



# Research News

Summer 2009

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Region 2 University Transportation Research Center [www.utrc2.org](http://www.utrc2.org)

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## Director's Letter

The current President of the City College of New York has resigned to become President of the University of Cincinnati. The Chancellor of CUNY has asked me to serve as Interim President of CCNY for at least one year. So, my colleagues, this is my last letter to you as Director of UTRC. It has been a privilege to work, talk, argue, have coffee and just hang around with you. This



will have been – in August – my 20th year, an appropriate time to step down and welcome new blood and ideas to UTRC. During the coming period, Dr. Camille Kanga, newly appointed as Assistant Professor of Civil Engineering at CCNY and the long time operational brains of the Center will serve as Interim Director. USDOT has been notified of and has

approved of this transition. In my new office, I will still be just a few footsteps away from UTRC and hope to remain active in the transportation life of the region. I want to thank all of you, my friends and colleagues, for helping make UTRC into the success that it is and I look forward to its continued growth and impact on the Region.

## News & Notes

### **Congratulations Interim City College President Paaswell!**

UTRC is pleased to announce that the Board of Trustees of The City University of New York appointed Dr. Paaswell Interim President of The City College of New York, beginning October 15. Buz brings a thorough knowledge of The City College, nationally recognized expertise in the fields of transportation and civil engineering, and invaluable executive-level experience to this position.



For more information, visit [http://www.cuny.edu/news/newsreleases\\_p=4401.html](http://www.cuny.edu/news/newsreleases_p=4401.html).

## Professor Agrawal Appointed Chief Editor

UTRC is proud to inform you that its Principal Investigator, Dr. Anil Agrawal, Professor of Civil Engineering at City College of New York, has been appointed the Chief Editor of the ASCE Journal of Bridge Engineering effective October 1, 2009. He has been serving as the Associate Editor of ASCE Journal of Bridge Engineering and ASCE Journal of Structural Engineering for the last several years. The Journal, devoted exclusively to bridge engineering, reports on both the theory and the practice of the structural design, inspection, construction, and performance of bridges. From materials to rehabilitation, safety to demolition, papers address all aspects of a bridge's life. Dr. Agrawal is the 3rd Chief Editor since the Journal was launched in 1996. UTRC congratulates Dr. Agrawal for his achievements and appointment!

<http://www.pubs.asce.org/journals/bridge/>

## New National Transportation Security Center of Excellence Created at Rutgers

The Center for Transportation Safety, Security and Risk, one of seven new university transportation security centers of excellence created by Congress, has been established within the Edward J. Bloustein School of Planning and Public Policy at Rutgers. Organizationally, the center works cooperatively with the *National Transit Institute* and the *Alan M. Voorhees Transportation Center*, as well as with other Rutgers faculty and staff in the *School of Engineering*, *Center for Advanced Infrastructure and Transportation*, *School of Environmental & Biological Sciences*, *School of Public Health* and other staff involved in disaster preparedness and emergency response.

## Search to Begin for New UTRC Director

UTRC will begin its search for a new Director. Our goal will be for new Director to begin at the start of the 2010/2011 academic year. Candidates must be nationally recognized experts in the field of transportation, as well as active faculty members. Candidates must have proven leadership skills and possess management experience at the highest level. More information will be posted at [www.utrc2.org](http://www.utrc2.org).

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## RESEARCH HIGHLIGHTS

### LIVING SNOW FENCE: First Training Session Held

Drifting and blowing snow is a major concern for NYSDOT maintenance managers. It causes safety challenges for motorists and workers and is costly to remove or control. Living snow fence allows managers to use vegetation instead of human-made fences to keep snow from blowing and drifting across a highway. Dr. Timothy Volk of SUNY's College of Environmental Science and Forestry (ESF) is developing guidance on living snow fence design and installation. Working with his co-workers Lawrence Abrahamson and Philip Castellano, Dr. Volk is also developing and refining a train-the-trainer course on designing and installing living snow fence. In late May, Dr. Volk, Region 3 and Onondaga East Residency hosted the first train-the-trainer session. At this session, 30 NYSDOT staff had an enlightening and productive two days learning how to design a living snow fence, and then actually installing it. The course was offered at SUNY ESF's Heiberg Research Forest in Tully, south of Syracuse.



Dale Neu of Onondaga East Residency doing final work placing mulch. Mulch, placed with an excavator or shovel, is an important final step to conserve moisture and discourage weed growth.



