# **BPAC Members**

The below information is for public participation only. If you have any questions or concerns, please contact Angela Ryan, <a href="mailto:aryan@forwardpinellas.org">aryan@forwardpinellas.org</a> or (727) 464-5580.

Topic: Bicycle Pedestrian Advisory Committee Meeting 8:30 – 10:30 am

Time: September 20, 2021 Eastern Time (US and Canada)

Join Zoom Meeting

https://us02web.zoom.us/j/81178774440?pwd=bjJaeTZISVo1UnZHYU93 R1c1SHBqQT09

Meeting ID: 811 7877 4440

Passcode: 074888

One tap mobile

+13017158592,,81178774440#,,,,\*074888# US (Washington DC)

+13126266799,,81178774440#,,,,\*074888# US (Chicago)

Dial by your location

- +1 301 715 8592 US (Washington DC)
- +1 312 626 6799 US (Chicago)
- +1 646 876 9923 US (New York)



# BICYCLE PEDESTRIAN ADVISORY COMMITTEE (BPAC) MEETING AGENDA SEPTEMBER 20, 2021 – 8:30 a.m.

310 Court Street, 1<sup>st</sup> Floor Conf. Room Clearwater, FL 33756

THE PLANNING COUNCIL AND METROPOLITAN PLANNING ORGANIZATION FOR PINELLAS COUNTY

# FACE MASKS ARE ENCOURAGED, BUT ARE NOT REQUIRED

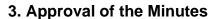
- 1. CALL TO ORDER AND INTRODUCTIONS (8:30 8:35)
- 2. PUBLIC COMMENTS Please limit comments to 3 minutes (8:35 8:40)
- 3. APPROVAL OF MINUTES AUGUST 16, 2021 (8:40 8:45)
- 4. FORWARD PINELLAS EXECUTIVE SUMMARY (8:45 8:50)
- **5. AERIAL TRANSIT PRESENTATION (**8:50 9:20)
- **6. PINELLAS TRAIL VISIONING STUDY (**9:20 9:35)
- 7. SHERIFF'S ENFORCEMENT ACTIVITY (9:35 9:55)
- 8. SPOTlight EMPHASIS AREAS UPDATE (9:55 10:00)
  - A Vision for U.S. Highway 19 Corridor
  - Gateway Area Master Plan
  - Enhancing Beach Community Access
- **9. BPAC BUSINESS** (10:00 10:10)
  - **A.** Florida Bicycle Association (FBA)
  - B. Friends of the Pinellas Trail
- **10. AGENCY REPORTS** (10:10 10:15)
- **11. OTHER BUSINESS** (10:15 10:30)
  - A. Membership
  - **B.** Correspondence, Publications, Articles of Interest
  - C. Suggestions for Future Agenda Topics
  - D. Tri-County BPAC Meeting on September 29, 2021 in Tampa
- **12. ADJOURNMENT** (10:30)

NEXT BPAC MEETING - OCTOBER 18, 2021

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons who require special accommodations under the Americans with Disabilities Act or persons who require translation services (free of charge) should contact the Office of Human Rights, 400 South Fort Harrison Avenue, Suite 300, Clearwater, Florida 33756; [(727) 464-4062 (V/TDD)] at least three days prior to the meeting.

Appeals: Certain public meetings result in actions taken by the public board, commission or agency that may be appealed; in such case persons are advised that, if they decide to appeal any decision made at a public meeting/hearing, they will need a record of the proceedings, and, for such purposes, they may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Forward Pinellas is committed to making our documents accessible to all audiences If you have accessibility concerns, please contact <a href="mailto:aelmore@forwardpinellas.org">aelmore@forwardpinellas.org</a> or call 727-464-4880. Visit <a href="https://forwardpinellas.org/legal/website-accessibility-statement/">https://forwardpinellas.org/legal/website-accessibility-statement/</a> for more information.





# **SUMMARY**

The meeting summary for the August 16, 2021 meeting is attached for review and approval.

ATTACHMENT(S): BPAC Meeting Summary - August 16, 2021

**ACTION:** Approval of the Meeting Summary

# FORWARD PINELLAS BICYCLE PEDESTRIAN ADVISORY COMMITTEE MEETING SUMMARY AUGUST 16, 2021

The following is a summary of the Forward Pinellas Bicycle Pedestrian Advisory Committee (BPAC) held on August 16, 2021 at 310 Court Street, 1st Floor Conference Room, Clearwater, FL.

**BPAC Members Present** 

Brian Smith, Chairman Becky Afonso, Vice Chair

Daniel Alejandro Joseph Camera Kimberly Cooper Lucas Cruse - Zoom Lyle Fowler - Zoom Diane Friel - Zoom

Charlie Johnson

Jacob Labutka – Zoom Caroline Lanford - Zoom

Ron Rasmussen Derek Reeves - Zoom Gina Harvey - Zoom Annette Sala – Phone

Michael Siebel Jim Wedlake Georgia Wildrick

**BPAC Members Absent** 

Julie Bond
Dr. Lynn Bosco
Lisa Charest
Scott Daniels
Win Dermody
Deputy Eric Gibson

Edward Hawkes Alan Johnson

Paul Kurtz Lauren Matzke

Steve Moriarty Bert Valery

**Others Present** 

Frances Leong-Sharpe George Kinney Russ Hilton

Molly Cord Charlie Guy

Gloria Lepik-Corrigan - Zoom Megan Basnett - Zoom

Jared Carter – Zoom Jeff Gow - Zoom

Alayna Delgado – Zoom

At Large Citizen Representative

North County Citizen Representative, Oldsmar

Largo Citizen Representative Pinellas County Schools

St. Petersburg Citizen Representative

St. Petersburg Bicycle Pedestrian Coordinator PC Parks & Conservation Resources (PCR)

City of Largo

St. Petersburg Citizen Representative

**PSTA** 

Pinellas County Planning Department Pinellas Park Citizen Representative

City of Pinellas Park

Pinellas County Public Works Traffic At Large Citizen Representative At Large Citizen Representative Seminole Citizen Representative Largo Citizen Representative

**CUTR** 

At Large Citizen Representative St. Petersburg Citizen Representative

Friends of the Pinellas Trail

Clearwater Citizen Representative Pinellas County Sheriff's Office At Large Citizen Representative

South Beaches Citizen Representative

At Large Citizen Representative

City of Clearwater

At Large Citizen Representative

North Beaches Citizen Representative

City of Dunedin City of Dunedin

**Dunedin Citizen Guest** 

City of Dunedin

St. Petersburg Citizen Guest Clearwater Citizen Guest St. Petersburg Citizen Guest Tarpon Springs Citizen Guest

**Dunedin Commissioner** 

City of Oldsmar

Katie Habgood - Zoom
Jacobs Engineering
Forward Pinellas Staff
Amy Elmore – Zoom
Forward Pinellas Staff

# 1. CALL TO ORDER

Chair Brian Smith called the meeting to order at 8:30 a.m. and the attendees in the room introduced themselves. At this time, Chair Smith made the announcement that since there was no quorum, no action items could be brought before the committee and the members on Zoom could not be approved to vote.

# 2. PUBLIC COMMENTS

There were no public comments provided.

# 3. APPROVAL OF MINUTES

The summary from the June 21, 2021, meeting was recognized, and a couple of change requests were conducted. First, Annette Sala stated that she was not absent as she did attend by phone, also that Vice-Chair Afonso adjourned the meeting on June 21st.

# 4. FORWARD PINELLAS ACTIONS

Ms. Angela Ryan, Forward Pinellas Active Transportation Planner, reviewed the highlights of the Forward Pinellas Board meeting for July 14, 2021. Specifically, the Forward Pinellas Board approved the Advantage Pinellas Housing Compact, which is a collaboration between the County and the municipalities to develop strategic tools to increase the availability and opportunities for affordable housing. This information is important as it is in the BPAC's interest to help connect people to their homes, education and jobs through active transportation. Additionally, the Board approved the following: annual budget, executive director's performance, as well as two map adjustments. Finally, the Board authorized Whit Blanton to write a letter regarding the federal infrastructure package advocating for the increased flexibility of MPO funds and the ability to use additional transit funding for expanded transit service and not only state of good repair.

### 5. CITY OF DUNEDIN MULTIMODAL TRANSPORTATION MASTER PLAN

Ms. Frances Leong-Sharpe, City of Dunedin staff, shared a presentation on the City of Dunedin's Multimodal Transportation Master Plan. Dunedin was awarded a \$40,000 technical assistance grant from the Department of Economic Opportunity toward their goal to develop priorities for improving safety and connectivity around the City, and to encourage seamless travel between places where people live, work and play. Goals for the Plan are to address transportation and safety concerns; establish a Complete Streets Policy; incorporate and update the Bicycle and Pedestrian Master Plan; address golf carts, micromobility, autonomous vehicles and waterborne transportation; prioritize, budget and plan for improvements to key corridors and coordinate with regional and other local plans and agencies. Dunedin has identified five corridors to focus improvements on with an emphasis on bicycle and pedestrian safety and they are as follows: Causeway Boulevard, Douglas Avenue, Downtown CRA, Patricia Avenue and State Road 580/Skinner Boulevard. Questions were taken and appropriately answered.

# 6. SUN COAST TRANSPORTATION PLANNING ALLIANCE (SCTPA)

Ms. Amy Elmore, Forward Pinellas staff, shared a presentation with the committee on the Sun Coast Transportation Planning Alliance (formerly the MPO Chairs Coordinating Committee). The directors from each of the MPO/TPOs in the region have been working to rebrand the entity as the SCTPA, to better reflect the work being done to advance and promote transportation in Tampa Bay. The committee will be releasing a new logo and website this month to help speak with one voice for the region on shared goals and project priorities. This new website <a href="www.suncoasttpa.org">www.suncoasttpa.org</a>, is the first step to improve communications on regional issues of mutual interest and to demonstrate the purpose and priorities for all six MPOs and TPOs within the SCTPA. Questions were taken and appropriately answered.

# 7A. TRI-COUNTY TRAILS MAP

Mr. Jared Austin, Forward Pinellas staff, shared information with the committee on the development of a new Tri-County Trails Map. The idea developed from members of the Tri-County BPAC with the intent to explore options in developing a bicycle and pedestrian tool on any given trail network. It was requested that the staff from each of the counties consider different APPS or online web tools to help produce a seamless trail map tool. Through a collaborated effort with Pinellas, Pasco and Hillsborough planning staff, a draft of a uniform map was produced. The legend includes trail parking, overpasses and underpasses, unpaved trails, bicycle facilities and paved trails. Currently being addressed is a user location finder. This is not a completed project as of this date, but staff wanted to bring it to the BPAC for committee comment. Questions were taken and appropriately answered.

