



DISTRICT TWO ITS NEWSLETTER



November-December 2014 Issue 84

HAVE A SAFE AND HAPPY HOLIDAY SEASON

IN 2015, REMEMBER,

KNOW BEFORE YOU GO, CALL 511!



NOTES FROM THE DISTRICT 2 TRANSPORTATION SYSTEM MANAGEMENT & OPERATIONS (TSM&O) PROGRAM MANAGER

Since this newsletter covers the month of November and December it may get a little lengthy, however we will do our best to keep it under control. Guess I can begin with November's tremendous increase in ITS and TSM&O activities because of two Managed Lanes, two Toll facilities, five ITS, one Bus Rapid Transit and several Roadway projects all needing document reviews from our office at the same time. Combine that with several arterial ITS projects and you can see why our ITS staff has been pretty hard to reach the past two months. I can continue with discussions about our Ramp Metering, Truck Parking, Active Arterial Management and RTMC efforts but you probably already get the gist of what I am saying.

Instead I'd like to focus in on "Balance" and how important it is in our everyday lives. As the outgoing President of ITS Florida, Mr. Greg Letts of AECOM presented at the Annual meeting in early December. He didn't step up to the microphone and talk about the Transportation Industry, the state of ITS or any other technological subject. Instead, he focused on the importance of "Balance" in everyone's personal life and how the ITS effort can eat you up if you let it. Greg put a lot of thought into it as he spoke about missing his son's school event in order to be with us at the Annual meeting. He explained how he did everything in his power to coordinate the events to avoid a scheduling conflict only to have his son's school change the date of their event to the first week of December. Don't get me wrong, ITS and TSM&O have been tremendous fun over the past twelve years with even greater things to come in the future. The problem is that it can overwhelm individuals if they let it, so now is the time to discover "Balance." I am sure many of you can attest to the fact that in today's environment technology

has actually made it tougher (not easier) due to the multiple means of communication and access to information in real-time. I spoke with a close friend during the Thanksgiving Holiday about his job at Samsung and had a good laugh hearing about his holiday with the wife and kids.

He said the previous night he was on the SmartPhone doing work while developing a presentation on the laptop and trying to catch the football game on his "Smart" TV. Meanwhile, the wife was in the kitchen on the iPad trying to find Christmas gift deals on-line while using her SmartPhone to find a recipe for the Holiday dinner. Neither of them paid much attention to their two kids arguing over who gets to play on the OTHER iPad and who gets to use the Samsung Tablet! I laughed pretty hard at the fact that this is today's "normal" family instead of the one I grew up with a gazillion years ago. The only technology or argument we had was which channel to DIAL into for the evening entertainment on our BLACK AND WHITE TV! Never in my wildest dreams would I imagine saying "I miss those days."

On December 15th the Department will be hosting an Autonomous Vehicle Summit in Orlando to learn about the latest and greatest in this new technology. Talk about a paradigm shift this will bring to Transportation! Just when I thought I'd mastered everything there is to know about ITS technology this comes along to brighten my day. I am excited even though I fear what this transition will do to our workload ("Balance"). Likewise, I think about the amount of skill set that will be ready to assist us with this effort. During the ITS Florida Annual Meeting a representative from FHWA told us not to worry because there will be experts to assist. Well, I know there will be some, but



NOTES FROM THE DISTRICT 2 TRANSPORTATION SYSTEM MANAGEMENT & OPERATIONS PROGRAM MANAGER CONTINUED

“how many” and will we have the staffing or support to manage this effort?

If you've been keeping up with the news lately you would have learned that the pace to be the first “out the door” with an autonomous has picked up tremendously. MSN UK stated that England is working on legislation to allow self-driving cars on its roadways in the next few years. Mercedes-Benz just announced that its \$120,000 S550 Coupe is already equipped with an advanced suite of semi-autonomous technologies. Volkswagen, Audi, BMW and American car manufacturers are all in a race to get the product to market since the opportunity to expand their sales is being squeezed by current business opportunities. The reality is that there will be a lot to learn on our end to manage this new type of transportation technology as we try to figure out how to mesh it with the current environment.

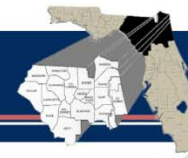
Our Spotlight Feature this month introduces you to Mr. Phil Tarnoff. I'd mentioned him in the October newsletter, stressing the fact that he was one of the pioneers of ITS. Mr. Tarnoff was gracious enough to spend a little time answering our questions while providing a very informative retrospect on his career and personal life. Phil has been “at it” with ITS for over 40 years and in some ways just recently found “Balance” in his life. He is very proud of his children, still madly in love with his wife, finds time to tend to an apiary while taking care of his garden and its 270 azalea bushes. I can only hope to have the same good fortune in the latter portion of my career.

It must sound kind of odd having me talk about “Balance” while dealing with the ever increasing workload but I have found some techniques to help me along. First off, I no longer arbitrarily

allow for changes to my daily schedule based on a convenience to others. If a vendor, colleague or consultant wants to meet with me I try to fit it into my calendar (which I proudly keep up to date on a daily basis) dependent on its importance. The requestor must provide a topic, some background and some back-up information so that I'm ready to cover the material at the meeting since I can only spare about 30 minutes of time for each visit. If it's a sales pitch I make sure that the request is given two weeks in advance. This allows me the opportunity to deal with the last minute “emergencies” that continue to pop-up from Central Office.

My daily schedule now contains time for a 10-minute lunch, one “pit-stop” and a two-minute one-on-one review with each of the ITS staff. I still allot 15-minutes of time to check on TMC activities since this is the hub for everything we are doing. There are two objectives for this TMC visit in that I can answer questions related to any unique situations that may have arisen during the day and I can also determine if they need any new technology/equipment that can make their work more productive. It's difficult for me to keep such a routine but I've noticed an increase in my productivity by sticking with this plan.

