

HAWAIIAN CONNECTIONS

THE HAWAII LOCAL TECHNICAL ASSISTANCE PROGRAM

VOLUME 10, No. 2

SUMMER 2008

In This Issue

- 1 The Hawaii DOT's Bicycle and Pedestrian Program
- 2 Education & Training Opportunities for Concrete Pavements
- 3 The North-South Road Meets A. menziesii
- 4 News From Our Partners A Moment in History
- 5 2008 Engineering Expo
- 6 The North-South Road Meets A. menziesii (cont.)
- 7 Clearview Font and More...
- 8 The Hawaii DOT's Bicycle and Pedestrian Program (cont.)
- 9 Education & Training Opportunities for Concrete Pavements (cont.)
- 10 Director & Program Manager's Notes
- 11 Hawaii LTAP Activities Hawaii LTAP News

Please pass this on to other interested parties in your office.

THE HAWAII DOT'S BICYCLE AND PEDESTRIAN PROGRAM

By Brennon Morioka, Ken Tatsuguchi, Darell Young, Rachel Roper, and Joann Shin, HDOT

With soaring gas prices, concerns over global warming, and a growing interest in healthy living, the Hawaii Department of Transportation (HDOT) must embrace a multi-modal approach to providing solutions and alternatives that address the diverse transportation needs of today's roadway user.

The Department's bicycle and pedestrian program complements our vision to manage the efficient movement of goods and services throughout Hawaii's roadway network. Hawaii's tropical climate, beautiful natural environment, and designation as a major tourist destination make the state the ideal place for a comprehensive bicycle and pedestrian network.

Successfully balancing the needs of roadway users is a continuing challenge. Motorized and non motorized forms of transportation often compete for funding and space in a limited traveled way. We strive to meet the needs of bicyclists, pedestrians, and persons with disabilities by providing options such as bike lanes, sidewalks, shoulders, shared use paths, and wide curb lanes.

One of the most recognizable documents published by the HDOT is the *Bike Plan Hawaii: A State of Hawaii Master Plan*. Originally developed in 1977, the document has undergone two updates. The latest edition,

dated September 2003, is available online at www.state.hi.us/dot/highways/bike/bike-plan. HDOT is currently working on executing a contract to implement high priority proposals in this bike masterplan.

We are also developing a statewide pedestrian master plan to parallel the *Bike Plan Hawaii*. This plan will provide guidance on the most efficient and effective use of federal, state, and local resources to implement pedestrian initiatives. It will also include the identification and prioritization of statewide policies and pedestrian projects.

The HDOT makes a concerted effort to incorporate bike and pedestrian improvements in every roadway project, when feasible. In 2007, the Department spent more than \$4.5 million in federal funds for bike-

(Continued on Page 8)



The flower of the A. menziesii see page 3.

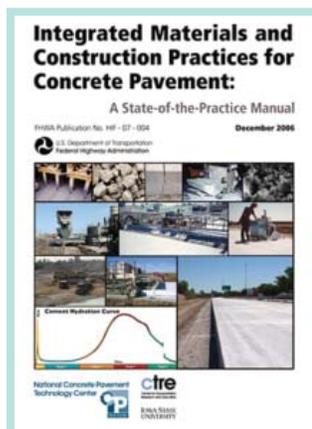
EDUCATION & TRAINING OPPORTUNITIES FOR CONCRETE PAVEMENTS

By Wayne Kawano, CCPI and Michael Ayers, ACPA

We've all heard the classic idiom, "Don't reinvent the wheel". In many ways, this holds true with concrete...it has truly met the test of time and it continues to move forward on those 'wheels'. But through the years, we have made a few tweaks and adjustments to the concrete pavement designs and construction techniques to improve the riding performance and enhance the durability for longer life pavements.

Through educational and training opportunities with the agencies, we are able to continue to improve in all areas of transportation. The Cement and Concrete Products Industry of Hawaii (CCPI) continues to support this effort along with our affiliation with the American Concrete Pavement Association (ACPA). **Michael Ayers**, Ph.D. Director of Highway Pavement Technology, has participated in several workshops in Hawaii over the past few years. Most recently, he was part of the FHWA group presenting the Integrated Materials and Construction Practices Manual (IMCP).

The IMCP training course is in keeping with the Federal Highway Administration's (FHWA's) efforts to train agency and contractor personnel in improving the quality of concrete pavement construction across the states. The relationship between materials and construction practices as they pertain to long-term pavement performance were highlighted at this workshop.



The basics of cement hydration, the addition of supplementary cementitious materials, and material incompatibility issues were covered in an understandable format. Troubleshooting during placement, immediately after placement, and durability issues were highlighted through the use of case studies and references to the troubleshooting guide tables in the IMCP manual.

