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It is time to update the Florida Transportation Modeling mailing list!

IMPORTANT NOTICE: If you want to continue receiving the *Florida Transportation Modeling* newsletter, or if you would like to receive the FSUTMS documentation CD-ROM, please mail or fax back the form on page 10 of this issue.

FSUTMS interactive documentation available

by Terrence Corkery, AICP, FDOT Systems Planning Office

Version 1.0 of the Florida Standard Model (FSUTMS) interactive documentation is ready for general distribution. The FDOT Systems Planning Office is releasing the manual in electronic format on CD-ROM. The compact disc will contain the Adobe

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Acrobat Reader program, enabling users to view the modeling documentation files, which will be provided in portable document format (PDF). The electronic medium will ease distribution and allow a voluminous array of model-related documentation to be incorporated into one comprehensive package:

Fifteen FSUTMS Technical Reports

- 14 FSUTMS modules plus one overview document
- scanned images with text search capability

GEN Operational Manual

- based on technical report, with more examples and illustrations added
- formatted to computer screen dimensions
- thumbnails of figures and tables (click to view)
- hypertext links within document, to the glossary, and to other documents
- pop-up definition boxes for input data illustrations separate printable version on 8½ x 11 pages
- 14 more to be completed for future versions of documentation CD URBAN/SYS TRANPLAN manual

Model Update Task Reports

<u>Historical documentation from 1970's and</u>

1980's

Future releases of the FSUTMS documentation CD may also contain several more documents to provide a complete library of modeling manuals, including FHWA's guide to Urban Transportation Planning and archived UTPS manuals.

How to order.

The FSUTMS on-line documentation CD will be distributed free of charge everybody on the Florida Transportation Modeling newsletter mailing list. important to note, however, newsletter mailing list is currently being updated (see notice above). To remain on the mailing list, recipients must fill out the form on the back page of this issue and return it by mail or fax. The form will be used as an indication of both your desire to remain on the mailing list and whether you wish to receive a copy of the FSUTMS documentation CD-ROM. The form will also provide the opportunity for corrections in name spellings, addresses, and phone numbers.

Jacksonville urbanized network gets a GIS-TM facelift

by Imran Ghani, Florida Department of Transportation-District Two

Editor's note: FDOT District 2, working with the Jacksonville MPO model, has succeeded in becoming one of the first field implementation projects of the new GIS-TM (Geographic Information Systems for Transportation Modeling) program developed by the FDOT Systems Planning Office. District Two's quick turn-around on the project illustrates the ease by which GIS-TM integrates FSUTMS and Arc View.

The HNET (highway network) model of FSUTMS is designed to build a highway network from a number of user-supplied files. The HNET model requires a minimum of five user-supplied files including PROFILE.MAS, XY, LINKS, SPDCAP, and TCARDS files (A TOLLLINK file is needed if there are toll facilities in the network). The XY file contains the X-Y coordinates of all the nodes in the network usually in a specific scale in terms of coordinate units per mile. The coordinates are usually obtained by digitizing points from a reference basemap. Recently, digitizing points has been replaced by extracting coordinates of

operating system.

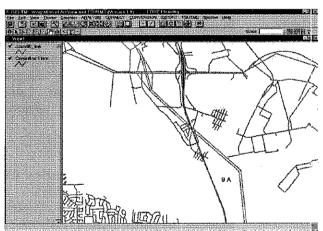
The advent of GIS-TM has allowed FSUTMS users to import the highway network as a shapefile and compare it with a GIS reference basemap. It is very important that the highway network accurately reflect the position and curvature of roads in the study area because travel time between nodes is determined by calculating the distance between nodes and dividing it by the speed of the facility between them. Inaccuracies in the highway network result in incorrect distance being calculated and hence this produces skewed travel times.