Another technique I am using is increased delegation to others with the hope that they use their best judgment. In the past I always felt the need to participate so that I could share my expertise but I now realize that in order to find “Balance” I must put my trust in others. It's sort of like pushing the baby bird out of the nest. If they try hard enough they quickly learn how to soar and if they fail it hurts a little but they get up, brush themselves off and try again. I am amazed at how well



**NOTES FROM THE DISTRICT 2
TRANSPORTATION SYSTEM
MANAGEMENT & OPERATIONS
PROGRAM MANAGER CONTINUED**

this is working so far while witnessing the exponential growth of the ITS staff.

My ultimate goal is to hold the fort until the Cavalry arrives. I may have mentioned the training program that I'm trying to develop so that we can recruit more talent into the TSM&O area. It's self-serving but a necessary evil since I'm at the tail end of my career. When we set-up in the new RTMC and things are settled with District Two deployments there will be only a few years left before it's time for me to go. The goal is to leave the program strong enough to help the next generation of TSM&O folks with the necessary tools to have a successful program. Only then will I reach the ultimate level of "Balance."

Pete Vega
District 2
Transportation System Management &
Operations (TSM&O) Manager



**NOTES FROM THE DISTRICT 2 ITS/TMC
PROGRAM MANAGER**

An ITS program cannot work without its field devices. They are the technological boots on the ground that not only gather important real-time traffic information for us and our partners, but also relay that information back to motorists. Although these devices are durable, as anyone who has had any technology issues of their own (laptop not working; home theater system on the fritz; dog ate the power cord) would know, with a large network of devices to support in our

service area, something is bound to happen at any time. That's why our maintenance contract with Traffic Control Devices (TCD) is so important. Managed by District II's Kevin Jackson, this one contract is singlehandedly responsible for ensuring that our whole system is as healthy as possible.

Kevin and his contractors seem to have the execution of this contract down to an art. Each morning our TMC staff sends us a device checklist that shows every unit that is down in the field. Those problematic devices not listed as "out of service", meaning that at the time fixing them is impractical, are to be troubleshot and fixed through the contract. Often, devices on the list are fixed within a couple of hours, a great turnaround by the maintenance team. Their efficiency allows them to often perform valuable proactive maintenance on our system, instead of spending their time trying to fix problems that have already occurred.

Our track record of healthy devices has been outstanding as of late. In fact, from late September to present we have had virtually no outstanding device issues at the end of the week. This is amazing, considering that between our DMSs, cameras, vehicle detectors, and road weather stations we have about 500 devices out in the field, with countless numbers of encoders, switches, and surge suppression devices supporting them. That's right, 500 devices, and as of this morning, not a single device issue. That's incredible.

This success of our devices is due to many aspects of our D2 ITS program. Most obvious, our maintenance staff have been great. In the time that we have recorded virtual perfection across our network, we've had multiple field



NOTES FROM THE DISTRICT 2 ITS/TMC PROGRAM MANAGER continued

cabinets hit by run-off-road vehicles. Quick thinking by maintenance has creatively fixed these problems. We have survived multiple storms, including the vicious front that rolled through Jacksonville a month ago, bringing heavy rain, lightning, and hurricane force winds to many parts of town. Devices went down shortly, but due to quick acting by our forces and a system that has benefitted from valuable preventive maintenance, they were soon back up again.

Maintenance has had the support of our TMC staff and other consultants as well. The TMC employs their exceptional communication skills and overall system knowledge to assist TCD as they troubleshoot D2's devices. There is also an extensive amount of research and testing on the district's end to ensure that we find out what devices work best for our environment, and which ones need to be removed from our network. Having the best equipment certainly helps when it comes to the longevity of our system.

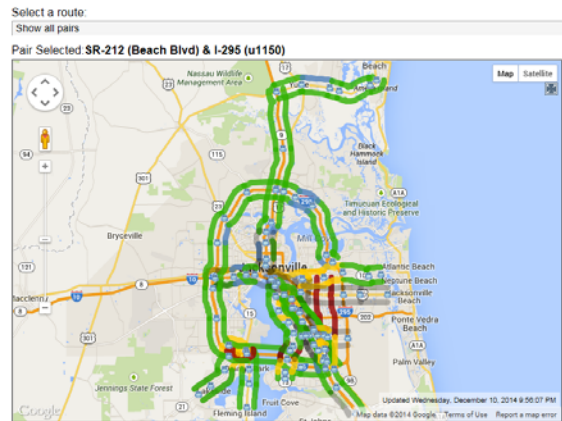
As we enter the "quiet time" (if I'm allowed to say that) of the year for device malfunctions, I am confident in our device maintenance and longevity. Through the knowledge and dedication of our maintenance staff and our other staff and consultants who support them, we have achieved fantastic results and unbelievably low device downtime. This is done with just one maintenance contract, managed by one FDOT employee, with the help of a few others who have all put a lot of hard work into our ITS inventory. The efficiency of our ITS department in this aspect is something that I, not only as a manager, but also a "tax-paying citizen", can be very proud of!

Josh Reichert
ITS/TMC Program Manager

NORTH FLORIDA TPO UPDATE

The North Florida Transportation Planning Organization's (NFTPO) investments in ITS are beginning to pay off in a big way. First and foremost is the Bluetooth deployment in North Florida and the issues that are being resolved with the communication network. We now have added data from a number of devices in Clay County along State Road 15 and 21. By the end of 2015 we hope to add a number of deployments in St. Johns County as well. The NFTPO System Manager is monitoring the deployment on a daily basis and attacking problems as they arise. This helps in that the biggest culprit for our network issues are the contractors doing construction along our roadways. We can now jump on these damages immediately thereby starting the clock on any repairs.

