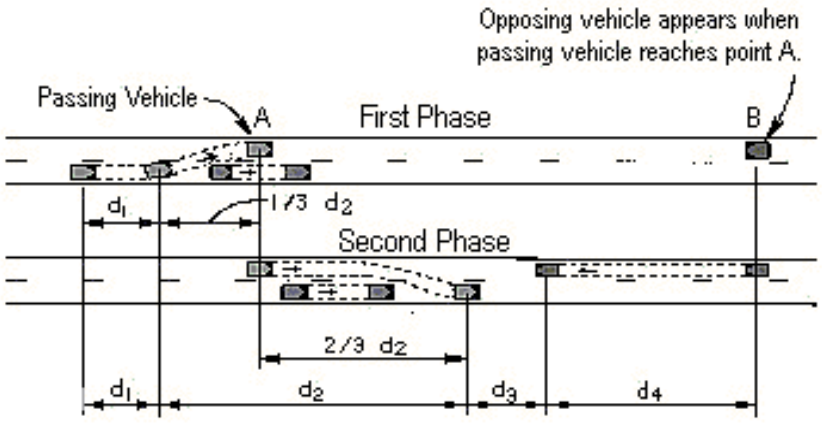
Passing Sight Distance



d_1 = Initial maneuver distance (m)

$$d_1 = 0.278 t_1 \left(V - m + \frac{a t_1}{2} \right)$$

d_2 = Distance while passing vehicle occupies left lane (m)

$$d_2 = 0.278 V t_2$$

d_3 = Clearance length (m):

d_4 =Distance traversed by an opposing vehicle (m)

$$d_4 = 2/3 d_2$$

Where;

t_1 = time of initial maneuver (s),
a = average acceleration (km/h/s),
V = average speed of passing vehicle (km/h),
m = difference in speed of passed and passing vehicle (km/h),
t_2 = time passing vehicle occupies the left lane (s).