

Generally a ½ -mile spacing will enable traffic flow at a wide range of speeds with cycle lengths ranging from 60 to 120 seconds. A ½-mile spacing is needed to provide efficient progressions at 30 mph with a 120-second cycle commonly used in developed urban areas during peak hours. At slower speeds the increase in headway will result in a serious reduction in flow rate. (Source: TRB Access Management Manual. 2003)

Cycle Length (s)	Spacing			
	1/8 mi (600 ft)	1/4 mi (1,320 ft)	1/3 mi (1,760 ft)	1/2 mi (2,640 ft)
	Progression Speed (mph)			
60	15	30	40	60
70	13	26	34	51
80	11	22	30	45
90	10	20	27	40
100	9	18	24	36
110	8	16	22	33
120	7.5	15	20	30

TABLE 2-1 RELATIONSHIP BETWEEN SPEED, CYCLE LENGTH, & SIGNAL SPACING

Source: TRB: Access Management Manual, 2003

General Intersection and Entrance Spacing Criteria

1. Functional classification of highway
 - Purpose of the highway for mobility vs. access to property
2. Highway speed limit
 - The higher the speed, the longer the distance to safely decelerate for turning movements
3. Traffic signal
 - Separation of signals for efficient traffic progression
4. Type of entrance or intersection
 - As the potential number of turning movements increases, so do the conflict points, leading to a greater potential for traffic crashes, particularly for left turns into and out of entrances or at intersections
5. Rural vs. urban areas
 - Rural: Greater spacing due to lower density, larger parcel size, and higher speed limits. Distances between destinations are longer requiring greater mobility.
 - Urban: Shorter spacing due to higher land use density, smaller parcels with less road frontage, slower traffic speeds, and greater need to accommodate pedestrians/bicyclists. Distances between destinations tend to be shorter so a lower level of mobility may be acceptable.

Other criteria that may need to be considered for new crossover spacing is presented on later in this section.