Here is a view taken in late July, looking south, of the Interstate 81 installation. The willows are showing good growth.

For the full article as it appeared in the NYSDOT Technology Transfer News, follow <https://www.nysdot.gov/divisions/engineering/technical-services/transportation-research-development/technology-transfer-news>

## **Maritime Support Services Location Study: Recommendations Presented**

Findings and recommendations have been presented as part of the Maritime Support Services Location Study conducted recently by Prof. Shmuel (Sam) Yahalom of SUNY's Maritime College. The study, conducted on behalf of the New York City Economic Development Corporation (NYCEDC) and the Brooklyn Navy Yard Development Corporation (BNYDC), aimed to identify and analyze existing maritime support services and then determine service needs for the future. Some of the study's recommendations have already been adopted and implemented by the NY City Council.



Major findings indicate that the Port of New York generates more than \$18 billion in international and domestic economic activity annually, serving more than 221 million DWT and nearly 5000 international vessels (deep draft) trip calls in 2005. The maritime support service industry carried the equivalent of 3.9 million truck trips of liquid and dry cargo in 2005. The Port of New York growth rate of tanker and container vessel exceeds the national level. Furthermore, the maritime support services industry employs 11,870 individuals, its economic impact is over \$2 billion annually, and the average tugboat handled is 381.8 thousand tons with an average value of \$596 million in 21,000 calls for service (2005).

The study's recommendations include but are not limited to the following: develop a maritime support service policy, create a seaport planning authority or agency, preserve existing berthing areas for the industry, encourage building more dry dock facilities, and develop a network of tie-up sites or hubs in each borough; thus, a hub could also be used as an emergency response facility, commercial center, recreation and education facility, and a transit stop for water transit.



## **SUNY Buffalo Awarded Grant To Study VMT and Land Use**

Adel Sadek and Qian Wang, faculty members in the Department of Civil, Structural and Environmental Engineering at the University at Buffalo, the State University of New York, were recently awarded a research grant, funded jointly by the New York State Energy Research and Development Authority (NYSERDA) and the New York State Department of Transportation (NYSDOT). The grant, which is entitled "Reducing Vehicle Miles Traveled through Smart Land-use Design", has three specific objectives. First, the study will evaluate recently developed tools and models that have the potential to provide the increased modeling sensitivity required for modeling smart growth strategies. The second objective is to use a real-world case study to demonstrate how these tools can be used to evaluate and analyze smart growth strategies, and how much reduction in vehicle miles traveled (VMT) may be achieved as a result of adopting and implementing smart growth principles. Finally, the third objective is to develop a prototype decision support system (DSS) that can be used by planning organizations for optimal land use design aimed at minimizing VMT.

## **Rowan University Lab Put In Place To Study Binders**

Dr. Yusuf Mehta of Rowan University has been awarded a grant to study the "Correlation between Multiple Stress Creep Recovery (MSCR) Results and Polymer Modification of Binder." Currently, the state of New Jersey requires the use of styrene-butadiene or styrene-butadiene-styrene formulations. In-lieu of the polymer shortages, the state of New Jersey would like to expand the use of polymers and rubber in the binder. The state of New Jersey has adopted specification limits from the Elastic Recovery test to evaluate modified binders. However, since then, the binder Expert Task Group has recommended the use of MSCR (Table 3 - AASHTO TP 70) to evaluate modified binders. Before the state of New Jersey can allow the use of other modifiers, there is a need to first determine whether parameters such as the Jnr and the recoveries determined from MSCR and ER are sensitive to the polymer or rubber modification of the binder. This will be a critical step in identifying whether these parameters can be effectively utilized in the selection of modified binder specification.



## **UTRC Investigators, Maxemchuk and Ukkusuri Recently Awarded NSF Grant**

UTRC provided seed money and the intellectual forum for Nicholas F. Maxemchuk, Professor, Department of Electrical Engineering, Columbia University and Satish V. Ukkusuri Professor at Purdue University, to collaborate and advance their research. UTRC continues to play a pivotal role by supporting innovative research and is happy to announce that Maxemchuk and Ukkusuri have received a three year NSF grant for "Collaborative Research: Integrating Real Time Traffic Signal Control with Networking Control Strategies to Optimize Urban Traffic Networks". The goal of this project is to decrease commute times, reduce fuel consumption and increase the capacity of urban roadways by using real time measurements, communications and processing to control the timing and phase of traffic signals.

