UMass ITE Wins Big at International Annual Meeting

The UMass Amherst ITE Student Chapter was both represented and recognized at the ITE International Annual Meeting held in San Antonio, Texas from August 9-August 12.

UMass Amherst was recognized at the awards dinner where the UMass ITE Student Chapter was awarded the International Outstanding Student Chapter Award. The award was accepted by outgoing chapter president Dr. David Hurwitz. This award was on the heels of being awarded the Student Chapter Award for the ITE Northeastern District in May 2009 at the District Annual Meeting in Saratoga, New York. In San Antonio, our parent section, the New England Section of ITE was also recognized for it’s section newsletter, The Chronicle, edited by Laura Castelli of VHB.

Student Chapter Vice-President Samuel Gregorio and Faculty Advisor Dr. Michael Knodler contributed to the technical sessions presented at the annual meeting. Samuel presented a research poster during the Traffic Safety Poster Session. The poster focused on an analysis of preliminary data from the safety belt data collected during the statewide Safety Belt Observation Study conducted in June 2009 by UMassSAFE. Dr. Knodler oversaw a discussion entitled, “Getting Students Interested in Transportation Conversation Circles,” which was attended by many students and faculty, along with many transportation professionals.

In addition to technical sessions, members attended presentations as well as committee meetings and other conferences events. The many sites of San Antonio, including the Alamo Mission and the Riverwalk, were also visited outside of conference activities.

A Message From the Incoming Student Chapter President: Steven Tupper

Current Members, Faculty, Alumni, and Friends:

The fall season is now open to us at UMass, which means new classes, new faces, and football at McGuirk. As a chapter, we are already off to a great start. However, before I go into that, let me first introduce myself as the President of the UMass Student Chapter of ITE. My name is Steven Tupper. I am a first year Masters Candidate in the transportation department. I have been working closely with ITE for the past two years and am excited for what we have in store this semester and year.

I look forward to building upon the work of my predecessor, David Hurwitz, who, through much hard work, helped the chapter be recognized as the “Outstanding Student Chapter” at the ITE International Annual Meeting this past August. I would like to thank him for his years of dedication to UMass ITE and wish him the best of luck in his future endeavors.

We kicked off our semester with our first chapter meeting on September 24th with great student attendance and filled what is sure to be a very active executive board. We have many exciting events planned already this semester including outings to the Berkshire East Zip-line, three Adopt-A-Highway cleanup events, attending the Warwick, RI NEITE Annual Meeting, and an ITE Webinar on reducing bicycle collisions.

I hope you all enjoy the season and I look forward to seeing many of you at the Alumni Themed UMass Technical Day in the Spring. Although, your presence is welcomed at anytime.

- Steven Tupper
President, UMass ITE

“In this business there are very few problems that can’t be solved with some yellow paint and a little bit of common sense.” - Henry A. Barnes
UMass 10th Annual Technical Day
A Roaring Success

On Thursday, March 26, the UMass Student Chapter of ITE hosted its 10th Annual UMass Technical Day in the Massachusetts Room of the Mullins Center on the UMass Amherst campus. The event was meant to bring together students and professionals in the field of Transportation engineering, construction, and planning.

Throughout the day over 100 students and professionals participated in the events of the meeting. The meeting included a working lunch moderated by Dr. Michael Knodler, the UMass Student Chapter Faculty Advisor. The lunch, entitled “Workforce development: Young engineers in Transportation,” allowed students and professionals to ask each other what they expect in each other as an employer and employee. After lunch, a panel session entitled “The Future of Transportation in the next 10 Years and Beyond: Issues, Challenges and Solutions,” was conducted featuring 5 transportation professionals.

At dinner, the keynote address was presented by Luisa Paiewonsky, Commissioner of the MassHighway Department. The address focused on the exciting future in transportation engineering and planning as a result of the decaying civil infrastructure that needs bright engineers to rebuild.

Jane Garvey, past director of the Federal Aviation Administration, presented the leadership award endowed in her name to Marsha Anderson Bomar, President of Street Smarts. Student Advisor Dr. Michael Knodler also presented the UMass ITE Student Service Award to current chapter secretary / treasurer Deanna Peabody and the Distinguished Alumni Award to David Bohn of Vanasse Hangen Brustlin, Inc.

