



DRIVER

Message from our President

It is my pleasure to share with you all the accomplishments our growing South Carolina Section has been up to this spring.

Our Spring meeting was well attended and very informative. Mr. Jeff Baxter, the Director of Development from the Noisette Company gave us a better understanding of the redevelopment efforts at the Navy Yard in Charleston.



Liz Carpenter, PE
AECOM

Ryan Eckenrode organized an upstate webinar on “Traffic Studies for Implementing Short-Term and Long –Range Roadway Improvements”. The webinar was hosted by AECOM in Greenville, SC and there were 15 members in attendance.

We had 18 members travel to the Southern District Meeting in Lexington, KY. Our Chapter was recognized as the 2011 Outstanding Section Runner-Up. Our Clemson Student Chapter was chosen Best Student Chapter Runner-Up next to 19 student chapters, way to go Tigers! The Clemson Student Chapter also participated in the traffic bowl, great job Jennifer, Kweku, Yiming, and Kevin. Our very own Howard Chapman was presented with the very distinguished John F. Exnicios Government Employee Outstanding Service Award. Although it was a great learning experience and there were very many informative technical sessions, there was also a little time for some fun. Our very own Mike Ridgeway won first place in a barefoot human race around the horse race track.

Please take a moment to mark your Calendars for our upcoming Fall Golf Tournament /meeting (September 6th) and our Christmas Party (December 6th). Hope to see you all soon and please have a safe and fun summer.

Liz

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**2012 dues
are now
due.
Please
pay
Joe
Sturm
ASAP.**

SCHOLARSHIP GOLF TOURNAMENT
THURSDAY SEPTEMBER 6TH

Please mark your calendars for **Thursday September 6th 2012** for the Annual SCSITE Scholarship Golf Tournament. We will once again be playing at Northwood's Golf Course in Columbia. We raised \$6,500 last year for scholarships; a real testament to our section. Let's keep it going!

We have a very special guest speaker this year. **Secretary of Transportation Robert J. St. Onge** has committed to be our speaker. We will try to get him on the links too.

Once again this will be the most affordable and most fun golf tournament you will find! No where else will you get golf, cookout, snacks and beverages for \$50; and it's for a good cause! (...and a chance to get your name on the prestigious DON TURNER CHAMPIONSHIP JUG).

Shoot me an email now and avoid the hassle of me calling you and asking for money! If you are a first timer, we will make you a beautiful sign for the golf course and sing your praises in upcoming emails/newsletters. The hole sponsorships are where we make our money. This is \$150 that is well spent.

Similar to last year we will have a few beverage cart sponsors available. These will be \$200, but you get your name paraded all over the course with our lovely cart people. Yes you can sponsor both a hole and a beverage cart!

If you are interested in helping out with the tournament as a cart girl/boy, please drop me a line. I promise you will have a blast.

Remember, golfers of all ability are welcome in this tournament. We will have closest to the pin and long drive competitions. I look forward to seeing you all soon.

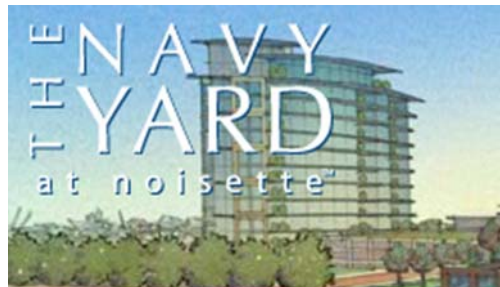
Mike Ridgeway 803-252-1799 mridgeway@srsengr.com

Spring Meeting Held in Lowcountry *Joe Sturm*

On a pleasant day in late March, the section had a fabulous spring meeting at the site of the former Charleston Navy Yard located in North Charleston, SC. The Yard is undergoing some radical changes in order to make it a desirable and sustainable place for people to live, work, and play. Therefore, was a perfect spot to learn more about land-use planning and sustainable design.

Jeff Baxter of the Noisette Company, the company leading the revitalization effort that owns much of the former Navy Yard, gave the lecture and provided insights into issues dealing with the transformation. Two of the challenges regarding the transformation involve planning for a currently unknown placement of a rail storage yard and handling political pressures from various angles.

In his current role as a project manager with Noisette, Jeff focuses on planning and development efforts, as well as historic preservation. Most recently, Jeff has been a project manager for the rehabilitation of 10 Storehouse Row, which was the building where the meeting took place. We are thankful to Jeff for his time and for sharing his insights with us on this complex venture.



