

HAWAIIAN CONNECTIONS

THE HAWAII LOCAL TECHNICAL ASSISTANCE PROGRAM

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

CITY & COUNTY OF HONOLULU TRANSPORTATION UPDATES

Submitted by: Don Hamada, City & County of Honolulu, DTS

Pedestrian Safety Initiative

With the goal of improving pedestrian safety, the Traffic Engineering Division of the City & County of Honolulu Department of Transportation Services (DTS) plans on conducting "pilot" projects at two unsignalized crosswalks on King Street. Many locations do not meet the FHWA warrants for traffic signal installation so other traffic control measures must be taken instead. Near the Kapalama Post Office, the DTS plans on installing in-road warning lights that would flash while a pedestrian is crossing. The DTS also plans on installing overhead flashing lights near McCully Times. The overhead lights are mounted on a mast arm and, when activated by a pedestrian, would illuminate while the pedestrian is crossing. Studies will be conducted at both locations to look at the cost effectiveness of each system.



Flashing crosswalk

Operations

Great strides have been made in operational efficiencies. A systematic three-year cycle program was implemented to use the actual running time and passenger count data from our TransitMaster Global Positioning System (GPS) to accurately calibrate bus schedules and the running time provided in our public schedules. TransitMaster's data is supplemented with the observations and suggestions from bus operators before schedules are revised.

A four-year program was established to evaluate each of our over 3,800 bus stops to improve both safety and operational efficiency.

Over time, our goal is to improve bus stops safety, travel times, and fuel efficiency.

We are committed to purchase hybrid-electric vehicles for most applications in the future. Hybrid-electric buses make up 10 percent of the fleet. This year, the Hawaii Council of Engineering Societies presented us with an award for our efforts promoting

TheBus - Service Update

Public Transit Division has made improvements in its operations and customer services.

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NEW SIGN RETROREFLECTIVITY REQUIREMENTS



One of the FHWA's (Federal Highway Administration's) primary missions is to improve safety on the nation's roadways. Approximately 42,000 people have been killed on American roads during each year of the last decade. While only one-quarter of all travel occurs at

night, about half of the traffic fatalities occur during nighttime hours. To address this disparity, the FHWA has adopted new traffic sign retroreflectivity requirements that are included as Revision 2 of the 2003 Manual of Uniform Traffic Control Devices (MUTCD).

To comply with the new requirements, public agencies will have until January 2012 to implement and then continue to use an assessment or management method that is designed to maintain traffic sign retroreflectivity at or above the minimum levels specified. Five assessment or management methods are defined in the MUTCD as acceptable maintenance methods for traffic signs. Agencies are also permitted to develop and use other methods based on engineering studies.

Public agencies will have until January 2015 to replace any regulatory, warning, or post-mounted guide (except street name) signs and until January 2018 to replace any street name signs and overhead guide signs that are identified by the assessment or management method as failing to meet the minimum retroreflectivity levels.

If an assessment or management method were being used, an agency would comply with the requirements of the new provisions even if there were some individual signs that do not meet the minimum retroreflectivity

levels at a particular point in time. Because of the seven to 10-year compliance period adopted for replacing signs that have insufficient retroreflectivity, highway departments will be able to implement improved sign inspection and management procedures and subsequently replace the signs in a period that is consistent with the typical sign replacement cycle.

Sheeting types (as defined in ASTM D4956) that can be used according to the new requirements are as follows:

- All prismatic sheeting materials may be used for all signs.
- High Intensity Beaded (Type III) and Super Engineer Grade (Type II) may be used for all signs except for the white legend on overhead guide signs.
- Engineer Grade (Type I) may be used for all signs except for:
 - o The white legend on guide signs,
 - o The white legend on street name signs, and
 - o All yellow and orange warning signs.

