

A low-angle, perspective shot of a busy city street, likely Times Square in New York City. The street is filled with tall buildings, numerous billboards, and a variety of vehicles including cars and taxis. In the foreground, the front wheel and handlebars of a bicycle are visible, suggesting the viewer is looking through the eyes of a cyclist. The scene is captured during the day with bright, natural light.

**ANNUAL REPORT 2013**

**University  
Transportation  
Research Center - Region 2**



This report represents the activity of the UTRC from January 1, 2013 – December 31, 2013.

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The preparation for this report was funded by a grant from the Research and Innovative Technology Administration of the United States Department of Transportation.

This document is disseminated under the sponsorship of the United States Department of Transportation in the interest of information exchange.

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# DIRECTOR'S MESSAGE

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**CAMILLE KAMGA**

Director

Assistant Professor, Civil Engineering  
The City College of New York, CUNY

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Once again it is the time of year to present our Annual Report highlighting the Center's activities conducted during the year, while reflecting on what the future holds for our organization.

We began the year 2013 by assembling the Center's application to continue receiving federal funding as part of the competition held by the Research and Innovative Technology Administration (RITA) of the U.S. Department of Transportation. This competition was designed to select up to 35 University Transportation Centers (UTCs) under the Moving Ahead for Progress in the 21st Century Act. On September 26, 2013, we were delighted to learn that our application was successful and that we will continue to be the federally-designated center for Region 2. Again, I want to thank each and every one of you for your support of our consortium.

During the year, we were successful with the renewal of our agreements with NYSDOT and NYMTC. Continuing with their strong commitments to Transportation Research and Education, the two agencies are making available to the Center up to \$20 million for the next five years. The renewal of these agreements is a testimony of the accomplishments achieved by our Center.

Looking through the pages of this report, you will agree with me that 2013 has been a very productive year for us, owing to a number of significant events that took place. We organized the New York City Mayoral Transportation Forum, which was the first of its kind. This event brought together the major candidates and was moderated by UTRC Distinguished Lecturer, Matthew Daus. The goal of this unique forum

was to not only educate voters on important transportation issues, but to educate the candidates on the transportation issues that matter to New Yorkers. We organized the second symposium on Connected and Self-Driven Vehicles. This symposium, built on the success of the first symposium held on June 17, 2013 at the University of Buffalo, took place on the campus of Rutgers University and was attended by approximately 100 people. The purpose of this symposium was to continue building an active community of researchers, industry, and government partners to work towards the goal of supporting exciting developments in the area of connected and self-driving vehicles that may well revolutionize our transportation systems in many ways. The successful event helped build an interactive virtual community for all of the stakeholders to stay in touch beyond this one-day symposium with the goal of expediting the development of a unique test-bed in our region.

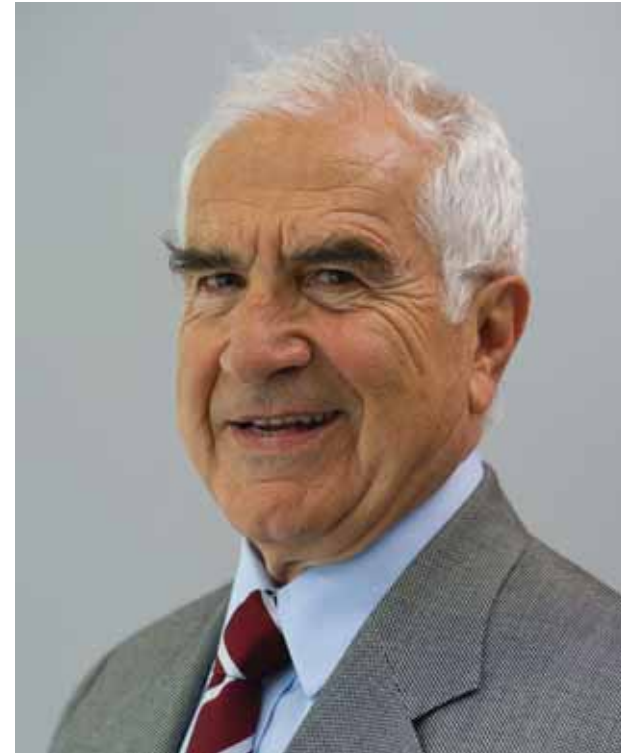
In light of the successful awards under the MAP-21 Act and the renewed commitments from our partners, we are looking forward again with a lot of optimism to continue to develop innovative solutions to meet 21st century transportation needs.

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## CHAIRMAN'S MESSAGE

With federal and local funding sources in place, the current phase of our Center's life is on solid footing. The challenges facing our region's transportation providers and users will provide opportunities for our Center's partners to contribute solutions that will increase transportation efficiency and effectiveness, equitably and economically.

The Center's value to this region is that of an impartial stakeholder focused on improving our understanding of the functions of transportation in economic development and quality of life. This requires focusing our research on technical/policy analysis that educates/informs policy makers. In this regard I would remind all of us to avoid engaging the Center in political advocacy actions that may mask/reduce the Center's most critical value – that of an objective regional stakeholder.



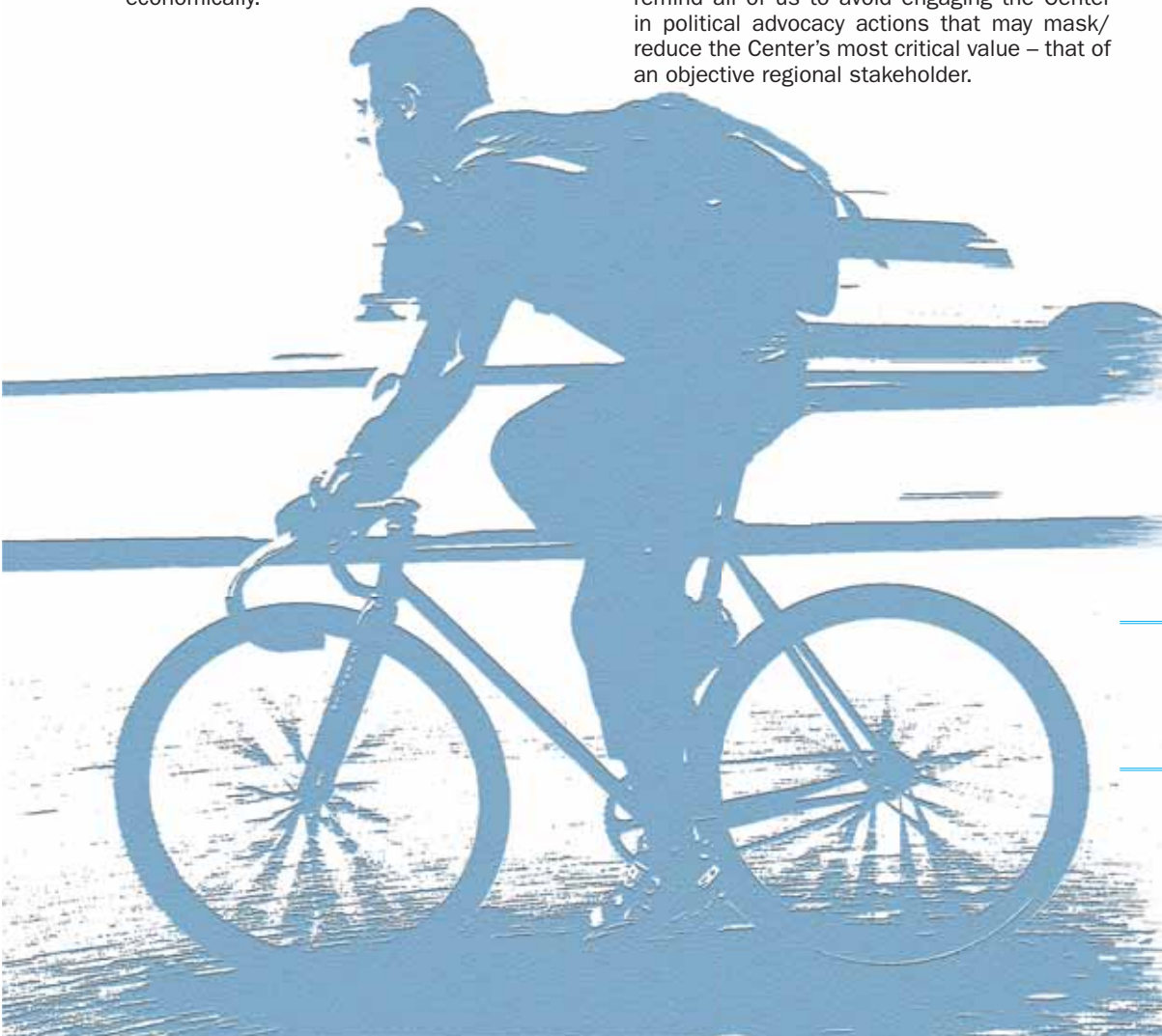
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**JOHN C. FALCOCCHIO**

Chairman

Professor, Transportation Planning and Engineering  
Polytechnic Institute of NYU

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# DIRECTOR EMERITUS'S MESSAGE

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**Robert E. Paaswell**

Director Emeritus

Distinguished Professor of Civil Engineering  
The City College of New York, CUNY

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We are all pleased that UTRC was again funded under the USDOT UTC program for the next several years. It is the hard work of all of the members and the great staff that must share credit for this continuing vote of confidence – one that has taken place for a quarter of a Century. Over this period the needs of the transportation community have changed substantially and the UTRC response to these changes has been equal to those change dynamics. UTRC has shifted from being concerned mainly with the supply of transit and roads to a very multi – modal center. Projects such as rail freight on Long Island, freight movement in Manhattan and Bus rapid transit and a variety of path breaking economic studies have made UTRC a major part of the mainstream of transportation discussions in Region 2.

But the most profound changes are taking place now. While I have written about sustainability and the impacts of the new digital world, the impacts are being felt even faster than we imagined two or three years ago. Hurricane Sandy added the word Resilience to our planning vocabulary; and we know that resilience is a response to the impacts of adapting sustainable design. But we also know that there are large scale cultural changes, especially among the millenials and younger generations. Now getting information in real time for smart devices, and making daily choices based on information from social networks and information sites, these travelers and doers make traditional travel data collection difficult- if not unusable.

The new types of surveys, passive surveys, rely on GPS, your cell phone and other devices that broadcast location (and coincidentally – your location choice). The preponderance of transportation related Apps (more for GPS associated info than any other category of Apps) make real time travel and location choice information a reality; system operators and planners must adopt to this new reality. And this group of millenials, with these types of choices are moving away from cars. HHCO is down, VMT is down and the desire to live in TODS and use public transit is up. Over the next several years, UTRC will be studying and documenting this phenomenon – adding to the long term planning capability of Region 2. These studies will be done in the context of sustainability (carbon reduction) and the necessity to address the short and long term impacts of global climate change.

# CENTER'S THEME

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## “**PLANNING** AND Managing **REGIONAL TRANSPORTATION** System in a Changing **WORLD**”

UTRC's primary focus is the stewardship, management, and future evolution of its already mature transportation systems, in the face of emerging policy challenges. The region's transportation agencies must continually adjust to the nature of the economy and its evolving transportation requirements; their emerging understanding of what is required to protect public safety and security; and new challenges, such as global climate change. As advances in technology continually redraw the boundaries of what is possible, transportation agencies also face the daunting challenge of revisiting how they define their missions, serve the public and conduct their routine business. Because this region has historically faced so many transportation challenges, it has a tradition of innovation in transportation. Yet as the early solutions it adopts become institutionalized, it tends to be slow to absorb and implement lessons from innovators elsewhere in the U.S. and abroad, and thus often falls behind the curve. To become a region that can plan and manage its systems effectively in the face of change, it must become more dynamic in its approaches to the management of information and technology.

**PLANNING TODAY** in Region 2, requires knowledge of multi-modal and intermodal systems serving both freight and passenger movements. Planning in the region involves not only MPOs, but all of the many agencies taxed with the need to move people and goods 24/7. Planning is constrained by institutional mandate and history, the need to catch up with a backlog of capital needs, and a chronic shortage of adequate funds for both maintaining and building the infrastructure. UTRC's role is to provide through academic programs, a solid base on which planning decisions can be made; yet UTRC has the capability to provide “instantaneous programs” in response to critical needs (such as the conference organized for New York State on public-private partnerships).

**MANAGING TODAY** in Region 2, means knowledge of interaction among complex multi-modal systems, budgeting, system operations and performance targets, customer needs, the need to address security, and – when fighting fires stops – a sense of vision of system performance and regional change. Management takes place at every level: from Board Chairpersons to line operators. UTRC has initiated and will develop programs ranging from Authority Board Member Training, to training in high technology for Transit workers. UTRC will develop a major training program for the New York City MPO addressing technical issues and management. UTRC is also part of the national group of UTCs that will develop online leadership courses for the profession as a whole.

**RESPONSES TO CHANGE** as the world changes, the demands on the transportation system change as well. Tomorrow's transportation systems will need to be more secure, more resilient to natural hazards, less damaging to the environment, and better able to use available capacity efficiently. Emerging transportation systems rely on real time technology and rapid transfer of operational information. UTRC will partner with leaders in innovation and deployment, including research labs and private firms. UTRC, through its continuing national leadership on new paradigms in transportation management, will continue to integrate technology into transportation systems. This is also an era of meeting financial needs through new – and proven – fiscal approaches, many of which include Public-Private Partnerships. UTRC's strong economic capability has made national (and international) impacts and will be used to assist regional agencies to address investment impacts. The institutions that have traditionally operated the regional assets must, themselves, begin to change. They must think multimodally, with integrated operating systems. UTRC, with its strategic capability, can assist the regional agencies (and be a model for national success) in organizational change responsive to new missions.

# HIGHLIGHTS

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## UNIVERSITY TRANSPORTATION RESEARCH CENTER AT CCNY RECEIVES \$25 MILLION

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Awarded \$5.2 million from U.S. Department of Transportation, \$20 million from two New York State agencies

The University Transportation Research Center, Region 2, (UTRC) based at The City College of New York, reports that it has received more than \$25 million in new federal and state funding:

- \$5.2 million for 2013 and 2014 from the U.S. Department of Transportation (USDOT) through the Research and Innovative Technology Administration's (RITA) University Transportation Center (UTC) program.
- \$10 million over five years from the New York State Department of Transportation.
- \$10 million over five years from the New York Metropolitan Transportation Council.

Among the projects the grants will support are:

- Studying the impact of transportation systems on the regional dynamics, competitiveness and structural changes of economies;
- Developing and evaluating new mechanisms for financing transportation infrastructure and operations;
- Promoting freight productivity, efficiency, and sustainability through multi-modal policy, planning and logistics;
- Developing infrastructure monitoring systems to enhance infrastructure inspection and management to ensure a state of good repair;
- Promoting safe, secure, livable and sustainable communities through quality of life improvements and diverse transportation development.

The center's research focus under the federal grant will be economic competitiveness. It was one of 33 awardees out of 142 applicants in the 2013 round of USDOT funding. The awards from the New York State Department of Transportation and New York Metropolitan Transportation Council are renewals of existing contracts.

A list of grant recipients is available at

[www.rita.dot.gov/utc/about/grant\\_recipients/html/2013\\_grant\\_recipients](http://www.rita.dot.gov/utc/about/grant_recipients/html/2013_grant_recipients)

*“The award from the federal government and the renewal of our agreements with NYSDOT and NYMTC are a tremendous vote of confidence not only for us but also for the region we serve.”*

**Dr. Camille Kamga**  
UTRC Director



UTRC will promote research that supports the USDOT strategic goals to improve public health and safety, foster livable communities, ensure that transportation assets are maintained in a state of good repair, support the nation's long-term economic competitiveness, work to achieve environmental sustainability, and achieve organizational excellence.



