1. Christiansen Praises TTI Accomplishments, Reflects on 2008

In his quarterly question-and-answer session with employees September 29, Agency Director Dennis Christiansen reflected on the “pretty incredible” achievements of TTI employees, as well as the obstacles faced during fiscal year 2008.

Christiansen highlighted the fact that the Institute ended the fiscal year with $45 million in total research expenditures, an 8.6% increase over last year. This increase was realized despite the Texas Department of Transportation (TxDOT) budget concerns that began the year on a cautionary note. “TxDOT research was actually up 2.2 percent for the year while non-TxDOT research was up about $3 million, or an 18 percent increase,” Christiansen noted, speculating that TxDOT funding may be down as much as 10 to 15 percent this year. Going forward, “we need to emphasize increasing non-TxDOT funding, while also supporting TxDOT,” he said.

Christiansen announced that the freezes on hiring and travel expenditures have been lifted. He also announced a 1.2 percent merit pay increase. Individuals receiving an increase will see it in their December paycheck, he said, and no one receiving a merit increase will receive less than $50 per month.
Christiansen focused part of his session on the work that was performed by TTI employees during Hurricane Ike. “All of us have a lot to be proud of—our people were heavily involved in Hurricane Ike evacuations,” he said. He mentioned that the Houston Office was closed for about a week and a half, and the Galveston office will remain closed through the fall semester. “But our people, to their credit, found places to work,” he said, “Many were without power and were dealing with other inconveniences as well.” (See Ike Changes Lives of TTI Houston, Galveston Employees and Hurricane Ike and the TTI Connection in this edition of CenterLine).

Calling the Diversity Council survey 82% response rate “amazing,” Christiansen thanked everyone for participating in the survey. TTI’s response rate compares to a rate of about 30% for comparable studies the Mays Business School team has performed, he said. The Diversity Council is analyzing the results and will post an executive summary on TTINet soon.

Christiansen also announced the formation of the TTI Strategic Working Group, which will help in the implementation of TTI’s strategic and risk management plans. He also announced the hiring of a new Human Resources Director for TTI. Linda Edge, human resources officer for the Texas A&M Agriculture Program, will begin her duties on October, 15, he said.

In closing, Christiansen invited all TTI staff members to the Transportation Hall of Honor induction ceremony honoring former TTI Director Jack Keese. The ceremony, which will be held at 10:30 a.m., October 22, in 102 Gilchrist, will be followed by a barbeque luncheon at noon. He encouraged everyone to participate in the ceremony and luncheon.

A complete synopsis of the Q&A is posted on TTINet.
2. Ike Changes Lives of TTI Houston, Galveston Employees

When Hurricane Ike was approaching the Texas coast September 11, staff members in the TTI Houston and Galveston Offices were preparing to secure their facilities and head home to protect life and property. But for some of the 25 Institute employees at 701 N. Post Oak, it meant that work was just beginning.

In advance of the storm, Darrell Borchardt and Jonathan Tydlacka led the deployment of traffic count equipment at almost 50 locations across the Houston region to provide traffic data along hurricane evacuation routes. To support Texas Department of Transportation (TxDOT) staff at Houston TranStar, Tony Voigt, Borchardt and Mike Vickich monitored the regional traffic sensor network as evacuations commenced.

After the storm, Vickich and Kathy Tran managed critical updates of public information to the TranStar website. At the request of TxDOT and the Harris County Office of Emergency Management, Tydlacka and the Houston Office field crew staff — including Paul Adamson and Michael Davis — transported and set up TTI’s data collection trailer at Houston’s Reliant Park so that emergency management personnel could remotely monitor the flow of Federal Emergency Management Agency (FEMA) supply trucks in and out of the city.

“While many of us in the Houston Office were busy boarding up our homes and preparing our families for the worst, we were also doing the best we could to continue to help our sponsors collect and disseminate traffic and emergency management information to decision makers and the public,” said Voigt, program manager for the Houston Research and Implementation Office. “Ike impacted all of us in the Houston Office in various ways. Most of us sustained damage to our homes and were without electricity for a week or so.”

