

# SUMMER 2013 RESEARCH NEWS

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**Dr. Camille Kamga**  
Director, University Transportation  
Research Center - Region 2  
Assistant Professor, The City College  
of New York, CUNY

During the past months, we, at UTRC, have been actively participating in advancing our programs while promoting our Center theme of “Planning and Managing Regional Transportation Systems in a Changing World”.

On June 19, 2013, we hosted the New York City Mayoral Transportation Forum. The event, featuring four (4) major candidates from the Democratic Party and four (4) major candidates from the Republican Party, was very well attended. The overwhelming interest of a Mayoral Transportation Forum, in NYC, was the first event of this type organized and hosted by the UTRC.

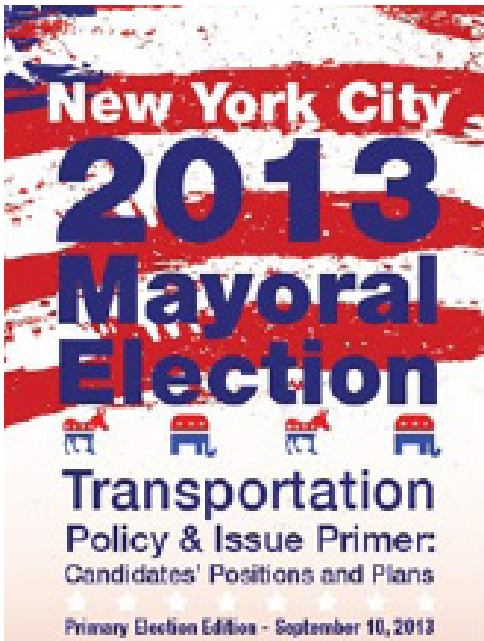
A white paper edited by Matthew Daus, summarizing the ideas and opinions relative to transportation, by the candidates, is available on our website at [www.utrc2.org](http://www.utrc2.org). I encourage you to read this comprehensive report in preparation of the November 2013, General Mayoral Election of November 2013.

During the summer, as it has become a tradition at UTRC, we successfully organized and hosted the 2nd Connected and Self-driven Vehicles Symposium at Rutgers University. This event brought industry, government and academia together, to explore the future directions in research and the deployment of connected vehicle technologies in our region. Similar to the 2012 symposium, many wireless communication technologies such as Vehicle-to-Vehicle (V2V), Vehicle-to-Infrastructure (V2I), Infrastructure-to-Vehicle (I2V), and Vehicle-to-Other (V2O), available for use, to improve our transportation system, were at the center of this symposium. The event was co-organized by Rutgers University, the University at Buffalo, and Princeton University.

In addition, we welcome and congratulate the two (2) new recipients of the September 11th Memorial Program for Regional Transportation Planning Academic Initiative who are just beginning their internships (both of which will be at the NYMTC office). Last year's recipients are scheduled to make presentations of their projects at the New York Metropolitan Transportation Council this month (September 18th). We also extend our congratulations to the twelve recipients of our Advanced Institute for Transportation Education (AITE) Scholarships. We are very proud that we were able to continue to fund these important educational programs.

Lastly, we are very pleased that we received approximately 70 applications for our 2013 UTRC Request for Proposals. This record-setting number of applications is a testament of the wealth of knowledge; and expertise that our faculty contributes to the consortium. We will commence the application review phase, as soon as possible.

### UTRC Publishes a Voter Guide and Report on NYC Mayoral Candidates' Transportation Policy Positions



Read the full report at:

<http://www.utrc2.org/publications/nyc-mayoral-transportation-white-paper>

The University Transportation Research Center (UTRC), for Region 2 (NY, NJ & Puerto Rico), held a NYC Mayoral Candidates' Transportation Forum at Baruch College on June 19th, moderated by Distinguished Lecturer and former NYC Taxi & Limousine Commissioner Matthew W. Daus, Esq. Since that time, the UTRC forum has inspired every candidate to issue comprehensive transportation policy plans and platforms. As promised at the UTRC Mayoral Forum, the valuable ideas and positions of all candidates before, during and after the forum were carefully tracked, analyzed and set forth in detail in this report entitled: New York City 2013 Mayoral Election Transportation Policy & Issue Primer: Candidates' Positions and Plans. This seminal report will serve as a primer on transportation policy issues facing the next Mayor, as well as a reference tool for voters, the media, academics and others interested in transportation policy making and the future of NYC. A sequel report will be released prior to the General Election scheduled for November 5, 2013, covering the updated and evolving positions of not only the Democratic and Republican nominees, but also of the Independence Party and any other major independent candidates.

This report is structured based on the topics selected for the Mayoral Forum, with additional categories and policy statements of candidates who both participated and did not participate in the event. The report is organized around the issues, with a primer or brief history framing the debate, and then analyzing, explaining and comparing the positions of the various candidates - in chart format. As an appendix to the report, each candidate's biography and transportation policy plans and statements are set forth in a similar organizational framework - based on the forum topics - but with additional details and statements supporting each candidate's positions.

### The University at Buffalo – SUNY Establishes the Institute for Sustainable Transportation and Logistics (ISTL); Dr. Adel Sadek to Serve as ISTL's Director



Transportation, logistics and supply-chain management represents a field of inquiry with tremendous impact on businesses and society, coupled with remarkable job opportunities. Research and education related to that field, however, call for a trans-disciplinary approach which integrates both engineering and managerial skills. In response to that need, the University at Buffalo (UB), the State University of New York (SUNY) recently launched the Institute for Sustainable Transportation and Logistics (ISTL). ISTL will bring national and international visibility to UB, educate students in a holistic fashion, and serve as a mechanism for facilitating multi-disciplinary, center-type proposals. The institute, while leveraging existing expertise at UB, will achieve critical mass through the hiring of seven (7) additional transportation and logistics faculty members split between the School of Engineering and Applied Sciences (SEAS) and the School of Management (SOM). A guiding principle for ISTL will be to partner with governmental and industry partners, who will then support the Institute through student scholarships, annual membership fees, and eventually endowed professorships and chairs. Partnerships will also allow ISTL faculty and students to research problems of direct relevance to society, while providing numerous opportunities for hands-on experiences. From an educational standpoint, ISTL will host a signature Master's program, which will offer a joint degree between SEAS and SOM, as well as a certificate, in transportation, logistics and supply-chain management. The institute will also partner with a number of international academic institutions. The founding departments of ISTL include the departments of Civil, Structural and Environmental Engineering (CSEE), Industrial and Systems Engineering (ISE), Computer Science and Engineering (CSEE), and Operations Management and Strategy (OMS). Prof. Adel W. Sadek of CSEE will serve as ISTL's Director.

