

TAPER LENGTH (FT)		DESIGN SPEED, S (mph)						
		30	<i>3</i> 5	40	<i>4</i> 5	50	55	60
$T_{t}$	Computed	180°	245′	320′	540′	600′	660′	720′
(See Note I)	Rounded	200′	250°	325′	550′	600′	675′	725′
T <sub>2</sub> (See Note 2)		100′	200′	200°	200′	200′	200′	200'
Full Deceleration (T <sub>1</sub> + T <sub>2</sub> )		300′	450°	525′	750′	800′	875′	925′

## Notes:

- 1.  $T_1 = Thru\ Turn\ lane\ width\ x\ design\ speed\ ^2/60\ (For\ ^40\ mph)\ (T_1 = W_2\ x\ S^2/60)$  Thru Turn lane width x\ design\ speed \quad (For > 40\ mph)\ (T\_1 = W\_2\ x\ S)
- 2.  $T_2$  = is computed as follows:  $\leq$  30 mph; 8:1 = 96' (Rounded to 100') >35 mph; 15:1 = 180' (Rounded to 200')
- 3.  $L_I$  = Length of storage lane to be determined by Figures 3-5 through 3-22 by capacity analysis for Left-Turn Storage, Minimum Length IOO'.
- 4. Turn Lane Width  $(W_1)$  is to be same as Through Lane Width  $(W_2)$  (12' assumed in computations).
- 5. Right of Way may be acquired from either side of the B or all from one side as needed.

PASSING/LEFT TURN LANE ON TWO-LANE HIGHWAY

Source: 2003 MUTCD Chapter 6, Page 6C-8, Table 6C-4 (Formulas for Determining Channelizing Taper Lengths). Found at the following:

<a href="http://www.virginiadot.org/business/bu-mutcd-disclaim.asp">http://www.virginiadot.org/business/bu-mutcd-disclaim.asp</a>
AASHTO Green Book, Chapter 9 (For turning lane tapers).

FIGURE 3-4\*

<sup>\*</sup> Rev. 1/11