

# TBAG

TAMPA BAY APPLICATIONS GROUP

An Open Forum for  
Transportation-Related Issues



Volume 21 • August 2002

## “FROM THE CHAIR”

by: Christopher Hatton, Kimley-Horn and Associates, Inc.  
2002 Chairman for the Tampa Bay Applications Group

Addition by subtraction. While it was unfortunate that Michael Hollock-Soloman could not join us for his presentation on “Quality Checks for Land Use and Socioeconomic Data”, having only three “workstations” on May 23rd showed us that good things do come in threes. In fact, the feedback was so positive that our future workshops will have only three stations in order to facilitate more interaction. This first workshop of the year focused on “Land Use and Transportation” and was a truly successful communication of fascinating information and data that exists in our Tampa Bay area.

## ATTENTION!!!

**Next TBAG Meeting  
Multi-modal Planning**

**August 29, 2002**



Brian and Janet showed us the wonderful things you can do with Pinellas County's Internet site.

Janet Deane (Information Systems – Pinellas County BCC) and Brian Smith (Pinellas County Planning Department) enlightened the group by showing us the amazing Property Appraiser data and other County information that is available through the Internet. Using a direct link to the web site during the presentation, Janet and Brian showed how the County keeps the site up to date, including easy access to numbered agenda items from Commission meetings!

Tom Thomson (Hillsborough County Transportation Department) detailed the recent changes in the County's Comprehensive Plan and Land Development Code,

which required modification of the Transportation Concurrency Analysis Methodology. Mr. Thomson reviewed the “Adequate Public Facilities (Concurrency) Methodology” and worked through several intriguing examples at his workstation.

Mary Stallings (Grimail Crawford) and Hoyt Davis (Gannett Fleming) presented a discussion of the “Local and Regional Land Use Databases” that are available for transportation planning in District 7. Their session addressed not only the different formats used by each county, but also the regional database information, such as existing land use data from SWFWMD.



Mary and Hoyt take a break in between sessions to smile for the camera. Thanks for a great workshop!



Tom updates us on changes in Hillsborough County's Concurrency Methodology.

The TBAG members extend a very special “thank you” to each of our presenters for outstanding workstation presentations. I hope everyone had a safe and enjoyable summer and we look forward to seeing all of you at our next meeting! Remember, it's Back to TBAG School on August 29th. ✍️

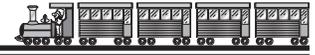
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# Multi-modalism – Welcome to the Family

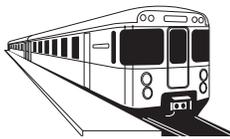


by: Angelo Rao, PE — Kimley-Horn and Associates, Inc.



I don't know about you, but when I think of multi-modalism, I think of family. Today's family is diverse and is comprised of many different members. Even pets are considered full family members. My dog Cocoa Bean seems to have more familial rights than I do – my rights are relegated to paying the bills!

Over the last couple of centuries or so, transportation has evolved from foot and bicycle use, to trains (and their urban cousins the streetcar), to rubber-tired busses and rapid transit, and eventually reaching the pinnacle of transportation - the private automobile. After World War II, the explosive economic growth that occurred took advantage of this latest evolutionary device and citizens became motorists and began their journey out of the cities to the suburbs. As other forms of transportation became redundant or even



gauche, the transportation family effectively evolved into an uni-modal system – the car.

As land use issues and urban sprawl became serious concerns, transportation professionals and elected officials have realized the importance of promoting diversified transportation modes. ISTEA and TEA-21 are proof-positive of this realization. Over \$370 Billion have been allocated since 1991, and another \$217 Billion is being considered for TEA-3 (the next generation).

Transportation professionals have a unique opportunity to ensure that non-conventional transportation sub-systems are introduced side-by-side with the conventional automobile sub-systems. With the advent of "New Urbanism" and the promotion of livable communities, the stage is set for creative planning. If the pedestrian is placed at the top of the hierarchy, then multi-modalism will truly take hold. This shift in paradigm automatically results in shorter blocks, narrower streets, closer setbacks, street grid systems, and increased densities. Pedestrianization, bicycling, transit use, and yes, even friendlier car use is added to the family.

So what's in it for me? Why should I get out of my car?