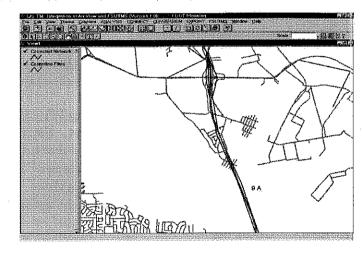
TRAVEL TIME = DISTANCE / SPEED

In order to determine the accuracy of the Jacksonville network, District Two looked at several different sources for reference street basemaps including TIGER/Line 95, ETAK and City of Jacksonville Street Centerline files. TIGER/Line 95 files were rejected because of kinks in the network and the fact that the roads were digitized at a scale of 1:100.000. It was felt that a more accurate

used to generate arc and node shapefiles from LINKS and XY files. The arc and node shapefiles were then converted to coverages using ARC/INFO and reprojected to match coordinate system/zone/units/ same datum as the centerline files. The three themes were then added to a single view in ArcView. At first glance, there appeared to be a good match between the highway network and centerline files. This confirmed that the coordinates per unit mile value entered in PROFILE.MAS was correct. Further examination of the overlay at a scale of 1:7000 revealed a lot of minor discrepancies. These discrepancies can be categorized into four different types.

1. Links added to the network after digitizing. As expected, these links showed the greatest deviation from actual positions. Many of the links were added based on information provided in CAD/survey plans. While these plans indicated the location of





nodes from TIGER/Line 95 files in District Two.

Once the coordinates of the nodes had been entered into an XY file, no effort was made to check the accuracy of the digitizing process by overlaying the FSUTMS highway network on top of other GIS basemaps or CAD maps. This was primarily because GIS desktop programs were not available at that time and major GIS programs like ARC/INFO required the user to have extensive knowledge about its command structure and were only available on a Unix

road network should be used as the basemap. ETAK and Street Centerline networks both provided a higher degree of accuracy and included the left/right address range on almost every block. The Street Centerline files were chosen as the basemap because the City of Jacksonville GIS Department had set up 300 control points while digitizing the centerline files and this increased the accuracy of the network. The centerline files are also being corrected on a continuous basis from aerial photography.

Once the basemap was selected, GIS-TM was

intersections/interchanges, the location of intermediate nodes was left to the modeler to interpolate.

Failure to follow the curvature of the road. In many instances curved roads were represented by a single straight link. This problem was easily corrected by breaking the link into smaller links and moving the nodes on top of the existing road so the network followed the curvature of the road. (Adding additional nodes will require that TCARDS,

Jacksonville urbanized network gets a GIS-TM facelift continued

TROUTE and other transit files depending on your model area will have to be recoded).

- 3. Usual errors associated with digitizing. Many nodes were consistently shifted east which was probably due to the unintentional movement of the basemap or hand while digitizing. Nodes which were off by centimeters in digitizing units were actually off by hundreds of feet in real-world coordinates.
- Incorrect coding. Many loop/ trumpet interchanges were incorrectly coded as

diamond interchanges.

It took a total of two days to correct the Jacksonville network. Nodes representing intersections in highway networks were placed on top of centerline intersections. Ramps, one-way streets, arterials and limited access freeways were aligned to match the centerline files. GIS-TM includes several options customized to fit modeling needs including the ability to make changes to the network and export these changes to an FSUTMS file format. At this time, no comparison has been made between volumes

on the original network and the corrected network. This was because the original network's SPDCAP files and other files were adjusted during validation and therefore, it is impossible to isolate the effect of aligning the network from the validation effort. It is our hope that a comparison between the two networks can be made before any files are adjusted as part of 1995 validation. Either way, an accurate network should be the goal of every MPO/county model.

If you have questions call Imran Ghani at (904) 381-8695.

A Simple Travel Market Analysis Tool Using FSUTMS and GIS

by Brian C. Fowler, P.E., Vanasse Hangen Brustlin, Inc.

Corridor studies must inherently address the for a particular corridor accommodate certain travel demands. These travel demands can further be segregated and considered as a series of "travel markets." An example of a travel market served by a corridor would be the commuter traffic using the corridor, related by individuals who reside in one defined geographic area, and work in another. Other travel markets might include shopping, recreational and commercial traffic, each of which may be related to different geographic areas, and create unique travel demands in the corridor. The identification of travel markets can be a key resource in "problem identification."

In fact, the identification of travel markets is discussed extensively as a crucial step in Chapter 4, "Definition of the Problem," of the MIS Desk Reference. It is concluded in this chapter that "Clearly, the identification of specific travel markets that contribute to a problem should be an early component of the information expected from the travel forecasting task in an MIS." This concept is applicable to any level of corridor study, but can be particularly informative when transportation control measures, HOV transit treatments are to be considered in the alternatives development phase.

