Faculty, staff and graduate student researchers at the Urban Transportation Center are close to finalizing transportation studies now underway. Here are capsule perspectives of three projects scheduled for completion in 2019.

**Mobility Management:** Researchers completed 10 phone interviews with mobility managers and transportation officials to learn best practices. The information will be used to develop a tool or contribute to future research on strategies needed to launch mobility management networks at the statewide level. A grant from the National Center for Mobility Management, a technical assistance center funded through a cooperative agreement with the Federal Transit Administration, supports the project.

**IDOT Organizational Structure:** Officials from five state departments of transportation shared information for a study on the role and function of planning within DOTs. The scope of the research is to gain knowledge on the value behind organizational restructuring within DOT departments to better support multi-modal projects and performance-centric planning. The study, titled “Planning Structure Research,” is funded by the Illinois Department of Transportation.

**Grade Crossing Safety:** Three site inspections were made at railroad grade crossing sites in two south Chicago suburbs as part of a study to improve safety and help mitigate delays. The project, sponsored by the South Suburban Mayor’s and Managers Association, also will address implementing “quiet zones” at crossings near schools, businesses and homes. Researchers learned that up to 400 trains pass through the area daily.

In September, the UTC moved forward with administering a scholarship award to recognize a late transportation leader and researcher. The 2018 Joe DiJohn Memorial Fund Scholarship was given to Sarah Geinosky, MUPP. The scholarship was established to honor the long-time UTC researcher and former executive director of the Pace Suburban Bus network. The award was presented August 23 by UTC Director Dr. P.S. Sriraj in a ceremony held at CUPPA Hall on the UIC campus. The award was given in the amount of $1,000. Sarah, a former UTC research assistant, was granted the scholarship for outstanding academic achievement and strong interest in pursuing a career in the transportation industry. She currently holds the position of scheduler with Pace.

“It certainly is appropriate that Sarah would land a position with Pace and become the first recipient of the Joe DiJohn Scholarship,” said Dr. Sriraj. “Sarah certainly deserves this honor and recognition for her academic performance and contributions as a graduate research assistant at the UTC.”
Seminar Series: Infrastructure Insight and More Shared by Experts from Metra and Pace

Representatives from two of metropolitan Chicago’s transportation service bureaus shared news and insight on current and future service enhancements and projects during the Fall 2018 Seminar Series hosted by the Urban Transportation Center.

Metra’s Engineering Overview and Capital Program

Metra oversees all commuter rail operations in the 3,700-square-mile northeastern Illinois region, with responsibility for day-to-day operations, fare and service levels, capital improvements, and planning. On September 20, Acting Chief Engineer Christopher Krakar provided an overview of the system, including a review of engineering responsibilities and how business is conducted on capital projects. He noted that the Engineering Department has 12 key responsibilities required to keep the commuter rail network operating safely and efficiently. These include design and construction of lines, stations and bridges, as well as project management and quality control. In 2018, Metra was managing improvements or major reconstruction to seven stations in Chicago and the suburbs and six bridges. Looking long-term, Krakar said it would cost $12.1 billion to keep the entire system — comprised of 11 lines on 1, 155 miles of track — in the state of good repair.

A Rapid Pace for Chicago’s Suburbs

In early 2019, Pace — the region’s commuter bus network — plans to debut Pulse, bus rapid transit service designed to provide express transportation options along heavily traveled corridors in suburban Chicago. The first Pulse service will operate along Milwaukee Avenue between Golf Mill Shopping Center and the Jefferson Park Blue Line station. At the presentation November 15, Charlotte Obodzinski, Pace Supervisor of the Rapid Transit Program, reported that one challenge with building the new network includes working with multiple municipalities and state and local transportation departments. As part of its Vision 2020 Plan, Pace plans to construct 23 additional Pulse lines in the future. Obodzinski also shared an update on the Pace I-90 Express Service launched in August of 2018. Located at Barrington Road in Hoffman Estates, the service lets busses pick up and drop off passengers without exiting the highway.

UTC Hosts Chinese Delegation, Transportation Seminar With German American Chamber

Fall brought the Urban Transportation Center together with a delegation of technology and communications professionals from the People’s Republic of China and representatives from German firms providing innovative transportation technology. Some 25 delegates from the Ministry of Industry and Information Technology visited CUPPA Hall October 18 and were presented with talk by UTC Director Dr. P.S. Sriraj on transportation solutions needed to meet challenges facing Chicago. The visit was coordinated by the U.S.-China Exchange Council, a non-profit organization headquartered in Northern California.

Representatives from three leading German companies -- Clevercity, Fraunhofer Institute for Transportation and Infrastructure Systems and INVENSTITY -- delivered presentations on improving transportation through better technology at “Innovation Seminar: Smart Transportation,” an afternoon workshop held November 7 at the UIC Student Center East. The event was co-hosted by the UTC and German American Chamber of Commerce of the Midwest. Dr. Elizabeth Kocs of the UIC Energy Initiative participated as a speaker, and following the presentations, Dr. Sriraj moderated a panel discussion.

http://www.utc.uic.edu/
Visiting Research Specialist Profile: Dr. Joseph Fazio, Ph.D., PE, PTOE

A senior transportation research expert and longstanding instructor with strong ties to the UTC and University was added to the research team. Earlier this fall, Joseph Fazio, Ph.D., PE, PTOE joined the Center as a Visiting Research Specialist, bringing a tremendous background in transportation planning, research and education.

