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FPTA CTD 2015 Annual Training and EXPO

The 2015 Inaugural Joint Annual Training and Expo with the Florida Public Transportation Association and the Commission for the Transportation Disadvantaged will be held Sunday, October 25 through Wednesday, October 28 in Daytona Beach.



The 2015 conference promises to be an interesting and enjoyable event with a substantial and diverse program including topics for everyone in the industry, whether you provide fixed route or paratransit services. Sessions sponsored by FDOT's Florida Transit Planning Network that will be of particular interest to transit planning professionals include:

Planning and Designing Transit Exclusive Lanes, Monday, October 26

In Florida, transit exclusive lanes are proving to be an effective strategy to facilitate more efficient and effective public transit services. This presentation will provide an overview of preferential transit treatment policies and projects. The Central Office Transit Office will present their "Typical Sections for Exclusive Transit Running Ways" guide and development of FDOT guidance for repurposing general purpose lanes as transit lanes. Representatives from FDOT Districts 4 and 5 will also present completed and ongoing transit projects that involve exclusive lanes and bus preferential treatments. An interactive roundtable will be conducted to discuss implementation challenges and lessons learned for sharing.

Transit Data Security and Applications, Monday October 26

Increasingly, transit agencies are using technological solutions to improve service and operational performance. General Transit Feed Specification (GTFS) open data is being leveraged to provide many new types of very useful information services including multimodal trip planning, timetable creation, real-time information and interactive voice response at little or no cost to the agency.

As our society has become more "networked," with traditionally isolated systems connecting to business networks and with each other, government agency websites and databases have been hacked, and corporate secrets have been compromised. Cyber-attacks on infrastructure control systems have the ability to cause physical consequences similar to those usually associated with more traditional attacks (such as bombs or equipment sabotage).

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Transportation is not immune to these changes, and there is the very real possibility that infrastructure such as Traffic Management Centers, signal control systems, and rail control systems may be manipulated via their cyber components to cause crashes, kill and injure the traveling public, and destroy critical systems. The protection of “infostructure” is especially important for transit agencies entrusted by the public to provide safe transportation services.

Due to the growing reliance on transit data, and often the shared use of an agencies’ data assets with external parties, special measures must be taken to ensure the security of the data. In this session, you will learn from industry experts the value of sharing GTFS data and considerations and strategies that can be used to protect transit data assets.

Interesting Planning Tool Developed by Code for America

Streetmix is an interactive street section builder that helps community members mockup the streets they'd like to live on and offer these mockups as future plans for city officials and planners.

In early 2013, San Francisco’s Department of Public Works convened members of the Second Street Improvement Project to brainstorm ways to improve the corridor. Like so many urban planning and transit meetings before it, the group used paper cutouts to visualize their ideas.

The problem with the approach was that members had to wait until the next meeting to present their ideas. It was then that 2013 Code for America Fellows Lou Huang, Marcin Wichary, Ezra Spier and Katie Lewis began work on a 24-7 solution.

With an interest in soliciting greater feedback and



citizen engagement, the group built Streetmix -- a web-based application where citizens and planners can mockup city street designs. Rather than forcing planners to offer their feedback using paper cutouts at meetings, this app lets you drag and drop sidewalks, cars and bus stops into an online and sharable interface.

Within the first week of its official launch, the app has been used by Sioux Center, Iowa residents to protest the widening of highways, has been forked into Spanish for Mexico City planners and is currently being used by Bike Cleveland to advocate for bike lanes.

To begin mocking up streets in your city visit streetmix.net.

JTA First Coast Flyer

The way Jacksonville rides transit changes forever in December. That’s when JTA will begin operating phase one of the First Coast Flyer Bus Rapid Transit system. Once it’s complete, the First Coast Flyer will connect customers to 57 miles of destination travel downtown and in the north, south-east, east and southwest areas of Jacksonville. The Flyer system will be developed in five project stages as shown below. Flyer service requires minimal use of schedules and features fewer stops, shorter waits,

easier transfers and frequent trips. Additional Flyer features include: branded stations, dedicated lanes, queue jumps, streetscaping and ticket vending machines

As the Northeast Florida region expands, the Flyer will be an essential part of a streamlined transit system that can grow and improve with the times.



