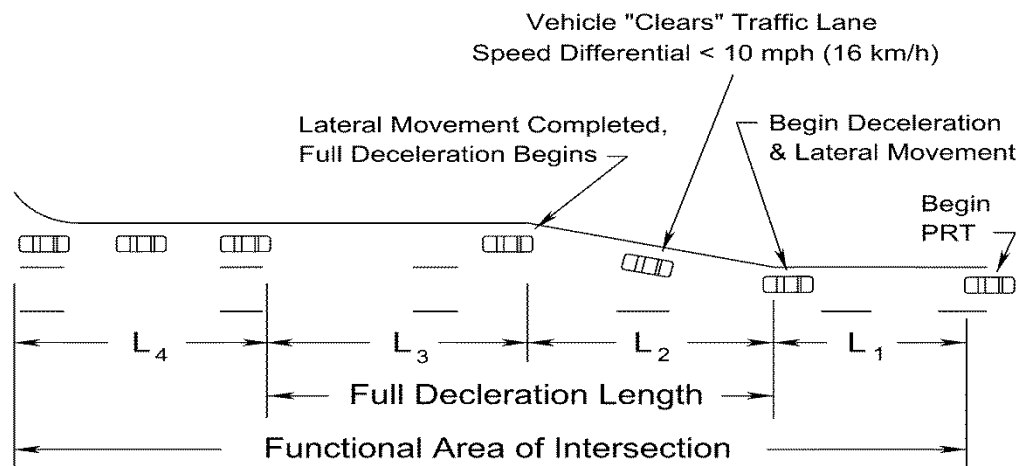


AASHTO specifically states that “a driveway should not be located within the functional boundary of an intersection”. The functional area on the approach to an intersection consists of three basic elements: perception-reaction decision distance, maneuver distance, and queue-storage distance. These elements are identified in Figure 4-3. The distance traveled during the perception-reaction time will depend on such factors as vehicle speed. Where there is a left or right turn lane, the maneuver distance includes the length needed for both braking and lane changing. In the absence of turn lanes, it involves braking to a comfortable stop. The storage length should be sufficient to accommodate the longest queue expected most of the time.



- L_1 = Distance traveled during perception-reaction time (PRT) (2.5 sec. x Design Speed in ft/sec.)
- L_2 = Taper distance to begin deceleration and complete lateral movement (Taper length see Figure 3-1)
- L_3 = Distance traveled to complete deceleration to a stop
- L_4 = Storage length (See Figure 3-1)

FIGURE 4-3 ELEMENTS OF THE FUNCTIONAL AREA OF INTERSECTION

SOURCE: 2011 AASHTO Green Book, Chapter 9, Section 9.7.2