The Planning and Zoning Commission will meet at 7:00 p.m. on THURSDAY, February 23, 2017, in the County Commission Chambers of the County Administration Building, 1801 27th Street, Vero Beach.

THE PLANNING AND ZONING COMMISSION SHALL ADJOURN NO LATER THAN 11:00 P.M. UNLESS THE MEETING IS EXTENDED OR CONTINUED TO A TIME CERTAIN BY A COMMISSION VOTE.

AGENDA

ITEM #1 CALL TO ORDER AND PLEDGE OF ALLEGIANCE

ITEM #2 ADDITIONS AND DELETIONS TO THE AGENDA

ITEM #3 APPROVAL OF MINUTES
A. January 26, 2017

ITEM #4 ITEM NOT ON CONSENT
A. Pointe West East Village Phase 2: Request for preliminary PD plan/plat approval for 161 residential lots. Redus EL LLC, Owner. Masteller & Moler, Inc., Agent. Located on the east side of 74th Avenue, south of 16th Street, and is bounded by the Pointe West golf course on three sides and by the East Village on one side (west side). Zoning: PDTND (Planned Development Traditional Neighborhood Design). Land Use Designation: AG-1 (Agricultural 1 unit per 5 acres). Phase 2 Density: 3.35 units/acre; Overall Pointe West Density: 1.99 units/acre (PD-17-02-01 / 99070081-78258) [Quasi-Judicial]
ITEM #5 PUBLIC HEARING


ITEM #6 COMMISSIONERS MATTERS

ITEM #7 PLANNING MATTERS

A. Planning Information Package

ITEM #8 ATTORNEY'S MATTERS

ITEM #9 ADJOURNMENT

Except for those matters specifically exempted under the State Statute and Local Ordinance, The Commission shall provide an opportunity for public comment prior to the undertaking by the Commission of any action on the agenda, including those matters on Consent Agenda or matters added to the agenda at the meeting.

ANYONE WHO MAY WISH TO APPEAL ANY DECISION, WHICH MAY BE MADE AT THIS MEETING, WILL NEED TO ENSURE THAT A VERBATIM RECORD OF THE PROCEEDINGS IS MADE, WHICH INCLUDES THE TESTIMONY AND EVIDENCE ON WHICH THE APPEAL IS BASED.

ANYONE WHO NEEDS A SPECIAL ACCOMMODATION FOR THIS MEETING MUST CONTACT THE COUNTY’S AMERICANS WITH DISABILITIES ACT (ADA) COORDINATOR AT 772-226-1223, AT LEAST 48 HOURS IN ADVANCE OF THE MEETING.

Meeting may be broadcast live on Comcast Cable Channel 27 – may be rebroadcast continuously Saturday 7:00 p.m. until Sunday morning 7:00 a.m. Meeting broadcast same as above on Comcast Broadband, Channel 27 in Sebastian.
PLANNING AND ZONING COMMISSION

There was a meeting of the Indian River County (IRC) Planning and Zoning Commission (PZC) on Thursday, January 26, 2017 at 7:00 p.m. in the Commission Chambers of the County Administration Building, 1801 27th Street, Vero Beach, Florida. You may hear an audio of the meeting; review the meeting agenda, backup material and the minutes on the Indian River County website www.ircgov.com/Boards/PZC/2015.

Present were members: Chairman Alan Polackwich Sr., District 2 Appointee; Chip Landers, District 3 Appointee; Dr. Jonathan Day, District 4 Appointee; Angela Waldrop, District 5 Appointee; and Jordan Stewart, Member-at-Large.

Todd Brognano, Member-at-Large, and Shawn Frost, non-voting School Board Liaison, were absent. Let the record show that there is a vacancy for District 1 Appointee.

Also present was IRC staff: Bill DeBraal, Deputy County Attorney; Stan Boling, Community Development Director; John McCoy, Chief of Current Development; Roland DeBlois, Chief of Environmental Planning and Code Enforcement; William Schutt, Senior Economic Development Planner; and Lisa Carlson, Recording Secretary.

Call to Order and Pledge of Allegiance

The meeting was called to order at 7:00 p.m. and all stood for the Pledge of Allegiance.

Election of Chairman and Vice Chairman

Mr. DeBraal explained that a Chairman and Vice Chairman are elected at the first meeting every January and opened the floor for nominations.

ON MOTION BY Dr. Day, SECONDED BY Mr. Landers, the members voted unanimously (5-0) to re-elect Mr. Polackwich as Chairman.

ON MOTION BY Dr. Day, SECONDED BY Mr. Stewart, the members voted unanimously (5-0) to re-elect Mr. Brognano as Vice Chairman.

Additions and Deletions to the Agenda

There were none.
Approval of Minutes

ON MOTION BY Mr. Landers, SECONDED BY Dr. Day, the members voted unanimously (5-0) to approve the minutes of the December 8, 2016 meeting as presented.

Items on Consent

Chairman Polackwich read the following into the record:

A. Lost Tree Preserve PD: Request to modify the phasing schedule for the Lost Tree Preserve PD. Lost Tree Preserve LLC, Owner. Stephen R. Melchiori, Agent. Located north of 65th Street, just west of the FEC railroad and south of 69th Street. Zoning: PD (Planned Development). Land Use Designations: L-1, Low Density 1 (up to 3 units per acre) and C/1 (Commercial/Industrial). Density: 2.12 units per acre. (AA-17-01-16 / 99040238-77895) [Quasi-Judicial]

Chairman Polackwich asked the Commissioners to reveal any ex-parte communication with the applicant or any conflict that would not allow them to make an unbiased decision. He disclosed that some legal matters occurred in 2010 regarding the Subject Property while he was County Attorney but that he had no recollection of working on the case.

ON MOTION BY Dr. Day, SECONDED BY Mr. Stewart, the members voted unanimously (5-0) to approve staff recommendations on this Quasi-Judicial matter.

Chairman Polackwich read the following into the record:

B. Lake Sapphire West: Request for preliminary plat approval for an 18-lot subdivision to be known as Lake Sapphire West. GHO Lake Sapphire Corp, Owner. Schulke, Bittle & Stoddard, LLC, Agent. Located immediately west of the Lake Sapphire subdivision, on the north side of 5th Street SW, west of 43rd Avenue. Zoning: RS-3 (Residential Single-Family up to 3 units per acre). Land Use Designation: L-1 (Low Density-1 Residential up to 3 units per acre). Density: 1.89 units per acre. (SD-16-12-05/2016070128-77815) [Quasi-Judicial]

Chairman Polackwich asked the Commissioners to reveal any ex-parte communication with the applicant or any conflict that would not allow them to
make an unbiased decision. He disclosed that some legal matters occurred in 2013 regarding the Subject Property while was County Attorney but that had no recollection of working on the case.

ON MOTION BY Mr. Stewart, SECONDED BY Mr. Landers, the members voted unanimously (5-0) to approve staff recommendations on this Quasi-Judicial matter.

Items Not On Consent

Chairman Polackwich read the following into the record:


Chairman Polackwich asked the Commissioners to reveal any ex-parte communication with the applicant or any conflict that would not allow them to make an unbiased decision. The members stated that they had not had any ex-parte communication.

The secretary administered the testimonial oath to those present who wished to speak at tonight’s meeting on this matter.

Mr. John McCoy, Chief of Current Development, reviewed information regarding the request for preliminary plat approval and gave a PowerPoint presentation, copies of which are on file in the Board of County Commissioners (BCC) Office. He recommended that the Commissioners approve the preliminary plat for the Riviera Lake subdivision with the conditions listed in the staff’s report.

Mr. Stan Boling, Community Development Director, and Mr. McCoy explained the processes of determining density and right-of-way calculations. Also discussed was whether the fragmented sidewalk on this project would be extended by the County at some point and whether a crosswalk might be appropriate.

Applicant Mr. Scott McGuire, representing Knight, McGuire & Associates Inc., clarified details of the proposed project including plans for emergency access to the community.
ON MOTION BY Dr. Day, SECONDED BY Mr. Stewart, the members voted unanimously (5-0) to approve staff recommendations on this Quasi-Judicial matter.

Chairman Polackwich read the following into the record:


Chairman Polackwich asked the Commissioners to reveal any ex-parte communication with the applicant or any conflict that would not allow them to make an unbiased decision. He disclosed that while he was County Attorney, he did work on a couple of matters concerning this subdivision but that he retained neither hostility nor favor toward the Respondent.

The secretary administered the testimonial oath to those present who wished to speak at tonight’s meeting on this matter.

Mr. John McCoy reviewed information regarding the request for preliminary plat approval and gave a PowerPoint presentation, copies of which are on file in the Board of County Commissioners (BCC) Office. He recommended that the Commissioners grant preliminary PD plan/plat approval for The Lakes at Waterway Village PODs S, T, U with the conditions listed in the staff’s report.

ON MOTION BY Dr. Day, SECONDED BY Ms. Waldrop, the members voted unanimously (5-0) to approve staff recommendations on this Quasi-Judicial matter.

Public Hearing

Chairman Polackwich read the following into the record:

A. CONTINUED: Consideration of Proposed Amendments to County Sign Regulations (Land Development Regulations Chapter 901, Definitions,
Chapter 956, Sign Regulations, and Chapter 912, Single-Family Development: modification to regulation for temporary signs and various sign definitions. [Legislative]

Mr. Roland DeBlois, Chief of Environmental Planning and Code Enforcement, reviewed information regarding the proposed amendments to the County Sign Regulations and gave a PowerPoint presentation, copies of which are on file in the Board of County Commissioners (BCC) Office. He explained that the amendments are necessary due to a 2015 Supreme Court ruling regarding sign content and direction for changes given by the Board of County Commissioners in July 2016. He discussed proposed amendments that were redrafted since the last meeting in response to Commissioner comments. Staff is recommending that the Planning and Zoning Commission recommend that the Board of County Commissioners adopt the proposed ordinance amendments.