U.S. Department of Transportation Announces \$19.5 Million to Improve Transit Access in Selected Communities Around the Country

The U.S. Department of Transportation's Federal Transit Administration (FTA) recently announced that 21 organizations around the country will receive a share of \$19.5 million in grants to support comprehensive planning projects that improve access to public transit. The funds are made available through FTA's Transit-Oriented Development (TOD) Planning Pilot Program for communities that are developing new or improved mass transit systems. A list of selected projects is available online and in the Federal Register.

"Our nation's transportation demands have exceeded our capacity, causing millions of Americans to lose precious time stuck on congested roads and transit systems," said U.S. Transportation Secretary Anthony Foxx. "By investing in transit planned around housing, jobs and services, these communities are creating ladders of opportunity for their citizens and laying a strong foundation for economic development that our growing nation demands."

FTA Acting Administrator Therese McMillan announced the grants in Tacoma, Washington, home of Sound Transit, one of the grant recipients. She was joined at the announcement by Tacoma Mayor Marilyn Strickland, city council representatives and other local officials.

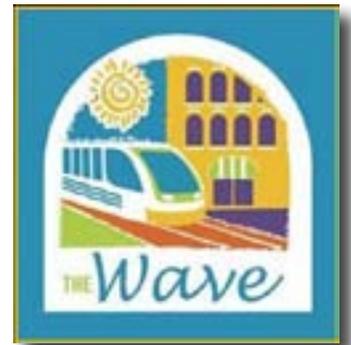
"Transit-oriented development is critical to the success of new projects and to the economy of the local communities they serve," said FTA Acting Administrator McMillan. "These grants will help communities like Tacoma develop a transportation system that encourages people to use transit to reach jobs, education, medical care, housing and other vital services that they need."

In total, FTA's TOD Pilot Program will provide grants for comprehensive planning work in 17 metropolitan areas around the country, helping communities integrate their land-use and transportation planning efforts as they improve their transit systems.

Two Florida planning projects were selected to receive the TOD Grants:

The Wave

The City of Fort Lauderdale will receive \$1,250,000 to study TOD for extensions of the Wave Streetcar, (scheduled to begin revenue service in 2017) to other transportation corridors throughout the city and county, in



particular the Uptown area, which has strong employment and regional transportation resources. The city is seeking to increase growth-appropriate development, including housing, and create more walkable, livable and inviting neighborhoods. The city and its study partners will catalyze TOD by addressing pedestrian and bike access and connectivity, sustainable urban design and a variety of housing. The work will proceed in alignment with local desires and address regional connectivity, "right sizing parking," cultural development and place-making. To promote transit, TOD will focus on connectivity to other modes. As part of this effort, the city will partner with county, regional, state and private transportation providers

Tri-Rail Coastal Link

The South Florida Regional Transportation Authority (SFR-TA) will receive



\$1,250,000 to promote TOD along the Tri-Rail Coastal Link (TRCL), a proposed 85-mile commuter rail line connecting Jupiter and Miami. A market and economic analysis identified billions of dollars in potential station area residential and commercial development spurred by the TRCL. The TOD work will provide the region with suggestions on how to realize that economic potential and increase the livability and quality of life in South Florida. The plan provides comprehensive station area planning for

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six stations, a corridor-wide infrastructure assessment, a station-area bicycle and pedestrian plan, an affordable housing analysis, and regional business plan. The Southeast Florida Regional Partnership, a consortium of stakeholders, will guide the project.

FTA's TOD Pilot Program was established under the current transportation funding authorization, the Moving Ahead for Progress in the 21st Century Act (MAP-21). To be eligible for the Pilot Program, the planning work must be associated with a transit project for which the local community intends to

seek funding through FTA's Capital Investment Grants (CIG) Program. The CIG Program is FTA's primary grant program for funding major transit capital investments, including rapid rail, light rail, bus rapid transit and core capacity projects.

