

MASSACHUSETTS

Rational Speed Setting and Enforcement Demonstration Project

▶ AT-A-GLANCE

▶ **Project Characteristics**
Demonstration Project
Combining Enforcement,
Education, and Engineering

▶ **Program Areas**
Community/Corridor Traffic
Safety Program

▶ **Targeted Populations**
Natick, Massachusetts
Community Residents

▶ **Type of Jurisdiction**
Town

▶ **Jurisdiction Size**
32,170

▶ **Funding**
FHWA Cooperative
Agreement: \$297,147

▶ **Contact**
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Problem Identification

According to the Fatality Analysis Reporting System (FARS), speeding is a contributing factor in approximately one-third of all traffic fatalities on the nation's roads. Speed limits establish a maximum speed that is appropriate for each segment of roadway. Speed limits must strike a balance between safety and efficient travel while considering factors such as road conditions, road geometry, land use, and crash characteristics. Research shows that increasing motorist compliance with posted speed limits will require a combination of consistent education and enforcement efforts.

Goals and Objectives

The goal of the *Rational Speed Setting and Enforcement Demonstration Project* is to increase motorist compliance with posted speed limits and decrease speed variance on demonstration roadways through a combination of education, enforcement, and engineering to set an appropriate speed limit and ultimately save lives.

The project's objectives include:

- Assist the demonstration community in site selection and program implementation, including educational program development and implementation;
- Evaluate the effectiveness of this combination approach for possible replication in additional communities;
- Provide technical and analytical assistance to Governor's Highway Safety Bureau (GHSB) staff and stakeholders who need to characterize the traffic safety experience of the Commonwealth or of local communities through the use of issue reports, fact sheets, and position papers;
- Provide training to GHSB staff and stakeholders on using traffic safety information; and
- Respond to queries from the data presentation tool accessed by Internet users.

Strategies and Activities

The *Rational Speed Setting and Enforcement Demonstration Project* implemented the following strategies and related activities to achieve its goals:

- Establish a cooperative agreement between the FHWA and GHSB to test the viability of using an engineering-based approach to set speed limits.
- Select Natick as the demonstration community and Hartford Street, Walnut Street, South Main Street, Cottage Street, Pine Street and

Union Street as treatment roadways.

- Complete an engineering study consisting of both data collection and a roadway inventory into a report that identified the 85th percentile speed for each roadway.
- Present the results of the engineering study to the demonstration community.
- Use the results of the engineering study to set an appropriate speed limit on six roadways in one demonstration community.
- Collect data in the treatment community and a comparison community to examine the effects of this process on vehicle speeds.
- Use the GHSB-MassSAFE engineering report on the six selected roadways in consideration of posting advisory speed limits. The selected roadway segments had been un-posted and governed by Massachusetts' prima facie speed limit law.
- Post advisory speed signs based on the 85th percentile speed, rounded down to the nearest 5 m.p.h. increment, with no mitigating factors present nor outlined in the report, in accordance with a rational speed limit setting approach.
- Implement and maintained a speed enforcement program cooperatively with GHSB's Massachusetts Safe Communities Program and the community's police department while providing public information in the community and at the selected sites to fully inform drivers and local residents of both the speed management program's rationale and the planned enforcement program.
- Enforce speeds under the Massachusetts' prima facie speed limit law (Chapter 90, Section 17) that allows for the enforcement of "reasonable and proper" speeds as determined by law enforcement. To ensure uniform application of this speed law, the advisory speed was considered reasonable and proper for the roadway segment. The enforcement threshold was not less than 5 m.p.h. above the advisory speed limit.
- Attend program meetings initiated by Natick residents such as the Police Department's command staff, local judges, clerk magistrates, and citizens.

Results

Preliminary data analysis for Natick's *Rational Speed Setting and Enforcement Demonstration Project* shows increased compliance with the revised speed limit on the six subject roadways. The new speed limit is expected to be largely self-enforcing and result in safety maintenance or increase on the subject roadways. The project will be completed in Spring, 2005.