

## **Urban Transportation Center: review of 2007/08**

**Interim Directors: Piyushimita (Vonu) Thakuriah and Siim Sööt**

### **1) Introduction and highlights**

The 2007/08 year was a successful period for UTC by many measures. We were active in publishing, supported a variety of research activities and presented in several national and international conferences. We also completed a Self-Study document in preparation of our upcoming external review for the purpose of Illinois Board of Higher Education center re-designation. Faculty served in internationally prominent conference program committees and journal editorial boards. Students won distinguished scholarships and highly competitive fellowships.

In terms of traditional academic measures, the 2007/08 school year was very productive. UTC faculty, staff, and students:

- Published or have scheduled for publication 26 papers in refereed journals or reviewed conference proceedings (14 in 2006/07, 14 in 2005/06, 20 in 2004/05, 26 in 2003/04).
- Published 11 technical reports and working papers.
- Published or otherwise presented 83 papers in refereed conference proceedings (26 in 2006/07, 40 in 2005/06, 32 in 2004/05, 34 in 2003/04).
- Graduated eight master's students (5 in 2006/07, 6 in 2005/06, 10 in 2004/05, 17 in 2003/04) and three PhDs (3 in 2006/07).
- Awards given to nine students (six in 2006-07, five in 2005/06, seven in 2004/05, six in 2003/04).

We received continued support from the Illinois Department of Transportation for the Metropolitan Support Initiative (METSI), the Federal Highway Administration grant, the Federal Transit Administration, Community Transportation Association of America and the Chicago Transit Authority collaboration project. We completed our second year involvement with the NSF Integrative Graduate Education and Research Traineeship (IGERT) doctoral program on Computational Transportation Science (CTS). New sponsors include Chicago Metropolitan Agency for Planning and NAVTEQ, LLC.

We began the academic year with a student orientation and luncheon. We again hosted a well-attended reception for alumni at the Transportation Research Board (TRB) Annual Meeting in Washington, DC.

Students in the center continued with two important activities initiated in the 2004/05 school year: the PhD Forum and Diversity Lunches. These initiatives continue to be well-attended and receive favorable comments from participants.

## **2) Aims of the unit overall**

### **Mission**

The Center developed a revised mission statement during the past year:

The mission of the Urban Transportation Center is to educate and conduct research to advance transportation planning, operations, management and policy with a particular emphasis on the Chicago region.

### **Vision**

The UTC will be an internationally recognized center for research, education and training in planning, analyzing and modeling surface mobility. The overall focus of the UTC will be on traditional scholarly outputs such as to publish in peer-reviewed journals, disseminate our research results in high-profile national and international conferences, compete in nationally-prestigious and peer-reviewed grant competitions and educate and train graduate students. With a stable funding base and a stimulating collaborative interdisciplinary environment, the center is a focal point for researchers in various disciplines interested in intellectually challenging transportation issues and problems. The center also seeks to provide technical assistance and support to federal, state and local agencies.

## **3) Review of Targets for 2007/08**

The Center's progress in achieving the targets outlined above is described below.

- Increase the number of papers submitted for review to internationally recognized journals from the current output of 14 papers per year to 20.  
CUPPA 2010 Goal 1: Intellectual contributions

*Result: Met goal. Published 26 papers in refereed journals or reviewed conference proceedings.*

- Increase the number of national and international conference presentations from 26 to 40.  
CUPPA 2010 Goal 1: Intellectual contributions

*Result: Greatly exceeded goal. Published or otherwise presented 83 papers in refereed conference proceedings*

- Develop and implement targeted scholarly and grants goals for each staff member, for the purpose of performance evaluation, and perform intensive performance review based on these goals.  
CUPPA 2010 Goal 1: Intellectual contributions

*Result: Met goal. A combination of EDP's and a specially-developed template was used to set targets.*

- Search for and hire a new permanent Director of UTC.  
CUPPA 2010 Goal: Consistent with all CUPPA 2010 Goals.

*Result: Did not meet target. College opted not to search in FY08, awaiting outcome of external review in FY09.*

- Develop collaborative relationships with School of Planning and Architecture in Delhi, India.  
CUPPA 2010 Goal 6: External partnerships.