Remember the Presidential election of 2000? Florida proved once and for all that every single vote does really matter. Well in transportation every single car



does really matter too. Examining the speed to v/c ratio curve - I call it the bullet curve – one notices how little change in traffic volume it really takes to move from relatively free flow to breakdown. For example, on I-275 through Tampa, peak hour breakdown might occur at about 6,000 vehicles over three lanes. Imagine if there were a 5%, or a 300-vehicle reduction, in the total volume? This reduction might be enough to permit "free-flow" conditions, albeit slow. Most motorists hate stop 'n go; but they can live with slow go. A true multi-modal system will eventually attract these 300 or so motorists.



Once we get the hang of multi-modalism, we're going to have to brace for the next step: inter-modalism. That is, inter-connected sub-systems that rely on each other in the overall plan. Examples include "Kiss 'n Ride", "Park 'n Ride", carpooling and vanpooling, and "Bikes on Busses" programs. Some of these systems exist today, and agencies, such as Bay Area Commuter Services, are promoting these non-conventional uses on a continually growing scale.



The out-of-pocket costs for parking and fuel are relatively low in our area and weather conditions can make an air-conditioned private vehicle very attractive. However, multi-modalism is here; all the component parts are in place. It is our responsibility to work together to find creative solutions that promote non-conventional transportation - we have the talent, energy and determination that will make multi-modalism work for the Tampa Bay Area. We just have to keep it in the family. 

## FUTURE TBAG MEETINGS!

October 24, 2002

12:00pm to 2:00pm

*New Methodologies (Workshop)*

December 3, 2002

5:00pm to 9:00pm

*2002 Awards Banquet*

# Bartow, Florida: Transportation Issues of a Small City

by: Michael Dorweiler, AICP — PBS&J

Most of us in the transportation industry know Bartow, Florida. It is the small city in central Polk County that serves as the Florida Department of Transportation's District One headquarters. US 98 from the north is the route of a number of commuters who work at the District's headquarters or numerous jobs asso-



ciated with government, including Polk County, the Southwest Florida Water Management District, many State agencies, and the City of Bartow (Bartow is the county seat). In all, approximately 15,000<sup>1</sup> commuters enter Bartow on a daily basis. While this may seem like a small number of commuters when compared to the Lakeland or Tampa Bay urban areas, Bartow's population is only 15,000<sup>2</sup>, making this a sizable number.

The transportation system serving Bartow is comprised of two US highways (US 17 and US 98) serving north-south travel and one state highway (SR 60) serving east-west travel through Bartow. A bypass route, SR 60 Bypass, was built on the north side of downtown in the 1960's. This bypass forces through traffic north and east of downtown. As a result, trips through downtown Bartow tend to be more local in nature.

Plans are in place to widen the existing two-lane sections of the SR 60 Bypass and US 17 to four lanes, with construction scheduled for completion by the end of 2003. At the same time construction is being completed on these projects, Main Street (SR 60) will be resurfaced and, once complete, removed from the state highway system and turned over to the City of Bartow. These improvements should further discourage through traffic in the downtown area.

Not unlike other urban areas, Bartow is trying to balance commuters, local traffic and downtown vitality. The improvements to SR 60 Bypass and US 17 should help with some of the traffic problems encountered by commuters during the peak hours. But these improvements may not address some of the local needs or downtown vitality concerns of the local population, particularly as they relate to traffic generated by the Polk County Government offices. As a result, a study

is being conducted for the Community Redevelopment Agency (CRA) by PBS&J under the direction of the Central Florida Regional Planning Council.

The Government Center and Courthouse have been the topic of previous studies. One issue is how to deal with the impacts of this heavy generator: whereby, high demand is created not only during the typical weekday peak hours but also on days when juries are selected from a large pool of people, all driving a vehicle to Bartow. Previous studies and a charrette proposed ideas, but really lacked an overall plan for the CRA to deal with the issues in a comprehensive manner.

Bartow has some amenities that help define the character of the City. This includes a historic courthouse, many historic neighborhoods and majestic oak lined streets. Unfortunately, few visitors see these assets when they enter Bartow. The City has undertaken a number of projects aimed at beautifying streetscapes, however there is a lack of continuity because of the disjointed nature of the projects. One of the ideas behind the current study is to expand upon the existing elements that are already in place with overall and specific traffic circulation and parking recommendations, creating a unified plan for the CRA as a whole.