GIS software provides an excellent tool for displaying travel markets as estimated by a travel demand model. To accomplish this, the information must first be extracted from the travel demand model, then effectively displayed using the GIS. This article describes a procedure for this process using TRANPLAN.

A travel market can be represented by the locations of the ends of the trips using the corridor, graphically depicted by traffic analysis zone (TAZ). The trips using particular corridor can be identified using select-link analysis. In detail, a step-by-step process which can used is as follows:

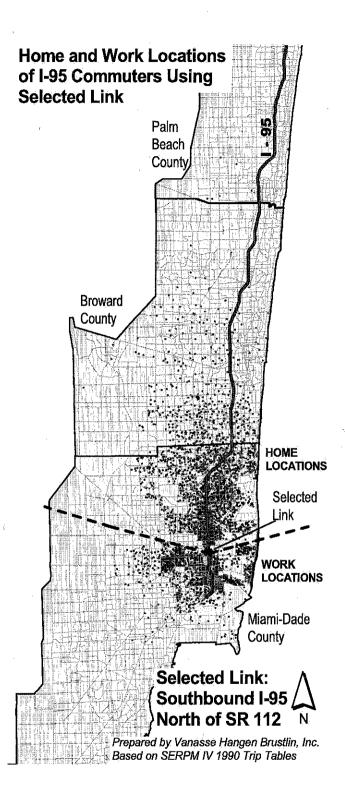
- Identify select-link set (or series of sets for multiple market evaluations) that would identify trips of interest. The select link set could consist of one or more links in one or both directions, using any or all links of the set. Perform assignment using "Selected Links" parameter (One or Two Way) and identified links, generating SELHIST file.
- Perform "Build Selected Link Trip Table"
 using SELHIST file and trip table of
 choice, to create "Travel Market Trip
 Table." Create "Zonal Trip End" files from
 the Travel Market Trip Table using the
 TRANPLAN utility program IZANDPAS
 (using a TRANPLAN trip table as input,
 this program outputs separate ASCII files
 containing zonal productions/origins and
 attractions/ destinations).
- Convert the Zonal Trip End files to a linkable file format (a file that can be linked to the GIS TAZ map). One way is

- to import them into Excel, and then save them as dBase files.
- Link the Zonal Trip Ends files to the GIS TAZ map.

Display the trip ends using the capabilities of the GIS. The use of a dot-density theme is recommended. Many different variations of travel market representation can be produced. The simplest would be to plot the origins and destinations of all trips using the corridor. With a little more effort, however, the results can be much more informative. Perhaps the best way to increase the usefulness of the information is to separately identify trips in each direction through the corridor, and trip tables from extract the production/attraction trip tables. In this way, the characteristics of home and attraction location can be isolated, an important distinction in truly evaluating travel demand.

An example of such a graphic is provided. This graphic was produced using a Home-Based Work trip table from the SERPM IV model in production/attraction format, thereby denoting the home and work locations of commute trips. The Travel Market Trip Table was created using a selected link on southbound I-95 in Miami-Dade County, just north of SR 112. The graphic was created using ArcView, originally in color, with home locations denoted in green (productions), and work locations in red (attractions). The use of color makes it very easy to interpret the graphic.

A Simple Travel Market Analysis Tool Using FSUTMS and GIS continued



This particular graphic was created for work on the I-95 HOV Systems Plan being performed by VHB for FDOT District IV. It illustrates the relative concentration or dispersion of both work and home locations of commuters using I-95, an important characteristic with respect to the potential market for carpooling.

Creating these graphics is relatively inexpensive, and it can be extremely informative. Not only can the user easily "see" the market behind the travel demand, but he may also identify areas of poor model performance that may warrant attention during the travel forecasting process, much more readily than with traditional methods. Strong consideration should be given to developing this type of information in conjunction with any corridor study. They are particularly valuable toward ascertaining the applicability of alternative facilities/corridors, and toward the identification of transit alternatives.