Speed Map - Jacksonville



Next up is the new RTMC and significant progress at the job site. Currently, the area looks like a war zone with all the torn up dirt and asphalt. Ironically, the project contractor is damaging our own communication system coming into the existing FHP Dispatch Center. It only took one time for them to damage the conduit/cable and see a bunch of officers in uniform before they promised "we'll never do that again!" Next month we begin to select

Continued on following page



NORTH FLORIDA TPO UPDATE cont.

colors with the interior designer so that we can proceed with procurement of the furniture. The timeline for move-in is late August 2015 but the hope is that good fortune allows us to gain 30-days based on expedited commissioning process.

As for the NFTPO System Manager we recently reached the 5-year time limit for the existing contract and are currently working within an extension of the agreement. In November we interviewed three firms (one of which is the incumbent) and the technical review team has submitted their selection to Professional Services. We hope to have the new contract in place by February so that this very valuable resource is available to us without any lost time.

On a final note, in January we will begin to provide more detailed information for this section of the newsletter since the NFTPO System Manager has requested the opportunity to provide their monthly updates for the contract. I believe this will be very informative to many of you since they are here to serve the partners of the North Florida ITS Coalition.

Pete Vega
TSM&O Program Manager



MAINTENANCE

As promised from the last newsletter, we are providing an update of the Freight Parking Pilot Project. The system is operational, and although there have been some “bugs” to work out, is working well at this time. The location of one of the vehicle detectors had to be moved because the original location wasn’t perpendicular enough to the exit lane to get accurate readings. Once this was corrected the TMC was getting good readings and the system was working well. Then the other vehicle detector had a failure and the system was down until that detector was repaired. Both detectors have recently been recalibrated and as of the writing of this article the system is working as planned.

As you are well aware, we made it through 2014 without a direct hit from a hurricane or tropical storm in the northeast Florida region. This is a welcome relief to us all but you always have to plan for the worst. With that in mind, the ITS Maintenance Group is working on rewiring the TMC generator and UPS system to allow one generator to run both the TMC and the FDOT telephone room. Currently there is one generator for the TMC and another that runs the telephone room, but the one that runs the TMC is old and has been having various issues. The wiring changes will put everything on the newer Generator panel and also use the TMC UPS for temporary back-up while the generator starts up or in case of generator failure.

Kevin Jackson
ITS Field Specialist



CONSTRUCTION

American Lighting and Signalization and their sub-contractors have been installing conduit, device poles, and power poles throughout the Phase 9 Project corridor. Installation of DMS foundations is currently scheduled for the end of December and first part of January. The Phase 9 project limits are on I-295 from Atlantic Boulevard to the southern I-295/I-95 Interchange. This project will complete the installation of ITS on the I-295 beltway. The project is scheduled to be completed before the end of 2015.

The construction of the I-95 ITS communications portion of the SR 23 project is underway. Work is currently progressing along the I-95 corridor in St. Johns County. Crews are nearing completion of directional boring conduit along the southbound right of way. Conduit installation is expected to continue for several months. Once conduit installation is completed, crews will install the pull boxes and splice vaults along the entire conduit run.

The design for the ITS devices and power infrastructure for I-95 in St. Johns County is currently underway. Plans have been submitted for review and comment by FDOT. This project will install DMS, CCTVs, MVDS, Arterial DMS, and power infrastructure on I-95 and several connecting arterial roadways from US 1 in south St. Johns County to the Rest Area north of CR 210. Once this project is completed FDOT will have ITS coverage on I-95 from north of Jacksonville to south of Miami.

Metric Engineering recently submitted 90% design plans for the installation of conduit, fiber optic cable, pull boxes and splice vaults on I-75 from SR 24 in Gainesville going north to the Georgia State Line. This project will connect to the I-75 Visibility Project which is being constructed on I-75 from the Marion County line going north to SR 24. Once completed, District Two will have ITS on all of I-75

within the District. During regular business hours the Gainesville Smartraffic TMC will be responsible for monitoring the devices along I-75. The District Two TMC in Jacksonville has a fiber optic cable connection to the Gainesville Smartraffic TMC and will be responsible for monitoring the devices after hours, weekends and whenever Gainesville operators need assistance.

Construction of the I-75 Visibility Project, mentioned above, continues with the contractor currently working on installation of pull boxes and splice vaults along the I-75 corridor portion of the project. The contractor has also started installing power service poles and equipment. The contractor has used approximately 70 percent of contract time to date with project completion anticipated for the Spring of 2015.

Craig Carnes
Metric Engineering

FIRST COAST TRAFFIC INCIDENT MANAGEMENT TEAM UPDATE

The First Coast TIM Team meeting was held on November 18, 2014 at the FDOT Urban Office Training Center, 2198 Edison Avenue at 10:00 A.M. Ms. Donna Danson opened the meeting by welcoming everyone and stated that these meetings are held so that all incident management agencies involved can help each other in order to improve incident management from the field to communication.

The TEAM started off the agenda with the update on the Overland Bridge Project given by Mr. Bill Kays. Mr. Kays informed all TIM members about upcoming changes that will affect traffic patterns especially throughout the rest of the holiday season. He mentioned that the project is on schedule and is looking

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FIRST COAST TRAFFIC INCIDENT MANAGEMENT TEAM UPDATE
continued

promising thus far. Mr. Ed Ward then provided the TEAM with the Emergency Operations update and some great news. He informed the TEAM that the hurricane season is over and that the cold air would make it unlikely for a hurricane to hit our District 2 area.