Mike Ayers further notes that the American Concrete Pavement Association (ACPA) offers a wide variety

of training opportunities related to the design, construction, and rehabilitation of concrete pavements. This comprehensive training program features courses tailored specifically for highways, airports, streets, and roads.

A number of training formats are available to suit the specific requirements of the sponsoring organization. These include web-based seminars (webinars), traditional classroom courses, and just-in-time seminars prior to the beginning of key projects. These courses have been developed in modular format allowing for customization in both focus and duration.

The following list highlights the current course offerings. A greatly expanded program is anticipated for 2009, and ACPA welcomes requests for specific topics, venues, and time frames.

Contractor/Agency Training Program

This newly developed program consists of "need to know" information for both contractor and agency personnel. The training modules do not present theory and instead concentrate on practical solutions to everyday construction-related issues. The course sponsor can select from a variety of modules including:

- Pavement design fundamentals as it relates to construction operations
- Fundamentals of concrete pavement materials
- Concrete mix design and optimization
- Developing a quality control/quality assurance

(Continued on Page 9)



Concrete Overlay H-1 Halawa Off Ramp

THE NORTH-SOUTH ROAD MEETS *A. menziesii*

By Nelson Sagum, HDOT

The North-South Road project is located East Kapolei, on the island of O'ahu, and it extends for approximately 2.3 miles, beginning at a portion of the proposed Kapolei Parkway and terminating in the vicinity of Interstate Route H-1. The Federal government and the State of Hawai'i are participating agencies for this project, and consequently, the requirements of both levels of government should be satisfactorily accomplished.

Planning studies were conducted between 1994 and September 2004. The North-South Road and its H-1 interchange are currently under construction at a cost of approximately \$175 million.

It was originally thought that this project was non-controversial, and that only an environmental assessment and Finding of No Significant Impact (or FONSI) would be prepared. However, as the project developed, various issues arose, including the requirement for an alternatives study, the potential of Hawaiian burial sites, relocation of the Kalo Gulch intermittent stream channel, the periodic flooding of East Kapolei, the closeness of the historical Ewa Villages and low income housing, and the proposed rapid transit system by the City & County of Honolulu. The satisfactory resolution of many of these issues was greatly assisted by Senator **Willie Espero**, of the Hawaii State Legislature; **Wayne Yoshioka**, **David Atkin** and **Larissa Sato**, of Parsons Brinckerhoff; **Greg Hiyakumoto** and **Jimmy Yamamoto** of RM Towill Corp.; **Yukie Ohashi** of PB Hawaii, Inc.; **Paul Conry**, **Vickie Caraway**, **William Standley** and **Greg Mansker** of the State Department of Land and Natural Resources (DLNR); **Christa Russell** and **Leila Gibson** of the U.S. Fish and Wildlife Service (USFWS); **Lolly Silva** of the U.S. Army, Corps of Engineers; and by many others.

One of the more intriguing issues involved the existence of an endangered species, the *Abutilon menziesii*, in East Kapolei. In 1996, while conducting a botanical survey of 80 percent of the East Kapolei property, **Dr. Kenneth Nagata**, a botanist, discovered 38 *A. menziesii* plants. In 1997, **Winona Char**, of Char & Associates, recorded 87 plants of this endangered species in a 100% survey of

the East Kapolei area. On the basis on these studies, it was concluded that *A. menziesii* was located throughout East Kapolei, and it was extremely difficult for this project to avoid it.

The plant was listed in 1986 as an endangered species, and has since been afforded protection in accordance with the Endangered Species Act of 1973, as amended, and Chapter 195D, Hawaii Revised Statutes, as amended. At a meeting involving the Saddle Road Improvements project on the Big Island, an endangered species was described as "two of five in the world"; the magnitude of the effect of this statement relates not only to the closeness of these endangered plants to extinction, but also that the recovery and preservation of this plant seemed plausible.



Gina Shultz and Christa Russell, of USFWS, inspecting *A. menziesii* in East Kapolei.

The beautiful flower of the *A. menziesii* resembles a miniature red hibiscus, with its stamen and soft petals. According to at least one source, Hawaiians would conduct gathering exercises in open fields, and these flowers would be picked and included in lei-making. *A. menziesii* is a shrub that could grow to a height in excess of six (6) feet. Its leaves are heart shaped and have a light green color, which is very similar to the ilima; consequently, the plant is commonly called the "red ilima." It is also known by its Hawaiian name, "kooloaula".