Students and professionals listen to the panel session about the future in transportation.

Students Attend NEITE / MAITE Joint Meeting in Waltham, MA

On Wednesday September 16th, 2009, the UMass ITE Student Chapter attended the joint NEITE / MAITE meeting held at the Best Western Hotel in Waltham, MA. For a few student chapter members, this was the first such professional meeting and it proved to be a great experience of what ITE is all about.

The NEITE Desjardin Memorial Scholarships were presented by Rod Emery to graduate student Karen Sentoff of UVM and undergraduate Erica Swansen of Northeastern. Student Chapter Advisor Michael Knodler, who also serves as the New England Section President, presented the news of the NEITE Section including presenting Laura Castelli the Newsletter Award for “The New England Chronicle” for which she won at the ITE Annual Meeting in San Antonio, Texas, in August.
Summer Transportation Institute Exposes Young Teens to Topics in Transportation

In the summer of 2009 the UMass Amherst campus served as a host site for the National Summer Transportation Institute (NSTI) for the third year. The UMass Amherst program under the direction of Dr. Michael Knodler and Program Coordinator Katrina Hecimovic was one of three such programs conducted in Massachusetts, including Merrimack College under the direction of Dr. Gary Spring and UMass Boston under the direction of Dr. Tomas Materday.

The UMass Amherst STI program attempted to create awareness among middle and high school students about transportation related careers and to encourage the pursuit of a college degree as preparation for a job in the transportation industry. During the four week program (July 6 to July 31), six participants in rising 8th to 10th grade were exposed to selected topics in all modes of transportation via team projects, invited speakers, and field trips, along with academic enhancement and recreation activities. The program took advantage of many University facilities and resources, with the students’ home base of the CEE Interactive Classroom at UMass Amherst.

Students were continuously challenged to advance their knowledge regarding the field of transportation, their understanding of transportation related careers, and the application of science and engineering principles in transportation. Additionally, STI attempted to promote critical skills that are required by transportation professionals such as effective communication, leadership, teamwork, and computer skills. The students learned the basics of AutoCAD, site surveying and measurements, turning movement counts, ITS, and water and energy conservation.

These content areas were examined through staff, practicing professional engineer and university faculty member led presentations, guided discovery, and hands-on design activities. Students attended field trips geared toward both technical learning, enrichment and team-building activities. Technical tours were conducted at transportation facilities across the state. Students attended a harbor cruise examining the port infrastructure and marine transportation of Boston, experienced the human factors laboratory at the Volpe Center in Cambridge, toured the Regional Traveler Information Center and hiked Mt. Sugarloaf to see the traffic cameras used for Masstraveler.com in action. Students also engaged themselves in group research projects and presentations on a weekly basis.

Students using the driving simulator at the Volpe National Transportation Systems Center in Cambridge, MA

Farewell and Goodluck to Outgoing ITE Student Chapter Members

As the UMass Student Chapter of ITE moves into another school year, many past student members have or will be moving on into the profession. The Student Chapter would like to thank each one of them for their service and their help in making the UMass ITE Student Chapter an international award winning chapter.

David Hurwitz, Ph.D. — Assistant Professor, Oregon State University, Corvallis, OR
Heather Rothenberg, Ph.D. — Management Analyst, National Highway Traffic Safety Administration, Washington, DC
Steven Andrews, MSCE — Transit Planner, Boston Region Metropolitan Planning Organization (CTPS), Boston, MA
Jocelyn Dewire, BSCE — Civil Engineer I, Massachusetts Highway Department, Boston, MA
Kimberly Rudy, BSCE — Masters Student, University of California at Berkeley, Berkeley, CA
Katie Woods, BSCE — Design Engineer, Pilgrim Nuclear Power Station, Plymouth, MA
Hannah Alders, BSCE
UMass ITE Hosts Bicycle Collision Reduction Webinar

On October 07, 2009, the UMass ITE Student Chapter hosted its second webinar. The webinar presentation was entitled, “Strategies for Reducing Collisions including Bicycles.” The presentation was conducted out of St. Louis, Missouri, by Paul L. Wojciechowski, AICP, P.E., who is a senior transportation planner at CH2M Hill.

A conference call was connected to hear and react in real time to the discussion and presentation. The UMass Student Chapter hosted the webinar over lunch. 20 students and two faculty members attended to listen to and view the presentation and the questions formulated from other groups attending the webinar from various locations.

