6. Projected Congestion (Forecast Data)

Short-Range Forecasted (year 2010) V/C ratio and average speeds

A modeling run was performed using the Department's TRAVEL/2 model.[10] This run used the Round 6.3 Cooperative Forecasts for land use, and a base transportation network for the year 2010 consisting of projects contained in the region's Constrained Long Range Plan (CLRP) that are anticipated to be completed by 2010. All data are for the PM peak hour and include the freeway network.[11]

Table 6.1: Countywide Results From 2010 Model Run

	Base (1998 Validation)	2010 CLRP	Chg From Base	% Chg From Base
Total Lane-Miles	2,474	2,633	159	6%
Vehicle-Miles Traveled (000)	1495.2	1778.8	283.6	19%
Vehicle-Hours Traveled (000)	55.0	74.8	19.8	36%
Average Speed (mph)	27.2	23.8	-3.4	-13%
Average V/C Ratio	0.61	0.65	0.04	7%
Lane Miles With V/C 0 to 0.59	1668.7	1521.8	-146.9	-9%
Percent	67%	58%		
Lane Miles With V/C 0.60 to 0.79	597.0	758.1	161.1	27%
Percent	24%	29%		
Lane Miles With V/C 0.80 to 0.99	204.2	337.7	133.5	65%
Percent	8%	13%		
Lane Miles With V/C 1.00 and up	4.3	15.7	11.5	268%
Percent	0.2%	0.6%		

Figures 6.1 and 6.2 show the link volumes and V/C ratios for the base case and the 2010 scenario. Figure 6.3 shows the difference in link volumes between the 2010 scenario and the base case. Increases in volume of 750 or more vehicles during the 2010 scenario occur on most of the new or widened roads contained in the scenario, including Midcounty Hwy, Woodfield Rd (MD 124), Great Seneca Hwy (MD 119), and MD 28 / MD 198; however, most of the new or widened roads have V/C ratios below 0.8 over a majority of their length, so they are having little

[10] The Department is in the process of moving to the TRAVEL/3 model, which applies the MWCOG model to a more detailed network for Montgomery County. It is anticipated that next year's report will use forecasts from TRAVEL/3.

[11] Typically, the freeway network was not included in the totals included as part of Policy Area Transportation Review (PATR), which contained a separate test solely for freeways.