The Endangered Species Act of 1973, as amended, and Chapter 195D, HRS, as amended, require that a "habitat conservation plan (HCP)" should be prepared. Unlike a "safe harbor agreement", which is another approved document, a HCP would permit the removal or "taking" of the affected species from its primary habitat. The U.S. Fish and Wildlife Service had indicated that a HCP prepared under State statute would also be acceptable to the Federal government. Studies needed to be concluded upon the issuance of a biological opinion, which would re-state the conditions under which *A. menziesii* may be removed from East Kapolei. Based on an approved habitat conservation plan, DLNR would also issue to the Hawai'i Department of Transportation (HDOT) an Incidental Take License at Kapolei, which

(Continued on Page 6)

NEWS FROM OUR PARTNERS...

Hawai'i Procurement Institute

By Jessica M. Horiuchi, Executive Director



SAVE THE DATE for HPI's Annual Conference:

Who: Anyone interested in Federal, State and County Procurement law

What: The Hawaii Procurement Institute (HPI) Annual Conference

When: October 27-28, 2008

Where: East-West Center, Imin Conference Center

Questions: Please email HPI Executive Director, **Jessica M Horiuchi** (hpinsitute@gmail.com)

** This year's topics include: Labor Standards Laws (Davis-Bacon and HRS Chapter 104), the State Small Business Preference Program, How Best to Prepare for Procurement Methodologies (including FFP, IDIQ, T&M) Among Federal & State Agencies, and the Success of a Design Build Operate Contract (H-Power).

A MOMENT IN HISTORY

By C.S. Papacostas, Hawaii LTAP

Just about 100 years ago, the growth in the numbers of automobiles in the Territory of Hawai'i brought about serious concerns about safety. Under a headline that said "Autoists Have No Special Rights," the Pacific Commercial Advertiser of November 27, 1908 wrote:

"The auto fiend who scorches at forty or fifty miles an hour, and imagines that pedestrians have no rights on the streets, is mistaken. Without giving an official opinion on the subject, Acting Attorney General Whitney said yesterday that the streets were for the use of the public irrespective of whether they rode, or walked, or whether if they rode, they rode in autos, carriages, or any other vehicle. Pedestrians had as much right in the streets as autoists, and the latter have no right to so use the roads or streets as to interfere with the safe use of them by pedestrians."

This sounds much like today's "Share the Road"

admonition that is seen on some "autoists'" bumper stickers.

The newspaper story of yore concluded with:

"Deputy Attorney General Sutton coincided fully with this opinion. Pedestrians may cross the street at any point convenient to themselves and women are not legally obliged to gather up their skirts and run, every time they cross a street merely to keep out of the way of some reckless autoist."

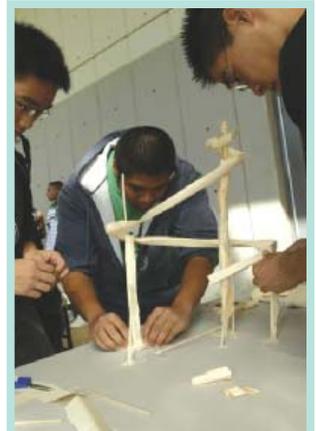
Pedestrian crosswalks, of course, were not as yet part of street design, and traffic ordinances were at an embryonic stage.

2008 ENGINEERING EXPO

By Laura Shimabukuro, College of Engineering

The College of Engineering hosted its annual High School Engineering Expo on Friday, February 8, 2008. Eleven high schools, including two from Maui, attended the event and competed in seven different games. Prepared games, which involve teams of students creating their projects before the event day, included: Bottle Rocket Competition, Egg Drop Competition, Model Paper Column Competition, Mouse Trap Racers Competition. Impromptu games, which involve teams creating projects at the event, included: Coaster Mania! Competition and Motor Building Competition. Each competition was organized and run by a College of Engineering student organization. Awards were provided to the top three teams in each of the competitions. The students were also able to visit exhibits sponsored by various local companies. Oceanit provided a science game where students who answered questions correctly could win prizes. Referentia demonstrated cool tricks with a computer and the Wii remote. See/Rescue discussed and showed their design of their Survival Technologies, including their RESCUE STREAMER. Besides the company exhibits, the College of Engineering's students showcased their Baja student project – an actual off-road vehicle that competes in the Society of Automotive Engineers Competition.

Participating High Schools:
Baldwin High School
Campbell High School
Farrington High School
Kaimuki High School
Kamehameha Schools
Maui High School
McKinley High School
Roosevelt High School
St. Andrew's Priory
Waianae High School
Waipahu High School



What did YOU think?

Editor's Note: In this feature, we quote our associates and stakeholders about our activities. This selection, highlights the Communication for Teambuilding & Relationship Management Workshop held in May.

"...As the Personnel Management Specialist with the County of Hawaii's Department of Public Works, this training will help me to assist my department with providing the training needed to assist our employees to work together better.

