

**METROPOLITAN TRANSPORTATION SUPPORT INITIATIVE  
METSI**

**For the Illinois Department of Transportation (IDOT)  
Bureau of Urban Program Planning**

**QUARTERLY REPORT**  
For the quarter ending June 30, 2008

Joseph DiJohn, Research Professor  
Director, Metropolitan Transportation Support Initiative  
Urban Transportation Center  
University of Illinois at Chicago  
412 South Peoria Street, Suite 340  
Chicago, Illinois 60607

Tel: (312) 996-1458  
Fax: (312) 413-0006  
E-mail: [joedi@uic.edu](mailto:joedi@uic.edu)

July 3, 2008

# **METROPOLITAN TRANSPORTATION SUPPORT INITIATIVE (METSI)**

## **QUARTERLY REPORT**

For the quarter ending June 30, 2008

### **CURRENT QUARTER ACTIVITIES**

#### **GENERAL AND ADMINISTRATIVE**

The following are highlights for the most recent quarter:

-Presented *ADA Special Services: Price Elasticity for the Provision of Free Service in Illinois* to the FTA Region V Ridership Symposium "Thinking Outside the Bus" on May 15.

-Published an Op-ed in *Crain's Chicago Business* titled "Pricing our way out of downtown traffic congestion" on May 19.

-Presented *The Impact of Infrastructure Projects in the Southwest Suburbs* to U. S. Rep. James Oberstar, Chairman of the House Transportation and Infrastructure Committee and Rep. Daniel Lipinski in Bedford Park on June 17.

-Cosponsored a workshop on Tank Car Safety with TRF Chicago Chapter, Northwestern University and the University of Illinois at Urbana-Champaign in Chicago on June 25.

-Met with Phil Pagano, Chairman of the Center and METSI's Advisory Board on May 7 and concluded postponing meetings until a permanent Director and Dean is named.

Below is a description of progress during the quarter. Please note the progress report below on the IDOT funded project Improving Operational Performance of Ramp Metering Systems, which was added as an amendment to the METSI contract.

#### **RESEARCH PROGRAM**

##### **Improving Operational Performance of Ramp Metering Systems**

In order to evaluate the performance of the three different sets of the Time Of Day (TOD) ramp metering rates (the original IDOT's TOD Tables, UIC's 2007 Updated Tables and UIC's 2008 Updated Tables), an experiment was developed. The purpose of this experiment was to implement each set of ramp metering rates for one week along the Eisenhower Expressway. Volume, occupancy and speed data were collected each week and evaluated in an effort to determine which set of ramp metering rates was the most effective. In most cases the 2008 Updated Tables outperformed other metering rates.

##### **Regional Intermodal Freight Planning**

CMAP is developing the next regional transportation plan, Go To 2040. They have retained Volpe Center to provide input into the freight component of the plan. Kazuya Kawamura is serving as a member of a small group of experts that provides feedback to both CMAP and Volpe regarding the 2040 plan. He continues to serve as a member of CMAP Intermodal Advisory Task Force (IATF) and is working on the creation of the publicly accessible web site that will post freight performance data.

##### **Center for Freight & Infrastructure Research and Education (CFIRE)**

CFIRE is one of ten National University Transportation Centers that were established under SAFETEA-LU and is led by the University of Wisconsin, Madison and will focus on issues of sustainability and freight transport. The UIC team has made progress on some of the tasks

specified in the work plan including the development of the freight model and “how to make intermodal competitive.” Kawamura will be presenting the findings from the study at the joint meeting of the Association of Collegiate Schools of Planning (ACSP) and the Association of European Schools of Planning (AESOP) in July. The development of the freight policy analysis tool (FPAT) is progressing with critical data collection efforts to be carried out in the next few months.

### **Lake County Commuter Coalition**

The new reverse commute train on Metra UP North Line called the “Sunrise Express” which began April 2, 2007 has been averaging almost 300 riders per day, above expectations. The Committee has not met since the implementation of the new service.

### **McHenry County Transportation Study Implementation**

Staff continues to participate on the McHenry County Transportation Study Implementation Task Force (ITF). Attended a meeting on April 10 to discuss the Pilot Coordinated Demand Response Service and a memorandum of understanding for the county to oversee the group.

### **Freight Congestion**

Continuing to undertake research into the impact of freight congestion on the Chicago region’s commute and submit a paper for presentation or publication.

