



MEETING NOTICE & AGENDA

Please be advised that the River to Sea Transportation Planning Organization (R2CTPO) **BICYCLE AND PEDESTRIAN ADVISORY COMMITTEE (BPAC)** will be meeting on:

DATE: Wednesday, April 11, 2018

TIME: 3:00 PM

PLACE: River to Sea TPO
2570 W. International Speedway Blvd.,
Suite 100 (Conference Room)
Daytona Beach, Florida 32114-8145

Mr. Bob Storke, Chairperson

AGENDA

- I. **CALL TO ORDER/ROLL CALL/DETERMINATION OF QUORUM/PLEDGE OF ALLEGIANCE**
- II. **NEW BPAC MEMBER INTRODUCTION** *(Contact: Debbie Stewart) (Enclosure, page 4)*
- III. **PUBLIC COMMENT/PARTICIPATION** *(Length of time at the discretion of the Chairperson)*
- IV. **ACTION ITEMS**
 - A. **REVIEW AND APPROVAL OF THE MARCH 14, 2018 BPAC MEETING MINUTES**
(Contact: Debbie Stewart) (Enclosure, pages 5-14)
 - B. **REVIEW AND RECOMMEND APPROVAL OF RESOLUTION 2018-## ADOPTING THE FY 2018/19 AND 2019/20 UNIFIED PLANNING WORK PROGRAM (UPWP)**
(Contact: Stephan Harris) (Enclosure, pages 15-17)
 - C. **REVIEW AND RECOMMEND APPROVAL OF THE 2018 RIVER TO SEA TPO'S "TELL THE TPO" SURVEY AND SURVEY KICK-OFF** *(Contact: Pamela Blankenship) (Enclosure, pages 18-32)*

V. PRESENTATIONS AND DISCUSSION ITEMS

- A. PRESENTATION AND DISCUSSION OF THE ST. JOHNS RIVER TO SEA LOOP TRAIL PROJECT DEVELOPMENT & ENVIRONMENT (PD&E) STUDY: SR 44 (LYTLE AVENUE) TO SR 400 (BEVILLE ROAD)** *(Contact: Stephan Harris) (Enclosure, pages 33-59)*
- B. PRESENTATION AND DISCUSSION TO BUNDLE HOLLY HILL SIDEWALK PROJECTS ALONG CENTER AVENUE, FLOMICH STREET AND 15TH STREET** *(Contact: Stephan Harris) (Enclosure, pages 60-64)*
- C. PRESENTATION AND DISCUSSION OF THE 2018 R2CTPO ANNUAL PLANNING RETREAT** *(Contact: Pamela Blankenship) (Enclosure, page 65)*

VI. STAFF COMMENTS *(Enclosure, pages 66-75)*

- Rectangular Rapid Flashing Beacons (RRFBs)
- Update on Annual Call for Projects

VII. INFORMATION ITEMS *(Enclosure, pages 66, 76-81)*

- BPAC Attendance Record
- Bicycle Suitability Map Subcommittee Report
- March 2018 TPO Outreach and Activities
- Project Review Subcommittee Meeting Notice
- Regional Resiliency Action Plan Listening Session
- TPO Board Meeting Report

VIII. BPAC MEMBER COMMENTS *(Enclosure, page 66)*

IX. ADJOURNMENT *(Enclosure, page 66)*

*****The next meeting of the BPAC will be on Wednesday, May 9, 2018*****

BPAC Notice and Agenda

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NOTE: Individuals covered by the Americans with Disabilities Act of 1990 in need of accommodations for this public meeting should contact the River to Sea TPO office, 2570 W. International Speedway Blvd., Suite 100, Daytona Beach, Florida 32114-8145; (386) 226-0422, extension 20416, at least five (5) working days prior to the meeting date.

NOTE: If any person decides to appeal a decision made by the board with respect to any matter considered at such meeting or hearing, he/she will need a record of the proceedings including all testimony and evidence upon which the appeal is to be based. To that end, such person will want to ensure that a verbatim record of the proceedings is made.

NOTE: The River to Sea TPO does not discriminate in any of its programs or services. To learn more about our commitment to nondiscrimination and diversity, visit our Title VI page at www.R2CTPO.org or contact our Title VI/Nondiscrimination Coordinator, Pamela Blankenship, at 386-226-0422, extension 20416, or pblankenship@r2ctpo.org.

**SUMMARY SHEET
BPAC
APRIL 11, 2018**

II. NEW BPAC MEMBER INTRODUCTION

Background Information:

Mr. Andrew Dodzik has been appointed to the BPAC as the alternate Flagler County representative by TPO Board Member Nate McLaughlin [Mr. Dodzik was introduced at the March 14, 2018 BPAC Meeting].

Ms. Nancy Burgess-Hall has been appointed to the BPAC as the primary Volusia County, District 2 representative by TPO Board Member Billie Wheeler.

Mr. Chris Daun has been appointed to the BPAC as the alternate Volusia County, District 2 representative by TPO Board Member Billie Wheeler.

ACTION REQUESTED:

AS DIRECTED BY THE BPAC

**SUMMARY SHEET
BPAC
APRIL 11, 2018**

IV. ACTION ITEMS

A. REVIEW AND APPROVAL OF THE MARCH 14, 2018 BPAC MEETING MINUTES

BACKGROUND INFORMATION:

Minutes are prepared for each meeting and must be approved by the BPAC. The March 14, 2018 BPAC meeting minutes are provided with this agenda packet for your review.

ACTION REQUESTED:

MOTION TO APPROVE THE MARCH 14, 2018 BPAC MEETING MINUTES

**Bicycle/Pedestrian Advisory Committee (BPAC)
Meeting Minutes
March 14, 2018**

Members Present:

Doug Hall
Michelle Grenham
Paul Eik, Vice Chairperson
Larry Coletti
Gilles Blais
Nic Mostert
Bob Storke, Chairperson
Gayle Belin
Jason Aufdenberg
Patrick McCallister
Nancy Burgess-Hall
Alice Haldeman

Non-Voting Technical Appointees Present:

Wendy Hickey
Melissa Winsett
Mike Ziarnek

Members/Technical Appointees Absent:

Jeff Hodge
Ted Wendler (excused)
Scott Leisen
Heidi Petito/Bob Owens
Danielle Anderson (excused)
Joe Villanella (excused)
Gwen Perney (excused)
Christy Gillis (excused)
Rob Brinson
John Cotton

Others Present:

Debbie Stewart
Stephan Harris
Pamela Blankenship
Colleen Nicoulin
Lois Bollenback
Andrew Dodzik
Lara Bouck
Emery Jeffreys
Maggie Ardito

Representing:

Daytona Beach
Edgewater
Flagler Beach
Flagler County
Holly Hill
New Smyrna Beach
Orange City
Ormond Beach
Volusia County, At Large, Alternate
Volusia County, District 1
Volusia County, District 2
Volusia County, District 3

Representing:

Flagler County
Volusia County
FDOT

Representing:

DeBary
DeLand
Deltona
Flagler County Transit
Palm Coast
Ponce Inlet
Port Orange
South Daytona
Volusia County School Board
Votran

Representing:

TPO Staff
TPO Staff
TPO Staff
TPO Staff
TPO Staff
Flagler County Alternate
H. W. Lochner
St. Johns River to Sea Loop Alliance
St. Johns River to Sea Loop Alliance

I. Call to Order / Roll Call / Determination of Quorum / Pledge of Allegiance

The meeting of the River to Sea Transportation Planning Organization (TPO) Bicycle/Pedestrian Advisory Committee (BPAC) was called to order at 3:00 p.m. by Chairperson Bob Storke. The roll was called and it was determined that a quorum was present.

II. **Public Comment/Participation**

Mr. Emery Jeffreys and Ms. Maggie Ardito, St. Johns River to Sea Loop Alliance, requested to have a presentation on the St. Johns River to Sea Loop projects for next month's agenda. Ms. Ardito stated the Alliance is putting together a special interest group and to contact her if anyone is interested.

III. **Action Items**

A. **Review and Approval of February 14, 2018 BPAC Meeting Minutes**

MOTION: *A motion was made by Mr. Blais to approve the February 14, 2018 BPAC meeting minutes. The motion was seconded by Mr. Coletti and carried unanimously.*

B. **Review and Recommend Approval of the Resolution 2018-## Adopting the Draft Bicycle and Pedestrian Plan Report**

Mr. Harris stated the February draft of the Bicycle and Pedestrian Plan is on the TPO's website; the TPO anticipated having the final draft available but it is not complete. He showed the difference between the February draft and the final draft on the screen; minor modifications were made to the tables and captions of Section 4 of the Safety Program, Bicycle Crashes. The same was done for Pedestrian Crashes. These revisions were suggested by the Bicycle and Pedestrian Plan Subcommittee.

Mr. Aufdenberg asked if any feedback was received from the web site form.

Mr. Harris replied one comment was received but it was not applicable to the report.

MOTION: *A motion was made by Mr. Blais to recommend approval of Resolution 2018-## adopting the draft Bicycle and Pedestrian Plan Report. The motion was seconded by Ms. Grenham and carried unanimously.*

C. **Appointments to the 2018 Transportation Improvement Program (TIP) Subcommittee**

Mr. Harris stated the Transportation Improvement Program (TIP) Subcommittee is made up of volunteers from the BPAC, TCC and CAC; three volunteers from each committee are requested. The TIP Subcommittee reviews the Traffic Operations, Safety and Planning Study applications received from the Call for Projects. Currently, there are four volunteers from the BPAC that were appointed last year. There is no time limit on how long individuals can serve. The TIP Subcommittee will meet twice before the priority list is adopted in June. The Call for Projects is open until April 2, 2018; the first TIP Subcommittee meeting is usually a couple of weeks after it closes. They will meet to evaluate and score the applications received. The current members are Mr. Bob Storke, Mr. Paul Eik, Mr. Scott Leisen and Mr. Gilles Blais. The BPAC can consider reappointment of the current members or accept any additional volunteers.

Chairperson Storke stated Mr. Leisen was not here today and asked if a motion would need to be made later if he wanted to remain on the TIP Subcommittee.

Mr. Harris replied no; it is up to the BPAC. He does not have to be here to be reappointed. If he does not wish to continue serving, he does not have to.

MOTION: *A motion was made by Ms. Haldeman to reappoint Mr. Bob Storke, Mr. Paul Eik, Mr. Scott Leisen and Mr. Gilles Blais to the 2018 Transportation Improvement Program (TIP) Subcommittee. The motion was seconded by Mr. Mostert and carried unanimously.*

D. Appointments to the 2018 BPAC Project Review Subcommittee

Mr. Harris stated the BPAC Project Review Subcommittee performs a similar function as the TIP Subcommittee except with bicycle and pedestrian projects. The current BPAC Project Review Subcommittee members are listed in the agenda packet. Last year, there were six BPAC members on the subcommittee; two of those are no longer eligible; Mr. Dustin Savage has resigned from the BPAC and Ms. Colleen Nicoulin is now TPO staff. There are now four members on the subcommittee for reappointment or any additional volunteers.

Chairperson Storke stated the current BPAC Project Review Subcommittee members eligible for reappointment are Mr. Jason Aufdenberg, Mr. Nic Mostert, Ms. Alice Haldeman and Mr. Roy Walters.

Ms. Belin stated she had volunteered last year but was unable to attend the meetings. She would be happy to volunteer again.

Chairperson Storke asked for volunteers and reiterated that these are all the projects that come through from the Call for Projects; this is the subcommittee that reviews and ranks the project applications.

Ms. Burgess-Hall asked how often the subcommittee would meet.

Mr. Harris replied they will meet at least twice; tentative dates are April 25 and May 2, 2018. The TPO does not know how many projects will be received by the end of the Call for Projects on April 2, 2018.

Mr. Coletti commented he would not be available for the first meeting but could make the second meeting.

Mr. Harris encouraged him to volunteer.

Ms. Hickey asked if a time had been set for those meetings.

Mr. Harris replied not yet; the TPO will try to schedule them around the members' availability.

Ms. Burgess-Hall volunteered.

Ms. Haldeman commented the only problem could be if not enough people can come there may not be a quorum. If there is not a quorum nothing will get done.

Ms. Burgess-Hall stated she could attend and if there is not a quorum, she would already be there.

Ms. Bollenback suggested that the committee take action now and appoint an alternate to the subcommittee. If everyone shows up they can still provide input.

Ms. Burgess-Hall agreed to serve as the alternate.

MOTION: *A motion was made by Mr. Eik to reappoint Ms. Alice Haldeman, Mr. Jason Aufdenberg, Mr. Nic Mostert and Mr. Roy Walters, to appoint Ms. Gayle Belin and Mr. Larry Coletti and appoint Ms. Nancy Burgess-Hall as the alternate to the 2018 BPAC Project Review Subcommittee. The motion was seconded by Mr. Hall and carried unanimously.*

E. Appointments to the Bicycle Suitability Map Subcommittee

Mr. Harris stated this subcommittee is not a standing subcommittee like the previous two. Last month, the strategy for creating the Bicycle Suitability Map was presented; since then, the Executive Committee approved the expenditure to proceed with it. The TPO is asking for three volunteers to provide input on the map product being built and to review the draft map. This is an item on the UPWP for a June deliverable.

Mr. McCallister, Mr. Blais, Mr. Aufdenberg and Mr. Coletti volunteered.

Mr. Harris stated the meeting dates and times have not been set yet; there will be at least two meetings.

MOTION: *A motion was made by Ms. Grenham to appoint Mr. Patrick McCallister, Mr. Gilles Blais, Mr. Jason Aufdenberg and Mr. Larry Coletti to the Bicycle Suitability Map Subcommittee. The motion was seconded by Ms. Belin and carried unanimously.*

IV. Presentation and Discussion Items

A. Presentation and Discussion of the “Tell the TPO” Survey Campaign

(Handout)

Ms. Blankenship stated every two years, the TPO takes on the “Tell the TPO” survey; this will be the third one. The purpose of the survey is to understand the public’s priorities and preferences on transportation for the TPO planning area. She introduced Ms. Lara Bouck, H.W. Lochner, to give the presentation.

Ms. Bouck gave a PowerPoint presentation and stated there are several goals for the survey; the primary goal is to obtain information on public opinion of transportation issues and the desires for mobility options in the TPO region. She reviewed the secondary goals and stated the target audience is everyone that lives, works or visits the TPO region; the goal is to receive 2,000 responses. She reviewed the marketing plan and the ways the survey will be accessed. There will be a prize drawing from the public’s responses, a competition between the committees of the TPO with a trophy for the winning committee and a trophy awarded to the most successful TPO Board member. The prior survey results are available on the TPO website. She reviewed the outreach efforts for the survey. Her team has been working with TPO staff and various stakeholders to review the survey instrument and suggest questions to change or new questions to add. There are six new questions under consideration. She encouraged the members to make any suggestions for questions or topics.

Mr. Eik asked for more detail on the survey updates regarding sea level rise and how that affects the TPO.

Ms. Bouck replied that is a candidate question until it is approved by the committees and the TPO Board. It is currently written to assess how impactful sea level rise is to the community. It is a five-point scale from very impactful to not at all impactful. We are trying to find out what people know about sea level rise and how it impacts transportation.

Mr. Aufdenberg referred to old question 9 – new question 7 regarding implementing technology and improving walking conditions; it would be nice to have examples of specific signals for pedestrians and to link how technology can help pedestrians as well as cars.

Mr. McCallister commented few people know what the TPO is; as a brand, “Tell the TPO” means nothing to most people. When he worked as the Government Relations Director for the Paralyzed Veterans of America, they had branded themselves for fundraising campaigns as “PVA”. As awkward as it was to use “Paralyzed Veterans” instead of “PVA”, it worked. It may be too late to rebrand but something like “Tell us about Your Transportation” would make the point of what we are looking for. His concern is the responses will be from the same people; Volusia and Flagler County commissioners, employees and any one associated with local government.

