AGENDA
BRADENTON TREE & LAND PRESERVATION BOARD MEETING
11:00 a.m. Friday, February 23, 2024
101 OLD MAIN STREET

Special Meeting of the Tree and Land Preservation Board

1. CALL SPECIAL MEETING TO ORDER

2. PLEDGE OF ALLEGIANCE

3. CITIZEN COMMENT

4. DISCUSSION OF ARBOR DAY EVENT

Planning for Arbor Day event and possible tree giveaways

a) Planning & Community Development: E-mail from Sara Muhs with Arbor Day Foundation
[EXTERNAL] Bradenton Community Canopy Call Follow Up.pdf

5. AGENDA FROM CANCELLED FEBRUARY 16TH, 2023 MEETING

a) Planning & Community Development: Agenda from meeting scheduled for February 16, 2024 but cancelled due to lack of quorum
February 2024 Packet.pdf

NON-DISCRIMINATION STATEMENT:

The City of Bradenton prohibits discrimination in all of its services, programs or activities on the basis of race, color, age, disability, sex, national origin, religion, genetic information or marital status. Persons with a disability needing a reasonable accommodation to participate in, or who require assistance or an alternative means for communication of program information such as Braille, large print, etc., should contact:

City of Bradenton

ADA/Title VI Coordinator

101 Old Main Street

Bradenton, FL 34205

ADACoordinator@cityofbradenton.com

941-932-9470

TTY: 7-1-1 or 1-800-955-8771

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AGENDA ITEM NO. 4.a

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE:	February 23, 2024
SUBMITTED BY:	Jamie Schindewolf, Planning & Community Development
ITEM TYPE:	Miscellaneous
AGENDA SECTION:	DISCUSSION OF ARBOR DAY EVENT
SUBJECT:	E-mail from Sara Muhs with Arbor Day Foundation
SUGGESTED ACTION:	Discuss Arbor Day event and possible tree giveaway

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:
[EXTERNAL] Bradenton Community Canopy Call Follow Up.pdf

From: Sara Muhs
To: Jamie Schindewolf; Greg DeLong
Subject: [EXTERNAL] Bradenton Community Canopy Call Follow Up
Date: Tuesday, February 13, 2024 2:30:23 PM
Attachments: image001.png
image002.png
image003.png
BradentonTreesOrderedMap.PNG
City of Bradenton Drafted 2024 Timeline.docx

[EXTERNAL EMAIL] This email originated from outside the City's email system, therefore the authenticity of the sender cannot be established. Exercise caution before clicking links, opening attachments or responding.

Hi Jamie and Greg,

It was so great to meet you both yesterday and chat with you. I'm excited for our partnership with the City of Bradenton to continue! I have requested species availability for a direct mail program & a pickup event, from our Procurement team. They are currently working with the grower (based out of northern Florida) and our arborists on staff to narrow down the species offering list to help provide a list suitable for Bradenton, that meets your suggestions.

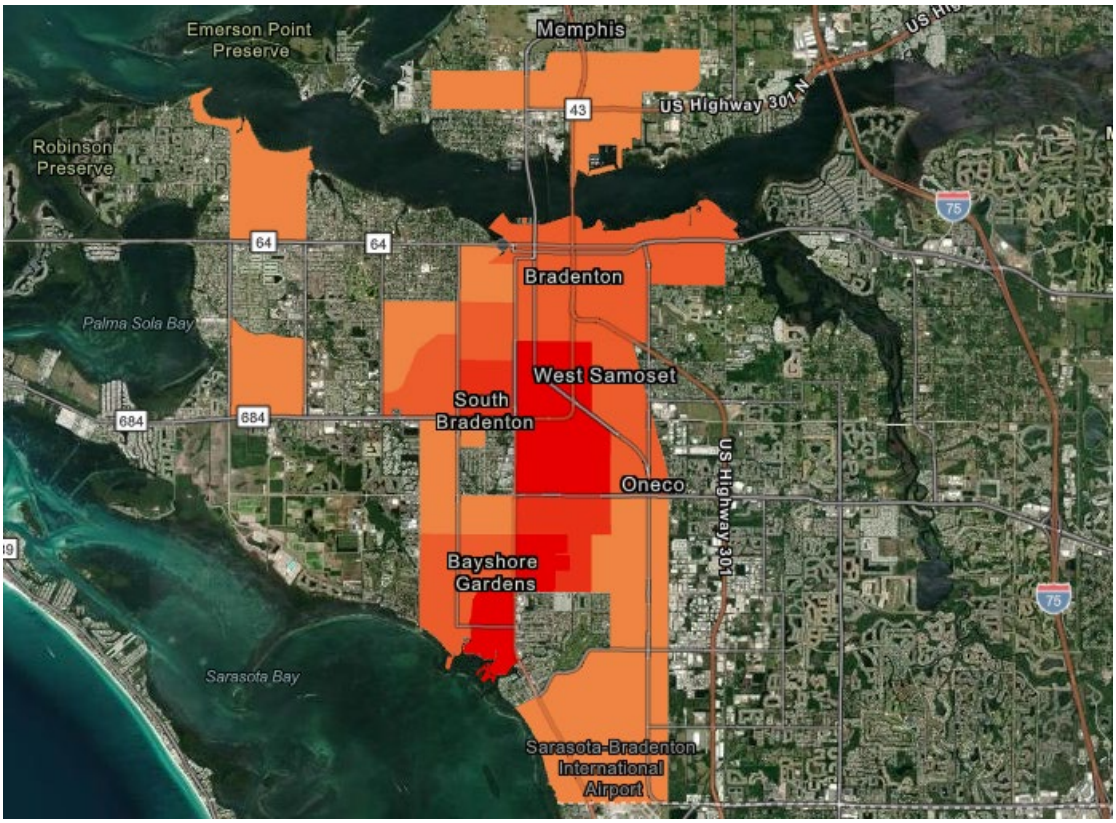
Here's some items I wanted to be sure to get sent your way, ahead of your Tree Board meeting on Friday:

- Drafted timeline – attached. Know that dates are fluid and can be adjusted, this is just a rough mockup of suggested time frames to help you make decisions on when to host your event and for marketing purposes.
- ADF Needs:
    - Confirmed budget.
        - Once I have the species list from our team and your budget, I can help provide some break down examples between the mailed trees & PU trees.
    - PU event details (date, time, location, tree delivery contact – name and phone number
        - Tree delivery takes place about 24-48 hours ahead of the event, so you'll want to make sure you've got a secure location to store the trees overnight.
    - Reservation portal opening date.

I'm also sharing our demo site, in case you'd like to play around with it and see what the end user will experience. Feel free to place as many test orders as you'd like.

I also pulled a couple of images to share from our GIS data viewer, utilizing our Nature Priority Index score, showing the portions of Bradenton in the highest need of tree coverage. The table below shows the index key, with some of Bradenton coming in at a 6 – moderate need. I'm sure you already have this info available to you and you of course know your city best. I always find it helpful for myself to view as I connect with partners, and like to share it, in case you want to target any of these specific neighborhoods with one of your distribution models or do some digging on your own. Additionally, attached you'll see a map image that I pulled from our reservation software, that shows

green circles in all the locations where past orders were placed throughout your program. This helps give an idea of where some of your trees are going and to what neighborhoods.



1 - Low Priority
2
3
4
5
6
7
8
9
10 - High Priority

Please let me know if you have any questions. Thanks!

Sara Muhs
Partner Relationship Manager
Work: 402-473-9633
211 N. 12th St. Lincoln, NE 68508
arborday.org

Arbor Day Foundation

Florida has a very broad Public Records Law. This agency is a public entity and is subject to Chapter 119 of the Florida Statutes, concerning public records. E-mail communications are covered under such laws & therefore e-mail sent or received on this entity's computer system, including your e-mail address, may be disclosed to the public or media upon request.

The City of Bradenton shall not be held liable for use of ANY map or drawing attachment, which is provided as a public service for informational purposes. PLEASE NOTE that this information is NOT intended to be used as an authoritative public record for any geographic location, or as a legal document and shall have no legal force or effect. The City of Bradenton makes reasonable efforts to provide that data sent as an attachment is virus free, however the City of Bradenton assumes no responsibility for damages caused by the downloading or installation of this data. In addition certain individuals or entities may have proprietary interests in such data and the use of it without such parties' consent may be prohibited. Viewing or Use of the data indicates that user accepts the above conditions.

AGENDA ITEM NO. 5.a

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE:	February 23, 2024
SUBMITTED BY:	Jamie Schindewolf, Planning & Community Development
ITEM TYPE:	Miscellaneous
AGENDA SECTION:	AGENDA FROM CANCELLED FEBRUARY 16TH, 2023 MEETING
SUBJECT:	Agenda from meeting scheduled for February 16, 2024 but cancelled due to lack of quorum
SUGGESTED ACTION:	Consider items on this agenda, time permitting

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:
February 2024 Packet.pdf

AGENDA
BRADENTON TREE & LAND PRESERVATION BOARD MEETING
1:30 p.m. Friday, February 16, 2024
101 OLD MAIN STREET

1. CALL MEETING TO ORDER

2. PLEDGE OF ALLEGIANCE

3. APPROVAL OF MINUTES

a) Planning & Community Development: November 17, 2023 Meeting Minutes
TLP BOARD DRAFT Minutes 11-17-23.pdf
b) Planning & Community Development: December 15, 2023 Meeting Minutes
TLP BOARD DRAFT Minutes 12-15-23.pdf

4. CITIZEN COMMENT

During this portion of the meeting, the Board will accept comments on any non-agenda items. Comments are limited to a maximum of 3 minutes.

5. ELECTION OF OFFICERS

a) Planning & Community Development: Election of Chairperson
b) Planning & Community Development: Election of Vice-Chairperson

6. REPORTS FROM CITY STAFF

a) Planning & Community Development: Marketing Materials Update
b) Planning & Community Development: December 2023 Tree Removal Permits
Tree Removal Permits December 2023.pdf
c) Planning & Community Development: January 2024 Tree Removal Permits.

January 2024 Tree Removal Permits.pdf
d) Planning & Community Development: Updated Policy for Volunteer Advisory Boards and Committees
Resolution 24-02 - Volunteer Advisory Boards Policy.pdf

7. NEW BUSINESS

a) Planning & Community Development: Urban Forestry Master Plan
Urban Forestry Master Plan.pdf
State of Florida - Urban Tree Canopy Assessment Report - 2023 (2).pdf

8. OLD BUSINESS

a) Planning & Community Development: Notable Tree Program Updates
b) Planning & Community Development: Annual Strategy Update
Annual Strategy.pdf
c) Planning & Community Development: Mailing Campaign
d) Planning & Community Development: Land Use Regulations: Section 4.1.3.5
Section 4.1.3.5 Amendments.pdf

9. BOARD MEMBER COMMENTS

10. ADJOURN

All interested persons and parties may appear either in person and be heard or submit written comments regarding the above matters to the Planning and Community Development Director. The meeting may be continued from time to time as necessary. Copies of the agenda or further information may be obtained from the Department of Planning & Community Development, 101 Old Main Street, Bradenton, FL, 34205, or by calling (941) 932-9407.

NON-DISCRIMINATION STATEMENT:

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AGENDA ITEM NO. 3.a

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE: February 16, 2024

SUBMITTED BY: Jamie Schindewolf, Planning & Community Development

ITEM TYPE: Minutes

AGENDA SECTION: APPROVAL OF MINUTES

SUBJECT: November 17, 2023 Meeting Minutes

SUGGESTED ACTION: Approval of minutes

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:
TLP BOARD DRAFT Minutes 11-17-23.pdf

ABBREVIATED MINUTES
CITY OF BRADENTON TREE & LAND PRESERVATION BOARD

1:30 P.M. FRIDAY, November 17, 2023
City Hall Council Chambers, 101 Old Main Street

PRESENT

Tree and Land Preservation Board Members: Edward Dean - Chair, Jennifer Hoffman – Vice-Chair, Richard Larsen, Alyssa Vinson, Ruth Lawler, Lauren Aristizabal.
City Staff: Jamie Schindewolf-Senior Planner, Monica Friedl-City Planner, Lori Brunner-Planning and Community Development Administrative Assistant, Jeff Burton-CRA Executive Director, Chris Munyon-CRA Manager.

REGULAR MEETING

Call to Order: by Ed Dean at 1:30 p.m.
Pledge of Allegiance.
Move to Approve: Both September 7, 2023 Workshop minutes and October 20, 2023 minutes made by Jennifer Hoffman and seconded by Alyssa Vinson. All approved as written.

Public Comment: None

Reports from City Staff:

1. Jeff Burton, CRA Executive Director, passed out copies of CRA grant opportunities. These are drafts; they will be rewriting the CRA plans. He mentioned that there is a tree canopy grant to give an incentive to property owners to plant shade trees in the urban parts of the City. There will be a list of trees that can and cannot be used. They will be involving City boards to help with the use of these grants. Mr. Burton stated that there will be $20,000 per grantee for monetary matching only, not maintenance. The Board discussed types of trees and gave opinions of how these grants can be used.

2. Jamie Schindewolf updated the Tree City USA application; Greg DeLong submitted it and it was accepted. They are now just waiting.

3. Notable Trees: Portal Update. Ms. Schindewolf reached out to Craig who stated that the next steps on his end were complicated and he will get back with her. Alyssa Vinson will contact him.

DRAFT

4. Grant Tracking Software Update. Ms. Schindewolf contacted the City Attorney, Scott Rudacille, who told her that they cannot use the software as it is a Sunshine Law concern.

5. Ms. Schindewolf discussed the marketing materials update and stated that there are no standards for branding. The next event is in January.

6. The Tree Removal Permits were included in the Board packet. No comments.

NEW BUSINESS

1. 2024 Meeting Dates. Motion to approve the meeting dates as proposed on the 2024 Calendar that was included in the packet by Alyssa Vinson and seconded by Jennifer Hoffman. All approved as written.

2. Mailing Campaign. Lauren Aristizabal discussed different ways to mail information to the public and the costs. The Board went over what could be on the mailings and who to target. Ms. Vinson will draft a post card. Motion to use up to $600.00 to immediately purchase mailing lists by Jennifer Hoffman and seconded by Ruth Lawler. All approved as written.

OLD BUSINESS

1. The letter regarding State Road 64 medians was discussed. The Board members read the draft letter and did not make any changes. Other medians and the tree removals, as well as plantings, were also discussed. Motion to send the letter to the Mayor and Council was made by Ruth Lawler and seconded by Richard Larsen. Alyssa Vinson and Jennifer Hoffman abstained from the vote. Chair Dean will email the letter to Ms. Schindewolf.

2. Notable Tree Nomination. Ms. Vinson and Mr. Larsen went to look at the tree that was nominated. There are no criteria at this point, but they agreed to nominate the tree. The Board will establish criteria for nominating trees. Chair Dean stated that the tree is notable due to its' size and location. Ms. Lawler passed out pictures of the tree. Motion to accept the tree as a Notable Tree for 2023 was made by Ms. Hoffman and seconded by Ms. Lawler.

3. Land Use Regulations – Section 2.1.3 revisions. Ms. Schindewolf made the proposed changes. Motion to update the section was made by Ms. Hoffman and seconded by Ms. Aristizabal.

4. Land Use Regulations – Section 4.1.3.5 revisions. Ms. Vinson and Mr. Larsen will meet to compare notes on the tree list. Ms. Vinson will also

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follow up with her contact at the City of Tampa to see how they placed it in the code, so she can then make the recommendation. Further discussion is tabled until the next meeting.

BOARD MEMBER COMMENTS

Jennifer Hoffman stated that the final 2023 tree give-away will be at the Braden River Library tomorrow morning.

Alyssa Vinson stated that the USDA issued their new map with added new zones to the map including a 10a and 10b upgrade for Manatee County.

Jamie Schindewolf introduced the Planning Department's new City Planner, Monica Friedl.

ADJOURNMENT

Mr. Dean adjourned the meeting at 2:53 p.m.

Edward Dean, Chair

DRAFT

AGENDA ITEM NO. 3.b

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE: February 16, 2024

SUBMITTED BY: Jamie Schindewolf, Planning & Community Development

ITEM TYPE: Minutes

AGENDA SECTION: APPROVAL OF MINUTES

SUBJECT: December 15, 2023 Meeting Minutes

SUGGESTED ACTION: Move to approve

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:
TLP BOARD DRAFT Minutes 12-15-23.pdf

ABBREVIATED MINUTES
CITY OF BRADENTON TREE & LAND PRESERVATION BOARD

1:30 P.M. FRIDAY, December 15, 2023
City Hall Council Chambers, 101 Old Main Street

PRESENT

Tree and Land Preservation Board Members: Edward Dean - Chair, Richard Larsen, Alyssa Vinson, Ruth Lawler, Lauren Aristizabal.
City Staff: Jamie Schindewolf-Senior Planner, Lori Brunner-Planning and Community Development Administrative Assistant, Ross Peterson-Superintendent, Landscape and Grounds.

REGULAR MEETING

Call to Order: by Ed Dean at 1:35 p.m.
Pledge of Allegiance.
Move to Approve: Meeting Minutes from November 17, 2023 were tabled.

Public Comment: None

Reports from City Staff:

1. Jamie Schindewolf updated the Tree City USA application status by stating that it has been approved.
2. Ms. Schindewolf stated that she reached out to Johnson Printing for marketing materials and the order is being processed.
3. Ms. Schindewolf passed out a printout of the map that is on the website in reference to the Notable Trees' locations, and nominations. More information can be submitted for future reference.
4. Ross Peterson updated the Board about trimming and removing trees north of Manatee High School on the Reflections of Manatee property. He's been working with Elizabeth Baylis and Councilwoman Lisa Gonzalez Moore.

NEW BUSINESS

1. Notable Tree Criteria – The Board discussed the size, species, maximum genetic potential, and other criteria needed. Ed Dean questioned whether the tree is on public or private property; if it would show significance. Ruth Lawler mentioned that there should be a way to reach out to the community for recognition of the trees.
2. Annual Strategy Update – Mr. Dean stated that the old strategy is outdated and asked for the Board's thoughts. He said the Board could look at the first 2 quarters of the year. Alyssa Vinson brought up Arbor

DRAFT

Day and that Riverwalk is going to be part of the Tree Quest this year. Also, Mr. Peterson has agreed to the tree giveaway at Mineral Springs. She would like to plan for educational activities. There are a lot more areas of Tree Quest where Board information could be shared. She would also like to see a community discussion about trees and what people want. Mr. Dean suggested a flyer that explains the Tree Board; he will put one together for future use. This subject will be brought back in January to discuss what the Board wants to accomplish.

OLD BUSINESS

1. Notable Tree Update – Ms. Schindewolf gave Jennifer Hoffman information on the plaque for Notable Trees.
2. Mailing Campaign – Lauren Aristizabal reached out to the vendor to purchase 3000 contacts by email addresses.
3. Land Use Regulations – The changes were provided in the Board packets, however no motion can be made since there is no quorum.

BOARD MEMBER COMMENTS

Ms. Vinson shared that "they" will be putting out a series of videos that focus on the water quality that trees provide, as well as different themes for tree tags, to try and make things more family friendly.

ADJOURNMENT

Mr. Dean adjourned the meeting at 2:16 p.m.

Edward Dean, Chair

DRAFT

AGENDA ITEM NO. 5.a

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE: February 16, 2024

SUBMITTED BY: Jamie Schindewolf, Planning & Community Development

ITEM TYPE: Miscellaneous

AGENDA SECTION: ELECTION OF OFFICERS

SUBJECT: Election of Chairperson

SUGGESTED ACTION: Elect a chairperson

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:

AGENDA ITEM NO. 5.b

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE: February 16, 2024

SUBMITTED BY: Jamie Schindewolf, Planning & Community Development

ITEM TYPE: Miscellaneous

AGENDA SECTION: ELECTION OF OFFICERS

SUBJECT: Election of Vice-Chairperson

SUGGESTED ACTION: Elect a vice-chairperson

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:

AGENDA ITEM NO. 6.a

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE: February 16, 2024

SUBMITTED BY: Jamie Schindewolf, Planning & Community Development

ITEM TYPE: Miscellaneous

AGENDA SECTION: REPORTS FROM CITY STAFF

SUBJECT: Marketing Materials Update

SUGGESTED ACTION: N/A

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:

AGENDA ITEM NO. 6.b

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE: February 16, 2024

SUBMITTED BY: Jamie Schindewolf, Planning & Community Development

ITEM TYPE: Miscellaneous

AGENDA SECTION: REPORTS FROM CITY STAFF

SUBJECT: December 2023 Tree Removal Permits

SUGGESTED ACTION: N/A

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:
Tree Removal Permits December 2023.pdf

Application Reference	Project/Activity	Location	App Status	Project/Activity Desc Line 1
234993	TREE REMOVAL	605 46TH ST EAST	ACTIVE	TREE REMOVAL DUE TO DAMAGING PROPERTY

Project/Activity Desc Line 2	Property Type
	Single Family

AGENDA ITEM NO. 6.c

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE: February 16, 2024

SUBMITTED BY: Jamie Schindewolf, Planning & Community Development

ITEM TYPE: Miscellaneous

AGENDA SECTION: REPORTS FROM CITY STAFF

SUBJECT: January 2024 Tree Removal Permits.

SUGGESTED ACTION: N/A

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

EXPLANATION:
None.

ATTACHMENTS:
January 2024 Tree Removal Permits.pdf

Application Reference	Project/Activity	Location	App Status	Project/Activity Desc Line 1	Project/Activity Desc Line 2	Property Type
240060	TREE REMOVAL NON RESIDENTIAL	420 41ST ST WEST	ACTIVE	LIVE/LAUREL OAK, GRAND LIVE OAK, NON-SIGNIFICANT TREE,	SIGNIFICANT TREE & SABAL PALM	Vacant Commercial
240112	TREE REMOVAL	2212 12TH ST WEST	WITHDRAWN	REMOVAL OF DEAD OAK TREE		Single Family Residential
240160	TREE REMOVAL	611 26TH ST WEST	ACTIVE	REMOVE OAK TREE		Office Building
240297	TREE REMOVAL	5408 TIDEWATER PRESERVE BLVD	ACTIVE	REMOVAL OF 1 OAK		Single Family Residential
240350	TREE REMOVAL	1613 12TH AVE WEST	ACTIVE	REMOVAL OAKS & EXOTICS		Vacant Residential

AGENDA ITEM NO. 6.d

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE:	February 16, 2024
SUBMITTED BY:	Jamie Schindewolf, Planning & Community Development
ITEM TYPE:	Miscellaneous
AGENDA SECTION:	REPORTS FROM CITY STAFF
SUBJECT:	Updated Policy for Volunteer Advisory Boards and Committees
SUGGESTED ACTION:	A required meeting to go over the updated Policy is scheduled for all Boards and Committees on March 11, 2024, at 2:00pm in Council Chambers.

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:
Resolution 24-02 - Volunteer Advisory Boards Policy.pdf

CITY OF BRADENTON
RESOLUTION NUMBER 24-02

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRADENTON, FLORIDA, MEMORIALIZING THE POLICY AND PROCEDURES GOVERNING VOLUNTEER ADVISORY BOARDS & COMMITTEES; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Bradenton has various volunteer boards. These boards are an integral part of citizen participation in local government and aid in the proper growth, development and stability of the City; and

WHEREAS, the City Council wishes to memorialize a uniform set of procedures and guidelines to be followed by the members of said volunteer boards to ensure advisory boards or committees function and operate in accordance with all applicable laws and regulations, as well as the expectations of the Bradenton City Council with respect to the administration of their duties;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL FOR THE CITY OF BRADENTON, FLORIDA:

1. The City of Bradenton hereby adopts the Policy & Procedures Governing Volunteer Advisory Boards & Committees;
2. Said Policy consists of 7 pages and is attached to and a part of this Resolution;
3. This Resolution shall take effect immediately upon its adoption.

PASSED AND DULY ADOPTED BY THE CITY COUNCIL FOR THE CITY OF BRADENTON, FLORIDA, WITH A QUORUM PRESENT AND VOTING ON THIS 10th DAY OF JANUARY, 2024.

ATTEST:

Tamara Melton
CITY CLERK

Gene Brown
MAYOR

APPROVED AS TO FORM:

Scott Rudacille
CITY ATTORNEY

POLICY & PROCEDURES GOVERNING

VOLUNTEER ADVISORY BOARDS & COMMITTEES

Approved by City Council – Resolution 24-02 dated January 10, 2024

PURPOSE:

The purpose of this policy is to establish uniform guidelines to ensure that advisory boards or committees function and operate in accordance with all applicable laws and regulations, as well as the expectations of the Bradenton City Council with respect to the administration of their duties as a board or committee outlined in the ordinance or resolution by which they were established.

These procedures shall apply uniformly to all City of Bradenton Advisory Boards and Committees. The procedures are intended to supplement matters covered in existing Resolutions creating said Boards and Committees.

DEFINITIONS:

"Advisory Boards or Committees" are defined as those bodies created by the Bradenton City Council for the purpose of advising the Council on matters related to the business of City government. Advisory boards generally have authority only to advise and make recommendations to Council and do not have the authority to establish policies or make decisions on behalf of the City Council.

"Public Records". Section 119.011(12) F.S. defines public records to mean: All documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, data processing software, or other material, regardless of the physical form or characteristics, or means of transmission, made or received pursuant to law or ordinance or in connection with the transaction of official business by any agency.

AUTHORITY: Authority has been granted by the Bradenton City Council to enforce this Policy's administration.

PROCEDURE:

A. Creation

Advisory boards and committees should be created by resolution or Ordinance of the City Council, unless otherwise specified by State Statute. Resolutions and Ordinances creating advisory boards and committees should include, at a minimum:

- Express creation of the advisory board or committee
- Purpose and duties of the advisory board or committee
- Membership qualifications
- Terms of appointment
- Provisions for operation of the advisory board or committee
- Conditions of appointment or removal

B. Membership

1) Appointments. Representatives to advisory boards or committees are made by appointment of the Mayor and confirmed by City Council. Appointments will be made from applications of qualified potential members and confirmed by Council at a regular Council meeting.
2) Alternate Members. For those advisory boards or committees which have alternate members, an alternate member shall serve in the place of an absent regular member, and shall have all rights and responsibilities of the regular member, including the right to vote, unless the resolution or ordinance creating the advisory board or committee provides otherwise.
3) Attendance: Advisory Board and Committee members should make an effort to attend all meetings and arrive on time for the scheduled meeting. Members should notify the Board or Committee secretary or Chairperson of planned absences in advance of the meeting. Excessive absences and tardiness may result in a member's removal from the Board or Committee.
4) Quorum: The number of members which constitute a quorum shall be set forth in the resolution or ordinance creating the advisory board or committee. However, if quorum is not specified in any such resolution or ordinance, quorum shall be a majority of the advisory board or committee members then appointed.
5) Hold Overs: Advisory board and committee members may continue to serve following the expiration of their terms until the City Council fills the position which would be vacated.
6) Removal: Advisory board and committee members serve at the pleasure of the City Council. Any advisory board or committee member may be removed by the City Council in their discretion or as may otherwise be provided in the resolution or ordinance creating the advisory board or committee.

ROLES & RESPONSIBILITIES:

A. Advisory Board or Committee Members -

1. Orientation:

All new advisory board or committee members must sign an Oath of Office upon appointment and prior to participation in any meetings. All new advisory board and committee members must make an appointment with the City Clerk who will administer the Oath.

All new advisory board or committee members must receive training on Rules of Procedure, Florida's Government in the Sunshine Law, Public Records law and instructions on the use of City issued email. The City Clerk will coordinate the training for new advisory board or committee members. Each new advisory board or committee member will receive a copy of the Handbook for Volunteer Advisory Board

and Committee Members (copy attached, as may be amended from time to time) which includes an Overview of the Applicable Laws Relating to Government in the Sunshine, Public Records and Ethics as drafted by the City Attorney.

Further training will be provided on these topics via video prepared by the City Attorney and should be completed within 30 days of appointment.

All Advisory Board or Committee members must also take cybersecurity training that will be assigned by the IT Department to ensure knowledge of the risks of cyber-attacks, ransomware and malware, and phishing emails. Cybersecurity training is required for all new appointments and annually during the term.

Failure to complete the required training within 30 days will result in a recommendation to Council that the Advisory Board or Committee member be removed.

2. **Conduct & Expectations:**

Advisory Board or Committee members are expected to follow the City of Bradenton Pledge of Public Conduct as adopted by the City Council.

City of Bradenton
Pledge of Public Conduct

The following is the Pledge of Conduct adopted by the City Council:

We, the Mayor, City Council and employees of the City of Bradenton agree to:

*Establish a process to promote positive interaction among ourselves and the citizens of Bradenton in a positive and non-threatening environment;
*Encourage visible, involved and active participation among all;
*Promote improved communication through active listening, providing feedback and honest expression of ideas; and
*Utilize consensus for decision making;
* We realize that though we may disagree, we will be respectful of each other;
*We will direct all comments to the issues and will avoid personal attacks.

The various volunteer advisory boards and committees play an integral part in citizen participation in local government and aid in the proper growth, development and stability of the City. Serving on an Advisory Board or Committee is both a challenging and a rewarding opportunity. The following are some of the expectations the City has of its Advisory Board and Committee members:

- Act as a conduit for citizens input to the City's Elected Officials. Advisory Board and Committee Members should seek and consider input from citizens interested in or impacted by an issue in formulating a determination on an issue before the Advisory Board or Committee.
- Comply with all local, state and federal laws, rules and regulations.
- Prepare for and pay attention during each meeting and maintain a positive, respectfully and productive environment at all meetings.
- Provide advice and recommendations to City Council using only the authority granted to the Advisory Board or Committee by City Council.
- Act solely in an advisory capacity without compensation.
- Advisory Board or Committee members should make an effort to attend all meetings. Members should notify the Advisory Board or Committee Secretary or Chairperson of planned absences in advance of meetings. Excessive absences and tardiness may result in a members removal from an Advisory Board or Committee.
- All members have a valuable contribution to make to the Advisory Board or Committee and are asked to follow the City of Bradenton Pledge of Public Conduct when representing the City in their appointed role.
- Comply with annual financial disclosure requirements, if applicable to the Advisory Board or Committee to which they are appointed.
- Discharge their duties and responsibilities on the Advisory Board or Committee without favor or prejudice toward any person or group.
- Refrain from voting on any matters on which they may have a conflict. Should a member abstain from voting due to a conflict, the member must complete Form 8B, Memorandum of Voting Conflict for County, Municipal, and Other Local Public Officers. Form 8B can be obtained from the City Clerk's Office and a copy must be attached to the meeting minutes. Potential voting conflicts should be discussed with the City Attorney in advance of the meeting.

A. Electronic Communications

Members of all Advisory Board or Committees are required to use a City issued email address for all correspondence related to City business. The Administrative Aide to the Mayor will notify the IT Department of all new appointments and terminations. The IT Department will then create or close out an email account, as necessary. Outlook web access is accessible to all users where internet access is available. Passwords will be assigned at the time of administration of the Oath. Instructions on accessing Outlook are included in the Volunteer Advisory Board or Committee Handbook that will be provided at the time of administration of the Oath.

Email communications that are made or received in connection with City business are subject to Florida Public Records Law and must be preserved and maintained accordingly. All email messages made or received using a City issued email account are centrally logged and archived the moment they are sent or received, and are subject to review at any time. All emails are considered public record and shall be

retained for a specified length of time as determined by message content, City policy and state retention guidelines as interpreted by the City's administration. There shall be no expectation of privacy in anything created, stored, sent or received using city-supplied computer equipment. The Advisory Board or Committee Member will be set up with two factor authentication from the IT Department to access their email account to ensure the safety and security of the system.

In the event an email is made or received in connection with any City business via a **non**-city email server, account and/or device, it shall be the responsibility of the advisory board or committee member making or receiving the email to ensure that all such emails are preserved. **City business transmitted on a personal device, or on a non-City email account, shall be emailed (forwarded) to the advisory board or committee member's city email address to allow for archival and maintenance of the record.**

Messages sent or received in connection with any City business using an electronic format other than email (i.e. text messages; social media posts; etc.) shall be archived as well in accordance with all applicable laws; rules; requirements etc. applicable to such records, by the officer or advisory board or committee member who created the record.

In the event an Advisory Board or Committee member forgets their password, they must request a password reset through the staff liaison, and provide contact information. The staff liaison will confirm to the IT Department that the Advisory Board or Committee member is a current member and provide the contact information to the IT Department who will then contact the Advisory Board or Committee member to reset the password.

Chairperson -

The Chair of an Advisory Board or Committee plays an essential role in ensuring the effectiveness of the Advisory Board or Committee and has the following responsibilities:

- Ensure that meetings are conducted efficiently and that the Advisory Board or committee is focusing only on those issues that are relevant to the purpose of the Advisory Board or Committee;
- Ensure that all members are given an opportunity to share ideas, concerns and opinions on the issue before the Advisory Board or Committee;
- Ensure strict compliance with Florida's Government in the Sunshine Law, Public Records Law and Code of Ethics for Public representatives;
- Discourage repetitive arguments

B. Staff Liaison -

The staff liaison is a City staff member whose duty it is to help with the administration of meetings of the advisory board or committee and to serve as a conduit between the advisory board or committee, the Mayor, the City Attorney and City Council. The duties required of the staff liaison include, but may not be limited to:

- Publicly noticing the advisory board or committee meeting and reserving the meeting room
- Preparing the agenda, with backup materials, distributing to members, and making publicly available via the City's website
- Ensuring that all persons with disabilities are provided with the assistance necessary to enable them to effectively participate in meetings
- Keeping attendance records of meetings
- Taking minutes of meetings
- Maintaining all public records of the advisory board or committee
- Introduction of new members to the advisory board or committee and informing new members of the rules and processes which govern the advisory board or committee

MEETINGS:

All advisory boards or committees shall meet as the advisory board or committee deems appropriate to fulfill the mission designated by Council as set forth in the establishing ordinance or resolution. All meetings shall be open to the public and must be properly advertised. No business may be conducted at a meeting in the absence of a quorum. The public may observe all proceedings but may only contribute during designated public comment periods. An agenda shall be prepared and distributed in advance of each scheduled meeting by the City staff liaison. The agenda must include a designated opportunity for public comment. All meetings shall be recorded by audio. Minutes shall be taken by the staff liaison and retained by the City Clerk.

Government in the Sunshine & Public Records Laws and How They Relate to Volunteer Advisory Boards or Committees:

Chapter 119, Florida Statutes: Public Records

Section 119.01 General state policy on public records:

(1) It is the policy of this state that all state, county, and municipal records are open for personal inspection and copying by any person. Providing access to public records is a duty of each agency.

Florida has a very broad definition of materials which constitute public records.

Section 119.011(12) F.S. defines "public records" to mean:

All documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, data processing software, or other material, regardless of the physical form, characteristics, or means of transmission, made or received pursuant to law or ordinance or in connection with the transaction of official business by any agency.

The term is defined broadly to include governmental or quasi-governmental boards or departments. Therefore, documents and materials generated by advisory boards or committees that provide advice or recommendations are public records, unless specifically exempted by Statute. The key to determining whether a record is made or received in connection with official business is whether the record is used to or prepared with the intent to ***"perpetuate, communicate or formalize knowledge***."

Chapter 286, Florida Statutes: Open Government

Section 286.011 Public Meetings and records; public inspection; criminal and civil penalties.

(1) All meetings of any board or commission of any state agency or authority or of any agency or authority of any county, municipal corporation, or political subdivision, at which official acts are to be taken are declared to be public meetings open to the public at all times . . .

Section 119.011(2), F.S. defines the term "agency" to include:

Any state, county, district, authority, or municipal officer, department, division, board, bureau, commission, or other separate unit of government created or established by law including, for the purposes of this chapter, the Commission on Ethics, the Public Service Commission, and the Office of Public Counsel, and any other public or private agency, person, partnership, corporation or business entity acting on behalf of any public agency.

The scope of Florida's Government in the Sunshine Laws applies to governmental proceedings at the state and local level and to elected and appointed boards. **The law has been applied to any gathering of two or more members of the same board or committee to discuss some matter which will foreseeably come before the board or committee for action.**

There are three basic requirements of Section 286.011, Florida Statutes:

(1) Meetings of public boards or commissions must be open to the public;
(2) Reasonable notice of meetings must be given;
(3) Minutes of the meetings must be taken.

The Office of the Attorney General for the State of Florida publishes a guide entitled "Government-in-the-Sunshine Manual" to assist the public and governmental agencies in understanding the requirements of and exemptions from Florida's open government laws. The Manual can also be viewed on the website of the Attorney General for the State of Florida at MyFLSunshine.com.



bradenton

The Friendly City

HANDBOOK

FOR VOLUNTEER ADVISORY BOARD OR COMMITTEE MEMBERS

INTRODUCTION

The City of Bradenton has various volunteer advisory boards or committees. Representatives of these advisory boards or committees are appointed by the Mayor and confirmed by the City Council. All advisory boards or committees are comprised of citizens serving in a voluntary capacity for the purposes of providing assistance and advice to the City Council and receive no compensation for their services. All advisory boards or committees are created by an ordinance or resolution which sets forth the advisory board or committee's purpose, membership requirements, functions, powers, responsibilities, jurisdiction, and terms and conditions of appointment or removal.

