

SUMMARY MINUTES - ADOPTED



Bicycling and Pedestrian Advisory Committee (BPAC)

Broward County Government Center, in person
1 University Drive, 2nd FL Hearing Room, Plantation, FL 33324
March 13, 2024, at 6:30 p.m.

Board Members Present

Steve Lim – District 1
Chris Wolf – District 3
George Palaidis – District 4
Maximiliano Goldstein (Vice Chair) – District 5
Janet Arango – District 6
Phillip Kim – District 9
Michael Kroll (Chair) – League of Cities

Board Members Absent

All present

County Staff

Sara Forelle, Senior Planner, BPAC Coordinator, Urban Planning
Josette Severyn, Mobility Project Coordinator, Mobility Advancement Program

Attendees

Humberto Arrieta, FDOT District 4
Sam Berens, resident, Better Streets Broward
Sarah Clark, resident
Luis Costa, Colliers Engineering & Design for FDOT
Christina Fermin, Marlin Engineering for Broward County
Alejandro Munoz, resident, Better Streets Broward

I. CALL TO ORDER

Michael Kroll, Chair called the meeting to order at 6:32 PM.

II. ROLL CALL

The roll was called by staff. A quorum was present. Member Kim arrived shortly after roll call.

III. INTRODUCTION OF VISITORS

The presenters, staff and other attendees introduced themselves. Chair Kroll welcomed George Palaidis, a new member, and asked him to share why he joined the BPAC. Member Palaidis stated he is a 15-year County resident and has been involved in numerous bicycling and safety events.

IV. APPROVAL OF MINUTES – November 8, 2023 & January 10, 2024

Chair Kroll requested questions or comments on the minutes. Upon a motion by Vice Chair Goldstein, seconded by Member Wolf, the November 8, 2023 minutes were approved by a unanimous vote. Upon a motion by Member Wolf, seconded by Vice Chair Goldstein, the January 10, 2024 minutes were also approved by a unanimous vote.

V. NEW BUSINESS

1. PRESENTATION — FM# 408046.2 Pines Boulevard and Flamingo Road Intersection Project - Humberto Arrieta, PE, Project Manager, FDOT-District IV - Consultant Management - Section 5

Mr. Arrieta introduced the project and the consultant, Luis Costa with Colliers Engineering. The Broward MPO requested that the FDOT study the feasibility of installing an elevated [Center left-Turn Overpass](#) (CTO) to span the Pines Boulevard and Flamingo Road intersection. This could be the first elevated CTO to be installed in the United States.

The intersection is heavily travelled and surrounded by many different uses, including shopping centers on three of the four corners. It is a wide intersection with two lanes for left turn movements, three for straight, one right turn lane, and bike lanes in all four directions. Pedestrian crossing distances vary from 152 feet to 175 feet.

Study Area Overview



Figure 1 - Aerial view of the Pines Boulevard and Flamingo Road intersection. (Source: FDOT)

Mr. Costa shared slides that show left turns are at level-of-service E or F during peak hours. The entire intersection is anticipated to fail by 2050 if improvements are not made.

The CTO (image below) is a new concept for the United States and has several advantages over other. The slide below lists features of the CTO concept.

Center Turn Overpass (CTO) Concept

- **CTO Features:**
 - Elevated Left Turn Movements
 - Improved Level of Service
 - 7' Buffered Bike Lanes
 - Standard 6' Sidewalk
 - ADA Compliant Accessibility
 - Reduced Crosswalk Length
 - Crosswalk Refuge Areas



Figure 2 - Isometric illustration of a center lane overpass at the subject intersection. (Source: FDOT)

The image below includes additional features. The lack of a pier at the intersection makes this overpass appear more open and feel less intrusive. The approaches are also shorter, so it has a smaller footprint.

Center Turn Overpass (CTO) Concept

- **No pier in the intersection**
- **Steel Structure Required**
- **Flanking spans are required**
 - Balance loads
 - Minimize structure depth
 - Improve sight distance
- **Retaining walls at roadway approaches**



Figure 3 - At grade illustration of the center lane overpass from the northbound lane. (Source: FDOT)

The slide below shows that costs are estimated in the range of \$39 million, excluding the cost of additional right-of-way (ROW). So far, the study indicates a minimal need for

additional ROW at this location; however, the intersection redesign is expected to impact cross traffic access to adjacent properties. This preliminary study will help gauge feasibility of the project. Additional steps in future planning phases include property owner and resident outreach.

