

**METROPOLITAN TRANSPORTATION SUPPORT INITIATIVE  
METSI**

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

**QUARTERLY REPORT**  
For the quarter ending December 31, 2007

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

### **QUARTERLY REPORT**

For the quarter ending December 31, 2007

#### **CURRENT QUARTER ACTIVITIES**

##### **GENERAL AND ADMINISTRATIVE**

The following are highlights for the most recent quarter:

-Arranged a presentation on October 1 on Transit Legislation by Rep. Julie Hamos under the sponsorship of the Chicago Chapter of the Transportation Research Forum.

-Cosponsored a first-of-a-kind meeting on November 19 with global and regional private providers and area transit and planning agencies to discuss public/private opportunities.

-Joe DiJohn appeared on Channel 7's News Views with CMAP's Randy Blankenhorn on October 7 to discuss some solutions to the Chicago region's congestion.

-Completed and mailed the Fall Issue of the UTC Newsletter *Connector*.

-Postponed the Global Supply Chain Symposium on Innovative Public/Private Financing for Supply Chain Infrastructure scheduled for November 20 due to schedule conflicts.

-The UTC received a fully executed contract with IDOT-DPIT to develop a statewide database of public transit providers.

-Prepared a column for the Opinion Page of Crain's Chicago Business on the Impact of Freight Congestion on our Commute. It is scheduled to appear on January 14, 2008.

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 METSU contract.

##### **RESEARCH PROGRAM**

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

The software program that was developed as a part of the project (reported in previous quarterly reports), was used to analyze traffic data and develop updated Time of Day (TOD) and Local Traffic Responsive (LTR) tables for all ramp meters along the Eisenhower Expressway. A detailed report summarizing the results of the analysis is being prepared and will be forwarded to the IDOT'S TSC office shortly. Traffic data from other expressways are being extracted so that other metered ramps in the region can be calibrated.

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

Kazuya Kawamura continues as a member of CMAP Intermodal Advisory Task Force (IATF) and as the chair of the Research and Planning Subcommittee. He 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. A workshop was held on November 16 in Madison to obtain input and project ideas for the following components of the program:

### **Program Development**

Dr. Kawamura will be responsible for the development, administration, monitoring and evaluation of activities undertaken by the UIC team. He will also participate in the knowledge exchange with other freight scholars and practitioners through conferences, meetings and presentations.

### **Making Truck-Rail Intermodal Competitive**

Dr. Kawamura is the principal investigator for the proposed study that focuses on finding the public policy options that help intermodal become more competitive in the broader segments of freight markets including short to medium distance shipments. The match funds for this activity will come from Midwest state DOTs and METSI. A graduate Research Assistant has been hired for the project and will be developing the database of freight industry contacts and shippers to be interviewed.

### **Mississippi Valley Freight Coalition (MVFCC)**

UTC staff will provide logistical and technical support on an as needed basis to facilitate the initiatives being planned under the MVFCC effort. An additional role that UIC can play is to assure that the key stakeholders in the Chicago region are kept fully informed and will be able to supply support if necessary.

### **External/Continuing Education and Outreach**

These activities include the aforementioned web-based freight performance indicator, as well as supporting the conferences that are aimed at bringing key stakeholders in the region together to support freight issues.

### **Lake County Commuter Coalition**

The new reverse commute train on Metra UP North Line called the “Sunrise Express” which began April 2 has been averaging a total of over 200 riders per day, some days carrying 260 riders. In addition, 70 riders are carried on the inbound direction. A survey undertaken by Metra reveals that 66% of the trips are new riders to Metra, 30% had no car available and almost 40% drove alone prior to riding the train underlining how transit can reduce highway congestion.

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

Staff continues to participate on the McHenry County Transportation Study Implementation Task Force (ITF). A grant application in the amount of \$350k was approved by McHenry County. Reviewed “A Guide for Seniors: Finding the Right Transportation Option for You,” a directory of paratransit providers produced by Faith in Action of McHenry County.

### **Freight Congestion**

Undertaking research into the impact of freight congestion on the Chicago region’s commute. Presented a paper at the IDOT Planning Conference on September 14, prepared a Column for the Opinion Page to Crain’s Chicago Business for publication on January 14 and preparing a paper for presentation to the national Transportation Research Forum meeting in March.

