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And Now the Students ...

Previous versions of this newsletter have been dedicated to the different themes of the Georgia Transportation Institute/University Transportation Center (GTI/UTC), economic development, system productivity and transportation finance. In each newsletter, we highlighted some of the achievements of the students who have been funded with GTI/UTC funds and the recognition they have received from national organizations. This newsletter will primarily focus on our students....simply because this year has been amazing in what they have accomplished.

I came to Georgia Tech 21 years ago with the goal of building a transportation research and educational program that would be internationally and nationally recognized. At the time (1988), there were five transportation graduate students in the program, with three civil engineering professors responsible for teaching and research. Twenty one years later, there will be 65 transportation graduate students in the civil engineering program this coming fall, with many more found in city planning, public policy, logistics, economics and in our partner institutions. Of the 65, 12 are women pursuing Ph.D. degrees. Boy, has transportation as a field of study grown over the past 20 years!!

Perhaps most importantly, the quality of the students being attracted to the transportation graduate program has been phenomenal. This year, four of our transportation graduate students received National Science Foundation Graduate Research Fellowships....to my knowledge an unprecedented number of such fellowships offered to one transportation program in one year. Three of our graduate students won Eisenhower Fellowships, and one of our students received a Fulbright Fellowship to study climate change and transportation in Europe...one of the few such fellowships offered to students in civil engineering. Two of our students received Eno awards to attend it's Leadership Conference Our students won numerous other awards and scholarships from a variety of organizations as well (last year, 39 of our 60 graduate students won some form of scholarship or award).



Director Dr. Michael Meyer

Why has this increase in numbers and quality occurred? I suspect there are many reasons having to do with the rising importance of the transportation sector in the economy and its relationship to such things as the environment. However, it is important to recognize the impact of UTC funds on what has happened, at least at our Center. Without UTC dollars, and the matching support we receive from the Georgia Department of Transportation, we would have nowhere near the program we have today. The ability to support students in research projects that are of interest and importance to the nation, state and local community cannot be measured simply in the amount of dollars expended. The graduates of our program, and of all the other UTC programs, are the transportation professionals of tomorrow. They will be the ones dealing with the transportation challenges and problems facing society in the future. And hopefully they are the ones that will be using the knowledge and experience gained while working on UTC-supported research who will develop the strategies and actions to meet these challenges.

— Michael D. Meyer, Director

Dr. Adjo Amekudzi to Step Down as Deputy Director of GTI/UTC



Dr. Adjo Amekudzi

Dr. Adjo Amekudzi has been the Deputy Director of GTI/UTC since the Center was created. She was responsible for coordinating the Center's research program and working with the Center's partners in developing an overall strategy for research, education and technology dissemination. Adjo has decided to step down from this position so that she can concentrate on her research and professional activities (she will also be taking a leave of absence next year in Ghana, teaching at Kwame Nkrumah University of Science and Technology, Kumasi).

Dr. Amekudzi is a professional leader in three major areas of civil engineering: civil infrastructure management (most notably asset management), sustainability and transportation planning. Her technical contributions focus on defining and refining analytical and quantitative methodologies in several sub areas of infrastructure management. Her ideas (as articulated in her peer-reviewed publications) have strengthened transportation policy decision-making by developing new strategies for integrating redevelopment and transportation development, integrating environmental considerations into transportation planning, and incorporating concepts of sustainability into transportation planning.

Adjo, thank you for all your hard work and contributions to the GTI/UTC!!

Dr. Michael Hunter to be Deputy Director of GTI/UTC

Dr. Michael Hunter will assume the responsibilities of the Deputy Director of GTI/UTC. Dr. Hunter's primary teaching and research interests are in transportation operations and design, specializing in adaptive signal control, traffic simulation, freeway geometric design, and arterial corridor operations. Mike obtained his B.S. in Civil Engineering from Rensselaer Polytechnic University (1992), his M.S. in Civil Engineering from the University of Texas at Austin (1994), and his Ph.D. in Civil Engineering from the University of Texas at Austin (2003). After obtaining his M.S. he worked as a transportation engineer for several years at the Sear-Brown Group in Rochester, NY. He has conducted numerous traffic impact studies, signal timing projects, freeway operation evaluations, toll plaza analyzes, etc.