Discussion followed regarding enforcement procedures as well as the possibility of the drafting of more detailed language in some parts of the proposed amendment.

ON MOTION BY Dr. Day, SECONDED BY Mr. Stewart, the members voted unanimously (5-0) to accept staff recommendations on this Legislative matter.

Chairman Polackwich read the following into the record:

B. County Initiated Request to Amend (Update) Mixed Use Policy 5.6 of the Future Land Use Element (FLUE) of the County’s Comprehensive Plan [Legislative]

Mr. William Schutt, Senior Economic Development Planner, discussed the County initiated request to amend the text of Mixed Use Policy 5.6 of the Future Land Use Element (FLUE) of the County’s Comprehensive Plan. He first educated the Commission as to the County’s process and timeline for processing the proposed amendments and then detailed the history of the policy and the actual proposed changes. The proposed amendments intend to accommodate larger project “master plan” areas and require a major shared infrastructure that will integrate commercial and residential development with a re-configured Indian River State College (IRSC) campus. Staff is recommending that the Planning and Zoning Commission recommend that the Board of County Commissioners approve the request to amend Policy 5.6 of the FLUE of the Comprehensive Plan.
Discussion followed regarding the proposed policy revisions and the fact that the IRSC campus is currently the only location that is relevant to this amendment.

Attorney Mr. Christopher Marine of Gould Cooksey Fennell, representing Vero 12 LLC and the Greenfield Trust which is the owner of the Subject Property adjacent to IRSC, spoke in favor of the proposed amendment.

ON MOTION BY Dr. Day, SECONDED BY Ms. Waldrop, the members voted (5-0) to accept staff recommendations on this Legislative matter.

Commissioner’s Matters

There were none.

Planning Matters

Mr. Stan Boling welcomed Ms. Angela Waldrop to the commission as the District 5 appointee and added that Mr. Patrick Grall has just been selected as the new District 1 appointee. He stated that while a February 9, 2017 meeting was unlikely, a February 23, 2017 meeting was anticipated.

Attorney’s Matters

There were none.

Adjournment

There being no further business, the meeting adjourned at 8:53 p.m.
TO:    Members of the Planning and Zoning Commission

DEPARTMENT HEAD CONCURRENCE:  

[Signature]
 Stan Boling, AICP; Community Development Director

FROM:  John W. McCoy, AICP; Chief, Current Development

DATE:  February 14, 2017

SUBJECT: Redus EL, LLC’s Request for Preliminary PD Plan/Plat Approval for the Pointe West East Village Phase 2 [PD-17-02-01 / 99070081-78258]

It is requested that the data herein presented be given formal consideration by the Planning and Zoning Commission at its regular meeting of February 23, 2017.

BACKGROUND, DESCRIPTION & CONDITIONS

Masteller & Moler, Inc. on behalf of Redus EL, LLC has submitted an application for preliminary PD plan/plat approval for the Pointe West East Village Phase 2. The subject site is located on the east side of 74th Avenue, south of 16th Street, and is bounded by the Pointe West golf course on three sides and by the East Village on one side (west side).

The Pointe West East Village was approved in two phases by the Planning & Zoning Commission at its regular meeting of July 28, 2005. The approval for both phases included a total of 305 lots and park tracts on 98.59 acres. The subdivision improvements for Phase 1 were constructed some time ago and homes are currently under construction in Phase 1. Meanwhile, the preliminary PD approval for the second phase has expired. The applicant is now seeking re-approval of phase 2 consistent with the 2005 approval. Phase 2 consists of 161 lots and park tracts on 47.98 acres and will be constructed in two sub-phases.

Conceptual PD plan approval was granted in 1999 for the overall Pointe West development, which included 1199 residential units. The conceptual PD plan has been modified several times since 1999. The current conceptual plan allows for 1,178 residential units and 169,231 sq. ft. of commercial area. With the re-approval of Phase 2 of the East Village, the total number of residential units project wide will be 1,157 units, which includes some residential units within the overall project’s adult living facility. Pointe West East Village Phase 2 will be the last portion of the overall Pointe West project to receive preliminary PD plan/plat approval.

The Planning and Zoning Commission is now to consider granting preliminary PD plan/plat approval for the East Village Phase 2.
The proposed preliminary PD plan/plat conforms to the approved Pointe West conceptual PD plan.

1. **Site Area:**
   - East Village Phase 2: 47.98 acres (excludes the adjacent golf course)
   - Pointe West Total Area: 602.99 acres

2. **Zoning Classification:** PDTND, Planned Development Traditional Neighborhood Design

3. **Density:**
   - East Village Phase 2: 161 lots on 47.98 acres = 3.35 units/acre
   - Overall Project: 1,199 units on 602.99 acres = 1.99 units/acre
   
   Note: Including the golf course area adjacent to the East Village, the portion of Pointe West located east of 74th Avenue will have a density of 1.58 units per acre.

4. **Utilities:** The project will connect to the county public water and wastewater systems. These connections have been approved by the Environmental Health Department and the Utility Services Department.

5. **Phasing:** East Village Phase 2 will be constructed in two sub-phases (2a and 2b). The sub-phases are divided north and south with 2a on the south side and 2b on the north side. Phase 2a includes 68 lots while 2b includes 93 lots.

6. **Traffic Circulation:** The site has access through the established roads in Phase 1, which provide connections to 74th Avenue and 16th Street. Both 16th Street and 74th Avenue are paved roads. Access to all individual lots will be from local roads or rear alleys constructed with the proposed development. The roadway and alley layout and overall internal circulation plan have been approved by the Traffic Engineering Division. A traffic impact study for the overall Pointe West project was previously approved by the Traffic Engineering Division. No off-site traffic improvements are required or proposed in connection with East Village Phase 2.

7. **Stormwater Management:** The conceptual stormwater management plan has been reviewed and approved by the Public Works Department. This plan proposes to use the existing golf course lakes for stormwater treatment as was approved with the Pointe West master stormwater plan. The Public Works Department will perform a detailed drainage review with the land development permit plans for this phase. Prior to the issuance of a land development permit, the applicant will need to obtain a Type "A" stormwater management permit.

8. **Landscape Plan:** The landscape plan is consistent with the conceptual PD plan, providing street trees throughout the area of development. Prior to issuance of the land development permit, the applicant must obtain planning staff approval of detailed landscape plans for the parks and pedestrian greenways.

9. **Environmental Issues:**
   - **Uplands:** While there are no native upland areas within Phase 2, there are a number of specimen trees that will require preservation, relocation, or mitigation. The applicant will need to obtain approval of a tree mitigation plan prior to the issuance of a land development permit.
- **Wetlands:** There is a small isolated wetland within Phase 2, which will be impacted by the development. The applicant will need to obtain a county wetland resource permit, prior to the issuance of a land development permit.

10. **Architectural Design Criteria:**

- **Streetscape:** The applicant will follow the streetscape plan approved with Phase I, which includes street trees evenly spaced along all streets.

- **Plan Book:** All home types constructed within Pointe West have been reviewed by staff for consistency with TND (Traditional Neighborhood Design) principals and special design related PD conditions applicable to the Pointe West project. Homes to be constructed in Phase 2 will be similar to the types of homes in Phase 1 of the East Village which meet required design and architectural requirements. Prior to any new model types being constructed, the applicant must submit and obtain planning staff approval of a plan book which will provide floor plans and elevations for all unit types to be constructed.

11. **Required Improvements:**

- **Internal Sidewalks:** As required by the conceptual PD plan, sidewalks will be provided on both sides of all proposed streets. The sidewalks range from 4-7 feet in width, depending on the type of road and whether on-street parking is provided.

- **Streetlighting:** Streetlights are required and will be maintained by a property owners' association. The streetlights must be incorporated into the project land development permit.

12. **Concurrency:** The applicant has obtained a conditional concurrency certificate for this phase. This satisfies concurrency requirements related to preliminary plat approval.

13. **Surrounding Land Use and Zoning:**

North: Golf Course, 16th Street / PD-TND
East: Pointe West East Village Phase 1, Vacant / PD-TND, A-1
South: Pointe West Golf Course, Main Relief Canal, Agricultural / PD-TND, A-1
West: Pointe West Golf Course, 74th Avenue, single-family lots / PD-TND

**RECOMMENDATION**

Based on the analysis performed, staff recommends that the Planning and Zoning Commission grant preliminary PD plan/plat approval for Pointe West East Village Phase 2 with the following conditions:

1. Prior to issuance of a land development permit, the applicant shall obtain approval of:

   a. All streetlight locations.
   b. Final landscape plans for the park and pedestrian greenways.
   c. A county wetland resource permit.
   d. Approval of a tree mitigation plan for specimen trees.
2. Any new model types must be approved by staff, consistent with the design-related PD conditions and TND criteria applicable to the Pointe West project.

ATTACHMENTS

1. Application
2. Location Map
3. Preliminary PD Plat/Plan
4. Conceptual Landscape Plan
5. Aerial

APPROVED AS TO FORM AND LEGAL SUFFICIENCY

BY: WILLIAM K. DEBRAAL
DEPUTY COUNTY ATTORNEY
Please indicate the type of application being submitted:

- Conceptual PD Special Exception:
- Concurrent Special Exception & Preliminary PD:
- Preliminary Planned Development:
- Final Planned Development:

Note: For a PD rezoning please use the appropriate rezoning form.

