

Table 4D-102 (CA). Minimum Yellow Change Interval Timing

$$\text{Yellow Time} = \frac{\text{Detector Setback Distance}}{\text{Speed}}$$

$$T = \frac{D}{V} = \text{The minimum yellow change interval (sec)}$$

V = Speed (ft/sec)

d = Deceleration Rate (10 ft/sec²)

t_R = Reaction Time (1 sec)

Reaction Distance = Vt_R

Deceleration Distance = $\frac{1}{2}dt^2$ or $\frac{1}{2}Vt$ or $\frac{V^2}{2d}$

D = Detector Setback = Deceleration Distance + Reaction Distance = $\frac{V^2}{2d} + Vt_R$

$$T = \frac{\frac{V^2}{2d} + Vt_R}{V}$$

$$T = \frac{V}{2d} + t_R$$

a - For Speed determined by 85th Percentile

SPEED (Determined by 85th Percentile Speed)*	MINIMUM YELLOW INTERVAL
mph	Seconds
25 or less	3.0
30	3.2
35	3.6
40	3.9
45	4.3
50	4.7
55	5.0
60	5.4
65	5.8

*See Section 4D.26 Standard under paragraph 14b

b - For Posted or Prima Facie Speed

POSTED SPEED or UNPOSTED PRIMA FACIE SPEED	MINIMUM YELLOW INTERVAL*	MINIMUM YELLOW INTERVAL*
mph	Seconds	Seconds
15	N/A	3.0
20	N/A	3.2
25	N/A	3.6
30	3.7	N/A
35	4.1	N/A
40	4.4	N/A
45	4.8	N/A
50	5.2	N/A
55	5.5	N/A
60 or higher	5.9	N/A

*Speed values for Table 4D-102b (CA) are inclusive of the 7 MPH added for speeds equal to 30 MPH or higher and 10 MPH for speeds equal to or lower than 25 MPH for determining the minimum values of the yellow intervals.