

STC Research Project Description

Project Title: Developing Crash Prediction Models for Planning Applications

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Project Start Date: November 1, 2003

End Date: October 31, 2004

Other Milestones, Dates:

Project Objective:

Develop crash prediction models for assessing safety consequences of long-range transportation plans for urban areas.

Project Abstract:

The project will obtain crash data for urban areas from a few different states, and regression models will be developed by correlating the number of crashes, and/or crash rates, with traffic volume and geometric characteristics of road segments. Intersection crashes will be analyzed separately.

Task Description:

1. Obtain data from two or more states.
 2. Develop cross-classification tables for crash rates.
 3. Develop regression models for crash rates, or number of crashes.
 4. Compare models of different states with each other.
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Total Budget: \$ \$65,378 (Federal funds); \$ 130,933 (with matching funds)

Student Involvement (Thesis, Assistantships, Paid Employment):

Ph. D. dissertation; and research assistantship

Relationship to Other Projects:

Technology Transfer Activities:

TRB paper; presentations at conferences of ITE, ASCE, and TRB at local and national levels.

Potential Benefits of Project:

The models will improve the evaluation and selection of long-range urban transportation plans.

TRB Keywords:

Crash prediction models; long-range transportation plans; tools for safety assessment