accounts.

2F.4 Size of ETC Pictographs

STANDARD:

The ETC pictograph (see Chapter 2A) shall be of a size that makes it a prominent feature of the sign legend as necessary for conspicuity for those road users with registered ETC accounts seeking such direction, as well as for those road users who do not have ETC accounts so that it is clear to them to avoid such direction when applicable.

GUIDANCE:

An ETC pictograph that is in the shape of a horizontal rectangle should have a minimum height between approximately 1.5 and 2 times the upper-case letter height of the principal legend on the sign. The width of an ETC pictograph in the shape of a horizontal rectangle should be between approximately two and three times the height of the pictograph. When the pictograph is the principal legend on the sign, such as for advance guide signs for open-road tolling lanes (see Section 2F.15), the minimum height of a horizontal rectangular ETC pictograph should be consistent with that of a route shield prescribed for the particular application and type of sign.

For ETC pictographs whose shape is square, circular, or otherwise similar in height and width, or is a vertical rectangle, the same basic principles for conspicuity and placement should be followed. ETC pictographs whose shape is not in that of a horizontal rectangle should be suitably sized to facilitate conspicuity as described in the previous Standard paragraph and should be of a similar approximate area as the horizontal rectangular pictographs designed in accordance with the height and width as provided in the previous Guidance paragraph.

2F.5 Regulatory Signs for Toll Plazas



R3-28



R3-29P



R3-30P

SUPPORT:

Toll plaza operations often include lane-specific restrictions on vehicle type, forms of payment accepted, and speed limits or required stops. Vehicles are typically required to come to a stop to pay the toll or receive a toll ticket in the attended and exact change or automatic lanes. Electronic toll collection (ETC) lanes with favorable geometrics typically allow vehicles to move through the toll plaza without stopping, but usually within a set regulatory speed limit or advisory speed. In some ETC lanes and in most lanes that accommodate non-ETC vehicles, a stop might be required while the ETC payment is processed because of geometric or other conditions.

GUIDANCE:

Regulatory signs applicable only to a particular lane or lanes should be located in a position that makes their applicability clear to road users approaching the toll plaza.

Regulatory signs, or regulatory panels within guide signs, indicating restrictions on vehicle type and forms of toll payment accepted at a specific toll plaza lane should be installed over the applicable lane either on the toll plaza canopy or on a separate structure immediately in advance of the canopy located in a manner such that each sign is clearly related to an individual toll lane.

SUPPORT:

Section 2F.13 contains information regarding the incorporation of regulatory messages into guide signs for toll plazas.

Section 2F.16 contains information regarding the design and use of toll plaza canopy signs.

GUIDANCE:

One or more Speed Limit (R2-1) signs (see Section 2B.13) should be installed in the locations provided in the following Option for an ETC-Only lane at a toll plaza in which an enforceable regulatory speed limit is established for a lane in which it is intended that vehicles move through the toll plaza without stopping while toll payments requiring stops occur in other lanes at the toll plaza. The speed limit displayed on the signs should be based on an engineering study taking into account the geometry of the plaza and the lanes and other appropriate safety and operational factors.

A Speed Limit (R2-1) sign should not be installed for a toll plaza lane that is controlled by a STOP (R1-1) sign or where a stop is required.

OPTION:

Speed limit signs may be installed over the applicable lane on the toll plaza canopy, on the approach end of the toll booth island, on the toll booth itself, or on a vertical element of the canopy structure. Down arrows or diagonally downward-pointing directional arrows may be used to supplement the speed limit signs if an engineering study or engineering judgment indicates that the arrow is needed to clarify the applicability of a sign to a specific lane or to improve compliance.

STANDARD:

A STOP (R1-1) sign shall not be installed for a toll plaza lane that is operated as an ETC-Only lane and that is designed for tolls to be collected while vehicles continue moving.

OPTION:

A STOP (R1-1) sign may be installed to require vehicles to come to a complete stop to pay a toll in an attended or exact change lane, even if that lane is also available for optional use by vehicles with registered ETC accounts. A PAY TOLL (R3-29P) or TAKE TICKET (R3-30P) plaque, as appropriate to the operation, may be installed directly under the STOP (R1-1) sign for a toll plaza lane, if needed.

The mounting height of the STOP sign and any supplemental plaque may be less than the normal mounting height requirements if constrained by the physical features of the toll island or toll plaza.

The lateral offset of a STOP or other regulatory sign located within a toll plaza island may be reduced to a minimum of 1 foot from the face of the toll island or raised barrier to the nearest edge of the sign.

GUIDANCE:

If used, a STOP (R1-1) sign for a toll plaza cash payment lane should be located in a longitudinal position as near as practical to the point where a vehicle is expected to stop to pay the toll or take a ticket.

OPTION:

A Toll Rate (R3-28) sign may be installed in advance of the toll plaza to indicate the toll applicable to the various vehicle types.

GUIDANCE:

If used, the Toll Rate (R3-28) sign should be located between the toll plaza and the first advance sign informing road users of the toll plaza.

The R3-28 sign should not contain more than three lines of legend. Each line that shows a toll amount should display only a single toll amount.

OPTION:

Additional toll rate information exceeding three lines of legend may be displayed on the toll booth adjacent to the payment window of an attended lane or the payment receptacle of an exact change or automatic lane where it is visible to a road user who has stopped to pay the toll, but is not visible to approaching road users who have not yet entered the toll lane.

2F.6 Pay Toll Advance Warning Sign (W9-6)



W9-6

STANDARD:

The Pay Toll Advance Warning (W9-6) sign shall be a horizontal rectangle with a black legend and border on a yellow background. The legend shall include the distance to the toll plaza and, except for toll ticket facilities, the toll for passenger or 2-axle vehicles. Where the toll for passenger or 2-axle vehicles is variable by time of day, a changeable message element shall be incorporated into the W9-6 sign to display the toll in effect. For toll plazas where road users entering a toll-ticket facility are issued a toll ticket, the legend PAY TOLL shall be replaced with a suitable legend such as TAKE TICKET.