## UTRC BOARD OF DIRECTOR'S MEETING



A meeting of the Board of Directors of the University Transportation Research Center was held on Friday, December 6th, 2013 at the City College of New York, CUNY. The UTRC Board is a unique selection of two members from each of its consortium universities. Under the MAP 21 grant, UTRC consortium includes nineteen (19) universities since two universities; Manhattan College and New York Institute of Technology joined the group. The meeting attendees included Dr. John Falcocchio, Board's Chairman and Professor of Transportation Planning and Engineering at the Polytechnic Institute of NYU, Dr. Robert E. Paaswell, UTRC Director Emeritus and Distinguished Professor of Civil Engineering at CCNY, Dr. Camille Kamga, UTRC Director and Assistant Professor of Civil Engineering at CCNY, UTRC staff members, and representatives from each of the nineteen consortium universities.

The Board's Chairman, Dr. Falcocchio called the meeting to order. A quorum of representatives was present, and the meeting, having been duly convened, was ready with business. UTRC's Director Emeritus then welcomed and thanked everyone for attending the meeting. He mentioned the center's overall success since its establishment in 1987 until the present and acknowledged the contribution of all faculty members from each consortium university who are involved in UTRC research projects. He also talked about the center's successful collaboration with local transportation agencies and partners.

UTRC Director, Dr. Camille Kamga, then reviewed the agenda and welcomed everyone to the meeting. He discussed the current status of the UTRC grant under MAP 21 and then presented a comprehensive update on the center's financial plan and allocation of the grant's funding towards the center's research, technology transfer, and education & workforce development activities. Following his report, UTRC staff presented the research, technology transfer and education programs in detail describing the center's engagement in projects that ultimately help foster goals set forth by USDOT in areas such as safety, reduced congestion, global connectivity, environmental stewardship and security, preparedness and response.

In the second half of the meeting, representatives from two member universities; Manhattan College and the New York Institute of Technology, delivered presentations summarizing their school's resources and specializations to perform research exemplifying UTRC completed and ongoing research projects. Dr. Kaan Ozbay, a former Rutgers Professor, now at NYU Poly, also presented about resources at the Center for Urban Science and Progress (CUSP) at Poly and the current research projects that the CUSP is performing.

After the presentations, the meeting was open to discussion. The meeting was adjourned after the Board discussed a number of strategic goals to transact center's activities.

## HIGHLIGHTS

### UTRC HOSTED A MAYORAL TRANSPORTATION FORUM

UTRC organized a state of the art event; NYC Mayoral Transportation Forum on June 19, 2013 at the Baruch College/CUNY. The mayoral forums held by other groups mostly followed a simple format allowing each candidate to talk about whatever they wished, with tremendous flexibility. The goal of this unique forum was to not only educate voters on important transportation issues, but to educate the candidates on the issues that matter to New Yorkers. In order to accomplish this task, Mr. Daus appointed a panel of transportation policy experts comprised of former high-level transportation officials, academics and organizational stakeholders experienced in all modes of transportation and governmental agencies, and who have worked closely with Matt in the past and/or with CUNY's Transportation Research Center (UTRC) at City College. This panel was charged with the task of assisting me in collecting data and information on numerous transportation topics and compiling the candidates' positions and facts to prepare for the forum. They all helped in vetting not just the topics, but also the specific questions. As part of our unique format, each expert asked certain candidates prepared questions unbeknownst to the candidates, as well as their own spontaneous and tough follow-up questions.



*A Panel of Transportation Policy Experts Comprised of Former High-level Transportation Officials, Academics and Organizational Stakeholders*



*Republican Candidates: From Left to Right: Adolfo Carrion, John Catsimatidis, Joe Lhota, George McDonald*



*Democratic Candidates: From Left to Right: Sal Albanese, John Liu, Bill Thompson, Anthony Weiner*

Mr. Daus chaired the Transportation Forum Committee, which included: Elliot G. (Lee) Sander (Board Chairman of the Regional Plan Association, former MTA CEO, former NYC Department of Transportation - DOT Commissioner, and NYC Taxi and Limousine Commission - TLC Board Member); Ira J. Goldstein (Executive Director of the Black Car/Limo Fund and former TLC Chief of Staff); Tim Gilchrist (former Senior Transportation Adviser to the Governor, and former President of the Moynihan Station Development Corp.); Dr. Robert "Buzz" Paaswell (former Chicago MTA CEO and UTRC Founder); Paul Steely White (Executive Director of Transportation Alternatives); Chris Boylan (former MTA Deputy Executive Director and Executive at the General Contractors' Association); Gene Russianoff (Senior Attorney of NYPIRG's Straphangers' Campaign); Rohit Aggarwala (former NYC Chief Sustainability Officer and Special Advisor to the Chair of the C40 Cities Climate Leadership Group); Dr. Camille Kamga (UTRC Director); Dr. Steven Koonin (Director of New York University's Center for Urban Science and Progress -CUSP); Christopher Ward (former Executive Director of the Port Authority of NY & NJ); and Sam Schwartz (former NYC Traffic Commissioner). Special thanks go out to Ira Goldstein for chairing a subcommittee of for-hire ground transportation industry stakeholders (representing both owners and drivers) to address the taxicab, livery, black car, commuter van, paratransit and limousine industry issues. Also, many thanks go to Mitch Wallerstein, the President of CUNY's Baruch College, who welcomed the guests to the event at his facilities, as well as to CUNY Chief Operating Officer and Executive Vice Chancellor Allan Dobrin, who delivered opening remarks. The Mayoral Transportation Forum was sold out many weeks in advance and was at capacity with between 400-500 attendees, including most major news and media outlets.

Media coverage and video of the event can be accessed at the following link:

[utrc2.org/events/MayoralForum](http://utrc2.org/events/MayoralForum)

To read the full article authored by Matthew W. Daus, please follow the link:

[taxicabtimes.com/professor-matthew-daus-hosts-moderates-nyc-mayoral-candidates-forum-on-p1994-1.htm](http://taxicabtimes.com/professor-matthew-daus-hosts-moderates-nyc-mayoral-candidates-forum-on-p1994-1.htm)

## UTRC HOSTED A NYSDOTA AND NYSDOT FUNDED CONFERENCE ON : LAST MILE FREIGHT DELIVERY: USE OF CLEANER MOBILITY VEHICLES

UTRC and the Research Centre -Instituto de Engenharia Mecânica (IDMEC – IST), Lisbon, Portugal received funding from NYSDOTA to organize a conference in New York City. The conference entitled “Last Mile Freight Delivery: Use of Cleaner Mobility Vehicles” was held on Friday, October 4th, 2013 at the Baruch College Conference Center in New York City. The purpose of the event was to present cross-disciplinary perspectives on the use of electric vehicles (EV) and other vehicles as a sustainable mobility transportation solution. Such wide perspective was attained through a multi-disciplinary team from the U.S. and Europe, organizing an event that reflected their specific and coordinated expertise. It also reflected on the variety of invited national and international speakers that presented ways to link and coordinate their perspectives from engineering, business models, city administration, suppliers and society as a whole. UTRC, in close collaboration with IDMEC-IST held a successful event with that targeted transportation experts from public and private sector, public officials and community leaders, transit community members, academia, consultants, and interested public. The conference addressed the key issues on the use of environmentally friendly vehicles in the last mile operations in the New York metropolitan region.

The transportation solutions discussed in the event will contribute to a more sustainable transportation system. Examples of implementation of EV on last mile operations were presented, focusing on the potential reduction of the energy consumption and associated GHG emissions of the multi-modal transportation system. Those examples should help to better understand what challenges and benefits can be brought up with a similar implementation within the New York Metropolitan region.

The conference’s presentations and video are available at UTRC’s website at:  
[www.utrc2.org/events/lastmilefreightdelivery.com](http://www.utrc2.org/events/lastmilefreightdelivery.com)



## HIGHLIGHTS

### DR. JOSE HOLGUIN-VERAS RECEIVED THE WHITE HOUSE TRANSPORTATION “CHAMPIONS OF CHANGE” AWARD

On May 8th, the White House honored twelve people as Transportation “Champions of Change.” This Champions event, “Transportation Technology Solutions for the 21st Century,” focused on individuals or organizations that have provided exemplary leadership in developing or implementing transportation technology solutions to enhance performance, reduce congestion, improve safety, and facilitate communication across the transportation industry at the local, state or national level.

“These Champions represent the very best in American leadership, innovation, and progress,” said Secretary LaHood. “I’m proud to recognize these transportation leaders who work every day to grow our economy and help us reach our destinations more quickly, efficiently, and safely.”



Dr. José Holguín-Veras is the William H. Hart Professor of Civil and Environmental Engineering at the Rensselaer Polytechnic Institute and the Director of the Center for Infrastructure, Transportation, and the Environment. Dr. Holguín-Veras has led the development of an off-hour freight delivery system that combines Global Positioning System (GPS) remote sensing monitoring with GPS-enabled smart phones. This transportation technology solution has facilitated a shift in deliveries from the congested daytime hours to the off-hours of 7PM to 6AM. Since the system has been implemented, freight receivers enjoy the superior reliability of off-hour deliveries, carriers benefit from increased productivity, and daytime travelers and pedestrians enjoy reduced congestion, noise, and pollution. His influential research has led to substantial improvements in the ability to model and induce changes in the behavior of the freight industry. The Champions of Change program was created as an opportunity for the White house to feature groups of Americans – individuals, businesses and organizations – who are doing extraordinary things to empower and inspire members of their communities.

To learn more about the White House Champions of Change program and nominate a Champion, please visit the website at:  
[www.whitehouse.gov/champions](http://www.whitehouse.gov/champions)

### TWO VOLVO EDUCATION RESEARCH FOUNDATIONS AWARDS INCLUDE UTRC INSTITUTIONS

UTRC consortium institutions were recently honored with two awards from the Volvo Research Education Foundations (VREF) to become VREF Centers of Excellence (CoE) on Urban Freight. One award was given to a global team of freight experts led by the METRANS Transportation Center (University of Southern California, Los Angeles), and includes UTRC (City College of New York, Columbia University, Hofstra University, and University at Buffalo); the French Institute of Science and Technology for Transport, Development and Networks (IFSTTAR), University of Paris-Est; and the Korea Transport Institute (KOTI). The vision of this center, known as METROFREIGHT, is to become a global leader in urban freight research, education, and outreach. Though each member institution will address specific regional needs, the Center will also recognize both the local and global challenges of urban freight logistics. For UTRC, this award will support research consistent with UTRC’s focus area on “Promoting freight productivity, efficiency, and sustainability through multi-modal policy, planning, and logistics.” In addition, a key component of the VREF CoE is to include public and private industry partners in the effort to address the issues and propose solutions. Researchers will seek input from UTRC’s agency partners, including the New York City Department of Transportation.

The second CoE award was given to Rensselaer Polytechnic Institute to develop a Center of Excellence on Sustainable Urban Freight Systems (CoE-SUFS), led by Dr. José Holguín-Veras, the William H. Hart Professor of Civil and Environmental Engineering. As part of the CoE-SUFS, an international network of leading freight transportation researchers—collectively the most widely published and cited group of freight researchers—will collaborate with multiple world cities to increase the sustainability of urban freight systems. The CoE will have as its core partners the Rensselaer Polytechnic Institute and the cities of New York and Albany; University of Westminster and the City of London, Kyoto University and Osaka, Monash University and the City of Melbourne, and TNO/Delft University and Rotterdam. In addition, the CoE will be supported by a network of Associate Research Centers distributed all over the world, which will work together towards a transformation of urban freight systems that includes: Chalmers University of Technology and University of Gothenburg and Gothenburg, Sweden; Universidad de Los Andes and Bogota, Colombia; Universidad del Norte and Barranquilla, Colombia; UAE University and Abu Dhabi, Abu Dhabi; Universidad de Cantabria and Santander, Spain; Universidad Ibero-Americana and Santo Domingo, Dominican Republic; University of Pretoria and Pretoria, South Africa; Institute for Transport and Logistics and Bologna, Italy; Indian Institute of Technology-Madras and Chennai, India; SouthEast University and Nanjing, China; University of Toronto and Toronto, Canada; Dalian Maritime University and Dalian, China; Universidade Federal de Minas Gerais and Belo Horizonte, Brazil; and Universidade de São Paulo and São Paulo, Brazil.



### **UTRC ICON MENTOR, HERBERT S. LEVINSON RECEIVED THE CONNECTICUT CHAPTER OF ITE 2013 TRANSPORTATION ACHIEVEMENT AWARD**

Each year Connecticut Institute of Transportation Engineers (ITE) presents four members with one of the following awards: Service to the Chapter Award, Transportation Leadership Award, President's Award, and Transportation Achievement Award.

The 2013 transportation achievement award was given to Herbert Levinson; UTRC Icon mentor. This award is given to a member with many years of dedicated service to the traffic engineering profession and the Institute of Transportation Engineers.

*Herbert S. Levinson Receiving the 2013 Transportation Achievement Award Given by the Connecticut Institute of Transportation Engineers (ITE)*



### **HERBERT LEVINSON WAS AWARDED AN HONORARY DOCTOR OF ENGINEERING DEGREE AT THE ILLINOIS INSTITUTE OF TECHNOLOGY (CHICAGO)**

Herbert Levinson has received an honorary Doctor of Engineering degree for his outstanding contributions to the safe and efficient movement of people and goods on the streets and highways of the nation.

Levinson has been an Icon Mentor at the University Transportation Research Center for many years. He is a member of the National Academy of Engineering and an honorary member of the Institute of Transportation Engineers

*Herbert S. Levinson Receiving an Honorary Doctor of Engineering Degree from John L. Anderson, President of Illinois Institute of Technology (Chicago)*

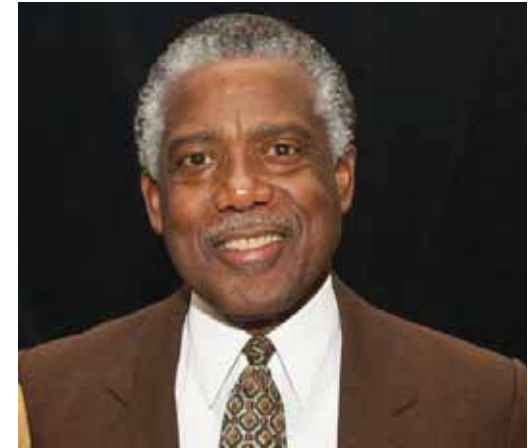


### **UTRC CONSORTIUM FACULTY, DR. XUEGANG (JEFF) BAN, AN ASSISTANT PROFESSOR AT RPI RECEIVED THE CUTC-ARTBA NEW FACULTY AWARD**

Dr. Xuegang (Jeff) Ban, an assistant professor of Civil and Environmental Engineering at the Rensselaer Polytechnic Institute was awarded the 2012 New Faculty Award by the Council of University Transportation Centers (CUTC) and American Road & Transportation Builders Association (ARTBA). The CUTC/ARTBA New Faculty Award is given annually to a tenure-track faculty member in transportation education. The award purpose is to recognize outstanding teaching and research contributions to the transportation field.

*Dr. Xuegang (Jeff) Ban Receiving the CUTC-ARTBA New Faculty Award from Dr. Teresa Adams, CUTC President and Director of National Center for Freight and Infrastructure Research and Education, University of Wisconsin*

### **DR. NEVILLE PARKER RECEIVED THE CCNY'S PRESIDENT'S AWARD FOR OUTSTANDING FACULTY SERVICES**



Dr. Neville Parker received the City College President's Award for Outstanding Faculty Service in the School of Engineering for the inaugural year of the President's Awards.

CCNY President Coico presented the award at a special reception for faculty on Monday, May 20, 2013 at the Great Hall, CCNY.

The Department of Civil Engineering's chairperson, Dr. Julio Davalos acknowledged his outstanding service contributions to CCNY for so many years and conveyed him his warmest appreciation and gratitude.

We proudly congratulate Dr. Parker for his commitment and services to the Civil Engineering Department and to students.

