

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

## **QUARTERLY REPORT** for the quarter ending March 31, 2003

### **CURRENT QUARTER ACTIVITIES**

#### **GENERAL AND ADMINISTRATIVE**

An Advisory Board meeting was held on February 19, 2003 and was presided over by the new Chairman, Phil Pagano, Executive Director of Metra. At the Chairman's suggestion, the Board was expanded to include representation of county government in the region. Mike Tryon Chairman of the McHenry County Board agreed to participate on the Advisory Board. At the request of Sue McNeil, UTC Director, the Advisory Board considered a resolution supporting the Center's seeking an earmarked University Transportation Center. The focus of the center would be regional planning. The Board unanimously approved a resolution which is attached to this report. In addition, the Chairman will bring the matter to the Illinois delegation and request their support.

During the quarter, received a grant contract covering the fourth fiscal year of METSU. Below is a progress report on the activities of the Research Program, Technical Assistance, Workshops and Training during the recent quarter.

#### **RESEARCH PROGRAM**

##### **Intermodal Freight**

The proposal to the NSF by Northwestern University and UIC has been selected for funding. The project will receive \$600,000 over three years to develop a decision support tool for freight infrastructure planning and operation. The UTC team will contribute in the areas of cost and benefit calculations and coordination of stakeholders. There is nothing new to report.

##### **Freight Impact Analysis Methodology – Impact of truck traffic on the Value of Land**

This project, started in September, 2002 will use hedonic pricing model to determine the effect of truck traffic on the land value. Since land value captures market's valuation of both negative and positive attributes, the findings from this research will be used in monetizing the perceived impact of truck traffic. The land value data at parcel level will be obtained from the Center for Urban Economic Development (CUED), a research unit in the College of Urban Planning and Public Affairs at UIC.

##### **Job Access and Reverse Commute**

Staff is working cooperatively with various agencies in the state and the region to assist in the development of a plan, strategy and goals to address access to work and reverse commute issues in the Chicago region and the state of Illinois. Staff is also participating with the CATS Community Mobility Task Force where a presentation is given at each of their meetings on the status of various UTC activities. Also assisting IDOT, IDHS and Work Welfare and Families in providing analysis and comments on Coordination legislation being considered by the State Legislature.

##### **Environmental Justice**

A preliminary report addressing Tier I measures has been submitted to CATS staff for review and Tier II measures are being developed. There is nothing new to report.

### **Kane County Transit Opportunity Assessment**

Discussions with Metra are anticipated in order to define the scope of Phase 2 of the project.

### **Rail-Highway Grade Crossing Collision Report**

Undertook an analysis of highway grade crossing accidents for CATS pertaining to the whistle ban issue in northeastern Illinois. A preliminary phase one report has been submitted to CATS for review and we are awaiting their comments. A phase two report is underway.

### **Asset Management**

Developed a proposal jointly with the University of Wisconsin, Madison titled the Evaluation of Transportation Private Sector Asset Management Practices. During the quarter, completed the report, which was approved by TRB for presentation at their Annual Conference in January.

### **Data Mining and Knowledge Discovery in Civil Infrastructure Systems**

Completed drafting case study analyzing the 1997 Commodity Flow survey and submitted a proposal to NCHRP for continued work. During the quarter, explored researching freight related data.

### **UIC Campus Shuttle Program**

Developing a real time traveler information system on the UIC Campus Shuttle service that would identify the current location of the shuttle bus via GPS location technology and map the progress of the vehicle on the University website. All buses have the units installed and the demonstration can be viewed at [www.uic.edu/cuppa/utc](http://www.uic.edu/cuppa/utc). During the period, we have been obtaining users input into the website and planning changes accordingly.

### **Economic and Productivity Impacts of Intelligent Transportation Systems (ITS)**

Developing a proposal to undertake this research project. Completed a literature review and developing the data needs for economic productivity analysis in the Chicago region.

