

# Modeling at the Crossroads

*Model Task Force to discuss the future of FSUTMS*

*by Terrence Corkery, FDOT Systems Planning Office*

With all the recent changes in policy and technology affecting transportation planning, the future direction of modeling in Florida has become unclear. Specifically, several modelers have wondered if current efforts to enhance the Florida standard model (FSUTMS) are meeting Florida's transportation planning needs. How can we make FSUTMS the best tool to integrate land use and transportation planning? How can we help make the model evolve into a system capable of absorbing future micro-simulation models produced by the federal Travel Model Improvement Program? In response to these questions, the Florida Model Task Force tri-chairs, Dennis Hooker, Danny Lamb, and Shi-Chiang Li, have announced that the Model Task Force will meet March 28 and 29, 2001 in Orlando.

The workshop's focal point will be a round table discussion Thursday morning March 29 (beginning 9:00 AM), devoted to an exchange of ideas on the future direction of Florida's models in meeting the emerging needs of transportation planning. The

## Model Task Force Workshop

March 28-29, 2001

Radison Hotel Orlando Airport

5555 Hazeltine National Drive

Orlando, FL 32812

Hotel reservations: 407-856-0100

Rate: \$86.00 per night

**Reservation deadline: 03/09/01 for guaranteed room; later on a space-available basis.**

success of this discussion hinges crucially on the participation of *all* segments of the Florida modeling community: MPOs, local governments, transit agencies, state government, and consultant staff. To encourage greater participation in the discussions, the overall group will form breakout work groups after which all questions and concerns will be consolidated into a comprehensive summary and discussed by the overall group.

Before the meeting starts Wednesday, the MTF subcommittees will meet on March 28, beginning at 8:30 AM with the Trip Generation Subcommittee discussing FIU's lifestyle model research. Following this meeting, the Freight Subcommittee will discuss progress on developing the Statewide Highway Freight Model.

The full MTF will begin meeting at 2:00 PM March 28 with technical presentations on the Statewide Model, the Tampa Bay Region Employer Survey, and the Unified Network for Transportation (UNETTRANS). The morning session on March 29 will be the round table workshop, discussed above, on the mission of the Model

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# Modeling at the Crossroads *Continued*

Task Force and the future direction of modeling in Florida. Thursday afternoon's session consists of technical presentations on transit feasibility analysis, the Northeast Florida Regional Model network development, and the use of ITS to gather travel time data. The meeting is scheduled to end at 4:15 PM March 29.

The meeting will be held at the Radisson Hotel Orlando Airport, 5555 Hazeltine National Drive. A block of rooms has been reserved at a rate of \$86.00 per night. **The deadline**

**for reserving your room is March 9, 2001**, but the hotel will continue to take reservations on a space-available basis afterward. The hotel's phone number is 407-856-0100. Note that the two days prior to the Model Task Force meeting (at the same location), the Systems Planning Office will be offering a training course on the newly released GIS-TM Version 2.1 program. (See article on page 3.) For the latest information on the MTF meeting, visit [www.dot.state.fl.us/planning/systems/stm/training.htm](http://www.dot.state.fl.us/planning/systems/stm/training.htm) on the web.

## Ask Harry .....

by Harry Gramling, FDOT Systems Planning Office

*This column is dedicated to providing information on new features and releases of FSUTMS along with user questions and answers that may be of general interest.*

An astute user (Dawn Qiu of the Southwest Florida RPC) reported that colors were plotted incorrectly when using H PLOT13, i.e., ONE WAY VOLUME / CAPACITY RATIOS. The ensuing investigation verified Dawn's findings and culminated in the provision of a new PLOTNET.EXE file by Jim Fennessy. Colors were being plotted correctly when TOTAL VOLUME CAPACITY RATIO was requested.

During the investigation, Jim recommended adding an additional option to the H PLOT13.HWY script file: CRITICAL DIRECTION.