The advisory boards or committees are an integral part of citizen participation in local government and aid in the proper growth, development, and stability of the City.

Advisory Boards or Committees may have administrative, managerial, quasi-judicial, investigatory, and/or advisory powers. Each of the various volunteer advisory boards or committees for the City of Bradenton serve a different purpose and have a specific scope of authority as set forth by City Ordinance or Resolution establishing the same and/or as provided by State Statute.

ELECTED OFFICIALS

Mayor – *Gene Brown*

City Council

Ward 1 – *Jayne Kocher*

Ward 2 – *Marianne Barnebey*

Ward 3 – *Josh Cramer*

Ward 4 – *Lisa Gonzalez Moore*

Ward 5 – *Pam Coachman*

DEFINITIONS

Boards: Boards usually act in an advisory and/or investigatory capacity to the City Council. Boards are involved with specific on-going subject areas and are generally standing bodies.

Committees: Committees are generally established to accomplish a specific goal. Committees usually act in an advisory or investigatory capacity.

Quasi-judicial Proceedings: *The action taken and discretion exercised by public administrative agencies or bodies that are obliged to investigate or ascertain facts and draw conclusions from them as the foundation for official actions.* In a quasi-judicial proceeding, the person or entity filing a request to be considered has the right to present evidence and expert witnesses, to question and cross-examine witnesses, and to speak in rebuttal. Florida case law requires that public hearings be held on certain matters such as requests for site plan approvals and site-specific re-zoning.

Pension Fund Board of Trustees: Pension Fund Boards of Trustee are specific bodies designated to manage the pension trust fund plans for certain classes of employees enrolled in the pension plans, such as Fire and Police Personnel.

ADVISORY BOARD OR COMMITTEE APPOINTMENT GUIDELINES

All advisory board or Committee members must comply with the following guidelines:

1. All appointments to a volunteer advisory board or committee require formal action by City Council. Unless otherwise specified by State Statute, all advisory boards or committees serve in an advisory capacity to City Council.

2. All new advisory board or committee members shall be familiar with their duties and the responsibilities of the board before attending their first meeting.

3. All advisory board or committee members must sign an Oath of Office upon appointment and prior to participation in any meetings. All new advisory board or committee members must make an appointment with the City Clerk to take the oath and receive training on Florida's Government in the Sunshine Law, Public Records Law and instructions on the use of City issued email.

4. The size of an Advisory Board or Committee, the requirements for membership and terms of office are established by the City Council, unless otherwise specified by State statute.

5. The City shall not discriminate with regard to gender, race, national origin, disability, age, religion or familial status.

Mayor and City Council may amend these guidelines at any time at their discretion.

Volunteer Advisory Boards or Committees in the City of Bradenton

Affordable Housing Advisory Committee

Architectural Review Board

Bradenton Housing Authority

Citizens Advisory Committee

Construction Trade Board

Fire Pension Board of Trustees

Merit Personnel Board

Nuisance Abatement Board

Planning Commission

Police Pension Board of Trustees

Tree and Land Preservation Board

VOLUNTEER ADVISORY BOARD OR COMMITTEE DESCRIPTIONS

Affordable Housing Advisory Committee

The Affordable Housing Advisory Committee was established for the purpose of reviewing established policies and procedures, ordinances, land development regulations and adopted local comprehensive plan of the city. The Committee shall recommend specific initiatives to encourage or facilitate affordable housing while protecting the ability of the property to appreciate in value. Recommendations of the advisory committee may include the modification or repeal of existing policies, procedures, ordinances, regulations or plan provisions. The Committee also helps the City develop its Local Housing Assistance Plan (LHAP) for the State Housing Initiatives Partnership (SHIP) program. The Committee consists of nine members appointed by City Council from different backgrounds who have experience with affordable housing, either from a professional standpoint or as an advocate.

Architectural Review Board

The Architectural Review Board was established for the purpose of protecting and furthering the public interest and welfare of the City relating to historic and architectural preservation and enhancement, design compatibility and place making, and the aesthetic and physical improvement of the public realm for greater community benefit. The board meets at the will of the Director of the Department of Planning & Community Development. The board consists of six (6) members serving three (3) year terms. Whenever possible, five members of the board shall be chosen so that the following professions are represented: architecture; building/construction trades; urban planning; landscaping architecture and historic preservation. One active member of the planning commission representing one of the aforementioned professionals shall be appointed to the ARB as a liaison.

Bradenton Housing Authority Board

The Bradenton Housing Authority was established after a finding by the City Council that there was a shortage of safe and sanitary dwelling accommodations in the City available to persons of low income at rentals that they can afford.

The Board of the Housing Authority consists of five (5) members who serve for a term of four years each. A vacancy shall be filled for an unexpired term by appointment of the Mayor with approval of the City Council within 60 days after said vacancy occurs. The Board of the Housing Authority shall have at least one member who is current in rent in a housing project or a person of low or very low income who resides within the Housing Authority's jurisdiction and is receiving rent subsidy through a program administered by the Authority or public housing agency that has jurisdiction for the same locality served by the Housing Authority.

A majority of the board members shall constitute a quorum of the Board for the purpose of conducting its business and exercising its powers and for all other purposes.

Citizens Advisory Committee

The purpose of the Citizens Advisory Committee is to ensure transparency and enhance the trust between the Bradenton Police Department and the Bradenton community by demonstrating police credibility and responsiveness; ensuring citizen complaints are welcomed and taken seriously by the Bradenton Police Department; identifying trends of wrongful conduct by Bradenton Police Department Employee(s); recommending training improvements; and increasing the public's knowledge about the complaint and investigation process of the Bradenton Police Department.

To the extent possible, the membership of the Committee shall reflect the racial, ethnic, and cultural diverseness of the City of Bradenton. The term of each member shall be two years. Members shall not serve more than two consecutive terms.

The Committee shall consist of seven members. The Mayor shall select two members and each City Council member shall recommend two to three names of possible candidates from their Ward for selection by the Mayor. Members must meet the following criteria:

1. Be at least 18 years of age;
2. Be a current resident of the City of Bradenton; or own or be a principal in a business or not-for-profit organization in the City of Bradenton;
3. Reside in the Ward of the City Council member making the recommendation;
4. Complete a written application;
5. Pass a background check;
6. Have no prior felony convictions, convictions of a crime of violence, or any conviction involving moral turpitude;
7. Devote a minimum of 8 hours, yearly, to participate in a ride along with the Bradenton Police Department;
8. Attend annual Use of Force and other related training as determined by the Chief of Police in cooperation with the Committee Chair;
9. Must agree to conduct themselves in a professional and respectful manner;
10. Not be currently holding or running for political office in the City;
11. Must not work for or have immediate family associated with any law enforcement agency;
12. Attend and successfully complete the Manatee County Sheriff's Office Citizens Law Enforcement Academy within one year of appointment.

Firefighters' Pension Fund Board of Trustees

The Firefighters' Pension Fund is administered by a Board of Trustees that act as the named fiduciary and administrator of the Fund as defined by Florida law. The sole and exclusive

administration of and responsibility for the proper operation of the retirement system is vested in the Board of Trustees. The Board consists of five (5) members, two (2) of whom shall be residents of the City appointed by City Council, and two (2) of whom shall be members of the system, elected by a majority of the firefighters who are members of the system. The fifth member shall be chosen by a majority of the previous four members. Each member shall serve as a Trustee for a period of two (2) years, unless he or she sooner leaves the employment of the City as a Firefighter or otherwise vacates their office as Trustee, whereupon a successor Trustee shall be chosen.

Merit Personnel Board

The Merit Personnel Board shall hear review requests from any employee of the City in respect to any dismissal, demotion or suspension. The Board shall have the power to examine witnesses under oath and to compel their attendance for production of evidence before it by subpoena issued in the name of the City and attested by the City Clerk. The Board shall make a written statement of the facts of each appeal and its findings and recommendation, all of which shall be submitted to the City Council for such action as the Council, in its judgment, determines to be appropriate. The Board shall consist of five (5) members serving three (3) year terms. Each member shall be of a different vocation from the others and not employed by the City in any capacity, official or otherwise.

Nuisance Abatement Board

The City may bring a complaint before the Nuisance Abatement Board alleging a nuisance as that terms is defined by Section 54-83 of the City's Code of Ordinances. A complaint may be filed with the City by a resident or any occupant of real property within the City that is aggrieved by an alleged nuisance. The Board shall hear complaints that a nuisance exists at a particular place or premises. The Board has the power to hold public hearings and to declare that any place or premises is or has been a public nuisance which must be abated, issue orders and impose fines on the owner thereof. The Board shall consist of seven (7) members serving three (3) year terms.

Planning Commission

The Planning Commission was established to accomplish the maximum economic, physical and social welfare and a coordinated and harmonious development of land, buildings and transportation facilities of the City. The Commission is the local planning agency as required by F.S. Section 163.3174. The Commission is charged with preparing, recommending, reviewing and maintaining a development plan containing policies for guiding decisions regarding development. The Board serves as a special advisor to the City Council and will make recommendations on special use permits, Land Use Atlas Amendments, vacations of public easements, alcoholic beverage sales, subdivision plats, planned development projects and other applicable land use matters. The commission meets on the third Wednesday of every month at 2:00 p.m. at City Hall. The Board is comprised of seven (7) members and four (4)

alternates for four (4) year terms. Alternates shall serve only if a regular member is absent or disqualified from voting on a particular case.

Police Pension Board of Trustees

The Pension Fund is administered by a Board of Trustees that act as the named fiduciary and administrator of the Fund as defined by Florida law. The sole and exclusive administration of and responsibility for the proper operation of the system is vested in the Board of Trustees. The Board consists of five (5) members, two (2) of whom shall be residents of the City appointed by City Council, and two (2) of whom shall be members of the system, elected by a majority of the police officers who are members of the system. The fifth member shall be chosen by a majority of the previous four members. Each member shall serve as Trustee for a period of four (4) years, unless he or she sooner leaves the employment of the City as a police officer or otherwise vacates their office as a Trustee, whereupon a successor Trustee shall be chosen.

Tree and Land Preservation Board

The Tree and Land Preservation Board was established for the purpose of promoting awareness of the City-wide tree canopy and tree education programs, and open space and parkland preservation initiatives. The Board may also, when determined by the Department of Planning and Community Development, advise owners of buildings, land and other properties, that may impact the City's tree canopy and open spaces, and other lands, concerning the treatment of the natural, visual characteristics and value of such properties. The Board works closely with City departments, various civic and private groups, individuals, and outside agencies and organizations. The Board consists of eleven (11) members serving three (3) year terms. Five (5) members constitute a quorum. Membership requirements:

- Two Florida-registered landscape architects;
- One Florida-certified arborist;
- One county agricultural extension office representative;
- One land use planner;
- Two landscape nursery professionals
- One Keep Manatee Beautiful member;
- Three City residents interested in the Board's purpose; and
- One alternate.

City of Bradenton
Pledge of Public Conduct

The following is the Pledge of Conduct adopted by the City Council:

We, the Mayor, City Council and employees of the City of Bradenton agree to:

*Establish a process to promote positive interaction among ourselves and the citizens of Bradenton in a positive and non-threatening environment;

*Encourage visible, involved and active participation among all;

*Promote improved communication through active listening, providing feedback and honest expression of ideas; and

*Utilize consensus for decision making;

* We realize that though we may disagree, we will be respectful of each other;

*We will direct all comments to the issues and will avoid personal attacks.

CITY ISSUED E-MAIL PROCEDURES

As a member on a City Advisory Board or Committee you are required to use your City issued email address for all correspondence related to City business. Outlook Web Access is accessible to all users where internet access is available. Your password will be assigned at the time you are administered the Oath. **To log into Outlook Web Access**:

1. Launch your web browser
2. On the address bar, type: www.bradentonfl.gov
3. At the very bottom of the page click on Employee Access;
4. Click Employee Email – OWA
5. Type your email address in: firstname.lastname@bradentonfl.gov
6. Type your password
7. Click Log On
8. Approve your second factor prompt on your mobile device.

You may also use the Outlook app for iOS and Android on your mobile device, from the AppStore or the Google PlayStore.

City Advisory Board or Committee member assumes all risk associated with the use of City email.

ADVISORY BOARD OR COMMITTEE MEMBER EXPECTATIONS

The various volunteer advisory boards or committees play an integral part in citizen participation in local government and aid in the proper growth, development and stability of the City. Serving on an Advisory Board or Committee is both a challenging and a rewarding opportunity. The following are some of the expectations the City has of its Advisory Board or Committee members:

- Act as a conduit for citizens input to the City's Elected Officials. Members should seek and consider input from citizens interested in or impacted by an issue in formulating a determination on an issue before the Advisory Board or Committee.
- Provide advice and recommendations to City Council using only the authority granted to the Advisory Board or Committee by City Council.
- Act solely in an advisory capacity without compensation.
- Advisory Board or Committee members should make an effort to attend all meetings. Members should notify the Advisory Board or Committee Secretary or Chairperson of planned absences in advance of meetings. Excessive absences may result in a member's removal from an Advisory Board or Committee.
- All members have a valuable contribution to make to the Advisory Board or Committee and are asked to follow the City of Bradenton Pledge of Public Conduct when representing the City in their appointed role.

ROLE OF CHAIRPERSON

The Chair of an Advisory Board or Committee plays an essential role in ensuring the effectiveness of the Advisory Board or Committee and has the following responsibilities:

- Ensure that meetings are conducted efficiently and that the Advisory Board or Committee is focusing on only those issues that are relevant to the purpose of the Advisory Board or Committee;
- Ensure that all members are given an opportunity to share ideas, concerns and opinions on the issue before the Advisory Board or Committee;
- Ensure strict compliance with Florida's Government in the Sunshine Law, Public Records Law and Code of Ethics for Public representatives
- Discourage repetitive arguments.

KEY POINTS TO FLORIDA'S GOVERNMENT IN THE SUNSHINE AND PUBLIC RECORDS LAWS AND HOW THEY RELATE TO VOLUNTEER ADVISORY BOARDS OR COMMITTEES:

Chapter 119, Florida Statutes: Public Records

Section 119.01 General state policy on public records:

(1) It is the policy of this state that all state, county, and municipal records are open for personal inspection and copying by any person. Providing access to public records is a duty of each agency.

Florida has a very broad definition of materials which constitute public records.

Section 119.011(12) F.S. defines "public records" to mean:

> All documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, data processing software, or other material, regardless of the physical form, characteristics, or means of transmission, made or received pursuant to law or ordinance or in connection with the transaction of official business by any agency.

The term is defined broadly to include governmental or quasi-governmental boards or departments. Therefore, documents and materials generated by advisory boards that provide advice or recommendations are public records, unless specifically exempted by Statute.

The key to determining whether a record is made or received in connection with official business is whether the record is used to or prepared with the intent to ***"perpetuate, communicate or formalize knowledge***."

Chapter 286, Florida Statutes: Open Government

Section 286.011 Public Meetings and records; public inspection; criminal and civil penalties.

(1) All meetings of any board or commission of any state agency or authority or of any agency or authority of any county, municipal corporation, or political subdivision, at which official acts are to be taken are declared to be public meetings open to the public at all times . . .

Section 119.011(2), F.S. defines the term "agency" to include:

> Any state, county, district, authority, or municipal officer, department, division, board, bureau, commission, or other separate unit of government created or established by law including, for the purposes of this chapter, the Commission on Ethics, the Public Service Commission, and the Office of Public Counsel, and

any other public or private agency, person, partnership, corporation or business entity acting on behalf of any public agency.

The scope of Florida's Government in the Sunshine Laws applies to governmental proceedings at the state and local level and to elected and appointed boards. **The law has been applied to any gathering of two or more members of the same advisory board or committee to discuss some matter which will foreseeably come before the advisory board or committee for action.**

There are three basic requirements of Section 286.011, Florida Statutes:

(1) Meetings of public boards or commissions must be open to the public;
(2) Reasonable notice of meetings must be given;
(3) Minutes of the meetings must be taken.

The Office of the Attorney General for the State of Florida publishes a guide entitled "Government-in-the-Sunshine Manual" to assist the public and governmental agencies in understanding the requirements of and exemptions from Florida's open government laws. The Manual can also be viewed on the website of the Attorney General for the State of Florida at MyFLSunshine.com.

Attached, as Exhibit A is an overview of applicable laws relating to Government in the Sunshine, Public Records, and Ethics prepared by Blalock Walters, P.A., Attorneys for the City of Bradenton.

EXHIBIT A

CITY OF BRADENTON
OVERVIEW OF APPLICABLE LAWS RELATING TO
GOVERNMENT IN THE SUNSHINE, PUBLIC RECORDS AND ETHICS
(February, 2022)

Prepared by:
Scott E. Rudacille
&
Mark P. Barnebey
BLALOCK WALTERS, P.A.
City Attorney for the City of Bradenton

This memo is designed to give an overview of some of the "Government in the Sunshine" laws, the laws relating to public records, and the laws relating to ethics that may be applicable to the City of Bradenton. This is a very broad overview and may not address all of the specific exemptions which could apply to a given situation.

GENERAL

The City of Bradenton is a municipality, originally chartered in 1903. Municipalities have Home Rule authority, pursuant to Article VIII, Section 2(b), of the Florida Constitution, and as such have the authority to exercise any power for municipal purposes unless otherwise prohibited by law. As a municipality, the City must comply with the Government in the Sunshine Law (Chapter 286, Florida Statutes), Public Records Act (Chapter 119, Florida Statutes) and the Ethics laws (Chapter 112, Florida Statutes).

GOVERNMENT IN THE SUNSHINE

Generally, the Sunshine Law (Section 286.011, Florida Statutes) require (1) that meetings of public boards be open to the public, (2) that the public is given reasonable notice of these meetings, and (3) that minutes are taken. These requirements apply not only to the public board, but to any advisory committees formed by the public board, unless the committee is purely a fact-finding committee.

In the City of Bradenton, the Sunshine Law would apply to the City Council, Code Enforcement Board, Planning Commission, Community Redevelopment Agency Board, Nuisance Abatement Board, Police Pension Board, etc. If any additional committees are

formed by the Council or any of these boards, the City Attorney should be consulted to determine if the Sunshine Law applies to that committee as well.

The Sunshine Law requirements do not generally apply to staff meetings for a number of very practical reasons relating to communication among members, unless there has been some delegation of decision-making authority to staff members or the staff member is acting as a liaison between board members.

1. Which meetings must be public?

A question frequently arises as to when a gathering of board members becomes a "meeting" subject to the Sunshine Law. The answer is that the *Sunshine Law apply to any gathering, whether formal or informal, involving two or more members of the same board, where a matter which will foreseeably come before the board for action is being discussed.* Sunshine Law issues will generally not arise in regard to communications between a board member and staff, or between members of different boards (for example, a City Councilmember and Planning Commissioner). However, when a staff member is having individual discussions with members of the same board, they must be careful not to act as a conduit and pass information or ideas from one board member to another.

There are also instances in which the Sunshine Law will apply even though two board members are not physically present. For example, a telephone conversation between two board members is subject to the Sunshine Law. If the subject of the conversation is a matter that may foreseeably come before the board, then a Sunshine violation may occur.

A written or e-mail report from one board member to the rest of the board, which merely informs them of an issue to be discussed at a upcoming meeting is not a Sunshine Law violation. However, if the report or e-mail solicits responses or comments from the other board members, then Sunshine Law issues may be created. Because of the potential of such a Memorandum to create Sunshine Law issues, we do not encourage board members sending Memorandums to other board members. (It should be noted that, as will be discussed further, such e-mail or report must be made available to the public under the Public Records Act regardless of whether or not it falls under the purview of the Sunshine Law.)

a. Email and Internet Activity

One evolving area of the Sunshine Law is internet activity by public officials. Social networking, blogging, message boards, tweeting, and other forms of web-based communications raise new questions regarding the potential applicability of the

Sunshine Law. Generally, it should be assumed that such communications would be considered to be subject to the Sunshine Law in the same manner as an e-mail.

As a general rule, we would not recommend that board members engage in any of type of communications which could be construed as a back-and-forth debate or discussion between board members regarding board matters. Remember, if a board member sends an e-mail or posts a blog about a board matter, and another board member provides an unsolicited response, it may be that both board members could be found to be in violation of the Sunshine Law, even though the first sender had no intention of starting a dialogue. The only way to avoid the potential for Sunshine issues is to avoid these types of communications regarding board matters altogether.

b. Delegation of Authority

When a single board member is authorized to take action on behalf of the board, any meetings with regard to that action must be made "in the Sunshine." This would apply to a board member who has been authorized to reject certain options from board consideration, such as meeting with a private contractor and rejecting certain contract provisions on behalf of the board. However, if the board member is only gathering information regarding contract proposals and bringing those back to the board for consideration, then the Sunshine Law would not apply.

2. Participation by phone or electronic means

Under Section 286.011, Florida Statutes, meetings of a public board must be held in a public place with a quorum of board members physically present. Thus, under AGO 2003-41, participation of a board member in a public meeting by telephone conference, video conference, or any other communications media technology should only be permitted in extraordinary circumstances. "Extraordinary circumstances" are determined by the board. It should also be noted that any board members participating by phone do not count towards the board's quorum requirements.

3. What kind of notice is required?

Under the Sunshine Law, the type of notice required varies depending on the circumstances, such as the gravity of the matter considered and the board involved. Chapters 163 and 166 Florida Statutes, provide certain notice requirements for certain types of actions. The only requirement under Section 286.011, Florida Statutes, is that the notice is "reasonable."

Generally, the notice should contain the time and place of the meeting and an agenda, if

available. The meeting notices are also required to contain specific information regarding handicapped access to the meeting, as well as a notice that anyone wishing to have a verbatim transcript of the meeting must hire their own court reporter.

4. What is required for the minutes?

Written minutes of a meeting must be made. There is no requirement for tape recording or a verbatim transcript. All that is required are brief notes or memoranda reflecting the events of the meeting.

5. Shade Meetings

One exception from the Sunshine Law requirements is for meetings between a public board and the board's attorney to discuss pending litigation or adverse administrative proceedings, commonly referred to as a "shade meeting". Shade meetings are limited in their scope to discussions regarding settlement negotiations or strategy related to litigation expenditures. There are many specific procedural issues that must be followed in order to conduct a shade meeting, including strict requirements regarding who may attend. The statute also requires that the shade meeting be recorded by a certified court reporter. So, it is important to remember that while the public may not be present for the shade meeting, the transcripts of the shade meeting(s) will become public record as soon as the litigation has concluded.

6. Consequences of Sunshine violations

a. Criminal penalties

A knowing violation of the Sunshine Law is a second degree misdemeanor, punishable by up to 60 days in jail and/or a $500 fine. If convicted, the official may be removed from office by executive order of the Governor.

b. Civil actions

Sunshine Law issues can result in costly lawsuits against the local government and the individual public officials alleged to have violated the law. The Sunshine Law provides for a plaintiff to recover their attorneys' fees and costs from the local government or individual defendants if they are able to prove a Sunshine Law violation has occurred. Further, if a public official is sued individually, and the official is found to have violated the law, the local government may be prohibited from reimbursing the official for the cost of defending against the claims.

c. Validity of action taken

Any action taken in violation of the Sunshine Law is generally void ab initio. Thus, any

resolutions passed during meetings which violate the Sunshine Law are generally of no effect and must be re-examined, re-discussed, and re-approved at an open meeting.

d. Cure

Violations of the Sunshine Law can often be cured by subsequent action of the board. Depending on the nature and status of the matter that was discussed, curative actions may include public disclosure of the violation, board discussion, public hearings and reconsideration of the matter discussed. If you believe you may have violated the Sunshine Law, please contact us so that we can determine how to resolve the issue.

PUBLIC RECORDS ACT

Generally, all materials made or received by an agency in connection with official business are public records and must be held open for public inspection, unless they are specifically exempted by statute or the Florida Constitution. Section 119.07, Florida Statutes.

1. What types of materials can be a public record?

Anything intended to perpetuate, communicate, or formalize knowledge is sufficient to be a public record. This includes computer records and e-mails, including e-mails received by a board member at home which deal with City business. This also includes working drafts or preliminary reports, but may exclude board members' or employees' personal notes to themselves.

2. Attorney-client records

Generally, the Public Records Act does not protect communications between a board member and the agency attorney, when those communications are reduced to writing (or e-mail). There are public record exemptions for certain records prepared in conjunction with litigation or adverse administrative proceedings, but unless otherwise instructed by the agency attorney, it should be assumed that any written communications are public record. See Section 119.071(1)(d).

3. Personnel records

Unless there is a statutory exemption, personnel records are generally public records. Examples of exempted items are social security numbers, certain complaints made against employees , some criminal history information, and drug test results in the context of a drug-testing program.

4. Exemptions in general

There are a number of miscellaneous exemptions from disclosure, so any sensitive information should be referred to our office before the documents are made public. Here are some examples of miscellaneous exemptions found in the Florida Statutes:

a. Bank account, debit, charge, and credit card numbers. Section 119.071(5)(b).
b. Records regarding the ownership of, or security interests in, public obligations. Section 279.11.
c. Certain work product of the agency attorney. Section 119.071(1)(d).
d. Social security numbers. Section 119.071(4)(a).
e. Building plans, blueprints, schematic drawings, and diagrams which depict the internal layout and structural elements of a building owned by the agency. Section 119.071(3)(b).

5. Retention of records

The Department of State has adopted a General Records Schedule for State and Local Government Agencies. The time for retention of a public record varies greatly depending on the nature of the record. For example, minutes of a regular meeting are required to be kept permanently, while video or tape recordings of the meeting must be kept for 2 years.

6. Copies of records

The public may obtain copies of any record, in the form in which it is maintained, upon payment of the fees prescribed by the City. The City's fees may not exceed those prescribed in Section 119.07, Florida Statutes.

The statute also provides for the public to be charged a special service charge in instances where the nature or volume of the request involves extensive clerical or supervisory assistance by City staff. This charge must be reasonable in light of the labor cost actually incurred by the City in providing the service. The court has held that (1) this special service charge is applicable regardless of whether or not copies are made, (2) the local government may include the cost of the employee's salary and benefits in calculating the charge, and (3) the local government may collect a reasonable deposit before beginning the research. Board of Count y Commissioners of Highlands County v. Colby, 976 So.2d 31 (Fla. 2d DCA 2008). In fact, the court noted that a "policy of collecting an advance deposit seems prudent given the legislature's determination that taxpayers should not shoulder the entire expense of responding to an extensive request for public records." Id.

7. Consequences of Violations

a. Criminal penalties

Violations of the Public Records laws are generally punishable as a first degree misdemeanor, carrying a maximum jail term of one year, and a maximum fine of $1,000. Public officers may also be suspended or removed from office.

b. Civil actions

Violations of the Public Records law can result in civil lawsuits against the local government. Under the statute, the local government may be required to pay the Plaintiffs attorneys' fees and costs if suit is filed to gain access to the records, and the court determines that the local government unlawfully withheld the records.

ETHICS FOR PUBLIC OFFICERS

As a general rule, we recommend that if a matter impacts you or a relative of any type in any material way and which would be unique to the impact on the general public, then you should discuss the matter with the City Attorney.

1. Doing business with one's agency

In general, public officers acting in their official capacity are prohibited from doing business with any entity in which the officer or the officer's spouse or child has a material interest. Section 112.313(3). Similarly, a public officer in his or her private capacity generally may not do business with that officer's agency. An officer may not maintain private employment or contractual relationships with a business entity which is subject to regulation by the officer's agency or is doing business with that agency. Section 112.313(7)(a). The officer also may not maintain employment or contractual relationships with a business entity which would create a recurring conflict.

2. Conflicting employment or contractual relationships

In general, an officer may not maintain private employment or contractual relationships with a business entity which is subject to regulation by the officer's agency or is doing business with that agency. Section 112.313(7)(a). Officers are also generally prohibited from maintaining employment or contractual relationships with a business entity which would create a recurring conflict.

3. Voting conflicts

A board member may not vote on any matter which the board member knows would result in private gain to the board member, any relative, employer or any business associate. Section 112.3143(3)(a). If such a conflict exists, the officer must generally abstain from voting and publicly disclose his or her interest in the matter, then file a written memorandum.

4. Acceptance of gifts

A public officer is prohibited from accepting anything of value based on an understanding that the gift would influence the officer's vote, official action, or judgment. Section 112.313(2). Even gifts which are not prohibited may require filing a disclosure. The City Council may adopt more restrictive requirements.

Again, these are very broad summaries of the current laws. If you have questions regarding this Memorandum or any specific instance, please contact us.

AGENDA ITEM NO. 7.a

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE:	February 16, 2024
SUBMITTED BY:	Jamie Schindewolf, Planning & Community Development
ITEM TYPE:	Miscellaneous
AGENDA SECTION:	NEW BUSINESS
SUBJECT:	Urban Forestry Master Plan
SUGGESTED ACTION:	Discuss updating the Urban Forestry Master Plan for the City of Bradenton

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:
Urban Forestry Master Plan.pdf
State of Florida - Urban Tree Canopy Assessment Report - 2023 (2).pdf

URBAN FORESTRY MASTER PLAN

City of Bradenton, FL

UPDATE

SEPTEMBER 2011





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ACKNOWLEDGEMENTS

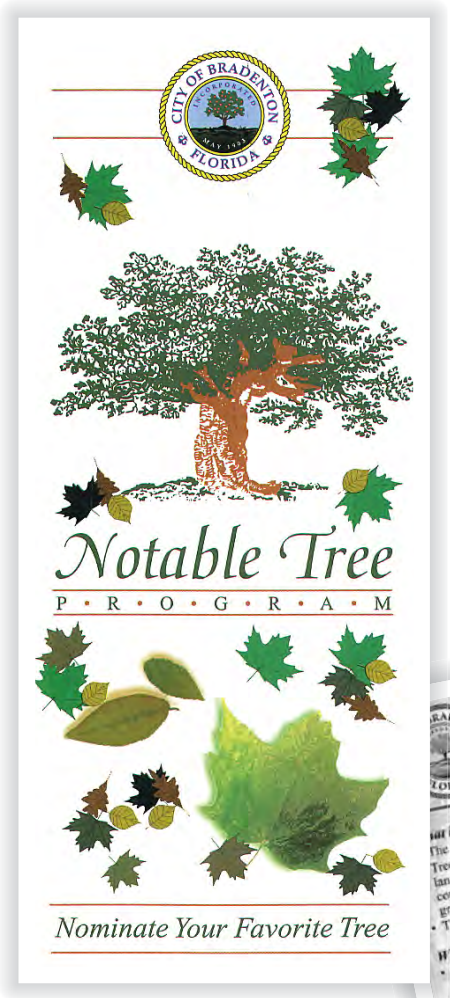
INTRODUCTION

Purpose and Scope

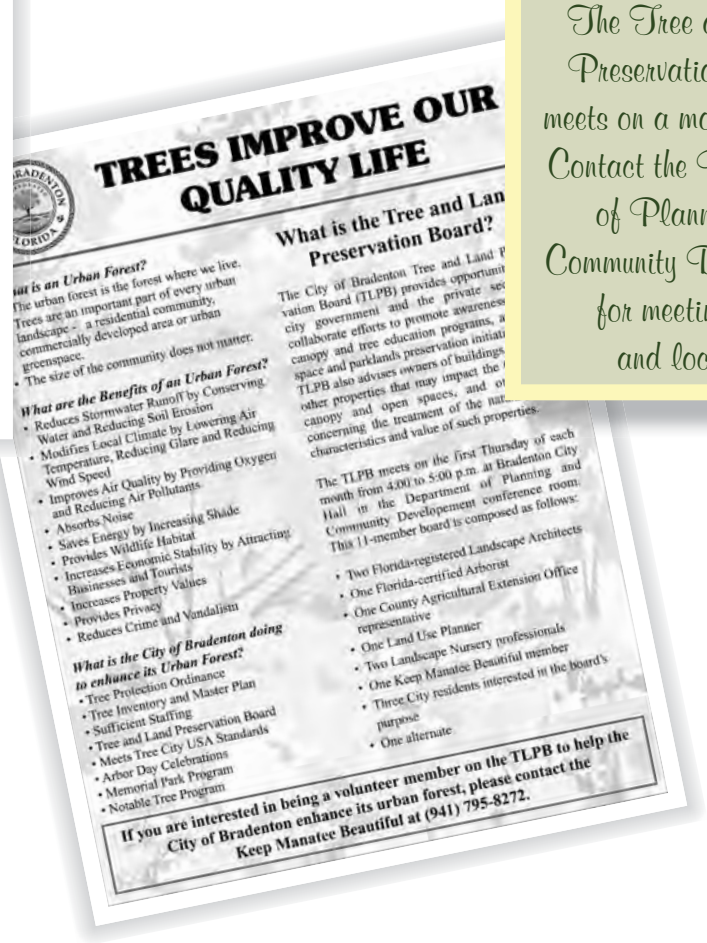
The purpose of this document is to serve as a blueprint for developing an incremental approach to the issues of urban forestry for the City of Bradenton. The major goals are as follows:

1. Provide an organizational framework for the City of Bradenton's urban forestry program.
2. Establish street tree-planting opportunities for urban and suburban commercial corridors.
3. Inventory and assess the City's existing tree canopy.
4. Identify opportunities to increase and improve tree canopy.
5. Establish standards for the implementation of canopy roadways.
6. Revise the preferred tree-planting palette.
7. Revise establishment and maintenance guidelines to include urban and suburban commercial corridors.
8. Develop corridor guidelines as correlated to the future land use map.
9. Revise the list of potential grant/funding opportunities that are available to implement improvements to the urban forest.
10. Involve and educate the community through public workshops.

Tree and Land Preservation Board



The Tree and Land Preservation Board (TLPB) was established in December 1992 and is composed of a broad cross section of citizenry concerned with fostering the growth of the urban forest. The purpose of the Tree and Land Preservation Board is to promote awareness of the City-wide tree canopy and tree education programs as well as open space and parklands preservation initiatives. The TLPB may also, when determined by the Department of Planning and Community Development (PCD), advise owners of buildings, land, and other properties that may impact the City's tree canopy and open spaces, and other lands concerning the treatment of the natural, visual characteristics and value of such properties. The TLPB works closely with City departments, various civic and private groups, individuals, and outside agencies and organizations.



TREES IMPROVE OUR QUALITY LIFE

What is the Tree and Land Preservation Board?

The City of Bradenton Tree and Land Preservation Board (TLPB) provides opportunities for city government and the private sector to collaborate efforts to promote awareness of the City-wide tree canopy and tree education programs, as well as open space and parklands preservation initiatives. The TLPB also advises owners of buildings, land, and other properties that may impact the City's tree canopy and open spaces, and other lands concerning the treatment of the natural, visual characteristics and value of such properties.

The TLPB meets on the first Thursday of each month from 4:00 to 5:00 p.m. at Bradenton City Hall in the Department of Planning and Community Development conference room. This 11-member board is composed as follows:

- Two Florida-registered Landscape Architects
- One Florida-certified Arborist
- One County Agricultural Extension Office representative
- One Land Use Planner
- Two Landscape Nursery professionals
- One Keep Manatee Beautiful member
- Three City residents interested in the board's purpose
- One alternate

What is an Urban Forest?

The urban forest is the forest where we live. Trees are an important part of every urban landscape – a residential community, commercially developed area or urban greenspace.

- The size of the community does not matter.

What are the Benefits of an Urban Forest?

- Reduces Stormwater Runoff by Conserving Water and Reducing Soil Erosion
- Modifies Local Climate by Lowering Air Temperature, Reducing Glare and Reducing Wind Speed
- Improves Air Quality by Providing Oxygen and Reducing Air Pollutants
- Absorbs Noise
- Saves Energy by Increasing Shade
- Provides Wildlife Habitat
- Increases Economic Stability by Attracting Businesses and Tourists
- Increases Property Values
- Provides Privacy
- Reduces Crime and Vandalism

What is the City of Bradenton doing to enhance its Urban Forest?

