IMPROVING DATA AND SAFETY MANGEMENT SYSTEMS

The Challenge:

Develop and implement a comprehensive SMS that "gives decision makers and those who manage and maintain local roadways the tools to systematically identify, prioritize, correct, and evaluate the performance of their transportation safety investments."

(See National Cooperative Highway Research Program Report 501)

BACKGROUND

Improving traffic safety data and developing a comprehensive and effective Safety Management System (SMS) is a high priority and is an overarching and essential strategy to reduce serious and fatal traffic crashes in Hawaii over the next five years.

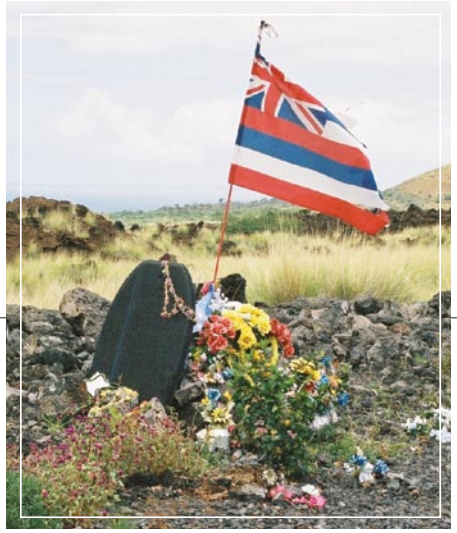
An integrated SMS is "a coordinated, comprehensive management approach to integrating engineering, education, enforcement, and emergency service efforts … to more effectively address major crash problems and achieve a greater reduction of overall injuries and deaths." (See National Cooperative Highway Research Program Report 501)

Each of the other six emphasis areas included improved data and information sharing as key strategies.

Accurate and timely data, information and an SMS are the essential tools to accomplish the required coordinated and comprehensive approach to integrating the work of Hawaii's transportation safety partners. Achieving the goal of saving lives and reducing traffic deaths and serious collisions will require significant improvements in data, information and safety management systems so that these systems are more efficient and traffic safety data becomes more accessible, timely, accurate and complete.

There is growing evidence from the Transportation Research Board, other states and countries that investment in improving both traffic safety data and safety management systems help to reduce serious collisions and associated high cost both human and financial, paid by government, businesses and citizens.

STRATEGIES



EMPHASIS AREA-RELATED

- Use crash data sources to identify high-risk locations in order to improve effective allocation of resources in enforcement, education and engineering to reduce crashes, injuries and deaths.
- Develop a standardized motor vehicle accident form, coordinated data collection methods, and an accessible crash database that can provide real time input and update of traffic incident data.
- Employ wireless communication and GPS technology to facilitate expeditious reporting and information input.
- Establish leadership towards long-term commitment to improve data and management systems and understand the risks of failure to improve and the benefits of effective information and management systems.
- Improve data and information to track progress in each of the other emphasis areas including: bicycle and pedestrian activity, impaired driving, aggressive driving, motorcycle & moped, specific crashes.
- Improve the data collection systems to create and disseminate to stakeholders a standardized data set for tracking bicycle and pedestrian activity, level of use, safety, injuries, and fatalities.

ORGANIZATIONAL

Improve traffic safety data to be more timely, accessible, integrated, complete and useable:

- Identify organizations and leaders responsible for improvement of traffic safety data and information.
- Conduct an inventory of existing data bases and assess existing data bases, using national standards and guidelines.
- Survey traffic safety partners to determine their data and information needs.
- Identify specific gaps and prioritize efforts to correct such deficiencies.
- Strengthen the charter of Traffic Records Coordinating Committee (TRCC).

Improving Data and Safety Management Systems

continued

- Establish executive level TRCC to provide oversight support, resources, and direction to all ongoing traffic record activities within Hawaii.
- Identify and reduce the barriers to implementing the Traffic Records Assessment 2006 recommendations.
- Improve linking and integration of data.
- Improve data quality assurance processes and reduce redundant entry.
- Improve training for data collection, entry, and quality assurance.

Improve the process to turn data into useful information:

- Improve data analysis and display capacity.
- Improve existing processes to turn data into useful information for law enforcement and other safety partners.

Improve Integrated Safety Management Systems:

- Establish an organization in charge of integrating all elements of a safety management system.
- Conduct an inventory of existing structures and processes for information flow and decision making by safety partners. Assess the opportunities to improve, based on national guidelines and national assessment tools.
- Review the current culture of collaboration for traffic safety at key partnering organizations including state Department of Transportation, county police departments and motor vehicle departments.
- Resolve liability issues that reduce access to critical information needed for timely decision-making by Department of Transportation and non-DOT safety partners.
- Develop a process to quickly resolve road jurisdictional issues.

Obtain funding needed to improve data, information flow and develop an effective safety management system.