

METROPOLITAN TRANSPORTATION SUPPORT INITIATIVE (METSU)

QUARTERLY REPORT

for the quarter ending December 31, 2006

CURRENT QUARTER ACTIVITIES

GENERAL AND ADMINISTRATIVE

The task to undertake the project Improving Operational Performance of Ramp Metering Systems: Ramp Signal Tuning and Assessment of Different Metering Algorithms was added as an amendment to the METSU grant contract. Below under RESEARCH PROGRAM is the progress report for that task.

There has been much activity during the quarter planning, organizing and administering workshops. Listed below are some of the highlights:

-“Rail~Volution Chicago 2006” was held on November 5 through 8. Assisted IDOT and RTA by participating in the program planning committee.

-“Neighborhood Arts and Transit: Cultural Excursions on the Pink Line” was a mobile workshop in connection with Rail~Volution. Developed and led the workshop on November 6 for approximately thirty persons from around the U. S.

-Higher Education Working Group was held on November 6 in connection with RTA's Moving Beyond Congestion effort. A major finding was the universities interest in a student pass for Metra similar to CTA's U-Pass. Metra was informed of the interest and has asked UTC to assist in the matter, which is described below under Metra College Student Pass.

-UTC and METSU were co-sponsors of “Making the Chicago Region More Competitive in the Global Supply Chain: A Forum for Business, Government and Freight Industry Leaders” with World Business Chicago and the Chicagoland Chamber of Commerce. Joe DiJohn also moderated a panel discussion on transportation costs. The event took place on November 21.

-“Transportation Crises in Chicago” was the topic of the Chicago Chapter of TRF's meeting on November 29. Dave Young, author and retired Chicago Tribune transportation reporter, Ian Savage, Northwestern University and Joe DiJohn, UTC gave panel presentations. There will be an Advisory Board meeting on January 17.

Below is a description of progress during the quarter.

RESEARCH PROGRAM

Improving Operational Performance of Ramp Metering Systems

The project has two parts. The first part involves the assessment of different ramp metering algorithms using computer simulations. The second part of the study involves collaboration with TSC engineers to address the tuning issues of the ramp meter control/operation parameters in the existing ATMS at the TSC. Four different ramp metering approaches (i. e., ALINEA with and without queue control, ZONE, fixed-rate ramp meter, and no ramp meter) with various traffic volumes were considered. The selected algorithms were coded into study bed network which included 1.85 miles on the north-bound local lanes of the Interstate-94 Dan Ryan Expressway in Chicago. Using microscopic simulation, the efficacy of the selected algorithms as applied in the study bed was evaluated and their performances were compared. Furthermore, the optimum fixed green times for the Heavy Goods Vehicles (HGV) operation in the corridor was evaluated.

Safety Analysis

Based on his work on pedestrian safety, Prof. Siim Soot has been asked to serve on the Mayors Task Force on Pedestrian Safety.

Regional Intermodal Freight Planning

Kazuya Kawamura continues to chair the Research and Planning Subcommittee of CMAP Intermodal Advisory Task Force (IATF). He is also serving on the organization Committee for the Global Supply Chain Forum, the event jointly sponsored by the Chicagoland Chamber of Commerce, UIC, Metropolis 2020 and World Business Chicago. He led a panel session on Freight Development Patterns: What are the Implications for Regional Growth. Dr. Kawamura is also participating in the strategic planning of the newly created National University Transportation Center at the University of Wisconsin, Madison now officially called the Center for Freight and Infrastructure Research and Education (CFIRE). The theme of the Center is sustainable freight transportation and infrastructure systems. He contributed to drafting the strategic plan.

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 trips. The majority of funding is provided by CFIRE with METSI is providing the match. The study will begin upon funding availability.

Job Access Reverse Commute (JARC)

Staff is participating in Sen. Susan Garrett's Reverse Commute Committee working with employers and municipalities and assisting in the development of a early morning reverse commute train on Metra UP North Line. A JARC application has been made by Metra to RTA requesting \$250,000 and has received CMAP and RTA Board approval for implementation in spring or summer, 2007.

McHenry County Transportation Study Implementation

Staff continues to participate on the McHenry County Transportation Study Implementation Task Force (ITF) and the two Sub-Committee Working Groups; Coordinated Paratransit Services and Taxi Vouchers. Staff attended a Task Force meeting on November 1 and supported a McHenry County New Freedom grant application for a Centralized Call Center which received approval from CMAP and RTA.

