



The Travel Model *Improvement* Program

Fiscal Year 2007 Annual Report

September 30, 2007

Travel Model Improvement Program

FHWA

Helping Agencies Improve Their Planning Analysis Techniques



EXECUTIVE SUMMARY

This report covers the Travel Model Improvement Program's (TMIP) activities from October 1, 2006, to September 30 (FY 07). Non-TMIP modeling activities are also presented, as they are of interest to the travel model community. The report also presents a look ahead at future TMIP directions and a summary of past TMIP funding.

TMIP has three goals: To help planning agencies build their institutional capacity to develop and deliver travel related information to support transportation and planning decisions, TMIP initiated several new projects including the highly touted Web knowledge and information exchange (WKIE) webinar series, the Travel Model Mentoring Program and the Listserv Technical Syntheses; continued to work with its organizational, academic and agency partners; sponsored two peer reviews and (together with the National Highway Institute [NHI]) offered three courses and three seminars; continued the Website, Email List and Clearinghouse; and produced three issues of the TMIP Newsletter.

To develop and improve analytical methods that respond to the needs of planning and environmental decision making processes, deployment of Transportation Analysis Simulation System (TRANSIMS) and its development as open source software continued; the Transportation Economic Land Use System (TELUS) continued to expand its user base and functionality; an American Community Survey (ACS) Peer Exchange was held; and the National Household Travel Survey Transferability project was wrapped up.

To develop mechanisms to ensure the quality of technical analysis used to support decision making and to meet local, state, and federal program requirements. The Transportation Research board's TRB Special Report 288, Metropolitan Travel Forecasting: Current Practice and Future Direction (TRB SR 288) was released, and the implications for travel modeling are significant. TMIP also continued to support the Environmental Protection Agency (EPA) with technical assistance on the Motor Vehicle Emission Simulator (MOVES). There were also non-TMIP activities of interest to modelers; the Federal Highway Administration (FHWA) continued the certification checklist of travel forecasting methods, the Resource Center continued to provide project level technical assistance and training, and support to special planning studies.

After several years of slow growth and maintenance the future of TMIP looks active and robust. TRB SR 288 suggests an expanded role for travel model support, and TMIP is developing a plan to fulfill that suggestion.

INTRODUCTION

Fiscal Year 2007 was the 14th year for the TMIP. This fifth annual report describes the TMIP program and strategic plan goals and objectives; actions taken to support those goals both by the TMIP team and others within and outside FHWA; and attempts to assess our impact on the modeling community. Non-TMIP projects will be identified as such; they are included here so the reader may also learn of other initiatives of interest to modelers.

TMIP follows its mission by acting on three strategic goals and objectives. The following is the TMIP mission:

TMIP will . . .

Do What?

Support and empower planning agencies.

How?

Through leadership, innovation and support of planning analysis improvements.

Why?

To provide better information to support transportation and planning decisions.

FUNDING AND SUPPORT

The TMIP activities discussed here are supported by a variety of sources. The FHWA Associate Administrator for Planning, Environment and Realty provides TMIP staff support and, through the Surface Transportation Environment and Planning Cooperative Research Program (STEP), provides the primary source of funding for TMIP activities. Separate funding for TRANSIMS is provided by specific funding allocations in SAFETEA-LU. For more information on funding see the appendix.

PERFORMANCE BY GOAL

Each goal is addressed individually below, together with the actions and activities that are designed to meet that goal. Some actions address more than one goal.

Goal One “To help planning agencies build their institutional capacity to develop and deliver travel related information to support transportation and planning decisions.”

In order to achieve this goal, TMIP employs a variety of outreach and training actions. In accordance with our strategic plan, we:

- Provide information to transportation decision-makers, non-technical professionals, and other stakeholders on the value, role, useful applications, and limitations of travel forecasting;
- Develop and cultivate collaborative partnerships with other organizations concerned with improving travel analysis techniques;
- Promote organizational structures that support quality travel analysis activities;
- Identify and communicate the state of the practice in technical analysis and data collection and associated resource requirements;
- Deliver and communicate technical products and services to travel model users; and
- Promote planning technical analysis as a profession.

A variety of mechanisms are employed to provide and disseminate information including planning and organizing Web-based seminars, working with organizational partners to plan and present at conferences, promoting and providing peer reviews, offering training, maintaining a website, email list and modeling information clearinghouse, producing and distributing newsletters and supporting peer exchanges.