By default, links are plotted in the ANODE-BNODE direction in the color appropriate for that link direction. On some links (usually involving adjacent one-way links) directional volume/capacity ratios can be quite different with the possibility existing that the link plotted by ANODE-BNODE will be in the color assigned to the lower V/C ratio, thus implying a better-than-realistic condition. The CRITICAL DIRECTION option will cause the link to be plotted in the color assigned to the higher V/C ratio regardless of ANODE-BNODE order.

It should be noted that annotated VOLUME/CAPACITY ratios were correct.

The updated PLOTNET.EXE has been e-mailed to users who responded to my request for e-mail confirmation of receipt of FSUTMS.V54. Any user that did not receive the updated file can obtain one, if needed, by sending an e-mail request to me (address below).

HEVAL optionally produces a file named HRLDXY2.ASC

that is read by GIS-TM to estimate levels of service. HEVAL.EXE as shipped in FSUTMS.V54 reported some capacity values erroneously. Since GIS-TM is the only known user of the HRLDXY2.ASC file, copies of an updated (11-13-2000) HEVAL were included on the GIS-TM 2.0 distribution CD along with a README file describing the need to replace existing copies of HEVAL.EXE. If anyone other than GIS-TM users utilize the HRLDXY2.ASC file and needs the updated HEVAL, please send me an e-mail.

Jim Fennessy has provided a new utility program named GETOD.EXE, that reads matrix files (e.g., FHSKIMS, PTRIPS, etc.) and then writes a report including only the user-selected OD pairs of data. For example, a user needs an ASCII file that reports the travel time to selected zones from a particular zone. This task can be accomplished using GETOD. GETOD will be included in future versions of FSUTMS. If you feel that this program would be helpful to you, please e-mail me and I will send it to you.

Please be aware that when using special script files and using the &FSUTMS tag in the PROFILE.MAS file to direct FSUTMS to those files, the names of all directories (folders) containing those script files must not have blank spaces in their names. For example, a folder named "my.scripts" will be OK, but a folder named "my scripts" will not function properly, resulting in ignored special script files. Always review the first line of the FSUTMS.LOG file to verify that special scripts were applied.

Please e-mail your comments or questions to [harry.gramling@dot.state.fl.us](mailto:harry.gramling@dot.state.fl.us) or call (850) 414-4928, SUNCOM 994-4928.

## FDOT releases new improved GIS-TM package

The Florida Department of Transportation (FDOT) has addressed the growing need for integration between Geographic Information Systems (GIS) databases and the Florida Standard Urban Transportation Model Structure (FSUTMS) by developing a GIS application that integrates FSUTMS data with ArcView software. The application allows for conversion of ASCII FSUTMS data files to a format compatible with ArcView. Once the data file is converted, it can be displayed, spatially analyzed, edited, plotted, and overlaid with other GIS data.

FDOT chose ArcView because it is widely used throughout Florida. A survey conducted in 1999 by the Model Task Force (MTF) GIS Subcommittee showed that ArcView is used by all 25 MPOs in Florida. ArcView is a tool that brings geographic information to your desktop, and allows the user to visualize, explore, query and analyze data spatially. ArcView is easier to use and requires less computer hardware than the more elaborate ARC/INFO package.

The earlier release of GIS-TM was created in ArcView using AVENUE programming. GIS-TM version 1.0 was released in February 1998. Version 1.0 was focused on highway network data. Highway network data are used for visualizing and analyzing current and future transportation system characteristics in an area. In addition to the highway network component, zone-based socioeconomic data were incorporated into GIS-TM version 1.0.

During the last two years, the MTF GIS subcommittee, the MTF, and Modeling User Groups in the state of Florida have provided/requested further development of GIS-TM. To address most of these suggestions and comments, FDOT released GIS-TM version 2.1 in January 2001.

The GISTM21.APR project was customized by FDOT to meet the needs of the integration of FSUTMS and GIS. GIS-TM version 2.1 was created using robust C programming. Functionality includes the ability to build various FSUTMS files into GIS layers.