GUIDANCE:

The Pay Toll Advance Warning sign should be installed overhead at approximately 1 mile and 1/2 mile in advance of mainline toll plazas at which some or all lanes are required to come to a stop to pay a toll (see Sections 2F.14 and 2F.15).

OPTION:

If there is insufficient space for the W9-6 sign at the 1-mile or 1/2-mile advance locations, the Pay Toll Advance Warning (W9-6P) plaque (see Section 2F.7) may be installed at those advance locations above the appropriate guide sign(s) that relate to toll payment types.

An additional W9-6 sign may be installed approximately 2 miles in advance of a mainline toll plaza. This sign may be either overhead or post-mounted.

If the visibility of a ramp toll plaza at which some or all lanes are required to come to a stop to pay a toll is limited, the W9-6 sign may also be installed in advance of the ramp toll plaza.

2F.7 Pay Toll Advance Warning Plaque (W9-6P)



W9-6P

OPTION:

The Pay Toll Advance Warning (W9-6P) plaque may be installed above the appropriate guide sign(s) relating to toll payment types at the 1-mile and/or 1/2-mile advance locations on the approach to a toll plaza if there is insufficient space for the W9-6 sign (see Section 2F.6) at those advance locations.

STANDARD:

The W9-6P plaque shall be a horizontal rectangle with black legend and border on a yellow background. The legend shall include the distance to the toll plaza and, except for toll-ticket facilities, the toll for passenger or 2-axle vehicles. Where the toll for passenger or 2-axle vehicles is variable by time of day, a changeable message element shall be incorporated into the W9-6P plaque to display the toll in effect. For toll plazas where road users entering a toll-ticket facility are issued a toll ticket, the legend PAY TOLL shall be replaced with a suitable legend such as TAKE TICKET.

OPTION:

The distance to the toll plaza may be omitted from the W9-6P plaque if the distance is displayed on the guide sign that the plaque accompanies.

The toll for passenger or 2-axle vehicles may be omitted from the W9-6P plaque if the toll information is displayed on the guide sign that the plaque accompanies.

2F.8 Stop Ahead Pay Toll Warning Sign (W9-6a)



W9-6a

STANDARD:

The Stop Ahead Pay Toll (W9-6a) sign shall be a horizontal rectangle with a black legend and border on a yellow background. The legend shall include STOP AHEAD PAY TOLL and, except for toll-ticket facilities, the toll for passenger or 2-axle vehicles. Where the toll for passenger or 2-axle vehicles is variable by time of day, a changeable message element shall be incorporated into the W9-6a sign to display the toll in effect. For toll plazas where road users entering a toll-ticket facility are issued a toll ticket, the legend PAY TOLL shall be replaced with a suitable legend such as TAKE TICKET.

GUIDANCE:

The Stop Ahead Pay Toll sign should be installed overhead downstream from the W9-6 sign that is 1/2 mile in advance of a mainline toll plaza where some or all of the lanes are required to come to a stop to pay a toll (see Sections 2F.14 and 2F.15). The location of the overhead sign should coincide with the approximate location where the mainline lanes begin to widen on the approach to the toll plaza lanes.

Where open-road tolling is used in addition to a toll plaza at a particular location, the W9-6a sign should be located such that the message is clearly related to the lanes that access the toll plaza and not to the open-road tolling lanes.

OPTION:

If there is insufficient space for the W9-6a sign at the recommended location, the Stop Ahead Pay Toll (W9-6aP) plaque (see Section 2F.9) may be installed at that location above the appropriate guide sign that relates to toll payment types.

If the visibility of a ramp toll plaza at which some or all lanes are required to come to a stop to pay a toll is limited, the W9-6a sign may also be installed in advance of the ramp toll plaza.

2F.9 Stop Ahead Pay Toll Warning Plaque (W9-6aP)



W9-6aP

OPTION:

The Stop Ahead Pay Toll (W9-6aP) plaque may be installed above the appropriate guide sign at the location specified for the Stop Ahead Pay Toll (W9-6a) sign (see Section 2F.8) if there is insufficient space for the W9-6a sign at that location.

STANDARD:

The W9-6aP plaque shall be a horizontal rectangle with black legend and border on a yellow background. The legend shall include STOP AHEAD PAY TOLL and, except for toll-ticket facilities, the toll for passenger or 2-axle vehicles. Where the toll for passenger or 2-axle vehicles is variable by time of day, a changeable message element shall be incorporated into the W9-6aP plaque to display the toll in effect. For toll plazas where road users entering a toll-ticket facility are issued a toll ticket, the legend PAY TOLL shall be replaced with a suitable legend such as TAKE TICKET.

OPTION:

The toll for passenger or 2-axle vehicles may be omitted from the W9-6aP plaque if the toll information is displayed on the guide sign that the plaque accompanies.

2F.10 LAST EXIT BEFORE TOLL Warning Plaque (W16-16P)



W16-16P

GUIDANCE:

The LAST EXIT BEFORE TOLL (W16-16P) plaque should be used to notify road users of the last exit from a highway before it becomes a facility on which toll payments are required. The plaque should be installed above or below the appropriate guide signs for the exit (see Sections 2E.33 and 2E.36).

STANDARD:

The W16-16P plaque shall have a black legend and border on a yellow background.

2F.11 TOLL Auxiliary Sign (M4-15)



M4-15

STANDARD:

The TOLL (M4-15) auxiliary sign (see Figure 2F-4) shall have a black legend and border on a yellow background and shall be mounted directly above the route sign of a numbered toll highway or, if used, above the cardinal direction and alternative route auxiliary signs, in any route sign assembly providing directions from a non-toll highway to the toll highway or to a segment of a highway on which the payment of a toll is required.

2F.12 Electronic Toll Collection (ETC) Account-Only Auxiliary Signs (M4-16 and M4-20)



M4-16



M4-20

STANDARD:

In any route sign assembly providing directions from a non-toll highway to a toll facility, or to a tolled segment of a highway, where electronic toll collection (ETC) is the only payment method accepted and all vehicles are required to have a registered ETC account, the ETC Account-Only (M4-20) auxiliary sign (see Figure 2F-4) shall be mounted directly below the route sign of the numbered or named toll facility. The M4-20 auxiliary sign shall have a white border and purple background and incorporate the pictograph adopted by the toll facility's ETC payment system and the word ONLY in black letters on a white panel set on the purple background of the sign.

