1. TTI Reflects on Nighttime Driving Safety

What appears to be random and pointless words printed on a dozen street signs that dot the roadways in and around Bryan and College Station, Texas, may have implications for nighttime drivers across the country. The test signs are part of a three-year project to determine which signage materials provide the best reflectivity and are most readable. TTI is conducting the project for the Texas Department of Transportation (TxDOT) with cooperation from the City of College Station Traffic Engineering Office.

When the study is completed in February, about 100 volunteers will have been hooked up to an “eye-tracker” device that records their eye movements while they drive at night. When a sign is spotted, the driver reads the words aloud. With the help of an onboard global positioning system (GPS), a TTI experimenter in the vehicle notes the distance from the sign.

“This is one of the first studies in which we’ve had volunteers drive on open roads in our instrumented vehicle and eye tracker,” says Senior Research Scientist Susan Chrysler. “Our primary concern, of course, is the safety of our volunteers while they are driving. So, we have another TTI employee riding in the front passenger seat to act as a safety observer.”

Full story
2. Study Reveals Cable Barriers Saving Lives, Money

In its latest study of the effectiveness of cable barriers, the Texas Department of Transportation (TxDOT) has determined that cable barriers, over a one-year or longer period, prevented 18 fatalities and 26 serious injuries. The preliminary figures mirror a similar study last year that showed fatalities dropped from 52 to just one. The studies focused on Texas medians that had cable barriers in place for at least one year.

High-tension cable barriers have been constructed along 700 miles of Texas roadways and are designed to prevent vehicles from crossing into oncoming lanes of traffic. These crossovers often result in head-on collisions.

“If you cross the median, chances are good that the resulting crash will cause a fatality or incapacitating injury because they usually occur at high speeds,” explains Scott Cooner, a TTI research engineer devising a cable barrier maintenance manual for TxDOT. “The studies make it clear that cable barriers are keeping people from crossing the median…and they are saving lives.”

The cable systems are also only about one-third the cost of concrete barriers. However, on the downside, the study shows that maintenance costs for the cable barriers are much higher than costs to repair concrete barriers.

“That seems to be the only disadvantage,” Cooner said. “Over a 15-year lifespan of the cables, the maintenance costs will be higher but still less expensive overall compared to their concrete counterparts.”

TTI has been involved in the crash testing of end terminals and components for cable barriers since 2001. Cable barriers have become common fixtures along the nation’s highway system.

A cable barrier system in the median of SH 71 in Bastrop County.
3. Texas Gas Consumption Continues Decline

For the second month in a row, Texans bought less gasoline than they did in the same month the year before. Associate Research Scientist Dave Ellis says the May 2008 fuel purchases in the state are down about 1 percent from the previous May. April figures were down 3.2 percent from 2007.

Ellis has been analyzing raw gasoline consumption data from the Texas Comptroller’s Office and adjusting the figures for population increases and other factors.

“We expect the decline to continue during the summer months because that’s when the traditional vacation period occurs and a higher percentage of miles driven are discretionary miles. I believe more people will elect to stay close to home because of the price at the pump,” Ellis says.

Full story

4. TTI Anniversaries

5 Years

Stacey Alejandro, Senior Office Assistant (FSM)
Xingnian Chen, Graduate Assistant Research (EGE)
Linda Cherrington, Research Scientist (HTM)
Kathy Cowen, Financial Management Supervisor (BUS)
Andy Mullins, Research Scientist (HTF)
Stacy Schnettler, Communications Specialist (KAC)
Cash Williams, Software Applications Developer (NET)

10 Years

Scott Cooner, Research Engineer (HSO)
Beverly Storey, Associate Research Scientist (AEM)

25 Years

Susan Massey, Financial Management Supervisor (BUS)
5. UTCM Colloquium Examines Older Driver Issues Abroad

Can the Japanese and Australians teach us something about traffic safety? The answer seems to be “yes,” based on the latest University Transportation Center for Mobility (UTCM) colloquium presented by Sue Chrysler, manager of the Human Factors Group.

Chrysler’s UTCM presentation July 14 detailed a recent Federal Highway Administration International Scan Tour to both countries. “The Australians have very similar demographics to the United States, so we concentrated our visit in three Australian states: New South Wales, Victoria and Queensland,” she said. Chrysler pointed out that despite the similarities, Australia has a much lower fatality rate than the United States based on population. “Australia is very aggressive in enforcement measures, using radar, speed cameras and road checks.”