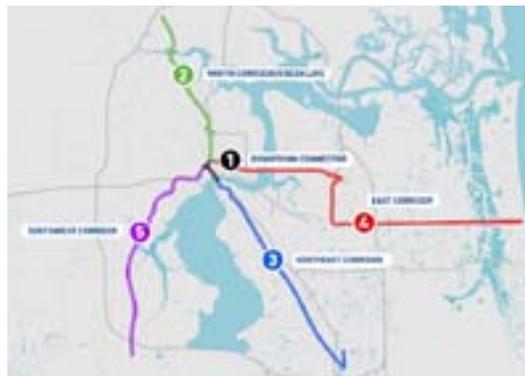
Earlier this year, the Obama Administration announced a new proposal for transportation funding, the GROW AMERICA Act, which would make critical investments in transit and other infrastructure needed to promote long-term economic growth, enhance safety and efficiency, and support jobs for the 21st century.

SunRail Receives \$93.4 Million for Expansion

The Federal Transit Administration (FTA) has awarded a \$93.4-million federal grant agreement to extend SunRail commuter rail service 17.2 miles from Southern Orlando to Osceola County. The extension will provide faster and more efficient travel to jobs and cultural and retail destinations in downtown Orlando and throughout Central Florida.

"Projects like Central Florida's SunRail commuter rail system not only create jobs as they are built, but help connect area residents with ladders of opportunity through improved access to work and school," said U.S. Transportation Secretary Anthony Foxx. "We will continue to support important projects like this that provide 21st century transportation options designed to meet the needs of central Florida's growing population."

The 17.2-mile Phase II South commuter rail line extension will extend service from south of Orlando through Kissimmee to Poinciana in Osceola County. The project will improve transit service to regional employment, entertainment, cultural and retail destinations, including the Orlando Central Business District and through transit connections to the Orlando International Airport, Disney World, SeaWorld, Universal Studios and the Lake Nona mixed-use commercial community.



"We applaud Central Florida's vision and support for a safe, efficient and connected transportation network that gives more than two million residents a convenient and reliable alternative to traffic congestion on Interstate 4," said FTA Acting Administrator Therese McMillan. "SunRail will connect residents from Orange and Osceola counties with the jobs and services they need, while

removing barriers to success throughout the region."

The Full Funding Grant Agreement commits \$93.4 million in funding from FTA's Capital Investment Grant Program. The funding amount represents roughly half of the project's \$186.9 million estimated total cost. The remaining costs are covered by the state of Florida and Orange and Osceola counties.

SunRail estimates the new extended line will provide approximately 2,000 daily linked trips when the extension opens in 2019. The project will include four new commuter rail stations (Meadow Woods in Orange County and Osceola Parkway, Kissimmee Amtrak, and Poinciana in Osceola County), the purchase of two locomotives and four passenger cars and the construction of a vehicle storage and maintenance facility.

Source: *Railway, Track & Structures* September 29, 2015

The Transit IDEA Program

The Transit IDEA Program, which supports development and testing of innovative concepts and methods for advancing transit practice, is funded by the Federal Transit Administration (FTA) as part of the Transit Cooperative Research Program (TCRP). Following is a summary of a new IDEA report entitled Transit Information Access for Persons with Visual or Cognitive Impairments that presented a concept to increase ridership to large segments of the community who are currently unable or unwilling to travel independently through enhanced information resources. [Access the complete report.](#)

Public transportation is key to independence for individuals who, for various reasons, cannot drive. Unfortunately, independent use of public transportation can be challenging for large portions of the society. This project addressed some of the unmet needs of passengers with visual impairments and of passengers with cognitive disabilities, who may be unable or unwilling to use public transportation. People who are blind are disadvantaged when using public transit as they cannot access printed information at a bus stop; cannot read the number of a bus arriving at a bus station; and, once on a bus, may miss the desired stop if the bus driver does not call all stops, or if the ADA-mandated audible announcement cannot be heard due to loud background noise. Individual with cognitive disabilities may have problems organizing and executing independent trips, may need to hear transit information (e.g., which bus line to take) multiple times, and may need to be instructed as to when to call a stop and exit the bus. For both communities, improved access to information during a trip is key to independent and safe travel using public transportation.

The project team has explored a novel approach to real-time, customizable, multi-modal travel-related information access. Unlike previous research addressing a similar problem, this system does not require continuous access to the Internet. Information is pushed to one's own smartphone from Wi-Fi Access Points (APs). This approach also obviates the need for continuous utilization of the Global Positioning System (GPS) in the user's smartphone, an operation that could quickly drain the cell phone's battery. In this system, APs are placed both at bus stops and

within bus vehicles. These APs are programmed to communicate with the user's smartphone through Wi-Fi, providing information that is then presented to the user in accessible form. In the prototype implementation, Wi-Fi APs are embodied in TP-LINK systems, running different types of server software, depending on whether the AP is placed at a bus stop or inside a bus vehicle. The APs communicate with a client application implemented in a Nexus 7 tablet, operated by the user. Needless to say, the same application could be deployed on a variety of other tablets or smartphones.