The process can also be used to identify the travel market associated with a specific geographic area, rather than a corridor, such as a Central Business District or DRI. The Travel Market Trip Table would simply be created for a specific zone or group of zones, rather than for selected links, and the remainder of the process followed.

Spotlight on GEN:

Enhancements studied for trip generation model step

by Jeanette Berk, Advanced Planning, Inc.

This article is first in a new series of write-ups that will focus on one of the modules within the FSUTMS model stream. It discusses some of the efforts on-going in Florida as well as some of the recent research activities in the United States. Should you want to obtain more information on these research activities, please contact Jeanette Berk at Advanced Planning, Inc at (352) 475-2249.

Trip Attraction Equation Refinements Study undertaken by District 4

As we all know, the Florida Standard Urban Transportation Model Structure (FSUTMS) uses industrial, commercial, service and total employment and school enrolment as trip attraction variables. The standard trip attraction equations, using these variables, were developed in the early 1980s for statewide use. The coefficients of these variables can be localized to improve model accuracy. However, this has rarely been carried out and almost all the models in Florida use the state's default coefficients. Recent enhancements to District Four's trip generation module, including lifestyle trip production variables and the inclusion of independent school trip and truck trip purposes has created the need in District Four to review and refine the standard trip attraction equations and their coefficients.

Spotlight on GEN:

Enhancements studied for trip generation model step continued

District 4 just recently started the nine-month study, which promises some interesting findings.

Survey of Trip Attraction Rates and Models conducted by District 7

District 7 completed a four-week research effort to locate recent trip generation studies for trip attraction activities in Florida and other areas in the nation which might have relevance for the Tampa Bay area. The research effort also included identification of trip attraction models used elsewhere in the nation that could have significance for the Tampa Bay area.

The majority of the available trip attraction rate data in Florida is being collected by local governments and Regional Planning Councils as part as their Development of Regional Impact (DRI) monitoring effort or to administer their impact fee ordinances. The data gathered is typically for the PM peak period and focuses on the trip rates and lengths during that period. The majority of DRIs in Florida are a combination of employment centers and dwelling units. The way the trip data are obtained from the DRIs, trip attraction rates cannot be separated from trip production rates.

Outside the state of Florida, three major research efforts were identified. Research is being conducted by the Metropolitan Washington Council of Governments, the Houston-Galveston Area Council and the North Central Texas Council Governments. Extensive workplace surveys have been conducted by the Houston-Galveston Area Council. As a result of the surveys, trip attraction rates have been stratified not only by employment types but also by such factors as area types and trip purposes.

Studies on the national agenda

Nationwide, the attraction side of the generation model has not received as much attention as home-based trip generation, and techniques that have been used are generally less sophisticated. Typically, simple cross-classification or regression schemes are used to relate non-residential trip making to various attributes of the land uses from which those trips are produced, or to which they are attracted. Following are some research activities that might be of interest to us all.

Telecommunications for All Trip Types in an MPO Transportation Model

by: John Niles (Global Telematics) & Ellen Williams (Ellen Williams & Associates, Inc.)

Voice. data. and video telecommunications usage are growing rapidly for all kinds of service delivery, including government, education, banking and brokerage, health &, retail shopping, real estate, and tourism. Teleservices delivered via telemarketing centers, teller machines, kiosks, web sites, wired classrooms, video conferencing rooms. telemedicine networks change the patterns of customer movement as surely as teleworking changes patterns of commuting and business meetings for workers. Telecommunications is both a substitute for travel, and a stimulant of travel.

Local government transportation planning still mostly assumes that the impact of telecommunications on travel is neutral, because planners cannot yet sort out what the impacts are and how they should he included in the typical four-step travel model.

The authors have begun to address telecommunications impacts on travel and travel modeling in an ongoing series of projects, beginning with the Metropolitan Planning Organizations (MPO) serving metropolitan Seattle-Tacoma and Southern California. Telecommunications has the potential to change the volume destination, length,

routing, and mode of trips. Ways of inserting telecommunications into models include the unsatisfactory alternatives of making telecom a "mode of travel," or assuming that it is already implicit in properly calibrated trip generation tables.

