

## Last Meeting of 2005 Proves Grand Finale

### *Joint Meeting Tops Attendance Expectations*

Capping off a year of well attended quarterly meetings, the TSITE Fall Meeting was held in Knoxville September 21 – 23. The meeting was a joint one with the Tennessee chapters of the American Planning Association (APA) and the American Society of Landscape Architects (ASLA). The variety in social outings area tours and technical presentations proved to be a successful mix of our three organizations.

The first ever Tennessee Conference of Planning, Landscape Architecture, and Transportation Engineering attracted 357 professionals and guests from around the state and the country. In fact, one attendee came all the way from Mexico to attend the conference!



*Attendees listen to a keynote speaker.*

A wide variety of tours included a canoe trip to see greenway planning from the water, TDOT's new Knoxville traffic control center, and historic street design in the city's legacy neighborhoods. Concurrent sessions meant a topic of interest was always available, ranging from safe routes to school to public involvement strategies. Another highlight was Mark Fenton, a national television personality and proponent of active community living. His spirited presentation highlighted the lack of everyday physical activity in America and how our city composition (particularly our road design and network) has to play a part in reversing this trend.

Thanks to our TSITE speakers: **Alan Childers, Marshall Elizer, Preston Elliott, Jeff Hammond, Jack Humphreys, Bob Murphy, Lane Swauger, and Brad Thompson.**

Special thanks to our sponsors who included: **Knoxville-Knox County MPC, Stansell Electric company, Grasham Smith and Partners, Neel-Schaffer, Parsons Brinkerhoff, Ragan-Smith Associates, Southern Traffic Services, TDOT, Mattern and Craig, RPM Transportation Consultants, SITE, and Volkert and Associates.**

## Partnership at APWA Meeting Continues

### *TSITE Provides Technical Sessions at Fall Meeting*

For the past several years, TSITE has been active in participating with the Tennessee Chapter of the American Public Works Association's annual meeting. This year's meeting in Chattanooga was another successful meeting.

Participants enjoyed regular events like the golf outing and equipment rodeo. Taking advantage of unique Chattanooga activities, a welcoming dinner was held at the Chattanooga Aquarium where attendees were able to tour the new addition to the facility.

The TSITE Room of technical sessions included participation from members **Steve Allen, Richard Riggins, Steve Meyer, Mike Howard, and Don Moore.**

Thanks to everyone who attended this and all TSITE meetings this year.



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The following points of business were addressed at the Fall Meeting:

The TSITE Operations Manual update continues. If you have any comment on the way we do business, fell free to contact Jeff Hammond to have it considered for inclusion into the current manual.

Treasurer **Greg Judy** reported that after all auction proceeds were in, the Section had raised \$4,080! All together, \$5,110 has been deposited to the scholarship fund this year. Thanks for one of the highest yearly contributions ever!

At the meeting, District Representative **John Van Winkle** did not have any definitive information on the status of SDITE's Meeting next spring. Recent unofficial communications with Mississippi members have hinted at a meeting in Jackson on the original dates. As soon as any word on the meeting becomes official, TSITE will get word out.

Despite the lack of firm SDITE Meeting information, the UT Chapter continues to make plans to attend a Mississippi meeting. UT was the winner of the Stammer Chapter Award entitling them to again represent TSITE in the quiz bowl competition. The team must be identified by the SDITE board meeting on December 5<sup>th</sup>.

Opportunities abound for strengthening TSITE's technical program. Taking advantage of web-based programs or seminars is an easy way to promote TSITE's technical mission. If members in an area wish to join to host such a program, they may contact an officer for assistance in registration, food, or other local meeting expenses.

## Member Memos

- Congratulations to **Dr. Arun Chatterjee** and **Mr. Robert Haynie** for receiving ITE Life Member status this year. These two gents were recognized at the Fall Meeting.
- Congratulation to **Dyan (Damron) Schnarrs** on her marriage to husband Tim. The couple was wed on October 1 in Brentwood and honeymooned in the Bahamas. Dyan works with RPM, Tim is president of GTS Construction.

## AWARDS!

TSITE wishes to congratulate the winners of this year's section awards.