Mike, welcome to the Deputy Director position!!

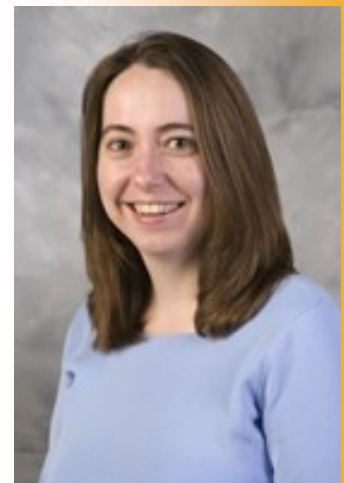


Dr. Michael Hunter
Dep. Director

Dr. Laurie Garrow to be Associate Director for Research of GTI/UTC

Dr. Laurie Garrow will assume the responsibilities of the Associate Director of Research for GTI/UTC. In this capacity, Laurie will oversee the Center's research solicitation and review process. She will also be responsible for making sure that research projects are completed on time. Laurie has an impressive track record of conducting research that has significantly impacted the airline industry, as well as other service industries, while simultaneously sparking new research in the discrete choice modeling and operations research areas. Dr. Garrow has received numerous awards and recognition among her academic colleagues. In 2009, she won a NSF CAREER award that was jointly funded by the Decision, Risk, and Management Science and Service Enterprise Systems programs. Her CAREER award is focused on understanding how the dynamics of customer search and purchase behaviors in online channels impacts firm profitability.

Laurie, welcome to the Associate Chair's position!!



Dr. Laurie Garrow
Assoc. Director

New Research Projects Identified

The following research projects have been selected through a peer review process for this coming year. The projects are presented by GTI/UTC program theme—economic development, system productivity, and transportation finance.

Economic Development

Effects of private transportation improvements on economic development: The opportunities and effects of public-private or private-private partnerships for mobility improvements (including alternative fueled shuttles and IT infrastructure) will be examined in this project. Their effects on local and regional economic development (including low income workers/households) will be assessed. The focus will be on South Atlanta and the region around the City of Hapeville where closure of the Ford Hapeville assembly plant has negatively impacted the local economy. The research team will partner with Ford Motor Company and a local development firm to study the extended benefits of an “Aerotropolis Atlanta” development planned for the site of the former Ford assembly plant. The study will assess the triple bottom line benefits of different mobility and transportation options for the site, surrounding neighborhoods, the adjacent Atlanta airport, and the regional transportation system, coupled with different energy generation and industrial co-location options. Increased understanding of such benefits will also impact developments at other former manufacturing sites.

Framework of inter-jurisdictional passenger travel and freight movement model: Intercity and interstate passenger travels, particularly between major metropolitan areas, occur along major corridors which are also main routes of truck commodity flows that account for 75 percent of total commodity flows by value in the U.S. and both directly and indirectly affect the economic competitiveness of the region, as well as the nation. Thus, critical infrastructural needs exist on a scale larger than current MPO boundaries as inter-jurisdictional cooperation can help regions, cities and towns compete globally as a cohesive region rather than competing solely against each other. This research will develop a model that estimates intercity (and interstate) passenger travel along with analysis of inter-jurisdictional commodity flows by mode.

Impact of environmental justice considerations in transportation planning and decision making: This project will 1) examine how Environmental Justice factors are being considered in the transportation planning and decision making process at GDOT, 2) examine how Environmental Justice factors are being considered in transportation planning and decision making in state DOTs and MPOs around the country, 3) assess how EJ has impacted transportation planning since the Environmental Justice Executive Order was adopted, relative to the best practices for considering EJ in transportation planning in state DOTs and MPOs around the country; and 4) develop and propose strategies for improving the current practice at GDOT. This final report will provide guidance on priority areas that can be focused on in the short and long terms to improve existing practice to meet (or exceed) best practice standards for addressing EJ in transportation planning and decision making.