This project envisioned a new location-based information access system with the potential to increase safety and comfort for people with visual or cognitive impairment taking public transportation. Transit-related information is broadcast through Wi-Fi access points located at bus stations and inside bus vehicles). Users can subscribe to this system by simply downloading an app for their smartphone. The app automatically connects to the in-station Wi-Fi access point when the user is in the vicinity of the bus stop, and initiates an interaction between the user and the system through accessible modalities. The system also seamlessly manages the connection transfer between the in-station access point and the Access Point in an incoming bus of the desired line. Through this always-connected modality, the user is able to access a plethora of information that is specific to his or her bus ride, including the time till the next bus, the current location of the bus, and specific warnings when the bus is approaching the desired stop. The interface modalities can be customized to ensure easy access to the information.

By providing personalized transit information to each user, regardless of possible sensorial or cognitive impairments, the proposed system has the potential to increase ridership to large segments of the community who are currently unable or unwilling to travel independently. Some of these individuals currently prefer to resort to Paratransit rather than taking a bus, resulting in unnecessary high costs for the transit agencies. The proposed system encourages and facilitates independent use of public transportation, which has the potential to increase revenues for transit services.

FDOT Sponsored Transit Research Projects

New Approaches to Funding Public Transit Improvements through Mobility Fees

The vital link between land use and transit is further established as more cities adopt new approaches in mitigating the impact of new developments to the transportation network by imposing fees and incentivizing transit-friendly practices. Local governments are becoming more aware of the intensification in road and transit usage as a consequence of the surge in pedestrian and motorized traffic from new developments.

To offset the potential impact of new developments on the transportation network, local governments are either considering or implementing the use of impact fees for transportation improvements such as supporting transit operations and providing additional intermodal facilities. Designation and requirements for these impact fees vary, some cities call it congestion mitigation fee while others refer to it as a mobility fee and sustainability fee.

The City of San Francisco has recently launched their Transportation Sustainability Program, which aims to revamp their current Transit Impact Development Fee (TIDF), extending the fee to include other types of development beyond non-residential uses. The program is the city's attempt to have luxury developers pitch in for public transit, an amenity that developers often champion to attract potential buyers. Revenue from the proposed transportation sustainability fee will be used to fund the modernization of the environmental review process, transit operations and capital improvements, and programs that aim to reduce auto-dependency.

The City of Chicago, on the other hand, is taking a different approach in encouraging developers to contribute to public transportation. The City of Chicago is proposing an ordinance that would incentivize residential developers in designated transit-oriented development areas to allot one bike parking spot for each unit in the building, plus other bike rental and car-share station on site in exchange for looser parking requirements. The ordinance will promote the use of alternative modes of transportation, reducing reliance on automobiles and curbing congestion, while at the same time allowing developers to build more units using the additional space that were originally allocated for automobile parking.

To further explore new approaches in funding transit, the Florida Department of Transportation (FDOT), Transit Office, will be conducting a study entitled The Application of Local Government Mobility Fees for Funding Transit Improvements - Best Practices. Following is a description of the study:

As local governments across the State rescind transportation concurrency and adopt a mobility plan that establishes a multimodal transportation network utilizing mobility fees, the Department of Transportation, Transit Office, will be conducting a project to create a best practices guide. The guide will assist local governments and transit planners on how mobility fees can be applied to transit improvements to offset the impacts to the transportation network as a result of development. The guide will explore existing adopted mobility plans and will develop a best practices in the application of mobility fees to transit facilities, taking into account coordination efforts with stakeholders and how transit improvements are identified and fees applied to transit improvements. In addition, the Department will be establish a working group consisting of transportation, transit and land use planners to discuss ideas and recommend components for best practices. For more information about the project or if you are interested in learning about the working group, please contact Chris Wiglesworth at the Florida Department of Transportation, Transit Office, phone: (850) 414-4532.

