

# The Future of Freeways

Research identifies strategies for developing managed lanes

**R**ising construction costs, land consumption, neighborhood impact and environmental issues are all factors that must be considered when examining transportation alternatives, particularly on our freeway systems. There is a growing realization that simply adding more general-purpose lanes to freeways is not always the answer to increasing mobility and travel efficiency. A viable and increasingly popular method for meeting urban mobility needs is the concept of “managed” lanes.

Managed lanes maintain free-flow travel speeds on the designated lanes by allowing only eligible user groups on those lanes through management strategies such as setting vehicle-occupancy levels, pricing and vehicle types. These eligible user groups can vary by time of day or other factors, depending on available capacity of the facility, as well as the mobility needs of the community.

Some regional transportation agencies have made a public policy decision to proceed with multiple managed lanes projects, and managed lanes are options in major investment studies underway in Texas and across the country. Because the managed lanes concept is so new, and the experience base is so small, the Texas Department of Transportation (TxDOT) began a major research project in September 2000 to examine planning, designing and operating successful managed lanes. As the project nears the end of its third year, Texas Transportation Institute (TTI) researchers have already completed a number of tasks providing direction to the Department and others interested in managed lanes.

“There are so many things to consider at all stages of a managed lanes project, but getting started can be particularly challenging,” says Beverly Kuhn, one of the TTI research supervisors of the effort. “With so many agencies and stakeholders involved, and with all of the ideas and strategies that are possible, the groundwork has to be in place before a successful project can become a reality.”

TTI research results in three areas key to laying that groundwork are now being implemented:

- ▶ **Passing legislation to ensure legal authority to develop projects.** Some of the results of the legislative research (See TTI Research Report 4160-8) are currently being implemented in various forms in the 2003 legislative session in Texas to ensure that TxDOT has the authority to implement any potential managed lane strategy.
- ▶ **Educating to gain support from the public and policy makers.** TxDOT is using the education brochures developed for the media and policymakers to communicate the objectives and advantages of managed lanes (See TTI Research Reports 4160-7, 4160-5-P1, and 4160-6-P2).
- ▶ **Funding and financing to overcome barriers to implementation.** New financing options for TxDOT are being considered in the current legislative session in Texas (See TTI Research Report 4160-9).



Managed lanes provide travelers with more choices than driving alone on a congested freeway.

“The research results from this project have come at the perfect time,” says Carlos Lopez, TxDOT Traffic Operations Division director and project director. “Their timely implementation will go a long way towards helping TxDOT plan and design managed lanes to serve the mobility of Texans in the future.” **R**

#### MORE INFORMATION

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