Studying emerging applications of telecommunications in the same way telecommuting has been studied to discover the prospect for dramatic, policy-driven future changes in trip generation rates and in origin-destination tables seems more productive. The results of these studies could then be used to modify the appropriate steps in existing and future transportation models. This is the essence of the Southern California Telecommunications Deployment Strategy, an officially adopted policy of this sixcounty urban region.

Analysis of Trip Chaining Related to the Work Trip

by: G. Giuliano and W. Recker Support: U.S. Department of Transportation and California Department of Transportation

Work-related trip chaining (linking of individual trips into a single tour) is increasing. This has resulted in trips that are shorter and have air quality benefits, but are also more peak-oriented and auto-dependent. This project uses data the Nationwide Personal Transportation Study (NPTS) examine trip chaining related to the work trip. The purpose of the research is to analyze the social, economic and demographic factors associated with work trip chaining.

This will contribute to a better understanding of work-related private vehicle use and the difficulties involved in attempting to reduce private vehicle use and to increase carpooling and transit use.

Spotlight on GEN:

Enhancements studied for trip generation model step continued

Application of Activity-Based Household Travel Analyses to Study the Impact of Transportation Policies and Neighborhood Characteristics on Accessibility

by: Will Recker and Thomas F. Golob Support: U.S. Department of Transportation and California Department of Transportation

Generic algorithms have been successfully used to solve the household activity pattern problem (HAPP) of analyzing and predicting the optimal path of household members through time and space as they complete a prescribed agenda of activities. This project will incorporate a behavioral structure in the mathematical procedure that optimizes household activity/travel and will demonstrate paths. application to policy-sensitive travel demand situations using travel/activity information drawn from households in the metropolitan Portland, Oregon, area.

The data will provide rich insight into the impacts of transportation policy and neighborhood characteristics on accessibility. It will also provide a comprehensive framework for understanding and predicting such higher-level travel decisions as activity substitution, transfer of accessibility to other members of the household via carpooling, and trip chaining.

Activity-Based Assessment of Trip Generation and the Temporal Stability of Travel Patterns

Investigator: Michael G. McNally
Support: U.S. Department of
Transportation and California
Department of Transportation

Activity-based analysis provides a Promising policy-sensitive alternative to conventional transportation modeling. This project will develop and refine an activity-based approach to trip generation modeling. The activity-based approach will be used to develop new models and to assess the temporal stability of individual and household travel/activity patterns over time.

The research will use two extensive data bases: an Orange County, California, data base composed of conventional trip diaries and GIS-based land use and transportation data (1976 and 1991); and a Portland, Oregon, data base composed of two-day activity diaries and extensive GIS-based supporting data (1985 and 1994). This information will be used to generate and classify daily activity patterns for each data set, and to develop and evaluate an activity-based trip generation model which reflects the influence of accessibility and maintains spatial and temporal linkages in travel behavior.

Activity-Based Evaluation of Travel Characteristics in Alternate Land Development and Network Structures

Investigator: Michael G. McNally
Support: U.S. Department of
Transportation and California
Department of Transportation

This research applies an activity-based approach to investigate fundamental characteristics of travel behavior. The approach integrates household activities, distributions, land use regional demographics, transportation and framework which networks in a explicitly recognizes the complexity of travel behavior in terms of spatial and temporal constraints, household interactions and transport accessibility.

The research will utilize two extensive

data bases: an Orange County, California, data base composed of conventional trip diaries and GIS-based land use and transportation data (1976 and 1991); and a Portland, Oregon, data base comprised of two-day activity diaries and an extensive supporting activity data base (1985 and 1994). These data sets will enable a comparative assessment of the relative contributions of external factors, especially land use and network structure, to travel behavior in each region.

Activity-Based Spatio-Temporal Measure of Accessibility for Transit and Automobile Modes

Investigator: Will Recker
Support: U.S. Department of
Transportation and California
Department of Transportation

A previous project incorporated a behavioral structure in a mathematical procedure that optimizes household/ travel activity paths, and demonstrated its application to policy sensitive travel demand situations among households in Portland, Oregon. This led to the specification of a spatio-temporal measure of accessibility and quantified improvement in this measure for personal auto travel.