### **Urban Sprawl**

The current activity in the area of urban sprawl is an analysis of the relationship between obesity and the built environment in the Chicago metropolitan area. The current question under investigation is how the relationship is impacted at different geographic scales. A paper based on this research will be presented at the joint meeting of the ACSP and AESOP in July.

### **American Community Survey: Trends in Commuting Behavior by Population Subgroups**

The study investigates seasonal effects of work trips using non-public data from the ACS. The research will determine how the year should be divided into transportation demand periods to assess seasonality in transportation demand. There was little activity during the quarter.

### **Spatial Accessibility Indices for Transit**

The development of this project will enhance the functionality of an accessibility measure tool that will facilitate the practice of transportation planning in the Chicago area. A paper with the latest findings will be presented at the joint ACSP and AESOP conference in July.

### **Database and Library**

The UTC web site has been reformatted and includes a METSI link. All METSI Quarterly reports are posted on the web site.

### **Locomotive Horns**

Ashish Sen, Director Emeritus, is working with CMAP and IDOT to maintain the exemption granted to northeastern Illinois by the FRA. The matter has been sent to the Committee on National Statistics (CNSTAT) of the National Academies. There is nothing new to report.

### **Longitudinal Employer-Household Dynamics (LEHD) Data**

The UTC team has conducted extensive analysis of the LEHD data for Illinois obtained from IDES and have identified shortcomings in previously released data. These deficiencies have been made known to Census, FHWA as well as to planning and transportation agencies in the Chicago region. There has been no activity during the quarter.

### **Burnham Plan**

Undertaking research into the transportation components of the Burnham Plan in anticipation of the 100-year anniversary in 2009. The abstract has been selected for presentation to the ITE Midwest conference in Chicago on July 6 through 8.

### **UIC Green Campus Initiative**

Assisting the University in developing a transportation component of the campus plan to reduce greenhouse gases and congestion. The project will develop transportation data, survey campus faculty and staff and make recommendations to improve the efficiency and effectiveness of transportation and parking on campus. Have been assigned to the Transportation and Grounds subcommittee of the Chancellor's Committee on Sustainability.

### **Volunteer Driver Programs Masters Thesis**

Work continues on the research assistant's thesis proposal: Contribution of Volunteer Driver Programs to the Transportation Network in the Chicago Region. The final draft has been submitted to the thesis review committee.

### **The Economic and Environmental Impact of Intermodal Terminals**

Submitted a scope of work to IDOT to undertake an analysis of the impacts of the intermodal terminals in Rochelle and Joliet.

### **The Impact of Weather Conditions on Highway Driving**

Continuing to prepare a scope of work to undertake an analysis of the impacts of weather on driving in Illinois for submission to IDOT.

## **TECHNICAL ASSISTANCE**

### **Association for Commuter Transportation (ACT)**

Participate as a member on the Board of Directors and to develop jointly sponsored workshops.

### **CMAP Intermodal Advisory Task Force (IATF)**

Continue participation on the Task Force and attended meeting on April 24 and June 4.

### **CMAP Public Private Task Force**

Meetings were held on April 16, May 19, June 11 and 30 with CMAP in planning to develop a CMAP Public Private Partnership Task Force. A mailing list, invitation letter and meeting agenda were developed for the first meeting to be held on July 1.

### **CMAP Comprehensive Plan Development**

There is nothing new to report on CMAP's Regional Comprehensive Plan Development.

### **Greater North Michigan Avenue Association (GNMAA)**

Continue participation with the Transportation Committee and attended meeting on June 26.

### **IDOT- DPIT**

The Database project is underway separate from METSI.

### **Interagency Coordinating Committee on Transportation (ICCT)**

Attended the ICCT meeting on April 3 and gave an update on the Database project.

### **Champaign MPO**

Work on trip generation has been completed. Paul Metaxatos is assisting the Champaign Urbana MPO (CUUATS) to create a travel demand technical support group that will provide expertise to small and medium size MPOs in Illinois.

### **Chicago Department of Transportation**

Provided assistance to CDOT in implementing a CMAQ funded internship program at five universities in the Chicago area. The interns are to develop bicycle, pedestrian and transit programs and related research.

## **WORKSHOPS, TRAINING AND VISITING SCHOLARS**

### **A Technical Discussion on Wireless Data Transportation Systems: Wireless Trends, Tools and Tips Session II- Wireless Link Engineering**

Cosponsored the webinar with USDOT on April 8.