*Result: Close to signing MOU with SPA, Delhi and also with the National Information and Communication Technology of Australia (NICTA).*

- Win grants with a value in excess of \$1,000,000 during 2007/08  
CUPPA 2010 Goal 1: Intellectual contributions, and Goal 10: Entrepreneurial and Development Activity

*Result: Greatly exceeded target by winning \$1,729,203 in grant funds.*

*Additional Information: Grant activity is given in Appendix 3.*

- New promotional materials for UTC drafted by Fall 2007.  
CUPPA 2010 Goal 10: Entrepreneurial and development activity

*Result: Made progress but this is a continuing process.*

- Develop and refine website content and appearance by Fall 2007.  
CUPPA 2010 Goal 10: Entrepreneurial and development activity

*Result: Met target in early Spring 2008.*

- Announce Krambles scholarship in summer and fall 2007, award scholarship in Fall 2007.  
CUPPA 2010 Goal 2: Preparing students, and Goal 10: Entrepreneurial and development activity

*Result: Met target.*

- Develop a Working paper and Technical Report series.  
CUPPA 2010 Goal 1: Intellectual contributions

*Result: Met target.*

## **Research**

### Metropolitan Transportation Support Initiative (METSI)

The METSI grant has been funded by the Illinois Department of Transportation continuously since 1999, has been continued through the 2008/09 fiscal year. There are three components to the METSI program: Research Projects, Technical Assistance and Workshops and Education.

*Research Projects* include the following:

- Improving operational performance of ramp metering systems
- Regional intermodal freight planning
- Freight and infrastructure research and education
- Lake County Commuter Coalition
- McHenry County transportation plan implementation
- Freight congestion
- Highways and sprawl
- Trends in commuter behavior by population subgroups
- Spatial accessibility indices for transit
- Locomotive horns
- Longitudinal employer-household dynamics data
- Loop detector data
- Burnham Plan
- UIC Green Campus initiative
- Safety analysis
- Volunteer driver programs

*Technical assistance* was provided to the following agencies/organizations:

- Association for Commuter Transportation (ACT)
- Chicago Metropolitan Agency for Planning (CMAP) Intermodal Advisory Task Force
- CMAP Private Providers Task Force
- CMAP Comprehensive Plan Development
- Greater North Michigan Avenue Association
- Illinois Department of Transportation (IDOT)
- Interagency Coordinating Committee on Transportation
- Peoria Metropolitan Planning Organization
- Champaign Metropolitan Planning Organization

*Workshops and Education:* the Urban Transportation Center sponsored numerous workshops and net conferences, which are detailed in Appendix 4. In addition, the Center sponsored or co-sponsored the following major conferences: University of Wisconsin-Madison and CFIRE workshop (November 16) and ITE Midwest Meeting (July 2008). Co-sponsored meetings of the Chicago Transportation Research Forum (TRF) throughout the year.

#### Continued Collaboration Among the CTA, UIC, and MIT

Work sponsored by the Chicago Transit Partners has received continued funding through April 2009 and continues to provide significant support for students. Student project presentations to the CTA on May 20, 2008 are included in Appendix 6B.

#### FTA and CTAA Research

Our work on employment transportation services was supported by the Federal Transit Administration and by the U.S. Department of Labor's JobLinks Program through Community Transportation Association of America. Completed two nationally significant reports, which have received wide circulation nationally and internationally.

- 1) Thakuriah, P., P.S. Sriraj, S. Soot and J. Persky (2008). *Economic Benefits of Employment Transportation*. Final Report to Federal Transit Administration, U.S. DOT and Community

Transportation Association of America, June for Grant No's DOT IL-37-X007-00 4 and DOT IL-37-5002-00

- 2) Thakuriah, P., S. Soot and P.S. Sriraj (2008). *Partnerships for the Job Access and Reverse Commute Program: A Multi-Site Study of the Institutional and Coordination Processes behind Employment Transportation for Low-Income Workers*. Final Report to Federal Transit Administration, U.S. DOT and Community Transportation Association of America, June for Grant No DOT IL-37-X007-00 4 and CTAA 918.

Next phase of work will include the analysis of employment transportation as well as special transportation programs for persons with disabilities.