OPTION:

The NO CASH (M4-16) auxiliary sign (see Figure 2F-4) with a black legend and border on a white background may be used in a route sign assembly directly below the M4-20 auxiliary sign.

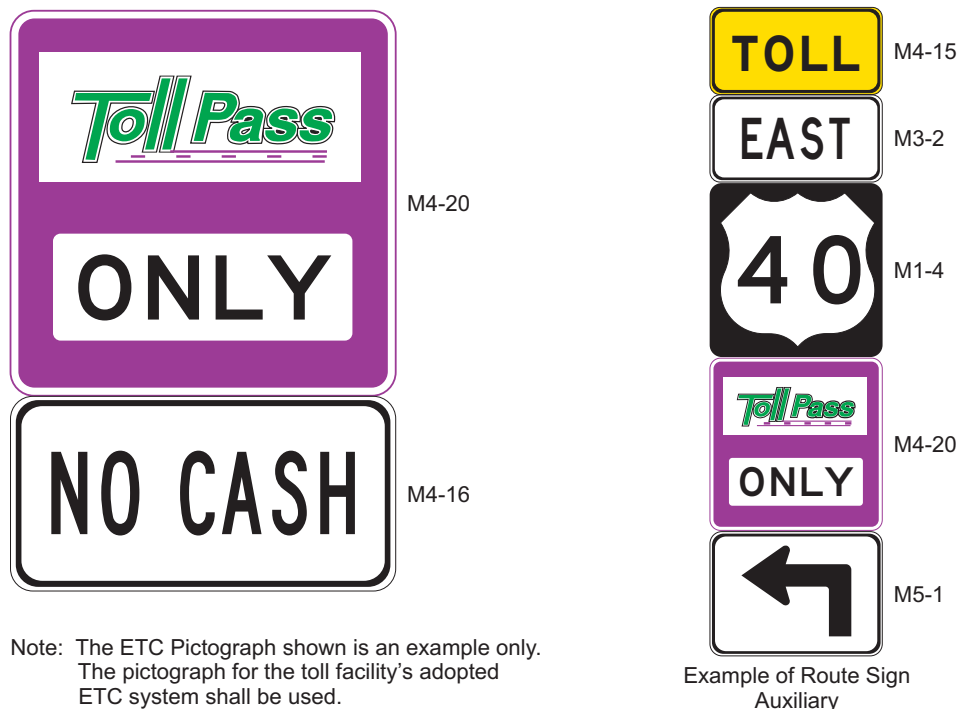


Figure 2F-4 ETC Account-Only Auxiliary Signs for Use in Route Sign Assemblies

2F.13 Toll Facility and Toll Plaza Guide Signs – General

SUPPORT:

Toll plazas are used on many toll highways, bridges, and tunnels for collection of tolls from road users. Electronic toll collection and/or open-road tolling might also be used on such facilities, either in addition to or in place of collecting toll payments at toll plazas.

Chapter 2G contains information regarding signs for preferential and managed lanes that are applicable to toll roads.

Chapter 3E contains information regarding pavement markings for certain toll plaza applications.

STANDARD:

Directional assemblies for entrances to a toll highway or to a road leading directly to a toll highway with no opportunity to exit before paying or being charged a toll, shall clearly indicate that the facility is a toll facility. The TOLL (M4-15) auxiliary sign (see Section 2F.11) shall be used above the route sign of a numbered toll facility in any route sign assembly that provides directions to the toll route from another highway.

A rectangular panel with the black legend TOLL on a yellow background shall be incorporated into the guide signs leading road users to a toll highway (see Figure 2F-5).

Guide signs for toll highways, toll plazas, and tolled or priced managed lanes (see Chapter 2G) shall have white legends and borders on green backgrounds, except as specifically provided by Sections 2F.13 through 2F.16.

OPTION:

Where conditions do not permit separate signs, or where it is important to associate a particular regulatory or warning message with specific guidance information, regulatory and/or warning messages may be combined with guide signs for toll plazas using plaques, header panels, or rectangular regulatory or warning panels incorporated within the guide signs, as long as the proper legend and background colors are preserved.

STANDARD:

When regulatory messages are incorporated within a guide sign, they shall be on a rectangular panel with black legend on a white background. When warning messages are incorporated within a guide sign, they shall be on a rectangular panel with black legend on a yellow background.

SUPPORT:

Figure 2F-5 shows examples of guide signs for entrances to various types of toll highways and for ETC account-only entrances to non-toll highways.

STANDARD:

Signing for entrances to toll highways where ETC is employed only through license plate character recognition such that road users are not required to establish a toll account or register their vehicle equipment shall comply with the provisions of the first Standard of this section (see Figure 2F-6).

If only vehicles with registered ETC accounts are allowed to use a toll highway, the guide signs for entrances to such facilities shall incorporate the pictograph adopted by the toll facility's ETC payment system and the regulatory message ONLY (see Figures 2F-1, 2F-5, and 2F-6). The use, size, and placement of the ETC pictograph shall comply with the provisions of Sections 2F.3 and 2F.4.

SUPPORT:

Sections 2F.11, 2F.12, and 2F.17 contain additional provisions regarding signs for toll highways that only accept ETC payments.

