



# BPAC Annual Report 2023

#### **DRAFT**

# **ABOUT BPAC**

# History

The Broward County Bicycling and Pedestrian Advisory Committee (BPAC) was originally created by Broward County Resolution on October 6, 1981. For over 40 years, BPAC has advised the Broward County Board of County Commissioners on matters pertaining to bicyclists and pedestrians. The BPAC consists of eleven members, with each of the nine Broward County Commissioners appointing one representative and two appointed by the Broward League of Cities. Broward County Urban Planning Division (UPD) provides support for BPAC.

## **Purpose**

Per the Broward County Administrative Code, the BPAC was established with the following purposes:

Study and advise the Broward County Board of County Commissioners, with the cooperation and assistance of the County Administrator, on all matters related to bicycling and walking.

Review Broward County road construction projects at their planning and design stages for the possible inclusion and/or placement of bicycle and pedestrian facilities.



# Committee Meetings

Meetings are held the second Wednesday every other month, starting in January, at 6:30 pm at Government Center West, 1 North University Drive, Plantation, 33324, 2nd Floor Hearing Room. BPAC meetings are announced through the Sunshine meeting notice directory. Dates and locations may be subject to change. Please check online for updates at BPAC website. Meetings were held on the following dates:

- September 14, 2022
- December 14, 2022 (the meeting was rescheduled from November due to a storm)
- January 25, 2023
- March 8, 2023
- May 3, 2023
- July 12, 2023





# Message from the BPAC Chair



As the Chair of the Broward County Bicycling and Pedestrian Advisory Committee (BPAC), I reflect on how wonderful it is to live, work and play in Broward County's urban and natural environments. The ability for all of us to enjoy these environments while safely walking or biking plays a vital role in the County's economy and health.

For over 40 years the BPAC has been dedicated to its core responsibility of advising the Broward County Board of County Commissioners on bicyclist and pedestrian matters and identifying proactive initiatives to meet the everchanging challenges to improve our County's bicycle and pedestrian facilities.

My fellow BPAC members and I remain committed to helping ensure the public's health, safety, and welfare through diligently working with and advising the County.

It has been a pleasure as a BPAC member for the last 12 years to work with a County and State that are dedicated to improving our bicycle and pedestrian facilities. Some of the recent initiatives that have been undertaken by the County have included the passing of the Penny Sales Tax Initiative that led to the Mobility Advancement Program (MAP) which includes numerous bicycle and pedestrian improvement projects, the incorporation of Complete Streets initiatives in the County Comprehensive Plan and Land Use Plan, and the County's commencement of developing a "Low Stress Multimodal Mobility Transportation Master Plan" that will address key bicycle, pedestrian and transit facilities throughout the County.

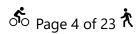
Through these initiatives as well as numerous traffic and roadway improvements currently being undertaken, Broward County is focused on creating a truly multimodal system that will provide improved equitable mobility and safety for pedestrians and bicyclists throughout Broward County. Through these initiatives Broward County continues to demonstrate its desire to improve bicycle and pedestrian accessibility, usage and safety for our residents and visitors. We are very proud to support and encourage the County to continue its proactive approach to improving our bicycle and pedestrian systems and taking the County to another level. This Annual Report outlines some of the initiatives and actions the BPAC has undertaken to attain this.

On behalf of all the BPAC members, I can state that we serve on the BPAC because we believe in the potential of this community and that the residents of Broward County deserve a first-class bicycle and pedestrian system that is accessible to all.

Michael D. Kroll RLA, FASLA

Chair, Broward County Bicycling and Pedestrian Advisory Committee





# BICYCLING & WALKING: NATION, STATE & COUNTY

# State of Pedestrian & Bicycle Safety in the U.S.

In 2022, the National Complete Streets Coalition and Smart Growth America published the latest <u>Dangerous by Design</u> Report. Florida ranks #2 in states with high pedestrian fatalities in metropolitan areas. South Florida consistently ranks high on the list but dropped by one position to #14.