### **Education**

Twenty-nine (29) graduate students in Urban Planning and Policy, Public Administration, Civil Engineering and Mathematics, Statistics and Computer Science were funded by the UTC graduated over the 2007-2008 period. The list of students supported is given in Appendix 2. Ten master's students and two PhDs supported by UTC graduated during the year. These students have either all successfully been placed in nationally/internationally competitive jobs or have continued onto doctoral studies. Nine students won significant awards – they are listed in Appendix 8.

We again produced the UTC resume book and all students seeking summer internships found placements for Summer 2008.

### **Outreach**

The UTC Connector continued this year. We also continued our UTC Friday seminar series and hosted several internet seminars. The list of seminars and events offered by UTC is given in Appendix 5.

UTC faculty and staff continue to be very active in professional organizations. We have representation on eight different technical committees in the Transportation Research Board (TRB). We have continued our affiliation with the Community Transportation Association of America (CTAA) and the American Public Transportation Association (APTA). We serve on journal editorial boards, review panels, external review panels, planning commissions and advisory groups. We also serve on numerous university committees, college committees and program committees. The list of professional organizations and committees in which UTC faculty and staff have participated in the last year is given in Appendix 7.

### **Administration**

The five and ten-year directions identified in the UTC Strategic Plan in 2004/2005 remain unchanged and have been updated to reflect newer priorities.

## 5) Targets for 2008/09

Goals and targets for 2008/09 were identified, discussed and revised and are as follows:

- Increase the number of papers submitted for review to internationally recognized journals and peer-reviewed conference proceedings from the previous (2007/2008) target of 20 papers per year to 22.  
CUPPA 2010 Goal 1: Intellectual contributions
- Increase the number of national and international conference presentations from the previous goal of 40 to 45.  
CUPPA 2010 Goal 1: Intellectual contributions
- Develop and implement targeted scholarly and grants goals for each staff member, for the purpose of performance evaluation and perform intensive performance review based on these goals.  
CUPPA 2010 Goal 1: Intellectual contributions
- Search for and hire a new permanent Director of UTC.  
CUPPA 2010 Goal: Consistent with all CUPPA 2010 Goals.
- Develop collaborative relationships with School of Planning and Architecture in Delhi, India, and NICTA, Australia.  
CUPPA 2010 Goal 6: External partnerships.
- Win grants with a value in excess of \$1,250,000 during 2008/09 exceeding the previous target of \$1,000,000.  
CUPPA 2010 Goal 1: Intellectual contributions, and Goal 10: Entrepreneurial and Development Activity
- Draft new promotional materials for UTC drafted by Fall 2009.  
CUPPA 2010 Goal 10: Entrepreneurial and development activity
- Develop a Working Paper and Technical Report series.  
CUPPA 2010 Goal 1: Intellectual contributions

## **Appendix 1: Urban Transportation Center Faculty and Staff**

### **Faculty employed by the Center**

Siim Sööt	Interim Director
Piyushimita (Vonu) Thakuriah	Associate Professor of Urban Planning and Policy
Joseph DiJohn	Director of METSI
Paul Metaxatos	Research Assistant Professor
Ashish Sen	Professor Emeritus
P. S. Sriraj	Senior Associate and Research Assistant Professor

### **Faculty associated with the Center**

Darold Barnum	Professor of Managerial Studies
Kazuya Kawamura	Associate Professor of Urban Planning and Policy
Jie (Jane) Lin	Assistant Professor of Transportation Engineering
Sharon Mastracci	Assistant Professor of Public Administration
Abolfazl (Kouros), Mohammadian	Assistant Professor of Transportation Engineering
Peter Nelson	Head and Professor of Computer Science
Anthony Pagano	Associate Professor of Managerial Studies
Michael Shiffer	Clinical Associate Professor of Urban Planning and Policy
Eric Welch	Associate Professor of Public Administration
Ouri Wolfson	Professor of Computer Science

### **Visiting Scholars**

C. Jotin Khisty  
Susumu Kudo  
H. Onur Tezcan

### **Support Staff**

Karin Allen	Interim Assistant Director of Research Programs and Research Transportation Program Manager
Silvia Becerra	Program Coordinator
Lise Dirks	Research Transportation Specialist
Vanessa Smith	Associate Director for Business and Finance
George Yanos	Principal Research Programmer