- Loaded and unloaded highway networks, loaded and unloaded transit networks, ZDATA files, and production/attraction files may be displayed as GIS layers.
- Toll links, TCARDS, transit optional links, transit walk access zones, and transit station data may also be converted into GIS layers.
- The highway and transit layers may be edited using GIS-TM tools, then exported back to FSUTMS format.
- GIS-TM has the ability to compare networks, such as highway/transit networks or loaded highway/transit networks, to identify differences in network attributes, such as changes in traffic volume, capacity, speed, area type, number of lanes, headway, etc.
- An extension that calculates the level of service from loaded highway networks is also available for GIS-TM version 2.1.

Registered users of FSUTMS and ArcView may obtain a copy of the GIS-TM program free of charge by contacting Vidya Mysore of the FDOT Systems Planning Office in Tallahassee (850)414-4924, SUNCOM 994-4924, FAX (850)-921-6361 or by E-Mail: [vidya.mysore@dot.state.fl.us](mailto:vidya.mysore@dot.state.fl.us)

## GIS-TM training workshop offered

The first GIS-TM Version 2.1 training workshop is set for March 26-27, 2001 at the Radisson Hotel Orlando Airport, Hazeltine National Drive. A block of rooms has been reserved at a rate of \$86 per night. **The deadline for reserving your room is March 9, 2001, but the hotel will continue to take reservations after that date on a space-available basis.** The workshop will begin 1:00 PM Monday and end 5:00 PM Tuesday. Note that the Model Task Force meeting will be held at the same location beginning Wednesday morning (see page 1 article).

The GIS-TM workshop will provide hands-on experience. The training objective is to teach the basic functionalities of GIS-TM, including data conversions from FSUTMS to ARCVIEW environments of loaded and unloaded highway/transit networks, ZDATA files, Toll links, TCARDS, transit optional links, and transit walk access zones, all of which may be displayed as GIS layers. This process involves spatial and attribute data editing of the highway and transit layers using GIS-TM tools, and then exporting back to FSUTMS format.

Training will also focus on the Level of Service calculator extension that determines the level of service from loaded highway networks.

In addition students will learn how to customize GIS-TM for the individual model, manage data and utilize the Florida Geographic Data library along with the GIS-TM for transportation planning applications.

To register, contact Vidya (see end of article at left) or visit [www.dot.state.fl.us/planning/systems/stm/training.htm](http://www.dot.state.fl.us/planning/systems/stm/training.htm) on the web.

# FDOT District 3 Developing Regional Planning Model for Northwest Florida

By Robert G. Schiffer, AICP, PBS&J/Tallahassee

Growth over the years in Northwest Florida has resulted in more of a continuous pattern of urban development along the coastal region between Pensacola, Fort Walton Beach, and Panama City. The U.S. 98 and I-10 corridors are experiencing a significant growth in traffic traveling between these three urbanized MPO areas. Existing FSUTMS models within the region do not allow for the forecasting of travel demand between urbanized areas. With these issues in mind, the FDOT District 3 Planning Office has initiated development of the Northwest Florida Regional Planning Model.

The intent of the NWFRPM is not to replace the urban MPO models but rather to supplement the urban models in evaluating travel demand along the U.S. 98 and I-10 corridors connecting the urban areas. The model will also be used to forecast travel demand in rural areas not presently included in any urban FSUTMS model. Planning efforts for limited access highway connections between Panama City and Dothan, I-10 and I-65 near Pensacola, and linkages between Bay and Gulf Counties will benefit from the availability of this model in the future. The NWFRPM will also serve as a starting point for expansion of any existing MPO model within the study area in the future.

The NWFRPM covers the ten counties in Florida located west of the Apalachicola River. (The model also carries the unique distinction of being the only regional model in Florida that exists almost entirely in the central time zone!) The model includes the entirety of the Pensacola, Fort Walton Beach, and Panama City urbanized areas. It also includes areas within urban counties not presently in the urban models/MPO planning areas (e.g., the model includes all of Escambia County while the MPO's study area does not). The

NWFRPM also includes a number of counties that are entirely rural.