Activities with Organizational Partners

In FY 07, TMIP sponsored, showed and/or presented papers and moderated discussions at four national conferences. The four conferences represent a broad spectrum of our client base including technical planners, researchers and decision makers at all agency levels. The conferences were:

- October 2006, Association of Metropolitan Planning Organizations (AMPO) Annual conference in Miami Beach, FL;
- January 2007, Transportation Research Board (TRB) Annual Conference in Washington, DC;
- May 2007, TRB Planning Applications Conference, Daytona Beach, FL; and
- August 2007, Institute of Transportation Engineers (ITE) Annual Meeting, Pittsburgh, PA.

Also in 2007 a working partnership continued with Argonne National Laboratory (ANL) on TRANSIMS technology:

- FHWA made slots available for ANL staff to attend the pilot course on Introduction to TRANSIMS.
- ANL staff made significant contributions to the TRANSIMS open source community in the form of software development expertise and technical assistance.

- Work with Volpe National Transportation Systems Center (VNTSC) continued:
- FHWA made slots available for VNTSC staff to attend the pilot course on Introduction to TRANSIMS.

Peer Reviews

The TMIP peer review program provides the modeling community with a method to gain insight and experience in modeling issues. Furthermore, the practice of producing and posting a written report for each peer review, presenting the peer review program and results at conferences and publishing an annual synthesis of peer review issues and recommendations for corrective action by the individual panels improves the state of the practice of travel demand forecasting. TMIP continued the Peer Review Program for a fourth year in FY 07, hosting peer reviews both geographically dispersed and at agencies of various sizes (See Map of Peer Review Locations – Historical and Current). Two peer reviews were held during FY 07, one each at: Memphis Area Metropolitan Planning Organization, Memphis, TN (2nd meeting)

Community Planning Association of Southwest Idaho (COMPASS), the Metropolitan Planning Organization (MPO) for Boise, ID

- http://tmip.fhwa.dot.gov/services/peer_review_program/documents/compass/
- The Boise review identified eight technical issues with the current model and recommended strategies for resolution, along with several overarching recommendations for improvement modeling commercial vehicles, external trips and post processing of assignment speeds.

East West Gateway Council of Governments, MPO for St. Louis, MO

- http://tmip.fhwa.dot.gov/services/peer_review_program/documents/ewgcg/
- The primary purpose of the St. Louis peer review was to advise the agency on model fixes and enhancements to be used for its spring 2007 compliance review.

The URLs link to documentation of the Peer Reviews, including the panels' recommendations.

