

	LANE ENDS SIGNS		Issued: JULY 2016
			Revised:
			Page 1 of 4
RECOMMENDED PRACTICES	PART	HIGHWAY SIGNS	
	SECTION	WARNING SIGNS	
	SUB-SECTION		

General

Lane Ends signs are often used to inform motorists of a lane elimination from the right or the left side of the roadway downstream of their travel direction. These signs are intended to provide advance warning to motorists so that they can select and accept a gap in the adjacent traffic stream and safely perform a lane change maneuver to merge into the adjacent through-lane without braking abruptly at the end of the lane. These signs also inform motorists in through-lanes of the lane elimination so that they are prepared to accommodate the merging vehicles.

Lane Ends signs are often used in the following situations:

- An outside passing/climbing lane on a highway is eliminated;
- An outside driving lane on a highway is eliminated;
- An outside driving lane on a highway ramp is eliminated;
- An entrance ramp intersects a highway in parallel form, and the auxiliary lane is eliminated.

Standard

There are three types of Lane Ends signs: WA-33, WA-33X, and WA-37, and two types of tab signs: WA-510-T and WA-33A. All of these signs consist of a black message or symbol on a yellow background. The right or the left version of the Lane Ends signs is

used as appropriate.

- WA-33R and WA-33L Lane Ends signs indicate one of the two driving lanes is eliminated.



WA-33-R WA-33-L	750 mm × 750 mm	
Colour	Symbol and Border Background	Black Yellow
Sheeting	ASTM D4956 Type IX or XI	

- WA-33X-R/L Lane Ends signs indicate an outside driving lane on a multilane highway is eliminated.



WA-33X-R WA-33X-L	900 mm × 900 mm	
Colour	Symbol and Border Background	Black Yellow
Sheeting	ASTM D4956 Type IX or XI	

- WA-37-R/L Lane Ends signs are placed on overhead structures indicating an outside driving lane on a multilane freeway will be eliminated within a specified distance.



WA-37-R WA-37-L	3200 mm × 3970 mm	
Colour	Message and Border Background	Black Yellow
Sheeting	ASTM D4956 Type IX or XI for diamond shape sign; Type III or IV for background panel	

- WA-510-T distance tab signs are attached below the WA-33 and WA-33X Lane Ends signs to indicate the distance to the start of the taper.



WA-510-T	600 mm × 300 mm	
Colour	Message and Border Background	Black Yellow
Sheeting	ASTM D4956 Type IX or XI	

- The educational Right Lane Ends tab sign, WA-33A, may be attached below the Lane Ends sign to communicate the meaning of the Lane Ends symbol. The educational tab sign is only needed to enhance the meaning of WA-33 and WA-33X signs at problematic locations.



WA-33A-TR WA-33A-TL	600 mm × 300 mm	
Colour	Message and Border Background	Black Yellow
Sheeting	ASTM D4956 Type IX or XI	

Guidelines for Use

Lane Ends signs shall be used where there is a reduction in the number of driving lanes on provincial roadways from the right or the left. The appropriate Lane Ends signs shall be selected according to the following lane elimination situations:

1. An outside passing/climbing lane on a highway is eliminated;
2. An outside driving lane on a highway is eliminated;
3. An outside driving lane on a highway ramp is eliminated;
4. An entrance ramp intersects a highway in parallel form, and the acceleration lane is eliminated;
5. An outside driving lane on freeway main stream is eliminated.

WA-33 signs shall be used in cases 1 to 4 if the number of driving lanes in one direction reduces to one lane after the lane elimination.

WA-33X signs shall be used in cases 1 to 4 if the number of driving lanes in one direction reduces to two or more lanes after the lane elimination.

WA-37 signs shall be used in case 5 to provide advance warning to motorists if a reduction in the number of driving lanes occurs on the main stream of a multilane freeway and there is an existing overhead sign support structure where an overhead sign panel can be installed.

WA-510-T signs should be used as supplementary tab signs and placed below WA-33 and WA-33X signs to indicate the distance to the start of the taper where lane elimination occurs.

WA-33A signs should only be used as educational tab signs under WA-33 and WA-33X signs at problematic locations to enhance the effect of the Lane Ends signs.

Guidelines for Placement

In cases 1 and 2, where lane elimination occurs on highway through-lanes, two WA-33 or WA-33X signs should be installed:

- a. The first Lane Ends sign, along with a WA-510-T distance tab sign, shall be placed at a distance 250 m to 500 m upstream of the start of the taper to provide advance warning to motorists. This distance may vary depending on the field condition and position of other signs;

- b. The second Lane Ends sign shall be placed at the start of the taper to indicate the end of the lane.

In case 3, where lane elimination occurs on highway ramps, one WA-33 or WA-33X sign shall be placed at the start of the taper where lane elimination occurs.

In case 4, where lane elimination occurs at junction of an entrance ramp and highway main stream:

- a. If the paralleled length of an entrance ramp acceleration lane is less than or equal to 150 m and the decision sight distance is adequate, there is no need for a Lane Ends sign;
- b. If the paralleled length of an entrance ramp acceleration lane is between 150 m and 800 m, one WA-33 or WA-33X Lane Ends sign should be placed at the start of taper where lane elimination occurs;
- c. If the paralleled length of an entrance ramp acceleration lane is greater than 800 m, two WA-33 or WA-33X Lane Ends signs are required. The first Lane Ends sign along with a WA-510-T distance tab sign shall be placed at a distance 250 m to 500 m upstream of the start of the taper to provide advance warning. The second Lane Ends sign shall be placed at the start of the taper.

In case 5, where lane elimination occurs on a multilane freeway:

- a. A WA-37 sign shall be placed on an existing overhead sign support structure located upstream of the lane, and it shall be placed over the lane that is going to be eliminated;

- b. Two WA-33X signs shall also be placed downstream of the WA-37 sign. The first WA-33X sign, along with a WA-510-T distance tab sign, shall be placed at a distance 250 m to 500 m upstream of the start of the taper to provide advance warning. The second WA-33X sign shall be placed at the start of the taper.

On divided highways, particularly where the left lane ends, WA-33 or WA-33X signs may be installed on both right and left side of the road.

Pavement markings and/or delineation markers shall also be used to mark the transition.

Sign placement shall be in accordance with the recommended practice "Placement of Signs".

References to Standards

<p><i>Recommended Practices</i> <i>Section: General</i></p>	<p>Placement of Signs</p>
---	---------------------------