Highways and Sprawl

Work continues with Census 2000 and American Community Survey (ACS). A modified paper titled *Emerging Commuting Trends: Evidence from the Chicago Area* has been submitted for publication in the *Journal of the Transportation Research Forum*. The article, co-authored by Soot, Berman and DiJohn focuses on the growing importance of demographic changes on commuting and congestion. Work also continues on a report on the recent changes in commute travel times. Annual mean travel time data has been developed for work trips by county. The most recent data shows the largest increases in the collar counties that have affordable housing and high growth rates. In these areas job growth lags behind growth in the number of workers residing in the county. Our work resulted in a quotation in the *Christian Science Monitor*.

Emergency Ride Home (ERH)

Developed a region-wide demonstration program and received approval and CMAQ funding for the project. Seeking verification of a commitment of soft match funding using toll revenues. There is nothing new to report.

Northeast Lake County TMA

Assisting employers and municipalities in improving Metra UP North Line service. This was discussed at Sen. Susan Garrett's Reverse Commute Committee meetings on December 11. Metra has developed a proposal to add an early morning rush hour train in each direction on the UP North Line and Metra has made a JARC application (See JARC above). Employers have committed to market the program and adjust their shuttle buses to serve the new train. Staff has updated its Employer's Research Guide to Implementing Commuter Benefits and distributed it to the Chambers of Commerce in Waukegan and Lake Forest.

Database and Library

Staff continues developing a database and library of UTC and METSI as a project-level resource.

Lake County Coordinated Transportation Services Committee

Staff developed a scope of work for a paratransit coordination study in Lake County and submitted it to RTA as an RTAP grant application. Over 100 paratransit provider surveys were distributed and 30 have been completed. Staff is undertaking summary and analysis of the results and developing a mapping system to graphically show the results. Preliminary results of the Survey was discussed with the committee at their meeting on October 18.

Transit Check Ridership Analysis

Continue advocacy for commuter choice benefits and prepared a scope of work to undertake a study of the impact of Transit Check usage on ridership volume and patterns. This was submitted to the RTA as an RTAP grant application. Awaiting grant approval.

Longitudinal Employer-Household Dynamics (LEHD) Data

Developed a scope of work to utilize LEHD data developed by IDES and the Bureau of the Census to improve transit planning, especially job access and alternatives analysis. The goal is to provide origin-destination data updated quarterly. Staff has begun analyzing the data but there are shortcomings that need to be overcome to make the data suitable for use. A presentation on the status of the project will be given to the Advisory Board on January 17.

Moss Thesis Proposal

Advising a graduate student undertaking a thesis proposal to identify what, if any benefits can be brought as applied to vertical concrete walls bring to noise, air, visual and temperature pollution mitigation efforts along transportation corridors.

TECHNICAL ASSISTANCE

Association for Commuter Transportation (ACT)

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

CMAP Community Mobility and Seniors and Persons with Disabilities Task Forces

These two task forces have been holding combined meetings. Participated in the meeting held on November 13.

CMAP Intermodal Advisory Task Force (IATF)

Continued participation with the Task Force and Subcommittees and attended task force meeting on November 15.

CMAP Private Providers Task Force

Participating with the Task Force on a proposal to develop a private enterprise demonstration project to get low income residents to jobs as a regional JARC project. No meetings were held during the quarter.

CMAP Jobs-Housing-Transportation Advisory Committee

Assisting CMAP by co-sponsoring summit to be held on February 8.

CMAP Transportation Management and Operations (TM&O) Work Group

There were no meetings during the quarter.

Greater North Michigan Avenue Association (GNMAA)

Continued assistance and attended a committee meeting on December 20.

IDOT- DPIT

Met with IDOT staff and developed a final scope of work for the database project for use by IDOT and the ICCT.

Interagency Coordinating Committee on Transportation (ICCT)

Participated in a meetings held on December 7 and 21. The scope of work for the development of a GIS based data base has been finalized with Natasha Holmes, IDOT-DPIT and presented to the ICCT. IDOT is pursuing a JARC grant to fund the data base.

Peoria MPO

Staff has provided comments on the Peoria Tri-County Regional Planning Commission's consultant assessment of the MPO modeling needs and has provided the comments to IDOT as well. Staff is waiting to hear from IDOT and the MPO regarding the next course of action. There has been no reply from Peoria during the quarter.