The Tongue Fu portion of the training provided valuable information to assist not only with customer service, but to also handle internal personnel matters. This section provided useful phrases to use that help to diffuse difficult situations with difficult people. This workshop would be very useful not only for our Engineers to attend, but also for our front line employees. It will provide them with some tools to assist them in dealing with the public.

What I valued the most about the Teambuilding component was that it made me think about both successful teams and not so successful teams. As a whole, we tend to focus on the negative and are quick to complain about problems in our teams. While discussing this topic with other participants, there were a couple of people who offered examples of when they worked on successful teams. After some thought, I realized that I was part of a successful team recently. This realization helped me to appreciate those who were on that team and identify what those qualities were that made it successful..."

Submitted by: **Jennifer Sakamoto**, County of Hawaii



THE NORTH-SOUTH ROAD MEETS *A. menziesii*

(Continued from Page 3)



(Left) Details of the reddish flower and (Right) heart shaped leaves of the *Abutilon menziesii*.

would permit the “taking.”

In addition to identifying a funding source, a habitat conservation plan should describe strategies which would maintain, restore and enhance existing populations of *A. menziesii*. The first draft of the HCP was completed in June 1998, and after nearly five (5) drafts of this document, the final version was printed in March 2004. In 1998, DLNR agreed to maintain and manage the population in East Kapolei and the HDOT would provide approximately \$1.2 million to DLNR in order to financially support DLNR's management efforts and promote the recovery of the plant.

The primary objective of the HCP involved the creation and long-term maintenance of at least three (3) “wild” populations, which would ultimately result in the delisting of this plant from the threatened and endangered list of the USFWS. Consequently, one of the earlier requirements involved the establishment of a complete representation of the East Kapolei population, which could be accomplished through seeds or cuttings. A DLNR horticulturist, **Greg Mansker**, applied a highly-successful horticultural method to obtain cuttings. He bent and secured an existing stalk to the ground and then covered a portion of the stalk with soil. In a few days, the stalk would root and could be cut and transplanted to a pot or to another site.

Our consultant, **Yukie Ohashi**, of PB Hawaii, met periodically with the Endangered Species Recovery Committee (ERSC), a semi-autonomous body of DLNR composed primarily of other botanists and biologists. The ERSC reviewed and commented on the draft HCPs and submitted the Final HCP to DLNR for execution. As for the distribution and long-term survival of this plant at three (3) “wild” sites, the ESRC indicated that the Koko

Head Botanical Gardens did not qualify as a “wild” site, since the plants there were regularly irrigated and nurtured; instead, this garden, which had been very successful at growing *A. menziesii*, has been designated as a “banking” source for these plants. To date, DLNR has located two (2) potential “wild” sites, in the Diamond Head State Park and at the Honouliuli Wildlife Refuge; other sites, which have been investigated, include the Kealia Trail area and

the Ka Iwi State Park. A potential third “wild” site, called the Contingency Reserve Area, is located on approximately 24 acres near the intersection of the North-South Road and the East-West Road in East Kapolei.

In March 2005, Incidental Take License No. ITL-05 was issued to the HDOT. In accordance with the HCP, the HDOT enlisted “cooperators”, essentially developers of the lands in East Kapolei, who would support the proposals of the HCP and would provide financial contributions to a contingency fund. The “cooperators” thus far include the State Department of Hawaiian Home Lands, the University of Hawaii, West Oahu Campus, and the City and County of Honolulu and; their financial contributions total \$200,000.

The Incidental Take License has a time limit of 20 years from July 31, 2001, to fully accomplish the objectives of the HCP. By October 2005, approximately 181 plants were transplanted to the “wild” sites. Currently, DLNR personnel are continuing to transplant *A. menziesii* to various sites around Oahu and to record their growth and reproduction.

In 2004, the HDOT received an Environmental and Preservation Award from the Hawaii Chapter of the American Planning Association, for its Habitat Conservation Plan. This award, and the total effort involved in the construction of the North-South Road and its amenities, are rarely experienced by a planning engineer and are very much appreciated.

The project is scheduled for completion in 2009.

CLEARVIEW FONT AND MORE...

By C.S. Papacostas and Gail Ikeda, Hawaii LTAP

Many people have noticed a subtle change on Moanalua Freeway.

The guide signs now feature Clearview, a new and more legible federally approved alternative to existing FHWA Standard Alphabets for Traffic Control Devices.

According to **Wayne Kaneshiro** of the Federal Highway Administration's (FHWA) Hawai'i Division, the agency issued a memorandum titled "MUTCD - Interim Approval for Use of Clearview Font for Positive Contrast Legends on Guide Signs" on Sept. 2, 2004. The memorandum states in part that "the Clearview font was developed through a decade of research starting in the early 1990s. The goal of the Clearview font was to increase legibility and reduce halation of highway sign legends in comparison to that of Standard Highway Signs (SHS) Alphabets (Highway Gothic font). This research development effort resulted in final design of Clearview font letters in 2003."