Airport operations and economic development for medium and large hub airports: Economic development implications for Atlanta's Hartsfield-Jackson International Airport: In a recent study for the FAA on the economic development benefits from airport runway expansions (with a focus on Atlanta's Hartsfield-Jackson International Airport), covering a panel of 35 large and medium hub airports over a 12 year period (1996-2007), a translog model of airport short run operating costs was developed and estimated. The purpose of this proposal is to extend this analysis in five specific directions. First, data will be updated to 2008 and, if possible, 2009. Second, in order to isolate as much as possible the effects of airports and landing capacity on economic development, the sample for the original study only included MSAs with one commercial airport. Although not excluding Atlanta's Hartsfield-Jackson International Airport, this did eliminate many of the largest MSAs and airports (e.g. Los Angeles, Chicago, New York). The proposed study will include these airports and explore how, if at all, this alters the economic development benefits of additional runway capacity. Second, the proposed study will develop and estimate a two output cost model, freight shipped and passengers served, which will provide additional insights on airport production technology (e.g. economies of scope), and on the impact that air freight has on economic development. Third, the original analysis included number of runways as a quasi-fixed factor of production to the exclusion of airport operating characteristics (e.g. retail and repair services, elevation, runway characteristics) that affect airport costs. By collecting these data (which are available) and including operating characteristics in the model, it will be possible to obtain better estimates of the underlying technology and of the impact that additional runway capacity has upon airport operating costs and, ultimately, upon economic development. Fourth, based upon the more general model, the proposed study will identify the link between airport operations and economic development and will expand the set of economic development indicators analyzed in the original study.



A GTI/UTC research project will examine the economic impact of the world's busiest airport

System Productivity

Freight performance measures: An efficient trucking sector is essential to the State's economic prosperity. However, rapid growth in trucking is placing a growing burden on state highways, in terms of both pavement maintenance and repair costs and congestion-induced traffic delays. To support better freight planning this project will: (1) Develop a set of performance metrics that can be used to evaluate and track trucking industry performance and its impacts on the State's economy and the environment, identify developing problems, and plan improvements in truck freight mobility and access; (2) Identify and assess how well existing databases and other data sources support the proposed performance metrics, and (3) Identify methods and the level of effort required for collecting data to support improved performance measurement in the future. Special attention will be given to measures of travel time reliability, and to operation of the State's high volume, long haul trucking corridors and their linkages to within-state seaports and rail intermodal facilities.

Travel-time estimation and forecast for NaviGator: We will incorporate recent advances in traffic flow theory and simulation to build a framework able to provide short-term (up to ~30 min) travel time forecasts across the metropolitan Atlanta freeway network. This would allow us to predict the onset and propagation of congestion through the network, and to improve current "real-time" travel time estimates in NaviGator (which are usually displayed with a ~10 min delay). Because off-the-shelf commercial simulation packages do not perform well in saturated freeways, we will use a traffic simulation model being developed at Georgia Tech, which is able to predict realistic traffic dynamics on congested freeways.



Work zone technology test bed: The Georgia Tech team will adapt the communications technology test bed established for a National Science Foundation (NSF) distributed simulation project to evaluate the performance and suitability of construction work zone technologies. Such technologies would include various vehicle speed and presence detectors, flashing warning lights, etc. The current test bed, located between 10th Street to North Avenue, and Spring Street and the GT campus, will be adapted to provide data connectivity points that allow deployed technologies at pre-set locations to communicate with the GT server systems. Because the NSF test bed already has video monitoring systems in place, these corridors can be used to evaluate the accuracy, precision, and impact of these technologies. Once the test bed is operational, GDOT will be able to provide new technologies to the testing team, who will set up field experiments in the test bed to evaluate performance and verify manufacturer claims. The GT team will assess the suitability of the technologies for establishing benchmark and work zone performance metrics and evaluate communications demands. As technologies are verified, GT will work with the state DOT to undertake a construction zone deployment for final testing.

Transportation Finance

Assessment of the impact of future external factors on road revenues: National studies have concluded that future petroleum-based gas taxes are not likely going to be sufficient to meet the needs of state transportation programs. What will happen to annual transportation revenues in Georgia over the next 30 years if the Motor Fuel Tax is not replaced? How do these revenue streams change if many of the strategies proposed under demand management, clean air, land use and transportation planning to reduce VMT are successful? This study will examine key trends in Georgia, declining VMT, increasing gas mileage, denser land use, and travel demand management strategies, that will cumulatively act to reduce the level of funding generated from the motor vehicle tax. The study will quantify the likely impacts and identify alternative funding sources.

