Research Roundup: One-Click Veteran’s Resource, Analysis of Extreme Weather & Public Transportation

Researchers from the Urban Transportation Center completed projects in fall of 2016 that will: 1) Help improve mobility for Illinois veterans and their families, 2) Provide regional transportation planners and agencies a better understanding of the impact of extreme weather on public transit networks.

The One-Click Transportation Resource Center is a website that lets veterans and their families quickly find up-to-date travel information for public and specialized transportation, commercial transportation like intercity bus and rail service, and ride share and car share options. Senior citizens and people with disabilities also can benefit from this online resource.

The website also links to the Google Trip Planner Transit page and contains a scalable Illinois map with locations of veteran service centers. It was constructed upon the TRANPRO Information Management System, a digital source that maintains Illinois Public and Specialized Transportation Provider Inventory data. Funding for the project was provided through a Veterans Transportation and Community Livability Initiative grant from the Federal Transit Administration administered by the Illinois Department of Transportation.

The UTC research team, led by Senior Associate Lise Dirks, also prepared a report, “The Illinois One-Click Transportation Resource Center.” The report provides insight into veterans and their transportation requirements when travelling to and from medical facilities in the U.S. and Illinois and offers an analysis of existing transportation services, results from a stakeholder assessment of transportation needs and technical insight on the development of the “one-click” website.

Two separate studies led by UTC Director P.S. Sriraj centered on weather and its role in shaping planning and operations for bus and rail systems.

A report based on a survey of 900 professionals revealed a great deal of insight, including these two conclusions: Transit agency professionals have a moderate-to-high level of confidence that the systems they manage will continue to operate during an extreme weather event, and they acknowledge that extreme weather incidents take place more often and are more severe.

Also, case studies of two transit agencies revealed: 1) Commuters use below grade rapid transit stations more often during heavy rain or snow than above-ground stations. 2) Installation of shelters and benches at bus stops or on subway platforms helps maintain ridership on very hot or very cold days, and may even cut down on ridership loss on rainy days.
Exploring Urban Mobility Focus of UTC Fall 2016 Seminar Series Presentations

Strategies on how to overcome mobility challenges in metropolitan areas formed the focus for four presentations offered by the Urban Transportation Center during the Fall 2016 semester. The UTC teamed up with Sam Schwartz Consulting to host “Exploring Urban Mobility: Navigating the Road Ahead,” a four-part program offered through the popular Seminar Series of current developments and trends in modern transportation research, planning, and operations.

The goal of the series: Build awareness for current and ongoing developments into successful programs that improve mobility in ever-evolving urban environments across the nation. Here are short reports on the presentations, which were held in the Great Cities Institute Conference Room at CUPPA Hall.

Policy Impact: Shared Mobility Challenges. Managing the adoption and integration of new and emerging mobility innovations to achieve a successful new transportation paradigm is a defining issue of our time. During the presentation held September 29, Joe Iacobucci shared thoughts on why the mobility industry (comprised of ridesource, rideshare, carshare, taxicabs, for-hire vehicles, bikeshare, and microtransit) is essential to the economic vitality of a city. Director of Transit for Sam Schwartz Consulting, Mr. Iacobucci said cities need to develop a long-term policy strategy to provide more opportunities to better determine mass mobility and transportation outcomes.

Mobility as a Service: Integrating Modes and Autonomous Vehicles. In the near future, driverless technology will be able to transform transportation and affect where people choose to live, work, and play. The role of autonomous vehicles also will dramatically impact mobility, traveler access and land in the immediate future. At the second presentation October 13, Mr. Iacobucci presented three possible perspectives on cities and society: Good – Reduced congestion, “last mile” issues solved, the disabled are better served. Bad – Some jobs disappear, pedestrians and bikes are squeezed out, too expensive for the poor or those in rural areas. Ugly – Public transit is decimated, higher rates of stroke, heart attacks from inactivity, encourages sprawl.

A Tale of Three Cities: Mobility Strategies. Mobility strategies developed for three U.S. cities were explored October 27 during the third installment of the series. Mark de la Vergne, Principal for Sam Schwartz Consulting, said a growing number of city leaders are aspiring to re-envision their streets as places for more than just automobiles. Here are examples:

Boise, ID: The Boise Transportation Action Plan will enable this medium-sized, fast-growing city to realize its vision of a transportation system that provides mobility choices, creates economic connections, enhances social equity and encourages healthy lifestyles.

Grand Rapids, MI: Grand Rapids is a rapidly growing urban center, and future success of its Downtown area will be supported by providing more transportation choices and integrating technology with these choices.

