



NOTES

1. LATE/ZIPPER MERGE LOCATIONS SHALL BE DETERMINED PER THE DIRECTION OF THE REGION TRAFFIC ENGINEER.
2. ALL ZIPPER MERGE SIGNING SHALL HAVE A BLACK LEGEND ON A YELLOW BACKGROUND.
3. WHEN THE GEOMETRIC CONDITION EXISTS WHERE BOTH APPROACH LANES MERGE, A W4-8 SIGN SHALL BE USED INSTEAD OF THE THE W4-2.
4. SIGN 1 SHALL BE PLACED AT LEAST 500 FEET UPSTREAM OF THE SIGN 2 LOCATION AND NO GREATER THAN 1000 FEET UPSTREAM OF THE SIGN 2 LOCATION. AT LANE DROP LOCATIONS WHERE BACKUPS GREATER THAN 1000 FEET REGULARLY OCCUR, AN ADDITIONAL SIGN 1 MAY BE INSTALLED AT THE DISCRETION OF THE REGION TRAFFIC ENGINEER.
5. SIGN 1 SHALL BE PLACED A MINIMUM OF 500 FEET AND IN ADVANCE OF THE UPSTREAM LANE TAPER, AND THE SIGN LOCATION MAY BE ADJUSTED BASED ON GEOMETRIC CONDITIONS AND ENGINEERING JUDGMENT.
6. SIGN 2 SHALL BE PLACED USING GUIDELINES FOR THE ADVANCED PLACEMENT OF WARNING SIGNS FROM THE CURRENT MUTCD. TABLE 2C-3 FROM THE MUTCD 11TH EDITION IS PRESENTED BELOW FOR REFERENCE.
7. SIGN 3 SHALL BE PLACED AT THE BEGINNING OF THE LANE TAPER (MERGE POINT). SIGN 3 SHOULD BE DOUBLE POSTED WHERE ROADWAY CONDITIONS PERMIT.
8. WHITE BROKEN LANE LINE SHALL BE PLACED TO THE BEGINNING OF THE LANE TAPER (MERGE POINT). DO NOT INSTALL ANY LANE REDUCTION ARROW PAVEMENT MARKINGS.
9. A TAKE TURNS ROAD STENCIL MAY BE PLACED IN EACH OF THE MERGING LANES AT THE MERGE POINT, AT THE DISCRETION OF THE ENGINEER. SEE S-627-1 FOR STENCIL.

Table 2C-3. Guidelines for Advance Placement of Warning Signs

Posted or 85th-Percentile Speed	Condition A: Speed reduction and lane changing in heavy traffic ²	Advance Placement Distance ¹								
		Condition B: Deceleration to the listed advisory speed (mph) for the condition								
		0 ³	10 ⁴	20 ⁴	30 ⁴	40 ⁴	50 ⁴	60 ⁴	70 ⁴	80 ⁴
20 mph	225 ft	115 ft	N/A ⁵	—	—	—	—	—	—	—
25 mph	325 ft	155 ft	N/A ⁵	N/A ⁵	—	—	—	—	—	—
30 mph	460 ft	200 ft	N/A ⁵	N/A ⁵	—	—	—	—	—	—
35 mph	565 ft	250 ft	N/A ⁵	N/A ⁵	N/A ⁵	—	—	—	—	—
40 mph	670 ft	305 ft	100 ft ⁶	100 ft ⁶	N/A ⁵	—	—	—	—	—
45 mph	775 ft	360 ft	125 ft	100 ft ⁶	100 ft ⁶	N/A ⁵	—	—	—	—
50 mph	885 ft	425 ft	200 ft	175 ft	125 ft	100 ft ⁶	—	—	—	—
55 mph	990 ft	495 ft	275 ft	225 ft	200 ft	125 ft	N/A ⁵	—	—	—
60 mph	1,100 ft	570 ft	350 ft	325 ft	275 ft	200 ft	100 ft ⁶	—	—	—
65 mph	1,200 ft	645 ft	450 ft	400 ft	350 ft	275 ft	200 ft	100 ft ⁶	—	—
70 mph	1,250 ft	730 ft	525 ft	500 ft	450 ft	375 ft	275 ft	150 ft	—	—
75 mph	1,350 ft	820 ft	625 ft	600 ft	550 ft	475 ft	375 ft	250 ft	100 ft ⁶	—
80 mph	1,475 ft	910 ft	725 ft	700 ft	625 ft	550 ft	450 ft	350 ft	200 ft	—
85 mph	1,600 ft	1,010 ft	825 ft	800 ft	750 ft	675 ft	575 ft	450 ft	300 ft	150 ft