Figure 6.1
PM Peak Hour Volume and Volume / Capacity Ratio
1998 Base

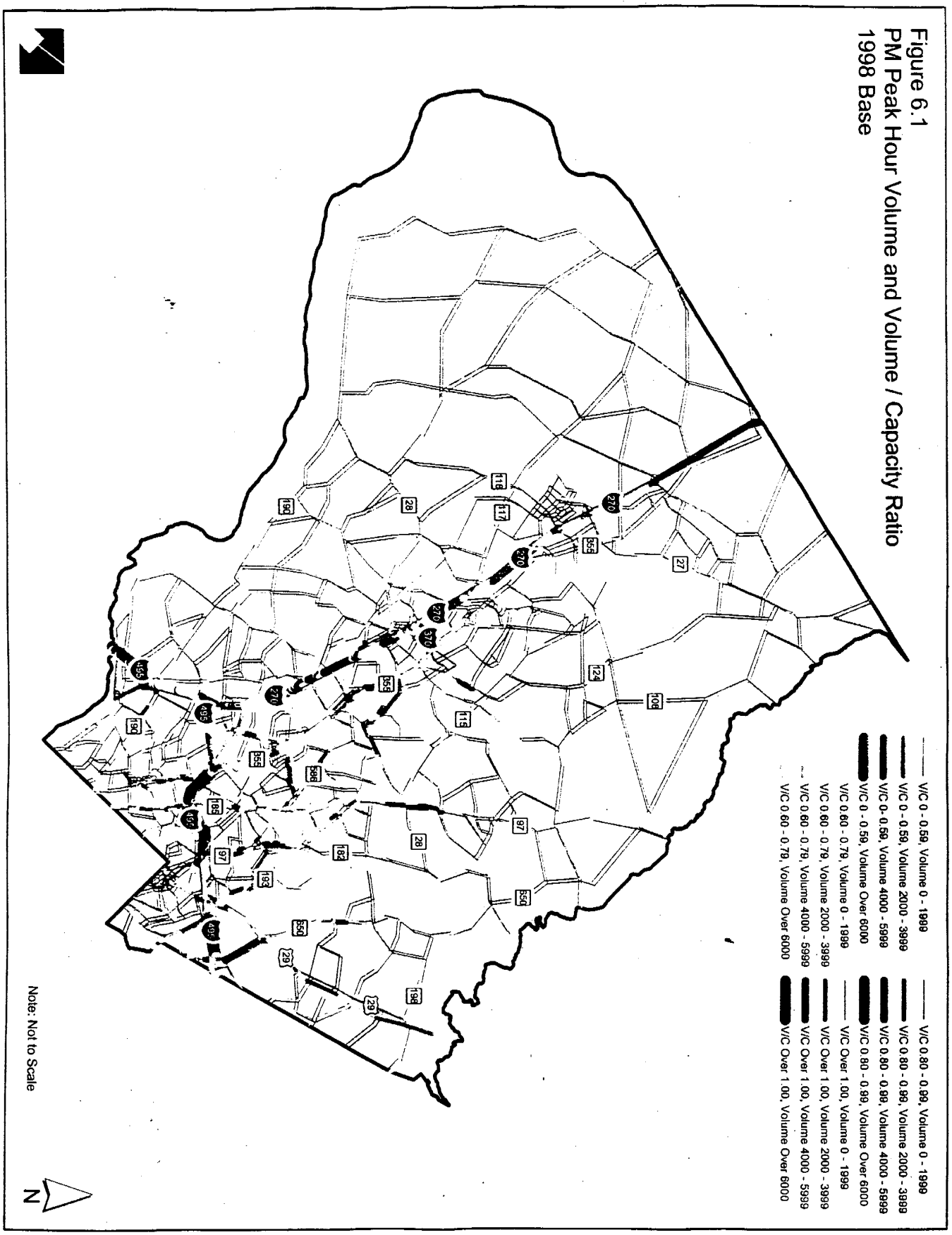


Figure 6.2
PM Peak Hour Volume and Volume / Capacity Ratio
2010 Network / Land Use