For official announcement, please see:

<http://www.buffalo.edu/provost/policies-and-resources/efund/1213funded/istl.html>



## The Four 2012-13 Academic Year Participants Presented at the Brown Bag Seminar Held at the New York Metropolitan Transportation Council (NYMTC)



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

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 which honors three NYMTC staff members who died in the attack on the World Trade Center on September 11, 2001: Ignatius Adanga, Charles Lesperance, and See Wong Shum. 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 the 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: Street Closures in NYC.

Jeremy Safran, Master 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: Safety Data Viewer



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).



Meeting with the mayor of Galapagos Islands, Ecuador - UNEMI officials, Alberto Mendoza Diaz (Instituto Mexicano del Transporte, Secretaría de Comunicaciones y Transportes) and the CUNY ITS representation

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 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 Bentalitis, University of Texas, Austin; Dr. Alberto Mendoza, Instituto Mexicano del Transporte, Secretaría de Comunicaciones y Transportes; Dr. George Dedes, DGNSS Solutions, LLC; Dr. Mihalis 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.



## The Cornell Local Roads (CLR) Program: Awarded a 2013 Roadway Safety Award; Dr. David Orr to Represent CLR at the Ceremony

The Cornell Local Roads Program has been awarded a 2013 Roadway Safety Award by the U.S. Department of Transportation Federal Highway Administration and the Roadway Safety Foundation. Their entry, Inexpensive Nighttime Inspection Kits to Improve Rural Sign Safety, was selected in the Operational Improvements category. The National Roadway Safety Awards is a biennial competition sponsored by the U.S. Department of Transportation (USDOT) Federal Highway Administration (FHWA) and the Roadway Safety Foundation (RSF) to recognize roadway safety achievements that move the United States towards zero deaths and serious injuries on the Nation's roadways. <http://safety.fhwa.dot.gov/roadwaysafetyawards/>

This project, using FHWA Accelerating Safety Activities Program (ASAP) and Local Technical Assistance Program (LTAP) funding, involved collaboration between the Local Roads Program, three County Highway Departments in Western New York and Cornell University Civil Engineering students.

### Resources



#### Retroreflectivity Testing Kit

Each sign inspection kit consists of the following items:

- 3 inch x 6 inch sign panels of appropriate colors (6 total: Yellow, Orange, Fluorescent green, Green, White, and Red)
- Clamps to hold panels to signs (2)
- Flashlight (halogen recommended)
- Small container to store and protect the panels, clamps, and flashlight
- Copy of the NYS Edition of the Traffic Sign Handbook for Local Roads

Retroreflectivity Comparison Panels Tech Tip

[http://www.clrp.cornell.edu/tip\\_sheets/pdf/retroreflectivity/panels.pdf](http://www.clrp.cornell.edu/tip_sheets/pdf/retroreflectivity/panels.pdf)

Video of Sign Inspection Kit

[http://www.youtube.com/watch?feature=player\\_embedded&v=n7zeBji3IN0](http://www.youtube.com/watch?feature=player_embedded&v=n7zeBji3IN0)

Accelerating Safety Activities Program (ASAP) Final Report

[http://www.clrp.cornell.edu/researchprojects/pdf/ASAP\\_2011\\_Final\\_Report-web.pdf](http://www.clrp.cornell.edu/researchprojects/pdf/ASAP_2011_Final_Report-web.pdf)

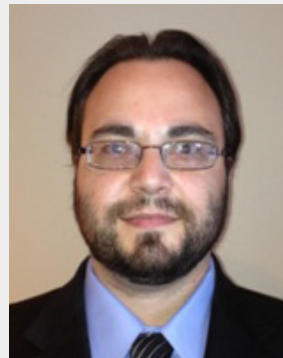
Dr. Feng Chen, a Post-Doctoral Research Fellow at the Interdisciplinary Research Center (iLab) at the H. J. Heinz III College of Carnegie Mellon University in Pittsburgh, PA, will join the Computer Science Department at the University at Albany – State University of New York (UAlbany), Albany, NY, as an Assistant Professor in January 2014. Dr. Chen received his Ph.D. in Computer Science from Virginia Tech in 2012. Dr. Chen's work has addressed several topics in transportation research such as path anomaly detection and traffic flow prediction. His contributions span many areas including large-scale spatio-temporal data analysis, social media mining, energy efficiency mining for sustainability, text mining and statistical machine learning. At UAlbany, he will participate in joint research with Professor Catherine Lawson (Department of Geography and Urban Planning) and Professors Jeong-Hyon Hwang and S. S. Ravi (Department of Computer Science) on various aspects of information extraction from GPS trajectories and other associated data.

The Roadway Safety Awards ceremony is scheduled for November 6, 2013 in Washington, DC. U. S. DOT Deputy Secretary John Porcari, FHWA Administrator Victor Mendez and elected officials from New York State are invited to the ceremony. Dr. David Orr, PE will be representing the Cornell Local Roads Program at the ceremony.

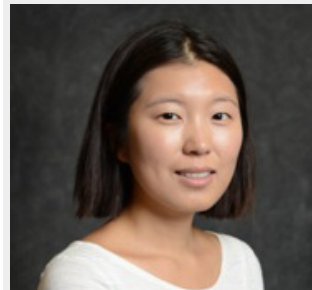
A tip sheet for making the panels and a video of how to use the panels was produced and placed on the Cornell University Local Roads Program website: [www.clrp.cornell.edu](http://www.clrp.cornell.edu). The methods for making the kits and their effectiveness were shared with the other 57 LTAP centers at the National LTAP Conference in Grapevine, TX in 2012.

### The University at Buffalo - SUNY hires two new transportation faculty members

Two new transportation faculty members recently joined the University at Buffalo, the State University of New York: Dr. Panos Anastasopoulos as Assistant Professor in the Department of Civil, Structural and Environmental Engineering, and Dr. Jee Eun (Jamie) Kang as an Assistant Professor in the Department of Industrial and Systems Engineering.



Dr. Anastasopoulos received his B.Sc. from the Athens University of Economics and Business in Greece, and his M.Sc. and Ph.D. in Civil Engineering from Purdue University. He has a cross-disciplinary research background in transportation safety, reliability/sustainability of infrastructure systems, transportation planning, engineering economics, and statistical/econometric methods and applications. He is currently serving as Editorial Board Member in Elsevier's Analytic Methods in Accident Research, and in ASCE's Journal of Infrastructure Systems, while he is also an Advisory Editor (in Statistical and Econometric Methodologies) in the International Journal of Critical Illness and Injury Science. He is a TRB's ABJ80 Statistical Methods Committee Member, and a SAE International Crash Data Collection and Analysis Steering Committee Member, serving as Sub-Committee Member in the Data Collection and Archiving, and Data Analysis sections.



