

**METROPOLITAN TRANSPORTATION SUPPORT INITIATIVE
METSI**

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

QUARTERLY REPORT
For the quarter ending September 30, 2008

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METROPOLITAN TRANSPORTATION SUPPORT INITIATIVE (METS)

QUARTERLY REPORT

For the quarter ending September 30, 2008

CURRENT QUARTER ACTIVITIES

GENERAL AND ADMINISTRATIVE

The following are highlights for the most recent quarter:

-Presented the paper “The Burnham Transportation *Plan of Chicago: 100 Years Later*” to the ITE Midwest Annual Conference in Chicago on July 6, to the Chicago Chapter of the Transportation Research Forum at DePaul University on September 24 and to the UIC CUPPA Friday Forum on September 26.

-Published an Op-ed in *Crain’s Chicago Business* “Transportation System Needs a Modern-Day Daniel Burnham” on July 21.

-Was quoted in the *Economist* article “Train Wreck in Suburbia” on September 11.

-Was appointed to the Search Committee for the Director of the UTC.

-Was appointed to the Congestion Pricing and Bus Rapid Transit Technical Advisory Committee by the City of Chicago.

-Unrelated to METSI, the RTA approved an ordinance authorizing the UTC to undertake a study of the Impact of Seniors Ride Free Program.

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

Data extraction and processing of speed, flow rate and density data for I-90 and I-94 are underway. The data is being utilized to determine critical occupancies at metered ramp junctions in order to identify ideal 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 Freight Committee (formerly IATF) and is working on the creation of the publicly accessible web site that will post freight performance data. Ms. Yandan Lu, a PhD student Research Assistant with a background in computer engineering has been hired for the project.

Center for Freight & Infrastructure Research and Education (CFIRE)

The contract with the University of Wisconsin was finalized for a total of \$500,000 over 5 years. Kazuya Kawamura presented the findings from the “How to make truck-rail intermodal competitive” study at the joint meeting of the Association of Collegiate Schools of Planning (ACSP) and the Association of European Schools of Planning (AESOP) on July 10. He and a graduate Research Assistant, Erin Roosa, have submitted a paper based on the study to the

Transportation Research Board (TRB) Annual Meeting, which is under review. Dr. Jane Lin's group has succeeded in obtaining data sets from the state DOTs and the MPOs throughout the country to test the county-level estimation of freight tonnage productions and attractions by commodity. Dr. Kouros Mohammadian and a PhD student, Amir Samimi, have developed a web-based survey tool that targets carriers to collect data needed to calibrate the mode choice model of freight shipments. Both teams have submitted a paper to the TRB meeting.

Small-Area Data for Freight Modeling

Developed a method to construct small-area freight data using publicly available information. A paper on the topic was also submitted to an academic journal.

Lake County Commuter Coalition

The new JARC funded reverse commute train on Metra UP North Line called the "Sunrise Express" which began April 2, 2007 has been considered a success. This project is closed.

McHenry County Transportation Study Implementation

Staff continues to participate on the McHenry County Transportation Study Implementation Task Force (ITF). The pilot paratransit coordination effort is being developed and has received an \$180,000 grant award from the Senior Service Grant Commission. In addition, the McHenry County Board adopted a resolution approving its membership in the McHenry County Paratransit Council.

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 was presented at the joint meeting of the ACSP and AESOP in July and an academic paper for journal publication is being prepared.

Home Ownership and Transportation

Prior research on the relationship of home ownership and transportation is being updated and a paper for journal publication is being prepared.

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 was presented at the joint ACSP and AESOP conference in July and a paper on

the topic was published in the Transportation Research Record.

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 project has been terminated due to lack of external funding.

Burnham Plan of Chicago Centennial

Undertaking research into the transportation components of the Burnham *Plan* in anticipation of the 100-year anniversary in 2009. During the quarter, held meetings with the UIC effort, and with DePaul University for a joint universities effort, which will include a series of events including a summer course on the *Plan of Chicago*. In addition, three presentations on the Burnham *Plan* have been given during the quarter. Have also announced intent to submit a paper to the Burnham Centennial Commission.

UIC Green Campus Initiative

Assisting the University in developing a transportation component of the campus plan to reduce greenhouse gases and congestion. Participated in the 2008 Sustainable University Symposium held on July 29. Have been assigned to the Transportation and Grounds subcommittee of the Chancellor's Committee on Sustainability and attended meetings on July 22 and September 22.

Volunteer Driver Programs Masters Thesis

The final draft has been submitted to the thesis review committee and the project is closed.

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. Awaiting comments.

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.

Bus ITS Projects

Preparing papers for journal publication on Paratransit Scheduling and Dispatching and Bus Tracking Technologies.

Household Travel Surveys

Undertaking research whether traditional household travel surveys can be reduced in size. If this can be accomplished, future surveys can be taken more economically for the benefit of MPO's.

Greater Roseland Red Line Extension Project

Have been appointed to the project Technical Advisory Committee (TAC) to the RTA RTAP project being undertaken by UIC Voorhees Center. Attended the kick-off meeting on August 8.

TECHNICAL ASSISTANCE

Association for Commuter Transportation (ACT)

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

CMAP Freight Committee (formerly IATF)

Continue participation on the Committee and attended meetings on July 10 and September 25.

CMAP Public Private Task Force

Assist CMAP in the development of this new Task Force. Co-chaired the first meeting held on July 1.

CMAP Comprehensive Plan Development

There is nothing new to report on our input to the CMAP's Regional Comprehensive Plan.

Greater North Michigan Avenue Association (GNMAA)

Continue participation with the Transportation Committee. No meetings were held during the quarter.

IDOT- DPIT

The Database project is underway separate from METSI. Discussed possibility of amending the contract for assistance downstate from Tom Ashby.

Interagency Coordinating Committee on Transportation (ICCT)

There were no meetings held during the quarter.

Champaign MPO

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 Bicycle Intern Project

Provided assistance to CDOT in implementing a CMAQ funded internship program at five universities in the Chicago area. This project is closed.

City of Chicago

Joseph DiJohn has been asked to serve on the Technical Advisory Committee on the Congestion Pricing and Bus Rapid Transit USDOT grant funded project.

WORKSHOPS, TRAINING AND VISITING SCHOLARS

ITE Midwest Conference- Attended and presented a paper "The Burnham Transportation *Plan of Chicago: 100 Years Later*" in Chicago on July 6 through 8.

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

Chicagoland Chamber Presents CTA President Ron Huberman- Attended meeting at the Chamber offices on July 8 to hear Ron Huberman presentation on the condition of the CTA.

Work Zone Traffic Analysis Strategies- Co-sponsored a net conference with FHWA on July 9.

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

2008 Sustainable University Symposium- Participated in developing the program for the UIC effort to reduce the University's carbon footprint on July 29.

Moving at the Speed of Congestion- Attended the meeting sponsored by the MPC on August 5.

Traffic Incident Management Plans in Southeast Michigan and Southeast Wisconsin: Institutional and Technical Challenges to Managing Congestion and Improving Responder Safety- Co-sponsored a webinar with FHWA and ACT on September 11.

Chicago Chapter of the TRF- Presented a paper "The Burnham Transportation *Plan of Chicago: 100 Years Later*" at DePaul University on September 24.

CUPPA Friday Forum- Presented a paper "The Burnham Transportation *Plan of Chicago: 100 Years Later*" at UIC on September 26.

PLANNED ACTIVITIES FOR NEXT QUARTER

RESEARCH PROGRAM

Improving Operational Performance of Ramp Metering Systems- Data extraction and processing of speed, flow rate and density for I-90 and I-94 continues.

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

Center for Freight & Infrastructure Research and Education (CFIRE)

Undertake analysis of the data sets in preparation of the model of freight tonnage production by commodity and mode choice.

Small-Area Data for Freight Modeling- Will present research findings to the Chicago Area Transportation Modeling Users Group meeting in December.

McHenry County Transportation Study Implementation Task Force (ITF)- Continue participation in the ITF activities for the implementation of the pilot paratransit program.

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. Will present paper for a journal publication.

Home Ownership and Transportation- Complete update of prior research and submit paper for journal 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- Research continues on the project.

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

Burnham Plan of Chicago Centennial- Planning continues with UIC, DePaul University and the Centennial Commission for a series of events in 2009.

UIC Green Campus Initiative- Continue participation and attend Transportation and Grounds Subcommittee meetings.

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.

Bus ITS Projects- Complete papers and submit for journal publication.

Household Travel Surveys- Address the issue of reducing the sample size of household travel surveys and provide to IDOT and small MPO's.

Greater Roseland Red Line Extension Project- Continue to participate on the Technical Advisory Committee and attend meetings on October 24 and January 30, 2009.

TECHNICAL ASSISTANCE

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

CMAP Freight Committee- Continue assistance to CMAP and attend meetings on November 6 and December 4.

CMAP Public Private Task Force- Continue assistance to CMAP and prepare for next meeting on October 7.

CMAP Regional Comprehensive Plan Development- There is nothing new to report.

GNMAA- Provide ongoing assistance to GNMAA Transportation Committee.

ICCT- Continue participation and attend the next meeting scheduled for December.

Champaign MPO- Continue to provide assistance to create a travel demand technical support work group, which will begin in November.

City of Chicago- Meet with the Civic Consulting Alliance on October 6 and have the first Technical Advisory Committee later in October and advise on defining the time and area parameters for the project.

WORKSHOPS, TRAINING AND VISITING SCHOLARS

Findings and Lessons Learned from an Evaluation of Advanced Parking Management Systems for Transit- Planning to co-sponsor the webinar with the USDOT ITS Professional Capacity Building Program Series on October 21.

Arizona E-VII Program: Strategies fo Improving Emergency Response to Traffic Incidents while Enhancing safety for Emergency Responders- Planning to co-sponsor the webinar with the USDOT on October 23.

Are 3 Heads Better than 2? Formulating Carpool Policies for Managed Lanes- Planning to co-sponsor a webinar with ACT and the University of South Florida on November 19.

The Transportation Sector in Today's Economy- Will co-sponsor a meeting with the Chicago Chapter of the TRF and the Northwestern University Transportation Center in December.

UTC Annual Symposium- Begun to plan for a Symposium on University Transportation and Bicycle Programs in the Spring 2009.

TRB Annual UTC Reception- Begun to plan for a Reception at the Annual TRB meeting in Washington in January 2009.

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

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
Future of Public Transit in Chicago
ITE Midwest Conference
Joint ACSP and AESOP Annual Conference
Work Zone Traffic Analysis Strategies
Managing Travel Demand to Mitigate Congestion: Part III- Integration of Demand Management Strategies
2008 Sustainable University Symposium
Moving at the Speed of Congestion Workshop
Traffic Incident Management Plans for SE Michigan and SE Wisconsin Webinar
Chicago Chapter of TRF Presentation
CUPPA Friday Forum
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Longitudinal Employer-Household Dynamics (LEHD)
Volunteer Drivers Program Masters Thesis
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