The TEAM moved on to the Construction Project Update where Mr. Ron Tittle informed the TIM TEAM of many projects occurring in the First Coast area that will affect traffic flow in upcoming months. Mr. Tittle also advised all to be aware and cautious when driving through construction zones as safety is the main concern. Mr. Josh Reichert then provided the TEAM with the ITS updates. He mentioned that the RTMC construction has officially begun and that we are hoping to move in to the building before the end of next year. Mr. Reichert also gave a brief presentation on two incidents that occurred on November 17, 2014 where two semi-trucks heading northbound overturned on the Dames Point Bridge due to inclement weather. He congratulated the incident management teams for their valiant effort in clearing both incidents in less than 90 minutes meeting the open roads duration goal.

If you are interested in presenting a training session for your agency and would like assistance, please contact Team Member Craig Carnes with Metric Engineering at: ccarnes@metriceng.com. Mr. Carnes is willing to work with agencies' schedules, including nights and weekends to make the training course available.

This meeting marks the last meeting that the First Coast TIM Team will hold in 2014 and we look forward to the next First Coast TIM Team bi-monthly meeting on **January 20, 2015** at the

FDOT Urban Office Training Center, 2198 Edison Avenue at 10:00 A.M. Please remember your attendance at this meeting is important as we need representation from all incident responder agencies to continue to grow together. Also it is very important that we start off the New Year showing our commitment to providing excellent incident management. We are looking forward to seeing everyone there.

ALACHUA-BRADFORD TRAFFIC INCIDENT MANAGEMENT TEAM UPDATE

The Alachua-Bradford TIM Team will hold its next bi-monthly meeting on February 11, 2015 at the FDOT Gainesville Operations Office, 5301 N.E. 39th Avenue at 10:00 A.M. Please mark your calendar to attend this meeting as this will be the first meeting for the calendar 2015 year.

District 2 TRAFFIC INCIDENT MANAGEMENT TEAM MISSION:

The Florida Department of Transportation District Two's Traffic Incident Management Teams through partnering efforts strive to continuously reduce incident scene clearance times to deter congestion and improve safety. The Teams' objective is to exceed the Open Roads Policy thus ensuring mobility, economic prosperity, and quality of life.

District 2 TRAFFIC INCIDENT MANAGEMENT TEAM VISION:

Through cooperation, communication and training the Teams intend to reduce incident scene clearance times by 10% each year through 2015.

Donna Danson
District 2 ITS Program Manager



ROAD RANGER UPDATE

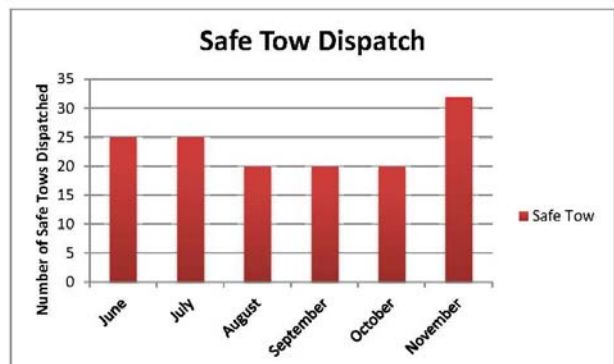
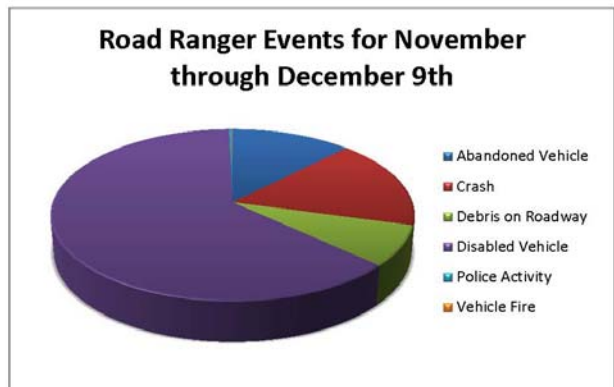
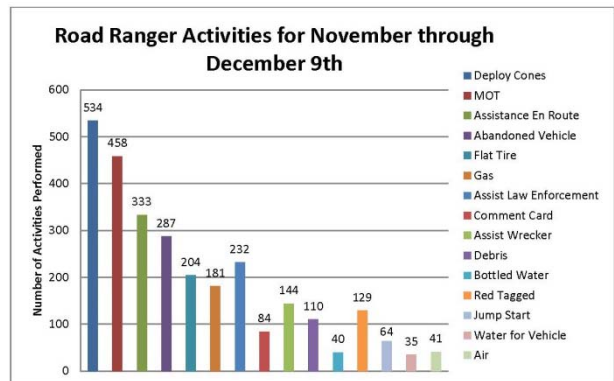
The Road Rangers held their last safety meeting for the year on December 3, 2014 at 11:30 AM at the FDOT Urban Office Training Center. Mr. Marshall Adkison started off the meeting by jumping straight into his presentation. He reminded the Road Rangers that safety is extremely important, especially with the holidays approaching and is always one of the top priorities of the Road Rangers. Mr. Adkison also reviewed the importance of Maintenance of Traffic on the roadways and standard procedures to refresh the Road Rangers on how these tools can save lives. After Mr. Adkison’s presentation Ms. Donna Danson then had the opportunity to congratulate Road Ranger Jason Burney on his article in the monthly FDOT newsletter. Mr. Burney was recognized for his excellent efforts in helping a stranded motorist on the Buckman Bridge on October 23, 2014. The motorist was terrified and with the comfort and help of Mr. Burney she was able to make it off the bridge and back on the roadway safely in hardly any time at all.

