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 website 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. Elk 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. Dodzuk 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. Dodzík 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 RZCTPO 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 Levy 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 14th day of April 2018.

Debbie Stewart, Recording Secretary
River to Sea Transportation Planning Organization
The FHWA provides this information to practitioners about acceptable methods of enhancing pedestrian safety that can be implemented at uncontrolled marked crosswalks. The FHWA continues to be committed to helping practitioners reduce the number of pedestrian injuries and fatalities that occur at uncontrolled marked crosswalks each year.

There are numerous treatments that comply with the current edition of the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD, see https://mutcd.fhwa.dot.gov/) that can be employed either individually or in varying combinations to enhance safety at uncontrolled marked crosswalks. These treatments range from various types of crosswalk markings to enhancing the edge of a standard Pedestrian Crossing warning sign with light-emitting diodes that can be activated by pedestrians. In addition to traffic control devices, roadway treatments, such as lighting or roadway narrowing, can enhance the safety of pedestrians using the crosswalk. The most appropriate treatment, or combination of treatments, will depend on the specific conditions of each site. Conducting a Road Safety Audit (see https://safety.fhwa.dot.gov/rsa/) is one way to identify potential treatments based on the roadway and user characteristics. Additional information to help in the selection of treatments for varying site conditions can be found in the following FHWA resources:

- Pedestrian & Bicycle Safety Web site (http://safety.fhwa.dot.gov/ped_bike/)
- PEDSAFE Web site (http://www.pedbikesafe.org/PEDSAFE/)
- Safe Transportation for Every Pedestrian (STEP), an Every Day Counts Initiative (https://www.fhwa.dot.gov/innovation/everydaycounts/edc_4/step.cfm)

The following traffic control devices comply with the provisions of the 2009 Edition of the MUTCD and can be implemented for a particular crossing if their use would be appropriate based on the specific conditions at the site, such as roadway geometrics and traffic volumes and speeds:

**Pedestrian-activated Flashing LEDs in the Border of a Warning Sign** – Section 2A.07 describes the use of flashing white or yellow LEDs in the border of a pedestrian crossing warning sign. The flashing LEDs may be pedestrian activated to increase their effectiveness in making the crossing sign more conspicuous when a pedestrian desires to cross the roadway.

**Enhanced Conspicuity of Pedestrian Crossing Signs** – Section 2A.15 describes numerous methods that may be used to improve the conspicuity of regulatory or warning signs that are associated with pedestrian crossings.
Yield Here to (or Stop Here for) Pedestrians signs – Section 2B.11 describes pedestrian crossing signs that may be placed upstream from a crosswalk to inform drivers on multi-lane roadways that they are legally required to stop a specified distance in advance of the crosswalk if a pedestrian is crossing the roadway.

Overhead Pedestrian Crossing Signs – Section 2B.12 describes pedestrian crossing signs that may be mounted over the roadway to make it easier for drivers to notice that a crosswalk is present, especially from a greater distance than they would for post-mounted signs, and to inform them of their legal obligation to stop if a pedestrian is waiting to cross or in the process of crossing the roadway.

In-street Pedestrian Crossing Signs – Section 2B.12 describes pedestrian crossing signs that may be placed in the street to notify drivers that a crosswalk is present and to inform them of their legal obligation to stop if a pedestrian is waiting to cross or in the process of crossing the roadway.

High-visibility Crosswalk Markings – Section 3B.18 describes the various types of crosswalk markings that may be used, including those that include diagonal or longitudinal lines to increase the visibility of the crosswalk to approaching drivers.

Additional information on crosswalk marking patterns is available in a recent study, Crosswalk Marking Field Visibility Study (Report No. FHWA-HRT-10-068).
**Midblock Pedestrian Signals** – Sections 4C.05 and 4C.06 describe warrant criteria that can be used in a signal needs study of a marked crosswalk location to determine if the installation of a midblock pedestrian signal is justified to assist pedestrians or schoolchildren in safely crossing the major street.

**Pedestrian Hybrid Beacons** – Section 4E.01 describes warrant criteria that can be used to determine if the installation of a pedestrian hybrid beacon is justified to assist pedestrians in safely crossing the major street.

**Pedestrian-activated Warning Beacons** – Section 4L.03 describes the use of a flashing yellow warning beacon to supplement a pedestrian crossing warning sign. The warning beacon may be pedestrian activated to increase its effectiveness in making the crossing sign more conspicuous when a pedestrian desires to cross the roadway.