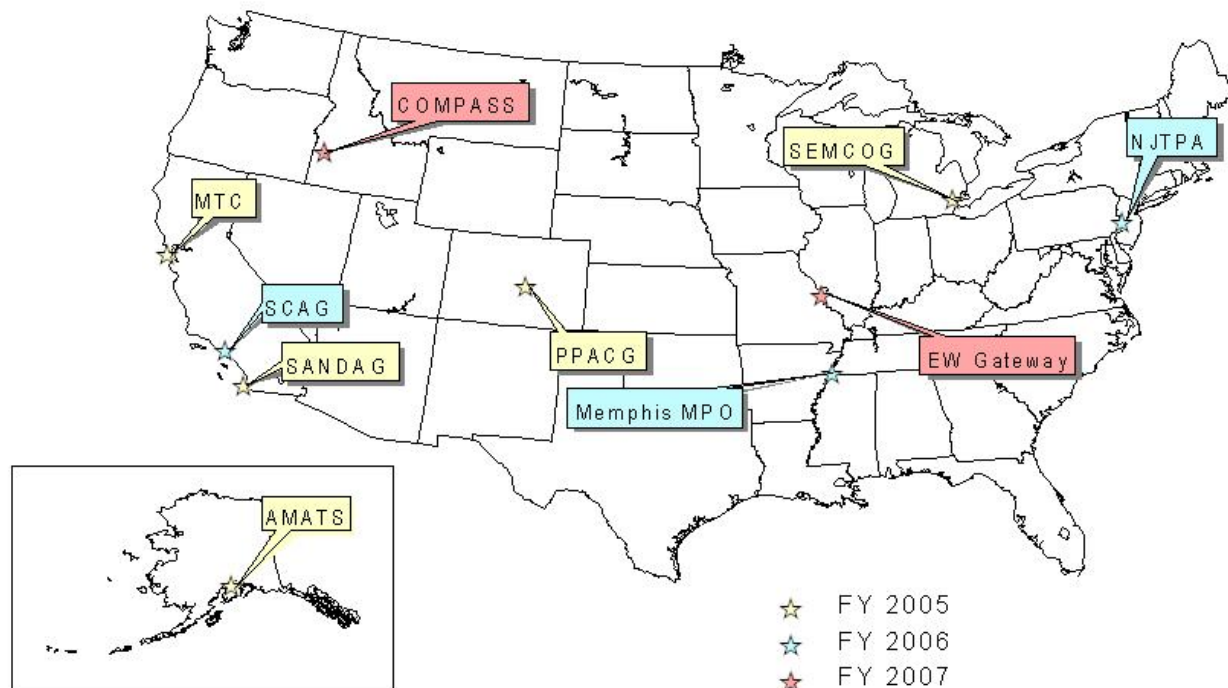
Training

Web Knowledge and Information Exchange

TMIP began a new initiative in 2007: Web knowledge and information exchanges. This training is delivered online to make it more accessible to and cost effective for our planning agency clients. In FY 07, TMIP hosted two such exchanges, one on the subject of National Household Travel Survey data, and one on Land Use Forecasting. Attendance at both Web exchanges reached capacity (80 connections each), with some participants joining from conference rooms with multiple attendees.

Model Mentoring Program

The Travel Model Mentoring Program provides newer modelers a resource to glean quick support and receive the benefit of the advice of more experienced modelers. The program also



Peer Review Locations—Historical and Current.

gives newer modelers the support and platform they need to grow into future mentors, themselves. The program has approximately 20 mentors and supported three mentoring arrangements in FY 07.

Courses and Seminars

During FY 07 TMIP continued its tradition of hosting NHI courses relevant to travel forecasting and offering one-day TMIP seminars on advanced modeling topics. In FY 07 TMIP sponsored:

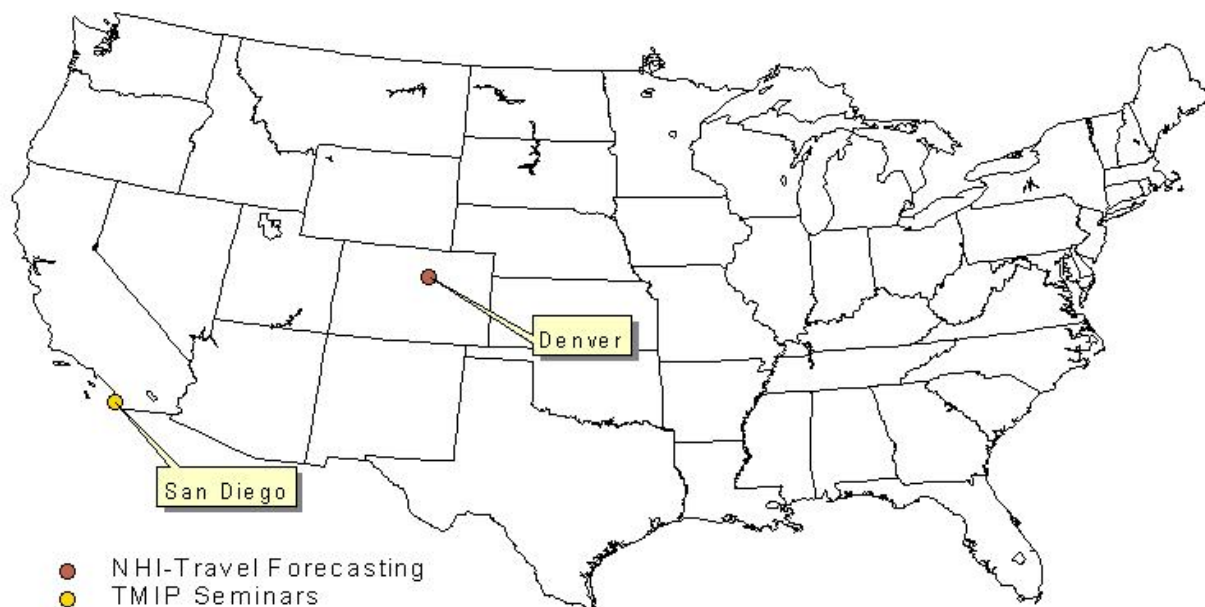
Introduction to Travel Demand Forecasting (4.5 day NHI course) in Denver, Colorado

This course was also presented through NHI, without the explicit help of TMIP in Alaska and Michigan.

TMIP also sponsored the following three seminars in San Diego, CA:

- Activity and Tour-Based Modeling (TMIP Seminar);
- Forecasting Land-Use Activities (TMIP Seminar); and
- Travel Model Validation, Calibration and Reasonableness Checking (TMIP Seminar).

Planners and modelers at all levels of expertise, across multiple agency levels and also from the private sector attend TMIP training. In FY 2006, 166 practitioners attended eight TMIP



TMIP Training Locations for Fiscal Year 2007.

courses and seminars. This represents an approximately 45 percent decrease in overall attendance, and 40 decrease in offerings. Attendance and offerings declined from FY 2005 to FY 2006.