Even though a particular type of sheeting might initially meet the minimum retroreflectivity levels when new, it might quickly degrade to below the minimum retroreflectivity levels. For additional information on this rulemaking and sign retroreflectivity, please visit the FHWA retroreflectivity web site:

www.fhwa.dot.gov/retro.

Submitted by:
Matt Lupes, P.E.
 Highway Safety Engineer
 Federal Highway Administration
 Office of Safety Design



GOT A BETTER MOUSETRAP?

Year round the Hawaii LTAP Director challenges our readers to submit descriptions of devices or machine modifications they invented for improved operations so that everyone can gain from the fruits of local creativity. The 2008 winner of the Better Mousetrap Award was given to **Jordan Canha**, of the Hawaii Department of Transportation Maui District, for inventing the “Suck’em Dry Molokai” (featured in our Winter 2007 issue). We look forward to others submitting their devices to be featured in future issues.



Accepting this year’s award is **Stephen Rodgers (Right)** on behalf of **Jordan Canha**.

Better Mousetrap?

Have you or one of your co-workers built a better mousetrap recently? A modified gadget? An improved way to do a job? Please let us know about it. The best entries will be featured in a future issue of Hawaiian Connections.



Your name and phone number:

 Inventor’s name and phone:

 Invention:

 Please fax this form to (808) 956-8851.

A MOMENT IN HISTORY

By C.S. Papacostas, Hawaii LTAP

AUTO DRIVERS MUST MUZZLE MUFFLERS

This was the headline carried in the Pacific Commercial Advertiser of January 18, 1913. By that time, the number of automobiles in the Territory was on a steady increase, bringing with all its benefits some “negative externalities” as economists would describe them. One of these, of course, is noise. And this is what the short newspaper article said:

Section 27 of Ordinance 11, known as the auto ordinance, will be invoked against all auto drivers who persist in opening up the muffler and otherwise making loud and disturbing noises with their gas wagons.

Attorney Ashford, who was appointed a committee of one

of the Central Improvement Committee, to prepare a law for presentation to the legislature to prevent unnecessary noises as far as autos are concerned, has discovered, after a thorough examination of the auto ordinance, that Section 27 provides fully for preventing these unnecessary auto noises.

“The law will be carried out by the proper authorities,” said Mr. Ashford yesterday.

By this time, the word “autoist” for “auto driver” seems to have passed its prime, but note the use of “gas wagons.” Originally, the term “horseless carriage” was popular as well.

NEWS FROM O

Cement and Concrete Products Industry of Hawaii

By Wayne Kawano, CCPI of Hawaii President



Building a Greener Hawaii with Pervious Concrete Pavements



The Hawaii Department of Education, in a joint effort with CCPI, recently completed a demonstration project using pervious concrete pavement for their parking lot at the Ewa Beach Elementary School. The

DOE has taken a proactive, leadership role towards exploring innovative technologies for their sustainable developments.

This was a great opportunity for the DOE to get a first hand look at this environmentally friendly concrete material, how it's placed, and how it functions. From this pilot project, the DOE will be able to better develop design applications and to recognize the benefits of using pervious concrete pavements.

What is Pervious Concrete?

Pervious concrete is a "no-fines" concrete using a single sized coarse aggregate, cement, water, and admixtures for workability. The coarse aggregate is generally a 3/8-inch maximum size aggregate. When properly proportioned, the concrete has a "wet metallic sheen" appearance. Pervious concrete has no slump and cannot be pumped. Placement is by tailgating or conveyor belt.

How Does Pervious Concrete Work

The U.S. Environmental Protection Agency has recognized pervious concrete as a Best Management Practice for the infiltration and mitigation of storm water similar to a grassy swale or detention basin. The inter-connected voids in pervious concrete will pass 3-5 gallons per minute per square foot (270 – 450 inches per hour). Storm water is captured and held in the pervious concrete and the recharge bed until it drains into the subgrade. Once in the subgrade, naturally occurring microorganisms consume the organic matter washed through the pavement. The cleaned storm water is returned to the aquifer. The storm size that can be captured and treated is determined by the available area of pervious concrete and the depth of the concrete and aggregate layers. It is a standard practice for the pervious concrete in parking lots to be a minimum of 6" thick.