### **Jack Humphreys Young Member Award: Dyan (Damron) Schnarrs, EIT**

Dyan became a member of ITE in 2001 as President of the charter TTU Chapter in Cookeville. She continues to interact with that chapter as a student chapter liason. She also is a member of the SDITE Education and Student Chapter Committee. She has had great success in NSPE; she was selected as one of the top five young engineers nationally by that organization. Dyan works for RPM Transportation Consultants in Brentwood.

### **Tennessee Section Outstanding Individual Award: Cindy Pionke, P.E.**

Cindy has been a member of ITE since 1987 and has served the Section in many capacities over the past 5 years, culminating in President in 2002. She currently works for the Knox County Department of Engineering and Public Works where she is director of the Planning and Development Division. Other past awards include the Knox MPC Excellence in 1995 and the 2004 Government Engineer of the Year Award by ASCE.

### **Volunteer Distinguished Service Award: Marble Hensley, P.E.**

Marble is well known across all aspects of this organization having held membership since 1951 and having served as its President in 1969. As a founder of Hensley & Associates and later Hensley-Schmidt, he has helped shaped many transportation engineers across the southeast. He has dedicated much effort to the promotion of the City of Chattanooga and the State of Tennessee through service on boards and commissions too numerous to list. He received the Herman Hoose Distinguished Service Award from SDITE in 2004 and was honored in 1973 with the establishment of SDITE's outstanding individual award bearing his name.

**Keep your eye out for ITE dues bills to be sent in the next few weeks. This year, normal dues payment includes free membership to a specialty council. TSITE dues remain at a low, low \$15!**





# Bulletin Board

U.S. DOT has initiated a Freight Model Improvement Program (FMIP) with the Department of Agriculture, the Department of Energy and the U.S. Army Corps of Engineers, with oversight by FHWA's Office of Freight Management and Operations. FMIP will address the challenges in freight planning and operations at the state, regional and local levels. A Web site has been launched at <http://www.fmip.gov>, which serves as a clearinghouse that will provide up-to-date information on developments in freight modeling; disseminate inventories and assessments of modeling strategies and related data collection methods; host a library of current research, data and methods; and support discussion and direct peer-to-peer exchanges.

Land Transport New Zealand has published guidelines to assist designers in providing appropriate pavement markings for existing and proposed multi-lane roundabouts in New Zealand. To view the guidelines, go to <http://www.transfund.govt.nz/roads/docs/guideline-multi-lane-roundabouts.pdf>.

The city of Dubai has initiated a Dynamic Integrated Navigation System (DINS), which will assist drivers by providing directions and planning routes according to traffic conditions. Specifically, the system enables users to get real-time traffic information, vehicle guidance, navigation and traffic tracking management. The information would be available online and sent to PDAs, phones and in-vehicle technology. An article in the *Khaleej Times* provides more information: [http://www.khaleejtimes.com/DisplayArticle.asp?xfile=data/theuae/2005/October/theuae\\_October172.xml&section=theuae](http://www.khaleejtimes.com/DisplayArticle.asp?xfile=data/theuae/2005/October/theuae_October172.xml&section=theuae)

The Active Living Resource Center Web site offers ideas to support more livable communities. The site offers recommendations to the public on various topics related to traffic calming, walking and biking and safe routes to schools. Visit the site at <http://www.activelivingresources.org/index.html>.

The Insurance Institute for Highway Safety's latest status report covers the following issue areas: speed camera programs in Australia and Britain; characteristics of excessive speeders; and safety repercussions of Florida's motorcycle helmet-use law. View the report at <http://www.hwysafety.org/sr/pdfs/sr4008.pdf>

The ITS Joint Program Office (JPO) has announced the availability of the ITS Lessons Learned Knowledge Resource (LLKR), a new tool for ITS decision-makers that contains lessons learned on planning, designing, deploying, operating and maintaining ITS systems. Visit LLKR at <http://www.itslessons.its.dot.gov>. The ITS JPO also has redesigned its ITS Deployment Statistics Web site. The update includes results from several surveys including ITS technologies deployed in 30 medium-sized cities, 20 tourist cities and the 78 largest U.S. metropolitan areas, as well as statewide and rural ITS systems deployed in all 50 states. Visit the Web site at <http://www.itsdeployment.its.dot.gov>.