As in any plan there is need to balance many different and sometimes conflicting concerns. In the case of Bartow, local concerns are focused on providing access to downtown but also discouraging through traffic on local streets; on providing adequate parking for downtown businesses and services while balancing short-term versus long-term demand; and addressing existing traffic operational deficiencies with an eye to future circulation changes. One of the strongest concerns from downtown businesses is creating a destination to draw people to downtown Bartow.

Traffic circulation recommendations from the ongoing study are designed to reinforce existing travel patterns, encouraging through vehicles to travel around downtown and vehicles entering downtown to enter on main routes (i.e., Broadway Avenue or Main Street). Through travel on local streets will be discouraged with the exception of travel to the hospital located north of downtown, adjacent to US 98.

See "Bartow" - Continued On Page 5

# ATTENTION

***Bring your lunch and bring a friend!***



## **Tampa Bay Applications Group Meeting**

**AUGUST 29, 2002**

*FDOT District Seven Office from 12:00 p.m. to 2:00 p.m.*

*District Seven Auditorium*

*(Auditorium Opens at 11:30 a.m.)*

## **MULTI-MODAL PLANNING**

**Bob Clifford (Florida Department of Transportation - District 7)**

***An Update on the Strategic Intermodal System***

The 2020 Florida Transportation Plan includes a goal for the development of a “strategic intermodal system” (SIS) composed of corridors, facilities and services of statewide and regional significance. The FDOT is in the process of determining which facilities and services will be part of the SIS. This presentation will cover a current status report on the progress of outlining the SIS, in addition to a schedule for 2002 and future plans for implementation.

**Jim Ryan, Federal Transit Administration (FTA)**

**Wade White (Gannett Fleming)**

***Using FSUTMS to Measure the Benefits of Multi-Modal Investments***

Mode choice models quantify attributes of a transportation system such as travel time, travel cost, access and overall usability. The sum of these measures is represented uniquely for each origin and destination in a region. The FTA’s latest modeling initiative, referred to as User Benefits (UB), will be used to evaluate projects that apply for funding under the FTA New Starts (Section 5309) process. To support the concept of User Benefit analysis, the FTA has developed a specialized software package, SUMMIT, to facilitate UB reporting. This presentation will cover UB as an evaluation tool and the SUMMIT program.

**Martin Gutenplan (FDOT – Systems Planning Office)**

**Demian Miller (Tindale-Oliver)**

***Implementation of the Multi-Modal Areawide Level of Service***

In an effort to establish positive examples of Multi-modal Transportation Districts (MMTD) and refine methodologies established in the Multi-modal Areawide Level of Service Handbook, the FDOT Systems Planning Office and Policy Planning Office agreed to provide technical assistance to the City of DeLand in its effort to implement the State’s first MMTD. As a foundation to this effort, the University of Florida Department of Urban and Regional Planning was contracted to conduct a feasibility study regarding DeLand’s current and future potential as a MMTD. *Following on the heels of the August 19th presentation before DeLand’s City Commission*, this presentation will detail the methods and results of this study, as well as describe the thresholds, guidelines, and planning philosophy of the Multi-modal Areawide Level of Service Handbook.

A secondary entrance to the hospital is planned which will allow local traffic an option of using a route other than US 98.

Among the elements in the traffic circulation portion of the plan are gateways, consisting of signage and landscaping, which provide a means for defining entries toward the downtown area.



Signage would also be a key component in guiding drivers toward downtown destinations. Some traffic calming elements are planned to encourage through traffic

on Main Street rather than other east-west streets. Bicycle and pedestrian elements are designed to encourage linkages from the Polk County Government Center to downtown and from the Fort Frazer Trail (a rails-to-trails project connecting Lakeland to Bartow adjacent to the US 98 right-of-way) to downtown Bartow and south to Mary Holland Park.