# MANAGEMENT STRUCTURE

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UTRC has adopted a corporate style of management. In this style, the UTRC Board provides policy guidelines, and approval of UTRC activities. Dr. Camille Kamga, Assistant Professor of Civil Engineering at The City College of New York, serves as the Director, overseeing day-to-day operations and providing a bridge between UTRC policies and the activities and resources used to carry out those policies. The Board of Directors, with representatives from consortium universities, is chaired by Dr. John Falcocchio of Polytechnic University and conducts its business through a well-organized committee structure. The full Board reviews center objectives and programs, approves budgets, and reviews and recommends actions forwarded by its two major working committees.

## BOARD OF DIRECTORS

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### CITY UNIVERSITY OF NEW YORK, NEW YORK

**Dr. Hongmain Gong** - Geography  
**Dr. Neville A. Parker** - Civil Engineering

### CLARKSON UNIVERSITY, NEW YORK

**Dr. Kerop D. Janoyan** - Civil Engineering

### COLUMBIA UNIVERSITY, NEW YORK

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**Dr. Elliott Sclar** - Urban and Regional Planning

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**Dr. Mark A. Turnquist** - Civil Engineering

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**Dominic Esposito** - Research Administration

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**Dr. Joyoung Lee** - Civil & Environmental Engineering

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**Dr. Marta Panero** - Engineering & Computing Sciences

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**Dr. Elena Prassas** - Civil Engineering

### RENSSELAER POLYTECHNIC INSTITUTE, NEW YORK

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**Dr. William "All" Wallace** - Civil Engineering

### ROCHESTER INSTITUTE OF TECHNOLOGY, NEW YORK

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**Dr. James J. Winebrake** - Science, Technology,  
& Society/Public Policy

### ROWAN UNIVERSITY, NEW JERSEY

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**Dr. Beena Sukumaran** - Civil Engineering

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**Dr. Kaan Ozbay<sup>2</sup>** - Civil Engineering

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**Dr. Catherine T. Lawson** - City & Regional Planning  
**Dr. Adel W. Sadek** - Transportation Systems Eng  
**Dr. Shmuel Yahalom** - Economics & Maritime

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**Dr. Thomas H. Wakeman III** - Civil Engineering

### SYRACUSE UNIVERSITY, NEW YORK

**Dr. Riyadh S. Aboutaha** - Civil Engineering  
**Dr. O. Sam Salem** - Construction Engineering  
and Management

### THE COLLEGE OF NEW JERSEY, NEW JERSEY

**Dr. Thomas M. Brennan, Jr.** - Civil Engineering

### UNIVERSITY OF PUERTO RICO – MAYAGÜEZ, PUERTO RICO

**Dr. Didier M. Valdes-Díaz** - Civil Engineering  
**Dr. Ismael Pagan-Trinidad** - Civil Engineering

<sup>1</sup> - Member under SAFETEA-LU Legislation

<sup>2</sup> - Now at NYU-Poly

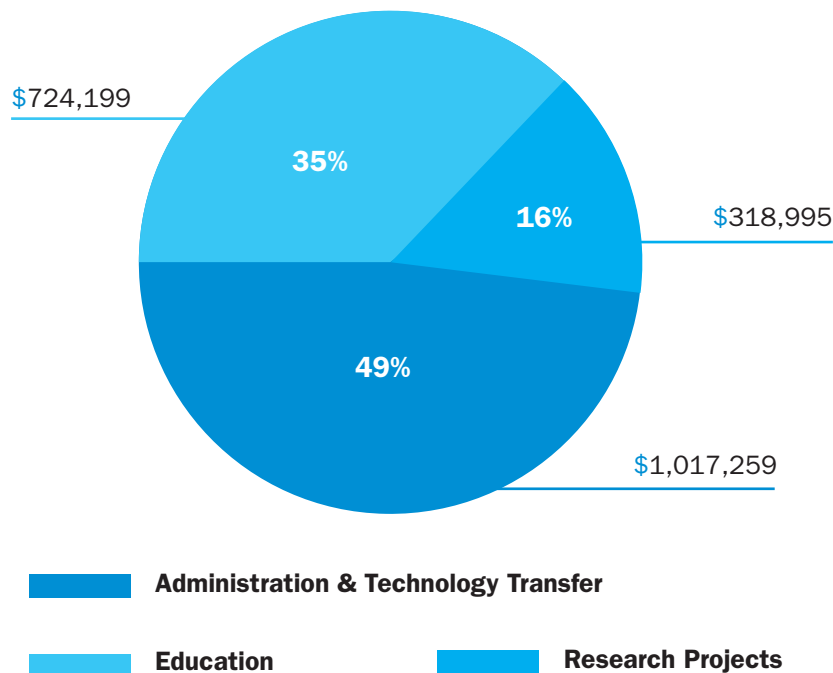
# FINANCIAL REPORT

The following charts summarize the UTRC revenues and expenditures for FY 2012-2013. Under both transportation legislations – Extension of SAFETEA-LU and MAP-21, the University Transportation Research Center Region 2 funding authorized by USDOT are \$3,397,600 and \$2,592,500 respectively. During this fiscal year, the annual USDOT grant allocated to our programs was approximately \$1M. We faced some delays in implementing some of the programs as the Center participated in the subsequent UTC competition to continue receiving USDOT funding. It is expected that the new funds made available by USDOT will be allocated to our programs during the next fiscal year.

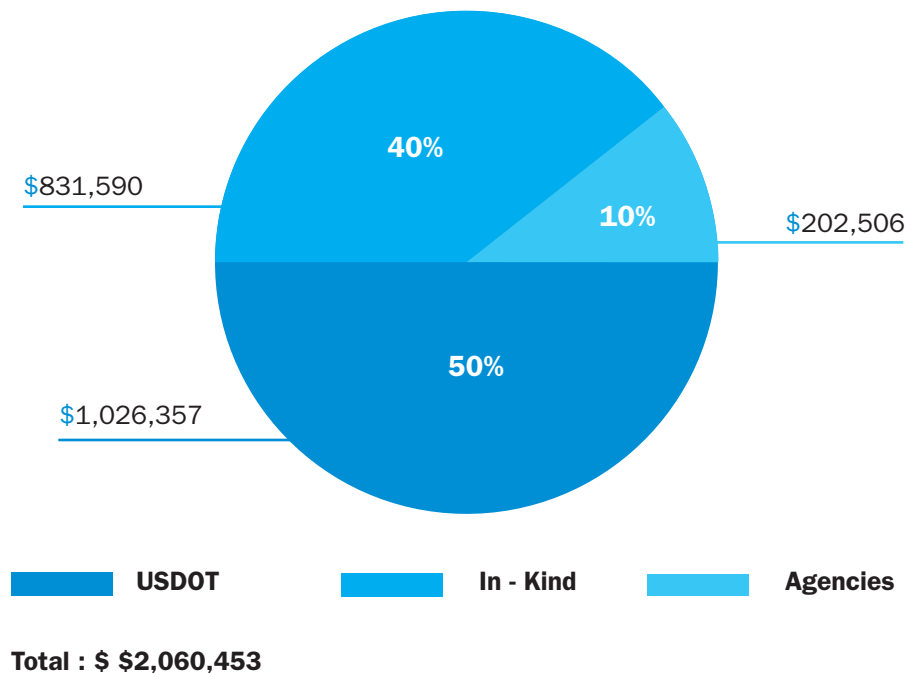
During the FY 2012-2013, we have been successful to renew a long-term financial agreement with our long-time partners - the New York State Department of Transportation and the New York Metropolitan Transportation Council. Both agencies have committed a total of \$20 millions for the next five years to the Center. Approximately \$200,000 was received from the New Jersey Department of Transportation and the New York State Energy and Development Authority towards the performance of our research program.

Continuing with its tradition, strong partnerships, and solid financial commitment from federal, state, and local transportation agencies, UTRC allocated 35 percent of its total budget to its educational initiatives and 16% to perform research projects.

## ALLOCATIONS



## FUNDS



# STAFF

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**DR. CAMILLE KAGMA**  
**Director**  
Assistant Professor of  
Civil Engineering

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**DR. ROBERT E. PAASWELL**  
**Director Emeritus**  
Distinguished Professor of  
Civil Engineering

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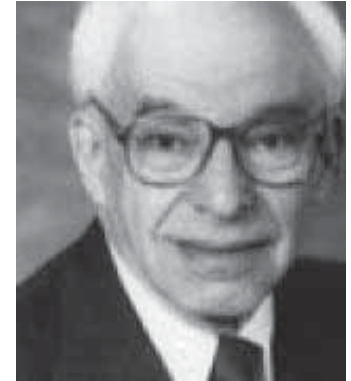
**DR. CLAIRE MCKNIGHT**  
**Associate Director  
of Education (Retired)**  
Associate Professor of  
Civil Engineering

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**PENNY EICKEMEYER**  
**Associate Director  
for Research**

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**HERBERT LEVINSON**  
**UTRC Icon Mentor**  
Professor of Transportation

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**NADIA ASLAM**  
**Assistant Director for  
Technology Transfer**



**DR. ELLEN THORSON**  
**Senior Research Fellow**



**DR. ALISON CONWAY**  
**Associate Director for  
New Initiatives**  
Assistant Professor of  
Civil Engineering



**DR. ANIL YAZICI**  
**Post-doc/ Senior Researcher**



**BENJAMIN MILLER**  
**Senior Research Associate**





**MATTHEW W. DAUS, ESQ**  
Distinguished Lecturer



**NATHALIE MARTINEZ**  
Research Associate  
Budget Analyst



**ABHISHEK SINGHAL**  
Ph.D. Candidate  
Research Associate



**ANDRIY BLAGAY**  
Graphic Design Intern



**TIERRA FISHER**  
Office Assistant



**SABIHEH FAGHIH**  
Research Assitant  
Ph.D. Candidate



**DAN WAN**  
Research Assitant  
Ph.D. Candidate

# MEMBER UNIVERSITIES

## 1 CITY UNIVERSITY OF NEW YORK

The City University of New York is the nation's largest urban university: 11 senior colleges, 6 community colleges, a graduate school, a law school and a school of biomedical education. More than 450,000 degree-credit students and adult, continuing and professional education students are enrolled at campuses located in all New York City boroughs. CUNY, with more than 100 nationally recognized research centers, institutes and consortia, is also one of the nation's major research institutions. Because of its urban context, many of CUNY's campuses are involved in transportation research and education.

## 2 CLARKSON UNIVERSITY

Clarkson University is an institution of choice for 3,000 enterprising, high-ability students pursuing degrees in 50+ rigorous academic programs of study. Its faculty is on the leading edge of research of international relevance and the institution offers focused graduate programs in select disciplines. However, its primary mission is undergraduate education. Across the institution, faculty and students develop close, mentoring relationships and make lifelong connections that guide career success.

## 3 COLUMBIA UNIVERSITY

Columbia University was founded in 1754 as King's College by royal charter of King George II of England. It is the oldest institution of higher learning in the state of New York and the fifth oldest in the United States. Today it has an enrollment of over 23,000 students in 16 schools and colleges. Columbia conducts transportation-related research through its strong departments of Urban Planning, Civil Engineering, and Industrial Engineering and Operations.

## 4 CORNELL UNIVERSITY

Founded in 1868 by Andrew White and Ezra Cornell as an institution where "any person can find instruction in any study," Cornell University today encompasses thirteen undergraduate, graduate, and professional colleges and schools. Cornell is a unique combination of public and private divisions, being both a private, nonsectarian university and the land-grant institution of New York State.

## 5 HOFSTRA UNIVERSITY

Hofstra University can help you get where you want to go, with small classes, dedicated faculty and a beautiful, energized campus, plus all the opportunities of New York City within easy reach. Find your future by choosing from about 150 undergraduate and about 160 graduate programs, in Liberal Arts and Sciences, Business, Communication, Education, Health and Human Services and Honors studies, as well as a School of Law and School of Medicine. The student-faculty ratio of 14 to 1 and a priority on teaching excellence ensures you're part of creating your own success.

## 6 MANHATTAN COLLEGE

Manhattan College is a Lasallian educational institution founded in 1853 by the De La Salle Christian Brothers, a Catholic religious teaching order started by Saint John Baptist de La Salle, the patron saint of teachers. De La Salle is known as the innovator of modern pedagogy for his work establishing schools to educate disadvantaged children in 17th century France.

## 7 NEW JERSEY INSTITUTE OF TECHNOLOGY

The New Jersey Institute of Technology (NJIT) is a public research university enrolling nearly 8,100 students in 92 degree programs. NJIT has built its research program around multi-disciplinary centers that encourage partnerships among various disciplines, as well as with other educational institutions, private enterprise and government agencies. NJIT hosts a number of publicly and privately funded research initiatives.

## 8 NEW YORK INSTITUTE OF TECHNOLOGY (NYIT)

A global, private institution of higher education, NYIT has 14,000 students on campuses in North America, China, the Middle East, and online. Since 1955, NYIT has pursued its mission to:

- Provide career-oriented professional education.
- Give all qualified students access to opportunity.
- Support applications-oriented research that benefits the larger world.

## 9 NEW YORK UNIVERSITY

Founded in 1831, New York University is one of the largest private universities in the United States, with nearly 51,000 students. The University, which includes 14 schools and colleges, occupies six major centers in Manhattan. NYU is home to the Robert F. Wagner Graduate School of Public Service, which engages transportation issues through programs in Urban Planning, Public Management and Finance, and Negotiation and Conflict Resolution.



## 10 POLYTECHNIC INSTITUTE OF NYU

Polytechnic University, the nation's second oldest private engineering university, was founded in 1854 in Brooklyn, New York. Today, it is the New York metropolitan area's preeminent resource in science and technology education and research. Polytechnic has a distinguished history in electrical engineering, polymer chemistry and aerospace and microwave engineering. Currently, it is a leader in telecommunications, information science and technology management. It is also a leader in the development of approaches to online learning.

## 11 RENSSELAER POLYTECHNIC INSTITUTE

RPI was established in Troy, NY in 1824. It has the oldest program in Civil Engineering in the English-speaking world. Today the university has 7,000 students and schools of Architecture, Engineering, Humanities, Management, and Science. RPI provides regional, national, and international leadership in research relating to intelligent transportation systems, transportation modeling, traffic operations, intermodal freight transportation, transportation economics, and analytical approaches to emergency management.

## 12 ROCHESTER INSTITUTE OF TECHNOLOGY

RIT is a place where brilliant minds assemble and collaborate, where they pool together their individual talents across disciplines in service of big projects and big ideas. It is a vibrant community teeming with students collaborating with experts and specialists: a hub of innovation. It is an intersection of disciplines, a launching pad for a brilliant career, and a highly unique state of mind. It is a perfect environment in which to pursue your passion. Here, the future is envisioned each day. And remade each day after.

## 13 ROWAN UNIVERSITY

Established as a normal school in 1923, today Rowan is a comprehensive public university serving nearly 10,000 students in a Graduate School and colleges of Business, Communication, Education, Engineering, Fine & Performing Arts, and Liberal Arts & Sciences. Rowan's Civil and Environmental Engineering Department conducts transportation research in the areas of pavement design, materials, rail crossing safety, structural design of bridges, and structural design and testing of transit vehicles.

## 14 RUTGERS UNIVERSITY

From its roots as a colonial college (chartered in 1766) and land-grant institution, Rutgers has developed into one of America's leading public research universities. New Jersey's state university fulfills its three-part mission of instruction, research and service by educating a diverse student body of over 48,000 on its three campuses, by creating new knowledge, and by contributing to the economic and cultural vitality of the state.

## 15 STATE UNIVERSITY OF NEW YORK (SUNY)

The State University of New York's 64 geographically dispersed campuses bring educational opportunity within commuting distance of virtually all New Yorkers and comprise the nation's largest comprehensive system of public higher education. Across this network, SUNY has many capabilities that relate directly and indirectly to transportation research. In addition to the major research clusters described below, UTRC works with individual faculty members at SUNY Colleges.