- Tree Protection Ordinance
- Tree Inventory and Master Plan
- Sufficient Staffing
- Tree and Land Preservation Board
- Meets Tree City USA Standards
- Arbor Day Celebrations
- Memorial Park Program
- Notable Tree Program

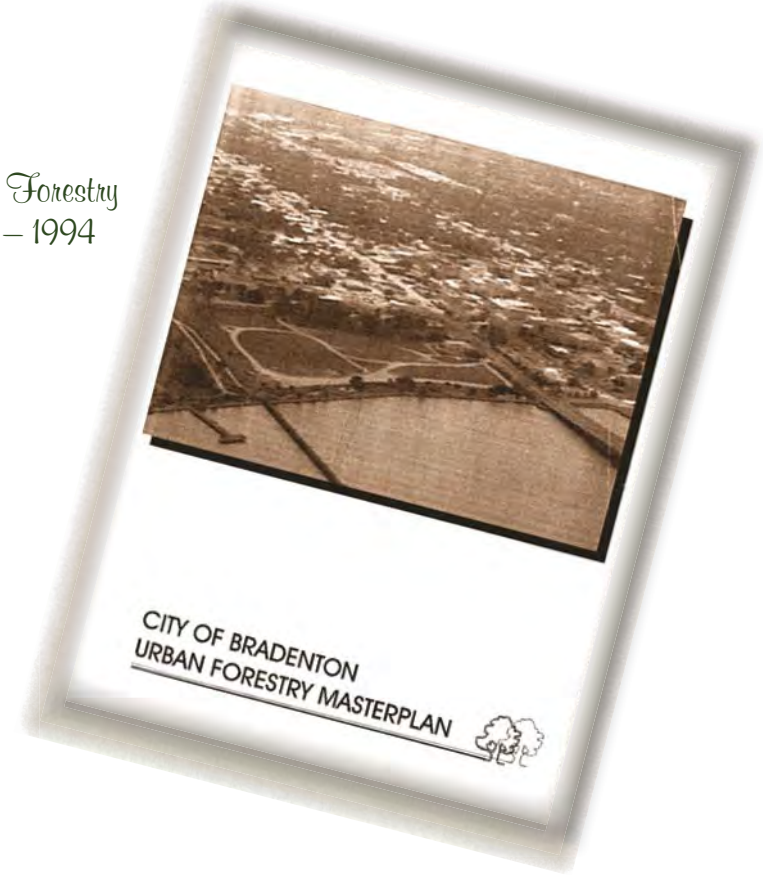
If you are interested in being a volunteer member on the TLPB to help the City of Bradenton enhance its urban forest, please contact the Keep Manatee Beautiful at (941) 795-8272.

The Tree and Land Preservation Board meets on a monthly basis. Contact the Department of Planning and Community Development for meeting times and location.

Original Urban Forestry Master Plan

- Developed in 1994.
- Provided organizational framework for the City's tree program.
- Established planting opportunities for major thoroughfares and the downtown area.
- Developed street tree-planting palette.
- Developed guidelines for establishment and maintenance of urban trees.
- Provided a reference for funding opportunities for street tree projects.
- Provided conceptual planting plans for two specific priority projects.
  - Palma Sola Causeway
  - State Road 64 at the Braden River

Original Urban Forestry Master Plan – 1994



Tree Benefits

TREE CITY USA

The City of Bradenton has been recognized as a Tree City USA since December of 1992, which means it is dedicated to the preservation and planting of trees. The City has received five growth awards from the National Arbor Day Foundation: in 1997, 2000, 2002, 2004, and 2008. The Tree City USA Growth Award is provided in cooperation with the National Association of State Foresters and the USDA Forest Service to recognize environmental improvement and encourage higher levels of tree care throughout America. The National Arbor Day Foundation designed the award not only to recognize achievement, but also to communicate new ideas and help communities plan for improvements to tree care.

It is the premise of this document that trees are an integral part of the urban infrastructure, as are the traditional public works components of streets, water, sewer and sanitation. The economic benefits of a tree, however, are often overlooked but well documented. Benefits of trees to the overall quality of life include:



Tree City USA Signage, Old Main Street

Water Quality

In addition to the visual impact of trees, tree canopies and root systems provide a natural filter to our water supply and reduce storm water runoff, flooding, and erosion.

Air Quality

Trees are natural air filters. Their foliage reduces particulate matter from the air, including dust, micro-sized metals, and pollutants such as ozone, nitrogen oxides, ammonia and sulfur dioxides. Trees take in carbon dioxide and produce oxygen. These processes can have a significant impact on reducing smog and overall air pollution.

Energy

Trees cool the air naturally. Homes shaded by trees need less energy for cooling, which in turn means lower monthly utility bills in the summer. Four trees planted around each home could save up to 30% on summer cooling costs.

Real Estate

Shaded neighborhoods have a positive economic influence on real estate values, timeliness of home sales, and neighborhood desirability.

Business

Trees are good for business. Research shows that consumers respond positively to shopping environments with healthy urban forests. In fact, shaded business districts yield an 11% increase in business.*

(Note: Information provided by the Florida Urban Forestry Council.)
**Center for Urban Horticulture, Fact Sheet #5, University of Washington*

Urban Forestry Progress

Manatee County Urban Forest Canopy Analyses

A canopy coverage goal is important to ensure that a healthy, sustainable forest can be maintained as the City continues to develop and expand. In the *Manatee County Urban Forest Canopy Analysis 2004 and 2009,* there was a small increase in total acreage and population within the City, but a much larger increase in canopy coverage: from 24% to 33%, or approximately 830 acres. This is important to understand so that the City can create or adjust tree codes and goals and objectives to properly manage the urban forest to attain canopy coverage goals. American Forests, the oldest national nonprofit conservation organization in the United States, which aims to protect, restore and enhance the natural capital of trees and forests, has established the following canopy coverage goals:

- Average tree cover counting all zones 40%
- Suburban residential zones 50%
- Urban residential zones 25%
- Central business districts 15%

These goals may not exactly reflect what is right for the City of Bradenton, but they are a great starting point for beginning to assess the urban forest and create or adjust the City's canopy goals.

Significant benefits of the current urban forest include:

- 1,030 tons of carbon sequestration per year
- 132,271 tons of carbon storage—a 35,744 ton increase since 2004 (more than any other incorporated area within the County)
- Air pollutant removal of 391,823 pounds per year
- Without the urban forest, it is estimated that the City of Bradenton would need 33.7 million cubic feet of additional stormwater storage. This is approximately equal to:
  - 1" of water over the entire City
  - 100 football fields over 6' deep
  - 100 acres nearly 8' deep
  - 1 square mile 1.25' deep
- Annual value of urban forest benefits based on 2009 canopy
  - Carbon Sequestration $51,500
  - Air Pollutant Removal $1,022,290
  - Stormwater Management $5,880,129
  - Total benefit $6,953,919



2nd Avenue East

CANOPY ROADS

A Canopy Road is a roadway with canopy trees that border each side of the road while providing a significant amount of canopy over or directly adjacent to the roadway. Preservation and maintenance of healthy trees that comprise Canopy Roads will help maintain their historic, aesthetic, cultural, and environmental value. In order to designate, preserve, promote, and protect Canopy Roads, the City and TLPB should consider:

- Developing appropriate definitions for a Canopy Road Protection Zone.
  - A designated section of right-of-way and up to 15 feet of the adjacent private property.
- Developing appropriate definitions of a Clear Zone.
  - The canopy above a roadway must be maintained to a 16-foot clearance over drivable surface from curb to curb for vehicular use. It shall also mean the canopy above pedestrian zones trimmed to 10 feet above ground surface and 2 feet laterally from edge of sidewalk.



18th Street Northeast

Clear Zones listed above are suggestions and will be further defined as the Canopy Road program is further developed. Clear Zones shall be required to meet current Florida Department of Transportation (FDOT) and all other local requirements at the time projects are implemented.

- Developing preferred Canopy Road characteristics such as:
  - A Canopy Road shall have a minimum length of one-eighth mile (660 feet) with a minimum of 50% overhead coverage (excluding invasive species) per section of roadway as measured by branching, drip Line, shading, and other visual cues; or
  - A Canopy Road shall have a minimum length of one-quarter mile (1,320 feet) with overhead coverage contributing to a point-based evaluation based on tree canopy coverage as a percentage of overall roadway length, canopy condition, and composition; and
  - A Canopy Road shall consist of a minimum of 75% native plant species and naturalized plant species; and
  - A Canopy Road may be composed of more than one segment of differently named roads providing they are contiguous and the combined length meets the minimum requirement.
  - Canopy Roads shall have appropriate signage to delineate the limits of the Canopy Road.

- Developing special pruning requirements so not to compromise the integrity of the canopy to shade the road. For example:
  - Requirements for franchised utilities to notify the City prior to any utility line clearing on Canopy Roads, and that such proposed maintenance be performed under the direct supervision of an ISA Certified Arborist, urban forester, or registered consulting arborist (RCA).
- Developing permit requirements for protection of Canopy Roads for projects with proposed impacts to Canopy Roads.

The City Council should be authorized to designate roads as Canopy Roads and set standards for their implementation through the adoption of an appropriate ordinance. Requests for Canopy Roads could be made by residents, City staff, the TLPB, or other members of the community. Once the above standards are further established, the following process for designating Canopy Roads should be further developed and implemented:



48th Street Court East

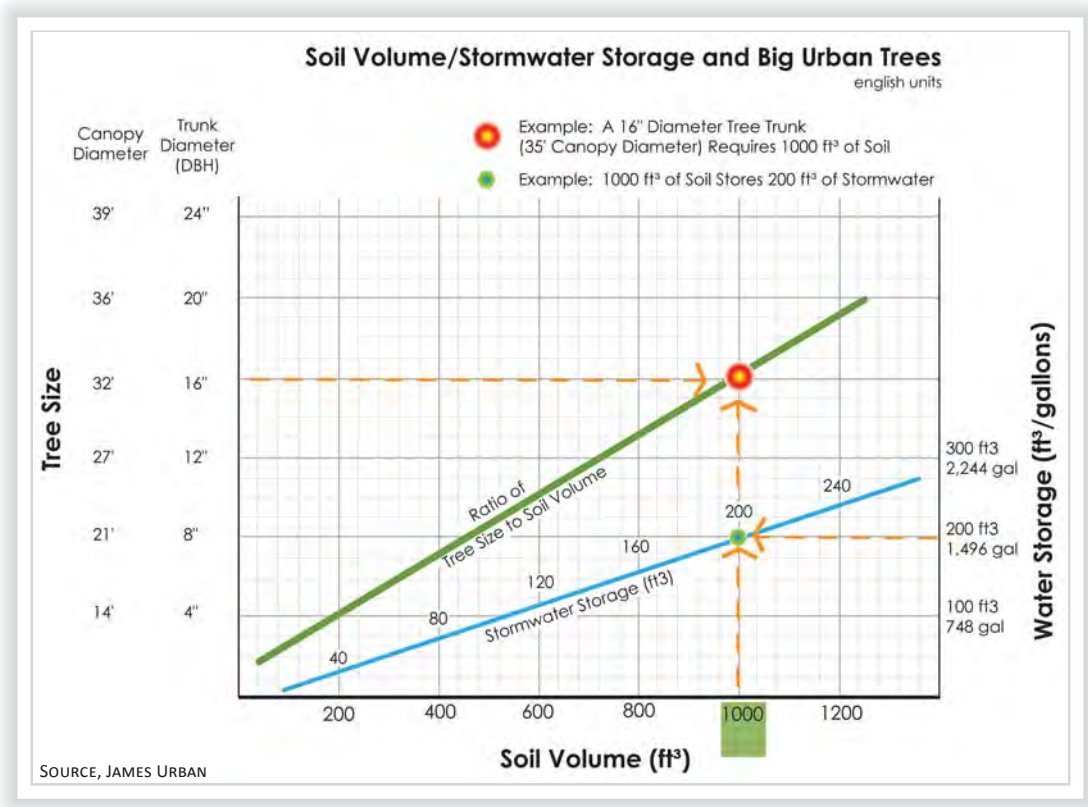
- A written public meeting notice should be provided to property owners residing on a potential Canopy Road and the appropriate neighborhood associations.
- The public meeting notice should detail the Canopy Road standards that would become applicable if the road is designated a Canopy Road.
- A public meeting notice should be posted on the potential Canopy Road a minimum of 15 days prior to the public meeting.
- Requests should be coordinated and brought to the Council by PCD for approval.

Potential Canopy Roads

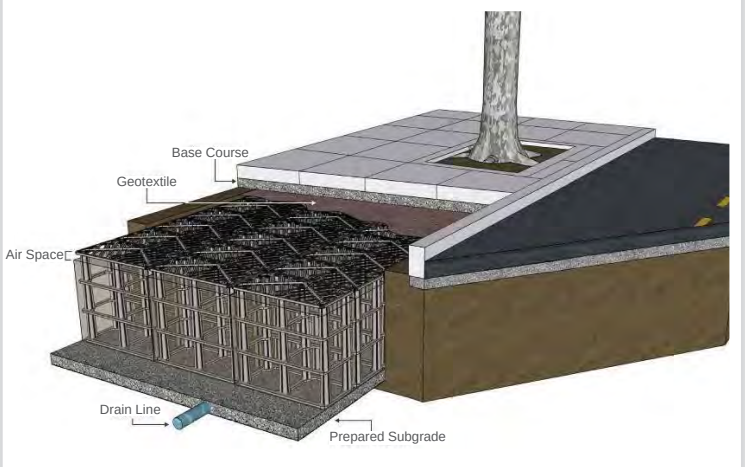
- 12th Street West from Manatee Avenue to Barccarrota Boulevard
- Manatee Avenue East from 1st Street to 15th Street East
- 2nd Avenue East from 15th Street East to 24th Street East
- 48th Street Court East from Manatee Avenue to 8th Avenue East
- 18th Street Northeast from 1st Avenue East to 4th Avenue East

SOIL VOLUME

Soil volume is extremely important to the long-term health of trees. The proposed concepts show many of the trees in very small confined spaces. Trees typically do not thrive in this situation but often live several years before they begin to decline due to inadequate soil volume. It is recommended that a minimum of 1,000 cubic feet of non compacted soil be provided for each tree.



Source, James Urban



This graphic shows how Silva Cells (a product by DeepRoot) may be used to provide non-compacted, subsurface soil volumes to provide a healthier growing environment for trees in the urban forest.

COMMERCIAL CORRIDORS

In Bradenton, like many finer-scaled cities, the smaller urban blocks and streets in the urban core create a basic grid of potential corridor parks that can enhance the living environment of both residents and visitors. These corridors and associated plazas can be valuable frameworks to enhance the urban forest with creative plantings, hardscaping, street furniture, and lighting.

When these key components are successfully combined with creative and efficient infrastructure, community identity is strengthened at a pedestrian scale that enhances safety and promotes connectivity. Over time, a system of successful streetscapes can attract quality development and retail tenants, thus increasing property values and economic vitality.

Priority Projects

- Cortez Road West from 51st Street West to 43rd Street West
- 6th Avenue East from 1st Street to 15th Street East
- 6th Avenue West from 15th Street West to 1st Street
- 8th Avenue West from 14th Street to 9th Street West
- 9th Avenue East from 1st Street to 27th Street East
- 9th Avenue West from 9th Street West to 1st Street
- 13th Avenue East from 15th Street East to 27th Street East
- 13th Avenue West from 1st Street to 14th Street West
- 1st Street from Manatee Avenue East to 13th Avenue East
- 9th Street West from 8th Avenue West to 17th Avenue West
- 14th Street West from Manatee Avenue to 26th Avenue West
- 27th Street East from Manatee Avenue to Golf View Avenue







Concept plans are a key component for public involvement and gaining overall consensus. Three specific areas have been selected by the City for the following preliminary concepts. These concepts are correlated to the Bradenton Form-Based Code and the Future Land Use Map as applicable. Once additional opportunities are identified, the concept plans for urban and suburban commercial corridors can be modified and applied throughout the City to fit within the local context.* The following concepts will assist in communicating the City's vision for the urban forest and neighborhood beautification.

***Note:** The following prototypical landscape graphics are shown on three specific roadways and are meant to serve as a general guideline, which reflects the City of Bradenton's vision for the urban forest. As plans for each project are further developed, all current FDOT and other local standards must be adhered to. Specific tree locations will be subject to existing utilities.*

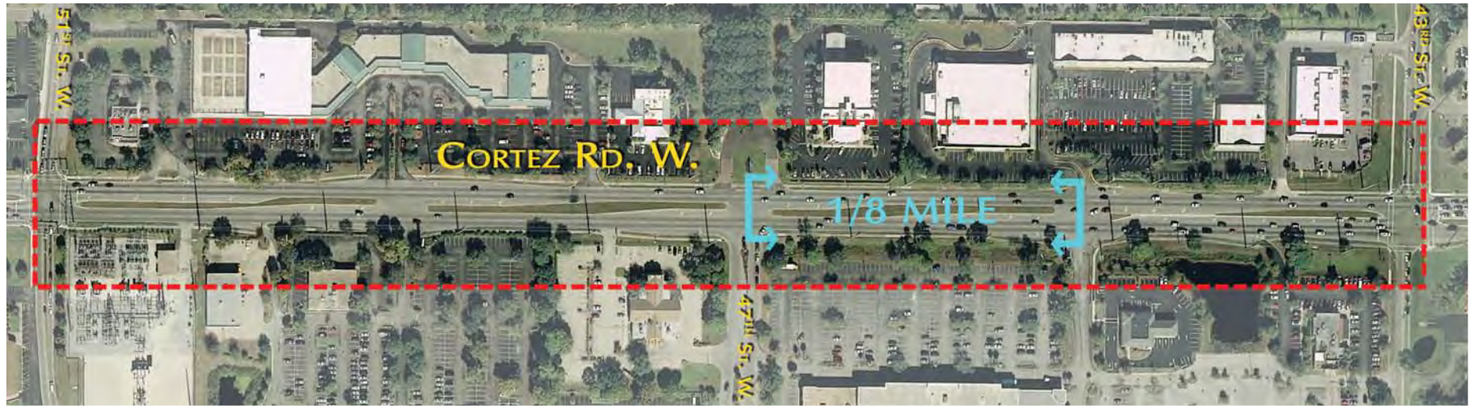
Suburban Commercial Corridors

Cortez Road West

This concept represents a section of Cortez Road from 51st Street West to 43rd Street West. The right-of-way (ROW) along this corridor currently runs immediately adjacent to the back of sidewalk, leaving little opportunity to plant trees within the ROW. It does provide an opportunity to develop public/private partnerships to implement street tree plantings on private property.

The majority of this section of roadway has turn lanes directly adjacent to the medians. Per FDOT Index No. 546, for design speeds of less than 50 MPH, no trees shall be permitted within 100' of the median nose (measured to edge of pavement). For 50 MPH and greater, no trees shall be permitted within 200' of the median nose.

- Thoroughfare Type: Road
- Right-of-way Width: Varies
- Pavement Width: Varies
- Transect Zone: NA
- Tree Spacing: 30' On Center (OC) Recommended
- Planter Type: Planting strips in medians and outside of right-of-way



Recommended Trees

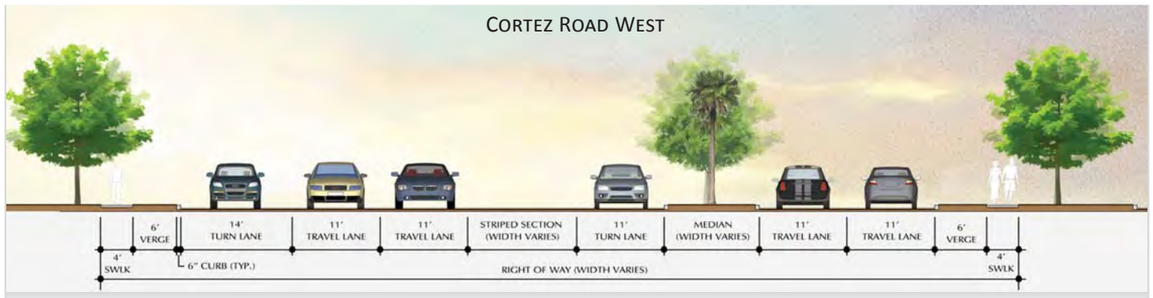
- **Canopy Trees**
  - American Sweetgum
  - Florida Elm
  - Gumbo Limbo
  - Red Maple
  - Southern Live Oak
- **Palm Trees**
  - Buccaneer Palm
  - Cabbage Palm
  - Paurotis Palm
- **Understory Trees** *(implemented wherever conflicts prohibit the use of a canopy tree):*
  - Buttonwood
  - Dahoon Holly
  - Orange Geiger Tree



PLAN VIEW



PERSPECTIVE VIEW



SECTION VIEW

Urban Commercial Corridors

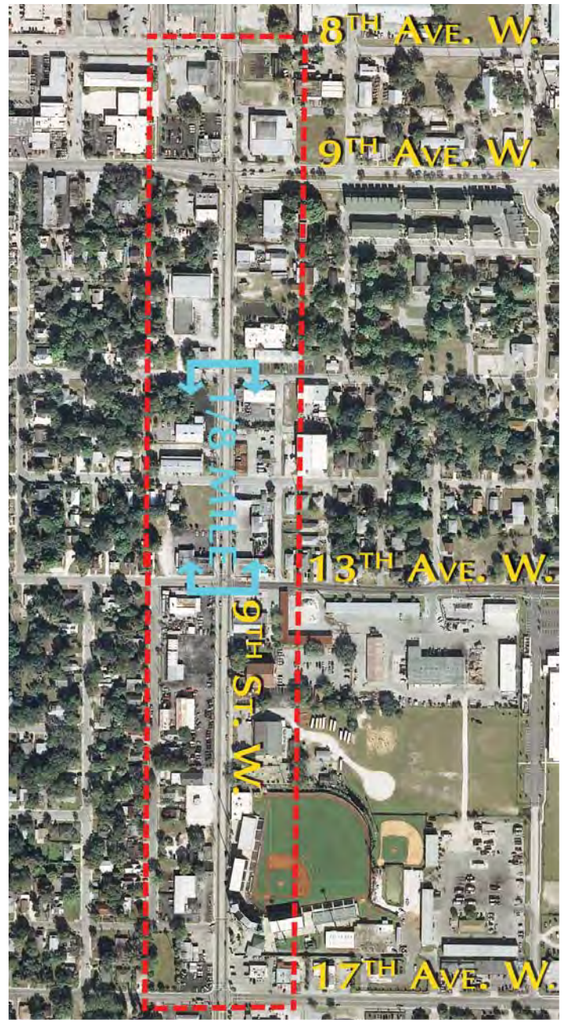
9th Street West

This concept represents a section of 9th Street West from 8th Avenue West to 17th Avenue West. The proposed concept represents what it might look like with the Form-Based Code implemented through redevelopment.

- Thoroughfare Type: Street
- Right-of-way Width: 58'
- Pavement Width: 42'
- Transect Zone: T4-O
- Tree Spacing: 15' OC Recommended
- Planter type: Planting strips at verge and 40' median planting area at mid block



PLAN VIEW, T4-O CORRIDOR AFTER REDEVELOPMENT



Recommended Trees

- **Canopy Trees**
  - American Sweetgum
  - Florida Elm
  - Red Maple
  - Southern Live Oak
  - Southern Magnolia
- **Palm Trees**
  - Buccaneer Palm
  - Cabbage Palm
  - Florida Thatch Palm
  - Royal Palm
  - Silver Palm
- **Understory Trees** *(implemented wherever conflicts prohibit the use of a canopy tree):*
  - Buttonwood
  - Dahoon Holly
  - Orange Geiger Tree



PERSPECTIVE VIEW

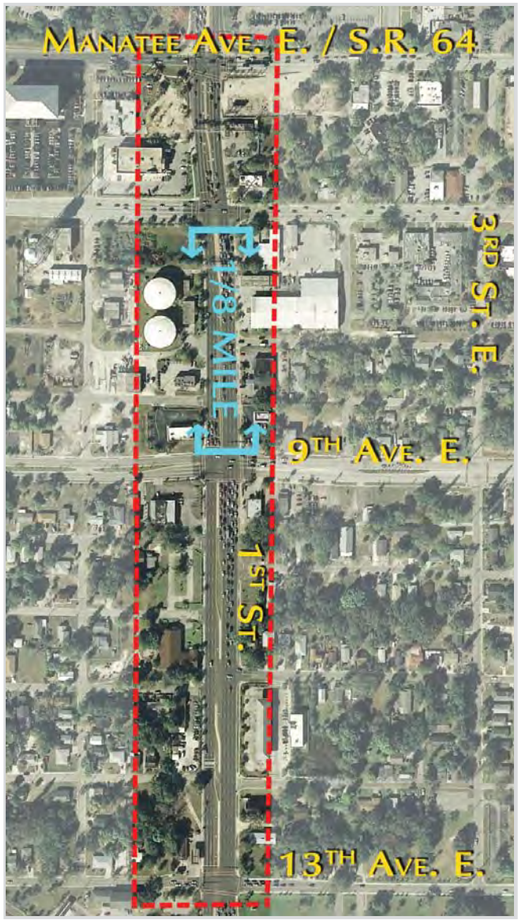


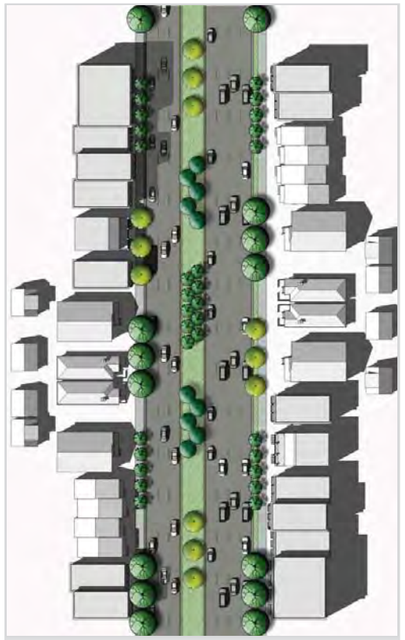
SECTION VIEW, TYPICAL ST-58-42

1st Street

This concept represents a section of 1st Street from Manatee Avenue East to 13th Avenue East. The proposed concept represents what it might look like with the Form-Based Code implemented through redevelopment.

- Thoroughfare Type: Street
- Right-of-way Width: 120'
- Pavement Width: 77'
- Sidewalk Width: 8'/12'
- Transect Zone: T5
- Tree Spacing: 30' OC, Average
- Planter type: Tree wells or planting strip with opportunity for subsurface soil volume





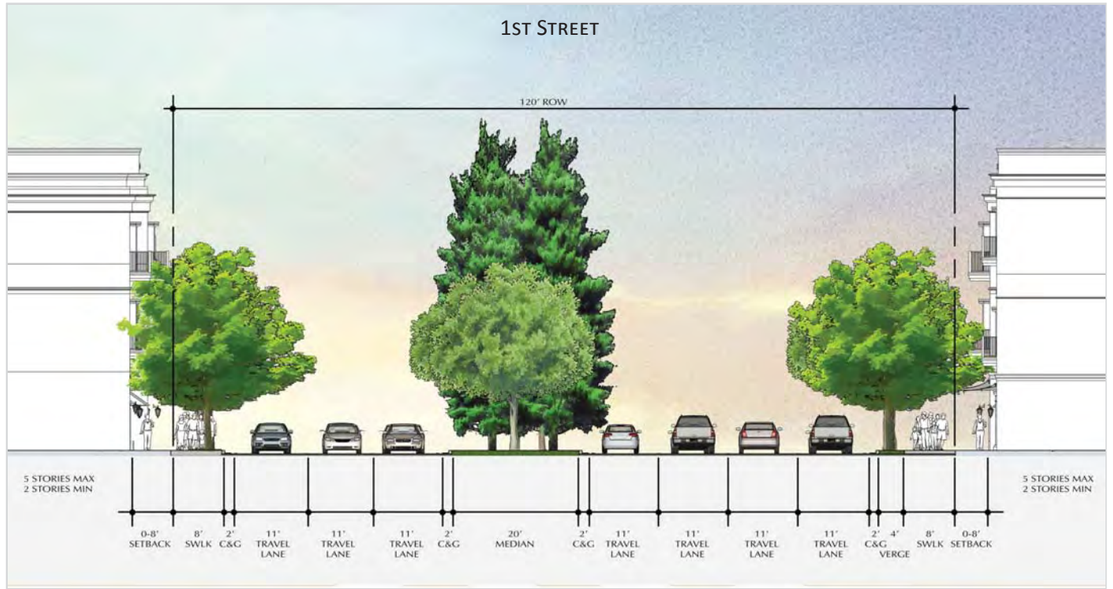
PLAN VIEW, T5 CORRIDOR AFTER REDEVELOPMENT

Recommended Trees

- **Canopy Trees**
  - American Sweetgum
  - Bald Cypress
  - Florida Elm
  - Longleaf Pine
  - Red Maple
  - Slash Pine
  - Southern Live Oak
  - Southern Magnolia
  - Winged Elm
- **Palm Trees**
  - Buccaneer Palm
  - Cabbage Palm
  - Paurotis Palm
  - Royal Palm
- **Understory Trees** *(implemented wherever conflicts prohibit the use of a canopy tree):*
  - Buttonwood
  - Dahoon Holly
  - Fringe Tree
  - Orange Geiger Tree



PERSPECTIVE VIEW



SECTION VIEW, TYPICAL HW-120-77

STREET TREE PALETTE

The Street Tree Palette is directly referenced from the Tree Lists in the City of Bradenton Form-Based Code. The Street Tree Palette may be updated periodically. Please contact the City of Bradenton, Department of Planning and Community Development to obtain the current Street Tree Palette. For additional Tree information resources, see *References and Additional Resources* on page 21.

RECOMMENDED TREE SPECIES

TREES

Acacia farnesiana	Sweet Acacia
Acacia pinetorum	Pineland Acacia
Acer rubrum	Red Maple
Bursera simaruba	Gumbo Limbo
Capparis cynophallophora	Jamaica Caper
Carya alba	Mockernut Hickory
Carya aquatica	Water Hickory
Celtis laevigata	Sugarberry
Cercis canadensis	Eastern Redbud
Chamaecyparis thyoides	Southern White Cedar
Chionanthus virginicus	Fringe Tree
Chrysophyllum oliviforme	Satin Leaf
Citharexylum fruticosum	Fiddlewood
Clusia rosea	Pitch Apple
Coccoloba uvifera	Sea Grape
Conocarpus erectus	Buttonwood
Cordia sebestena	Orange Geiger Tree
Diospyros virginiana	American Persimmon
Ilex x attenuata 'East Palatka'	East Palatka Holly
Ilex cassine	Dahoon Holly
Ilex vomitoria 'Pendula'	Weeping Yaupon Holly
Ilex vomitoria 'Will Fleming'	Will Fleming Yaupon Holly
Juniperus silicicola	Southern Red Cedar
Krugiodendron ferreum	Black Ironwood
Liquidambar styraciflua	American Sweetgum
Lysiloma latisiliqua	Wild Tamarind
Magnolia grandiflora	Southern Magnolia
Magnolia virginiana	Sweetbay Magnolia
Malus angustifolia	Southern Crabapple
Morus rubra	Red Mulberry
Ocotea coriacea	Lancewood
Persea borbonia	Redbay
Pinus Elliottii	Slash Pine
Pinus Elliottii var. densa	South Florida Slash Pine
Pinus palustris	Longleaf Pine
Pinus taeda	Loblolly Pine
Piscidia piscipula	Jamaican Dogwood
Prunus serotina	Wild Black Cherry
Prunus umbellata	Flatwoods Plum
Quercus geminata	Sand Live Oak
Quercus laurifolia	Laurel Oak
Quercus myrtifolia	Myrtle Oak
Quercus virginiana	Southern Live Oak
Quercus virginiana 'Highrise'	Highrise Southern Live Oak
Sideroxylon foetidissimum	Wild Mastic
Simarouba glauca	Paradise Tree
Swietenia mahagoni	Mahogany
Taxodium ascendens	Pond Cypress
Taxodium distichum	Bald Cypress
Ulmus alata	Winged Elm
Ulmus americana var. floridana	Florida Elm
Ximenia americana	Hog Plum
Zanthoxylum fagara	Wild Lime

PALMS

Acoelorraphe wrightii	Paurotis Palm
Coccothrinax argentata	Silver Palm
Pseudophoenix sargentii	Buccaneer Palm
Rhapidophyllum hystrix	Needle Palm
Roystonea elata	Royal Palm
Sabal palmetto	Cabbage Palm
Thrinax morisii	Keys Thatch Palm
Thrinax radiata	Florida Thatch Palm

MAINTENANCE GUIDELINES

Recommended Tree Policies and Maintenance Guidelines

An urban forestry maintenance program is invaluable to the health and safety of the urban forest. An overview of key policies and guidelines is provided below, however detailed information and procedures for each section should be further developed in an urban forestry maintenance program.

Selection

It is important to select the best quality tree, a Florida Fancy or Florida #1, per Florida Nurserymen's Grades and Standards. These standards apply equally to both field grown and container grown trees.

It is also very important to ensure trees selected do not have girdling roots. Girdling roots are often hidden and can eventually wrap around the trunk of the tree, essentially strangling it years down the road. This situation can occur in both field grown and container grown trees therefore trees should be selected from a grower that has demonstrated the capacity to establish good, healthy root systems, whether through balled and burlapped (B&B) field grown trees or properly managed container grown trees.

Field grown trees should be hardened off in the nursery for a minimum of 3-4 weeks. Hardened off means the trees have been held in the nursery after digging under optimum irrigation until new roots have begun to regenerate.

Roots Plus Growers (RPG) guarantees the best quality hardened off field grown tree available. All RPG trees are held until new roots develop and are ready to start growing into the landscape. Whether RPG/field grown trees or containerized trees are selected, careful attention to root management practices is recommended.

To ensure you are receiving the best quality trees as recommended above, your landscape architect should tag them at the nursery and further inspect them upon delivery to the project site.

Tree Transplanting

Project-specific tree mitigation notes should be provided for every project containing existing trees. These plans and specifications should be prepared by a registered landscape architect, ISA Certified Arborist, or Registered Consulting Arborist. In addition, transplanting should be performed by an ISA Certified Arborist or Registered Consulting Arborist with a minimum of five years experience transplanting and establishing trees of similar size and species.

MAINTENANCE GUIDELINES

Planting

One of the biggest mistakes that kill trees is planting them too deep. Many times, when you receive trees from the nursery they are already too deep, so an inch or two deeper on site often leads to a tree that is actually planted several inches too deep. In this condition, trees could survive several years and continually decline. Trees should be planted 1-2 inches higher on the project site than it was at the nursery. Other key things to look for are the trunk taper and the first lateral root. If the trunk taper is visible and the first lateral root is at or just below the surface, then the tree is at the proper depth. The project landscape architect should observe planting operations and inspect planting depths during and at the completion of every project.

Watering

Trees should be irrigated with automatic irrigation wherever possible. If irrigation is not available, watering bags such as Treegator, or a watering truck should be used throughout the establishment period. Below is a recommended watering schedule for establishment:

Week 1 – 8	5 times/week	25 gal/day
Week 9 – 12	3 times/week	25 gal/day
Month 4 – Year 3	1 time/week	25 gal*

*Watering amounts should also be implemented during drought periods and may vary due to the severity of the drought.

Weed Control

A regular maintenance program should be implemented for weed control and should, at a minimum, include:

- Pre-emergent herbicides applied in spring and fall
- Monthly (or as needed) weeding with approved herbicide such as Roundup
- Removal of all weeds by hand on a monthly basis

Mulch

At a minimum, the following mulching guidelines should be applied:

- A three-inch layer of mulch should be maintained and replenished as needed for the first three years.
- Mulch shall be kept one foot away from the bases of all trees and palms.
- Mulch should be melaleuca, eucalyptus, or other sustainably harvested hardwood mulch.
- Supplemental mulch shall be of the same type and quality originally applied to the project.

Pest Control

Trees should be inspected regularly for pests and disease and treated appropriately. The Manatee County Extension Office could be a valuable resource for such a program.

Fertilization

Trees should be fertilized regularly (minimum of three times in first year), or as needed to maintain a healthy, growing condition free of symptoms of nutritional deficiency or undesirable appearance. Fertilizer content and frequency will depend on soil conditions and tree species. Refer to the Extension Office bulletin *Fertilization Recommendations for Trees and Shrubs in Home and Commercial Landscapes.*

Pruning

Improper pruning techniques have a dramatic and adverse effect on trees. Each tree species will have a different level of pruning intensity, especially during establishment. This section is intended to provide general guidance in the area of proper pruning techniques. It is recommended that strong consideration be given to the following:

- Pruning cuts shall be in accordance with **ANSI A300 pruning standards**.
- Remove dead and damaged branches/fronds.
- Young trees should be pruned to develop strong branching patterns.
- Thin interior of canopy to promote air circulation.
- Provide clearance above sidewalks and roadways to avoid pedestrian and vehicular conflicts.
- Prune throughout the year (as needed) to keep trees within desired limits.
- Reduce potential hazardous conditions.
- Do not 'lollipop' or 'lions tail'. These practices deform trees and reduce canopy that is vital to the health of the trees.
- Crape myrtles should be minimally pruned (if necessary). Seed heads can be removed to pencil sized wood to encourage stronger blooming, but should not be topped.
- Do not remove more than 20% of live foliage at any one time.
- Never cut the central leader.
- Prune palms yearly, or as needed.
  - Do not remove fronds growing horizontally or pointed upward, prune only from the 3-9 o'clock position.
  - Cut fronds as close to the trunk as possible.
  - Remove all inflorescences.