# 7B. BIKE YOUR CITY

Ms. Ryan shared information on past Bike Your City events and the valuable data that comes from them. In October of 2020, over 500 people participated in the Bike Your City Safety Harbor Scavenger Hunt and in March of 2021, over 5,000 registered for the Bike Your Own City Scavenger Hunt. A great deal of educational information was shared by both events relating to RRFB's and how they work, bicycle and pedestrian safety, as well as overall transportation safety. Ms. Ryan asked the committee their thoughts on the next Bike Your City event, considering the type of event that could be held and in what month. The committee pointed out the benefits to both an in-person ride and a virtual scavenger hunt. It was noted that these events are a great opportunity to promote bicycle/pedestrian safety and education throughout the communities. Also, Ms. Ryan informed the group that this fall there will not be a specific biking event as Forward Pinellas is planning the Gulf Coast Safe Streets Summit. In conjunction with that event on November 3, 2021, a Walking Audit will be performed as a demonstration project in the North Greenwood neighborhood in Clearwater and committee members were invited to register for the Summit and participate. Questions were taken and appropriately answered.

### 8. BYLAWS DISCUSSION

Chair Smith commented on the renewal of the bylaws reminding members of the new term limits of four years and a limit of two terms and phase out procedures for members who have been on the committee for eight years or more. Because there was no quorum at today's meeting, no action was taken.

# 9. SPOTLIGHT EMPHASIS AREAS UPDATE.

Regarding the Vision for US19, the committee was last informed on the Innovative Intersection Study. Although there are no updates on this study yet, it is anticipated the BPAC will be provided a presentation on this study in the near future. Regarding the Gateway Area Master Plan, the project has been selected for an APA Planning Award, and the planning team will attend the APA

conference to accept the award in September. Additionally, the new Gateway Dashboard is available through the Forward Pinellas website. In regard to enhancing Beach Access, TBARTA is continuing their feasibility study of Aerial Gondolas and Forward Pinellas staff will request a presentation on this study for the September BPAC meeting.

# **10. BPAC BUSINESS**

# A. Florida Bicycle Association (FBA)

Vice-Chair Becky Afonso provided the following updates on the Florida Bicycle Association. First, regarding the Florida legislative session, the Bicycle Pedestrian Safety bill made it to the desk of the Governor and was signed on June 29, 2021 and is now law. Second, on July 31, 2021, FBA held its annual membership meeting in Broward County and had one of the bill sponsors, Representative Christine Hunschofsky attend. At this meeting, new board directors and officers were elected. Forward Pinellas' Planner, Ms. Angela Ryan is the new Treasurer of the FBA. Third, a meeting with the Department of Transportation Safety Collation is scheduled to discuss bicycle education and working with the Parent Teacher Association. Fourth, there is a bicycle safety quiz online, where bicycle safety certificates can be earned. Ms. Afonso advised the group to look for a story on the bicycle safety quiz in the next FBA Messenger. Lastly, Ms. Afonso provided accolades and thanks for work conducted by Forward Pinellas on the Legislative Workshop.

# B. Friends of the Pinellas Trail

Mr. Scott Daniels was unable to be present. Jim Wedlake shared an update that the new Pinellas Trail guidebook is doing well, as is the new Facebook page and website. A public Zoom meeting is currently being planned for the fall for the public to engage with County, Forward Pinellas and local citizens pertaining to guestion on the Pinellas Trail

Charlie Johnson inquired as to the fatal bicycle crash on Keystone Road and the letter that was to be written to address expedient attention to a guardrail along the Trail. Ms. Ryan shared that Joan Rice shared information regarding the immediate plans which are already in the works for addressing this hazard. Ms. Rice was unable to attend the meeting but will provide an update at the next meeting.

# 11. AGENCY REPORTS

# Pinellas Trail Loop/Duke Energy Trail (North & South Gaps)

Ms. Gina Harvey with Pinellas County Public Works (PCPW) Traffic provided updates to the current trail projects. Specifically, there was a trail closure in Largo just north of West Bay and this section of the Pinellas Trail will be closed for two weeks with a well-designed detour.

# Clearwater Bicycle Pedestrian Program

Ms. Lauren Matzke was not in attendance.

# Largo Bicycle Pedestrian Program

Ms. Diane Friel was in attendance, and gave an update on the City of Largo projects. Ms. Friel confirmed the Pinellas Trail closing between 4<sup>th</sup> Avenue Northwest & 8<sup>th</sup> Avenue Northwest, was to repair a stormwater drainpipe. Ms. Friel shared that Largo has a Traffic and Transportation Committee which meets monthly to discuss traffic and safety issues and has invited the committee to reach out to Megan Dion <a href="mailto:mdion@largo.com">mdion@largo.com</a> with the City of Largo Planning with any concerns so she can bring them to the attention of the committee. The New Largo City Hall Project proposal is in full swing along the 400 – 500 block of West Bay Drive. The City of Largo is also looking forward to adopting the Safe Streets Plan. Also

on the City of Largo website are details on the roadway improvement plans currently in the works for 2021-2022.

# • St. Petersburg Bicycle Pedestrian Program

Mr. Lucas Cruse, St. Petersburg Transportation shared the following updates. First, the SunRunner construction is proceeding along Central and 1<sup>st</sup> Avenues. Second, the City is relocating bike lanes off of 1<sup>st</sup> Avenue and will be adding bike lanes to Central Avenue. In precaution for this retrofit, West of 58<sup>th</sup> Avenue there are advisory bike signage advising bicyclists to not use 1<sup>st</sup> Avenue. In the next month, striping will be added for bike lanes, 58<sup>th</sup> and 35<sup>th</sup> Avenues, then filling the gap with sharrows between 35<sup>th</sup> and Central Avenues. Third, the Coast Bike Share is going through a renewal process and in conjunction with this process all the pedal bikes and Ebikes should now be using the HOPR application. Fourth, the DTSP Mobility Study is moving forward, and the committee should stay tuned for additional options to get involved.

# Pinellas County Schools

Mr. Joseph Camera, Pinellas County Schools, explained that the pick-up and drop-off line on 54<sup>th</sup> Avenue at Blanton Elementary has been moved off of 54<sup>th</sup> Avenue. This process should alleviate traffic on 54<sup>th</sup> Avenue.

# FDOT District 7 Updates

An FDOT representative was not in attendance.

# Pinellas Trail Security Task Force (PTSTF)

The next meeting of the PTSTF is October 12, 2021. The meeting will take place at the EMS Building on Ulmerton Road.

A request was made to have the Sheriff come in to discuss their role on the Pinellas Trail.

# 12. OTHER BUSINESS

# A. Membership

It was recognized that there are openings for St. Petersburg, Dunedin, Clearwater and Pinellas Park/Mid-County and an opening for the Health Department.

# B. Correspondence, Publications, Articles of Interest

There were no comments regarding this item.

# C. Suggestions for Future Agenda Topics

No other suggestions for future agenda topics.

#### D. Other

Georgia Wildrick announced her retirement from the committee.

Ms. Ryan pointed out one of the articles in the agenda packet on Health Policy Brief and improving the health of people.

The next Tri-County meeting is scheduled for September 29, 2021 hosted by Hillsborough County.

# **13. ADJOURNMENT**

Chairman Smith adjourned the meeting at 10:23 am. The next BPAC meeting is scheduled for Monday, September 20, 2021.





# **SUMMARY**

The September 8, 2021 Executive Summary will be provided for your information. A staff member will review actions taken by the Forward Pinellas Board at that meeting.

ATTACHMENT(S): Executive Summary for September 8, 2021

**ACTION:** None Required, Informational Item Only



# Board Meeting Summary & Action Sheet

September 8, 2021

Please note that this summary has not been approved as the official minutes of the board.

#### THE PLANNING COUNCIL AND METROPOLITAN PLANNING ORGANIZATION FOR PINELLAS COUNTY

The Forward Pinellas Board held this public meeting in person on September 8, 2021, at 1 p.m. in the Magnolia Room at Pinellas County Cooperative Extension.

# The board unanimously approved amendments to the Transportation Improvement Program (TIP)

The board approved amendments including the reconciliation of projects included in year one (2021/22) of the TIP with projects in year one (2021/22) of the FDOT work program; the addition of a southbound left-turn lane on US 19 at the intersection of Gandy Blvd.; and the acceptance of a \$4.6 million federal grant awarded to Pinellas County from the U.S. Department of Transportation (DOT) for a "Connected Community" project to expand connected vehicle roadside units along US 19 and SR 60 along with predictive analytics for incident and congestion risk predictions. These new innovative technologies will measure and manage congestion, and help to create a safer roadway.

- Commissioner Merz clarified that these amendments would not affect any current priorities or projects in the TIP.
- Commissioner Eggers clarified with Pinellas County staff that the innovative technologies include software and roadside units located throughout the SR 60 corridor and on US 19 through the Largo and north county area to manage the traffic system more efficiently.

# The board approved three amendments to the Countywide Plan Map

- The board recommended approval of three amendments:
  - An amendment from Pinellas County to amend the property at 20<sup>th</sup> Terrace SW from Residential Low Medium to Residential High to allow for single-family attached residential subdivision. (10-0)
  - O An amendment from Pinellas County to amend the property at 8119 46<sup>th</sup> Avenue North from Residential Low Medium to Retail & Services to allow for the development of a pool contractor office and warehouse. (10-0)
  - An amendment from Pinellas County to amend the property at 1201 Gooden Crossing from Retail & Services to Residential Low Medium to allow for the development of three single-family detached homes. (10-0)

# **SPOTlight Updates**

• The expansion of the entrance to Honeymoon Island State Park is expected to be completed by March 2022. In addition, Forward Pinellas and partners are developing design concepts to

- improve safety and manage congestion at Alt. US 19 and Curlew Road, and along Causeway Boulevard.
- Forward Pinellas is working with FDOT and the City of Clearwater to discuss design options and questions about the Drew Street Concept Plan, and will hold public meetings as the design phase begins, with a focus on safety issues brought forward by residents.
- Forward Pinellas is beginning a safety study on Gulf Boulevard with the City of St. Pete Beach to identify speed management solutions, improve safety at roadway crossings and encourage people to travel in a safe manner. The study is scheduled to be completed in late 2022.
- Forward Pinellas will conduct a "before and after" safety study analyzing traffic behavior associated with the rectangular rapid flashing beacon at the crossing of the Duke Energy Trail at Sunset Point Road in Clearwater. The analysis will address the effects of modifications to the crossing.
- Forward Pinellas staff launched the Gateway Master Plan Dashboard to track progress on the implementation of the Gateway Master Plan. View the dashboard here: www.GatewayMasterPlan.org
- The Downtown St. Pete Mobility Study will be holding community outreach events in October to get feedback on recommended strategies and scenarios. Staff will present an action plan and recommendations to the City Council and the Forward Pinellas board in coming months.