Implications of alternate revenue sources for transportation planning: As current funding sources are proving to be inadequate, alternative revenue sources, such as the VMT tax, sales tax, energy tax, parking tax, tolls, and others, are used or discussed around the United States to provide financing of transportation (improvement). In addition, these revenue sources are also designed in part to affect travel behaviors through the internalizing of travel costs. This research will measure stated and revealed behavior with respect to such alternative funding sources by conducting focus group and survey research.

Truck weigh station revenue analysis: This study will examine the institutional and financial structure of Georgia's truck weighing strategy. With declining state budgets, the staff working at the state's weigh stations has been reduced, resulting in fewer operating hours. The impact of this reduced operation on the number of overweight trucks operating on the road without permits will be examined in this research. This study will examine the recent history of truck weighing efforts in the United States and the corresponding impact on permit revenues. Recommendations will be made that in essence makes a business case for improving the operation of the weigh-in-motion stations.

Impact of regional special purpose sales taxes on local government's infrastructure funding: One of the popular funding strategies being considered in several states including Georgia is to allow local governments, especially counties, to create a transportation regional sales tax. This project would look at the implications of such a regional sales tax on the ability of counties to provide county-specific sales tax initiatives for transportation and other public services (e.g., schools).

Asset management: Inventory expansion: Recent developments in the asset management program at the Georgia DOT include linking strategic goals with asset management, and the adoption of risk-based performance targets and factors for resource allocation. To support the next steps, this project will answer the following questions: (1) what items after pavements and bridges should be considered for inclusion in the asset management program? (2) what inventory data should be gathered on the assets? (3) what are the determining factors to measure risks? and (4) how should the risk factors be determined?

GTI/UTC Studies MARTA Finance

The GTI/UTC, along with the University of Georgia, conducted a transit finance study for the Metropolitan Atlanta Rapid Transit Authority (MARTA). The purpose of the study was to examine a peer set of transit agencies and determine the relative standing of MARTA compared to this national peer set. The information found in this memorandum was produced from two major data sources. The first was the National Transit Database, which includes a wide range of data on transit ridership and financial statistics for the nation's transit properties. The second source was more detailed case studies of transit systems that are similar to MARTA, including the systems in Charlotte (NC), Dallas (TX), Houston (TX), Miami (FL), and Washington DC. The findings of the study include:

- Almost all of the transit systems considered to be MARTA's peer agencies have suffered ridership losses over the past two years, except in those cases (such as Denver) where transit service has been expanded significantly. Even in such cases, growth in ridership has been at a much slower rate than in recent years.
- Of MARTA's peer institutions, MARTA maintained one of the highest farebox recovery ratios from 2002 to 2008. The only peer agency that was consistently higher than MARTA was BART, which only operates heavy rail service.
- MARTA's peer institutions have a much wider operating funding base (more sources of funding) than that available to MARTA. In many cases, state and local governments provide direct assistance to the transit agency (in addition to sales tax revenues).
- Those that have a broader funding base seem to have established a more stable transit service with resulting stable ridership. This is not surprising given that the uncertainty of service cut-backs could cause riders to seek alternative means of travel.
- Similarly, MARTA's peer institutions have a much broader base of capital funding than that available to MARTA. Primarily, the funding base includes state and local funding that is not found in the MARTA case. Once again, those having such a broad base seem to have experienced more stable operations than MARTA even during the recent economic recession.
- Many of MARTA's peer institutions have been pursuing aggressive expansion of their transit services, primarily by adding bus rapid transit (BRT) and light rail services. The major funding source for the light rail services in particular has been a service area-specific sales tax.



GTI/UTC Student National Awards

GTI/UTC students have had a banner year in receiving national awards, including an unprecedented four NSF GRF Awards. The following students have received GTI/UTC funding that allowed them to establish the record of accomplishment that helped win the awards.