Pittsburgh, PA: The Uptown and West Oakland neighborhoods present many challenges but also unique opportunities. Long overlooked, Uptown is a convenient pass-through that can shuffle a great amount of traffic to both Oakland and Downtown.

Shuttle Bug: Linking Workers to Public Transportation in Lake County. Since 1996, the Shuttle Bug bus service has linked workers to public transportation in Northern Cook and Southern Lake Counties. At the fourth event November 17, Bill Baltutis and Tim Grzesiakowski of TMA of Lake Cook pointed out that the Shuttle Bug, a public-private partnership, operates 13 shuttle routes between one CTA and seven Metra stations. Among the benefits of the program: An improved quality of life, offers workers a commute option to driving alone, a boost to an area’s economic development, reduction in traffic congestion and better air quality.
More than 70 transportation professionals from the U.S. and overseas joined Urban Transportation Center faculty and staff researchers and University of Illinois at Chicago (UIC) affiliated faculty colleagues at the UTC and CUPPA Alumni Association Reception held January 9 during the 2017 Transportation Research Board Annual Meeting in Washington, D.C.

For the third year, the reception was held at Acadiana restaurant, located near the Washington Convention Center, and featured networking, socializing and the announcement of the winners of the 2016 George Krambles Transportation Scholarship Awards.

Eight researchers competed in the Krambles competition. The recipients are:


3rd Place (tie): Moyin Li for paper on: “Mobility Disadvantage and Face-to-Face Social Meetings.”


UTC Director P.S. Sriraj (at right) welcomed guests, which included past Director Piyushmita (Vonu) Thakuriah, and past Executive Director Steve Schlickman, recognized staff and affiliated faculty researchers for their contributions, and shared UTC highlights from 2016.

1) In 2016, the Center completed 10 research reports that address freight, maritime freight, safety, mobility, transportation planning and paratransit.

2) Seven presentations were delivered through the UTC Seminar Series program in 2016.

3) Ph.D. Candidate Takanori Sakai was presented with Best Paper by the TRB Urban Freight Transportation Committee for “Logistics Chain Modeling for Urban Freight: Pairing Truck Trip Ends With Logistics Facilities.”

Sponsorship for the reception was provided by Schlickman & Associates and uGRID. Around 20 alumni from the College of Urban Planning and Public Affairs (CUPPA) and other academic departments at UIC attended. UTC faculty, staff and affiliated faculty researchers also contributed to the 2017 TRB Annual Meeting, which attracts more than 12,000 professionals from around the world, by participating in committee meetings, delivering presentations and sharing transportation research results.
By Dr. P.S. Sriraj, Director

In the Fall of 2016, the Urban Transportation Center hosted a meeting of the minds, of sort. Faculty and staff researchers, administrative staff, PhD candidates and graduate students, and affiliated faculty gathered for a morning retreat on the UIC Campus. CUPPA Dean Michael A. Pagano also participated before having to depart for meetings in Washington, D.C.

The purpose: Chart a course into 2017 and beyond in order to keep the UTC on track to meeting its mission to conduct interdisciplinary research that will help metropolitan Chicago and Illinois effectively address transportation challenges.

Through strategic exercises and group work sessions, participants developed a SWOT/TOWS analysis and even conducted an “icebreaker exercise” where all involved launched paper airplanes containing two personal questions. Being a transportation research unit, we found the latter to be especially appropriate, memorable and enjoyable.

But in all seriousness, we gained great insight into the UTC’s acknowledged strengths (37-year history, multi-disciplinary research capabilities) and opportunities (growth in freight industry, partnership with private providers), as well as perceived weaknesses (reduced staff capacity, failure to leverage past success) and threats (state budget stalemate, increased competition). In the months ahead, UTC faculty and staff will embrace our strengths and advance opportunities to remain a strong, vital transportation research unit that delivers innovative transportation solutions and inspires education and professional development.

The year 2016, my first serving as director, certainly was a transitional year for the UTC; but we can reflect back on many accomplishments. These include:

- Completion of 10 research studies that address pertinent issues such as enhancing mobility, improving safety and providing transportation options for veterans.
- Hosting seven Seminar Series presentations, including a special afternoon talk featuring CMAP Executive Director Joseph Szabo on The Power of a Unified Region.
- Provided 10 UIC PhD and Master’s candidates and undergraduate students with opportunities to assist UTC researchers in ongoing studies.

The retreat last fall provided the framework to make 2017 an even more successful and productive year for the UTC. Stayed tuned for updates on our progress.