**PROJECT NAME:** Pointe West's East Village

**Plan Number:** PD-17-02-01

**PROPERTY OWNER:** Redus EL, LLC

**NAME:**

1 Independent Drive, 10th Floor

**ADDRESS:** Jacksonville, FL 32202

**CITY, STATE, ZIP:** 904-351-7353

**PHONE NUMBER:** Sarah.wicker@wellsfargo.com

**E-MAIL ADDRESS:** Sarah Wicker

**CONTACT PERSON:**

**PROJECT ENGINEER:** Masteller & Moler, Inc.

**NAME:** 1655 27th Street, Suite 2

**ADDRESS:** Vero Beach, FL 32960

**PHONE NUMBER:** (772) 567-5300

**E-MAIL ADDRESS:** mastmolr@bellsouth.net

**CONTACT PERSON:** John M. Boyer, PE – Senior Project Engineer

**AGENT:** D.R. Horton

**NAME:** 1430 Culver Drive NE

**ADDRESS:** Palm Bay, FL 32907

**PHONE NUMBER:** 321-953-9135

**E-MAIL ADDRESS:** djihrarini@drhorton.com

**CONTACT PERSON:** Daniel Linarini

**SIGNATURE OF OWNER OR AGENT:**

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F:\Community Development\APPLICATIONS\CurDev applications\PDAPP.doc

Revised April 2016 Page 1 of 3

ATTACHMENT 1
TAX PARCEL ID#(s) OF SUBJECT PROPERTY: 33 39 07 00002 0000 0000.1

PROPERTY CLASSIFICATION(S):

<table>
<thead>
<tr>
<th>Land Use Designation</th>
<th>Zoning District</th>
<th>Acreage</th>
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<tbody>
<tr>
<td>AG-1</td>
<td>PD-TND</td>
<td>47.98</td>
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TOTAL PROJECT ACREAGE 47.98

EXISTING SITE USE(S): Vacant

PROPOSED SITE USE(S) AND INTENSITY (eg # of units, square feet by use): Construct 161 single-family lots in accordance with approved CPD. 161 units brings total East Village unit count to previously-approved 305 units. Overall East Village density shall be 3.10 units/acre.

** PLEASE COMPLETE THE SUBMITTAL CHECKLIST **

The following items must be attached to the application:

- If the applicant is other than the owner(s), a sworn statement of authorization from the owner;
- Two deeds and a verified statement naming every individual having legal or equitable ownership in the property; if owned by a corporation, provide the names and address of each stockholder owning more than 10% of the value of outstanding corporation shares;
- A copy of the owner's recorded warranty deed;
- A check, money order or cash made payable to "Indian River County":

<table>
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<tr>
<th>Planned Development Request - Conceptual PD Special Exception</th>
<th>Preliminary PD Plan</th>
<th>Final PD Plans</th>
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<td>less than 20 acres</td>
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<td>over 40 acres</td>
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<td>+ $100.00 for each additional 25 acres over 40 acres</td>
<td>+ $50.00 for each additional 25 acres over 40 acres</td>
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</tbody>
</table>

For concurrent application fees combine the appropriate fees and subtract $400.00.

- Ten sets of complete Conceptual, Preliminary or Final PD (final plat plans must be signed and sealed by surveyor) Plans as per Chapter 915, pursuant to the type of approval being requested.
- Any requirements of the zoning or subdivision ordinance which the applicant is requesting to be waived (such as minimum lot width and size, street frontage requirements, setbacks, etc.), shall be clearly indicated by section and paragraph numbers, together with the rationale for the waiver request(s), on an attached sheet.
2 Aerials for conceptual or preliminary PDs

Itemized response to pre-application for conceptual or concurrent applications

2 sealed surveys

3 set of floor plans and elevation for commercial or multi-family buildings

Written Statement and Photograph of Posted Sign

For Final PD's only

Letter from developer providing timeline for achieving the 75% completion threshold for the overall subdivision improvement

ONE OF THE FOLLOWING SETS OF REQUIRED IMPROVEMENT DOCUMENTS:

CONSTRUCTION COMPLETE - BUILT OUT:

Certificate of Completion from Public Works or copy of letter to Public Works and Utilities requiring inspection of improvements.

IF IMPROVEMENTS ARE DEDICATED TO THE PUBLIC:

Original Engineer’s Certified Cost Estimate for Improvements (signed and sealed)

Failure to provide information on which option is being selected may result in a delay in processing the application.

OR

CONSTRUCTION INCOMPLETE - BOND OUT:

Original Engineer’s Certified Cost Estimate for Improvements (signed and sealed; note items to be completed or percent completed at 75% threshold for overall subdivision).

Statement that improvements are nearing completion and a certificate of completion will be obtain prior to final plat approval

Copies of Documents to be recorded with the final plat:

a. Covenants, Deed Restrictions, Bylaws, etc. or Statement There Are None

b. Property Owner’s Association Articles of Incorporation or statement indicating why recording of POA is NOT required.
TO: The Members of the Planning and Zoning Commission

DEPARTMENT HEAD CONCURRENCE:

Stan Boling, AICP; Community Development Director

THROUGH: John W. McCoy, AICP; Chief, Current Development

FROM: Ryan Sweeney; Senior Planner, Current Development

DATE: February 15, 2017

SUBJECT: Florida Power & Light Company’s Request for Special Exception Use Approval for a Private Heavy Utility (Solar Energy Center) [SP-SE-17-03-01 / 2016110089-78358]

It is requested that the data herein presented be given formal consideration by the Planning and Zoning Commission at its regular meeting of February 23, 2017.

DESCRIPTION & CONDITIONS

Culpepper & Terpening, Inc., on behalf of Florida Power & Light Company (FPL), has submitted an application for major site plan and special exception use approval to construct a new private heavy utility (solar energy center). The subject site is approximately 697 acres in size and is located on the east side of 122nd Avenue SW, immediately north of the Indian River County/St. Lucie County boundary (see attachment #2). The site is zoned A-2, Agricultural-2 (up to 1 unit per 10 acres), a zoning district in which special exception use approval is required for private heavy utilities (including solar energy centers). The proposed solar energy center will consist of approximately 350 acres of solar arrays, stabilized access pathways, and an on-site electrical substation. The remainder of the site (i.e. the southern half) is not proposed for development at this time (see attachment #5), and any future use will be subject to A-2 zoning district regulations.

It should be noted that the proposed project includes an on-site electrical substation. An electrical substation as a stand-alone use in the A-2 zoning district would be classified as a private limited utility, and would require administrative permit use approval by the Planning & Zoning Commission (PZC), but would not require approval by the Board of County Commissioners (BCC). The proposed solar energy center, which includes the on-site substation as an accessory use/improvement, must be reviewed through the special exception use approval process, and that process requires public hearings by the PZC and the BCC. If the subject solar energy center project is approved, then the on-site substation will also be approved as an accessory use/improvement.
In this case, the applicant has applied for concurrent major site plan and special exception use approval. Consistent with the County land development regulations (LDRs), staff has approved the major site plan application subject to BCC approval of the special exception use request.

The PZC now needs to consider the special exception use request for the proposed private heavy utility (solar energy center), conduct a public hearing, and make a recommendation to the BCC to approve, approve with conditions, or deny the request. Pursuant to Section 971.05 of the LDRs, the PZC is to consider the appropriateness of the requested use for the subject site and compatibility of the use with the surrounding area. The PZC may recommend reasonable conditions and safeguards necessary to mitigate impacts and to ensure compatibility of the use with the surrounding area.

ANALYSIS

1. **Size of Development:**
   - Overall site size: 697.07 acres
   - Area of development: 354.60 acres

   **Note:** The site currently consists of 3 separate parcels that must be combined through a unity of title. The applicant must provide a recorded unity of title that combines the 3 separate parcels prior to site plan release.

2. **Zoning Classification:**
   - A-2, Agricultural-2 (up to 1 unit per 10 acres)

3. **Land Use Designation:**
   - AG-2, Agricultural-2 (up to 1 unit per 10 acres)

4. **Building Area:**
   - Proposed: 540 square feet (prefabricated equipment vault)

5. **Impervious Area:**
   - Proposed: 766,333 square feet or 17.59 acres

   **Note:** The impervious area calculations include the on-site substation compound that will be entirely covered with a loose rock material, the equipment vault, and the proposed stabilized access pathways that will provide access to the solar panel arrays. Building area, parking area, and stabilized pathways are not counted as open space.

6. **Open Space:**
   - **Required:** 80%
   - **Proposed:** 95%

   **Note:** The solar arrays are post-mounted above the existing grade (i.e. the existing ground level), which will remain unaltered underneath the arrays. The open ground underneath the arrays is considered open space.

7. **Traffic Circulation:** Access to the proposed project will be provided via a gated, stabilized two-way driveway connection to 122nd Avenue SW, which is a semi-improved dirt road located within St. Johns Improvement District (SJID) right-of-way. The proposed site layout includes a modified grid network of 16' to 20' wide stabilized access pathways to allow maintenance vehicles access throughout the site, and to provide access to the on-site substation compound (see attachment #5).
In accordance with County LDRs, the applicant has submitted a project traffic study which has been reviewed and conditionally approved by Public Works. Based on that study, it has been determined that all County culvert crossings along the project access route, which is 122nd Avenue from SR 60 to the project site, shall be reinforced with 12 inches of asphalt millings installed over the culverts for a distance of 50 feet each way from the centerline of each culvert crossing. Acceptable improvements to the County culvert crossings are shown on the associated site plan, and must be installed prior to the issuance of a project Certificate of Occupancy (C.O.). The project’s driveway location, design, internal circulation plan, and traffic study have all been approved by Traffic Engineering.