Voigt says most employees’ homes received only minor damage with the exception of Shamanth Kuchangi’s apartment, which was waterlogged after the building’s roof blew off, allowing rain to soak everything inside. He relocated to a non-damaged apartment in the same complex.

The basement and elevators of TTI’s Houston Office building received water damage from the storm but were repaired so that employees could return to work by September 22. “My hat’s off to Holly Crenshaw [manager of Facilities, Safety and Support Services] for coordinating with our building management about the repairs. She kept our staff informed at a
time when all types of communication within the Houston area were difficult,” Voigt said.

Meanwhile, the TTI office on the Texas A&M campus on Pelican Island remains closed. Two employees live in Galveston and have offices on campus. **Ryan Taylor** temporarily relocated to the Arlington Office. **Linda Cherrington** is working out of her home. “I was one of the very fortunate,” Cherrington said. “My home was not damaged, electricity came back quickly, and I have Internet access. So, I’m working as most residents here are cleaning up and trying to get their lives back to normal.”

“Ike also had an impact on numerous employees living in Navasota, Somerville and Caldwell areas,” said Crenshaw. “They were without electricity until just recently.”

A silver lining in the hectic and frustrating events surrounding Hurricane Ike was the arrival of Hope. Allison Hope Vickich was born two days after the eye moved through Houston. It’s the same day that the power to the Vickich home was restored.

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### 3. TTI Anniversaries

#### 5 Years

**Jason Beesinger**, Assistant Research Specialist (HTP)  
**Colleen Dau**, Lead Office Assistant (FWZ)  
**Geza Pesti**, Associate Research Engineer (DTL)  
**Mike Pratt**, Associate Transportation Researcher (FSO)

#### 10 Years

**Rochelle Patterson**, Lead Software Applications Developer (NET)  
**Teresa Qu**, Assistant Research Engineer (AMA)
4. “This Is Only a Test….”

A TTI research project testing the quality and durability of pavement markings has motorists near Beaumont, Lubbock and Bryan seeing stripes. On sections of the roadways in all three locations, there are various unusual patterns of markings in the travel lane adjacent to a roadside sign that reads “Pavement Marking Test Area.”

“This Texas Department of Transportation [TxDOT]-sponsored project will do two things,” says Assistant Research Scientist Yunlong Zhang. “First, it will determine which configuration of stripes is best for accelerated testing of pavement marking durability. Secondly, TxDOT can also use the data to assess the performance of various markings on different surface types.”

The three-year project began last year. The pavement markings in Beaumont and Lubbock were applied about six months ago, while the Highway 21 test site near Bryan appeared two weeks ago.

“We placed the pavement markings in the travel lane in order to accelerate the testing procedure,” Zhang says. “Normal pavement markings last about two to three years. With a good accelerated test, the performance of the markings can be evaluated quickly with significant cost savings.”

5. TTI in the News

There have been numerous mentions of TTI and our experts in recent media reports. Here are links to some of the stories.

Rush hour changing in San Antonio (San Antonio Express-News) Sept. 18

Unbuckled children at risk (Blanco County News) Sept. 17

The cost of congestion (Market Watch) Sept. 16

How to avoid road rage (Autonet.ca) Sept. 12

Free bikes during Democratic National Convention (Examiner.com) Sept. 5

Work zone safety conference (For Construction Pros.com)
6. Turning Trash into Fuel: The India Project

India’s landfills hold more than just refuse. They could hold the promise of an alternative, renewable fuel source that’s much easier on the environment than conventional fuels such as oil, natural gas and coal.

TTI is currently leading an effort to evaluate the feasibility of using the gases generated by Maharashtra, India, landfills as a fuel source for their refuse trucks and municipal buses. The U.S. Environmental Protection Agency (EPA) — in partnership with the National Environmental Engineering Research Institute (NEERI), Mack Trucks Inc. and the Texas State Energy Conservation Office (SECO) — is conducting the study.