The current project will extend the modeling system, and its application to Portland, to include public transit modes. This will help identify the potential of public transit to provide accessibility for those activities which Portland residents actually perform. Tests will be conducted to assess the effectiveness of a variety of transit options for this population group. Another portion of the research will refine and complete the incorporation of revealed behavioral relationships in the modeling system.

Model Task Force:

GIS Subcommittee approves new network display options

by Vidya Mysore and Terrence Corkery, FDOT Systems Planning Office

The GIS Subcommittee has been working energetically since the Model Task Force last met in October. Among its accomplishments, the subcommittee has completed its initial evaluation of two new software packages for displaying and editing model networks: GIS-TM and VIPER. Both of the new programs show promise of far exceeding the usefulness and user-friendliness of the HNIS program currently employed by most FSUTMS modelers. The GIS-TM program integrating ArcView and FSUTMS was developed by the FDOT Systems Planning Office, and was distributed to the public beginning in March. VIPER is a product of the Urban Analysis Group, software developer of TRANPLAN and FSUTMS. The FSUTMS-compatible version of VIPER is still in its final development stages.

Teleconference Meeting Held

The GIS Subcommittee, under chairman Glen Ahlert of the Lee County MPO, held a teleconference meeting on March 26, 1998, to discuss the ongoing evaluation of VIPER and the development of future enhancements for GIS-TM. During the meeting, a discussion was held about increasing the number of members, specifically consultants. Currently, there are 2 MPOs, 5 FDOT districts, and 3 consultants represented in the subcommittee. Anyone can

participate in a meeting, and is encouraged to do so. Only official members, however, are permitted to vote on decisions and recommendations to the Model Task Force. It was stated that a few telephone lines should remain open, allowing invited guests to participate. Also, public sector members should maintain a majority in the subcommittee.

Evaluating VIPER

The subcommittee was updated about the status of the Urban Analysis Group's VIPER The Systems Planning Office completed an internal evaluation of VIPER earlier this year. During negotiations with FDOT to renew the statewide FSUTMS maintenance contract, UAG offered to replace HNIS with VIPER as the network editing and display tool in the FSUTMS package. This means that VIPER will be enhanced to the point where it exceeds the capabilities of HNIS. VIPER's immediate needs include adding capabilities such as turn prohibitors, find node, and multiple link annotations, features that HNIS already has. FDOT will distribute VIPER to public sector FSUTMS users (with the exception of universities, which will no longer be categorized as government users for VIPER). During an interim period, FSUTMS

program diskettes will contain both HNIS and VIPER, allowing users to transition to the new network display program.

Phase II of GIS-TM

Two major issues will be the focus of GIS-TM's phase two software development: conversion of Lifestyle ZDATA and incorporation of transit network and route data.

Conversion of transit networks is already underway. The Systems Planning Office has sent subcommittee members copies of the Roadway Characteristics Inventory (RCI) database dictionary. Subcommittee members are currently reviewing the 250 tables contained in the RCI database, selecting which tables are relevant to traffic modeling. The goal is to link the RCI database to the street networks using GIS-TM. Since street networks are based on dynamic segmentation, users will be able to import individual tables based on milepost numbers.

Questions about the Model Task Force's GIS Subcommittee may be addressed to Vidya Mysore at 850-922-0444, vidya.mysore@dot.state.fl.us

Model Task Force:

Freight Subcommittee studies truck model

by Huiwei Shen and Terrence Corkery, FDOT Systems Planning Office

The Model Task Force Freight Subcommittee, under chairman Frank Baron of the Miami-Dade MPO, held a meeting at the FDOT Orlando Urban Office on April 21, 1998. The meeting was held to hear a presentation on a new truck model under development and to discuss progress in incorporating freight modeling into FSUTMS.

Port Area Truck Model in Progress

Dr. Al-Deek and his staff from the University of Central Florida Transportation Systems Institute gave a presentation on a Port Truck Freight Model they are developing for the Department's Public Transit and Rail Office. Phase one of this in-progress study, which focuses on truck trip generation characteristics at the Port of Miami, will be completed in a few months. Mr. Gene Johnson, with UCF, covered the data collection methodology for this study. He explained that cargo coming in and out of the port has been reported in twenty-foot-equivalent units (TEUs) as well as total tonnage. Gene briefed the subcommittee on the facilities and operations the three major shippers located at the Port of Miami have onsite. This topic sparked a lengthy discussion on methodologies to determine the origin and destination of freight trucks and the usefulness of this information to the Department and the

MPOs in their modeling efforts. Dr. Al-Deek explained that this was outside his current scope of work, but it would be a logical future phase.