Figure 1 – The top 20 most dangerous metropolitan areas for pedestrians (2016-2020) Source: Dangerous by Design 2022 - Smart Growth America

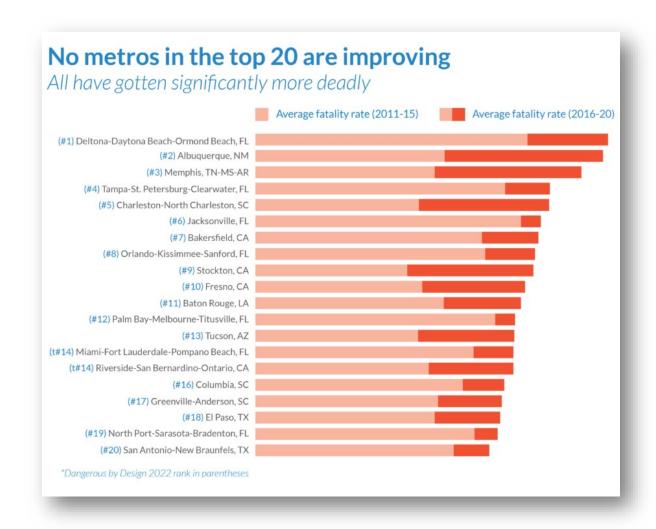
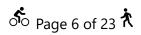


Figure 2 - Source: Dangerous by Design 2022 - Smart Growth America

The National Safety Council's graphs, below, show that injuries incurred from bicycle accidents are highest among young males (10-14 yrs). Fatal accidents are highest among men between 55-64 years. Accidents in general decreased between 1999 and 2017, but are again on the rise (also see Center for Decease Control). Bicycling.com reported that according to a Streetsblog by Tara Goddard, Texas A&M, eight out of nine cyclists killed in the U.S. are men. In part due to the fact that more men ride compared to women, but there may also be a lifestyle component at play: men are more likely to choose a direct route rather than a safer route, prioritizing efficiency over safety. The same applies to foot travel as well: men are more likely to engage in risky behavior like dashing across a 50 MPH road (Source: https://www.bicycling.com/culture/a43576894/toxic-masculinity-cyclist-pedestrian-driver-fatalities/).

Risk taking behavior in younger men has been termed "young male syndrome" by a study published in Frontiers in Neurology (National Library of Medicine, 2019). According to the study, young males tend to be more aggressive and competitive than females and tend to focus on temporary benefits and gains, rather than long-term consequences. The result is higher accident rates, particularly road traffic accidents. However, the study observes that mortality rates increase with age of the patient, regardless of riskiness of behavior. It is important to consider these factors when designing facilities for mobility.





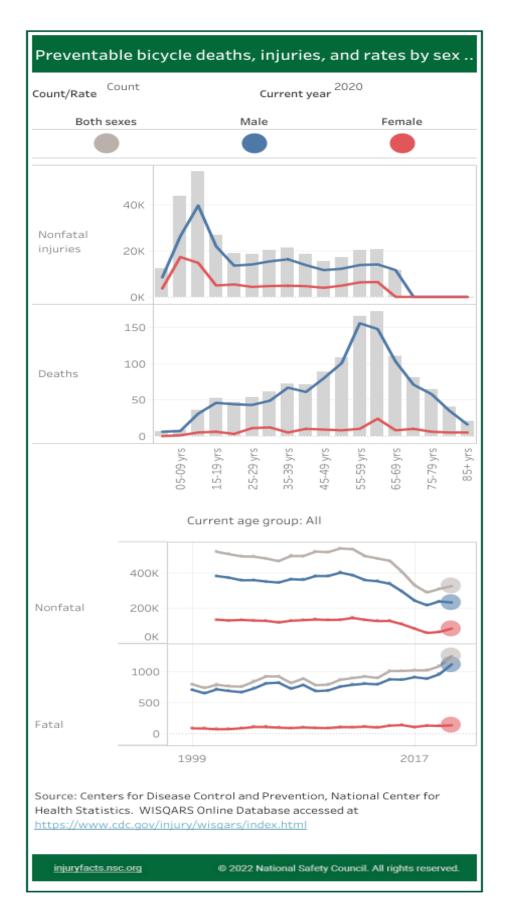


Figure 3 - Source: National Safety Council (NSC) at https://injuryfacts.nsc.org/home-and-community/safety-topics/bicycle-deaths/