Cost Estimate



ENGINEERING ESTIMATE OF PROBABLE CONSTRUCTION COST Pines Blvd at Flamingo Road (CTO) FM# 408046-2-52-01						
LRE ESTIMATE						
QUANTITY	UNIT	ITEM NO.	SEQUENCE DESCRIPTION	UNIT PRICE	AMOUNT	COMMENTS
1	-	-	Draft LRE Sequence 10 - Pines Blvd At Grade	\$14,212,723.17	\$ 14,212,723.17	
1	-	-	Draft LRE Sequence 11 - Flamingo Rd At Grade	\$13,405,959.86	\$ 13,405,959.86	
1	-	-	Draft LRE Sequence 12 - Pines Blvd Median Retaining Wall Section	\$ 2,854,337.56	\$ 2,854,337.56	
1	-	-	Draft LRE Sequence 13 - Flamingo Rd Median Retaining Wall Section	\$ 2,379,248.84	\$ 2,379,248.84	
SUBTOTAL					\$ 32,652,269.49	
QUANTITY	UNIT	ITEM NO.	PAY ITEM DESCRIPTION	UNIT PRICE	AMOUNT	COMMENTS
1	LS	0101- 1-	MOBILIZATION (40804625201)		\$ 3,285,226.95	10% of Total Project Cost
1	LS	0102- 1-	MAINTENANCE OF TRAFFIC (40804625201)		\$ 2,612,181.56	8% of Total Project Cost
1	LS	0996- 16-	PARTNERING, DO NOT BID	\$ 6,000.00	\$ 6,000.00	
1	LS	0996- 25-	INITIAL CONTINGENCY AMOUNT, DO NOT BID		\$ 150,000.00	
SUBTOTAL					\$ 6,033,408.51	
TOTAL					\$ 38,685,678.00	

- Long Range Estimate \$39 Million
- Does not include right of way costs

Figure 4 - Slide showing cost estimates and two images of the intersection. (Source: FDOT)

Below is contact information provided by the presenters. They also stated that this is a preliminary phase in the project. It will need to undergo the Planning, Development and Environment (PD&E) phase to address any issues before going to design.

Contact Information

If you have additional questions, please contact
FDOT Project Manager Mr. Humberto Arrieta, P.E. at:

Humberto.Arrieta@dot.state.fl.us



3400 West Commercial Boulevard
Fort Lauderdale, FL 33309



(954) 777-4152 or
Toll Free: (866) 336-8435; Ext. 4152



Figure 5 - Slide with project contact information (Source: FDOT).