# **Updates**

- As a result of the Legislative Committee workshop on August 11, 2021, entitled *Finding Common Ground: A Conversation with State Legislators*, a number of legislators have pledged to work more closely with Pinellas local governments during the 2022 legislative session especially on four key topics: How do we keep our streets safe, fund our transportation system, make housing more affordable, and adapt to a changing climate.
- In January 2021, a team of reviewers from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) conducted a certification review of Forward Pinellas' plans and programs. They found four noteworthy practices, including outreach flexibility using virtual and hybrid public involvement; complete streets grant funding; Long Range Transportation Plan 2045 Advantage Pinellas; and the 2020 Excellence in Regional Transportation Award for the LRTP. They recommended staff review the Public Participation Plan and conduct an Equity Assessment, which are both currently underway. There was one corrective action identified, and that action was remedied by Forward Pinellas shortly after the site visit and before the final Certification Report was completed.
- FDOT is updating the Strategic Intermodal System (SIS) Policy Plan, Florida's high priority network of transportation facilities which are vital to moving people and freight, linking Florida's regions, and investing in strategic transportation facilities. Mr. Blanton, Chair Rice, and Commissioner Eggers expressed their hope for more flexibility in SIS funding especially related to transit operations and parallel, arterial roads that could relieve traffic stress on SIS corridors. FDOT staff will provide specific details and recommended changes in 2022.

- View the full video with more details here: <a href="https://youtu.be/AeeD1SeO08E">https://youtu.be/AeeD1SeO08E</a>
- Partially funded through Forward Pinellas' Complete Streets Grant, the City of Clearwater developed a Complete Streets Concept Plan for the Fort Harrison Avenue corridor from Belleair Road to Myrtle Avenue/Alt. 19, connecting three major destinations, Morton Plant Hospital Campus, Downtown, and the North Marina Area. After two walking audits and several public meetings, the visioning team identified improvements that improve multimodal connections, create a gateway, encourage economic vitality, and attract investment and development. The City of Clearwater plans to complete the design of the northern section and construct the demonstration projects by Fall 2022.
  - O Mr. Blanton reinforced that complete streets projects focus on adapting a roadway to make it safe and accessible for all users within the context of the roadway, and eliminating travel lanes is only one tool in the toolbox. Staff will be working to provide consistent communication about complete streets as well as analyzing projects before and after a complete streets conversion to ensure we're improving areas strategically.
  - O City of Clearwater Planning Director Lauren Matzke supported additional traffic analyses to ensure improved roadway functions in daily and emergency conditions.
  - Commissioner Albritton stated that every street has a different personality and the location of the Fort Harrison Complete Streets Concept Plan was ideal. In addition, demonstration projects allowed the City of Clearwater to test and refine possible solutions before significant investment and construction.
- In response to the many benefits of micromobility devices and share programs, the vastly growing popularity, and the regulatory challenges, Forward Pinellas Principal Planner Angela Ryan has developed a new Knowledge Exchange Series module devoted to micromobility, or small, lightweight transportation devices, such as electric bicycles, electric scooters, and electric skateboards. The goal of this research is to provide a proactive and collaborative approach to providing a regulatory framework for micromobility in Pinellas County. View the full Micromobility Knowledge Exchange Series here: www.ForwardPinellas.org/Micromobility
  - With the increase of micromobility on our trails, Commissioner Eggers requested we manage safety concerns through continued analysis and education.
  - O Angela Ryan noted that Forward Pinellas is currently conducting a speed study on the Pinellas Trail confirming people using micromobility on trails are staying under 20mph. However, the increased usage on the trails since March 2020, along with some users not following trail rules, is leading to a negative perception. Mrs. Ryan highlighted Pinellas County's upcoming trail courtesy campaign that will help educate trail users about being respectful and sharing the trails.
  - o Mr. Blanton agreed that education and communication can go a long way and suggested trail rangers help spread the message of safety and sharing the trail. Mr. Blanton noted with the unprecedented trail usage due to the pandemic, we must be mindful to manage a spectrum of different users on the trails.

- PSTA, in partnership with Forward Pinellas, held virtual outreach for the Transit-Oriented
  Development pilot project entitled SunRunner Rising, studying how people could get to and
  from the SunRunner transit stations. PSTA is also celebrating their 1M Flamingo Fares
  passenger this week. Learn more about Flamingo Fares here: <a href="https://flamingofares.com/">https://flamingofares.com/</a>
- TBARTA approved a scope of work to advance regional public transportation through a study for regional rapid transit on US 19 between SR 54 in Pasco County and the Gateway area in Pinellas County.
- Mr. Blanton is drafting a letter to the Florida Legislature dissuading the restriction of -mid-block crossings and rapid rectangular flashing beacons due to the damaging impacts this would have on safety and equity throughout Pinellas County.
- PSTA is currently requesting funding from partners and local governments to resume regular operations of the Clearwater Ferry. In the future, PSTA will also request funding for the expansion of ferry services. In addition, the Cross Bay Ferry interlocal agreement is currently moving forward.
- Forward Pinellas is seeking an elected official to chair the Transportation Disadvantaged Local Coordinating Board. Thank you Commissioner Michael Smith for your service.
- We are delighted to welcome Alex Burns aboard our team as an Intern through our partnership with the Masters of Urban and Regional Planning Program at the University of South Florida.
- Early bird registration for the 2021 Gulf Coast Safe Streets Hybrid Summit is now open. Register today: www.GulfCoastSafeStreetsSummit.org/Register.

# **Action Sheet**

# September 8, 2021

At its September meeting, the Forward Pinellas Board took the following official actions:

- Consent Agenda (vote: 10-0)
  Approved to include the following:
  - A. Approval of Minutes of the July 14, 2021 Meeting
  - B. Approval of Committee Appointments
  - C. Cancellation of the December Forward Pinellas Meeting
- Approval of Amendments to the Transportation Improvement Program (TIP)
   Following a presentation by Jensen Hackett of FDOT, the board, in its role as the
   metropolitan planning organization, approved three amendments to the TIP. (roll call
   vote: 10-0)

# Countywide Plan Map Amendment(s)

Three cases were recommended for approval:

- 1. CW 21-10 Pinellas County (vote: 10-0)
- 2. CW 21-11 Pinellas County (vote: 10-0)
- 3. CW 21-12 Pinellas County (vote: 10-0)

# 5. Aerial Transit Presentation



#### **SUMMARY**

In July 2020, TBARTA completed an Innovative Transit Technologies (ITT) Feasibility Study as the first step toward evaluating three emerging technologies: aerial gondolas, air taxis and hyperloop. The ITT Study detailed each technology's current development, their intended operational and service capabilities, and their potential for success in the Tampa Bay region. One recommendation was to explore local interest in pursuing an aerial gondola project in a specific corridor. TBARTA and Forward Pinellas met with leaders from Clearwater and St. Petersburg, and each city expressed interest in examining separate corridors.

The Pinellas Aerial Gondola Feasibility Study will examine two potential corridors/routes in the cities of St. Petersburg and Clearwater, with a target completion date of April 2022. The corridors are not in competition with each other; the study will assess each corridor based on its own merits, needs, and feasibility. The purpose and intent of the study's report is to provide TBARTA, Forward Pinellas, the City of St. Petersburg, and the City of Clearwater with sufficient information to decide whether to continue consideration of one, both, or neither corridor. Potential recommendations include advancing to a more detailed environmental assessment or a design/build contract.

TBARTA staff will provide a presentation discussing the overall project concept and study plan.

ATTACHMENT(S): None

**ACTION:** None, information only





#### **SUMMARY**

The Fred Marquis Pinellas Trail is a linear trail currently extending from St. Petersburg to Tarpon Springs. The multiuse trail, created along a portion of abandoned CSX railroad, provides a unique, protected greenspace for walking, jogging, skating, and biking. With the goal of completing the 75-mile trail loop in the near future, the Trail serves as a linear park and multimodal transportation pathway directly linking eight municipalities and numerous unincorporated communities.

The Trail just celebrated its 30th anniversary in December 2020. While prior years showed Trail user counts averaging above 70,000 each month, 2020 saw an incredible increase due to the Covid-19 pandemic with users at record highs of over 250,000 in May and an average of 180,000 trail users per month in 2020. These numbers highlight the importance of recreation, nature, non-motorized mobility, and group exercise bonding during a stressful time of isolation and unknowns.

The Pinellas Trail has the potential to serve as the backbone of a comprehensive trail system like few others in the state of Florida. As such, Pinellas County is developing a holistic visioning plan which will ensure this regional asset reaches its full potential for a unique, integrated system of trails connecting communities, residents, businesses, recreation/nature opportunities and commuters. In association with the, "Pinellas Trail Visioning Study", is a trail courtesy education awareness program intended to kick-off in October 2021, which will provide practical suggestions to allow everyone to share and enjoy the Trail.

Pinellas County staff will provide an overview of the Pinellas Trail Visioning Study and respond to any committee member questions.

ATTACHMENT(S): None

**ACTION:** None required; informational item only.





#### **SUMMARY**

Sergeant Mark Eastty from Pinellas County Sheriff's Office (PCSO) will provide a presentation on current roadway related enforcement initiatives within the PSCO jurisdiction. The PSCO covers the unincorporated areas in Pinellas County and over a dozen cities. The Sheriff's Office purpose is to provide services, help, and protect the people of Pinellas County, both visitors and residents.

The Pinellas County Sheriff's Office is dedicated to keeping the traffic ways of Pinellas County safe by having a full service traffic enforcement program, the Selective Traffic Enforcement Program Unit (STEP Unit). The STEP Unit is broken into two separate squads, the Traffic Enforcement unit and the DUI unit. The Traffic Enforcement unit focuses on high volume traffic areas and traffic related problems, such as school zones, neighborhood traffic related issues, and strict enforcement of seatbelt and vehicle safety requirements. The DUI unit is a dedicated unit that primarily works during the night and specializes in DUI enforcement. The Pinellas County Sheriff's Office has obtained a grant from FDOT to increase the number of deputies on the road during holidays for the purpose of removing impaired drivers from our roads. The DUI Unit won numerous awards in 2019 for Outstanding Dedication to DUI Enforcement and Outstanding Dedication to Drugged Driving Enforcement from MADD.

A representative from the Pinellas County Sheriff's Office, Sgt. Eastty, will provide an overview of enforcement activities focusing on the STEP Unit, as well as efforts to keep cyclists and pedestrians safe. Sgt. Eastty will also be available to respond to committee member comments.