Parking recommendations include two areas: the Government Center and Courthouse and the downtown businesses and other services. Future demands for the Government Center and Courthouse are expected to exceed the on-site parking currently in place. Therefore, recommendations focused on maximizing spaces in the short-term (using remote locations) and long-term by identifying the location of a future parking structure. The proposed location was recommended in close proximity to the Courthouse where the number of judges is expected to increase and the services associated with those judges (i.e., clerks, attorneys and jurors) can be expected to increase, as well. This would also serve other government services that are in close proximity, as well as provide parking for downtown Bartow.

Downtown parking, while viewed by some downtown merchants to be in short supply, appears adequate for the short-term, provided some existing on-street parking is restriped and signage is used to identify parking locations not immediately on Main Street. Long-term may be a new parking structure solely serving the downtown but this would likely only be needed if redevelopment takes place in the downtown core.

Clearly, Bartow is not unlike other cities in Florida that also face traffic circulation and parking issues. Overall, there is a need to make better use of the existing infrastructure and then expand as necessary. The recommended improvements are designed to create an overall positive environment for vehicles, bicycles and pedestrians, as well as supporting a vibrant downtown for the future. 🚗

<sup>1</sup> "Analysis of Commuting Patterns for Bartow, Florida", Central Florida Economic Development Council, 1999.

<sup>2</sup> 2001 Florida Estimates of Population, BEBR, April 2001.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

## Measuring the Benefits of Multi-modal Investments

by: Wade White, AICP — Gannett Fleming, Inc.

Mode choice models, such as the one included in the Tampa Bay Regional Planning Model, quantify attributes of a transportation system including travel time, travel cost, access and overall usability of the system. The sum of these measures is represented uniquely for each origin and destination in a region. By extracting certain information from the mode choice model, travel forecasters can potentially measure the overall benefit of various multi-modal transportation investments to the community.

It is this concept that underlies the Federal Transit Administration's (FTA) latest modeling initiative. A new measure, commonly referred to as User Benefits (UB), will be used to help evaluate projects that apply for funding under the FTA New Starts (Section 5309) process. The measure relies on the mode choice model to quantify the characteristics of the transportation system and travelers.

To support the concept of User Benefit analysis, the FTA has developed a specialized software package, SUMMIT, to facilitate UB reporting. SUMMIT reads mode choice output files and provides aggregate reporting of travel time savings, changes in transit trips and which segments of the population benefit from improvements. By providing a common reporting framework, SUMMIT permits consistent reporting of transportation system benefits across the Country while reflecting the variables and costs unique to local data and models.

# TRANSPORTATION COURSES AT USF FOR FALL 2002

**EN EGX 84508 001 Transportation Engineering I**  
Mon 3:00pm-5:50pm CUT 102 R. Pendyala

**EN EGX 84510 901 Transport Planning/  
Economics**  
Mon 5:00pm-7:50pm CUT 202 X. Chu

**EN EGX 84509 901 Traffic Systems Engineering**  
Tue 5:00pm-7:50pm CUT 202 J. Lu

**EN EGX 85747 901 Intelligent Transportation  
Systems**  
Wed 5:00pm-7:50pm CUT 202 J. Lu

**EN EGX 84489 903 Transp. Project Eval.  
Methods**  
Thr 5:00pm-7:50pm CUT 202 E Mierzejewski

**EN EGX 84492 001 Trans Data Coll & Analysis**  
Fri 2:00pm-4:50pm CUT 202 R. Pendyala

**EN EGX 85748 001 Grad Transportation Seminar**  
Mon 11:00am-11:50am CUT 202 R. Pendyala

The courses are open to all. For more information, call the Civil and Environmental Engineering Department at (813) 974-2275.

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Co-editor: Christopher Hatton  
Kimley-Horn and Associates, Inc.  
1220 Tech Boulevard  
Tampa, FL 33619  
(813) 620-1460 • Fax (813) 620-1542  
christopher.hatton@kimley-horn.com

Co-editor: Kasey Cursey  
Gannett Fleming, Inc  
9119 Corporate Lake Drive • Suite 150  
Tampa, FL 33634  
(813) 882-4366 • Fax (813) 884-4609  
kcursey@aol.com

FDOT - District Seven • Planning & Programs • 11201 North McKinley Drive • Tampa, FL 33612



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TAMPA BAY APPLICATIONS GROUP

**FDOT  
Planning & Programs District 7  
11201 North McKinley Drive  
Tampa, FL 33612**