

2011

Intelligent Transportation Society of Texas
University of Texas at Austin
Student Chapter Annual Report



The University of Texas at Austin
Cockrell School of Engineering

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INTELLIGENT TRANSPORTATION SOCIETY OF TEXAS: UNIVERSITY OF TEXAS STUDENT CHAPTER ANNUAL REPORT

Organizational Objective

The Intelligent Transportation Society of America, better known as ITS America, is a forum in which industry, government, and academia meet to build consensus on fostering, developing, and deploying Intelligent Vehicle-Highway Systems. The society's mission is to help evolve a significantly safer, cleaner, more productive, and more competitive U.S. transportation system. To this end, the Society promotes public-private-academic partnerships and co-operations in the ITS community.

We are a student organization at the University of Texas at Austin chartered under the Intelligent Transportation Society of Texas' state charter from ITS America. The primary goals of our chapter are to 1) Promote and cultivate student awareness, interest and research in intelligent transportation systems at The University of Texas at Austin, 2) Introduce students to the Intelligent Transportation Society of America, 3) Assist students in their ITS and transportation related interests, 4) Create a network between students and the ITS community, 5) Extend the network of supporters of ITS, 6) Provide the means for students interested in ITS and their prospective employers to come together, 7) Provide opportunities for ITS @ UT members to be involved in the local Austin, TX community.

ITS Officers

President	Donna Chen
Vice President, Activities	Daniel Evans
Vice President, Administration	Gaurav Vyas
Secretary	Weiyuan Yuwen
Treasurer	Tarun Rambha
Advisor	Dr. Zhanmin Zhang

Executive Summary

This year has yet again been successful and eventful for The University of Texas at Austin ITS Student Chapter. We were pleased to have new members join, bringing with them more energy and new ideas to our chapter. We are always searching for new ways to improve our Chapter and help others, and this year was no exception. We continued some of our favorite on campus activities such as Explore UT, Introduce a Girl to Engineering Day, and undergraduate recruitment at the Fall Gathering, among other things. Additionally, we organized many recurring professional activities, such as a series of guest lecturers from both the academic and the professional sides of transportation engineering within the civil engineering department. Off campus, our group held many recreational activities to strengthen the connection and build the network between the students in the department, including intramural sports teams, potluck picnics, group outings to Austin landmarks like Mount Bonnell, and so on.

Professional Activities

Our ITS group works exceptionally hard to offer a variety of professional development activities, exposure to and interaction with the professional community of transportation engineers. Our members participate in discussions with speakers with different backgrounds in transportation through our distinguished speaker series, expand their

communication and networking skills at a variety of conferences, and gain practical experience through technical projects.

Transportation Research Board Conference

In January, we once again made the annual trek to Washington D.C. to partake in the Transportation Research Board Conference. With a plethora of speakers, posters, vendors, and round table discussions to choose from, everyone was able to keep busy over the course of the conference. Our department was also very proud of the large number of UT faculty and students presenting their work, with Transportation Engineering graduate students collectively presenting 18 papers and 26 posters at the 2011 TRB Conference. The experience was wonderful and we were proud to represent our Chapter and program well. ITS worked in conjunction with our sister society, ITE, to compile and organize students' resumes onto CDs which were distributed at the conference.

Of course while in Washington we made sure to explore the city as well. Trips were made to the National Zoo and Smithsonian Museums. In addition to the conference, we had sponsored our third annual UT Alumni Happy Hour at Buffalo Billiards. The event gave us all a chance to relax and reconnect with our alumni.

Distinguished Speaker Series Guest Speakers

- **Joe Cantalupo** , executive director of CAMPO,
 - ✓ *Topic: 2035 Regional Transportation Plan.*
 - ✓ April 9, 2010

- **Rob Spillar**, Transportation Director for the City of Austin,
 - ✓ *Topic: Austin's Strategic Mobility Plan.*
 - ✓ April 30, 2010

- **Dave Tuttle**, PhD researcher,
 - ✓ *Topic: Plug-in electric vehicles.*
 - ✓ July 17, 2010

- **Federico Mendoza**, Brown and Gay,
 - ✓ *Topic: Interchange design.*
 - ✓ September 10, 2010

