Fort Meade Traffic Analysis

The purpose of this study was to analyze the traffic conditions at the three entrances to Fort Meade off MD 175 including the stacking distances between the proposed security gates and MD 175 to ensure that the traffic does not spill back on to MD 175. This study was initiated after the September 11, 2001 incidents. Turning movement counts were conducted during the AM and PM peak hours. The data collected was utilized to estimate the average time required to process a vehicle through the security gate. Two alternative access plans were developed to accommodate the Fort Meade traffic on-site and to ensure that the queues do not block MD 175. Since this relates to inbound traffic, the morning period was the critical period for analysis. The current traffic volumes were forecasted to the year 2020. CORSIM was setup and executed for four different conditions for the AM peak hour. In addition to the CORSIM analysis, the capacity and levels of service was also analyzed at the three intersections on MD 175 using the critical lane volume (CLV) analysis methodology. The analysis results show that Alternative A is projected to operate at acceptable levels of service and the queuing of vehicles before the security gates can be accommodated on-site and does not spill back on to MD 175. Further, the construction costs and right-of-way requirements for the access plan is less than the other alternatives.