## 16 STEVENS INSTITUTE OF TECHNOLOGY

Founded in 1870 in Hoboken, New Jersey, the Stevens Institute of Technology is one of the leading technological universities in the country. It is named for a distinguished family in American engineering, dating back to the early days of the Industrial Revolution, that helped pioneer the development of the steamboat and railroad technology. Research at Stevens Institute includes structural dynamics, soil-structure interaction, freight transportation, and embedded, real-time, intelligent infrastructure systems.

## 17 SYRACUSE UNIVERSITY

From its founding in 1870, Syracuse University has been the embodiment of Scholarship in Action—education that transcends traditional boundaries through a combination of innovative thinking, daring choices and entrepreneurial attitude. The iconic campus is nestled amongst the rolling hills of Central New York—itself a crucible of historic change and progress. Building on that foundation, SU continues to create opportunities for students and faculty to push limits, build pathways, and make connections that lead to new discoveries and transformational change.

## 18 THE COLLEGE OF NEW JERSEY

The College of New Jersey (TCNJ) is a highly selective institution that has earned national recognition for its commitment to excellence. Founded in 1855, TCNJ has become an exemplar of the best in public higher education and is consistently acknowledged as one of the top comprehensive colleges in the nation. TCNJ currently is ranked as one of the 75 "Most Competitive" schools in the nation by Barron's Profiles of American Colleges and is rated the No. 1 public institution in the northern region of the country by U.S. News & World Report.

## 19 UNIVERSITY OF PUERTO RICO - MAYAGÜEZ

The University of Puerto Rico was established in 1903. Transportation research at UPR is concentrated on its Mayagüez campus, which serves over 12,000 students in colleges of Agricultural Sciences, Engineering, Arts and Sciences, and Business Administration. Its Department of Civil Engineering has an active program in natural hazards research with applications in transportation, including research in structures, advanced materials, earthquake engineering, and construction management issues. Its Civil Infrastructure Research Center is funded by FEMA, FHWA, and the Puerto Rico Department of Transportation, and other partners.



SYRACUSE UNIVERSITY



The College of New Jersey



A photograph of a computer lab or classroom. The room is filled with rows of white desks, each equipped with a black computer monitor, a mouse, and a black office chair. The desks are arranged in a perspective that leads towards a window with white blinds in the background. The lighting is bright and even. A blue rectangular box is overlaid on the right side of the image, containing white text.

# Education & Workforce Development

# “UTRC prepares the transformation to **PLAN** and **MANAGE** the complex **TRANSPORTATION** systems of the **FUTURE**”

The modern professional must combine the technical skills of engineering and planning with knowledge of economics, environmental science, management, finance, and law as well as negotiation skills, psychology and sociology. And, she/he must be computer literate, wired to the web, and knowledgeable about advances in information technology. UTRC's education and training efforts provide a multi-disciplinary program of course work and experiential learning to train students and provide advanced training or retraining of practitioners to plan and manage regional transportation systems. UTRC must meet the need to educate the undergraduate and graduate student with a foundation of transportation fundamentals that allows for solving complex problems in a world much more dynamic than even a decade ago. Simultaneously, the demand for continuing education is growing – either because of professional license requirements or because the workplace demands it – and provides the opportunity to combine State of Practice education with tailored ways of delivering content.

# UTRC AWARDS AITE SCHOLARSHIP

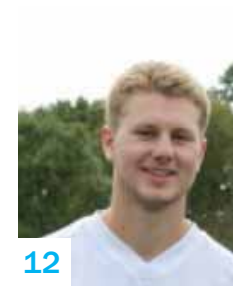
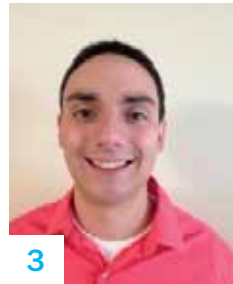
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Twelve recipients have been chosen for the UTRC 2013 Advanced Institute for Transportation Education (AITE) Program, a scholarship program with a competitive application process. The program is intended to increase the knowledge and capabilities of transportation professionals through education in transportation and related fields. The major component of the AITE Program is the provision of scholarships to students who are just starting their careers and to those who are currently working in the transportation field and endeavor to increase their knowledge and skills.

This program requires matching resources to be contributed by either the participating university, for the full-time student participants, or from the participating agency, for the employee applicants. Full-time students awarded the AITE Scholarship will receive a stipend equal to the value of the match provided by the University, not to exceed \$25,000, total, during three semesters. The school's contribution is provided for tuition reimbursement. Students who are employed and sponsored by one of the participating agencies will receive free tuition, not to exceed \$25,000, total, during four semesters. The agency will supply the match by providing work-release-time valued by the employee's salary.

The 2013 AITE Scholarship recipients are:

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**1** **KRYSTAL GITTENS**  
New York University

Krystal Gittens is pursuing a master's degree in urban planning from NYU's Robert F. Wagner Graduate School of Public Service, with a concentration in Environment, Infrastructure, and Transportation. The Urban Planning program prepares students to work on the key challenges facing communities and large cities, as well as provide students with the practical skills needed to become a visionary urban planning leader and artful community change agent. Her research will focus on understanding the role that environment and infrastructure play in urban development and the impact that they have on the expansion of transportation systems. Krystal currently works in the Materiel Department of the MTA-New York City Transit Authority and holds a Bachelor of Science in Finance from Georgetown University.

**2** **HAKIM HAWRAMEE**  
State University of New York (SUNY)

Hakim Hawramee is pursuing a master's degree in civil engineering with a concentration in Bridge Engineering at the State University of New York at Buffalo. Proposed Project Title: Development of Standardized Design-Build Project Delivery for Highway Bridges Brief Abstract: Design-build approach is increasingly used in bridge projects because of its reduced project schedule and minimized delivery risk to owner. Multiple State Department of Transportation's created guidelines for implementing this approach. For example, Utah Department of Transportation (UDOT) proposed a document containing instructions to proposers. Pennsylvania Department of Transportation (PennDOT) released an innovative bidding toolkit for facilitating expedited post disaster bridge projects. However, there is no nationwide standardized specification for the design-build approach. This research tends to synthesize the guidelines used by various state DOTs and recommends a standard design-build approach for bridge projects in New York State.

**3** **BRIAN ISOLDI**  
State University of New York (SUNY)

Brian Isoldi is currently enrolled in his second year of the University at Albany's Master in Urban and Regional Planning Program with a concentration in Transportation Planning. Brian is currently interning at the New York State Energy Research and Development Authority helping integrate smart growth and sustainability into New York State. He has also interned at the Federal Highway Administration where he developed a guidebook to be used by municipalities and metropolitan planning organizations for efficient freight transportation planning. He also interned at the New York State Department of Transportation and wrote a preliminary feasibility investigation report to relieve bottleneck congestion on a major highway interchange. Brian is the Northeast representative of the American Planning Association Student Representative Council. His research will focus on analyzing bus rapid transit and light rail transit in various cities to determine which form of transit will have the biggest impact on future transit expansions. He has also written a student tutorial for Transit Boardings Estimation and Simulation Tool (TBEST). Brian is looking forward to his career in the field of transportation planning.

**4** **NOLAN LEVENSON**  
New York University

Nolan Levenson is pursuing a master's degree in urban planning from NYU Wagner, with an Environment, Infrastructure, and Transportation specialization. After working as a Community Liaison on the Purple Line Light Rail project in Maryland, Nolan has returned home to New York City. Before moving to Baltimore, he attended Macalester College in St. Paul, Minnesota where he majored in Geography and Urban Studies. While at Macalester, he had the opportunity to study abroad in Ecuador, and learn about Bus Rapid Transit and pedestrian safety in Quito. He is particularly interested in equitable public transit development, community engagement, pedestrian and bicycle planning, transit-oriented development, and geographic analysis. His research focuses on Bus Rapid Transit in New York City.

making transportation decisions that support a sustainable society. Deb is earning a master's degree in urban and regional planning at the State University of New York at Albany (UAlbany). Having worked in planning for the last 25 years, collaborating with communities to develop and implement land use master plans and zoning ordinances, and leading efforts to link planning and environment in the transportation decision-making process, Deb feels a Masters in Regional Planning will help her to gain a deeper understanding of the concepts and will increase her credibility and influence in the field.

**5** **LAUREN MELENDEZ**  
State University of New York (SUNY)

Lauren is in her second year in the Master of Urban and Regional Planning program at the State University of New York at Albany. After receiving a bachelor's degree from SUNY Albany in Urban Studies and Planning, she worked as a summer intern at the Genesee Transportation Council, the designated MPO for the Genesee-Finger Lakes Region. Lauren is currently a Project Assistant at Empire State Future, a New York statewide smart growth advocacy and education organization. Her interest within the transportation realm include equity in transportation and bicycle and pedestrian transportation planning.

**6** **DEBRA A. NELSON**  
State University of New York (SUNY)

Debra Nelson is a Strategic Policy Advisor with the NYS Department of Transportation. Deb has more than 20 years' experience in environmental leadership in the transportation realm. As a state leader, she co-chairs NYSDOT's Statewide Sustainability Team that brings the sustainability triple bottom line to all aspects of NYSDOT's business. Deb serves as Project Director/Team Leader on the I-81 viaduct project in Syracuse, in which sustainability, economic competitiveness, social equity and environmental stewardship are central to looking at how best to meet our transportation needs. Debra is also a prominent national leader in environmental stewardship, planning and sustainability in transportation. She chairs the International Conference on Ecology and Transportation and advises with the National Cooperative Highway Research Program, the Strategic Highway Research Program and the National Highway Institute. Deb serves as the New York state representative on the Transportation Research Board, and is currently a member of two TRB committees addressing Sustainability, and Environmental Analysis, and previously served on the TRB committee related to Ecology. Debra has been certified as a Professional Wetland Scientist by the Society of Wetland Scientists and a Certified Ecologist, conferred by the Ecological Society of America. She is an ardent champion for

**7** **JOE NIECIAK**  
**Polytechnic Institute of NYU**

Joe Nieciak is currently pursuing a master's of science degree in transportation planning and engineering at the Polytechnic Institute of New York University. His undergraduate degree is in Geography with a concentration in Urban Planning from DePaul University in Chicago. His professional background includes employment in local government finances, as well as transportation-related internships with the Congress for the New Urbanism and the Chicago Department of Transportation. Joe's specialized interest is in Public Transportation Planning and his goal is to improve the quality and experiences of public transportation users in an effort to encourage greater usage throughout the country. The main theme of his education is to fully comprehend public transportation systems and their effects on developmental patterns and the environment. He seeks to study how public transportation systems function, how to improve their desirability, and methods to improving their speed, reliability, and efficiency. Upon successful graduation, he seeks to utilize the skills attained from his Polytechnic education, and apply them directly to helping transit agencies create a more seamless system for the future.

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**8** **CORDELL V. ROGERS**  
**The City College of New York**

Cordell V. Rogers is pursuing his master's of science in civil engineering concentrating in transportation management at the Grove School of Engineering at the City College of New York. The Grove School of Engineering promises to prepare graduates to work in the public and private sectors on all levels from municipal through national governments and international companies. Cordell is particularly interested in transportation engineering research regarding transit workforce training and the integration of new technologies.

**9** **DAVID SOLIMAN**  
**New Jersey Institute of Technology**

David M. Soliman is currently pursuing his master's of science degree in transportation at the New Jersey Institute of Technology. At the age of 20 he earned his Bachelor's Degree from the City University of New York, College of Staten Island in Finance and Economics. He then continued on to earn his Masters of Science in Business Management. David plans to conduct research on the various management styles within the governmental transportation sector. After he completes his second master's degree, he anticipates continuing his education to the doctorate level with the goal of furthering his understanding of the transportation sector as well helping him achieve career success. David is currently employed by the Metropolitan Transportation Authority as a Manager of Real Estate Finance. He plays an integral part in handling the financial aspects of MTA properties including Pennsylvania Station, Grand Central Terminal, 2 Broadway, as well as all the system-wide leased-in and leased-out properties. Additionally, he is involved with the sale of the MTA's headquarters buildings at Madison Ave. which will necessitate the relocation of Metro-North, MTA HQ, & MTA Police personnel. David also augments other Real Estate Department staff for the financial aspects of administering a complex agreement for the private sector to install wireless/cell phone and internet service within NYC's subway system.

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**10** **ELLIOT WARD**  
**New York University**

Elliot Ward is pursuing a master's degree in urban planning from NYU Wagner, specializing in International Development Policy. Interested broadly in the role of transportation to support economic growth and environmental sustainability, Elliot has worked in China for the Beijing University Lincoln Institute for Land Policy and interned with the Energy Foundation's China Sustainable Transportation Center. For the AITE Scholarship Elliot will research public bus system service differences in mid-sized American cities.

**11** **LORI ZELLER**  
**Rutgers University**

Lori Zeller is in her second year of the masters in City and Regional Planning program at the Edward J. Bloustein School of Planning and Public Policy at Rutgers. Her graduate research focuses on the transportation-related impacts resulting from the New York Islanders' impending relocation from Nassau Coliseum in Uniondale, NY, to the Barclays Center in Brooklyn, NY. This year Lori received the Susan Kirk Scholarship in Transportation and is working as a Teaching Assistant for GIS courses at Bloustein. Lori has worked as an intern for the Regional and Transportation Planning division of the Bergen County Department of Planning and Economic Development and as a Research Assistant at the Voorhees Transportation Center.

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**12** **DONATAS ZVIRBLIS**  
**Rutgers University**

Donatas Zvirblis is a second year master's student at Rutgers University. He is a recipient of the Advanced Institute for Transportation Education Graduate Scholarship from the Urban Transportation Research Center, and his research focuses on extraction and recovery of bitumen from road cores.



## NYMTC/UTRC SEPTEMBER 11TH MEMORIAL PROGRAM CONTINUES FOR THE YEAR 2013

Two students have recently been selected to be 2013-14 participants in the NYMTC/UTRC September 11th Memorial Program Academic Initiative, a program which began in 2005 to honor three NYMTC staff members who died in the attack on the World Trade Center on September 11, 2001: Ignatious Adanga, Charles Lesperance and See Wong Shum. These students include Emily Grace Heard from Columbia University and Homer Hill from Hunter College.



### EMILY HEARD

An MS Urban Planning candidate at Columbia University's GSAPP, Emily will perform her internship at the New York Metropolitan Transportation Council. Emily's project will be the Long Island Community Planning Initiative for the East Side Access Project. Her work will include supporting the development of a Community Planning Initiative in anticipation of the significant impact that the MTA East Side Access project will likely have on specific Long Island communities in the interrelated areas of station access, parking and transit-oriented

development. Emily will conduct one-on-one outreach to Long Island municipalities to develop these approaches and work directly with willing municipal officials; research the likely community impacts of the completion of the East Side Access project; and aid in the development of an organizational partnership for the initiative.



### HOMER HILL

Homer Hill received a B.A from Bard College where he studied urban history and film. Homer has worked at the NYC DOT Greenways Division, the Greenpoint Waterfront Association for Parks and Planning (GWAPP) and most recently the Union Square Partnership where he worked to develop and implement a mobile GIS data tracking system to coordinate street scape maintenance and beautification projects throughout the Union Square neighborhood. Homer is pursuing his Master's degree in Urban Planning program at the Hunter College,

City University of New York. Homer was selected as one of the two recipient of the NYMTC/UTRC September 11th Scholarship program. He is currently performing his internship at NYMT. His project work includes the development of a Green House Gas (GHG) inventory for the New York region. After completing a preliminary analysis of existing GHG data, Homer is working to develop a draft scope of work and future emissions reduction strategy for the region.