Model development is being approached in an incremental manner. The work plan is to build the model using a 2000 database. This means that some of the pieces needed to complete model development, such as 2000 Census data, are not yet available. Rather than going back to an earlier base year and having to extrapolate population and dwelling unit information, the District is committed to waiting for Census 2000 information to become available, resulting in a more accurate validation process in the long run.

The following four phases of model development are envisioned over the next several years:

- Base Year Highway Network and Traffic Analysis Zone Development
- Base Year Socioeconomic Data Development and Travel Behavior Information
- Validation of Base Year Travel Demand Model
- Development of Future Year Highway Network and Socioeconomic Databases

Work is currently proceeding on phase 1 of this model development. A base year highway network and TAZ map have been prepared. A GIS tool for network extraction is being developed to enable updated networks for the urban areas to be derived from the regional model. Work has begun on the development of Census Block-to-TAZ equivalency files for later use in socioeconomic data development.

For further information on the Northwest Florida Regional Planning Model please contact either Craig Gavin in the FDOT/District 3 planning office at (850) 638-0250 or Rob Schiffer in the PBS&J Tallahassee office at (850) 575-1800.



# Planning Applications in the 2000 Highway Capacity Manual

By Doug McLeod, Florida Department of Transportation, Chair of the Planning Applications Subcommittee of TRB's Highway Capacity and Quality of Service Committee and Rick Dowling, Dowling Associates, Principle Investigator for NCHRP Project 3-55(2)A - Planning Applications for the 2000 Highway Capacity Manual

The Highway Capacity Manual is essential for transportation planning in the U.S. because it is the most widely referenced document on roadway capacity and level of service analyses. Marking the new millennium the 2000 Highway Capacity Manual, due for publication by the Transportation Research Board later this year, will be completely revamped. The 2000 edition should be of special interest to transportation planners because it includes broader planning applications and expands the breadth of analysis to include corridors and areawide analyses. Furthermore, clearer guidance is provided to planners in applying the Highway Capacity Manual and there is greater consistency in planning applications across technical chapters. This article presents a transportation planning overview of the forthcoming Highway Capacity Manual.

The 2000 Highway Capacity Manual will be completely restructured to include over 30 chapters divided into five parts: I - Overview; II - Concepts; III - Methodologies; IV - Corridor and Areawide Analyses; and V - Simulation and Other Models. Planners will find useful information and techniques in the first four parts, especially Parts II and IV.

Chapter 9 of Part II, titled Analytical Procedures Overview, should be of special interest to planners. The chapter includes sections on

- the roadway structure of the Highway Capacity Manual extending from traditional point (e.g., signalized intersections) analyses to areawide (e.g., metropolitan) network analyses,
- hourly and daily volume equivalencies,
- use of default values (including an appendix to develop local defaults), and
- service volume tables (including an appendix on developing service volume tables).

In developing the 2000 Highway Capacity Manual the oversight committee took the position that there is only one Highway Capacity Manual methodology. This is important in developing planning applications in that there is no separate Highway Capacity Manual planning methodology to the detailed operational methodologies appearing throughout the document. Planning applications essentially use varying amounts of default values and, as appropriate, simplifying assumptions. Thus, establishing default values becomes essential for many planning applications.

A frequently used planning tool is generalized service volume tables in which the analyst desires to know what the maximum service volume is for a facility operating with a specific level of service. Florida DOT's generalized tables are an example in which default values have been calculated and only minimum inputs are needed to determine maximum service volumes or the level of service of a roadway at generalized planning level. A new feature of other Part II chapters is the inclusion of "example service volume tables" for virtually all roadway point and facility analyses covered in the Highway Capacity Manual. A word of caution, however, the service volume tables appearing in the Manual are labeled "example" because the oversight committee did not believe the tables presented should be used as national default tables and multiple purposes were considered in developing the tables. As an aside, in 2001 Florida DOT will be updating (based on real data and the 2000 Manual equations) its roadway service volume tables and expanding them to include transit, pedestrian and bicycle modes.