The presentation, entitled “Older Road User Safety and Mobility in Australia and Japan,” focused on the efforts in those countries to make traveling safer for the older driver. Chrysler found that both countries have implemented safety measures with them in mind, including infrastructure improvements, speed control and pedestrian improvements.

“The population of the United States is aging,” Chrysler says. “And based on our scan tour, it’s clear that the efforts in those countries could lead to initiatives and research opportunities for us.”

6. 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.

Improving mobility (The Heritage Foundation) July 28

2030 Committee (The Daily Texan) July 25

Speed management (AME Info) July 20

Batman leaving Gotham (Los Angeles Times) July 18
7. ITE Honors TTI with Awards, Positions

After 18 years as a member of the Institute of Transportation Engineers (ITE), Gary Thomas, director of the Center for Professional Development and Fellow of ITE, has been elected to the ITE Board of Directors, representing the Texas District (TexITE). Thomas joins 15 other board members who will help set policy and “chart a path for ITE and its many programs and activities.”

Thomas’ three-year term begins January 1, 2009. He began his affiliation with ITE as a student chapter president while attending Arizona State University. He’s held numerous positions with the organization, including chair of the Education Council, officer of the Arizona and Missouri Valley Sections, faculty advisor at Iowa State University, and student chapter liaison and webmaster for the Texas District.

During ITE’s summer meeting in San Antonio, Assistant Research Engineer Marcus Brewer was named the TexITE Younger Member of the Year. The award recognizes an individual member (35 years old or younger) for leadership, commitment to excellence, and activism within TexITE and other professional groups.
Also during the summer meeting, Graduate Student Jon Re received the Outstanding Student Paper Award in the Texas District and was named the Outstanding Student by the Texas A&M University student chapter. In addition, the ITE student chapter at Texas A&M was named the Outstanding Chapter of the Year in the Texas District.

8. July Seminars Tackle Intellectual Property, TxDOT Reports

With TTI generating the majority of Texas A&M University System intellectual property (IP) licensing revenue, an IP management seminar for employees seemed appropriate. The July 21 seminar was conducted by Darrell Kuhn, licensing manager for the System Office of Technology Commercialization (OTC).

“In 2007, IP licensing generated $7.4 million in royalty income for the System,” says Kuhn. “TTI’s inventions were responsible for $4.4 million of that, and the 2008 figures are trending toward increases in both amounts.” Kuhn says the ET and SRT series guardrail end treatments account for much of TTI’s total and have historically been “the System’s largest technology-based royalty income producer, bar none.”

Kuhn’s seminar was an overview of IP management and the technology transfer process, as well as the functions of the OTC. He urged those in attendance to contact the OTC as soon as they come up with ideas. “Even if it’s just a drawing on a napkin, get in touch with us,” Kuhn said. “The earlier we get involved, the smoother the process can be.”

A research development seminar on patents and disclosing inventions is being planned for the near future.

More information about intellectual property and the functions of the OTC can be found on the OTC website. TTI intellectual property and copyright information and policies are located on
TTINet.

On July 7, Rhonda Brinkmann and Chris Pourteau of TTI Communications presented, “Report Development and Deliverables Preparation,” a research development seminar that offered tips and suggestions for researchers writing technical reports.

The seminar was designed to show how concise, easily understood reports can help researchers’ work stand out.

Brinkmann and Pourteau urged researchers to

- isolate topics into small chunks (Information Mapping® strategies),
- create a “picture” with words,
- avoid too many prepositional phrases,
- use active voice, and
- use and place graphics effectively.

Attendees were urged to contact TTI Communications if they need help with writing, editing, graphics and audiovisuals, deliverable processing and publishing, and distribution services.

9. TTI Day 2009 Planning Volunteers “Enthusiastic”

The 2009 TTI Day is scheduled for May 6, a full 10 months away. Even so, the estimated 40 planning committee members are “enthusiastic” about getting the event organized.

“I have been amazed by the enthusiasm of our volunteers,” says TTI Day Chair Kerry Fillip following the kickoff meeting held July 11. “I was especially encouraged by a nearly 100 percent survey approval for having Habitat for Humanity as our charity for next year.” The survey was conducted after the 2008 TTI Day.