Ms. Blankenship replied a question was added to indicate if the individual had taken the survey before in order to gauge if the survey is reaching new people.

Mr. Aufdenberg referred to old question 8 – new question 10 and suggested some safety points for pedestrians could be an option. Providing real time information such as when a bus will arrive or what direction a person is heading is helpful like the signal at Nova Road and Bellevue Avenue.

Ms. Burgess-Hall asked if the locator there was working.

Mr. Aufdenberg replied he was not sure what “locator” means.

Mr. Hall explained it is the push button to activate the light; there were some complaints about how loud the locator signal is and it has been turned down. Now it is difficult to find the button.

Ms. Burgess-Hall commented originally, the locator button had not been activated and she has not received any follow-up yet.

Mr. Aufdenberg replied he would have to go back and check it; he did not get to all four corners of the intersection.

Mr. Mostert asked what changes have resulted from the prior TPO surveys.

Ms. Blankenship replied the main goal of the survey is to create awareness of the TPO; who we are and what we do. It is to confirm that the TPO is on the right track; that what we are doing is what people are wanting. It is good to know that information for the plans and studies the TPO undertakes. From the survey responses, the TPO can gauge if what it is doing is making a difference.

Ms. Bouck referred to the handout and stated new candidate questions are highlighted in blue.

Ms. Blankenship explained there are a number of new candidate questions but not all of them can be included. The TPO would like to know if the committee members have suggestions as to which candidate questions would be more valuable. The TPO is suggesting removing questions 3 and 8 and bringing them back in the next survey. This will enable the TPO to add more new questions.

Mr. Dodznik asked how the TPO decided on \$100 for Candidate Question D.

Ms. Bouck replied it is a round number and relates to 100%. That question relates back to the Make Your Mark exercise the TPO does with the Long Range Transportation Plan (LRTP) public participation.

Mr. Blais commented that one problem is bicycles that are assisted with motors are riding on the sidewalks. They should not be defined as bicycles and he suggested there needs to be a different definition for these motorized bicycles.

Mr. Aufdenberg commented that bicycles on sidewalks still have to recognize pedestrian speed and it would still be the law; even a regular bicycle should not go faster than pedestrian speed on the sidewalk under Florida law. It just needs to be enforced.

Mr. Blais commented the motorized bicycles need to be identified and controlled.

Ms. Burgess-Hall replied that would require public education and added that he makes a valid point. She does not know how it can be addressed effectively because the police are not giving tickets now.

Mr. Aufdenberg suggested having a candidate question regarding electric bikes on the survey in the future.

Ms. Bouck reviewed the schedule for the survey and stated comments would be received in March and the survey instrument will be approved in April. The survey will go live at the end of April and will be live for two months. The data will be compiled and analyzed in July and the summary report will be presented in August.

B. Presentation and Discussion of the Bike Florida Sand and Stars Tour

Ms. Nicoulin gave a PowerPoint presentation on the Bike Florida Sand and Stars Tour coming to Edgewater and Titusville this weekend; Mr. Harris asked her to give this presentation because she is on the Bike Florida's Board of Directors. They are having an annual spring ride that has been occurring since 1994; this is the 24th year. This year's spring ride will be in Edgewater starting March 17, 2018; FDOT's Alert Today Alive Tomorrow program is the sponsor. She thanked them for their support in getting this bike tour to Volusia County. The first half of the tour, March 17 – 20, 2018, they will be staying Edgewater; then they will move to Titusville for the last three days. She reviewed the background of Bike Florida and their mission. There are 600 riders registered this year for the tour. She explained the map and where the tour has been in the past. They have been in Volusia County more than any other county in the state. She explained the route of this tour and reviewed the activities, amenities and entertainment offered to the riders and non-riders. She announced the TPO would be fitting bicycle helmets at one of the events. All the entertainment is open to the public. After the tour, Bike Florida puts together an economic impact report and they provide donations to the host cities; this year the city of Edgewater will receive a donation that they will use for their YMCA. They will also donate to the city of Titusville and other non-profit partners that assist with the tour. Last year, the economic impact was \$884,000 that was brought into the community. Since 2011, the total economic impact has been over \$4.2 million into the community.

Chairperson Storke asked what time the TPO was doing the helmet fitting.

Ms. Blankenship replied she will be setting up at 3:00 pm and the fitting starts at 4:00 pm.

C. Presentation and Discussion of Rectangular Rapid Flashing Beacon (RRFB) Alternatives

(Handout)

Mr. Harris stated the committee has previously discussed that the Federal Highway Administration (FHWA) had rescinded their interim approval of the rectangular rapid flashing beacons (RRFBs); that is still the case but there are a lot of those devices installed that are working and are very effective. It is the hope that the patent dispute that led to this will be resolved soon and the RRFBs will be approved again. He showed videos of various available alternatives to the RRFBs and explained how they work. All these alternatives are approved by FHWA and are in the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTC).

Ms. Burgess-Hall commented that Mr. Aufdenberg had mentioned the in-roadway warning lights.

Mr. Aufdenberg replied they have them in Charlottesville, VA. He does not have data to back up their safety implementations.

Ms. Burgess-Hall stated that could be very effective beachside in the tourist area.

Mr. Coletti asked what the committee could do to get cities with dangerous intersections like Palm Coast to utilize some of these alternatives. It looks like these options could significantly increase the safety at dangerous intersections.

Mr. Harris suggested contacting the local Public Works Departments. If there are problem areas, the TPO can make those known. The TPO has done a number of safety studies in Palm Coast so they are aware of areas where there is room for improvement.

Mr. Dodzik asked if there were presentations that could be given to city officials or Public Works Departments.

Mr. Harris replied that the TPO gave presentations last year; one to the Flagler County School Board where there were areas of concern for students going to and from school. There is also the SR A1A Pedestrian Safety Study completed last year on areas of concern in Flagler Beach and Beverly Beach.

Ms. Haldeman stated he could also contact the elected official that appointed him to this committee and inform him/her of the concerns.

Discussion continued. Mr. Harris continued showing videos of alternatives to the RRFBs.

Mr. Dodzik asked how a HAWK signal affected right-hand turns.

Mr. Ziarnek replied they are used at mid-block crossings, not at intersections.

Ms. Burgess-Hall asked if the HAWK signal could be used at roundabouts.

Mr. Ziarnek replied he did not believe it would be used at a roundabout. Right now, FDOT is continuing to use the RRFBs because they were already in the design process and this did not impact anything that was approved for design.

Discussion continued regarding pedestrian safety and roundabouts.

Mr. Eik asked if this committee had any responsibility in how to make its concerns known regarding pedestrian safety and roundabouts before construction begins and find out how they intend to provide for pedestrians. He is surprised FHWA terminated their approval of this warning device (RRFB). The alternatives presented may be useful at a mid-block crossing or intersection but they do not address this specific issue with roundabouts. He asked how they would take visually or hearing impaired pedestrians into consideration. He is disappointed that FDOT and other officials have not explained any of this.

Mr. Harris replied a lot of these devices can be fitted with audible sound that can direct someone to the push button; sometimes the push button can be made to vibrate.

Mr. Blais suggested using a loud bell such as they did in Germany years ago to clear the intersection for bicyclists.

Chairperson Storke asked how to communicate with the contractor doing the design.

Ms. Winsett replied sometimes they use a contractor but a lot is done in-house.

Mr. Aufdenberg commented it would be nice to see the cost to install and maintain these alternatives. He asked if a spec sheet was available.

Mr. Harris replied he would research that. He continued showing videos of the alternatives to the RRFBs. All of these are suitable for certain mid-block locations; before equipment is installed the roadway would have to be analyzed before an option is selected.

V. Staff Comments

Mr. Harris stated there are two mid-block crosswalk proposals for International Speedway Boulevard (ISB); one in front of Mainland High School and the other in front of Daytona State College. He asked if Mr. Ziarnek had an update for those proposals.

Mr. Ziarnek replied he could not provide a status update at this time but he can get information. He believes there is right-of-way acquisition and a realignment of driveways that are taking place. A right-hand turn lane into a driveway is not going to happen because of safety. He will follow up with Mr. Harris later.

Ms. Blankenship announced the R2CTPO Annual Planning Retreat held in partnership with VCARD will be Friday, March 23, 2018 at the Brannon Center in New Smyrna Beach. The topic will be on the future of transportation

technology and there will be three autonomous vehicles on display. There will be a full breakfast; the link to register is on the flyer.

Mr. Harris asked if the vehicles would be static displays or if attendees would be able to ride in them.

Ms. Blankenship replied she was not sure yet.

VI. Information Items

- BPAC Attendance Record
- 2018 R2CTPO Annual Planning Retreat – March 23, 2018
- TPO Board Meeting Summary
- TPO Outreach & Activities (February 2018)
- Who's Who in Transportation

VII. BPAC Member Comments

Mr. Ziarnek, FDOT Bicycle and Pedestrian Coordinator, stated he has been tasked to find out some things regarding the health of the community and the understanding of bike/pedestrian transportation in the community. He is questioning what the level of awareness is in the smaller communities. He did find that Ormond Beach has a 2016 to 2026 Bicycle Plan and he is researching if the smaller communities have something similar or a process in place to reach out to the TPO for sidewalks, etc. He also would like to know if any communities do bicycle or pedestrian counts and if they have any prohibitions against wheels on sidewalks other than wheelchairs. He is also doing an inventory of the bridges on the Intracoastal for bicycle and pedestrian facilities as some of the bridges are reaching the end of their life span.

Mr. McCallister commented that Lake Helen has a bridge that crosses I-4 and there is no bike lane. A resident of Lake Helen who does drive cannot effectively get to West Volusia County. Lake Helen is essentially a bicycling island; you can bicycle there but cannot get off the island safely on a bicycle. He does not drive any longer due to autism and if he did not have cycling courage he could not work a regular job or get off the island. The beachside is not the only place with problems with bridges.

Ms. Winsett commented that Volusia County implements a lot of the different RRFB alternatives. The last cost estimate she received for a pair of RRFBs that are solar operated was \$7,000; that does not include the study, enhanced striping and other things that go along with it. In order to get a mid-block crossing approved, there would have to be 20 pedestrians crossing in a single hour or 60 pedestrians in a 4-hour period.

Mr. Coletti stated the SR 100 and the SR 206 bridges over the Intracoastal have a lot of debris on them for bicyclists; he asked what could be done to have them cleaned periodically.

Mr. Ziarnek replied he could get in touch with the FDOT District 5 Traffic Operations Safety Office; Mr. Chad Lingenfelter.

Mr. Dodzik stated he was glad to be a part of the BPAC and he looks forward to getting an education.

Mr. Hall stated in response to an earlier comment by Mr. Eik, it is the committee member's responsibility to educate planners to what the needs are; if they do not know what is needed, they will not know what to do. We need to know what they are doing so we know when to get involved and how to influence them. He stated he previously ran a program in Gainesville called "VICE"; Visually Impaired Cycling Enthusiasts. He would love to see that done here. It involves using a tandem bicycle with the blind person in back as a stoker and a sighted person in front as the pilot. It would be a great opportunity and activity.

Mr. Eik stated he appreciated the TPO having the RRFB alternatives presentation on the agenda today; he was happy that it was not forgotten. The discussion today was encouraging and informative.

Mr. Blais commented he had a meeting with the Holly Hill City Manager regarding this committee. There is a rise in Holly Hill of senior citizens with coaster bicycles; he is keeping track of it. Also, bicyclists that cannot put their bikes on a Votran bus chain them to the bus stop post. There is a rise of bicyclists in Holly Hill.

Mr. Aufdenberg stated he has explored Volusia County on a bicycle and over the last three days he rode from Ormond Beach to Cedar Key on the Gulf Coast. He went across Volusia County, through Lake, Marion and Levi Counties. The most interesting part was the Marjorie Harris Carr Cross Florida Greenway that just opened this week. It is a 16-mile, off-road, paved path that goes from southwest of Ocala to SR 200 and it was spectacular. The rest of the ride was on the road; US federal roads were the best to ride on because they had wide shoulders that were well maintained. The county roads were hit or miss. A lot of cars did change lanes to go around them even when they were riding on the shoulder; people are getting the message about sharing the road with bicyclists. They only had two minor incidents in a 160-mile trip.

Mr. McCallister announced that April is Autism Awareness Month and what the BPAC does is important to the autistic community. Many autistic people cannot drive; the sensory issues are too prohibitive along with other conditions. He stated what the BPAC does not just affect recreational bicyclists but also affects the necessity riders.

Chairperson Storke reminded the committee that it takes more than one month to gather information to present an item if a member has idea for a presentation.

III. Adjournment

The BPAC meeting adjourned at 4:51 p.m.

River to Sea Transportation Planning Organization

**Mr. Robert Storke, Chairman
Bicycle/Pedestrian Advisory Committee (BPAC)**

CERTIFICATE:

The undersigned duly qualified and acting Recording Secretary of the River to Sea TPO certifies that the foregoing is a true and correct copy of the minutes of the March 14, 2018 regular meeting of the Bicycle/Pedestrian Advisory Committee (BPAC), approved and duly signed this 11th day of April 2018.

**Debbie Stewart, Recording Secretary
River to Sea Transportation Planning Organization**

**SUMMARY SHEET
BPAC
APRIL 11, 2018**

IV. ACTION ITEMS

B. REVIEW AND RECOMMEND APPROVAL OF RESOLUTION 2018-## ADOPTING THE FY 2018/19 AND 2019/20 UNIFIED PLANNING WORK PROGRAM (UPWP)

BACKGROUND INFORMATION:

The TPO's transportation planning activities are funded in large part through federal grants. These federally-funded transportation planning activities must be identified and approved by the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA) and FDOT in advance of each fiscal year. The activities, products and budgeted funds must be documented in the TPO's Unified Planning Work Program (UPWP) which is updated every two years. This update is for the period from July 1, 2018 to June 30, 2020. The UPWP describes the role of the TPO, the focus of its planning efforts, and any special studies that are to be undertaken in that two-year span. The UPWP identifies the types and amounts of planning funds the TPO expects to receive from FHWA, FTA and other sources, and prescribes how those funds will be spent.

The UPWP was developed by TPO staff with input from the UPWP Subcommittee. Review and comment has been provided by FDOT/FHWA. The following changes have been made to the draft UPWP based on comments from FDOT/FHWA:

1. The Joint Certification Statement on the Metropolitan Planning Process has been removed from Appendix B
2. The most up-to-date versions of the UPWP Statements and Assurances forms (Appendices C and D) have been merged into the new Appendix B
3. "River to Sea TPO" has been added to the "Responsible Agency" field and "\$161,491" has been added to the "Total Cost" field for Task 2.08 on Page 44.

Resolution 2018-## is for adoption of the FY 2018/19 – 2019/20 UPWP. Due to its relatively large size, the document can be viewed and downloaded from the TPO's website at the following link:

<https://www.r2ctpo.org/2018/04/04/draft-fy-2018-19-and-2019-20-upwp/>

A hard copy is available upon request.