Maps of 8-hour ozone nonattainment areas and particulate matter (PM<sub>2.5</sub>) nonattainment areas are available online. 8-hour ozone nonattainment area maps: <http://www.fhwa.dot.gov/environment/conformity/nonattainment/8hrozonepages/index.htm> (PM<sub>2.5</sub>) nonattainment area maps: <http://www.fhwa.dot.gov/environment/conformity/nonattainment/pm25pages/index.htm>

The TTN Bulletin Board is an open forum for ITE members. As space permits...you send it, we'll print it!





## WORD ON THE STREET

### CURRENT ISSUES IN TRANSPORTATION

*It's the worst natural disaster our country has seen in over 100 years. It has claimed the lives of over 1,000 residents in the Gulf Coast region. It has impacted many of our colleagues and clients. And in the upcoming weeks, decisions will be made in rebuilding the region that will affect the transportation industry nationwide. In this edition, reprinted articles remind us again of the devastating affects of Hurricane Katrina.*

### **Hurricane Katrina: Implications for the Construction Industry**

**Robert A. Murray, Chief Economist  
McGraw-Hill Construction (Edited)**

*construction.com - 09/20/05*

By size and scope, Hurricane Katrina ranks as the costliest natural disaster in U.S. history. The total cost of the devastation is expected to be \$125 billion or more, substantially greater than the damage caused by 1992's Hurricane Andrew, estimated to be \$37 billion (adjusted to 2005 dollars).

Infrastructure reconstruction work in the impacted region has been estimated to cost \$3.5 billion. That would cover shoreline protection, repair to roads and bridges, cleanup and repairs to drinking water and waste water systems, and repair to power stations and communications lines.

The big ticket items for transportation infrastructure will cost about \$1.5 billion. They include the rebuilding of US Route 90, which once ran for more than thirty miles along the coast of Mississippi next to the Gulf of Mexico, the replacement of the twin spans of US Route 10 that cross Lake Ponchartrain from New Orleans to Slidell, and the rebuilding or selected repair of major bridges along US Route 10 in Mississippi, and across Mobile Bay. In addition, there will be significant costs for repairing environmental projects, with an estimated cost of \$500 million required for cleaning up drinking water systems in New Orleans, rehabilitating the flood water pumping systems, and repairing the levees and dams that gave way in the city. Finally, there are general cleanup costs for removing debris and related materials, for which

the U.S. Corps of Engineers has already allocated \$1.5 billion.

That money is really just a down payment, a marker for funding coastline restoration, the construction of additional levees and dams, and the relocation of residential and commercial areas from some parts of the city. The existing facilities at New Orleans, and along the Gulf Coast in general, were designed to protect people and property from fast-moving Category 3 hurricanes. That proved inadequate with Katrina, and it's expected that new construction will enhance the capability of the region to withstand stronger storms.

For Louisiana specifically, there is storm-related destruction along northeastern Lake Pontchartrain near Slidell, flooding related to levee breaks in New Orleans proper - Lakeview, Gentilly, Mid-City and Uptown, and flooding related to the overtopping of levees in East New Orleans and St Bernard Parish.

It's estimated that 40% of the twin spans of US Route 10 crossing Lake Ponchartrain were destroyed by the storm surge. The Louisiana State Department of Transportation and Development awarded a \$31 million contract to Boh Brothers Construction to repair the bridge, although it will be accomplished by shifting undamaged spans from one bridge to the other and then using temporary spans on the more damaged bridge. The description suggests that more work will be needed. During first quarter 2006, the state of Louisiana will take bids for a new double span.

Much of the damage, both in Slidell and on the south side of Lake Ponchartrain, was due to the 15 to 20 foot storm surge that raised lake levels and breached levees. Near term construction will focus on rebuilding the levee system. Other proposals have been made to limit the storm surge into the lake with mechanical doors or dikes, which would require construction of levees and reconfiguration of outlets from the lake into the Gulf of Mexico. This would presumably be a multi-billion dollar project, but could lessen the need to raise the levels of dikes and levees along the Lake Ponchartrain shoreline.

With regard to New Orleans, sections of major highways, bridges, and local roads were flooded, but damage was not caused by the storm surge and should be repairable at reasonable cost. Damage to water and waste water systems is likely more serious. New Orleans was in the middle of efforts to increase the capacity and integrity of its waste water system, as a result of a 1998 consent decree with the EPA. Construction had been completed on underground pipelines, and design work had been completed for upgrading or replacing 50 of the city's 83 pumping stations. The waste water pumping stations alone will now cost \$150 million more.