Course or Seminar	Presentations			Attendance		
	FY 07	FY 06	FY 05	FY 07	FY 06	FY 05
Introduction to Travel Demand Forecasting Course	1	2	2	15	28	48
Estimating Regional Mobile Source Emissions Course	0	1	2	n/a	11	33
Activity and Tour-Based Modeling Seminar	1	2	3	19	32	67
Forecasting Land-Use Activities Seminar	1	2	3	11	60	82
Travel Model Validation, Calibration and Reasonableness Checking Seminar	1	2	3	13	40	75
TOTAL	4	9	13	58	171	305
AVERAGE				15	19	23

Website, Email List and Clearinghouse

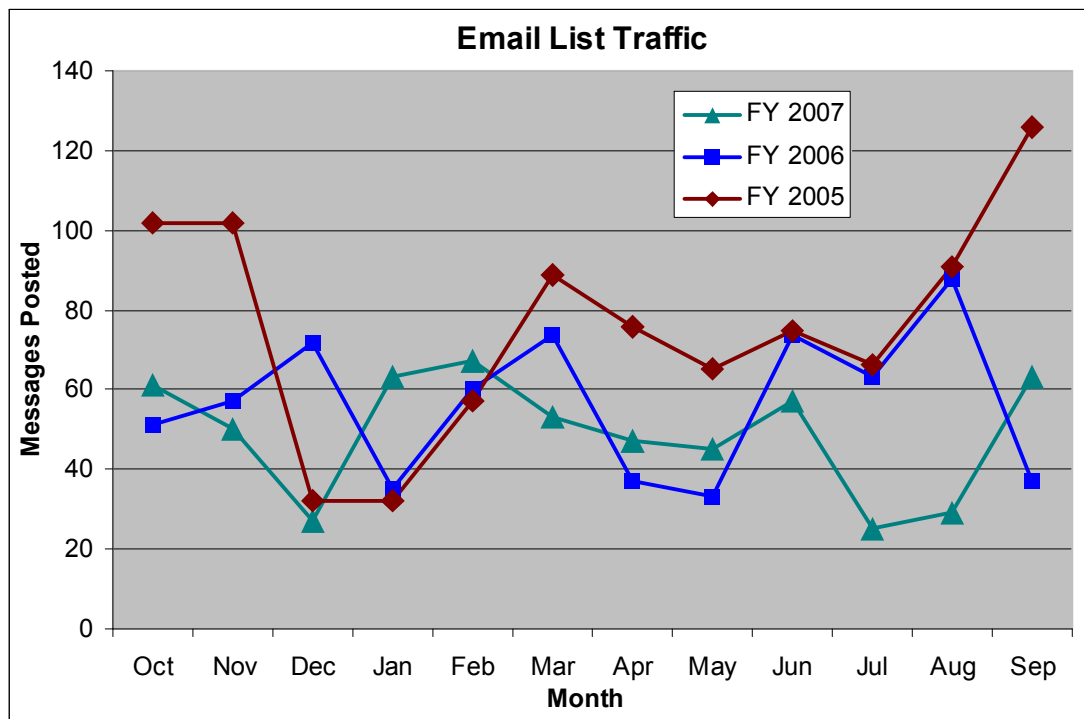
Website

The TMIP website is our face to the community. The homepage consists of updated calendar items; recent additions to the website; news; navigation to: services; courses and conferences; TRANSIMS information; links; contacts; clearinghouse; and travel model discussions.

In FY 07 there were between 3400 and 5500 visitors to the website each month, typically around 5000 per month. (This number represents a slight decline in visitors per month from FY 06.) Visits to the homepage tracked slightly lower than the previous year, averaging about 1150 hits per month, with a spike to nearly 1900 in January 2007.

TMIP-L, the TMIP email list

The TMIP email list is the scene of technical discussions, information exchange, job postings and course advertisements of interest to the travel model community. It currently boasts approximately 920 members, up from 800 at the same time in FY 06, and averaged between 25 and 67 postings and replies per month (See Figure Email List Traffic). The TMIP email list is hosted and archived by Texas Transportation Institute (TTI) and is the source of the Hot Topics column in the *TMIP Connection* newsletter (discussed below).



Technical Syntheses

The objective of the series is to provide technical syntheses of current discussion topics generating significant interest on the TMIP email list. Each synthesis is drawn from emails posted to

the TMIP email list regarding a specific topic. The syntheses are intended to capture and organize worthwhile thoughts and discussions into one concise document. The syntheses are based on comments posted to the email list. There were four syntheses created in FY 07; all on fuel price:

[Fuel Price Synthesis: Travel Model Uncertainties](#) (September 2007)

[Fuel Price Synthesis: Potential Travel Model Considerations](#) (September 2007)

[Fuel Price Synthesis: Determining Current and Future Gas Prices](#) (August 2007)

[Fuel Price Increases and Impact on Driver Behavior](#) (June 2007)

The Technical Syntheses also help to meet TMIP's Quality Assurance Goal, Goal Three.