Summer Meeting Held at IBHS Research Center *Liz Carpenter*

The SCSITE Summer Meeting was held at the Disaster Research Center in Richburg, SC. It was a beautiful day to be out and about on a tour. One of the most interesting things heard on the tour was that it just cost \$3,000 to use fortified upgraded materials (stronger nails, roof straps, front door open to outside) to invest in a safer, stronger home.

We had around 22 attendees. There was a presentation, campus tour, and question and answer session of the 10 Risks associated with the disaster research.

- Earthquake
- Flood
- Freezing Weather
- Hail
- High Winds
- Hurricane
- Lightning
- Tornado
- Water Damage
- Wildfire



If you missed the meeting, you will find some information on the research center and great demonstrations of what the center is all about on the website www.disastersafety.org.

Legislative Update *Gaye Sprague*

As of this writing, the SC legislative year is coming to a close and the texting while driving bill, H.4451, is on the Senate calendar for second reading consideration and could be taken up as soon as today. There have been a lot of questions, comments, etc. on the Senate floor and it has been carried over numerous times. As it currently exists, any person under the age of 18 would be prohibited from using an electronic device while driving a motor vehicle. For persons aged 18 and older, the only prohibition is when driving through a school zone or highway work zone. There are still several steps for the bill to go through so stayed tuned to see if the bill passed and missed any vetos by mid-June.

A proviso regarding DOT was adopted and will become law for one year unless it is deleted by the House or budget conference committee: **Amendment No. 95 - Funds appropriated in this section (of the DOT law) shall be made available to any property owner whose property value has been diminished by any federal or state statute, including regulations, procedures, manuals, or rulings, that restricts complete ingress or egress to the identified property. A property owner shall make application to the department on forms provided by the department for a specific dollar amount, based on the fair market value of the property as if complete ingress and egress were allowed. The department shall make a determination within thirty days from receipt of the application and shall notify the applicant of its determination. If legal action is initiated against the department, and the court subsequently vacates the department's determination or the court rules in favor of the property owner, the department shall pay all court and legal costs of the property owner, in addition to the requested value of the property.**



Gaye Sprague, PE

Sprague & Sprague
CONSULTING ENGINEERS

Update: Amendment No. 95 was pulled as of 6/4/12.

Treasurer's Report *Joe Sturm*



Joe Sturm



As of 5/15/12, the section's checking account stands at **\$7,001.48**. We were able to contribute \$11,000 to our scholarship funds at ITE HQ, so that deserves a round of applause. Our budget is on track with our expectations.

The scholarship balances, as of 5/15/12, are as follows:

Rowe **\$29,288.96**

Stafford Clark **\$32,172.45**

If you have not paid dues for 2012, please mail your payment to Joe at the following address:

Joe Sturm
SCDOT Traffic Engineering
 955 Park Street, Room 526
 Columbia, SC 29202



PAY YOUR DUES ONLINE WITH PAYPAL

After a while of exploring and learning the capabilities of the Pay Pal website, I was able to establish a Pay Pal account for our section and link it to the section's bank account. Now you can conveniently pay your Section Dues online through PayPal using your credit card. Note that you are not required to have a Pay Pal account to pay online.

If you have not yet paid your section dues for 2012, please visit the section's website at <http://www.scs-ite.org/>, click on the Pay Pal link (see the screenshot below), and follow the simple on-screen instructions. The entire process is quick and easy to follow. If you are unsure if your section dues are current, send me an email at SturmJP@scdot.org and I will let you know your status. Special thanks go out to Radha Swayampakala, an engineer with RS&H, for his help in making this a reality.



Jae H. Mattox, III, P.E.



Mattox Steps Down as Section Newsletter Editor

After 6 six years of serving as the Section Newsletter Editor, I think it is time to pass the torch on to someone new. Just to recap, the SCSITE Driver was born in the Fall of 2007 when I was serving as the Section Secretary/Treasurer. Since that time, with help from many, we have published a total of 17 newsletters.

On August 11, 2009 at the ITE Annual Meeting in Birmingham, Alabama, the SCSITE Driver received the International District and Section Newsletter Award. This was a major milestone as it was the first time that our section has won this award.

I have thoroughly enjoyed serving in this role and it has been a great way for me to build relationships with many people in the section. I plan to continue to assist with the newsletter but will be passing the Editor responsibilities to Rick Reiff of Stantec Engineering who has volunteered to be my successor. Please welcome Rick to this new role and support him in this effort as you have supported me.