ATTACHMENT(S): None

**ACTION:** None required; informational item only





# **SUMMARY**

Forward Pinellas staff will provide a brief update on the status of activities related to the three SPOTlight emphasis areas.

- Vision for U.S. Highway 19 Corridor
- Gateway Area Master Plan
- Enhancing Beach Access

ATTACHMENT(S): None

**ACTION:** None Required; Informational Item Only





# A. Florida Bicycle Association (FBA)

Vice Chair Becky Afonso, who is also the FBA Executive Director, will provide an update on FBA activities. Information on the FBA is available at floridabicycle.org.

- Legislative Session
- Bike/Ped Proposals

# B. Friends of the Pinellas Trails (formerly Pinellas Trails, Inc.)

A representative from Friends of the Pinellas Trail may take this opportunity to provide an update.

# 10. Agency Reports



Updated information on the following programs or projects of interest to the BPAC will be provided at the meeting.

- Pinellas Trail Loop/Duke Energy Trail (North & South Gaps)
- Keystone Road Update
- Clearwater Bicycle Pedestrian Program
- Largo Bicycle Pedestrian Program
- St. Petersburg Bicycle Pedestrian Program
- Pinellas County Schools
- FDOT District 7
- Pinellas Trail Security Task Force (PTSTF) next meeting is October 12, 2021

ATTACHMENT(S): None

**ACTION:** None required, informational only

# 11. Other Business



# A. Membership

There is currently one vacancy on the BPAC membership list, and it is for the Largo seat.

**ATTACHMENT**: BPAC Membership List

# B. Correspondence, Publications, Articles of Interest

Loki An Intention Dataset to Train Models for Ped and Vehicle – September 2021 Teaching Kids About Bicycling is About More - August 2021 The Best Places to Ride a Bike in the Tampa Bay Area – August 2021 Pinellas Trail Usage Report – July 2021 Pinellas County Fatalities Report – September 1, 2021

# C. Suggestions for Future Agenda Topics

This item is provided to allow Committee members to suggest topics for future BPAC agendas.

# D. Other

If any member has other business to discuss, they may address it under this item.

Rev. 09/2021

#### BICYCLE PEDESTRIAN ADVISORY COMMITTEE MEMBERSHIP LIST

#### Voting St. Petersburg Area (St. Pete/Gulfport/So Pasadena/Tierra Verde)

Lisa Charest (10/14/20)
 Kimberly Cooper (10/13/99) (reappointed 5/9/18)

Charles Johnson (06/14/17)
 Megan Basnett (09/08/21)

#### **Clearwater Area**

5. Gloria Lepik-Corrigan (09/08/21)

6. Vacant - pending application

7. Win Dermody (03/12/14)

#### **Dunedin Area**

8. Russ Hilton (09/08/21)

9. Vacant - pending application

#### **Pinellas Park and Mid-County**

10. Ronald Rasmussen (12/13/06)

11. Vacant

#### Largo Area

12. Daniel Alejandro (10/12/16)

13. Vacant

### North County Area (Tarpon Springs/Palm Harbor/Ozona/Oldsmar/Safety Harbor)

14. Becky Afonso (Vice Chair) (10/08/14) 15. Jared Carter (09/08/21)

#### At Large Area

 16. Paul Kurtz
 (12/11/13)

 17. Vacant - application pending
 (12/12/12)

 18. Brian Smith (Chairman)
 (12/12/12)

 19. Lynn Bosco
 (11/14/12)

 20. Stephen Moriarty
 (06/09/21)

21. Ed Hawkes (11/18/98) 22. Annette Sala (03/12/14)

### Seminole Area

23. Jim Wedlake (05/12/10)

#### **Beach Communities**

24. Bert Valery (10/1983-10/1998) (reappointed 07/10/02)

25. Alan Johnson (05/09/18)

#### **Technical Support**

- County Traffic Department (Joan Rice representative; Gina Harvey and Casey Morse alternates)
- 2. Pinellas County Planning Department (Caroline Lanford representative)
- 3. PSTA (Jacob Labutka representative; Heather Sobush and Reid Powers alternates)
- 4. City of Clearwater (Lauren Matzke representative)
- City of St. Petersburg (Lucas Cruse representative; Cheryl Stacks alternate)
- 6. City of Largo (Diane Friel representative: Taylor Hague alternate)
- 7. City of Oldsmar (Alayna Delgado representative, Tatiana Childress alternate)
- 8. City of Pinellas Park (Derek Reeves representative)
- Pinellas County School System (Joseph Camera- representative, Autumn Westermannalternate)
- 10. Pinellas County Health Department (Vacant representative)
- 11. Friends of the Pinellas Trails (Scott Daniels representative)
- 12. CUTR (Julie Bond representative)

#### Sheriff's Office /Police/Law Enforcement Representatives

- 1. Pinellas Park Police Dept.
- 2. St Petersburg Police Dept.
- 3. Largo Police Dept.
- 4. Sheriff's Office Deputy Eric Gibson
- 5. Clearwater Police Dept.

#### **Non-Voting Technical Support**

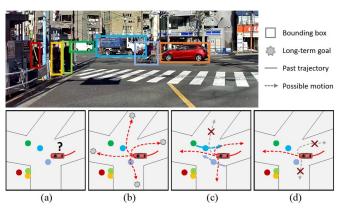
- 13. FDOT (Alex Henry representative)
- 14. County Parks and Conservation Resources (Lyle Fowler representative; Spencer Curtis alternate)

<sup>\*</sup>Dates signify appointment



# LOKI: An intention dataset to train models for pedestrian and vehicle trajectory prediction

9 September 2021, by Ingrid Fadelli



The researchers showed that reasoning about long-term goals and short-term intents plays a significant role in trajectory prediction. With a lack of comprehensive benchmarks for this purpose, they introduced a new dataset for intention and trajectory prediction. An example use case is illustrated in (a) where the team predict the trajectory of the target vehicle. In (b), long-term goals are estimated from agent's own motion. Interactions in (c) and environmental constraints such as road topology and lane restrictions in (d) influence the agent's short-term intent and thus future trajectories. Credit: Girase et al.

Human decision-making processes are inherently hierarchical. This means that they involve several levels of reasoning and different planning strategies that operate simultaneously to achieve both short-term and long-term goals.

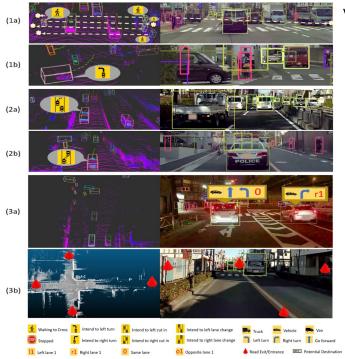
Over the past decade or so, an increasing number of computer scientists have been trying to develop computational tools and techniques that could replicate human decision-making processes, allowing robots, autonomous vehicles or other devices to make decisions faster and more efficiently. This is particularly important for robotic systems performing actions that directly impact the

safety of humans, such as self-driving cars.

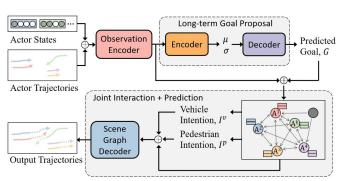
Researchers at Honda Research Institute U.S., Honda R&D, and UC Berkeley have recently compiled LOKI, a <u>dataset</u> that could be used to train models that predict the trajectories of pedestrians and vehicles on the road. This dataset, presented in a paper pre-published on arXiv and set to be presented at the ICCV conference 2021, contains carefully labeled images of different agents (e.g., pedestrians, bicycles, cars, etc.) on the street, captured from the perspective of a driver.

"In our recent paper, we propose to explicitly reason about agents' <u>long-term goals</u> as well as their short-term intents for predicting future trajectories of traffic agents in driving scenes," Chiho Choi, one of the researchers who carried out the study, told TechXplore. "We define long-term goals to be a final position an agent wants to reach for a given prediction horizon, while intent refers to how an agent accomplishes their goal."





vehicle wants to reach its ultimate goal of turning left to its final goal point," Choi explained. "When reasoning about the agent's motion intent to turn left, it is important to consider not only agent dynamics but also how intent is subject to change based on many factors including i) the agent's own will, ii) social interactions, iii) environmental constraints, iv) contextual cues."



Visualization of three types of labels: (1a-1b) Intention labels for pedestrian; (2a-2b) Intention labels for vehicle; and (3a-3b) Environmental labels. The left part of each image is from laser scan and the right part is from camera. In (1a), the current status of pedestrian is "Waiting to cross", and the potential destination shows the intention of pedestrian. In (3a), the blue arrow indicates the possible action of the current lane where the vehicle is on, and the red words present the lane position related to the ego-vehicle. Credit: Girase et al.

Choi and his colleagues hypothesized that to predict the trajectories of traffic agents most efficiently, it is important for machine learning techniques to consider a complex hierarchy of short-term and long-term goals. Based on the agent motions predicted, the model can then plan the movements of a robot or vehicle most efficiently.

The researchers thus set out to develop an architecture that considers both short- and long-term goals as key components of frame-wise intention estimation. The results of these considerations then influence its trajectory prediction module.

"Consider a vehicle at an intersection where the

Our model first encodes past observation history of each agent to propose a long-term goal distribution over potential final destinations for each agent independently. A goal, G is then sampled and passed into the Joint Interaction and Prediction module. A scene graph is constructed to allow agents to share trajectory information, intentions, and long-term goals. Black nodes denote road entrance/exit information which provides agents with map topology information. At each timesteps, current scene information is propagated through the graph. We then predict an intent (the action will the agent take in the near future) for each agent. Finally, the trajectory decoder is conditioned on predicted intentions, goals, past motion, and scene before forecasting the next position. This process is recurrently repeated for the horizon length. Credit: Girase et al.

The LOKI dataset contains hundreds of RGB images portrayed different agents in traffic. Each of these images has corresponding LiDAR point clouds with detailed, frame-wise labels for all traffic agents.

The dataset has three unique classes of labels. The first of these are intention labels, which specify 'how' an actor decides to reach a given goal via a series of actions. The second are environmental labels, providing information about the environment



that impacts the intentions of agents (e.g., 'road exit or 'road entrance' positions, 'traffic light," 'traffic sign," 'lane information," etc.). The third class includes contextual labels that could also affect the future behavior of agents, such as weather-related information, road conditions, gender and age of pedestrians, and so on.

"We provide a comprehensive understanding of how intent changes over a long time horizon," Choi said. "In doing so, the LOKI dataset is the first that can be used as a benchmark for intention understanding for heterogeneous traffic agents (i.e., cars, trucks, bicycles, pedestrians, etc.)."

