Generally a ½ -mile spacing will enable traffic flow at a wide range of speeds with cycle lengths ranging from 60 to 120 seconds. 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 <u>Access Management Manual</u>. 2003)

Cycle Length (s)	Spacing			
	1/8 mi	1/4 mi	1/3 mi	1/2 mi
	(600 ft)	(1,320 ft)	(1,760 ft)	(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**

- 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

Other criteria that may need to be considered for new median<sup>\*</sup> crossover spacing is presented later in this section.