In the remaining chapters of Part II urban street, pedestrian and bicycle, highway, freeway and transit concepts are addressed. These chapters provide a good overview of capacity and level of service analyses for these roadways and modes, present required input data, and provide example service volume tables. For example, in approximately six pages the highlights of urban street facility analyses are presented, which allows the analyst a quick overview without getting bogged down in the details of the detailed methodology chapters.

Part III contains the methodology chapters, most of which will be familiar to current users of the Highway Capacity Manual. Many of the Part III chapters are reformatted versions of chapters in the current manual.

The current freeway chapters (3, 4, 5 and 6) become chapters 23, 24, 25 and 22, respectively, of the new manual. The freeway facility chapter (currently Chapter 6, future Chapter 22) gets a major overhaul in the new manual. An entirely new chapter on interchange ramp terminals is added to the new manual.

The current rural and suburban highways chapters (7 and 8) become chapters 21 and 20, respectively, in the new manual. The two-lane highway chapter gets a major overhaul in the new manual.

## Planning Applications in the 2000 Highway Capacity Manual *Continued*

The current urban streets chapters (9, 10, 11, 12, 13 and 14) become chapters 16, 17, 15, 27, 18, and 19, respectively, in the new manual. Major changes in the methodologies for transit, pedestrians, and bicycles are incorporated in the new manual. Relatively minor changes are made in the analytical procedure for signalized intersections. Unsignalized intersections and arterials have no methodological changes.

Part IV on corridor and areawide analysis is new material to the Highway Capacity Manual and represents the oversight committee's attempt to give guidance on these important topics. Chapter 28's (Assessment of Multiple Facilities) purpose is to present a methodological framework for analyzing the performance of systems of transportation facilities. The framework is intended for application to major investment studies (MIS), air quality conformity studies, and in the development of congestion management systems (CMS) and long range transportation plans (LRTP).

Unlike the previous Part III point, segment and facility chapters in which level of service is usually determined by a single performance measure, this chapter emphasizes that system performance should be measured in more than one dimension. In other words, the use of a single measure (e.g., average travel speed on arterials) simply is not enough to explain the performance of transportation corridors and systems.

In the 2000 Highway Capacity Manual the term "corridor" refers to a set of generally parallel transportation facilities designed to move people between two points. The purpose of Chapter 29 (Corridors) is to describe procedures for combining individual facility, segment and point analyses into estimates of overall corridor performance measures in terms of travel time, speed and delay for each mode of travel. For highway corridors consisting of a freeway and an arterial, a six-step process is provided.

The purpose of Chapter 30 (Areal Analysis) is to provide guidance to analysts wishing to adopt the Highway Capacity

Manual analysis procedures for use in areawide analyses involving regional travel demand forecasting models and long range transportation plan analyses. Adapted from the more detailed methodologies presented in Part III, procedures are presented for estimating speed, delay, travel time and other systemwide performance measures.

The motivation for replacing the current travel demand forecasting procedures used to estimate speed and capacity with Highway Capacity Manual procedures is to improve the accuracy of the capacity and speed estimates used in demand forecasting and air quality analysis. Replacement of the standard Bureau of Public Roads (BPR) speed-flow curve with recommended Highway Capacity Manual curves will increase the accuracy of forecasted speeds, particularly for congested conditions. The use of the point (node) delay procedures described in an appendix can further increase the accuracy of the forecasted speeds.

### Concluding Remarks

Based on the above information, hopefully it is obvious the 2000 Highway Capacity Manual is a greatly improved document that can help meet the needs of transportation planners. It now includes techniques to address generalized planning (e.g., generating localized service volume tables) and specific planning (e.g., procedures to address major investment studies along corridors). The breadth of analyses has been expanded to include corridor and areawide analyses. It gives guidance on how to improve the estimation of speed, delay, travel time and other systemwide performance measures for travel demand forecasting models and air quality conformity studies. It stresses the importance of multiple performance measures when evaluating transportation systems. Furthermore, there is greater consistency in planning applications across procedural chapters and clearer guidance is given to planners through improved examples and detailed appendixes. Planners, take a look at the new 2000 Highway Capacity Manual!