Full story: http://tti.tamu.edu/infofor/media/news.htm?news_id=4835

7. Hurricane Ike and the TTI Connection

Thanks to some hard work and a lot of planning (especially from members of TTI’s Houston Office) the Hurricane Ike evacuation of tens of thousands of southeast Texans was much different than the disastrous 2005 Hurricane Rita evacuation.

Senior Research Engineer Russell Henk attributes much of the success to the fact that fewer Houstonians evacuated, and those that did were better informed about the process. Henk praises Governor Rick Perry’s Task Force on Evacuation Transportation and Logistics, of which Henk was a member. “Before the task force was formed, Houston had no real contra-flow plans. That’s one of the reasons the Rita evacuation turned out to be so chaotic,” Henk says.

The 2005 evacuation resembled a parking lot as residents along the coast converged on Houston escape routes, where half of all
city residents were trying to flee at the same time. Running out of fuel and drinking water and enduring 100-degree temperatures, motorists were stalled for hours, with the typical three-hour drive to San Antonio or Dallas taking more than 20 hours.

**Full story:**
http://tti.tamu.edu/infofor/media/news.htm?news_id=4837

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**8. TTI Center to Study Increased Waterway Travel**

TTI’s Center for Ports and Waterways (CPW) has been selected as the contractor for a $100,000 National Cooperative Freight Research Program (NCFRP) contract that will determine the feasibility of increasing freight traffic on our nation’s waterways.

“The North American marine highway system is underutilized at a time when the nation’s roads and freight systems are at near maximum levels,” says **CPW Director Jim Kruse**. “Increasing waterway freight transport is essential, considering that freight traffic will need to double in the next 25 years to accommodate our growing population. By shifting our emphasis to short sea shipping, it will help in numerous areas, from congestion to pollution.”

The research project will evaluate the obstacles for increasing short sea shipping. In part, Kruse and his staff will produce a white paper that proposes strategies to overcome those current barriers.

The CPW released a report this year for the National Waterways Foundation and the U.S. Maritime Administration highlighting the benefits of moving cargo by water.

**For more information:**
http://tti.tamu.edu/infofor/media/news.htm?news_id=4647

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9. Briaud Seeks Top Job of International Society

In one year, Research Engineer Jean-Louis Briaud will learn if he will become president of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE). Briaud, a Zachry Department of Civil Engineering professor and holder of the Spencer J. Buchanan Chair in Civil Engineering, has become renowned worldwide for his work in soil mechanics and foundation engineering.

The ISSMGE is an 84-member society representing 18,000 individual members. It works to promote cooperation among engineers and scientists for advancement in the field of geotechnics as well as its engineering and environmental applications. The elections will take place October 4, 2009, in Alexandria, Egypt.

“It is exciting to have a chance to serve all my colleagues on the international scene, to get an appreciation of the geotechnical practice and culture in different countries, and to further develop communication between countries,” Briaud said. “The campaigning started with trips to Poland, Canada and Japan. The voting process is like the United Nations: one country, one vote. If there are any Aggies out there with good ties to the geotechnical leaders of the member countries, I sure could use some help.”

Professor Briaud is developing a website (http://ceprofs.tamu.edu/briaud/) to present his vision for ISSMGE and to give some background on his experience.

If elected, Briaud will serve as president for a four-year term.

Visit the ISSMGE website: http://www.issmge.org/home/index.asp?sid=296&mid=1
10. TDS Organizes First Annual Summit

The inaugural Teens in the Driver Seat (TDS) Summit is drawing interest from school districts and professional groups across the state and even as far away as Wisconsin. The summit, scheduled for October 24-25 at The University of Texas at San Antonio, is “designed to spread the word about TDS and the importance of community involvement in tackling teenage driving safety issues,” said TDS Director and Senior Research Engineer Russell Henk.

An estimated 200 participants will attend the summit, which will have breakout sessions designed for both students and professionals. Among the speakers are Congressman Ciro Rodriguez and Maria Teresa Cerqueira of the World Health Organization.

“We are extremely excited about the first TDS Summit and the interest it’s getting,” said Henk. “This will be a great event that we can build upon for future summits.”

