

LEADING-LEFT-TURN PHASE	
ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none"> <li>Increases intersection capacity of a 1- or 2-lane approach without a left-turn lane if compared with 2-phase traffic-signal operation.</li> <li>Minimizes conflicts between left-turn and opposing straight-through vehicles by clearing the left-turn vehicles through the intersection first.</li> <li>A driver tends to react quicker than with lagging-left operation.</li> </ul>	<ul style="list-style-type: none"> <li>A left-turning vehicle completing its movement may delay the beginning of the opposing through movement once the green is exhibited to the stopped opposing movement.</li> <li>Opposing movement may make a false start in response to the movement of a vehicle given the leading green.</li> <li>Where there is no left-turn lane, an obstruction to the left-turn movement is created if a through vehicle is present.</li> </ul>
LAGGING-LEFT-TURN PHASE	
ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none"> <li>Both directions of straight-through traffic start at the same time.</li> <li>Approximates the normal driving behavior of a vehicle operator.</li> <li>Provides for vehicle/pedestrian separation as pedestrians usually cross at the beginning of straight-through traffic.</li> <li>Where pedestrian signals are used, pedestrians have cleared the intersection by the beginning of the lag-green interval.</li> <li>Cuts off only the platoon stragglers from adjacent interconnected intersections.</li> </ul>	<ul style="list-style-type: none"> <li>A left-turning vehicle can be trapped during the left-turn yellow change interval as opposing through traffic is not stopping as expected.</li> <li>Creates conflicts for opposing left turns at start of lag interval because an opposing left-turning driver expects both movements to stop at the same time.</li> <li>Where there is no left-turn lane, an obstruction to the through movement during the initial green interval is created.</li> </ul>

Notes:

- 1. The disadvantages inherent in the lagging-left operation are such that its use is restricted to an interconnected or pre-timed operation, or to an actuated-control operation, such as a T intersection.*
- 2. The lagging-left turn phase is acceptable where both opposing through movements are stopped at the same time.*

**COMPARISON OF LEFT-TURN-PHASE ALTERNATIVES**

**Figure 77-5X**