### **America's Transportation Challenge**

Attended the presentation given by Matt Rose, Chairman of the BNSF Railway at Northwestern University in Evanston on April 9.

### **Assessing the Potential for BRT in Your Region: Lessons Learned from a Los Angeles-New York Peer to Peer Exchange Webinar**

Cosponsored the webinar with USDOT on April 16.

### **FTA Region V Ridership Symposium- "Thinking Outside the Bus"**

Attended and presented "ADA Special Services: Price Elasticity for the Provision of Free Service in Illinois" in Chicago on May 15.

### **TRF Chicago Chapter Activities**

The officers of the Chicago Chapter met on May 8 to discuss upcoming programs.

### **International Planning Conference**

The following papers were presented during May: "Construction of Small-area Data for Freight Modeling," Paratransit Applications of Computerized Scheduling and Dispatching," and "Bus Tracking Technologies."

**Tips for Planning and Operating Successful Shuttles and Circulators**

Cosponsored the net conference with the University of South Florida on May 28.

**Chicagoland Chamber Annual Meeting**

Attended the Annual Business Meeting in Chicago on June 9.

**Bicycle Intern Orientation Workshop**

Developed and presented orientation workshop to CDOT/CMAQ funded University interns on June 16.

**The Impact of Infrastructure Improvements in the Southwest Suburbs**

Presented information to Reps. Oberstar and Lipinski and local elected officials in Bedford Park on June 17.

**Managing Travel Demand to Mitigate Congestion: Part I- Pricing and Institutional Strategies**

Cosponsored the net conference with FHWA and ACT on June 19.

**Recent Developments in North American Railroad Tank Car Safety**

Cosponsored a net conference with Northwestern University Transportation Center, the Chicago Chapter of TRF and the University of Illinois Champaign-Urbana on June 25.

**Managing Travel Demand to Mitigate Congestion: Part II- Operational and Infrastructure Strategies**

Cosponsored the net conference with FHWA and ACT on June 26.

**Visiting Scholars from Australia**

Gave a presentation to visiting scholars on the region's transportation system and the METSI program on June 30.

**Future of Public Transit in Chicago-** The panel discussion in late April with the College of Urban Planning and Public Affairs (CUPPA) Alumni Association has been postponed until Fall.

**PLANNED ACTIVITIES FOR NEXT QUARTER**

**RESEARCH PROGRAM**

**Improving Operational Performance of Ramp Metering Systems-** Work continues on preliminary study. No adverse impacts to traffic flow on the Eisenhower Expressway will result from the implementation of the 2008 updated TOD tables.

**Regional Intermodal Freight Planning-** Continue participation with CMAP IATF in developing the 2040 plan and providing feedback to the Volpe Center.

**Center for Freight & Infrastructure Research and Education (CFIRE)**

Continue development of the work plan and the freight model. Will be presenting CFIRE findings to a joint meeting of ACSP and AESOP in Chicago on July 10.

**Lake County Commuter Coalition-** No meetings have been scheduled.

**McHenry County Transportation Study Implementation Task Force (ITF)-** Continue participation in the ITF activities.

**Freight Congestion-** Continue research and submit paper for presentation or publication.

**Urban Sprawl-** Research continues into the relationship of obesity and the built environment in the Chicago region. A paper will be presented at the joint meeting of the ACSP and AESOP in Chicago on July 10.

**American Community Survey: Trends in Commuting Behavior by Population Subgroups-** Prepare a paper on the seasonal effects of work trips.

**Spatial Accessibility Indices for Transit-** Will present study findings to the joint ASSP and AESOP conference in Chicago on July 10.

**Locomotive Horns-** Await reply from CNSTAT and direction from CMAP work group.

**Longitudinal Employer-Household Dynamics (LEHD) Data-** Staff feels it can do no more research in this area without an external funding source.

**Burnham Plan-** Research transportation components will be ongoing and a paper will be completed for presentation at ITS Midwest Conference on July 6 through 8.

**UIC Green Campus Initiative-** Continue participation and attend Transportation and Grounds subcommittee meeting on July 29.

**Volunteer Drivers Program Masters Thesis-** The survey of not-for-profit social service agencies and the final thesis report will be completed this summer.