The presentation included an overview of the NCHRP 500 Series Volume 18. Included in the seminar was information pertaining to intersection and parallel travel lanes and their affect on bicyclists and bicycle lanes. The presentation also included information on traffic calming, mid-block crosswalks, bicyclist conflicts, and improving safety by not only adjusting vehicle habits, but the habits of bicyclists.

Data Collection Continues to be Insightful and Useful to ITE Students

The UMass ITE Student Chapter has continued to pursue traffic data collection as a means of exposing student members to professional practice and as one of the primary sources of revenue generation for chapter activities. Data collection provides students valuable field experiences as well as interactions with currently employee transportation professionals.

Over the past calendar year, members of the ITE Student Chapter collected ATR based volume / speed / class and turning movement counts on campus at an intersection that is being considered for a roundabout (Oct 21-23, 08), and volumes data on the adjacent street and driveway to the campus police station as a step in the redesigning of the facility (Mar 24-25, 09).

More recently, members of the Student Chapter have participated in ATR data collection on Lincoln and Sunset Avenues in Amherst in conjunction with road closures set of by the town. It is hopeful that the data of pre, during, and post road closure will allow students to see first hand the effects of particular traffic calming techniques on traffic behavior.

The Student Chapter was also selected to participate in the 2008 ITE Trip/Parking Generation Project. The bulk of the data collection was conducted throughout the Fall 08 semester and the final documentation was completed and accepted by the committee in the early summer. The chapter was provided a $1000 award for the purpose of conducting 80 hours of trip and parking generation data collection and analysis for self storage facilities. Over 20 chapter members helped conduct over 48 hours of field observations at each site as well as convening meetings to determine the appropriate analysis for the collected data. The chapter hopes to participate in the Trip/Parking Generation Project again this year.
TOWN OF AMHERST SETS UP ROAD CLOSURES NEAR UMASS CAMPUS

Many students returned to UMass for the fall semester and noticed a change on the south-side of campus. The regularly used cut-through streets to avoid Downtown Amherst were blocked off by the town of Amherst, forcing students and residents back on to North Pleasant Street and University Drive. The closures appear on the roadways dubbed by students, the “Lincoln and Sunset Expressways” (Lincoln and Sunset Avenues).

The road closures appear on at the intersection of Lincoln @ Fearing Street and Sunset @ Fearing Street in order to keep students from accessing roads that were not designed to carry the cut-through traffic. Local citizens who reside on Lincoln and Sunset have expressed their approval of the current road closures as these streets have turned into high speed roads in the past few years. Additional road closures were placed at the end of McClure Street and Sunset Court.

In order to collect data on traffic speed and volumes, students and faculty of the UMass ITE chapter and the Department of Civil and Environmental Engineering placed ATR (Automatic Traffic Recorders) in nine locations around the neighborhood where the road closures were located. The data obtained will help the town of Amherst determine the effects of the road closures and whether or not these closures were able to deter students and other town drivers from using Lincoln and Sunset as cut-through streets.

The several road closures were removed from the streets during the time in which Amherst was holding a parade to celebrate its 250th Anniversary.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION DEPARTMENTS SET TO MERGE

Commencing on November 1st, 2009, the new Massachusetts Department of Transportation (MassDOT) will take shape to oversee four divisions: Highway, Mass Transit, Aeronautics and RMV. The new MassDOT will condense such separate entities as the Massachusetts Highway Department (MassHighway), the Massachusetts Turnpike Authority, and the Massachusetts Aeronautics Commission, and the RMV.

On September 15th, Governor Deval Patrick appointed Jeffrey B. Mullan as Secretary and CEO of the new MassDOT. Mullan is the current the executive director of the Turnpike Authority. Prior to 2007, Mullan worked 14 years at Foley Hoag LLP as a partner and the co-chairman of the firm’s administrative law practice. Before working for Foley Hoag LLP, Mullan also worked for the Massachusetts Highway Department.

Over the past months, Governor Patrick has expressed his desire to compact all of the state’s transportation agencies in order to eliminate waste in the state’s budget. The idea for compacting the agencies is not a new idea in Massachusetts, as former Governor Mitt Romney also worked the notion of having one state department of transportation instead of the many agency system currently in Massachusetts.