A - ENTRANCE TO A TOLL HIGHWAY ON WHICH REGISTRATION IN A TOLL ACCOUNT PROGRAM IS NOT REQUIRED



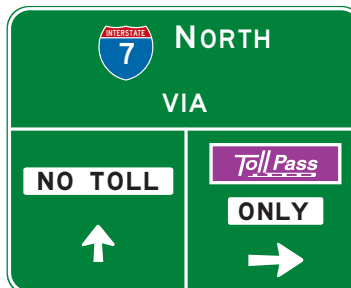
B - ENTRANCE TO AN ETC ACCOUNT-ONLY TOLL HIGHWAY OR ENTRANCE TO A TOLL HIGHWAY VIA AN ETC ACCOUNT-ONLY RAMP



C - ENTRANCE TO A NON-TOLL HIGHWAY VIA AN ETC ACCOUNT-ONLY TOLL ENTRANCE RAMP



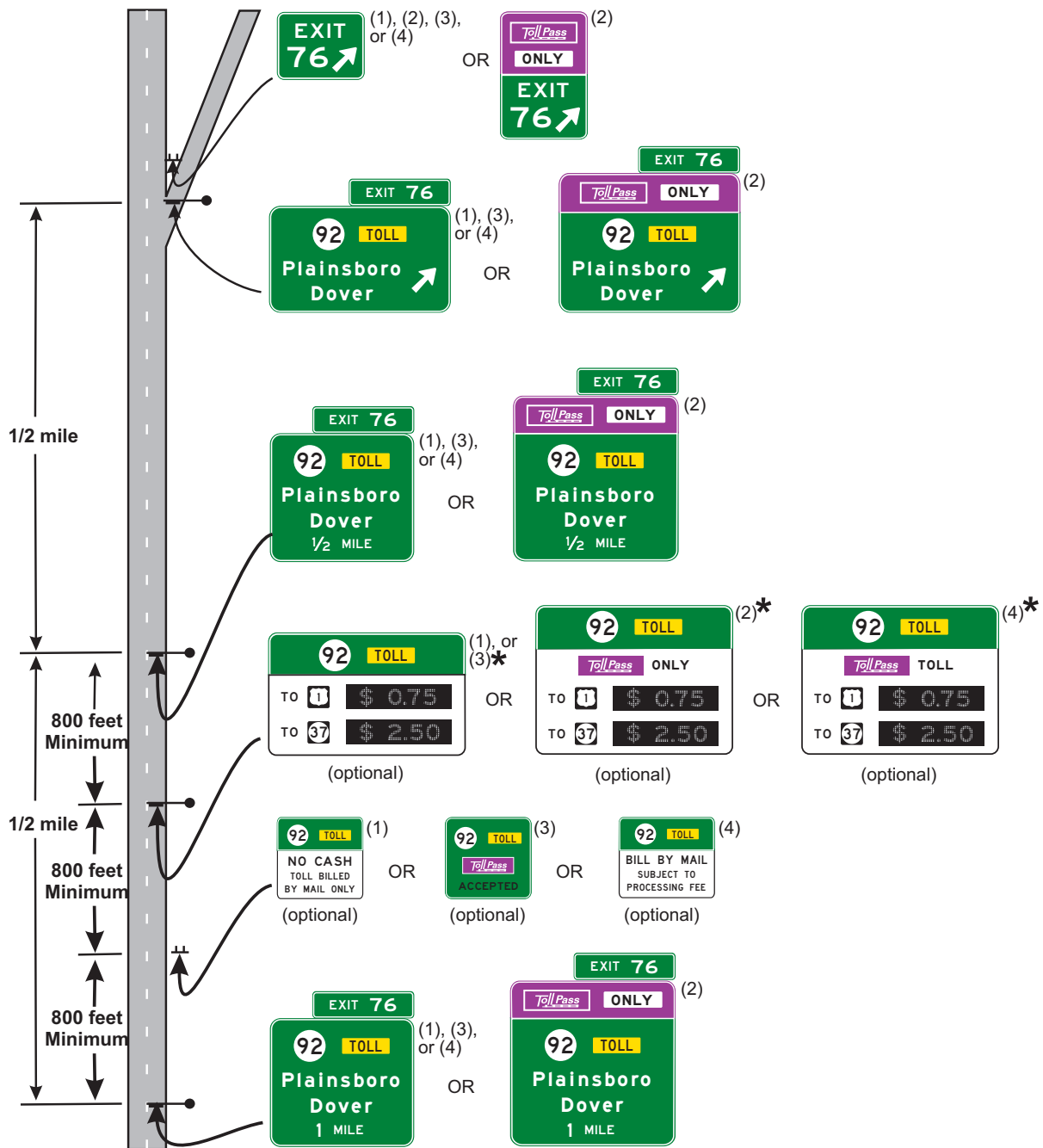
(the toll entrance is the only connection provided in the vicinity)



(an alternate non-toll entrance is provided in the vicinity)

Note: The ETC pictographs shown are examples only. The pictograph for the toll facility's adopted ETC system shall be used.

Figure 2F-5 Examples of Guide Signs for Entrances to Toll Highways or Ramps



- (1) All tolls are billed through license plate recognition only. A registered toll account or ETC device is not needed.
- (2) All tolls are billed through registered toll accounts only. All vehicles must be registered in an ETC account program.
- (3) Toll payments are also accepted from registered toll accounts. Registered toll accounts might receive a discount from the toll amount displayed on the signs.
- (4) Toll payments are also accepted from registered toll accounts. Registered toll accounts might receive a discount from the toll amount displayed on the signs.

* For managed toll highways only (see Chapter 2G)

Figure 2F-6 Examples of Guide Signs for the Entrances to a Toll Highway on which Tolls are Collected Electronically Only