DISCUSSION

- *How much additional right-of-way (ROW) would need to be purchased?* Currently, exactly how much will be needed is unknown and will be determined at later phases, but it is estimated that about 90% of the needs are met with existing ROW.
- *Will the pedestrian need to stop at the refuge, or will the signals be timed so they are able to complete the crossing in one trip?* The lights can be timed so that pedestrians can cross the intersection uninterrupted. This will be determined when the signals are designed. Taking the major left turn movements out of the at-grade intersection will work much better for everyone, including pedestrians.
- *If the turn lanes are elevated, how would a bicyclist make the left turn?* They could either climb up the ramp that will slope at 6%, which is not considered steep, go straight and make a U-turn, or use the crosswalk.
- Ms. Severyn was recognized and commented that Flamingo Road is a SunTrail alignment and asked the project managers to consider that the County has an open application with to fund a Flamingo Road Greenway from the southern county line to I-595. A 10-12 foot shared-use path is planned through the intersection. The presenters thanked her for the comment and requested her contact information to request additional information.
- *There are 4-5 other intersections in Broward County where the CTOs are being considered, one of which is Oakland Park Boulevard, will each intersection require its own feasibility study?* At this time the Oakland Study is already programmed. The rest are to be determined. One of the main challenges with this design option is the decreased accessibility to properties near the intersection because the accesses need to be managed for safety reasons; smaller commercial lots increase access issues.
- *How far in each direction from the intersection does the study consider?* We are looking at just beyond the footprint of the ramps which is about 1,200 feet, close to 1/4 mile, from the center of the intersection. We are also concerned with access management to driveways and shopping center entryways. This is a good location because it has a pretty decent access management plan. At Oakland Park Boulevard it will be more challenging because access driveways are more frequent.
- *Have you spoken with Broward County Transit (BCT) since there is a park-and-ride on one of the corners of this intersection and a high-frequency premium transit corridor is being planned along Pines Boulevard?* This could be good timing to discuss putting infrastructure upgrades for the buses. FDOT has not yet met with BCT. They anticipate meeting with the City of Pembroke Pines next. Meeting with other agencies may not happen until subsequent phases of this project. In the meantime, they welcome any information and feedback provided and will keep track, to address in future phases.
- *Why are the bike lanes not being moved next to the sidewalk?* Vice-Chair Goldstein stated that he understood that Broward County Highways is moving towards combining bike lane and sidewalks into a shared-use path, instead of sidewalk and buffered bike lanes. Mr. Arrieta responded that the Department would work with Broward County and design something that both agencies can agree on. For the time being they are following the current standard of a 7-foot bike lane with a 2-foot buffer. Mr. Arrieta said that they are designing an interchange on I-95 where a shared-use path will be included but said that he understood that cyclists do not like getting off the pavement to get on the concrete. Vice-Chair Goldstein responded that not all cyclists are alike—one group includes confident and very fit, able-bodied riders, but represent 5% of all bicyclists. Most riders, including young children and older people who are less confident would rather ride on the sidewalks. Elevating the bicycle facility above the pavement level would increase the perception of safety. Mr. Arrieta agreed in

principle and stated that they will coordinate with all of the interested parties to come to a consensus on the best fit for this particular intersection.

- When asked about the *funding source for this project*, Mr. Arrieta responded that the MPO had requested the study, since they do not have an engineering department.
- A discussion followed about the novelty of the proposed design and compared it against the time it took projects in the US to adopt implementation of the Divergent Diamond Interchange, which has become more common in South Florida. It may take another 4 plus years to vet this concept and make sure it works.
- *Member Palaidis shared a concern with right turns at the intersection, particularly double-laned right turns, and asked whether no turn on red light could be implemented.* There are a number of things that can be implemented, including enforcement, but some people are still going to break the rules and shout at the pedestrians trying to cross when they want to turn. These details will be worked out during the signal design phase.
- In closing, Ms. Forelle asked if Mr. Arrieta could come back to present to the BPAC during the PD&E phase of the project, to which he agreed and responded to contact him with any questions.

2. PRESENTATION – Broward Low Stress Multimodal Mobility Master Plan Updates –Christina Fermin, Marlin Engineering for the Mobility Advancement Program (MAP)

Prior to her presentation, Ms. Fermin was asked to provide an overview of how the outcomes of this project would be integrated into the Safe Streets for All (SS4A) Grant Action Plan. Ms. Fermin stated that the low stress network currently consists of about 200 projects. In their next steps they will be prioritizing the projects and then passing them on to the SS4A to inform the Action Plan on how certain safety projects should be designed. Ms. Forelle will try to identify someone from the MPO to present an overview of the SS4A efforts to the BPAC at the June 2024 meeting.

Ms. Fermin stated they are currently wrapping up the needs assessment and have a draft project list of the proposed network. Next month, they will be reaching out to the municipalities for network buy-in and feedback prior to the consultant moving into the feasibility analysis phase. The top ten projects will be included and reviewed for fatal flaws. Conceptual designs will be developed for the first five projects. An accompanying design manual is also in progress. The consultant aims to deliver the final report by October-November of this year.

Ms. Fermin reminded the members that the purpose of the study was to design a low stress network. It would be targeted to the majority of people (60%) who fall under the category of being very concerned about safety and prefer to ride or walk on a facility physically separated from vehicular traffic such as a shared use path, urban side path or ride in a separated bike lane. To identify the level of traffic stress (LTS) they used a methodology found in the Florida Department of Transportation (FDOT) 2023 Multimodal Quality Level of Service Handbook. The target for the network is to increase the number of LTS 1 & 2 facilities, which are on the lower range of traffic stress levels.