Stantec add to Charleston Transportation Team

Josh Johnson recently joined Stantec’s Charleston office as a highway designer. Johnson will be involved with a range of highway and street design assignments throughout the Carolinas. His previous experience while with another engineering firm includes traffic analyses and highway design projects. Johnson is a 2009 graduate of Clemson University with a Bachelor of Science in Civil Engineering. He obtained a Master of Science in Civil Engineering from Clemson in 2010.

Johnson joins a growing team of design professionals in Stantec’s 25-person Charleston office. Services provided include transportation engineering, urban design, planning and landscape architecture, program and project management and buildings engineering.



Josh Johnson



Howard Chapman Received John F. Exnicios Government Employee Outstanding Service Award

The John F. Exnicios Government Employee Outstanding Service Award is presented to a member of the Southern District who, over a period of at least 10 years as an employee in government public service in the transportation field, has contributed outstanding service to the community, to the advancement of traffic and transportation engineering in the public sector arena, and the Southern District ITE. The 2011 recipient was Mr. Howard Chapman.

Continue reading about Mr. Chapman and the award in the Southern District section of this newsletter.



Howard Chapman, P.E.



Greenville County Sidewalk Improvements

Hesha N. Gamble, PE, PTOE

In 2009, Greenville County received a \$3.4 million energy efficiency grant from the Department of Energy in order to reduce fossil fuel emissions; reduce total energy use; and improve energy efficiency in the building sector, transportation sector, and other appropriate sectors, along with creating jobs. The County completed a long-range comprehensive audit of its 76 facilities and retrofitted several of the air, gas and lighting systems to be more energy efficient. These retro-fits are expected to save the County of Greenville in excess of 3,223,616.4 Kilowatts Per Hour annually. The County also used the money to support its award-winning air awareness campaign. While most of the grant went towards retrofit projects, \$1.15 million of this grant was allotted for sidewalk projects. These projects are all located in the vicinity of schools, helping to reduce emissions by reducing vehicle trips and providing alternate means of transportation to schools (via sidewalks). Many of the projects chosen by Greenville County helped to complete connections within the existing sidewalk network to allow for safe passage to and from schools. Between 2011 and 2012, sidewalks have been constructed along 16 different roads with 12 projects, improving walking/biking access to 10 different schools. These new sidewalks encourage a walking tradition in these areas beyond school-age children, which changes the culture of energy usage.



Meet Keith Riddle—New Member of SCSITE

Keith Riddle is the Safety Projects Engineer for SCDOT's Safety Project Development group. Keith graduated with a Bachelor of Science in Civil Engineering from Auburn University in 2001 and is a registered Professional Engineer in the state of South Carolina. Keith is a graduate of the Engineering Development Program. Keith has worked with SCDOT since 2002 and has worked in several offices, including the Letting Preparation Group, various Road Design squads, and the Design Standards Group. Keith is now responsible for managing various Safety Projects, executing Contracts, and providing support to Consultants throughout the life of a Project. Keith's hobbies include tennis, basketball, reading, mastering his Pulpo a la Gallega recipe, and watching movies.



Keith Riddle, P.E.



Meet Doug Giovanetti—New Member of SCSITE

Doug Giovanetti is a Design Review Engineer in SCDOT's Traffic Engineering Office. Originally from Sao Paulo, Brazil, Doug grew up in Orangeburg and graduated with a Bachelor of Science in Civil Engineering from the University of South Carolina in 2003. He is a registered PE in the state of SC and has been with SCDOT for 8 years, working in Road Design and Work Zone Traffic Control before joining the Design Review section of Traffic Engineering. His personal interest include home renovation, backpacking, playing organized kickball, solo space travel, and spending time with his two rescue pups.

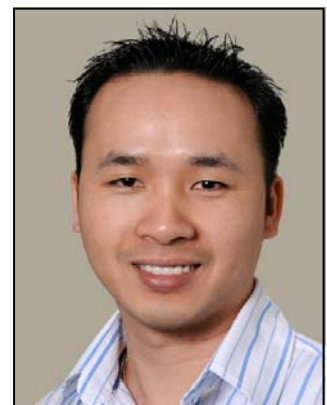


Doug Giovanetti, P.E.



Meet Minhkai Nguyen—New Member of SCSITE

My name is Minhkhai Nguyen. I'm from Vietnam. I came to live in the United States from 1996. I'm working at Traffic Signals and System at SCDOT headquarters about 4 years from now. I graduated at Midlands Tech College for Associate Degree in Computer Technology at May 2005. Also, I graduated at University of SC for Bachelor of Science in Electrical Engineering at May 2006 and Master of Engineering in Electrical Engineering at August 2007. I'm very happy to be ITE member.