**The Economic and Environmental Impact of Intermodal Terminals-** Awaiting approval of scope from IDOT.

**The Impacts of Weather Conditions on Highway Driving-** Will begin upon approval of scope.

#### **TECHNICAL ASSISTANCE**

**ACT-** Continued activity on Board of Directors and seek to cosponsoring workshops.

**CMAP Intermodal Advisory Task Force (IATF)-** Continue ongoing assistance to CMAP and attend meetings on July 10.

**CMAP Public Private Task Force-** The first meeting will be held on July 1 and will be co-chaired by Randy Blankenhorn and Joe DiJohn.

**CMAP Regional Comprehensive Plan Development-** Continue participation as requested by CMAP and provide research input into white papers. There is nothing new to report.

**GNMAA-** Provide ongoing assistance to GNMAA Transportation Committee and attend meetings on July 24 and August 28.

**ICCT-** Continue participation, obtain input on data needs and attend meetings on September 4 and December 4.

**Champaign MPO-** Continue to provide assistance to create a travel demand technical support work group.

### **WORKSHOPS, TRAINING AND VISITING SCHOLARS**

**ITE Midwest Conference-** Continue on planning committee for conference and presenting a paper on the Burnham Transportation Plan of Chicago in Chicago on July 6 through 8.

**Joint ACSP and AESOP Annual Conference-** Attend and present several papers to the conference in Chicago on July 8 through 10.

**Work Zone Traffic Analysis Strategies-** Planning to cosponsor a net conference with FHWA on July 9.

**Managing Travel Demand to Mitigate Congestion: Part III- Integration of Demand Management Strategies-** Planning to cosponsor the third in a series net conference with FHWA and ACT on July 10.

**2008 Sustainable University Symposium-** Planning to participate in developing the program for the UIC effort to reduce the University's carbon footprint.

### **PROJECTS COMPLETED DURING CURRENT CALENDAR YEAR**

**Climate Change: Tipping Point for TDM or Tipping at Windmills Webinar**

**Lessons learned Implementing Multi-Jurisdictional Transit Signal Priority Systems: King County Metro Transit and the Los Angeles County Metropolitan Authority Webinar**

**Update on Rail Transit and Amtrak Service in Illinois Workshop**

**Approaches for Building Effective Regional Relationships in the Deployment of IT Webinar**

**Canadian National Purchase of the Elgin, Joliet and Eastern Railroad Panel**

**The Impact of Freight Congestion on the Chicago Area Commute Presentation**

**Late for Work? Blame Freight and Truck Traffic Op-Ed**

**Evaluation of the Application of Delivery Consolidation in the U.S. Urban Area Using Logistics Cost Analysis**

**Suburban Growth Extends Further but the Rate of Suburban Growth is Declining METSI Workpaper**

**ADA Special Services: Price Elasticity for the Provision of Free Service in the State of Illinois Discussion Draft Paper METSI Amendment**

**TRB Annual Meeting and Presentations**  
**TRF Annual Meeting and Presentations**  
**STB Open House on the CN purchase of the EJ&E**  
**Merging Environmental Protection and Transportation Impacts: I-355 South Extension**  
**LEHD Workshop with CMAP**  
**Public Transit in Illinois and the Intersection of Service, Labor and Technology Seminar**  
**A Technical Discussion on Wireless Data Transportation Systems: Wireless Trends, Tools and Tips Session II- Wireless Link Engineering Webinar**  
**Assessing the Potential for BRT in Your Region: Lessons Learned from a Los Angeles-New York ITS Peer to Peer Exchange Webinar**  
**America's Transportation Challenge**  
**Tips for Planning and Operating Successful Shuttles and Circulators Net Conference**  
**What in the World is Going on at the STP Workshop**  
**Managing Travel Demand to Mitigate Congestion: Part I- Pricing and Institutional Strategies**  
**Managing Travel Demand to Mitigate Congestion: Part II- Operational and Infrastructure Strategies**  
**Recent Developments in North American Railroad Tank Car Safety**  
**FTA Region V Ridership Symposium- "Thinking Outside the Bus"**  
**Chicagoland Chamber Annual Business Meeting**  
**Pricing our way out of downtown traffic congestion Op-ed**  
**Chicago Area University Intern Development and Orientation**  
**ADA Special Services: Price Elasticity for the Provision of Free Service In Illinois**  
**The Impact of Infrastructure Improvements in the Southwest Suburbs**  
**Peoria MPO Technical Assistance**  
**International Planning Conference**  
**Visiting Scholars from Australia**  
**Website and Library**

7/03/08