Ms. Fermin showed images she had previously shared with the BPAC of the assessment and followed by the “Existing Network” which includes Existing and Planned Bicycle Facilities on roads that are part of a local network, not necessarily regional (see below).

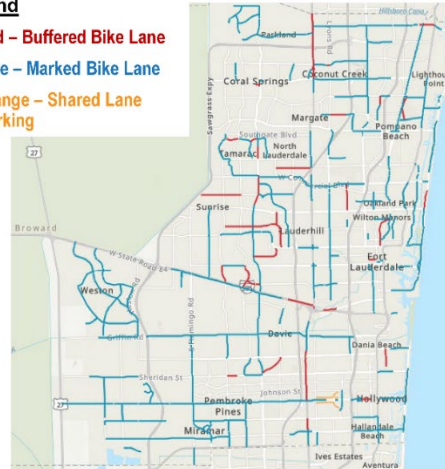
Existing Network

Data Inputs:

- Existing and Planned Bicycle Network
- Posted Speed Limit
- Number of Travel Lanes
- High Injury Network (HIN)
- Canals without Trail features
- Florida Power & Light (FPL) right-of-way

Legend

- Red – Buffered Bike Lane
- Blue – Marked Bike Lane
- Orange – Shared Lane Marking



Broward MPO Bicycle Network



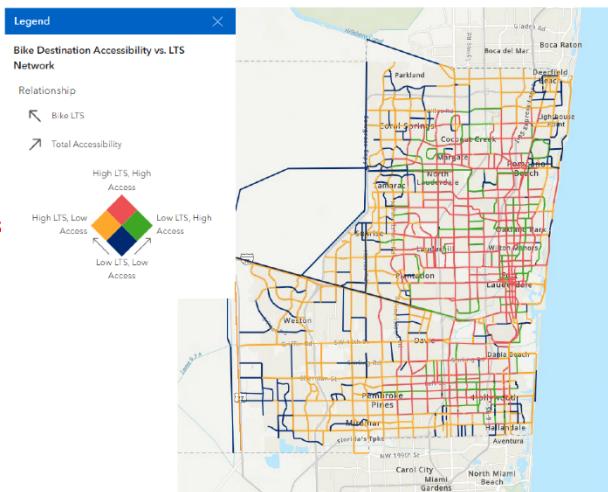
Gap Analysis Web Map

Figure 6 - Map of currently existing and planned bicycle network (Source: Marlin Engineering for MAP)

The assessment concluded that most of the County facilities classify as LTS 1 or 2 for pedestrians, but LTS 3 or 4 for bicyclists, which is considered an uncomfortable ride for most bicyclists. An accessibility analysis was also conducted to generate a map that shows proximity of access to transit stops, schools, grocery stores, and parks. The accessibility analysis was combined with the level of traffic stress analysis to classify areas with different combinations of high/low accessibility and high/low level of traffic stress. The next image highlights that the more suburban and rural areas to the west are very low in accessibility but also feature low stress opportunities. While the central and east side areas of the County are more accessible, but the corridors also are higher stress. Achieving the “green” status of high accessibility but low LTS is the ultimate objective.

Accessibility Analysis & LTS

- **Low BLTS/PLTS and High Access**
 - Many destinations, route is comfortable (LTS 1 or 2)
- **High BLTS/PLTS and High Access**
 - Many destinations, route is uncomfortable (LTS 3 or 4)
- **Low BLTS/PLTS and Low Access**
 - Not many destinations, route is comfortable (LTS 1 or 2)
- **High BLTS/PLTS and Low Access**
 - Not many destinations, route is uncomfortable (LTS 3 or 4)



Destination Accessibility Analysis Web Map



Figure 7 - Map of combined Accessibility and Level of Traffic Stress (LTS) analysis.

To identify gaps and opportunities the consultants also looked at other inputs such as speed limit, number of vehicular travel lanes, and the “high injury network” – bicycle and pedestrian crashes only. They also looked at canals and FPL right-of-way. Additionally, the study included planned projects, including lists from the Transportation Improvement Plan (TIP), Surtax funding, and FDOT, as well as the MPO’s designated “super connectors” between communities. The Gaps and Opportunities map is the proposed network for the study:

- Purple represents existing trails;
- Green marks easy to implement projects;
- Orange consists of moderate to implement and may involve two or more jurisdictions;
- Red represents more difficult to implement for reasons such as ROW constraints, and are on the high-injury network;
- Blue are opportunities along canals; and
- Yellow includes the projects under construction (for example Loxahatchee Rd in the north).

