RESEARCH PROJECT DESCRIPTION

PROJECT NUMBER
04409

PROJECT TITLE
Intermodal Management System Update and Integration of Environmental Justice Elements into the Transportation Planning Process

PRINCIPAL INVESTIGATORS
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OBJECTIVE
The purpose of the proposed project is to develop a comprehensive Intermodal Management System (IMS) that to help planners improve management of intermodal activities. The new procedures will be both comprehensive and flexible. The flexibility will allow for updates of the IMS on a more continuous basis. The majority of IMS data interface and analysis will be performed directly in a GIS platform. In addition to developing a new IMS, the project will also serve as an update of the Intermodal Management System for Jefferson and Shelby Counties study performed in 1996. Specific attention will be given to the environmental justice aspects of intermodal transportation.

ABSTRACT
The project is sponsored by the Regional Planning Commission of Greater Birmingham (RPCGB). It will provide an extensive review of the 1996 IMS, to determine adequacy of previously identified stakeholders, data collection procedures, project ranking methodologies, and tracking mechanisms. The status of projects in the Transportation Improvement Program (TIP) will be reviewed. For projects that were not implemented, sponsors and RPC staff will be interviewed to identify reasons and salient “lessons learned.” As appropriate, new data collection procedures and project performance measures will be developed and incorporated into
the updated IMS. In particular, the methodologies presented in NCHRP Report 399, “Multimodal Corridor Capacity Analysis Manual,” will be reviewed for their applicability.

The project will review and update the environmental justice (EJ) procedures in place at RPCGB and will develop recommendations for better accommodation of EJ in the IMS. The majority of IMS data interface and analysis will be performed directly in a GIS platform. Considerable coordination with RPCGB will be required to ensure that the new IMS is consistent with their current and projected GIS utilization (staffing, software, hardware, etc.).

TASK DESCRIPTIONS:
1. Review of pertinent professional and research literature to identify trends and major developments in IMS preparation/maintenance and intermodal planning.
2. Conduct a review and critique of the 1996 IMS.
3. Develop new facility and system performance measures.
4. Perform data collection.
5. Review and update base maps, using GIS layers.
6. Develop a methodology for collection and analysis of appropriate EJ information.
7. Develop final report documenting all project activities.

MILESTONES AND DATES
1. Sep – Nov 2003
2. Sep – Dec 2003
5. Oct 2003 – Apr 2004
7. Apr – June 2004

YEARLY AND TOTAL BUDGET
Nine-month project; Regional Planning Commission of Greater Birmingham $61,956.

STUDENT INVOLVEMENT
Two graduate students from the CEE Department at The University of Alabama at Birmingham will be involved in this study.

RELATIONSHIP TO OTHER RESEARCH PROJECTS
This project addresses issues identified in UTCA Project 01225, “Multimodal Transportation Planning Needs Survey.”

TECHNOLOGY TRANSFER ACTIVITIES
The investigators will seek publication of project-derived results in appropriate peer-reviewed journals and conference proceedings.

POTENTIAL BENEFITS OF THE PROJECT
The project will result in an updated IMS for the Birmingham region based on the latest methodologies and performance measure determination. The project will also update the EJ
procedures at RPCGB and the public involvement process associated with intermodal projects. These accomplishments will improve planning and long term performance of intermodal activities.

TRB KEY WORDS:
intermodal, planning, performance measures, management system, environmental justice, IMS