FUNDING SOURCES

Implementation

State and Federal Funding

- Florida Department of Transportation – Highway Beautification Grant
- Department of Agriculture – "America the Beautiful"
- Florida Forest Service – Small Business Administration
- Florida Department of Transportation – Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)
- Department of Community Affairs – Community Development Block Grant

Local Government Funding

- Capital Improvement Program
- Local improvement districts
- Municipal funding
- City of Bradenton Woodbury Tree Fund
- Manatee County Tree Fund

Private Funding

- Community service groups and organizations
- Trusts and foundations
- Corporate and private donations
- Florida Urban Forestry Council

Maintenance

State Funding

- Florida Department of Transportation – Highway Maintenance Agreements

Local Government

Manatee County Operating Budget

- County employees and equipment
- Private sector – landscape maintenance companies

Municipality Operating Budget

- City employees and equipment
- Private sector – landscape maintenance companies

Sheriff's Department Workforce

Private

Community Service Groups and Organizations

- Keep Manatee Beautiful
- Garden clubs, etc.

Local Businesses

- Adopt-A-Spot Program

REFERENCES AND ADDITIONAL RESOURCES

- American Forests, *www.americanforests.org*
- An Illustrated Guide to Pruning, Second Edition, Edward F. Gilman
- Best Management Practices: Tree and Shrub Fertilization, Companion publication to the ANSI A300 Standard for Tree, Shrub, and Other Woody Plant Fertilization
- Best Management Practices: Tree Pruning, Companion publication to the ANSI A300 Part 1: Tree, Shrub, and Other Woody Plant Maintenance—Standard Practices, Pruning
- City of Bradenton Form-Based Code
- City of Bradenton Urban Forestry Master Plan, 1994
- Florida Department of Transportation (FDOT), Maintenance Rating Program, *www.dot.state.fl.us*
- FDOT Design Standards, Index No. 546 and Index No. 700, *www.dot.state.fl.us*
- Florida Urban Forestry Council, *www.fufc.org*
- Grades and Standards for Nursery Plants, Florida Department of Agriculture and Consumer Services
- Manatee County Extension Office, University of Florida IFAS Extension, *http://manatee.ifas.ufl.edu*
- Manatee County Urban Forest Canopy Analysis 2004 and 2009
- Manatee County Urban Forestry Master Plan, 2005
- Plant the Right Tree in the Right Place Guidelines, Florida Power and Light (FPL), *www.fpl.com*
- Roots Plus Growers, *www.rootsplusgrowers.org*
- Up By Roots: Healthy Soils and Trees in the Built Environment, James Urban



ACKNOWLEDGEMENTS

BRADENTON CITY COUNCIL

Mayor – Wayne Poston
Ward I – Councilman Gene Gallo
Ward II – Councilwoman Marianne Barnebey
Ward III – Vice Mayor and Councilman Patrick Roff
Ward IV – Councilman Bemis Smith
Ward V – Councilman Harold Byrd, Jr.

DEPARTMENT OF PLANNING & COMMUNITY DEVELOPMENT

Timothy Polk, Director
Ruth Seewer, Development Review Manager
Karen Aihara, Executive Planning Administrator

TREE AND LAND PRESERVATION BOARD

Robert Egolf
James Farr
Patrick Gallagher
Thomas Heitzman
Peter Keenan
Ingrid McClellan
Linda Perez
Caryl Ponder
Deborah Coupland-Porter
Mary Runnells
Frank Solinko
William Swan III

The Urban Forestry Master Plan Update was made possible through the City of Bradenton Woodbury Tree Fund.

ADOPTION BY CITY COUNCIL
September 28, 2011
Resolution 11-56

TREE CITY USA®

U.S. GREEN BUILDING COUNCIL
FLORIDA GULF COAST CHAPTER
MYAKKA RIVER BRANCH

bradenton

Kimley-Horn and Associates, Inc.

MANATEE COUNTY TREE PROGRAM
January 1, 2012 through January 31, 2013

Goals and Objectives:
Assist communities in their urban forestry programs by strengthening:

1) active involvement by community tree boards or citizen tree advisory groups, and
2) development of urban tree management plans based on current inventory data.

New leadership within the local governments in Manatee County recognizes the failures of the past and opportunities for the future with regard to tree preservation. The local governments have their tree protection ordinances and tree boards in place, but need coordination in enforcing/updating the ordinances, planning the Arbor Day events, implementing their urban forestry master plan, and providing public information and education. Keep Manatee Beautiful will work each of these government's tree boards in the development of their urban tree management plans. We will also work with the other two local governments in becoming a Tree City USA – City of Bradenton Beach and Town of Longboat Key.

Bradenton is undertaking a new Tree Canopy Program that is public/private partnering with neighborhoods and businesses. This program involves public purchases and planting of trees that neighborhoods and businesses agree to maintain in perpetuity. Keep Manatee Beautiful would like to build upon this countywide based on current inventory data, which includes promoting the "greening" of existing building frontages in its hardscaped business core. Also, Manatee County has had many of its canopy trees improperly pruned. Information and education to government staff in Public Works and Parks/Recreation Departments, schools, homeowners, and tree care professionals are essential to the best management practices for Manatee County's urban forest.

These components would be combined for our local governments into the overall Manatee County Tree Program and accomplish the following significant priorities:

1) Create a tree management and equipment purchase plan that allows local governments to realistically maintain the stock of publicly owned trees to ensure survival and nurturing ***by creating for each government an Operations Manual that includes the Manatee County Tree Canopy Analysis***;

2) Empower existing tree boards to make them more effective and to establish a working grant-writing team ***by creating for each tree board a Guidelines Notebook with purchase of basic publications***; and

3) Execution and oversight of public information and education of best management practices for trees ***through Arbor Day programs that host Seminars for homeowner associations/condominium associations/ property managers, host Workshops/Training Sessions for those who provide tree maintenance services, create public service announcements at METV and EDV-TV to air on multiple channels, create brochures and post on government web pages, while using existing publications.***

This program is made possible by Keep Manatee Beautiful and an Urban and Community Forestry Grant from the US Forest Service through the Florida Forest Service.

If eligible, the City of Bradenton or Manatee County Tree Fund will pay for your street tree(s) to be planted along the corridor on your property. Watering during the required three-month irrigation establishment is available upon your request. After that, the property owner assumes responsibility for all necessary maintenance. Trees will be planted three times a year: January for Florida Arbor Day, April for National Arbor Day and September for Keep America Beautiful's National Planting Day.



Manatee Avenue East at 5th Street East

For additional information, contact Keep Manatee Beautiful.
To order free street trees for your private property on Manatee Avenue West, please complete the application within this brochure and mail to:

Keep Manatee Beautiful
P.O. Box 14426
Bradenton, Florida 34280
941.795.8272
FAX 941.795-3490
keep@manateebeautiful.com
www.manateebeautiful.com

Brochure production paid for by an Urban and Community Forestry grant from the US Forest Service through the Florida Department of Agriculture and Consumer Services, Florida Forest Service.

KEEP MANATEE Beautiful
P.O. Box 14426
Bradenton, FL 34280

UF UNIVERSITY of FLORIDA IFAS Extension

bradenton The Friendly City

TREE CITY USA

City of Bradenton
Tree & Land Preservation Board

Manatee County Government
Environmental Lands Management/Acquisition & Tree Board

Corridor Tree Canopy Program



Enhancing Manatee County's community environments by returning tree canopy to its major corridors within the City of Bradenton and unincorporated Manatee County.

Many of Manatee County's major corridors once looked like these photographs of Manatee Avenue with large oaks and other canopy trees overarching our road, providing a shady and attractive drive into the County and to the beaches. But owing to road construction, neglect and development much of the canopy has disappeared.



Manatee Avenue West at 27th Street West

The intent of the Corridor Tree Canopy Program is to return canopy to all major corridors, such as Manatee Avenue West, Cortez Road, U.S. 41 and Business 41. A model project to enhance the Manatee Avenue West corridor has been chosen as a first step. This is particularly needed from 39th Street West to 75th Street West.

Through coordination with Keep Manatee Beautiful, the City of Bradenton's Tree and Land Preservation Board is collaborating with the Manatee County's Environmental Lands Management/Acquisition and Tree Board to return tree canopy to *Manatee Avenue West* in a seamless fashion within the city limits and in unincorporated Manatee County jurisdictions from 15th Street West to 75th Street West.



Manatee Avenue East at 9th Street East

Property owners along the corridor will be encouraged to select canopy trees that will be planted on their properties outside the *Manatee Avenue West* right-of-way free of charge. Several canopy tree species are recommended for the property owner, including: slash pine, live oak, maple, magnolia and Eagleston holly. On select properties on *Manatee Avenue West* outside city limits, understory trees are recommended, including: East Palatka holly, Little Gem magnolia, Chickasaw plum, Geiger and mulberry.

Trees provided will be approximately 10'-12' in height and have a 4'-6' spread. This is a typical required tree size for new development. Registered Landscape Architects will help you plant the right tree in the right place, so as not to have a conflict with signs and utilities. Turner Tree has partnered in this program and will be the primary nursery providing trees.



APPLICATION

Manatee Avenue West Only

Supplies are limited. application due one month prior to planting date for eligibility and availaility.

Name: _____

Address: _____

_____

Telephone: _____

Email: _____

Tree Planting Address: _____

Tree Type(s) & Quantity:

Outside City Limits Only

___ Slash pine
___ East Palatka holly
___ Live oak
___ Little Gem magnolia
___ Maple
___ Chickasaw plum
___ Magnolia
___ Geiger
___ Eagleston holly
___ Mulberry

Planting Date Options:

___ Florida Arbor Day—3rd Friday, January
___ National Arbor Day—Last Friday, April
___ Keep America Beautiful's National Planting Day —2nd Saturday, September

William W. Swan, III & Associates, Inc.
Landscape Architects and Planners

5910 - 59th Street West, Ste.100
Bradenton, FL 34210
(941) 792-0714 Office ◊ Cell (941) 962-0273 E-mail William@swanscape.com

Manatee Avenue Corridor Tree Canopy Program

	Name/Business	Address	No. /Species of Tree	Hose Bib Location	
1.	C. Mills/1st Presbyterian	City, 1402 Man. Ave.	NO TREE ?	NO TREE	4/18
2.	Nancy/Wares Creek.	City, 1725 Man. Ave.	NO TREE	NO TREE	4/18
3.	Sunita Sharan, MD	City, 1825 Man. Ave.	1- Magnolia	Front of Bldg.	4/18
4.	Brad/Fero Yacht	City, 1910 Man. Ave.	1-Holly	West Side	4/18
5.	Mike/ Ameriprize	City, 2310 Man. Ave.	NO TREE	NO TREE	4/18
* 6.	Harry Bakker/Heinz	City, 2424 Man. Ave.	1- Magnolia	Water truck	9/6-7
7.	Dawn/ADP	City, 2620 Man. Ave.	2- Magnolia	West Side	4/18
8.	Adrian/ Barnes/Walker	City, 3119 Man. Ave.	1- Holly	West Side	4/18
9.	Jim Dill/Carriage House	City, 3307 Man. Ave.	1 Magnolia	S.W. Corner	4/18
* 10.	Byron/St. Stephens	City, 39th Street W.	2 Holly	Orange Paint	9/6-7
X 11.	Brian/Pinnacle Med.	Co., 4110 Man Ave.	NO TREE	NO TREE	
** 12.	Patty/Top Hat	Co.,5120 Man. Ave.	1- Holly ?	Orange Paint	1/17
** 13.	Dick/Wallpaper	Co.,5706 Man. Ave.	1 Holly	Orange Paint	9/6-7
* 14.	Trout & Leigh Ins.	City,2110 Man. Ave.	2- Magnolia	Orange Paint	9/6-7
** 15.	Jiffy Lube R. Anderson	Co., 5220 Man Ave.	2- holly	Orange Paint	9/6-7
X 16.	Desoto Plaza	City, 3201 – 3213 Man.	NO TREE	NO TREE	
X 17.	Mike-Ameriprize	City, 2310 Man. Ave.	N0 TREE	NO TREE	
* 18.	Christ Church	City, 4030 Man. Ave.	3 – Oak, 2 - Mag	Orange Paint	9/6-7
* 19.	Diet Center, Edwin Plotts	City, 3027 Man.	1- holly	Orange Paint	9/6-7
***20.	Palma Sola Animal Clinic	Co., 6116 Man Ave.	1 – Magnolia	Orange Paint	1/17

*** 21. Legler & Flynn	City, 2027 Man. Ave.	1-Holly to be planted next year		1/-17
*** 22. Beachway Plaza	City, 7208-7324 Man. Ave.	Understory Trees		1/17
*** 23. Beachway Plaza	Co. 7208-7324 Man. Ave.	Understory Trees		1/17
* 24. Gold Key Mort.	City, 4909 Man. Ave. W.	1- Magnolia		9/6-7
X 25. Weight Loss by Design	Co., 4701 Man. Ave. W.	NO TREE	NO TREE	9/6-7
*26. Boyd Realty – Jayne	City, 2200 Man Ave. W.	Unknown Species		1/17

LEGEND

* City Trees to be planted on 9/6-7

** County Trees to be planted on 9/6-7

*** Trees to be planted on 1/7

General Notes

Trees to be 10' to 12' Height x 4' to 6' Spread - Florida No.1 grade or better. Three (3) caliper. Trees installed on City property on Sept. 6/7 are numbered 6, 10, 14, 18, 19, and 24.

Trees installed on County property on Sept. 6/7 are numbered 13, 15, and 20.

Trees shall be installed with top of root ball an inch to one and one half inch above existing grade. Trees to be 'watered in' to avoid air pockets. Provide a 4 to 6 foot diameter soil ring around base of trunk to help hold in Irrigation water. Trees to be staked or guyed to ground. Four foot diameter Cypress mulch bed, three inches in depth, to be added after a three month establishment period. Owner or City of Bradenton hired assistant to soak tree with Irrigation water for Twenty minutes a day for a period of three months to assist with the establishment process. Underground utility locations will be flagged. Trees numbered 20 through 23 will be installed on Jan. 17, 2012.

Trees planted on County property will require three (3) Landscape Contractor bids. The Quantity, Species, and Size are indicated below:

3 - Eagleston Holly 10' to 12' Height x 5' to 6' Spread, 3" Caliper.

Trees Planted on City of Bradenton property will be installed by Turner Tree and Landscape. The Quantity, Species, and Size are indicated below:

3 – Live Oak	10' to 12' Height x 5' to 6' Spread, 3" Caliper
6 – D.D. Blanchard Magnolia	10' to 12' Height x 5' to 6' Spread, 3" Caliper
3 – Eagleston Holly	10' to 12' Height x 5' to 6' Spread, 3" Caliper

The above City of Bradenton property trees to be installed by Turner Tree and Landscape on September 6th or 7th, 2012. See above Manatee AvenueTree Canopy Report for planting instructions.

SR 64 W. CORRIDOR TREE CANOPY PROGRAM

Quotation Form Due by August 31, 2012

to Keep Manatee Beautiful, P.O. Box 14426, Bradenton, FL 34280, keep@manateebeautiful.com

PLEASE WORK WITH WILLIAM SWAN, RLA FOR SPECIFIC TREE LOCATIONS ON THE PRIVATE PROPERTIES BELOW - WORK 941-792-0714, CELL 941-962-0273, WILLIAM@SWANSCAPE.COM

Installation of Trees at 5706 Manatee Ave. W./Wallpaper by Contractor

Qty.	Sym	Species	Common name	Size	Unit Price**	Extnd Price**
1		*Ilex x attenuata 'Eagleston'*	Eagleston Holly	10'-12' Height, 4'-6' Spread	160.00	160.00
			SUB-TOTAL =			160.00

Approved 8/31/12

Installation of Trees at 5220 Manatee Ave. W./Jiffy Lube by Contractor

Qty.	Sym	Species	Common name	Size	Unit Price**	Extnd Price**
1 ~~2~~		*Ilex x attenuata 'Eagleston'*	Eagleston Holly	10'-12' Height, 4'-6' Spread	160.00	~~320.00~~
			SUB-TOTAL =			~~320.00~~

Change Order 8/31/12
160.00
160.00 ✓

**Estimated costs to include Florida No. 1 quality purchase of trees, delivery, installation, staking, backfill and fine grading, soil amenities of Mycor Tree Saver (3 oz. per 1" caliber), PHC Healthy Start Macro tablets (21 gram - 1 per 1 gal., 3 per 5 gal., 4 per 10 gal.and 5 per 15 gal.) and PHC Terra-Sorb Hydro Gel, and one-year warranty. Planting will occur for Keep America Beautiful's National Planting Day before or after September 8, 2012. Traffic control shall be in accordance with the project plans.

Mulch- Flori-mulch at 4 cu. ft. at 3 in. depth per tree

Qty.	Unit Price**	Extnd Price**
2 ~~3~~	8.00	24.00
SUB-TOTAL =		24.00

Change Order 8/31/12
16.00
16.00 ✓

Irrigation (water truck)
****Watering Schedule Below**
A. Initial: All trees shall be watered at installation.
B. Scheduled: All trees are thoroughly watered according to the following schedule for the first 9 weeks after installation.
Weeks 1-3: Minimum 5 times per week – flood soil ring (repair, if necessary)
Weeks 4-6: Minimum 3 times per week – flood soil ring (repair, if necessary)
Weeks 7-9: Minimum 2 times per week – flood soil ring

Qty.	Unit Price**	Extnd Price**
3	2,100.00	6,300.00

SUB-TOTAL = 6,300.00 — Omit

TOTAL ESTIMATE = $ 6,804.00 $ 336.00

Turner Tree and Landscape
CONTRACTOR NAME

2504 104th St. Court E
STREET ADDRESS

Bradenton FL 34211
CITY, STATE & ZIP CODE

941 - 745-2101
TELEPHONE

Randy Hulbert
AUTHORIZED SIGNATURE/TITLE

8/31/12
DATE

Doug McCall
8-31-12

SR 64 W. CORRIDOR TREE CANOPY PROGRAM

Quotation Form Due by August 31, 2012

to Keep Manatee Beautiful, P.O. Box 14426, Bradenton, FL 34280, keep@manateebeautiful.com

PLEASE WORK WITH WILLIAM SWAN, RLA FOR SPECIFIC TREE LOCATIONS ON THE PRIVATE PROPERTIES BELOW - WORK 941-792-0714, CELL 941-962-0273, WILLIAM@SWANSCAPE.COM

Installation of Trees at 5706 Manatee Ave. W./Wallpaper by Contractor

Qty.	Sym	Species	Common name	Size	Unit Price**	Extnd Price**
1		*Ilex x attenuata 'Eagleston'*	Eagleston Holly	10'-12' Height, 4'-6' Spread		
			SUB-TOTAL =			

N/A

Installation of Trees at 5220 Manatee Ave. W./Jiffy Lube by Contractor

Qty.	Sym	Species	Common name	Size	Unit Price**	Extnd Price**
2		*Ilex x attenuata 'Eagleston'*	Eagleston Holly	10'-12' Height, 4'-6' Spread		
			SUB-TOTAL =			

N/A

**Estimated costs to include Florida No. 1 quality purchase of trees, delivery, installation, staking, backfill and fine grading, soil amenities of Mycor Tree Saver (3 oz. per 1" caliber), PHC Healthy Start Macro tablets (21 gram - 1 per 1 gal., 3 per 5 gal., 4 per 10 gal.and 5 per 15 gal.) and PHC Terra-Sorb Hydro Gel, and one-year warranty. Planting will occur for Keep America Beautiful's National Planting Day before or after September 8, 2012. Traffic control shall be in accordance with the project plans.

Mulch- Flori-mulch at 4 cu. ft. at 3 in. depth per tree

Qty.	Unit Price**	Extnd Price**
3		
SUB-TOTAL =		

N/A

Irrigation (water truck)
****Watering Schedule Below**
A. Initial: All trees shall be watered at installation.
B. Scheduled: All trees are thoroughly watered according to the following schedule for the first 9 weeks after installation.
Weeks 1-3: Minimum 5 times per week – flood soil ring (repair, if necessary)
Weeks 4-6: Minimum 3 times per week – flood soil ring (repair, if necessary)
Weeks 7-9: Minimum 2 times per week – flood soil ring

Qty.	Unit Price**	Extnd Price**	Change Order 8/31/12
2 ~~3~~	600.00	1,800.00	1,200.00
		1,800.00	

SUB-TOTAL =

TOTAL ESTIMATE = 1,800.00 $1,200.00

dm

Turf + Surf Lawn + Pool Care
CONTRACTOR NAME

7803 19th Ave. Dr. W.
STREET ADDRESS

Bradenton, FL 34209
CITY, STATE & ZIP CODE

941 -720 -0160
TELEPHONE

Jack McClellan
AUTHORIZED SIGNATURE/TITLE

8-31-12
DATE

URBAN TREE CANOPY

ASSESSMENT



STATE OF FLORIDA

DECEMBER | 2023

PlanIT Geo
developers of TreePlotter

Florida Department of Agriculture and Consumer Services
Commissioner Wilton Simpson



STATEWIDE COMMUNITY

TREE CANOPY ASSESSMENT

> **Growing large-canopy trees is a worthwhile investment and a cornerstone of today's movement toward sustainable communities.**
>
> **James Urban**

PREPARED BY

PlanIT Geo, Inc., Arvada, Colorado

PREPARED FOR

Florida Department of Agriculture and Consumer Services (FDACS)

COMPLETED

December 2023

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1,540,257
ACRES OF CANOPY

36%
AVERAGE URBAN TREE CANOPY COVER IN FLORIDA COMMUNITIES

EXECUTIVE SUMMARY

BACKGROUND OF THIS ANALYSIS

Urban tree canopies are in perpetual motion. New tree plantings and existing tree growth add canopy, while development, natural disasters, disease, and pests take it away. These changes can be hard to gauge from the ground, but tree canopy change can be precisely tracked by analyzing aerial imagery from the past and present. This assessment evaluated urban tree canopy (UTC), possible planting area (PPA), and tree canopy change from 2013 to 2021 for 488 registered municipalities and Census Designated Places (CDP) in Florida.

The urban forest is an invaluable asset for the State of Florida, providing residents and visitors with meaningful, quantifiable environmental, social, and economic benefits. This assessment can be used for data-driven decision-making by the Florida Forest Service and all municipalities and other stakeholders of Florida's urban forest. Current canopy goals, policies, ordinances, management practices, and priorities can be amended based on the results provided herein. By highlighting areas where current efforts are working well, but also areas where improvement is needed, this assessment serves as a strategic compass for future planning efforts.

PROJECT METHODOLOGY

The results of this assessment are based on the USDA's National Agriculture Imagery Program (NAIP) from 2013, 2017, and 2021. The assessment utilized modern machine learning techniques to classify all land areas as either urban tree canopy, possible planting areas, or areas unsuitable for tree planting. For comparison and context to the trends of canopy coverage, Florida's 67 counties were grouped into ten regions. The results below begin with total statewide metrics and are then organized by region. These data insights allow the State of Florida to revise existing strategies and develop new ones to protect and expand the urban forest.

KEY FINDINGS

This study assessed a total area of 4.9 million acres. Urban tree canopy (UTC) covered 1.5M acres of that area in 2021, representing an average UTC coverage of 36%. That's over 2,400 square miles of canopy shading Florida cities, an urban forest roughly the size of the state of Delaware, or about 43 times the size of Walt Disney World.

In 2021, 1.2M acres (29%) of the assessed area was identified as unsuitable for urban tree canopy, while possible planting area (PPA) spanned 1.5M acres (35%). If all of Florida's PPA was converted with canopy, the state could potentially achieve a maximum canopy cover of 71%.

Between 2013 and 2017, each of Florida's ten regions gained urban tree canopy. Conversely, from 2017 to 2021, a decline in canopy was observed across all regions. The initial gains, amounting to 102,408 canopy acres, were

36% URBAN TREE CANOPY

35% POSSIBLE PLANTING AREA

29% TOTAL UNSUITABLE AREA

Figure 1. Based on statewide analysis of 2021 high-resolution imagery.

subsequently negated by substantial losses, totaling 168,052 acres in the latter period. The net result: Florida's combined urban forest was 2% smaller in 2021 than in 2013.

Over the entire assessment period, a roughly equal number of municipalities experienced canopy gains as those that experienced losses. 243 communities had net positive canopy changes, compared to 245 communities with net negative changes. Regionally, the five regions nearest the panhandle experienced canopy losses, while central and southern regions gained canopy. Severe storms, particularly Hurricane Michael, which made landfall in the West Panhandle in 2018, were significant contributors to canopy loss.

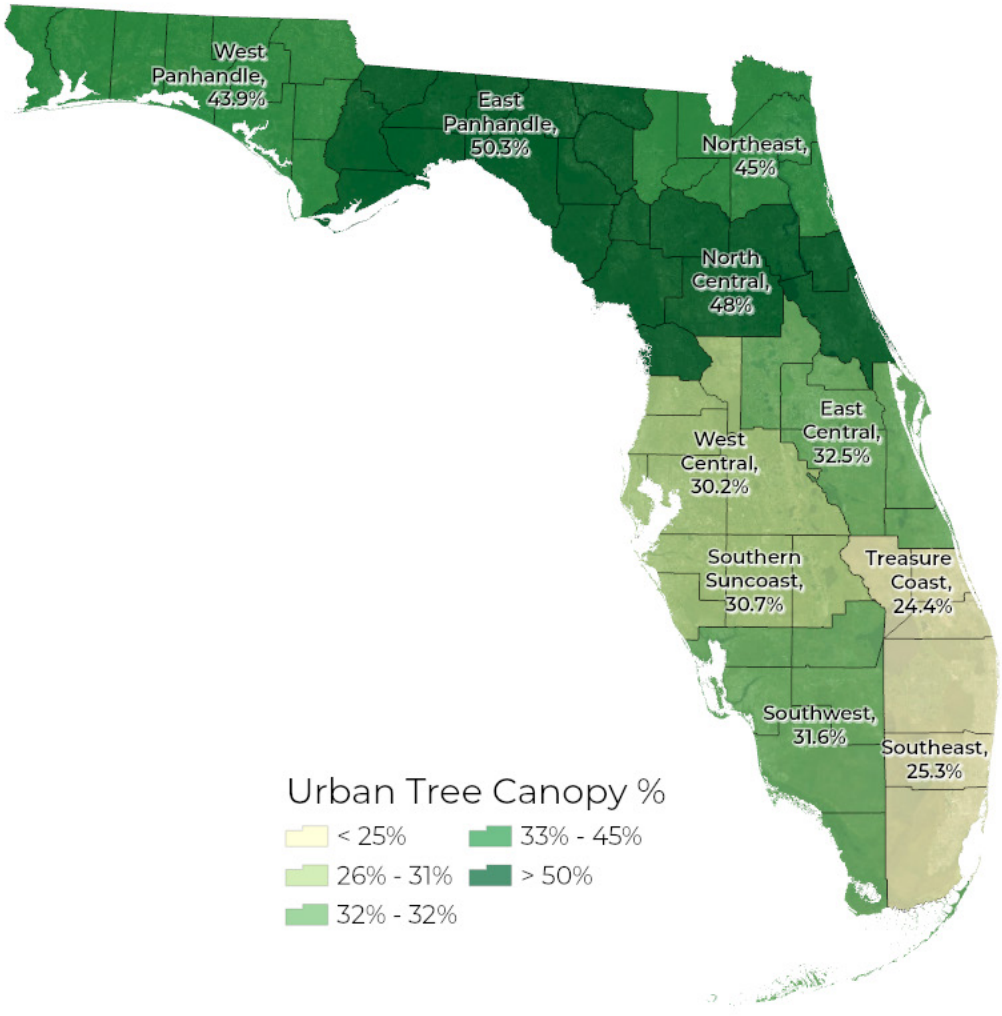


Figure 2. Map of the tree canopy cover by region in 2021.

ECOSYSTEM BENEFITS

Using the best available science from i-Tree tools, values were calculated for some of the benefits and functions provided by the urban tree canopy in throughout the entirety of Florida. Trees produce oxygen, indirectly reduce pollution by lowering air temperature, and improve public health by reducing air pollutants which cause death and illness. Trees and forests mitigate storm-water runoff which minimizes flood risk, stabilizes soil, reduces sedimentation in streams and riparian land, and absorbs pollutants, thus improving water quality and habitats. Florida's existing canopy provides over $456 million annually in avoided infrastructure costs and ecosystem benefits.

RECOMMENDATIONS

There is immense potential for Florida to preserve and expand its urban forest. The state encompasses almost 4 million acres of tree canopy, with an additional 1.5 million acres available for canopy expansion. The recommendations below aim to raise awareness of the current state of the urban forest and turn Florida's immense potential into real progress.

- **Leverage the results of this assessment to promote the urban forest with data-backed resources and presentations**
- **Learn what is working and what isn't by examining communities with the largest canopy gains and losses**
- **Use TreePlotter to prioritize planting efforts and maximize urban forest management resources**
- **Set evidence-based canopy goals to focus management actions, motivate government officials and the public, and inspire funding and stewardship**
- **Develop outreach programs toward private landowners**
- **Continue urban forest monitoring to track progress and revise strategies**



PROJECT

METHODOLOGY

Land cover within the boundaries of 488 Florida communities was mapped using the sources and methods described below. To provide contextual comparisons and organize the results the state was divided into ten regions.

DATA SOURCES

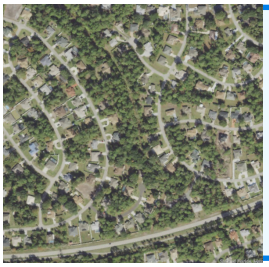
This assessment utilized high-resolution, multi-spectral imagery from the U.S. Department of Agriculture's National Agriculture Imagery Program (NAIP) to derive the near-current land cover data set. To track canopy changes over time, NAIP imagery from 2013, 2017, and 2021 were analyzed. For the canopy change analysis, NAIP imagery collected in 2021 and 2017 was a 60-centimeter resolution, while 1-meter resolution data was collected in 2013 to classify the historical tree canopy.

MAPPING LAND COVER

While no methodology for obtaining a land cover data set is inherently wrong, there are considerations that must be factored into each analysis on a project-by-project basis. For example, when performing a change analysis, it is often difficult to accurately compare the results derived from previous assessments that used divergent methods for generating a land cover data set. PlanIT Geo partnered with EarthDefine to create a methodology that reduces the chance of variability from year to year and assessment to assessment.

NAIP imagery was used as the basis for our analysis due to its reliability and availability on a repeating basis every two to three years. High-accuracy land cover data was generated using modern machine-learning techniques to classify all areas of interest as either urban tree canopy, possible planting area, or area unsuitable for planting.

1 Some portions of the state's canopy data were collected in 2022 while the other portion were collected in 2021. For consistency, all recent-year data is reported as 2021.



Urban Tree Canopy

Urban tree canopy (UTC) was defined as vegetated land cover that is over 10 feet high.



Possible Planting Area

Possible planting area (PPA) was defined as all vegetated areas where tree canopy does not exist, and there are no constraints on planting trees.



Unsuitable For Planting

Areas unsuitable for planting were defined as any space where it was not feasible to plant trees. This includes areas with physical constraints (impermeable surfaces) and land use constraints (golf courses, airports, utility corridors).

IDENTIFYING TREE CANOPY CHANGE

Tree canopy change was identified by comparing imagery captured from multiple years. Tree canopy changes were tracked from 2013 to 2017 and from 2017 to 2021. The figures below provide examples of canopy loss and canopy gain.



Figure 3. Maturing trees added canopy in this Bunnell City neighborhood between 2013 (left) to 2021 (right), even with the addition of new homes.



Figure 4. Severe storms, particularly 2018's Hurricane Michael, created extensive canopy loss on Mexico Beach (Bay County) between 2013 (left) to 2021 (right).

ASSESSMENT LEVELS

To best inform the Florida Forest Service and all other stakeholders, urban tree canopy and other associated metrics were tabulated across several geographic boundaries. These assessment levels include the entire state, ten regions organized into groups of counties, City/Town/CDP boundaries, and census block groups.

Census block groups are the second smallest geographic unit of measure at which the U.S. Census publishes statistical data within a state and represents between 600 and 3,000 people. Census block groups are particularly valuable for assessing the equitable distribution of tree canopy because they are linked to readily available demographic and socio-economic data. This report will discuss the results from statewide, regional, and municipal assessment levels.

The example below shows census block groups in Orlando prioritized by unemployment rate. The highest priority areas (higher rates of unemployment) are shown in dark blue. To explore more results at the census block group level, please visit https://pg-cloud.com/FloridaCanopy.

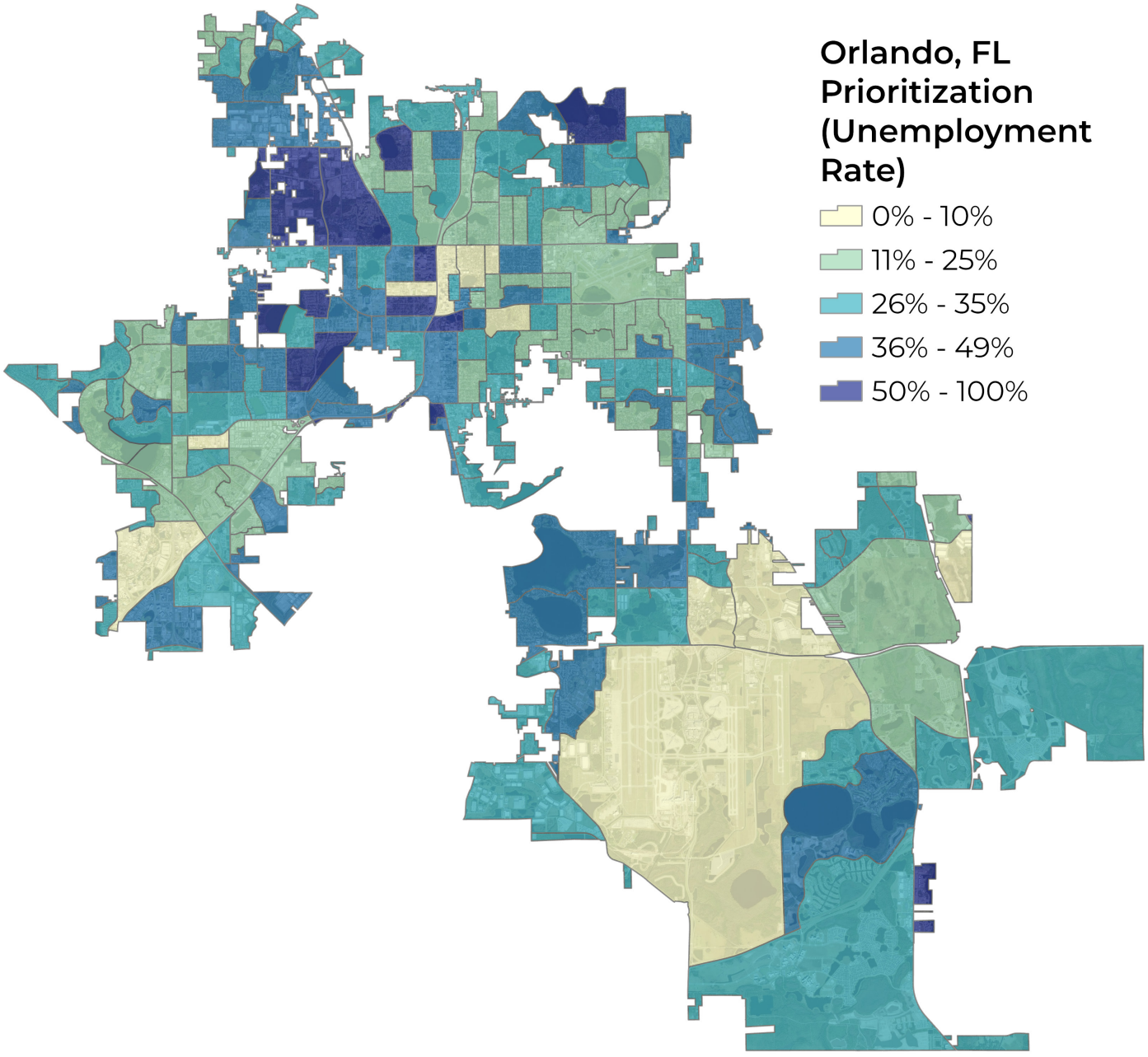


Figure 5. Prioritization of census block groups in Orlando, Florida, based on unemployment rates.

STATEWIDE

RESULTS

This assessment analyzed 488 cities, Towns, and Census Designated Places (CDPs) across Florida to establish the current state of urban tree canopy (UTC) and how it has shifted over time. This report will highlight metrics and trends at the statewide, regional, and municipal levels. For more localized insights, you can go to https://pg-cloud.com/FloridaCanopy to explore the full data set with a suite of easy-to-use canopy analysis tools.

