



Traffic Signal Design Manual

ORIGINATOR Director, Bureau of Highway Operations		7-1-4
CHAPTER 7	Sequence of Operations	
SECTION 1	General	
SUBJECT 4	Dual/Single Entry	

Traffic signal phases are typically operated in one of two modes, dual-entry or single-entry. The mode that is selected will depend on the overall characteristics of the location being signalized.

Dual entry refers to a mode of operation in a dual-ring controller where one phase in each ring is serviced concurrently. Dual-entry operation services two separate non-conflicting phases simultaneously. An example of this would be if phases 2 and 6 were to terminate in response to a call on phase 4 and no calls on phase 8 or 7. The controller would service phase 4 and phase 8 (or 7) simultaneously. Controller programming would determine if phase 8 or 7 were to be timed concurrently with phase 4. The majority of traffic signal installations will utilize dual-entry operations.

Single-entry refers to a mode of operation in which a phase in one ring can be selected and timed alone in the absence of a call from a nonconflicting phase. Single-entry is typically less efficient to use because, depending on vehicle arrival characteristics, it *may* service only one phase at a time. An example of this would be if phases 2 and 6 were to terminate in response to a call on phase 3 and no calls on phase 8 or phase 4. Phase 3 would be serviced and timed alone, and phases 8 and 4 would remain red. The single-entry mode of operation is commonly associated with protective only-left-turn operations.