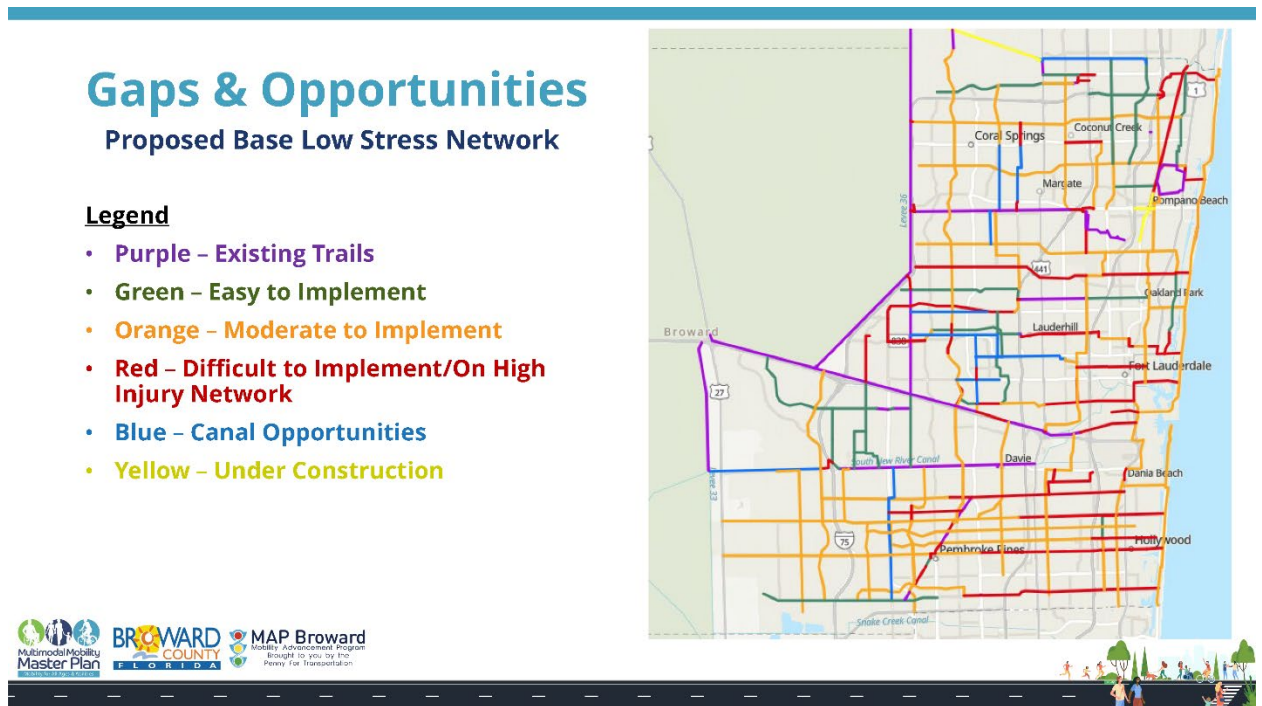


Figure 8 - Map showing gaps and opportunities for the proposed low stress network. (Source: Marlin Engineering for MAP)

Shown below is Proposed Low Stress Network map which marks the proposed network in orange dashed lines and the existing network as solid blue lines. Additional proposed projects appear with dashed lines. In combination, this would provide a nice regional network that would allow north/south as well as east/west movement. The goal of the network is for the municipal partners to tie their own facilities and systems into this one to create a more densely connected and accessible Countywide network.