ACTION REQUESTED:

MOTION TO RECOMMEND APPROVAL OF RESOLUTION 2018-## ADOPTING THE FY 2018/19 AND 2019/20 UNIFIED PLANNING WORK PROGRAM (UPWP)

RIVER TO SEA TRANSPORTATION PLANNING ORGANIZATION

RESOLUTION 2018-##

**RESOLUTION OF THE RIVER TO SEA TRANSPORTATION PLANNING ORGANIZATION ADOPTING THE
FY 2018/19 AND 2019/20 UNIFIED PLANNING WORK PROGRAM (UPWP)**

WHEREAS, the River to Sea Transportation Planning Organization (TPO) is the duly designated and constituted body responsible for carrying out the urban transportation planning and programming process for Volusia County and portions of Flagler County inclusive of the cities of Flagler Beach, Beverly Beach and portions of Palm Coast and Bunnell; and

WHEREAS, Florida Statutes 339.175; 23 U.S.C. 134; and 49 U.S.C. 5303 require that the urbanized area, as a condition to the receipt of federal capital or operating assistance, have a continuing, cooperative and comprehensive transportation planning process that results in plans and programs consistent with the comprehensively planned development of the urbanized area; and

WHEREAS, 23 C.F.R. 450.104 provides that the River to Sea TPO shall bi-annually develop and endorse the Unified Planning Work Program (UPWP).

NOW, THEREFORE, BE IT RESOLVED, by the River to Sea TPO that:

1. The tasks in the FY 2018/19 and 2019/20 UPWP are consistent with the area transportation plan; and
2. The FY 2018/19 and 2019/20 UPWP is hereby endorsed and adopted;
3. The Chairperson of the River to Sea TPO (or her designee) is hereby authorized and directed to submit the FY 2018/19 and 2019/20 UPWP to the:
 - a. Florida Department of Transportation;
 - b. Federal Transit Administration (FTA) (through the Florida Department of Transportation);
 - c. Federal Highway Administration (FHWA) (through the Florida Department of Transportation); and the
 - d. Federal Aviation Administration (FAA).

DONE AND RESOLVED at the regularly convened meeting of the River to Sea TPO held on the 25th day of April 2018.

RIVER TO SEA TRANSPORTATION PLANNING ORGANIZATION

**VOLUSIA COUNTY COUNCIL VICE CHAIR DEB DENYS
CHAIRPERSON, RIVER TO SEA TPO**

CERTIFICATE:

The undersigned duly qualified and acting Recording Secretary of the River to Sea TPO certified that the foregoing is a true and correct copy of a resolution, adopted at a legally convened meeting of the River to Sea TPO held on April 25, 2018.

ATTEST:

DEBBIE STEWART, RECORDING SECRETARY
RIVER TO SEA TRANSPORTATION PLANNING ORGANIZATION

**SUMMARY SHEET
BPAC
APRIL 11, 2018**

IV. ACTION ITEMS

C. REVIEW AND RECOMMEND APPROVAL OF THE 2018 RIVER TO SEA TPO'S "TELL THE TPO" SURVEY AND SURVEY KICK-OFF

BACKGROUND INFORMATION:

The River to Sea TPO's consultant, H.W. Lochner, has been working with TPO staff, stakeholders and committees to develop the 2018 Tell the TPO Survey Campaign. They will be presenting the launch of the survey. The TPO Board received a presentation of the overview of the work effort and the draft survey instrument at their March meeting.

The specific goals of the survey include the following:

- Ascertain the transportation wants, needs, problems, preferences and suggestions from residents, business community, elected officials, and other stakeholders
- Provide data that the TPO can analyze in order to ascertain trends
- Act as an educational tool and expose each person who takes it to the benefits, mission and programs of the TPO
- Add to the TPO database of interested residents, businesses, and visitors

To ensure the highest survey response rate, the survey will primarily be administered via the www.TelltheTPO.com website but hard copies will also be available in the form of a self-mailer paper copy (both in Spanish and English). Additionally, each local agency will be provided with a link to share on their website to help reach a broader audience.

The Tell the TPO Survey Campaign will kick off on April 30, 2018 and run through June 30, 2018. Each committee member will be invited to participate as an ambassador to the campaign. A special "committee" link will be provided to each committee member for electronic dissemination of the survey; this link will provide the ability to track how many surveys each committee's link attracts. A special recognition trophy will be presented at the end of the campaign to the committee that generates the most survey responses.

The draft Tell the TPO Survey questions have been provided with the agenda based on feedback from the advisory committees and TPO Board for your review and recommendation of approval.

ACTION REQUESTED:

MOTION TO RECOMMEND APPROVAL OF THE 2018 RIVER TO SEA TPO'S "TELL THE TPO" SURVEY AND SURVEY KICK-OFF



TELL THE TPO

Community Transportation Survey

TPO BOARD/COMMITTEE BRIEFINGS

APRIL 2018

“Tell the TPO” Survey Goals

1. Obtain information about public opinion on hot button transportation issues and desires related to mobility options.
2. Engage the public in thinking about transportation planning issues.
3. Build partnerships with other agencies, civic organizations, and the business community.
4. Build the TPO’s database of interested residents, businesses and visitors.
5. Increase awareness and branding regarding the TPO.
6. Compare results from 2018 survey with baseline results from prior years’ surveys.

Survey Launches April 30th!



Marketing Plan: Maximum Exposure

- Target everyone who *lives*, *works*, or *visits* the TPO region
- Maximize public response
 - Concise survey – the longer the survey the less the response
 - Available online – www.tellthetpo.com & in hard copy
- Ambassador Challenge
- Partnerships with agencies, organizations, and the business community
 - Email and social media blasts; links on websites; hard copy collection centers
- Attendance at local/regional events
- Fun and Excitement: Prize drawing for respondents – two night stay for two!

>> TARGET GOAL : 2,000 Responses <<



Get the Word Out: Tools

- Hard copy surveys in English/Spanish
- Flyers
- Rack Cards
- Website: www.TelltheTPO.com
 - Text and graphics for social media blasts
 - Text for email blasts
- Individual links for Ambassador Challenge
- QR Codes

TELL THE TPO WHAT YOU THINK ABOUT TRANSPORTATION IN VOLUSIA COUNTY AND FLAGLER COUNTY!

TELL THE TPO!
HERE'S HOW:

INDIVIDUALS
Please complete the TPO survey for a chance to win a 2 night hotel stay for 2! Then share the link on your social media outlets and with friends: www.TelltheTPO.com

EMPLOYERS
Email the www.TelltheTPO.com link to your employees, clients and contact lists and encourage them to participate.

GOVERNMENT AGENCIES
Put the www.TelltheTPO.com link on your website and social media outlets, in newsletters, and/or in emails to your employees and stakeholders.

ORGANIZATIONS
Announce the survey in your next newsletter or email blast, and post the www.TelltheTPO.com link on your website and social media outlets.

RESPOND TO WIN!
All responses received by June 30, 2018 will be entered into a drawing for a chance to win a 2 night hotel stay for 2!

ABOUT THE RIVER TO SEA TPO
The River to Sea Transportation Planning Organization (TPO) is an independent public service organization responsible for carrying out the urban transportation planning and programming of all federal and state transportation funds for the Metropolitan Planning Area (MPA), which includes all of Volusia County and portions of Flagler County, including Beverly Beach and Flagler Beach as well as portions of the cities of Palm Coast and Bunnell.

2018 SURVEY LIVE: APRIL 30TH TO JUNE 30TH
Learn more at www.TelltheTPO.com
#telltthetpo2018

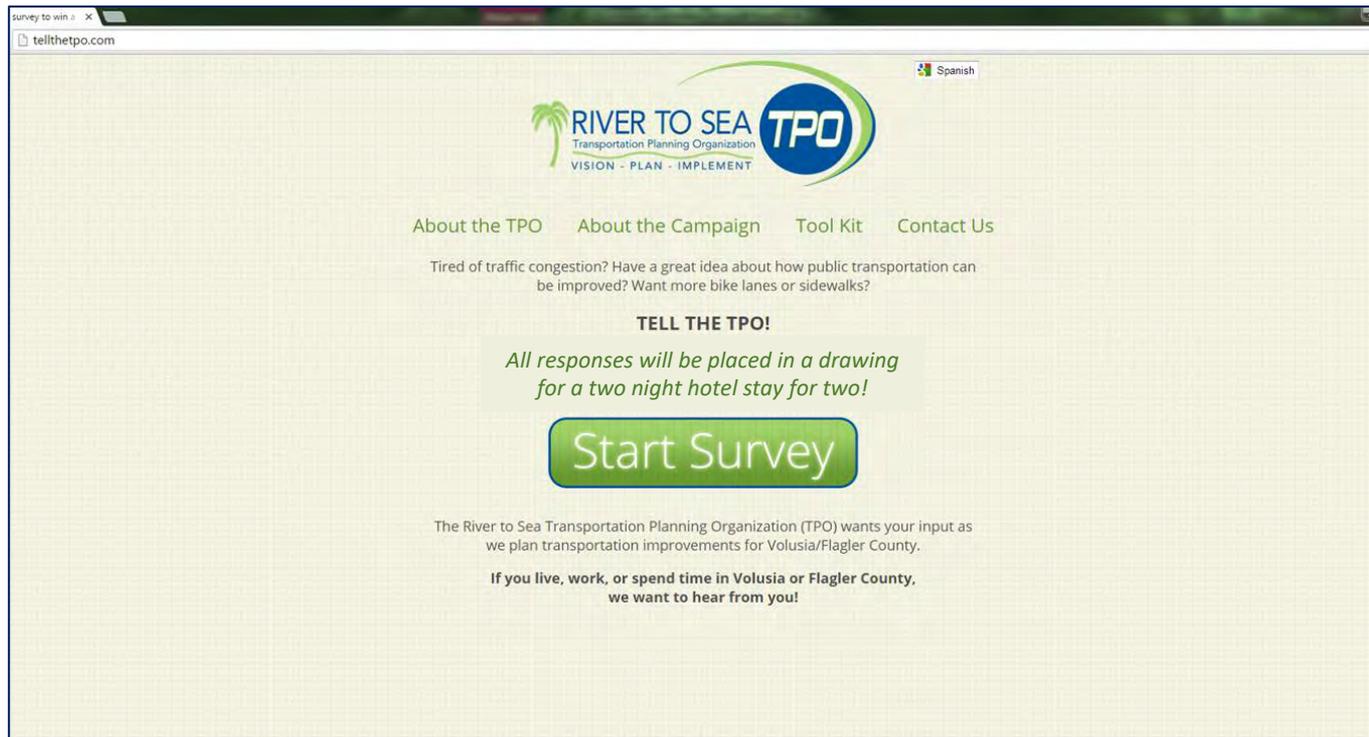
Ambassador Challenge

- Each Board and committee member is an ambassador
 - Each Board member will be given a unique survey link to measure success.
 - Each Committee will be given a unique survey link
- Links for Board members and Committees will be emailed out on Friday, April 27th, 2018
- We encourage each of you to your contact lists, stakeholder, e-newsletters
- Coveted trophies will be awarded to the most successful:
 - Board member
 - Committee

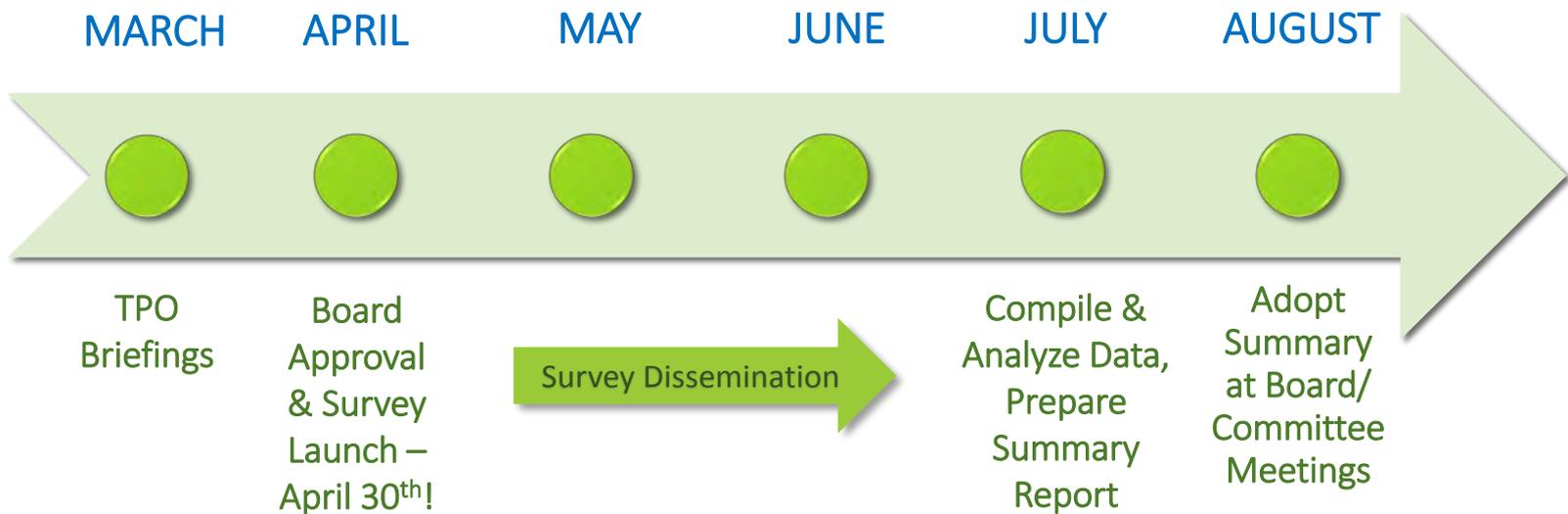
Next Steps

- The Survey Team is:
 - Coordinating with One Voice Volusia to make a presentation to their network of over 105 agencies and community organizations.
 - Targeting two additional community events to have an in-person presence to encourage participation.
 - Connecting with project partners to point them to the Tool Kit available on the survey website, which includes:
 - Suggested email and social media blast language and graphics
 - Printable surveys
 - Outreach flyer, and more.
 - Approaching major employers and schools to help disseminate and publicize the survey
 - Mobilizing for the [April 30th survey launch date.](#)

Survey Website



Survey Schedule



Any Questions?



www.tellthetpo.com

TPO Project Manager: Pamela Blankenship

pblankenship@r2ctpo.org

Consultant Project Manager: Lara Bouck

lbouck@hwlochner.com





2018 Tell the TPO Survey

FINAL DRAFT 04-03-18

The River to Sea Transportation Planning Organization (TPO) wants your input as we plan transportation improvements for Volusia County and parts of Flagler County. Please complete our survey online at www.TelltheTPO.com or mail back this copy. All responses received by June 30, 2018 will be eligible to enter a drawing for a free 2 night hotel getaway for 2!

1a. Home Zip _____ **Work/School Zip (If applicable):** _____

1b. Have you taken a River to Sea TPO "Tell the TPO" survey in the past? (Check one)

___ Yes ___ No

2. What forms of transportation do you use regularly (3 or more times per week)? Select any that apply.

- Walk
- Bicycle
- Drive Alone
- Carpool
- Bus
- SunRail

3. If you do not walk or bicycle now, what prevents you from doing so? Select any that apply.

- Lack of pedestrian or bicycle facilities (sidewalks, marked crosswalks, paths, bike lanes, etc.)
- Safety concerns (too much traffic, roads too busy, vehicles too fast, sidewalks too close to roadway, etc.)
- Distance too far or takes too long to walk or bicycle
- I am not comfortable with my bicycle riding/walking ability
- I won't walk or ride a bicycle, even if pedestrian and bicycle facilities are improved
- I can't walk or bicycle, no matter how sidewalks or bicycle lanes are improved

4. If you do not regularly use public transit buses, what improvements might make them a more attractive option for you? Select any that apply.

- More convenient bus stops or route locations
- Faster or more direct bus service
- More frequent and/or expanded hours for bus service
- Cleaner buses
- Lower fares
- I do not know enough about public bus service to make that choice
- I will not ride the bus, even with public transportation improvements

5. If you do not regularly use SunRail, what improvements might make it a more attractive option for you? Select any that apply.

