The Effect of Operational Changes on the US 290 HOV/HOT Lane

The first segment of the US 290 HOV lane opened in 1988. Initially, the requirement for using the HOV was an occupancy of 2 or more persons (HOV 2+). However, increasing congestion in the HOV lane forced METRO to change this policy, and in July 1999, the requirement was increased to 3 or more persons (HOV3+) during the morning peak period. This change drastically reduced the volumes in the lane during the morning peak period causing the lane to become underutilized. In December 2000, the QuickRide program was introduced on US 290 in an effort to combat the underutilization problem.

Table 1 compares the volumes on the HOV lane during the morning peak (6:45-8:00) for three periods: June 1999 (prior to 3+ requirement), June 2000 (3+ requirement but prior to QuickRide), and June 2001 (QuickRide). The change from HOV2+ to HOV3+ caused the volume of 2-person vehicles to drop 62.4% during the morning peak while 3-person vehicles increased by 60.7%. However, the total volume on the HOV lane decreased by 44.5% in the morning peak. The addition of the QuickRide program caused the HOV2 volume to increase 40.3% between 2000 and 2001, while the HOV3 volume changed relatively little (-2.7%). Additionally, the total volume of the HOV lane increased 21.1%. The effects of the operational changes can also be seen in Figure 1, which shows the changes in HOV2 volume between the three periods.

Table 1. Total HOV Lane Volume for Morning Peak (6:45-8:00)

Period	HOV 2 Vehicles		HOV 3+ Vehicles		Total Vehicles	
	Vehicles	Change	Vehicles	Change	Vehicles	Change
June 1999	1268		140		1563	
June 2000	477	-62.4%	225	60.7%	867	-44.5%
June 2001	669	40.3%	219	-2.7%	1050	21.1%

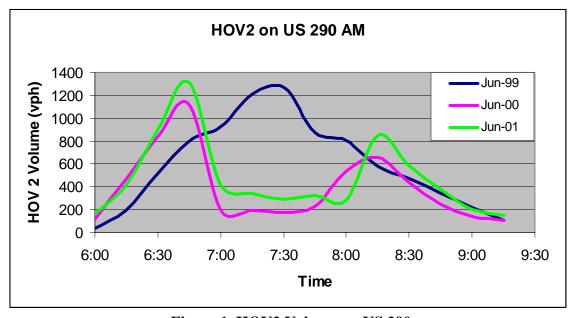


Figure 1. HOV2 Volume on US 290.