His positions include working on a grant at the Federal Highway Administration’s (FHWA) Turner Fairbank Highway Research Center and as Chief Scientist at Michaels Associates, Ltd., where he served clients such as National Cooperative Highway Research Program, FHWA, Illinois Department of Transportation, Illinois State Toll Highway Authority, and Chicago Transit Authority. Internationally, Dr. Fazio participated in projects by the United States Agency for International Development, the World Bank, Government of India (GOI), IIT Delhi, and IIT Bombay. Completed information technology services projects include aiding in the design and safety evaluation of IDOT’s REVLC system on the Kennedy Expressway under a Lester B. Knight subcontract.

He also has significant teaching experience. Dr. Fazio taught for many years at prestigious institutions such as the South Dakota School of Mines and Technology, where he held the position of associate professor, and as an adjunct professor at the Illinois Institute of Technology and UIC. His research has been published in international and peer-reviewed journals, textbooks and manuals. In 2011, he started a home e-business, Fazio Engineerware, while being a caregiver to his late, widowed mother.

Dr. Fazio has a long history with the UTC and University. He grew-up in the Taylor Street neighborhood in the 1960s, when the University of Illinois at Chicago Circle campus, now known as UIC, was being constructed. In the early 1980s he was hired as the second graduate research assistant at the UTC, then under the directorship of Dr. Robert Paaswell. In 1990, he earned his doctoral degree in Civil Engineering from UIC, and in 1985 he earned his master’s degree; he also earned a bachelor of science in 1983 and a bachelor of arts in 1979. He holds a Professional Engineer license from the State of Illinois and is a certified Professional Traffic Operations Engineer. And, he currently serves on the Transportation Research Board’s subcommittees on Freeways/Multilane Highways, and Pedestrian and Bicycles in the Highway Capacity and Quality of Service Committee.

Research Assistants Contribute to Eight Ongoing UTC Transportation Studies

Research assistants advanced eight studies during the Fall 2018 semester at UIC, providing valuable support to faculty and staff researchers. Here are short recaps.

An in-depth study of delays at-grade railroad intersections in the village of Dolton is the focus of Shazal Afraaz, while Eric Boria is working with colleague Liz DeChant on the “Evaluation Report of Coordinated Transit Response Planning and Operations Support Tools for Mitigating Impacts of All-Hazard Emergency Events,” funded by the Federal Transit Administration. Lucy Chen is continuing to contribute to a study for IDOT on exploring the organizational structures of planning departments in different state Departments of Transportation. A very relevant topic in transportation today — the impact of autonomous vehicles — is being studied by Adam Davis, who is concentrating on the areas of equity, legislation and the economy. In the study, “Maritime Freight Data Collection System and Database to Support Performance Measures and Market Analyses,” Nahid Farazi is exploring ways to maintain and expand the Illinois maritime freight system.

Through a study underway of the south Chicago suburbs, Krupa Gajjar and colleagues are investigating options to improve safety at grade rail crossing and to minimize the impact of train horn noise throughout the community through development of a “quiet zone.” Peter Kersten is conducting a literature review and mapping Metra service areas for a study addressing last mile issues in south and southwest Cook County. Michael McCarthy is working on two studies: Conducting a follow-up survey by phone to collect state-level mobility management practices, and evaluating the project selection and evaluation process for IDOT’s Economic Development Program. And, Kevin Peralta also is on the team assigned to the IDOT Economic Development Program, focusing on providing state assistance to roadway improvements targeted to promote economic growth.
By Dr. P. S. Sriraj, Director

As we close the book on 2018, I can reflect back with confidence on accomplishments made and look forward to continued progress and success. As noted within this issue, the faculty, staff and student researchers here are moving forward with several research studies; some are scheduled for completion next year. These projects cover a wide range of topics – mobility, safety, transportation resiliency, economic development, maritime freight – and are representative of the diverse transportation research capabilities of the Center. Watch for updates in the spring. And from a communications perspective, our staff is working on the relaunch of the Center’s website — www.utc.uic.edu — to the new Red Multisite platform hosted by the University; we plan to debut the new site in spring of 2019.

People, of course, are core of any organization, and here at the UTC we are proud to recognize a new member to the staff, a milestone reached by one of our outstanding Affiliated Faculty members and a prestigious award given to a PhD candidate.

In September, the UTC welcomed Dr. Joseph Fazio, PE, PTOE as a Visiting Research Specialist. Dr. Fazio has a long-standing affiliation with the UTC and University, and he brings a tremendous level of skill and knowledge from the engineering side of transportation to the Center. Read more in the profile article on Page 3.

We offer heartfelt congratulations to Dr. Bo Zou, who was promoted to Associate Professor in the College of Engineering this September. A UTC Affiliated Faculty member, Dr. Zou has expanded his research from aviation to ground transportation, with a focus on future mobility systems. Here’s Dr. Zou’s outlook on transportation: “I am very excited about what’s taking place today, with constant technology innovations and an operation paradigm shift in transportation. My current research mainly focuses on fundamental methodological issues related to autonomous vehicles, shared mobility, and crowdsourced city logistics.”

And, we salute the UTC’s Em Hall, who in December learned she was chosen to be the recipient of an Eisenhower Fellowship to support the initial stages of her dissertation research into the role non-profit organizations play in public-private transportation solutions.

Finally, the UTC is looking forward to participating in the 2019 Annual Meeting of the Transportation Research Board next month in Washington. Hope to see you at this yearly gathering of transportation scholars and professionals from around the world. Wishing all a prosperous 2019.