- More frequent and/or expanded hours for SunRail service
- Expand SunRail service to DeLand station
- Expand SunRail service beyond DeLand station
- Lower fares
- More parking at stations
- More effective feeder bus service
- I will not ride SunRail, even with public transportation improvements

6. What is your overall level of satisfaction with the current transportation facilities in Volusia/Flagler Counties? *(Select one answer for each category. If you select 'dissatisfied' for any category, please provide specifics in the text block available at the end of this survey.)*

Rank 1-5: * Satisfied * Somewhat satisfied * Neutral * Somewhat dissatisfied * Dissatisfied

- Sidewalks and crosswalks *(availability, maintenance conditions, etc.)*
- Trail system *(availability, trail conditions, logical connections, etc.)*
- Bicycle lanes *(accessibility, bicycle lane markings, pavement conditions, etc.)*
- Public transit service *(accessibility, routes connecting destinations, etc.)*
- Public transit shelters/benches *(availability, conditions)*
- Local neighborhood streets *(traffic, maintenance conditions, etc.)*
- Major streets *(traffic, maintenance conditions, etc.)*
- Interstate highways *(traffic, maintenance conditions, etc.)*

7. As we prioritize spending on transportation projects, do you think we should invest more, the same or less than we are currently spending on the following?

Rank 1-5: * Much more * More * The Same * Less * Much less

- Improving roadway operations *(better traffic signal timings, adding or extending turn lanes, etc.)*
- Implementing technology to improve safety and efficiency of traffic operations *(e.g. coordinated traffic signals, real-time mobile traffic information, etc.)*
- Building new roadways
- Adding lanes to existing roadways
- Traffic calming measures *(e.g. roundabouts, speed bumps, etc.)*
- Improving/adding bus service
- Improving/adding SunRail service
- Encouraging carpooling *(e.g. communication and/or incentives)*
- Adding/improving multi-use trails
- Improving walking conditions *(e.g. sidewalks and crosswalks, pedestrian signals, etc.)*
- Improving bicycling conditions *(bike lanes, wayfinding, paved shoulders, etc.)*

8. New transportation technology is important for which of the following *(Score each option from 1 to 5, with 1 being the most important and 5 being not important. Scores may be used multiple times.)*

Score 1-5: * Most important * Somewhat Important * Neutral * Less Important * Least Important

- Improving the flow of vehicle traffic
- Helping transit vehicles arrive on time or have shorter travel times



- Reducing freight shipping travel times
- Providing real-time information to drivers/transit riders/pedestrians (e.g. via mobile devices, variable message signs on roadways, etc.)
- Decreasing roadway crashes
- Providing safer intersections for pedestrians (e.g. talking or countdown signals, etc.)

9. Transportation needs exceed the amount of funding available. Which types of transportation projects are your highest priorities to fund with our limited resources? (Please select your top three choices)

- Improve transit service (bus and SunRail)
- Widen existing roadways
- Construct new bike lanes and trails/greenways
- Construct new sidewalks/improve connectivity
- Install bicycle/pedestrian-oriented signals
- Improve roadway safety
- Replace/upgrade aging facilities
- Street appearance (lighting and landscaping)
- Build new streets and roadways
- Implement new transportation technologies
- Other: _____

10. Crash data shows the following intersections as the 10 highest crash locations in the planning area. These areas also have increasing congestion. Which of these intersections cause the greatest concern for you as a driver, bicyclist or pedestrian? (Please select your top three choices)

1. Dunlawton Ave @ South Nova Road
2. Granada Boulevard @ North Yonge Street (US 1)
3. International Speedway Boulevard @ Ridgewood Ave
4. International Speedway Boulevard @ Williamson Road
5. South Clyde Morris Boulevard @ Dunlawton Ave
6. Granada Boulevard @ Nova Road
7. Cypress Point Parkway @ Palm Coast Parkway/Boulder Rock Drive
8. Granada Boulevard @ Williamson Road
9. International Speedway Boulevard @ Clyde Morris Boulevard
10. Palm Coast Parkway @ Old Kings Road

Optional Questions:

Please describe yourself (This information helps us know if we've reached all types of travelers within our area):

- a. Age: <16 16 to 25 26 to 40 41 to 65 >65
- b. Gender: Female Male
- c. Work Status: Employer Employee Student Retiree Other
- d. Race/Ethnicity: White Hispanic/Latino Black/African American Asian Other
- e. Annual Income (circle one):
 <\$25,000 \$25,000 to \$45,000 \$45,001 to \$100,000 \$100,001 to \$150,000 >\$150,000



If you want to be eligible to win a free 2 Night Getaway for 2, please provide your name, email address and phone number below. PUBLIC RECORDS NOTICE: *The River to Sea TPO is governed by the State of Florida public records law. Information we receive may be disclosed to any person making a public records request in accordance with Chapter 119 Florida Statutes. This information is for prize notification purposes only.*

Name _____ Email _____ Phone number _____

Please let us know if you would like additional information on: (Select all that apply*)

River to Sea Transportation Planning Organization (*meetings, issues and events*)

reThink Your Commute (*ridesharing, carpooling, park-and-ride services, etc.*)

Votran (*bus schedules, updates, route changes, etc.*)

Flagler County Public Transportation (*news, updates, etc.*)

SunRail (*news, updates, schedule, etc.*)

No thank you

** If you check any box other than the last one, your email address will be shared with the agency you indicated.*

As we plan transportation improvements in Volusia and Flagler Counties, do you have any additional concerns, suggestions, problems, and/or recommendations for us?

BLOCK OF SPACE FOR ANSWER

**SUMMARY SHEET
BPAC
APRIL 11, 2018**

V. PRESENTATIONS AND DISCUSSION ITEMS

A. PRESENTATION AND DISCUSSION OF THE ST. JOHNS RIVER TO SEA LOOP TRAIL PROJECT DEVELOPMENT & ENVIRONMENT (PD&E) STUDY: SR 44 (LYTLE AVENUE) TO SR 400 (BEVILLE ROAD)

BACKGROUND INFORMATION:

The St. Johns River to Sea Loop Trail Project Development and Environment (PD&E) Study (FM #439865-1) is being conducted to develop and evaluate options for a multi-use trail along US 1 or an alternate route from SR 44 (Lytle Avenue) to SR 400 (Beville Road), a distance of approximately 12.5 miles. The purpose of this study is to close the existing trail gap in accordance with Shared-Use Nonmotorized (SUN) Trail standards. The study covers portions of New Smyrna Beach, Port Orange, South Daytona and unincorporated Volusia County. The study began on June 28, 2017 and completion is scheduled for June 2019.

ACTION REQUESTED:

NO ACTION IS REQUIRED UNLESS OTHERWISE DIRECTED BY THE BPAC

St. Johns River to Sea (SJR2C) Loop Project Development & Environment (PD&E) Study

ALONG US 1 OR ALTERNATIVE ROUTE
FROM SR 44 (LYTLE AVENUE) TO BEVILLE ROAD
VOLUSIA COUNTY, FLORIDA

Financial Project ID No: 439865-1-22-01

BICYCLE/PEDESTRIAN ADVISORY COMMITTEE (BPAC)
PRESENTATION | April 11, 2018



Purpose of Briefing

- Provide background information
- Introduce the project
- Outline the study objectives and schedule
- Share information about the project
- Receive input

Purpose of a Trail

- Promote nonmotorized travel, increase mobility, improve connectivity, enhance economic prosperity, and promote healthy living
- Used by bicyclists, pedestrians, skaters, runners and others
- Paved facility physically separated from motorized vehicular traffic by an open space or barrier and is either within the highway right-of-way or an independent right of way
- Not to replace on-street bicycle lanes



What is a PD&E Study?

PD&E stands for Project Development and Environment and is conducted to meet the requirements of the National Environmental Policy Act (NEPA)

- Prepared to determine social, natural, cultural and physical impacts associated with a project. Provides the following information:
 - ❑ Need for the project
 - ❑ Benefits and impacts to the community and environment
 - ❑ Design options
 - ❑ Cost
- Work with the public to receive input and identify the best solution. Several outreach opportunities include:
 - ❑ Website with project updates
(CFLRoads.com; search by number 439865-1)
 - ❑ Newsletters
 - ❑ Public workshops and meetings

What issues are addressed in PD&E Study?

□ Social Impacts

- Right-of-way
- Residential
- Business
- Community services and facilities

□ Cultural Impacts

- Historic and archaeological sites
- Recreational sites

□ Natural Impacts

- Wetlands
- Water quality
- Animal habitat

□ Physical Impacts

- Visual and aesthetics
- Contamination
- Drainage
- Utilities

□ Costs

- Right-of-way
- Construction
- Mitigation

When the study is complete, one of two recommendations is made:

- 'No-Build' Alternative
- 'Build' Alternative

Shared Use Non-Motorized (SUN) Trail Program

- Provides funding for the development of a statewide system of paved multi-use trails (SUN Trail network) for bicyclists and pedestrians
- For funding and maintaining projects within the SUN Trail network, the Department allocates in its program a minimum of \$25 million annually
- The SUN Trail network is the paved component of the Florida Greenways and Trails System (FGTS) Priority Land Trail Network
- Program will not fund components such as sidewalks, nature trails, and development of amenities associated with trail projects
- Funded projects shall be operated and maintained by an entity other than FDOT upon of construction, and FDOT is not obligated to provide funds for the operation and maintenance.



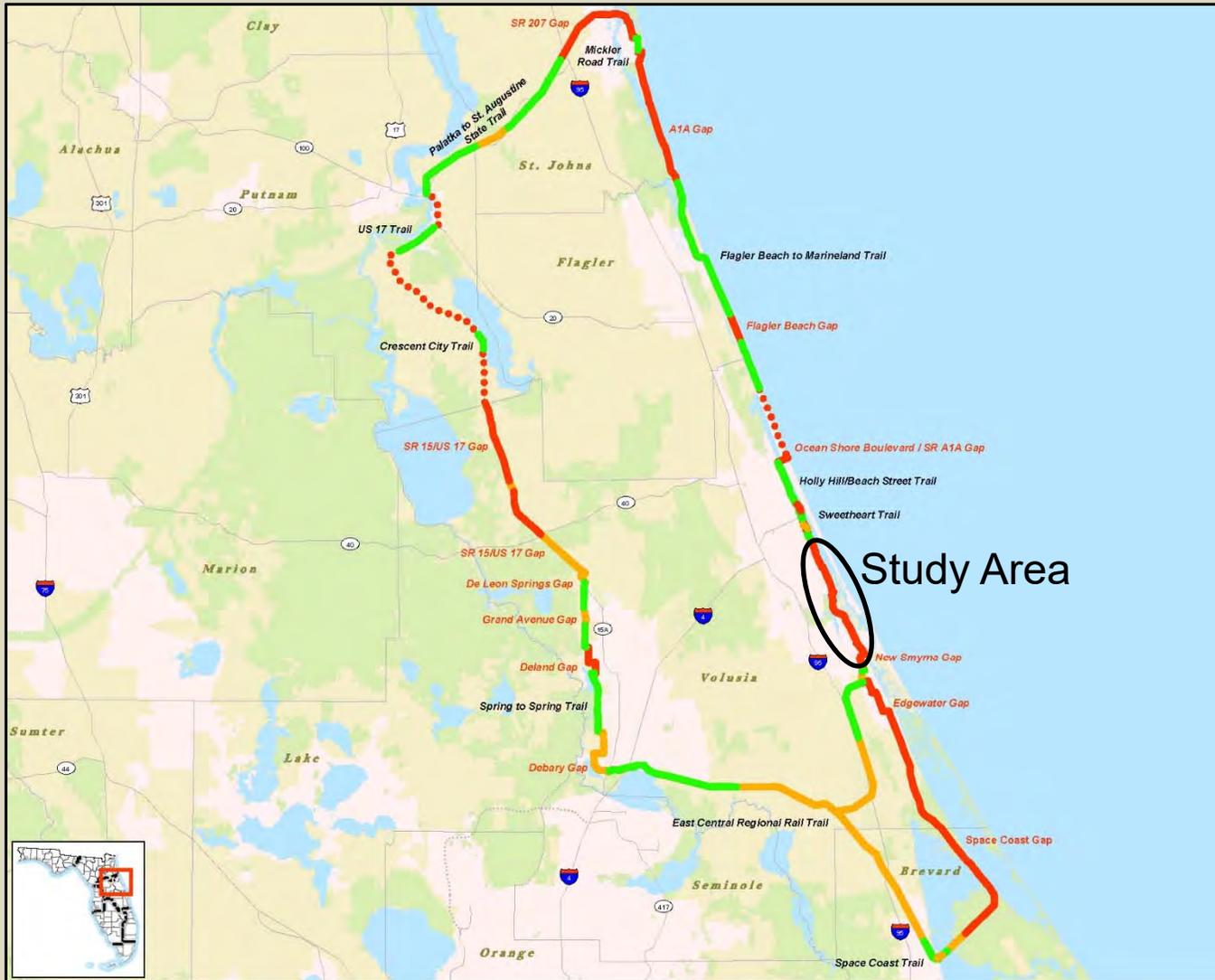
Shared Use Non-Motorized (SUN) Trail Program

- FDOT defines multi-use trail as a paved, shared-use path
- Typically 12 feet wide
- May vary 10 feet to 14 wide
- As narrow as 8 feet in extremely constrained areas (such as bridges or environmentally sensitive lands)
- The FGTS Plan establishes Florida's vision for a statewide trail network and the framework for systematically closing trail gaps and connecting priority corridors through coordinated planning efforts of both public and private partners

Further info available at <http://www.floridasuntrail.com>



SUN Trail Regional System – SJR2C



FDOT INTERMODAL SYSTEMS DEVELOPMENT

Shared-Use Nonmotorized (SUN) Trail Regional System

St. Johns River - to - Sea Loop

State Of Florida Department of Transportation
Systems Planning Office

LEGEND

- Existing Trails
- Programmed or Funded for Construction
- Partially Funded for Pre-Construction Phases
- Unfunded Gap

Existing Trail Name
Project in Development

NOTES:

No Warranties: This map and its content is made available by the Florida Department of Transportation (FDOT) on an "as is", "as available" basis without warranties of any kind, expressed or implied. This product is for reference purposes only and is not to be construed as a legal document or survey instrument. Information is subject to change.

Disclaimer of Liability: The user of this map and data assumes all responsibility and risk for the use of both. Under no circumstances, including negligence, shall the FDOT or its employees be liable for any direct, indirect, incidental, special, exemplary or consequential damages, or lost profits that result from the use, misuse or inability to use the map and data.

Additional trail information may be obtained by contacting your local government.