TDS is a peer-to-peer education and outreach program that is now active in more than 125 schools in Texas, and has recently begun deployment in Connecticut and Georgia. The students themselves spread the word about the specific dangers that contribute to teenage car crashes, including driving at night and distractions such as cell phones. An estimated 6,000 U.S. teenagers die in crashes every year.

For more information:
http://tti.tamu.edu/conferences/tds08/#program

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11. TRB Focus of TTI Seminar

An informal, roundtable-style Research Development Seminar September 11 focused on activities within the Transportation Research Board (TRB) and offered tips for researchers getting involved with committees.

Kim Fisher, TRB associate director of the Technical Activities Division, conducted the seminar and mentioned the challenge of accommodating everyone for TRB’s Annual Meeting. “There were 3,200 research papers submitted this year, which was the most ever,” she said. “About 50 percent of the papers are presented in poster sessions. It’s not that they are of less quality; we have just run out of space.”

As part of her duties at TRB, Fisher meets with transportation agencies and departments of transportation. Fisher was in College Station as part of a state visit.

12. Editor’s Corner: Ramping Up Readability

Technical reports and other documents that contain complex information easily get bogged down in jargon, terminology and unending sentences. In the process, content can get lost. Here are a few tips to ramp up the readability and clarity of any document you create:

- **Organize and segment information.** Move logically from one topic of your report to another. Keep sections short and make sure all information within each paragraph and section relates clearly to the designated topic.
- **Use meaningful headings.** Keep wording of chapter titles and section headings clear. In most cases, descriptive wording that relates to your specific content such as “Background of ISTEA-21” is more meaningful than generic section labels such as simply “Background.”
- **Shorten sentences and paragraphs.** A good general rule is to limit sentences to two lines or less and avoid a single page of text with no new paragraph (unless broken up with graphics). Keep double-spaced paragraphs less than a page
and single-spaced paragraphs less than one-half page.

- **Increase use of active voice.** Active-voice sentences, where your subject takes action, usually convey content more clearly than passive-voice sentences, where the subject is acted upon. Simple, active-voice sentences produce clear and meaningful writing, and editors recommend that you aim for at least half active voice throughout documents. Instructional documents such as manuals, guidelines and handbooks especially benefit from active voice because some passive voice sentences make it difficult for readers to determine the meaning of a sentence.

- **Check readability statistics.** You have helpful readability tools within your Microsoft Word® program. The spell check feature not only checks spelling but reviews readability of your document and provides statistics. (To get readability levels in Word 2003, go to Tools/Options and choose the Spelling & Grammar tab. Check the boxes for “Check grammar with spelling” and “Show readability statistics,” and then select OK. In Word 2007, go to your Office button, choose Word Options/Proofing and select “Check grammar with spelling.” That choice will give you a subsequent choice to “Show readability statistics.”)

- **Include introductions and summaries in plain language.** The majority of a technical document probably needs to use industry terminology and complex concepts to convey its meaning adequately. However, you can add introductory and summary sections written at lower readability levels that will make your overall document more understandable.

- **Use appropriate graphics.** Sometimes a picture really is worth a thousand words.

*Editor’s Corner is written by Rhonda Brinkmann, research editor in TTI Communications. Rhonda is happy to respond to requests for column topics.*

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### 13. Reminders/Calendar

**October 14-15** — 2008 Transportation Short Course  
College Station, Texas  
Registration required  
[http://tti.tamu.edu/conferences/tsc08/](http://tti.tamu.edu/conferences/tsc08/)

**October 30** — TTI Blood Drive  
Gilchrist Building
9 a.m.- 3 p.m.
Call or email for appointment

**November 17-19** — Traffic Safety Conference
http://tti.tamu.edu/conferences/traffic_safety/

**November 27-28** — Thanksgiving Holiday

**December 24-January 2** — Christmas and New Year’s Day Holiday

**January 5-7** — Fourth Annual Texas Transportation Forum
Austin, Texas
http://www.dot.state.tx.us/ttf/Registration.htm

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