8. **Off-Street Parking:** The subject site will be an unmanned, restricted access solar energy center, and will be accessed only by authorized maintenance crews on an infrequent basis. The LDRs do not require permanent off-street parking spaces for such uses. The proposed site layout provides adequate space for maintenance vehicles to maneuver and park within the site. Therefore, the project site plan provides sufficient parking area on-site.

9. **Landscape Plan:** The proposed landscape plan satisfies the requirements of LDR Chapter 926, including nonvehicular area landscaping and an adjacent properties buffer provided along the exterior perimeters of the on-site substation. All of the landscaping identified on the project landscape plan must be installed prior to the issuance of a project C.O.

10. **Stormwater Management:** The applicant submitted a preliminary stormwater management plan that has been reviewed and approved by Public Works. That plan proposes to utilize the existing grove furrows/ditches to convey and treat the minimal amount of stormwater runoff that will be generated by the project. Prior to site plan release, the applicant must obtain a County Type “B” Stormwater Permit pursuant to Chapter 930 of the County LDRs.

11. **Utilities:** The project will be an unmanned facility, and will not include any bathroom facilities. Therefore no well or septic permits are required or proposed. The County Department of Utility Services and the Department of Health have acknowledged that the site will not include any utility provisions, and have approved the associated project site plan.

12. **Extended Roadway Grid Network:** Per Policy 3.8 of the Transportation Element of the County Comprehensive Plan, the County must consider protection of the extended roadway grid network during the site plan review and approval process (see attachment #3). The applicant has depicted on the project site plan the extended roadway grid network for all potential extended roads that may cross the site at some time in the future (17th Street SW, 21st Street SW, 114th Avenue SW, and 122nd Avenue SW). Please see attachment #5. Those potential extended road locations correspond with the proposed on-site stabilized access paths and are clear of proposed solar panel arrays. Consequently, staff has confirmed that the subject extended roadway grid network is properly protected with respect to the proposed project.

13. **Specific Land Use Criteria:** Pursuant to LDR section 971.44(2), the following criteria for private heavy utilities apply to this project:

   1. **Per Chapter 901, the definition of utilities, public and private – heavy includes “all major electrical generation plants (generating fifty (50) megawatts or more), major sewage treatment and disposal facilities, and major water purification plants.”**
Note: The proposed use (solar energy center) meets the definition of a private heavy utility.

2. Any power generation facility shall be consistent with the provisions of the Florida Electrical Power Plan Citing Act, Chapter 23, Section 23.09191 F.S.;

Note: The proposed solar energy center will have a maximum gross capacity of 74.5 megawatts, and is therefore exempt from the Florida Electrical Power Plant Siting Act.

3. All below-ground high voltage cables within a utility right-of-way shall be made known to the public through the use of signs posted therein;

Note: There are no proposed below-ground high voltage cables within a utility right-of-way. Therefore, the above referenced signage criteria do not apply to the subject project. It should be noted that “high voltage” warning signs will be provide in English and Spanish along the perimeter security fence of the on-site substation compound.

4. The disposal of all waste, gaseous, liquid or solid, shall comply with all federal, state and local laws;

Note: It is anticipated that no hazardous or toxic waste will be generated by the proposed project. The applicant has acknowledged that if there is any disposal of waste, gaseous, liquid, or solid, such disposal will comply with all federal, state, and local laws.

5. Between all above-ground facilities, (except distribution and collection facilities) and adjacent properties having a residential land use designation, a Type "A" buffer (reduce to "B" buffer where abutting a local roadway, reduce to "C" buffer where abutting a Thoroughfare Plan roadway) (with six-foot opaque screening) as specified in Chapter 926, Landscaping shall be provided;

Note: All of the adjacent properties have an AG-2, Agricultural-2 (up to 1 unit per 10 acres) agricultural land use designation, and no adjacent property has a residential land use designation. Therefore, the above referenced landscape buffer requirements do not apply to the subject project.

6. In all zoning districts except the industrial districts, all equipment, machinery, and facilities which cannot, by their size or nature, be located within an enclosed building shall be separated from adjacent properties having a residential land use designation by a Type "C" buffer (with six-foot opaque screening) as specified in Chapter 926, Landscaping;

Note: As described in item 5 above, all of the adjacent properties have an AG-2, Agricultural-2 (up to 1 unit per 10 acres) agricultural land use designation, not a residential land use designation. Therefore, the above referenced landscape buffer requirements do not apply to the subject project.
7. Driveways located in close proximity to adjacent properties having a residential land use designation shall provide a six-foot opaque screening between the driveway and adjacent property. An eight-foot opaque screen may be required if deemed necessary to mitigate noise and visual impacts.

Note: As described in item 5 above, all of the adjacent properties have an AG-2, Agricultural-2 (up to 1 unit per 10 acres) agricultural land use designation, not a residential land use designation. Therefore, the above referenced driveway screening requirements do not apply to the subject project.

14. Surrounding Land Use and Zoning:

North: Citrus Groves / A-2
East: Citrus Groves / A-2
South: SJID Canal, St. Lucie County (Citrus Groves) / AG-5 (St. Lucie County Zoning)
West: 122nd Avenue SW, Citrus Groves / A-2

All conditions recommended by staff have been accepted by the applicant.

RECOMMENDATION

Based on the analysis above, staff recommends that the PZC recommend that the BCC grant special exception use approval for a private heavy utility facility (solar energy center with on-site substation) to be known as FPL Indian River Solar Energy Center with the following conditions:

1. Prior to site plan release, the applicant shall provide a recorded unity of title that combines the three separate parcels currently comprising the project site.

2. Prior to issuance of a certificate of occupancy (C.O.), the applicant shall:
   a. Install all required landscape improvements as shown on the approved project landscape plan.
   b. Install the required County culvert crossing improvements as shown on the approved project site plan.

ATTACHMENTS

1. Application
2. Location Map
3. Extended Roadway Grid Network Map
4. Aerial
5. Site Plan
6. Landscape Plan
**SPECIAL EXCEPTION SITE PLAN (SPSE) APPLICATION FORM**

**PROJECT NAME (Please Print):** FPL Indian River Solar Energy Center

**PROPOSED PROJECT USE:** Construct energy generation facility (solar farm)

**CORRESPONDING PRE-APPLICATION CONFERENCE PROJECT NAME AND CD PLUS ASSIGNED FILE NUMBER (IF ANY):**

**PROJECT #:** 201610089 - 78358  
**SP-SE-17 - 03-01**

**OWNER: (PLEASE PRINT)**  
Evans Properties, Inc.  
*Florida Power & Light Company*

**NAME**  
Krista Hendricks

**ADDRESS**  
700 Universe Blvd.

**CITY, STATE, ZIP**  
Juno Beach, FL 33408

**PHONE NUMBER**  
561-304-6161

**EMAIL ADDRESS**  
Krista.Hendricks@nexteraenergy.com

**AGENT (PLEASE PRINT)**

**NAME**  
David Knight, PE

**ADDRESS**  
80 Royal Palm Pointe, Suite 401

**CITY, STATE, ZIP**  
Vero Beach, FL 32960

**PHONE NUMBER**  
772-569-5505

**EMAIL ADDRESS**  
davidk@knightmcguire.com

**CONTACT PERSON**  
Krista Hendricks

**PROJECT ENGINEER: (PLEASE PRINT)**

**NAME**  
Culpepper & Terpening, Inc.

**ADDRESS**  
2980 South 25th Street

**CITY, STATE, ZIP**  
Ft. Pierce, FL 34981

**PHONE NUMBER(s)**  
772-464-9497

**EMAIL ADDRESS**  
BTerpening@ct-eng.com

**CONTACT PERSON**  
Butch Terpening

**PROJECT SURVEYOR: (PLEASE PRINT)**

**NAME**  
Culpepper & Terpening, Inc.

**ADDRESS**  
2980 South 25th Street

**CITY, STATE, ZIP**  
Ft. Pierce, FL 34981

**PHONE NUMBER(s)**  
772-464-9497

**EMAIL ADDRESS**  
BTerpening@ct-eng.com

**CONTACT PERSON**  
Butch Terpening

**SIGNATURE OF OWNER OR AGENT**

**ATTACHMENT**
• DOES THE REQUEST INCLUDE A CONCEPTUAL PLAN ONLY OR A CONCEPTUAL AND "FINAL" SITE PLAN?: __Conceptual and Final

• AMOUNT OF NEW IMPERVIOUS SURFACE: (SQ. FT.) 826,333 sf (18.97 acres)

• SITE ADDRESS: 1750 122nd Avenue SW, Vero Beach, FL 32968

• SITE TAX PARCEL ID#: 3338300000005000000001.0; 333831000001000000001.0

• IS ALL OR A PORTION OF PROJECT IN ENVIRONMENTALLY SENSITIVE AREA AS DESIGNATED IN THE COMPREHENSIVE PLAN OR ADDRESSED IN A PRE-APP CONFERENCE?