National Science Foundation Graduate Research Fellowships

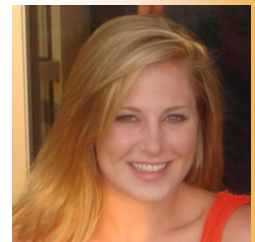
Donald Katz is a graduate of North Carolina State University, where as a student in the Park Scholarships program he earned a Bachelor of Science in Civil Engineering in May 2007. After graduation he spent one year in Dhaka, Bangladesh as a U.S. Fulbright Student Scholar. After his return to the United States, Donald spent several months researching at the Regional Plan Association in New York City studying high-speed rail options for the Northeast Corridor with America 2050. Subsequently, he conducted research at the Institute for Transportation Research and Education at N.C. State University on an evaluation of new highway work zone pavement markings as well as a study on the effects access management techniques have on local businesses.



Donald Katz

Donald began his graduate education at Georgia Tech in August 2009. Advised by Dr. Michael Meyer and Dr. Laurie Garrow, he is researching air traffic passenger and freight movements as they relate to megaregions. Flows within, between, and outside of megaregion hub cities will be compared to available airport capacity, and evaluated by the megaregion's attributes.

Brittany Luken is a Ph.D. candidate in Georgia Tech's Transportation Systems group. Under the guidance of Dr. Laurie Garrow, Brittany's research efforts are focused on investigating how online airline pricing and seat map information can be used to develop multi-airport choice models. She is also the recipient of a \$10,000 Airport Cooperative Research Program (ACRP) Graduate Research Fellowship, for which she is currently completing a paper analyzing airport catchment areas, and the recipient of a Georgia Department of Transportation and Gordon W. Schultz Graduate Fellowship.



Brittany Luken

Brittany is avidly involved in educational outreach, as well. This past summer she developed activities to introduce 7th and 8th grade girls to Transportation Engineering during the Technology Engineering and Computing Girl's Camp. Brittany also participated in Scout Day at the Fernbank Museum, where she taught elementary age boy and girl scouts about science. Brittany also mentored an undergraduate student for the Fall 2009 semester and helped her develop an interdisciplinary airport simulation project.

National Science Foundation Graduate Research Fellowships



J.P. O'Har

John Patrick O'Har, who goes by J.P., is a doctoral student and was a participant in Georgia Tech's 5 year B.S./M.S. program. He graduated last May with a B.S.C.E., is scheduled to graduate this August with a M.S.C.E., and then continue his work towards a PhD. He is currently working with Dr. Amekudzi and Dr. Meyer on a Georgia Department of Transportation (GDOT) project "Best Practices in Selecting Performance Measures and Standards for Effective Asset Management". As part of this project J.P. developed an inventory of tools and databases at GDOT that could be used in an asset management system. The next step of this project will include developing a risk-oriented asset management system for the Department and also developing a means of data visualization for the Department's assets. J.P.'s current research interests include transportation asset management and climate change. He was a co-author, along with Dr. Amekudzi and Dr. Meyer, of a paper entitled "Transportation Asset Management Systems and Climate Change: An Adaptive Systems Management Approach" that was recently accepted for publication in the *Transportation Research Record*, the Journal of the Transportation Research Board (TRB). His proposed research includes developing a risk appraisal framework for vulnerable (to the impacts of climate change) transportation infrastructure assets, that uses existing transportation asset management systems, in order to provide a strategic platform for climate change-related investment decision making.



Brent Weigel

Brent Weigel is a second year PhD student in the Transportation Systems Engineering group of CEE. Brent's research interests include transportation-related climate change mitigation and adaptation, transportation sustainability, bicycle/pedestrian transportation systems, and building energy efficiency. As a graduate research assistant, Brent is working with CEE faculty, the Metropolitan Atlanta Rapid Transit Authority, and the Southeast Energy Efficiency Alliance to develop a Transit Greenhouse Gas Emissions Management Compendium, which will help transit agencies reduce greenhouse gas emissions and energy consumption. For his doctoral research, Brent is developing a life cycle analysis framework of transportation and building-related greenhouse gas emissions from building site alternatives, which will enable reductions in greenhouse gas emissions from the built environment. Upon graduation, Brent will pursue a career as a research university faculty member, with the goal of advancing research and education for sustainable engineering.