“We have volunteer representation from the Houston TTI urban office, but I would really like to have someone from each office on board,” Fillip said. “After all, TTI Day is for all of us.” Kerry said she will be contacting the other offices soon to ask for their support.

The next planning meeting is scheduled for later this month.
10. TTI Budget, Holiday Schedule Approved

The Texas A&M University System Board of Regents approved TTI’s 2009 fiscal year operating budget of $52,102,000 during its meeting August 1. The regents also approved the Institute’s holiday schedule.

2008-2009 Holiday Schedule

- **Thanksgiving** — November 27-28, 2008
- **Christmas-New Year’s Day** — December 24-January 2, 2009
- **Martin Luther King, Jr. Day** — January 19, 2009
- **Spring Break** — March 19-20, 2009
- **Memorial Day** — May 25, 2009
- **Independence Day** — July 3, 2009

11. Editor’s Corner: Follow the Yellow Brick Guidelines*

Many sponsors and publications have editorial guidelines that authors need to follow when preparing reports or papers for submittal and publication. Editorial guidelines give you requirements regarding document format, arrangement and style. Many editorial guidelines also include information on scheduling and major deadlines.

Adhering to editorial guidelines helps your publication process go smoothly, produces a professional manuscript appearance, gives you an authority for decisions you make regarding your document and shows your sponsor or potential publisher that you know the rules. This column gives links to editorial guidelines that often apply to reports or papers written by TTI personnel.
Texas Department of Transportation (TxDOT) reports. TTI has created editorial guidelines for Research Management Committee (RMC) projects conducted for TxDOT. You can find Guidelines for Preparing, Editing, and Submitting TxDOT RMC Reports at http://ttinet.tamu.edu/communications/editing/TTIGuidelines.pdf.

Transportation Research Board (TRB) papers and reports. TRB editorial guidelines apply to presentations at annual meetings and papers for publication in TRB’s Transportation Research Record. The guidelines in Information for Authors are updated as of May 2008: http://www.trb.org/guidelines/authors.pdf.

TRB’s Cooperative Research Program (CRP) reports. Reports developed for the related CRP programs-National Cooperative Highway Research Program, Transit Cooperative Research Program, Airport Cooperative Research Program, National Cooperative Freight Research Program and Hazardous Materials Cooperative Research Program-follow similar but individual editorial guidelines. You can find general information at: http://www.trb.org/CRP/About/DivD.asp. Specific guidelines for preparing CRP reports are located at:

- Author Guidelines for Submitting CRP Reports: http://www.trb.org/NotesDocs/Author_Guidelines.pdf,
- CRP Executive Summary Guidelines: http://www.trb.org/NotesDocs/ExecSumsPrep.pdf, and

Federal Highway Administration (FHWA) reports. Depending on which office of FHWA sponsors your project, you might have slight variations in how to prepare your reports. The FHWA Communications Reference Guide covers general information regarding report preparation: http://www.tfhrc.gov/qkref/qrgmain.htm.

Electronic accessibility document guidelines. When published online, most federal and state reports must meet editorial guidelines for electronic accessibility. TTI Communications can help you make sense of the complex guidelines as well as apply accessibility requirements to your file. You can find information about electronic accessibility guidelines at http://www.w3.org/TR/WCAG10/.

* This column’s title refers to the yellow brick road in The Wizard of Oz, a phrase intended to indicate that you’re on the right road.
12. Reminders/Calendar

August 17-20 — ITE Annual Meeting
   Anaheim, California
   For more information,
   http://www.ite.org/annualmeeting/

September 3-5 — 2008 ITS Texas Annual Meeting
   Austin, Texas
   For more information,
   http://tti.tamu.edu/conferences/its08/

September 7-9 — 13th International HOV/HOT Systems Conference
   Minneapolis, Minnesota
   For more information,
   http://tti.tamu.edu/conferences/hov08/

October 14-15 — 2008 Transportation Short Course
   College Station, Texas
   Registration required
   For more information,
   http://tti.tamu.edu/conferences/tsc08/

   Houston, Texas
   For information/registration,
   http://tti.tamu.edu/conferences/traffic_safety/

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