Mr. Ashraf El-Maghraby, also with UCF, briefed the subcommittee members on the statistical analyses performed in this study. The proposed truck trip generation equations have not been tested yet. However, the UCF team is currently studying a list of variables to determine which ones are statistically significant enough to be used in the final model.

Model Task Force:

Freight Subcommittee studies truck model continued

Dr. Al-Deek wrapped up the presentation by discussing the proposed model structure, which he stressed was still under development. The model structure will change to reflect the final selection of variables used. Discussion continued focusing on the proposed variables.

Subcommittee members responded that the UCF study is a positive first step in developing a freight component of FSUTMS. The subcommittee identified the need for this study to address a longer time horizon. Also, total vehicle trips should be categorized into productions and attractions, or at least origins and destinations. Since each Florida port is unique, the developed model should be applied elsewhere for validity testing. The multimodal aspect of freight movement is also an issue. The model being developed by Dr. Al-Deek is a trip generation model. To forecast freight traffic adequately, a mode split module is needed. There was also a concern about whether the data collected during this study would be applicable for future forecasts.

Mr. Warren Merrell, manager of the Systems Planning Office, stated that the Florida Senate is considering a bill which advocates creating additional port plans, an indication that this issue is here to stay. Mr. Merrell said that over the coming months as this issue begins to take shape, he and his staff will keep the subcommittee current.

Updates on Freight Planning throughout Florida

In response to the Federal Highway Administration desire to see some level of freight planning in the next round of Long Range Transportation Plan (LRTP) updates, the FDOT Systems Planning Office has developed a draft report to the Statewide Model Task Force on freight modeling and forecasting techniques. Systems Planning is awaiting additional feedback on this report

both from the Department and the subcommittee. A statewide approach may be needed to model freight since most freight comes from and goes to locations outside the state. A recent study indicated that Texas is a major freight destination from Port Canaveral. The subcommittee and Model Task Force need to coordinate with FDOT management to ensure further study on this matter.

The members present each gave a brief status report on freight planning efforts in their areas.

Orlando has created a Freight Mobility Committee to develop a short-term operational plan. The goal of this committee is not to develop a model but to be responsive to the freight movers' operational needs.

Jacksonville's efforts are currently centered around sketch planning techniques.

The Sarasota/Manatee MPO has a freight committee working in conjunction with the MPO on developing a freight study with a 3-to 5-year time horizon. There is one road in the Sarasota/Manatee area designated as a truck route. The freight modeling methodology is going to be based largely on the federal Quick Response System (QRS).

The Hillsborough MPO currently has four freight-related projects in progress, including a truck route plan, a goods movement study, and an update of the port master plan.

A Miami-area freight committee was established with members from the public and private sectors. The focus of this committee is short-range operational improvements. A scope of services is under development for a travel survey, which will consider movement of freight through the area. This effort is being funded jointly by the MPO and FDOT at approximately one million dollars.

The discussion shifted to airports and other intermodal terminals, which exhibit very different behavioral characteristics. Land use and airport planning need to be included as part of the freight planning process. The discussion then expanded to freight modeling in general. There is a need to integrate freight special generators into existing models, both at the local and statewide levels. At the statewide level, the FIHS network, which carries the majority of freight traffic, would be a good network to use.

New Budgeting Issues

The Systems Planning Office briefed the subcommittee on the new budgeting issues concerning all state agencies and their potential impacts. FDOT will be focusing more on project applications than operational programs. It was suggested that the subcommittee and the MTF should begin to brainstorm future project ideas. These projects could be discussed at the next subcommittee meeting and a final list could then be presented to the MTF.

