TYPICAL

Table: TAPER LENGTH (FT) vs DESIGN SPEED, S (mph)

TAPER LENGTH (FT)		DESIGN SPEED, S (mph)						
		30	35	40	45	50	55	60
T_1 (See Note 1)	Computed	180'	245'	320'	540'	600'	660'	720'
	Rounded	200'	250'	325'	550'	600'	675'	725'
T_2 (See Note 2)		100'	200'	200'	200'	200'	200'	200'
Full Deceleration $(T_1 + T_2)$		300'	450'	525'	750'	800'	875'	925'

Notes:

1. T_1 = Thru Turn lane width x design speed^2/60 (For $\leq$ 40 mph) $(T_1 = W_2 \times S^2/60)$
   Thru Turn lane width x design speed (For > 40 mph) $(T_2 = W_2 \times S)$

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_1 = Length of storage lane to be determined by Figures 3-5 through 3-22 by capacity analysis for Left-Turn Storage, Minimum Length - 100'.

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 ₵ 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:
http//www.virginiadot.org/business/bu-mutcd-disclaim.asp
AASHTO Green Book, Chapter 9 (For turning lane tapers).

FIGURE 3-4*

* Rev. 1/11