Minhkai Nguyen





Lori Mahany, PE, PTOE



The Annual Meeting of the Southern District of the Institute of Transportation Engineers was held in Lexington, Kentucky in April. This year's meeting was a joint meeting between the Southern and Great Lakes Districts, giving attendees an opportunity to reconnect with both old friends and new. As with previous Southern District meetings, the South Carolina Section was well represented with officers, members and student members attending the meeting. The South Carolina Section was recognized for outstanding achievements of individual members and the section as a whole.

Here are some specific meeting highlights:

2011 SDITE Student Awards Winners Recognized

Winners of the 2011 SDITE Awards for students and student chapters were announced at the Annual Meeting in Lafayette. In addition to representing the South Carolina Section in the District Traffic Bowl competition, the Clemson University Chapter also took chapter honors.

Best Student Chapter Runner-Up Award – Clemson University

2011 SDITE Individual Award Winners Recognized

Award recipients were recognized for their outstanding service at the Southern District Annual Meeting Banquet. Five awards were presented, including one to the South Carolina Section's own Mr. Howard Chapman. These awards are a great honor and represent the best of the Southern District. The winners for the 2011 slate of awards were as follows:

John F. Exnicios Government Employee Outstanding Service Award – Howard R. Chapman

The John F. Exnicios Government Employee Outstanding Service Award is presented to a member of the Southern District who, over a period of at least 10 years as an employee in government public service in the transportation field, has contributed outstanding service to the community, to the advancement of traffic and transportation engineering in the public sector arena, and the Southern District ITE. The 2011 recipient was Mr. Howard Chapman.

Mr. Chapman received his B.S. degree from VMI and a M.S. degree from the University of South Carolina. He is a Registered Professional Engineer and a Lieutenant in the US Air Force Reserves/Retired. He was the Director of the Department of Traffic and Transportation for Charleston, South Carolina and then became the Director of the Charleston Area Regional Transportation Authority (CARTA), overseeing the changeover of the system from operation by the electric utility to operation by the newly formed CARTA.

For one year after Hurricane Hugo, Mr. Chapman served as Deputy to the Mayor of Charleston and assisted with distribution of food, clothing, and building supplies throughout the Lowcountry. He has served as Director of Emergency Operations for Charleston and has worked with the South Carolina Downtown Development Association on a number of Main Street programs throughout the state. He has been called on by the Governor of South Carolina, the Lieutenant Governor of Florida, and the US Secretary of Transportation to share his expertise in hurricane evacuation and assistance to hurricane victims.

Mr. Chapman has served in all offices of the South Carolina Section and is a Past President of the Southern District. He is a recipient of the Southern District's Hensley and Hoose Awards and the South Carolina Section Outstanding Traffic Engineer of the Year Award.

As a community volunteer, he currently serves on the Charleston County Transportation Committee and has served as a member of the Mount Pleasant Planning Commission. He has served as President of the State Safety Council and was a founding member of the Mount Pleasant Tree Commission among many other community activities.

2011 SDITE Section Award Winners Recognized

The Southern District has divided the eight Sections into two groups based on size for the Section Award competition. Group 1 is comprised of Alabama, Deep South, Kentucky and South Carolina. Group 2 is comprised of Georgia, North Carolina, Tennessee and Virginia. The South Carolina section was named the 2011 Outstanding Section Runner-Up Award (Group 2) – South Carolina Section.

2011 SDITE Officer Elections

Election for 2013 SDITE Officers was held at the Annual Business Meeting in Lafayette on April 12th. The South Carolina Section was well represented by Bryan Webb in the election for Secretary/Treasurer. The results of the election were as follows:

President – Martin Bretherton (Georgia)

Vice President – Kirsten Tynch (Virginia)

Secretary/Treasurer – Bill Seymour (Kentucky)



ITE 2013 International Officer Elections

Congratulations to Zaki Mustafa, P.E. (F) and W. Hibbett Neel, Jr., P.E. (F) on their nominations to serve as ITE International President and International Vice President, respectively, for 2013. While both candidates are unopposed, please be sure to cast your ballot to show your support for these candidates. Mr. Neel represents the Southern District and has been a leader at the Section, District and International levels.

ITE 2012 Annual Meeting and Exhibit – Atlanta, GA

The ITE 2012 Annual Meeting and Exhibit is being held in Atlanta, GA August 12-15. For those of you who have attended previous Southern District meetings, the Local Arrangements Committee promises that the meeting will incorporate many of the features and activities of a typical Southern District meeting including a great spouse program.