The <u>League of American Bicyclists</u> (founded in 1880) publishes a <u>Bicycle Friendly State ranking</u> for all 50 states based on four public data sources and a Bicycle Friendly State survey that is answered by each state's Department of Transportation and/or a statewide bicycle advocacy organization. These grades can help states, citizens, and advocates understand the relative strengths and weaknesses of their state relative to other states. Florida's ranking has fluctuated over the years, but this past assessment places Florida #8 out of 50 states.



Figure 4 - Bicycle Friendly States Ranking (Source: League of American Bicyclists, 2023). The elements ranked include infrastructure and funding; education and encouragement; traffic laws and practices; policies and programs; and evaluation and planning.

Data from the University of Florida's Geoplan Center, <u>Signal Four Analytics</u> (below) compiles data by County and for the entire State from the Florida Department of Highway Safety and Motor Vehicles. The graphics below show pedestrian and bicycle accidents for Broward County. Total fatalities remained relatively constant from 2015-2019, and have gone up and down between 2020 and 2022. While it is encouraging that fatalities are decreasing, continued implementation of complete streets, greenways, and trails will help to further improve safety.

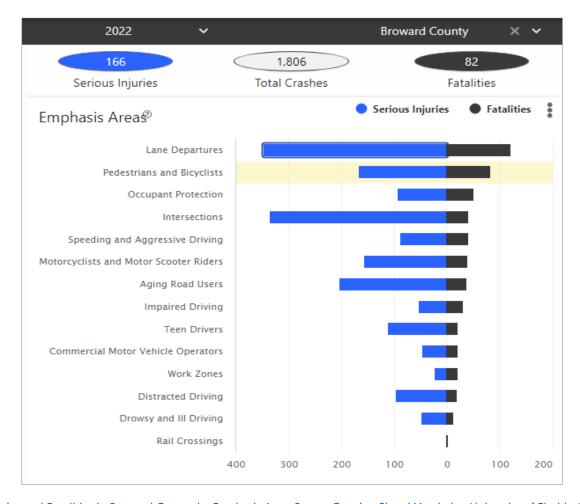


Figure 5 – Injuries and Fatalities in Broward County by Emphasis Area. Source Geoplan <u>Signal4Analytics</u>, University of Florida (2022)

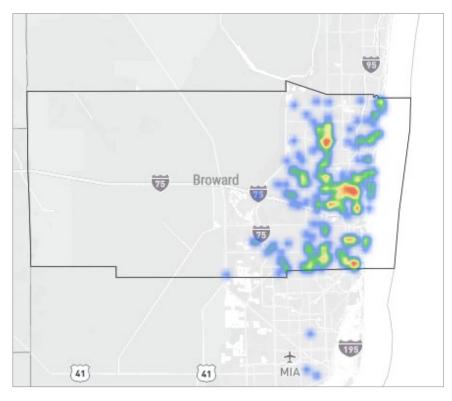


Figure 6 - Heat map of location of fatalities and injuries in Broward County (2022). Source Geoplan Signal4Analytics, University of Florida.



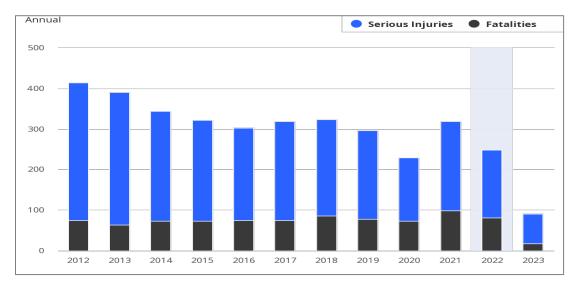


Figure 7 – Annual Serious Injuries and Fatalities in Broward County. Source of figures above, Geoplan <u>Signal4Analytics</u>, University of Florida (2023)

# The State of Air Quality in Broward County

Broward County Air Quality Measures in 2021 and 2022 were similar in the number of good air quality days which were in the range of 82%. The United States Environmental Protection Agency calculates the Air Quality Index (AQI) for five major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide, and nitrogen dioxide. Ground-level ozone and airborne particles are the two pollutants that pose the greatest threat to human health. Ground level ozone is created when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources chemically react in the presence of sunlight (EPA, 2023). More information about Broward County's air quality monitoring can be found at the Broward County ambient air monitoring page.