## **Lifecycle Carbon Footprint Analysis of Transportation Capital Projects**

NJDOT has contracted with the Voorhees Transportation Center (VTC) at Rutgers to develop methods and software to estimate lifecycle carbon emissions associated with the construction and maintenance of transportation capital projects. Phase I of the project will include literature and practice reviews of the state-of-the-art of materials production, construction equipment, and maintenance practices for transportation capital projects. The reviews consist of planning documents, standard practice specification

manuals, related cutting edge literature, and computer models that address carbon dioxide and other greenhouse gas emissions. A literature review of induced travel effects associated with infrastructure construction is also included in Phase I of the research to assess the viability of estimating carbon emissions associated with changes in travel behavior. Phase II will involve development of an assessment methodology for highway and transit projects, and development, testing, and dissemination of a software tool.

## **Evaluation of Property Values in New Jersey Transit Villages**

The Voorhees Transportation Center is also conducting research examining whether property values near transit villages or train stations are higher than properties located more than one mile away from a train station. The project is funded by the New Jersey Association of REALTORS Governmental Research Foundation (GRF). The research will compare property values of residential and commercial properties within a radius of a quarter mile, half a mile and one mile of a train station to those located within more than one mile from the station. A minimum of five transit hubs, spread geographically across New Jersey, will be included in the study. At least one of the hubs analyzed will be a Department of Transportation-designated Transit Village. Wherever possible, the study will examine property values in the same location prior to Transit Village designation in comparison to values post-designation.

## **NYSDOT Initiates New Projects**

NYSDOT has selected PIs for three new research studies. They are:

- Grading Rubber Modified Performance Grade, Thomas Bennert, Rutgers University
- Integrated Vegetation Management Decision Support, Christopher Nowak, SUNY College of Environmental Science and Forestry
- Verification/Development of Seismic Design Specifications for Downstate Zone, Anil Agrawal, City College.

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## **RECENT EVENTS**

### **Paaswell on WNYC's Brian Lehrer Show**

Buz Paaswell was introduced as the "resident transportation guru" during WNYC's four segment series, Door to Door, hosted by Brian Lehrer. Buz offered his insights and expertise on such topics as Your Commute and Your City, Technology and Public Policy. Here is the link to the Podcasts.

<http://www.utrc2.org/aboutus/news.php>

### **Andrews Provides Testimony to Senate**

Rutgers Planning professor Clinton Andrews was one of five invited witnesses who testified on July 7th before the U.S. Senate Banking, Housing & Urban Affairs Committee on the impact of transit in reducing greenhouse gas emissions. To learn more and view his testimony, go to

[http://banking.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing\\_ID=5469b84c-73cb-4087-a1f5-57c49f21ae82](http://banking.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing_ID=5469b84c-73cb-4087-a1f5-57c49f21ae82)

### **9/11 Award Winners Present to NYMTC**

This year's recipients of the September 11<sup>th</sup> Academic Initiative Program presented their research and experiences at NYMTC's Brown Bag Lunch Series on September 16th. This initiative was created in 2005 by the New York Metropolitan Transportation Council and the University Transportation Research Center to serve as a living memorial to Ignatius Adanga, Charles Lesperance, and See Wong Shum, the three NYMTC employees lost during the attack on the World Trade Center. To date, it has attracted 51 applicants and has had 18 participants selected through Year 5 (2009-10), 9 in agency internships and 9 in independent research covering a variety of topics pertinent to the Region's TIP goals.



Student topics are listed below. For more detailed description of the students and their work

<http://www.utrc2.org/education/911memorial.php>.

- Nicholas Tulach, Ph.D. candidate in Urban Planning, Rutgers University, "The Tyranny of the Shovel: Exploring Changes in Planning During Periods of Economic Crisis."
- Peter Feroe, Masters in Urban Planning, May 2009, New York University, Internship with the Westchester County Department of Planning on Transit Oriented Development Along the I-287 Corridor.
- Evan Bialostozky, Masters Degree in Geography, May 2009, Hunter College Internship with NYMTC Technical Group
- Jennifer Lozano, Masters Degree in Urban Planning, May 2009, New York University Internship in MTA Capital Construction- Workforce Initiatives
- Darrell Sonntag, Ph.D candidate, Civil and Environmental Engineering, Cornell University "Independent Research on Modeling the Temporal and Size Distributions of Diesel Vehicular Particulate Matter Emissions"

## **Rutgers Offers Workshop on New DEP Grants**

In July, the Voorhees Transportation Center partnered with NJ Future, the Mayors Committee for a Green Future and the NJ Sustainable State Institute to host "Planning and Designing Climate-Friendly Towns: A Workshop for DEP Grants". The workshop highlighted the Local Government Greenhouse Gas Reduction Program created by the NJ Department of Environmental Protection. A focus of the workshop was on zoning standards that allow for transit-oriented development.