Using the entire parking lot with a recharge basin allows capturing the storm water that falls on the structures' roofs, hardscape run-off, and parking lot. The design of a pervious concrete section requires designing for the hydrology (how much rain it will capture and treat) and designing for the anticipated traffic loads. These designs can be easily accomplished using computer programs from the Portland Cement Association and the National Ready Mixed Concrete Association for the hydrology and pavement section determinations. Log on to www.perviouspavement.org for additional information.

Pervious Concrete Construction

Pervious concrete is different to place, but not difficult. When constructed using fixed forms, the concrete is screeded with an A-frame vibrating screed or a single tube hydraulic screed (Bunyan). After screeding, the surface is compacted about 1/2" to 3/4" depending on the thickness, using rollers and tapping plates around the edges. Joints are generally rolled into the concrete. Because pervious concrete has so little mix water, the surface must be covered with 6 mil visqueen within 20 minutes of placing or earlier if encountering weather problems. The visqueen is left in place for a minimum of seven days for curing.

Economics of Pervious Concrete

When considering the cost of pervious concrete for a parking lot, the true cost is the cost of the entire storm water system and not just the cost of the parking lot

(Continued on Page 5)



Parking lot at the Ewa Beach Elementary School.

UR PARTNERS...



surface. For the same amount of storm water to be captured and passively treating on-site. (The pervious concrete system eliminates the storm water piping system needed for a given project.) Also consider the life-cycle cost of the parking lot and storm water system. For a conventional asphalt pavement, how many surface

treatments and overlays will be required? What is the cost of in terms of replacement parts, labor, and electricity for the storage and filtration system? Properly designed and constructed pervious concrete has a service life of at least 30 years. The only expected maintenance is an occasional sweeping or pressure water washing.

The National Ready Mix Concrete Association has developed pervious concrete certification programs which have been presented in Honolulu by CCPI. The American Concrete Institute has developed guidelines on pervious concrete, ACI 522R-06. For further information, please contact CCPI.

Hawai'i Procurement Institute

By Jessica M. Horiuchi, Executive Director

The Hawaii Procurement Institute would like to invite you to join us at our 2008 Annual Conference on October 27-28 at the East West Center.

Highlights of the 2008 Conference include:

- Presentation on the Methodology of Large Scale Procurements (City Rail Transit)
- Discussion of Different Types of Procurement Methodologies (FFP, IDIQ, T&M, CPFF, CPAF, Multiple Award IDIQ) Among Federal & State Agencies

- Panel Discussion - Success of H-Power (Design Build Operate) Contract
- Update on the Status of the Hawaii PTAC

For more information, please visit our website: <http://www.hawaii.edu/law/site-content/special-programs-community-service/hawaii-procurement-institute/>

Please feel free to pass this on to anyone you feel would be interested. Mahalo.



American Public Works Association

SAVE THE DATE for APWA's PARTNERSHIP IN PUBLIC WORKS, A Meet and Greet Night

What: An evening dedicated to provide networking opportunities between representatives from State and City Agencies, Utility Companies and those interested in Public Works.

Where: Dave & Busters, Sunset Lanai

When: Thursday, October 9, 2008
5:00 pm to 8:00 pm

Cost (includes heavy pupus): \$5 for APWA members
\$10 for non-members

For more information please contact either Chandra Tanaka (chandra.tanaka@actuslendlease.com, 203-5214) or Corey Matsuoka (cmatsuoka@ssfm.com, 531-1308)



HAWAII DEPARTMENT OF TRANSPORTATION

By Brennon T. Morioka and Paul Santo, HDOT

Events like the tragic bridge collapse in Minneapolis, Minnesota on August 1, 2007 bring about questions as to the adequacy of Bridge Programs across the nation. Incidents like this cause policy makers to reassess current practices and rules to make traveling on our highways and bridges safer. This is why the National Bridge Inspection Standards (NBIS) was established. The Federal Highway Administration (FHWA) issued the NBIS after the collapse of the Silver Bridge over the Ohio River that killed 46 people in 1967. The NBIS established a program for regular comprehensive inspection of all public bridges carrying vehicular traffic.