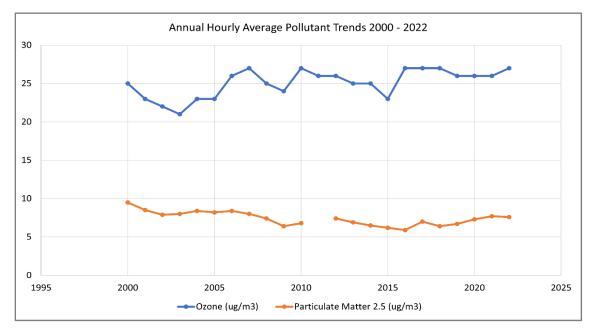


Figure 8 - Broward County Air Quality Measures (note: 2011 data NA) (Source: Broward County Natural Resources Division)





# County Departments and Divisions

Broward County promotes the development of a safe mobility system including bicycling through collaboration with the Broward Metropolitan Planning Organization (MPO), Florida Department of Transportation (FDOT), and municipalities to fund and construct safe and equitable bicycle facilities.

Within the County, several Departments and Divisions assist with planning and construction of bicycle and pedestrian facilities and programming activities for all ages and abilities.

- The Broward County Urban Planning Division supports the Bicycling and Pedestrian Advisory Committee and the Complete Streets Team. Both advise the Board of County Commissioners on bicycle and pedestrian projects and enforcement.
- The Broward Complete Streets Team (CST) and its member agencies partner with the Broward MPO, FDOT, municipalities and others to: incorporate Complete Streets design guidelines into codes and Comprehensive Plans; identify and allocate funding; and construct multimodal projects. Both the Broward County Comprehensive Plan and the Broward County Land Use Plan include policies that promote Complete Streets. The CST reviews projects that impact county roads for compliance with Broward County's Complete Streets policies and standards. The CST includes representatives from several County agencies, such as the Transportation Department (Transit), Public Works Department, Parks and Recreation Division, Urban Planning Division, Natural Resources Division, and Human Services Department, as well as a member of the Broward Bicycling and Pedestrian Advisory Committee.
- The Mobility Advancement Program (MAP), funded through a 30-year sales surtax approved by Broward residents in 2018, has 66 bicycle and pedestrian path projects listed through 2027. The projected cost is \$151 million. In 2023, MAP staff received a federal grant to develop a Multimodal Mobility Transportation Master Plan. It is a countywide effort to examine the transportation system in Broward County to plan and develop a network of Low Stress facilities. The Master Plan is intended to enhance mobility and promote equitable access for non-motorized users of all abilities and ages.
- The Broward County Parks and Recreation Division manages 14 parks that offer a variety of recreational bike paths and programs. These include 20 miles of mountain bike trails, a Tandem Bicycle Program for adults who are blind or visually impaired, and hand-cycles at Central Broward Regional Park for adults with physical disabilities. (See more information under Outreach.)
- Broward County encourages residents and visitors to partake in safe bicycling. In partnership with Joe DiMaggio Children's Hospital, the Parks and Recreation Division operates several Safety Towns to teach children bicycle safety. Also, throughout Florida Bicycle Month in March, the County features free year-round fitness and safety education for all levels of riders at local parks.



# **BPAC ACHIEVEMENTS**

#### **BPAC Goals**

At the beginning of 2023, the BPAC developed several long-term goals and selected a few on which to focus. At its March 8, 2023 meeting, the BPAC shortlisted the following goals to implement over the next 1-3 years:

Review and provide input on bike/ped facilities to no less than five FDOT projects and five Broward County projects. Projects should be reviewed prior to the commencement of 60% plan preparation.