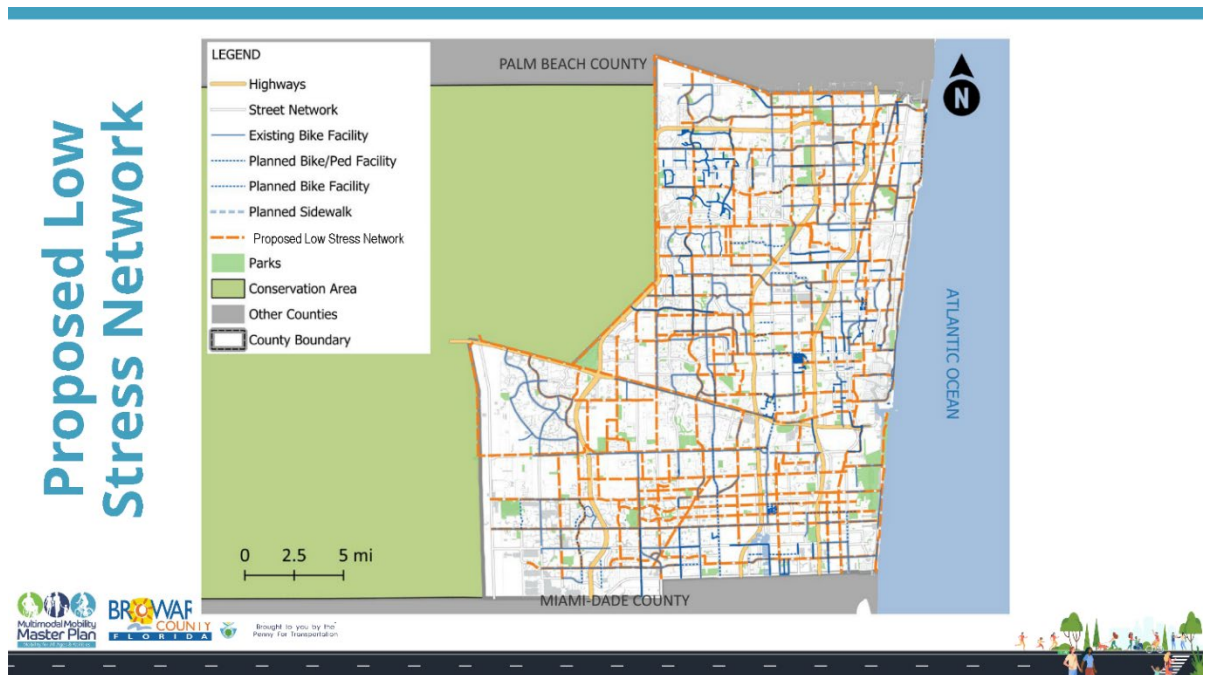


Figure 9 - Map showing the proposed network by type of facility proposed. (Source: Marlin Engineering for MAP)

At the end of her presentation, Ms. Fermin invited the members to visit the project website and fill out the survey if they hadn't already. A Crowdsourcing Map is available for public feedback. The mobile-friendly website can be accessed using the scan code featured in the slide, below. It's also multilingual – English, Spanish and Creole. Ms. Fermin showed the BPAC how to use the different features of the Crowdsourcing map - layers can be turned on/off, posted comments can be viewed and new ones added about the proposed network.