□ YES x NO

• FLOOD ZONE: □ ZONING: □ AG-2 (Agricultural) FLUE: □ AG-2 (Agricultural)

• TOTAL (GROSS) ACREAGE OF PARCEL: 697.07

• AREA OF DEVELOPMENT (NET) ACREAGE: 354.6

• PROPOSED CHANGES TO EXISTING DEVELOPMENT (IF APPLICABLE):

A. NUMBER OF UNITS: FROM N/A TO

B. DENSITY: FROM N/A UNITS PER ACRE TO _______ UNITS PER ACRE

• CHANGE IN USES BY SQUARE FEET GROSS BUILDING AREA

USE: FROM N/A SQ. FT. OF _______ TO N/A SQ. FT. OF _______

COMMENTS: ______________________________________________________________

**PLEASE COMPLETE APPLICATION CHECKLIST ON NEXT PAGE**
## SPECIAL EXCEPTION SITE PLAN APPLICATION SUBMISSION CHECKLIST

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<td>&gt; 100 acres</td>
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<tr>
<td>+ $50.00 for each additional 25 acres over 100 acres</td>
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<tr>
<td>3. Completed Application Form, and if pre-app conference already held, then a pre-application conference discrepancy letter response or summary of plan revisions</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4. Ten (10) Copies of the Site Plan</td>
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<td></td>
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<tr>
<td>5. Two (2) Sealed Site Surveys</td>
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<tr>
<td>6. Two (2) aerials of site with project overlaid, showing surrounding 200 feet</td>
<td>X</td>
<td></td>
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<tr>
<td>7. One (1) Copies of the Owner’s Deed</td>
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<tr>
<td>8. Letter of Authorization (if applicant is not owner)</td>
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<tr>
<td>10. Completed Tree Removal Permit Application OR Signed Exemption Form</td>
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<tr>
<td>11. Completed Land Clearing Permit Application OR Signed Exemption Form</td>
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</tr>
<tr>
<td>12. Three (3) sets signed, conceptual floor plans and elevations prepared by architect or engineer (when project is required by Florida law to have such architectural or engineering drawings)</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>13. Environmental Survey if all or portion of project in environmentally sensitive area</td>
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</tr>
<tr>
<td>14. Concurrency Application or Acknowledgement Form</td>
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<tr>
<td>15. Written statement and photograph of posted sign (Needed if Planning &amp; Zoning approval required)</td>
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</table>
All surrounding Indian River County parcels zoned A-2
Figure 4.10

Extended Roadway Grid Network

Functional Class

- Urban Collector & Local Road
- Rural Major Collector
- Urban Principal Arterial
- Rural Minor Arterial
- Urban Principal Arterial - Interstate
- Rural Principal Arterial - Interstate

Municipalities

Indian River County
MEMORANDUM

TO: Members of the Planning and Zoning Commission
FROM: Stan Boling, AICP; Community Development Director
DATE: February 16, 2017
SUBJECT: Planning Information Package for the February 23, 2017 Planning and Zoning Commission Meeting

For this meeting’s packet, the following articles are provided:


(2) “Orlando-area home sales drop 26 percent in a month-biggest drop in 8 years”, Orlando Sentinel, February 15, 2017, May Shanklin.

(3) “Buying a home in Miami-Dade is so expensive it could hurt the economy”, Miami Herald Real Estate News, February 9, 2017, Nicholas Nehamas.


(5) Excerpts from “Florida Jobs 2030”, Florida Chamber Foundation.


cc: Board of County Commissioners (via e-mail)
Jason Brown (via e-mail)
Michael Zito (via e-mail)
Michael Smykowski (via e-mail)
Phil Matson (via e-mail)
Central Florida citrus growers find creative ways to survive despite deadly greening disease

Sanford — Brothers Ted and Ed White grew up picking citrus in their dad's groves five decades ago, when oranges were king in Central Florida and the future of the industry shined with seemingly limitless potential.

That was before the freezes of the 1980s, the land-development boom of the 1990s, the hurricanes of the 2000s and the latest and deadliest scourge: citrus-greening disease.
But like other growers who are sticking with Florida's state fruit, Ted, 58, and Ed, 57, are finding ways to adapt and survive.

In November, they closed the packinghouse that operated in the Conway neighborhood of Orlando for nearly 55 years — 34 with the Whites as owners — and moved their business to seven acres at their parents' homestead in Sanford, slashing commuting and labor costs. They pared their budget further by switching from a landline telephone to cellphones.

The brothers converted a barn into a farm store and began selling vegetables and pick-your-own herbs and strawberries along with old-Florida standards such as fruit, juice, honey, orange ice cream and boiled peanuts. For 50 cents, kids can feed a flock of chickens.

It's free to watch oranges skitter up a conveyer belt into a machine that washes and waxes them — a smaller version of the one used in the old packinghouse.

"Citrus greening is a huge challenge," said Ted White, the company president. "We felt like it would be better for us to downsize."

The latest U.S. Department of Agriculture production estimate for the 2016-17 Florida orange season is more bad news for the battered industry: 71 million boxes, each containing 90 pounds of fruit. That's down from the 242 million boxes produced in the 2003 to 2004 season, shortly before several hurricanes devastated Florida, and nearly one-third less than in 2013-2014.

The record is 244 million boxes in 1997-1998.

In Central Florida, Lake County was the second-highest producer in the state until the freezes of the 1980s, said Candice Erick, who helps forecast Florida's citrus crop for the state Department of Agriculture and Consumer Services.

In 1980, Lake had 122,777 acres of groves, she said. By 1986, it had 13,523 acres. In 2016, only 8,766 acres remained. Last season, Lake produced 1.6 million boxes of citrus, barely edging out minor player Osceola's 1.5 million.

Uncle Matt's Organic is one Lake company that's found a niche in natural. Based in Clermont, Uncle Matt's touts its products as free of genetically modified organisms, or GMOs, and synthetic pesticides and fertilizers.

The family business was launched in 1999 and now markets to Publix and Whole Foods, among other retailers.

"We're very fortunate," said Benny McLean, 74, who has been in the citrus business for more than 50 years and is production manager and father of founder and chief executive Matt McLean. "We got in at the right time."

The family also operates three pick-your-own organic peach orchards in Clermont and is branching out to organic vegetables. But citrus is its lifeblood, and the McLeans are among the growers contributing to research
on how to control greening, which first appeared in Florida in 2005 in Miami-Dade County.

About $250 million has been invested in citrus-greening research over the past decade, according to the trade group Florida Citrus Mutual.

The state's $10.8 billion citrus industry is at stake. Florida produces most of the juice oranges in the country, and the fruit is so identified with the state that its image appears on license plates.

"Citrus is not only our industry," said Peter Chaires, director of association services at the Florida Fruit & Vegetable Association. "It's our way of life, and we're going to do everything we can to hold onto it."

Greening, spread by an insect called the Asian citrus psyllid, causes leaves to curl, discolor and drop, limbs to die and fruit to grow misshapen, too small and bitter.

Alex Heller, 34, vice president of the 78-year-old Heller Bros. in Winter Garden, said greening is forcing growers to pull and replace their trees or sell land that has become more valuable for development.

Some growers are diversifying into blueberries, peaches, olives, avocados and tea and even pinning their hopes on hops for beer.

But none will generate anywhere near the cash that citrus does, nor is there a chance that all of the state's 500,000 acres of citrus will be converted to those crops, Florida Citrus Mutual spokesman Andrew Meadows said.

"Entire communities and families have been built on citrus, and nothing's going to replace that," Meadows said. "That's why the urgency, why we're being so aggressive in finding solutions."

While some growers have given up, others are cautiously optimistic. Prices have risen as the orange crop has dwindled, and juice prices are up, too.

"Generally, I am more upbeat because as this thing continues to shrink in size, I think it will create a better opportunity for those who are left," Heller said.
Orlando-area home sales drop 26 percent in a month — biggest drop in 8 years

Limited inventory and new transportation options helped home prices tick up in 2016.

By Mary Shanklin
Orlando Sentinel

HOME sales usually chill in January compared with December, but sales in the core Orlando market last month cooled more than usual for that time of year.

Sales dropped more than 26 percent in January from December — the largest dropoff experienced in Orange and Seminole counties since the deep freeze of the recession in January 2009, according to a report from Orlando Regional Realtor Association.

"We traditionally experience a big drop in sales between December and January after the rush to close for tax purposes," said association president Bruce Elliott of Regal R.E. Professionals LLC.

Spring will bring a more dynamic market as the peak buying season nears, he added.
The midpoint price in the core Orlando market in January was $199,000, down 4 percent from a month earlier but up 10.6 percent from a year earlier. Prices gained the most in the last year, by percentage increases, in the ZIP code areas for Pine Hills, Oak Ridge and Belle Isle, and Oakland, the Orlando real estate association reported.

The 10 Orlando-area ZIP codes with the greatest median-price gains in January from a year earlier were:

- 32808, $92,000, up 42 percent
- 32809, $132,900, up 40 percent
- 34760, $256,500, up 38 percent
- 32818, $155,000, up 24 percent
- 32773, $142,250, up 24 percent
- 32810, $135,000, up 22 percent
- 32789, $435,000, up 22 percent
- 32805, $61,500, up 21 percent
- 32771, $196,000, up 20 percent
- 32792, $202,000, up 19 percent

Homeowner Scott Baker said he has been trying to sell a house in the Vista Lakes area in southeast Orlando.

"I think the market may be softening a little bit after a very strong run the last three years," he said. Baker added that he’s not concerned about a collapse because mortgage requirements might get rolled back in a way that opens more homeownership opportunities.

Even though sales dropped to 2,195 in January from 2,948 in December, the home-selling industry pointed to two factors they say indicate the market is not repeating the patterns that led up to the bubble bursting in 2007.

Pending sales increased 15 percent in December from a year earlier and overall sales edged up slightly during that time.

Buyers had more of an advantage in January than December. Median sales prices were down and interest rates softened slightly to 4.3 percent in January from 4.32 percent in December.