Communicate with at least five local bicycle clubs and five local schools or youth bicycle clubs, by the end of 2024 to solicit their opinions about the current and future state of walking and cycling in Broward County and encourage active commutes by organizing activities, including bike buses to schools.

Invite the "Low Stress Multimodal Mobility Transportation Master Plan" team to present the Initial, Draft and Final Plan to BPAC.

Prepare a list of the top 10 policies/best practices that local governments can use to increase cyclist and pedestrian safety and encourage mode shift to walking, cycling, and public transit from private automobiles. Submit this list to the Board of County Commissioners by the end of 2024.

Publish at least 10 best practices that developers can use to incorporate and encourage active travel in their projects by the end of 2024.

#### 2023 Goals Workshop

- □ In December 2022, the BPAC voted to discuss future priorities at a workshop the next month. In January 2023, the BPAC decided to dedicate a portion of one or more meetings on the process of developing the goals. Members received a brainstorming worksheet that contained a list of BPAC purpose statements and previous goals.
- On January 25, 2023, the BPAC discussed previously submitted draft goals. Through a facilitated activity, the goals were grouped and ranked by topic areas. The goals were ranked by using an impact grid based on ease of effort to implement and level of impact.
- On March 8, 2023, the BPAC discussed the seven highest ranked goals. The BPAC edited the goals and decided upon five. The BPAC also began discussions on how to implement



- the goals over the next 1-3 years and which members might be interested in taking the lead on each one.
- On May 3, 2023, the BPAC endorsed the goals and directed the coordinator to post them on the <u>BPAC website</u>. Vice-Chair Goldstein began reporting to the BPAC on progress regarding the outreach-to-schools goal.

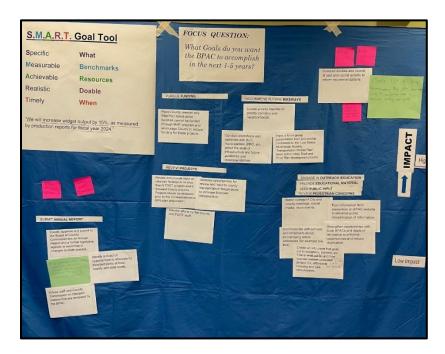




Figure 9 - Proposed BPAC goals grouped by topic areas.

Figure 10 - BPAC members reviewing the proposed goals prior to ranking.

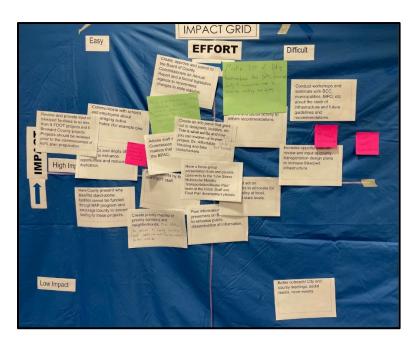


Figure 11 - Proposed goals ranked by ease of effort and level of potential impact.



## Progress Report on Adopted Goals

Review FDOT and Broward County projects

(More information is available in the adopted minutes on the **BPAC** webpage)

# 1. PRESENTATION - Broward County Bicycle Facilities - Laila Kitchen, PE, Highway Construction & Engineering (HCED)

On September 14, 2022, Ms. Kitchen spoke about recent efforts by HCED to re-evaluate bicycle facility design standards, including grade separated paths. For example, standardizing the consideration of buffers next to the bike lanes (at road level). Another standard could be to build wider sidewalks that accommodate both bike and walking paths (grade separated from the vehicular travel lanes, and when possible, horizontally separated by type of user). The map below shows completed and future projects.

The BPAC recommended increasing shade, particularly under constrained circumstances and adding bollards in situations where a separated path is wide enough that it might be confused for a parallel lane by vehicle drivers.