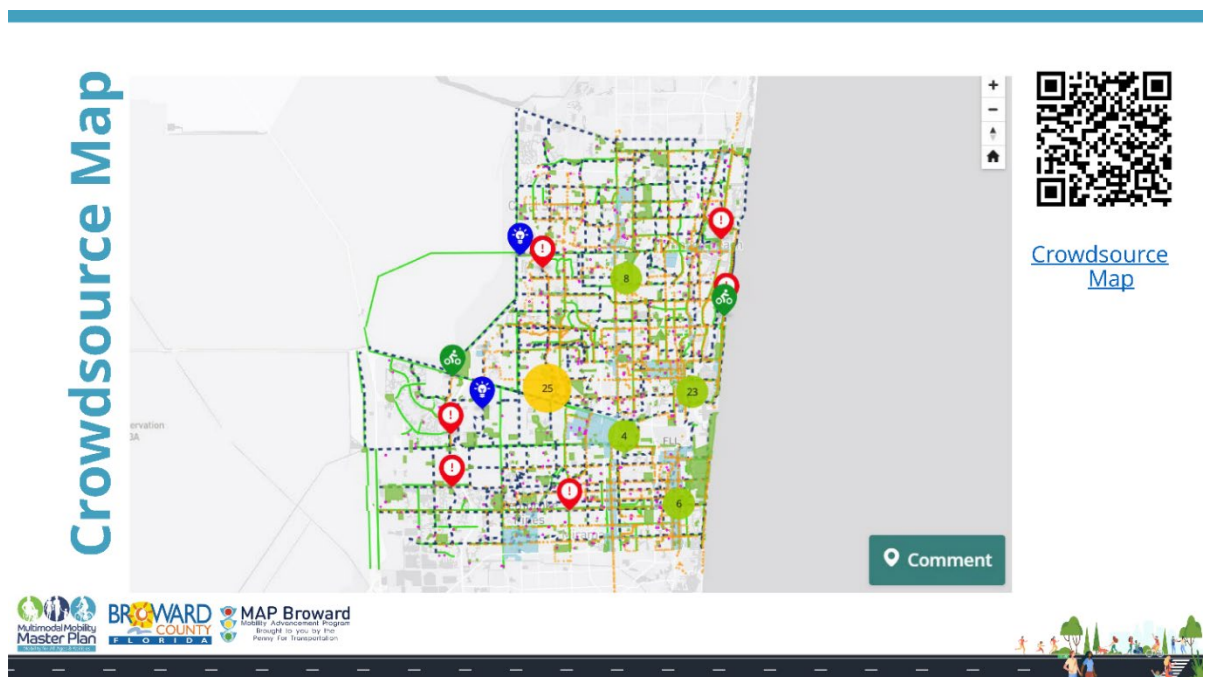


Figure 10 - Image of the Crowdsourcing map for the Low Stress Project input and related QR code. (Source: Marlin Engineering for MAP).

Ms. Forelle commented on the ease of use of the map and recommended the members not only try it out, but also share it with others.

DISCUSSION

- Chair Kroll remarked how he liked the map and crowd sourcing element for public engagement. In reference to the ease of implementation, he thought that the color coding and criteria seemed easy to understand.
- Vice-Chair Goldstein asked whether the canals were opportunities or challenges since he understands that the Water Management District doesn't want this to happen. He experienced that they don't like having trails along the canals because they believe that adding shade trees reduces the drainage. He asked if the consultants had already spoken with the District to see if they are on board. Ms. Fermin responded that once the County approves a final plan, then they will share with the South Florida Water Management District and ask what it will take for them to approve some of the canal opportunities.
- Chair Kroll mentioned he represents the League of Cities and asked if the consultant team was reaching out to them. Ms. Fermin responded that they are marketing the project through the MPO and their contact list includes the League.
- They are also pushing it out through their social media and newsletter. In addition to the BPAC there are other boards and committees that they have gone to, including the Complete Streets Team. Also, early on they went to farmers markets and different on the ground events. Their Public Information Officer is going to be at the MPO's Let's Go Biking event in Miramar.
- Ms. Fermin offered to share the code and the links so that Ms. Forelle and the BPAC members can share with other groups.
- Ms. Forelle also offered to coordinate publishing the information in an environmental education newsletter the Air Quality Group emails to schools and the teachers who share with their students.

3. MOTIONS – ANNUAL ELECTION OF OFFICERS – Chair, Vice Chair & Secretary

Ms. Forelle reminded the members that they elect the slate of BPAC officers at the beginning of each calendar year. Unfortunately, due to public notice issues, they were unable to conduct this business at the January 2024 BPAC meeting. The following motions were made and approved.

MOTION – Nominations for BPAC Chair – Vice-Chair Goldstein nominated Michael Kroll, who accepted the nomination. The motion was seconded by Member Lim and adopted unanimously.

MOTION – Nominations for BPAC Vice-Chair – Chair Kroll nominated Max Goldstein for the position, and he accepted. The motion was seconded by Member Arango and adopted unanimously.

MOTION – Nominations for BPAC Secretary – Vice-Chair Goldstein nominated Janet Arango for the position, and she accepted. The motion was seconded by Member Wolf and adopted unanimously.

VI. OLD BUSINESS

None.