But the slowdown in sales ramped up the months of supply to 3.9 months in January from 2.87 months in December.

mshanklin@orlandosentinel.com or 407-420-5538
Buying a home in Miami-Dade is so expensive, it could hurt the economy

Jason Lopez and his wife Yadira Lopez pose with their dog Maverick in the apartment they rent in Kendall. Both work good jobs but market forces have priced them out of buying a home in Miami-Dade County.

PEDRO PORTAL pportal@miamiherald.com

By Nicholas Nehamas

nnehamas@miamiherald.com

Jason and Yadira Lopez both have good jobs and college degrees — but they can’t find a nice home in a good neighborhood they can afford.

Jason Lopez doesn’t believe they’re asking for too much.

He’s a University of Miami graduate who works in public relations. Yadira went to Florida International University and makes a living in marketing. Together, they expect to earn about $120,000 in 2017. They’re in their early 30s and want to have children.

“We have student loans, we have a car payment,” Lopez said. “There are homes out there, but they’re not in good shape and we don’t want to overpay. We want to be responsible and live within our means. … [Miami’s] not really a place for first-time home buyers anymore.”

[Miami’s] not really a place for first-time home buyers anymore. Jason Lopez
Even in the far-flung Kendall neighborhoods where they’re hunting for a single-family home or townhouse under $300,000, South Florida’s mid-market housing crunch is squeezing out middle-class couples like the Lopezes. Now, business leaders are starting to worry that the skilled workers who power Miami’s diversifying economy will be lost under the tide of rising home prices.

"The impact goes beyond housing," said Carlos Fernandez-Guzman, president and CEO of Pacific National Bank. "It goes deeper into the core fiber of the economy. ... This has been a concern of the business community for quite some time."

See where you can afford a home in South Florida

South Florida seemed to have whipped its “brain drain” problem when housing prices plummeted during the recession. Between 2011 and 2013, the region’s population of 25- to 34-year-olds with a bachelor’s degree or higher grew at the eighth-fastest rate in the nation, according to research by the Center for Population Dynamics at Cleveland State University. But home prices have soared 59 percent since the market bottomed out in 2011. And wages have barely budged.

Last year, a study on where recent college grads have the most economic opportunities ranked South Florida dead last out of 40 large U.S. metro areas because of low starting salaries and high housing costs, according to real-estate website Trulia and job-networking site LinkedIn.

"We start to get concerned about housing prices, and then a cycle comes around and prices start to drop and everyone gets comfortable that affordability is back," said Fernandez-Guzman, the co-chair of a housing solutions task force at the Greater Miami Chamber of Commerce. "But the prices always rise again and chip away at our trained and educated workforce."


We bring people down from Palm Beach [County] and recruit them to Miami, and it can be hard. Victor Mendelson, Heico

Hiring engineers, sales people and other key employees from expensive housing markets like Southern California is easy, Mendelson said. Those newcomers see Miami as a relatively good deal. But recruiting workers from less pricey areas, including the rest of Florida?
“It is a concern for us,” Mendelson said. “We bring people down from Palm Beach [County] and recruit them to Miami, and it can be hard. They’ll come down and start looking for homes and say, ‘Wow, I didn’t expect I would get so much less home for the money than I would a few miles up the road.’ ”

But affordable homes in good neighborhoods do exist. They’re just hard to find. In order to help South Floridians searching for a home, the Miami Herald has updated an online tool with new data that can help buyers find hidden-gem neighborhoods. The tool uses home price data from Zillow, school grades from the Florida Department of Education and crime statistics from software mapping company Esri to help readers identify undervalued areas.

Mid-market crunch

Miami isn’t another middle-of-the-road American city like St. Louis or Minneapolis anymore. (No offense, friends.) It’s become a metropolis with a global brand, attracting out-of-town companies and enjoying a cultural renaissance. But its success has also made it one of the least affordable cities in the United States — and one of the least affordable in the English-speaking world, according to the 2016 Demographia International Housing Affordability Survey.

**Miami is one of world’s least affordable cities**

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<th>City</th>
<th>Affordability gap*</th>
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*NOTE: The affordability gap measures the difference between median household income and median home price.

Foreign investors have driven home prices out of whack with local incomes. In the year between August 2015 and July 2016, foreign nationals spent $6.2 billion on South Florida residential real estate, according to the Miami Association of Realtors. That’s 39 percent of total home spending in the region.

The gap between incomes and home prices makes South Florida the nation’s eighth-worst market for first-time home buyers, a Bloomberg study found. The other cities in the top 10 were all in California, except for Honolulu.
In today's local housing market, it's not just a question of providing government-subsidized homes for construction and service-industry employees. (Although affordable housing for those workers is desperately needed, too, advocates say.) The middle of Miami's residential real-estate market is hot — and inventory is falling at alarming rates.

Over the past two years, the number of single-family homes on the market between $250,000 and $600,000 has dropped 18 percent, according to Mike Pappas, president and CEO of the Keyes Company. Homes are now staying on the market for 57 days, down from 79 days in 2014.

57 Days mid-market homes spend on the market, down from 79 in 2014

The $250,000 to $600,000 range is crucial because it captures the spread of homes that two-income couples with college or advanced degrees could expect to afford in South Florida, based on typical earnings and recommended housing costs.

The mid-market feeding frenzy is happening even as luxury condo sales tank. Foreign buyers drove the latest real-estate boom, now ground to a halt by a strong dollar. But there was a downside to all that investment: South Florida developers chasing foreign cash are building primarily luxury homes, driving up construction and land costs, and making it difficult to produce homes at more affordable price points.

"You hear about people looking at 45, 50 homes," Pappas said. "They're making multiple offers. They're getting outbid by cash. ... There is product out there. But it takes a lot of work to find."

Sales for mid-market homes soared 27 percent in December, according to the Miami Association of Realtors. The price range between $300,000 and $600,000 accounts for nearly 40 percent of all sales in Miami-Dade County, according to the Realtor's group.

"It's the strongest market in South Florida," Pappas said. "It's the sweet-spot of all sweet-spots."

All that competition and not enough new construction makes life tough for locals.

"It's very difficult to find value," said Bruce Lamberto, a city of Miami Beach employee who owns six rental homes in Northeast Miami-Dade. "A year ago, I looked at a house that was listed for $175,000. Today, a similar home is listed for $275,000."

It's very difficult to find value. Bruce Lamberto, investor

There are now only 4.6 months of supply available for mid-market homes. A balanced market generally has between six and nine months of supply, meaning the mid-market is firmly in seller's territory. And more people keep moving to South Florida: Miami-Dade, Broward and Palm Beach counties added 500,000 residents over the past five years.

Meanwhile, middle-class buyers complain that many attainable homes need thousands of dollars in repairs or aren't up to code. Seven in 10 Miami-Dade homes were built before 1980, according to U.S. Census data. Homes generally need extensive renovation after 30 or 40 years of wear and tear.

"Sellers are very aware of the amount of buyers in the market and the lack of inventory," said Ray Duran, regional sales manager at Quontic Bank in Coral Gables. "It definitely puts the sellers in a stronger position at the negotiating table."
Homes get more expensive as they get closer to big employment centers. Trulia calculated that a middle-class family in South Florida spends 39 percent of its income on housing, transportation and utilities. That's the third-highest rate in the nation after San Francisco and Los Angeles.

The lack of affordable inventory combined with traffic gridlock is even influencing the way companies work. Thanks to improvements in communications technology, roughly 20 percent of Sprint's 1,200 South Florida employees now have the option of working remotely. That can save them the option of choosing between an affordable mortgage payment and a soul-crushing commute.

"You don't need to be in the office all day long," said Sprint regional president Claudio Hidalgo. "By using technology, we end up saving on office space, the need for a car, housing."

**Ugly math**

It might seem strange that Miami is less affordable than other expensive cities like New York, Seattle and Boston. But workers in those cities earn more money on average. So even though homes are more expensive, they are also more attainable because of higher wages.

In the Boston metro area, for instance, the median home sells for $435,000 and median household income is $80,500, according to the Demographia International Housing Affordability Survey. That means homes cost 5.4 more times than income. In Seattle, homes are 5.5 times more expensive than incomes. In New York, it's 5.7. The gap in the Miami metro area stands at 6.1. In North America, only Toronto, Honolulu and the major cities in California are less affordable, Demographia found.

The disparity between worker incomes and average housing costs in South Florida can be daunting: In Miami-Dade, the median household makes $43,000 per year, according to U.S. Census figures. In Broward, it's $52,000.

Using a calculation favored by housing experts — that households should spend no more than 3 1/2 times their income on housing — a typical Miami-Dade buyer should spend roughly $150,000 on a home. A Broward home buyer should spend $182,000.

That doesn't compare well to median sales prices.

$305,000 Median sales price for an existing single-family home in Miami-Dade County

Existing single-family homes in Miami-Dade sold for $305,000 and condos for $210,000 in December, according to the Miami Realtor's association. In Broward, single-family homes went for $320,000 and condos for $150,000, according to the Greater Fort Lauderdale Realtors.

The math looks better for a two-income, college-educated couple in Broward but still leaves them coming up short in Miami-Dade. That couple's earnings qualify them for a $288,000 home in Miami-Dade and for a $320,000 home in Broward.

One warning sign about what Miami could become lies just to the south: the Florida Keys.

In the Keys, many workers in the tourism industry have been priced out. Even teachers, firefighters and police officers find themselves commuting from South Dade.
“You have to have people who work in the restaurants,” said Martin Flynn of Tri-Star Affordable Development, which has worked on several projects in the Keys. “You have to have people who are going to teach your kids.”