Clearinghouse

The TMIP clearinghouse is a comprehensive collection of material on travel demand forecasting and related subjects. It is easily accessible to the public and is another free service of TMIP. The clearinghouse exists to supply documentation and data to the travel model community; it is increasingly electronic in nature, but hard documents (not available electronically), are shipped from TTI (See Figure Customers by Type by Year). The TMIP clearinghouse houses nearly 350 documents.

The table on page 10 shows the ten most requested documents, and how they ranked in previous years.

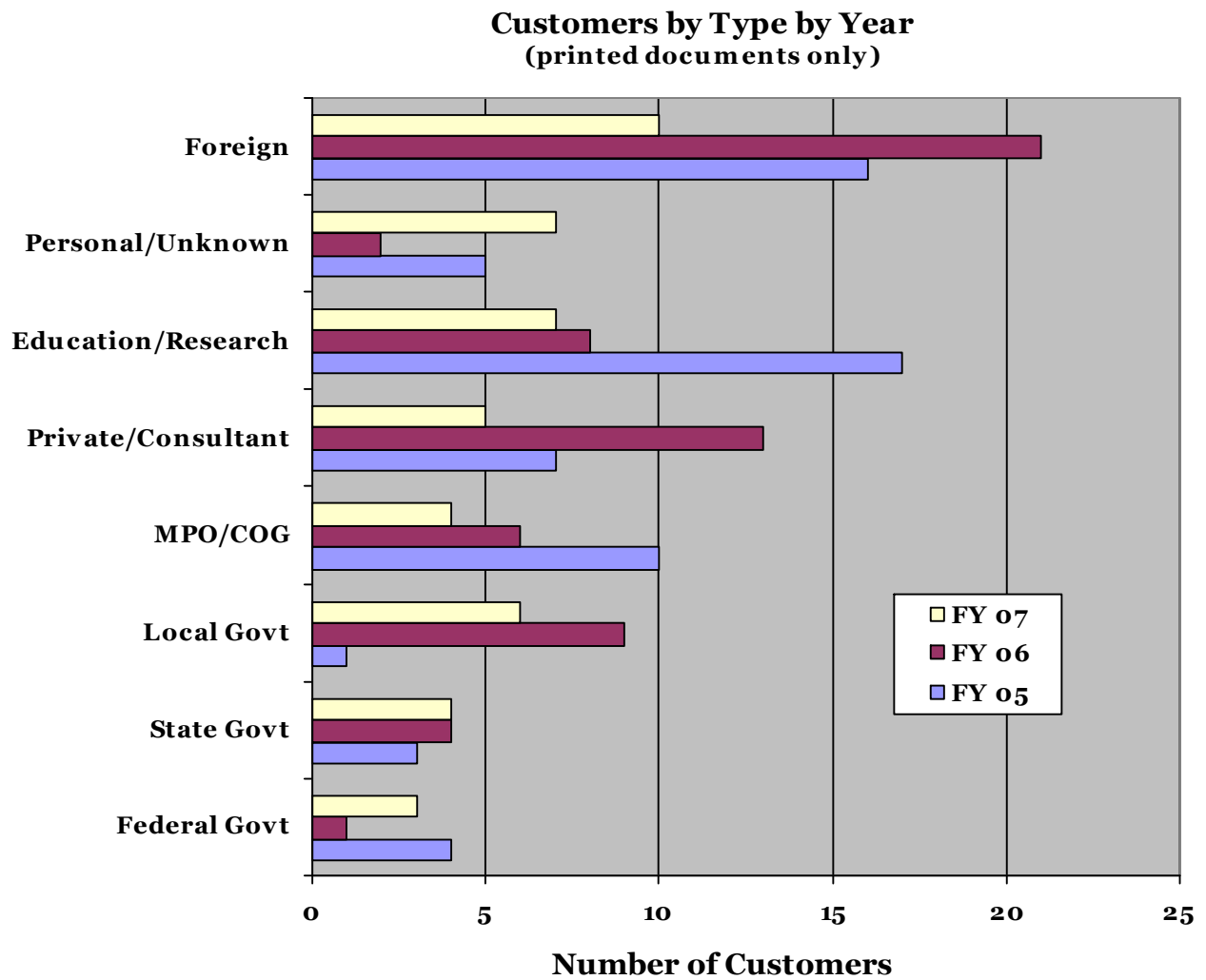
Web Working Group

The Web working group is a body of subject area experts who volunteer to review material as it comes available to determine its appropriateness for the TMIP clearinghouse.