- **Rashed Islam**, VP at HDR,
 - ✓ *Topic: Innovative intersection and interchange design.*
 - ✓ October 8, 2010

- **Tom Rioux**, PhD researcher and lecturer from UT,
 - ✓ *Topic: His experiences in Haiti in the last few months and the transportation needs they have.*
 - ✓ November 3, 2010

- **Jim Dale**, PTV America,
 - ✓ *Topic: BRT planning and operations.*
 - ✓ November 12, 2010

- **Nathan Wilks**, City of Austin's Bicycle and Pedestrian Program,
 - ✓ *Topic: Bicycle and Pedestrian Program.*
 - ✓ February 11, 2011

- **Anna Martin**, HDR Engineering Project Manager and Capital Area TexITE Vice President,
 - ✓ *Topic: Two recently designed continuous flow intersections for the "Y" in Oak Hill.*
 - ✓ March 11, 2011

- **Tom Brahms**, Executive Director of ITE

- *Topic:* Meet with small groups of students
- April 8, 2011



After joining the staff of the Institute of Transportation Engineers in February 1973, Thomas W. Brahms was selected to be the Executive Director in May 1976

and has served in that position since that time. During his tenure, ITE has undertaken proactive and aggressive roles concerning traffic congestion, transportation manpower, transportation safety, intelligent transportation systems and expansion of the magnitude of investment in research and development.

SWUTC Student Conference

On Friday, April 7, 2011 the Southwest Region University Transportation Center hosted the second annual conference in Winedale, Texas. Students worked in teams to identify the state-of-the-art for selected topics for the year 2030 and develop action plans to reach the state-of-the-art. Students and faculty from three universities participated in the conference, including Texas A&M University, the University of Texas, and Texas Southern University. ITS provided transportation and lunch for the 20 students from the University of Texas who participated. The students were split into teams to identify the state-of-the-art of transportation related topics for the year 2030 and developed plans of action for how the industry should prepare for the future. The conference hoped to encourage students from different schools and backgrounds to work together towards a common goal.

Our chapter looks forward co-hosting the SWUTC student conference with the UT ITE student chapter and in the spring of 2012.

ITS Texas Annual Meeting

The UT ITS Student Chapter is excited to be sending five student members to attend the 2011 ITS Texas Annual Meeting in San Marcos November 9th through the 11th. Through financial support from ITS Texas and the Cockrell School of Engineering, our chapter was able to fund the registration fees for students wishing to attend this meeting and be exposed to the great variety of featured speakers and topics. We look forward to networking with ITS Texas professional members and other ITS student chapter members in November!

Service Activities

Throughout our group's history, one constant has been service to both The University of Texas and the city of Austin. Whether on campus recruiting new members or in the community, members of ITS have always been more than willing to volunteer their time for others.

Introduce a Girl to Engineering Day

On February 26, 2011, ITS members volunteered at Introduce a Girl to Engineering Day during Engineers Week at UT. Thousands of girls in first grade through eighth grade from central Texas arrived at the UT College of Engineering, with many receiving their first exposure to what engineering is all about as well as all the types of engineering fields. Booths and activities were set up across campus by all engineering departments in order to provide multiple options for the girls to check out what was most interesting to them. For this event, members of our group showed off a simulated signal control with the objective to pass much traffic as possible in the limited time. The program demonstrates real-life signal operation and then asks the user to choose what to do in each scenario. Everyone was a winner and received a stamp on their cards.

Explore UT

On March 5, 2011, the University of Texas hosted its 12th annual open house to school children all across Texas. Open to families and groups who want to visit the campus and learn about the university's activities, Explore UT Day welcomed over 50,000 visitors to participate in over 400 events. ITS hosted one of those 400 events during which K-12 students were exposed to the transportation engineering profession via a computer game. The kids simulated signal control as traffic grew heavier and traffic networks grew more complex. Five ITS members volunteered at the event and answered questions about the game and the transportation engineering field. It was a rewarding experience to show a small side of our profession to kids who might otherwise never have the exposure and to explain to both the kids and the parents the types of challenges and problems that transportation professionals face and solve every day. We might have even convinced some of the kids to become future traffic and transportation engineers!