## Evaluating Alternative Land Use Concepts at the Regional Level

*By Whit Blanton, AICP*

A policy shift has been made, or is being made in many communities toward developing a broader balance in their local transportation system. The reasons are myriad: a desire to reduce suburban sprawl, a search for transportation concurrency alternatives, an effort to revitalize neighborhoods and build community, a need to provide access to jobs, or even in response to successful political advocacy. Regardless of the motivating force, many local and regional governments across Florida are recognizing that

our transportation system relies entirely too much on the automobile to meet the demands of growth and to ensure preservation of community character and economic vitality. This belief, though not universally popular, is gaining momentum in many Florida cities and counties.

One of the pioneer communities for innovative approaches to land use and transportation is Gainesville. Still based strongly in the environmental movement, Gainesville's

**Evaluating Alternative Land Use Concepts at the Regional Level** *Continued*



transportation policies have increasingly reflected a more civic orientation of equity, redevelopment, strategic investment and neighborhood revitalization. Within this context the Metropolitan Transportation Planning Organization (MTPO) recently completed an update of its 20-year Transportation Plan. The plan is referred to as the Livable Community Investment Plan because it strategically targets transportation investments that support important local land use objectives.

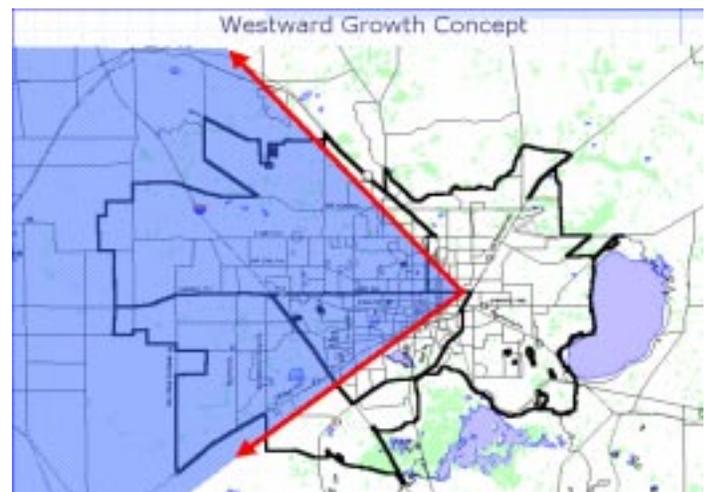
“Make transportation investments that support livable community centers and neighborhoods by:

1. Re-investing in the traditional core areas of Gainesville and the towns of Alachua County to develop walkable downtown centers;
2. Connecting a limited number of highly developed mixed use centers, and
3. Providing a high level of premium transit service in a linear Archer Road corridor.”

Hallmarks of this 20 year plan include the construction of dedicated bus lanes on Archer Road to the Shands/VA Hospital area, enhancing the transit service in several key corridors, reducing the number of through travel lanes from

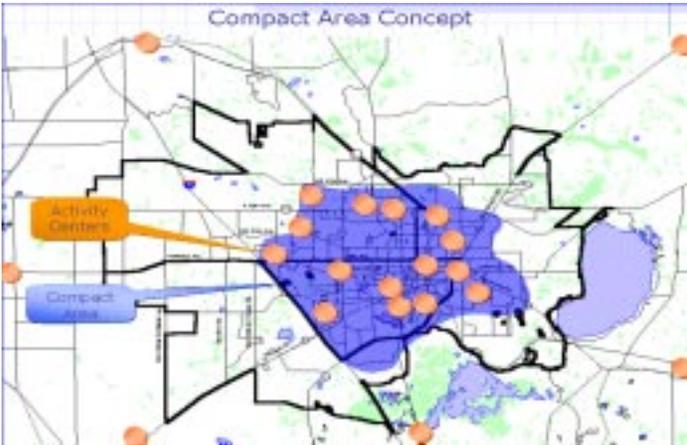
four to two on University Avenue from the western edge of the University of Florida to Waldo Road on the east side of town, constructing new or enhancing existing two-lane roads to create a multi-modal “boulevard” effect and the allocation of nearly \$4 million in bicycle and pedestrian facilities defined through the Countywide Bicycle Master Plan.