"Halation" is derived from the word "halo" and refers to a bright ring that appears around the edges of bright objects, in this case the lettering on the signs.

Research undertaken by the Pennsylvania Transportation Institute (PTI) and the Texas Transportation Institute (TTI) had the following objectives:

- * Upgrade highway signing word messages to accommodate the needs of older drivers without increasing the capital letter height and the overall length and height of word messages and the signs themselves,
- * Improve word pattern recognition by using mixed case words of the same size composed of lower case letters designed for highway sign applications,
- * Improve the speed and accuracy of destination recognition and the legibility distance of word messages, and

- * Control or minimize the halation of words displayed on high brightness retroreflective materials for drivers with reduced contrast sensitivity.

The complete FHWA memorandum is available at http://mutcd.fhwa.dot.gov/res-ia_clearview_font.htm

According to the FHWA site relating to the Manual For Uniform Traffic Control Devices (MUTCD), "Section 1A.10 of the 2003 edition of the MUTCD contains a new provision authorizing the Federal Highway Administration to issue Interim Approvals. Such approvals allow the interim use, pending official rulemaking, of a new traffic control device, a revision to the application or manner of use of an existing traffic control device, or a provision not specifically described in the MUTCD. Interim Approvals are considered by the Office of Transportation Operations based on the results of successful experimentation, studies, or research, and an intention to place the new or revised device into a future rulemaking process for MUTCD revisions."

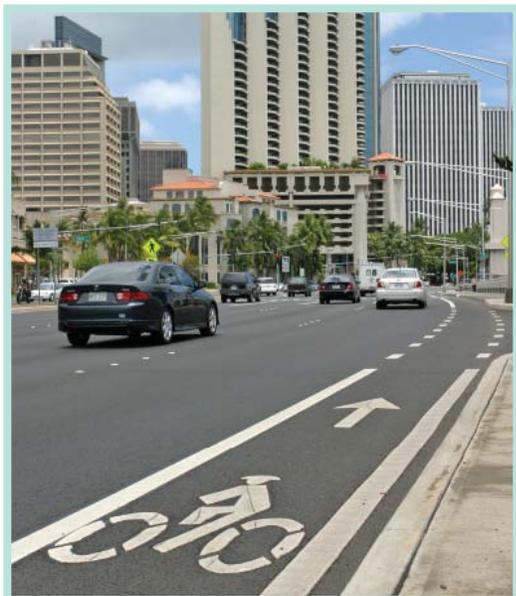
Any jurisdiction that wishes to use a device or application that has received Interim Approval is required to submit a written request to the FHWA Director of the Office of Transportation Operations. This is exactly what the Hawaii Department of Transportation (HDOT) did, according to **Karl Kunishige**, of the Highway Division's Traffic Branch.

Karl also explained that, in addition to the new font, the Department installed retroreflective sheeting that would allow discontinuance of electric lighting of the signs to reduce energy costs. The sheeting is expected to be designated as Type X, the highest category specified by the American Society for Testing and Materials, now known as ASTM International.



(Left) Highway Gothic Font sign. (Right) Clearview Font sign.

THE HAWAII DOT'S BICYCLE AND PEDESTRIAN PROGRAM *(Continued from Page 1)*



way expenditures. There were five stand alone bikeway projects and nine additional projects that implemented bicycle improvements, such as shared use paths, bike lanes, and shoulder improvements for roadways designated as signed shared roadways. For more information please see the "Bikeway Expenditures and Current Projects" report located at www.state.hi.us/dot/administration/legislature/index.htm. We will also spend approximately \$28 million over the current biennium for pedestrian safety improvements, including the installation of pedestrian countdown timers, LED lights, and advanced striping.

The Federal Transit Administration (FTA) provides support to bicycle and pedestrian programs across the nation by providing funding to local public transportation systems. Incorporating accommodations for bicyclists and pedestrians is an integral part of a successful transit system. This includes providing connections to stations and bicycle facilities such as bike racks on buses and bicycle parking at stations.

Managing an effective bicycle and pedestrian program requires the utilization of the five 'E's of Safety. The five 'E's of Safety are engineering, enforcement, education, emergency services, and everyone else. From the engineering standpoint, the HDOT references engineering design standards from organizations such as the American Association of State Highway and Transportation Officials (AASHTO) and Federal Highway Administration (FHWA). The HDOT works with community partners such as the Honolulu Police Department, the Department of Health, and the Department of Education for efforts in enforce-

ment and education. Another integral key to a comprehensive program includes the participation of everyone in the community. Together we can develop better strategies to make it safer and more pleasant to drive, walk, and bike on Hawaii's roadways.