In 2021, UTC covered 36% of the assessed area, representing 1.5M acres of urban forest. That's over 2,400 square miles of trees spreading out over Florida communities, providing millions of dollars of environmental, social, and economic benefits. 29% of the land cover was considered unsuitable for tree planting, and the remaining 35% represented possible planting areas (PPA). If all 1.5M acres of PPA were converted into tree canopy, the statewide UTC coverage could theoretically reach 71% (without converting any unsuitable areas).

The North Central region had the most urban forest statewide at 310,245 acres. At the municipal level, the massive boundaries of the City of Jacksonville (five times the size of Tampa, Florida's second largest City), helped it lead most metrics in terms of raw acreages. Jacksonville (located in the Northeast region) had an above-average canopy percentage of 40% and a UTC area of 225,886 acres, representing an impressive 15% of Florida's total urban tree canopy. Perhaps more than any other City, the tree policies and programs in Jacksonville have the potential to impact statewide urban forest totals.

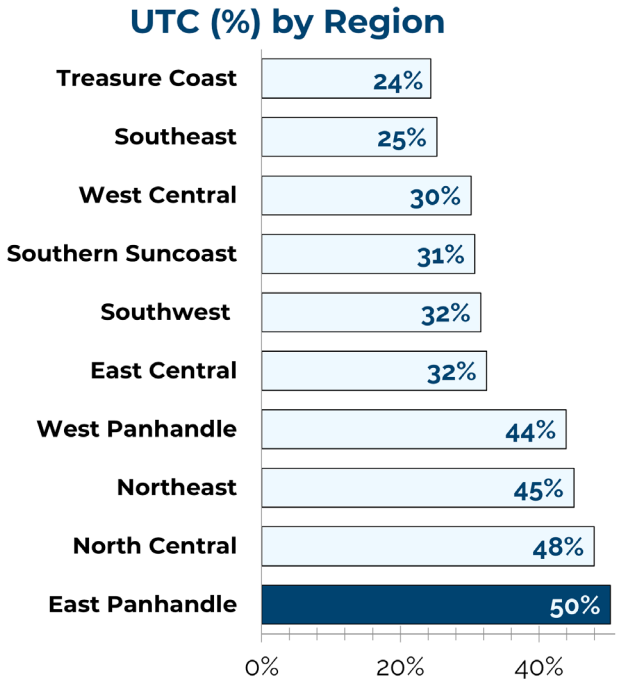


Figure 6. Percentage of urban tree canopy cover by region.

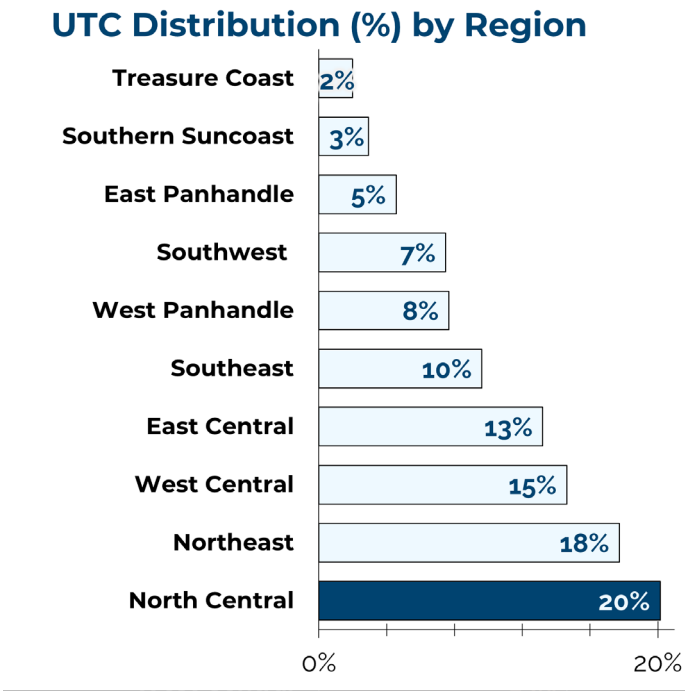


Figure 7. Distribution of urban tree canopy area by region.

The Treasure Coast region had the lowest canopy percentage (24%), it also had the second largest percentage of unsuitable land at 33% (second to the densley populated Southeast with 45% of land cover classified as unsuitable for tree planting). At the municipal level, cities and Towns located on barrier islands consistently had the lowest urban tree canopy statewide. These narrow, development-packed communities frequently had around 30% of their land cover classified as unsuitable for tree planting.

Largest UTC		
Region	**City**	**UTC%**
West Panhandle	Westville	85%
East Panhandle	Branford	77%
East Panhandle	Madison	76%

Smallest UTC		
Region	**City**	**UTC%**
West Central	Hillcrest Heights	3%
Southeast	Canal Point	4%
Southeast	Manalapan	4%

TREE CANOPY CHANGE

Urban tree canopy shifted in unison for all regions during the two assessed time periods. From 2013 to 2017, all ten regions gained UTC. From 2017 to 2021, every region lost UTC. However, the statewide canopy gains of the earlier period (+102,408 acres) were negated by larger losses (-168,052 acres) in the later period. The net result was Florida's urban forest in 2021 was 2% smaller than in 2013.

Over the entire assessment period, net canopy changes were evenly split at the municipal and regional levels. 243 communities had net positive canopy change, compared to 245 communities with net negative change. Regionally, the five regions nearest the panhandle experienced canopy losses, while central and southern regions gained canopy.

A major contributor to this trend is the increasing severity of the Atlantic hurricane season. From 2013 to 2016, just four major storms made landfall in Florida, in contrast to the 16 named storm events that hit the state between 2017 and 2023.

Hurricane Michael made landfall in the West Panhandle in October 2018. Hurricane Michael was the first Category 5 hurricane to hit Florida in over 20 years and the 160 mile-per-hour winds and subsequent inland tornadoes caused tragic loss of life and vast urban forest damage. Over the entire assessment period, the West Panhandle had the greatest canopy losses statewide, both by percentage (-10%) and area (-26,015 acres).

The Southwest region gained the most canopy area over the full assessment period, growing its urban forest by 4,000 acres. Put another way, communities in the Southwest region were the most successful at limiting canopy losses from 2017 to 2021, as other regions did have larger gross canopy gains. The Southwest region was led by the City of Cape Coral, which had a state-high net gain of 2,868 acres of urban tree canopy.

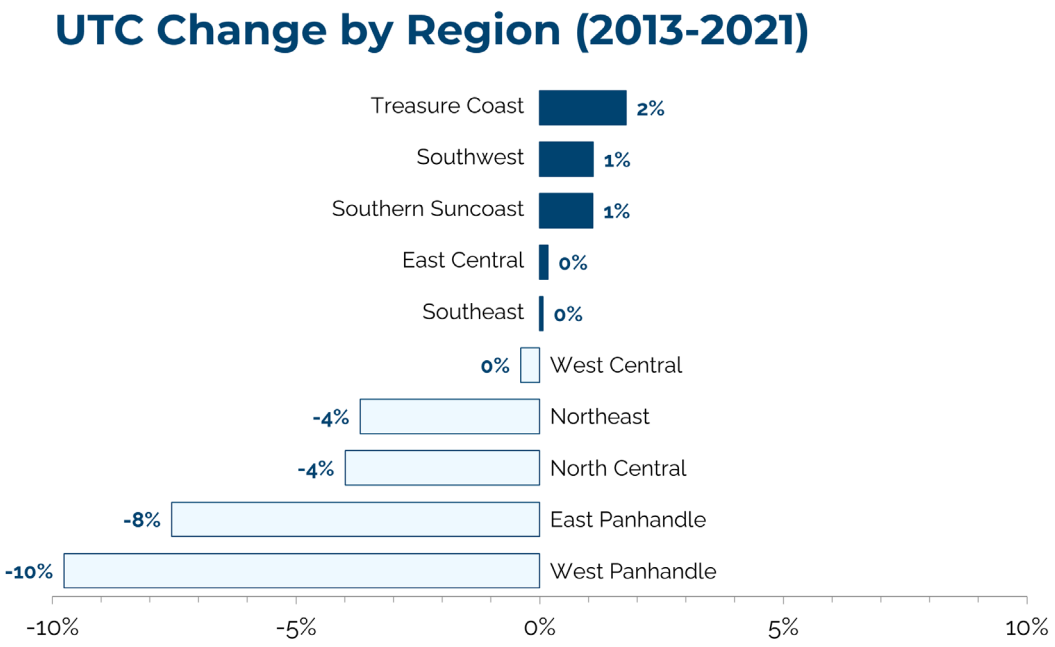


Figure 8. Urban tree canopy changes by percent by region.

For a comprehensive table of the results for all 488 cities and CPDs assessed, refer to the appendix (page 31). These communities are arranged alphabetically within each of the ten designated regions. The table includes each municipality's near-current (2021) UTC percentage, the percentage of areas identified as PPA, and the observed change in UTC from 2013 to 2021.

Largest Canopy Increases		
Region	**City**	**UTC Change 2013-2021 (%)**
Southwest	Bokeelia	18.9%
Southwest	Sanibel	18.1%
Southwest	Captiva	14.3%

Largest Canopy Decreases		
Region	**City**	**UTC Change 2013-2021 (%)**
West Panhandle	Panama City	-35.5%
West Panhandle	Tyndall Air Force Base	-33.2%
West Panhandle	Parker	-32.8%

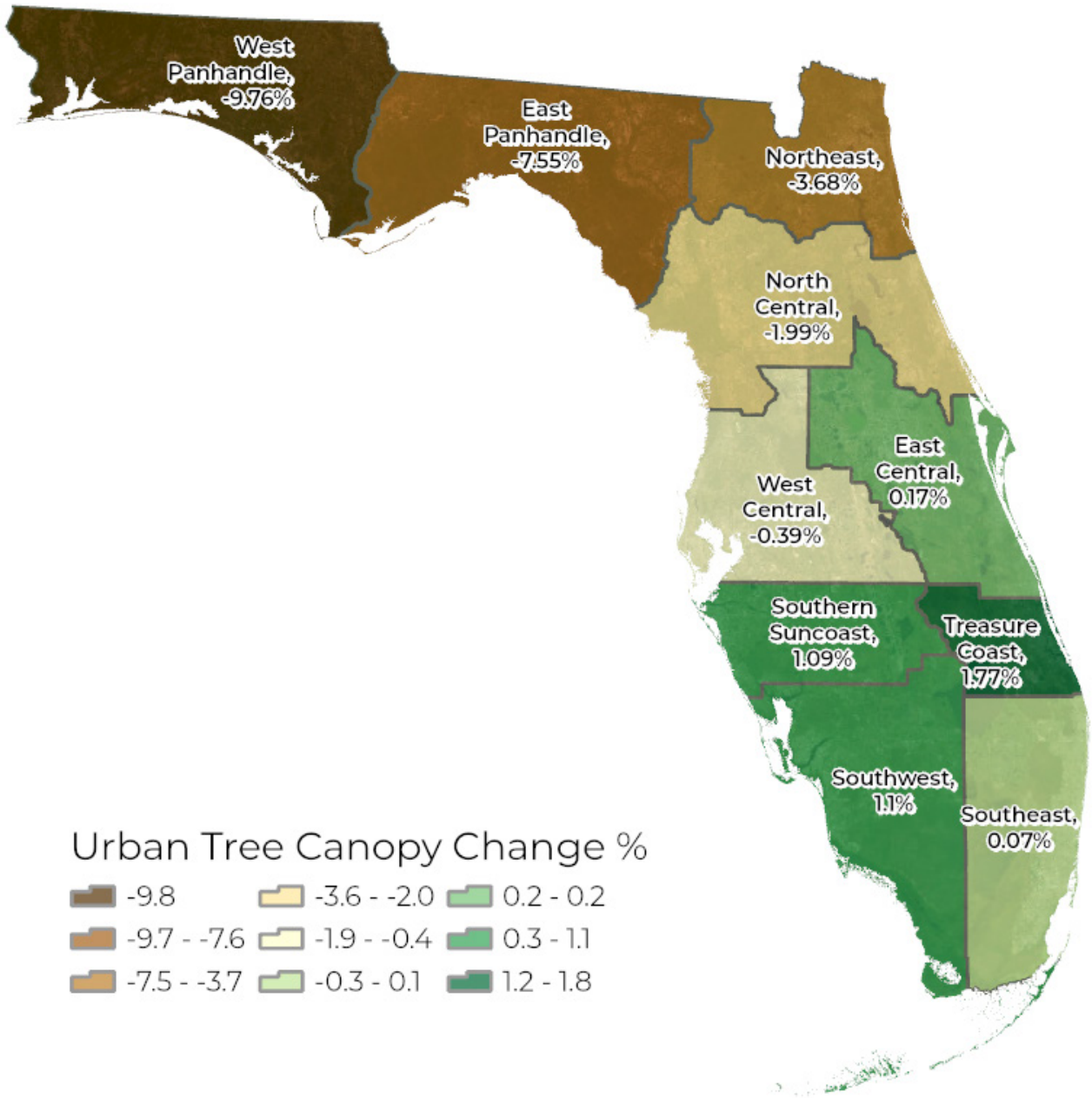
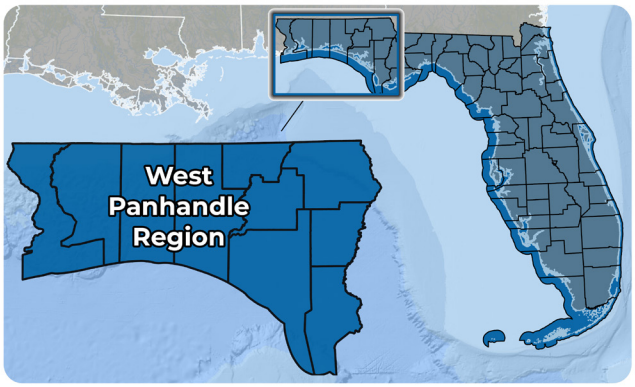


Figure 9. Map of net canopy change from 2013 to 2021 for all ten regions.



WEST PANHANDLE REGION



The West Panhandle region contains 56 municipalities and Census Designated Places (CDPs) across ten counties: Escambia, Santa Rosa, Okaloosa, Walton, Holmes, Washington, Bay, Jackson, Calhoun, and Gulf. The West Panhandle covers a total of 269,392 acres of land, making it the fourth smallest region in the state.

REGIONAL KEY FINDINGS

Urban forests in the West Panhandle cover 44% of the total land area. The unfortunate stand-out statistic for the area is the change in canopy cover. While urban tree canopy (UTC) saw a slight increase of just over 2% from 2013 to 2017, it took a sharp 11% decrease from 2017 to 2021. Overall, The net canopy change during the entire assessment period was -26,105 acres, a decrease of 10%, which is the largest regional canopy loss statewide. One of the primary causes of this loss was Hurricane Michael, which hit Bay County in the fall of 2018. The Category 5 winds and subsequent inland tornadoes caused tragic loss of life and drastic damage to the state's urban forests.

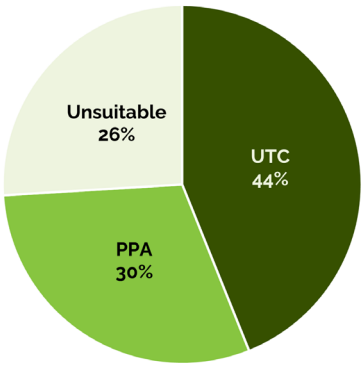


Figure 10. Urban tree canopy, possible planting area, and area unsuitable for UTC in the West Panhandle region.

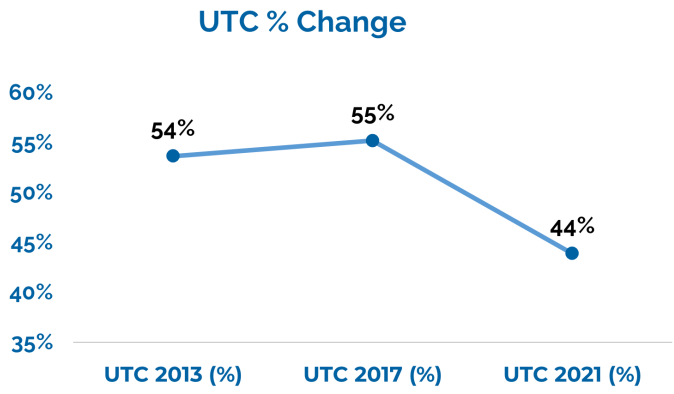


Figure 11. West Panhandle's urban tree canopy percentage in 2013, 2017, and 2021.

Identifying possible planting area (PPA) will play a key role in helping the region restore the urban forest to pre-storm levels. One-third of the West Panhandle is classified as PPA. If all 81,153 acres of PPA are utilized for tree plantings then UTC cover could potentially reach up to 74%. Efforts to transform unsuitable into suitable planting areas can help to increase this number even further.

**The most recent NAIP imagery collection did not encompass the Eglin Air Force Base and its adjacent areas. The latest available canopy data is 2017 for the following municipalities: Cinco Bayou, Fort Walton Beach, Mary Esther, Niceville, Shalimar, and Valparaiso.*

MUNICIPAL KEY FINDINGS

Among the 56 communities assessed, Panama City was the largest, encompassing 8% of the total area within the West Panhandle. The City of Freeport had the largest UTC area at 7,304 acres, while the Town of Westville had the highest UTC percentage at 85%. Tyndall Air Force Base had the lowest UTC percentage at 10%. Over the entire assessment period, Tyndall Air Force Base lost a substantial 32% of its UTC, the largest percentage loss of any community statewide.

Fortunately, 22 municipalities experienced an increase in canopy cover during the study period. Notably, Century Town demonstrated remarkable resilience in its canopy, accruing 249 acres during the assessment period. Panama City lost the most UTC by area with a decrease of 8,045 canopy acres. Panama City also has the largest amount of PPA at 9,548 acres, presenting an excellent opportunity for future tree plantings.

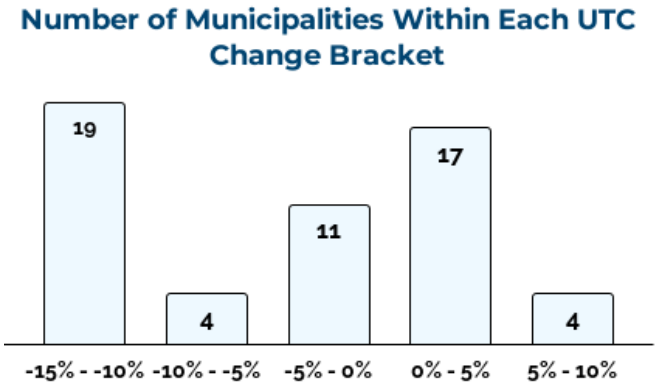


Figure 12. Number of West Panhandle communities with percent canopy cover change ranges (left).

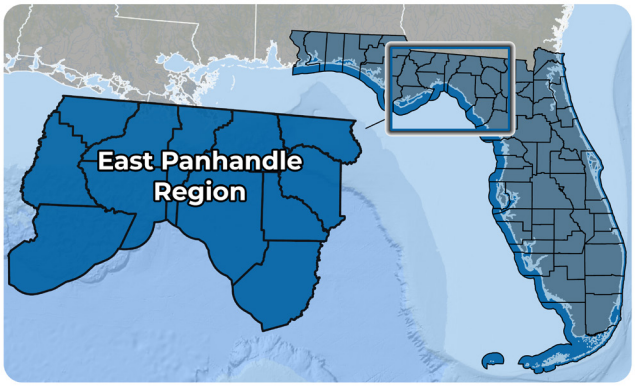
Table 1. Municipalities with the largest UTC increase (top) and the largest UTC decrease (bottom).

Largest UTC Increase		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Century	249	11.8%
Campbellton	161	9.4%
Laurel Hill	208	7.7%
Largest UTC Decrease		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Panama City	-8,045	-35.5%
Tyndall Air Force Base	-3,015	-33.2%
Parker	-401	-32.8%

THE WEST PANHANDLE LOST 10% (-26,015 ACRES) OF ITS CANOPY IN 8 YEARS, THE LARGEST REGIONAL CANOPY LOSS STATEWIDE.



EAST PANHANDLE REGION



The East Panhandle region contains 29 municipalities and Census Designated Places (CDPs) across ten counties: Escambia, Santa Rosa, Okaloosa, Walton, Holmes, Washington, Bay, Jackson, Calhoun, and Gulf. The East Panhandle covers a total of 139,768 acres of land, making it the second smallest region in the state.

REGIONAL KEY FINDINGS

Urban tree canopy (UTC) in the East Panhandle made up an exceptional 50% of the land cover, the highest of all regions. There was little change in the region's UTC from 2013 to 2017 (+387 acres). However, from 2017 to 2021, every community in the region experienced a loss of canopy, totaling -10,941 acres. The net canopy change during the entire assessment period was -10,554 acres by area and -8% by percentage. That is the second-largest loss of UTC percentage of all regions. One of the primary causes of this loss was Hurricane Michael, which made landfall in the adjacent West Panhandle region. The Category 5 winds and subsequent inland tornadoes caused tragic loss of life and drastic damage to the state's urban forests.

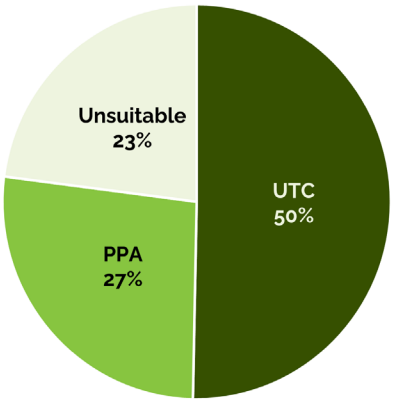


Figure 13. Urban tree canopy, possible planting area, and area unsuitable for UTC in the East Panhandle region.

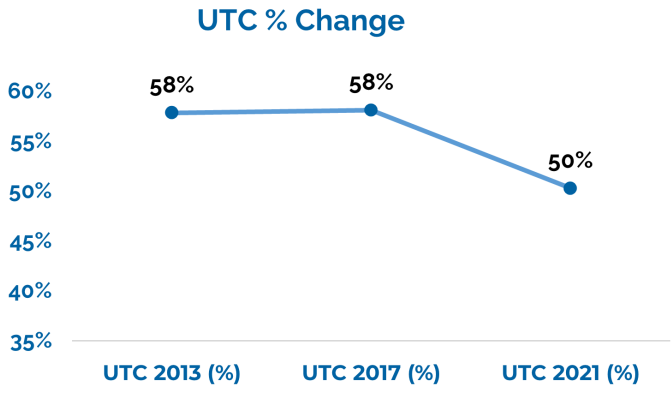


Figure 14. East Panhandle's urban tree canopy percentage in 2013, 2017, and 2021.

The utilization of the available possible planting area (PPA) will be instrumental in the region's efforts to restore the urban forest to its pre-storm levels. In the East Panhandle, 27% of the land was designated as available plantable space. In theory, if all 37,366 acres of PPA are utilized for planting trees, the UTC cover could reach as high as 77%. Efforts to decrease the amount of impervious coverage could increase this potential canopy metric even more.

MUNICIPAL KEY FINDINGS

Among the 29 communities assessed, the City of Tallahassee was the largest. Tallahassee, the capital of Florida, covered 47% of the total area in the East Panhandle, making it the leader of canopy-related metrics. Tallahassee had the largest UTC area (30,912 acres), the largest PPA area (15,996 acres), and lost the most UTC area over the entire assessment period (-5,180 acres).

Lamont had the highest percentage of UTC at 77%, while the City of Jasper had the lowest percentage of UTC at 31%. Over the entire assessment period, Eastpoint had the largest UTC percentage loss at -18%. Out of all the communities in the region, Midway was the only one that saw a net increase in canopy over the eight-year study period. This gain amounted to 15 canopy acres, which is an increase of less than 1%.

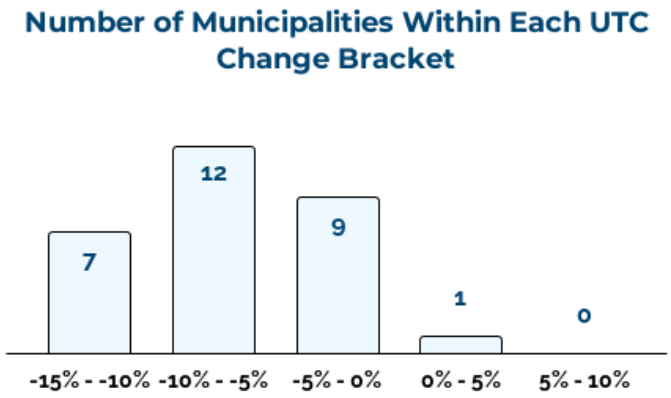


Figure 15. Number of East Panhandle communities with percent canopy cover change ranges (left).

Table 2. Municipalities with the largest UTC increase (top) and the largest UTC decrease (bottom).

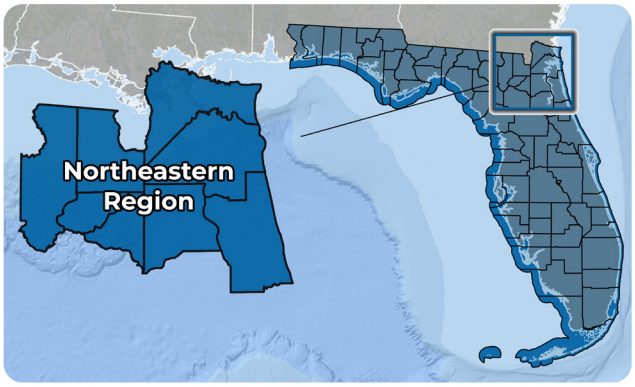
Largest UTC Increase		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Midway	15	0.2%

Largest UTC Decrease		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Eastpoint	-877	-18.5%
Hosford	-418	-13.2%
Chattahoochee	-435	-12.1%

EVERY COMMUNITY IN THE EAST PANHANDLE LOST CANOPY FROM 2017 TO 2021.



NORTHEAST REGION



The Northeast region, encompassing 31 municipalities and Census Designated Places (CDPs), extends across eight counties: Columbia, Baker, Union, Bradford, Nassau, Duval, Clay, and St. Johns. The Northeast region, with a total area of 606,755 acres, ranks as the third largest region in the state.

REGIONAL KEY FINDINGS

Urban tree canopy (UTC) in the Northeast made up 45% of the land cover. There was little change in the region's UTC from 2013 to 2017 (+1,103 acres) but there was a large decrease in canopy cover from 2017 to 2021 (-23,411 acres). The net canopy change during the eight-year assessment period was -22,308 acres by area equating to a 4% loss. This represents the third-largest loss of canopy area among all of Florida's regions.

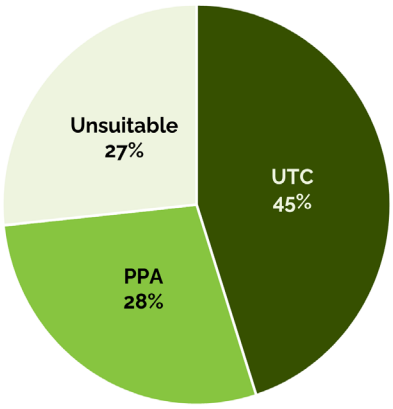


Figure 16. Urban tree canopy, possible planting area, and area unsuitable for UTC in the Northeast region.

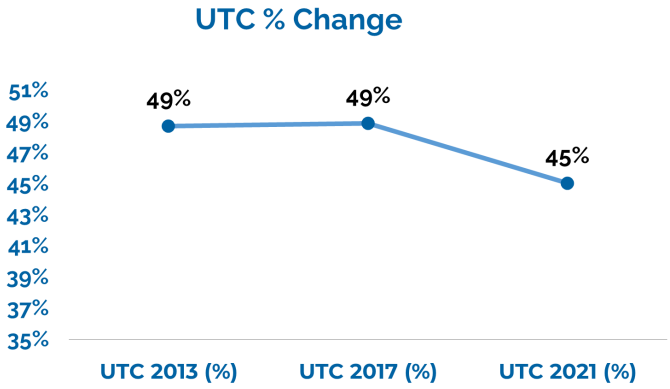


Figure 17. Northeast's urban tree canopy percentage in 2013, 2017, and 2021.

Using the available possible planting areas (PPA) will be crucial in regrowing canopy losses since 2017. One-quarter of the Northeast region was classified as PPA. If all 445,062 acres of PPA are utilized for tree plantings, the region's canopy cover could theoretically reach up to 73%. Attempts to diminish impervious coverage might enhance the potential canopy metric to an even greater extent.

MUNICIPAL KEY FINDINGS

Among the 31 communities assessed, the City of Jacksonville was the largest, encompassing a massive 80% of the assessed area for the entire region. Jacksonville was also the largest City statewide by a significant margin and therefore led in most area metrics. Jacksonville had the largest UTC area (225,886 acres), largest PPA area (142,635 acres), and lost the most UTC area over the entire assessment period (-18,861 acres).

The City of Hampton had the highest percentage of UTC at 68%, while the City of Jacksonville Beach had the lowest UTC percentage at 25% in 2021. Over the entire assessment period, the Town of Callahan lost the largest percentage of UTC at -10%. Only six communities had a net canopy gain throughout the eight-year assessment period. The City of Macclenny saw the largest increase in urban tree canopy (UTC), gaining 133 acres in area, while the Town of Penney Farms had the highest percentage increase at 8%.

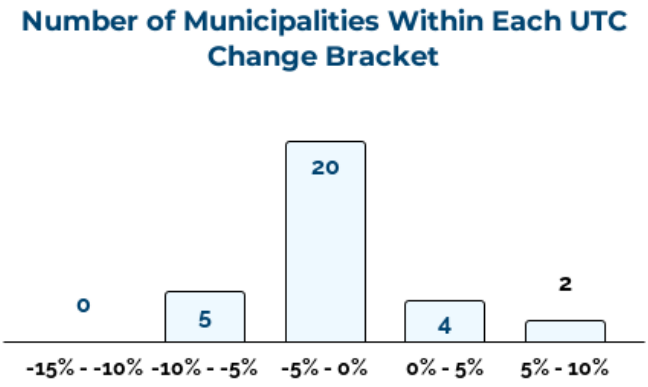


Figure 18. Number of Northeast communities with percent canopy cover change ranges (left).

Table 3. Municipalities with the largest UTC increase (top) and the largest UTC decrease (bottom).

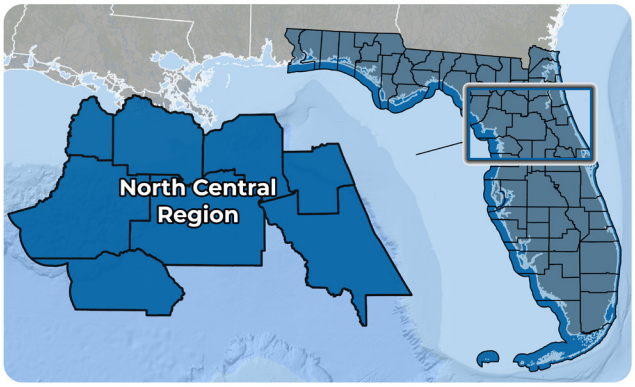
Largest UTC Increase		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Penney Farms	72	7.8%
Glen St. Mary	17	5.8%
Macclenny	133	4.3%

Largest UTC Decrease		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Callahan	-110	-9.5%
Lake City	-844	-9.2%
Baldwin	-92	-7.2%

JACKSONVILLE LOST THE MOST UTC AREA OVER 8 YEARS AND HAD THE LARGEST UTC AREA OF ANY CITY IN 2021.



NORTH CENTRAL REGION



The North Central region contains 61 municipalities and Census Designated Places (CDPs) spanning eight counties: Gilchrist, Levy, Citrus, Alachua, Marion, Putnam, Flagler, and Volusia. At 646,924 land acres, the assessed area of the North Central region is the fourth largest in the state.

REGIONAL KEY FINDINGS

In 2021, the North Central region had the largest area of urban forest statewide with 310,245 canopy acres, equating to 48% UTC cover. North Central experienced the most dynamic canopy changes during the assessment period. This region gained the largest amount of canopy area from 2013 to 2017 (+21,886 acres), but unfortunately lost the most canopy area from 2017 to 2021 (-34,768 acres). Overall, there was a net canopy change of -12,882 acres, which equates to a 2% decrease.

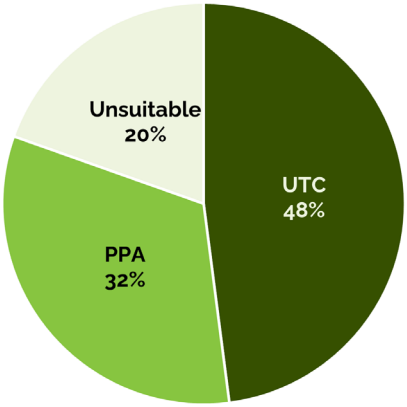


Figure 19. Urban tree canopy, possible planting area, and area unsuitable for UTC in the North Central region.

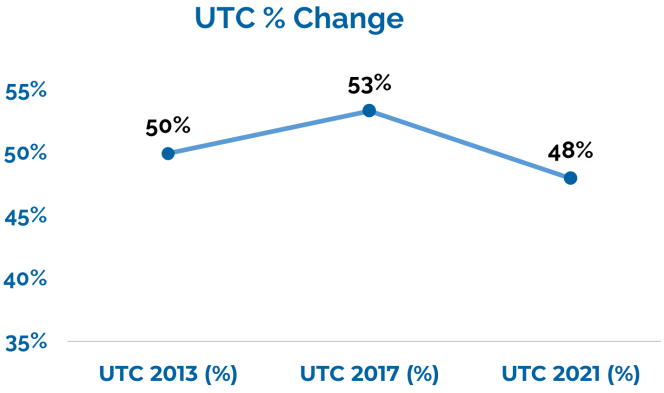


Figure 20. North Central's urban tree canopy percentage in 2013, 2017, and 2021.

To recover the substantial amount of canopy lost since 2017, this region will need to make the most of its possible planting area (PPA). The North Central region is fortunate to have significant available space for new trees (32%) and the lowest percentage of unsuitable land statewide (20%). If all 210,137 acres of PPA are utilized for tree plantings it is theoretically possible for the canopy cover to reach up to 80%. Working towards a decrease in impervious coverage could amplify the potential canopy metric even further.

MUNICIPAL KEY FINDINGS

The largest cities in the North Central region are the Cities of Bunnell, Palm Coast, Daytona, and Gainesville. Bunnell had the largest UTC area (52,543 acres) and the largest PPA area (29,974 acres).

The Town of Micanopy had the highest percentage of UTC at 72%, while the City of Daytona Beach Shores had the lowest canopy cover at 6%. Daytona Beach Shores, being a barrier island community, is situated on a narrow strip of land that doesn't provide much space for planting. Communities on barrier islands across Florida's various regions often exhibited some of the lowest urban tree canopy coverage.

Over the entire assessment period, the City of Trenton lost the largest percentage of UTC (-21%), while the City of Palm Coast lost the most UTC by area (-3,155 acres). The Town of Ponce Inlet gained the largest percentage of canopy (8%), while the City of Daytona Beach gained the most UTC acres (1,121 acres).

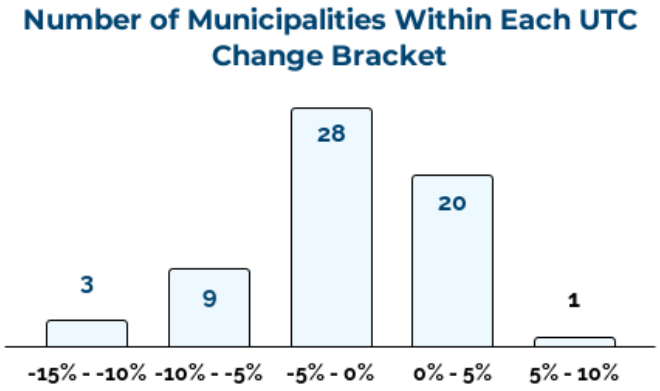


Figure 21. Number of North Central communities with percent canopy cover change ranges (left).

Table 4. Municipalities with the largest UTC increase (top) and the largest UTC decrease (bottom).