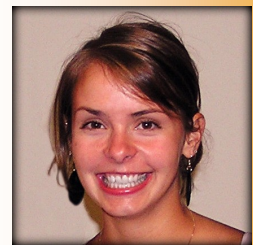
Eisenhower Graduate Research Fellowships

Elise M. Barrella is a second year Ph.D. student in Georgia Tech's transportation systems group under the advisement of Dr. Adjo Amekudzi. Her research interests are in sustainable transportation infrastructure and planning and community development. She is currently working on an FHWA-sponsored project that will produce a guidebook to help agencies incorporate sustainability into the transportation planning process. Her dissertation will complement this research by developing a self assessment method that will help transportation agencies easily identify and implement sustainability best practices. In addition to her academic achievements, Elise is a campus leader serving as the President of Women's Transportation Seminar and Marshall of Chi Epsilon Honor Society for the 2009-2010 school year.



Elise Barrella

Josephine D. Kressner is a first year Ph.D. candidate in Georgia Tech's Transportation Systems group minoring in statistics and is advised by Dr. Laurie Garrow. Josie was awarded a Georgia Tech Presidential Fellowship as an incoming student and recently received an Honorable Mention for the National Science Foundation Graduate Research Fellowship. Her research efforts are focused on residential location choice models and socio-demographics. She is examining the effects of income, race, age, and other such demographic characteristics on how often and where people move, specifically with regards to sustainable transportation and similar relating infrastructure developments. She has recently joined Georgia Tech's chapters of Institute of Transportation Engineers and Women in Transportation Seminar.

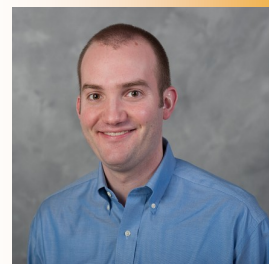


Josie Kressner

Thomas A. Wall also received an Eisenhower Fellowship (see below)

Fulbright Fellowship

Thomas A. Wall, a Ph.D. student in the transportation group, has been awarded a 2010 Fulbright Scholarship. He will be spending this coming academic year at the University of Oxford and the University of Amsterdam studying the potential impact of climate change on transportation infrastructure. The growing consensus in the global scientific community is that the planet's climate is changing. The United Nations' Intergovernmental Panel on Climate Change reported in 2007 that scientific observation has shown a global increase in the frequency and extremity of storm events, flooding, and average temperatures. Events such as Hurricane Katrina underscore the profound implications that such changes will have for civil infrastructure in the future. However, US research institutions and government agencies have only recently begun to investigate strategies for adapting existing infrastructure to changes in the climate that will occur despite efforts at mitigation. Tom's dissertation will focus on the development of risk-based analysis methods for determining the most cost effective strategies for highway adaptation to changing environmental conditions. Tom has a B.S. in civil engineering from Oregon State University and an M.S. in civil engineering from Georgia Tech. His doctoral dissertation advisor is Professor Michael Meyer.



Tom Wall

ITS Wayne Shackelford Scholarship Winners 2009

This annual award is designed to promote the study of ITS technologies by the best university students. The award was given based on an abstract submitted on developing an innovative plan for employing ITS systems to address congestion issues in metro Atlanta. Finalists were given expense-paid trips to the annual GA ITS meeting an opportunity to present their solutions to GA ITS members. Finalist Carlos Campo based his solution on the convergence of new technologies for vehicles, infrastructure, operations and customer information, innovative land use policies, and multiple flexible transportation options. Finalist Yi Lin Pei proposed technologies like GPS tracking and auto-drive combined with personal freedom, smart growth land use, and multimodal transportation. Winner Yanzhi (Ann) Xu, proposed a comprehensive information system for travelers to allow making better decisions, with the accompanying ITS technology deployment, infrastructure investment, and agency coordination to make it a success.



