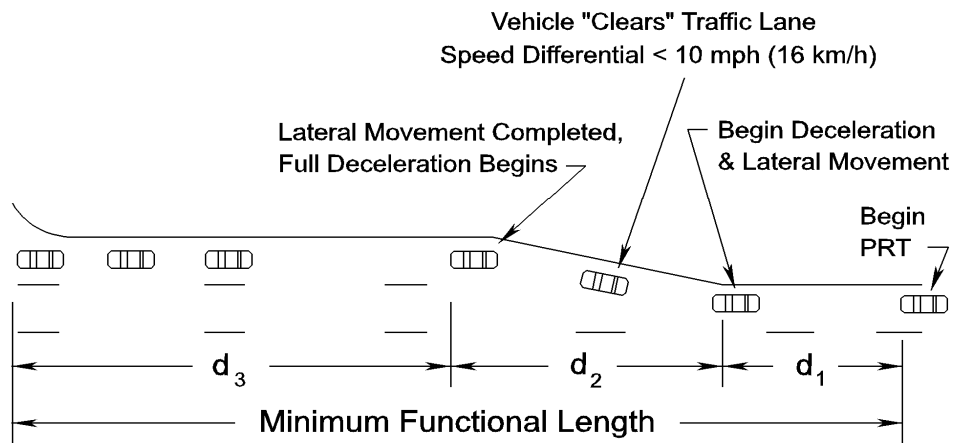


FIGURE 4-2A PHYSICAL AND FUNCTIONAL AREAS OF INTERSECTION

Source: FHWA, National Highway Institute Course No. 15255

AASHTO specifically states that “a driveway should not be located within the functional boundary of an intersection”. AASHTO does not present guidelines as to the size of the functional area of an intersection; however the size must be much larger than the physical area (see Figure 4-2A). The functional area should be composed of the distance traveled during the braking Perception-Reaction Time plus the distance required to move laterally and come to a stop plus any required storage length (see Figure 4-3). The minimum maneuver distance assumes that the driver is in the proper lane and only needs to move laterally into a right turn or left turn bay.



- d_1 = distance traveled during perception-reaction time (PRT) (2.5 sec. x Design Speed in ft/sec.)
- d_2 = distance traveled while driver decelerates and maneuvers laterally (Taper length see Figure 3-1)
- d_3 = storage length (See Figure 3-1)

FIGURE 4-3 FUNCTIONAL AREA OF INTERSECTION

Source: 2004 AASHTO Green Book