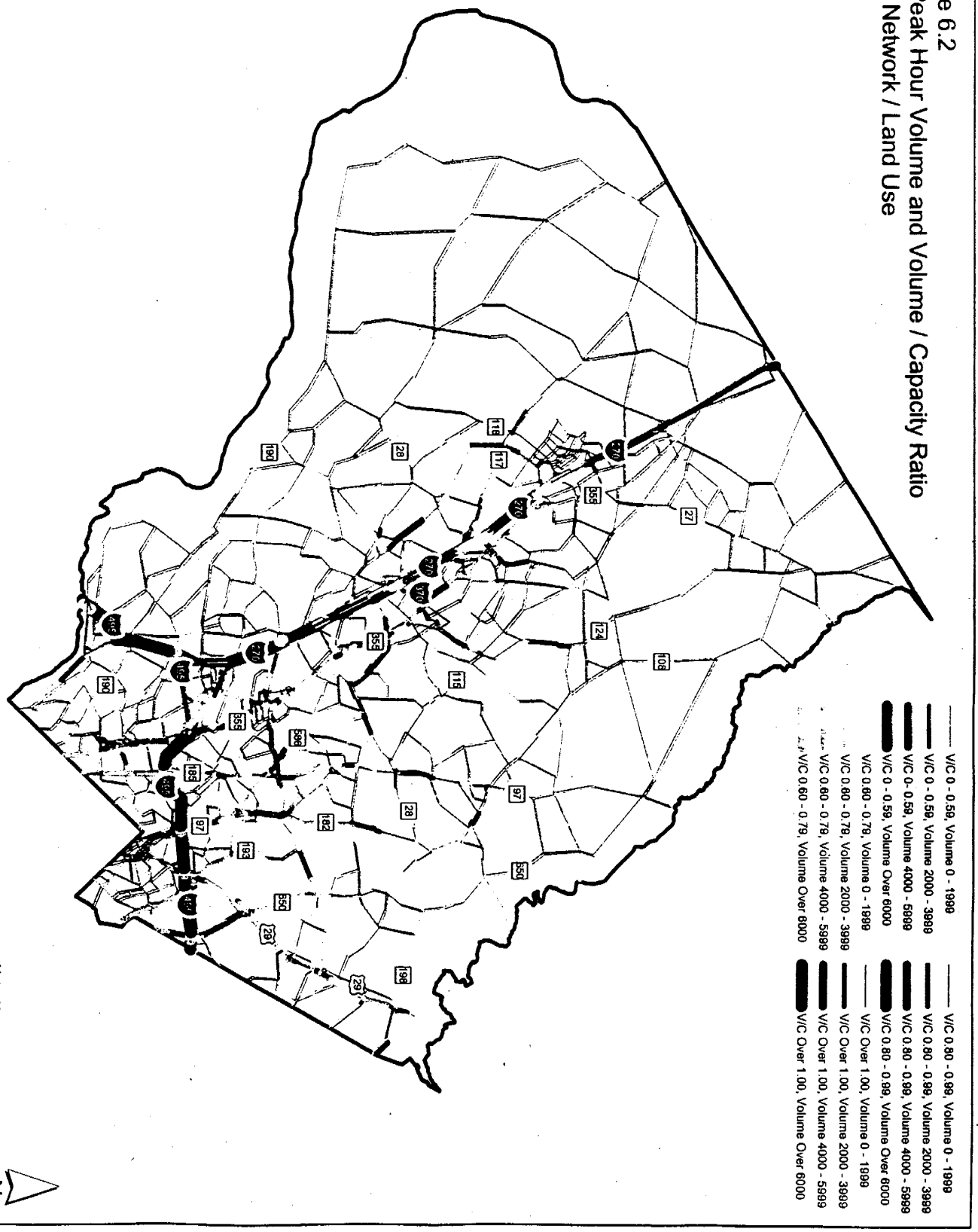
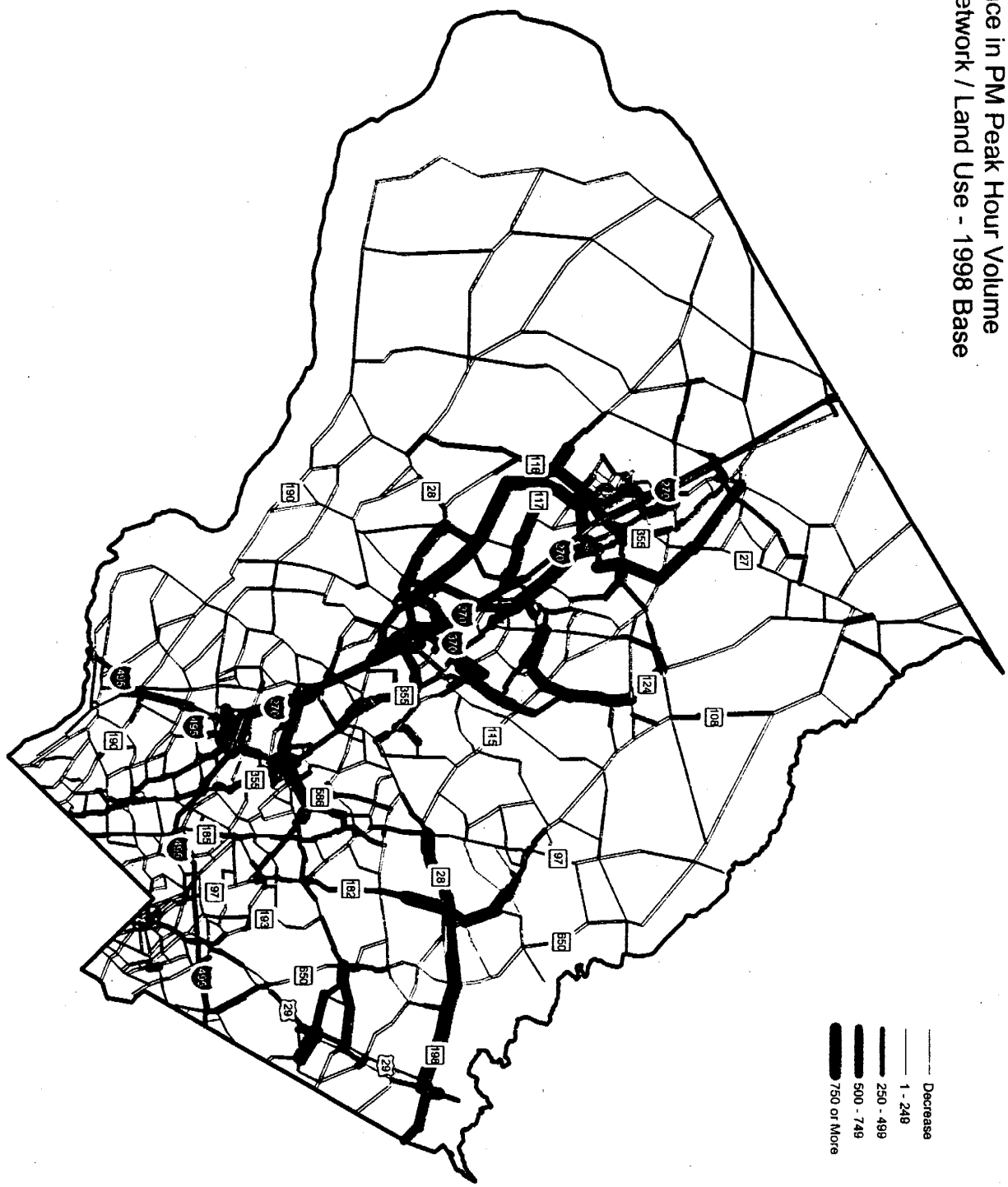