Dr. Kang received her Ph.D. and M.S. in Civil and Environmental Engineering from University of California, Irvine, and B.S. in Urban Engineering and Planning from Yonsei University, Korea. Her research interests include travel demand models, transportation network problems, transportation systems, applications of Operations Research to infrastructure design, and transportation sustainability. She was a recipient of Women's Transportation Seminar graduate scholarship in 2012, and was selected as an Eno Fellow in 2013.

### Dr. John Falcocchio, Chairman, University Transportation Research Center-Region II Professor of Transportation Planning & Engineering Polytechnic Institute of New York University (NYU-Poly)

Dr. John Falcocchio has been a Professor of Transportation Planning & Engineering at the Polytechnic Institute of New York University (NYU-Poly) since 1981, and the Director of the NYU-Poly's Urban ITS Center since 1995. Until 2003, he was the Executive Director of NYU-Poly's Transportation Research Institute, and was the head of its Department of Civil Engineering until 2001. He received his BCE, MS and PhD at NYU-Poly (then Polytechnic Institute of Brooklyn), and a Certificate in Traffic Engineering from the Yale University Bureau of Highway Traffic where he studied on a nine-month fellowship.



Dr. Falcocchio's transportation career has been shaped through a professional lifetime blend of academic and practical work experiences ranging from construction engineering to urban transportation planning for public agencies and the private sector. He was the Founding Principal of Urbitran Associates, a privately owned architecture and planning company, where he was responsible for the firm's transportation projects. In the last 20 years he has concentrated on the delivery of intelligent transportation systems solutions for improving transportation system performance and travelers benefits.

Strongly committed to integrating advanced technologies into transportation infrastructure management strategies, Dr. Falcocchio in 1995, co-established the Urban Intelligent Transportation Systems Center (UITSC) at NYU-Poly. For the last 10 years the UITSC has provided the NYCDOT and NYSDOT with an effective framework to assess ITS technology deployment strategies in upgrading the performance of New York City's transportation systems through research, professional training, demonstration projects, and international outreach.

His current research concentrates on the development and use of real-time traffic performance metrics in monitoring and managing traffic congestion. Two on-going projects include the evaluation of traveler benefits for the Manhattan Midtown-in-Motion transportation project, and the completion of a forthcoming book on urban traffic congestion co-authored with Herbert Levinson.

Dr. Falcocchio is the author of 45 publications, has participated in twenty national and international conferences and professional presentations and has written a dozen books and reports.

## 2013 UTRC AITE Scholarship Recipients

The application review process has been completed and 12 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:

### 2013 – 2014 AITE Recipients

NAME	UNIVERSITY
Krystal Gittens	New York University
Hakim Hawramee	Rutgers University
Brian Isoldi	State University of New York (SUNY)
Nolan Levenson	New York University
Lauren Melendez	State University of New York (SUNY)
Debra A. Nelson	State University of New York (SUNY)
Joe Nieciak	Polytechnic Institute of NYU
Cordell V. Rogers	The City College of New York
David Soliman	New Jersey Institute of Technology
Elliot Ward	New York University
Lori Zeller	Rutgers University
Donatas Zvirblisis	Rutgers University

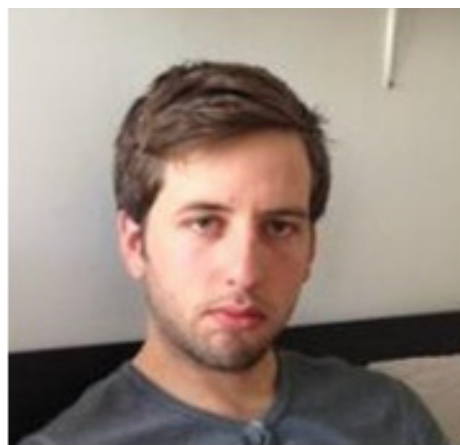


## NYMTC/UTRC SEPTEMBER 11TH MEMORIAL PROGRAM CONTINUES FOR THE YEAR 2013

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**, a MS Urban Planning candidate at Columbia University's GSAPP, 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**, a Masters in Urban Planning candidate at CUNY Hunter College, will perform his internship at the New York Metropolitan Transportation Council. Homer's topic will be Greenhouse Gas (GHG) Emission Reduction Implementation Planning, which will involve development of selected regional transportation strategies for reducing GHG emissions, including evaluation of potential strategies for implementation by NYMTC member agencies.

## Critical Transport Ph.D. Working Group at Columbia University

Last spring, a group of Ph.D. students at Columbia University and The Graduate Center, CUNY started a working group for doctoral students conducting research on transportation-related issues. The goal of the working group is to provide a forum for doctoral student research that falls outside the economic and engineering paradigms that dominate transport scholarship while also building a community of emerging transport scholars in the New York region. Critical Transport Studies, the name of our working group, seeks to advance critical, radical and social justice agendas in transport studies by providing a forum for scholars who take a post-positivist and theoretical approach to scholarship. Participants in the group look beyond microeconomic and aggregated research approaches to incorporate methodological and theoretical developments from sociology, geography, urban planning, anthropology and history into their work.

The group meets monthly to discuss transportation policy issues and ongoing student research. This fall, we will have several research presentations from students working on their dissertations and/or

preparing for academic conferences, as well as inviting some critical transport scholars to join us for free form conversations about how to augment existing approaches to transport scholarship. Other projects include compiling a bibliography of critical transport scholarship, launching a blog and organizing a conference on new methodological approaches to transportation. We maintain an email list that members use to share information about publications, conferences, and policy issues related to transportation. We are currently planning our schedule for the 2013-14 academic year, with more detailed information forthcoming on our website, <http://opencuny.org/ccts/>. Our meetings are held at various locations in New York City and we welcome scholars and PhD students interested in critical and alternative transport studies research to join us. For more information about the group, please email Lauren Ames Fischer at [laf2153@columbia.edu](mailto:laf2153@columbia.edu).