According to the state’s press release, the bill, that was signed into law on June 26, 2009, was aimed at other items outside of the merging of the state agencies. The bill also included a reform of the MBTA pension system, creates a transportation trust fund to ensure that transportation revenues are spent on transportation, and requires forward funding of Regional Transit Authorities to help expand regional transit excess.
**UPCOMING EVENTS:**

**Thursdays — Transportation Program Seminar Series**

**Fall 2009 — Ongoing Adopt-A-Highway Clean Up on Route 116**

**Fall 2009— Trip to Berkshire Zipline (no date)**

**October 22nd — UMass ITE Student Chapter Meeting**

**October 23nd — October Adopt-A-Highway Clean-Up**

**October 23rd — ITE Hockey Night (UMass vs. Maine)**

**November 2nd — NEITE / RIITE Meeting, Providence, RI**

**November 5th — CEE Pre-Registration**

**November 11th — Veteran’s Day (No Classes)**

**November 12th — ITE Bowling Night, Northampton, MA**

**November 18th — UMass ASCE/ITE Joint Student Chapter Meeting**

**November 26th-29th — Recess for Thanksgiving (No Classes)**

**December 7th — NEITE Annual Meeting, Warwick, RI**

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**FALL POTLUCK BRINGS TRANSPORTATION PROGRAM TOGETHER**

The kick-off of a new semester and academic year was celebrated by a potluck dinner event. The event brought together the UMass Transportation Center Staff, transportation faculty, students, and members of the ITE Student Chapter.

The event was held on Thursday, October 2nd, at the home of Dr. Michael A. Knodler, faculty adviser of the ITE Student Chapter. Students and faculty showed off their cooking and grilling skills while others participated in meeting with new faces. This was a great opportunity to spend time with other members of the program and their families before the busy fall semester got underway.

**ITE STUDENT CHAPTER TO HOST ANNUAL FOOD AND CLOTHING DRIVE**

During the months of November and December, the UMass ITE Student Chapter will sponsored a clothing and food drive within the campus community. The student chapter will be soliciting support from the College of Engineering and the surrounding community. It is hopeful that the chapter will be able to collect many generous donations thought the campus and within the graduate transportation department.

The start of the food and clothing drive is yet to be determined, as well as the length. All the donations were made to the Amherst Survival Center. The center supplies people in need in the regional area with food, clothing, minor health care, and community necessities.

In terms of goods, the ITE Student Chapter is looking for donations outside of the Amherst area as well. Welcomed goods include: high-protein non-perishable foods and un-ripped, unstained clothing. Winter clothing is preferable during this drives as the winter months in New England are upon us. If you would like to donate, contact UMass ITE.

**ADOPT-A-HIGHWAY CONTINUES, JUST IN A NEW SPOT**

The UMass Student Chapter will continue with its help in the Adopt-A-Highway program during the upcoming school year. Due to particular state highway boundaries, which were conveyed to the chapter in the spring, our new two mile section of roadway is the freeway section of Route 116 from Route 9 to the UMass exit ramps one-mile upstream.

The next clean-up scheduled for the semester will be held in late October. The exact date is still being determined, so stay tuned. As always, in appreciation of the community service that the students provide, the Student Chapter treated all of the helpers with lunch.
STUDENT RESEARCH CORNER

SAMUEl GREGORIO: ANALYSIS OF MASSACHUSETTS SAFETY BELT USAGE

Safety belts are one, if not the most, effective safety device within vehicles today. Yet, when driving on the roadways, many vehicle occupants still are not buckling up. With Click It or Ticket and more advanced seat belt laws taking affect, we as transportation safety professionals are seeing an increase in safety belt usage across the United States.

Massachusetts, a secondary seat belt law state, ranked 51st of the 51 states (D.C.) in overall safety belt usage in 2008. In the recent past, Massachusetts has consistently ranked near the bottom of these rankings. However, the safety belt usage rate for Massachusetts increased by nearly 7 percentage points in 2009 to 73.99%.

Using the preliminary data gathered from the 2009 Massachusetts Safety Belt Observation Study, a quantitative analysis of overall safety belt usage based upon specific variables was conducted. These selected variables included both traditional demographic attributes, such as gender and age, and non-traditional demographics, such as a community’s median household income. The analysis also included the combination of these variables.

