Abstract

This comparative descriptive research aimed to determine the efficiency of the Circumferential Road 5 (C-5) in terms of travel time and delay, and level of service. Two projects were proposed for the improvement of traffic along C-5 Kalayaan intersection, one was the tunnel proposed by DPWH and the other was the elevated U-turn proposed by the MMDA. Then the Former President Gloria Macapagal-Arroyo chose the elevated u-turn for it is more economic-wise because it does not need high-cost utility bills. It determined whether the elevated U-turn increased its level of efficiency or not through the volume capacity ratio and capacity analysis for freeway. Another factor that was considered is the travel speed. Primary and Secondary data were collected and compared then showed that improvement with the travel speed occurred after the elevated u-turn was built. Findings on the study showed that the C5-Kalayaan intersection has improved in 2009 and 2010 after the elevated U-turn was constructed from its worst scenario during 2008. That is why improvement of the intersection is really needed. On the other hand, the C5-Kalayaan intersection has experienced long delay time in 2006. Then, it has improved also after the construction of the U-turn.