# UTRC

## Sponsored Research

### Completed Projects

#### “PNEUMATIC GARBAGE COLLECTION IN NEW YORK CITY”

**Vacuum Garbage Systems in Manhattan Could Create Big Energy Savings; Upgraded Roosevelt Island System Could Further Reduce Truck Miles, Diesel Fuel Use, NYSDA & NYSDOT Studies Find**

*Reports from CUNY University Transportation Research Center Quantify Costs and Benefits of Underground Pneumatic Waste Removal*

*Principal Investigator: Dr. Camille Kamga*

*Project Managers*

*Benjamin Miller, Senior Research Associate, Freight Programs and Juliette Spertus*

The solution to noisy, diesel-burning garbage trucks hauling away waste in New York City may lie under the pavement and over the heads of city residents, two new studies suggest.

The reports, from the University Transportation Research Center (UTRC) at the City College of New York, show 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 were funded by the New York State Energy Research and Development Authority (NYSDA) and the New York State Department of Transportation (NYSDOT) through a program that explores techniques to reduce transportation-related fossil fuel use.

Pneumatic collection uses negative air pressure to pull solid waste through a network of pipes to a central collection point. There, it is compacted and sealed into containers for transport to a processing or disposal facility. It is not a new idea: the technology has been used successfully in Europe and Asia for more than 50 years. Since 1975, such a system has collected residential trash on Roosevelt Island (in the East River between Manhattan and Queens).

Read more.....

The reports are available online.

A Study of the Feasibility of Pneumatic Transport of Municipal Solid Waste and Recyclables in Manhattan Using Existing Transportation Infrastructure

<http://www.utrc2.org/publications/pneumatic-waste-manhattan-report-Final>

Eliminating Trucks on Roosevelt Island for the Collection of Wastes

<http://www.utrc2.org/publications/pneumatic-waste-roosevelt-island-report-Final>



Photo by Greg Whitmore, 2010: Pneumatic tubes connecting to cyclone separators in Roosevelt Island terminal



Photo by Brian Ross, 2011: Pneumatic refuse chute on a typical Roosevelt Island residential hallway



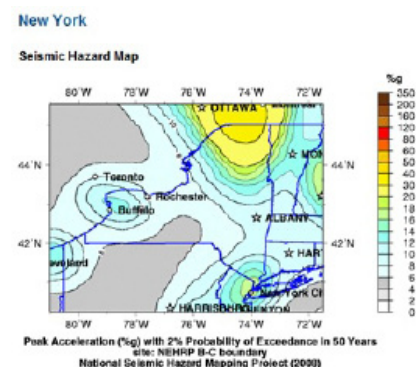
## “SEISMIC EVALUATION AND RETROFIT OF DETERIORATED CONCRETE BRIDGE COMPONENTS”

UTRC has released a final report for the research entitled: “Seismic Evaluation and Retrofit of Deteriorated Concrete Bridge Components”, funded by the Research and Innovative Technology Administration/USDOT (RITA). The principal investigator was Dr. Riyad Aboutaha, an Associate Professor of Civil and Environmental Engineering at Syracuse University.

Corrosion of steel bars in reinforced concrete structures is a major durability problem for bridges constructed in New York State (NYS). The heavy use of deicing salt compounds this problem. Corrosion of steel bars results in loss of steel cross section, deterioration of bond between concrete and reinforcing bars, and results in unsymmetrical concrete section that is susceptible to shear stresses produced by torsion. Though earthquake frequency of occurrence and the expected ground accelerations in NYS is less than in western states, the potential for earthquake damage in or around NYS is still very real. Given the level of deterioration in many reinforced concrete bridges in NYS, they are considered vulnerable to major damage during a moderate seismic event. The findings of this investigation suggest the need for seismic retrofit of deteriorated reinforced concrete bridge columns, particularly, those with corroded lap splice in the longitudinal reinforcement. The study also suggests the need for retrofit of corroded pedestal over piers and abutments, as they may cause sudden unseating of girders.

The full report is available for a free download at the UTRC website:

<http://www.utrc2.org/research/projects/seismic-evaluation-of-concrete-bridge-components>



## “COMPRESSING AND QUERYING MULTIPLE GPS TRACES FOR TRANSPORTATION PLANNING”

UTRC has released a final report for the research entitled: “Compressing and Querying Multiple GPS Traces for Transportation Planning”, funded by the Research and Innovative Technology Administration/USDOT (RITA). The principal investigator was Catherine T. Lawson, an Associate Professor of Geography and Planning at the University at Albany (SUNY).

In recent years, there has been a significant increase in the number of vehicles equipped with GPS devices. These devices generate huge volumes of trace data, and information extracted from these traces could significantly help transportation planners with routine tasks and special studies. However, extracting information from trace data is a challenging problem because of the proliferation of GPS devices and the rate at which trace data is generated. One approach for handling this problem is to compress the GPS data in such a way that the amount of information lost due to compression is as small as possible. During the period of this project, our focus was on the design, implementation and evaluation of GPS trajectory compression algorithms that can achieve specified compression rates while minimizing the information loss due to compression. Our work has led to new algorithms for compressing single and multiple GPS traces.

The full report is available for a free download at the UTRC website:

<http://www.utrc2.org/publications/compressing-and-querying-multiple-gps-traces-transportation-planning>

## “FINANCING RAIL CAPITAL PROJECTS: HISTORICAL LESSONS; CONTEMPORARY CASES”

UTRC has released a final report for the research entitled: “Financing Rail Capital Projects: Historical Lessons; Contemporary Cases”, funded by the Research and Innovative Technology Administration/USDOT (RITA). The principal investigator was Dr. James K. Cohen, Professor Emeritus at John Jay College of Criminal Justice (CUNY).

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 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:

<http://www.utrc2.org/publications/financing-rail-capital-projects-historical-lessons-contemporary-cases>



# Research News from UTRC Consortium Universities/Members

**Dr. Karl Korfmacher, an Associate Professor at the Rochester Institute of Technology presented a case study based on the UTRC sponsored research, *Analysis of Environmental, Economic, and Infrastructure Impacts of Transportation Activities Associated with High Volume Horizontal Hydraulic Fracturing Operations in the Marcellus Shale Formation Using the Geospatial Intermodal Freight Transport (GIFT)* at the 2013 ESRI users Conference**

In 2011, Pennsylvania shipped a reported 668,815 tons of solid and liquid waste from high volume hydraulic fracturing wells extracting natural gas from the Marcellus Shale formation to 50 waste disposal, treatment, or recycling facilities in Ohio. This is likely an underestimate, as reporting waste amounts by the gas companies is voluntary in PA. To estimate emissions and truck counts generated by the transportation of these wastes, UTRC funded researchers at the Rochester Institute of Technology used ArcGIS 10.0 Network Analyst software to generate probably trucking routes and coupled the results with the Geospatial Intermodal Freight Transport (GIFT) model to calculate emission estimates. The team presented their first case study at the 2013 ESRI Users Conference on July 9. Values below represent totaled impacts of one-way trips from the PA wells to the OH facilities.