County leaders understand they need to protect local workers and companies. But they also see the upside in being a city that has arrived on the world stage, said Jaret Davis, a Miami native who is co-managing shareholder of law firm Greenberg Traurig and chair of the Beacon Council, Miami-Dade’s taxpayer-funded economic development arm.

“When I was growing up, when Miami was mentioned it was with Dallas, Detroit and St. Louis,” Davis said. “Now you hear it being named with the New Yorks and San Franciscos. We are on the radar of every major country.”

Nicholas Nehamas: 305-376-3745, Nich Nehamas

This article includes comments from the Public Insight Network, an online community of people who have agreed to share their opinions with the Miami Herald and WLRN. Become a source at MiamiHerald.com/insight.

Read more here: http://www.miamiherald.com/news/business/real-estate-news/article131543514.html#storylink=cpy
Better budget for more than sunscreen and bug spray. Florida once again has the nation's costliest home insurance, a new report shows.

It is the only state with an average annual premium above $2,000.

That's all the more reason for consumers to know more about their options in the updated The Palm Beach Post Property Insurance Guide, available today.

The state's average annual premium of $2,055 soars above the national average of $1,132, according to the National Association of Insurance Commissioners January 2017 report.

Hermine was the first hurricane to make landfall in Florida in more than a decade.

Texas checks in at $1,947 and Louisiana averages $1,847 for a standard homeowner policy known as an HO-3.

The annual report takes a deep dive into data reported by state regulators, in this case from 2014.

It shows a familiar picture. Florida continues to the lead the country for the priciest home premiums, as it did in the previous year's report.

Florida enjoyed an 11-year hiatus from hurricanes until 2016, but insurance industry officials say the state's risk of catastrophic damage remains high, with 80 percent of the population living in coastal counties.

Most expensive home insurance

<table>
<thead>
<tr>
<th>Average annual premium</th>
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<tbody>
<tr>
<td>Florida $2,055</td>
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<tr>
<td>Texas $1,947</td>
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<tr>
<td>Louisiana $1,847</td>
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<tr>
<td>U.S. average $1,132.</td>
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Source: National Association of Insurance Commissioners January 2017 report based on 2014 data

Get help here

See which companies have the strongest financial ratings and fewest complaints in the updated Palm Beach Post Property Insurance Guide:
FLORIDA JOBS 2030
A Cornerstone Series Report For the Florida 2030 Initiative

FLORIDA CHAMBER Foundation
SECURING FLORIDA’S FUTURE
fffoundation.org
Executive Summary

“Today, because of rapid economic and social change, [we] need to prepare students for jobs that have not yet been created, technologies that have not yet been invented, and problems we do not yet know will arise.”

- Andreas Schleicher, Director, Organisation for Economic Co-Operation and Development, Directorate of Education and Skills

By 2030, Florida will add six million more residents and will need to create 2 million net new jobs. At the same time, rapid innovation technology will drive increased automation, globalization, digitization, and advances in machine learning in the next decade and a half. While these shifts are already well underway, by 2030 these and other disruptive technologies will lead to the development of new jobs and a shift in the skills and competencies required for existing jobs within the state’s economy. Though many of the jobs Floridians will hold in 2030 have not yet emerged, Florida has a strategic opportunity to prepare for these shifts by leveraging its many assets and changing demographics to make decisions that will have generational benefits and create economic opportunity for millions of Floridians.

The Florida Chamber Foundation is leading its once-in-a-decade initiative, commonly known as Florida 2030, to ensure that Florida is well positioned to address these disruptions. Florida 2030 brings together communities across Florida to discuss critical challenges and opportunities. The initiative is stimulating thinking about securing Florida’s future and engaging business and community leaders across all 67 counties to identify trends and factors that drive their regional economies. As one component of Florida 2030, the Florida Chamber Foundation has partnered with JFF on Florida Jobs 2030, an analysis of the state’s 21st-century jobs. This analysis draws on labor market research and qualitative interviews with more than 90 stakeholders from Florida’s business, education, nonprofit, and workforce communities to examine these 21st-century jobs, the skills required to perform them, and anticipated gaps in the labor market.

Florida’s economic and demographic diversity represent both an opportunity and a challenge to the state. Florida’s historically strong agricultural, tourism, and construction sectors remain anchors within Florida’s dynamic economy. In recent years, growth within these industries has been complemented by gains in five of Florida’s eight targeted industry clusters, which include: aerospace and aviation; health care and life sciences; manufacturing; logistics and distribution; and financial and professional services. The
analysis of current and projected jobs within these five industry clusters is highlighted in this report, as are several cross-sector opportunities.

Together, aerospace and aviation; health care and life sciences; manufacturing; logistics and distribution; and financial and professional services represent 30 percent of Florida’s jobs and over 40 percent of the gross state product. As the snapshots below highlight, there are strong middle-skill and entry-level opportunities within each of the five clusters. Further, the projected gaps between anticipated number of workers available to fill positions and industry demand represent opportunities to further diversify the workforce and help more Floridians prepare for and enter into high-demand occupations with strong career pathways. Specific opportunities within each of the clusters are highlighted briefly below.³

### Aerospace and Aviation:

- **92,598 jobs** statewide (2016)
- **3 percent net job growth** projected through 2021
- **35 percent of jobs** require a postsecondary degree or credential
- Key sub-baccalaureate opportunities:
  - Aircraft mechanics and service technicians
  - Avionics technicians
- Greatest projected long-term skill gaps:
  - Customer service representatives
  - Business operations specialists
  - Team assemblers

### Finance and Professional Services:

- **885,247 jobs** statewide (2016)
- **6 percent net job growth** projected through 2021
- **42 percent of jobs** require a postsecondary degree or credential
- Key sub-baccalaureate opportunities:
  - Insurance sales agents
  - Paralegals
- Greatest projected long-term skills gaps
  - Customer service representatives
  - Tellers
  - Insurance sales agents
Health Care and Life Sciences:

- **810,381 jobs** statewide (2016)
- **9 percent net job growth** projected through 2021
- **66 percent of jobs** require a postsecondary degree or credential
- Key sub-baccalaureate opportunities:
  - Medical assistants
  - Licensed practical and vocational nurses
  - Medical records and health information technicians
- Greatest projected long-term skills gaps:
  - Billing and posting clerks
  - Medical and clinical laboratory technologists

Logistics and Distribution:

- **724,277 jobs** statewide (2016)
- **4 percent net job growth** projected through 2021
- **21 percent of jobs** require a postsecondary degree or credential
- Key sub-baccalaureate opportunities:
  - Heavy and tractor-trailer truck drivers
  - Aircraft mechanics and service technicians
- Greatest projected long-term skills gaps:
  - Wholesale and manufacturing sales agents
  - Shipping, receiving, and traffic clerks

Manufacturing:

- **360,783 jobs** statewide (2016)
- **4 percent projected net job loss** through 2021
- **10 percent of jobs** require a postsecondary degree or credential
- Key sub-baccalaureate opportunities:
  - Welders
  - Machinists
  - Industrial machinery mechanics
- Greatest projected long-term skills gaps:
  - Wholesale and manufacturing sales representatives
  - Maintenance and repair workers
In addition to the opportunities highlighted within each of the targeted clusters, several broad trends emerged from the research. The demand for both employability skills and digital skills is strong—and anticipated to grow—throughout Florida. Cultivating these two types of skills in Florida’s learners represents a clear opportunity for the state to better prepare them for 21st-century jobs.

The importance of employability skills such as communication, critical thinking, and problem solving was underscored by numerous stakeholders during interviews and supported by the job posting analysis, which demonstrates that these skills are in high demand among Florida’s employers. As technology continues to advance and automation increasingly changes the world of work, strong employability skills will enable Floridians to interact critically with technology, collaborate effectively, and demonstrate agility as jobs and responsibilities continue to shift.

Advancing the digital skills of Floridians represents another key opportunity for Florida. As innovations such as 3-D printers, advanced robotics, big data, and cloud computing proliferate, Florida’s workers will need to develop more advanced digital skills—including productivity digital skills (e.g., word processing), advanced digital skills (e.g., networking and design), and occupation-specific digital skills (e.g., AutoCAD). Importantly, these skills are not only important in “tech” jobs, but are increasingly integrated into occupations in all sectors; and research has shown that digital skills are increasingly a differentiating factor between entry-level and middle-skill jobs.

To prepare for projected shifts in Florida’s labor market and the changing landscape of skills required for 21st-century jobs, Florida Jobs 2030 highlights four core recommendations for Florida communities:

- Expand and deepen cross-sector collaboration between business, education, and workforce development;
- Foster opportunities for targeted skills development in a manner that is responsive to the ever-shifting needs of a global economy;
- Create effective “bridges” to facilitate transitions between high school, postsecondary, and/or the workforce; and
- Establish community-wide accountability structures to help measure progress and system alignment.

Within each recommendation, the Florida Chamber Foundation’s Florida Jobs 2030 highlights specific strategies for policymakers, educators, and the business community to advance these goals. While some of these ideas are not new, there is an urgency for
Florida's stakeholders to coalesce around these recommendations to ensure that Florida has the talent it needs in 2030 and beyond.

If you would like copies of this report or would like to request a presentation of the report results, please visit our website at www.FloridaChamber.com/FloridaJobs2030 for more information.
Median Household Income by Race/Ethnicity

- **WHITE ALONE (Not Hispanic or Latino)**: $54,626
- **HISPANICS + LATINOS**: $41,776
- **AFRICAN AMERICANS**: $35,936

The United Way estimates that a Florida family of four will need to earn $47,484 to afford basic necessities.

