SPR PROJECT DESCRIPTION

PROJECT NUMBER: 01465

PROJECT TITLE: Evaluation of Profiled Pavement Markings

PRINCIPAL INVESTIGATORS:
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PROJECT OBJECTIVE:
This project will provide a quantitative assessment of the effectiveness and usefulness of “profiled pavement marking”(PPM), and a comparison to PPM to flat thermoplastic markings (FTM).
PROJECT ABSTRACT:
The Alabama Department of Transportation holds the safety of the traveling public of paramount concern. For that reason, in February 1999, ALDOT began using PPM routinely as edge lines and lane lines for roadways exhibiting ADT volumes above 2500. This type marking replaced the FTM used previously. The purpose of the change is to enhance visibility of the lane marking in wet weather, both in daylight and dark. The raised portions of the PPM are designed to remain above the flow of water running off the road, increasing visibility during daylight and retroreflectivity of car lights at night.

Current costs for the PPM are roughly four to five times the cost for FTM. ALDOT desires a quantitative comparison of the PPM versus FTM to determine the extent to which PPM is a cost-effective safety treatment. Such a program will be developed in this project.

PROJECT TASK DESCRIPTIONS:
• Task 1, Kickoff Meeting
• Task 2, Literature Search
• Task 3, Select Test Sections
• Task 4, Mark and Survey Test Sections
• Task 5, Analyze Crash Data
• Task 6, Measure Retroreflectivity: over time, day versus night, in wet weather, etc.
• Task 7, Data Analysis
• Task 8, Interim Report
• Task 9, Final Report

MILESTONES AND DATES:
Task 1: Sep 2001
Task 2: Sep – Dec 2001
Task 3: Oct 2001
Task 4: Oct – Nov 2001
Task 5: Sep – Dec 2001
Task 8: Jan 2002
Task 9: May – Jul 2003

TOTAL BUDGET:
30-month project; Alabama Department of Transportation – State Planning & Research (SPR) funds: $244,844

STUDENT INVOLVEMENT:
One graduate student and one undergraduate student will contribute to the research effort.

RELATIONSHIP TO OTHER RESEARCH PROJECTS:
This project is not related to any other UTCA project.
TECHNOLOGY TRANSFER ACTIVITIES:
No technology transfer is anticipated from this project, except for the interim and final reports.

POTENTIAL BENEFITS OF THE PROJECT:
This project will determine the safety cost-effectiveness of profiled pavement markings, allowing ALDOT to optimize its funding.

TRB KEYWORDS:
Profiled pavement markings, flat thermoplastic markings, safety, cost effectiveness