HPP UTCA PROJECT DESCRIPTION

PROJECT NUMBER:  
03312

PROJECT TITLE:  
Data Analysis for the Through Trip Rates Project

PRINCIPAL INVESTIGATOR:  
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PROJECT OBJECTIVES:  
The objective of this study is to develop a methodology to assist transportation professionals in estimating through-trip rates for a community, based on a combination of community characteristics, types of roadways entering the community, and economic characteristics of surrounding communities. The proposed methodology will be developed for communities with populations below 50,000, which typically have minimum transportation planning tools because there is no requirement for them to maintain travel forecasting models or perform long-range transportation planning.

PROJECT ABSTRACT:  
This project will provide personnel in small urban communities with an improved decision making process for highway infrastructure planning and management. It focuses on the analysis of travel through small communities (less than 50,000 persons) in Alabama. The investigator will record and analyze vehicles either passing through or stopping in small communities, and will examine roadway and community factors as a method to predict “through-trip” travel. The inclusion of both community characteristics and economic considerations will help make the methodology more universal in application. This project will use technological advances for data collection, so that it will not interfere with existing traffic conditions.

PROJECT TASK DESCRIPTIONS:  
This will be a small, short-duration project, conducted in support of a non-UTCA project (see “relationship to other research projects” below). The first task will be organization of the field effort. Second will be collection of non-intrusive data through video surveillance. Third will be analysis of the data. Fourth will be development of the methodology, incorporating community characteristics and economic considerations. The final task will be development of the project report.
MILESTONES AND DATES:
The proposed project will be a five-month effort, from January 1, 2003 through May 31, 2003.

TOTAL BUDGET:
One-year project: UTCA $13,200; total budget $26,400.

STUDENT INVOLVEMENT:
This project will include students from many different disciplines, not just those traditionally focused on transportation.

RELATIONSHIP TO OTHER RESEARCH PROJECTS:
The project is related to another project being conducted by Dr. Anderson, funded by the Federal Highway Administration TERP program.

TECHNOLOGY TRANSFER ACTIVITIES:
The methodology and equations developed in this research will be published, and thus available to transportation professionals making decisions regarding transportation infrastructure in small urban communities.

POTENTIAL BENEFITS OF THE PROJECT:
The ultimate benefit of developing an improved methodology for determining through trip rates will be the application of the methodology by small communities desire to determine the appropriateness of improving transportation infrastructure in their community.

TRB KEYWORDS:
External Trips, Traffic Analysis, Through Trips