

JULY 2004

# MONTGOMERY COUNTY ANNUAL DEVELOPMENT APPROVAL AND CONGESTION (ADAC) REPORT



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION  
MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING



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## 1. Executive Summary

This is the first Annual Development Approval and Congestion report. This document provides a countywide snapshot of development approvals and traffic congestion, based on a review of available data sources. The report recommends a prioritized list of state and county roadway improvements to address congestion and new development and the County's planning and policy goals. The list can be found in Section 7 on page 52.

### Development Approvals

- Montgomery County will experience about a 7% increase in households and about a 9% increase in jobs between 2005 and 2010, based on current forecasts.
- Nearly 70% of the residential development approved during the past year was located in just six policy areas: White Flint, Rockville, Potomac, Bethesda CBD, Silver Spring CBD, and Grosvenor. Residential development approved during the past year represents approximately 25% of the total remaining residential development pipeline.
- Nearly 65% of the new peak hour trips generated by the remaining residential pipeline development are in just six policy areas: White Flint, Rockville, Potomac, Silver Spring CBD, Clarksburg, and Grosvenor.
- Nearly 90% of the non-residential development approved in the past year was located in just five policy areas: White Flint, Potomac, Fairland / White Oak, Rockville, and Wheaton CBD. Non-residential development approved in the past year represents approximately 12% of the total remaining non-residential development pipeline.

### Congestion Patterns

Simply stated, congestion is too many vehicles in the same general place at the same general time. This report uses different performance measures that sample the use of the roadway network from different data sources at different places and times to estimate congestion.

- Congestion continues to be worse during the evening peak periods than in the morning peak periods.
- **Peak Hour Intersection CLV:** In a sample of Critical Lane Volumes (CLVs) from 320 signalized intersections, 19% had CLVs exceeding the LATR standard during the morning peak hour, and 16% had CLVs exceeding the LATR standard during the evening peak hour. Another 24% (28% in the evening peak hour) of the intersections had CLVs closely approaching the LATR standard.
- **Intensity of Arterial Use:** Data from the traffic signal system shows that with very few exceptions among the locations sampled, those locations experiencing significant, recurring

off-peak weekday and weekend congestion do so at levels *below* those experienced during the typical weekday peaks.

- **Average and Spot Speed on Freeways:** Observation from aerial surveillance of freeway congestion shows that the weekday peak periods typically have three to four hours of congested conditions, but data from the State Highway Administration traffic detectors show that there can be significant day-to-day variation.
- **Route Specific Speed and Travel Times:** Travel time and speed data for a sample of specific routes show more congestion in the evening peak period than the morning peak period. The data also show that while much congestion is based upon the alternating and conflicting flows of traffic at intersections, the location of the congestion can extend far back in queues from the intersection. The ratio of the slowest to the fastest route travel time may vary from 150% to 250% slower, which for long routes can be as much as 20 to 30 or more minutes of delay. There is a diurnal variation in route travel times that is similar to that observed for the variation in traffic volumes.
- **Short-term Forecasts of Congestion based on New Development:** When compared with the base case, in the year 2010 the County's road network will add 10% more lane-miles countywide through the transportation improvements contained in the regional Constrained Long Range Plan. Countywide during the evening peak hour, the network will also experience a 19% increase in vehicle-miles traveled, a 13% decrease in average speed, and a 65% increase in the number of lane miles operating between 80% and 100% of capacity.
- **Expanded Periodic Tracking of Congestion Including Sampling of Monitored Traffic Operations Data:** Enhanced data collection by directly tracking and periodically sampling congestion conditions, sampling the on-going monitoring of traffic operation activities, and changes in data policies will improve the analysis contained in future Annual Development Approval and Congestion reports.

## 2. Introduction

On October 28, 2003, the County Council passed Resolution #15-375 approving the 2003-5 Annual Growth Policy (AGP) Policy Element. Section F4 of the resolution is titled Annual Development Approval Report, and states the following:

*The Planning Board must submit to the County Council by September 1 each year an updated report listing and describing significant developments approved by that date or expected to be approved by the following July 1 that would impact road and school capacity. The report must include a prioritized list of road and intersection improvements based on current and projected congestion patterns and additional anticipated development.*

This report is intended to meet the requirements set forth in Section F4 of the resolution. The role of this report is to provide current information on both development approvals and the state