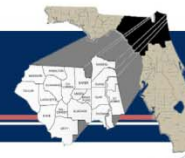
Ms. Danson also recognized the Road Rangers for their participation in the “Move Over Law Media Event”. The telecast originally aired on First Coast News on November 13, 2014. It reviewed the importance of the Move Over Law in Florida and how it can save lives, especially our Road Rangers’ lives, on our roadways. It featured our very own Mr. Mitchell Hayes and his near death experience while helping a stranded motorist on July 2, 2014. The telecast can be seen at the following link <http://www.firstcoastnews.com/story/traffic/2014/11/13/drivers-disobey-move-over-law-for-service-vehicles/18917267/>. This segment is scheduled to be replayed two more times before the end of the year.

The Road Rangers play an essential role in incident management and are utilized to make incident scenes safer for our incident responders and motorists. So far, the months of November and December have been fairly busy for our Road

Ranger service as the rangers have been involved in assisting with close to 2,000 incidents. We hope to maintain our excellent services and finish strong in 2014.

The charts below illustrate the Road Ranger activities from the beginning of November through December 9, 2014 as well as the different types of reported events. We can clearly see that the number of safe tows that have been dispatched in November was significantly higher when compared to the past six months.





RISC – RAPID INCIDENT SCENE CLEARANCE - UPDATE

District 2 has not had a RISC incident in the last month, but our RISC Contractors remain ready to respond if needed.

PERFORMANCE MEASURES

November and December have proven to be some interesting months with the weather ranging from as high as 87 degrees to as low as 26 degrees here in District Two. We definitely welcomed the cooler temperatures in the month of November, especially during our Thanksgiving festivities when the temperatures seemed to dip the lowest but of course, with Thanksgiving being the most traveled holiday of the year the weather did not stop the amount of travelers on the roadway.

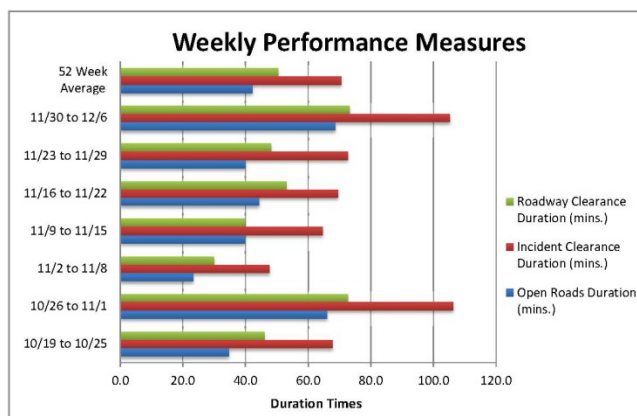
Road Ranger activities for the months of November and December have increased significantly due to events such as crashes, congestion, abandoned and disabled vehicles on the roadways. So far there have been over 5,000 activities here in District Two during the course of the mentioned months. This could also be due to the amount of congestion and crashes during the Thanksgiving travel period. The number of congestion events was about 20 percent less than the weekly average during the week of Thanksgiving but was higher the week before and after Thanksgiving with over 23 percent more congestion events reported in SunGuide than the weekly average.

In terms of the amount of crashes in District Two around the same time period there was a significant increase by approximately 12 percent during the weeks before, during and after Thanksgiving. It also probably did not help that during the week of November 23-29,

2014 there was a total of 3.14 inches of rainfall recorded in the area. The inclement weather could have led to more events on our roadways.

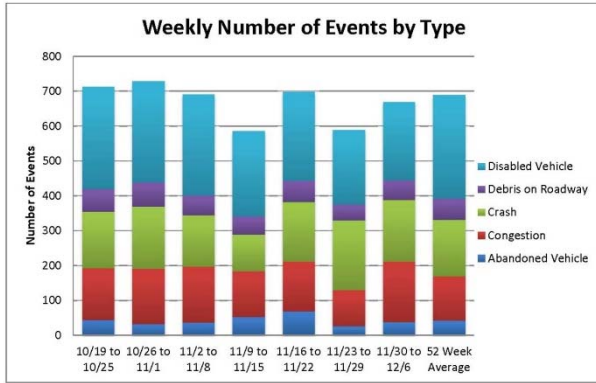
The Open Roads Duration, Incident Clearance Duration and our Roadway Clearance duration have been significantly lower than our weekly average by approximately 6 percent in each category for the past month. Looking at the Weekly Performance Measures chart below we can see that we only had two weeks where all the Incident Clearance duration times were slightly above the weekly average. During the week of October 26 to November 11, there was an increase in the number of crashes along with congestion events which could have contributed to the average being slightly higher for that week than usual. Also, the week after Thanksgiving from November 30 to December 6 there was also an increase in congestion events. We will definitely be keeping a keen eye on the Performance Measures during the month of December for the holidays.

The following charts illustrate the Performance Measures data for the past seven weeks as well as the different types of events reported.





PERFORMANCE MEASURES continued



Sherrell Lall, Metric Engineering

OPERATIONS

Florida is no stranger to inclement and dramatic weather. The past month for District 2 RTMC Operations has demonstrated that in full. We've experienced some of the best of Mother Nature ranging from severe fog to intense wind speeds.

Fog has been a recurring event recently. One affecting every part of the district. Our operators have been busy pushing out floodgates for the Paynes Prairie area in Alachua County to posting DMS for low visibility on one of Jacksonville's infamous seven bridges.

In addition to fog concerns, we've recently had issues regarding wind speeds on our higher bridges. Our tallest and biggest concern, the Dames Point Bridge, has recently had some activity. Over the past month we've had incidents of high winds being directly responsible for accidents there crossing the St. Johns River. The biggest of course being two semis that blew over prior to them reaching the

top of the bridge on November 17th. This was a large incident with tons of exposure emphasizing the need for our program and DMS messaging for motorists. Or at least, for those who are paying attention.