Source:
Florida Department of Transportation
Systems Planning Office

Date: 10/19/2017

Existing Conditions

- SIS Highways
- Planned SIS roads
- County Boundaries
- Water
- Urban Areas
- Managed Lands

0 4.25 8.5 17
Miles



Project Location



- St. Johns River to Sea (SJR2C) Loop
- US 1 or Alternative Route from SR 44 (Lytle Avenue) to Beville Road
- Approximately 12.5 miles in length
- Volusia County
- New Smyrna Beach, Port Orange, South Daytona

Purpose and Need

- **Develop and evaluate options for a multi-use trail along US 1 or alternative route from SR 44 (Lytle Avenue) to Beville Road**
 - Close existing trail gap
- **Project is needed for system linkage**
- **Once complete, trail will connect:**
 - Edgewater, New Smyrna Beach, Port Orange, South Daytona, Daytona Beach, and parts of unincorporated Volusia County



Summary of Challenges

- Limited R/W
- Utilities
- Trail Connectivity
- Crossing of Florida East Coast Railway (FECR)
- Conflicts with traffic and pedestrians
- Environmental impacts at bridges and causeways
- Existing bridges – insufficient width to accommodate new trail
- Drainage
- Constructability
- ADA compliance (driveway conflicts)
- Consideration to Section 106 resources



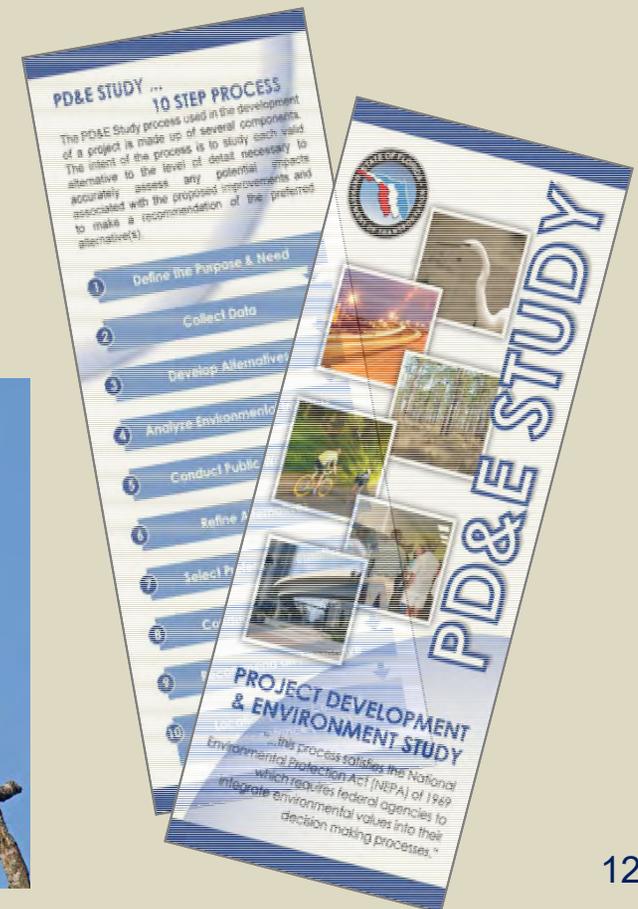
FECR Crossing



Historic Resources

PD&E Study Components

- **Engineering** – analyze data and identify solutions
- **Environmental** – evaluate potential impacts to the natural, social, and physical environments
- **Public Involvement** – ongoing throughout the process

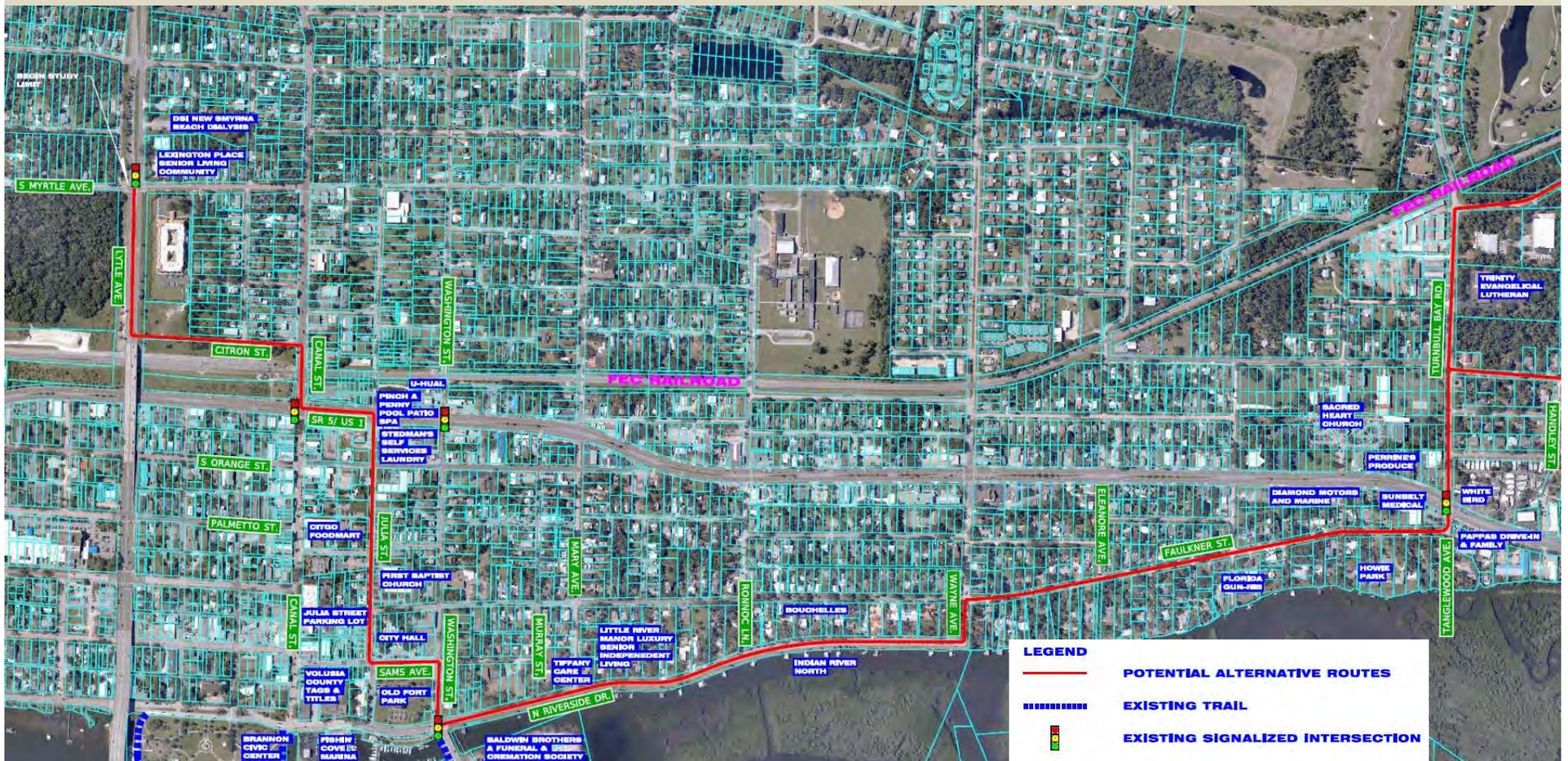


Engineering & Environmental Analysis

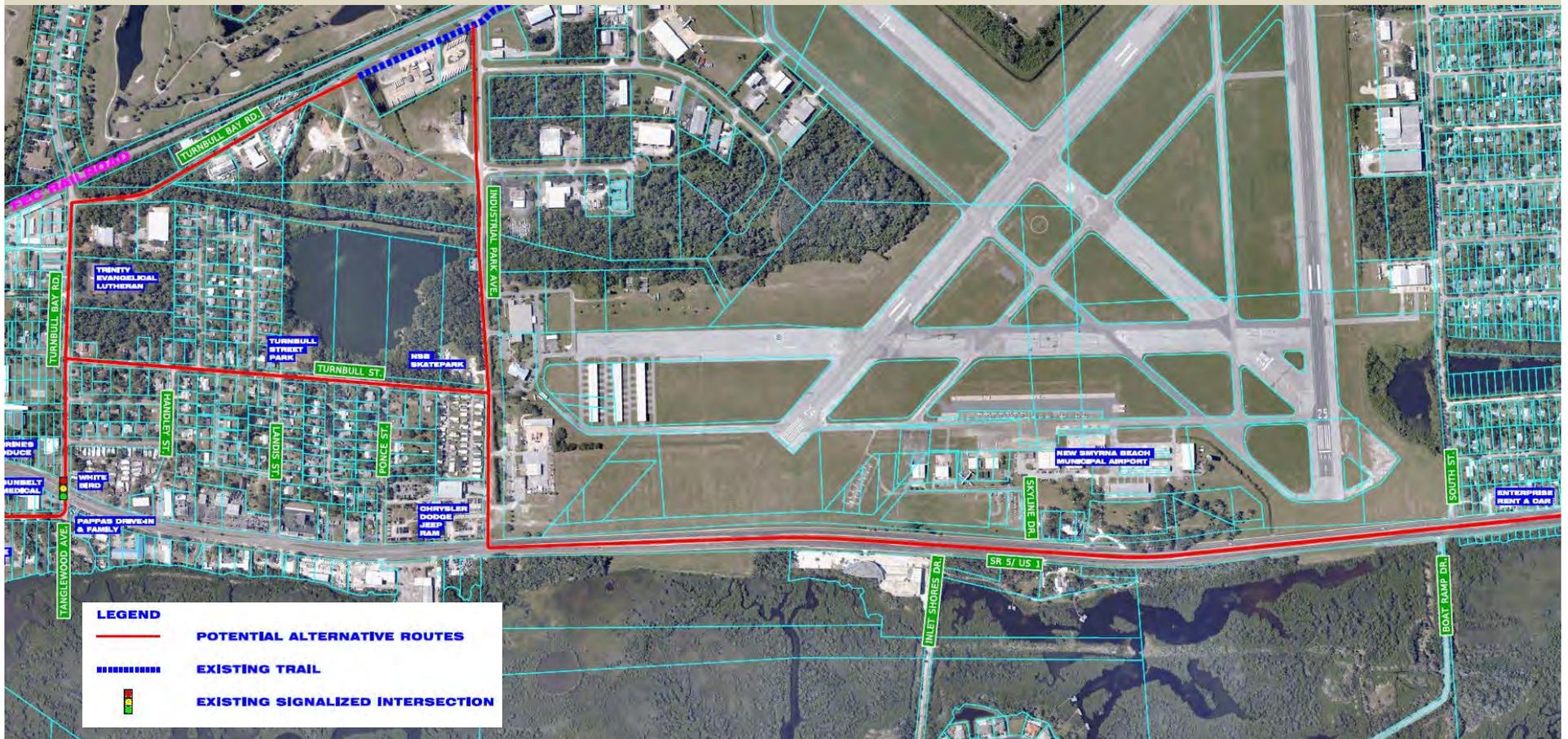
- Pedestrian Crash Data
- Existing bicycle/pedestrian conditions
- Identification of wetlands
- Threatened/Endangered species
- Existing land use & property information
- Existing & planned developments
- Existing drainage
- Contamination sites
- Archeological/Historical sites



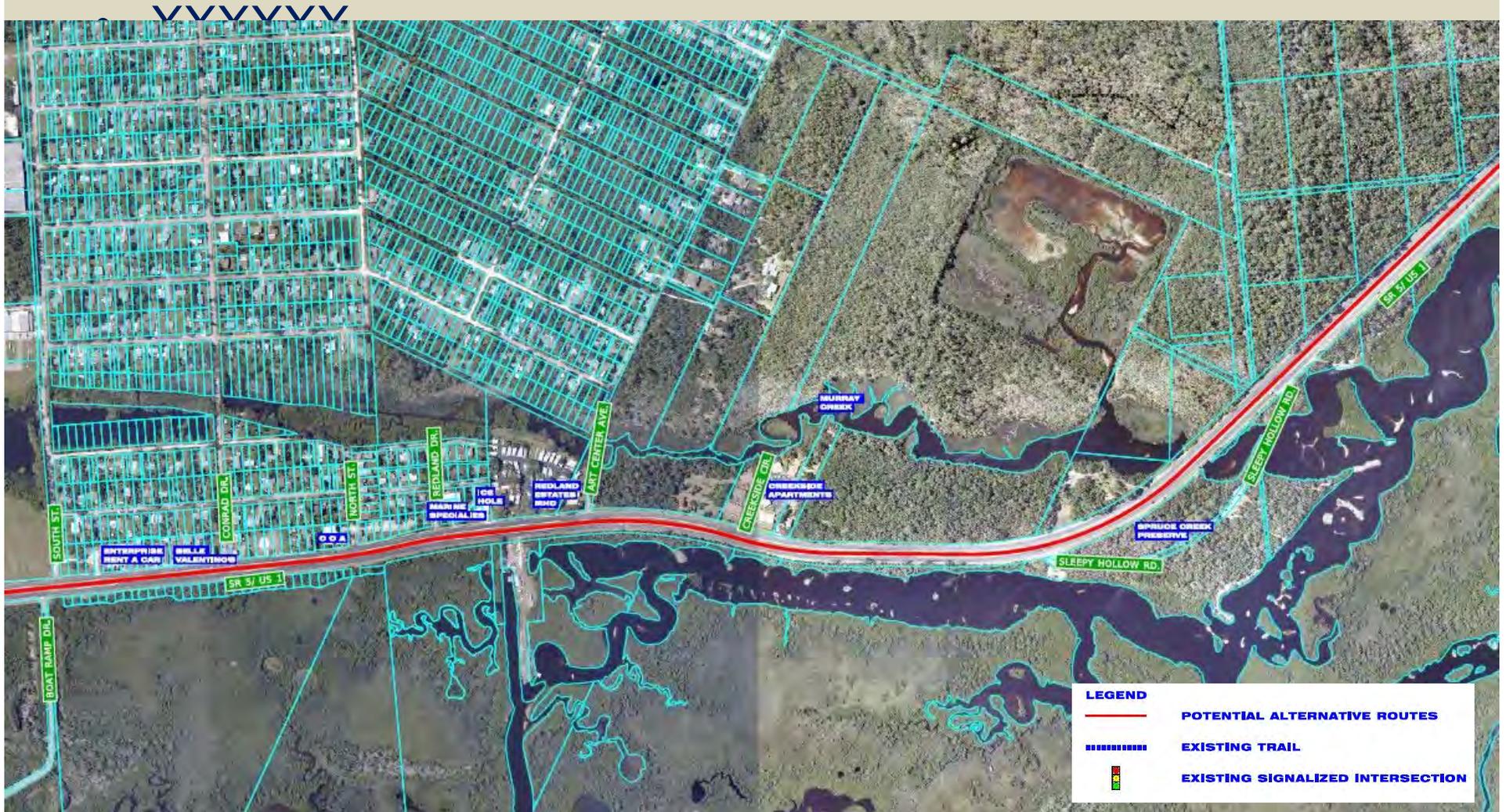
Corridor Alternatives – New Smyrna Beach