Wells (Count)	Trucks (Count)	WASTE (Mg)	Hours (Total)	Km (Total)	Energy (Gj)	CO (Mg)	CO2 (Mg)	NOx (Mg)	SOx (Mg)	PM10 (Mg)	VOC (Mg)
2,850	30,775	606,739	120,942	10,913,043	1,208,217	11	11,297	96	0.1	2	2

The research team modeled a 22-ton fully loaded truck and used a round up function to generate whole truck numbers. Overlapping routes were split by network road segments in ArcGIS and summed to provide estimates of truck traffic and emission totals along each road segment. These results, shown in the map below, indicate which segments experienced the highest truck traffic, useful in planning for road and infrastructure condition monitoring. High traffic segments and emission estimates will ultimately be used in emission dispersion models linked to census data to estimate human exposure impacts of increased truck traffic due to hydraulic fracturing.

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## UTRC sponsored research paper wins the *Second Best Scientific Paper for 2012* authored by Dr. Huiming Yin of Columbia University

Dr. Yin won "***The Second Best Scientific Paper for 2012***" in the International Journal "Road Materials and Pavement Design" (award of 1000 Euros) -H.M. Yin, B. Lai, Viscoelastic modeling and characterization of zeolite modified asphalt binder considering phase transformation and air void interaction,

*Road Materials and Pavement Design*, 13, 279-299, 2012.

See - <http://explore.tandfonline.com/content/est/trmp-best-paper>

This paper was based on the research results in the UTRC mini-grant - ***Investigation of Rheological Behavior of Asphalt Binder Modified by Warm Mix Asphalt Additives***, H.M. Yin, the University Transportation Research Center – Department of Transportation, \$5,000, 1/1/2009-12/31/2009.

## Dr. Huiming Yin receives the NSF Grant for a SusCHEM/Collaborative Research: Fundamental Understanding of Foaming Process towards a New Warm Mix Asphalt Technology, a project built on the UTRC sponsored project

A three-year NSF Grant was awarded to Yin for his proposal to advance the understanding of the asphalt foaming process in building structures and establish a theoretical framework to predict the material behavior for material design. We hope this advanced research will lead to new theories and models of sustainable engineering materials in energy and environmental aspects.



**SusChEM/Collaborative Research: Fundamental Understanding of Foaming Process towards a New Warm Mix Asphalt Technology**, H.M. Yin (PI), National Science Foundation, CMMI 1301160, \$270,000, 9/1/2013-8/31/2016. (Collaborated with Michigan Technological University at their budget of \$200,000).

See - [http://www.nsf.gov/awardsearch/showAward?AWD\\_ID=1301160](http://www.nsf.gov/awardsearch/showAward?AWD_ID=1301160)

This project was also built on the research results in the UTRC mini-grant - **Investigation of rheological behavior of asphalt binder modified by warm mix asphalt additives**, H.M. Yin, the University Transportation Research Center – Department of Transportation, \$5000, 1/1/2009-12/31/2009.

## Dr. Alain Kornhauser, Professor at Princeton University Publishes a Draft Final Report on “Uncongested Mobility for All NJ’s Area –Wide a Taxi System”

Available for Download (15M) Slide Presentations (123M ppt)

Dr. Alain Kornhauser, Professor at the Princeton University and his students have been conducting a quantitative assessment of the mobility implications of autonomousTaxi (aTaxi), the ultimate in Smart Driving Cars. The task was simple: How well could a truly safe fleet of self-driving cars serve the demand for personal mobility? Rather than just focus on the mobility needs of cities, or suburbs the decision was to assess the full spectrum of today's land uses. New Jersey was selected not only because we live here, but also because it embraces essentially all uses of land from extremely rural farms and preserved spaces, through a wide variety of suburban developments to both old and new high density urban living....Table 1 below summarizes how each and every of the 32+ million person trips that take place on a typical weekday can be served efficiently and effectively. Short trips (a 10 minute walk or less) are served by Walking & Cycling (with Door2Door aTaxi service is provided to elderly and handicapped). All other trips are served by the appropriate combination of aTaxi and NJ Transit's existing commuter rail lines. To appropriately serve all of the 30+ million daily non-walk/

cycle trips, a fleet of about 1.8 million aTaxis would be needed. (In 2010, **3.9 million cars were registered in NJ** plus an additional 2.5 million trucks.) At peak hours state-wide average vehicle occupancies reach the 3.0 level while during most off-peak times average vehicle occupancies are very close to 1.0. In those off-peak times few people wish to travel between the same places at the same time so that there is very little opportunity for trips to coincidentally share an aTaxi. Because the aTaxi provide excellent demand-responsive service to and from NJTransit rail stations, many trips (almost 5 million) are best served by aTaxi <-> Rail multi-modal combinations. In fact NJ Transit's rail system plays a part in serving over 6 million trips each day, more than **20 times what it currently served today**. This is a reflection of the large amount of activity that takes place within a short walk of NJT's train stations, if only there existed an efficient system, like aTaxis, to bring passengers to/from the station at the other end of the trip.

**Table 1. Trips by mode on typical weekday in New Jersey (requiring about 1.8 million aTaxis)**

Item	Walk & Cycle	to/fr NYC	to/fr PHL	Train Only	Taxi+ Train	Taxi Only	Rail Total	Taxi Total	Total Trips
<b>Trip/Day (in Millions)</b>	1.94	0.9	0.2	1.3	3.7	24.82	6.1	29.6	32.86
<b>% Daily Trips</b>	5.9%	2.7%	0.6%	4.0%	11.2%	75.5%	18.6%	90.1%	100%



# Research News from Lighting Research Center (LRC)

## Lighting Research Center to Conduct Sustainable Roadway Lighting Seminars

As part of a program jointly administered by the New York State Department of Transportation (NYSDOT) and the New York State Energy Research and Development Authority (NYSERDA), the Lighting Research Center (LRC) at Rensselaer Polytechnic Institute was awarded a contract to develop and conduct a series of three educational seminars on sustainable roadway lighting throughout New York State. The focus will be on technological and research developments that are rapidly changing lighting practices for improved safety and reduced energy and environmental impacts.