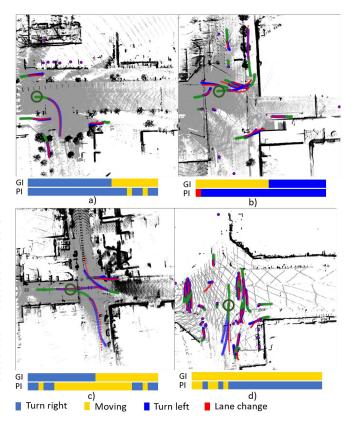
Category	Set	Instances	Description				
	Stopped	130743	The vehicle is stopped. This can happen in many scenarios such as stopping for				
	**		a traffic light, waiting to make a turn at an intersection, yielding for a pedestrian, etc.				
	Parked	127150	The vehicle is parked along the street or parking lot				
	Lane change to the left	2120	The vehicle is merging into the next lane.				
Intention Labels (Vehicle)	Lane change to the right	2087	and the new materials				
	Cut in to the left	347	The vehicle is cutting into another lane.				
	Cut in to the right	736	The venicle is cutting into another tane.				
	Turn left	15190	The vehicle is turning (ex: at an intersection or towards a highway ramp).				
	Turn right	13171	The venice is turning (ex. at an intersection of towards a nightway tump).				
	Moving / Other	206243	The vehicle is driving forward or some other movement that is not captured in the other la				
Intention Labels (Pedestrian)	Stopped	32538	The pedestrian is stopped along the street				
	Moving	241889	The pedestrian is walking (ex: along the street)				
	Waiting to cross	49576	The pedestrian is waiting to cross the intersection.				
	Crossing the road	64870	The pedestrian is crossing the road.				
	Potential Destination	67862	The potential location where the pedestrian may walk to.				
Environmental Labels	Lane information	440338	The possible actions a vehicle can take based on the current lane it is in. (e.g. right turn, left				
			Turn, go forward, u-turn, lane change not possible). Note that multiple choices can be selected				
			depending on the situation. For example, a vehicle can be in a lane that goes forward or turns				
			left. In our dataset, if a lane type is possible we select 1 and if it is not possible we select 0. So-				
			metimes, if the vehicle is out of frame and lane information cannot be deduced, we label it as -1				
	Traffic light	42476	The current state of the traffic light (e.g. Red straight, Green round, Yellow round, etc.)				
	Traffic sign	39066	The type of the traffic sign (e.g. Stop, Left turn only, Do not enter for all)				
	Road Exit and Entrance	126889	The positions of the road entrances/exits for a given scene. There can be a variable number				
			of road entrances/exits depending on map topology. Refer to figure 9 for more details.				
	Age	166874	The estimated age category (child, adult, senior) of the pedestrian.				
Contextual Labels	Gender	166874	The gender of the pedestrian (male/female)				
Contextual Labels	Weather	644	The weather condition of the scenario (Sunny/Dusk/Cloudy/Night).				
	Posd condition	644	The road surface condition (dry / wet)				

Details of the LOKI dataset. We report the various types of labels, number of instances of each label, and descriptions for all label types. Credit: Girase et al.

In addition to compiling the LOKI dataset, Choi and his colleagues developed a model that explores how the factors considered by LOKI can affect the future behavior of agents. This model can predict the intentions and trajectories of different agents on the road with high levels of accuracy, specifically considering the impact of i) an agent's own will, ii) social interactions, iii) environmental constraints, and iv) contextual information on its short-term actions and decision-making process.

The researchers evaluated their model in a series of tests and found that it outperformed other state-of-the-art trajectory-prediction methods by up to 27%. In the future, the model could be used to enhance the safety and performance of autonomous vehicles. In addition, other research

that impacts the intentions of agents (e.g., 'road exit' teams could use the LOKI dataset to train their own or 'road entrance' positions, 'traffic light," 'traffic models for predicting the trajectories of pedestrians sign," 'lane information," etc.). The third class and vehicles on the road.



Visualization of top-1 trajectory prediction result (green: past observation, blue: ground truth, red: prediction) and frame-wise intention of a particular agent in dark green circle at the start of the observation time step (GI: Ground truth Intention, PI: Predicted Intention) is shown at the bottom of each scenario. Credit: Girase et al.

"We already started exploring other research directions aimed at jointly reasoning about intentions and trajectories while considering different internal/external factors such as agents' will, social interactions and environmental factors," Choi said. "Our immediate plan is to further explore the intention-based prediction space not only for trajectories but also for general human motions and behaviors. We are currently working on expanding the LOKI dataset in this direction and believe our highly flexible dataset will encourage the prediction community to further advance these domains."



**More information:** Harshayu Girase et al, LOKI: Long term and key intentions for trajectory prediction, arXiv:2108.08236 [cs.CV] <a href="mailto:arxiv.org/abs/2108.08236">arxiv.org/abs/2108.08236</a>

### © 2021 Science X Network

Provided by Science X

APA citation: LOKI: An intention dataset to train models for pedestrian and vehicle trajectory prediction (2021, September 9) retrieved 10 September 2021 from <a href="https://techxplore.com/news/2021-09-loki-intention-dataset-pedestrian-vehicle.html">https://techxplore.com/news/2021-09-loki-intention-dataset-pedestrian-vehicle.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.

# **FORTUNE**

# DESIGNAMERICA'S INFRASTRUCTURE

# Teaching kids to ride bikes is about more than recreation and health

BY **CARI SHANE** 

August 17, 2021 9:12 AM EDT



As a student at Howard University in Washington, D.C., Martino Wilkerson had to be at his lifeguard job at 5:15 a.m.—and his bicycle was his key mode of transport. "I couldn't afford a car. And while there was a Metro bus stop a few blocks from my house, my nine-minute bike ride to work would have taken 45 minutes by bus." Wilkerson is among 870,000 people—many of them young and urban—who bike to work, according to the U.S. Census. While the Census data show that only 0.6% of Americans bike to work, and most fall in the 16-to-24 age group, advocates of cycling and bike lane infrastructure say "active transportation" will, in the long run, save money, boost income, and help economic profiles—both an individual's and society's.

Studies like *Bicycling Means Business* issued by the League of American Bicyclists, a national bike advocacy group more than 100 years old, show that

cycling related activities pump nearly \$140 billion into our national economy, providing 1 million jobs and \$18 billion in tax revenue.

The impact on the individual can be even greater. Owning a car is expensive. AAA reported that the average yearly cost of a car in 2020 was \$9,561, an increase of nearly \$280 from the year prior, and that does not include expenses such as parking. Further, its research shows that families that earn less than \$70,000 a year spend nearly 20% of their income on transportation. "So if you can alleviate that, or even cut that expense in half, you have just made a more affordable city for people to live in," says Mike Sule, the executive director of Asheville on Bikes, a North Carolina bike advocacy group.

It's why D.C.'s decision six years ago to teach all second graders to ride a bike is not only about health and recreation but also about economics. The program is the brainchild of Miriam Kenyon, director for health and fitness education, LGBTQ and sexual health programs for DC Public Schools (DCPS). The genesis for the program came when she brought in a local group to teach bike safety and discovered that a significant percentage of children as old as 10 didn't know how to ride a bike. Riding a bike "opens up, sort of, that accessibility...independence," says Kenyon, of the program that began in all D.C. public schools in 2015. Now 85% of second graders are able to ride a bike proficiently upon graduation from the scheme.

"If you connect the dots for people, it's a frugal choice," says Bill Nesper, executive director of the League of American Bicyclists. "It's a great choice for your money, for economics; it's a great choice for your health, and you don't have to spend money on a car."

"By diversifying the mode share of your biking, walking, transit, you reduce people's cost of living," says Sule, who is the first professionalized full-time bicycle advocate in the state of North Carolina. "Let's do this to promote affordability. Let's do this to promote economic development. Let's do this to promote health."

# A health investment

The direct health impact of a program like DCPS's bike program is profound. Studies have shown that children who learn to ride bikes early tend to stick with it their whole life and become healthier adults. Furthermore, the "public health impact is also an economic impact for the society," says Jenny Liu, an associate professor at the <u>Toulan School of Urban Studies & Planning</u> and director of the Center for Urban Studies at Portland State University in

Oregon, who studies the economics of cycling. "Because if we have healthier people who are more active, it obviously drives the costs of health care down," especially for minorities. A 2011 <u>study</u> of health inequalities shows that eliminating health disparities would reduce household health costs by nearly \$230 billion. Sixty-four percent of D.C.'s public school students are Black and 18% are Hispanic.

"Cities with good biking and walking infrastructure have healthier residents and lower health care expenses. This increases the spending power of those residents, because they are not forced by poor health to spend their own scarce resources on expensive health care items," says Sule. Portland, Ore., which lands on almost every list of top cycling cities, estimates that the investment in bike lanes could save the city \$600 million a year. A study on NYC's investment in new bike lanes found that for every \$1,300 spent, all city residents gained the equivalent of one full year of life at full health. The coauthor of that study, Babak Mohit, suggests that bike lanes are a better return on investment than health treatments, such as dialysis, which can cost nearly \$130,000 a year.

# The economics of cycling

Liu's research on the economics of cycling has led to the development of an "economic assessment guide book" for cities and towns interested in investing in bike infrastructure. "I think that having evidence is super important in thinking about where do we want to put our infrastructure investment money? What do we want our cities to look like in the future?"

Liu says when she started studying the economics of bike infrastructure there wasn't robust research that asked, "What does the data show us when you put in a nice, separated bike lane in a business district?" The answers gave advocates the ammunition they needed to change the existing attitudes of municipal leaders—that their cities should remain car-centric and not bike-and walk-friendly. "There was an assumption that more bikes and less car parking would be bad for business," says Liu. What she found in her study that focused on six cities—Portland, Seattle, San Francisco, Memphis, Minneapolis, and Indianapolis—is that bike lanes don't hurt business and can in fact boost business. For example, bike lanes installed on one street in Minneapolis resulted in a 52.44% increase in food sales. A similar study in London showed that cyclists spent 40% more at local businesses compared to car drivers.

And then there is the infrastructure cost. Studies show that bike lanes cost less to build than roadways and highways—240% less, according to a <u>study</u> by

the Political Economy Research Institute. It costs about \$60 million to build a mile of urban freeway and less than \$250,000 to build a mile of bike lane. "Active transportation" has also caught the attention of the federal government. Over the past three decades, there has been an uptick in federal dollars focused on bicycling infrastructure, from \$22.9 million in 1992 to more than \$970 million in 2017.