The Bridge Inspection Program is the foundation of the entire bridge management operation and the bridge management system. Information obtained during the inspections is used for determining needed maintenance and repairs, for prioritizing rehabilitations and replacements, for allocating resources, and for evaluating and improving design for new bridges. The accuracy and consistency of the inspection and documentation are vital because they impact programming and funding appropriations but also affect public safety. We are happy to announce that Hawaii now has the best record in the country in terms of having all bridges currently inspected.

Hawaii has approximately 1,162 bridges on the National Bridge Inventory (NBI). These include highway structures including culverts with extreme ends of openings greater than 20 feet in length.

NBI Bridges in Hawaii			
Island	State-Owned	County-Owned	Totals (Ea. Island)
Hawaii	138	126	264
Maui	122	43	165
Oahu	446	210	656
Kauai	55	22	77
Totals (All Islands)	761	401	1162

All NBI bridges are eligible to use Federal Highway Bridge Program funds depending on their level of deficiencies. In Federal fiscal year 2007, the apportion-

ment of Bridge Program funds authorized for Hawaii was about \$19.6 million. These funds can be used for replacement, rehabilitation, systematic preventive maintenance, seismic retrofitting, bridge inspections and appraisals, and other related work.

About 39% of bridges in Hawaii are classified as deficient and categorized as either structurally deficient or functionally obsolete. In simple terms, a bridge is categorized as structurally deficient when its deck, superstructure or substructure is rated as poor, or its load-carrying capacity is substandard. A functionally obsolete bridge is generally a bridge that has poor deck geometry or vertical underclearance rating. Any bridge classified as structurally deficient is excluded from the functionally obsolete category.

Structurally Deficient (SD) & Functionally Obsolete (FO) Bridges in Hawaii			
Owner	SD	FO	Total
State	53	246	299
Counties	90	60	150
Totals (State-wide)	143	306	449

Although the bridges are classified as deficient, they are not necessarily unsafe. Most of the bridges in Hawaii are constructed with concrete. Concrete bridges generally have a high degree of internal redundancy that allows them to carry more loads than calculations show before failure. Approximately 80% of the SD bridges are single-lane bridges located on rural highways with the majority of them posted to carry limited



Kupapaulua Bridge widening.

TRANSPORTATION'S BRIDGE PROGRAM

loads.

It was estimated that it would cost over \$3.5 billion to rehabilitate, replace and seismically retrofit all of the State-owned bridges that are deficient and eligible to receive Federal Highway Bridge Program funds. With only 2 to 5 bridges rehabilitated, replaced or retrofitted each year historically, it would virtually be impossible to catch up with the present needs as well as the future demands as the bridges age. FHWA recognized this and for that reason made preventive maintenance activities for bridges eligible to use Bridge Program funds.

The basic philosophy of the preventive maintenance or bridge preservation program is to keep the good bridges good while trying to upgrade the poor bridges. If planned and funded accordingly, this can be a cost-effective way of extending the service life of our bridges. However, because of the number of bridges needing attention and the limited funds Hawaii receives and can allocate for preventive maintenance (1 to 2 percent of the Bridge funds) has been one of the bigger challenges we face to effectively implementing this program.

