

## **FUT Symposium 2012-10-01**

### **Urban Freight for Livable Cities:**

**-How to deal with collaboration and trade-offs.**

#### **A. Sharing the Urban Space**

##### **Off-Hour Deliveries in the Big Apple: Multi-Stakeholder Cooperation in a (Really) Complex Environment**

Dr. José Holguín-Veras, William H. Hart Professor, Director of CITE, Rensselaer Polytechnic Institute, USA

The off-hour delivery (OHD) implementation project—being conducted in New York City by the New York City Department of Transportation and the Rensselaer Polytechnic Institute—provides an interesting example of multi-stakeholder cooperation between public and private sector partners, community advocates, and trade organizations. The project is large, complex, and requires the collaboration of all partners to fully achieve its goals.

Starting as a small research project in 2002, the OHD concept has blossomed into a potent urban freight demand management tool expected to switch to the off-hours (between 19:00 and 6:00) 20% to 40% of the urban delivery traffic currently made in the congested hours of the day. The economic and environmental impacts are tremendous: \$150-\$200 million/year, mainly from travel time savings, productivity increases, and pollution reductions (e.g., 20.9% of OHD leads to reductions of: 202.7 tonnes of CO, 40 tonnes of HC, 11.8 tonnes of NO<sub>x</sub>, and 69.9 kilograms of PM<sub>10</sub>). In response to these impacts, the American federal government created a program to foster OHD in other American cities, which will start work on their own versions of the OHD project pioneered in NYC.

The path to implementation was opened when the project demonstrated that it benefited all: citizens and bicyclists enjoyed enhanced quality of life due to less interference from deliveries, the urban economy improves because of lower delivery costs, the carriers benefit from the increased productivity, the receivers benefit from increased reliability, day-hour travelers enjoyed faster travel speeds, and—with the use of low noise truck technologies—local communities are not impacted by night noise. Achieving that feat greatly benefited from the research conducted that revealed the need for carefully crafted public sector intervention.

Although nowadays the OHD project is widely recognized as a huge success, the road it took to get there was not a smooth one. At various stages, the project had to overcome lack of interest from potential participants, skepticism, and even hostility from some quarters. In most cases, these complex reactions reflected that, to many individuals, the concept was an intriguing though untested idea. The story of how the project overcame these challenges to win almost unanimous support provide important lessons for other sustainability initiatives related to urban freight systems.

Professor Holguín-Veras will discuss the lessons learned during the OHD project, the important role that cutting edge research plays by defining new paradigms of urban freight systems, and identifying the most effective pathways to achieve the desired goals; the need to build coalitions of agents-of-change that involve both private and public sector partners; the role of pilot testing as an external validation mechanism to test research concepts; the need to define pathways for implementation of promising concepts, while accounting for the complex political realities of modern urban environments. Professor Holguín-Veras will also discuss the need for agents-of-change to be patient and determined as they push forward the frontiers of knowledge and practice in search for a better world.