Please consider attending this meeting where there will be many informative technical sessions as well as technical tours and seminars, including two presentations by members of the South Carolina Section:

Engaging Stakeholders Leadership Module – Rick Day

Determination of Origin-Destination Using Bluetooth Technology – Rick Reiff



New OTISS Software for Traffic Impact Studies

ITE and Transoft Solutions are taking trip generation into the next generation with OTISS. OTISS is an on-demand, cloud-based application for transportation professionals who need to perform traffic impact analyses. Built into the software are over 4500 datasets which form the basis of the 8th Edition ITE Trip Generation Informational Reports

OTISS makes it easy to look up trip generation data and complete adjustments for trip reductions, internal capture, and pass-by trips for proposed single or multiple land use developments.

SCSITE SHIRTS FOR SALE

Please contact Joe Sturm if you are interested in ordering an ITE Logo Shirt



Project Time Management *Sreekanth Nandagiri, P.E., PMP*



Sunny Nandagiri, PE, PMP



Project Time Management includes the processes required to accomplish timely completion of the project. Processes involved in the project time management include:

- Activity Definition-Identifying the specific schedule activities that need to be performed to produce the various project deliverables
- Activity Sequencing-Identifying and documenting dependencies among schedule activities
- Activity Resource Estimation-Estimating the type and quantities of resources required to perform each schedule activity
- Activity Duration Estimation-Estimating the number of work periods that will be needed to complete individual schedule activities
- Schedule Development-Analyzing activity sequences, durations, resource requirements, and schedule constraints to create the project schedule

In this article, let us try to understand the first process of the project time management, i.e., activity definition:

Activity Definition:

Defining the schedule activities involves identifying and documenting the work that is planned to be performed. The activity Definition process will identify the deliverables at the lowest level in the work breakdown structure (WBS), which is called the work package. Project work packages are planned (decomposed) into smaller components called schedule activities to provide a basis for estimating, scheduling, executing, and monitoring and controlling the project work. Define activities involves examining the lowest level of the WBS, called work packages, and breaking them down even further into activities. For example, if a work package was “bake a birthday cake,” the activities derived from this could include: select recipe, determine which ingredients needed to be bought, buy ingredients, preheat oven, mix ingredients, place ingredients in cake pan, place in oven, and remove from oven when done.

Inputs for Activity Definition include:

- Enterprise Environmental Factors-Include availability of project management information systems and scheduling software tools
- Organization Process Assets-Contain the existing formal and informal activity planning-related policies, procedures, and guidelines that are considered in developing the activity definitions
- Project Scope Document-The project deliverables, constraints, and assumptions documented in the project scope statement are considered explicitly during activity definition
- Work Breakdown Structure-It is a primary input to schedule activity definition
- Work Breakdown Structure Dictionary-It is a primary input to schedule activity definition
- Project Management Plan Dictionary-It contains the schedule management plan which provides guidance on the development and planning of schedule activities and the project scope management plan.

Project Time Management cont.

Tools and techniques for Activity Definition include:

- Decomposition-Involves sub-dividing the project package into smaller, more manageable components called schedule activities
- Templates-A standard activity list or a portion of an activity from a previous project is often usable as a template for a new project
- Rolling wave planning-It is a form of progressive elaboration planning where the work to be accomplished in the near term is planned in detail at a low level of the WBS, while work far in the future is planned for WBS components that are at a relatively high level of the WBS
- Expert judgment-Project team members or other experts who are experienced and skilled in developing detailed scope statements, WBSs, and project schedules can provide expertise in defining activities
- Planning component-When insufficient definition of the project scope is available to decompose a branch of the WBS down to the work package level; the last component in that branch of the WBS can be used to develop a high-level project schedule for that component.

Outputs for Activity Definition include:

- Activity List-It is a comprehensive list including all schedule activities that are planned to be performed on the project
- Activity Attributes-These are an extension of the activity attributes in the activity list and identify the multiple attributes associated with each schedule activity.
- Milestone List-The list of schedule milestones identifies all milestones and indicates whether the milestone is mandatory (required by the contract) or optional (based upon project requirements or historical information)
- Requested changes-The activity definition process can generate requested changes that can affect the project scope statement and WBS. Requested changes are processed for review and disposition through the Integrated Change Control process

Author of this article is a licensed Professional Engineer in Eight States (including South Carolina) and is also a certified "Project Management Professional" (PMP). He is an active member of the South Carolina Section of ITE (SC-ITE) and is currently serving as a Technical Committee chair for the SC-ITE.

Mr. Nandagiri works for AECOM as their Associate Vice President.