The Department works closely with various community organizations. Our community partners include the Association for the Advancement of Retired Persons (AARP), the Hawaii Cycling League (HBL), Peoples Advocacy for Trails Hawaii (PATH), One Voice, and many others.

We are currently working with the Hawaii Cycling League and the City's Bicycle Coordinator to revise the "Bike Oahu" informational map and will include community input when developing the statewide pedestrian master plan. The HDOT plans to hold a series of workshops relating to pedestrian safety. The HDOT, County Planning and Public Works Departments, county Police Departments, the Federal Highway Administration, and community organizations will all be major participants of these educational workshops.

The HDOT is no longer in the business of just building roads. We want to be a part of building communities by creating facilities that represent a sense of place that fits into what residents see as their vision for their home. We believe our roads must fit into and preserve our way of life, not intrude upon it.



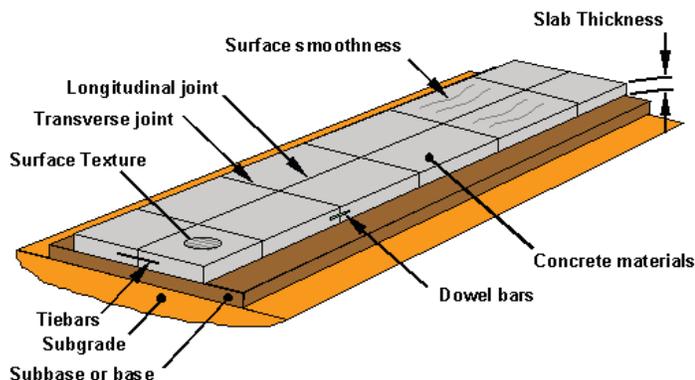
EDUCATION & TRAINING OPPORTUNITIES FOR CONCRETE PAVEMENTS (Continued from Page 2)

program

- Slipform paving operations
- Fixed form paving operations
- Curing and texturing concrete pavements
- Jointing and sawing operations
- Troubleshooting and problem solving materials and construction issues

Concrete Pavements 101, Design, Construction and Rehabilitation of Concrete Pavements

This highly regarded course presents the theory and practice of designing and constructing concrete pavements. The course is intended primarily for engineers and technicians with a need for more in-depth knowledge of current concrete pavement technology. Both theory and practice are covered in this course and the discussion ranges from basic definitions to the latest design and construction methods.



The following topics are typically addressed during a 3-day course:

- Concrete pavement types and design features
- Overview of concrete pavement design methods
- Mechanistic-Empirical pavement design procedure
- StreetPave (ACPA design method)
- Subgrades and bases
- Concrete mix design
- Construction operations
- Life-cycle cost analysis
- Strategy selection for pavement rehabilitation
- Pavement restoration procedures
- Overlay design and construction
- Concrete pavement sustainability

Professor's Seminar

The Professor's Seminar is intended to provide college and university professors with the latest information regarding concrete pavement design and construction. The course content is a combination of latest theory and practical applications. The attendees are provided with presentations and handouts to facilitate development and delivery of both undergraduate and graduate level courses.

Webinar Program

The recently launched and very popular webinar program represents the latest effort by ACPA to offer state-of-the-art training, with the added benefits of no travel requirements, low cost, and a minimal time commitment. The 16 webinars offered in 2008 introduce the basic concepts of design, materials selection, construction, economic and environmental considerations and others. These live presentations require the user to have an internet connection and a long-distance telephone capability, although voice over internet protocol (VOIP) is planned in the near future. (VOIP will allow participants simply to access a website and then, hear the program through computer speakers vs. a phone.) Beginning in September, the webinar programs will start at 8:00 am Hawaii time!

Please consult the ACPA website at www.pavement.com for details about these and other training opportunities. Alternately, you can directly contact **Michael Ayers** at ph. 217-621-3438, email: mayers@pavement.com or **Wayne Kawano**, CCPI at ph. 808-848-7100, email: wkawano@ccpihawaii.org. Mahalo!

"The great aim of education is not knowledge but action" - **Herbert Spencer**



Director's Note

by C.S. Papacostas



In April, I participated in the "First International Symposium on Transportation and Development" in Beijing, China where I chaired a session on transportation and land use and had a joint paper on parking pricing effects presented by my co-author Prof.

Xiuyuan Zhang of the Jiaotong University.

This milestone meeting was jointly sponsored by the Transportation and Development Institute of the American Society of Civil Engineers and the China Academy of Transportation Sciences.

The enormous pace of development that Beijing is currently undertaking, especially in preparation for the summer Olympics in August, was truly astounding. But also very noticeable were the concomitant effects of residential displacement and air quality degradation. Recent transportation developments include an explosion in automobile ownership, hundreds of miles of new expressways, a vast expansion of the Beijing airport, and a new light rail transit line from downtown to the airport.