The RTMC has not just been dealing with weather over this time period as well. A Pilot Project, spearheaded by Joshua Reichert, resulted in those travelling northbound through St. Johns County witnessing a new sign before the rest area just short of the Duval County line. Truckers and motorists are now informed of the open spaces for trucks before they reach the rest area. This is part of the department's goal to assist truckers with their routes and hopefully increase the efficiency and movement of freight to and from Florida's many ports.





OPERATIONS continued

Freight parking is managed by detectors placed at truck parking facilities with RTMC operators and supervisors verifying the accuracy every few hours. Our numbers are pushed to a sign located a mile ahead of the rest area giving the Freight Operators a warning if the lot is full. Thus being able to plan for their next required stop/rest.

The Holiday Season is a busy one for the Transportation Management Center and 2014 looks to finish strong. Projects are underway to complete the 295 Beltway, SR-23 is picking up steam, The Paynes Prairie Project is wrapping up and connection with ITS Devices to District 5 on I-95 is full steam ahead on the design phase. Here is to a cheerful end of the year and a prosperous 2015. As you know, without ITS devices outside of Jacksonville (and parts of Jacksonville) the TMC depends on FDOT and TIM Partners to assist us with traffic information reports. You can reach our 24/7 line at (904)359-6842 or our work day line at (904)360-5465. You can also leave feedback on the 511 system (Phone and smartphone applications) about road conditions and bugs you may find in the system that is relayed to our operators in real time. To ensure safe travels during this Holiday Season remember to Know Before You Go! Use FL511.

Jesse Gilmour
TMC Supervisor

MARKETING

It seems Florida has two seasons... summer and a slightly cooler version of summer. And our neighbors to the north know it. On November 25th, just before the Thanksgiving holidays, they arrived at the I-95 Florida Welcome Center stamping their snow boots in the doorway and shaking off the winter chill. After regaling us with tales of faraway lands

where 4 foot high snow drifts covered front porches and swallowed mailboxes, we regaled them with tales of palm trees decorated in twinkling lights, steel drums playing "Have Yourself a Merry Little Christmas" in the background. And after demonstrating our 511 app, then watching several of them download it on the spot, we sent them on their merry little way to visit Uncle Cedric and Aunt Lulabelle down in New Smyrna Beach. Then we sat back and admired our handiwork from inside our cozy little 511 booth. No heater required.

Just before the weather changed from summer to "almost winter," we spent a little time honoring our Veterans. The week of November 10th we visited two VFW (Veterans of Foreign Wars) posts - Westside (Blanding Blvd) and the Beaches - to deliver 511 goodies. It was the least we could do to honor those who have served on foreign soil defending this country we love and call home. And it was an absolute delight to see the smiles on their faces as they opened their little bags of 511 goodies. After those two stops, we headed over to the Wounded Warrior Project on Belfort Road where we continued to foster the spirit of goodwill and comradery. It excites me to know that going forward these two agencies will be partnering with us in our 511 efforts. Hooray for new "team members".

But the icing on the cake this season will be our 511 Holiday Media Event next week. Each December, we invite local law enforcement officers, FDOT officials and travel experts to share their knowledge of all things transportation-related. Then we invite the local media to come in and package it up with a nice little bow on top for distribution to the motoring public. We value these partnerships with area law enforcement officers, members of our local television and radio stations and the print media, as they help bring awareness to the 511 program year round.



MARKETING continued

2014 has certainly been a year of progress! And we eagerly await the dawning of the new calendar year. Bring on 2015!

And as always, wherever you're headed make sure your trip begins with a call to 511. You can also log onto www.FL511.com or download our free 511 Traffic App available for Apple and Android.

Everyone knows that 511 is the preferred navigation system of choice for Santa and his reindeer! Know Before You Go and Keep Moving!

Sherri Byrd
Marketing Manager



When did you last stop at the Welcome Center on I-95? Lots of fun and interesting things to see, and you might just see the 511 Team!

REGIONAL TRAFFIC MANAGEMENT CENTER CONSTRUCTION PROGRESS

As most of you are aware, it's "full steam ahead" with the construction of the new RTMC! In the coming months, we'll provide you with a "progress report" in pictures so you can enjoy the progress right along with all of us!



The two pictures above, right, were taken on 12-11-14. The panoramic below was 3 short days earlier.





SPOTLIGHT ON...Philip Tarnoff

First of all, we're a little humbled by this opportunity to speak with you. You've been considered by many in this industry a "pioneer" of sorts, a forefather of modern technology. Tell us a little about your background. Where did you go to school and what did you study?

Your question makes me feel very old. I prefer to think of myself as a participant rather than a forefather of modern technology, although I still am not a big fan of Facebook.

I received my undergraduate degree in Electrical Engineering from Carnegie Mellon University (it was called Carnegie Institute of Technology when I was there). I received my masters in Electrical Engineering from New York University.

I specialized in feedback control systems, which turned out to have an interesting relationship with adaptive traffic control and other ITS technologies, although at the time traffic management was not on my list of future career possibilities.

How did you end up in the field of Transportation?

My career trajectory began with employment in the defense industry, where I acquired good technical experience with analog and digital computers, control systems and simulation. It led to employment with a small consulting company that had contracts both with the Department of Defense and with the Bureau of Public Roads (which ultimately became the Federal Highway Administration). When the consulting company experienced hard times, I applied for and was selected as a research engineer with the FHWA. At FHWA, I became very interested in traffic control systems and traffic management. A field which I have pursued to this day.

What positions have you held? Past jobs and appointments?

After graduating from NYU, I was employed by Johns Hopkins University Applied Physics Laboratory (APL), a Navy contractor, where I was involved with the simulation of surface-to-air missile systems using both analog and digital computers.