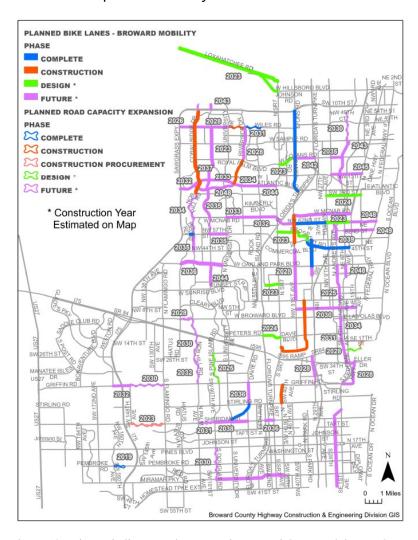


Figure 12 - Planned Bike Lanes in Broward (Broward County Highways Construction and Engineering Division)



# 2. DISCUSSION – Questions about Bicycle Safety Design for Richard Tornese, HCED Director. Mr. Tornese fielded questions from the BPAC about safety features that are considered during project design, facility maintenance, and two-way bicycle lanes.

On December 14, 2022, Mr. Tornese fielded questions from the previous meeting, mostly about vertical features used to separate bike lanes from vehicles, including delineator posts, low walls, and "armadillos". Delineator posts are seldom used by the County, and the others have generated safety concerns. Members shared concerns, such as seams and joints, vehicles using wider parallel multi-use facilities, and the need for facilities for cyclists who are not comfortable or capable of riding in the streets. Mr. Tornese offered to continue sharing information about new projects with the BPAC.

# 3. PRESENTATION - Broward MPO's Complete Streets Initiative – Fazal Qureshi, Transportation Engineering Project Manager, Broward MPO

At the March 8, 2023 meeting, Mr. Qureshi provided a presentation about the history of Complete Streets policies and programs at the Broward MPO. The MPO emphasizes the need for Complete Streets through studies, policies, master plans and funding. Mr. Qureshi shared the information about how equity area mapping was used in the development of "Bundle Areas" where tight mobility networks and connectivity improvements can be established, particularly within and around activity centers. He also shared information about how to participate in the 2050 Metropolitan Transportation Plan outreach process. BPAC members asked about how Complete Street design guidelines are incorporated into the different project selection rating systems.

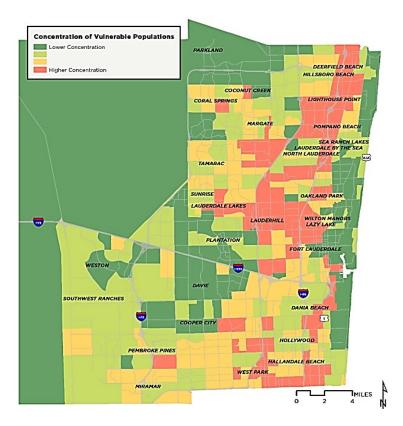


Figure 13 - Concentration of Vulnerable Populations. Source: Broward Complete Streets Master Plan, Broward MPO 2019





Figure 14 - Source: Broward Complete Streets Master Plan, Broward MPO 2019

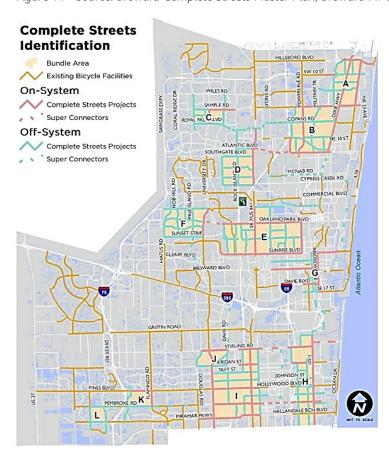


Figure 15 - Complete Streets Bundle Areas, Broward Complete Streets Master Plan, Broward MPO, 2019.

# 4. PRESENTATION - FDOT Sunrise Blvd/US 1 Gateway project - Carlos Cejas, P.E. (Vice President), Nelson Mora, P.E. (Senior Project Manager), Gannett Fleming, Inc.