Suggestions for next meeting

Subcommittee chairman Frank Baron suggested holding the next subcommittee meeting in Tampa or Orlando. A tour of a port or other freight facility might be scheduled in conjunction with the next subcommittee meeting. A tour of Port Canaveral had recently been coordinated by Dennis Hooker for the Orlando MPO. Dennis said he would be happy to see if a similar tour could be arranged for the Model Task Force Freight Subcommittee. The subcommittee agreed this suggestion should be investigated further. Members with any other ideas are encouraged to contact Huiwei Shen with the FDOT Systems Planning Office: 850-488-4642, huiwei.shen@dot.state.fl.us

What's happening in the district planning offices?

When embarking on a new data collection or research project, it is often helpful to talk to someone who is working on a similar project. Coordinating activities and sharing information between districts can save time and money! The modeling contacts in each district are listed below, followed by an unofficial "off-the cuff" list of ongoing modeling-related projects in the district.

District 1 - Jim Baxter (941) 519-2562
Development of a Districtwide FIHS Model
Polk County Network Update
Development of intersection geometry in a DEMO study for SR
70
Traffic Memorandums for US 301, SR 84, Harborview Rd. &
Golden Gate Pkwy
Lee County Plan Update
Polk County Plan Update

District 2 - Imran Ghani (904) 381-8695
Jacksonville MPO 2020 LRTP
Nassau County Transportation Study
Putnam County Transportation Study
Clay & St. Johns Counties future year SE data
I-95 HOV Study
SR 55/US 19 Action Plan
SR 19/SR 100/US 17 Action Plan
Port Talleyrand Study
DRI SR 16 & I-95
Plemo Study SR 20
Live Oak Truck Study
Districtwide Park-n-Ride Study

District 3 - Craig Gavin (850) 638-0250
Developing Remote Traffic Microwave Sensor sites
Installation of non-intrusive traffic counting stations
Collection of RCI data with Differential Global Positioning
Systems
Developing FIHS Management System
Evaluating corridor improvements on US 90
Action Plan on SR 85 & I-10
Developing Districtwide Long Range Transportation Plan
Summaries
Pensacola 2020 LRTP
Tallahassee 2020 LRTP
Corridor Management Study - North Monroe Street
Developing Transportation Planning and Analysis Software
(TPAS)

District 4 - Shi-Chiang Li (954) 777-4601
US 1 Alternatives Study
Ft. Lauderdale Airport/Seaport Connector Study
I-95/I-595 Corridor Master Plan
ZDATA2 Development
Palm Beach County Model Validation
Treasure Coast Regional Planning Model Validation
Broward County MPO Model Validation
SR-A1A Capacity Analysis
CR-510 /Wabasse Causeway Study
Southeast Florida Regional Travel Characteristics Study (joint effort with District 6 and MPOs)

District 5 - Alice Gilmartin (407) 623-1196
Develop process to expedite DRI reviews
Arterial Investment Studies on SR 513 & US 1
Plemo Studies on US 441, SR 25, SR 46 & Apolllo Blvd
extension
1996 Model Validation for Metroplan Orlando
Model development for Lake County
Model refinement effort for the Brevard Model
Congestion Management Implementation Efforts for US 17/92
Annual traffic count on interstate ramps to be included in 1998
count book
SR 50/SR 405 corridor analysis
Rail Feasibility Study in Volusia County

District 6 - Phil Steinmiller (305) 377-5910 Miami Dade MPO 2020 LRTP Southeast Florida Regional Travel Characteristics Study (joint effort with District 4 and MPOs) Alternative land use scenario study for Transit

District 7 - Danny Lamb (813) 975-6437
Corridor, Subarea and Special Transportation Studies
RTA Phase III: Tampa Bay Regional Planning Model Validation
RTA Phase IV: Tampa Bay Regional Transportation Strategy
Update
District Highway Statistics Program
Florida Intrastate Highway System Corridor Studies
Districtwide Major Investment Study Consultant
Tampa Bay Regional Travel Characteristics Study
Modal Systems Planning And Analysis
Tampa Bay Regional Goods Movement Study

Turnpike District - Joey Gordon (850) 922-2520
Potential new interchange study in Broward and Palm Beach
Counties
Review of the Orlando Region land use and model development
Potential new interchange study in Polk County
Development of a GIS & FSUTMS application to identify
capacity-deficient roadways

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