Over half of the world’s population now lives in urban areas, with growing demands on transportation systems and increasing environmental consequences, local and global. Acknowledging the complexity of these issues, the Swedish-based Volvo Research and Education Foundation made an open call worldwide to establish two Centers of Excellence (CoEs), networks of international, multidisciplinary research and collaboration.

A team led by RPI’s Professor Jose Holguin-Veras was chosen to establish the Center of Excellence for Urban Freight Systems (CoE UFS). The announcement was made January 14th, during the Center for Infrastructure, Transportation and Environment’s (CITE) Annual Reception in Washington DC.

The winning team includes the world’s six leading urban freight research groups (Rensselaer Polytechnic Institute, University of Westminster, Kyoto University, Monash University, Pennsylvania State University, TNO Delft University of Technology) or Core Research Partners, who will work closely with cities and the private sector to raise awareness of freight issues, improve analytical tools and behavioral understanding, and to engage full stakeholder participation in promising solutions.

The ultimate goal of the CoE-UFS is behavior modification: to shift urban freight from a system driven solely by profit maximization to one that accounts for the effects produced, and aims towards sustainability, increased quality of life, economic efficiency, and environmental justice.
Dr. Xuegang (Jeff) Ban is an Assistant Professor of the Department of Civil and Environmental Engineering at Rensselaer. He joined the Institute in 2008, after three years at the Institute of Transportation Study at the University of California, Berkeley. His research interests are in transportation network modeling and simulation, traffic operations and control, and intelligent transportation systems (ITS). In 2011 Ban was awarded a prestigious Faculty Early Career Development Award (CAREER) from the National Science Foundation (NSF), and in 2012, the New Faculty Award by the Council of Transportation Research Centers. His current research, funded by NSF, USDOT and others, is a study of how mobile devices including GPS and cellular phones can help monitor and optimize traffic systems, and reduce roadway congestion.

Dr. Cara Wang is an Assistant Professor of Civil and Environmental Engineering at RPI. Her research interests include sustainable transportation planning, spatial econometrics, and the statistical modeling of urban land use systems. Currently Dr. Wang is PI of: an NSF project developing spatial econometric approaches for urban transportation and land use modeling; a project evaluating the cooperative multi-carrier delivery initiatives in NYC; and a project investigating the feasibility of installing noise reduction technologies on trucks to support off-hour deliveries. Dr. Wang’s study on spatial statistical modeling of transportation won her the Sixth Annual Benjamin H. Stevens Graduate Fellowship in Regional Science, the Pikarsky Award for Outstanding PhD Dissertation in Science and Technology, and the Best Paper Award for Young Researchers. Dr. Wang helped organize the 12th International Conference of Chinese Transportation Professionals in August, 2012, in Beijing, China; a major academic event for professionals interested in transportation issues in China and other developing countries.

Dr. José Holguín-Veras is the William H. Hart Professor, and Director of the Center for Infrastructure, Transportation, and the Environment (CITE) at Rensselaer. He has led numerous multi-year, multi-university, multi-million dollar projects, transitioned numerous research ideas into practice, and created extensive collaborations of the world’s leading freight researchers.

His ability to transition research into practice—navigating complex implementation environments—has been recognized with appointments to highly prestigious positions. Among others, he has been appointed to the Board of the New York State Thruway Authority, where he is overseeing—as the only researcher in the board’s history—the replacement of the $7 billion Tappan Zee Bridge; and to the National Academy of Sciences’ Disaster Research Roundtable, where he helps shape American disaster response policy.

Professor Holguín-Veras’ extensive research and professional experience provide him with unique insights into the need for more humanitarian models, integrated passenger and freight transportation planning, and robust, behaviorally based policies. His work, complemented by international collaborations, informs his vision of both the need for profound change in urban freight operations and planning, and how best to accomplish the ultimate goal of sustainable urban freight systems.
Senior Research Engineer **Mr. Jeffrey Wojtowicz** has been with the Center for Infrastructure, Transportation and the Environment (CITE) at RPI since 2003. He serves as a project and technical manager for freight projects, with research interests in intelligent transportation systems (ITS), traffic signal systems, emergency response for planned special events, and traffic incident management. He holds both his BS and MS degrees in Civil and Environmental Engineering from RPI. He was Project Manager for research that resulted in the ITS America “Best of ITS” award in Research and Innovation for a real-time route guidance project, as well as four Project of the Year Awards from ITS-New York. He has an extensive working knowledge of the trucking industry, including involvement since an early age with a family trucking business in operation for over 75 years. He and his family have a collection of antique trucks, dating back to a 1924 Model T Ford. Wojtowicz serves as the