### **Developing a Regional Focus for Integrated Transportation and Land Use Planning**

Developed an outline of a scope of work to support the development of a strategic, regional transportation and land use plan in conjunction with IDOT, NIPC and the RTA. Work on the project has begun.

### **National Environmental Policy Act (NEPA) and the Planning Process**

At the request of IDOT staff, developed a research proposal entitled Statewide Transportation Planning Process and NEPA: Its Effectiveness, Issues and Solutions for submission to IDOT staff for review, comment and approval. Literature review is underway.

### **McHenry County Transportation Study**

At the request of CATS and the County Board Chairman, agreed to assist the County in their effort to undertake a countywide transportation study funded by an Illinois Tomorrow grant. Our role would be to assist the county in drafting an RFP, selecting and managing a consultant and providing technical assistance to the county during the project.

**Sprawl** Our current sprawl-related work continues in the three areas identified in the previous quarterly report. These are described below.

**Sprawl and Pedestrian Safety:** This week we expect to submit our report on pedestrian safety in Illinois. It highlights the statewide improvements in pedestrian traffic safety, the annual number of fatalities have declined from 272 in 1990 to 187 in 2000, or a drop of 31%. Still, there is room for improvement especially in Cook County. Cook County accounts for over 55% of the state's fatalities. Its per capita fatality rate is 50% higher than the statewide rate. The study also shows that there seems to be a climate effect with a high association between fatality rates and the latitude of the county. This corresponds with national studies that show higher fatality rates in southern metropolitan areas. Several of these reports, however, attribute these higher rates to sprawl, southern metro areas tend to be newer than northern metro areas, e.g., Phoenix versus Boston, and therefore typically have lower population densities—have more sprawl.

While the data show particularly low per capita fatality rates in suburban Chicago (McHenry and DuPage Counties), we do not have reliable exposure rates to assess the fatalities in ways highway fatality data are examined. The pending CATS household travel survey may well provide important information to address the gap in comprehensive data on walking.

**Census 2000:** We continue to map and analyze the data from the 2000 Census. We analyzed and mapped the differences between the travel times to work for the two largest counties in the nation, Los Angeles and Cook. Not only does Los Angeles County have lower travel times but also the highest travel times are associated with high-income neighborhoods. By contrast Cook County has substantially longer travel times especially in low-income neighborhoods. This is particularly true on the south side of the city of Chicago, where the lack of local jobs translates into inordinately high travel times for those individuals who work. Transportation and other solutions need to be developed for these neighborhoods.

We have also finished and submitted for review our first report from the Census Transportation Planning Package (CTPP). This examines the county-to-county trip data released in March 2003. It reveals some important changes in commuting and the factors that effect commuting. Most importantly, for the first time in over forty years the population of the region grew more rapidly (1990 to 2000) than the number of commuters. The 11% increase in population only translated into a growth in commuters of 7%. This modest increase in commuters, smaller than in previous decades, has had a milder impact on the number of commuters and traffic congestion than anticipated.

We are now anticipating the arrival of the full CTPP. This will provide us with journey-to-work data by small area and we can further study changes in travel behavior as they relate to urban decentralization.

**Sprawl and Public Health -- Obesity:** We continue to seek data that are printed on driver's licenses. They include the critical information that would facilitate an analysis of the association between (a) degree of obesity (self declared by expressing their height and weight) and (b) the place of residence within the Chicago metropolitan area. We are interested in both the distance

of the residence to downtown Chicago and the population and employment densities in the home area.

With the assistance of IDOT we continue to be in communication with Robert Mueller regarding driver's license data. We remain committed to obtaining these data.

### **Intercity Bus Strategic Plan (IDOT-DPT)**

The addendum to the study which included a survey of an additional set of transportation providers is nearing completion. A final draft report is scheduled for release next quarter.

### **Computer Aided Scheduling and Dispatching (CASD) Systems (IDOT-DPT)**

The addendum to the study included the survey of the new paratransit operator in Peoria. The analysis of the results is underway with a projected completion next quarter.