Assessment of Mobile Fare Payment Technology Deployment in Florida

Increasingly, smartphone apps are being used by transit agencies to make electronic fare collection as convenient as possible by simply downloading a ticket on your phone for a visual inspection by a bus operator or conductor or tapping the mobile phone on a reader.

FDOT is exploring opportunities that mobile fare payment systems offer to increase ridership, improve customer satisfaction, and reduce costs. The Center for Urban Transportation Research at the University of South Florida is assessing the benefits

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and challenges associated with the technology in order to provide FDOT with a framework for the implementation of a future mobile payment pilot project with a Florida transit agency.

Study on Method to Identify Transit/Trail Connections Nears Completion

Livable communities promote public health and wellbeing by providing access to affordable housing and job opportunities, access to recreation and open space, access to health-promoting food options, and access to medical services. Improved access is associated with proximity to public transit services. Livable communities also promote preventive care through the design of a built environment that supports active transportation such as walking and bicycling. More walking and bicycling reduces dependence on auto travel that causes air pollution and contributes to lung disease. In many communities, there is a network of fixed route public transit service and also the existence of bicycle lanes, paved shoulders and sidewalks on at least a portion of the street network. Most public transit riders already walk or bicycle to and from a transit stop. It is possible that in some cases, a community has a multi-use or single use trail which, if connected to transit service, could serve well beyond a first and last mile of a transit rider's journey. In other cases, a community may be developing a network of urban trails that opens up further possibilities to enhance community-wide accessibility by connecting the trail network to the transit network at multiple points.

The Florida Department of Transportation (FDOT) Public Transit Office contracted with the USF Center for Urban Transportation Research (CUTR) to conduct a study to develop a methodology to evaluate how intermodal connections between public transportation and trails can improve livability in Florida communities. The livability qualities of interest to this study are accessibility and connectivity improvements resulting from public transit connections to trails and greenways.

The study included a literature review about public trail connections with public transit service and found that among trails organizations there is little discussion regarding connecting public trails with public transit. Local government planning efforts emphasize use of the street system to develop networks of sidewalks

and bicycle facilities, such as wide curb lanes and bicycle lanes. The goal for urban trail planning tends to be to connect urban trails to the larger and growing urban



bicycle lane, bicycle route, and sidewalk network along the roadway, indicating that trails/transit connectivity is a concept that has not yet gained widespread consideration. Public trail planning tends to be from the perspective of public health benefits from active recreation. The literature on public transit planning suggests that station access is a large concern with a focus upon pedestrian and bicycle access from the street system rather than connectivity with public trails. Bicycle connectivity to transit is often interpreted by public transit agencies as providing bicycle parking at transit stops and stations as well as provisions for allowing bicyclists to bring their bicycles on board the bus or rail car. In some urban areas, such as San Francisco, work is underway to develop mobile phone apps to enable trail users with wayfinding information so that they may use public transit to access trails. In these cases, the focus is upon aiding trail/transit users rather than a planning application.

The study also included the development of case studies highlighting various methodologies that other urban areas outside Florida have used to evaluate transit/trail connections for the purpose of identifying priority locations for improvements. Case studies included those for Oregon Metro, Washington Metropolitan Area Transit Authority, and a joint study by Houston-Galveston Area Council with METRO. In each case, the planning methodologies were tailored to a different and specific planning goal in mind. All methods sought public input as well as the use of field inventories and site observations. All case study methods included an approach to narrowing down and prioritizing areas to examine further.

FDOT selected Hillsborough County and Pinellas
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County, Florida as example locations to develop and test a recommended methodology for addressing transit/trail connectivity. Applying relevant findings from the literature review and case studies, a geographic information systems (GIS) spatial analysis was conducted to identify geographic subareas in each county in which to do site observations of existing and potential transit/trail locations. Recommendations have been developed for these locations through the use of a transit/trail audit and findings from the application of the developed methodology are

summarized with recommendations for process improvements. These elements will provide guidance for other agencies that wish to replicate this analysis in their communities.

The final report will be available after October 30, 2015. For more information about this study, "Methodology for Linking Greenways and Trails with Public Transportation in Florida" (FDOT BDV26 TWO 977-03), please contact [Sara Hendricks](#) at (813) 974-9801, or [Martin Catalá](#) at (813) 974-9791.