## Lighting Research Center Evaluates Advanced Crosswalk Lighting in Aspen

The Lighting Research Center (LRC) at Rensselaer Polytechnic Institute recently conducted a field evaluation of pedestrian crosswalk lighting using bollard luminaires in the City of Aspen, Colorado. Building on a previous UTRC study of crosswalk lighting approaches conducted for the New Jersey Department of Transportation, LRC researchers temporarily installed bollard luminaires at two intersections in the city. LRC Senior Research Scientist John Bullough made photometric measurements and interviewed city residents and visitors over two nights to gauge interest and acceptance of the new lighting, in cooperation with the City of Aspen's Engineering Department. Overall, responses to the new lighting were very favorable, with people reporting that they felt safer and more visible while crossing the street. Project partners 3M and Intrigue Lighting fabricated the prototype luminaires for the demonstration.

(Photo Caption: Bollard luminaires evaluated by the LRC in Aspen, Colorado.)

# Research Projects at the Alan M. Voorhees Transportation (VTC) at Rutgers University

Stephanie DiPetrillo and Andrea Lubin of the Alan M. Voorhees Transportation Center (VTC) at the Edward J. Bloustein School of Planning and Public Policy at Rutgers, The State University of New Jersey received funding for a new research project, ***"Reducing Purchased Passenger Transportation Costs for State Agencies"***, funded by NJDOT. This research will seek to determine cost saving measures that New Jersey state agencies can use when purchasing passenger transportation for clients served by the human services programs they offer.

Dr. Deva Deka of the Alan M. Voorhees Transportation Center (VTC) at the Edward J. Bloustein School of Planning and Public Policy at Rutgers, The State University of New Jersey with Cecilia Feeley of Rutgers Center for Advanced Infrastructure and Transportation were awarded a new research project. They will serve as co-principal investigators, with project management assistance from VTC's Andrea Lubin.

## Lighting Research Center Offers Outdoor Lighting Institute

The Lighting Research Center's Outdoor Lighting Institute will be held October 16-17, 2013. The Outdoor Lighting Institute provides engineers, lighting designers, municipal officials, utility personnel and others with the knowledge and tools that they need to develop outdoor lighting installations that substantially reduce energy use and light pollution while improving safety and security. Registration is limited and more information can be found online at:

<http://www.lrc.rpi.edu/education/outreachEducation/OutdoorInstitute.asp>

New Jersey Governor's Council for Medical Research and Treatment of Autism with the New Jersey Department of Health, ***"An Assessment of the Transportation and Mobility Needs and Barriers of Adults on the Autism Spectrum."*** This two year study will focus on researching the transportation needs of New Jersey adults with Autism Spectrum Disorders (ASD) through research tasks that will include a literature review, key informant interviews with stakeholders in both the ASD and transportation communities, a statewide survey of adults with ASD, and several consumer focus groups.

The Alan M. Voorhees Transportation Center (VTC), in association with the John J. Heldrich Center for Workforce Development at Rutgers will initiate a research study, ***"Increasing Female and Minority Representation in the Workforce"***, for the New Jersey Department of Transportation (NJDOT) in the fall of 2013. The study will evaluate NJDOT's existing patterns of female and minority employee representation as well as the effectiveness of existing recruitment and retention policies and procedures.



## Completed projects at the Alan M. Voorhees Transportation (VTC) at Rutgers University

Principal investigator Andrea Lubin and senior researcher Stephanie DiPetrillo of the Alan M. Voorhees Transportation Center (VTC) at the Edward J. Bloustein School of Planning and Public Policy at Rutgers, The State University of New Jersey completed two research studies in December 2012 focused on transportation equity concerns. Both of these multi-year studies were funded by the New Jersey Department of Human Services, Division of Disability Services and the Centers for Medicare and Medicaid Services and sought to address transportation related issues impacting the dramatic underrepresentation of persons with disability in the U.S. labor market.

The first study, entitled *A Strategy for Getting People with Disabilities to Work: Supporting New Jersey County Transportation*, focused on researching both in state and nationwide best practices and innovative ways to expand and leverage the financial and other resources available to improve and enhance community transportation services

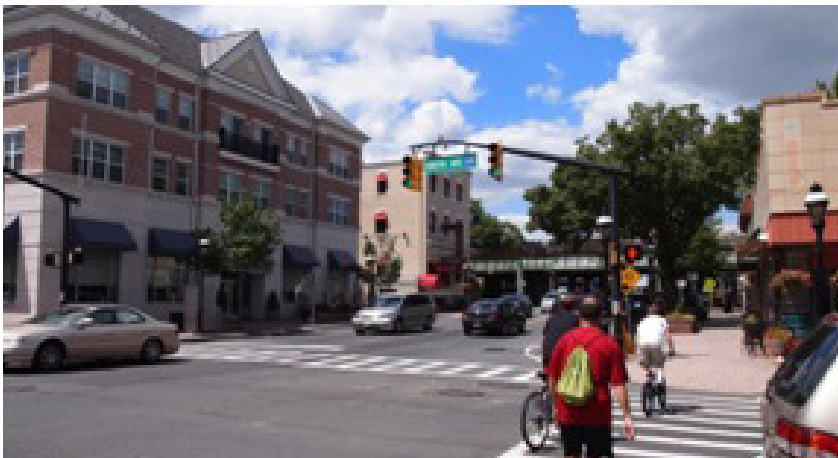
for people with disabilities, particularly those seeking employment.

The second study, entitled *Connecting to Jobs by Connecting to Transit*, involved VTC collaborating with the nonprofit travel training organization NJTIP to develop, pilot, and refine a transportation orientation and familiarization training program targeted to New Jersey's vocational rehabilitation community that assists persons with disabilities seeking employment. The main objective of the project was to inform and familiarize participating employment counselors with the range of transportation options available to their clients in their respective geographic locales.

For more information on either of these studies, please visit:

<http://policy.rutgers.edu/vtc/new/index.php>

## Measuring Benefits of Transit-Oriented Development



**Cranford Crossing** – rentals over ground floor retail. Shown is TOD (left), Cranford Station is located behind buildings on right. Cranford, New Jersey (Photo Credit: Alan M. Voorhees Transportation Center)

A team of researchers at the Alan M. Voorhees Transportation Center (VTC) at Rutgers University led by Prof Robert Noland, Ph.D. will soon be completing work on a two-year study to “Measuring the Benefits of Transit-Oriented Development.” A major goal of TOD is to direct land development to where public transit and infrastructure already exist, with the expectation that transit ridership will increase and auto use will decrease as the convenience of transit leads it to become the mode of choice. The objective was to document and assess the benefits gained through the implementation of a TOD strategy through key informant interviews, focus groups of those living near four stations, and a mail and online survey of 1,629 households near eight stations in New Jersey.

The full report will be available shortly on the VTC website.