A new document was identified to add to the Travel Demand Modeling subject category: TRB Special Report 288 – *“Metropolitan Travel Forecasting - Current Practice and Future Direction,”* 2007.

A request for new references was sent to all subject advisors via email in August 2007. No recommendations were received by September 20, 2007.

TTI staff in September 2007 began a literature review for citations published since 2005. Attention was initially focused on the Emissions Analysis subject category. The primary search resources were Google, the Transportation Research Board, and the TRANSPORT database available through the Texas A&M University Sterling Evans Library. An initial search of 107 entries yielded seven possible documents for review. Hard copies of the documents were requested for review.



TMIP Connection Newsletter

TMIP produced three issues of *TMIP Connection* in FY 07. Newsletter topics covered were:

- Model User Group profiles,
- Model sharing,
- Modeling conferences,
- Other tools and applications,
- Modeling research, and
- News of the modeling community.

FY07 Top Clearinghouse Documents Shipped		Number Shipped	Rank FY06	Rank FY05
1.	Travel Demand Forecasting Self Instructional CD-ROM	132	1	1
2 Tied (T).	Creating Synthetic Baseline Populations	12	4	10
2T.	Model Validation and Reasonableness Checking Manual	12	2	7
4.	Land Use Forecasting Case Studies: A Synthesis and Summary	9	6	n/a
5T.	Data Collection and Modeling Requirements for Assessing Transportation Impacts of Micro-Scale Design	7	8	8
5T.	Third Oregon Symposium on Integrating Land Use and Transport Models (CD)	7	5	3
7T.	TRANSIMS – The Dallas Case Study	6	n/a	n/a
7T.	Time-of-Day Modeling Procedures, State-of-the-Art, State-of-the-Practice	6	6	n/a
7T.	Integrated Transportation and Land Use Forecasting: Sensitivity Tests of Alternative Model Systems Configuration	6	3	2
7T.	Travel Survey Manual Appendices	6	8	13
7T.	Scan of Recent Travel Surveys	6	n/a	n/a

There were approximately 1300 newsletter subscribers at the end of FY 07. Additionally, the Web link to the newsletter is distributed electronically through the TMIP email list and FHWA planners, and notification is sent to our partners for mention in their newsletters.

Goal Two: “To develop and improve analytical methods that respond to the needs of planning and environmental decision making processes”

To achieve Goal Two, the following series of objectives were employed:

- Identify current and emerging analytical needs;
- Develop tools, techniques, procedures to meet analytical needs;
- Conduct basic research to meet analytical needs; and
- Assess goal performance and obtain customer feedback.

Under these objectives a number of initiatives were deployed; the development and dissemination of TRANSIMS, the development and dissemination of TELUS, a peer exchange on the ACS, continuing work on data transferability, and the production and dissemination of this annual report.

TRANSIMS

TRANSIMS research efforts in FY 07 focused on developing and testing templates for microsimulation studies.

Developmental

Portland, Oregon – Completed work on trip-based application of the router and microsimulator. Demonstrated an initial capability for microsimulating highway tours. Shared findings on difficulties with microsimulating transit tours based on aggregate choice models. Began development of improved procedures for microsimulating transit systems. Continued development of TRANSIMS 4.0.

New Orleans – Awarded in 2006, use of TRANSIMS to evaluate multimodal evacuation plans for the New Orleans area. The Louisiana State University (LSU) team developed an integrated network model from the existing southern and northern models used by New Orleans Regional Planning Commission and added highway networks to Baton Rouge. The LSU team, with the University of New Orleans, began development of a synthetic population to evaluate household-based evacuation models.

Case Studies

Buffalo – Started in 2006, using TRANSIMS to simulate cross-border truck flows in conjunction with background auto traffic.

Burlington – Awarded in 2006, using TRANSIMS to estimate the impacts of bottleneck removal and transportation systems management improvements for a small urban area.

Chicago – Scoped in 2006, using TRANSIMS as the model to estimate the movement of people, auto and transit vehicles in an evacuation of the downtown loop in response to a hazardous plume released in the vicinity of the Sears Tower. This effort began adapting TRANSIMS methods to model the transport-related impacts of no-notice incidents. This study is funded by Illinois Department of Transportation and the Department of Homeland Security.

Based on the solicitation for new TRANSIMS applications in the spring of 2007, the following projects were selected. Contracts were awarded at the end of 2007 and work will begin in 2008.

Atlanta – Awarded at the end of 2007, the team of GRTA, AECOM, ARC, and GADNR, will use TRANSIMS as the source of daily vehicle activity and vehicle trajectories to estimate mobile source emissions for the Atlanta area using MOVES and MOBILE6.