Sources for this Article: *Project Management Institute's "Project Management Body of Knowledge" (PMBOK), 2000 and 2007 Editions, <http://tapuniversity.com/2009/03/03/define-activities-process/> and the AECOM's Project Management's internal training material.*

SCSU ITE Student Chapter News *Judith Mwakalonge*



Judith Mwakalonge, PhD
SCSU ITE Student Chapter Advisor

Spring semester was very productive for SCSU ITE chapter. On May 4, 2012, the President of SCSU ITE chapter graduated from South Carolina State University and he will continue his education at the University of Massachusetts at Lowell. Mr. Bradley, will pursue his Ph.D. in Civil Engineering: Transportation. SCSU ITE chapter appreciates his service as the president, wishes him all the best in his studies at UMass, Lowell, and will miss him. New leaders were elected with Mr. Brunner serving as the president, Ms. Johnson as the Vice President, and Ms. Tebyanian as the secretary.

Three students presented their research papers at the 53rd Transportation Research Forum Annual Meeting. Mr. Curtis Bradley presented a paper entitled "Factors to be considered in Planning High Speed Rails: Southeast Corridor of the United States". Mr. Chris Douglas presented a paper entitled "A Walk on the safe side: an in Depth Look at the safe and complete streets act of 2011". Mr. Andrew Brunner presented a paper entitled "The Effects of Urban Sprawl on Daily Life: Determining the Best Measures to Address Them". In addition, Ms. Fariba Tebyanian attended the 2012 SDITE / GLDITE Joint Annual Meeting in Lexington, Kentucky and presented a paper entitled "Bluetooth Technology for Travel Time Data Collection: Errors Involved & Correction Measures".

The SCSU ITE chapter is very happy for Mr. Andrew Brunner for being the 2nd Place winner of the Graduate Student Paper Award for 2012 for Transportation Research Forum. The picture below shows Mr. Brunner receiving his award at the 53rd Transportation Research Forum Annual Meeting.

On March 19, 2012, Mr. Jae Mattox from SCDOT served as the key speaker at the SCSU ITE Chapter meeting. The chapter enjoyed his presentation and appreciates Mr. Mattox for taking his time to come to speak with SCSU students.



Curtis Bradley, Chris Douglas, and Andrew Bunner at the TRF Annual Meeting

College Corner

News from the Citadel ITE Student Chapter *W. Jeff Davis*

SC Section ITE Spring Meeting - 15 Citadel students attended the SC Section ITE Spring Meeting held March 20 on the former N. Charleston Navy Base. Students networked with ITE members and learned about land use and transportation issues, which are underway to transform the Noisette and Park Circle areas of N. Charleston.

Battery 2 Beach – Work on the 2-year long Battery 2 Beach Service Learning project came to a close with a press conference on May 18, bike to work day. The press conference was held at the new boardwalk on Shem Creek and included all three local news stations. Nathan Fultz and Jon Tousignant spoke with news media. Coverage also included an article and editorial in the Post & Courier, as well as a forthcoming article in the Charleston Business Journal. This Battery 2 Beach is 32-mile bicycle and pedestrian facility that will improve non-motorized transportation in the Charleston area. Citadel students partnered with Charleston Moves, College of Charleston, and other organizations to conduct a benefit-cost study of the B2B route that will link Charleston's Battery with Sullivan's Island, Isle of Palms and Folly Beach.

2012 Robert Ridgway Award Winners - Civil engineering students are winners of the 2012 ASCE Robert Ridgway Award, recognizing The Citadel as the most outstanding Student Chapter of the American Society of Civil Engineers. ASCE's national committee on student activities determines the winning school through a rigorous review process based on evaluation of a comprehensive annual report prepared by student officers. The Citadel was selected as the top school from a field of 25,000 students at 281 colleges and universities across the US and 11 countries. 2012 marks the first time in school history The Citadel received this prestigious award.

A critical component in receiving this recognition was the students' work on the Battery 2 Beach service learning project. "Winning this prestigious award is the result of many hard years of student teamwork and excellent faculty support," said Clay Settle, the ASCE student chapter president.



**William J. Davis, PE,
PhD
Citadel ITE Stu-**



Summer 2012

News from the Student Chapter *Daniel Baker*



Nathan Huynh, PhD
Student Chapter Advisor



This past semester, USC ITE held a meeting sponsored by CDM Smith and sent several members to the annual ASCE conference known as Carolina's Conference. At the ITE meeting, Bill Huffstetler, P.E. spoke to USC ITE about the challenges CDM Smith faced in Louisiana during the design and construction phases of the LA-1, Gateway to the Gulf Project. Mr. Huffstetler's presentation included a discussion on the structural design of the project, as well as the impact of the project on the surrounding communities. As previously noted, USC ITE sent a few members to the annual Carolina's Conference. At this conference, several members competed in the transportation portion of the competition. This section focused on the design a roadway system which required crest and sag vertical curves. In the fall of 2012, USC ITE is planning on having 3 meetings spaced throughout the semester. We would like to extend an invitation to all ITE professionals who are interested in joining one of the meetings! More details will be presented as the meeting times are solidified!

