



Strategic Congestion and Mobility Analysis



This series of fact sheets highlights our expertise in Transportation and covers the following topics:

- **Commuter Choice and Transportation Demand Management**
- **Environmental Analysis and Assessment**
- **Freight Transportation**
- **Global Climate Change**
- **Hazardous Materials**
- **Land Use and Transportation Systems**
- **Strategic Congestion and Mobility**
- **Sustainable Development**

In the last two decades, metropolitan areas have experienced significant growth in traffic volumes and congestion, decreases in carpooling and transit use, and economic, political and environmental objections to building new highway capacity. In the last two years, the nation has experienced a significant rebound in transit use and a reduction in the growth trend in vehicle miles traveled. Experts predict that even with modest gains in transit, the quality of travel in terms of reliability and mobility will continue to degrade even with the significant investment in the transportation infrastructure.

The transportation planner has traditionally focused on examining investments in the long-range context of at least twenty-years out to solve these transportation problems, while investments in ITS technologies made in the 1990s are now becoming mainstream and are being used to manage and operate the current system. Transportation planners need an integrated framework linking the operations and ITS technology management capabilities with the traditional long-range outlook. ICF International accomplishes this integration with our Strategic Congestion and Mobility Analysis Process.

ICF International's Approach

ICF develops and applies analytical tools and data for improving transportation monitoring, operations analysis, performance measurement, and management. Our approach fills the planning void between the daily operations and management of the transportation system and the long-term planning and programming process to strategically focus on the next 5-to-10 year period. We work with clients to identify the most promising capital investments to reduce congestion and improve mobility during this time frame.

This short-term approach works best when the client has access to a database of real-time and archived traffic flows on both the arterial and freeway system. This data is often collected by the transportation management center and the transit operator, but not often placed in a database for planning analysis. ICF brings database development and analysis tools to bridge the gap

between daily operations management and transportation planning. The client's active partnership in the effort will strengthen the organizational ties between operations management staff and transportation planners that should unify the agency's response to emerging traffic and congestion issues. ICF's Strategic Congestion and Mobility Analysis Process will:

- identify congestion "pinch points" or bottlenecks that restrict flow and mobility
- link the operations' real-time and archived data to planning models
- provide a time-series measures of mobility for use in performance measurement
- provide planning justification for project prioritization and programming
- illustrate the linkages between land use policies and planned investments as part of growth management programs
- provide a mechanism for institutional integration

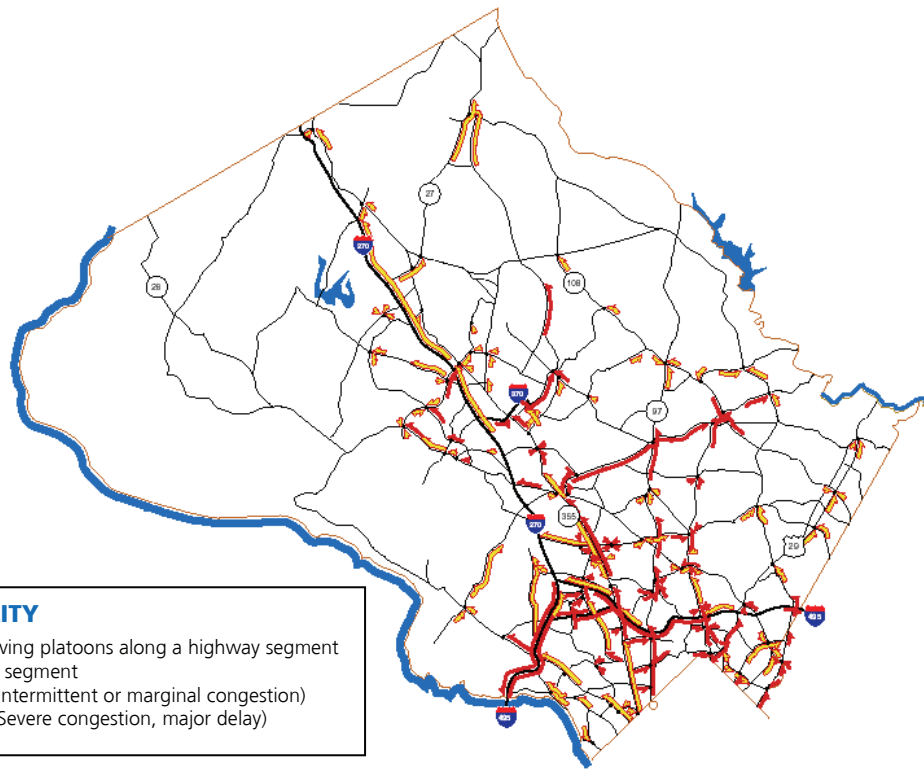
Featured Projects

ICF has successfully completed the Mobility Action Program (MAP) for Montgomery County, Maryland. The MAP is a process to monitor, analyze, and propose viable solutions to address congestion, safety, mobility, economic development, and other factors that contribute to creating and maintaining a livable community.

The MAP produced a congestion map for the entire county by working with the advanced traffic management staff. Each line represents the intensity and extent of afternoon peak hour congestion. A similar map was developed for the morning peak hour. In addition, a CD was developed using video from the Montgomery County's aircraft to illustrate the congested segment.

The MAP was able to use traffic signal detector data and generate streaming video of changing traffic congestion for corridor analysis.

The MAP process also evaluated the major corridors within the County and developed a classification scheme to identify corridors that should be considered for capital investment. ICF used both mobility (traffic volume) and congestion (speed) to classify corridors.



About ICF International

ICF International (www.icfi.com) partners with government and commercial clients to deliver consulting services and technology solutions in defense, energy, environment, homeland security, social programs, and transportation. Combining passion for our work with industry expertise and innovative analytics, we deliver compelling results throughout the entire program life cycle, from analysis and design through implementation and improvement. Since 1969, ICF International has been serving government at all levels, major corporations, and multilateral institutions. More than 1,600 employees serve these clients worldwide.

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