On, May 3, Mr. Cejas gave a presentation about improving mobility at the eastern-most intersection of US 1 and Sunrise Boulevard. An overview of the different data sets being used to develop design options was presented. The BPAC members were encouraged to provide comments through the project's outreach channels so that they are documented during design stages. Members shared concerns about incorporating bicycling and pedestrian facilities, including crossings that would not only be safe, but convenient.



Figure 16 - Example of data collected for the project.



Figure 17 - One of several intersection design concepts shared

# 5. PRESENTATION - FDOT District 4 – A1A Multimodal Study – Wade Walker, Kittelson & Associates and Peng Zhu, PhD, PE, PTOE, TranSystems (project manager).

At the July 12 2023 meeting, Mr. Walker and Mr. Zhu presented concepts about a mobility study that focuses on multimodal safety and capacity for alternative modes such as transit, bicycling and walking. The project team reached out to municipalities along the corridor to learn about context, needs and concerns. Concepts will be developed at a later stage and shared at public meetings. *Note: this meeting lacked quorum; no actions were taken*.

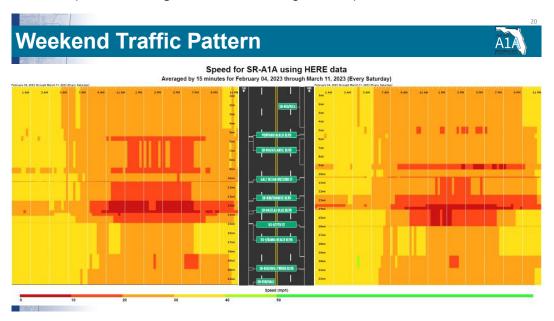


Figure 18 - Slide from the A1A Study presentation depicting a new way to graph average speed by segment and time of day. Source: A1A Multimodal Study, 2023.

#### 6. BPAC Complete Streets Team Representative

At the September 2022 meeting, a motion was passed to select Member Goldstein as the new BPAC representative on the Complete Streets Team. Member Goldstein reported on several Complete Streets Team discussions, including the following:

- Center Lane Overpasses at major intersections.
- The proposed Low Stress Multimodal Facility Master Plan process which was in the process of consultant contracting. A steering committee will include the BPAC coordinator.
- Turnpike Enterprise widening and interchange update process.
- Dixie Highway South Broward project which will provide enhanced bicycle and pedestrian facilities through the cities of Hallandale and Hollywood by the repurposing of a lane in each direction.

For more information, visit the Broward Complete Streets webpage.



#### 7. Agency Updates and Bike/Ped Coordination with FDOT District 4 – Michael Melendez, consultant to FDOT District 4

Mr. Melendez provided agency updates and covered a variety of topics and updates each meeting, including:

- Coordinating invitations to FDOT project managers to provide presentations about upcoming projects with Ms. Forelle.
- Safe Streets Summit in January 2023.
- The FDOT District 4 Bike/Ped Master Plan published in 2018, which applies to roads within the Department's jurisdiction, including some collectors and arterials, and state and interstate highways, may be updated soon.
- Bicycle Counters, both fixed and mobile, that have been installed on different trails in the region. The Mobile counters are often used for before and after project monitoring counts.
- Sharing with FDOT staff BPAC member concerns about road project construction debris in bike lanes and shoulders on SR 84, near Weston.

### Outreach to local bicycling clubs and schools

Vice Chair (VC) Goldstein took the lead on this goal and focused on establishing rolling school buses within the City of Plantation. VC Goldstein reported that he reached out to the Mayor of Plantation, who is a bike rider and advocate. The City is working with the MPO to develop separated bicycle facilities along the University Drive corridor between SR 84 and Sunrise Boulevard. Another effort will focus on Cleary Boulevard between University Drive and Nob Hill Road.

At the May 2023 meeting, Vice-chair Goldstein volunteered to champion the BPAC goal that includes outreach to schools and promoting bike buses. He has reached out to the City of Plantation's Mayor and Council members, as well the city's Education Advisory Board to garner support for the bike buses. With this support he plans on reaching out to some schools in Plantation to find volunteers, including through PTAs. The BPAC coordinator has been providing support to this effort by researching and sharing information and trainings that cover the topic.