The importance of our bridges cannot be disputed. Our roadways and our bridges are the lifeline of our economy and our way of life. Ensuring that our priorities are reflected in the way we develop our budget is of greatest importance. The Minneapolis incident highlights the potential consequences if failing to do so. We believe the DOT's federal aid program reflects our



New Kealahaka Bridge along side existing bridge.

commitment to our bridge system. Well over a year prior to the August 1st tragedy, HDOT made a conscious decision to increase funding for our bridge program for rehabilitation, replacement, and retrofit. Over the next six years, HDOT will spend on average about \$45 million per year on various bridge projects compared to an average of about \$15 to \$20 million per year in the past.

There is still much more that can be done to upgrade and modernize our highway system, but we believe our priorities have been developed through sound judgment and assessments that are based on needs and potential consequences if those needs are not met, and not just from a roadway or transportation perspective, but from a global view of impacts to our economy and to our quality of life.

What did YOU think?

Editor's Note: In this feature, we quote our associates and stakeholders about our activities. This selection, highlights the Pedestrian Safety Action Plan Workshop held in August.



"...Mahalo to you and your staff for a very informative and comfortable planning experience. I have just returned from the Pro Walk Pro Bike Conference in Seattle and one of the impressions I took from it is just how strong the partnerships are in our State, as shown by the excellent work of your LTAP team in gathering stakeholders for the Pedestrian Safety Action Plan effort..."

Submitted by: **Laura Dierenfield**, Peoples Advocacy for Trails Hawaii (PATH)

CITY & COUNTY OF HONOLULU TRAN

energy conservation and alternative fuels. By 2013, over 50 percent of our fleet will be hybrid.

In addition, our maintenance staff has implemented programs to improve fuel efficiency on our conventional diesel buses. All revenue vehicles now have nitrogen-inflated tires. We've begun to implement a "reduced engine load at idle" program whereby bus transmissions automatically shift into neutral when the bus is stopped. In our central city routes, buses are idling at stop about 50 percent of the time. The maintenance team has also placed greater emphasis on tire balancing and front-end alignment to improve fuel efficiency.



Hybrid-electric bus

Customer Services

We are proud of our progress providing excellent transit service to our disabled community driven by the spirit of Aloha. Our per-capita ridership on TheHandi-Van is within the top five areas nationally. Our fixed route buses transport more than 500 mobility devices per day, and we have largely eliminated any issues over inoperable lifts.

We've also partnered with our substantial bicycling community. In 2005, we were honored by Sportwork as having the highest number of bicycle boardings in large urban areas. All of our buses are equipped with either two or three position bike racks. We carry more than 1,000 bicycles per day.

We were one of the first transit systems to partner with GOOGLE to provide worldwide Internet transit travel directions. Our staff collaborated with GOOGLE engineers over the intricacies of transit schedule data and helped GOOGLE design the structure of the now standard data stream.

We also began a program of "secret shoppers" who ride buses and report on the quality of service. In the spring

of 2007, the shoppers evaluated 387 bus trips for customer service, ADA compliance, operations and safety. The data showed that the service is of high quality and the information was then communicated back to the employees via the company newsletter. Areas in need of improvement were noted; more emphasis was made in the training area and activities are being monitored for quality assurance.

In early 2007, we participated in APTA's Peer Review Program on the quality of service from the customer's perspective. Since then we have implemented several of the major recommendations for TheBus including the following:

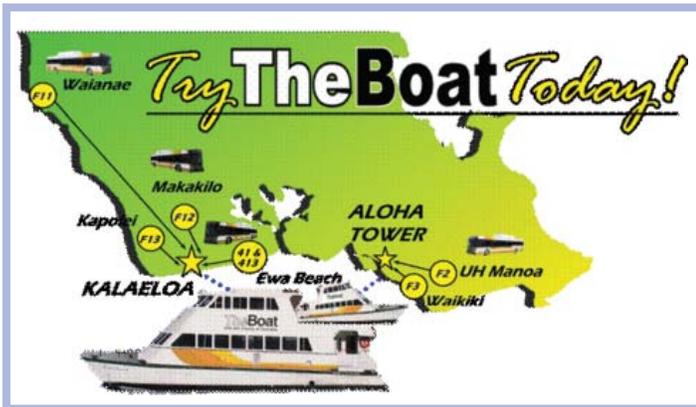
- *Physical Appearance of the Buses:* We've initiated a major campaign to provide a mid-life cosmetic upgrade to our oldest buses. We have also begun a program to buff out water spots on bus windows and have installed a new polymer waxing system on our bus washers. Initial results are promising, and we hope this will help us improve the exterior appearance and solve our chronic problem with water spotting, which makes a clean bus appear dirty. We also added an odor neutralizer to buses to improve the on-board experience.
- *Hiring and Training:* We are evaluating the use of the Bus Operator Selection System (BOSS) in new operator recruitment. We've administered the program to our last four new bus operator classes. We also revamped our in-service refresher training program and have cycled all existing operators through this program.
- *Performance Measurement:* We simplified and clarified our annual objectives and broadcast them to all staff within the system. We also consolidated several redundant reports into a single monthly performance report, which is sent to board members, management staff within Oahu Transit Services, Inc., and to transit staff within the City's Department of Transportation Services.

TheBoat - Year One

In September 2007, our Transportation Planning Division launched a demonstration project, TheBoat, an integrated commuter ferry service from Kalaeloa to Aloha Tower Market Place that runs weekdays during peak hours. After some initial strong currents, TheBoat is now making bearings and the tide is changing. TheBoat has just

SPORTATION UPDATES (Continued from Page 1)

completed one year of service and has met proficiency markers to provide a reliable and on-time waterborne service for Honolulu's public transit riders. The water commuter service sails Monday through Friday and is running three round trips each during AM and PM peak hours. TheBoat has some advantages over TheBus, including bathrooms, snack bar, guarantee seating, free internet access, sight-seeing decks, relaxing and refreshing setting, and no highway congestion. Often, dolphins can be seen in the next lane.



The City Administration has a strong commitment to the TheBoat to achieve the very best public transit service, modes, and choices for its public transit users. DTS continues to explore ways to improve our public transit service for Honolulu commuters.

TheBoat is supported with inter-modal links with TheBus. Shuttle buses pick up riders in their communities and arrive at the docks about 10 minutes prior to TheBoat's departure. The cost to ride TheBoat is \$2 or free with TheBus pass or transfer. DTS has made available free park-and-ride options at the Kalaeloa Pier for carpools only and at Kapolei Home Depot parking lot for all motorists. Like TheBus, TheBoat also welcomes bicyclists.

At the request of the communities served, shuttle service was expanded to reach Makaha, Kapolei, and Ewa residents. The F11 shuttle now serves Makaha Towers; the F12 Makakilo shuttle serves Kapolei Knolls; the F13 shuttle serves Kaup'e'a community in Kapolei; and adjusted Route 41 serves Ewa Beach. The F2 shuttle continues to serve the University of Hawaii and the F3 shuttle serves Waikiki.

With enhancements in connections, time schedules, and operations, ridership of TheBoat continues to swell. In July, ridership topped 7,800. DTS is anchored about the potential of TheBoat as Ewa, Ewa Beach, and Kapolei continue to build out - more mobility options are necessary to meet the increasing capacity of the new residents. More information about TheBoat is available at www.trytheboat.com.

NATIONAL SURVEY OF BICYCLISTS AND PEDESTRIANS

By C.S. Papacostas, Hawaii LTAP

Wayne Kaneshiro of the Hawai'i Division of FHWA brought to our attention a recent report entitled "National Survey of Bicyclist and Pedestrian Attitudes and Behavior" that was conducted by the Gallup Organization of Washington, D.C. It was jointly sponsored by the National Highway Traffic Safety Administration (NHTSA) and the Bureau of Transportation Statistics (BTS), both agencies within the U.S. Department of Transportation.