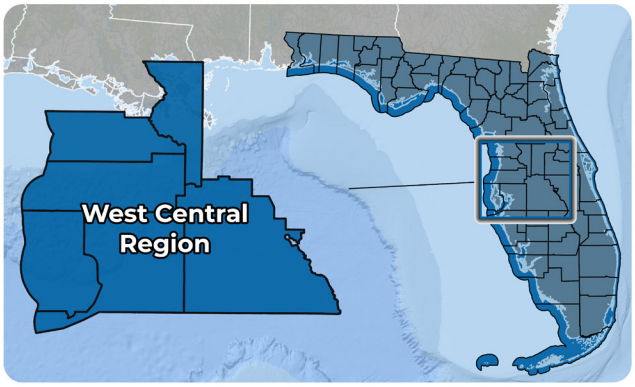
Largest UTC Increase		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Ponce Inlet	230	8.4%
Waldo	67	4.8%
Inverness	219	4.0%

Largest UTC Decrease		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Trenton	-448	-20.6%
Welaka	-125	-13.1%
High Springs	-1,482	-10.1%

THE DYNAMIC NORTH CENTRAL REGION GAINED THE MOST CANOPY AREA FROM 2013 TO 2017 AND LOST THE MOST CANOPY AREA FROM 2017 TO 2021.



WEST CENTRAL REGION



The West Central region covers a vast area, including 80 municipalities and Census Designated Places (CDPs), spanning six counties: Sumter, Hernando, Pasco, Pinellas, Hillsborough, and Polk. With a total area of 927,660 acres, it's the largest region in the state.

REGIONAL KEY FINDINGS

In the West Central region, 30% of the area was covered by urban tree canopy (UTC). The West Central region gained a sizable amount of UTC from 2013 to 2017 (+19,082 acres), and lost a similar amount from 2017 to 2021 (-21,966 acres acres). The net canopy change during the entire assessment period was -2,885 acres by area and just over -1% by percentage.

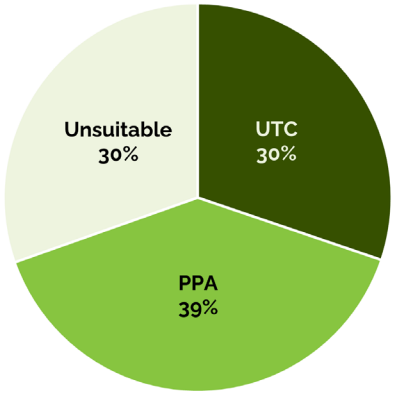


Figure 22. Urban tree canopy, possible planting area, and area unsuitable for UTC in the West Central region.

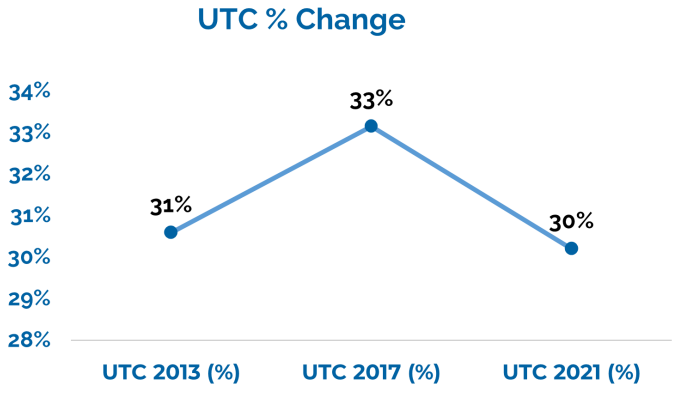


Figure 23. West Central's urban tree canopy percentage in 2013, 2017, and 2021.

To help the region reverse its negative canopy change trend, possible planting areas (PPA) must be used to their fullest potential. The West Central region has 294,181 acres of PPA, the largest amount of all regions. If every acre of PPA is utilized for tree plantings, the canopy cover could reach up to 70%. Efforts focused on minimizing impervious coverage could boost the potential canopy metric to a greater degree.

MUNICIPAL KEY FINDINGS

The largest cities in the West Central region are the City of Tampa and the City of St. Petersburg. Tampa had the largest UTC area at 26,205 acres, while Alturas had the largest potential with 24,738 acres of PPA.

The City of Brooksville had the highest UTC percentage at 58%. The Town of Hillcrest Heights had the lowest UTC statewide with 3%. However, it is important to note that Hillcrest Heights has a relatively small land area compared to the substantial 4,000 acres of water from the adjacent Crooked Lake. Since the extensive lake is within Town boundaries it does have a significant effect on the total percentage of UTC cover.

Looking at the next nine communities with the lowest canopy cover, most were barrier island communities near St. Petersburg. Across multiple regions, communities on barrier islands have some of the lowest urban tree canopy due to their limited land area and compact development. A prime example is the City of Treasure Island, which had 74% of its land cover deemed unsuitable for tree canopy.

Over the entire assessment period, the City of Wildwood experienced the largest loss in canopy, with a 14% decrease representing 5,342 acres of lost canopy. The Town of Belleair Shore gained the most UTC by percentage (12%), while the City of Tampa gained the most UTC by area (1,814 acres).

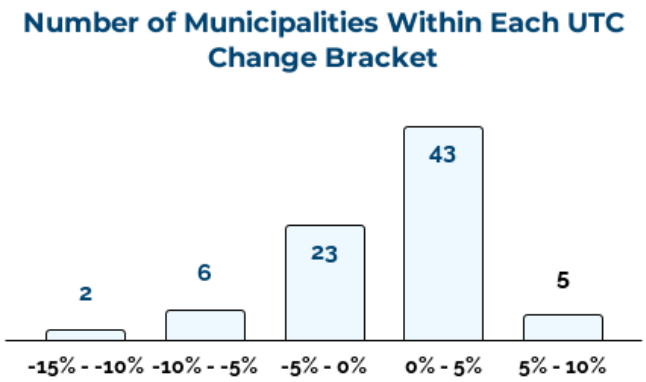


Figure 24. Number of West Central communities with percent canopy cover change ranges (left).

Table 5. Municipalities with the largest UTC increase (top) and the largest UTC decrease (bottom).

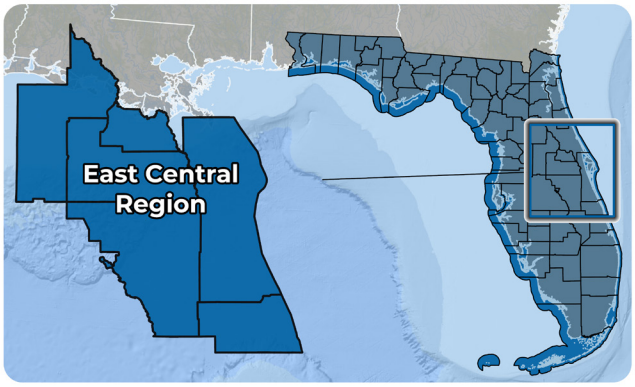
Largest UTC Increase		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Belleair Shore	5	11.9%
Indian Rocks Beach	51	9.1%
Indian Shores	18	8.1%

Largest UTC Decrease		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Wildwood	-5,342	-14.5%
Davenport	-328	-12.2%
Lake Alfred	-560	-8.9%

WEST CENTRAL HAS 294,181 ACRES OF PPA, THE MOST OF ANY REGION.



EAST CENTRAL REGION



The East Central region contains 67 municipalities and Census Designated Places (CDPs) spanning six counties: Lake, Seminole, Orange, Osceola, Brevard, and Indian River. With 715,606 total acres, the assessed area of the East Central region is the second-largest in the state.

REGIONAL KEY FINDINGS

In the East Central region, urban tree canopy (UTC) constituted 31% of the land cover. Between 2013 and 2017, this area experienced a notable increase in canopy, gaining 17,641 acres. However, this period of growth was followed by a decline from 2017 to 2021, during which 16,596 acres of canopy were lost. Consequently, the net increase in canopy throughout the entire assessment period amounted to a modest 1,045 acres, representing a change of less than 1%.

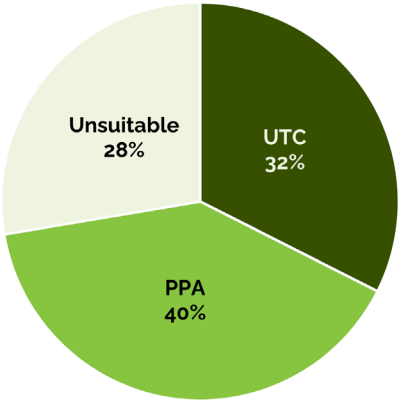


Figure 25. Urban tree canopy, possible planting area, and area unsuitable for UTC in the East Central region.

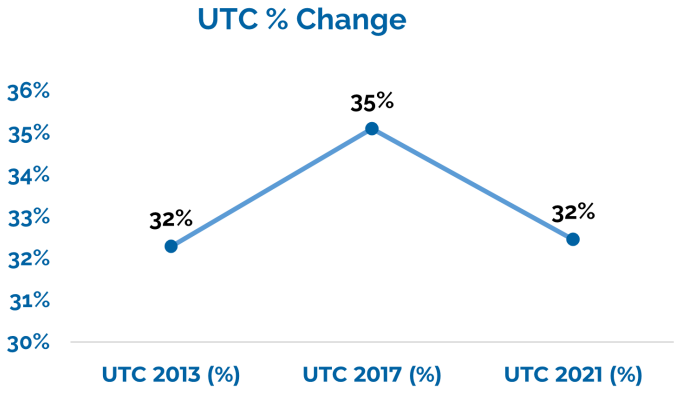


Figure 26. East Central's urban tree canopy percentage in 2013, 2017, and 2021.

Possible planting area (PPA) will be essential in furthering additional canopy growth. The East Central region has the second largest area (250,176 acres) of PPA, amounting to 40%. If every acre of PPA is utilized for tree plantings then UTC cover could theoretically reach an impressive 72% canopy cover. Striving to reduce impervious coverage may further elevate the potential canopy metric.

MUNICIPAL KEY FINDINGS

In the East Central region, the largest and most prominent urban centers are the cities of Orlando and Palm Bay. Orlando distinguishes itself with the most expansive canopy area with 18,952 acres, while Palm Bay contains extensive PPA spanning an impressive 26,365 acres suitable for new trees.

The Town of Melbourne Village emerged with the highest percentage of UTC at 69%, while the City of Satellite Beach had the lowest percentage of UTC at 14%. Over the entire assessment period, the City of Fellsmere experienced the most significant decline in canopy with a loss of 3,026 acres, or an 8% decrease in canopy. Fortunately, the City of Fellsmere has considerable new tree planting potential, evidenced by its 70% PPA, tied with the City of Mascotte for highest proportion of PPA in the region. The City of Palm Bay experienced the most substantial growth in canopy in terms of land area (1,305 acres) while the Town of Orchid experienced the largest percent increase (8%).

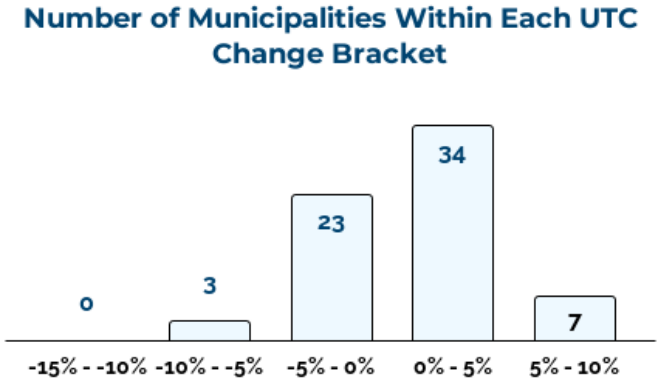


Figure 27. Number of East Central communities with percent canopy cover change ranges (left).

Table 6. Municipalities with the largest UTC increase (top) and the largest UTC decrease (bottom).

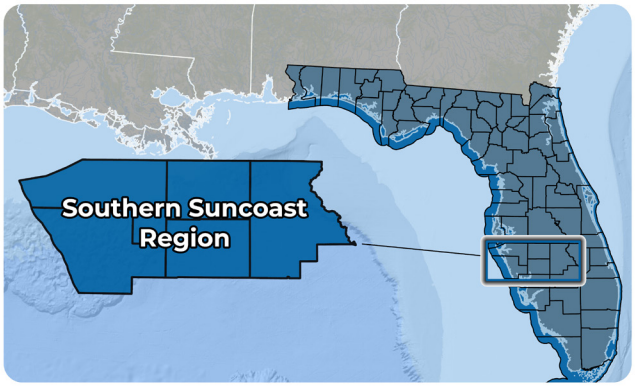
Largest UTC Increase		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Orchid	56	7.7%
Cocoa Beach	240	7.5%
Vero Beach	501	6.8%

Largest UTC Decrease		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Fellsmere	-3,026	-8.2%
Oakland	-110	-7.4%
Montverde	-77	-6.5%

THE CITY OF FELLSMERE LOST 3,026 ACRES OF UTC BUT HAS AMPLE REGROWTH OPPORTUNITIES WITH 70% PPA.



SOUTHERN SUNCOAST REGION



The Southern Suncoast region, encompassing 22 municipalities and Census Designated Places (CDPs), extends across five counties: Manatee, Sarasota, Hardee, Desoto, and Highlands. This region, covering 175,776 acres, stands as the second-smallest in the state.

REGIONAL KEY FINDINGS

Urban tree canopy (UTC) in the Southern Suncoast made up 31% of the land cover. Over the span of 2013 to 2017, this region experienced an expansion of its UTC, accruing 7,388 acres of UTC. However, in the subsequent interval from 2017 to 2021, there was a decline in UTC amounting to a loss of 5,783 acres. The net canopy change during the entire assessment period was an increase of 1,605 acres, which translates to a net gain of 1% in canopy coverage.

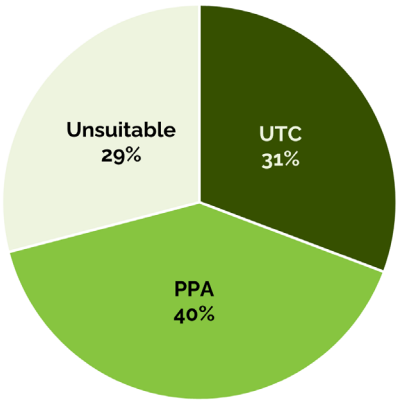


Figure 28. Urban tree canopy, possible planting area, and area unsuitable for UTC in the Southern Suncoast region.

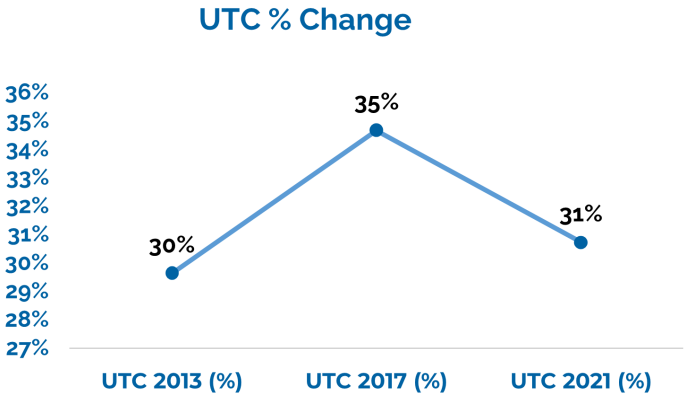


Figure 29. Southern Suncoast's urban tree canopy percentage in 2013, 2017, and 2021.

The utilization of possible planting area (PPA) will play a pivotal role in expanding canopy coverage. The Southern Suncoast region had 40% of its land deemed suitable for future tree plantings. If all 59,050 acres of PPA are utilized for tree plantings then UTC cover could theoretically reach as high as 71%. Initiatives to lower impervious coverage could raise the potential canopy metric even more.

MUNICIPAL KEY FINDINGS

North Port was the largest City by area in the Southern Suncoast region. North Port had the largest UTC area (21,979 acres), while Nokomis and Osprey were tied for the highest UTC percentage at 38%. The City limits of North Port encompass the majority of the 8,500-acre Myakka State Forest, a substantial contributor to the region's UTC. Almost half of the Southern Suncoast's UTC comes from the City of North Port. Additionally, North Port also gained the most UTC area over the entire assessment period (832 acres) and also had the largest PPA area (31,349 acres).

Cortez and the City of Sarasota gained the most UTC by percentage at 5% each. The largest UTC losses were the Town of Lake Placid by percentage (-5%) and the City of Venice by area (-304 acres). Those losses put Lake Placid at a UTC percentage of 12%, which is the lowest canopy coverage in the region.

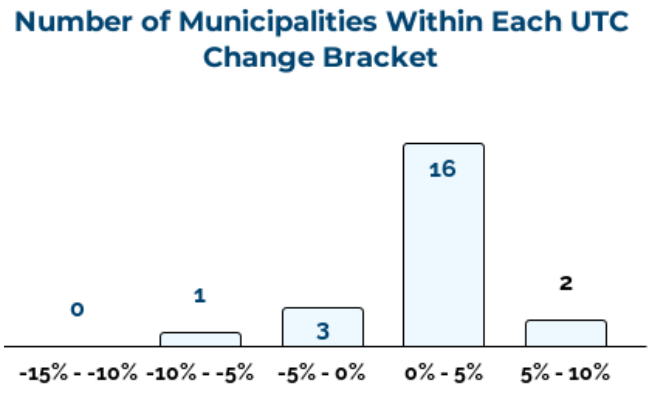


Figure 30. Number of Southern Suncoast communities with percent canopy cover change ranges (left).

Table 7. Municipalities with the largest UTC increase (top) and the largest UTC decrease (bottom).

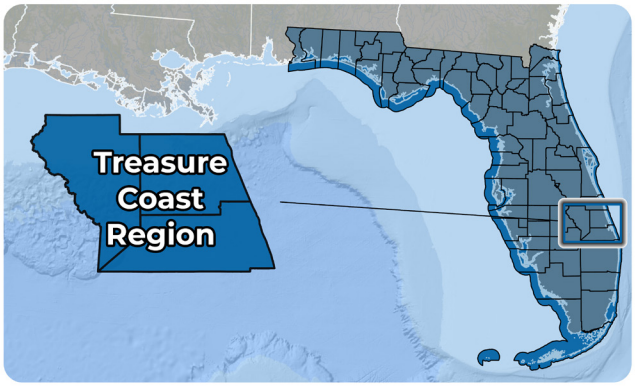
Largest UTC Increase		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Cortez	77	5.4%
Sarasota	505	5.3%
Holmes Beach	52	4.6%

Largest UTC Decrease		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Lake Placid	-156	-5.2%
Avon Park	-275	-4.2%
Venice	-304	-3.0%

NORTH PORT CONTAINS ALMOST HALF OF ALL THE UTC IN THE REGION.



TREASURE COAST REGION



The Treasure Coast region contains 11 municipalities and Census Designated Places (CDPs) and spans three counties: Okeechobee, St. Lucie, and Martin. At 140,675 acres, the assessed area of the Treasure Coast region is the smallest in the state.

REGIONAL KEY FINDINGS

In 2021, the Treasure Coast region had a proportionally small urban forest but the canopy is trending in the right direction. Urban tree canopy (UTC) in the region made up 24% of the land cover, which is the lowest of all regions. Treasure Coast gained 9,050 acres of UTC from 2013 to 2017 and lost -6,817 acres of UTC from 2017 to 2021. The net canopy change during the entire assessment period was 2,233 acres, a 2% increase, the highest of any region.

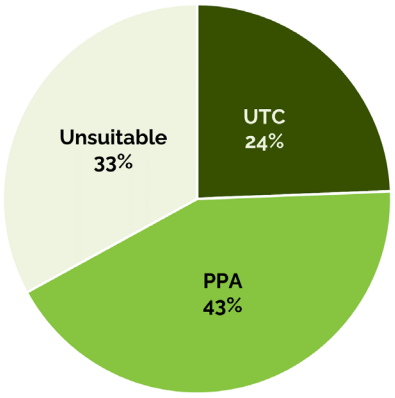


Figure 31. Urban tree canopy, possible planting area, and area unsuitable for UTC in the Treasure Coast region.

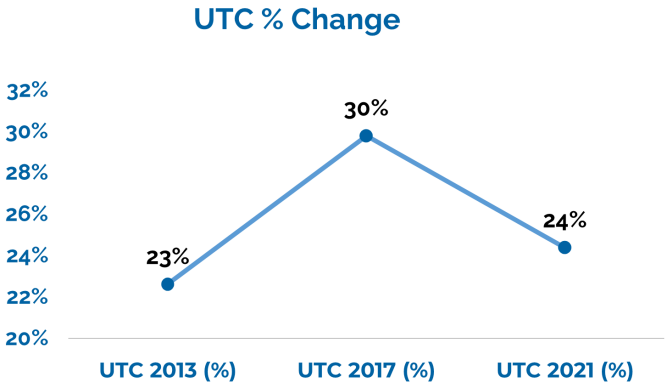


Figure 32. Treasure Coast's urban tree canopy percentage in 2013, 2017, and 2021.

Treasure Coast has ample potential land to contribute to its canopy expansion. The region's 53,779 acres of PPA represent 43% of the region, the highest in the state. In theory, if every acre of PPA is utilized for tree plantings then UTC cover could reach up to 67%. Aiming to reduce impervious coverage could contribute to an increased potential canopy metric.

MUNICIPAL KEY FINDINGS

The largest City in the Treasure Coast region was Port St. Lucie, which made up over half of the assessed area. Port St. Lucie had the largest UTC area (14,793 acres) and PPA area (34,704 acres). However, Port St. Lucie was the only community in the region to have a net loss of canopy. The City lost 1% of its UTC, representing 694 acres.

Despite expansive coverage of UTC acres, Port St Lucie had the lowest UTC percentage (20%), while the Town of Jupiter Island had the highest percent of urban trees, covering over half of its land area (60%). Indian Town Village had the highest potential for new tree growth, with 55% of its area suitable for plantings. The City of Fort Pierce saw the largest growth in tree-covered area, adding 702 acres of new trees over the eight-year assessment period. Meanwhile, Jupiter Island had the biggest percentage increase in trees, growing by nearly 12%.

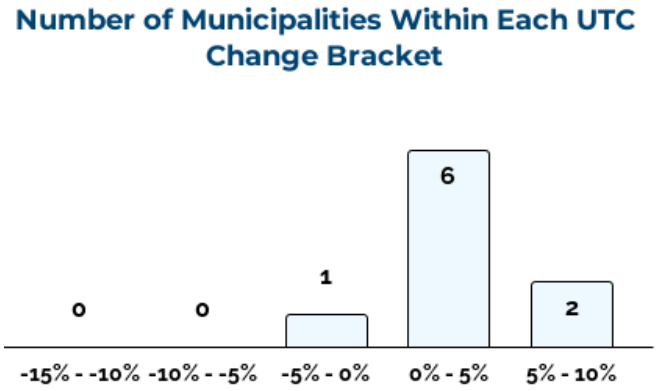


Figure 33. Number of Treasure Coast communities with percent canopy cover change ranges (left).

Table 8. Municipalities with the largest UTC increase (top) and the largest UTC decrease (bottom).

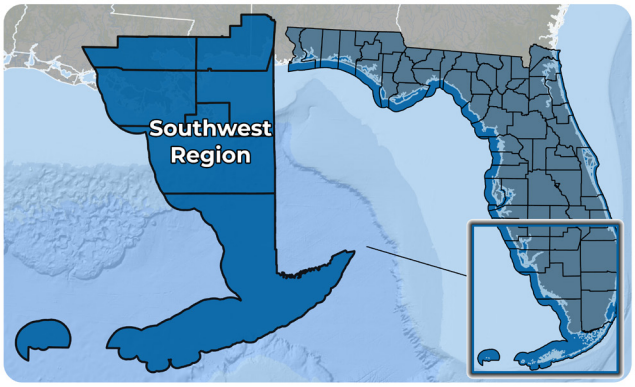
Largest UTC Increase		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Jupiter Island	199	11.5%
Jensen Beach	473	10.5%
Stuart	348	7.6%

Largest UTC Decrease		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Port St. Lucie	-694	-0.9%

FROM 2013 TO 2021, ALL COMMUNITIES BUT ONE EXPERIENCED NET POSITIVE CANOPY INCREASES.



SOUTHWEST REGION



The Southwest region includes 29 municipalities and Census Designated Places (CDPs), covering six counties: Monroe, Collier, Hendry, Lee, Charlotte, and Glades. At 426,981 total acres, the assessed area of the Southwest region is the fourth-smallest in the state.

REGIONAL KEY FINDINGS

In the Southwest region, the urban tree canopy (UTC) covered 32% of the overall land cover. Between 2013 and 2017, the Southwest region experienced a significant expansion in canopy, adding 19,024 UTC acres, which translates to an increase of just over 5%. However, from 2017 to 2021, -15,024 acres of canopy were lost. Despite this setback, over the entire assessment period, the Southwest region emerged as the leader in UTC area growth, with a net gain of 4,000 acres, the most of all regions.

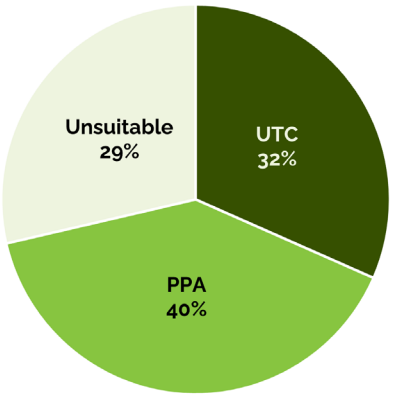


Figure 34. Urban tree canopy, possible planting area, and area unsuitable for UTC in the Southwest region.

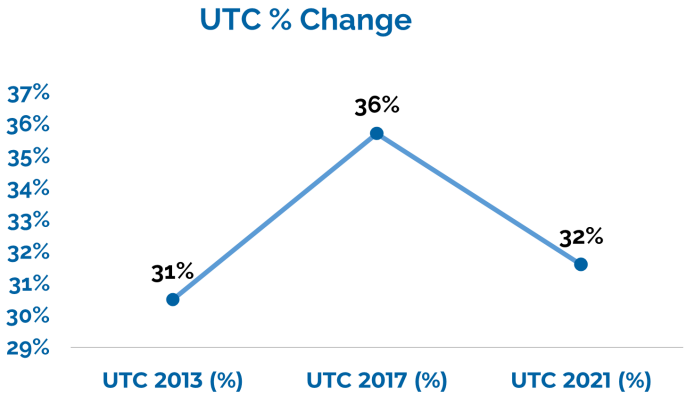


Figure 35. Southwest's urban tree canopy percentage in 2013, 2017, and 2021.

Possible planting area (PPA) will be essential in furthering additional canopy growth. The Southwest region had a PPA percentage of 40%. If all 145,115 acres of PPA is utilized for tree plantings then UTC cover could theoretically reach 71%. Efforts focused on minimizing impervious coverage could boost the potential canopy metric to a greater degree.

MUNICIPAL KEY FINDINGS

The largest communities in the Southwest region are Cape Coral and Lehigh Acres. Lehigh Acres had the largest UTC area at 14,831 acres, while Cape Coral had the largest PPA area at 32,327 acres. Remarkably, Cape Coral added the most tree cover of any community in the state during the study period, a total of 2,868 acres. Regarding percentage growth, Bokeelia experienced the largest increase in the Southwest region with an increase of 19% throughout the eight-year assessment period.

Meanwhile, the City of Fort Myers lost the most UTC area (-788 acres) over the entire assessment period, while Tavernier experienced the largest percentage loss in tree cover (-16%). Even with that loss, Tavernier still had a comparatively high UTC percentage (56%) in the Southwest region in 2021, second only to Sanibel which boasted 70% UTC.

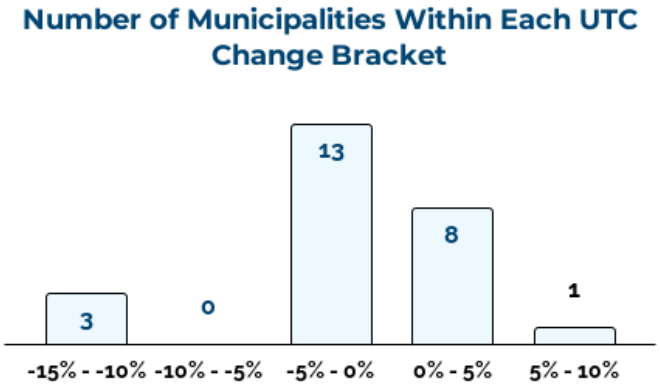


Figure 36. Number of Southwest communities with percent canopy cover change ranges (left).

Table 9. Municipalities with the largest UTC increase (top) and the largest UTC decrease (bottom).

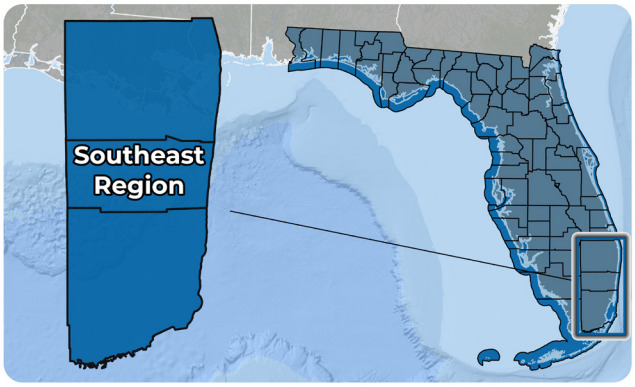
Largest UTC Increase		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Bokeelia	1,113	18.9%
Sanibel	1,915	18.1%
Captiva	108	14.3%

Largest UTC Decrease		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Tavernier	-249	-15.7%
Marathon	-639	-11.8%
Islamorada, Village of Islands	-423	-10.4%

THE SOUTHWEST HAD A NET GAIN OF 4,000 ACRES OF UTC, THE MOST OF ALL REGIONS.



SOUTHEAST REGION



The Southeast region contains 102 municipalities and Census Designated Places (CDPs) and spans three counties: Palm Beach, Broward, and Miami-Dade. At 678,744 combined total acres, the assessed area of the Southeast region is the fifth-largest in the state.

REGIONAL KEY FINDINGS

Urban tree canopy (UTC) in the Southeast region made up 25% of the land cover, the second lowest regional average in the state. The Southeast region had the highest percentage of land cover unsuitable for UTC (45%) of all regions. This is unsurprising given that the Southeast features Florida's three most populated counties and includes the expansive Miami metropolitan area.

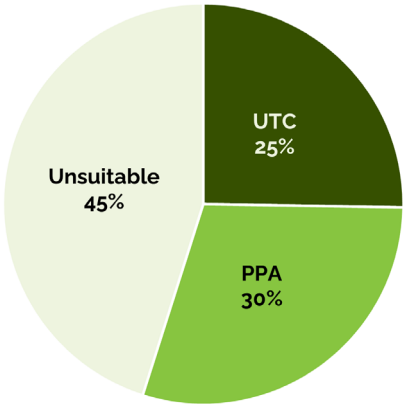


Figure 37. Urban tree canopy, possible planting area, and area unsuitable for UTC in the Southeast region.

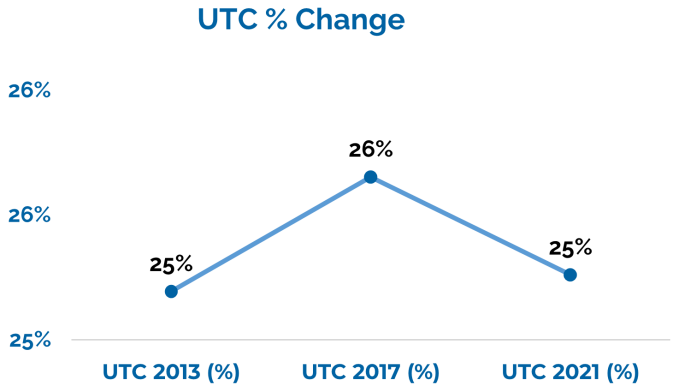


Figure 38. Southeast's urban tree canopy percentage in 2013, 2017, and 2021.

The Southeast gained 2,691 acres of UTC from 2013 to 2017. However, this upward trend was followed by a reduction of 2,304 canopy acres from 2017 to 2021. Despite these fluctuations, the Southeast was one of five regions to have net positive canopy change over the entire assessment period. The regional gain was modest both in terms of area, 388 acres, and percentage, less than 1%. This was the smallest net increase seen throughout Florida's ten regions. Overall, the Southeast region has a proportionally small but relatively stable urban tree canopy.

The potential for new canopy lies in the region's possible planting area (PPA), which is crucial for improving the Southeast's comparatively low UTC average. The Southeast region had a PPA percentage of 30%. If all 173,839 acres of PPA were effectively utilized for tree planting, the UTC coverage in the Southeast could theoretically reach up to 55%. Aiming to reduce impervious coverage could contribute to an increased potential canopy metric.

MUNICIPAL KEY FINDINGS

The largest cities in the Southeast region were Miami, West Palm Beach, and Palm Beach Gardens. Of these, Palm Beach Gardens is notable for having the most extensive canopy coverage, totaling 11,853 acres. However, it experienced the most significant reduction in UTC throughout the assessment period, with a decrease of -1,058 acres. On a positive note, Palm Beach Gardens also stands out for its substantial capaCity for canopy growth. This City boasts 15,514 acres suitable for new trees, the largest potential in the Southeast region.

In 2021, contrasting scenarios were observed in UTC throughout the region. Lazy Lake Village boasted the highest UTC percentage (70%), while the Canal Point had the lowest, with only 4%. Over the entire assessment period, the City of Hialeah experienced the most pronounced decrease in UTC coverage, with a 6% reduction. Meanwhile, the Town of Gulf Stream achieved the highest increase in UTC percentage, at 10%. Although occupying only a relatively small area, the Town of Jupiter gained the most UTC area with 944 acres.

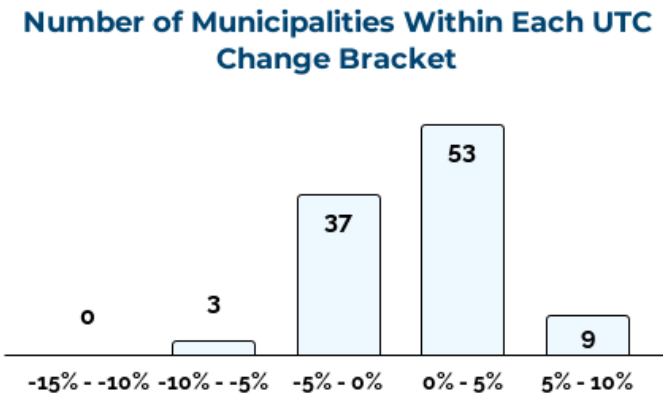


Figure 39. Number of Southeast communities with percent canopy cover change ranges (left).

Table 10. Municipalities with the largest UTC increase (top) and the largest UTC decrease (bottom).

Largest UTC Increase		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Gulf Stream	49	9.8%
Lazy Lake Village	1	9.0%
Palm Beach	183	7.5%

Largest UTC Decrease		
City	UTC Change 2013-2021 (Acres)	UTC Change 2013-2021 (%)
Hialeah	-811	-5.9%
Palmetto Bay Village	-273	-5.1%
Hialeah Gardens	-104	-5.0%

THE DENSELY POPULATED SOUTHEAST HAS THE LOWEST UTC (25%) AND HIGHEST PERCENTAGE OF LAND COVER UNSUITABLE FOR UTC (45%).



RECOMMENDATIONS

Florida's natural resources are vast and valuable, with its 1.5 million acres of urban forest ranking among the state's most important and valuable assets. The State's urban forests provide communities with resilience-boosting services, such as lowering air temperatures, improving public health, and expanding wildlife habitat. However, these forests face numerous challenges. Hurricanes, pests, diseases, and rapid development- stemming from Florida having one of the fastest-growing populations in the country- all pose serious risks to the urban tree canopy.

Assessments of Florida's tree canopy, conducted on a recurring basis, serve multiple functions. These assessments can serve as a baseline, a report card, and a strategic compass for the state's long-term canopy health. The results of this assessment can help guide planning, investment, and management strategies to ensure that the communities most in need of the urban forest benefits gain access to necessary resources.

RECOMMENDATIONS

1. **Leverage the results of this assessment to promote the urban forest**
   The findings of this assessment are pivotal for promoting investment in urban forest monitoring, maintenance, and management; and offer essential support for state, county, and local budget requests and grant applications. These results can be used to craft targeted presentations and resources for government leaders, planners, engineers, resource managers, and the public, to make an empirical case for urban forest needs and benefits.

2. **Learn from cities with the largest canopy gains and losses**
   There is a story behind the urban tree canopy change in every community. Are tree ordinances proving effective? Are management plans working? Are storms and disease taking a toll? Cities can seek out nearby and similarly-sized communities to get ideas on what's working and what isn't.

3. **Use TreePlotter to prioritize planting efforts**
   Utilization of TreePlotter™ CANOPY enables the Florida Forest Service and other urban forest stakeholders to create detailed planting priority maps. Users can create uniquely weighted scenarios to target areas based on specific criteria such as low UTC, high PPA, or specific socio demographic criteria. By focusing on these areas, the allocation of urban forest management resources can be maximized, offering a greater return on investment.

4. **Set evidence-based canopy goals**
   As Florida's population grows and urbanization expands, the preservation and growth of existing canopy is vital. These assessment findings can be used to develop short and long-term goals, such as: establishing annual tree planting targets, improving the quality of tree cover by planting a wider variety of large maturing trees, or setting specific canopy coverage goals by a future date.