In his discussion of transportation developments, **Ren Jinxiong** of the Ministry of Communications said, among other things, that the country has plans for a 120,000 km National Expressway System, of which about half has already been completed. Funding sources include public-private partnerships and toll operations, short-term loan financing, and significant sales taxes imposed on purchasing a vehicle. Tolls are restricted to expressways with some users, such as the military, being exempt. The right to operate toll roads can be assigned from one company to another.

He also explained that toll highway agreements address the period of operation, pavement maintenance, and toll controls and he indicated that private operators tend to minimize investments in the second item, leading to a need for a better system of accountability. There is also a need to automate toll collection to minimize labor costs. In the discussion that followed, it appeared that the current levels of borrowing might not be sustainable in the long term, given the anticipated revenues.

Finally, I could not but notice how interested our Chinese colleagues have become about environmental policies and planning.

Program Manager's Note

by Juli Kobayashi



As we approach the second half of 2008, we look forward to valuable workshops that will assist you with your training needs. Some of the upcoming scheduled workshops:

- **July 1** ~ Emergency Relief Manual Training
- **July 28 & 29** ~ HDOT CADD Drafting Standards & Procedures
- **August 5 & 6** ~ Roundabout Workshop
- **August 12 – 14** ~ New Approaches to Highway Safety Projects
- **August 25 – 29** ~ Planning and Designing for Pedestrian Safety
- **August 25 – September 12** ~ Heavy Equipment Training (Kaua'i)
- **September 8 – 10** ~ Context Sensitive Solutions
- **September 15 – October 3** ~ Heavy Equipment Training (O'ahu)
- **September 17 – 19** ~ Annual Superintendent/Overseers Conference
- **October 23 or 24** ~ Construction Career Days (CCD)
*If you would like to get involved in the coordination and planning of our next CCD event, meetings are held at HCC every 1st Friday of the month at 9:00 a.m. For more information please visit our new CCD website at <http://hltap.eng.hawaii.edu/ccd/>
- **December 1 – 12** ~ Safety Inspection of In-Service Bridges

Some of the unscheduled workshops that we are currently working on are:

- Urban Drainage Design
- Chain Saw Training
- Basic Relocation under the Uniform Act

Please continue to visit our website at: <http://hltap.eng.hawaii.edu/> for more information on each workshop. We would also like to encourage you to send in your workshop requests or contact us at 808-956-9006.

*Hawaiian Connections features scenic pictures from various locations in Hawaii. (Photos courtesy of the Hawaii Visitors and Convention Bureau).

In this issue, we are featuring the State Fish of Hawaii, the Picasso Trigger fish known by it's Hawaiian name, Humuhumunukunukuapua'a, meaning "trigger fish with a snout like a pig". This fish is endemic to the salt water coasts of various central and south Pacific Ocean islands. The Humuhumu (for short) can often be seen spitting out sand from their mouths in order to sift through the material for food.

HAWAII LTAP ACTIVITIES

Compiled by Gail Ikeda, Hawaii LTAP

We ended the first quarter of 2008 with a week of "Work Zone Safety Training" sessions on O'ahu, Maui, Kaua'i and Hawai'i. Returning instructor, **Steven Jenkins**, from the Montana LTAP Center, discussed the five parts of a Traffic Control Work Zone, flagging duties and responsibilities, safety and liability issues. Participants were each given copies of the "Guidelines for Temporary Traffic Control" handbook to follow along with the discussion.

Also returning in March was instructor **Larry Mattke** of Mandli Communications, Inc. for the "Roadview 6 & Roadview Explorer" workshops. These hands-on workshops covered the application and use of photolog and inventory software packages: Roadview Workstation and Roadview Explorer. Attendees were able to utilize thousands of miles of digital road photolog images and data collected since 2001.

Starting off the second quarter was a collaborative workshop entitled: "Managing Risk in Construction Projects". Together with the American Public Works Association, American Society of Civil Engineers and the American Council of Engineering Companies of Hawai'i, we developed a workshop to explore the perceived responsibilities and risk exposures of the owners, contractors and designers. Numerous speakers provided insight on key issues that were of special concern and case studies of risk allocation they have experienced on past projects.

In May, our "Communication for Teambuilding and Relationship Management" workshop, gave participants valuable lessons in Tongue Fu!®. The inspirational and dynamic instructor, **Gwen Fujie**, shared techniques on how to work with, rather than for someone. We learned practical tools, thoughts, and techniques to grow our own personal satisfaction in working with others. The second half of the day focused on the idea that just because people are working side-by-side doesn't mean they're operating as a team. Participants took turns sharing their experiences of good and bad teams and how



Gwen Fujie discusses the benefits of teamwork with workshop participants.

they worked and didn't work.