The Port of New Orleans survived in fairly good shape, benefiting from being on higher land near the Mississippi. Its main problems have been blockages to the river and lack of electricity, which should be fully corrected over the next few weeks.

As for Mississippi, long sections of Route 90 extending along the coast will need to be completely rebuilt. Also along the coast there appears to be washouts and some damage to railroad lines. The coast of Mississippi is exceptionally vulnerable to hurricanes and other storms, as development has taken place nearly up to the beaches. In Biloxi, significant public structures, including hospitals and convention centers, are near the Gulf waters. Reconstruction and redesign at the current site will need to be part of a more extensive coastline protection plan.

### The Federal Response to Hurricane Katrina

In the immediate aftermath of Katrina, Congress passed two relief packages. There was the initial \$10.5 billion to assist FEMA in meeting the needs of the local area, and then a second package of \$51.8 billion that pushed the total amount of federal money to more than \$62 billion.

Of the money authorized so far, \$23.2 billion is designated for temporary housing and other financial assistance to individuals. Another \$11 billion will be directed to FEMA for "mission assignments" such as debris removal. FEMA search and rescue operations will consume another \$4.7 billion, and the Army Corps of Engineers has been allotted \$3 billion for repairs to broken levees.



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The federal government hired five private contractors to begin the process of rebuilding homes in devastated areas. Bechtel National, Fluor Corp, Shaw Group, CH2M Hill, and Dewberry Technologies were the first recipients of what is expected to be a long list of federal rebuilding contracts awarded in the wake of Hurricane Katrina. Given the enormous scope of damage, this effort is expected to be the largest U.S. rebuilding effort ever launched after a natural disaster. Shaw, Bechtel, and Fluor reported that their contracts were valued at as much as \$100 million and are primarily designed to create temporary housing for displaced families and individuals.

In his address on September 15 to the nation, President Bush gave added emphasis to the federal role in the reconstruction efforts. At the outset, he emphasized that New Orleans would be rebuilt, stating that "there is no way to imagine America without New Orleans." He called for the creation of a Gulf Opportunity Zone, covering the impacted region in Louisiana, Mississippi, and Alabama, that would provide tax incentives and loans for small businesses. He requested that Congress pass an Urban Homesteading Act, which would provide building sites on federal land through a lottery to low-income citizens.

With such proposals, it's expected the federal aid that already totals \$62 billion may well end up exceeding \$200 billion. The federal budget deficit will be much higher than the \$333 billion the Bush Administration estimates for the current fiscal year ending September 30 and the \$340 billion for fiscal 2006. How this plays out with Congress remains to be seen - some members of Congress have pointed out that increased spending for reconstruction in the Gulf must be offset to some extent by reduced spending from other accounts. One area to watch in coming months is whether there will be any impact on the increased spending in the new federal transportation bill, enacted in August. That bill offered funding increases to all states - it's possible that some of the increases for states outside the Gulf region may be reduced to help pay for reconstruction efforts.

### **From ITE...**

**Aliyah Horton** (*Washington Weekly*)

On September 15, 2005, a bipartisan group of Senators introduced S. 1714, the Federal Highway Administration Emergency Relief Program. The bill was drafted and sponsored by the leadership of the Senate Environment and Public Works Committee. According to a Congressional Research Service legislative summary, the bill "authorizes the Secretary of Transportation to obligate more than \$100 million in a state for a fiscal year under the emergency relief program for projects for the repair or reconstruction of highways, roads, and trails in response to damage caused by Hurricane Katrina. (Effectively, modifies the \$100 million limit that may be obligated from such program in any fiscal year for such projects). Sets the federal share of project costs at 100 percent. Authorizes appropriations in the amount of \$2.9 billion for the emergency relief program."

Congress has approved almost \$62 billion in funding to restructure the Gulf Coast areas affected by Hurricanes Katrina and Rita. There is an expectation that the rebuilding will grow into the hundreds of billions of dollars. As such, members of Congress are looking for ways to offset those costs, due to the growing budget deficit. Some members have advocated for revisiting the funding authorized in SAFETEA-LU to use the approximate \$24 billion in congressional earmarks, including High Priority Projects. The notion has received mixed response. Many have considered the idea a "non-starter," while others have volunteered to forgo certain projects if they are directed specifically toward transportation projects in the region. According to AASHTO's Weekly Transportation Report, if all of the earmarks are rescinded, only \$9.8 billion would be saved over the course of SAFETEA-LU because a lot of the funding goes to states by formula. There also has been discussion that monies in the Highway Trust Fund be used to secure construction bonds.