I was lured away from APL by a small consulting firm, Kelly Scientific, where I worked on many different types of projects including some research assignments for the Bureau of Public Roads.

When the Kelly Scientific experienced hard times, I joined the FHWA Office of Research where I ultimately became responsible for the Urban Traffic Control System/Bus Priority System (UTCS/BPS) research. This research involved the development and testing of the early adaptive traffic signal systems.

From FHWA I went to work for Alan Voorhees and Associates (AMV), a transportation consulting firm that had a very successful planning and operations practice. I led their operations-related consulting activities.

Next step was the formation of Farradyne Systems, Inc. in 1984, which became PB Farradyne when it was sold to Parsons Brinckerhoff. Farradyne Systems was very successful, specializing in both consulting and implementation of traffic management systems throughout the US. In addition to traditional traffic management systems, Farradyne Systems developed one of the earlier navigation and traffic information systems, variable speed systems and adaptive traffic control systems.

After selling PB Farradyne, I moved to the University of Maryland in 1997, where I formed



SPOTLIGHT ON...Philip Tarnoff continued

and managed the Center for Advanced Transportation Technology (CATT) which became one of the larger centers on the UMD College Park campus. The CATT was involved in numerous programs including performance measurement, coordination of emergency response activities, distance learning, training (including the Operations Academy) and data visualization.

How many years have you been in the industry and are you still working full-time?

I joined FHWA in 1970, so I have been in the industry for more than forty years. Although I have retired from the University of Maryland, I am still actively consulting, and participating as the Chairman of the Board of Traffax Inc., a Bluetooth equipment manufacturer. My consulting work includes co-leadership of the Operations Academy, and work with the connected vehicle program. I am also a member of the Board of Advisors for the George Mason University Engineering School.

In your book *The Road Ahead*, you make the argument that technology is a cost-effective way to reduce traffic congestion without spending a lot of money building new highway systems. If we can't build our way out of the problem, what's the single most important thing we can do *now* to start alleviating overcrowded highways?

There is no question that we have neither the funding nor the national will for major highway construction projects. Nor is new construction necessarily the best approach to addressing the growing problems of highway congestion. There is no single answer to this problem, but the application of a coordinated set of solutions are available that will certainly help. I would begin with the low-hanging fruit. The first step includes the nation's signal systems which, in many

cases are outdated and poorly managed. 65% of the nation's signals have not been retimed in the past 10 years. I would also begin to install adaptive traffic signal control in locations where it makes sense; i.e. locations where there are unpredictable changes in traffic flows due to incidents (in some cases on adjacent facilities), shopping centers, universities, special events or factories with unpredictable shift changes.

But there are a number of other areas in which near term solutions (many of which are mentioned in the book) are available to ease congestion. These include use of shoulders during peak periods, ramp metering, and improvements in incident response such as better towing policies. Some of these solutions require senior management and/or political support. But as roadway performance continues to deteriorate, the needed support will begin to emerge. In fact there are signs that this is beginning to occur.

But these measures will only take us so far. More extreme measures including various pricing policies including tolling, congestion pricing and increased parking fees are also needed. These policies must be accompanied by improvements in transit service to provide people with economical alternatives.

None of these are new ideas. The bottom line is that transportation must be viewed holistically as a system that must offer the needed capacity to the individuals who want to use it. We have a tendency to try to influence traveler performance using disincentives such as pricing, without considering the parallel incentives that must be provided so that people have available alternatives.

Photo enforcement is a parallel example of the use of disincentives without incentives. We fine people for running red lights or speeding, even though their actions may be the result of "our"



SPOTLIGHT ON...Philip Tarnoff continued

poor operations (poorly timed signals or unrealistic speed limits). Some of the law breaking that leads to photo enforcement fines is the result of the public's frustration with our poor operations. Is it no wonder that we don't get the public support that we desperately need? Shouldn't we provide the incentives for people to obey the signals or travel at a safe speed by providing good operations?

I can imagine that at times you've felt like the Lone Ranger or a salmon struggling to swim upstream. What is the most difficult project you've fought for and subsequently won?

I have won and lost many difficult projects. Many of the successful outcomes have been as a result of collaboration with other individuals. One difficult project that has proven to be very successful was the I-95 Corridor Coalition's Vehicle Probe Project. This project, which still exists, was initiated by the Coalition's management team, which determined that the availability of accurate travel time information would benefit all of the Coalition's members. Working with George Schoener, the Executive Director and Neil Pedersen, Chair of the Coalition's Executive Board, we were able to develop a plan and provide supporting documentation to convince the Coalition's membership to pursue this groundbreaking project in spite of opposition based on the project's size in comparison with other Coalition activities.

What ITS related changes do you see on the horizon, especially within the next 5 years?

I feel as if Transportation Management and Operations TSMO (and ITS) is finally becoming recognized as a major program to be integrated into DOTs management structure at a level that is equivalent to that of other functions of the DOT such as maintenance and construction. In

some cases, we are beginning to see programming and budgeting of TSMO projects as part of the normal programmatic process within the DOTs. Although these improvements are scattered, they are beginning to spread throughout the transportation community. In other words, TSMO is beginning to get some respect. But it's just a beginning.

Another positive development is the increasing recognition of the fact that Intelligent Transportation Systems are the tools of TSMO and not necessarily an end in themselves. If we are going to effectively manage traffic we need the entire toolkit plus all of the management activities needed to support it.

Specifically, ITS will continue to advance technically, along with advances in vehicle telematics as well as the overall information technology industry. Telecommunications will continue to become faster and more reliable. Sensor technology will continue to advance. Software development will become more predictable and manageable. The challenge faced by the transportation community is to take advantage of these advances. For example, improved sensors provide us with the ability for enhanced performance measurement. But will we use this new capability and for once integrate performance measurement into our management processes?