Corridor Alternatives – New Smyrna Beach



Corridor Alternatives – New Smyrna Beach



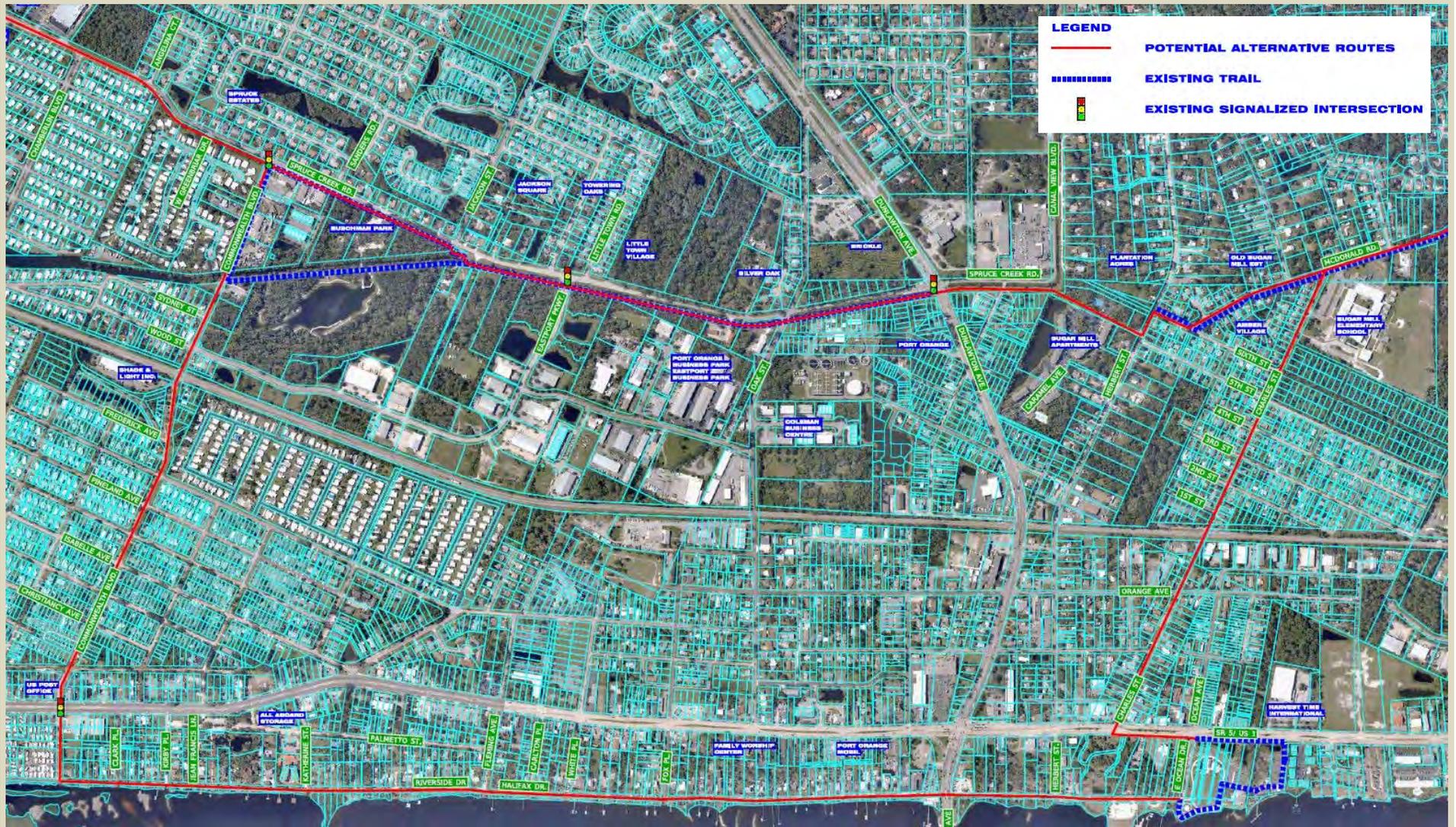
Corridor Alternatives – New Smyrna Beach & Ponce Inlet



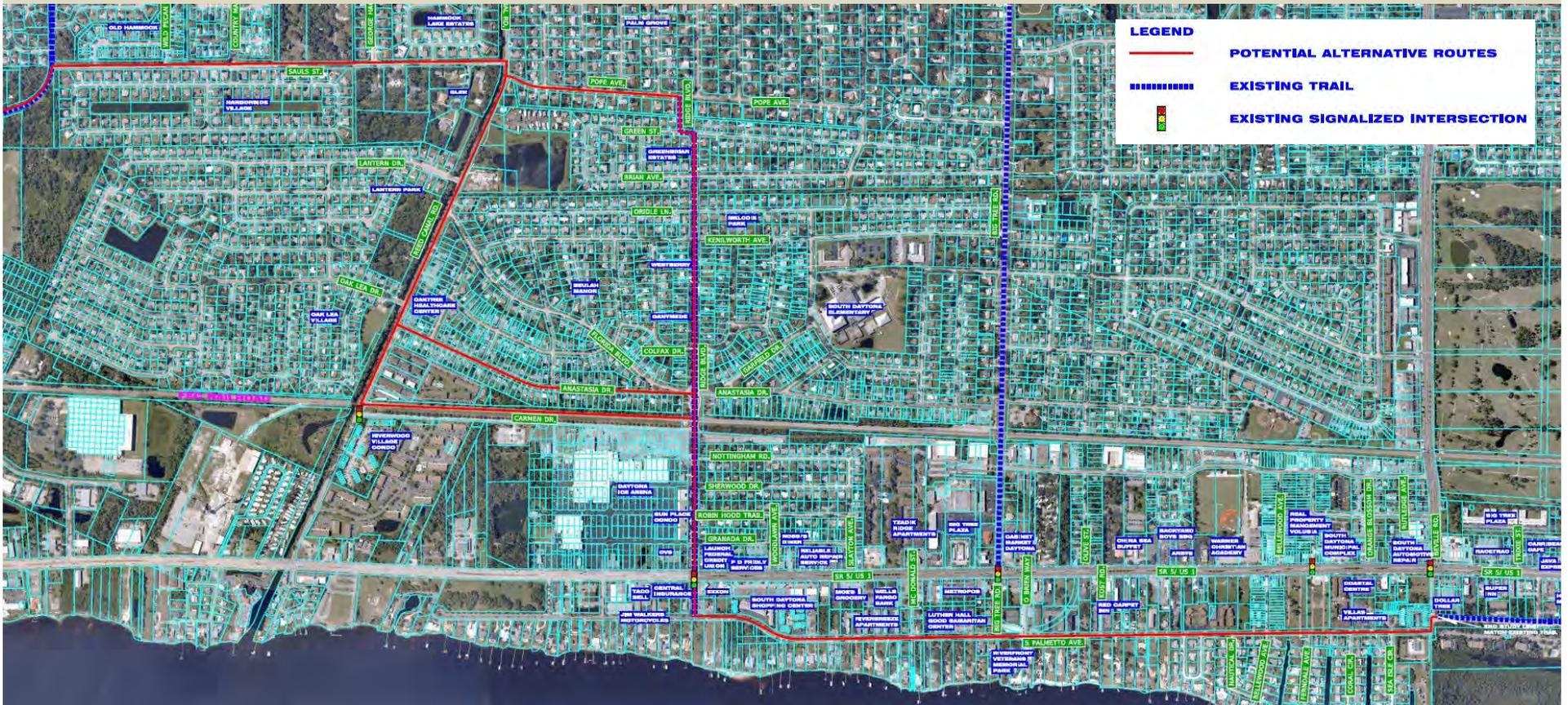
Corridor Alternatives – Port Orange



Corridor Alternatives – Port Orange



Corridor Alternatives – South Daytona



Stakeholder Coordination

Jurisdictions

- City of New Smyrna Beach
- City of Port Orange
- City of South Daytona
- City of Ponce Inlet
- Unincorporated Volusia County

Local Interests

- Elected Leaders (local, state, and federal)
- Property Owners
- Business Owners & Managers
- Neighborhoods (including Harbor Oaks)
- Trail and Bicycle Groups (River to Sea Loop Alliance, East Coast Greenway Alliance)
- Civic Groups (Safe Routes to School, NSB for Smart Growth, Port Orange-South Daytona Chamber, Southeast Volusia Chamber)
- Places of Worship
- Utilities (NSB Utilities)



Stakeholder Coordination

U.S. Federal Government

- U.S. Coast Guard
- U.S. Army Corps of Engineers
- Federal Aviation Authority
- U.S. Fish and Wildlife Service

State of Florida

- Department of Transportation
- Department of Environmental Protection
- Department of Economic Opportunity
- Fish and Wildlife Conservation Commission

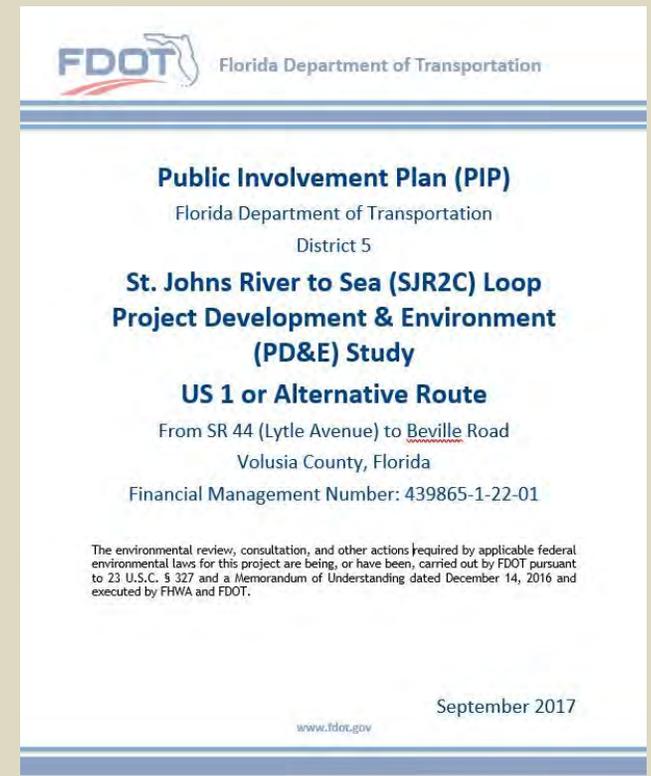
Regional Agencies

- River to Sea Transportation Planning Organization
- East Central Florida Regional Planning Council
- St. Johns River Water Management District
- Florida East Coast Railway
- Volusia County
 - Public Schools
 - NSB Fire Department and Fire Station #53
 - Planning and Development
 - Public Works
 - School Board
 - Parks, Recreation and Culture
 - Traffic Engineering
 - Engineering and Construction
 - Economic Development
 - Votran



Public Involvement

- Public Involvement Plan
- Meetings with Agencies
- Local Government Coordination
- Meetings with the Public
 - Public Kick-off Meetings Held January 10 & 11, 2018
- Project Website
- <http://www.cflroads.com>
(search 439865-1)



Key Public Comments

- January 10, 2018 Kick-off Meeting
 - Convert N. Riverside Dr. to One-Way (NSB)
 - Environmental impacts
 - Landscaping, bicycle racks, and restrooms
 - “Not in my front yard”
- January 11, 2018 Kick-off Meeting
 - Keep along Halifax Drive
 - Separation of trail from roadway
 - Incorporate Reed Canal Road
 - Connect to recreational and historic sites
 - Keep along Palmetto Avenue

Study Schedule and Funding

- **Began Study: June 28, 2017**
- **Receive District approval of Non Major State Action (NMSA) (study completion): June 2019**



- **Future phases include:**
 - **Design (Funded 2019)**
 - **Right-of-Way (if applicable) (currently not funded)**
 - **Construction (currently not funded)**

Contact Information

FDOT Project Manager

Heather Grubert, P.E.

(386) 943-5540

Heather.Grubert@dot.state.fl.us

FDOT, District Five

719 South Woodland Boulevard

DeLand, Florida 32720



**SUMMARY SHEET
BPAC
APRIL 11, 2018**

V. PRESENTATIONS AND DISCUSSION ITEMS

**B. PRESENTATION AND DISCUSSION TO BUNDLE HOLLY HILL SIDEWALK PROJECTS
ALONG CENTER AVENUE, FLOMICH STREET AND 15TH STREET**

BACKGROUND INFORMATION:

Representatives from the City of Holly Hill are scheduled to provide a presentation on bundling sidewalk projects along Center Avenue, Flomich Street and 15th Street.

ACTION REQUESTED:

NO ACTION IS REQUIRED UNLESS OTHERWISE DIRECTED BY THE BPAC



CITY OF HOLLY HILL

The City with a Heart

1065 Ridgewood Avenue ♥ Holly Hill, Florida 32117

www.hollyhillfl.org

Building, Zoning, Licensing & Inspections

386-248-9442
Fax 386-248-9498

City Clerk

386-248-9441
Fax 386-248-9448

City Manager

386-248-9425
Fax 386-248-9448

Community Services

386-248-9435
Fax 386-248-9448

Economic Development

386-248-9444
Fax 386-248-9448

Finance

386-248-9427
Fax 386-248-9497

Human Resources

386-248-9440
Fax 386-248-9448

Information Technology

386-248-9459
Fax 386-248-9448

Public Works

386-248-9463
Fax 386-248-9499

Utility Billing

386-248-9432
Fax 386-248-9458

Mayor & City Commission

386-248-9441
Fax 386-248-9448

March 29, 2018

Lois Bollenback, Executive Director
River to Sea TPO
2570 West International Speedway Boulevard, Suite 100
Daytona Beach FL 32114

Re: City of Holly Hill Sidewalk Project Funding

Dear Ms. Bollenback

The City of Holly Hill currently has 5 sidewalk projects on the Prioritized Project List. The projects and the current status of each are as follows:

Flomich Street:

Phase I – Nova to Decatur – **funded for design and in the work program for fiscal year 2018-2019**

Phase II – Decatur to Ridgewood – **Phase II is at feasibility study phase – Tier C**

Center Avenue:

Phase I – LPGA to Flomich - **Phase I is on Tier B**

Phase II – 3rd Street to LPGA - **Phase II is at feasibility study phase - Tier C**

15th Street: On Tier B

Nova to Center Avenue

The City has requested federal funding assistance with each project, however the City is not LAP certified. At this point, the City has two options available with regard to LAP certification. They are as follows:

1. Option A: The City can partner with Volusia County. The County has agreed to provide project management for the five sidewalk projects. Their letter of support and required conditions is attached. The City agrees with and accepts the terms and conditions outlined by the County including our commitment to pay the local match and any cost overruns for the bundled project, should we choose this option.
2. Option B: The City has recently hired two individuals who have previously completed LAP courses certifying the agencies they worked for and are willing and capable of completing the project specific LAP certification for this project as soon as possible. The individuals are as follows:
 - Jonathan McKinney – Director of Finance – John holds a Master of Business Administration degree and is a Certified Government Finance Officer. He has

24 years of progressive responsible experience and has served as an Assistant City Manager with the City of Edgewater as well as the Director of Finance for various agencies. He has experience and knowledge in areas including but not limited to; contracts negotiation and management, systems design and implementation and all-hazard planning.

- Antoine Khoury – City Engineer and Public Works Director – Antoine holds a Bachelor of Science in Engineering and is a licensed Professional Engineer (PE). He has 30 years of experience as an engineer and served Seminole County for 22 years in positions ranging from Transportation Engineer, Deputy County Engineer, and Director of Public Works. He has extensive experience in areas including but not limited to; ROW settlements, street and drainage maintenance, traffic engineering and water quality maintenance. Antoine was instrumental in many of Seminole County’s major road projects.

Currently, the five projects are separate LAP funding request. The City intends to have the individual projects designed as a bundled unit under one contract. For this reason, the City request that all projects be bundled and programmed for FDOT funding (for design) in the 2019-2020 fiscal year. The amount that the City would be asking for with regard to design for all sidewalks as a bundled unit would be \$235,000 broken down as follows:

- Flomich Street - \$110,000
- Center Ave - \$100,000
- 15th Street - \$25,000

Please call me at 386-248-9425 if you need any further details or have any questions.

Sincerely,



Joseph Forte
City Manager
Holly Hill



**Public Works Department
Engineering Division**

March 2, 2018

Mr. Joseph A. Forte
City Manager
City of Holly Hill
1065 Ridgewood Ave.
Holly Hill, FL. 32117

Re: Holly Hill Sidewalk Projects

Dear Mr. Forte:

Per our conversations and correspondence Volusia County is willing to provide project management and Local Agency Program (LAP) support to City of Holly Hill on the sidewalk projects along Flomich Street from Nova Road to Ridgewood Avenue, Center Street from Flomich Street to the southern City limits (near 3rd Street) and 15th Street from Nova Road to Center Street. With the understanding that these are all city streets and will require a considerable amount of county manpower to manage, the following conditions will be required to be memorialized in an interlocal agreement between the county and city if the projects get funded.

(1) The City will be responsible for coordinating with the River 2 Sea Transportation Planning Organization (R2C TPO) staff to get these projects bundled for the design phase. The five (5) projects are currently separate LAP funding requests. Since it is the County's intention to hire an engineering firm to design the individual projects (bundled under one contract), funding for the design of the individual projects must be programmed by the FDOT in a single fiscal year.

(2) The City will be responsible for the R2C TPO local match requirement and all county costs that are not eligible for reimbursement by LAP. These costs will include but not be limited to cost overruns, unfunded items, any budget shortfalls and all county staff time, including procurement of services and project management responsibilities, which Florida Department of Transportation (FDOT) staff has stated is not eligible for reimbursement under LAP funding.

