

Lane Taper Set-up Quick Guide

When an incident requires a lane closure, it is important to follow these guidelines for taper length and cone spacing so that individuals inside the work zone are safer and traffic outside the work zone will be minimally impacted.

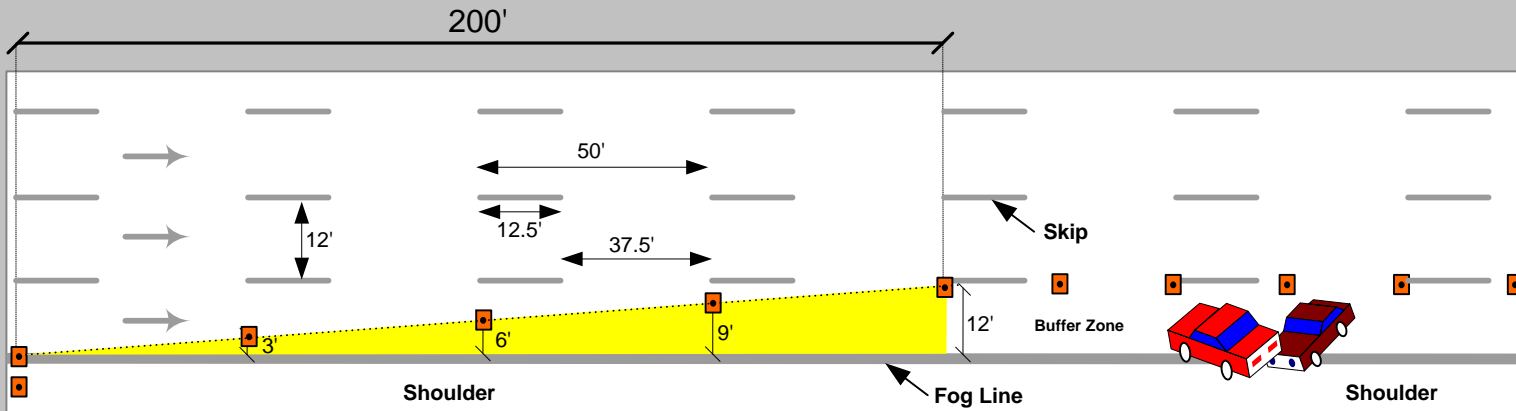
A good lane taper will direct and guide motorists safely around the incident!



How to Set Up a Lane Taper

1. Using the chart on the back of this sheet, identify the number and placement of cones/flares needed. Faster vehicle speeds require longer tapers!
2. You will need one more cone/flare than the number of skips used for the taper. A skip is the broken white line dividing each lane.
3. Set up the first cone/flare on, or inside, the fog line (solid white edge line). Also, place an additional cone/flare on the shoulder to prevent motorists from entering the incident site. This is the first sign notifying motorists to merge into the next lane.
4. Count the number of skips needed to identify where the last cone/flare will be placed.
5. Lay out cones/flares in a diagonal pattern, connecting the first cone/flare to the last cone/flare, while paying close attention to traffic. Place cones/flares at consistent increments to ensure a well-designed taper. Remember, the distance from the beginning of one skip to the beginning of the next is 50 feet! Use this as a guide. See graphic below for more details.
6. For a double-lane closure, simply repeat the same pattern in the second lane of traffic.

Single-Lane Closure (30 mph)



Speed (mph)	Number of Skips
70	17
65	16
60	15
55	14
50	12
45	11
40	7
35	5
30	4
25	3

NOTE: All tables, charts, and graphics were created for a single-lane closure based on 12-foot lanes and 50-foot spacing between the beginning of one skip to the beginning of the next skip.



Cone/Flare Placement Guide

		Distance from Fog Line to Cone/Flare Placement (ft)																	
		0 skip	1st skip	2nd skip	3rd skip	4th skip	5th skip	6th skip	7th skip	8th skip	9th skip	10th skip	11th skip	12th skip	13th skip	14th skip	15th skip	16th skip	17th skip
Speed (mph)	70	0	1/2	1 1/2	2	3	3 1/2	4	5	6	6 1/2	7	8	8 1/2	9	10	10 1/2	11 1/2	12
	65	0	1	1 1/2	2	3	4	4 1/2	5	6	7	7 1/2	8	9	10	10 1/2	11	12	
	60	0	1	1 1/2	2 1/2	3	4	5	5 1/2	6 1/2	7	8	9	9 1/2	10 1/2	11	12		
	55	0	1	2	2 1/2	3 1/2	4	5	6	7	8	8 1/2	9 1/2	10	11	12			
	50	0	1	2	3	4	5	6	7	8	9	10	11	12					
	45	0	1	2	3	4 1/2	5 1/2	6 1/2	7 1/2	9	10	11	12						
	40	0	2	3 1/2	5	7	8 1/2	10	12										
	35	0	2 1/2	5	7	9 1/2	12												
	30	0	3	6	9	12													
	25	0	5	8	12														

Source: Federal Highway Administration (distances rounded to nearest half foot)

A few tips:

- By placing cones/flares at these distances away from the fog line and at *consistent* increments, you will be able to achieve a desirable lane taper. CONSISTENCY is key because it creates a well-defined barrier between motorists and the incident scene.
- Remember to begin creating the taper at the fog line and move your way into the traffic lane, thereby creating a barrier for yourself as you go.
- As a *minimum* requirement, it is recommended to use the 30 mph data highlighted in the table above. A taper shorter than this on a freeway simply looks like a flat line to approaching motorists.

Responder Outreach Program

Be Safe – Be Seen