5. **Develop outreach programs towards private landowners**
   To increase canopy in Florida, it's important to understand that most urban forests are often situated on private land. Incorporating these findings into community outreach and education programs for citizens and private landholders is crucial. Disseminating these data will help residents understand the changes in their local urban forests and the numerous benefits trees offer. Pairing educational programming with tree giveaways, tree planting programs, and tree maintenance events can help increase urban tree canopy on private property.

6. **Continue urban forest monitoring to track progress and revise strategy**
   Regular canopy assessments with the latest available imagery are recommended to manage and expand urban tree canopy effectively. The imagery used in this assessment is updated every two to three years. By conducting recurring assessments, all urban forest stakeholders can keep an accurate pulse on the urban forest and get key feedback on areas of growth and loss. Additionally, major hurricanes can drastically reshape urban tree canopy in a single day. Urban tree canopy assessments provide the data needed to help communities assess damage and prioritize equitable recovery.



REPORT

APPENDIX

GLOSSARY/KEY TERMS

Land Acres: Total land area, in acres, of the assessment boundary (excludes water).
Non-Canopy Vegetation: Areas of grass and open space where tree canopy does not exist.
Total Acres: Total area, in acres, of the assessment boundary (includes water).
Unsuitable Planting Area: Areas where it is not feasible to plant trees. Airports, ball fields, golf courses, etc. were manually defined as unsuitable planting areas.
Urban Tree Canopy (UTC): The "layer of leaves, branches and stems that cover the ground" (Raciti et al., 2006) when viewed from above; the metric used to quantify the extent, function, and value of the urban forest. Tree canopy was generally taller than 10-15 feet tall.
Possible Planting Area (PPA): Possible planting area (PPA) was defined as all vegetated areas where tree canopy does not exist, and there are no constraints on planting trees.

COMMUNITY RESULTS TABLE

A comprehensive list of community results alphabetically sorted by municipality name can be found below. This table presents each community's most recent* urban tree canopy percentage, possible plantable space percentage, and urban tree canopy change from 2013 to 2021.

**The most recent NAIP imagery collection did not encompass the Eglin Air Force Base and its adjacent areas. The latest available canopy data is 2017 for the following municipalities: Cinco Bayou, Fort Walton Beach, Mary Esther, Niceville, Shalimar, and Valparaiso.*

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
North Central	Alachua	44%	44%	1.3%	-4.4%	-3.1%
West Panhandle	Alford	34%	43%	4.1%	-30.6%	-26.5%
East Central	Altamonte Springs	36%	20%	2.0%	-3.4%	-1.4%
West Panhandle	Altha	17%	51%	1.4%	-19.0%	-17.6%
West Central	Alturas CDP	20%	70%	-0.2%	-0.5%	-0.6%
Southwest	Alva CDP	38%	53%	2.5%	-6.8%	-4.3%
Southern Suncoast	Anna Maria	25%	11%	1.6%	2.9%	4.5%
East Panhandle	Apalachicola	34%	40%	0.7%	-7.6%	-6.9%
West Central	Apollo Beach CDP	27%	43%	2.6%	-0.1%	2.5%
East Central	Apopka	31%	42%	0.3%	-3.5%	-3.3%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
Southern Suncoast	Arcadia	30%	36%	6.1%	-5.0%	1.1%
North Central	Archer	47%	44%	0.2%	-6.1%	-5.9%
East Central	Astatula	42%	40%	2.6%	-2.6%	0.0%
East Central	Astor CDP	66%	20%	3.5%	-0.8%	2.7%
Northeast	Atlantic Beach	13%	10%	-0.7%	-0.8%	-1.5%
Southeast	Atlantis	18%	28%	0.6%	-1.6%	-1.1%
West Central	Auburndale	21%	50%	-1.4%	-2.2%	-3.6%
Southeast	Aventura	25%	10%	2.3%	-0.7%	1.6%
Southern Suncoast	Avon Park	19%	47%	-2.2%	-2.1%	-4.2%
West Central	Babson Park CDP	24%	51%	-1.6%	3.2%	1.6%
West Panhandle	Bagdad CDP	66%	15%	6.1%	-5.6%	0.5%
Southeast	Bal Harbour village	29%	14%	0.5%	0.3%	0.8%
Northeast	Baldwin	51%	29%	-0.4%	-6.8%	-7.2%
West Central	Bartow	29%	57%	3.4%	-1.8%	1.6%
West Panhandle	Bascom	39%	44%	-2.6%	-27.7%	-30.3%
Southeast	Bay Harbor Islands	23%	12%	-4.9%	5.5%	0.6%
East Central	Bay Lake	55%	23%	3.4%	-2.9%	0.5%
North Central	Bell	48%	34%	-0.7%	-0.6%	-1.3%
Southeast	Belle Glade	8%	53%	-1.2%	0.9%	-0.3%
East Central	Belle Isle	32%	32%	2.2%	-2.4%	-0.2%
West Central	Belleair	33%	19%	-1.3%	0.1%	-1.2%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
West Central	Belleair Beach	19%	20%	5.0%	3.0%	8.0%
West Central	Belleair Bluffs	30%	19%	-0.3%	3.3%	2.9%
West Central	Belleair Shore	24%	20%	6.2%	5.6%	11.9%
North Central	Belleview	27%	45%	2.5%	-4.4%	-1.9%
North Central	Beverly Beach	11%	45%	3.9%	-11.2%	-7.3%
North Central	Beverly Hills CDP	30%	35%	2.2%	-2.0%	0.2%
Southwest	Big Pine Key CDP	39%	39%	-10.9%	6.7%	-4.2%
Southeast	Biscayne Park village	48%	22%	-2.8%	2.2%	-0.6%
West Panhandle	Blounts	44%	36%	0.3%	-21.2%	-20.9%
Southeast	Boca Raton	28%	22%	-0.5%	-1.1%	-1.5%
Southwest	Bokeelia CDP	51%	36%	19.6%	-0.7%	18.9%
West Panhandle	Bonifay	52%	26%	4.2%	-4.8%	-0.6%
Southwest	Bonita Springs	37%	30%	4.1%	-3.1%	1.0%
Southern Suncoast	Bowling Green	23%	53%	4.9%	-4.0%	1.0%
Southeast	Boynton Beach	22%	28%	2.6%	-1.5%	1.2%
Southern Suncoast	Bradenton	29%	26%	6.5%	-2.4%	4.2%
Southern Suncoast	Bradenton Beach	22%	12%	3.1%	0.9%	4.1%
West Central	Brandon CDP	36%	29%	4.8%	-3.1%	1.7%
East Panhandle	Branford	77%	17%	3.1%	-4.6%	-1.5%
Southeast	Briny Breezes	9%	13%	3.4%	1.5%	4.9%
East Panhandle	Bristol	39%	36%	3.6%	-14.4%	-10.8%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
North Central	Bronson	53%	32%	0.1%	-6.1%	-6.0%
Northeast	Brooker	28%	55%	1.9%	-3.0%	-1.1%
West Central	Brooksville	58%	24%	5.2%	-2.3%	3.0%
North Central	Bunnell	59%	34%	5.8%	-7.8%	-1.9%
West Central	Bushnell	24%	65%	3.5%	-2.1%	1.3%
Northeast	Callahan	47%	26%	-1.4%	-8.1%	-9.6%
West Panhandle	Callaway	21%	48%	0.5%	-27.6%	-27.1%
West Panhandle	Campbellton	56%	36%	-0.1%	9.5%	9.4%
Southeast	Canal Point CDP	4%	74%	-5.0%	0.1%	-4.9%
East Central	Cape Canaveral	23%	21%	2.7%	-0.6%	2.1%
Southwest	Cape Coral	19%	47%	10.1%	-5.9%	4.2%
Southwest	Captiva CDP	51%	11%	11.9%	2.4%	14.3%
East Panhandle	Carrabelle	33%	38%	1.8%	-4.7%	-3.0%
West Panhandle	Caryville	75%	15%	-3.6%	-0.7%	-4.4%
East Central	Casselberry	36%	24%	3.7%	-1.3%	2.4%
North Central	Cedar Key	32%	35%	3.3%	-5.9%	-2.5%
West Central	Center Hill	29%	65%	0.1%	-4.2%	-4.1%
West Panhandle	Century	64%	24%	10.1%	1.8%	11.8%
East Panhandle	Chattahoochee	46%	31%	1.0%	-13.1%	-12.1%
West Central	Cheval CDP	50%	24%	4.1%	-1.1%	3.0%
North Central	Chiefland	34%	46%	0.5%	-3.5%	-3.0%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
West Panhandle	Chipley	40%	33%	6.2%	-8.5%	-2.3%
East Central	Christmas CDP	51%	44%	6.7%	-5.4%	1.3%
West Panhandle	Cinco Bayou*	35%	17%	2.5%		
West Central	Clearwater	31%	19%	0.9%	0.0%	0.9%
East Central	Clermont	19%	41%	-1.0%	-1.2%	-2.3%
Southwest	Clewiston	11%	52%	1.5%	-2.4%	-0.9%
Southeast	Cloud Lake	27%	46%	7.3%	-4.9%	2.4%
East Central	Cocoa	36%	31%	6.7%	-3.4%	3.3%
East Central	Cocoa Beach	24%	28%	2.5%	5.0%	7.5%
Southeast	Coconut Creek	37%	22%	1.9%	-0.2%	1.7%
West Central	Coleman	43%	48%	5.4%	-4.0%	1.3%
Southeast	Cooper City	29%	28%	1.8%	-0.3%	1.5%
Southeast	Coral Gables	51%	15%	-0.5%	0.0%	-0.5%
Southeast	Coral Springs	30%	22%	0.9%	1.4%	2.3%
Southern Suncoast	Cortez CDP	32%	32%	2.7%	2.7%	5.4%
West Panhandle	Cottondale	37%	45%	-5.5%	-19.4%	-24.9%
North Central	Crescent City	50%	35%	3.0%	-3.6%	-0.6%
West Panhandle	Crestview*	53%	24%	4.7%	-3.4%	1.3%
East Panhandle	Cross City	33%	42%	4.6%	-8.6%	-4.0%
North Central	Crystal River	52%	23%	2.1%	-6.9%	-4.8%
Southeast	Cutler Bay	29%	34%	0.7%	-5.2%	-4.6%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
West Central	Dade City	22%	52%	0.9%	-5.9%	-5.0%
Southeast	Dania Beach	27%	20%	-0.6%	-0.7%	-1.3%
West Central	Davenport	16%	46%	-6.3%	-5.9%	-12.2%
Southeast	Davie	25%	35%	0.1%	-0.7%	-0.6%
North Central	Daytona Beach	47%	27%	9.2%	-6.5%	2.7%
North Central	Daytona Beach Shores	6%	17%	3.1%	-2.8%	0.3%
North Central	De Leon Springs CDP	61%	22%	0.7%	-5.0%	-0.4%
North Central	DeBary	42%	33%	1.3%	-6.4%	-5.7%
Southeast	Deerfield Beach	22%	25%	0.9%	0.3%	1.1%
West Panhandle	DeFuniak Springs*	62%	21%	0.0%	-2.3%	-2.3%
North Central	DeLand	40%	26%	4.5%	-5.4%	-4.1%
Southeast	Delray Beach	25%	25%	1.0%	-1.0%	0.1%
North Central	Deltona	33%	37%	6.7%	-5.4%	1.3%
West Panhandle	Destin*	31%	19%	1.6%	-0.2%	1.4%
Southeast	Doral	17%	19%	-1.1%	-1.7%	-2.8%
West Central	Dover CDP	27%	54%	3.7%	-5.7%	-2.0%
West Central	Dundee	16%	60%	-8.1%	2.0%	-6.0%
West Central	Dunedin	37%	22%	1.1%	-0.4%	0.7%
North Central	Dunnellon	52%	32%	1.9%	-10.2%	-8.3%
West Central	Eagle Lake	13%	53%	-1.1%	-2.8%	-3.9%
North Central	East Palatka CDP	35%	34%	3.4%	-2.6%	0.8%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
East Panhandle	Eastpoint CDP	65%	20%	-2.2%	-16.3%	-18.5%
East Central	Eatonville	27%	34%	0.1%	-5.1%	-4.9%
West Panhandle	Ebro*	61%	29%	-5.2%	-3.3%	-8.5%
North Central	Edgewater	56%	25%	4.6%	-2.7%	1.9%
East Central	Edgewood	30%	32%	4.2%	-3.7%	0.5%
Southeast	El Portal village	46%	22%	-0.4%	2.4%	1.9%
West Central	Elfers CDP	27%	25%	5.0%	-6.3%	-1.3%
Southern Suncoast	Ellenton CDP	30%	44%	4.2%	-3.2%	1.0%
Southern Suncoast	Englewood CDP	36%	36%	5.2%	-4.1%	1.1%
Southwest	Estero village	42%	27%	5.2%	-2.9%	2.3%
West Panhandle	Esto	48%	46%	3.5%	3.6%	7.1%
East Central	Eustis	39%	34%	2.7%	-2.4%	0.3%
Southwest	Everglades	46%	26%	-0.3%	-1.2%	-1.5%
North Central	Fanning Springs	64%	22%	2.9%	-5.6%	-2.7%
East Central	Fellsmere	20%	70%	-7.2%	-1.0%	-8.2%
Northeast	Fernandina Beach	41%	22%	1.4%	-3.6%	-2.3%
West Panhandle	Ferry Pass CDP	42%	22%	2.8%	-5.7%	-3.0%
North Central	Flagler Beach	27%	35%	2.7%	-3.0%	-0.3%
Northeast	Fleming Island CDP	53%	21%	0.3%	-1.8%	-1.5%
North Central	Floral City CDP	51%	43%	3.3%	-2.9%	0.5%
Southeast	Florida City	22%	47%	0.5%	-1.4%	-0.9%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
Southeast	Fort Lauderdale	25%	17%	0.2%	-0.3%	-0.1%
West Central	Fort Meade	27%	60%	3.2%	-2.7%	0.5%
Southwest	Fort Myers	28%	33%	1.7%	-4.9%	-3.2%
Southwest	Fort Myers Beach	25%	18%	5.1%	-4.4%	0.7%
Treasure Coast	Fort Pierce	27%	35%	9.9%	-5.3%	4.7%
West Panhandle	Fort Walton Beach*	36%	29%	1.9%		
Northeast	Fort White	50%	30%	1.6%	-6.2%	-4.6%
West Panhandle	Freeport*	61%	29%	-2.3%	-3.6%	-5.9%
West Central	Frostproof	18%	62%	-7.1%	1.3%	-5.8%
East Central	Fruitland Park	38%	36%	2.6%	-3.4%	-0.8%
North Central	Gainesville	58%	18%	0.6%	-6.3%	-5.6%
East Central	Geneva CDP	56%	34%	6.6%	-3.3%	3.3%
West Central	Gibsonton CDP	34%	38%	3.6%	-2.1%	1.6%
Southeast	Glen Ridge	35%	39%	8.1%	-2.5%	5.6%
Northeast	Glen St. Mary	45%	29%	9.6%	-3.7%	5.8%
Southeast	Golden Beach	37%	13%	-1.0%	3.9%	2.9%
Southeast	Golf village	31%	32%	2.6%	-3.1%	-0.5%
West Panhandle	Graceville	52%	36%	1.6%	1.3%	2.9%
West Panhandle	Grand Ridge	29%	49%	3.8%	-17.7%	-13.9%
East Central	Grant-Valkaria	45%	44%	3.0%	0.8%	3.8%
Northeast	Green Cove Springs	47%	25%	3.1%	-5.1%	-2.0%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
Southeast	Greenacres	24%	28%	0.5%	0.7%	1.2%
East Panhandle	Greensboro	53%	27%	2.9%	-9.8%	-6.9%
East Panhandle	Greenville	44%	33%	2.6%	-5.6%	-3.0%
West Panhandle	Greenwood	23%	55%	0.9%	-15.7%	-14.8%
East Panhandle	Gretna	46%	36%	1.4%	-5.2%	-3.8%
East Central	Groveland	18%	66%	2.0%	-3.7%	-1.7%
West Panhandle	Gulf Breeze	50%	21%	6.4%	0.8%	7.2%
Southeast	Gulf Stream	32%	23%	13.3%	-3.5%	9.8%
West Central	Gulfport	31%	21%	5.2%	-3.6%	1.6%
West Central	Haines City	14%	56%	-5.2%	-0.5%	-5.7%
Southeast	Hallandale Beach	17%	19%	0.0%	1.1%	1.0%
Northeast	Hampton	69%	22%	7.3%	-3.8%	3.6%
Northeast	Hastings CDP	42%	43%	2.4%	-1.6%	0.8%
East Panhandle	Havana	41%	41%	1.8%	-12.8%	-11.1%
Southeast	Haverhill	29%	37%	6.6%	-0.8%	5.8%
North Central	Hawthorne	56%	33%	8.0%	-6.2%	1.8%
Southeast	Hialeah	10%	16%	-3.3%	-2.6%	-5.9%
Southeast	Hialeah Gardens	10%	19%	-2.6%	-2.4%	-5.0%
North Central	High Springs	39%	50%	0.1%	-10.1%	-10.1%
West Central	Hillcrest Heights	3%	82%	1.4%	-1.1%	0.3%
Northeast	Hilliard	55%	29%	5.2%	-7.3%	-2.1%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
Southeast	Hillsboro Beach	23%	25%	-0.3%	-0.3%	-0.6%
Treasure Coast	Hobe Sound CDP	32%	36%	11.6%	-6.6%	5.0%
West Central	Holiday CDP	25%	25%	1.1%	-1.0%	0.2%
North Central	Holly Hill	33%	23%	1.2%	-2.8%	-1.5%
Southeast	Hollywood	27%	21%	-0.8%	1.0%	0.2%
Southern Suncoast	Holmes Beach	22%	17%	3.3%	1.3%	4.6%
Southeast	Homestead	18%	43%	0.5%	-0.7%	-0.2%
North Central	Homosassa CDP	71%	19%	1.2%	-3.8%	-2.6%
North Central	Homosassa Springs CDP	60%	26%	5.2%	-4.1%	1.1%
East Panhandle	Horseshoe Beach	41%	29%	2.0%	-9.8%	-7.8%
East Panhandle	Hosford CDP	62%	23%	-6.2%	-7.1%	-13.2%
East Central	Howey-in-the-Hills	32%	55%	4.7%	-3.7%	1.1%
West Central	Hudson CDP	29%	34%	1.8%	-2.1%	-0.3%
Southeast	Hypoluxo	24%	26%	9.3%	-4.7%	4.6%
Southwest	Immokalee CDP	24%	60%	0.1%	-4.9%	-4.8%
East Central	Indialantic	26%	24%	5.8%	0.0%	5.8%
Southeast	Indian Creek village	24%	23%	-0.5%	-1.2%	-1.6%
East Central	Indian Harbour Beach	17%	25%	3.5%	0.3%	3.8%
East Central	Indian River Shores	57%	13%	9.2%	-4.2%	5.0%
West Central	Indian Rocks Beach	23%	18%	6.0%	3.1%	9.1%
West Central	Indian Shores	17%	15%	5.3%	2.8%	8.1%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
Treasure Coast	Indian village	26%	55%	5.1%	-1.9%	3.2%
North Central	Inglis	65%	21%	3.3%	-5.0%	-1.7%
North Central	Interlachen	63%	23%	5.9%	-6.1%	-0.2%
North Central	Inverness	54%	27%	6.1%	-2.1%	4.0%
Southwest	Islamorada, Village of Islands village	52%	17%	-10.2%	-0.1%	-10.4%
Northeast	Jacksonville	46%	29%	0.0%	-3.8%	-3.8%
Northeast	Jacksonville Beach	8%	16%	-0.9%	-1.0%	-1.9%
West Panhandle	Jacob City	55%	30%	12.7%	-16.2%	-3.5%
East Panhandle	Jasper	49%	25%	-4.0%	-7.9%	-11.9%
West Panhandle	Jay	19%	58%	2.1%	0.1%	2.2%
East Panhandle	Jennings	69%	16%	2.1%	-12.1%	-9.9%
Treasure Coast	Jensen Beach CDP	29%	36%	14.9%	-4.4%	10.5%
Southeast	Juno Beach	21%	44%	8.8%	-2.1%	6.7%
Southeast	Jupiter	32%	26%	6.9%	0.3%	7.2%
Southeast	Jupiter Inlet Colony	20%	26%	5.9%	-1.2%	4.7%
Treasure Coast	Jupiter Island	60%	21%	15.4%	-3.9%	11.5%
West Central	Kathleen CDP	42%	46%	5.3%	-5.5%	-0.2%
West Central	Kenneth City	22%	23%	3.7%	-2.7%	1.0%
Southeast	Key Biscayne village	37%	13%	-4.6%	4.0%	-0.7%
Southwest	Key Colony Beach	18%	16%	-9.7%	11.2%	1.5%
Southwest	Key Largo CDP	56%	20%	-6.7%	4.0%	-2.8%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
Southwest	Key West	29%	22%	-0.6%	3.5%	2.9%
Northeast	Keystone Heights	45%	23%	2.6%	-2.8%	-0.3%
East Central	Kissimmee	27%	33%	2.8%	-2.1%	0.7%
North Central	La Crosse	44%	45%	0.2%	-6.6%	-6.4%
Southwest	LaBelle	16%	57%	-2.0%	-0.1%	-2.2%
East Central	Lady Lake	29%	32%	5.1%	-5.6%	-0.5%
West Central	Lake Alfred	19%	64%	-9.1%	0.2%	-8.9%
East Central	Lake Buena Vista	40%	20%	-0.6%	-1.4%	-2.0%
Northeast	Lake Butler	36%	45%	2.3%	-3.5%	-1.2%
East Central	Lake Butler CDP	36%	36%	3.8%	0.4%	4.2%
Northeast	Lake City	36%	41%	-0.3%	-8.9%	-9.2%
Southeast	Lake Clarke Shores	22%	32%	5.4%	-2.5%	2.9%
West Central	Lake Hamilton	18%	62%	-7.8%	0.2%	-7.6%
North Central	Lake Helen	57%	31%	7.4%	-3.9%	3.5%
East Central	Lake Mary	38%	31%	3.0%	-2.9%	0.2%
West Central	Lake Panasoffkee CDP	51%	37%	1.1%	-3.1%	-2.0%
Southeast	Lake Park	16%	29%	6.5%	-1.6%	4.9%
Southern Suncoast	Lake Placid	12%	47%	-6.8%	1.6%	-5.2%
West Central	Lake Wales	21%	57%	1.7%	0.9%	2.6%
West Central	Lakeland	28%	39%	3.4%	-3.3%	0.1%
East Panhandle	Lamont CDP	53%	31%	-0.6%	-5.4%	-6.0%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
West Central	Land O' Lakes CDP	41%	35%	4.0%	-2.2%	1.8%
Southeast	Lantana	19%	26%	3.0%	-1.1%	1.9%
West Central	Largo	30%	21%	1.2%	0.6%	1.7%
Southeast	Lauderdale Lakes	18%	23%	1.0%	0.3%	1.3%
Southeast	Lauderdale-by-the-Sea	19%	17%	1.7%	-0.5%	1.2%
Southeast	Lauderhill	21%	25%	0.8%	0.3%	1.1%
West Panhandle	Laurel Hill	58%	36%	6.5%	1.2%	7.7%
Northeast	Lawtey	57%	30%	3.1%	-3.2%	-0.1%
Southwest	Layton	38%	34%	-0.1%	-3.2%	-3.3%
Southeast	Lazy Lake village	70%	14%	4.2%	4.9%	9.0%
North Central	Lecanto CDP	51%	35%	4.4%	-3.6%	0.9%
East Panhandle	Lee	49%	29%	-1.3%	-7.3%	-8.5%
East Central	Leesburg	34%	46%	3.6%	-6.3%	-2.6%
Southwest	Lehigh Acres CDP	25%	50%	7.4%	-8.5%	-1.1%
Southeast	Lighthouse Point	22%	18%	-0.2%	0.7%	0.5%
East Panhandle	Live Oak	51%	26%	1.2%	-6.5%	-5.3%
Southern Suncoast	Longboat Key	31%	19%	3.2%	-0.2%	3.1%
East Central	Longwood	31%	28%	0.6%	-4.3%	-3.7%
Southeast	Loxahatchee Groves	40%	43%	1.5%	-6.3%	-4.8%
West Central	Lutz CDP	55%	31%	3.1%	-3.6%	-0.5%
West Panhandle	Lynn Haven	18%	44%	1.9%	-29.7%	-27.8%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
Northeast	Macclenny	49%	24%	7.1%	-2.8%	4.3%
West Central	Madeira Beach	12%	14%	0.9%	1.4%	2.3%
East Panhandle	Madison	76%	13%	5.2%	-8.3%	-3.1%
East Central	Maitland	36%	24%	0.6%	-5.1%	-4.6%
East Central	Malabar	35%	53%	3.6%	1.7%	5.3%
West Panhandle	Malone	18%	53%	1.0%	-16.5%	-15.5%
Southeast	Manalapan	4%	3%	1.6%	-0.8%	0.8%
Southeast	Mangonia Park	17%	24%	4.5%	-2.6%	1.9%
Southwest	Marathon	40%	29%	-4.1%	-7.7%	-11.8%
Southwest	Marco Island	46%	19%	-1.4%	-1.2%	-2.5%
Southeast	Margate	20%	25%	0.2%	1.0%	1.2%
West Panhandle	Marianna	33%	41%	0.3%	-20.7%	-20.4%
Northeast	Marineland	38%	36%	0.9%	-3.9%	-3.0%
West Panhandle	Mary Esther*	43%	25%	1.9%		
East Central	Mascotte	19%	70%	3.1%	-3.5%	-0.4%
East Panhandle	Mayo	66%	22%	-1.1%	-6.0%	-7.1%
North Central	McIntosh	58%	30%	2.4%	-3.9%	-1.6%
Southeast	Medley	7%	21%	0.1%	-0.9%	-0.8%
East Central	Melbourne	22%	43%	2.1%	-1.0%	1.2%
East Central	Melbourne Beach	26%	26%	4.0%	1.6%	5.6%
East Central	Melbourne Village	69%	13%	4.4%	-4.0%	0.4%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
East Central	Merritt Island CDP	31%	32%	3.6%	1.3%	5.0%
West Panhandle	Mexico Beach	11%	38%	4.0%	-32.4%	-28.4%
Southeast	Miami	25%	13%	-0.5%	0.5%	0.0%
Southeast	Miami Beach	26%	11%	-1.6%	3.3%	1.7%
Southeast	Miami Gardens	17%	31%	-0.4%	-0.8%	-1.3%
Southeast	Miami Lakes	27%	18%	0.5%	-0.9%	-0.5%
Southeast	Miami Shores village	41%	19%	-1.0%	1.8%	0.8%
Southeast	Miami Springs	28%	26%	0.4%	-3.5%	-3.1%
North Central	Micanopy	72%	21%	1.9%	-3.0%	-1.2%
Northeast	Middleburg CDP	60%	26%	2.0%	-5.7%	-3.7%
East Panhandle	Midway	48%	41%	1.8%	-1.6%	0.2%
East Central	Midway	29%	44%	7.3%	-6.3%	1.0%
West Panhandle	Midway*	46%	21%	3.9%	-10.9%	-7.0%
West Panhandle	Milton	47%	16%	4.7%	-3.9%	0.8%
East Central	Mims CDP	47%	39%	8.1%	-3.1%	4.9%
East Central	Minneola	29%	43%	0.6%	-4.5%	-3.8%
Southeast	Miramar	27%	34%	-2.7%	3.9%	1.1%
West Panhandle	Molino CDP	65%	25%	7.1%	-6.3%	0.8%
East Panhandle	Monticello	47%	24%	-1.3%	-7.6%	-8.9%
East Central	Montverde	33%	42%	0.5%	-7.0%	-6.5%
Southwest	Moore Haven	14%	54%	1.4%	0.6%	2.0%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
North Central	Morriston CDP	56%	32%	2.8%	-4.4%	-1.6%
East Central	Mount Dora	34%	30%	1.1%	-2.6%	-1.5%
West Central	Mulberry	35%	46%	5.6%	-2.6%	3.0%
Southwest	Naples	30%	19%	1.6%	-3.3%	-1.7%
West Panhandle	Navarre*	49%	28%	2.8%	-2.1%	0.8%
Northeast	Neptune Beach	13%	16%	-0.6%	-1.5%	-2.0%
West Central	New Port Richey	33%	22%	3.9%	-1.9%	2.1%
North Central	New Smyrna Beach	45%	32%	-1.0%	-4.0%	1.6%
North Central	Newberry	35%	51%	5.6%	-4.4%	-5.5%
West Panhandle	Niceville*	69%	18%	0.9%		
Southern Suncoast	Nokomis CDP	38%	35%	8.0%	-4.5%	3.5%
West Panhandle	Noma	55%	41%	4.2%	0.7%	4.9%
Southeast	North Bay Village	19%	14%	-4.2%	5.3%	1.2%
Southwest	North Fort Myers CDP	34%	44%	5.7%	-6.9%	-1.2%
Southeast	North Lauderdale	23%	25%	0.1%	1.6%	1.7%
Southeast	North Miami	40%	19%	-1.0%	2.2%	1.2%
Southeast	North Miami Beach	26%	22%	-1.0%	1.7%	0.7%
Southeast	North Palm Beach village	31%	22%	6.6%	-1.9%	4.7%
Southern Suncoast	North Port	34%	48%	6.7%	-5.4%	1.3%
West Central	North Redington Beach	14%	16%	3.2%	1.8%	5.0%
North Central	Oak Hill	50%	39%	0.5%	0.8%	1.3%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
East Central	Oakland	35%	35%	0.5%	-7.9%	-7.4%
Southeast	Oakland Park	20%	21%	-0.3%	-0.3%	-0.6%
North Central	Ocala	34%	30%	2.3%	-4.0%	-1.7%
Southeast	Ocean Ridge	34%	20%	8.9%	-1.8%	7.1%
East Central	Ocoee	29%	37%	-0.5%	-4.2%	-4.7%
West Central	Odessa CDP	45%	32%	4.5%	-3.6%	0.9%
East Central	Okahumpka CDP	44%	40%	5.5%	-4.5%	1.0%
Treasure Coast	Okeechobee	26%	40%	6.0%	-4.8%	1.2%
West Central	Oldsmar	51%	21%	2.4%	-2.1%	0.3%
Southeast	Opa-locka	12%	20%	0.0%	-1.3%	-1.3%
North Central	Orange City	44%	26%	3.1%	-5.6%	-2.5%
Northeast	Orange Park	48%	18%	-1.4%	-4.8%	-6.2%
East Central	Orchid	56%	12%	8.9%	-1.2%	7.7%
East Central	Orlando	27%	31%	2.5%	-3.6%	-1.1%
North Central	Ormond Beach	42%	33%	4.5%	-5.1%	-0.5%
Southern Suncoast	Osprey CDP	38%	31%	5.7%	-2.5%	3.2%
North Central	Otter Creek	69%	22%	5.5%	-2.4%	3.1%
East Central	Oviedo	47%	25%	4.3%	-1.7%	2.6%
Southeast	Pahokee	10%	61%	-2.4%	1.3%	-1.1%
North Central	Palatka	46%	23%	5.2%	-5.9%	-0.8%
East Central	Palm Bay	28%	48%	4.7%	-2.3%	2.4%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
Southeast	Palm Beach	29%	18%	9.2%	-1.7%	7.5%
Southeast	Palm Beach Gardens	33%	43%	0.3%	-3.3%	-2.9%
Southeast	Palm Beach Shores	23%	18%	6.5%	-0.1%	6.4%
Treasure Coast	Palm City CDP	35%	30%	11.5%	-4.4%	7.0%
North Central	Palm Coast	55%	25%	0.3%	-5.6%	-5.2%
West Central	Palm Harbor CDP	40%	20%	1.6%	-1.0%	0.6%
East Central	Palm Shores	29%	30%	0.5%	-5.3%	-4.9%
Southeast	Palm Springs village	20%	31%	3.7%	-1.7%	2.0%
Southern Suncoast	Palmetto	22%	38%	3.5%	-1.6%	1.9%
Southeast	Palmetto Bay village	38%	27%	1.3%	-6.4%	-5.1%
West Panhandle	Panama City	22%	42%	-2.0%	-33.5%	-35.5%
West Panhandle	Panama City Beach	44%	22%	-3.2%	-6.4%	-9.6%
West Panhandle	Parker	19%	35%	1.4%	-34.2%	-32.8%
Southeast	Parkland	31%	30%	0.1%	1.5%	1.6%
West Panhandle	Paxton	64%	31%	2.4%	-1.4%	1.0%
Southeast	Pembroke Park	13%	17%	1.0%	-0.2%	0.9%
Southeast	Pembroke Pines	21%	35%	-0.2%	1.0%	0.9%
Northeast	Penney Farms	66%	20%	11.1%	-3.3%	7.8%
West Panhandle	Pensacola	29%	23%	2.1%	-7.0%	-4.9%
East Panhandle	Perry	66%	23%	-0.4%	-7.3%	-7.7%
North Central	Pierson	50%	34%	2.1%	-3.5%	-1.4%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
Southeast	Pinecrest village	48%	20%	-0.2%	-4.8%	-5.0%
West Central	Pinellas Park	21%	24%	3.0%	-3.2%	-0.2%
West Central	Plant City	30%	42%	4.3%	-5.1%	-0.8%
Southeast	Plantation	30%	25%	1.5%	-0.3%	1.2%
Southern Suncoast	Plantation CDP	34%	28%	5.3%	-2.5%	2.9%
West Central	Polk City	26%	59%	0.0%	-4.3%	-4.4%
North Central	Pomona Park	51%	39%	5.0%	-3.7%	1.3%
Southeast	Pompano Beach	19%	23%	1.0%	0.3%	1.2%
West Panhandle	Ponce de Leon	68%	18%	2.6%	-1.9%	0.7%
North Central	Ponce Inlet	24%	54%	22.5%	-14.1%	8.4%
Southwest	Port Charlotte CDP	32%	33%	4.9%	-2.2%	2.7%
North Central	Port Orange	42%	25%	3.1%	-3.2%	-0.1%
West Central	Port Richey	39%	31%	2.4%	-3.3%	-0.9%
West Panhandle	Port St. Joe	37%	37%	3.0%	-19.9%	-17.0%
Treasure Coast	Port St. Lucie	20%	47%	5.0%	-6.0%	-0.9%
Southwest	Punta Gorda	34%	38%	6.1%	6.0%	12.1%
East Panhandle	Quincy	54%	25%	0.2%	-8.5%	-8.2%
Northeast	Raiford	38%	52%	3.4%	-4.4%	-1.0%
North Central	Reddick	50%	40%	4.4%	-2.5%	1.9%
West Central	Redington Beach	18%	17%	2.7%	1.2%	3.9%
West Central	Redington Shores	12%	15%	3.3%	3.4%	6.7%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
West Central	Riverview CDP	36%	38%	3.6%	-3.5%	0.2%
Southeast	Riviera Beach	14%	27%	5.6%	-0.9%	4.7%
East Central	Rockledge	25%	38%	2.7%	-1.1%	1.7%
Southeast	Royal Palm Beach village	22%	36%	0.8%	0.0%	0.8%
West Central	Ruskin CDP	29%	42%	5.1%	-4.4%	0.7%
West Central	Safety Harbor	42%	21%	3.4%	-3.2%	0.1%
West Central	San Antonio	31%	50%	0.1%	-2.6%	-2.5%
East Central	Sanford	31%	28%	4.2%	-2.5%	1.7%
Southwest	Sanibel	70%	11%	16.7%	1.4%	18.1%
Southern Suncoast	Sarasota	34%	19%	6.4%	-1.1%	5.3%
East Central	Satellite Beach	14%	29%	3.9%	0.4%	4.3%
Northeast	Sawgrass CDP	36%	27%	-0.5%	-0.8%	-1.3%
Southeast	Sea Ranch Lakes village	28%	18%	-0.3%	-2.0%	-2.3%
East Central	Sebastian	31%	38%	8.9%	-4.7%	4.2%
Southern Suncoast	Sebring	25%	46%	0.5%	-3.0%	-2.5%
West Central	Seffner CDP	37%	37%	2.2%	-4.7%	-2.4%
West Central	Seminole	31%	24%	2.9%	0.4%	3.3%
North Central	Seville CDP	43%	47%	2.5%	-4.6%	-2.1%
Treasure Coast	Sewall's Point	49%	19%	7.7%	-6.2%	1.6%
West Panhandle	Shalimar*	35%	24%	2.2%		
North Central	Silver Springs Shores CDP	35%	32%	2.9%	-4.3%	-1.4%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
West Panhandle	Sneads	34%	46%	0.4%	-22.3%	-21.9%
East Panhandle	Sopchoppy	40%	29%	0.7%	-3.3%	-2.6%
East Central	Sorrento CDP	40%	48%	3.8%	-2.4%	1.4%
Southeast	South Bay	5%	76%	-2.1%	0.7%	-1.4%
North Central	South Daytona	30%	24%	2.6%	-2.8%	-0.2%
Southeast	South Miami	38%	18%	-0.5%	-3.8%	-4.4%
Southeast	South Palm Beach	11%	12%	6.1%	-2.8%	3.3%
West Central	South Pasadena	16%	16%	1.8%	1.2%	2.9%
Southeast	Southwest Ranches	29%	50%	-1.2%	-0.6%	-1.7%
West Panhandle	Springfield	15%	45%	1.8%	-32.6%	-30.8%
West Panhandle	Springhill CDP	74%	17%	4.4%	-7.8%	-3.4%
Northeast	St. Augustine	25%	40%	-0.9%	-3.2%	-4.1%
Northeast	St. Augustine Beach	38%	19%	-1.3%	-1.1%	-2.4%
East Central	St. Cloud	24%	47%	4.4%	-2.0%	2.3%
Southwest	St. James City CDP	46%	36%	11.6%	-1.7%	9.9%
West Central	St. Leo	45%	34%	2.6%	-2.2%	0.4%
Treasure Coast	St. Lucie Village	47%	27%	11.0%	-9.6%	1.4%
East Panhandle	St. Marks	62%	21%	4.0%	-5.7%	-1.8%
West Central	St. Pete Beach	15%	13%	2.2%	1.9%	4.1%
West Central	St. Petersburg	32%	21%	5.9%	-3.0%	2.9%
Northeast	Starke	51%	29%	3.8%	-2.7%	1.1%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
Treasure Coast	Stuart	27%	25%	13.1%	-5.5%	7.6%
West Central	Sun City Center CDP	31%	32%	2.5%	-2.6%	-0.1%
Southeast	Sunrise	24%	26%	1.4%	0.6%	2.1%
Southeast	Surfside	22%	17%	-4.6%	4.6%	0.0%
Southeast	Sweetwater	13%	22%	-1.0%	-1.3%	-2.3%
East Panhandle	Tallahassee	31%	51%	0.1%	-7.9%	-7.9%
Southeast	Tamarac	19%	26%	0.6%	-0.1%	0.5%
Southeast	Tamiami CDP	14%	25%	-1.1%	-2.6%	-3.7%
West Central	Tampa	36%	22%	4.5%	-2.0%	2.5%
West Central	Tarpon Springs	35%	26%	1.0%	-1.6%	-0.6%
East Central	Tavares	38%	36%	0.7%	-1.4%	-0.8%
Southwest	Tavernier CDP	56%	21%	-13.6%	-2.0%	-15.7%
West Central	Temple Terrace	48%	19%	5.1%	-5.1%	0.0%
Southeast	Tequesta village	26%	25%	5.4%	-0.4%	5.0%
West Central	The Villages CDP	11%	35%	5.3%	-2.6%	2.6%
West Central	Thonotosassa CDP	39%	48%	3.0%	-3.2%	-0.2%
East Central	Titusville	43%	26%	6.1%	-3.4%	2.7%
West Central	Treasure Island	13%	13%	2.1%	2.4%	4.5%
North Central	Trenton	24%	50%	-13.7%	-7.0%	-20.6%
West Panhandle	Tyndall Air Force Base CDP	10%	51%	1.0%	-34.2%	-33.2%
East Central	Umatilla	31%	48%	0.9%	-3.0%	-2.1%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
West Panhandle	Valparaiso*	50%	19%	-1.0%		
West Central	Valrico CDP	40%	33%	5.6%	-4.1%	1.5%
Southern Suncoast	Venice	22%	34%	3.6%	-6.6%	-3.0%
West Panhandle	Vernon	62%	28%	3.7%	-4.6%	-0.9%
East Central	Vero Beach	38%	22%	10.9%	-4.0%	6.8%
Southeast	Virginia Gardens village	20%	21%	-0.5%	-3.0%	-3.4%
North Central	Waldo	65%	22%	6.6%	-1.8%	4.8%
Southern Suncoast	Wauchula	32%	44%	4.7%	-1.4%	3.2%
West Panhandle	Wausau	63%	24%	8.5%	-5.9%	2.5%
West Central	Webster	23%	58%	3.6%	-3.0%	0.6%
North Central	Welaka	47%	35%	2.7%	-15.8%	-13.1%
Southeast	Wellington village	18%	51%	1.3%	-0.2%	1.1%
West Central	Wesley Chapel CDP	34%	40%	4.9%	-2.5%	2.4%
East Central	West Melbourne	25%	35%	1.4%	-2.3%	-0.9%
Southeast	West Miami	25%	21%	-0.3%	-2.3%	-2.6%
Southeast	West Palm Beach	31%	40%	1.5%	0.1%	1.6%
Southeast	Westchester CDP	15%	24%	0.8%	-3.9%	-3.1%
Southeast	Weston	28%	44%	-1.9%	3.2%	1.3%
West Panhandle	Westville	85%	8%	2.5%	-0.9%	1.6%
West Panhandle	Wewahitchka	59%	29%	0.7%	-14.4%	-13.7%
East Panhandle	White Springs	70%	20%	-0.2%	-9.8%	-10.0%

