

# Best Practices in Design & Construction of Concrete Pavements

## **COURSE OVERVIEW:**

In response to numerous requests for a basic concrete pavement design and construction course, Hawaii LTAP and the CCPI are offering a 2-day seminar on March 7-8, 2005. Topics will include the following:

- Pavement types and design features
- Portland Cement Association pavement design method
- AASHTO 1993 pavement design procedure
- Introduction to the mechanistic–empirical design method (M-E Design Guide)
- Concrete mix characterization
- Jointing design and layout for streets and highways
- Design, load transfer design
- Concrete pavement construction practices
  - Slipform paving operations
  - Fixed form paving operations
- Design and construction of subgrades and subbases
- Concrete curing, sawing joints, and joint sealing
- Design and construction methods for concrete overlays of asphalt pavements.
- Ultra-Thin Whitetopping

The design modules include determining realistic input values, their meaning relative to construction, how they affect the design, and other related topics.

## **AUDIENCE:**

This course is designed for transportation professionals including contractors, consulting engineers, agency personnel, and anyone desiring a basic knowledge of concrete pavement design and construction procedures. Prior background in these areas is not required. Participants will learn the basics of designing and constructing high quality and long-lasting concrete pavements.

## **INSTRUCTOR:**

### **Dr. Michael E. Ayers**

Dr. Michael E. Ayers is the Director of Highways and Concrete Pavement Technology for the American Concrete Pavement Association in Skokie, Illinois. He is responsible for technical issues relating to highway pavements and technology transfer activities for the ACPA. Dr. Ayers is the Principal Instructor for the FHWA/NHI titled, "Construction of Portland Cement Concrete Pavements," as well as the ACPA Professors Seminar, and Concrete Pavements 101 (Design, Construction, and Rehabilitation of Concrete Pavements). In addition, his responsibilities include oversight of research conducted through ACPA and its affiliates.

Prior to joining ACPA, Mike was the Director of Technology Transfer at ERES Consultants in Champaign, Illinois. In that capacity, he was responsible for development and delivery of training courses for the Federal Highway Administration, state agencies, and private industry. He was very active in research and served as Principal Investigator for numerous federal and state funded research projects. Before joining ERES in 1996, Dr. Ayers was an Associate Professor of Civil Engineering for Oklahoma State University. He received his B.S., M.S. and Ph.D. from the University of Illinois at Urbana/Champaign.

### Registration Procedure

- 1) Please contact Gail Ikeda at 956-8367, 956-8851 (FAX) or [gail@eng.hawaii.edu](mailto:gail@eng.hawaii.edu) by **Friday, February 25, 2005**
- 2) Attendance is limited, and preference is given to local government employees.
- 3) Private company participation is on a space available basis at a fee of \$160 (Parking included). Make checks payable to **Research Corporation of the University of Hawaii (RCUH)**.

### 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 workdays prior to the workshop date.

### Parking

Parking for the East West Center is \$4/day (\$8 total). If you would like to receive a parking pass please contact us by Friday, February 25, 2005. Make checks payable to **Research Corporation of the University of Hawaii (RCUH)** and mail to:

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

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**March 7-8, 2005**

East-West Center, Jefferson Hall  
Pacific Room  
1777 East West Road

8:30 a.m. – 4:30 p.m.

Workshop sponsored by the  
**Cement and Concrete Products  
Industry of Hawaii**

and the  
**Hawaii Local Technical Assistance  
Program**

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

### Hawaii Local Technical Assistance Program

University of Hawaii at Manoa  
Department of Civil and Environmental Engineering  
2540 Dole Street, Holmes Hall #383  
Honolulu, Hawaii 96822