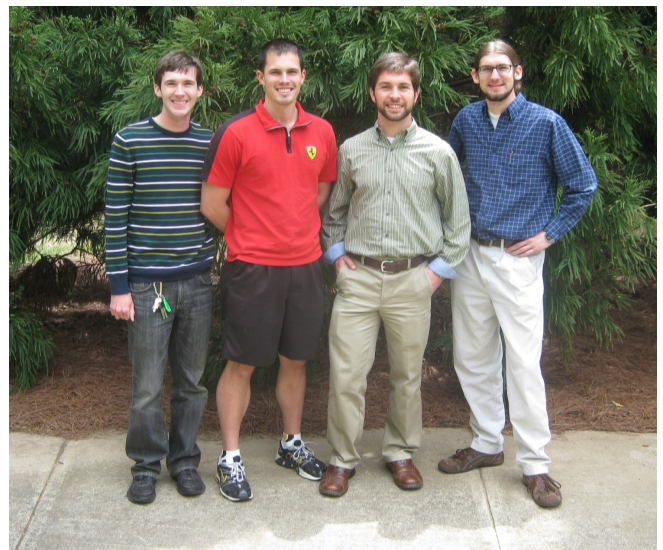
Yi Lin Pei

Carlos Campo

Yanzhi Xu

GTI/UTC and MARTA Continues Internship Program

GTI/UTC and MARTA are continuing its very successful summer intern program. This program began in 2008 when Dr. Beverly Scott, the CEO of MARTA and Dr. Michael Meyer agreed to establish a formal program. GTI/UTC funds are used to support this internship. As noted by Dr. Michael D. Meyer, Director of the GTI/UTC, “without the resources provided by the University Transportation Center grant, it is highly doubtful that MARTA and the Georgia Transportation Institute could have reached agreement on a program that would support so many students. This program has already been a huge success, and it will likely only get better in the future.”



Joel Anders Chris Barrow Brandon Kearse Andy McBurney

Shannon Griffin's Graduate Internship at MARTA

by Shannon Griffin

For the past year I have been working as a graduate intern (supported by GTI/UTC funds) in the Transit Systems Planning Group at MARTA. I have been a part of a wide variety of projects ranging from corridor planning to environmental analysis and transit oriented development. I have been exposed to numerous expansion projects like the Beltline, Clifton Corridor and South Fulton Parkway.

For the Beltline I represented MARTA at both stakeholder committee meetings and technical advisory committee meetings. During the South Fulton Parkway transit feasibility study, I assisted with the public outreach campaign. This involved contacting stakeholders and holding interviews to learn about what their vision was for the corridor. I also worked on public outreach for the Clifton Corridor helping to set up a Facebook fan page and managing the content that is distributed.

I have truly enjoyed my experience at MARTA and was able to learn about the many different aspects of transportation planning. Even more enjoyable was learning from my two wonderful supervisors, Jason Morgan and Tameka Wimberly (pictured at right). They worked hard to keep me involved in all of their projects and were a great resource inside the office and out.



Tameka Wimberly Shannon Griffin Jason Morgan

Kaiser and Weigel Selected for Eno Leadership Conference

Two GTI/UTC students have been selected for this year's Eno Leadership Conference. Mary Kaiser, a graduate student in City Planning, and Brent Weigel, a doctoral student in civil engineering, will be attending the one week conference in Washington D.C. This meeting introduces students to the intricacies of policy development in transportation and allows students to meet some of the nation's transportation leaders. GTI/UTC has a long history of sending students to the leadership conference, as well as having several faculty members being alumni of this program.

Dr. Michael Meyer also serves as the Chair of the Eno Board of Regents that oversees the program. The GTI/UTC subsidizes half of the costs associated with each student's participation in the conference.

Student Chapter of ITE at Georgia Tech wins SDITE Best Student Chapter Award and the William H. Temple Scholarship Challenge Traffic Bowl Competition

The Student Chapter of the Institute of Transportation Engineers (ITE) at Georgia Tech was awarded the Southern District of ITE (SDITE) 2009 Best Student Chapter Award and won the William H. Temple Scholarship Challenge Traffic Bowl Competition at the SDITE 2010 Annual Meeting held April 11-14th in Portsmouth, Virginia.