Emerging Partnerships to Address First Mile/Last Mile Transit Challenges

Ehail cab companies seem to be making an effort with public transportation agencies in the U.S., at least if a few early partnerships are any indication. In Dallas, DART riders can now access Uber via the agency's mobile ticketing app, a program intended to simplify connections at transit stations. A similar smartphone union has emerged between Uber and MARTA in Atlanta. Transit agencies in Los Angeles and Minneapolis now cover Uber trips as part of their "guaranteed ride home" programs, which reimburse regular commuters who need to travel outside rush hour for an emergency.

Several other cities are also discussing similar "first mile, last mile" arrangements with transit agencies, according to the Shared-Use Mobility Center, an interest group focusing on shared mobility, which is tracking the partnerships. The hope is that Uber, like other taxi outfits before it, can serve as a feeder option to and from bus and rail stops. Such coordination would benefit both sides by discouraging private car-reliance and encouraging more transit use.

"We're really interested in promoting opportunities that will in fact get them adding value to transit," says Sharon Feigon, the center's executive director. "Ultimately having more options, especially options that are connected to the transit system in a good way, is going to benefit everyone."

As reported by WFTS Tampa, Hillsborough Regional Transit Authority is looking for new ways to reach people who don't live near a bus stop, and they're even considering teaming with ride-sharing companies like Lyft and Uber.

Starting next month HART will open bidding to contractors, including cab companies and ride-sharing services like Lyft and Uber, to get riders like Gaffney to and from the bus stop and to other places when routes have ended. It's all part of pilot program called First mile/Last mile.

"First mile, last mile, it's this problem, this connection – how to get that last bit of your trip. There's got to be a way we can partner with these companies so that they can do what they're good at. We don't recreate the wheel and they can fill in this gap," said Hart CEO Katharine Eagan.

Eagan said the pilot program will be most beneficial to people who don't live near a bus stop or people who work overnight. Once finalized the rider will be able to contact or call the vendor directly.

"Someone can hold up their HART pass and get that validated by the vendor or they can buy a flat fare. Three dollars is our highest flat fare," Eagan said.

As part of the contract, HART will pick up the rest of the cost. Eagan says whoever wins the bid will be regulated by HART's rules and standards.

Each bus on the street costs taxpayers about \$60 an hour. Eagan says not many people ride the bus late at night, so by partnering with a private contractor to offer services during those times could save taxpayer dollars.

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Emerging Partnerships—cont'd from pg 8

"It gives us the opportunity to get the bus off the street when it doesn't make financial sense, but preserve that service that we are paying for, it's still a flat fare for our patrons so they can get from point A to point B," she said.

Eagan said the pilot program may be similar to ones in other cities but Tampa is trying its own approach.

"We are the next market, and we want to position ourselves to be attractive and innovative," Eagan said.

The bidding process is set to begin in September and should be done by the end of the year. The actual service could start sometime in 2016.

As reported by the Tampa Bay Times, in nearby Pinellas County, the Pinellas Suncoast Transit Authority (PSTA) is working on a partnership with Uber to get riders to and from bus stops and transfer hubs according to the Tampa Bay Times.

PSTA chief executive officer Brad Miller met with Uber representatives recently to discuss a pilot project that, if successful, could be expanded to other parts of the county, Miller said.

"We're very much looking to provide alternatives to as many people in Pinellas County as we can and a partnership with Uber would really fit a niche," Miller said.

Under the proposal, riders would contact Uber to set up a one-way ride from a prearranged location to a PSTA bus stop or transfer center within a designated zone. A rider connecting with a PSTA bus could pay Uber an additional \$2 to cover the cost of the bus fare.

PSTA would pay a subsidy to Uber to lock a discounted rate, which Miller said would be about \$4 for a one-way trip.

Miller wants to roll out the pilot project in the area currently served by the East Lake Connector, one of four underperforming routes on the chopping block in a plan that PSTA's board of directors will consider at a public hearing.

PSTA will provide ridership numbers to Uber and work to develop a proposal to bring to the PSTA board, Miller said.

Source: Atlantic City Lab, WFTS, and Tampa Bay Times

FDOT is interested in your ideas about resources it can provide in support of your transit planning initiatives and professional development. Please contact Diane Quigley with your suggestions for future training topics or guidance and technical assistance needs.