

4 PROBLEM STATEMENT

Each individual who travels the I-66 corridor has experienced the problems associated with high levels of traffic and related problems with congestion. In fact, the effects of congestion are not limited to I-66, but also affect many of the adjacent and parallel roadways in the densely developed corridor. These problems were recognized in a June 2003 letter from Congressmen Frank Wolf and Tom Davis which encouraged Governor Warner to move forward with plans to improve westbound operations on I-66 between the Rosslyn Tunnel and the Dulles Connector Roadway. Five key elements were noted in the letter that supported the need for improvements. These needs included:

1. Ease congestion on I-66 westbound;
2. Reduce congestion on parallel local roadways;
3. Improve access to regional activity centers;
4. Improve economic vitality of activity centers; and
5. Provide quicker emergency evacuations from Washington, DC.

Traffic studies, including vehicle counts and origin-destination analyses, were conducted to evaluate these initial needs. The studies indicate that there is peak period congestion on the westbound portion of I-66 in the AM and right before and after the HOV restrictions in the PM period. Congestion is also beginning to develop during the westbound PM HOV period as well as shown in Chapter 3 of this report. Congestion in the AM and PM periods has been noted from the entrance ramp from Lee Highway (Route 29 at Spout Run Parkway) to the Dulles Airport Access Highway. In addition, the traffic volumes and ramp data collected indicate that parallel routes such as Route 50 and George Washington Memorial Parkway experience congestion when the HOV restrictions are in place and that all ramps leading to I-66 experience heavy volumes during both AM and PM peak periods.

Root causes for this congestion include not only inadequate capacity on I-66 for the demand generated within the region, but also a need for improvements to the transit system in the study area so that ridership on the Orange Line, Virginia Railway Express, and bus transit routes operated by WMATA, PRTC and other providers can be maximized. Several studies have been initiated by WMATA that propose transit capacity enhancements in the study area as a method to relieve congestion on the Orange Line. In this sense, congestion that occurs is a function of a lack of overall multimodal capacity at a transportation system level between the traditional urban core communities of Washington, Rosslyn, and Crystal City and activity centers along I-66 and the Dulles Toll Road. This lack of multimodal capacity increases travel times and limits access to these regional activity centers for commuters, employees, employers, and visitors. Finally, the lack of multimodal capacity in the study area and the resulting congestion that occurs has a negative impact on the ability of the transportation system to respond to potential emergency evacuations.

The congestion that occurs on I-66 westbound not only limits the overall response times of all emergency service providers in the corridor, but the combination of congestion, limited capacity and geometric constraints (such as limited sight distances and narrow shoulders) that exist on I-66 also makes enforcement and incident management more difficult during peak periods. As a result, even minor incidents can result in long delays in the corridor. The overall lack of multimodal capacity required to meet existing and future regional travel demand in the study area results in an unstable traffic flow in the I-66 corridor.