Figure 19 - Florida Safe Routes to School website banner (and link). Source: website at https://www.fdot.gov/projects/floridasrts/home





Figure 20 - Multimodal Mobility Master Plan logo

#### Low Stress Multimodal Mobility Transportation Master Plan

The Broward Mobility Advancement Program (MAP) is funded with a voter-approved transportation surtax. The MAP staff secured federal funding to develop a countywide master plan, which will serve as the blueprint for future low stress bicycle, pedestrian, and greenway projects. The BPAC established a goal for participating in this process by securing the ability to review work products at different stages. Ms. Forelle participates as a member of the steering committee and continues to track opportunities for presentations from the consultants.

# Top 10 policy proposals/best practices & 10 best practices for developers to encourage active travel in developments

Beginning in late March 2023, BPAC members submitted seventeen (17) recommended Best management practices associated with safe and convenient bicycle facilities. The BPAC coordinator identified and grouped the submittals under the following topic headings:

- Development and Land Use
- Mobility Recommendations
- Environmental Recommendations
- Legal/Enforcement Recommendations
- Education

Additional work is needed to separate the policy proposals from the best practices for developers. Drafts will be distributed in the fall of 2023 to the BPAC members for further review and comment. Final products may include images and handouts that can be used by the members to share with residents, visitors, agencies and elected officials, after approval from the Board of County Commissioners.





# **Outreach Activities & Resolution**

# October Broward Municipal Services District Wellness Jamboree in Central County

Ms. Forelle staffed a tent at the 2022 Healthy Community Zone Wellness Jamboree. The event was held on Saturday, October 22, 2022, at Reverend Samuel Delevoe Memorial Park in the Broward Municipal Services District. This annual event features information about different County services that help improve the quality of life and health of community residents. The BPAC coordinator attended to provide information about bicycle and pedestrian safety. Over fifty (50) bicycle helmets from an FDOT safety program were distributed to attendees. Printed bike/ped materials in English and Spanish were also provided, including activity and coloring books. Each year, Urban Planning Division staff identify abandoned bicycles which are refurbished and raffled at the event. This year there were ten (10) children's bikes.





Figure 21 - Images of the bicycle and pedestrian safety tent at the 2022 Wellness Jamboree and one happy raffle winner.





#### March 2023 Bicycle Month Proclamation

In coordination with the Broward County Parks and Recreation Division and the Mobility Advancement Program (MAP), the BPAC submits a proclamation to the Board of County Commissioners to celebrate March as state bicycle month. The proclamation was adopted by the BPAC at the December 2022 meeting, but was unable to be read at a Commission meeting due to time limitations.

### March 2023 Bicycle Month Programs and Broward County Parks

Each year, the Broward County Parks and Recreation Division organizes numerous events to promote fun and safe bike riding. <u>Click here for the Bike Month Calendar.</u>

EVENT NAME	DATE	PARK
Kids Bike Fest and Rodeo	March 11	Vista View
Rodeo & Neighborhood Slow Roll	March 18	Central Broward Park
Rodeo & Scavenger Hunt	March 26	West Lake
Skills & Safety Lessons from Bike Box	March 11	Markham Park
Skills Lessons	March 15	Quiet Waters Park
Scavenger Hunt & Bike Ride	March 11	Tradewinds Park
Scavenger Hunk & Bike Ride	March 12	Topeekeegee Yungnee (TY) Park
Scavenger Hunk & Bike Ride	March 26	Tradewinds Park
Two-person Team Cycling Series at the	March 1, 8,	Brian Piccolo Sports Park
Velodrome	15	
Tandem Leisure Ride	March 4	Tradewinds Park
Bike and Hike – BYO Bike	March 24	Kristin Jacobs Natural Area at Hillsboro Pineland

For more information about these programs, contact Paula Finlayson at Broward County Parks and Recreation.



Figure 22 - Photos from 2023 Bike Month Events







Figure 23 - Photos from Broward County Parks Tandem Programming, 2023