123 West Indiana Avenue, 4th Floor • DeLand, Florida 32720
Tel: (386) 736-5967, 257-6067, 423-3974 • Fax: (386) 822-5736

www.volusia.org

(3) The County will assist and advise the City regarding ROW acquisition, but the City will handle all correspondence and perform negotiations. The City will be responsible for any and all eminent domain actions, if required. The County will not participate in condemnation activities on City streets.

(4) The County will handle the construction phase on behalf of the City (It is highly preferred and far more cost effective to bundle as many of the sidewalk projects together as possible).

(5) The City will be responsible for the post-construction maintenance.

Please call me at 386-736-5967 if you would like to discuss further or are in need of additional information.

Sincerely,



Tadd Kasbeer, PE
Assistant County Engineer

cc: George Recktenwald, Deputy County Manager
John Angiulli, Public Works Director
Gerald N. Brinton, PE, County Engineer

123 West Indiana Avenue, 4th Floor • DeLand, Florida 32720
Tel: (386) 736-5967, 257-6067, 423-3874 • Fax: (386) 822-5736

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**SUMMARY SHEET
BPAC
APRIL 11, 2018**

V. PRESENTATIONS AND DISCUSSION ITEMS

C. PRESENTATION AND DISCUSSION OF THE 2018 R2CTPO ANNUAL PLANNING RETREAT

BACKGROUND INFORMATION:

On March 23, 2018, the River to Sea TPO, in partnership with the Volusia County Association for Responsible Development (VCARD), held an annual planning retreat at the Brannon Center in New Smyrna Beach. The Annual Retreat focused on the future of Transportation Technology including the transportation technology/infrastructure associated with Smart Cities and A.C.E.S. (Automated, Connected, Electric and Shared Vehicles). In addition, a variety of considerations were introduced regarding the changes influenced by these emerging technologies. These included land use/site planning, policy/legislation, economics and funding as well as generational changes, acceptance of technology, business trends and the work underway at Embry-Riddle Aeronautical University (ERAU). TPO staff will provide an overview of the event.

ACTION REQUESTED:

NO ACTION IS REQUIRED UNLESS OTHERWISE DIRECTED BY THE BPAC

**SUMMARY SHEET
BPAC
APRIL 11, 2018**

VI. STAFF COMMENTS

- Rectangular Rapid Flashing Beacons (RRFBs)
- Update on Annual Call for Projects

VII. INFORMATION ITEMS

- BPAC Attendance Record
- Bicycle Suitability Map Subcommittee Report
- March 2018 TPO Outreach and Activities
- Project Review Subcommittee Meeting Notice
- Regional Resiliency Action Plan Listening Session
- TPO Board Meeting Report

VIII. BPAC MEMBER COMMENTS

IX. ADJOURNMENT



Memorandum

Subject: **INFORMATION:** MUTCD – Interim Approval
for Optional Use of Pedestrian-Actuated
Rectangular Rapid-Flashing Beacons at
Uncontrolled Marked Crosswalks (IA-21)

Date: MAR 20 2018

From: Martin C. Knopp 
Associate Administrator for Operations

In Reply Refer To:
HOTO-1

To: Federal Lands Highway Division Directors
Division Administrators

Purpose: The purpose of this memorandum is to issue an Interim Approval for the optional use of Rectangular Rapid-Flashing Beacons (RRFB) as pedestrian-actuated conspicuity enhancements for pedestrian and school crossing warning signs under certain limited conditions. Interim Approval allows interim use, pending official rulemaking, of a new traffic control device, a revision to the application or manner of use of an existing traffic control device, or a provision not specifically described in the *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD). State and local agencies must request and receive permission to use this new Interim Approval, designated IA-21, from the Federal Highway Administration (FHWA) in accordance with the provisions of Section 1A.10 of the MUTCD before they can use the RRFB, even if prior approval had been given for Interim Approval 11 (IA-11), now terminated. The issuance of this new Interim Approval does not reinstate IA-11 either in whole or in part.

Background: The Florida Department of Transportation has requested that the FHWA issue an Interim Approval to allow the use of RRFBs as pedestrian-actuated conspicuity enhancements to supplement standard pedestrian and school crossing warning signs at uncontrolled marked crosswalks. The RRFB does not meet the current standards for flashing warning beacons as contained in the 2009 edition of the MUTCD, Chapter 4L, which requires a warning beacon to be circular in shape and either 8 or 12 inches in diameter, to flash at a rate of approximately once per second, and to be located no less than 12 inches outside the nearest edge of the warning sign it supplements. The RRFB uses rectangular-shaped high-intensity light-emitting-diode (LED)-based indications, flashes rapidly in a combination wig-wag and simultaneous flash pattern, and may be mounted immediately adjacent to the crossing sign.

Research on the RRFB: The City of St. Petersburg, Florida, experimented with the RRFB at 18 pedestrian crosswalks across uncontrolled approaches and submitted its final report in 2008. In addition to “before” data, the city collected “after” data at intervals for one year at all 18 sites and for two years at the first two implemented sites. For the first two sites, the city collected data for overhead and ground-mounted pedestrian crossing signs supplemented with standard circular yellow flashing warning beacons, for comparison purposes, before the RRFBs were installed. The data showed higher motorist yielding rates at crosswalks where the RRFBs had been installed in comparison to lower rates for standard warning beacons. The higher yielding rates were sustained even after two years of operation, and no identifiable negative effects were found. The St. Petersburg data also showed that drivers exhibit yielding behavior much farther in advance of crosswalks with RRFBs than with standard circular yellow flashing warning beacons.

In addition to the St. Petersburg locations, experimentation with RRFBs was also conducted at other uncontrolled marked crosswalks in Florida and other States. Data from locations other than St. Petersburg was limited, but did show results similar to those found in St. Petersburg.

The Texas Transportation Institute (TTI) conducted a Federally funded research project¹ that developed and tested a new flash pattern for the RRFB that was shown to be at least as effective as the flash pattern that was initially tested in St. Petersburg, Florida, and that showed that mounting the RRFB unit above the sign was at least as effective as mounting the RRFB unit below the sign. In this project, the results were generally favorable, however there was a wide range of yielding rates, with some as low as 19 percent. This broad range indicates that there might be certain factors or characteristics of locations at which the RRFB might not be effective.

A separate project² conducted by TTI examined data from multiple projects to determine various factors that influenced driver yielding rates at RRFB locations. In this project, the researchers found that intersection configuration, presence of a median refuge, crossing distance, approach to the crossing, and one-way vs. two-way traffic significantly affected the rate of driver yielding. Additional factors including posted speed limit, mounting of the beacons (overhead or roadside), and the type of crossing and sign—Pedestrian (W11-2) or School (S1-1) sign compared with the Trail Crossing (W11-15) sign—were also significant.

¹ Fitzpatrick, K., R. Avelar, M. Pratt, M. Brewer, J. Robertson, T. Lindheimer, and J. Miles. *Evaluation of Pedestrian Hybrid Beacons and Rapid Flashing Beacons*. Report No. FHWA-HRT-16-040, pp. 88-106. Texas Transportation Institute, College Station, Texas. July 2016.
<https://www.fhwa.dot.gov/publications/research/safety/16040/index.cfm>

² Fitzpatrick, K., M. Brewer, R. Avelar, and T. Lindheimer. *Will You Stop for Me? Roadway Design and Traffic Control Device Influences on Drivers Yielding to Pedestrians in a Crosswalk with a Rectangular Rapid-Flashing Beacon*. Report No. TTI-CTS-0010. Texas A&M Transportation Institute, College Station, Texas. June 2016.
<https://www.fhwa.dot.gov/publications/research/safety/16040/index.cfm>

FHWA Evaluation of Results: The Office of Transportation Operations reviewed the available data in 2008 and considered the RRFB to be highly successful for the applications tested (uncontrolled marked crosswalks). The RRFB offers significant potential safety and cost benefits because it achieves high rates of compliance at a low relative cost in comparison to other more restrictive devices that provide comparable results, such as full midblock signalization or pedestrian hybrid beacons.

The FHWA granted interim approval status to the RRFB on July 16, 2008, and designated that action as Interim Approval 11 (IA-11).

The FHWA was later informed that the concept of the RRFB had been patented by a private company. Because patented traffic control devices are not allowed to be included in the MUTCD, are not allowed to be given interim approval status, and are not allowed to be a part of an official experiment, the FHWA terminated Interim Approval 11 on December 21, 2017.

The FHWA has confirmed that the patents on the RRFB device that was the subject of Interim Approval 11 have been expressly abandoned and the concept of the RRFB is now in the public domain. Because of this action, the RRFB is once again eligible for interim approval status and the FHWA is issuing this new Interim Approval for the RRFB.

Interim Approval 11 (IA-11) remains terminated. Agencies that previously had been approved to use RRFBs under IA-11 are not covered by this new Interim Approval to install new RRFBs. If agencies that had approval under IA-11 wish to continue to install new RRFBs, then they must submit a new request to the FHWA and agree to comply with the terms and conditions of IA-21.

This Interim Approval does not create a new mandate compelling installation of RRFBs, but will allow agencies to install this traffic control device, pending official MUTCD rulemaking, to provide a degree of enhanced pedestrian safety at uncontrolled marked crosswalks.

Conditions of Interim Approval: The FHWA will grant Interim Approval for the optional use of the RRFB as a pedestrian-actuated conspicuity enhancement to supplement standard pedestrian crossing or school crossing signs at uncontrolled marked crosswalks to any jurisdiction that submits a written request to the Office of Transportation Operations. A State may request Interim Approval for all jurisdictions in that State. Jurisdictions using RRFBs under this Interim Approval must agree to the following:

- Comply with the Technical Conditions detailed in this memorandum;
- Maintain an inventory list of all locations at which the RRFB is installed; and
- Comply with all the conditions as listed in Paragraph 18 of Section 1A.10 of the MUTCD.

In addition, any agency that receives this approval must acknowledge agreement with the following:

- That an agency will furnish its list of locations where implemented if requested by FHWA;
- That FHWA has the right to rescind this Interim Approval at any time; and
- That issuance of this Interim Approval does not guarantee that the provisions, either in whole or part, will be adopted into the MUTCD.

1. General Conditions:

- a. Each RRFB unit shall consist of two rapidly flashed rectangular-shaped yellow indications with an LED-array-based light source, and shall be designed, located, and operated in accordance with the detailed requirements specified below.
- b. The use of RRFBs is optional. However, if an agency opts to use an RRFB under this Interim Approval, the following design and operational requirements shall apply, and shall take precedence over any conflicting provisions of the MUTCD for the approach on which RRFBs are used:

2. Allowable Uses:

- a. An RRFB shall only be installed to function as a pedestrian-actuated conspicuity enhancement.
- b. An RRFB shall only be used to supplement a post-mounted W11-2 (Pedestrian), S1-1 (School), or W11-15 (Trail) crossing warning sign with a diagonal downward arrow (W16-7P) plaque, or an overhead-mounted W11-2, S1-1, or W11-15 crossing warning sign, located at or immediately adjacent to an uncontrolled marked crosswalk.
- c. Except for crosswalks across the approach to or egress from a roundabout, an RRFB shall not be used for crosswalks across approaches controlled by YIELD signs, STOP signs, traffic control signals, or pedestrian hybrid beacons.
- d. In the event sight distance approaching the crosswalk at which RRFBs are used is less than deemed necessary by the engineer, an additional RRFB may be installed on that approach in advance of the crosswalk, as a pedestrian-actuated conspicuity enhancement to supplement a W11-2 (Pedestrian), S1-1 (School), or W11-15 (Trail) crossing warning sign with an AHEAD (W16-9P) or distance (W16-2P or W16-2aP) plaque. If an additional RRFB is installed on the approach in advance of the crosswalk, it shall be supplemental to and not a replacement for the RRFBs at the crosswalk itself.

3. Sign/Beacon Assembly Locations:

- a. For any approach on which RRFBs are used to supplement post-mounted signs,

at least two W11-2, S1-1, or W11-15 crossing warning signs (each with an RRFB unit and a W16-7P plaque) shall be installed at the crosswalk, one on the right-hand side of the roadway and one on the left-hand side of the roadway. On a divided highway, the left-hand side assembly should be installed on the median, if practical, rather than on the far left-hand side of the highway.

- b. An RRFB unit shall not be installed independent of the crossing warning signs for the approach that the RRFB faces. If the RRFB unit is supplementing a post-mounted sign, the RRFB unit shall be installed on the same support as the associated W11-2, S1-1, or W11-15 crossing warning sign and plaque. If the RRFB unit is supplementing an overhead-mounted sign, the RRFB unit shall be mounted directly below the bottom of the sign.

4. Beacon Dimensions and Placement in the Sign Assembly:

- a. Each RRFB shall consist of two rectangular-shaped yellow indications, each with an LED-array-based light source. The size of each RRFB indication shall be at least 5 inches wide by at least 2 inches high.
- b. The two RRFB indications for each RRFB unit shall be aligned horizontally, with the longer dimension horizontal and with a minimum space between the two indications of at least 7 inches, measured from the nearest edge of one indication to the nearest edge of the other indication.
- c. The outside edges of the RRFB indications, including any housings, shall not project beyond the outside edges of the W11-2, S1-1, or W11-15 sign that it supplements.
- d. As a specific exception to Paragraph 5 of Section 4L.01 of the 2009 MUTCD, the RRFB unit associated with a post-mounted sign and plaque may be located between and immediately adjacent to the bottom of the crossing warning sign and the top of the supplemental downward diagonal arrow plaque (or, in the case of a supplemental advance sign, the AHEAD or distance plaque) or within 12 inches above the crossing warning sign, rather than the recommended minimum of 12 inches above or below the sign assembly. (See the example photo that is shown below.)

5. Beacon Flashing Requirements:

- a. When actuated, the two yellow indications in each RRFB unit shall flash in a rapidly flashing sequence.
- b. As a specific exception to the requirements for the flash rate of beacons provided in Paragraph 3 of Section 4L.01, RRFBs shall use a much faster flash rate and shall provide 75 flashing sequences per minute. Except as provided in Condition 5f below, during each 800-millisecond flashing sequence, the left and right RRFB indications shall operate using the following sequence:

The RRFB indication on the left-hand side shall be illuminated for approximately 50 milliseconds.

Both RRFB indications shall be dark for approximately 50 milliseconds.

The RRFB indication on the right-hand side shall be illuminated for approximately 50 milliseconds.

Both RRFB indications shall be dark for approximately 50 milliseconds.

The RRFB indication on the left-hand side shall be illuminated for approximately 50 milliseconds.

Both RRFB indications shall be dark for approximately 50 milliseconds.

The RRFB indication on the right-hand side shall be illuminated for approximately 50 milliseconds.

Both RRFB indications shall be dark for approximately 50 milliseconds.

Both RRFB indications shall be illuminated for approximately 50 milliseconds.

Both RRFB indications shall be dark for approximately 50 milliseconds.

The RRFB indication on the right-hand side shall be illuminated for approximately 50 milliseconds.

Both RRFB indications shall be dark for approximately 250 milliseconds.

- c. The flash rate of each individual RRFB indication, as applied over the full flashing sequence, shall not be between 5 and 30 flashes per second to avoid frequencies that might cause seizures.
- d. The light intensity of the yellow indications during daytime conditions shall meet the minimum specifications for Class 1 yellow peak luminous intensity in the Society of Automotive Engineers (SAE) Standard J595 (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated January 2005.
- e. To minimize excessive glare during nighttime conditions, an automatic signal dimming device should be used to reduce the brilliance of the RRFB indications during nighttime conditions.
- f. Existing RRFB units that use the flashing sequence that was specified in the Interim Approval 11 memorandum and a subsequent interpretation (the RRFB indication on the left-hand side emits two slow pulses of light after which the RRFB indication on the right-hand side emits four rapid pulses of light followed by one long pulse of light) should be reprogrammed to the flash pattern specified above in Condition 5b as part of a systematic upgrading process, such as when the units are serviced or when the existing signs are replaced.