**Gateway Center** – condos, rentals, and office above ground floor retail. Shown is pedestrian bridge connecting the TOD to the New Brunswick Train Station. New Brunswick, NJ (Photo Credit: Alan M. Voorhees Transportation Center)



### Upcoming Events

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#### **Reshaping Metropolitan America: Development Trends and Opportunities To 2030 Metropolitan Planning + Design Series**

September 20, 2013 at NYU Wagner Puck Building

Nearly half the buildings that will be standing in 2030 do not exist today. That means 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 delivers 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 outlines a policy agenda for reshaping America that meets the new market demand for sustainable places.

Publisher's Link to purchase the book: <http://islandpress.org/ip/books/book/islandpress/R/bo8079737.html>

To register, please visit the website at: [www.utrc2.org/Events](http://www.utrc2.org/Events)

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#### **Building Regulatory Bridges Between Airports and Transportation Regulators (2013 IATR-AGTA Joint Conference Preview)**

September 22-25, St. Louis, Missouri

Taxicab and limousine government officials and airport ground transportation professionals have existed for way too long in separate regulatory silos. Airports are the elixir of economic life for regulated for-hire transportation industry owners and drivers, as well as for tourism and business travel to most neighboring localities. Many members of the International Association of Transportation Regulators (IATR) and the Airport Ground Transportation Association (AGTA) have little or no communication with one another, but share important responsibilities for seamless customer service and passenger safety for private ground transportation to, from and beyond airports. Well, all of that is about to change. Better regulatory communication and collaboration in these challenging times is not an option, but a necessity.

The IATR's first-ever joint conference this year will be held from September 22- 25 in St. Louis, Missouri, with AGTA, with the theme of "Building Regulatory Bridges" between airports and regulators. To register for the IATR conference, please visit [www.iatr.org](http://www.iatr.org). The deadline for conference registration is fast approaching so please make your plans now before we are sold out.

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#### **Last Mile Freight Delivery: Use of Cleaner Mobility Vehicles**

October 4, 2013 at Baruch College William and Anita Newman Conference Center

The event will present cross-disciplinary perspectives on urban logistics using electric vehicles (EV) and other vehicles as a sustainable mobility transportation solution. Presentations at the event will reflect various perspectives, as speakers will represent the public and private sectors and academia, including public officials, community leaders, transit community members, academia, consultants and the interested public. The multi-disciplinary team will be from the U.S. and Europe. The event will provide a forum that will gather experts and sustainability advocates to focus on the actions that can be taken immediately to meet the environmental challenges and take advantage of the business opportunities presented by such dense city areas, namely with the use of small sized mobility solutions.

Stay tuned for a detail program agenda with detailed description.

To register, please visit the website at: [www.utrc2.org/Events](http://www.utrc2.org/Events)



## **Bureau of Research 15<sup>th</sup> Annual NJDOT Research Showcase**

### **October 23, 2013 at Conference Center at Mercer**

The 15th Annual NJDOT Research 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 is highlighted in presentations, poster sessions, and displays. Continental breakfast and lunch are included in the program.

To register, please visit the website at: <http://cait.rutgers.edu/cait/15th-annual-njdot-research-showcase>

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## **19th Statewide Conference on Local Bridge**

### **October 30-31, 2013 – Holiday Inn Syracuse**

Since 1994 Cornell Local Roads have collaborated with the New York State Department of Transportation Structures Division to present a conference about bridge issues for local governments. It is held in the Syracuse area and runs for 1½ days.

A Steering Committee guides the Conference format and program, meeting two or three times annually. The Conference is intended to actively foster partnerships between local agencies with bridge responsibility and the NYSDOT. Conference participants include NYS county, city, town, and village highway officials; representatives of state and federal agencies; and private sector personnel.

- NYSDOT
- FHWA
- NYS County Highway Superintendents' Association
- ABCD, Western NY Chapter, Inc.
- ABCD, Northeast Chapter, Inc.
- ABCD, Eastern NY Chapter, Inc.
- ACEC, American Council of Engineering Companies

For more information, please visit the conference website at:  
<http://www.clrp.cornell.edu/trainingevents/bridgeconference.htm>

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## **Parking Reform Made Easy**

### **November 8, 2013 at The City College of New York Bernard and Anne Spitzer School of Architecture**

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 explains the problems with minimum parking requirements and shows 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 addresses 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 will be 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 <http://islandpress.org/ip/books/book/islandpress/P/bo8793591.html>

To register, please visit the website at: [www.utrc2.org/Events](http://www.utrc2.org/Events)



## Past Events

### The Second Connected Vehicles Symposium

June 17 – 18, 2013 at Rutgers University



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



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

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 was the centerpiece of this meeting. However, this year's symposium broadened its scope by looking at some of the emerging trends and challenges 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 desire 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 in Busch campus of Rutgers University on June 17-18, 2013.

For Conference proceedings and speaker's presentations, please visit the conference website at:  
<http://www.connectedvehicleworkshop.com/>



## Past Events

### UTRC Hosted a Mayoral Transportation Forum

Wednesday, June 19, 2013 at Baruch College

Article Authored by Matthew W. Daus, Distinguished Lecturer at UTRC/CCNY



Democratic Candidates: From L to R: Sal Albanese, John Liu, Bill Thompson, Anthony Weiner



A Panel of transportation policy experts comprised of former high-level transportation officials, academics and organizational stakeholders



Republican Candidates: From L to R: Adolfo Carrion, John Catsimatidis, Joe Lhota, George McDonald

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



## Past Events

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on the issues that matter to New Yorkers. In order to accomplish this task, I 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 me 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.

Mr. Daus chaired the Transportation Forum Committee, which included: Elliot G. (Lee) Sander (Board Chairman of 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); 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: • [http://www.windelsmarx.com/news\\_detail.cfm?id=288](http://www.windelsmarx.com/news_detail.cfm?id=288)

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

<http://taxicabtimes.com/professor-matthew-daus-hosts-moderates-nyc-mayoral-candidates-forum-on-p1994-1.htm>

## Articles

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### Watching the Wheels

Dr. David King, an assistant professor at Columbia university and his students imagine a New York of bike shares and self-driving cars.