**In-roadway Warning Lights** – Section 4N.02 describes pedestrian-activated yellow lights that may be installed in the roadway surface at an uncontrolled marked crosswalk location to warn drivers that a pedestrian is waiting to cross or in the process of crossing the roadway.
The following roadway features, which are not considered to be traffic control devices, can be implemented for a particular crossing if their use would be appropriate based on the specific conditions at the site, such as roadway geometrics and traffic volumes and speeds:

**Curb Extensions (bulb-outs, neckdowns)** – This feature, which is particularly beneficial in urban settings where on-street parking (either parallel or diagonal) is present, shortens the crossing distance and allows the pedestrian waiting to cross to be more visible to the approaching driver. Where physical construction is not immediately feasible, neckdown of the street width at the crosswalk can be accomplished on an interim basis using markings and flexible delineator posts to achieve a traffic calming effect similar to that of a curb extension.

**Pedestrian Refuge Islands (median islands)** – This feature, which is particularly beneficial on wide multi-lane roadways, allows pedestrians to cross a two-way street in two stages by finding a gap in one direction, and then stopping on a median island of sufficient width to wait while searching for a gap in the other direction of traffic.

**Raised Crosswalks** – This feature improves pedestrian safety by forcing drivers to slow down when traversing the crosswalk location.

**Crosswalk Lighting** – This feature improves pedestrian safety by allowing the pedestrian waiting to cross or in the process of crossing to be more visible to the approaching driver during nighttime conditions.
2018 Tell the TPO Survey

DRAFT REVISIONS TO 2016 SURVEY

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 5/31/2016 will be eligible to enter a drawing for a free iPad Mini. 5/30/2018 will be cut off.

1a. Home Zip _______ If applicable: 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

24. What forms of transportation do you use regularly (34 or more times per week)? Select all that apply.
   • Walk
   • Bicycle
   • Drive Alone
   • Carpool
   • Bus
   • SunRail

35. If you do not walk or bicycle now, what prevents you from doing so? Select all 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
   • No matter how many sidewalks or bicycle lanes are improved, I do not care to walk or bicycle
   • I am not comfortable with my bicycle riding/walking ability

   I will not walk or ride a bicycle, even if pedestrian and bicycle facilities are improved.

   No matter how many sidewalks or bicycle lanes are improved, I do not care to walk or bicycle

46. If you do not regularly use public transit buses, what improvements might make them a more attractive option for you? Select all 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
57. If you do not regularly use SunRail, what improvements might make it a more attractive option for you? Select all 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

62. 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.)

- 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.)

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

- 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., variable message signs on highways, coordinated traffic signals, real-time mobile traffic information, etc.)
- Building new roadways
- Adding lanes to existing roadways
- Traffic calming measures (e.g., roundabouts, speed tables, 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)
- Improving bicycling conditions (bike lanes, wayfinding, paved shoulders, etc.)

- Sidewalks and crosswalks
- Trails
- Bicycle facilities
8.10. New transportation technology is most important for which of the following? (Rank: Score each option from 1 to 5, with 1 being the most important and 5 being the least important. Scores may be used multiple times.) (Rank from 1 to 5 where 1 is most important and 5 is least important)

1 2 3 4 5

- 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

3. In order to improve driving in our area, do you think we should invest more, the same, or less in the following? (Select one for each):

Less  The Same  More

- 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., variable message signs on highways, coordinated traffic signals, real-time mobile traffic information, etc.)
- Building new roadways
- Adding lanes to existing roadways
- Encouraging carpooling
- Improving walking conditions
- Improving bicycling conditions
- Improving transit

8. Local funding is required to pay for additional public transit (SunRail and buses). What funding sources would you support to expand transit service? Check one.

- Increased ad valorem taxes (property taxes)
- A transit impact fee for new development
- An overlay tax district for urban areas to support mass transit
- A general sales tax of one cent per dollar
- A general sales tax of ½ cent per dollar
- Yes, I support additional funding sources for transit, but would need more information to suggest a preferred method of funding
- No, I do not support consideration of a dedicated funding source for transit
11. Optional Questions Please describe yourself (This is optional, but important information that helps us know if we've reached all types of travelers within our area): (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

__<$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 iPad Mini 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, and for contact info purposes if you would like additional information from the TPO:

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
2018 CANDIDATE QUESTIONS – NEW QUESTIONS

CANDIDATE QUESTION A
How impactful is sea-level rise on our community's current transportation system (e.g. loss of roadway use due to flooding/erosion, interruptions to evacuation routes, degrading of transportation infrastructure, loss of access to/use of facilities, storm and drain flooding)?

Very impactful – Somewhat impactful – No Opinion – Minimally impactful – Not at all impactful

CANDIDATE QUESTION B
Please indicate below whether you agree or disagree with the following statement:

When considering transportation improvements in our local community, those that directly benefit tourism should be a priority (e.g. beautification in key tourism areas, increasing visitor safety, easing event-related congestion, better wayfinding/signage).

Strongly Agree – Agree – No Opinion – Disagree – Strongly Disagree

CANDIDATE QUESTION C1
Please select what you feel are the three best features of our current transportation system:

- Traffic flow
- Roadway conditions
- Traffic signal timing
- Bicycle lanes/facilities
- Sidewalks/crosswalks
- Bus service
- SunRail service
- Roadway lighting/landscaping
- Other ___________________________
CANDIDATE QUESTION D
If you had $100 to fund transportation, how would you spend it? (You may choose more than one and allocate portions of the $100 in the column to the right of the checkbox.)

