

Additional criteria can also be taken into consideration apart from the criteria mentioned above. **Table 11** shows the left-turn phasing justification for the intersection. A protected left turn phase can be provided for the northbound, southbound and westbound approach as the approaches meet at least one of the above-mentioned criteria.

Table 8: Left-Turn Phasing Justification based on Peak Hour Volumes							
Left-Turn Movement	Cross-Product per Thru Lane	Left-Turn Volume	Opposing Thru Lanes	Left-Turn Phase Min.		P/P Lagging Only Min.	
				Cross-Product per Thru Lane	Left-Turn Volume	Cross Product per Thru Lane	Left-Turn Volume
NB Left (ø1)	46,155	102	2	50,000	125	30,000	75
SB Left (ø5)	98,264	173	2	50,000	125	30,000	75
EB Left (ø3)	50	5	1	50,000	125	30,000	75
WB Left (ø7)	802	401	1	50,000	125	30,000	75

### Capacity Analysis / Delay

Intersection capacity analyses were performed to determine the existing and future traffic conditions within the study area. Intersection capacity analyses were performed using the methodology outlined in the Highway Capacity Manual 6<sup>th</sup> Edition (HCM 6<sup>th</sup> edition). This methodology is the industry standard for the evaluation of intersection capacity and delay. Computer software Synchro was used to facilitate the analysis. The vehicular delay value that results from the Synchro was used to determine the level of service for the intersection at SR 7 / US 41 / N Valdosta Road at Old US 41/ Val Del Road.

Level of service (LOS) is a letter designation used to describe traffic operating conditions, on a declining scale from A to F. LOS "A" represents free-flow traffic conditions, and LOS "F" represents extreme delays with stopped traffic conditions. Generally, LOS E and F are viewed as unacceptable. **Table 8** indicates the relationship between delay and LOS for signalized and unsignalized intersections, respectively.

Table 9: Level of Service for Signalized and Unsignalized Intersections		
Level of Service	Control Delay Per Vehicle (sec)	
	Unsignalized Intersection	Signalized Intersection
A	≤10	≤10
B	>10 and ≤15	>10 and ≤20
C	>15 and ≤25	>20 and ≤35
D	>25 and ≤35	>35 and ≤55
E	>35 and ≤50	>55 and ≤80
F	>50	>80