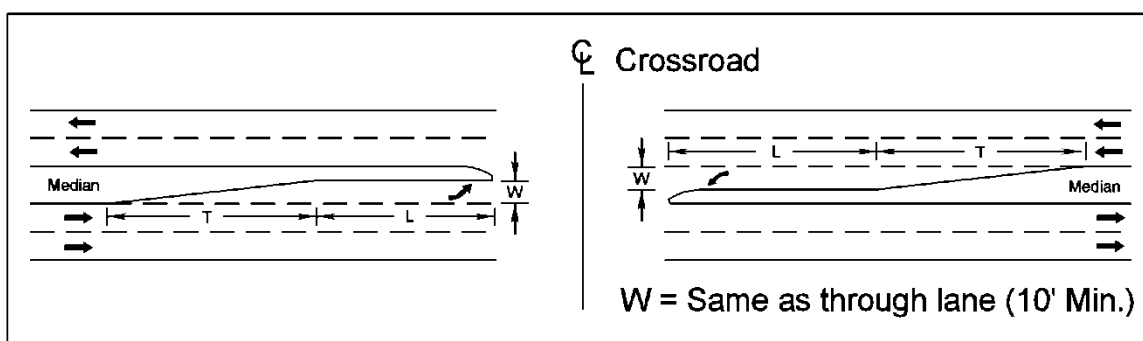


Taper rates: Rural - 8:1 for design speeds 30 mph and less, 15:1 for design speeds 35 mph and greater. Urban - 8:1 for design speeds 45 mph and less, 15:1 for design speeds 50 mph and greater. For urban dual lane taper (150' min.), See 2011 AASHTO Green Book, Chapter 9, Section 9.7.1, page 9-127.

Note: Taper lengths shown above were compiled using these formulas and were rounded up.

### For Four-Lane Highways

\*Dimension "L" to be adjusted upward as determined by Figure 3-3 or by capacity analysis for left-turn storage lanes on four-lane or greater (divided) highways.



**FIGURE 3-2 LEFT AND RIGHT TURN STORAGE AND TAPER LENGTHS**

### For Two-lane Highways

Dimension "L" to be adjusted upward as determined in Figures 3-5 through 3-22 or by a capacity analysis for left-turn storage. A capacity analysis is defined as a detailed analysis of the location in accordance with the guidelines contained in the current issue of the *Highway Capacity Manual* for intersection capacity and signalization requirements.

In general, when left-turn volumes are higher than 100 VPH, an exclusive left-turn should be considered.

Dual left-turn lanes should be considered when left turn hourly volumes exceed 300 VPH.