## **Bullough Presents Research Findings**

Senior Research Scientist, John Bullough of the Lighting Research Center at Rensselaer Polytechnic Institute recently presented "Toward Performance Specifications for Intelligent High Beam Headlamps" at the International Symposium on Automotive Lighting September 29-30, 2009, hosted by the Darmstadt University of Technology in Germany. Dr. Bullough also has a written contribution, "Predicting Stopping Distances Under Different Types of Headlamp Illumination," to be included in the conference proceedings. Dr. Bullough also presented "Methods of predicting visual performance in driving situations" at The Eye and The Auto 2009, in Warren, MI, at the Detroit Institute of Ophthalmology. This was a presentation on

using models such as relative visual performance and a peripheral detection model LRC developed to make predictions about the visibility provided by different lighting systems used when driving. "Vehicle lighting, roadway illumination and interactions: Recent data" was presented at the Society of Automotive Engineers Forum on Safety, Vehicular Lighting and Roadway Lighting in Troy, MI. This was a presentation to the SAE Lighting Committees on some of our research for NHTSA on the relative contribution of headlamps and roadway lighting to visibility and glare. Abstracts for these presentations and papers can be accessed at <http://www.lrc.rpi.edu/>.

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## UPCOMING EVENTS

### **Infrastructure Security Workshop - October 13<sup>th</sup>-14<sup>th</sup>**

The two day workshop hosted by the Center for Advanced Information Processing (CAIP) at Rutgers University and co-sponsored by UTRC and NJDOT will provide a forum to disseminate information on infrastructure security and evacuation planning for Engineers, Consultants, and Owners.

A number of relatively natural and manmade catastrophes, some of which have been cited above, have been instrumental in allocating funds to several research and development projects throughout the USA. These and other "infrastructure security" projects are generating very valuable and potentially lifesaving results. However, there is a need to communicate these results to public and private agencies as well to develop synergies among practitioners and researchers to share their results. This workshop provides a forum for the transfer of knowledge and experiences that can be used to improve evacuation planning, security and the safety of infrastructure facilities. The objective of the two-day workshop is to provide a forum to disseminate information on infrastructure security and evacuation planning; assisting Engineers, Consultants, and Owners to:

1. Share the results of recent research findings with the public and private agencies with the goal of ensuring their implementation to minimize potential impacts of future events.
2. Create an information-sharing platform among researchers that are potentially working on complementary projects to maximize the impact of their findings through active information sharing and collaboration. A variety of topics related to security will be covered.

For additional information and registration, visit the event site at:

<http://www.isw.rutgers.edu/content/infrastructure-security-workshop>

### **NJDOT 11th Annual Research Showcase-October 14<sup>th</sup>**

The NJDOT Bureau of Research will hold its 11<sup>th</sup> Annual Research Showcase on October 14, 2009 at the Conference Center at Mercer County Community College at 1200 Old Trenton Road in East Windsor, New Jersey. The showcase is hosted by the New Jersey Department of Transportation, Federal Highway Administration, and the Center for Advanced Infrastructure and Transportation at Rutgers University. The event hours are from 8:00 am (registration) to 12:30 pm.

The Research Showcase aims to bring together transportation professionals from Federal, State and Local Governments, University Research Partners and Legislators to showcase the broad scope of the ongoing research program and to explore potential research ideas for the future. This year's event will emphasize the value of research in transportation, in addition to, identifying issues and finding solutions related to Safety, ITS/Congestion Mitigation, Security, Infrastructure, and the Environmental issues impacting our State.

The NJDOT Research Showcase has become a model for other states who desire to showcase the work being conducted through their Research and Technology Programs. New Jersey is proudly leading the way in showcasing our multi-faceted efforts of advancing transportation safety, environment stewardship

and infrastructure renewal through our world-class Research and Technology Program.

