

# LOW-COST ROADWAY SAFETY IMPROVEMENTS

## DESCRIPTION:

As an interim measure to capital (re)construction of high crash locations, recent highway safety research has identified a multitude of "low-cost" practices that can reduce crash frequency and has quantified the safety benefit of these practices. This course, based upon the NHI "Low Cost Safety Improvements" workshop, will cover these practices as they are applicable to Hawaii.

The workshop starts with an overview of highway safety issues with an emphasis on "do it now" solutions, it starts with steps to identify high crash locations. During the remainder of the workshop, participants will learn a host of countermeasures to address these locations along with their associated crash reduction factors as identified in the "AASHTO Strategic Highway Safety Plan -- NCHRP 500 Guidebooks." Specifically, countermeasures will be discussed in each of the following areas: roadside hazards; signing, markings, and lighting; traffic control devices; intersections; traffic signals; and railroad grade crossings; pedestrian issues will be discussed throughout.

A brief introduction to recent low-cost safety improvements developed by States and local engineers will also be provided. Through exercises and case studies, participants will learn to analyze highway safety situations and apply appropriate "low cost" countermeasures to improve those situations.

## OBJECTIVES:

Upon completion of the course, participants will be able to:

- Identify appropriate engineering countermeasures from crash patterns
- Recognize deficiencies in operation/design and select appropriate countermeasures for roadside hazards
- Recognize deficiencies in safety performance of signing, markings, and lighting, and elect appropriate countermeasures
- Recognize deficiencies in operation/design of intersections and select appropriate countermeasures
- Recognize deficiencies in operation/design of traffic signals and select appropriate countermeasures
- Recognize deficiencies in operation/design of railroad grade crossings and select appropriate countermeasures
- Illustrate new and innovative low-cost safety improvement measures developed by State DOTs

## TARGET AUDIENCE:

Federal, State, and local transportation, traffic and safety engineers, and planners involved in reducing intersection crashes.

## INSTRUCTOR:

*Keith A. Trimels is a registered Professional Engineer in AZ, CA, ID, and WY. With 20 years of experience in the transportation industry, he has designed, built, and maintained roads throughout the western U.S. His experience ranges from materials testing to multi-million dollar project management and business development.*

*Mr. Trimels has worked in both the private and public sectors, and most recently was a nationally recognized safety and Intelligent Transportation System (ITS) engineer with the Federal Highway Administration (FHWA) before serving as the Western Regional Manager for a national ITS consultant. He is currently a Principal with IDT Group where he incorporates his broad experience into technical, leadership, and organizational training for transportation organizations and others.*

### Registration Procedure

- 1) Please contact Gail Ikeda at 956-8367, 956-8851 (FAX) or [gail@eng.hawaii.edu](mailto:gail@eng.hawaii.edu) by **Monday, June 26, 2006**.
- 2) Attendance is limited, and preference is given to local government employees.
- 3) Private company registration fee is \$50 (includes parking pass).

### Cancellations

Please contact us if you must cancel your registration or if someone will be substituting for you. Refunds will be made if notice of cancellation is received at least 3 working days prior to the workshop date.

### Parking

Parking for the East West Center is \$4/day. If you would like to a parking pass, please contact us by June 26, 2006. Make checks payable to **Research Corporation of the University of Hawaii (RCUH)** and mail to:

Hawaii LTAP  
University of Hawaii  
Dept of Civil and Environmental Engineering  
2540 Dole St, Holmes 383  
Honolulu, HI 96822  
Attn: Gail Ikeda

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**July 10, 2006**

East-West Center  
Jefferson Hall, Asia Room  
1777 East-West Road  
8:30 a.m. – 4:30 p.m.

Workshop sponsored by the

**Hawaii Local Technical Assistance  
Program**

in cooperation with the  
*Hawaii State Department of Transportation  
University of Hawaii's  
Department of Civil & Environmental Engineering  
and the Federal Highway Administration*

### Hawaii Local Technical Assistance Program

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