- Improved transit service (bus and SunRail)
- Widen existing roadways
- Construct new bike lanes and trails/greenways
- Pedestrian/bicycle connectivity
- Improve roadway safety
- Maintain existing facilities
- Street appearance (lighting and landscaping)
- Build new streets and roadways

CANDIDATE QUESTION E
Does the local community provide adequate transportation options for:

- Seniors
- Low-income travelers
- Tourism workers
- Students
- Commuters
- Disabled travelers
8. Local funding is required to pay for additional public transit (SunRail and buses). What funding sources would you support to expand transit service? (Check one):

- Increased Ad valorem taxes (property taxes)
- A transit impact fee for new development
- An overlay tax district for urban areas to support mass transit
- A general sales tax of one cent per dollar
- A general sales tax of ½ cent per dollar
- Yes, I support additional funding source for transit, but would need more information to suggest a preferred method of funding
- No, I do not support consideration of a dedicated funding source for transit

9. As we prioritize spending on transportation projects, do you think we should invest more, the same, or less than we are spending now on the following? (Select one for each):

- Sidewalks and crosswalks
- Trails
- Bicycle facilities
- Bus service
- SunRail
- Improving conditions on existing roadways
- New roadways

10. New transportation technology is most important for which of the following:

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

11. Optional Questions (This information helps us know if we've reached all types of travelers within our area):

- Age: □ <16 □ 16 to 25 □ 26 to 40 □ 41 to 65 □ >65
- Gender: □ Female □ Male
- Race/Ethnicity: □ White □ Hispanic/Latino □ Black/African American □ Asian □ Other
- Annual income: □ <$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 iPad Mini, please provide your name and email below.

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Name __________________________ Email __________________________

Please let us know if you would like additional information on:

- River to Sea Transportation Planning Organization (meetings, issues, and events)
- Real-time traffic information (avalanche, road closures, park and ride services, etc.)
- Vostran (bus schedules, updates, route changes, etc.)
- SunRail (news updates, schedules, etc.)

As we plan transportation improvements in Volusia and Flagler Counties, do you have any additional concerns, suggestions, problems, and/or recommendations for us?
2016 Tell the TPO...
A Community Transportation Survey

The River to Sea Transportation Planning Organization (TPO) wants your continued 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 with contact information received by 5/31/2016 will be eligible to enter a drawing for a free iPad Mini!

1. Home Zip [ ] if applicable: Work/School Zip [ ]

2. What is your overall level of satisfaction with the current transportation facilities in Volusia/Flagler Counties? (Rank: 1 = completely dissatisfied; 2 = somewhat dissatisfied; 3 = neutral; 4 = somewhat satisfied; 5 = completely satisfied):
   a. Sidewalks and crosswalks (availability, maintenance conditions, etc.)
   b. Trail system (availability, trail conditions, logical connections, etc.)
   c. Bicycle lanes (accessibility, bicycle lane markings, pavement conditions, etc.)
   d. Public transit service (accessibility, routes connecting destinations, etc.)
   e. Public transit shelters/benches (availability, conditions)
   f. Local neighborhood streets (traffic, maintenance conditions, etc.)
   g. Major streets (traffic, maintenance conditions, etc.)
   h. Interstate Highways (traffic, maintenance conditions, etc.)

3. In order to improve driving in our area, do you think we should invest more, the same, or less in the following? (Select one for each):
   a. Improving roadway operations (better traffic signal timings, adding or extending turn lanes, etc.)
   b. Implementing technology to improve safety and efficiency of traffic operations (e.g., variable message signs on highways, coordinated traffic signals, real-time mobile traffic information, etc.)
   c. Building new roadways
   d. Adding lanes to existing roadways
   e. Encouraging carpooling
   f. Improving walking conditions
   g. Improving bicycling conditions
   h. Improving transit

4. What forms of transportation do you use regularly (4 or more times per week)? (Check all that apply):
   - Walk
   - Bicycle
   - Drive alone
   - Carpool
   - Bus
   - SunRail

5. If you do not walk or bicycle now, what prevents you from doing so? (Check all 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
   - No matter how many sidewalks or bicycle lanes are improved, I do not care to walk or bicycle

6. If you do not regularly use public transit buses, what improvements might make them a more attractive option for you? (Check all 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 will not ride the bus even with public transportation improvements

7. If you do not regularly use SunRail, what improvements might make it a more attractive option for you? (Check all 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
   - I will not ride SunRail even with public transportation improvements
   - More parking at stations
   - More effective feeder bus service

Continue Survey +

To complete this survey online visit www.TelltheTPO.com