Region	City	UTC %	PPA %	UTC Change 2013-2017 (%)	UTC Change 2017-2021 (%)	UTC Change 2013-2021 (%)
West Central	Wildwood	23%	55%	2.0%	-16.5%	-14.5%
North Central	Williston	41%	35%	4.0%	-3.3%	0.6%
Southeast	Wilton Manors	27%	15%	-2.5%	2.4%	-0.1%
West Central	Wimauma CDP	25%	54%	1.2%	-2.8%	-1.5%
East Central	Windermere	42%	35%	0.9%	-1.9%	-1.0%
East Central	Winter Garden	28%	37%	0.7%	-0.6%	0.1%
West Central	Winter Haven	23%	49%	-1.2%	-1.9%	-3.2%
East Central	Winter Park	37%	21%	0.6%	-3.4%	-2.8%
East Central	Winter Springs	54%	20%	4.1%	-1.3%	2.9%
East Panhandle	Woodville CDP	51%	36%	1.8%	-6.2%	-4.5%
Northeast	Worthington Springs	49%	35%	6.2%	-8.7%	-2.5%
East Central	Yalaha CDP	38%	53%	3.3%	-1.9%	1.4%
North Central	Yankee	41%	49%	3.8%	-1.8%	2.0%
Northeast	Yulee CDP	54%	31%	-0.2%	-5.3%	-5.5%
West Central	Zephyrhills	21%	39%	3.0%	-4.9%	-1.9%
Southern Suncoast	Zolfo Springs	33%	51%	6.2%	-2.3%	3.9%



DECEMBER | 2023

URBAN TREE CANOPY

ASSESSMENT

STATE OF FLORIDA

PlanIT Geo™
developers of TreePlotter

Florida Department of Agriculture and Consumer Services
Commissioner Wilton Simpson

AGENDA ITEM NO. 8.a

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE: February 16, 2024

SUBMITTED BY: Jamie Schindewolf, Planning & Community Development

ITEM TYPE: Miscellaneous

AGENDA SECTION: OLD BUSINESS

SUBJECT: Notable Tree Program Updates

SUGGESTED ACTION: Discuss Notable Tree Program

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:

AGENDA ITEM NO. 8.b

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE:	February 16, 2024
SUBMITTED BY:	Jamie Schindewolf, Planning & Community Development
ITEM TYPE:	Miscellaneous
AGENDA SECTION:	OLD BUSINESS
SUBJECT:	Annual Strategy Update
SUGGESTED ACTION:	Discuss Annual Strategy update.

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:
Annual Strategy.pdf

2023 Beautification Strategy Plan
Bradenton Tree and Land Preservation Board

What do we want to accomplish this year?

1st Quarter (Jan. to Mar.)

- Election of Officers
- Conduct an educational event for Florida Arbor Day (Third Friday in January).
- Plan for 2nd quarter activities.

2nd Quarter (Apr. to Jun.)

- Host a park cleanup day in celebration of Earth Day.
- Facilitate a tree give-a-way program in celebration of National Arbor Day (Last Friday in April).
- Plan for 3rd quarter activities.

3rd Quarter (Jul. to Sep.)

- Disseminate educational material (Topic such as: Florida friendly landscaping, biodiversity, tree trimming, corrective pruning, mulching, efficient Irrigation).
- Plan for 4th quarter activities.

4th Quarter (Oct. to Dec.)

- Conduct Notable Trees program.
- Host a public education event (Could be a booth set up at the Farmers Market or other planned event).
- Participate in Tree City USA program.
- Update to annual beautification strategy.
- Plan for 1st quarter activities.

Ongoing Activities

- Identification of opportunities for use of tree fund expenditures.

AGENDA ITEM NO. 8.c

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE: February 16, 2024

SUBMITTED BY: Jamie Schindewolf, Planning & Community Development

ITEM TYPE: Miscellaneous

AGENDA SECTION: OLD BUSINESS

SUBJECT: Mailing Campaign

SUGGESTED ACTION: Discuss mailing campaign

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:

AGENDA ITEM NO. 8.d

Item Cover Page

TREE & LAND PRESERVATION BOARD AGENDA ITEM REPORT

DATE:	February 16, 2024
SUBMITTED BY:	Jamie Schindewolf, Planning & Community Development
ITEM TYPE:	Miscellaneous
AGENDA SECTION:	OLD BUSINESS
SUBJECT:	Land Use Regulations: Section 4.1.3.5
SUGGESTED ACTION:	Vote on recommended changes to Land Use Regulations Section 4.1.3.5

Is this item Quasijudicial?
No

Does this item require a public hearing?
No

ATTACHMENTS:
Section 4.1.3.5 Amendments.pdf

4.1.3.5 *Sidewalks*. Sidewalks shall be provided on at least one side of all local streets and minor collectors and both sides of arterials and major collectors. In the UC/UCBD and UV districts, sidewalks shall be provided on both sides of the street, regardless of the street classification. Sidewalks shall be concrete and shall be a minimum of four inches thick and five feet wide in residential areas, and eight feet wide in mixed-use and non-residential districts. ~~Except in the UC/UCDB district there shall be at minimum a three-foot-wide strip of landscaped area (as defined in section 4.1.4.4.b.) between the sidewalk and curb, in which a tree (as listed herein) shall be planted every 100 feet.~~ Landscaped area shall be a minimum of three feet and in all areas possible maximized within the right of way, trees shall be planted every 100 feet according to the following criteria:

Tree~~s shall be~~ species shall ~~limited to~~not include ~~t~~the following:

- Brazilian Pepper, Carrotwood, Australian Pine, Chinese tallow, Melaleuca or any tree that meets the definition of 'Invasive' as determined by the Florida Invasive Species Council. https://floridainvasivespecies.org/plantlist.cfm

Tree species shall be chosen based on climate suitability and site constraints following the principle of 'Right Tree, Right Place' as shown in Schedule X.X Tree Matrix.

~~Black olive;~~

- ~~Dwarf magnolia;~~
- ~~Palms (with the exception of cabbage palms);~~
- ~~Crape myrtle.~~

The director of public works may, at ~~his~~ their discretion, ~~approve additional species or~~ prohibit planting under certain circumstances. Trees planted in the right of way must meet the following criteria:

a. A root barrier shall be placed around select trees within or near the right-of-way.

b. No tree shall be placed any closer than ten feet (five feet with a root barrier) to any utility owned and operated by the City of Bradenton Public Works Department.

c. No trees shall be planted within utility easements.

d. No trees shall be planted under overhead utility lines.

e. Trees planted within medians shall not be paced as to hinder site [sight] visibility at intersections from any direction.

f. Trees planted in medians should be limited to height and diameter as to not cause damage to vehicles from the drip line.

g. Trees planted next to sidewalks shall be planted at a height as to not obstruct pedestrians use.

h. Trees shall not be planted in front of any signs.

i. All trees must be provided with an adequate watering system schedule until established.

j. In instances where tree planting is hindered by existing infrastructure or lack of adequate space, a modular suspended pavement system such as Silva-cells should be installed.

In PDPs where adequate provision for pedestrian circulation is provided, the requirements of this section may be modified by the approving body. Sidewalks shall be constructed as part of the street construction in subdivisions and PDPs unless phasing is specifically stipulated by city council. As part of

the approval of a permit for a construction or alteration of structure or parking area, the PCD director may require the construction or reconstruction of sidewalks in order to fulfill the requirements of this section.

Schedule X.X **Tree Matrix**

TREE TYPE / SIZE / FORM			TREE DENDROLOGY				TYPICAL CHARACTERISTICS				
Tree Type [1]	**Tree Size [2]**	**FL Grades & Standards Tree Type-Form [3]**	**Common Name**	**Scientific Name**	**Plant Family**	**Florida Native**	**Mature Crown Spread**	**Mature Height**	**Species Rating [4,5]**	**Growth Rate [6]**	**POWER LINE TREE? (Y/N)**
SHADE	SMALL	TYPE 1	Oriental Sweetgum	Liquidambar orientalis	Altingiaceae	NO	10' to 12'	15' to 20'	[5]	FAST	**N**
SHADE	MEDIUM	TYPE 1	American Hornbeam	Carpinus caroliniana	Betulaceae	YES	20' to 30'	20' to 30'	41-60%	SLOW	**N**
SHADE	MEDIUM	TYPE 1	Bluejack Oak	Quercus incana	Fagaceae	YES	25' to 35'	25' to 50'	[5]	MODERATE	**N**
SHADE	MEDIUM	TYPE 1	Florida Maple	Acer floridanum	Sapindaceae	YES	25' to 40'	20' to 40'	41-60%	MODERATE	**N**
SHADE	MEDIUM	TYPE 1	Myrtle oak	Quercus myrtifolia	Fagaceae	YES	35' to 40'	35' to 40'	81-100%	MODERATE	**N**
SHADE	MEDIUM	TYPE 1	Red Bay	Persea borbonia	Lauraceae	YES	30' to 50'	30' to 50'	21-40%	MODERATE	**N**
SHADE	MEDIUM	TYPE 1	Swamp Bay	Persea palustris	Lauraceae	YES	25' to 30'	25' to 35'	[5]	MODERATE	**N**
SHADE	MEDIUM	TYPE 1	Turkey Oak	Quercus laevis	Fagaceae	YES	25' to 30'	30' to 40'	41-60%	MODERATE	**N**
SHADE	LARGE	TYPE 1	(American) Sycamore	Platanus occidentalis	Platanaceae	YES	50' to 70'	75' to 90'	41-60%	FAST	**N**
SHADE	LARGE	TYPE 1	American Elm	Ulmus americana	Ulmaceae	YES	50' to 70'	70' to 90'	81-100%	FAST	**N**
SHADE	LARGE	TYPE 1	Black Cherry	Prunus serotina	Rosaceae	YES	35' to 50'	60' to 90'	41-60%	FAST	**N**
SHADE	LARGE	TYPE 1	Black Gum/Tupelo	Nyssa sylvatica	Cornaceae	YES	25' to 35'	65' to 75'	61-80%	MODERATE	**N**
SHADE	LARGE	TYPE 1	Bluff Oak	Quercus austrina	Fagaceae	YES	35' to 50'	40' to 60'	61-80%	NOT AVAIL	**N**
SHADE	LARGE	TYPE 1	Common Hackberry	Celtis occidentalis	Celtidaceae	YES	40' to 50'	45' to 80'	[5]	FAST	N
SHADE	LARGE	TYPE 1	Common Persimmon	Diospyros virginiana	Ebenaceae	YES	20' to 35'	40' to 60'	41-60%	MODERATE	**N**
SHADE	LARGE	TYPE 1	Durand Oak	Quercus durandii (sinuata)	Fagaceae	YES	40' to 60'	50' to 90'	61-80%	NOT AVAIL	**N**
SHADE	LARGE	TYPE 1	Green Ash	Fraxinus pennsylvanica	Oleaceae	YES	25' to 30'	30' to 45'	61-80%	MODERATE	**N**
SHADE	LARGE	TYPE 1	Laurel Oak	Quercus laurifolia	Fagaceae	YES	35' to 45'	60' to 70'	61-80%	FAST	**N**
SHADE	LARGE	TYPE 1	Pecan	Carya illinoensis	Juglandaceae	NO	50' to 70'	70' to 100'	41-60%	MODERATE	**N**
SHADE	LARGE	TYPE 1	Pignut Hickory	Carya glabra	Juglandaceae	YES	30' to 40'	50' to 65'	81-100%	MODERATE	**N**
SHADE	LARGE	TYPE 1	Pop Ash	Fraxinus caroliniana	Oleaceae	YES	40' to 60'	50' to 80'	[5]	FAST	**N**
SHADE	LARGE	TYPE 1	Pumpkin Ash	Fraxinus tomentosa (sp. "profunda")	Oleaceae	YES	45' to 50'	60' to 70'	61-80%	FAST	**N**
SHADE	LARGE	TYPE 1	Red Maple	Acer rubrum	Sapindaceae	YES	25' to 35'	60' to 75'	61-80%	FAST	**N**
SHADE	LARGE	TYPE 1	Sand Live Oak	Quercus geminata	Fagaceae	YES	45' to 60'	30' to 50'	81-100%	MODERATE	**N**
SHADE	LARGE	TYPE 1	Shumard's Oak	Quercus shumardii	Fagaceae	YES	40' to 50'	55' to 80'	41-60%	MODERATE	**N**
SHADE	LARGE	TYPE 1	Silver Maple	Acer saccharinum	Sapindaceae	YES	40' to 60'	60' to 80'	<21%	FAST	**N**
SHADE	LARGE	TYPE 1	Southern Live Oak	Quercus virginiana	Fagaceae	YES	60' to 120'	60' to 80'	81-100%	MODERATE	**N**
SHADE	LARGE	TYPE 1	Southern Red Oak	Quercus falcata	Fagaceae	YES	60' to 70'	60' to 80'	41-60%	MODERATE	**N**
SHADE	LARGE	TYPE 1	Strangler Fig	Ficus aurea	Moraceae	YES	50' to 70'	50' to 60'	41-60%	MODERATE	**N**
SHADE	LARGE	TYPE 1	Sugarberry	Celtis laevigata	Celtidaceae	YES	50' to 60'	50' to 70'	41-60%	MODERATE	**N**
SHADE	LARGE	TYPE 1	Swamp Chestnut Oak	Quercus michauxii	Fagaceae	YES	40' to 60'	60' to 80'	61-80%	NOT AVAIL	**N**
SHADE	LARGE	TYPE 1	Swamp Tupelo	Nyssa sylvatica var. biflora	Cornaceae	YES	65' to 70'	80' to 100'	61-80%	SLOW	**N**
SHADE	LARGE	TYPE 1	Sweetgum	Liquidambar styraciflua	Altingiaceae	YES	35' to 50'	60' to 75'	61-80%	MODERATE	**N**
SHADE	LARGE	TYPE 1	Water Hickory	Carya aquatica	Juglandaceae	YES	25' to 40'	60' to 70'	61-80%	SLOW	**N**
SHADE	LARGE	TYPE 1	Water Oak	Quercus nigra	Fagaceae	YES	60' to 70'	50' to 60'	41-60%	FAST	**N**
SHADE	LARGE	TYPE 1	Water Tupelo	Nyssa aquatica	Cornaceae	YES	25' to 35'	75' to 100'	61-80%	SLOW	**N**
SHADE	LARGE	TYPE 1	White Ash	Fraxinus americana	Oleaceae	YES	10' to 15'	35' to 60'	61-80%	MODERATE	**N**
SHADE	LARGE	TYPE 1	Willow Oak	Quercus phellos	Fagaceae	YES	40' to 50'	60' to 75'	<21%	FAST	**N**
CONIFEROUS	MEDIUM	TYPE 2	American Hophornbeam	Ostrya virginiana	Betulaceae	YES	15' to 25'	25' to 40'	<21%	SLOW	**N**
CONIFEROUS	MEDIUM	TYPE 2	Podocarpus (Yew Plum)	Podocarpus macrophyllus	Podocarpaceae	NO	20' to 25'	30' to 40'	81-100%	SLOW	**N**
CONIFEROUS	MEDIUM	TYPE 2	Red Cedar	Juniperus virginiana	Cupressaceae	YES	20' to 30'	30' to 45'	81-100%	FAST	**N**
CONIFEROUS	MEDIUM	TYPE 2	Sand Pine	Pinus clausa	Pinaceae	YES	15' to 25'	25' to 40'	41-60%	SLOW	**N**
CONIFEROUS	LARGE	TYPE 2	Baldcypress	Taxodium distichum	Cupressaceae	YES	25' to 35'	60' to 80'	81-100%	FAST	**N**
CONIFEROUS	LARGE	TYPE 2	Broadleaf Podocarpus	Podocarpus nagi	Podocarpaceae	NO	15' to 25'	30' to 50'	81-100%	MODERATE	**N**
CONIFEROUS	LARGE	TYPE 2	Chinese Juniper	Juniperus chinensis	Cupressaceae	NO	15' to 25'	40' to 50'	[5]	MODERATE	**N**
CONIFEROUS	LARGE	TYPE 2	Loblolly Pine	Pinus taeda	Pinaceae	YES	30' to 35'	50' to 80'	61-80%	FAST	**N**
CONIFEROUS	LARGE	TYPE 2	Loblolly-Bay	Gordonia lasianthus	Theaceae	YES	25' to 35'	50' to 75'	81-100%	MODERATE	**N**
CONIFEROUS	LARGE	TYPE 2	Longleaf Pine	Pinus palustris	Pinaceae	YES	30' to 40'	60' to 80'	61-80%	FAST	**N**
CONIFEROUS	LARGE	TYPE 2	Pondcypress	Taxodium ascendens	Cupressaceae	YES	10' to 15'	50' to 60'	81-100%	SLOW	**N**
CONIFEROUS	LARGE	TYPE 2	Slash Pine	Pinus elliottii var densa	Pinaceae	YES	35' to 50'	75' to 100'	61-80%	FAST	**N**
ORNAMENTAL	SMALL	TYPE 3	American Elder	Sambucus nigra (subsp. Canadensis)	Adoxaceae	YES	6' to 10'	8' to 12'	21-40%	MODERATE	**Y**
ORNAMENTAL	SMALL	TYPE 3	Blackhaw (Walter's Vibernum)	Viburnum obovatum	Caprifoliaceae	YES	6' to 10'	8' to 25'	61-80%	MODERATE	**N**
ORNAMENTAL	SMALL	TYPE 3	Burford Holly (Chinese Holly)	Ilex cornuta 'Burfordii'	Aquifoliaceae	NO	15' to 25'	15' to 25'	81-100%	MODERATE	**Y**

Table 284.3.2-A - City of Tampa Tree Matrix

TREE TYPE / SIZE / FORM			TREE DENDROLOGY				TYPICAL CHARACTERISTICS				
Tree Type [1]	Tree Size [2]	FL Grades & Standards Tree Type-Form [3]	Common Name	Scientific Name	Plant Family	Florida Native	Mature Crown Spread	Mature Height	Species Rating [4,5]	Growth Rate [6]	POWER LINE TREE? (Y/N)
ORNAMENTAL	SMALL	TYPE 3	Chickasaw Plum	Prunus angustifolia	Rosaceae	YES	15' to 20'	12 to 20'	61-80%	MODERATE	**Y**
ORNAMENTAL	SMALL	TYPE 3	Chinese Fringetree	Chionanthus retusus	Oleaceae	NO	10' to 15'	15' to 20'	41-60%	SLOW	**N**
ORNAMENTAL	SMALL	TYPE 3	Crapemyrtle	Lagerstroemia indica	Lythraceae	NO	15' to 25'	10' to 30'	81-100%	MODERATE	**Y**
ORNAMENTAL	SMALL	TYPE 3	Devilwood	Osmanthus americanus	Oleaceae	YES	10' to 15'	15' to 25'	[5]	MODERATE	**N**
ORNAMENTAL	SMALL	TYPE 3	Flatwoods Plum	Prunus umbellata	Rosaceae	YES	12' to 20'	12' to 20'	41-60%	MODERATE	**N**
ORNAMENTAL	SMALL	TYPE 3	Florida Privet	Forestiera segregata	Oleaceae	YES	5 to 10'	10' to 15'	61-80%	MODERATE	**Y**
ORNAMENTAL	SMALL	TYPE 3	Fringetree	Chionanthus virginicus	Oleaceae	YES	10' to 15'	12 to 20'	41-60%	SLOW	**Y**
ORNAMENTAL	SMALL	TYPE 3	Jerusalem-Thorn	Parkinsonia aculeata	Fabaceae	NO	20' to 25'	15' to 20'	41-60%	FAST	**N**
ORNAMENTAL	SMALL	TYPE 3	Lemon Bottlebrush	Callistemon citrinus	Myrtaceae	NO	10' to 15'	10' to 15'	[5]	MODERATE	**Y**
ORNAMENTAL	SMALL	TYPE 3	Ligustrum (Japanese Privet)	Ligustrum japonicum	Oleaceae	NO	15' to 25'	8' to 12'	81-100%	MODERATE	**Y**
ORNAMENTAL	SMALL	TYPE 3	Loquat	Eriobotrya japonica	Rosaceae	NO	20'	25'	61-80%	MODERATE	**Y**
ORNAMENTAL	SMALL	TYPE 3	Possumhaw	Ilex decidua	Aquifoliaceae	YES	10' to 15'	10' to 15'	[5]	SLOW	**Y**
ORNAMENTAL	SMALL	TYPE 3	Purple Tabebuia	Tabebuia impetiginosa	Bignoniaceae	NO	10' to 15'	12' to 18'	[5]	SLOW	**N**
ORNAMENTAL	SMALL	TYPE 3	Red Buckeye	Aesculus pavia	Sapindaceae	YES	15' to 25'	15' to 20'	21-40%	MODERATE	**Y**
ORNAMENTAL	SMALL	TYPE 3	Southern Wax Myrtle	Myrica cerifera	Myricaceae	YES	20' to 25'	15' to 25'	[5]	FAST	**Y**
ORNAMENTAL	SMALL	TYPE 3	Starburst	Clerodendrum Quadriloculare	Lamiaceae	NO	10'	15'	[5]	FAST	**Y**
ORNAMENTAL	SMALL	TYPE 3	Swamp ("Stiff") Dogwood	Cornus foemina	Cornaceae	YES	10' to 15'	10' to 25'	[5]	MODERATE	**Y**
ORNAMENTAL	SMALL	TYPE 3	Sweet Acacia	Acacia farnesiana	Fabaceae	YES	15' to 25'	15' to 25'	41-60%	SLOW	**Y**
ORNAMENTAL	SMALL	TYPE 3	Upright Bottlebrush	Callistemon rigidus	Myrtaceae	NO	8' to 12'	8' to 12'	41-60%	FAST	**Y**
ORNAMENTAL	SMALL	TYPE 3	Weeping Bottlebrush	Callistemon viminalis [7]	Myrtaceae	NO	15' to 20'	15' to 20'	41-60%	MODERATE	**Y**
ORNAMENTAL	SMALL	TYPE 3	White Geiger (Wild Olive)	Cordia boissieri	Boraginaceae	NO	10' to 15'	15' to 20'	41-60%	SLOW	**Y**
ORNAMENTAL	SMALL	TYPE 3	Yaupon Holly	Ilex vomitoria	Aquifoliaceae	YES	15' to 20'	15' to 20'	81-100%	MODERATE	**Y**
ORNAMENTAL	MEDIUM	TYPE 3	'Nellie R. Stevens' Holly	Ilex x 'Nellie R. Stevens'	Aquifoliaceae	YES	10' to 15'	20' to 30'	81-100%	MODERATE	**N**
ORNAMENTAL	MEDIUM	TYPE 3	Black Mangrove	Avicennia germinans	Avicenniaceae	YES	NOT AVAIL	20' to 40'	41-60%	NOT AVAIL	**N**
ORNAMENTAL	MEDIUM	TYPE 3	Coastal Plain Willow	Salix caroliniana	Salicaceae	YES	25' to 35'	25' to 35'	61-80%	FAST	**N**
ORNAMENTAL	MEDIUM	TYPE 2	Dahoon Holly	Ilex cassine	Aquifoliaceae	YES	8' to 12'	20' to 30'	61-80%	MODERATE	**N**
ORNAMENTAL	MEDIUM	TYPE 2	'East Palatka' Holly	Ilex x attenuata	Aquifoliaceae	YES	10' to 15'	30' to 45'	21-40%	MODERATE	**N**
ORNAMENTAL	MEDIUM	TYPE 2	Eastern Redbud	Cercis canadensis	Fabaceae	YES	15' to 25'	20' to 30'	21-40%	FAST	**N**
ORNAMENTAL	MEDIUM	TYPE 3	Flowering Dogwood	Cornus florida	Cornaceae	YES	25' to 30'	20' to 30'	21-40%	MODERATE	**N**
ORNAMENTAL	MEDIUM	TYPE 3	Golden Trumpet Tree	Tabebuia chrysotricha	Bignoniaceae	NO	25' to 35'	25' to 35'	41-60%	FAST	**N**
ORNAMENTAL	MEDIUM	TYPE 1	Jacaranda	Jacaranda mimosifolia	Fabaceae	NO	45' to 60'	25' to 40'	41-60%	FAST	**N**
ORNAMENTAL	MEDIUM	TYPE 3	Red Mangrove	Rhizophora mangle	Rhizophoraceae	YES	15' to 25'	15' to 25'	81-100%	MODERATE	**N**
ORNAMENTAL	MEDIUM	TYPE 3	Seagrape	Coccoloba uvifera	Polygonaceae	YES	20' to 30'	25' to 30'	61-80%	MODERATE	**N**
ORNAMENTAL	MEDIUM	TYPE 3	Simpson Stopper	Myrcianthes fragrans	Myrtaceae	YES	15' to 20'	15' to 20'	81-100%	SLOW	**N**
ORNAMENTAL	MEDIUM	TYPE 3	Witch-Hazel	Hamamelis virginiana	Hamamelidaceae	YES	15' to 25'	20' to 30'	[5]	SLOW	**N**
ORNAMENTAL	LARGE	TYPE 2	American Holly	Ilex opaca	Aquifoliaceae	YES	15' to 25'	35' to 50'	61-80%	SLOW	**N**
ORNAMENTAL	LARGE	TYPE 1	'Bosque' Chinese Elm	Ulmus parvifolia	Ulmaceae	NO	35' to 50'	35' to 45'	41-60%	MODERATE	**N**
ORNAMENTAL	LARGE	TYPE 1	'Drake' Chinese Elm	Ulmus parvifolia 'Drake'	Ulmaceae	NO	35' to 50'	35' to 45'	41-60%	MODERATE	**N**
ORNAMENTAL	LARGE	TYPE 2	Japanese Blueberry	Eleocarpus decipiens	Caprifoliaceae	NO	20' to 40'	40' to 60'	81-100%	SLOW	**N**
ORNAMENTAL	LARGE	TYPE 2	Olive	Olea europaea	Oleaceae	NO	35' to 50'	25' to 50'	61-80%	SLOW	**N**
ORNAMENTAL	LARGE	TYPE 2	Red Mulberry	Morus rubra	Moraceae	YES	35' to 50'	50' to 75'	41-60%	FAST	**N**
ORNAMENTAL	LARGE	TYPE 1	Southern Magnolia	Magnolia grandiflora	Magnoliaceae	YES	30' to 40'	60' to 80'	61-80%	MODERATE	**N**
ORNAMENTAL	LARGE	TYPE 1	Sweetbay Magnolia	Magnolia virginiana	Magnoliaceae	YES	15' to 25'	40' to 50'	61-80%	MODERATE	**N**
ORNAMENTAL	LARGE	TYPE 1	White Mangrove	Laguncularia racemosa	Combretaceae	YES	30' to 40'	30' to 50'	81-100%	MODERATE	**N**
ORNAMENTAL	LARGE	TYPE 1	Winged Elm	Ulmus alata	Ulmaceae	YES	30' to 40'	45' to 70'	61-80%	FAST	**N**
PALM	SMALL	PALM	Chinese Windmill Palm	Trachycarpus fortunei	Arecaceae	NO	6' to 10'	10' to 20'	61-80%	SLOW	**Y**
PALM	SMALL	PALM	Cliff Date Palm	Phoenix rupicola	Arecaceae	NO	20'	25'	[5]	FAST	**Y**
PALM	SMALL	PALM	European Fan Palm	Chamaerops humilis	Arecaceae	NO	20'	15'	81-100%	SLOW	**Y**
PALM	SMALL	PALM	Pindo Palm	Butia capitata	Arecaceae	NO	10' to 15'	15' to 25'	61-80%	SLOW	**Y**
PALM	SMALL	PALM	Pygmy Date Palm	Phoenix roebellenii	Arecaceae	NO	7'	12'	61-80%	SLOW	**Y**
PALM	MEDIUM	PALM	Paurotis Palm	Acoelorraphe wrightii	Arecaceae	YES	12'	30'	61-80%	SLOW	**N**
PALM	MEDIUM	PALM	Puerto Rican Hat Palm	Sabal causarium	Arecaceae	NO	15'	45'	[5]	SLOW	**N**
PALM	MEDIUM	PALM	Senegal Date Palm	Phoenix reclinata [7]	Arecaceae	NO	40' to 50'	30' to 35'	61-80%	MODERATE	**N**
PALM	MEDIUM	PALM	Wild Date Palm	Phoenix sylvestris	Arecaceae	NO	20'	40'	81-100%	FAST	**N**

Table 284.3.2-A - City of Tampa Tree Matrix

TREE TYPE / SIZE / FORM			TREE DENDROLOGY				TYPICAL CHARACTERISTICS				POWER LINE TREE? (Y/N)
Tree Type [1]	Tree Size [2]	FL Grades & Standards Tree Type-Form [3]	Common Name	Scientific Name	Plant Family	Florida Native	Mature Crown Spread	Mature Height	Species Rating [4,5]	Growth Rate [6]	
PALM	LARGE	PALM	Bismarck Palm	Bismarkia nobilis	Arecaceae	NO	12' to 16'	30' to 60'	[5]	SLOW	**N**
PALM	LARGE	PALM	Cabbage Palm	Sabal palmetto	Arecaceae	YES	10' to 15'	40' to 50'	81-100%	SLOW	**N**
PALM	LARGE	PALM	Canary Island Date Palm	Phoenix canariensis	Arecaceae	NO	20' to 25'	40' to 60'	81-100%	SLOW	**N**
PALM	LARGE	PALM	Chinese Fan Palm	Livistona chinensis	Arecaceae	NO	10' to 12'	30' to 50'	81-100%	MODERATE	**N**
PALM	LARGE	PALM	Date Palm	Phoenix dactylifera	Arecaceae	NO	12 to 15'	50' to 80'	81-100%	MODERATE	**N**
PALM	LARGE	PALM	Ribbon Fan Palm	Livistona decora (deciphens)	Arecaceae	NO	15'	30'	81-100%	SLOW	**N**
PALM	LARGE	PALM	Washington (Mexican Fan) Palm	Washingtonia robusta [7]	Arecaceae	NO	10' to 15'	60' to 90'	61-80%	FAST	**N**

Notes:

[1] Typology: Shade; Coniferous; Ornamental; Palm

[2] Small [0-20' avg height]; Medium [20-40' avg height]; Large [40' or higher avg height]. Average ["avg"] height dimension is at time of full growth/maturity.

[3] Source: FL Dept of Agricultural & Consumer Services, Florida Grades and Standards for Nursery Plants 2015. Any species not listed above must obtain approval of natural resources coordinator and will adhere to Florida Grades & Standards criteria for use of species not listed and determination of Matrix Type. Type 1: Tall & Wide; Type 2: Tall & Narrow; Type 3: Short/Wide & Multi-Trunked; Palm.

[4] Source: Tree Species Ratings for Florida, January 2016, International Society of Arboriculture, FL Chapter. Rating % assigned to a specific tree upon evaluation and determination of its existing condition. Refer to sec. 27-285.4.1 for Rating % and tree condition equivalency factors. The higher the Rating % = the higher suitability in Tampa's urban environment (assuming proper placement & general maintenance).

[5] Species Rating not available from Florida ISA. Use Condition Rating factor as Species Rating factor in Mitigation calculation for grand trees.

[6] Growth Rate: refers to the vertical increase in growth. Slow: ≤ 12" per year; Moderate: 13"-24" per year; Fast: ≥ 25" per year. (Source: Dirr, M., Manual of Woody Landscape Plants, pub. Jan. 1990)

[7] Species listed as Category II on the 2017 Florida Exotic Pest Plant Council List of Exotic Species. Specie may be planted and/or retained, but no credit shall be factored into mitigation formula. See also sec. 27-284.1.2(2).

Reference : "Y" means "Yes," "N" means "No," "NOT AVAIL" means "not available at time of adoption of this document."