6. Beacon Operation:

- a. The RRFB shall be normally dark, shall initiate operation only upon pedestrian actuation, and shall cease operation at a predetermined time after the pedestrian actuation or, with passive detection, after the pedestrian clears the crosswalk.
- b. All RRFB units associated with a given crosswalk (including those with an advance crossing sign, if used) shall, when actuated, simultaneously commence operation of their rapid-flashing indications and shall cease operation simultaneously.
- c. If pedestrian pushbutton detectors (rather than passive detection) are used to actuate the RRFB indications, a PUSH BUTTON TO TURN ON WARNING LIGHTS (R10-25) sign shall be installed explaining the purpose and use of the pedestrian pushbutton detector.
- d. The duration of a predetermined period of operation of the RRFBs following each actuation should be based on the procedures provided in Section 4E.06 of the 2009 MUTCD for the timing of pedestrian clearance times for pedestrian signals.
- e. The predetermined flash period shall be immediately initiated each and every time that a pedestrian is detected either through passive detection or as a result of a pedestrian pressing a pushbutton detector, including when pedestrians are detected while the RRFBs are already flashing and when pedestrians are detected immediately after the RRFBs have ceased flashing.
- f. A small pilot light may be installed integral to the RRFB or pedestrian pushbutton detector to give confirmation that the RRFB is in operation.

7. Accessible Pedestrian Features:

- a. If a speech pushbutton information message is used in conjunction with an RRFB, a locator tone shall be provided.
- b. If a speech pushbutton information message is used in conjunction with an RRFB, the audible information device shall not use vibrotactile indications or percussive indications.
- c. If a speech pushbutton information message is used in conjunction with an RRFB, the message should say, "Yellow lights are flashing." The message should be spoken twice.

Any questions concerning this Interim Approval should be directed to Mr. Duane Thomas at duane.thomas@dot.gov.



Figure 1. Example of an RRFB dark (left) and illuminated during the flash period (center and right) mounted with W11-2 sign and W16-7P plaque at an uncontrolled marked crosswalk.

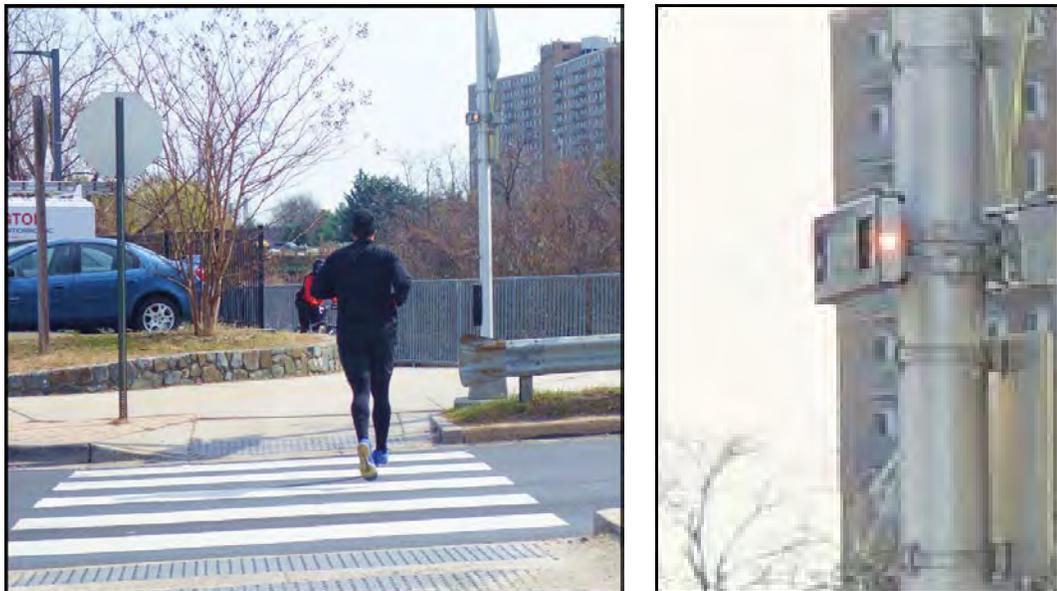


Figure 2. View of pilot light to pedestrian at shared-use path crossing with median refuge. Enlargement of pilot light at right.



Figure 3. Example of pedestrian pushbutton and R10-25 sign with pilot light for pedestrian actuation.

cc:
Associate Administrators
Chief Counsel
Chief Financial Officer
Directors of Field Services
Director of Technical Services

BPAC Attendance Record 2017

Name	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Notes
Holly Ryan/Doug Hall	x	exc	x									Daytona Beach (appt. 3/12) (alt. appt. 02/14)
Jeff Hodge	abs	abs	abs									DeBary (appt. 3/15)
Ted Wendler	exc	x	exc									DeLand (appt. 05/11) (appt. 6/14)
Scott Leisen	x	abs	abs									Deltona (appt. 12/12)
Michelle Grenham	exc	x	x									Edgewater (appt. 01/17)
Paul Eik (17/18 Vice Chairman)	x	x	x									Flagler Beach (appt. 7/14)
Larry Coletti/Andrew Dodzik	x	x	xx									Flagler County (appt 2/16)
Gilles Blais	x	x	x									Holly Hill (appt 3/17)
Nic Mostert	x	x	x									New Smyrna Beach (appt. 03/15)
Bob Storke (17/18 Chairman)	x	x	x									Orange City (appt. 12/07)
Gayle Belin	x	exc	x									Ormond Beach (appt. 01/15 - 07/16)
Danielle Anderson	x	abs	exc									Palm Coast (Appt. 02/16)
Joe Villanella	x	x	exc									Ponce Inlet (Appt. 4/17)
Christy Gillis	exc	exc	exc									South Daytona (appt. 01/16)
Patrick McCallister	abs	x	x									Volusia County District 1 (appt. 10/16)(Patterson)
Roy Walters/Jason Aufdenberg	x	x	x									Volusia County At-Large (appt. 03/05) (alt. appt 07/12)
Nancy Burgess-Hall	x	exc	x									Volusia County (app 2/14) D-2 (Wheeler)(alt. appt 09/15)
Alice Haldeman	x	x	x									Volusia County (appt. 04/13) D-3 (Denys)
<u>NON-VOTING MEMBERS</u>												
Wendy Hickey	exc	exc	x									Flagler County (appt. 12/15)
Heidi Petito/Bob Owens	abs	abs	abs									Flagler County Transit (appt 9/14)
Gwen Perney	x	x	exc									Large City - Port Orange (appt. 10/13)
John Cotton/Edie Biro	x	exc	abs									Votran (appt. 07/13)(alt. appt. 02/16)
Melissa Winsett/Terri Bergeron	x	x	x									Volusia County (02/14) (alt. Appt. 09/16)
Rob Brinson/Eric Kozielski	abs	abs	abs									Volusia County School Board (appt. 01/16)
Mike Ziarnek	x	exc	x									FDOT (appt 8/17)
QUORUM	Y	Y	Y									

Vacancies
Beverly Beach
Bunnell
Daytona Beach Shores
Flagler County School Board
Flagler County Traffic Engineering
Lake Helen
Oak Hill
Pierson
Port Orange
Volusia County D-2
Volusia County Chair



**BPAC Bicycle Suitability Map Subcommittee
Meeting Summary
March 28, 2018**

- Selected Jason Aufdenberg as Chairperson and Patrick McCallister as Vice Chairperson of the subcommittee
- Reviewed and discussed a draft consultant scope of services for the Bicycle Suitability Map
- Reviewed and discussed bicycle maps from Oregon, Utah and Washington, D.C.
- Discussed the following criteria for determining bicycle suitability:
 - Crashes
 - Number of traffic lanes
 - Obstacles
 - Obstructions
 - Presence of bicycle lane/paved shoulder
 - Traffic speed
 - Traffic volume
 - Width of bicycle lane/paved shoulder
- Discussed bicycle suitability levels (extremely low, low, medium, high)
- Discussed community outreach and public involvement

TPO Outreach & Activities Completed in March 2018

1 R2CTPO Presentation to the Rotary Club of Daytona Beach

Date: Monday, March 19, 2018

Location: Daytona Beach

Description: TPO staff gave a presentation to the Rotary Club of Daytona Beach on TPO project updates as well as crashes and technology.



2 Annual TPO Retreat on the Future of Transportation Technology

Date: Friday, March 23, 2018

Location: Brannon Civic Center, New Smyrna Beach

Description: The R2CTPO, in partnership with VCARD, held an annual retreat to discuss the future of transportation technology; more than 125 people participated including committee and board members, citizens, elected officials, government staff, consultants and press.



APRIL EVENTS:

April 30: Tell the TPO Survey Kick-off; runs through June 30, 2018 www.TelltheTPO.com

OTHER UPCOMING EVENTS:

May 5: Oak Hill Community Festival Helmet Fitting, Mary Dewees Park, Oak Hill

May 7: Collaborating for Resilience Session, Volusia County Emergency Operations Center (EOC)

May 7: Building Economic and Social Resilience Session, Volusia County EOC

May 31: SunRail Commission Meeting, MetroPlan Orlando

June 7: MPO Advisory Council Meeting, Location TBD

June-July: Summer School Program Bicycle/Pedestrian Safety Presentation and Helmet Fittings

ONGOING PROJECTS & STUDIES:

- Development of FY 2018/19 and 2019/20 Unified Planning Work Program (UPWP)
- 2018 Tell the TPO Survey Campaign
- Annual Call for Projects Process
- Votran Bus Stop Improvement Plan
- Flagler County Fixed Route Transit Operations Plan
- I-95 to SR 417 Connector Environmental Study
- Development of Bicycle Suitability Map
- Development of FY 2018/19-2022/23 Transportation Improvement Program (TIP)
- TSM&O (ITS) Masterplan Phase II
- Central Florida Visitors Study PAG
- Regional Truck Parking Study PAG
- Central Florida Regional Transit Study PAG
- Resilient Flagler County Study
- SR 442 Sidewalk Feasibility Study
- Ponce Inlet Mobility Feasibility Study



MEETING NOTICE & AGENDA

Please be advised that the River to Sea Transportation Planning Organization (R2CTPO)

BPAC PROJECT REVIEW SUBCOMMITTEE will be meeting on:

DATE: Wednesday, April 18, 2018

TIME: 2:00 p.m.

PLACE: River to Sea TPO

2570 W. International Speedway Blvd., Suite 100 (Conference Room)
Daytona Beach, Florida 32114-8145

Please reserve time on Wednesday, April 25, for a continuation of this meeting in case we do not complete our work on April 18.

AGENDA

- I. **CALL TO ORDER/ROLL CALL/DETERMINATION OF QUORUM**
- II. **PUBLIC COMMENT/PARTICIPATION** (*length of time at the discretion of the chairman*)
- III. **ACTION ITEMS**
 - A. **Selection of BPAC Subcommittee Chairperson and Vice Chairperson**
(*contact: Stephan Harris*)
 - B. **Evaluation and Ranking of Bicycle/Pedestrian Project Applications**
(*contact: Stephan Harris*) (*project applications to be provided under separate cover*)
- IV. **R2CTPO STAFF AND SUBCOMMITTEE MEMBER COMMENTS**
- V. **ADJOURNMENT**

BPAC Project Review Subcommittee Members

Jason Aufdenberg, Gayle Belin, Nancy Burgess-Hall (alternate),
Larry Coletti, Alice Haldeman, Nic Mostert, Roy Walters

cc: TCC, CAC, BPAC Members, Vickie Wyche, FDOT, Michael Ziarnek, FDOT, Press

Note: Individuals covered by the Americans with Disabilities Act of 1990 in need of accommodations for this public meeting should contact the River to Sea TPO office, 2570 W. International Speedway Blvd., Daytona Beach, Florida 32114-8145, (386) 226-0422, extension 20416 at least five (5) working days prior to the meeting date.



Save the Date
Collaborating for Resilience
A Regional Resiliency Action Plan Listening Session

Monday, May 7, 2018 | Volusia County EDC | 3825 Tiger Bay Rd Daytona Beach

Tuesday, May 8, 2018 | FDOH – Bill Posey Conference Center | 2555 Judge Fran Jamieson Way, Viera

Attend Either Date. Time: 9:00 am– 11:30 am

Register here: <https://www.surveymonkey.com/r/RRAPWorkshops>

RESILIENCY:

The capacity of individuals, communities, institutions, businesses, and systems within a region to plan, sustain, adapt, recover, improve and grow collaboratively—regardless what kind of chronic stresses and acute shocks they experience – through specific actions and implementation strategies geared to address specific vulnerabilities.

(adapted from 100 Resilient Cities for the Regional Resiliency Action Plan)

Join us for a listening session to guide the development of the Regional Resiliency Action Plan for Brevard and Volusia Counties

“Resiliency” has become the new norm for communities as they plan for and respond to increasing disasters, flooding, sea level rise, and other potential vulnerabilities. Understanding the roles, responsibilities and opportunities for local jurisdictions and agencies in preparing and planning for resiliency can be overwhelming. With support from the Department of Environmental Protection, the East Central Florida Regional Planning Council is working with stakeholders to develop a Regional Resiliency Action Plan to “*Increase the ability of local and regional stakeholders to implement resiliency and climate adaptation strategies across disciplines.*”

Collaborate with other local jurisdictions and agencies to discuss the roles, responsibilities, opportunities and barriers to promoting resilience based on the following four parameters:

- * *Leadership and Strategy*
- * *Infrastructure and Environment*
- * *Health and Wellbeing*
- * *Economy and Society*

LISTENING SESSION GOALS

- Identify actionable items for local and regional staff to better prepare, plan and implement resiliency.
- Discuss barriers to implementation and identify solutions.
- Identify appropriate department and agencies roles and responsibilities for actionable items.
- Increase the ability of local and regional stakeholders to implement resiliency and climate adaptation strategies across disciplines.





**River to Sea TPO Board
Meeting Summary
March 28, 2018**

- Received public comment requesting the TPO remember former TPO Board member and New Smyrna Beach Mayor George Musson who was re-elected on this day in 1978
- Received public comment regarding the new bus stop shelters in Daytona Beach and suggested the other cities follow their example for installing and maintaining shelters using an advertising firm
- Approved consent agenda including approval of the February 28, 2018 TPO Board meeting minutes, approval of Executive Director’s Salary, amendment of the lease with Root Riverfront Properties, LLC for office space, the 2017 State Modified Joint Certification Review Report and approval of expenditure for the Roadway Safety Evaluation and Improvement Analysis (\$91,195)
- Approved Resolution 2018-07 adopting the Bicycle and Pedestrian Master Plan Report
- Received a PowerPoint presentation of the R2CTPO “Tell the TPO” Survey Campaign, discussed the survey and provided direction for the candidate questions
- Received a PowerPoint presentation of the St. Johns River to Sea Trail PD&E Study
- Provided member concerns regarding public notice and communication
- Received the FDOT report
- Received the Executive Director’s report including updates on FY 2017/18 SU funding; the Roundtable of Volusia County Elected Officials consideration of an infrastructure sales tax; status update on the Volusia County Bus Stop Improvement Program; an update on regional studies; update of TPO Annual Retreat held on March 23, 2018; and a legislative update
- Received video regarding the Bike Florida Sand and Stars Tour that was in Edgewater and Titusville last week

The next River to Sea TPO Board meeting will be on Wednesday, April 25, 2018