# The economics of cycling inequality

There are few scientific studies that prove Wilkerson's narrative—that a bicycle allowed him to get to his job and enabled him to keep it. While there is strong research that shows having access to a car helps people get and stay employed, there isn't a lot of research on the relationship between bike ownership/bike infrastructure and employment, says Jennifer Dill of the Toulan School of Urban Studies and Planning at PSU.

What is known is that approximately one-third of the population doesn't drive (possibly because they can't afford a car) and is transit dependent, says Nesper. Many are "extreme commuters" who can spend hours on public transportation to get to work because they can't afford to live closer to their jobs in metro areas. Others live in transportation deserts that require long walks to transportation hubs, further increasing their commutes. Research shows that higher paid workers have the shortest commutes and the best access to public transportation, while hourly workers and those in the lowest income bracket face the longest commutes, whether by public transit or car. "If the bus doesn't run, if your car's broken down? Do you have other options?" asks Danny Harris, executive director of Transportation Alternatives, a New York City-based advocacy group. "How are you going to get to school? How are you going to get to work? If you miss that shift, will you lose your job and ultimately lose your livelihood, if you're one paycheck away from being unhoused? Transportation is everything. Because if you can't get to where you need to work, it means that you and your family will have nothing."

"Theoretically...if the transit system isn't there, then workers should have an alternative, and the bicycle would be a good alternative mode of transportation," says Sule. The problem in Asheville and other smaller cities and towns in the U.S. is the lack of a bicycle network to connect people from downtown to their home outside the city limits on safe and dependable bicycle facilities. "So until the facilities are built, traditional bike lanes, protected bike lanes, buffered bike lanes, you're not really going to have that load share for

workers who don't have transportation options, right? We've got to build the facilities first," says Sule.

"The idea that we've primarily built cities and our communities and success around car ownership, not only means that you're leaving so many people behind. But those who have traditionally been left behind for so many other reasons, especially low income and communities of color. It's an additional burden on progress for economic opportunity," says Harris.

A recent <u>report</u> by the League of American Bicyclists shows that Black and brown riders are the fastest-growing segment of the cycling population and the increasing number of riders includes those who use bikes to commute; the biggest spike is found in third-shift and late-shift workers. "Freedom for human beings really accelerates with cycling," says Harris. If you know how to ride and your community has good bike infrastructure, you have additional options, says Harris. Otherwise you are limited in where you can live, where you can look for work, and your ability to find and keep a job.

In New York City, Transportation Alternatives is working on launching the Equitable Commute Project, which would provide 10,000 bikes to essential workers in New York, "especially those in the outer boroughs," says Harris. Currently a pilot program, the group hopes to expand it to other cities.

"You've seen the studies, you understand the facts. An impartial, rational mind [can see that] active transportation is an asset to urban development. Hard stop," says Sule.

# Tampa Bay Times

# The best places to ride a bike in the Tampa Bay area

With Florida leading the nation in bicycling deaths, critical solutions include protected bike paths, driver education and cyclists finding the safest paths.

People bike along the Fred Marquis Pinellas Trail near Main Street in Dunedin on July 1, 2021. The 50-mile trail that runs the length of Pinellas County jumped from an average of 70,000 users per month pre-pandemic, to more than double to 180,000 per month in 2020, according to sensor data, after bicycle sales exploded during COVID-19 lockdowns. [ARIELLE BADER | Times]

# By **Sharon Kennedy Wynne**

Published Aug. 23 Updated Aug. 25

The pandemic brought an explosion of bicycle sales and drew big crowds to the Pinellas Trail. Meanwhile, Florida is the most hostile state in the nation for bicyclists.

The Tampa Bay area and the state of Florida have long held the title as the deadliest place, by far, to ride a bicycle, according to the Centers for Disease Control and Prevention, at almost three times the national average of deaths per million.

At the same time, the pandemic brought on a bicycle boom with a dramatic increase in sales in 2020, while paths like the Pinellas Trail popped a wheelie in user numbers. The trail more than doubled its number of users per month in 2020, according to data from electronic sensors on the trail.

With these good and bad trends in mind, *Tampa Bay Times* staffer Bernadette Berdychowski created an easy map of the friendliest places for bikes in the area.



A subway-style map of routes in the Tampa Bay area that have minimal shared space with vehicles. [BERNADETTE BERDYCHOWSKI]

This *Times* map shows what planners have identified as the easiest places for a cyclist of any skill level to find a nice stretch to pedal without encountering too many cars. Pinellas, Pasco and Hillsborough counties all have long paths. Some, like the Upper Tampa Bay Trail, have a mix of scenic rural pastures in eastern Hillsborough and safe urban spurs like the section that transports you over busy Gunn Highway on a beautifully constructed pedestrian bridge.

Within a few years, most of these trails will be connected to their counterparts on the east coast as part of the <u>Coast-to-Coast Trail</u>. It's an ambitious statewide effort that

began in 2014 to connect these paths across nine counties so that you could conceivably ride a bike from St. Petersburg to the Atlantic Coast.

The current scene is still grim for cyclists, with 7.4 fatalities per million people in 2015, according to the CDC, almost three times the national average of 2.5 per million. California, which also has nice weather and nearly twice as many residents as Florida, had 3.3 deaths per million residents.

What's different about Florida?

"Road design and attitude," said Gena Torres, an executive planner with Plan Hillsborough.

Most of Florida's roads were built in the golden age of highways, when suburbs were sprouting up, and the focus was on getting people around fast. Bicycles and pedestrians weren't part of the picture, Torres said. Add to that the attitude of drivers that roads are meant for cars.

In looking for solutions, planners have sought funding to extend and link these trails to each other so cyclists have a grid of bike paths to get to work or school instead of just for recreation. Torres pointed out that most people don't get hurt on bike paths, they get hit while taking their bike to work on busy roads.

Solutions also include education for drivers — like those flashing beacons you frequently see to warn drivers someone is using a crosswalk. Reducing and enforcing the speed limits on the roads will make it easier for people walking or biking to feel safe, Torres said. And there are resources to educate bicycle owners on how to find the safest path from here to there.



Closeup map of bike routes in downtown St. Petersburg. [ BERNADETTE BERDYCHOWSKI | Times ]

The 50-mile Fred Marquis Pinellas Trail, which runs the length of Pinellas County, jumped from an average of 70,000 users per month pre-pandemic to more than double to 180,000 per month in 2020, according to sensor data. And it hasn't coasted much in 2021, with more 1 million users on the Pinellas Trail by June of this year, or 130,000 a month on average, said Angela Ryan, principal planner with Forward Pinellas, the planning council and metropolitan planning organization for Pinellas County.

# **RELATED:** Mountain biking in flat Florida? Alafia River State Park offers easy to expert trails

"One of the benefits of having this huge increase in people cycling is people are more aware," Ryan said. "When people cycle themselves, they become more aware of cyclists. If we are accustomed to seeing more bikes on the road, and if are more accustomed to seeing them cross the trail, we will be more compliant with roadway laws."

Florida law requires cars to stop for anyone using a crosswalk, she noted, but that doesn't mean motorists are noticing the crosshatch markings on the road, a crosswalk sign or that there are pedestrians or cyclists trying to cross. But those rectangular rapid caution lights that flash when a pedestrian pushes a button to cross the road have been extremely effective, Ryan said.

A federal highway study found that motorist compliance at crosswalks went from 18 percent to 81 percent once those beacons were put in place, Ryan said, calling them "a fantastic way to allow people to cross safely."

And while the Tampa Bay area has lots of dedicated bike paths, educating cyclists on how to get there from their neighborhood can be a learning curve.



The Courtney Campbell Trail bridge is a 10.5-mile trail that provides pedestrian and bicycle access along the southern side of the Courtney Campbell Causeway, linking Tampa and Clearwater, and Hillsborough and Pinellas counties with views of Tampa Bay and connections between Cypress Point Park, Skyway Park, and Ben T. Davis Beach. [ DOUGLAS R. CLIFFORD | Times ]

It's the opposite of your instincts as a driver, said Wade Reynolds, principal planner and bicycle coordinator for Plan Hillsborough. A motorist tries to find the quickest route from one place to another. A cyclist keeps an eye out for the quiet roads that run parallel where speeds are low and cars are more scarce.



Closeup map of bike routes in downtown Tampa. [ BERNADETTE BERDYCHOWSKI | Times ]

So rather than riding on busy Hillsborough Avenue to get to Al Lopez Park in Tampa, a cyclist should likely choose Spruce or Cypress streets to travel east or west to head to the park's bike path and use side roads to reach it. Cyclists will look for "the least bad link" between two points, Reynolds said.

People for Bikes created a free <u>iPhone</u> and <u>Android</u> app to locate safe bike paths across the country. Just enter your location and you can find bike routes nearby that other cyclists have posted. Check the app store for their Ride Spot app or go to <u>peopleforbikes.org</u>. Bike/Walk Tampa Bay has lots of resources, including a list of <u>maps with routes and trails</u> from around the Tampa Bay region at <u>bikewalktampabay.org</u>. The site also highlights local events and area activities for cyclists.

Times staff writer Bernadette Berdychowski contributed to this report.

# **SHARON KENNEDY WYNNE**

Events, Family and Travel reporter

# **Pinellas Trail User Count Data Summary**



Automated Trail Counter Data Collection Period: July 1<sup>st</sup> – 31<sup>st</sup> (31 days)

# **July 2021**

31-Day Count Total: **141,211** 

Daily Average Users: 4,555

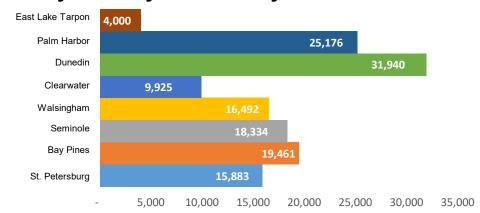
**Highest Daily Totals:** 

#1 – Saturday, July 4<sup>th</sup> (Dunedin – 1, 721)

#2 – Sunday, July 10<sup>th</sup> (Palm Harbor – 1,363)

#3 – Sunday, July 25<sup>th</sup> (St. Petersburg – 821)

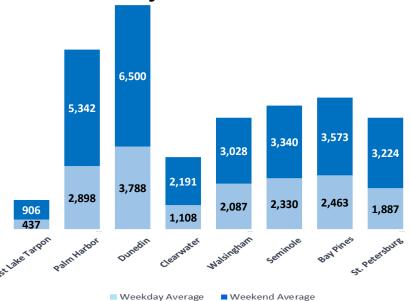
# **July Monthly Trail Use by Counter Location**