What's the most significant change you've witnessed in your last 4 decades of traffic engineering?

The single most significant change I've witnessed is the measurement of travel time. This change has been led by private industry, a fact which in and of itself represents a



SPOTLIGHT ON...Philip Tarnoff continued

significant paradigm shift. It provides the motoring public with the information they need for intelligent route and mode choices. It provides agencies with the capability to identify operationally deficient roadways, to measure system performance, and to identify incidents more rapidly. The change has been both technological (fleet monitoring, Bluetooth, crowd-sourcing, etc.), and structural in the sense that private sector players are true partners in the business. I believe that the changes that are occurring will lead to the demise of 511 which has been an expensive experiment with the collection and dissemination of government furnished data. I also believe that the multiple dissemination technologies being used for travel time measurement could ultimately lead to the demise of variable message signs whose data is rapidly becoming redundant (if not inferior) to the data that can be presented using smart phones and other in-vehicle devices.

What are your thoughts on Express Toll Lanes?

In these days of funding shortfalls with no immediate relief in sight, Express Toll Lanes will be one of the tools that States increasingly turn to for financial relief. When tolling is congestion-sensitive, these lanes can be used to provide quality service to their users. I recognize that they have been branded Lexus lanes by their opponents with the rationale that they are only of benefit to those who can afford the tolls. But our transportation system has many built in biases toward those who can afford optional services including first class fares, first class rail fares, fancier cars, etc. Even those who cannot afford to regularly use the lanes will benefit from the reduced congestion on the non-toll facilities, or the ability to occasionally use these lanes in cases of emergency. I believe that Express Toll Lanes are here to stay.



Philip Tarnoff

Describe a 'defining moment' in your career or personal life.

When one's career is forty plus years, there are obviously many defining moments. On a personal level, I would be remiss not to mention defining moments as my marriage and the birth of my two children.

From a career perspective, a defining moment occurred when I was in high school and read an article in Popular Science that described New York City's implementation of the first computer controlled traffic signal system. I've never forgotten that article, and find it ironic that my career followed the path of the article. I also find it ironic, how little the strategies used in the computer have changed since that article was written.



SPOTLIGHT ON...Philip Tarnoff continued

On a lighter note, do you have any funny stories relating to traffic management? I'm sure you've witnessed your share of highway debacles.

Farradyne installed a fog warning system north of Chattanooga, Tennessee that successfully alerted motorists of the presence of low visibility on a fog-prone section of I-75 that had experienced many fatalities. This system automatically lowered the speed limit based on visibility measured by sensors spaced along the roadside. When the system was installed, there was a requirement that it be compatible with future conversion to the metric system. As a result, the speed limit signs had the capability of displaying three digit speed limits. Somehow, the first digit (which was normally blanked) began displaying the numeral "1". As a result, the speed limits being displayed were 165 mph rather than the desired 65 mph. I thought it quite humorous as did numerous citizens of Tennessee who now had the ability to test the top speeds of their cars. Obviously, the state police did not see the humor in this situation.

How do you like to relax and unwind when you're not at work?

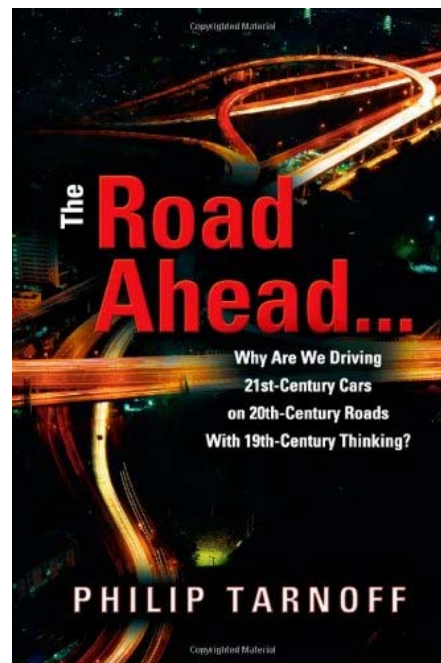
Semi-retirement has given me many opportunities to dabble in my multiple hobbies. The list is a long one and includes music (I play the clarinet in a local band), photography (mostly birds and nature), writing (the next book will be fiction), bee keeping (yes, I'm an apiarist), taking care of our extensive garden (we have 270 azaleas in our yard), and various church activities. So you can see that I've found multiple replacements for my 40 hour week career.

Your portfolio is already quite impressive. So what's next for you?

I intend to remain active within the TSMO community. This would include continued work with the Operations Academy, participation with the George Mason Advisory Board, working with Traffax and various other pursuits. I will continue to accept interesting consulting assignments, particularly those that deal with the future direction of the industry.

Editor's Note:

Mr. Tarnoff is the author of a book entitled (mentioned in the article above),



and maintains a blog at the following url.

<http://philiptarnoff.wordpress.com/about/>



TRAFFIC INCIDENT MANAGEMENT
2015 MEETING SCHEDULE
To Be Announced

FIRST COAST TIM TEAM MEETING
FDOT URBAN OFFICE TRAINING CENTER
2198 EDISON AVENUE- JACKSONVILLE
904-360-5400

January 20, 2015

ALACHUA/BRADFORD TIM TEAM MEETING
FDOT GAINESVILLE OPERATIONS OFFICE
5301 N.E. 39TH AVE- GAINESVILLE
352-381-4300

February 11, 2015

FDOT DISTRICT TWO ITS STAFF



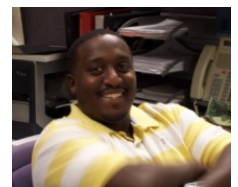
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