## UTRC STUDENT OF THE YEAR



*Abhishek Singhal Receiving the Award from Gregory D. Winfree, Deputy Administrator of RITA*

### ABHISHEK SINGHAL THE CITY COLLEGE OF NEW YORK, CUNY

Abhishek Singhal, a Ph.D. student in the Transportation program at the City College of New York and a research assistant at UTRC was presented the 2012 UTC Student of the year award at the CUTC Banquet at 2013 TRB meeting, held on January 17-23 at Washington, DC. Abhishek was selected on the basis of his technical merit, research and academic performance. Abhishek is currently pursuing his Ph.D. in Transportation Engineering at CCNY. At UTRC he provides research assistance in areas such as Intelligent Transportation Systems, Smart Cities and Sustainable growth, Transportation Safety and Systems Engineering Development & Integration. Abhishek has received his B.E. in Electronics Engineering in 2004 from Pune University, Pune, India and his M.E. in 2009 in Electrical Engineering (Telecommunications) from CCNY. His experience includes time at the Structural Engineering Laboratory, Indian Institute of Technology Kanpur, and he has been actively involved in research projects for NJDOT, DEP and NYCDOT.

As the CUTC awardee, he received \$1000 plus the cost of attending the TRB conference and CUTC Banquet ceremony and a certificate from USDOT.

## UTRC SPONSORED THE 2013 ITS-NY BEST STUDENT PAPER ESSAY



*2013 ITS-NY Best Student Paper Essay Winner, Akhan Almagabetov (Right) at the ITS-NY 20th Meeting with UTRC Director, Dr. Camille Kamga (Middle), and ITS-NY President, Isaac Tayki (Left)*

The winner, Akhan Almagabetov, was announced at the ITS-NY 20th Annual Meeting and Technology Exhibition in Saratoga Springs, NY. Akhan expects to receive his Doctorate from Syracuse University in August of this year. His area of study is Electrical Engineering, and his winning essay was entitled, "**Autonomous Tracking of Vehicle Taillights and the Detection of Alert Signals by Embedded Smart Cameras**". In addition to a networking experience with transportation experts, Mr. Almagabetov received a \$500 stipend along with a complimentary 2012 ITS-NY Annual Meeting registration, travel and lodging benefits to attend all technical sessions presented at the Annual meeting. Visit [www.ITS-NY.org](http://www.ITS-NY.org) for more information.

# THE FOUR 2012-13 ACADEMIC YEAR PARTICIPANTS PRESENTED AT THE BROWN BAG SEMINAR HELD AT THE NEW YORK METROPOLITAN TRANSPORTATION COUNCIL (NYMTC)

On September 18, four recipients of the 2012-13 academic year presented at the Brown Bag Seminar held at NYMTC for the September 11th Memorial Program for Regional Transportation Planning. The Program provides assistance to students and organizations for projects in both academic and public policy arenas as a way to educate and motivate those who are interested in transportation technology and planning. Penny Eickemeyer, UTRC Associate Director for Research, moderated the recipients' presentations.

The Brown Bag seminar highlighted the work of four 2012-13 academic year participants:

- Adam Davidson, Ph.D. candidate at CUNY Graduate Center in Earth and Environmental Sciences  
Project: Greenhouse Gas (GHG) Emission Reduction Implementation Planning
- Stanislav Parfenov, Master's of science candidate in civil engineering at Polytechnic/NYU  
Project: Taxi Travel Estimation and Calibration Modeling Tool (TTEC MT)
- Jeremy Safran, Master's of Urban Planning candidate, Robert F. Wagner Graduate School of Public Service, New York University  
Project: Bus Lanes in New York City
- Simin You, Ph.D candidate in computer science at the Graduate Center, CUNY  
Project: Traffic Safety Data Viewer



*From Left to Right: Simin You - Ph.D. Candidate at the Graduate Center, Adam Davidson - Ph.D. Candidate at the Graduate Center, Penny Eickemeyer - UTRC Associate Director for Research, Joel Ettinger - NYMTC Director, Jeremy Safran - Master's Student at NYU, Stanislav Parfenov - Master's Student at Polytechnic/NYU*



*Adam Davidson*



*Stanislav Parfenov*



*Jeremy Safran*



*Simin You*

# THE CUNY INSTITUTE FOR TRANSPORTATION SYSTEMS – CUNY ITS – TRAINING TEAM INITIALLY CONDUCTED A TWO-DAY CONFERENCE/WORKSHOP AT THE UNIVERSITY OF ECUADOR, AT MILAGO (UNEMI) JULY 5-6, 2012. THEY SUBSEQUENTLY RETURNED TO UNEMI AND CONDUCTED AN ADDITIONAL CONFERENCE/WORKSHOP (MAY 25-JUNE 1, 2013)

Both conferences were attended by approximately 90 participants, each,. The participants included UNEMI students and faculty, transportation professionals from the private and public sectors, as well as transportation security personnel. The participants of both conferences, were awarded certificates of attendance/participation.

The 2012 conference was followed by a visit to CCNY by UNEMI Chancellor/Rector M.Sc. Jaime Orozco and Vice-Rector Patricio Alvarez, November 12-13, 2012, during which a Memorandum of Understanding (MoU) was signed by the UNEMI Chancellor and CCNY's Provost and Senior Vice-President for Academic Affairs, Dr. Maurizio Trevisan. The MoU specifically addressed UNEMI's desire to create a field of research in Transportation, supply the infrastructure – offices, laboratories and auditoriums – and pay the costs of airline tickets, lodging and meals for visiting researchers. The MoU also addressed CCNY's desire to promote interest in teaching and research in activities of both institutions, hosting professors and researchers, and cooperation in academic counseling and development of Master's and Ph.D. programs at UNEMI and CCNY. The MoU positions the CUNY Institute for Transportation Systems (CUNY ITS) for a central role in transportation education, research and development in South America. The specific areas are Bolivia, Venezuela, Argentina, Columbia and Peru, as well as Ecuador, which has been designated as the host country for the consortium. The MoU also paves the way for joint externally funded research and development projects, and for the creation of a pipeline for fully funded graduate students to attend the Grove School of Engineering (GSOE), through an eventual joint graduate program to be considered.

The 2013 conference/workshop, was preceded by a visit to the Galapagos Islands for consultations with the Mayor and his staff, with respect to the Galapagos Transportation Master Plan, They also participated in a strategic session with the Chancellor and his staff relative to the development of a UNEMI International Program in Transportation (UNEMI IPT). The objective of the UNEMI IPT is to introduce the students to the concept of Learning-How-To-Learn in relation to studying the fundamentals of – and conducting research in transport science and technology.. The graduates of UNEMI ITP are envisioned to serve the public and private sector in education and research, operations and management, transport studies, and the development of new products. The UNEMI IPT will serve to create a new education/training/project implementation/research synergism between Universities, Research Centers, Public Sector, Private Sector and the Communities at an international level. The UNEMI IPT graduates will be afforded the opportunity to select a series of programs that will include: subject specific certification, Master's degrees in Transportation Science and Management, and Doctor of Philosophy in Transportation. The UNEMI IPT will be housed at UNEMI and the instructional personnel will have a joint appointment between the IPT and the other departments of the University. Participating countries in UNEMI IPT are Bolivia, Venezuela, Argentina, Columbia and Peru.

The team of multi-institutional instructors/consultants participating in the deliberations relative to UNEMI IPT, and conducting the conference/workshop, were led by Dr. Neville A. Parker, Herbert G. Kayser Professor of Civil Engineering and Director of the CUNY Institute for Transportation Systems (CUNY ITS) at CCNY. CCNY



*Meeting with the Mayor of Galapagos Islands, Ecuador – UNEMI officials, Alberto Mendoza Diaz (Institute Instituto Mexicano del Transporte, Secretaria de Comunicaciones y Transportes) and the CUNY ITS Representation*

team members were Dr. Kyriacos Mouskos, Associate Director, CUNY ITS, and Dr. Camille Kamga, Assistant Professor of Civil Engineering and Director, University Transportation Research Center, Region 2; Dr. Andrew Tarko, Professor of Civil Engineering and Director, Center for Road Safety, Purdue University; Dr. Natalia Ruiz-Juri and Dr. Nikos Benteinitis, University of Texas, Austin; Dr. Alberto Mendoza, Instituto Mexicano del Transporte, Secretaría de Comunicaciones y Transportes; Dr. George Dedes, DGNSS Solutions, LLC; Dr. Mihalios Golias, University of Memphis, Tennessee; and Mr. Patricio Vicuna, UNEMI PhD. Student at CUNY ITS/CCNY. Conference topics included Asset Management; Taxi Data Modeling in NYC; Traffic Safety; Integrated Transportation Planning Models; Transport Data Modeling/GIS/Data Warehousing; Transportation Research in Mexico; DTA Modeling Using VISTA; Vehicle Technologies for Mobility, Safety, Operations and Planning; and Freight Planning and Operations.

# UTRC HOSTS FRENCH INTERNS – YEAR 2013

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UTRC welcomed seven master's degree-level students with specialties in sustainable transportation and civil engineering from the Ecole Nationale des Travaux Publics de l'Etat (ENTPE) in Lyon, France, which is a highly competitive engineering school in France. The students are all participants in a national civil service program which requires that they complete a 20-week internship either in France or abroad.

The internship must be related to a specialty that the students have to choose in their first year (civil engineering, environment, urban planning, transport engineering, or building engineering). The internship occurs after the second year of classes out of a three year program. The tuition and living expenses are covered by the French government and in exchange, the students are required to work in French civil service positions for eight years after they graduate. These students, Dounia Khallouki, Maxim Peveri, Guillaume Faivre, Yohan Urie, Fabien Locatelli, Laurent Jacotot, and Mohammed Bailek, all wanted to work in New York and contacted UTRC in the Fall of 2012 to request an internship at no cost to the Center.

In addition to contributing to the professor's research and papers, the students are also required by their school to produce a lengthy technical and sociological report summarizing their internship pursuits. Upon returning to ENTPE in fall 2013, the students will present their work to a jury as part of their oral exams. The sociological part of the report requires the student to learn about and document the organizational structure of the office in which they are interning. In addition, the student must write this report in the language of their sponsor.

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## 1 MOHAMMED BAILEK

Mohamed Bailek is a Master's student at the University of ENTPE studying Civil Engineering. Mohammed's internship at UTRC was with CCNY professor Dr. Michel Ghosn. In this internship, he was working on projects related to trucks and pavement focusing on impact of overweight truck on roads.

## 2 GUILLAUME FAIVRE

Guillaume Faivre is a student at the ENTPE (French Engineering school based in Lyon) studying Urbanism. Guillaume's internship at the University Transportation Research Center was with Dr. Alison Conway. During his internship, he worked on projects related to trucks and bicycles.

Guillaume has taken courses in GIS mapping and Road Development. He is a civil servant: after his graduation, he will work for his State as a manager in the services dedicated to Town or Regional Planning.

## 3 LAUREUT JACOTOT

Laurent Jacotot is a Master's student at the University of ENTPE studying Civil Engineering. Currently, Laurent's internship at UTRC was with Graziano Fiorillo under the supervision of Dr. Michel Ghosn. During his internship, he worked on projects related to the effect of overweight trucks on the New York state bridges.

Laurent has taken civil engineering courses like Structural and Dynamic Analysis, Reinforced Concrete or Bridge Design but also management courses. After his graduation, he intends to work with the French Department of Transportation for several years.

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## 4 DOUNIA KHALLOUKI

Dounia Khallouki is pursuing her master's degree from the ENTPE, a French Engineering school, specialized in construction, civil engineering, urban planning and transportation issues. She is also enrolled in another master's degree in political sciences at the Institute of Political Sciences of Grenoble France.

Ms. Khallouki worked at the UTRC for a five months internship program. During her stay, she worked with Dr. Alison Conway on a pedicab research project. Her future goals are to do a specialization in transportation.

## 5 FABIEN LOCATELLI

Fabien Locatelli is currently a second year student and trainee civil servant enrolled at the French National Graduate School of Sustainable Civil Engineering, Transport and Planning (ENTPE). He follows courses in sustainable development where he learns how to adapt and develop cities in order to make them more reliable on their energy consumption or greenhouse gas emissions. He is majoring in Transport with a specialization on pedestrian safety issue and urban transportation planning.

His internship at UTRC was under the supervision of Dr. Camille Kanga. He worked on the 125th Street congestion mitigation project. He assisted in the collection of transportation related data at the 125th Street corridor. The data was used to develop scenarios and provide suggestions in order to improve the flow of vehicles in the corridor. He worked on this subject with Maxim but particularly focused on how pedestrians, bicycles and businesses could impact the traffic flow.

## 6 MAXIM PEVERI

Maxim is a French student in civil engineering at ENTPE, a French Engineering school. He chose Transportation as his major and interned at the University Transportation Research Center at CCNY. He worked on a project to model the 125th corridor using a software packages. Fabien and Maxim worked together on this project to provide a complete analysis of the corridor. Maxim is interested in traffic modeling and forecasting traffic issues.

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## 7 YOHAN URIE

Yohan Urie is a Master's student at the University of ENTPE studying Transportation. Yohan's internship at the University Transportation Research Center was with Dr. Anil Yacizi. During his internship, he worked on taxis data in Manhattan in order to find links between high congestion level and taxi fares.

Yohan have taken courses like transportation economy, transportation policy related to sustainable development. He also worked on research like road safety for Bordeaux, a project about bike lane's use and public transportation fare in France. Yohan has worked in the transportation field as a technical in charge of road safety and road traffic management.

A stack of several thick books is shown from a low angle, with the pages fanned out and curving upwards. The books are in black and white. A bright blue rectangular box is overlaid on the right side of the stack, containing the word "Research" in white, bold, sans-serif font.

# Research

# “The **UTRC** research program **ADDRESSES** the needs of **REGIONAL** **TRANSPORTATION**”

The research program objectives are (1) to develop a theme based transportation research program that is responsive to the needs of regional transportation organizations and stakeholders, and (2) to conduct that program in cooperation with the partners. The program includes studies that are identified with research partners and targeted short-term factually initiated projects. The program requires competitive proposals, which are evaluated to insure that the most responsive UTRC team conducts the work. The research program is responsive to the UTRC theme, as well as the complex transportation system of transit and infrastructure, and the rapidly changing environmental impacts of the nation's largest city and metropolitan area. The New York/New Jersey Metropolitan area has over 19 million people, 600,000 businesses and 9 million workers. The Region's intermodal and multimodal systems must serve all customers and stakeholders within the region and globally. Under the current grant, the new research projects and the ongoing research projects concentrate the program's efforts on the categories of transportation systems performance and information infrastructure to provide needed services to the New Jersey Department of Transportation, New York City Department of Transportation, New York Metropolitan Transportation Council, New York State Department of Transportation, the New York State Energy and Research Development Authority, and others, all while enhancing the center's theme.

# FEATURED COMPLETED PROJECTS AT UTRC IN THE YEAR 2013

## UNDERGROUND PNEUMATIC TRANSPORT OF MUNICIPAL SOLID WASTE AND RECYCLABLES USING NEW YORK CITY SUBWAY INFRASTRUCTURE

### Principal Investigator(s):

Dr. Camille Kamga, Benjamin Miller, Juliette Spertus, Penny Eickemeyer

### Institution(s):

City University of New York

### Sponsor(s):

New York State Energy Research and Development Authority (NYSERDA)  
New York State Department of Transportation (NYSDOT)

This research shows the benefits of expanding an existing underground pneumatic garbage disposal system on Roosevelt Island and creating new pneumatic disposal systems in Manhattan by making use of such existing transportation infrastructure as the Second Avenue Subway and the High Line Park viaduct. The studies found energy and environmental savings associated with proposals for two new pneumatic facilities that would be installed under the High Line and in the Second Avenue subway, along with related quality-of-life and health improvements due to a reduction in the amount of waste collected from sidewalks. Upgrading the existing pneumatic waste system on Roosevelt Island could eliminate trucks that are currently used to collect the Island's recyclables, commercial waste, and litter-bin waste.