# **Counter Locations**



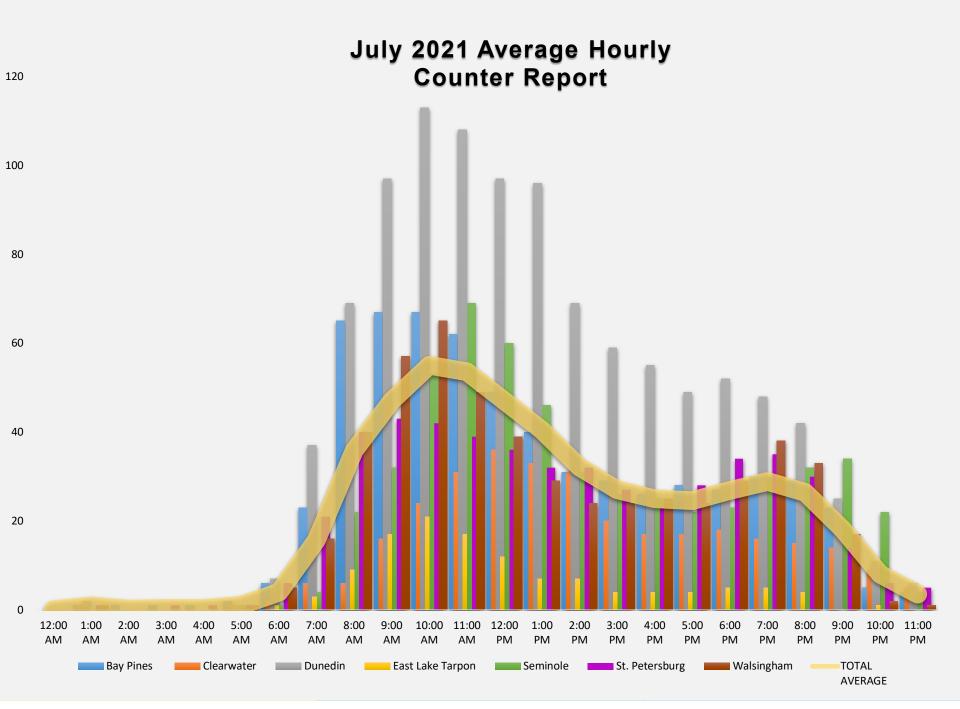
# Weekday & Weekend Profile



# **Trail User Mode Split**

↟	0140
8%	92%
23%	77%
15%	85%
5%	95%
15%	85%
21%	79%
12%	88%
17%	83%
	8% 23% 15% 5% 15% 21% 12%

Source: Forward Pinellas July 2021 National Weather Service: July 2020



# Pinellas Trail User Count Data Summary



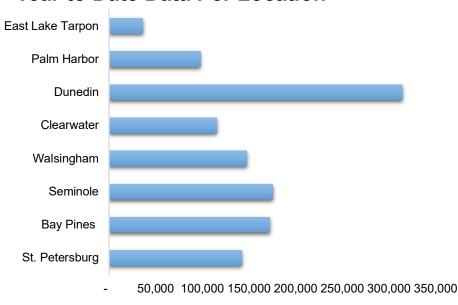
Automated Trail Counter Data Collection Period: January – July 2021 Data

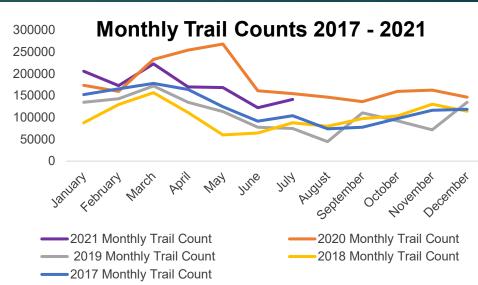


**Jan-July 2021 Total Count:** 

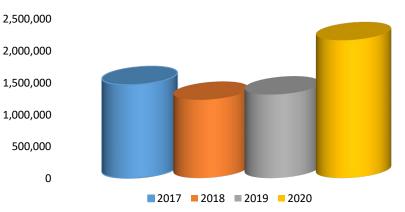
1,202,134

# **Year to Date Data Per Location**





# Pinellas Trail Use 2017 - 2020

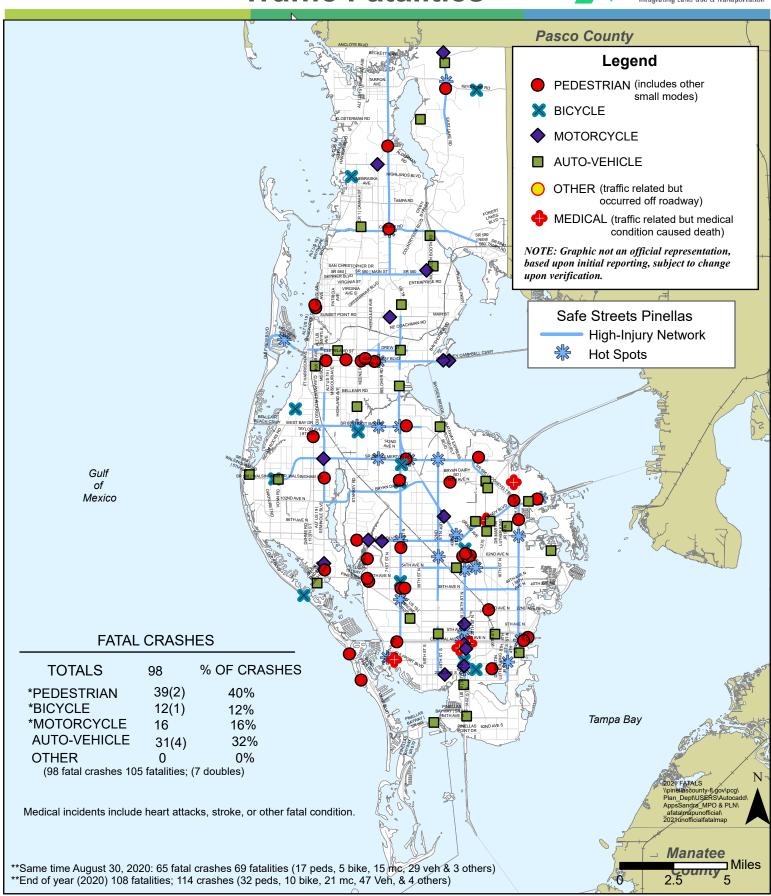


# **YEAR 2021**

(thru August 30th)

# Locations of Reported Traffic Fatalities





Data Source: Forward Pinellas, 2020. Map Produced: September 1, 2021.

\\pinellascounty-fl.gov\pcg\Plan Dept\USERS\Autocadd\AppsSandra MPO & PLN\ afatalmapunofficial\2021unofficialfatalmap\2021fatalsmapNEW.mxd