The report comes in three volumes:

1. Summary Report (DOT HS 810 971) which, according to its abstract, Provides a top line summary of key data results regarding the behaviors and attitudes on various topics related to walking and bicycling including reported frequency of walking

and bicycling during the summer months, trip purpose and characteristics, perceptions of safety, safety practices, facilities available and community design;

2. Findings Report (DOT HS 810 972) that presents a detailed analysis of these topics; and

3. Methods Report (DOT HS 810 973) that describes the methods used to conduct the interviews and analyze the data. It also contains a copy of the questionnaire that was administered to a sample of 9,616 U.S. residents 16 years and older.

The URL address of these reports is very long to include here. We suggest to those interested to use their favorite search engine for "NHTSA DOT HS 810 971" that, hopefully, will point them to the right place!

Director's Note

by C.S. Papacostas



Maui county just hosted our 9th Annual Highway Superintendent/ Overseers conference at Lahaina. Here is just an overview as we plan to publish a longer article in our next issue in December. As I have stressed in the past, this two-and-a-half day meeting is one of our most successful joint undertakings. It brings together representatives of the public works departments (or equivalents) of the four counties to learn about new developments and to exchange information and knowledge.

Like previous years, we were joined by the U.S. Corps of Engineers who demonstrated a computerized, GIS-based levee inventory system that is expected to expedite the monitoring and maintenance of national levee safety program activities. We also learned about the procedural and documentation requirements associated with federal participation in levee-related improvements.

The Hawaii DOT Maui Division sent five of their employees to this year's meeting and this proved to be of general advantage. Besides basic networking function, the meeting brought to the surface specific ways by which the counties and the state should cooperate, especially in natural and human emergency situations. We hope that their involvement will continue in the future.

One theme of the first day of the meeting was "pavement preservation" though preventive maintenance. Through lectures and a field trip, the attendees learned how to identify different common distress types and to prescribe the appropriate treatments at the right time to optimize overall performance.

As usual, each county and the HDOT summarized their major actions and projects for the year and shared information about technical, personnel-related, and administrative issues common to all.

On Thursday, Sept. 18, a panel of experienced senior members of each county commented on big lessons learned from mistakes made. On Friday, each county enumerated "lessons learned" from their responses to various natural disasters: Kaua'i discussed Hurricane Iniki, Maui talked about wildland brushfires, O'ahu elucidated issues associated with the Manoa Flood of 2004, and Hawai'i covered the aftermath of the October 2006 offshore earthquake.

Program Manager's Note

by Juli Kobayashi



One of the highlights at our 2008 LTAP-TTAP National Conference was a presentation that was made by **Jiro Sumada**, HDOT Deputy Director, on the Kiholo Bay Earthquake event that occurred on the Big Island in October 2006. He shared the valuable lessons learned from the experience by the Public Works Department and all those involved in the aftermath. Jiro also told them about our Superintendent/Overseers Conference and the Lessons Learned from Natural Disasters session that we were hosting on Maui this year. This sparked an interest within our LTAP-TTAP organization and we wanted to share some of the significant lessons learned from each of the counties:

- Communication is essential during and after the disaster - have emergency telephones available
- Prioritize the most important areas for clean up
- Training is needed prior to an emergency disaster for personnel
- Safety precautions are needed for the protection of workers
- Coordination and cooperation is crucial between agencies (i.e. fire department, police, state and counties) on responsibilities of each department
- Ownership issues are important to know prior to the event
- Local knowledge is vital for people in the field
- Regular maintenance checks and monitoring are essential
- Zoning issues that affect land use changes
- Attend community association meetings regularly
- Administration support is key
- Maintain a policy where workers understand that they need to report to their baseyards within a certain time after the disaster occurs
- Have equipment ready for workers (egs. engineers need rope and other equipment to inspect bridges)
- Proper paperwork needs to be filed for FEMA reimbursement
- Special fuel transfers may be needed

This sharing of information truly made this year's Superintendent/Overseers Conference one of the best ever. We want to especially thank the County of Maui for all their hospitality and ALOHA spirit!