Read the full article at:

[www.villagevoice.com/2013-08-07/news/watching-the-wheels/](http://www.villagevoice.com/2013-08-07/news/watching-the-wheels/)

### Has the Rise of Online Shopping Made Traffic Worse?

A Columbia's Graduate School of Architecture, Planning and Preservation Masters student thesis was featured in the Atlantic Cities:

[www.theatlanticcities.com/commute/2013/08/has-rise-online-shopping-made-traffic-worse/6409/](http://www.theatlanticcities.com/commute/2013/08/has-rise-online-shopping-made-traffic-worse/6409/)

## Publications

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### Recent Publications from the Lighting Research Center

Several peer-reviewed articles on transportation safety topics have been recently authored or co-authored by Lighting Research Center (LRC) researchers:

- “Ecoluminance: A new approach to visual guidance for roadways,” in the International Journal of Sustainable Transportation; a discussion of new sustainable lighting practices for roadways including roundabouts, exit ramps and urban boulevards.
- “Aviation-related LED perception research,” in Aviation, Space and Environmental Medicine; an overview of recent studies involving airfield lighting using light emitting diodes.
- “Headlamp levelness and glare: Preliminary analyses based on field data,” in the Society of Automotive Engineers International Journal of Passenger Cars; a field study of headlamp aim and the implications for visibility and glare.
- “Effect of different coloured luminous surrounds on LED discomfort glare perception,” in Lighting Research and Technology; a study of street light luminaire design principles for helping reduce glare for drivers and pedestrians.

### Recent Publication from the Alan M. Voorhees Transportation Center (VTC) at the Edward J. Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey

- Deka, D. (2013). “An Explanation of the Relationship between Adults’ Work Trip Mode and Children’s School Trip Mode through the Heckman Approach.” Journal of Transport Geography, Vol. 31, pp. 54-63.
- Park, Hyunsoo, Robert B. Noland and Ugo Lachapelle, (2013), Active School Trips: Associations with Caregiver Walking Frequency, Transport Policy, 29, 23-28.
- Law, Teik Hua, Robert B. Noland, and Andrew W. Evans, (2013), “Factors Associated with the Enactment of Road Safety Laws: A Cross-country Panel Analysis”, Risk Analysis, 33(7), 1367-1378.
- Noland, Robert B., (2013), From Theory to Practice in Road Safety Policy: Understanding Risk versus Mobility Research in Transportation Economics, 43, 71-84.
- Noland, Robert B., Nicholas J. Klein, and Nicholas K. Tulach, (2013), “Do Lower Income Areas have More Pedestrian Casualties?”, Accident Analysis and Prevention, 59, 337-345.



## Recent Publications from Rae Zimmerman, a NYU Professor

New publications (one book, 2 book chapters and 1 published conference proceedings paper)

- R. Zimmerman (2012) *Transport, the Environment and Security. Making the Connection*, Cheltenham, UK and Northampton, MA: Edward Elgar Publishing, Ltd.
- R. Zimmerman (2013) "Crisis Communications," in *SAGE Encyclopedia of Crisis Management*, edited by K. B. Penuel, M. Statler, and R. Hagen, Sage Publishers, pp. 188-193.
- R. Zimmerman (2012) "Critical Infrastructure and Interdependency Revisited," Chapter 20 in *The McGraw-Hill Homeland Security Handbook – 2nd edition*, edited by D. G. Kamien. New York, NY: The McGraw-Hill Companies, Inc., pp. 437-460.
- R. Zimmerman (forthcoming September 13, 2013) "Network attributes of critical infrastructure, vulnerability, and consequence assessment," in G. Deodatis; B. R. Ellingwood; D. M. Frangopol, eds. *Safety, Reliability, Risk and Life-Cycle Performance of Structures and Infrastructures*, to be published by CRC Press/Taylor & Francis Group.

## Presentations

### Conference Presentations of Dr. Rae Zimmerman

Since Hurricane Sandy, Professor Rae Zimmerman gave over a dozen talks on infrastructure-related impacts and recovery, including transportation. Some of the presentations were included the following venues (in inverse chronological order):

- 11th International Conference for Structural Safety and Reliability (ICOSSAR), Mini-Symposium: Risk Assessment of Terrorist Attack on Buildings and other Civil Infrastructure Systems, June 16, 2013;  
[http://icossar2013.org/wp-content/uploads/2013/06/ICOSSAR2013\\_Final\\_Program.pdf](http://icossar2013.org/wp-content/uploads/2013/06/ICOSSAR2013_Final_Program.pdf)
- New York Institute of Technology (NYIT) 8th Annual Energy Conference (June 13, 2013), Science and Technology (S&T) Innovations in Hurricane Sandy Research at Rutgers University, June 5, 2013;  
[http://www.nyit.edu/conferences/energy\\_schedule/](http://www.nyit.edu/conferences/energy_schedule/)
- NYU Institute for Public Knowledge infrastructure panel, May 14, 2013;  
<http://ipk.nyu.edu/event-calendar/details/200-public-forum-infrastructure>
- Advanced Energy 2013 conference session on cyber security, May 1, 2013;  
[http://www.aertc.org/conference2013/Speaker\\_Presentations/presentation.html#Track I\I5 Energy Cybersecurity II\Rae Zimmerman](http://www.aertc.org/conference2013/Speaker_Presentations/presentation.html#Track I\I5 Energy Cybersecurity II\Rae Zimmerman)
- UK Trade & Investment Mission: Hurricane Sandy Solidarity Campaign, Session 2: Utilities and Telecom, British Consulate-General on April 18, 2013;
- Metropolitan Waterfront Alliance 2013 Waterfront Conference on April 9, 2013;  
Baruch's Conference on Futureproofing Our Cities Urban Resilience, At What Cost? On March 14, 2013;  
<http://www.trb-adc60.org/Download2.html>;  
<http://www.trb-adc60.org/downloads/1-2%20Rae%20Zimmerman%20ABBREVIATED%20to%20copyright.pdf>
- Water. Water Everywhere: Ecology, Conservation, Adaptation, Transportation Research Board ADC60 Committee, Session 1, Sandy: The Big Picture on December 4, 2012;
- Association of Collegiate Schools of Planning (ACSP) 53rd Annual Conference, Cincinnati, OH, November 3, 2012.  
[http://www.acsp.org/sites/default/files/2012\\_ASCP\\_FINAL\\_Program\\_WEB.pdf](http://www.acsp.org/sites/default/files/2012_ASCP_FINAL_Program_WEB.pdf)

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- ▶ Clarkson University
- ▶ Columbia University
- ▶ Cornell University
- ▶ Hofstra University
- ▶ New Jersey Institute of Technology
- ▶ New York University
- ▶ Polytechnic Institute of NYU
- ▶ Rensselaer Polytechnic Institute
- ▶ Rochester Institute of Technology
- ▶ Rowan University
- ▶ Rutgers University
- ▶ State University of New York
- ▶ Stevens Institute of Technology
- ▶ Syracuse University
- ▶ The College of New Jersey
- ▶ University of Puerto Rico Mayagüez



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