Des Moines – Awarded at the end of 2007, a team led by Cambridge Systematics will use TRANSIMS to evaluate potential applications for a small urban area.

Minneapolis – Awarded at the end of 2007, a team led by Citilabs will use TRANSIMS in a before-and-after study of the Hiawatha light rail line.

Methods Research Projects

Visualizer bridge at Balfour: Develop a tool to simplify the transfer of data from the TRANSIMS microsimulator and other modules to various visualization tools.

Travel Time Reliability Post Processor at Georgia Tech: Evaluate travel time reliability concepts within TRANSIMS and develop tools for applications.

VII (Vehicle Infrastructure Integration) Concepts at Oakland University (affiliated researchers): Explore modeling of intelligent vehicle-highway interaction concepts using TRANSIMS

Simulation Validation & Calibration at University of Virginia: Explore and document procedures for calibrating and validating simulations such as TRANSIMS.

Pricing at Virginia Polytechnic: Use TRANSIMS to evaluate pricing models using Portland, OR, as a case study.

TELUS

Yet more agencies have adopted TELUS. Since July 1, 2006, 14 agencies became first-time registered users of TELUS, including six MPOs and three state departments of transportation (DOTs). There are now 224 MPOs registered as users and 31 DOTs; with more than 60 MPOs using TELUS for TIP development. In FY 07, an e-STIP approval module for Federal Transit Administration (FTA) Region 2 to link to an existing application at FHWA-NY was established. This application enables an integrated and seamless TIP/STIP process between state and federal approval agencies. FHWA has executed a new cooperative agreement with New Jersey Institute of Technology, per SAFETEA-LU, to continue the development and deployment of TELUS.

American Community Survey (non-TMIP)

A Peer Exchange entitled “Using ACS in Transportation Planning Applications” was held in May, 2007, in Daytona Beach. Participants included representatives from American Association of State Highway and Transportation Officials (AASHTO), State DOTs, MPOs, academia, private sector, the U.S. Census Bureau, and U.S. DOT. The Peer Exchange was an opportunity to share new experiences using ACS data products and to discuss expectations from the Census Transportation Planning Package using the ACS sample in the AASHTO consolidated purchase. Small area home-to-work flow data from the ACS are seen as the main value of the next CTPP. To read a report on this Peer Exchange, visit: http://www.planning.dot.gov/Peer/Daytona/daytona_2007.htm.

NHTS Transferability Project

Transferability refers to the transferability of the 2001 NHTS results to the regional or local level. The Transferability methodology provides estimates of regional or local travel, including vehicle trips (VT), vehicle miles of travel (VMT), person trips (PT), and person miles of travel (PMT) by trip purpose. NHTS Transferability is a GIS-based tool that enables users to download trip statistics for selected Census Tracts and Transportation Analysis Zones (TAZ). Outputs are in Excel spreadsheet and ESRI shape file formats. The project was completed. For more information see: <http://nhts.ornl.gov/tools.shtml>

Goal Three: “To develop mechanisms to ensure the quality of technical analysis used to support decision-making and to meet local, state, and federal program requirements”

A combination of studies, tools and technical support comprises the fulfillment of this goal. The National Academy of Science (NAS) report on metropolitan travel forecasting, technical support for the Environmental Protection Agency’s Motor Vehicle Emission Simulator, the certification checklist for forecasting, and direct technical help and special studies are all parts of quality assurance.

NAS Study

Released in FY 07, TRB SR 288, examines metropolitan travel forecasting models that provide public officials with information to make decisions on major transportation system investments and policies.

The report states that the shortcomings of models are related to inherent weaknesses and poor technical practice. To correct these weaknesses, the report explores what improvements may be needed to the models and how federal, state, and local agencies can achieve them.

TRB SR 288 was sponsored by the USDOT Office of the Secretary, FHWA and FTA. Its purpose was to determine the state of the practice in metropolitan travel forecasting; identify technical shortcomings of the models for their intended uses; and to recommend actions needed to ensure appropriate technical processes are being used.

The implications for TMIP are significant, as chief recommendations of TRB SR 288 include the call for the establishment of a National Travel Demand Forecasting Steering Committee and the development of a handbook of travel model practice and increasing funding for travel model improvement many fold.

To read the report in its entirety, go to: <http://onlinepubs.trb.org/onlinepubs/sr/sr288.pdf>.

Technical Support for MOVES Development

In 2007 the EPA announced a change in the scheduled implementation of MOVES. TMIP began discussions with EPA regarding the sensitivity testing of the MOVES model in order to begin to prepare a comparative analysis effort among MOVES, MOBILE6, microsimulation models and static assignment models.