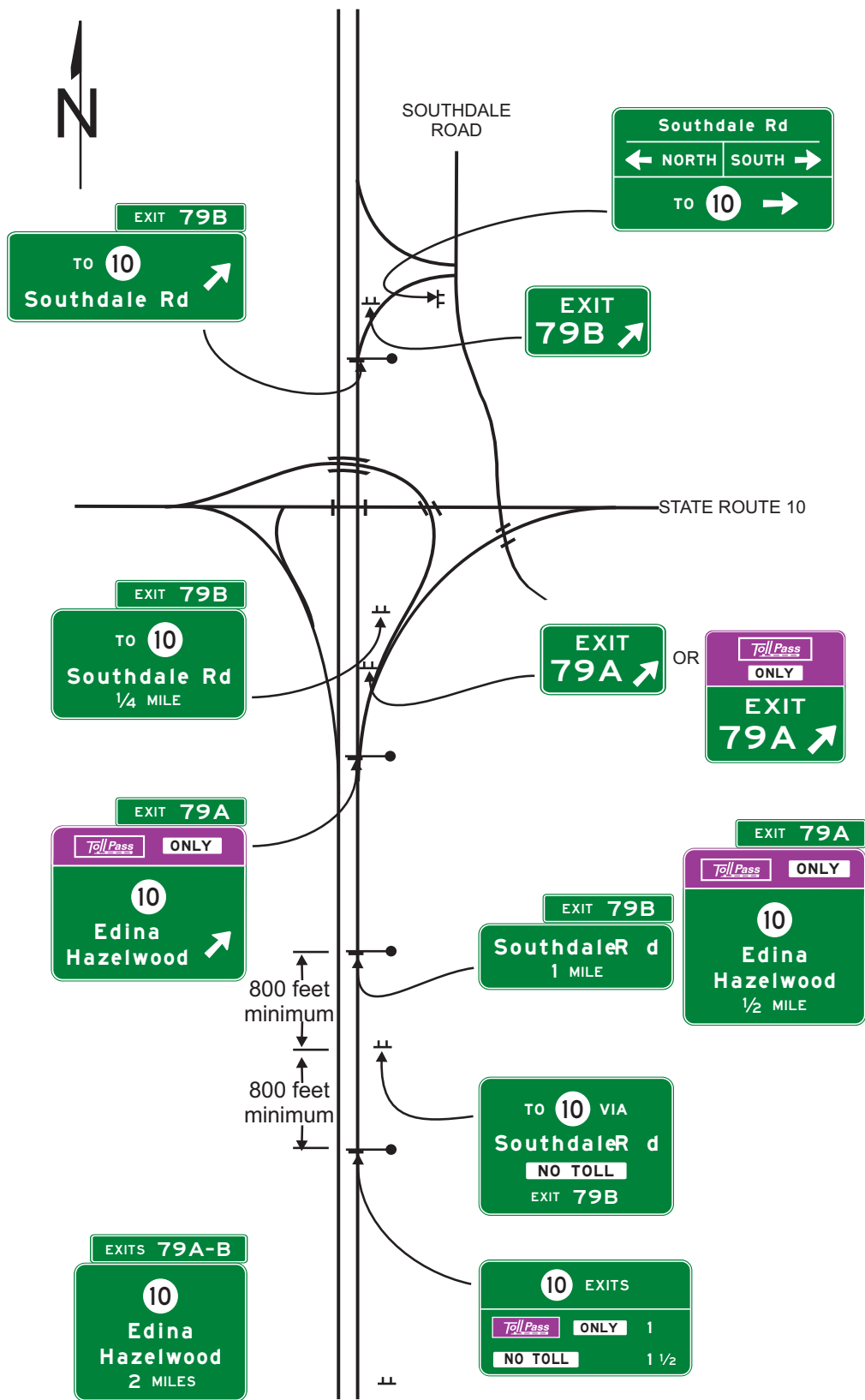


Figure 2F-7 Examples of Guide Signs for Alternative Toll and Non-Toll Ramp Connections to a Non-Toll Highway

Sections 2G.16 through 2G.18 contain additional provisions regarding signs for priced managed lanes that only accept ETC payments.

OPTION:

Where a toll highway on which tolls are collected only electronically also accepts payments from registered toll account users and those road users not registered in a toll account program are assessed a nominal surcharge in addition to the toll, or registered toll account users are assessed a discounted toll, such information may be displayed on a separate information sign near the entrance to such a facility (see Figure 2F-6).

SUPPORT:

Figure 2F-7 shows an example of guide signs for alternative toll and non-toll ramp connections to a non-toll highway.

Many different ETC payment systems are used by the various toll facility operators. Some of these systems accept payment from other systems' accounts.

OPTION:

Where a facility will accept payments from other systems' accounts in addition to its primary ETC-account payment system, such information may be displayed on a separate information sign near the entrances to such a facility or in advance of a toll plaza or open-road tolling lanes, as space allows between primary signs.

GUIDANCE:

Guide signs for toll plazas should be designed in accordance with the general principles of guide signs and the specific provisions of Chapter 2E.

Signs for toll plazas should systematically provide road users with advance and toll plaza lane-specific information regarding:

- A. The amount of the toll, the types of payment accepted, and the type(s) of registered ETC accounts accepted for payment;
- B. Which lane or lanes are required or allowed to be used for each available payment type; and
- C. Restrictions on the use of a toll plaza lane or lanes by certain types of vehicles (such as cars only or no trucks).

STANDARD:

Signs for attended lanes at toll plazas shall include word messages such as FULL SERVICE, CASH, CHANGE, or RECEIPTS (see Figures 2F-8 through 2F-11).

OPTION:

Signs for Attended lanes at toll plazas may incorporate the Toll Taker (M4-17) symbol (see Figures 2F-8 and 2F-9), in a size that makes the symbol the predominant feature of the sign, to supplement the required word message.

STANDARD:

Signs for Exact Change lanes at toll plazas shall incorporate an appropriate word message, such as EXACT CHANGE and the amount of the toll for passenger vehicles (see Figures 2F-8 through 2F-11).

OPTION:

Signs for Exact Change lanes at toll plazas may include the Exact Change (M4-18) symbol (see Figures 2F-8 and 2F-9), in a size that makes the symbol the predominant feature of the sign, to supplement the required word message.

STANDARD:

If used, the M4-17 and M4-18 symbols shall be used only as panels within guide signs that accompany the required word messages. The M4-17 and M4-18 symbols shall not be used as an independent sign or within a sign assembly.

If only vehicles with registered ETC accounts are allowed to use a toll plaza lane, the signs for such lanes shall incorporate the pictograph adopted by the toll facility's ETC payment system and the regulatory message ONLY (see Figures 2F-1, 2F-8, 2F-9, and 2F-11). The use, size, and placement of the ETC pictograph shall comply with the provisions of Sections 2F.3 and 2F.4.

OPTION:

The ETC payment system's pictograph, without a purple underlay or purple header panel, may be used on signs for Exact Change or attended lanes at toll plazas to indicate that vehicles with registered ETC accounts may also use those lanes (see Figure 2F-9).