For additional information and to register please visit the event site at

<http://cait.rutgers.edu/cait/events>

## **CIUS/Newman to Host Transformational Infrastructure**

The CUNY Institute for Transportation Systems and the Steven L. Newman Real Estate Institute will present a half-day conference on "Transformational Infrastructure" on October 23rd. Top transportation officials, economists, and leading real estate experts will discuss the state of NY's infrastructure and its impact on real estate market conditions. For more information follow

<http://zicklin.baruch.cuny.edu/newman/conferences/transformational-infrastructure>.

## **UTRC to Present Research at METRANS**

Ben Miller and Penny Eickemeyer will present their research findings at the third annual METRANS National Urban Freight Conference on October 23<sup>rd</sup> in Long Beach, CA. Their paper "Issues Associated with the Siting of a Truck-Rail Intermodal Facility on Long Island" discusses the findings of a NYSDOT sponsored CIUS/UTRC study to evaluate demand for and siting of potential locations for a truck/rail intermodal facility on Long Island. The paper also provides an overall context of freight rail delivery nationally and how this differs in Long Island.

## **UTRC and Rudin Center to Co-Host Policy Series and Doctoral Lunches**

The Thinking and Doing Breakfast Series: Policy Makers Meet Policy Researchers pairs current New York area transportation leaders and practitioners with top academic thinkers to discuss challenging transportation topics: bridging theory with practice. Breakfast begins at 8:00 AM; Conversation runs from 8:30 AM to 10:00AM. Events are held at The Puck Building.

- October 28, 2009: Funding Mass Transit with Richard Ravitch and Professor Charles Brecher
- November 25th, 2009: World Class Streets for a World City with NYC DOT Commissioner Janette Sadik-Khan, NYC Chief Designer Alexandros Washburn and Professor/ Vice Chancellor, NYU Abu Dhabi Hilary Ballon

Follow <http://wagner.nyu.edu/transportation/> for more information and to register.

The goal of the Urban Transportation and Planning Doctoral Series is to provide an informal setting in which some of the region's leading young scholars, as nominated by their faculty advisors, will have an opportunity to present their current dissertation research on cutting-edge transportation planning matters and engage other doctoral and masters students, as well as faculty and alumni, in a meaningful discussion. Candidates will present the following topics for the Fall 09 semester. Calls for faculty nominations for the Spring 10 semester will be detailed soon. Student sessions selected for the Fall 09 semester are listed below.

- Cities in Mind: Processes and Access to Opportunity, October 23, 2009 1:30 - 3:00 pm (Lunch starts at 1 pm), Speaker: Andrew Mondschein, UCLA
- Private Transit Services in Immigrant Communities, November 13, 2009, 3:00pm-3:00pm with Nicholas Klein, Rutgers University
- Neighborhood Design and the Energy Efficiency of Urban Lifestyle in China: Treating Residence and Mobility as Lifestyle Bundle Friday, Dec. 11, 2009, 1:00pm-3:00pm with Yang Chen PHD Candidate (MIT)

To register see



## **Wakeman to Present Transportation Links and Global Trade to NJDOT**

The Panama Canal Authority is investing \$5.3 billion to widen and expand the canal's capacity to service the current generation of 8000+ TEU container ships. When the new canal locks open in 2014, a new era will begin that could significantly change global trading patterns for years to come, just as the initial canal opening did in 1914. There are estimates that as much 25% of the West Coast current cargo base could be transferred to East and Gulf Coast ports as global trade picks up again. There will only be one chance to gain control of the initial surge, and it will be the deepest East Coast ports with corresponding intermodal connections and warehousing capacity that will capture this shift in market share.

Thomas Wakeman, Deputy Director of the Center for Maritime Systems at Stevens Institute of Technology, will discuss how the State of New Jersey's transportation and supply chain infrastructure could connect the local economic development activities in the State to the emerging global marketplace through its ports both in the north and in the south. The talk will address the current economic constriction that has impacted the prosperity of many and look to the future of international trade using maritime services offered at the State's maritime assets. Finding New Jersey's Transportation Links For Global Trade And Economic Developments will be held at the NJDOT offices on November 12<sup>th</sup>.