Beyond specific variables, the research also looked at the change in belt usage and non-user conversion rates by community and by each demographic variable over the past few year using data from the past statewide observational studies. This allowed for a visual of those locations that may not be of high belt usage, but are improving annually.

The hopeful outcome to be achieved was the targeting of those demographic locations and groups that represented both the high and low end of safety belt usage by percentage in Massachusetts. Using the statewide observation data and data obtained from the U.S. Census Bureau, each of the observed characteristics of the front-outboard vehicle occupants was analyzed.

As a result, the data showed that when combining demographic variables, teen drivers and male drivers consistently had a lower safety belt usage than that of older drivers and females respectively. As for non-traditional demographics, the data suggested that safety belt usage increased with a community’s median household income level, as seen in the figure below, and education level (based on persons with less than some college). Community’s with mid-level population densities were found to be of the highest belt usage rates while the most densely populated areas were of the lowest.

Past citation data was also examined for those users who were cited for a safety belt violation. As compared to the overall safety belt usage data, teens, along with young adults, and males obtained the majority of safety belt violations within citations. The most common primary violations with the seat belt violation, being that Massachusetts is a secondary seat belt law state, was speeding.

In the future, this research is hoped to guide traffic safety professionals towards those particular demographic areas that are in need of increased enforcement and education. Knowing the problem areas, it is hoped that targeted enforcement and education in these locations of low usage will help Massachusetts further climb the ladder of the national usage rankings.

Samuel Gregorio is a Master’s Degree student in the Transportation Engineering Program at UMass Amherst.
CALLING ALL UMASS ALUMNI

The UMass ITE Student Chapter is currently in the process of compiling a database of all UMass alumni currently working as transportation professionals. This list will be used to keep UMass alumni up-to-date on ITE Student Chapter activities, announcements, etc. This list will also be used to put graduates in touch with potential employers, and to help employers recruit from the pool of UMass transportation students. Although we can scrape together minor information, we need your help as UMass ITE Alumni.

Sends us your...
- Name
- Year of Graduation
- Degree (Bachelors, Masters, or PhD)
- Program (Civil Eng., Planning, etc)
- Company
- Address
- Phone Number
- Email
- Web Address

Send us your contact information!

Email to:
dpeabody@student.umass.edu

UMASS ITE ALUMNI SPOTLIGHT: DANIEL M. DULASKI PH.D.

This semester, the UMass Amherst Student Chapter of ITE, would like to spotlight Dr. Daniel M. Dulaski, former UMass ITE member and Chapter President. Dulaski received his Masters and Doctorate degrees from UMass Amherst in 1999 and 2005, respectively. He had received his Bachelors Degree from the University of Lowell (currently UMass Lowell) back in 1993. Dan’s doctoral studies focused on improving roadway safety through advancements in traffic control devices.

Prior to returning to UMass Amherst for his Ph.D., Dan served as the Town Engineer for Amherst, MA. While employed, he was able to redesign part of North Pleasant Street through the busy downtown to safely accommodate bicycles. Following his employment with the town, Dan was hired as a consultant to identify countermeasures that could be used on State Route 116, adjacent to Amherst College, to address pedestrian safety issues related with crossing a high-speed roadway. This culminated with the addition of refuge islands which have proved to be a great success.

Upon graduating, Dan was hire as a principle and chief engineer for Traffic Solutions, LLC in Boston, MA. He also served as an adjunct faculty member at Merrimack College. This allowed Dan to share his professional experiences with future transportation professionals.

In January 2009, Dan excepted a position as an Academic Specialist at Northeastern University in Boston, MA. While at Northeastern University, Dan’s research interests include transportation safety, geometric design, Intelligent Transportation Systems, traffic calming, and human factors. He is serving as the faculty advisor to the Northeastern University Student Chapter of ITE.

Within ITE, Dan was awarded the Student Service Award from the UMass Student Chapter in 2005. He has also held the position of Vice-Chair of the ITE Education Council. Dan is currently serving as the NEITE Young Professional’s and Mentoring Chair.

Dan currently resides in Quincy, MA with his wife Tina.

Dr. Daniel M. Dulaski is the newest faculty member on the Civil Engineer staff at Northeastern University

Photo Source: Northeastern University