Photo by Greg Whitmore, 2010: Pneumatic Tubes Connecting to Cyclone Separators in Roosevelt Island Terminal

**“Governor Cuomo has made innovation a cornerstone to stimulating the economy and creating green jobs. NYSERDA is pleased to once again partner with the Department of Transportation on a project which offers potential solutions to emissions reduction in the transportation sector, ”**

said Janet Joseph, NYSERDA Vice President for Technology and Strategic Planning. “The State’s investment in such studies demonstrates its commitment to expanding a clean energy economy that can support the technologies of tomorrow.”

New York State Department of Transportation Commissioner Joan McDonald said,

**“Through Governor Andrew Cuomo’s leadership, the State Department of Transportation has partnered with NYSERDA to encourage research projects like this one, which can develop programs and technologies that support economic development, enhance mobility and protect the environment. We look forward to continuing innovations that improve traffic management and reduce greenhouse gas emissions across the state. ”**

The final reports are available at:  
A Study of the Feasibility of Pneumatic Transport of Municipal Solid Waste and Recyclables in Manhattan Using Existing Transportation Infrastructure  
[www.utrc2.org/publications/pneumatic-waste-manhattan-report-Final](http://www.utrc2.org/publications/pneumatic-waste-manhattan-report-Final)  
Eliminating Trucks on Roosevelt Island for the Collection of Wastes  
[www.utrc2.org/publications/pneumatic-waste-roosevelt-island-report-Final](http://www.utrc2.org/publications/pneumatic-waste-roosevelt-island-report-Final)



Photo by Brian Ross, 2011: Pneumatic Refuse Chute on a Typical Roosevelt Island Residential Hallway



## MOBILE SOURCE AIR TOXICS (MSATS) MITIGATION MEASURES

### Principal Investigator(s):

Dr. Rae Zimmerman, Dr. Marta Panero

### Institution(s):

New York University, Rudin Center for Transportation Policy and Management (Rudin)

### Sponsor(s):

New York State Department of Transportation (NYSDOT)  
University Transportation Research Center - Region 2 (UTRC)

The objectives of this project were to:

- 1 Propose a “screening” protocol that will facilitate the decision making process regarding which projects warrant MSAT assessment;
- 2 Develop procedures (in consultation with regulatory agencies) for conducting qualitative and quantitative analyses of the seven priority MSATs in NYSDOT NEPA and SEQRA environmental documents;
- 3 Identify feasible MSAT mitigation measures for NYSDOT capital improvement projects and facilities. The work involves 10 separate tasks, including a guidance document for conducting MSAT assessments for projects that fall within NEPA/SEQRA.



The full report is available for a free download at the UTRC website:  
[www.utrc2.org/publications/air-toxics-mitigation-measures-Final](http://www.utrc2.org/publications/air-toxics-mitigation-measures-Final)

## FINANCING RAIL CAPITAL PROJECTS: HISTORICAL LESSONS; CONTEMPORARY CASES— FINANCE AND POLICY

### Principal Investigator(s):

Dr. James K. Cohen

### Institution(s):

City University of New York

### Sponsor(s):

University Transportation Research Center - Region 2 (UTRC)

Two questions informed the research for this article: first, how and why did the mid-20th century shift from private to public ownership? Second, does high speed rail create opportunities for the return of the Source: USEPA AIRS Monitoring Database private sector to a significant role in passenger rail transport, such as financing and operating new lines? To answer these questions, we adopted a historical, cross-national approach. While a number of articles have been written about general lessons that can be learned from foreign experience with high speed rail, our approach analyzes the specific reasons why the U.S. has lagged behind other countries. France was selected as a comparison case because of its history of moving from private to public provision of passenger rail services closely paralleled American rail history up to the Great Depression; and, because the divergence between the two countries at the end of the Great Depression provides powerful evidence for analyzing the causes of the decline of U.S. passenger railways in the post-World War 2 period. The full report is available for a free download at the UTRC website:  
[www.utrc2.org/publications/financing-rail-capital-projects-historical-lessons-contemporary-cases](http://www.utrc2.org/publications/financing-rail-capital-projects-historical-lessons-contemporary-cases)



## INNOVATIVE ROADWAY LIGHT SOURCE AND DYE COMBINATIONS TO IMPROVE VISIBILITY AND REDUCE ENVIRONMENTAL EFFECTS

### Principal Investigator(s):

Dr. John Bullough

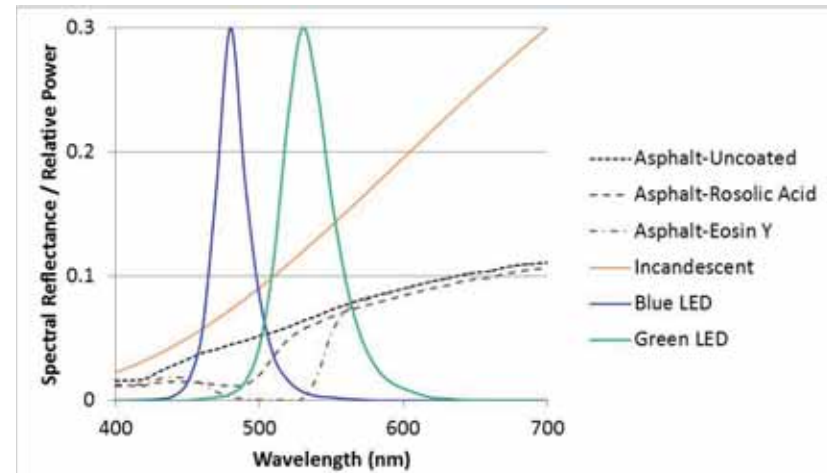
### Institution(s):

Rensselaer Polytechnic Institute, Lighting Research Center (LRC)

### Sponsor(s):

University Transportation Research Center - Region 2 (UTRC)

The researchers investigated the feasibility of a system consisting of a specialized LED streetlight and a dye based roadway surface coating that would reduce sky glow, but still provide adequate illumination of objects in the road. As envisioned, the streetlight would produce white light with narrow-band LEDs of red, green, and blue wavelengths. The roadway surface coating would use three dyes that would selectively absorb the specific wavelengths produced by the streetlight. This investigation examined the optical properties of green and blue absorbing dyes. The dyes, when in their liquid states, did selectively absorb light at the expected wavelengths. However, the dyes did not selectively absorb light when applied as a surface coating, so appropriate encapsulants would need to be developed for subsequent implementation. The full report is available for a free download at the UTRC website: [www.utrc2.org/publications/innovative-roadway-Final](http://www.utrc2.org/publications/innovative-roadway-Final)



## ENHANCING RESOURCE COORDINATION FOR MULTI-MODAL EVACUATION PLANNING

### Principal Investigator(s):

Dr. Daniel B. Hess

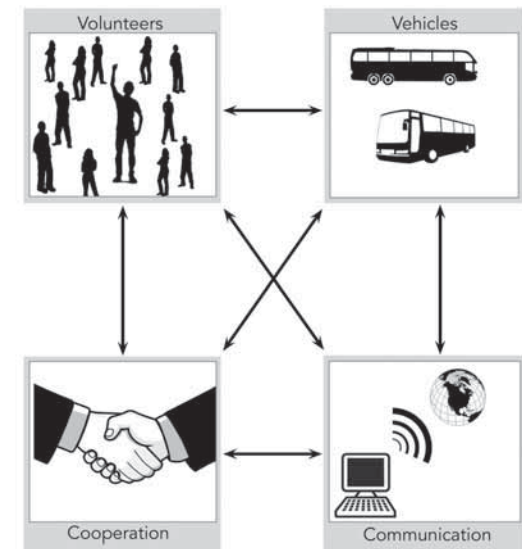
### Institution(s):

State University of New York (SUNY)

### Sponsor(s):

University Transportation Research Center - Region 2 (UTRC)

In an effort to understand the unique and complicated nature of disaster planning, the study reviewed published research about disaster preparedness, response, and recovery, especially as they relate to multi-modal evacuation. Although the federal government plays an integral role in disaster response, the primary authority during times of disaster still rests with state government. Most states place the decision to evacuate a locale with municipal leadership, specifically the chief executive officer of that municipality, if not the chief executive (i.e., Governor) of the state. This structure can generally be viewed as bottom-up, placing the authority to respond to a disaster or mandate an evacuation principally on the affected jurisdiction in ascending order: village, town, city, county, state. This research project seeks to increase knowledge about coordinating effective multimodal evacuation for disasters. It does so by identifying, evaluating, and assessing current transportation management approaches for multi-modal evacuation planning. The research increases equity by identifying strategies for evacuation of all residents, including carless residents during a disaster. The research also seeks to address the challenges of effectively incorporating multi-modalism into local emergency plans by enhancing transportation resource coordination through exploration of the feasibility of a new concept— a Transportation Reserve Corps (TRC). A TRC seeks to integrate planning for households without automobiles, multi-modal evacuation, and coordinated volunteerism with disaster preparedness, response and recovery. The full report is available for a free download at the UTRC website: [www.utrc2.org/publications/multi-modal-evacuation-planning-final](http://www.utrc2.org/publications/multi-modal-evacuation-planning-final)



## THE USE OF LARGE SCALE DATASETS FOR UNDERSTANDING TRAFFIC NETWORK STATE

### Principal Investigator(s):

Dr. Camille Kamga, Dr. Satish V. Ukkusuri

### Institution(s):

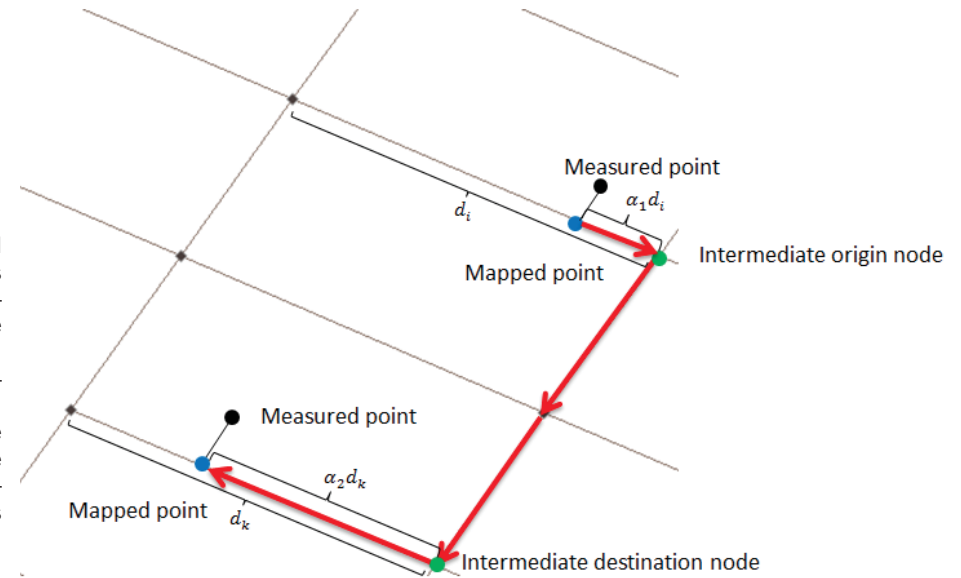
City University of New York

### Sponsor(s):

University Transportation Research Center - Region 2 (UTRC)

The goal of this research was to develop novel modeling techniques to infer individual activity patterns from the large scale cell phone datasets and taxi data from NYC. As such this research offers a paradigm shift from traditional transportation modeling by using large scale, disaggregate data and provides a unique perspective to understand the complex interactions among human behavior, urban environments and traffic patterns. The taxicab data used in this research provides limited trip information, which only contains the origin and destination location coordinates, travel time and distance of a trip. However, the extensive amount of data Key Components of a Transportation Reserve Corps Illustration of data mapping records compensates for the incompleteness of the data and makes the link travel time estimation possible. A novel algorithm for estimating the link travel times is also proposed and tested in this research. The full report is available for a free download at the UTRC website:

[www.utrc2.org/publications/datasets-network-state-Final](http://www.utrc2.org/publications/datasets-network-state-Final)



## VEHICLE CLASSIFICATION USING MOBILE SENSORS

### Principal Investigator(s):

Dr. Xuegang (Jeff) Ban, Dr. José Holguín-Veras

### Institution(s):

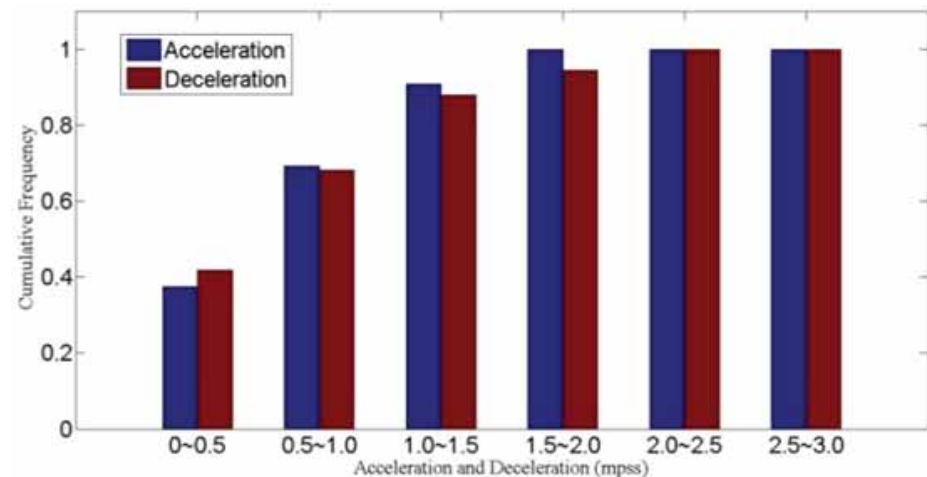
Rensselaer Polytechnic Institute

### Sponsor(s):

University Transportation Research Center - Region 2 (UTRC)

In this research, the feasibility of using mobile traffic sensors for binary vehicle classification on arterial roads is investigated. Features (e.g. speed related, acceleration/deceleration related, etc.) are extracted from vehicle traces (passenger cars, trucks) collected from real world arterial roads. Machine learning techniques such as support vector machines (SVM) are developed to distinguish passenger cars from trucks using these features. To address privacy concerns, classification is conducted using long vehicle traces and short vehicle traces separately. For classification using long traces, the proportions of accelerations and decelerations larger than 1mpss and the standard deviations of accelerations and decelerations are the most effective features. By classifying general trucks from passenger cars, the average misclassification rate for the best 4-feature SVM model is about 1.6% for the training data, and 4.2% for the testing data. For classification using short traces, it is necessary to define multiple types of traces and analyze them case-by-case. It was found that particularly for the turning movement traces, features such as average speed, standard deviation of speed, maximum acceleration/deceleration and standard deviation of acceleration/deceleration are fairly effective to classify vehicles. The misclassification rate for the best SVM classifier using short traces is about 14.8% for the stop-and-go traffic, and 15.6% for the non-stopped traffic. The full report is available for a free download at the UTRC website:

[www.utrc2.org/publications/vehicle-classification-final](http://www.utrc2.org/publications/vehicle-classification-final)



## EARLY AGE RUTTING POTENTIAL OF WARM MIX ASPHALT (WMA)

### Principal Investigator(s):

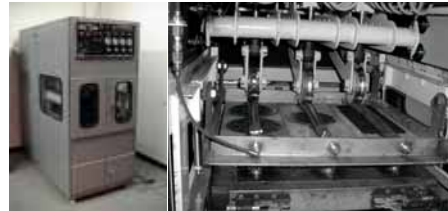
Dr. Thomas Bennert

### Institution(s):

Rutgers University, Center for Advanced Infrastructure and Transportation (CAIT)

### Sponsor(s):

University Transportation Research Center - Region 2 (UTRC)



Asphalt Pavement Analyzer (APA) at Rutgers University; b) Inside the Asphalt Pavement Analyzer Device