<http://utrc2.org/events/events.php?viewid=233>

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## **RECENT PUBLICATIONS**

### **Berechman Introduces New Book**

Throughout the world, the use of some kind of a formal transportation project evaluation procedure is a requirement. Yet, by and large, these are partial; in fact, much weight is often placed on the initial -pre-engineering -phases of the planning process, when vital information, such as accurate costs and demand projections, is largely missing. The book's main objective is to construct a comprehensive and methodical economic, planning and decision-making framework for the evaluation of proposed transportation infrastructure investment projects. To find more about The Evaluation of Transportation Investment Projects, written by Chairman and Professor of the Economics Department, at City College, Dr. Joseph Berechman, please follow the link below. Look for a UTRC event this Fall to highlight the book's findings.

<http://www.routledge.com/books/The-Evaluation-of-Transportation-Investment-Projects-isbn9780415777155>

### **Cohen Contributes to Body of Work on Financial History of Rail**

James Cohen, Associate Professor of Public Management, John Jay College of Criminal Justice, has added original contribution to understanding the causes of decline of French and American railway transport in the mid 20<sup>th</sup> Century. By identifying historic changes in public and private financial markets, Cohen was able to revise the existing historiography on the decline of rail. His work, detailed below, has been accepted for publication in a number of publications detailed below.

- Cohen, J. (2009), "Divergent Paths, United States and France : Capital Markets, the State, and Differentiation in Transportation Systems, 1840-1940," Enterprise and Society: The International Journal of Business History (v. 10, n. 3, September: 449-497, Oxford University Press).
- Cohen, J. (accepted for publication late 2009, early 2010), "Private Capital, Public Credit, and the Decline of Rail in the United States in the mid-20<sup>th</sup> Century," Journal of Transport History (

Manchester , England : University of Manchester Press ).

- Cohen, J. (2009), "Histoire comparative des systèmes de transport aux États-Unis et en France , 1830 à la Grande Crise," in Financer les entreprises face aux mutations économiques du XXe siècle, eds. L. Quennouelle-Corre et André Straus ( Paris , France : Comité pour l'histoire économique et financière de la France , Ministère de Finance).

## New TOD e-newsletter Produced

The latest issue of *Transit-Friendly Development*, a joint effort of the Voorhees Transportation Center at Rutgers and NJ TRANSIT, is now online. *Transit-Friendly Development* keeps municipal officials, planners and transit advocates up to date on TOD developments in New Jersey, as well as the Delaware Valley and New York metropolitan regions.

## Zhang Paper Now Available

"Modeling Near-Road Air Quality Using a Computational Fluid Dynamics Model, CFD-VIT-RIT", a paper produced by Y. Jason Wang and Ke Max Zhang, Assistant Professor of Mechanical and Aerospace Engineering at Cornell University is now available on the Environmental Science & Technology website. Download a preprint at:  
<http://dl.getdropbox.com/u/702418/papers/Modeling%20Near-Road%20Air%20Quality%20Using%20a%20Computational%20Fluid%20Dynamics%20Model%20CFD-VIT-RIT.pdf>

## Minigrant Paper Published

"Dynamic Analysis of Subway Structures Under Blast Loading", a study conducted by Huabei Liu, Asst. Professor of Civil Engineering at City College, has been accepted for publication in the Geotechnical and Geological Engineering. This project was funded through the UTRC Minigrant Program.

Subway systems are one of the main targets of terrorist attacks. Among the various schemes that terrorists may turn to, bombing is one of their prime options, examples of which include the 1995 attack on Paris subway and the 2005 attack on the London subway. Specifically in New York City, the threat of terrorist attacks on subway systems has intensified over the years yet how the existing subway structures would respond under internal blasting is still not clear; and how to consider such events in the structural design of the new Second Avenue Subway is also not resolved. No investigation considering the geological condition and subway structures in New York City has ever been endeavored. The study analyzes typical subway tunnels in New York City as objects and takes into account the geological condition of New York City. The coupled fluid-structure interaction, the guidelines to evaluate the structural integrity of existing subways and those to design new underground structure will be investigated in the later stage of investigation. The study can serve as a corner stone for the resistance evaluation and design of New York Subway structures subject to possible terrorist attack using explosives.