Champaign MPO

The Champaign County Regional Planning Commission has provided us with details about their 2002 Travel Survey and asked for assistance with the trip generation component of their travel demand modeling suite. We developed some innovative techniques for developing planning models for small urban areas and provided the information to them in an interim report.

Center for Supply Chain Management and Logistics

Providing in-kind match to the project which received seed funding from UIC. Also providing joint sponsorship with the Chicagoland Chamber of Commerce, World Business Chicago,

Metropolis 2020 and UIC assisted in planning for the Global Supply Chain Workshop held on November 21.

WORKSHOPS, TRAINING AND VISITING SCHOLARS

Striving to be the Best: Employer TDM Programs that Deliver Results to Employees and Stockholders Netconference

Jointly sponsored netconference with University of South Florida on October 18.

Moving Beyond Congestion

Attended meetings with RTA on October 27, November 9 and December 12 in support of their Moving Beyond Congestion Program.

Making the Chicago Region More Competitive in the Global Supply Chain: A Forum for Business, Government and Freight Industry Leaders

Co-sponsored the day-long forum on November 21 with Chicagoland Chamber of Commerce and World Business Chicago. Also moderated sessions on transportation costs and freight development patterns. Preparing a summary of the conference for distribution.

TRF Chicago Chapter Meeting on Transportation Crises

On November 29 Dave Young, former transportation reporter for the Chicago Tribune, Ian Savage, Northwestern University and Joe DiJohn participated in a panel discussion of Transportation Crises in Northeastern Illinois.

Rail~Volution Chicago 2006

Assisted IDOT and RTA plan the program and mobile workshops for the Annual Rail~Volution meeting which was held in Chicago on November 5 through 8.

Neighborhood Arts and Transit: Cultural Excursions on the Pink Line

Developed and lead a mobile workshop for Rail~Volution on November 6.

Transit Higher Education Working Group

Attended a meeting of universities and colleges in the region on November 6 as a part of RTA's Moving Beyond Congestion effort.

It's Time For Transit

Attended conference sponsored by Work, Welfare and Families on October 3.

APTA Annual Meeting and Conference

Attended APTA Annual Meeting and Conference on October 8 through 11.

FTA Reception

Attended reception on November 8 and discussed scholarship program with Marisol Simon, Region 5 Administrator.

PLANNED ACTIVITIES FOR NEXT QUARTER

RESEARCH PROGRAM

Improving Operational Performance of Ramp Metering Systems

The task is ongoing.

Making Truck-Rail Intermodal Competitive- Begin study upon grant approval.

Regional Intermodal Freight Planning- Continue participation on CMAP IATF and the Global Supply Chain Forum Summit which was held on November 21.

Job Access Reverse Commute- Continue communications with project partners.

McHenry County Transportation Study Implementation (ITF)- Participating in Committee activities including the two sub-committees on paratransit and taxi vouchers. Next meeting is scheduled for January 24.

Highways and Sprawl- Research continues in the areas of changing travel times and Census 2000 and ACS. Awaiting approval for the journal article that was submitted to the Journal of TRF.

Emergency Ride Home (ERH)- Attempt to transfer CMAQ grant to establish a region-wide ERH to Pace suburban bus.

Northeast Lake County TMA- Continue participation with Sen. Garrett and assist in the implementation and marketing of the JARC funded reverse commute train on Metra UP North Line.

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.

Lake County Coordinated Transportation Services Committee- Continue accumulating and analyzing completed provider surveys. Planning to attend meetings on February 21 and March 21. Also plan to submit a proposal jointly with DePaul University to undertake the Paratransit Coordination Study upon RTAP grant approval by the RTA.

Transit Check Ridership Analysis- Continue commuter choice benefits advocacy and begin work upon RTAP grant approval.

Locomotive Horns- Await direction from CMAP work group.

Longitudinal Employer-Household Dynamics (LEHD) Data- Continue analysis of the data and identify methods to make it usable. A presentation of the status of the project will be given at the Advisory Board meeting on January 17.

Moss Thesis Proposal- Participate in thesis defense

TECHNICAL ASSISTANCE

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

CMAP Committee Membership

Received notification from CMAP that UIC has been assigned membership on three CMAP Committees; Transportation, Environment and Natural Resources and Housing (Voorhees Center). These will replace many of the committees and task forces listed below.

CMAP Community Mobility and Seniors and Persons with Disabilities Task Forces-

Ongoing assistance to CMAP and attend meeting on January 8.