USC Student Chapter Officers

Spencer Senerman, USC ITE President

Stetson Rowles, USC ITE Vice-President

Kenny Martin, USC ITE Secretary



Update from Tiger Town *Jennifer Johnson*

The Clemson Chapter of the Institute of Transportation Engineers continues to be an active and influential student chapter both on campus and in the community. During the spring semester, the Clemson Chapter was focused on their safety campaign for no texting while driving as well as serving the community in numerous projects such as Math Counts and Clemson University's Engineering & Science Week Exposition for local 2nd grade students.

PROFESSIONAL DEVELOPMENT

Clemson ITE has hosted several seminars and workshops for its members throughout the year. One recent outing included a field trip to the Columbia, SC, Traffic Management Center. Throughout this trip, the group was able to visit the TMC and learn about ITS technologies as well as spend some time with a DOT Technician and gain hands on experiment with varying Traffic Signal Devices.

TECHNICAL PROJECTS & CONFERENCES

Once again, the Chapter had a great time at the SDITE Annual Meeting held in Lexington, KY. Traffic Bowl team members, Jennifer Johnson, Kevin Baumann, and Lee Tupper, led the Clemson team to a 2nd place finish, and the Clemson Chapter was also runner-up for the SDITE Best Chapter Award. The Chapter is looking forward to attending the International Meeting later this summer in Atlanta, GA. Numerous members also attended SCSITE Spring Meetings in Charleston, SC, and Greenville, SC. Even more, the Chapter actively participated in an study to help the Auburn ITE Student Chapter in their research on a trip generation of apartments close to colleges.



SERVICE PROJECTS

Throughout the spring, the Chapter worked diligently on their new safety campaign that encourages no texting while driving. The Chapter ordered over 11,000 bracelets promoting "Stay Alive – Don't Text & Drive" and also created a website (www.clemsonITE.org) where people can sign a Text Free Pledge. For the second year in a row, the Chapter organized the South Carolina state 5th grade bicycling poster competition for the Saris Cycling Group national competition. The Chapter sponsored a party at the school of the winning 5th grader. Other Chapter activities included a GPS Scavenger Hunt for local school-age students and sponsoring two competitions (surveying and transportation) at ASCE Carolina's Conference which was held at Clemson University this year.



Stay Alive – Don't Text & Drive!



Wayne Sarasua, PhD, PE
Student Chapter Advisor



Jennifer Ogle, PhD
Student Chapter Advisor



Chapter Vice-President Kevin Baumann with
the winning 5th Grader Destiny Roach

In|Sync®

Moving traffic faster and more safely

InSync substantially reduces crashes, travel time, stops, fuel consumption and emissions. This is why more agencies choose InSync than any other adaptive traffic control solution. With InSync, signals are automatically optimized and coordinated based on actual demand. Because InSync adapts immediately without the constraints of typical traffic control hardware, the benefits are unmatched by any traffic management solution.

The Benefits of InSync



- Proven to reduce crashes up to 30%, travel time up to 50%, stops up to 90% and fuel consumption and emissions up to 25%
- Total deployment timeline is 90 days or less
- Overlay system is 100% interoperable with all modern controllers, cabinets, detection and central systems and can be installed in less than four hours per intersection
- Live views for monitoring corridor from any browser if agency chooses to include cameras with its system
- Pricing competitive with standard detection systems but includes full InSync functionality
- Requires virtually no staff time for ongoing operations
- Powerful tools for local traffic professionals to view, monitor and provide input on ongoing operations on any web-enabled PC
- No ongoing licensing or maintenance fees required
- Two-year hardware and software warranty and unlimited technical support

INSYNC BREADTH OF DEPLOYMENTS

As of March 2012	Deployed	Scheduled	Total
Intersections	404	245	649
Corridors	65	40	105
Cities	36	24	55
States	14	12	18