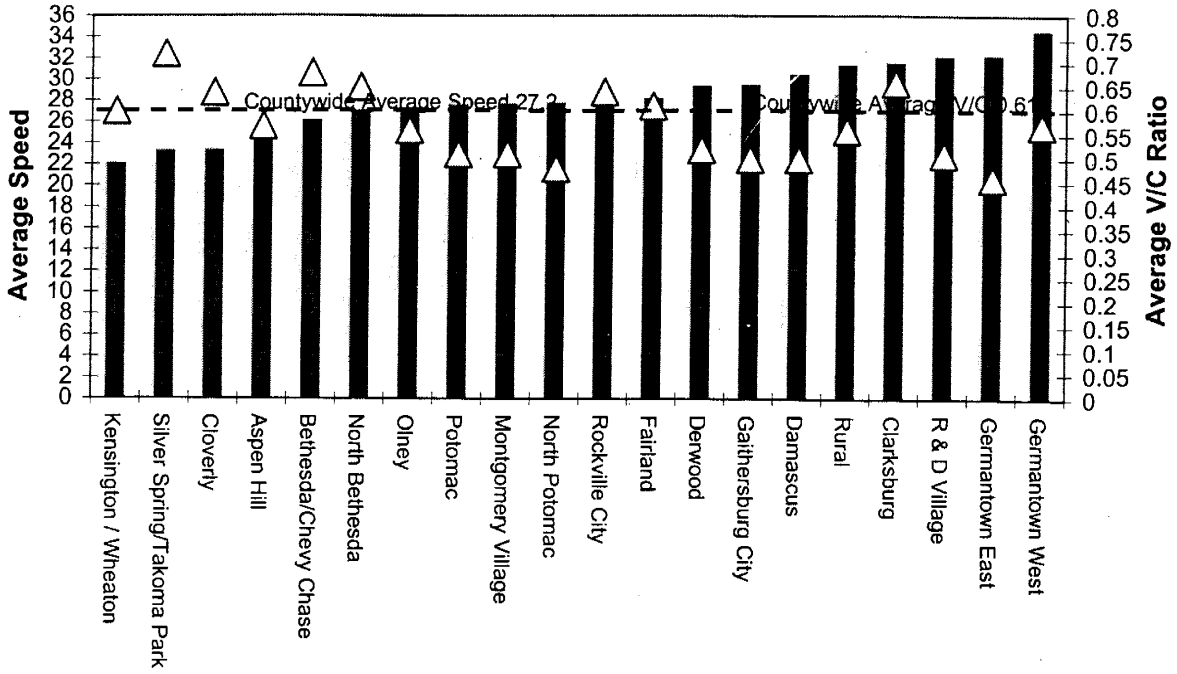


