



Traffic Signal Design Manual

ORIGINATOR Director, Bureau of Highway Operations		7-1-3
CHAPTER 7	Sequence of Operations	
SECTION 1	General	
SUBJECT 3	Overlap	

Another factor related to phasing and head displays is the use of overlaps. Under this type of operation, for example, a right turn movement moves in conjunction with the complementary left turn movement from the crossing street. Typically, this type of operation is best utilized when there are exclusive lanes for each movement. Under this scenario, the time given to the right turn overlap is governed by this left turn lane demand and not the right turn demand. This type of operation allows for efficient use of the green time for both streets by maximizing vehicle throughput. Overlaps are also commonly used at interchanges.

Right turn overlaps can be considered for use at locations where there is an exclusive right turn lane and a complementary left turn lane and protected left turn phase on the crossing street. In areas where pedestrian demands are high, particularly in central business districts (CBD), school crossings, or locations associated with special events, the use of right turn overlaps *should* be carefully evaluated with respect to pedestrian safety. In most cases right-turn overlaps for these types of areas *should* be avoided.

Figure 3 illustrates the chart used for overlaps. This chart is located on the Sequence of Operations Sheet. The overlap *should* only be shown if it overlaps two (2) or more phases. The chart *should* indicate which phases the overlap times concurrently.

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

Figure 3
Overlap Chart