Certification Checklist for Travel Forecasting Methods (non-TMIP)

FHWA has been using the checklist for the last two years in conducting certification reviews. The checklist has proven very helpful to this process. By using the checklist, reviewers are able to assess the initial ‘health’ of the travel models without getting involved in lengthy and detailed technical analyses. MPO staffs have commented that the checklist provides support and justification for budget requests for improvements to travel models. The checklist does not substitute for an in-depth analysis of a model or a peer review. However, the checklist does provide an initial diagnostic to determine whether a detailed model review is required. To access the checklist go to: <http://www.fhwa.dot.gov/planning/certcheck.htm>.

Project Level Technical Assistance (non-TMIP)

The FHWA Resource Center Planning Team has provided technical assistance and input on project level forecasts for NEPA and local project studies. Illustrative projects include major interchange projects, major capacity expansions in urban interstate corridors, and local roadway widenings to support major traffic generators. Specific technical issues have included: (i) sufficiency of model validation efforts; (ii) adequacy of adopted analytical approach for capturing economic and secondary/cumulative impacts of capacity-enhancing projects; and (iii) review of model outputs for reasonability.

The Planning Team has provided technical assistance — in consultation with the FHWA division offices — for project analyses conducted in the following states:

- Nebraska (2007 – ongoing)
- Michigan (2006 – ongoing)
- Wyoming (2007)

Special Studies (non-TMIP)

A number of state and local agencies have studies underway to refine existing analytical methods, implement travel surveys, or develop new methods. For example, the Planning Team has recommended model validation strategies to consider in model updates, techniques to consider in home-interview survey design to ensure data integrity, and provided exemplary model documentation reports for local agencies on request. The Planning Team also supports the implementation of simulation methods and emerging practices that shed light on the effectiveness of operations strategies — such as TRANSIMS and Dynasmart.

The Resource Center Planning Team has supported planning studies in:

- Oklahoma City (Association of Central Oklahoma Governments) (2007)
- Indianapolis (Indianapolis MPO) (2007)
- Bellingham (Whatcom) (2007)
- Vermont (Vermont Department of Transportation) (2007)
- Tennessee (Tennessee Department of Transportation) (2006-2007)
- Southern California (Southern California Association of Governments) (2007 – ongoing)
- Atlanta (Atlanta Regional Council/Georgia Regional Transportation Authority) (2007 – ongoing)
- Raleigh (North Carolina Department of Transportation) (2007 – ongoing)

Training (non-TMIP)

The Resource Center Planning Team has responded to technical assistance requests from state DOTs through the delivery of specialized workshops on travel forecasting. Training issues have included topics ranging from introductory workshops on travel models to statewide modeling practices and ‘off-model’ sketch planning applications.

The Resource Center Planning Team has supported technical assistance/training sessions for the following state DOTs (in consultation with FHWA divisions):

- Colorado DOT (2007)
- Wyoming DOT (2007)
- Virginia DOT (2006)

LESSONS LEARNED AND FUTURE DIRECTIONS

FY 07 was a pivotal year for both TMIP and the travel forecasting profession generally. With respect to TMIP, the mentoring program and the E-Mail list technical summaries were initiated. Through these programs TMIP enabled the travel forecasting community to develop closer connections. TMIP also began a series of webinars on various technical topics, taking greater advantage of web technology to deliver the program. TMIP continued the TRANSIMS deployments with the identification of three additional applications.

The major impact on travel forecasting in both the intermediate and long term came from TRB SR 288. This report identified major shortcomings in travel forecasting, both with respect to current practice and fundamental model capability. The report, identifying actions to be taken at the Federal, state and local levels, called on the travel forecasting community to move forward to address these issues. TMIP will respond to this call and work with agencies at all levels to move modeling forward. To that end TMIP began discussions with TRB to create a national travel forecasting steering committee; and began to plan to document and disseminate exemplary practices of travel forecasting. In the immediate term TRB SR 288 prompted FHWA to provide more resources to strengthening travel modeling.

Appendix: TMIP Funding

Enactment of TEA-21 in 1998 drastically changed the funding of FHWA's research programs, severely curtailing TMIP activities the first few years of the Act. This trend continued throughout both FY 04 and FY 05 due to continuing resolutions in lieu of reauthorization. The continuing resolutions did not include additional funding for TRANSIMS during 2004 and 2005. SAFETEA-LU was passed toward the end of fiscal year 2005.

In FY 06 and FY 07, Surface Transportation Environment and Planning Cooperative Research Program (STEP) provided the primary source of funding for TMIP activities. Separate funding for TRANSIMS was provided by specific funding allocations in SAFETEA-LU. TMIP experienced a windfall of special discretionary funds in FY 07 chiefly as a result of TRB SR 288.