### **Midwest Regional University Transportation Center**

Prepare two proposals to MRUTC; Mode Matters: A Tool to Measure Impacts of Air Quality of Multi-Modal Investments and An Impact Analysis of Changes in the Warehousing and Distribution Industry on Modal Investments in Freight Transportation.

## **TECHNICAL ASSISTANCE**

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

Staff continues its participation as a member of the GNMAA Traffic and Transportation Committee and Chair of the Traffic Mitigation Committee.

### **Commuter Choice**

Developing a program to market commuter choice benefit program jointly with CATS and RTA utilizing their Transit Check to facilitate the use of the tax free transit benefit for employers and employees through the use of payroll deduction. A workshop was held in Chicago supporting Commuter Choice benefits.

### **Regional Freight Planning**

Kazuya Kawamura continues to chair the Research and Planning Subcommittee and Sue McNeil continues to chair the Finance Subcommittee of the CATS Intermodal Advisory Task Force (IATF). During the period, provided background material on freight for the reauthorization of TEA 21 for the Committee. The report is attached.

### **CATS Rideshare Project**

Continuing to assist CATS jointly with the College of Engineering Computer Center at UIC in developing an improved rideshare matching program.

### **CATS Community Mobility Task Force**

Participating with and providing Job Access Reverse Commute related assistance to the CATS Task Force. Attended meetings on January 29 and March 17, 2003 to give a report on the Center's JARC activities.

### **Work, Welfare and Families**

Participating in the Transportation Working Group to address JARC transportation issues and the current legislation to establish a statewide Coordination Committee.

### **CATS Private Providers Task Force**

Participating with the Task Force and providing assistance in the areas of inventorying private transit providers and in JARC issues.

### **Hillside Bottleneck**

Agreed to assist IDOT in funding approximately \$3,000 in expenses to undertake a traffic count in connection with the construction at the Hillside bottleneck.

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

### **Employee Benefit Workshop**

Held a workshop jointly with the Association for Commuter Transportation (ACT) and CATS supporting Commuter Choice pre-tax benefit on February 21, 2003.

### **Creating Working Opportunities through Affordable Transportation**

Participated as a panelist in a Workshop sponsored by Work, Welfare and Families and Metropolitan Family Services on March 7, 2003.

### **Conference on Community Planning Tools**

Supporting a PhD student to attend the conference jointly sponsored by AASHTO and FHWA.

### **State of the Region Conference**

The Workforce Board of North Cook County and the Northwest Suburban Association of Commerce and Industry (NSACI) deferred the workshop indefinitely.

### **UTC Fall Symposium**

Have begun planning for the annual Fall Symposium sponsored by the Urban Transportation Center to be held in October, 2003. This year's topic will be circumferential transit and highway projects.

## **PLANNED ACTIVITIES FOR NEXT QUARTER**

### **RESEARCH PROGRAM**

**Intermodal Freight**- ongoing project with Northwestern University and NSF.

**Freight Impact Analysis Methodology-Impact of Truck Traffic on the Value of Land**-

identify data sources for truck traffic volumes and the functional form and the variables used for the hedonic price models.

**Job Access and Reverse Commute**- continue communications with project partners and continue seeking local match to federal JARC grant.

**Environmental Justice**- Awaiting CATS comments.

**Kane County Transit Opportunity Study**- assist the county in developing scope of Phase 2 of the project.

**Rail-Highway Grade Crossing Report**- awaiting review of report by CATS.

**Intercity Bus Strategic Plan**- anticipated completion of the addendum to the study during the quarter.

**Computer Aided Scheduling and Dispatching Systems**- anticipated completion of the addendum to the study during the quarter.

**Data Mining and Knowledge Discovery in Civil Infrastructure Systems**- continue exploration of freight-related data.

**UIC Campus Shuttle Bus Program**- continue demonstration during the Spring Semester with hopes of implementing the full system by mid-year.