**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 Marine Mammal of Hawaii, the Humpback Whale. The North Pacific Humpback Whales migrate to Hawaiian waters to breed, give birth and nurse their young during the winter months. An adult whale can grow to more than 40 feet in length and weigh more than 40 tons. These majestic creatures can be seen in Hawaii from November through mid-April.

HAWAII LTAP ACTIVITIES

Compiled by Gail Ikeda, Hawaii LTAP

Our fall quarter began with a collaborative effort between the Federal Highway Administration (FHWA) and the Hawai'i Department of Transportation (HDOT) to educate attendees on the "FHWA's Emergency Relief Program". This one day workshop comprehensively described the processes, provided eligibility criteria for the repair/restoration of damaged highway facilities, identified State, Federal and County agency roles and responsibilities, and helped to improve the State's emergency preparedness for future disasters.

Also in July, we welcomed back **Katiann Wong-Murillo** from FHWA and **Les Segundo** of the Hawai'i Department of Health, to two sessions of the "Environmental Assessments: Discussing Federal and State Processes". This workshop was also presented last year to accommodate a number of people that were placed on a wait list. They emphasized formulating a process to satisfy both the State and Federal Environmental Assessments (EAs) requirements.

Continuing in July, we worked together with the Hawai'i Asphalt Paving Industry (HAPI) to bring **Pete Pradere** to conduct the "Hot Mix Asphalt (HMA) Best Practices" one day seminar. General topics included: background, laydown operations, mat problems, material problems and innovative techniques.

The end of July included the HDOT Highway Design section, drafting head, **Gwen Kawamoto** to educate consultants on the HDOT CADD Drafting Standards and Procedures. Each company was furnished with the CADD files needed to comply with the State Drafting protocols using Microstation. She also discussed common mistakes and tips on how to

improve drafting consistency and quality, how to make corrections to advertised plans for addendums, how to prepare bid tabulations and how to post as-builts.

August began with "An Introduction to Modern Roundabouts and Basic Design" workshop conducted by **Howard McCulloch**. This workshop provided a broad overview on planning and design of roundabouts. It also included hands-on designs of simple roundabouts for actual intersections.



Speakers, (L-R) **Steve Kyono**, **Jamie Ho** (HDOT) and **Pat Phung** (FHWA) at the "FHWA Emergency Relief Program."

Safety specialists from around the State attended the "New Approaches to Highway Safety Analysis" workshop. The primary focus of the course was to help attendees gain an understanding of the Highway Safety Improvement Program process, safety engineering principles and human factor issues related to traffic and road safety.

In August we assisted the HDOT with a week of "Pedestrian Safety Action Plan" workshops. Look for a summary in our next issue.

Ending the third quarter we were fortunate to have HAPI sponsor **Larry Galehouse** to conduct the "Pavement Preservation: Applied Asset Management" workshop. This course provided transportation officials and practitioners with a comprehensive understanding of pavement preservation. Following the workshop he was a guest speaker at the "9th Annual Superintendent/Overseers Conference" on Maui. Details of the conference will be included in the next issue.

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

HAWAII LTAP NEWS



The Hawaii LTAP would like to welcome our new student assistant, **Ryan Saruwatari**. He is a recent graduate of Hawaii Baptist Academy. He participated in the 1st FIRST competition held on the island of Oahu. FIRST is a robotics competition where schools from all over the country compete in events to help high school students develop engineering and teamwork skills. In high school, he participated in Math League and played for the tennis team. Ryan is a freshman majoring in Electrical Engineering and his hobbies include playing tennis and video games, watching Japanese animation and reading Japanese comics.

Note from the editor:

In our previous issue's article "Clearview Font and More..." the 3M experimental sheeting was "Type XI", not "Type X".

There was also a typographical error the "A. menziensii", the correct spelling is "A. menziesii".



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

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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:

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