Developing the Livable Community Investment Plan involved the creation, evaluation and discussion of four alternative land use-transportation scenarios. The four alternatives were:



## Evaluating Alternative Land Use Concepts at the Regional Level *Continued*

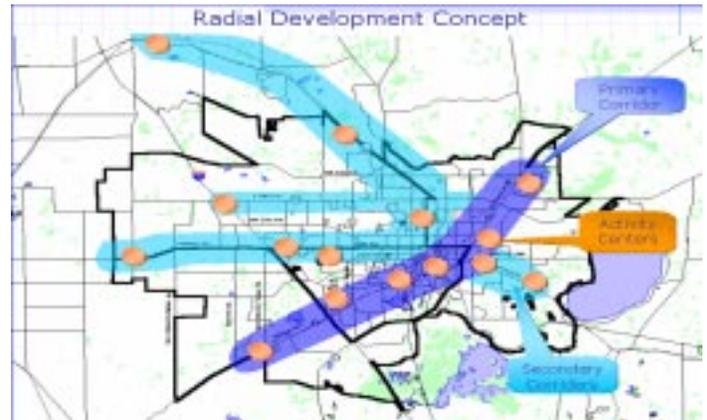
- Westward Growth – this baseline scenario reflects a continuation of recent development trends, assuming no change in local comprehensive plans. Population growth continues mainly west of West 34th Street, including substantial development west of I-75. The transportation projects evaluated primarily related to roadway capacity expansion given this dispersed pattern of relatively low-density development.



- Compact – this scenario promotes development in the traditional urban core of Gainesville with redevelopment and strategic infill projects as a way to provide the land use density, diversity (mix) and design to reduce trip lengths and the number of automobile trips. Compact development patterns would occur in outlying communities and within activity areas internal to the Gainesville metropolitan area.



- Village/Town Centers – This scenario directs future development to multiple centers of relatively high density and mixed activity such as the University of Florida, downtown Gainesville, Gainesville Mall and the SW 20th Avenue student village area. These areas would be supported by a transportation system that emphasizes internal accessibility within the activity centers and multi-modal connections between the centers.
- Radial Development – this scenario promotes higher intensity development along primary corridors for a transit system that would provide a high quality of service linking outlying areas with a central core area. Areas between the corridors are preserved as relatively low density residential development, agricultural uses or open space.



Community workshops in four parts of the Gainesville region – east, northwest, southwest and central – led to the development of goals, objectives and evaluation measures. Reducing congestion through widening roads was not a highly valued objective in Gainesville. These evaluation measures included a wide range of multi-modal and land use performance criteria. Some, such as jobs-housing balance or population and jobs served by transit, were input measures, while others, such as travel time comparisons and vehicle miles of travel, were output measures from the travel demand modeling process. The measures were used to help select among the four land-use transportation alternatives.

Unfortunately, the tools to integrate transportation planning and land use planning at the regional or even corridor level are lacking. For example, one of the alternatives, the Compact Development scenario, focused on creating a more compact

## Evaluating Alternative Land Use Concepts at the Regional Level *Continued*

development pattern (with infill and higher intensity redevelopment) to help reduce vehicle miles traveled, improve air quality and increase safety. Unfortunately, the traditional tools used in long range transportation plans and employed for this study are not effective at measuring these kinds of “design” variables on travel behavior. The result was that the Compact scenario, which limited roadway expansion projects and focused investment dollars on transit and other non-automobile modes, showed much higher levels of congestion, worse air quality (due to increasing delays) and more traffic crashes (again, because of delays). While all those may occur under such a scenario, it was not possible to adequately show the potential benefits of such a policy. Transit ridership was not appreciably affected, with minor increases resulting from increased frequency of service, more route coverage and higher parking costs. Land use proximity, density and other built environment factors are too subtle or complex to be reflected in our traditional tool set.