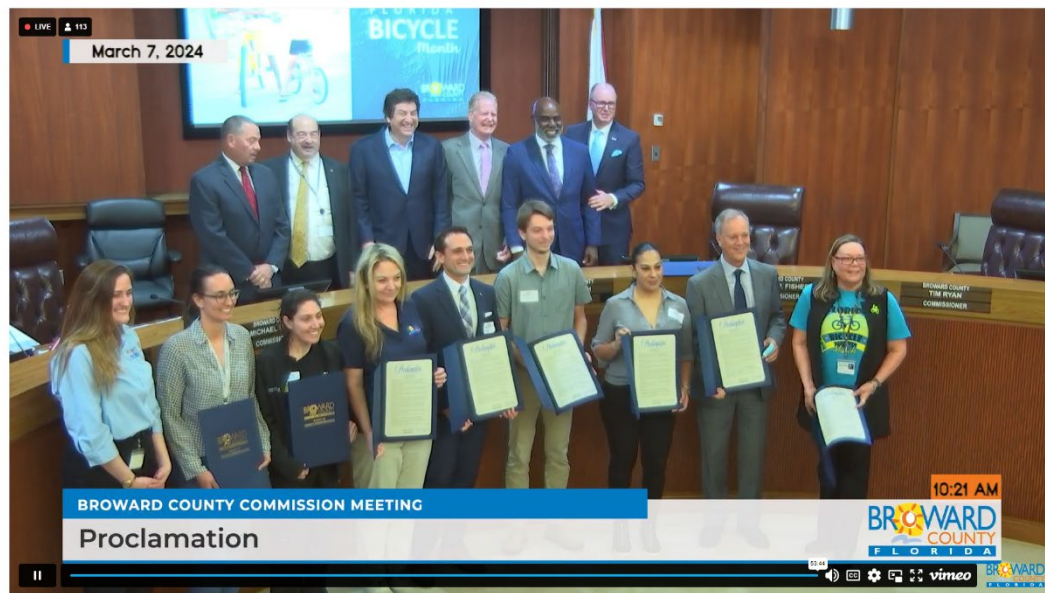
VII. AGENCY UPDATES

Claudette De Los Santos was unable to attend but had requested that Ms. Forelle share an invitation to the March 16, 2024 “Let’s Go Biking” event in Miramar hosted by the Broward MPO.

VIII. STAFF REPORT

Ms. Forelle explained that the BPAC would be undergoing a “sunset review”, a process that Broward County has established to review all of their boards to assess if they are achieving their purpose and have active membership. She explained that the process requires filling out some forms and interviewing the Chair, who has previously participated in past sunset reviews. Ms. Forelle is not anticipating any issues, since the BPAC has met regularly and fulfilled its purpose. She took the opportunity to congratulate the members who were all present.

The next topic was sharing highlights from the reading of the annual Bicycle Month proclamation by Vice-Mayor Furr at the Commission Meeting on Thursday, March 7, 2024. She thanked Member Wolf for speaking on behalf of the BPAC since Chair Kroll and Vice-Chair Goldstein were unable to attend. She also thanked members Arango, Kim and Palaidis who were also present. Below is the photo of the event.



County Commission Meeting - March 7, 2024

Regular Meeting Agenda: https://broward.legistar1.com/broward/meetings/2024/3/1143_A_County_Commission_24-03-07_Regular_Meeting_Agenda.pdf

Figure 11 – Photo of BPAC Members, supporter, and County staff with the Broward County Commission on the day of the proclamation.

Ms. Forelle also mentioned that she had recently become certified in helmet fitting through a course offered by the FDOT in conjunction with the University of Florida Ped/Bike Safety Center. She offered to bring helmets to the May 2024 meeting and conduct a short helmet fitting session and asked members to bring their own to check them.

IX. PUBLIC COMMENT

None

X. COMMITTEE MEMBER UPDATES

- a. *Complete Streets Team Updates* – None
- b. *Committee Member Updates* – Vice-Chair Goldstein shared that Better Streets Broward of which he and several of the visitors are members has started a book club. Their first meeting is on March 24th at the River Café in downtown Fort Lauderdale.

XI. ADJOURN

Upon a motion by Vice Chair Goldstein, seconded by Member Wolf, the BPAC voted unanimously to adjourn at approximately 8:26 p.m.

Next Meeting: Wednesday, May 8, 2024, at 6:30 PM

Transcript of meeting or recording available upon request. Contact Sara Forelle, Senior Planner, for additional information. Email: sforelle@broward.org or Phone: (954) 357-9785