The ITE at Georgia Tech Student Chapter, led by chapter President Alek Pochowski and faculty advisor Dr. Michael Hunter, had a memorable and exciting 2009-2010 school year. The student chapter hosted monthly student chapter meetings with excellent guest speakers on a wide variety of topics related to the transportation profession, and began a new Lunchtime Student Speaker Series in which students had the opportunity to present on relevant topics to their peers. Beyond the Georgia Tech campus, the chapter's participation in the Annual Meeting of the Transportation Research Board in Washington DC was larger than ever before with over 40 student members in attendance, and more than 15 unique presentations by student members. In addition, the student chapter had several social events each semester, and continues to serve their community with multiple service events every semester.

As a result of their victory in the Traffic Bowl, the ITE at Georgia Tech Traffic Bowl team, consisting of Rama Chilukuri, Matt Kittelson, and Alek Pochowski will participate in the International Institute of Transportation Engineers Collegiate Traffic Bowl Competition taking place at the ITE Annual Meeting and Exhibit on Wednesday, August 11, 2010 in Vancouver, BC, Canada. In addition, the students received a \$3,000 scholarship sponsored by the Associated Business Division of the Southern ITE District.



Matt Kittelson, Alek Pochowski and Rama Chilukuri holding the winner's check

GTI/UTC Seminar Series

David Greene's talk addressed the sustainability challenges faced by Transportation systems: greenhouse gas mitigation, oil dependence, finance and transitioning to a sustainable source of energy. He presented recent econometric evidence indicating that the transportation system is becoming less responsive to energy prices over time. He argued that taxing energy would be more effective than road pricing, since it taxes the amount of transportation "work" done. This suggests a sustainable revenue system based on a road user fee on all forms of energy, indexed to average system energy efficiency, and inflation. He showed that an energy user fee would have approximately twice the impact on greenhouse gas emissions as pricing vehicle travel.



David Greene,
Oak Ridge National Lab

Hal Kassoff, a Senior Vice President and Principle Professional Associate with Parsons Brinckerhoff, spoke at a joint meeting of the Georgia Institute of Transportation Engineers and the GTI/UTC. Over the past seven years, one of Mr. Kassoff's primary areas of interest has been sustainability and context sensitive solutions (CSS). He led the Sustainable Transportation Task Force for the 2007 industry-wide transportation policy summit for AASHTO and was honored in 2009 by the Green Highways Partnership with their annual Leadership Award.



Hal Kassoff,
Parson Brinkerhoff

Mr. Kassoff gave a presentation entitled "Sustainable Streets and Highways, Context Sensitive Solutions (CSS), and the Triple Bottom Line". In his presentation, Mr. Kassoff addressed the relationship between sustainability and CSS for streets and highways and also discussed how sustainability and CSS can be articulated, advanced, and evaluated using a triple bottom line framework. According to Mr. Kassoff, sustainability is the ultimate outcome we seek for all transportation projects. The context sensitive solutions approach is the way to get there, and the triple bottom line is a way of balancing and measuring the outcomes. Mr. Kassoff gave many unique examples of sustainable designs that have been implemented in other states, such as solar panels on noise barriers and using asphalt pavement to heat buildings. He also discussed some examples of successful context sensitive designs, such as I-70 in Glenwood Canyon in Colorado and Fort Washington Way in Cincinnati, Ohio. Mr. Kassoff emphasized that, for CSS to be successful, you must proactively engage stakeholders, have a project-focused interdisciplinary team, and have continuous communication among the stakeholders and an interdisciplinary team.



GTI/UTC

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Graphic Design

The University Transportation Center at the Georgia Transportation Institute (GTI/UTC) is committed to developing into a Center of excellence providing high-quality leadership on research, education and technology transfer to address issues related to transportation system productivity (including both passenger travel and freight of all modes), economic growth, and finance.

GTI/UTC works with local, state and regional agencies to identify research problems that support their needs and identify opportunities for them to advance to the next level; educate a new generation of students who well versed in art of multidisciplinary thinking and problem solution, collaborating effectively in teams to tackle problems with systems dimensions; provide continuing education opportunities to keep practitioners at the cutting edge of systems methodologies and technologies with transportation applications; and provide technology transfer resources to disseminate knowledge.



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