# CRASHES	DATAID	ON STREET	CROSS STREET	MODE	DATE	# FATAL	APPROX TIM	DHSMV	LEO	SEX/AGE
_	002F21	ULMERTON RD	IN FRONT OF 6363 ULMERTON	PED	1/6/2021		9:02PM	89358577		M/59
	004F21	34TH ST N	62ND AVE N	PED	1/8/2021		6:49AM	88425461		M/57
	007F21	PARK ST N	CR 16 (S OF 46TH AVE N)	PED IN WC/DELAY	1/18/2021		6:52PM	88430141		M/68
	012F21 013F21	COURT ST ROOSEVELT BLVD/SR686	JUST EAST OF MISSOURI AVE DODGE ST	PED/PED IN WC/DELAY PED/DELAY	1/29/2021 1/30/2021		7:26PM 11:36PM	24304614 88451237		M/37, M/59 M/60
	013F21 014F21	38TH AVE N	66TH ST	PED/DELAY	2/5/2021		8:27AM	24234848		M/68
1	015F21	38TH AVE N	64TH ST N	PED	2/8/2021	1	1:10AM	24234920	SP	M/40
	016F21	1ST ST N	4TH AVE N	PED/WC/DELAY	2/11/2021		9:33AM	24235101		F/85
	018F21 021F21	US HIGHWAY 19 US HIGHWAY 19	CURLEW RD INNISBROOK DRIVE	PED PED	2/12/2021 2/14/2021		8:30PM 7:55PM	88436801 88436805		M/61 M/65
	021F21 022F21	HERON BLVD	WHISPERWOOD AVE N	PED/DELAY	2/14/2021		8:10PM	24235108		M/65
1	023F21	E LAKE RD S	MAPLE TRCE	PED/OFFICER	2/17/2021		4:36PM	89358830	PCSO	M/30
	024F21	ROOSEVELT BLVD/SR686	10000 BLOCK	PED	2/18/2021		7:41PM	24235171		M/63
	031F21 032F21	GULF TO BAY 4TH ST N	S LAKE DR 90TH AVE N	PED PED	3/19/2021 3/22/2021		10:20PM 1:30PM	24305307 24235992		M/45 M/52
	032F21 036F21	118TH AVE N	44TH ST N	PED	3/31/2021		11:29AM	24235992		F/54
	038F21		400 FT W OF BELCHER RD	PED/DELAY	4/6/2021		8:24PM	24305254		M/46
	039F21	34TH ST N	62ND AVE N	PED	4/8/2021		7:20PM	24085309		M/43
	041F21 042F21	CENTRAL AVE STARKEY RD	21ST ST S PARK BLVD	PEDS/DELAY PED/DELAY	4/9/2021 4/12/2021		8:08PM 8:23PM	24236480 88474350		M/61,F/61
	042F21 043F21	GANDY BLVD	SAN MARTIN BLVD NE	PED/DELAY	4/15/2021		5:53AM	88451285		M/64 M/54
	045F21	PARK ST N	NEAR 62ND ST	PED	4/23/2021		10:05PM	89359382		F/62
	050F21	EDGEWATER DR	UNION ST	PED/DELAY	4/30/2021	1	?	?		M/82
	056F21	66TH ST N	69TH AVE N	PED/DELAY	5/7/2021		12:26AM	24085512		M/33
	058F21 062F21	SB US HIGHWAY 19 GULF BLVD 4400 BLK SPB	62ND AVE N N. OF PUBLIC BEACH PARKING	PED/DELAY PED/DELAY	5/11/2021 5/13/2021		1:46AM 9:00PM	88469089 89359589		M/40 M/77
	064F21	PASADENA AVE N	PINELLAS WAY N	PED	5/20/2021		10:02PM	24237431		M/55
	066F21	SB I 275		PED	5/21/2021		7:00PM	?	FHP	M/62
	076F21	US ALT 19	UNION ST	PED (SWATER CARR	6/8/2021		6:13PM	24305972		M/82
	077F21 079F21	GULF TO BAY BLVD GULF BLVD	S ORION AVE AT 10182	PED/SKATEBOARD PED	6/10/2021 6/13/2021		1:57AM 9:51PM	24306258 89359717		M/26 M/52
	079F21 080F21	PARK ST N	46TH AVE N	PED/DELAY	6/16/2021		5:40AM	88492723		M/?
1	084F21	GULF TO BAY BLVD	S AURORA AVE	PED	6/23/2021	1	3:30AM	24306247	CLW	M/24
	089F21	SEMINOLE BLVD	WALSINGHAM RD	PED	7/10/2010		5:11AM	88508210		M/53
	092F21 094F21	US HIGHWAY 19 18TH AVE S	118TH AVE N 19TH ST S	PED PED	7/13/2021 7/14/2021		12:19AM 10:17PM	24539699 24238675		F/53 M/54
	094F21 095F21	CLEARWATER LARGO RD	8TH AVE SW	PED	7/14/2021	1		?		M/34
	102F21	SEMINOLE BLVD	AT 5316 AREA	PED	8/28/2021		11:28PM	?	PCSO	M/44
	103F21	34TH ST N	62ND AVE N	PED/DELAY	8/29/2021		8:10PM	?	PP	M/?
	003F21 005F21	66TH ST N GULF BLVD	42ND AVE N JUST N OF 150TH AVE	BIKE BIKE	1/7/2021 1/14/2021		8:16PM 3:08PM	88841439		M/49 F/54
	005F21 027F21	15TH AVE S	34TH ST S	BIKE	3/6/2021		8:03PM	24235574		M/73
	030F21	34TH ST N	74TH AVE N	BIKE/DELAY	3/17/2021		12:57PM	24085087		M/77
1	051F21	18TH AVE S	25TH ST S	BIKE/DELAY	5/1/2021		4:09PM	24236975		M/25
	057F21	STARKEY RD	SOUTH OF EAST BAY DR	BIKE/DELAY	5/10/2021		5:55AM	24432474		M/?
	060F21 061F21	OSCEOLA RD KEYSTONE RD	GOLF VIEW DR MEADOWS DR	BIKE BIKE/DR & PASS	5/11/2021 5/11/2021		1:41PM 5:48PM	87552155 88428117		M/79 M/ 58; F/50
	072F21	66TH ST N	118TH AVE N	BIKE/DELAY	5/28/2021		6:08PM	24539408		M/35
	082F21	WALSINGHAM RD	OVAL DR	BIKE/DELAY	6/20/2021		12:13PM	24432767		M/60
	088F21	US ALT 19	DELAWARE AVE	BIKE	7/8/2021		4:39PM	88538335		F/63
	090F21 009F21	66TH ST N CR 611	SOUTH OF ULMERTON RD GREY OAKS BLVD	BIKE MC/DR	7/10/2021 1/23/2021		9:02PM 5:22PM	24432898 88443104		? F/65
	017F21	44TH ST S	22ND AVE S	MC/DR/DELAY	2/11/2021		12:11PM	24234985		F/20
	034F21	PARK BLVD	75TH ST N	MC/DELAY	3/23/2021	1	5:58PM	24085137		M/41
	035F21	ALDERMAN RD	WESTLAKE BLVD	MC/DR	3/27/2021		6:00PM	88268515		M/24
	037F21	18TH AVE S	34TH ST S	MC/DR	4/5/2021 4/8/2021		4:35PM 11:52PM	24236318 24305687		M/28
	040F21 047F21	COURTNEY CAMPBELL CSWY COURTNEY CAMPBELL CSWY	DAMASCUS RD DAMASCUS RD	MC/DR/DELAY MC	4/8/2021		11:32PM	24305687		M/46 M/29
	052F21	PARK BLVD	84TH LANE N	MC	5/4/2021		5:59AM	88498508		M/38
1	059F21	34TH ST N	11TH AVE N	MC/SCOOTER/DELAY	5/11/2021		1:32PM	24237196	SP	M/59
	068F21	SUNSET POINT	WORLD PARKWAY	MC	5/22/2021		4:14PM	24306096		M/33
	069F21 071F21	SEMINOLE BLVD US HIGHWAY 19	54TH AVE N CENTRAL AVE	MC MC	5/22/2021 5/24/2021		12:29PM 6:35PM	89359681 24432592		M/56 M/28
	073F21	US HIGHWAY 19	46TH ST N	MC	5/31/2021		8:35PM	24539484		M/67
	078F21	ULMERTON RD	SEMINOLE BLVD	MC/DELAY	6/12/2021		10:29PM	24432726		M/60
	093F21	SR 580	720FT WEST OF CHARLES	MC	7/13/2021		9:38AM	24306409		M/58
	099F21 001F21	5TH AVE S EAST LAKE RD	34TH ST S S OF TRINITY BLVD	MC/DR VEH/DR	8/14/2021 1/1/2021		8:49PM 6:32AM	24239437 85150864		M/28 F/22
	001F21 006F21	US HWY 19	JUST N OF MCCORMICK DR	VEH/DR/DELAY	1/17/2021		4:22PM	65150664 ?		F/75
1	010F21	118TH AVE N	IN THE 2200 BLK	VEH/DR/DELAY	1/23/2021		11:10PM	24234580		M/31
	011F21	CR 611/BAYSIDE BRIDGE	N OF ROOSEVELT BLVD/SR 686	VEH/PASS, MC/DR	1/24/2021		11:12PM	88436669	FHP	F/29, M/50
	019F21 020F21	SR 580 SB I 275	JUST E OF MCMULLEN BOOTH EXIT RAMP TO 1 375	VEH/DR VEH/DR	2/13/2021 2/14/2021		7:55AM 4:02PM	24304665 88401884		M/22 M/36
	020F21 025F21	GRAND AVE N	28TH ST N	VEH/DR VEH/DR/DELAY	3/3/2021		4:02PM 3:00PM	24084989		M/36 M/25
1	026F21	ROSER PARK DR S	4TH ST S	VEH/PASS, MC/DR	3/5/2021		4:22AM	24235572		F/34, M/33
	028F21	INDIAN ROCKS CSWY	EAST OF GULF BLVD	VEH/DR	3/8/2021	1	3:30AM	89358966	PCSO	M/44
	029F21 044F21	DREW ST US HIGHWAY 19	BTW HIGHLAND AND CREST DREW ST	VEH/DR VEH/DR	3/17/2021 4/20/2021		12:41PM 6:57PM	24305013 24305417		M/19 M/71
	044F21 046F21	GANDY BLVD	OAK ST NE	VEH/DR VEH/PASS, MC/DR	4/20/2021		3:30PM	24305417 88487174		M/47
	048F21	1275	INTERCHANGE AT 54TH AVE S	VEH/DR	4/28/2021	1	12:48PM	88268517	FHP	M/60
		1275	MM28	VEH/DR	4/28/2021		3:15PM	88312128	FHP	M/77
	053F21 054F21	4TH AVE N	49TH ST N 16TH ST NE	VEH/DR/DELAY	5/4/2021		5:48PM 3:11PM	24237028		M/58
	054F21 063F21	CAPE RAY AVE NE SB I 275	MM 28 NEAR GANDY BLVD	VEH/DR/DELAY VEH/DR	5/6/2021 5/18/2021		3:11PM 10:27PM	24237065 88492539		M/83 M/26
	065F21	NB I 275	EXIT30 RAMP/ROOSEVELT BLVD	VEH/DR	5/21/2021		12:20AM	88312129		M/40
1	067F21	HIGHPOINT DR	CURVE NEAR MIRA VISTA DR	VEH/DR	5/22/2021	1	3:52AM	88319008	FHP	M/21
	070F21	DR MLK ST N	8400 BLK	VEH/DR	5/23/2021		3:40PM	24237500		M/66
	074F21 081F21	PINELLAS BAYWAY US ALT 19	LEELAND ST S DUMHE RD	VEH/PASS/DELAY VEH/DR	6/2/2021 6/18/2021		2:43PM 8:31AM	24237703 88498549		F/83 M/54
	083F21	30TH AVE S	34TH ST S	VEH/DR	6/20/2021		2:30PM	24238624		F/84
1	086F21	CR 1	MANNING RD	VEH/DR	7/3/2021	1	9:50AM	88493295	FHP	F/39
	087F21	WALSINGHAM RD/SR 688	137TH AVE N	VEH/DR	7/8/2021		5:56PM	24432880		F/57
		US HIGHWAY 19 MCMULLEN BOOTH RD	NORTH OF NURSERY RD	VEH/DASS	7/12/2021		9:38AM 7:35AM	24306386		M/79
	096F21 097F21	TYRONE SQUARE BLVD N	SOUTH OF TAMPA RD NORFOLK ST N	VEH/PASS VEH/2 PASS	7/23/2021 7/30/2021		7:35AM 12:52PM	24239480		M/84 M16/F1
	097F21 098F21	SR 60	PROSPECT AVE S	VEH/PASS	8/10/2021		11:59PM	24306720		F/28
1	100F21	54TH AVE N	43RD ST N	VEH/DRS UNBORN	8/23/2021	1	5:41AM		FHP	?/UNBORN
	101F21	KEENE RD	SOUTH OF ROSERY RD	VEH/DR;VEH/PASS/DELAY	8/23/2021		10:14AM	?		?/?; ?/?
	008F21 033F21	I 275 SB 117TH TERRACE N	28TH ST S/MM21 AT 785	MED/VEH/DR MED/VEH/DR/DELAY	1/23/2021 3/22/2021		10:31AM 5:11PM	88410577 24235980		M/51 M/62
	055F21	CENTRAL AVE	3350 WALGREENS PHAR	MED/VEH/DR/DELAY	5/6/2021		4:02PM	24235980		M/60
0	075F21	EMERSON AVE S	37TH ST S	MED/VEH/DR/DELAY	6/3/2021	0	6:13PM	24237756	SP	M/57
0	085F21	PASADENA AVE S	AT 1238 PASADENA AVE S	MED/VEH/DR	6/28/2021	0	8:46PM	89359781	PCSO	M/54
98						105				
# CRASHES						# FATALS				
2	1	2021(7 doubles, 5 medicals)	Reports needing verified						<u>i</u>	
NOTES:										

NOTES:

2020 108 fatal crashes; (114 fatalities, 1 triple 4 doubles; 32 Peds, 10 bike, 21 motorcycle, 47 vehicle, 4 other)

2019 105 fatal crashes; 106 fatalities (1 double; 39 peds, 9 Bikes, 22 mc, 31 veh, 5 others)

2018 120 fatalities 115 crashes (5 doubles)/ (39 peds, 8 Bikes, 31 mc, 44 veh)

2017 116 fatalities 110 crashes (4 doubles and 1 triple) / (37 peds, 6 bikes, 30 mc, and 43 veh)

2016 117 fatalities110 crashes (3 triples and 1 double)

2015 104 fatalities102 crashes