



<http://htap.eng.hawaii.edu>

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*

Bridge Inspection Refresher Course

.....
Registration Procedure

1. Please contact Gail Ikeda at 808-956-8367, 808-956-8851 (FAX) or giked@hawaii.edu by **Monday, August 3, 2009**.
2. Attendance is limited, and preference is given to local government employees.
3. Private company registration fee is \$620.

Parking

East-West Center (EWC) parking passes are available at \$5/day. If you would like a parking pass please contact us by August 3, 2009. All vehicles (including government vehicles) are required to have an EWC parking pass in order to park in the EWC specified areas.

Payment

Payment can be made via Check – payable to the Research Corporation of the University of Hawaii (RCUH), Purchase Order, Credit Card (Visa & MasterCard) or Purchasing Card. Please mail payments to:

Hawaii LTAP
University of Hawaii at Manoa
Dept. of Civil & Environmental Engineering
2540 Dole Street, Holmes Hall 383
Honolulu, HI 96822

Cancellations

Please contact us if you are unable to attend 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 and parking passes are returned prior to the workshop date.

East-West Center, Jefferson Hall,
Asia Room
1777 East West Road
Honolulu, Hawaii

August 18-20, 2009
8:00 a.m. – 4:30 p.m.

Registration begins at 7:30 a.m.
Lunch is on your own.

Hawaii Local Technical Assistance Program
University of Hawaii at Manoa
Department of Civil & Environmental Engineering
2540 Dole Street, Holmes Hall #383
Honolulu, Hawaii 96822



Return Service Requested

Course Description:

The major goal of this course is to refresh the skills of practicing bridge inspectors in fundamental visual inspection techniques; review the background knowledge necessary to understand how bridges function; communicate issues of national significance relative to the nation's bridge infrastructure; re-establish proper condition and appraisal rating practices; and review the professional obligations of bridge inspectors.

This course is based on the "Bridge Inspector's Reference Manual," 2002 (updated in 2006) with reference to the "AASHTO Manual for the Condition Evaluation of Bridges," 2000, with interims, the "FHWA Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges," 1995, including 2003/2004 errata sheet, and the "AASHTO Guide for CoRe (Commonly Recognized) Structural Elements," 1998, with interims.

Core course topics include tri-axial constraint, inspector qualifications and duties, record keeping and documentation, structure inventory and appraisal overview, National Bridge Inventory (NBI) standard component ratings, element level rating, safety, component case studies for decks, superstructures, substructures, and channels, and a virtual bridge inspection classroom exercise.

Optional topics include bridge mechanics, superstructure type identification, inspection techniques, fatigue and fracture in steel bridges, traffic safety features, bridge site signing, culverts.

Course Outcomes:

- Identify and document inspection observations using standard methods
- Evaluate defects based on the current AASHTO Manual for Condition Evaluation of Bridges
- Code NBI bridge components using the FHWA Recording and Coding Guide
- Code element level bridge data in accordance with the AASHTO Guide for CoRe (Commonly Recognized) Structural Elements

Target Audience:

Federal, State, and local agencies and private sector personnel employed in inspecting bridges or managing bridge inspection programs. Participants must have completed prior comprehensive bridge inspection training, or meet the criteria for a bridge inspector under the State's procedures or requirements.



**INFRASTRUCTURE
ENGINEERS, INC.**

consulting engineers | commercial divers

Instructors:

Sean A. Patrick, P.E.

Sean Patrick is a professional engineer with 15 years of specialized experience in structures management and operations services. His background includes structural design and analysis, bridge construction inspection and NBIS safety and element level inspections. He is also very well versed in the development of bridge inspection reference manuals and training courses for various DOTs and the FHWA. Mr. Patrick is a certified FHWA/NHI Bridge Inspection Instructor, and has taught the comprehensive bridge inspection training program sponsored by the FHWA to well over 2000 other inspectors in 30 different states for government agencies all over the country.

Lance A. Andrews, P.E.

Mr. Andrews has been a structural engineer since 1994 and has worked on a variety of projects during his career. His current focus is on Bridge Inspection Projects, and he continues his role as an Instructor for PennDOT and FHWA/NHI Training courses. In addition to his PM Duties, he leads AECOM's Pittsburgh Bridge Inspection practice. He continues to hone his skills as a Team Leader on numerous bridge inspection and rehabilitation projects. Mr. Andrews has been the lead instructor and the co-developer for courses, ranging from the basic bridge inspection training and refresher classes to the development of a series of training sessions for bridge load ratings. He also has gained valuable experience during design projects and as resident engineer for construction projects.