**Economic and Productivity Impacts on ITS**- develop data needs to estimate economic productivity due to ITS in Illinois.

**Developing a Regional Focus for Integrating Transportation and Land Use Planning**- begin work on the two year project.

**Planning and the NEPA Process**- complete literature review and develop survey of other state transportation departments. Present abstract of project for presentation to Environmental Conference at UIC.

**McHenry County Transportation Study**- Have kick-off meeting with the county, define roles and develop scope of work for the RFP.

**Sprawl**- Complete the Sprawl and Public Safety portion of the study and continue research in the areas of Census 2000 and Sprawl and Public Health-Obesity.

#### **TECHNICAL ASSISTANCE**

**Regional Freight Planning**- ongoing meetings with CATS.

**GNMAA**- ongoing assistance with GNMAA and the Traffic Mitigation Committee.

**Commuter Choice**- continue to develop marketing plan for pre-tax RTA Transit Check and for Commuter Choice statewide and assist CATS in given presentations and workshops.

**CATS Rideshare Project**- ongoing assistance to CATS.

**CATS Community Mobility Task Force**- ongoing assistance to CATS.

**CATS Private Providers Task Force**- ongoing assistance to CATS

**Association for Commuter Transportation (ACT)**- ongoing assistance to ACT and participation on the ACT Board of Directors.

**Hillside Bottleneck**- fund traffic survey upon receipt of grant agreement from IDOT.

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

**Fall Symposium**- Planning to hold the event in October, 2003 on the topic of “Circumferential Transportation Systems” including both highway and transit systems, existing and planned.

## **PROJECTS COMPLETED**

**Downtown Pedestrian Activities Analysis**

**South Central MTD Technical Assistance**

**Lake Cook Road TMA Technical Assistance**

**Bus Rapid Transit Workshop**

**ITS Systems for Transit: Solving Real Problems Workshop**

**Visiting Scholar from Netherlands**

**Reinventing Transit: Planning Information-Based Transit Service Workshop**

**Metropolitan Conference on Public Transportation Research**

**Managing the Cost of ADA Paratransit Pilot Workshop**

**Peoria Study**

**The Future of Public Transit in Chicago Discussion Panel**

**First Urban Sprawl Conference**

**CATS Transit Workshop**

**CTA Transit Workshop**

**Pace Management Symposium**

**Economic Importance of Transportation**

**Greater North Michigan Avenue Association Workshop For Employers**

**Travel Time Activity And Time Use Analysis**

**Cook County TCSP Grant Application**

**Rural Transportation Brokerage Project**

**Visiting MIT Students**

**Springfield Mass Transit Appreciation Day**

**Visiting Delegation from China**

**Visiting Scholars from Saudi Arabia**

**ITS Presentation**

**Rural Transportation Assistance Program Presentation**

**I-55 Growth Corridor Study**

**GIS Mapping of Traffic Signals**

**Visiting Scholars from Norway**

**2<sup>nd</sup> Urban Sprawl Symposium, Transportation and Housing Symposium**

**Suburban Job Link**

**DuPage Area Transit Plan**

**Atlanta Leadership Delegation**

**1<sup>st</sup> Upper Midwest Regional Freight Transportation Workshop**

**Big Ten Universities Transportation Conference**  
**80,000 lb. Truck Weight Study**  
**Travel Time Projections**  
**Suburban Job-Link Corp.**  
**Commuter Rail Station Vanpools**  
**Visiting Scholars from China (2)**  
**3<sup>rd</sup> Annual Sprawl Symposium, Fortuitous Failures or Missed Opportunities**  
**Public-Private Partnerships in Transit Workshop**  
**Jennifer L. Dorn, FTA Administrator Luncheon**  
**Visiting Scholars from Germany**  
**Illinois State University**  
**Abbott Labs**  
**Asset Management Presentation to TRB**  
**Kane County Transit Opportunity Assessment, Phase 1**  
**Employee Benefit Workshop**  
**Creating Working Opportunities through Affordable Transportation**

04/03