Figure 6.3
Difference in PM Peak Hour Volume
2010 Network / Land Use - 1998 Base



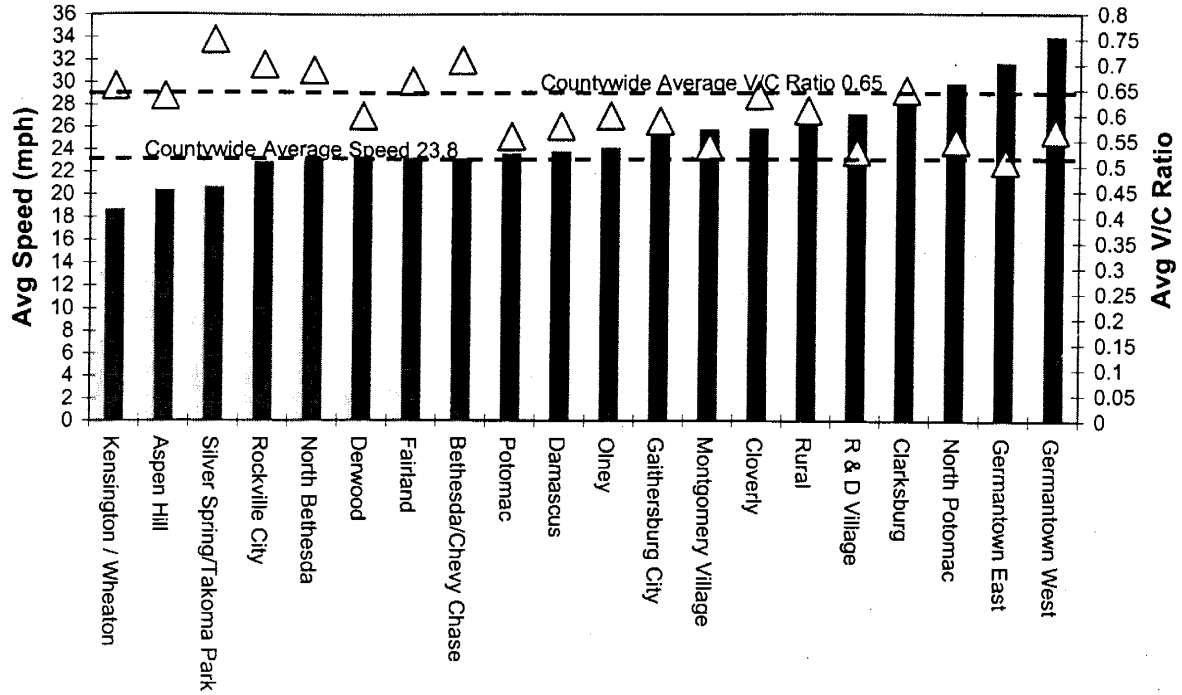
difficulty accommodating the new traffic. Many roads that have no capacity improvements built by the year 2010 have significant congestion, with V/C ratios over several successive links approaching or exceeding 1.0. Included in this group of roads are sections of Randolph Rd, Norbeck Rd (MD 28), Connecticut Ave (MD 185), MD 355, and Georgia Ave (MD 97), and others.

Figure 6.4: Policy Areas Ranked By Average Speed -- Base Case



Figures 6.4 and 6.5 show average speed (bars) and average V/C ratio (triangles) by policy area. The policy areas are ranked by average speed, so the policy area with the lowest average speed (i.e., where traffic is moving most slowly) is shown to the left of the graph – in the base case, the Kensington / Wheaton policy area.

Figure 6.5: Policy Area Ranked by Average Speed -- 2010 Scenario



The Fairland / White Oak policy area, where grade-separations along US 29 are operating during the year 2010 scenario, experiences a decrease in average speed relative to the base case, but has higher speeds when compared with the rest of the county. The central location of the Kensington / Wheaton Policy Area causes it to receive a significant amount of both north-south and east-west traffic. This factor, along with the relatively small number of improvements in the year 2010 scenario and a lack of freeway mileage, contributes to still having the slowest average speeds of the policy areas. The complete list of forecasting results by policy area may be found in Appendix N.

7. Transportation Improvement Priorities

The project priorities are broken into the following categories:

- Projects of Regional and Statewide Significance
- State Construction Priority List
- State Development and Evaluation (Project Planning) Priority List
- County Project Priority List

The projects of regional and statewide significance are not ranked. The remaining projects are ranked based on the following methodology: