

**METROPOLITAN TRANSPORTATION SUPPORT INITIATIVE
METSU**

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

QUARTERLY REPORT
For the quarter ending December 31, 2008

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METROPOLITAN TRANSPORTATION SUPPORT INITIATIVE (METSU)

QUARTERLY REPORT

For the quarter ending December 31, 2008

CURRENT QUARTER ACTIVITIES

GENERAL AND ADMINISTRATIVE

The following are highlights for the most recent quarter:

-Jointly sponsored a luncheon meeting with Northwestern University and TRF Chicago Chapter on December 4 featuring Adam Inselbuch, Credit Suisse discussing the Annual Financial Update of the Transportation Industry.

-Joe DiJohn was named to the Technical Advisory Group (TAG) of the City of Chicago Congestion Pricing grant for parking in the central area.

-Developed a staff rotation proposal with FTA Region V where UTC and FTA will exchange staff to work on transportation research issues. The kick-off workshop will take place on January 8.

-Had discussions with Jason Tai, Congressman Lipinski's Chief of Staff to develop a Rail Infrastructure Workshop to be held at UIC early in 2009.

-Announced the winners of the UIC George Krambles Scholarships funded by the Krambles Scholarship Fund. Winners were Minyan Ruan, PhD student and Emily Ziring and Meghan Mattingly, MUPP students.

-Four METSI supported papers were accepted for presentation at national conferences: two at the TRB Annual Meeting in January and two at the TRF Annual Meeting in March.

-The Fall Issue of the *Connector* Newsletter was published and distributed.

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

During the quarter, traffic flow data from Bishop Ford Expressway was analyzed. For this corridor, critical main line occupancies at loop detector locations were determined. Then time of day operation and local traffic responsive operation tables for current operational conditions were calibrated.

Regional Intermodal Freight Planning

Kazuya Kawamura continues to serve as a member of CMAP Freight Committee 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)

Under a five-year contract with the National Freight and Infrastructure Research and Education (CFIRE) at the University of Wisconsin, Madison, Kazuya Kawamura leads the UIC team's efforts. He continues to work on the study of rail-truck intermodal competitiveness in the U. S.

Jane Lin's group has succeeded in obtaining key data sets from the state DOTs and MPOs throughout the country to test the county-level estimation of freight tonnage productions and attractions by commodity. Her research has attracted attention from various DOTs and MPOs around the country. Korous Mohammadian, Kawamura and Amir Samimi, PhD student, are planning to conduct a web-based survey to collect the data needed to calibrate the mode choice model of freight shipments.

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 and a presentation given to the CMAP Transportation Modeling Users Group on December 3.

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 from the Senior Service Grant Commission. There is nothing new to report.

Freight Congestion

This project is closed.

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

Research on the relationship of Residential foreclosures and transportation has been undertaken and a paper Transportation and the Housing Crisis: Are They Related has been accepted by the TRF at their Annual Meeting to be held in March.

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.

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*. A paper *The Burnham Transportation Plan of Chicago: 100 Years Later* has been accepted for presentation at the Annual Meeting of TRF in March and a paper will be submitted 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. Participating on the Transportation and Grounds Subcommittee and attended meetings on November 17 and December 15. Assisting in making application for 2010 CMAQ grant for bicycle facilities. Was also appointed to the University Master Transportation Plan Committee.

Volunteer Driver Programs Masters Thesis

The final draft has been accepted by 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

The research addresses whether traditional household travel surveys can be reduced in size. The question is important for budgeting purposes by MPOs. The goal is to reduce the size, frequency and expense of surveys, which would benefit transportation planning in Illinois.

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 last quarter.

TECHNICAL ASSISTANCE

Association for Commuter Transportation (ACT)

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

CMAQ Freight Committee

Continue participation on the Committee and attended meetings on November 6.

CMAP Public Private Task Force

Assist CMAP in the development of this new Task Force and attended meeting on October 21.

CMAP Comprehensive Plan Development

This project is closed.

Greater North Michigan Avenue Association (GNMAA)

Continue participation with the Transportation Committee.

IDOT- DPIT

The Database project is underway separate from METSI. Contract was amended for assistance on the project from Tom Ashby.

Interagency Coordinating Committee on Transportation (ICCT)

Attended the ICCT meeting held on December 4.

Champaign MPO

Submitted a grant application to FHWA jointly with Champaign Urbana MPO (CUUATS) to create a Travel Demand Model for small sized MPOs in Illinois using TRANSIMS. METSI is providing in-kind matching funds for the project.

City of Chicago Congestion Pricing Project

Joseph DiJohn has been asked to serve on the Technical Advisory Group on the Congestion Pricing and Bus Rapid Transit USDOT grant funded project. Meetings were held on October 6 and November 18 to establish congestion pricing and geographic parameters for congestion parking fees.

College of Urban Planning and Public Affairs

Assisting the College by participating on the Dean's Executive Committee and the UTC Director Search Committee. Also participated in the External Review undertaken on October 16 and 17.

WORKSHOPS, TRAINING AND VISITING SCHOLARS

Findings and Lessons Learned from an Evaluation of Advanced Parking Management

Systems for Transit- Co-sponsored the webinar with the USDOT ITS Professional Capacity Building Program Series on October 21.

Arizona E-VII Program: Strategies for Improving Emergency Response to Traffic

Incidents while Enhancing Safety for Emergency Responders- Co-sponsored the webinar with the USDOT and ACT on October 23.

RailVolution Annual Meeting- Attended the Annual RailVolution Meeting on October 26 through 28.

Travel Time Estimation for Traffic Management and Traveler Information Workshop

Sponsored Robert Bertini, Portland State University, for a UTC workshop on November 10.

Second Annual William O. Lipinski Symposium on Transportation Policy- Attended the seminar sponsored by Northwestern University on November 13.

Freight and Land Use- Attended the seminar sponsored by CMAP on November 19.

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

On the Eve of the Centennial: Daniel Burnham, Big Thinkers and the Future of the Metropolis- Attended the seminar sponsored by the American Planning Association on November 20.

Method for Small-Area Demand Forecasting of Freight Flows- Paul Metaxatos presented the topic to the CMAP Modeling Users Group on December 3.

Annual Financial Update of the Transportation Industry- Co-sponsored a luncheon meeting with the Chicago Chapter of the TRF and the Northwestern University Transportation Center on December 4.

Rail Infrastructure Workshop- Discussed the development of the workshop with Congressman Lipinski's Chief of Staff.

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 and in developing a publicly accessible web site for freight performance data.

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 on a county level and conduct web-based survey.

Small-Area Data for Freight Modeling- Awaiting acceptance of paper from academic journal.

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

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 the update of prior research and present paper at the Annual TRF Meeting in March.

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. Will present paper at TRF Annual Meeting in March.

UIC Green Campus Initiative- Continue participation and attend Transportation and Grounds Subcommittee meeting on January 21 and submit CMAQ grant application for bicycle facilities. Also attend Master Transportation Plan Committee meeting on January 16.

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 on Computerized Scheduling and Bus Tracking Technologies for submission to journal publications.

Household Travel Surveys- Continue research to reduce size of household travel surveys.

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

TECHNICAL ASSISTANCE

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

CMAP Freight Committee- Continued assistance to CMAP and attend meeting on January 29.

CMAP Public Private Task Force- Continue assistance to CMAP and prepare for next meeting on January 22.

GNMAA- Provide ongoing assistance to GNMAA Transportation Committee and attend meeting on January 9.

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

Champaign MPO- Awaiting FHWA grant approval to develop a Travel Demand Model for small sized MPOs.

City of Chicago Congestion Pricing Project- Meet with the Technical Advisory Group on January 6 and advise on the ongoing project.

College of Urban Planning and Public Affairs- Continued participation on the Executive and UTC Director Search Committees. Goal is to hire a Director by June 2009.

WORKSHOPS, TRAINING AND VISITING SCHOLARS

Rail Infrastructure Workshop- Planning with Congressman Lipinski's Office for a Symposium to be held in Spring 2009.

TRB Annual Meeting and UTC Reception- Planned for a UTC Reception and presenting of papers on Buses on Shoulders and ADA Paratransit Demand at the Annual TRB meeting to be held in Washington, DC on January 12 through 14, 2009.

TRF Annual Meeting- Planned for presenting of papers on the Burnham Transportation Plan and Transportation and the Housing Crisis at the Annual TRF Meeting to be held in Portland, OR on March 16 through 18, 2009.

PROJECTS COMPLETED DURING CALENDAR YEAR 2008

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

Lake County Commuter Coalition

Longitudinal Employer-Household Dynamics (LEHD)

Volunteer Drivers Program Masters Thesis

CDOT Bicycle Intern Project

Findings and Lessons Learned from an Evaluation of Advanced Parking Management

Systems for Transit Webinar

Arizona E-VII Program: Strategies for Improving Emergency Response to Traffic

Incidents while Enhancing Safety for Emergency Responders Webinar

Are 3 Heads Better than 2? Formulating Carpools for Managed Lanes Webinar

Annual Financial Update of the Transportation Industry Seminar

On the Eve of the Centennial: Daniel Burnham, Big Thinkers and the Future of the

Metropolis Seminar

Method for Small-Area Demand Forecasting of Freight Flows Workshop

Travel Time Estimation for Traffic Management and Traveler Information Workshop

The 2010 Census is coming...but it won't look like the 2000 Census Workshop

Freight and Land Use Seminar

RailVolution Annual Meeting

CMAP Regional Comprehensive Plan Development

The Second William O. Lipinski Symposium on Transportation Policy

Freight Congestion

1/07/09