2F.14 Advance Signs for Conventional Toll Plazas

GUIDANCE:

For conventional toll plazas (those without a divergence onto a separate alignment from mainline-aligned open-road tolling or ETC-Only lanes), one or more sets of overhead advance guide signs complying with the provisions of this Section should be provided. The advance guide signs for multi-lane toll plazas should provide information regarding which lanes to use for all of the toll payment methods accepted at the toll plaza. These signs should include toll



Notes:

1. The M4-17 symbol is optional for an attended lane.
2. The M4-18 symbol is optional for an exact change lane.
3. The ETC pictograph that is shown is only an example. The pictograph for the toll facility's adopted ETC system shall be used.

Figure 2F-8 Examples of Conventional Toll Plaza Advance Signs

plaza lane numbers (if used), or action messages or lane-use information such as LEFT LANE(S), CENTER LANE(S), RIGHT LANE(S), or down arrows over the approximate center of each applicable lane. These signs should also incorporate regulatory messages indicating any restrictions or prohibitions on the use of the lanes associated with the various types of payment methods by certain types of vehicles. For mainline toll plazas, these signs should be at least 1/2 mile in advance of the toll plaza, and farther if practical.

Additional guide signs with lane information for the toll payment types should be provided between approximately 1/4 mile and 800 feet in advance of the toll plaza at a

location that avoids or minimizes obstruction of toll plaza canopy signs (see Section 2F.16) and lane-use control signals.

The number, mounting, and/or spacing of sets of advance signs for approaches to toll plazas on ramps, toll bridges, or tunnels, to accommodate a limited distance to the plaza from an intersection or from the start of the approach road to the bridge or tunnel, should be based on an engineering study or engineering judgment.

SUPPORT:

Figure 2F-10 shows examples of advance signs for a conventional toll plaza.



Attended Lane with an Optional M4-17 Toll Collector Symbol

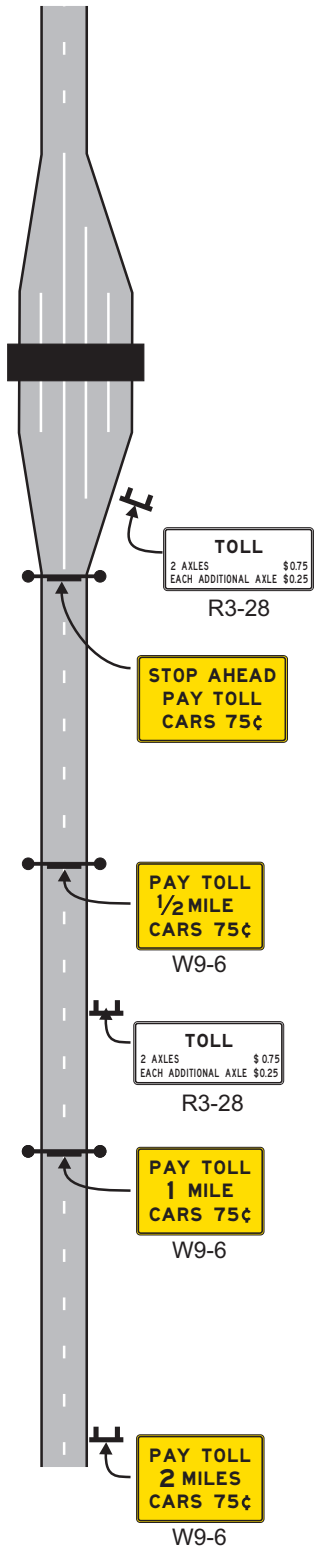
Exact change or ETC Account Lane with an Optional M4-18 Exact Change Symbol

ETC Account-Only Lane

- * Optional flashing yellow beacons that are separated from any lane-use control signals for the lane (see Section 2F.,16)
- ** The ETC Pictographs that are shown are only examples. The pictograph for the toll facility's system shall be used.