INSYNC BEST PEAK TIME RESULTS

City	Performance measurement in terms of reduction to:					Annual savings to motorists
	Stops	Delay	Travel Time	Fuel	Emissions	
Columbia, MO	90%	77%	29%	16%	25%	\$1,984,411
Evans, GA	100%	78%	48%	32%	39%	\$2,624,802
Grapevine, TX	88%	81%	45%	31%	40%	\$8,067,234
Lee's Summit, MO	95%	78%	32%	19%	41%	\$2,452,493
Salinas, CA	91%	89%	46%	N/A	N/A	\$1,722,152
San Ramon, CA	82%	85%	50%	38%	38%	\$2,333,636
Springdale, AR	93%	86%	42%	26%	35%	\$5,083,254
Topoka, KS	90%	71%	49%	36%	38%	\$2,087,501
Wichita, KS	100%	89%	44%	28%	42%	\$ 975,260
Upper Merion, PA	86%	76%	26%	28%	30%	\$ 802,204



Lead Bridge Engineer & Roadway Design Engineer—PB, Columbia, SC

HDR is seeking a lead Bridge Engineer and mid-level roadway design engineer in Columbia, SC

Read the detailed job descriptions and apply online at <http://www.pbworld.com/>



Resident Construction Engineer/Project Manager —Greenville, SC

F&H is seeking a Construction Project Manager, CE&I Project Manager, and Civil Engineer in Greenville

Read the detailed job description and apply online at <http://www.flohut.com/index.php/careers>



Bridge and Roadway Engineer —Charleston, SC

Stantec is seeking two structural engineers for their Charleston office.

Read the detailed job description and apply online at <http://www.stantec.com>



Stantec

Roadway and Bridge Engineers —Greenville & Fort Mill, SC

URS is seeking two engineers in South Carolina

Read the detailed job description and apply online at www.urs.com



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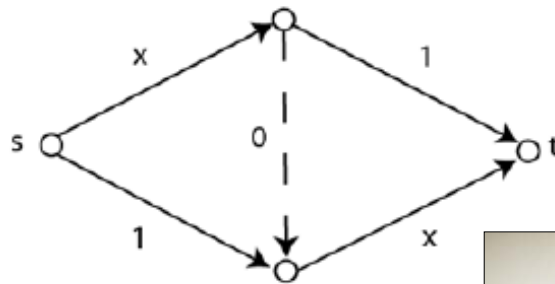
Question 1:

On the back seat of a car lies a spirit level. When the car goes around a sharp bend, which way will the bubble in the level move: towards the curb or towards the middle of road?



Question 2:

Who theorized that for some traffic patterns, increased road capacity (even if the total number of individual drivers does not increase) can lead to more congestion, and what is this theory known as?



Be the first to answer the questions correctly and you will be recognized in the next newsletter and receive a \$5 discount at the next meeting. Email your answer to davisas@scdot.org.



Alan S. Davis, PE



Last Issue's Challenge

Manuel Morales was the winner of the last issue's challenge. Manuel works for Southeastern Safety Systems, Inc.



Manuel Morales

Solutions

Question 1:

A frog sits on a lily pad in the precise middle of a circular pond with a radius of 6 meters. He jumps straight towards the edge of the pond a distance of 3 meters but this tires him and every subsequent jump is precisely half the distance of the jump before it (ie, 1.5 meters, 75 centimeters, etc.). How many jumps does it take him to reach the edge of the pond?



A: The frog will never reach the edge.

Question 2:

Sue Sugar had a toothache. She went to the only dentist office in town where she was greeted by Dr. Molar and Dr. Bicuspid, the partners. She noticed that whereas Dr. Molar had a wonderful set of teeth, his partner's teeth seemed in urgent need of attention.



With which partner should she book her appointment?

A: Dr. Bicuspid. Since these are the only two dentists in town it is certain they do each other's dental work. Therefore Dr. Molar must be responsible for the poor state of his partner's teeth and should be avoided.



2012 Section Officers

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About ITE

The Institute of Transportation Engineers is an international educational and scientific association of transportation professionals who are responsible for meeting mobility and safety needs. ITE facilitates the application of technology and scientific principles to research, planning, functional design, implementation, operation, policy development and management for any mode of transportation. Through its products and services, ITE promotes professional development of its members, supports and encourages education, stimulates research, develops public awareness programs and serves as a conduit for the exchange of professional information.

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The Facebook logo, consisting of the word "facebook" in white lowercase letters on a dark blue rectangular background.

We are on the web at
www.scs-ite.org

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“DRIVER” is the official publication of the South Carolina Section Institute of Transportation Engineers, the professional society for transportation engineers in South Carolina. It is affiliated with Southern District 5 ITE, as well as the International ITE.

Any suggestions on format or content are welcome. News on members, the section, or the profession should be submitted to Jae Mattox at mattoxjh@scdot.org.