## Lighting Center's Research Published

Miller-McCune published a feature article which came out September 24, 2009 focusing on Lighting Research Center's extensive headlamp studies. You can access the article at [http://www.miller-mccune.com/business\\_economics/shining-a-light-on-better-headlamps-1452](http://www.miller-mccune.com/business_economics/shining-a-light-on-better-headlamps-1452). Miller-McCune publishes articles about social issues and public policy and focuses on topics such as education, politics, the environment, economics, urban affairs and health. The magazine draws on academic research and other definitive sources to provide reasoned policy options and solutions for today's pressing issues.

## RPI's Holquin-Veras Study Highlighted in Journal of Commerce

Jose Holquin-Veras, Professor, Department of Civil and Environmental Engineering, Rensselaer Polytechnic Institute was recently interviewed regarding his study to track off-peak truck deliveries in New York City. The study will follow 25 carriers and 20 receivers who have agreed to take delivery between the off-peak hours of 7 pm to 6 am. Trucks will be equipped with "smart phones" that have GPS so that real-time traffic, routing and delivery information will be collected. The study aims to research the magnitude of off-peak delivery impacts on congestion. It is a great testimony of the quality and importance of Holquin-Veras's work and his work with Rutgers, Princeton, Purdue and NYU, as the Journal of Commerce is one of the most important trade magazines that deal with commerce in the USA. See the article at <http://www.joc.com/node/413365>.

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## CALL FOR PROPOSALS

### NYSDOT Proposals Due November 4th

The New York State Department of Transportation has issued a new Request For

Proposal: RFP# C-08-12: **Mobile Source Air Toxics (MSATs) Mitigation Measures**. The objectives of this project are to develop proposed procedures for qualitatively and quantitatively analyzing MSAT impacts in NYSDOT NEPA and State Environmental Quality Review Act (SEQRA) environmental documents and identify feasible MSAT mitigation measures for NYSDOT capital improvement projects and facilities. The RFP is available on the UTRC website at [http://utrc2.org/research/rfps/C-08-12-RFP\\_](http://utrc2.org/research/rfps/C-08-12-RFP_)

### October 30th Deadline for UTRC Minigrants, Best Paper Submissions, and Education & Tech Transfer Grants

UTRC is pleased to announce three programs – the Best Paper Competition, the Faculty Development Minigrants Program, and the Education and Technology Transfer Grants Program. The best paper competition is open to faculty, students and staff throughout the UTRC Consortium. To be eligible for this competition, the paper must have been published by a peer-review journal between September 1, 2008 and August 31, 2009. Members of UTRC's Advisory Board will take part in the review process. The winning paper will be honored at the Annual Leadership in Transportation Awards Reception held each February by the NYU Wagner Rudin Center for Transportation Policy & Management.

Faculty Development Minigrants Program will fund innovative research by untenured faculty at consortium universities. Mini-grants of up to \$5,000 will be awarded for the costs of developing a working paper in new and emerging areas related to transportation. The working papers completed within a year will be peer-reviewed and the author of the best paper will be eligible to receive a substantial grant for a full-scale study on the topic.

The second funding cycle for the 2009 UTRC Education and Technology Transfer grant program ends on October 30<sup>th</sup>. This program provides small grants to support transportation education and technology transfer projects across Region 2. Tech transfer activities which may be funded include hosting a transportation research conference or workshop and providing training to public agency employees on the outcomes of university research. Education activities which may be funded include transportation curriculum development workshops, partnerships with a community group or public agency, and exchange programs which allow students and faculty to collaborate across universities.

The deadline for each of these programs is October 30<sup>th</sup> through our on line submission system found at <http://www.utrc2.org/ReviewSystem/index.php>.

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**Region 2 University Transportation Research Center**

(Serving New Jersey, New York, Puerto Rico, and U.S. Virgin Islands)

Robert E. Paaswell, Ph.D., P.E., Interim President, The City College of New York  
Camille Kamga, Ph.D., Acting Director

Nadia Aslam, Administrative Assistant  
Penny Eickemeyer, Assistant Director for Program Management  
Herbert Levinson, Icon Mentor  
Danielle L. Petretta, AICP, Assistant Director for Technology Transfer  
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*For more information on our programs or to notify us for an address correction, please email [nadia@utrc2.org](mailto:nadia@utrc2.org).*

CONSORTIUM MEMBERS include the City University of New York, Columbia University, Cornell University, New Jersey Institute of Technology, New York University, Polytechnic Institute of NYU, Rensselaer Polytechnic Institute, Rowan University, Rutgers University, the State University of New York system, Stevens Institute of Technology, and the University of Puerto Rico.