The term warm mix asphalt (WMA) refers to technologies and systems that allow for the substantial reduction in production and compaction temperatures of hot mix asphalt. The original intent of utilizing WMA was to provide better workability and compaction of asphalt mixtures. In turn, a better compacted asphalt pavement should also enhance its general performance. It is well known that asphalt pavements compacted to better densities often have better fatigue and rutting performance. To help address New York State's concerns with the implementation of WMA, fourteen (14) sets of WMA and companion HMA plant produced mixtures were evaluated in the laboratory for their respective rutting, fatigue cracking, and moisture damage resistance. WMA technologies mainly revolved around foamed asphalt and surfactant technologies (Evotherm). To avoid issues

with reheating the loose mix in the laboratory, all test specimens were produced at the asphalt plant's Quality Control laboratory after 2 hours of oven conditioning. On average, the test results indicated that the WMA specimens were slightly more prone to laboratory permanent deformation testing, slightly more prone to moisture damage, but achieved a greater resistance to fatigue cracking. However, when comparing the test data to established performance criteria for rutting and moisture damage potential, both the WMA and HMA mixtures were found to perform equally in most cases. The full report is available for a free download at the UTRC website:

[www.utrc2.org/publications/warm-mix-asphalt-final](http://www.utrc2.org/publications/warm-mix-asphalt-final)

## COMPUTATIONAL MODELING OF DRIVER SPEED CONTROL WITH ITS APPLICATIONS IN DEVELOPING INTELLIGENT TRANSPORTATION SYSTEMS TO PREVENT SPEEDING-RELATED ACCIDENTS

### Principal Investigator(s):

Dr. Changxu (Sean) Wu

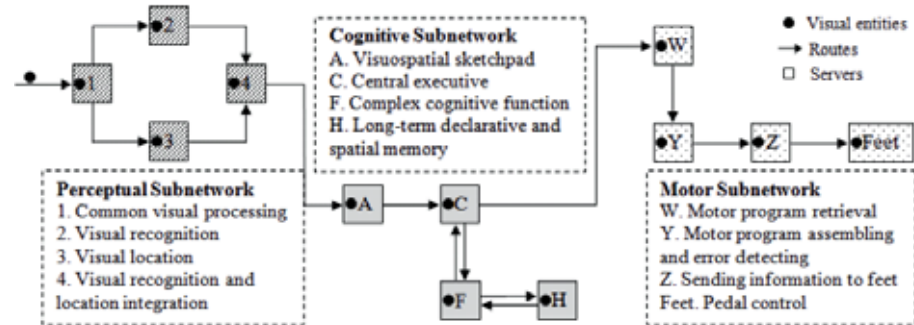
### Institution(s):

State University of New York (SUNY)

### Sponsor(s):

University Transportation Research Center - Region 2 (UTRC)

Speeding is the leading contributing factor in fatal accidents in New York State, according to NY State Department of Motor Vehicle Accidents Statistical Summary (2009). Understanding and modeling speeding and speed control is one of major challenges in human performance modeling which involves: a) the modeling of several aspects of human cognitive system: perception, decision making and motor control as well as their interaction with the vehicle model; b) individual differences in speed control and prediction of speeding in real time. However, few of existing computational models is able to cover all of these important aspects together. The main objective of this project was to build a new mathematical driver speed control model and apply it to develop an intelligent speeding control system. Multi-disciplinary approaches are used to build the mathematical model of driver speed control, integrating methods in operations research (Queuing Network-Model Human Processor, QN-MHP) and theories in psychology (Rule-Based Decision Field Theory, RDFT) to predict driving speed, pedal angle, acceleration, the time when drivers exceed the speed limit, and the magnitude of speeding. The model not only quantifies an average driver's speed control behavior, but also models individual drivers' decision making references and impulsiveness. A human driver experimental



study has been conducted to validate the prediction of the model. The model is implemented in a real-time intelligent speeding control system, which provides warnings to drivers to prevent speeding proactively. The intelligent system online monitors the pedal behavior of a driver, calculate the probability of speeding for that driver in the next few seconds, and proactively provide necessary warnings to that driver to prevent his or her speeding behavior in real-time. The full report is available for a free download at the UTRC website: [www.utrc2.org/publications/computational-modeling-Final](http://www.utrc2.org/publications/computational-modeling-Final)

## A SIMULATION BASED ASSESSMENT APPROACH TO INCREASE SAFETY AMONG SENIOR DRIVERS

### Principal Investigator(s):

Dr. Kevin Hulme

### Institution(s):

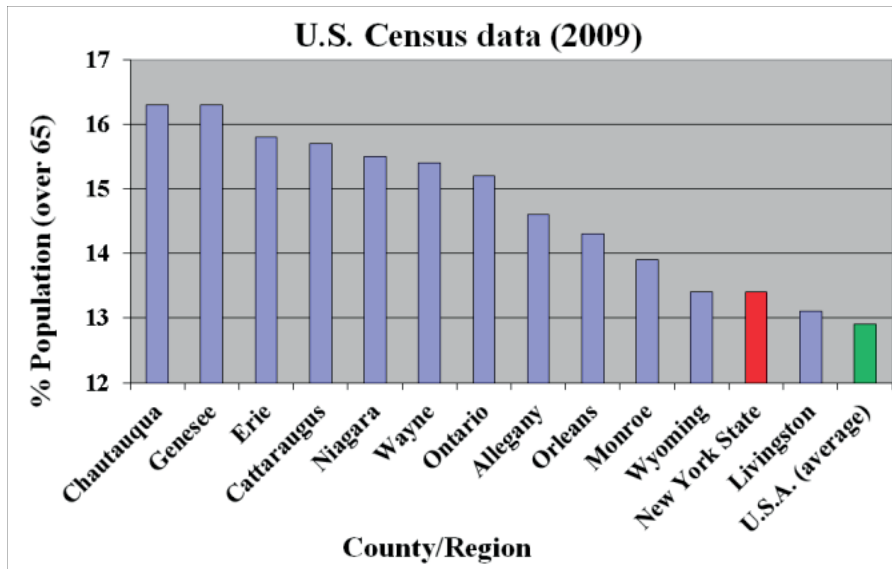
State University of New York (SUNY)

### Sponsor(s):

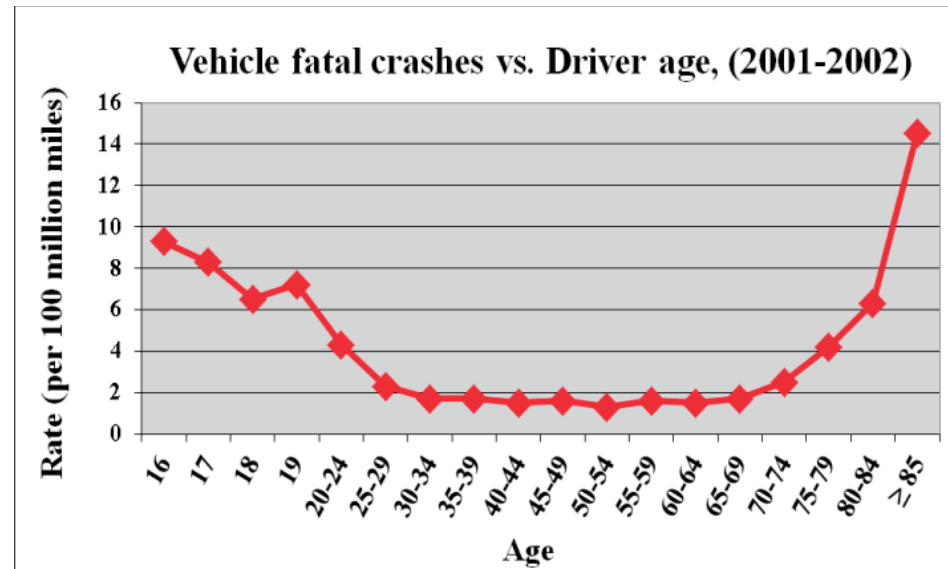
University Transportation Research Center - Region 2 (UTRC)

Statistics show that in the U.S., there are about 38 million licensed drivers over age 65; about 1/8 of our population. By 2024, this figure will DOUBLE to 25%. The completed research was intended to address the driving capabilities of our older population, as accident and injury risk has been statistically shown to increase – normalized per mile driven – with advanced age. The primary objective was to perform a preliminary Pilot Study (N=10) that allows our team to analyze the impact of supplementing traditional driver evaluation for senior persons with cognitive impairment using state-of-the-art driving simulation technologies. Within a simulator, a variety of driving scenarios can be implemented that sufficiently challenge drivers in a way that, due to safety and logistical concerns, cannot be accomplished within the confines of a real vehicle. Longer-term, a driving simulator can be used to define driving tasks that are most likely to be affected by stages of dementia, and to measure, capture, and analyze vital driver performance metrics. Each driver is evaluated at Erie County Medical Center (ECMC) using a conventional driver evaluation mechanism: in-clinic (to measure cognitive, motor and visual skills) and in-vehicle (to measure mechanical ability to operate a vehicle). Prior to these examinations, each driver is evaluated in a motion-based driving simulator located at the University at Buffalo (UB). A subsequent data analysis is performed in an effort to identify any trends or patterns between the three evaluation mechanisms. The full report is available for a free download at the UTRC website:

[www.utrc2.org/publications/safety-among-senior-drivers-final](http://www.utrc2.org/publications/safety-among-senior-drivers-final)



Western New York 65+ population (by County)



Accidents by age, normalized per mile driven



# Technology Transfer

# “UTRC’s Technology Transfer program goes **BEYOND** what might be considered **TRADITIONAL**”

UTRC’s Technology Transfer Program goes beyond what might be considered “traditional” technology transfer activities. Its main objectives are (1) to increase the awareness and level of information concerning transportation issues facing our Region; (2) to improve the knowledge base and approach to problem solving of the region’s transportation workforce, from those operating the systems to those at the most senior level of managing the system; and by doing so, to improve the overall professional capability of the transportation workforce; (3) to stimulate discussion and debate concerning the integration of new technologies into our culture, our work and our transportation systems; (4) to provide the more traditional but extremely important job of disseminating research and project reports, studies, analysis and use of tools to the education, research and practicing community both nationally and internationally; and (5) to provide unbiased information and testimony to decision-makers concerning regional transportation issues consistent with the UTRC theme.

# UTRC CONFERENCES & SYMPOSIUMS

## THE SECOND CONNECTED VEHICLES SYMPOSIUM



From Left to Right: Tom Maguire - NYCDOT, Jose Dios - NJTA, Carl Anderson - FHWA, James Misener - Independent Consultant, Dhanesh Motiani - NJDOT, Raheel Shabih - PANYNJ, Alison De Cerreno - PANYNJ



UTRC organized and sponsored the 2nd Connected Vehicles Symposium that was held from June 17-18, 2013 at Rutgers University. The Second Connected Vehicles (2CV) Symposium brought industry, government and academia together to explore the future directions in research and deployment of connected vehicle technologies in our region. Similar to the last year's symposium, many wireless communication technologies such as Vehicle-to-Vehicle (V2V), Vehicle-to-Infrastructure (V2I), Infrastructure-to-Vehicle (I2V), and Vehicle-to-Other (V2O) that can be used to improve our transportation system were the centerpiece of this meeting. However, this year's symposium broadened its scope by looking at some of the emerging trends and challenges in automating the task of driving. Initially these technologies can be seen as aids that deliver enhanced safety, comfort and convenience; however, in the long run, they can emerge as autonomous self-driving entities that efficiently share a common infrastructure that accommodates all levels of automation as well as bicycles, pedestrians and other entities that currently use our roadways.

The organizers of the 2CV symposium tried to achieve the participation of a very large and diverse group of stakeholders that can provide the broadest vision in terms of the major goals of the symposium briefly described above. The 2CV symposium was held at the CoRe Auditorium on Busch campus of Rutgers University on June 17-18, 2013.

For Conference proceedings and speaker's presentations, please visit the conference website at: [www.connectedvehicleworkshop.com](http://www.connectedvehicleworkshop.com)



Mercedes-Benz Representatives:  
David Larsen (Left) and Richard Krueger (Right)



Dr. Kaan Ozbay, NYU-Poly



Christine O'Brien, Insurance Council of NJ



Dr. Adel Sadek, UB/SUNY



## GPS FOR TRANSPORTATION SYMPOSIUM



*Dr. Hongmian Gong, Hunter College, CUNY*

UTRC sponsored a GPS for transportation Symposium held on May 17th, 2013 at the Roosevelt House, NY. The GPS Transportation symposium featured presentations by Mr. Matthew W. Daus, former Commissioner and Chairman of the New York City Taxi and Limousine Commissions, on public policies and regulations as well as by Dr. Hongmian Gong (Geography, Hunter College), Nicholas Maxemchuk (Electrical Engineering, Columbia University), Xuegang (Jeff) Ban (Civil and Environmental Engineering, Rensselaer Polytechnic Institute), and Jianting Zhang (Computer Science, City College) on GPS for person-based travel, public transit, freight transportation, and taxi industry.

The global positioning system (GPS) has been increasingly used to gather data for transportation modeling and planning. However, the potential of this emerging technology and its combined power with other technologies such as wireless telecommunications, geographical information systems (GIS), and Internet have not been fully understood and utilized. The goal of this symposium was to bring people together to discuss the use of GPS and other new geospatial technologies for transportation planning and policies. Ideas developed from this symposium served to facilitate future collaboration among universities, government agencies, non-for-profit organizations, and private industries.

For more information, please visit the symposium website at: [www.geo.hunter.cuny.edu/GPSSymp](http://www.geo.hunter.cuny.edu/GPSSymp)

## A SYMPOSIUM ON BIKES AND THE BROOKLYN WATERFRONT: PAST, PRESENT AND FUTURE

A half-day symposium on the evolving culture and impact of the bicycle in Brooklyn was presented by the Brooklyn Waterfront Research Center & the University Transportation Research Center. The symposium was held on March 22nd, 2013 at the CityTech University of CUNY.

The symposium addressed on how the biking is booming in Brooklyn. The event was very well attended by local authors, business people, planners and advocates. The event's organizers, Dr. Richard Hanley, Director of the BWRC and Dr. Camille Kamga, UTRC Director welcomed the speakers and attendees in their opening remarks. The event's keynote speaker, David Herlihy, a historian and author of the *Bicycle: The History*, talked about a history of the bike culture in Brooklyn. The event's sessions included:

- How Does Brooklyn Fit into New York City's Bicycling Plan?
- Engineering Bicycles and Bike Lanes
- Bicycles as Agents of Environmental and Social Change
- Bringing Cyclists to Brooklyn: Tourism, Recreation, and Sport
- Screening of "Racing Toward Red Hook," Jessica Scott, director



*Dr. Richard Hanley, BWRC Director, and Professor, New York City College of Technology, CUNY*



At the end of the event, a bike tour was offered to all attendees to the Brooklyn Water Front, the bikes for those were provided by Bike & Roll.

The event's presentations and video are available at: [www.utrc2.org/events/symposium-bikes-and-brooklyn-waterfront](http://www.utrc2.org/events/symposium-bikes-and-brooklyn-waterfront)



*David Herlihy  
Historian*



*Hayes Lord  
NYCDOT*



*Jessica Scott  
Filmmaker, Producer*



*Steve Durrant  
Alta Bicycle Share/CitiBike*

# UTRC BOOK TALK EVENTS

## RESHAPING METROPOLITAN AMERICA: DEVELOPMENT TRENDS AND OPPORTUNITIES TO 2030 METROPOLITAN PLANNING + DESIGN SERIES

Dr. Arthur C. Nelson, FAICP, is Presidential Professor of City & Metropolitan Planning at the University of Utah where he is also Director of the Metropolitan Research Center and is Co-Director of the Master of Real Estate Development Program.

UTRC hosted a book talk event with Dr. Arthur C. Nelson on September 20, 2013 at the New York University. Dr. Nelson presented his book's findings to the NYC audience. Since nearly half of the buildings that will be standing in 2030 do not exist today, we have a tremendous opportunity to reinvent our urban areas, making them more sustainable and livable for future generations. But for this vision to become reality, the planning community needs reliable data about emerging trends and smart projections about how they will play out. Arthur C. Nelson delivered that resource in Reshaping Metropolitan America.



