

**TECHNICAL SUMMARY**

Louisiana ITS Business Plan

Summary of Report Number 344  
March 2000

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**INTRODUCTION**

With the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in the early 1990's, the US Congress and the Federal Highway Administration directed state departments of transportation to change the way they do business. ISTEA required states to improve the safety and efficiency of existing facilities prior to capacity. One way to increase the efficiency and safety of the existing transportation system is to take advantage of new technologies.

The 1996 Transportation Equity Act for the 21<sup>st</sup> Century provides more than \$1.2 billion in Intelligent Transportation Systems (ITS) funding through 2003 to assist states in investing in technology to better manage the existing surface transportation system. The state of Louisiana has developed this coordinated Intelligent Transportation Systems (ITS) business plan in cooperation with the Baton Rouge, New Orleans, and northwest Louisiana Metropolitan Planning Organizations (MPO) to provide a roadmap for integration of ITS solutions in the state's routine transportation infrastructure planning and deployment processes.

**OBJECTIVES**

The objectives are defined under:

1. Development of the plan, which identifies the preferred program of projects and policy initiatives and outlines the purpose, requirements, responsibilities, estimated cost, and implementation schedule for each plan initiative.
2. Development of statewide architecture which defines the regional architecture that will serve as a high level template for ITS project design, development, and integration.

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**RESEARCH APPROACH**

The Louisiana ITS Plan is a need-based plan. Recommended improvements are based on documented, demonstrable transportation system needs as articulated in the state's annual statewide transportation improvement plan planning process, state and local transportation plans previously completed and key contact interviews with transportation system users, providers, and emergency service providers. The needs were compiled from a review of a number of transportation plans, augmented by interviews with the individuals and agencies.

Key contact interviews were conducted during the April to August, 1999, period. In addition to the document reviews and key contact interviews, a series of open ITS committee meetings were conducted during 1998 and 1999 to gather input for the plan. These meetings were routinely attended by 20 to 30 individuals representing the DOTD, DPSC, OEP, MPO's, FHWA (both Federal Aid and the Office of Motor Carrier Highway Safety), the Louisiana Transportation Research Center (LTRC), various local parishes, Louisiana State University, and local consultants involved in both traditional and ITS transportation planning at the state and local level.

**CONCLUSIONS**

Louisiana's ITS program includes process and technology-based initiatives to improve the operation and management of the state's surface transportation system. Key components of the ITS construction program outlined in the plan include:

1. Provision of regional traffic and incident management systems by developing basic ITS traffic and incident management functions in all Department of Transportation and Development (DOTD) district offices, linked to a centralized Louisiana State Police/DOTD ITS Center in Baton Rouge.

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| 2. | Improved urban traffic and incident management systems by developing Traffic Management Centers (TMC) in Baton Rouge, New Orleans, Shreveport, and Lafayette, with DOTD operation of the New Orleans and Shreveport TMC's and a DOTD seat with the locally operated Baton Rouge and Lafayette TMCs. | # | Provide planning, design, deployment funding, and operational support for ITS freeway management initiatives undertaken by MPO's in urban areas. The state's role in funding ITS projects is outlined in the Recommended Highway Project Selection Process prepared by the Task Force on Highway Project Identification and Prioritization. |
| 3. | Improved incident management capabilities statewide through continuation of the ongoing motorist assistance patrols (MAP), development of incident response plans and utilizing portable ITS applications in construction work zones.   | # | Fund and operate one or more state seats in all urban traffic management centers;   |
|    |   | # | Design, deploy and operate incident detection systems in rural areas with links to DOTD district traffic management systems;  |
| 4. | Installation of site-specific safety warning systems and weather information systems and associated dynamic message signs (DMS) and variable speed limit signs at key high accident and fog-prone locations along interstate corridors.   | # | Develop and operate a web site providing real-time traveler information supported by DOTD district traffic management systems.  |
| 5. | Development of an Advanced Traveler Information System to provide real-time traffic, incident, and alternative route data via DMS, displays at rest stops and other sites, and a DOTD web site.   |   |   |
| 6. | Implementation of the state's ITS/CVO program, including installation of weigh in motion scales at interstate port locations.   |   |   |
| 7. | Planning and implementation of a statewide fiber optic and wireless communications backbone system to provide for data, video, and voice communications among traffic, incident, and emergency management systems, devices, controllers, and centers.   |   |   |

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**RECOMMENDATIONS**

In carrying out these responsibilities, DOTD will:

- # Form an ITS Advisory Council to implement the ITS Business Plan
  
- # Establish traffic management functions in each DOTD district office. Basic functionality at each installation might include, for example, the ability to monitor the highway network and gather and disseminate information based on local needs.