Dr. Jack Reilly is Professor of Practice of Civil and Environmental Engineering at RPI. As an advisor to the World Bank on urban public transit systems in developing countries, Dr. Reilly was recently in India providing technical assistance to two urban agencies implementing bus rapid transit (BRT) and automatic vehicle location (AVL) systems. Transit Intelligent Transportation Systems are seen as promising to counteract the dramatic growth in the number of personal vehicles and congestion in the developing world; Dr. Reilly is involved in projects in several cities in China and India. With over 35 years of experience in the design, management and operations of transportation systems, Dr. Reilly was Deputy Executive Director of the Capital District Transportation Authority, a regional transportation operating agency with a fixed route bus and paratransit fleet, regional Medial brokerage and two railroad passenger terminals. He managed the development of a new passenger rail station at Rensselaer, the 10th busiest Amtrak station in the country.

**Transportation Graduate and Post-docs Students and Current Projects**

- **Johanna Amaya** (Colombia) *Cyber Enabled Discovery System for Advanced Multidisciplinary Study of Humanitarian Logistics for Disaster Response (NSF)*
- **Felipe Aros-Vera** (Chile) *Integrative Freight Demand Management in the New York City Metropolitan Area - Implementation Phase (USDOT)*
- **Shama Campbell** (Jamaica) *Freight Trip Generation and Land Use, funded by the National Cooperative Freight Research Program (NCFRP 25)*
- **Carlos Gonzalez-Calderon** (Colombia) *Improving Freight System Performance in Metropolitan Areas (NCFRP 38)*
- **Peng Hao** (China) *Using Mobile Sensors for Traffic Knowledge Extraction and Dynamic Network Management, (NSF)*
- **Rui Ma** (China) *BECS Collaborative Research: Modeling the Dynamics of Traffic User Equilibrium Using Differential Variational Inequalities, (NSF)*
- **Miguel Jaller-Martello** (Colombia) *Improving Freight System Performance in Metropolitan Areas (NCFRP 38)*
- **Eric Richardson** (USA) *Integrative Freight Demand Management in the New York City Metropolitan Area - Implementation Phase (USDOT)*
- **Ivan Sanchez** (Colombia) *Freight Trip Generation and Land Use, funded by the National Cooperative Freight Research Program (NCFRP 25)*
- **Zhanbo Sun** (China) *Mobile Sensor Traffic Probes – Addressing Transportation Modeling and Primary Protection in an Integrated Framework, (NSF)*
- **Xia Yang** (China) *Integrative Freight Demand Management in the New York City Metropolitan Area - Implementation Phase (USDOT)*
- **Dapeng Zhang** (China) *Improving Seasonal Adjustment Factors for Better AADT Estimation using Network Interpolation Techniques (UTRC / NYSDOT)*
- **Yiwei Zhou** (China) *Feasibility of Installing Noise Reduction Technologies on Commercial Vehicles to Support OHD (NYSERDA / NYSDOT)*
Alumni Michael Della Rocca ‘77 Honored for his Accomplishments

Mr. Michael Della Rocca was honored during the RPI Center for Infrastructure, Transportation and the Environment (CITE) reception at Transportation Research Board in Washington. A distinguished friend and alumnus of RPI, Della Rocca was honored for his outstanding accomplishments in the transportation field. Graduating from RPI in the late 1970’s with a BS in Civil Engineering and a Masters in Transportation Engineering, Della Rocca also received an MBA in Executive Management from St. John’s University.

Before stepping down in 2010, Della Rocca was a valued member, and ultimately Chairman, of RPI’s Civil and Environmental Advisory Board for nearly 10 years.

Mr. Della Rocca is currently North America Chief Executive for AECOM, leading a $4-billion professional services business practicing in the transportation, environmental, water, energy, buildings, mining, and government sectors. His team of 14,000 professionals includes specialists in engineering, science, economics, planning, finance, ecology, construction management, and operations. The company’s Americas business operates from over 300 offices in North and South America, and is engaged in some of the world’s most noteworthy projects, such as the Freedom Tower and Second Avenue Subway projects in Manhattan; the Croton Water Treatment Facility in NYC; the replacement of the Tappan Zee Bridge; the new privately financed high voltage DC transmission line linking Canada and New York city along the Hudson River; and the design of the recently opened Barclay’s Center in Brooklyn, to name just a few within New York.

Throughout his 35-year career, Della Rocca has published and presented widely in professional forums, and is a frequently quoted authority on the engineering industry. Active in a number of national design and construction industry organizations, Della Rocca also currently serves as Vice Chair of the New York Building Foundation and the New Jersey Alliance for Action, and has served as president of the American Council of Engineering Companies of New York.