Figure 2F-9 Examples of Toll Plaza Canopy Signs

**A - ALL TOLL PLAZA LANES ATTENDED
(NO AUTOMATIC OR ELECTRONIC
COLLECTION EQUIPMENT)**



B - EXCAT CHANGE AND ATTENDED TOLL LANES

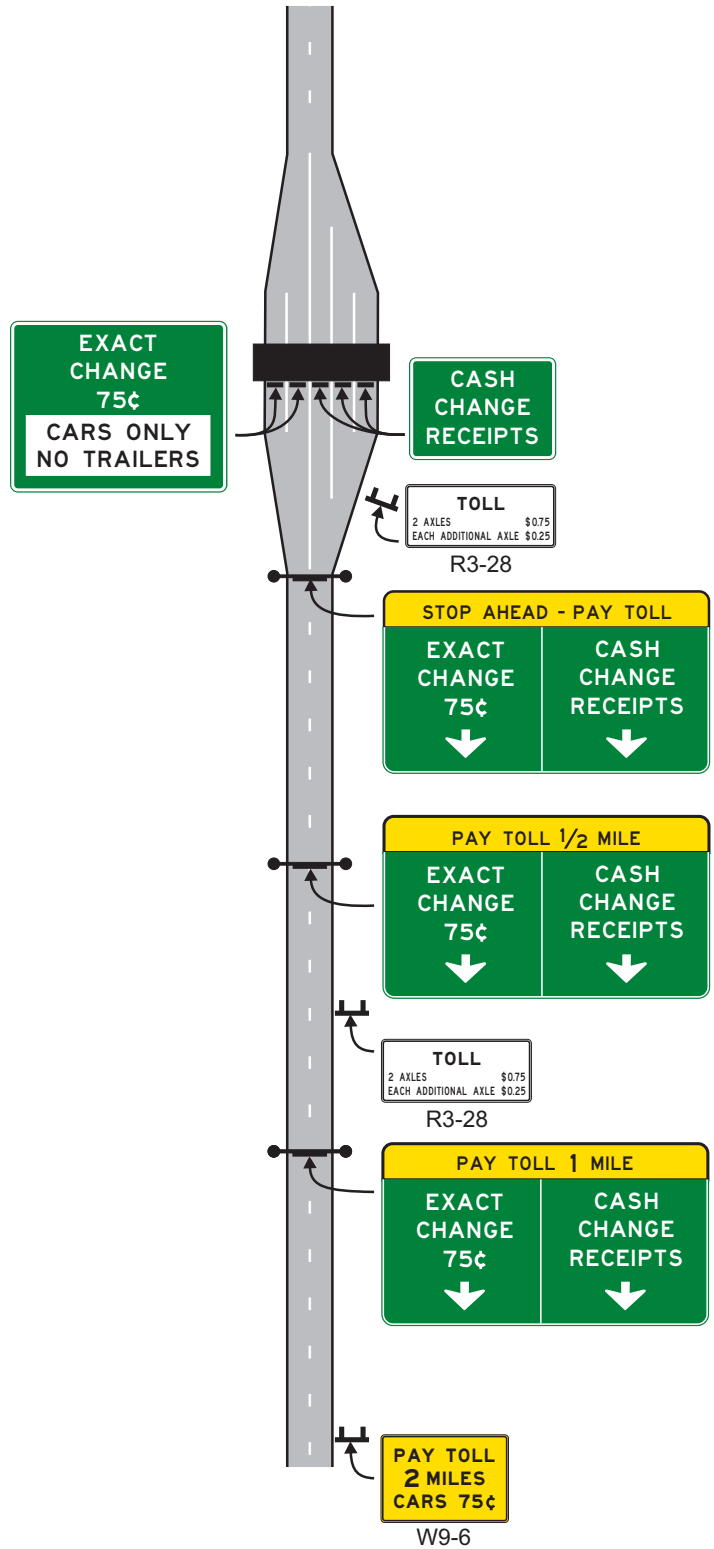


Figure 2F-10 Examples of Mainline Toll Plaza Approach and Canopy Signs

2F.15 Advance Signs for Toll Plazas on Diverging Alignments from Open-Road ETC Account-Only Lanes

SUPPORT:

Open-Road ETC lanes are sometimes located on the normal mainline alignment while the lanes for other toll payment methods are located at a toll plaza on a separate alignment (see Figure 2F-11). Since road users paying cash tolls must diverge from the mainline alignment, similar to a movement for an exit, it is important that the guide signs in advance of and at the point of divergence clearly indicate the required lane use and/or movements.

GUIDANCE:

For toll plazas located on a separate alignment that diverges from mainline-aligned Open-Road ETC lanes where vehicles are required to have a registered ETC account to use the Open-Road Tolling lanes, overhead advance signs should be provided at approximately 1 mile and 1/2 mile in advance of the divergence point. Both the 1-mile and 1/2-mile advance signs should include:

- A. The ETC (pictograph) Account-Only guide sign (see Figures 2F-8 and 2F-11) with a down arrow over the center of each lane that will become an Open-Road ETC lane;
- B. For the lane or lanes which will diverge to a toll plaza, guide signs conforming to the provisions of Section 2F.13, indicating which lane or lanes will diverge to the toll plaza for the various cash toll payment methods; and
- C. Regulatory signs, plaques, or panels within the guide signs, indicating any restrictions or prohibitions of certain types of vehicles from toll plaza lanes associated with the various types of payment methods.

At or near the theoretical gore of the divergence point, an additional set of overhead guide signs should be provided and should include:

- A. The ETC (pictograph) Account-Only guide sign (see Figures 2F-8 and 2F-11) with a down arrow over the center of each Open-Road ETC lane;
- B. Guide signs conforming to the provisions of Section 2F.13, with diagonally upward-pointing directional arrow(s) over the approximate center of each lane indicating the direction of the divergence, and providing lane information for all types of payment methods accepted at the toll plaza; and
- C. Regulatory signs, plaques, or panels within the guide signs, indicating any restrictions or prohibitions on the use of the toll plaza lanes associated with the various types of payment methods by certain types of vehicles.

Approximately 800 feet in advance of the toll plaza at a location that avoids or minimizes any obstruction of the toll plaza canopy signs (see Section 2F.16) and lane-use control signals, an additional set of overhead advance signs with lane information for the toll payment types should be provided.

STANDARD:

The use of down and directional arrows on the signs at the locations described in the previous Guidance Statement shall comply with the provisions of Section 2D.8.

SUPPORT:

Figure 2F-11 shows an example of advance signs for toll plazas on a diverging alignment from Open-Road ETC Account-Only Lanes.

Section 4K.2 contains information regarding the use of lane-use control signals for Open-Road ETC lanes for temporary lane closure purposes.

2F.16 Toll Plaza Canopy Signs

STANDARD:

A sign complying with the provisions of Section 2F.13 shall be provided above the center of each lane that is not an Open-Road ETC lane, mounted on or suspended from the toll plaza canopy, or on a separate structure immediately in advance of the plaza located such that each sign is clearly related to an individual toll lane, indicating the payment type(s) accepted in the lane and any restrictions or prohibitions of certain types of vehicles that apply to the lane. Except for toll-ticket systems, the toll for passenger or 2-axle vehicles shall be included on the canopy sign or on a separate sign mounted on the upstream side of the tollbooth.

The background color of a canopy sign for an ETC Account-Only toll plaza lane shall be purple (see Figure 2F-9).

OPTION:

Where vehicles are required to have a registered ETC account to use the lane, one or two flashing yellow beacons (see Section 4K.04) may supplement a canopy sign over an ETC Account-Only lane to call special attention to the location of the ETC Account-Only lane within the plaza.

The canopy sign for an ETC-Only toll plaza lane in which a regulatory speed limit is not posted and in which vehicles are not required to stop may display an advisory speed within a horizontal rectangular panel with a black legend and yellow background within the bottom portion of the canopy sign.