### **Highways and Sprawl**

We presented our analysis of highways and sprawl at the October American Collegiate Schools of Planning national meeting held this year in Milwaukee. The presentation highlighted increasing homeownership rates in the Chicago area and how growth into the outer counties contributes to ‘sprawl’ but is associated with very high homeownership. Using data through

2006 we showed that the 70 percent homeownership level in the Chicago area is higher than places that cannot 'sprawl' such as Los Angeles, San Francisco and Seattle due to topographic constraints and Portland due partly to growth management regulations. Even in the academic community there is not the appreciation of the association between sprawl and homeownership. The presentation created a substantial buzz and the editor of a journal has asked us to prepare the presentation for publication.

This line of research--highways, sprawl and homeownership--is now particularly noteworthy. Even before the sub-prime mortgage crisis national homeownership rates were declining. The highest national level was recorded in the second quarter of 2004 (69.2 percent) and it has declined during the last 13 quarters to 68.2 percent (in the third quarter of 2007.) There has also been some softening in the Chicago area data.

For the periods for which comparable data are available, however, the Chicago area is performing better than the national average. Since 2000 the homeownership rates have grown in the Chicago area by 3.4 percentage points compared to the national increase of 1.4 points. During this time the Chicago-area rate has grown from one point below the national level to almost one point greater than the national level. For a region as large as Chicago to have a rate higher than the national average is remarkable.

The most important point is that the Chicago region is economically sound and this can be readily seen in rising homeownership rates. The transportation system allows the region to grow and whereas the region would grow without addition highway capacity, new roads make the region more efficient.

### **Lake County Report**

Staff is finishing final draft of a report on the important demographic and economic changes in Lake County, during the beginning of this millennium, that drive the increases in peak-period traffic. We find that while the county is growing the other factors that contribute to traffic congestion are not growing as fast as might be expected. Automobile ownership appears to be growing at the same rate as population growth (different than recent history when automobile ownership was growing faster). Labor force participation is decreasing and the county is aging with noticeable increases in the retired population. This demographic section is part of an overall Lake County Transportation Report.

### **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. The publicly available data is of limited use because it is unknown if the calendar quarters match the cycles of transportation demand, to the extent these cycles exist. Our progress thus far has been hindered by disclosure requirements at the desired spatial resolution and will be seeking ways to circumvent the restrictions.

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

The development of this project will enhance the functionality of an accessibility measure tool that will facilitate transportation planning practice in the Chicago area. We have made good progress and have initiated discussions with CMAP on how to best incorporate such work in

their planning process. A related paper will be presented at TRB in January 2008.

### **Database and Library**

Staff continues developing a database and library for UTC and METSI. The College has hired a web site developer to assist in revamping the UTC and METSI web sites.

### **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. We are now working with the new data set recently released by the Census. Our collaboration with IDES continues and preliminary findings appear promising.

### **Loop Detector Data**

Staff has begun analyzing loop detector data from the region's expressways for the purpose of analysis and potential use in real time traveler information systems.

### **Burnham Plan**

Undertaking research into the transportation components of the Burnham Plan in anticipation of the 100-year anniversary in 2009.

### **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 reduce greenhouse gases and improve the efficiency and effectiveness of transportation and parking on campus.

### **Safety Analysis**

Undertaking an analysis of safety in Illinois. Have begun by mapping the location of fatal crashes, crashes involving property damage and pedestrian accidents in a GIS format.

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

A research assistant has made the following thesis proposal: Contribution of Volunteer Driver Programs to the Transportation Network in the Chicago Region.

## **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 October 25.

### **CMAP Private Providers Task Force**

Meetings were held with John McCarthy, Continental Airport Express, Tony Pagano, UIC and Bill Kiley, CMAP in planning for the meeting with private providers held on November 19.

### **CMAP Comprehensive Plan Development**

Continuing to meet with CMAP and discuss participation in the Regional Comprehensive Plan Development.

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

There has been little activity with the Transportation Committee.

### **IDOT- DPIT**

The final scope of work and budget for the Database project has been approved by IDOT and a presentation was given to the ICCT. The contract was approved on October 26 and a kick-off meeting was held on December 3.

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

Participated in the meeting held on December 6 and gave report on the status of the Database contract with IDOT- DPIT. An ICCT subcommittee will provide input into data needs.

### **Peoria MPO**

Met with Peoria MPO staff at the IDOT Planning Conference and offered assistance with their consultant to complete their transportation modeling tasks. There is nothing new to report.

### **Champaign MPO**

Work on trip generation has been completed. A paper based on this research will be submitted for presentation to the annual TRB meeting in January and for publication in the Journal of TRF. We anticipate they will need additional assistance in working with their consultant to complete their transportation modeling tasks.

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

### **2007 Global Supply Chain Forum: Innovative Public/Private Financing for Supply Chain Infrastructure**

The event planned for November 20 under joint sponsorship of CMAP, MPC, Metropolis 2020, and the Chicagoland Chamber of Commerce was postponed due to scheduling conflicts. No date has been set for rescheduling the event.

### **TRF Chicago Chapter**

Rep. Julie Hamos, Chair of the Transportation Committee of the Illinois House, gave a presentation on the status of Transportation Legislation on October 1 at DePaul University.

### **APTA Annual Meeting**

Attended the Annual Meeting held in Charlotte in October. Highlight was the transit funding referendum to raise the sales tax to support the new light rail system. Subsequent to the meeting, voters approved the sales tax by a large margin, 70% to 30%.

### **Operation Lifesaver**

Participated in the Operation Lifesaver trip to Rochelle Intermodal Yard on October 31 jointly sponsored by the ICC and the Union Pacific Railroad.

### **Seminar Series- NAVTEQ**

Attended a seminar on the future of ITS and mapping infrastructure on November 2.

### **Chicago Transportation History Lecture**

Presented a lecture on the history of transit in Chicago and the current legislation to a UIC College of Engineering class on November 14.

### **Setting the Freight Transportation Research Roadmap**

Cosponsored a workshop with the University of Wisconsin, Madison and CFIRE on November 16 in to assist in defining a research roadmap and priorities in freight research in 2008 and 2009.

### **Where Public Administration Meets Urban Planning**

Participated in a panel on November 16 as a part of the UIC CUPPA Panel Series cosponsored by the Public Administration Student Association.

### **Climate Change: Tipping Point for TDM**

Cosponsored a webinar with ACT and the University of South Florida on December 13.

### **VISTA Model Demonstration**

Participated in a meeting on December 4 of the Disruption Management Template Development Project at CMAP where the VISTA model was given a demonstration.

### **The Heat Is On: Why Hybrid Vehicles Won't Save the Planet**

Attended presentation by Reid Ewing on December 6 at a luncheon sponsored by the Metropolitan Planning Council.

### **Annual Conference of the Association of Collegiate Schools of Planning**

Attended the conference in Milwaukee in October and presented paper on the Relationship between Obesity and Sprawl in Chicago.

### **ITE Midwest Meeting**

Assisting in the planning and development of the annual meeting to be held in Chicago in 2008.

## **PLANNED ACTIVITIES FOR NEXT QUARTER**

### **RESEARCH PROGRAM**

**Improving Operational Performance of Ramp Metering Systems-** A report summarizing the analysis will be completed and other metered ramps in the region will be calibrated..

**Regional Intermodal Freight Planning-** Continue participation with CMAP.

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

**Program Development-** Development has begun.

**Making Truck-Rail Intermodal Competitive-** Received notice to proceed and contact database is underway.

**Mississippi Valley Freight Coalition (MVFCC)-** Activities are underway.

**External/Continuing Education and Outreach-** Activities are underway.

**Lake County Commuter Coalition-** Continued participation with the Coalition.

**McHenry County Transportation Study Implementation (ITF)-** Participating in committee and subcommittee activities on paratransit and taxi vouchers. The next meeting has not been scheduled.

**Freight Congestion-** Continue research and publish an op-ed in Crain's Chicago Business in January and paper for presentation to TRF in March.

**Highways and Sprawl-** Research continues in the areas of changing travel times and Census 2000 and ACS and a final draft report should be completed this quarter. A paper will be presented at the October annual meeting of the American Collegiate Schools of Planning in Milwaukee, Wisconsin.

**Lake County Report-** Complete draft report and submit for publication.

**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-** Continue development of indices and collaborate with CMAP on how to best incorporate the work into the planning process.

**Database and Library-** Continue development of a database of transportation information for use in determining research focus and to provide data to constituent transportation and planning agencies. Also, continue development of library and associated website.

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

**Longitudinal Employer-Household Dynamics (LEHD) Data-** Working with the 2004 data set from the Bureau of the Census to identify and rectify shortcomings, if any. Continuing the collaboration with IDES.

**Loop Detector Data-** The speculative work is ongoing.

**Burnham Plan-** Research transportation components will be ongoing.

**UIC Green Campus Initiative-** The project will be ongoing for 12 months.

**Safety Analysis-** Pursue the development of data and definition of objectives.

**Volunteer Drivers Program Masters Thesis**- A survey of not-for-profit social service agencies will be undertaken.

#### **TECHNICAL ASSISTANCE**

**ACT**- Continued activity on Board of Directors and seek to continue co-sponsoring workshops.

**CMAP Intermodal Advisory Task Force (IATF)**- Continue ongoing assistance to CMAP.

**CMAP Private Providers Task Force**- Follow up to luncheon meeting in held in November with public sector and private providers and develop specific action agenda for next meeting.

**CMAP Regional Comprehensive Plan Development**- Continue participation as requested by CMAP and provide research input into white papers.

**GNMAA**- Provide ongoing assistance to GNMAA Transportation Committee.

**IDOT- DPIT**- Statewide database project will be underway separate from METSI.

**ICCT**- Continue participation, obtain input on data needs and plan to attend meetings in 2008.

**Peoria MPO**- Awaiting comment from Peoria regarding the travel demand models.

**Champaign MPO**- Continue to provide assistance with trip distribution modeling.

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

**Approaches to Deploying 511 Systems: Implementers in California, Kansas and Montana Describe Their 511 Systems**- Plan to cosponsor a webinar with ACT on January 9.

**2007 Global Supply Chain Forum: Innovative Public/Private Financing for Supply Chain Infrastructure**- Planning with the cosponsors to reschedule the event at a future time.

**Transit Riders Alliance Campaign**- Planning to invite Rick Harnish, Midwest High Speed Rail Association to present the campaign to support all types of passenger transportation, including public transit.

**ITE Midwest Conference**- Continue planning for conference to be held in Chicago in 2008.

**TRB Annual Meeting**- Plan to attend in January and present several papers.

**TRF Annual Meeting**- Plan to attend in March and present paper on Freight Congestion.

**Future of Public Transit in Chicago**- Plan to cosponsor a panel discussion in late spring with the College of Urban Planning and Public Affairs (CUPPA) Alumni Association.

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

**UTC Advisory Board Meeting**

**RTA Transit Check Ridership Analysis**

**TRB Annual Meeting**

**RTA Human Services Transportation Plan**

**CMAP Innovation and Integration Summit**

**Using BRT to Reduce Urban Air Pollution Workshop**

**New Data on the Horizon: LEHD and the CTPP**

**Center for Tax and Budget Accountability Lake County Workshop**

**Views on Urban Sprawl Workshop**

**Business Leaders for Transportation**

**TRF Officers Meeting**

**Engaging Businesses Successfully in TDM: Canadian Success Stories Workshop**

**Design and Construction of Intermodal Terminals Workshop**

**New Data on the Horizon: LEHD & CTPP, Chicago Chapter TRF Workshop**

**Congestion Pricing and Urban Partnership Workshop**

**Employer-Based Alternative Commute Initiative- Rest Your Car**

**Transit Higher Education Working Group**

**REMI Web Training Course**

**You Get What You Incent Webinar**

**Richard J. Daley Forum**

**Truck Parking in the GCM Corridor**

**A Look at Employer TDM Programs in the Midwest Netconference**

**Chicagoland Chamber of Commerce Annual Breakfast**

**Transport Chicago**

**Emergency Ride Home CMAQ Grant Transfer**

**Commuter Rail University Fare Study**

**RTA Human Services Transportation Plan (HSTP)**

**Transit Check Ridership Analysis**

**CMAP Economic Development Grant Support Letter**

**Safe Routes to Schools: Why They Matter to Kids, Communities and TDM Professionals**

**IDOT Fall Planning Conference Presentation**

**Illinois Transportation Security Summit**

**CMAP Human Services Committee**

**Understanding the Transportation Models and Asking the Right Questions Webinar**

**After School Matters Workshop**

**Civic Conservation Alliance Meeting on the CTA**

**Lake County Paratransit Survey Final Report**

**APTA Annual Meeting**

**Moss Thesis Proposal**

**Lake County Coordinated Transportation Services Committee**

**Operation Lifesaver**

**Seminar Series- NAVTEQ**

**Chicago Transportation History Lecture**

**Setting the Freight Transportation Research Roadmap**

**Where Public Administration Meets Urban Planning**  
**The Status of Transit Funding by Rep. Julie Hamos**  
**American Collegiate Schools of Planning Annual Meeting**  
**Planning Transit Routes that Meet Your Community's Goals Webinar.**  
**Climate Change: Tipping point for TDM**  
**VISTA Model Demonstration**  
**The Heat Is On: Why Hybrid Vehicles Won't Save the Planet**  
**Moving Beyond Congestion**

1/04/08