On September 30, President George W. Bush signed a continuing resolution that continues federal government funding at FY05 funding levels until November 18. Hurricane Katrina and Supreme Court nominations have bogged down Congress's effort to complete consideration of FY06 spending bills. To date, only two appropriations bills have been signed into law—

interior/environment and legislative branch. Regarding transportation appropriations, the full House passed its bill on June 30. The Senate bill has been reported by the appropriations committee but has not been considered by the full Senate. The office of Senate Majority Leader Bill Frist (R-TN) has indicated that the transportation bill will be the first one considered when Congress returns from recess the week of October 17. It is expected that the bill will be finalized by late November.

## Things are Different in Oz

### *One benefit of a foreign meeting*

In Australia, they have a saying; in fact, if there's one thing they have in Australia, it's a saying. Flat out like a lizard drinking. It means very busy or hard at work – going all out. It's a saying that comes from the way the black-headed legless lizard (not a snake, a legless lizard) hydrates itself in the arid deserts of central Australia. To find water, it burrows strategically in “dry” river beds then lies in the wet sand drinking. That's one explanation; the other has something to do with a bloke in an outback bottle shop, but it means about the same thing: both the lizard and the mate are fully engaged.

You get the feeling that our Aussie colleagues fit the saying, too – and with results. Not only did they practically invent the road safety audit, but their roundabouts are models of good design, extensive transit provisions continue to promote good growth, and a national program has found a \$14 return on every \$1 spent at high-crash intersections. But the work being done in Australia and worldwide by transportation engineers may go unappreciated unless seen in its context. That's one of the great benefits of attending ITE's International Meeting in Melbourne. Some examples:

The City of Cairns is on the country's northeast coast at the base of the Cape York Peninsula in Queensland. Going north on the Captain Cook Highway out of town, a sign in a roundabout points out that Broome is to the left. Broome is indeed to the left – at the end of a 3500 km trip that takes between 47 hours and 6 weeks, depending on what you want to see and your survival skills. Signing Broome from Cairns is a little like signing Yakima, Washington from the west side of Nashville until you understand that the most notable man-made destination between the Aussie towns is probably the pub where part

of *Crocodile Dundee* was filmed. Then it adds up why two destinations so far apart are signed together.

In the geographic heart of Australia is Alice Springs – home to the National Road Transport Hall of Fame (my wife drew the line here - I'll have to see the Hall next time I'm there). “The Alice” was originally served by Afghan camel teams, then freight locomotives, and now joined by road trains. Road trains, as the name implies, are trucks pulling two to four trailers with a maximum length of 54 m (that's roughly 175') and weight of 125 tons. Add to that the fact that in outback parts of the Northern Territory there are no speed limits and the recommendation by the US Secretary of State's Travel Bureau that visitors pull off the road if they see a road train approaching is understandable. But in the context of the expanse of the NT, its extreme distances and sparse population (doctors make house calls by plane and kids have school at home with a two-way radio), unconventional solutions seem to work.

Sydney has problems more like what most American cities face. Being blessed as a world-class city with the most spectacular harbor in the world means being cursed with lots of traffic wanting to travel between downtown Sydney and the North Shore. By the late 1980s, the Sydney Harbor Bridge carried an ADT of 180,000 and another facility was needed. After much study, argument, and compromise, the Harbor Tunnel was constructed in 1992 under a Build-Own-Operate-Transfer (BOOT) agreement between the New South Wales government and a private company. So, private interests collect \$3 a car (southbound only – the total tunnel ADT is about 90,000), the NSW government gets a slightly used tunnel in 2022, and the rest of us get to enjoy the magnificent arch of the Harbor Bridge gracing the world-famous waterway.

So it is, that on the other side of the world, as here, engineers find solutions for unique needs in unusual circumstances. And it's something we can all be reminded of; to solve the problem we have to know the context. And to really know the context, sometimes we need to lie in the wet sand of the issue and drink awhile.



# In Pictures...TSITE 2005



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