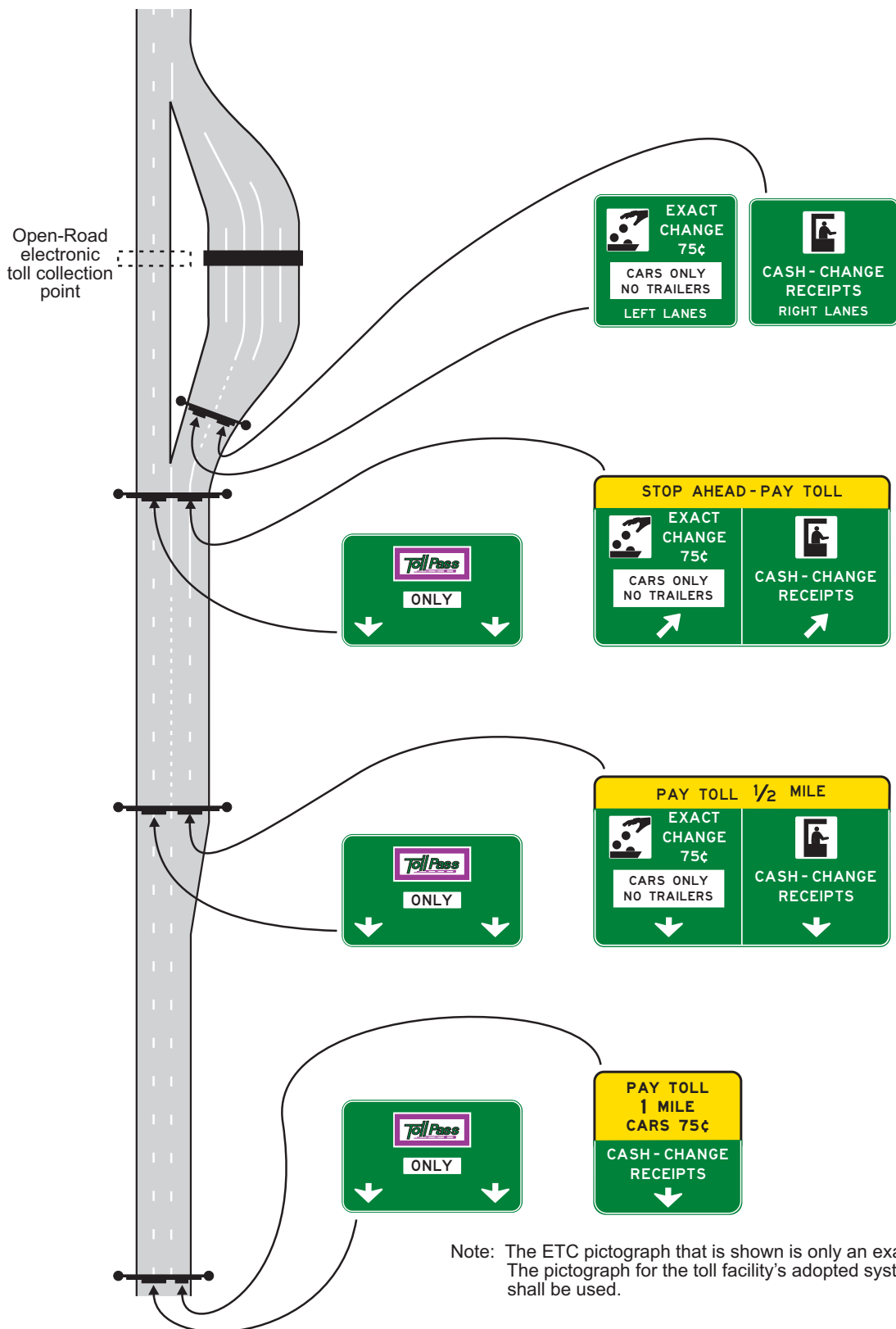


Figure 2F-11 Examples of Guide Signs for a Mainline Toll Plaza on a Diverging Alignment from Open-Road ETC Lanes

STANDARD:

Flashing beacons supplementing a canopy sign over an ETC Account-Only lane shall be mounted directly above or alongside the sign in a manner that is separated from any lane-use control signals for that lane (see Figure 2F-9).

For multi-lane toll plazas, lane-use control signals (see Section 4K.2) shall be provided above the center of each toll plaza lane that is not an Open-Road ETC lane to indicate the open or closed status of each lane. Lane-use control signals shall not be used to call attention to a lane for a specific toll payment type such as ETC Account-Only lanes.

SUPPORT:

Part 6 contains information regarding the closing of a lane for temporary traffic control purposes.

Figure 2F-9 shows examples of toll plaza canopy signs.

2F.17 Guide Signs for Entrances to ETC Account-Only Facilities

SUPPORT:

Some toll highways, bridges, and tunnels are restricted to use only by vehicles with a specific registered ETC account.

STANDARD:

Where vehicles are required to have a registered ETC account to use an ETC Account-Only facility, guide signs for the facility shall comply with the applicable provisions of Chapter 2E and specifically with the applicable provisions of Section 2F.13.

Guide signs for the entrance ramps to such ETC Account-Only facilities shall incorporate the pictograph of the toll facility's ETC payment system and the word ONLY in a header panel or plaque designed in accordance with the provisions of Section 2F.13 (see Figure 2F-5).

SUPPORT:

Section 2F.12 contains information regarding ETC-Only auxiliary signs for use with route signs in route sign assemblies.

2F.18 ETC Program Information Signs

STANDARD:

Except as provided in the following Option, signs that inform road users of telephone numbers, Internet addresses, including domain names and uniform resource locators (URLs), or e-mail addresses for enrolling in an ETC program of a toll facility or managed lane, obtaining an ETC transponder, and/or obtaining ETC program information shall only be installed in rest areas, parking areas, or similar roadside facilities where the signs are viewed only by pedestrians or occupants of parked vehicles.

OPTION:

ETC program information signs displaying telephone numbers that have no more than four characters may be installed on roadways in locations where they will not obscure the road user's view of higher priority traffic control devices and that are removed from key decision points where the road user's view is more appropriately focused on other traffic control devices, roadway geometry, or traffic conditions, including exit and entrance ramps, intersections, toll plazas, temporary traffic control zones, and areas of limited sight distance.