This unprecedented reference provides statistics about changes in population, jobs, housing, nonresidential space, and other key factors that are shaping the built environment, but its value goes beyond facts and figures. Nelson expertly analyzes contemporary development trends and identifies shifts that will affect metropolitan areas in the coming years. He shows how redevelopment can meet new and emerging market demands by creating more compact, walkable, and enjoyable communities. Most importantly, Nelson outlined a policy agenda for reshaping America that meets the new market demand for sustainable places.

Publisher's Link to purchase the book:

[islandpress.org/ip/books/book/islandpress/R/bo8079737.html](http://islandpress.org/ip/books/book/islandpress/R/bo8079737.html)

To view Dr. Nelson's presentation and the event video, please visit the website at:

[utrc2.org/events/book-talk/reshaping-metropolitan-america](http://utrc2.org/events/book-talk/reshaping-metropolitan-america)

## PARKING REFORM MADE EASY

Dr. Richard Willson, Professor and Chair of the Department of Urban and Regional Planning at California State Polytechnic University at Pomona delivered a presentation on his recent book entitled, "Parking Reform Made Easy" at the UTRC book talk Event. The Event took place at the Bernard and Anne Spitzer School of Architecture at the City College of New York.

Richard Willson's research concerns parking requirements, parking management, climate change planning, and transit-oriented development. His book, Parking Reform Made Easy, was published by Island Press in 2013. Today, there are almost three and a half parking spaces for every car in the United States. Outdated minimum parking requirements stand at the heart of this excess parking, wasting land in the suburbs and thwarting economic development in urban centers. The presentation explained the problems with minimum parking requirements and showed how to reform them.



Drawing on his new book, Parking Reform Made Easy, Dr. Willson illustrates a 12-step parking requirement reform process with practical examples. This process helps stakeholders answer the question of how much parking, if any, should be required in zoning codes. The parking reform process emphasizes good quality parking data, an understanding of future trends affecting parking use, and a series of technical and policy adjustment factors.

The presentation also addressed ways of managing parking reform through challenging community and political processes. In the end, parking requirements are a policy choice, not a technical calculation.

The presentation was useful to land use and transportation planners, economic developers, housing developers, designers, policy makers, and community activists.

More information on Parking Reform Made Easy is available at

[islandpress.org/ip/books/book/islandpress/P/bo8793591.html](http://islandpress.org/ip/books/book/islandpress/P/bo8793591.html)

To view W. Willson's presentation and the event video, please visit the website at:

[utrc2.org/events/parking-reform-made-easy](http://utrc2.org/events/parking-reform-made-easy)

## UTRC VISITING SCHOLAR SEMINARS

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### UTRC PRESENTED A SEMINAR ON “RAILROADS AS CHANGE AGENTS” BY FRANK WILNER

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On March 15, 2013, UTRC presented a Visiting Scholar Seminar with the transportation expert, Frank N. Wilner; an economist and a journalist. The event was held at the Baruch College Conference Center. Frank shared his perception on the American railroad industry with an insight into Wilner's latest book, “Amtrak: Past, Present, Future”.

Frank is an economist and journalist who has written six books on railroad economics, labor relations and public policy, discussed his latest book, “Amtrak: Past, Present, Future,” published by Simmons-Boardman Books of Omaha, Neb.

Wilner discussed the book in the context of how railroads have been a change agent in American public policy, being the first industry subject to economic, safety and labor relations regulation, the first subject to injured-worker compensation, and the first the first required to provide retirement/pension plan predating Social Security. The reasons for creation of Amtrak were examined, as well as the public policy fights that have bedeviled Amtrak and its yearly begging treks to Capitol Hill to keep its passenger trains operating.

Wilner also discussed the little-known matter of Amtrak's common stock, which is held by an insurance conglomerate, Warren Buffett and Bill Gates, and how the common stock ownership may prevent privatization of Amtrak and its Northeast Corridor that connects Washington, D.C., Philadelphia, New York and Boston. He also reviewed some of the dreadful marketing/finance decisions of Amtrak and what he calls the “dreadful” decisions of the Obama administration with regard to creating higher- and high-speed rail in the United States.

Railway Age magazine once described Wilner as perhaps the only person who has interacted with railroads from myriad perspectives – as a railroad officer, a White House appointed regulator, a journalist and rail-union official. Wilner also is the author of “Understanding the Railway Labor Act,” and “Railroad Mergers: History, Analysis, Insight.”

To access Frank's presentation and seminar video, please follow the link: [utrc2.org/events/railroads-change-agents](http://utrc2.org/events/railroads-change-agents)



### UTRC HOSTED A SEMINAR FEATURING SAM SCHWARTZ, PRESIDENT AND CEO OF SAM SCHWARTZ ENGINEERING (SSE) AND FORMER NYC TRAFFIC COMMISSIONER, TO TALK ABOUT “MOVE NY. FASTER. SMARTER. FAIRER”

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Sam Schwartz, president and CEO of Sam Schwartz (SSE) presented a talk on March 28, 2013 at the Baruch College Conference Center. Mr. Schwartz has been working on transportation issues in the city ever since the Lindsay Administration. (And even before that, as a New York City cab driver.) In early March, Schwartz, a traffic engineer and former New York City Department of Transportation traffic commissioner, released his most unconventional idea yet, a blueprint of sorts for the future of New York City's transportation infrastructure. He called his plan the “More Equitable Transportation Formula for NY Metro Area.”



In his presentation, Schwartz discussed his proposed plan “fair pricing,” which adds tolls to the East River bridges (which are currently free) while also lowering the tolls on the bridges that do not enter Manhattan, such as the Throgs Neck and the Verrazano-Narrows. The goal is to discourage people from driving into “the central business district,” a.k.a. Manhattan.

For more information on this presentation, please visit the website at: [www.utrc2.org/events/equitable-transportation-formula-ny-metro-area](http://www.utrc2.org/events/equitable-transportation-formula-ny-metro-area)

## UTRC PRESENTED A VISITING SCHOLAR SEMINAR WITH JEFFREY TUMLIN ON “LEARNING FROM AMERICA’S MISTAKES: MOSCOW AND ABU DHABI DEFINING THE GREAT 21ST CENTURY METROPOLIS”

During his visit to New York City in the Fall 2013, Jeffrey Tumlin, an owner and director at Nelson/Nygaard Consulting Associates, presented at the UTRC seminar on November 15th, 2013 at the SUNY Global Center. In his presentation, he compared the two metropolis cities; Moscow and Abu Dhabi. These cities are two rapidly growing and gentrifying global capitals, striving to take their place on the world stage. Like many developing cities, they’ve experimented with crass, Las Vegas-style development schemes, seeking the urban vision they’ve seen on American TV shows. Increasingly, they’ve been horrified by the result. Abu Dhabi, with a tenth of the world’s petroleum reserves, has learned from the mistakes of its better-known neighbor, Dubai, as well as those of American cities. It is now using its wealth to impose more sophisticated design, transport and sustainability requirements than most any US city. Now Moscow is starting to catch up, with new efforts to repair the urban realm of the historic city, and plan more walkable, livable communities at its burgeoning edges.



Jeffrey Tumlin is an owner and director of strategy at Nelson\Nygaard Consulting Associates, a San Francisco-based transportation planning and engineering firm that focuses on sustainable mobility. For more than twenty years, Jeff has led station area, downtown, citywide, and campus plans in cities from Seattle and Vancouver to Moscow and Abu Dhabi. His work at Stanford University resulted in traffic and GHG emission reductions of as much as 40%. He has developed plans throughout the world that accommodate millions of square feet of growth with no net increase in motor vehicle traffic. These projects have won awards from the U.S. General Services Administration, Institute of Transportation Engineers, American Planning Association, American Society of Landscape Architects, Congress for the New Urbanism, and Urban Land Institute.

To access Jeffrey’s presentation and seminar video, please follow the link: [utrc2.org/events/Visiting-Scholar-Seminar/Jeffrey-Tumlin](http://utrc2.org/events/Visiting-Scholar-Seminar/Jeffrey-Tumlin)



## UTRC FACULTY AND STAFF ATTENDED THE 92ND ANNUAL TRB MEETING



UTRC staff and consortium faculty participated at the 92nd Transportation Research Board Meeting held from January 13 - 17, 2013. There were more than 100 papers and presentations delivered at TRB from UTRC Consortium

faculty covering all kind of transportation related topics; Aviation, Bridges, Finance, Economics, Freight, Operations & Traffic Management, Pedestrian and Bicyclists, Policy and Safety, just to name a few. UTRC has compiled a list of all these presentations in a compendium available online at [www.utrc2.org/publications/utrc-trb-2013](http://www.utrc2.org/publications/utrc-trb-2013)

## UTRC DIRECTOR, DR. CAMILLE KAMGA, AN ITS BOARD MEMBER, ATTENDED THE 2013 ITS-NY ANNUAL MEETING



The 2013 Annual Meeting and Technology Exhibition was held on June 13, 2013 at Saratoga Springs. ITS-NY celebrated its 20th Year Anniversary! The Conference focused on the Theme of The Past, Present and Future of ITS. Many highly informative speakers and panel sessions addressed MAP-21 Performance Measures and Planning for Operations; Major Civil Projects with ITS Components; Disaster Planning and Recovery after Hurricane Sandy; more ITS Applications including Connected Vehicles; and the Future of ITS including Autonomous Vehicles; and more. CEUs was awarded for attendance at the conference. Celebratory Events included a Special 20th Anniversary and Awards Dinner!

## UTRC STAFF ATTENDED THE NEW YORK METROPOLITAN TRANSPORTATION COUNCIL ANNUAL MEETING



*Dr. Camille Kamga with FHWA Administrator Victor Mendez at the NYMTC Annual Meeting*

UTRC staff attended the NYMTC annual meeting held on February 26, 2013 at the US Custom House Auditorium in Manhattan. Council members gathered for NYMTC's 2013 Annual Meeting to discuss Hurricane Sandy and its effects on the region's transportation system. The Council also took action on a number of items including adopting the 2013 – 2014 Unified Planning Work Program (UPWP) and recognizing the work of several members, including Rockland County Executive C. Scott Vanderhoef, who participated in his last Annual Meeting. The presentations and a webcast of the speakers are available at NYMTC's website at: [www.nymtc.org/](http://www.nymtc.org/)

## 2013 INTERNATIONAL ASSOCIATION OF TRANSPORTATION REGULATORS (IATR) ANNUAL CONFERENCE



*From Left to right, Dr. Camille Kamga of the University Transportation Research Center, IATR Keynote Speaker Gregory Winfree - Administrator of the Research Innovation and Technology Administration of the U.S. Department of Transportation, and IATR President - Matthew W. Daus.*

UTRC Distinguished lecturer and IATR president, Matthew W. Daus hosted the 2013 IATR Conference, held on September 22-25, 2013 at St. Louis, Missouri. UTRC Director, Dr. Camille Kamga, a member of the IATR Academic Research Committee attended the conference.

A three days conference was organized around the following themes for each day:

- Day 1 - Airport Authorities and Regulators: Our Common Goals
- Day 2 - "Big Data" for Regulators and Airport Landside Managers – Technology, App Management, Ridesharing, Performance Management, and Fact-Based Policy-Making
- Day 3 - The Future of Accessible Ground Transportation – Paratransit, Airports and Regulators Working Together

The presentations and videos from the conference can be accessed at the IATR website: [www.iatr.org/2013IATRConference.html](http://www.iatr.org/2013IATRConference.html)

## UTRC AT THE TRANSACTION 2013 CONFERENCE



UTRC participated at the annual New Jersey Transportation Conference and Expo - TransAction 2013, held at the Tropicanna Hotel, Casino and Conference Center, Atlantic City, NJ on April 17th, 18th, and 19th (Wednesday, Thursday and Friday). TransAction 2013 featured 65 workshop sessions (4 & 5 concurrent throughout each day) specializing in bus, rail, roads, bridges, goods movement, pedestrian/bicycle, paratransit, community

transportation, ports, and much more. The conference served as a network opportunity for different transportation working agencies and groups from academia, private and public sector throughout tri-state area. For more information, please visit the conference website at: [www.njtransactionconf.com](http://www.njtransactionconf.com)

## UTRC STAFF AT THE 15TH ANNUAL NJDOT RESEARCH SHOWCASE



The 15th Annual NJDOT Research Showcase was held on October 23rd, 2013 at the Conference Center at Mercer. The NJDOT showcase is an opportunity for NJDOT customers to experience the broad scope of ongoing research initiatives, technology transfer activities, and academic research being conducted by university research partners and their associates.

Research was highlighted in presentations, poster sessions, and displays. The program was sponsored by the NJDOT Research Bureau with assistance from Rutgers' CAIT-NJ LTAP

# UTRC'S NEWSLETTER

UTRC's Newsletter, Research News, is published quarterly and provides information to transportation professionals about research, education, and outreach activities in Region 2. Research news is available online.

## WINTER 2013



[www.utrc2.org/content/winter-2013](http://www.utrc2.org/content/winter-2013)

## SPRING 2013



[utrc2.org/content/spring-2013](http://utrc2.org/content/spring-2013)

## SUMMER 2013



[www.utrc2.org/content/summer-2013](http://www.utrc2.org/content/summer-2013)

# UTRC'S WEBSITE

The University Transportation Research Center Region 2 maintains a Website at [www.utrc2.org](http://www.utrc2.org) which contains a comprehensive overview of the center's objectives, purposes and functions for planning and management of regional transportation systems.

The Website serves as an information tool for those transportation agencies that are interested in the center's research activities and as a bulletin board for students who are interested in pursuing transportation research studies toward advanced degrees.

The Website is a focal point for updated information presented in an accessible format which is visually pleasing and logically navigable.

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Welcome, Guest

**Dr. Robert E. Paaswell on ABC News: Piecing Together the Clues in the Deadly Train Derailment**

Prof. Robert E. Paaswell, Director Emeritus, UTRC & Distinguished Professor, Civil Engineering, The City College/CUNY

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PUBLICATIONS

- Application of Industrial Standards to Bus Maintenance Procedures
- Design of a Scale Model to Evaluate the Dispersion of Biological and Chemical Agents In a NYC Subway Station
- Development of a Rational Method to Design Wick Drain Systems

NEW IN RESEARCH:

- Benchmarking for Asset Hierarchy, Criticality Assessment and Risk Analysis at the MTA and other Transportation Companies
- Effectiveness-Based Pavement Preservation Selection Based on Statistical Analysis of Long Term Pavement Performance Data
- GPS Research Cluster Team for Transportation
- Lessons from Hurricane Sandy for Port

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Welcome, Guest Home Events

**MOVE NY. Faster. Smarter. Fairer**

MOVE NY. Faster. Smarter. Fairer

March 28, 2013 MOVE NY. Faster. Smarter. Fairer

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PUBLICATIONS  
Application of Industrial Standards to

Bikes And The Brooklyn Waterfront Past, Present, And Future Part 2

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Welcome, Guest Home

**Research**

**UTRC RESEARCH PROGRAM MISSION**

UTRC's research program is first and foremost responsive to our theme of "Planning and Managing Regional Transportation Systems in a Changing World". Issues surrounding the operation, expansion and maintenance of the region's vast networks of intermodal and multimodal systems are increasingly complex. UTRC, together with its regional partners and stakeholders, designs and implements a research program meant to bolster the region's transportation systems and to assist in meeting and serving the needs of a growing and demanding customer base.

**PROGRAM DETAILS**

UTRC has developed strong relationships with local sponsors and is continuously responsive to their needs. As a regional resource, state and local transportation agencies routinely look to the Center to deal with research and training problems and questions that require academic inputs or the application of state-of-the-art technologies. Public agencies, private organizations and nonprofits participate in the UTRC Research program and studies related to transit, intermodalities, infrastructure, funding and pricing and more, are regularly carried out.

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