The MTPO’s desire to test a compact model of development is laudable, but the transportation profession’s lack of technical tools to properly evaluate this and similar policy options is a significant hurdle to addressing fundamental land development and growth management policy changes. We have lifestyle variables in some of our models, but planners also need land use design variables.

### Transportation as Art and Science

Professional judgment is a hallmark of the transportation planning profession. That judgment is derived from experience and technical understanding. The science and the art of planning are intertwined and inseparable. Without a technically sound basis of evaluation, our understanding of land use-transportation relationships is intuitive, yet ultimately superfluous. Dig beneath the surface and it’s little more than elegant images and rhetoric. As a profession, transportation and land use planners intuitively *know* that certain land use patterns and design features influence travel

behavior and individual decision-making, but the science remains well behind the state of the art.

To be forceful advocates for change, planners need credible data and useful analytical methods. Better quantitative methods will move from the extreme to the mainstream many of the ideas, techniques and strategies of the recent policy shift. Such analytical methods require the integration of land use factors, such as development types (e.g., urban mixed use, suburban office, neighborhood commercial) and their associated characteristics with transportation factors, including trip generation rates, average trip lengths and mode share parameters. Without this analytical linkage, planners are unable to effectively demonstrate the potential benefits, if any, of choosing alternative land use strategies to address transportation needs and new policy directions.

Communities and developers need to sing a harmonious tune for balanced transportation and choice rather than continuing to have development driven by access to high-volume roadways. Unless our tools and measures change in response to this policy shift, making the case for alternative land use patterns will be a challenge. Strategies are needed in the short- to mid-term (1-5 years) to effect true long-term changes in land use and travel behavior (20-40 years).

Some of these tools are in place and under development to support the state’s new Multi-modal Transportation District provisions and requirements. While helpful, they do not yet effectively address broad, regional analyses of integrated land use and transportation strategies as required through the metropolitan long-range transportation planning process. As a profession we need to bridge the gap between land use and the highway, transit, bicycle and pedestrian level of service tools. Then we can figure out whether Gainesville’s compact scenario is truly a worthwhile policy direction.

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# FSUTMS Users' Group Year 2001 Meeting Dates

The **Central Florida Users' Group** has no meetings scheduled at this time. If you would like to obtain additional information about the group, please contact *Kacia DuHart (407) 482-7883*

The **Southwest Florida Users' Group** has no meetings scheduled at this time. If you would like to obtain additional information about the group, please contact *Jim Baxter (863) 519-2562*

This year's meeting dates for the **Northeast Florida Users' Group** are set on **May 2, August 1 and November 7**. All meetings are held at the FDOT-District 2 Jacksonville Urban Office-Training Facility. The meetings start at 2:00 PM and run until approximately 4:00 PM. The topics will be announced. If you would like to obtain additional information, please contact *Imran Ghani (904)360-5682*

This year's meeting dates and topics for the **Tampa Bay Users' Group** are as follows. On May 31 the meeting topic will be Corridor Studies and Subarea Studies. The August 30th meeting will focus on the Land-Use and Transportation relationship. On October 25th the group will discuss New Methodologies and Analysis Techniques. An Awards Banquet will be held in December (date to be announced). The brown-bag lunch meetings are all from 12:00 PM to 2:00 PM at the FDOT-District 7 office. For more information, please contact *Danny Lamb (813) 975-6437*

The **Southeast Florida Users' Group** meeting schedule for this year will be June 14, September 4 and November 13. The meetings all start at 2:00 PM and are held at the FDOT District 4 office. The topics will be announced. If you would like to obtain additional information, please contact *Shi-Chiang Li (954) 777-4655*

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