Undergraduate Summer Internship in Transportation (USIT)

The Undergraduate Summer Internship in Transportation (USIT) is an 11-week summer program for undergraduates interested in transportation. Many of our members are paired with interns and get to mentor them as they work together on the same projects for the summer. ITS sponsors many activities with the interns over the summer with ITE group, including a monthly series of luncheon presentation practices. We love the opportunity to share our interest in transportation and help cultivate the new generation of transportation professionals.

Social Activities

If college life is just about a lot of hard work and dedication in the labs and in front of computer screens, that would be too boring and unmemorable. Our ITS Student Chapter is very proud of our many contributions to

organizing different social activities and networking within the transportation engineering department. With our activities as a medium, students can get to know each other better, relax after the exams, and enjoy some breaks during the their busy school lives.

Potluck Picnics, Happy Hours, and Welcome Orientation

A newly established ITS tradition introduced this past year, the student chapter brought together students from different cultures by hosting potluck picnics at Easterwood Park, a great green space within walking distance from the UT campus. To truly appreciate the diversity of our Transportation Engineering program, participants in the potluck are encouraged to bring a dish or drink native to their home country or state. We hosted three of these potlucks this past school year, and they were successful in allowing the students to further understand each other's backgrounds as well as share in the joy of good food and drinks.

Another common event is the monthly happy hour. It's a good time to leave behind the stresses and worries of school work and have a dinner with friends in a local restaurant together.

ITS also took an active role in welcoming the new students into the program, organizing the week-long new student orientation social events including a number of activities that allowed the new students to get to know other students and learn about ITS, the transportation engineering department, and the City of Austin. The orientation included lunch at DoubleDave's Pizzaworks, kayaking on Town Lake, dinner on the festive patio of Trudy's Tex-Mex Restaurant, a trip to the top of Mount Bonnell for a breathtaking view of downtown Austin, bowling, watching the bats emerge from Congress Avenue Bridge, and a movie at the locally famed Alamo Drafthouse Cinema.

Sporting Events

One of the goals for our ITS student chapter is to encourage more students to get out and get some physical activity instead of sitting and facing their computer all day. Thankfully, UT offers many excellent and extensive intramural sports programs. Participation in these intramural teams by ITS members builds peer networking skills as well as teamwork ethic. Our sports activities cover a large range, including soccer, volleyball, softball, and flag football. No matter what the competition result is on the field/court, everyone is a winner for participating in activities and having fun together!

Special Events

There are also other non-regular activities held each year to substantiate our activity content and calendar. Activities this past year included tailgates for Longhorn home football games, a Texas Hold 'Em tournament, hosting visiting transportation engineering students from the Nagoya Institute of Technology in Japan, and hosting prospective students during recruitment visits.

The ITS Website

By keeping the website up to date with student membership information, officer contact information, schedules for speaker luncheons and volunteering or social activities, ITS can make sure that each of the members feel connected with the organization and with each other. The website is providing incoming students as well as prospective students with the information about ITS and what the club is doing and how to participate.

Concluding Remarks

As indicated in this annual report, ITS Texas at The University of Texas at Austin has been operating as a very successful and active organization. Through professional activities, a series of guest speakers,

service activities and social activities, we demonstrate our commitment to the transportation profession by supporting its future professionals, including our current Transportation Engineering students, children whose futures may be in transportation, prospective students and summer interns. We highly appreciate the financial support from ITS Texas and departmental donations from the Cockrell School of Engineering to help us achieve our organizational goals. We plan to continue our success in organizing the aforementioned activities and continue to develop more creative ways to enhance the graduate school experience for our members.

Current Student Members

First Name	Last Name
Aria	Berliner
Christina	Bernardo
Jack	Bringardner
Donna	Chen
Michael	DeGaspari
Daniel	Evans
Dan	Fagnant
Chris	Fournier
Mason	Gemar
Mobashwir	Khan
Mubassira	Khan
Katherine	Kortum
Ruoyu	Liu
Christopher	Melson
Matt	Pool
Eric	Porter
Tarun	Rambha
Pedro	Serigos
Abdus	Shakur
Yanfei	Sui
Ravi	Venkatraman
Gaurav	Vyas
Xiaoxia	Xiong
Weiyuan	Yuwen