The end of May, various government agencies including the Internal Revenue Service, the Federal Highway Administration and private companies attended the "Don't Duck Motor Fuel Taxes Workshop". This workshop presented topics such as: the impact of increasing prices on State/Federal revenues, State/Federal rules and form changes, Bio Diesel, evasion/compliance, IRS audits and exempt fuels.

Ending the quarter was a one-day training, "Asphalt Pavements and Sustainability", co-sponsored by the Hawai'i Asphalt Paving Industry and the Hawai'i LTAP. Returning instructor, **Steve Muench**, covered sustainability and how it relates to pavements, long-lasting HMA pavement design and preservation, life-cycle cost analysis, life-cycle assessment metrics for pavements, measuring sustainability in pavements and featured a panel discussion on the biggest challenges facing Hawai'i pavements today.

For more information on any of these workshops please contact us at (808) 956-9006.



HAWAII LTAP NEWS

The Hawaii LTAP would like to congratulate **Kevin Kuba** who recently graduated with a Mechanical Engineering degree from the University of Hawaii. Kevin started with our program as a sophomore in 2004. He assisted with workshop on-site registration, cataloging our Transportation Library, and has been instrumental in upgrading and maintaining our participant database. He looks forward to working at the Pearl Harbor Naval Shipyard. We want to thank him for all his dedication and wish him the best in all his future endeavors.



HAWAII LOCAL TECHNICAL ASSISTANCE PROGRAM

Executive Board

Thomas Jackson
Personnel Officer
Hawaii Department of Transportation
Highways Division, Personnel Staff

Wayne Kaneshiro
Safety Engineer
FHWA Hawaii Division

Jan Murakami
Personnel Management Specialist
Hawaii Department of Transportation
Highways Division, Personnel Staff

C.S. Papacostas
Director, Hawaii LTAP
Department of Civil and Environmental
Engineering
University of Hawaii at Manoa

Paul Santo
Engineer
Hawaii Department of Transportation
Highways Division, Design Branch

Hawaii LTAP Staff

Director:
C.S. Papacostas

Program Manager:
Juli Kobayashi

Program Assistant:
Gail Ikeda

IT Specialist:
Thong Lien

Training Associate:
Les Imada

Student Assistants:
Keoni Wasano
Kevin Kuba
Kristine Miyasato

Advisory Board

A. Ricardo Archilla
Assistant Professor
Department of Civil and Environmental
Engineering
University of Hawaii at Manoa

Thomas Jackson
Personnel Officer
Hawaii Department of Transportation
Highways Division, Personnel Staff

Wayne Kaneshiro
Safety Engineer
FHWA Hawaii Division

Galen Kuba
Engineering Division Chief
County of Hawaii
Department of Public Works

Wallace Kudo
Chief, Engineering Division
County of Kauai
Department of Public Works

Larry Leopardi
Chief, Division of Road Maintenance
Department of Facility Maintenance
City & County of Honolulu

Gordon Lum
Executive Director
Oahu Metropolitan Planning
Organization (OMPO)

Claude Matsuo
Head, Urban Honolulu Regional Branch
Traffic Engineering Division
City & County of Honolulu
Department of Transportation Services

Jan Murakami
Personnel Management Specialist
Hawaii Department of Transportation
Highways Division, Personnel Staff

Paul Santo
Engineer
Hawaii Department of Transportation
Highways Division, Design Branch

Cary Yamashita
Engineering Division Chief
County of Maui
Department of Public Works

The Hawaii Local Technical Assistance (LTAP) is a cooperative program of the University of Hawaii Department of Civil and Environmental Engineering, the Hawaii Department of Transportation, Highway Division, State of Hawaii and the U.S.. Department of Transportation Federal Highway Administration, Hawaii. The LTAP program provides technical assistance and training programs to local transportation related agencies and companies in order to assist these organizations in providing cost-effective improvements for the nation's highways, roads and bridges. Our office is located at:

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

*Please contact:
C.S. Papacostas, Director
Tel: (808) 956-6538
Fax: (808) 956-5014
E-mail: csp@eng.hawaii.edu*

*or
Juli Kobayashi, Program Manager
Tel: (808) 956-9006
Fax: (808) 956-8851
E-mail: juli@eng.hawaii.edu*

*Website:
<http://hltap.eng.hawaii.edu/>*

The contents of this newsletter do not necessarily reflect the official views or policies of the HDOT, FHWA or the University of Hawaii. The newsletter is intended to convey useful information to the local highway and transportation personnel. Any references to commercial products or organizations are included only for informational purposes and are not intended as endorsements by the Hawaii LTAP.

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

PRSRST STD
U.S. POSTAGE
PAID
HONOLULU, HI.
PERMIT NO. 278