LOS Measure for Signal → Delay

Capacity, Lost Time, Green Time, ...

Saturation Flow Rate:

\[ S = \frac{3600}{h} \]

1900 pc/h/lane

RT = 1.25 pc

LT = 1.5 pc

Pedestrians
Lost Time: STARE

Adjusted Flow Rate

L = Late Loading

L = Heavy Loading

O = Terminal Maneuvers

H = Heavy Vertical
\[ E = \text{Efficiency} \times \text{Flow Rate} \]

\[ T_L = t_{sl} + t_{cc} \]

\[ \text{Loss Time for Clearance} \to \text{Yellow/Red} \]
3. Proportion of vehicles which have been stopped:
\[ p_s = \frac{t_c}{t_c + (r + t_s)} \]

2. \[ p_r = \frac{r + t_c}{t_c} \]

1. \[ t_c = \frac{p_r}{1 - p} \]

4. Max. Vehicles in the Queue:
\[ Q_{\text{max}} = \frac{t_c}{r} \]
7. Maximum decay; \( \lambda t = 1 \)

\[
\text{Decay Time} = \frac{2(1-p)}{A_y^2} \times \lambda
\]

6. Formula for which:

\[
D_t = \frac{2(1-p)}{A_y^2}
\]

5. Tonawanda Vehicle Reservoir Creek
3\text{v1 eqn}: 15 + 8 + y = 20\text{vcirc} \Rightarrow 3/19 = 3 \times 9.14\text{y} = 28.2\text{y}.

2\text{v1 eqn}: 15 + 8 = 23\text{vcirc} \Rightarrow 2/19 = 2 \times 9.14 = 18.88\text{y}.

15 \text{eqn}: 19 = 0.472 \times 20 = 9.44\text{y}.

\text{Top} \Rightarrow \frac{3600}{140} = 0.472 \text{y} / \text{h}.

15, 8, 4

r = 405 \Rightarrow 9 = 20s

C = 605

Determine the rate: 1500 \text{ mL/hr}
\[ \theta = \frac{\pi}{6} \]

\[ 0.3 < \theta < 0.3 \pm 0.6 \]

**Note:** Beginnings of 3rd set.

\[ m_3 = \sqrt{V_0 \cdot \text{vector } + \text{rel.}} \]

\[ D_3 = 4.79 \text{ m/s} \]

\[ D_2 = \frac{2}{1} \left( \frac{9.44 + 18.8 \times 20}{20} \right) \times 60 = 9.44 \]

\[ \overline{D_1} = \frac{2}{1} \left( 60 \times 15 - 20 \times 9.44 \right) = 355.6 \text{ m/s} \]

\[ D_1 = \frac{2}{1} \times 60 \times 15 - \frac{2}{1} \times 20 \times 9.44 \]
Due Monday 11/13

\[ \begin{align*}
D_3 & = 235.9 \text{ sec} \\
D_f & = D_2 + D_3 \\
D & = 1110.2 \text{ vck-s} \\
f_c & = 16.8 \text{ sec} \\
\lambda_3 & = 0.067
\end{align*} \]