CMAP Intermodal Advisory Task Force (IATF)- Ongoing assistance to CMAP.

CMAP Private Providers Task Force- Ongoing assistance to CMAP.

CMAP Jobs-Housing-Transportation Advisory Committee- Continue participation as requested by CMAP.

CMAP TM&O- Ongoing participation and assistance to CMAP.

GNMAA- Ongoing assistance GNMAA Transportation Committee and attendance at a meeting on January 25.

IDOT- DPIT- Begin developing statewide database upon grant approval and a contract.

ICCT- Continued participation and planning to attend meeting on March 8. Also plan to present work scope of IDOT database project and obtain input from committee as to data needs.

Peoria MPO- Await comment from IDOT and Peoria regarding continued assistance to the metro area in the development of travel demand models.

Champaign MPO- Continue providing assistance on the trip generation component and awaiting comment on the recently submitted report.

City of Waukegan- At the request of the city will attend a municipal meeting to give a report on the status of the northeast Lake County corridor activities and the JARC application for an additional early morning reverse commute train on the Metra UP North Line.

WORKSHOPS, TRAINING AND VISITING SCHOLARS

Innovation and Integration Summit

Agreed to co-sponsor a CMAP Summit on the economic impact of linking jobs, housing and transportation to be held at UIC on February 6. Other sponsors include Metropolis 2020, Center for Neighborhood Technology, MPC and Metropolitan Mayors Caucus.

Global Supply Chain Summit

Drafting reports based on the November 21 summit in order to create a document summarizing the event. A meeting to discuss progress and next years event will take place on January 29.

UTC Advisory Board

A meeting is planned for January 17. Our work on Journey to Work will be presented.

TRB Annual Meeting

Planning to attend and give presentations at the meeting held in Washington on January 22 – 24.

PROJECTS COMPLETED DURING CURRENT CALENDAR YEAR

How To Make TDM Programs Boom with the Boomers Net Conference

TRF Chicago Chapter Luncheon- RTA Cook-DuPage Corridor Market Analysis

North Michigan Avenue By The Numbers- Transportation Section

Homeownership in the Chicago Area: Trends Leading the Nation

Are Sprawl and Obesity Related? Evidence from the Chicago Area

Where is the 2000-2005 Growth in Metropolitan Chicago: Collar or Fringe Counties?

TRB Annual Meeting Presentations

TRF Annual Meeting Presentation

9th International Conference of Advanced Technology Presentation

National Urban Freight Conference Presentation

George Krambles Distinguished Lecture

Why Your University Should Achieve the Best Workplaces for Commuters Designation

Analyzing the Effectiveness of Commuter Benefit Programs Webinar

The Case for Searches on Public Transportation Webinar

The 411 on 511: How This Advanced Traveler Information System Compliments and Competes with TDM Webinar

Improving Railroad Classification Terminal Performance Using Concepts of “Lean Railroading” Teleconference

Information Coordination Advisory Committee

Annual Meetings of Chicagoland Chamber of Commerce and TMA of Lake-Cook

Business and Site Specific Trip Generation Methodology for Truck Trips

Cargo Oriented Development

Sprawl and Public Health: Obesity

Locomotive Horns

ITS Deployment Analysis System (IDAS) Workshop

Intermodal Volumes III: Serial Measuring, Tracking and Anticipating Levels of Activity in Northeastern Illinois Workshop

CMAP TDM Annex

Annual Meeting of the Chicagoland Chamber of Commerce

Annual Meeting of the TMA of Lake Cook

DuPage Discovery Conference

International Conference on Applications of Advanced Technology in Transportation

CMAP Interactive Economic Development Conference

CMAP Reinventing Integrated Regional Planning in NE Illinois: “Skunk Works”

Attitude Survey

Asset Management and Metropolitan Planning Organizations

RTA Higher Education Summit: Moving Beyond Congestion

Working Together in the 21st Century Summit

Striving to be the Best: Employer TDM Programs that Deliver Results to Employees and Stockholders

Rail-Volution Chicago 2006

Neighborhood Arts and Transit: Cultural Excursion on the Pink Line Mobile Workshop

Making the Chicago Region More Competitive in the Global Supply Chain: A Forum for Business, Government and Freight Industry Leaders

TRF Chicago Chapter Meeting on Transportation Crises

International Conference on Applications of Advanced Technology in Transportation

It's Time For Transit

APTA Annual Meeting and Conference

FTA Reception

1/06/07