- 45% of Florida's households earn under this threshold ($47,484).

**LARGEST INDUSTRIES, BY 2015 EMPLOYMENT**

- **1.16 million** Government
- **1.12 million** Retail Trade
- **1.09 million** Health Care and Social Assistance
- **926,100** Accommodation and Food Services

Embargo Copy until 1/27/17
Aerospace & Aviation

Cluster Growth

Number of Jobs
92,598

=10,000 Jobs

1.7% of gross state product

Projected Growth

2011
+13%
2016
+3%
2021

Business Establishments
2,129

0.3% of total businesses statewide

Largest Sub-Clusters
with projected growth through 2021

0%
Air Transport

3%
Aerospace Parts & Products Manufacturing

8%
Support for Air Transportation

35% of jobs require a postsecondary degree or credential
Finance and Professional Services

Cluster Growth

Number of Jobs: 885,247
Projected Growth: +13%
Business Establishments: 115,609

15.8% of gross state product

18% of total businesses statewide

42% of jobs require a postsecondary degree or credential

Largest Sub-Clusters
with projected growth through 2021

- 6% Insurance Carriers
- 7% Legal Services
- 17% Management, Scientific, and Technical Consulting Services
Health Care and Life Sciences

Cluster Growth

Number of Jobs
810,381

Projected Growth
2011
2016
2021

+13%

Business Establishments
47,741

7.4% of total businesses statewide

8.4% of gross state product

66% of jobs require a postsecondary degree or credential

Largest Sub-Clusters
with projected growth through 2021

Medical Device Manufacturing
3%

Pharmaceutical Manufacturing
7%

Health Care
9%
Logistics and Distribution

Cluster Growth

Number of Jobs
724,277

Business Establishments
70,201

Projected Growth
+11% 2011
+4% 2016

10.9% of total businesses statewide

13.0% of gross state product

21% of jobs require a postsecondary degree or credential

Largest Sub-Clusters
with projected growth through 2021

2% Transportation & Warehousing

4% Wholesale Trade

14% Wholesale Trade Agents & Brokers
Manufacturing

Cluster Growth

Number of Jobs
360,783

=10,000 Jobs

Projected Growth

2011

2016

+11%

2021

+4%

Business Establishments
19,531

3% of total businesses statewide

6.4% of gross state product

10% of jobs require a postsecondary degree or credential

Largest Sub-Clusters

with projected growth through 2021

1%

Transportation Equipment Manufacturing

3%

Medical Equipment Manufacturing

11%

Computer and Electronics Manufacturing
75 years later: How World War II changed Florida forever

By Eliot Kleinberg • Palm Beach Post Staff Writer

An unidentified ship burns off the Palm Beach County coast. Of Florida alone, between February and May 1942, German U-boats sank 24 ships. Sixteen went down in a 150-mile stretch of Florida coastline from Cape Canaveral to Boca Raton. (Post archives)

Editor's Note: This story is adapted from an article that ran in 1992, on the 50th anniversary of World War II.

If you were living on Jupiter Island 75 years ago, on Feb. 21, 1942, you might have been partying at the local drinking hole, relaxing in your living room, or asleep in bed. All of a sudden, you would have felt the ground beneath you vibrate.

You would have heard a boom in the distance, so powerful it rattled dishes and windows and even broke some. You might even have been knocked out of bed. Far off at sea, you might have seen a dull white glow. A short time later, you might see two lifeboats pull up...
to the beach behind your house. Several men would stagger off, coated in oil. They would be the crew of the Republic.

You would then discover that living on America's coast had come with a price. America was at war, and the war had come literally to your backyard.

If you lived in America's heartland, you knew the war all too well; you sent your sons and husbands, and some didn't come back. But you never really felt personal fear. The war was in strange lands far across the sea.

But if you lived on the coast of Florida, you could see the war glowing on the horizon. You could see its smoke billowing and feel its heat. You could encounter its dead tangled in seaweed on the beach. And you lived with a special fear reserved for civilians in war's way: You went to bed every night wondering if a shell would crash down on you while you slept. After all, just offshore a few feet below the pleasure boaters and commercial fishermen the metal sharks lay in wait.

**Related**

Photos - When WWII Came to Florida

In those first few weeks after Pearl Harbor pulled America headlong into a two-front war, the untersee boots of Adolf Hitler's navy worked with virtual impunity. Off Florida alone, between February and May 1942, they sank 24 ships. Sixteen went down in a 150-mile stretch of Florida coastline from Cape Canaveral to Boca Raton.

The commanders were under strict orders to sink ships; nothing more. Hitler's plans at that point didn't include massacring civilians in American cities. But South Floridians didn't know that. They painted their headlights black, took part in blackouts and drills, patrolled beaches on foot or on horseback. Jumpy authorities rounded up virtually anyone with a German-sounding accent or Asian features. Rumors spread like fire on an oil slick. And some of the very features that attracted tourists to Florida made it the logical place for soldiers as well.

The state, a strategic asset for its geography and climate, became an armed camp. Its hotels turned into barracks. Hospitals, bases and airfields sprang up, increasing from eight in 1940 to 172 in 1943. The influx of soldiers led to the boom that changed Florida's population from about 2 million in 1940 to nearly 3 million a decade later. The sleepy southern locale became one of the nation's most important and fastest-growing states.

Florida would never be the same.

***

Authorities weren't messing around when they conducted a practice blackout Jan. 11, 1942 that threw into darkness a 300-mile stretch of South Florida coastline from Stuart to Key West.

"It was an impressive and sobering sight," wrote one reporter as he stood on a rooftop and watched the twin tourist towns of West Palm Beach and Palm Beach enveloped in black, "to see these two large municipalities as dark as a pocket when the huge observation plane soared over the resorts, its throbbing motors breaking the stillness, which seemed to hang like a pall over everything."

The war footing touched everyone. Beachfront hotels and restaurants, worried about business, initially resisted orders for coastal cities to dim lights so ships wouldn't be backlit. It was not until April 11, 1942 that Gov. Spessard Holland ordered a dimming of lights facing the sea. Street lights were hooded to cast only a small circle of light directly down. Ten donated station wagons were fitted with blankets as emergency standby ambulances.
Paranoia led authorities to detain people on the slightest suspicion of subterfuge. In the first days following the attack on Pearl Harbor, FBI agents and local police were under strict orders to pick up any Japanese. "Loafers" unknown to police were to be run off and any aliens held for questioning. The FBI searched a Japanese-owned import-export shop on Palm Beach's ritzy Worth Avenue and posted an armed sailor out front who answered no questions of nosy reporters.

The former Countess Erica von Haacke, of the Silesia region of Germany, was "taken into custody" in Palm Beach while wintering from New Jersey with her family. And the FBI arrested Baron Fritz von Opel — yachtsman, scion of the Opel carmaker family, and inventor of the rocket-propelled car on Feb. 26, 1942 at his Palm Beach residence along with his wife and two Hungarians.

By late February 1942, news reports showed, FBI agents made 55 raids in the West Palm Beach and Fort Lauderdale areas, arresting 29 suspected enemy aliens and confiscating guns and cameras.

Unlike their West Coast counterparts, Japanese residents of Florida — the state's 1940 census lists only 217 statewide — were not subject to the mass relocation to government-run camps. But the government froze the assets of George Morikami, former member of the Yamato colony in Boca Raton. It ran his farm and lodged servicemen in his home. It also confiscated land owned by the Yamato colony family of Hideo Kobayashi for the Boca Raton Army Air Field.

The Coast Guard set up observation towers every three miles, at places such as the Lake Worth casino. A polo grounds held barracks for about 280 U.S. Coast Guard beach watchers. The men, each armed with a .38-caliber pistol strapped to the waist and a rifle in a boot, rode horses shipped in from Fort Riley, Kansas.

Teenagers who never had been in a saddle were drafted for their local knowledge and rode eight to 10 hours a night. Where horses couldn't maneuver, 30 trained dogs took over. Authorities got a break in early 1942 when a big winter storm blocked Jupiter Inlet for the duration of the war, enabling patrols to negotiate most of the coastline.

Patrol dogs ran people off the beaches at night. And anyone crossing the bridges between West Palm Beach and Palm Beach encountered an armed sentry who shined his flashlight, demanded identification and sometimes searched cars. Just to cross the bridges, residents had to be fingerprinted and photographed for an ID card.

The nation's third Civil Air Patrol squadron formed at Morrison Field. The "Coastal Picket Patrol" and the "Mosquito Fleet" — rag-tag flotillas of pleasure and charter boats — patrolled for subs and rescued survivors from torpedoed ships.

And at "The Hill," the complex just west of downtown West Palm Beach that housed Palm Beach High School, Junior High and Elementary, stories of sinkings, attacks and Germans coming ashore flew through classrooms. Teachers would hush students, saying, "If you didn't see it, don't talk about it. The enemy might be listening."

***

In the first half-year of war, the Germans sank 397 ships and killed some 5,000 people, about twice as many as died in Hawaii on Dec. 7, 1941. University of Florida professor Michael Gannon, in the 1990 book "Operation Drumbat," called it "a six-months long massacre." He alleged monumental incompetence and delay by American authorities, focused on the Pacific. The "Gulf Sea Frontier" defensive force was responsible for 45,814 miles of serpentine Atlantic and Gulf coastline from Maine to Mexico. It had six ships, four under repair, and 32 planes, nearly half of them unarmed.

The German strategy was to interrupt the flow of supplies along the U.S. coast and to England, lay waste to the Allies' merchant fleet and strike a propaganda blow by letting Americans watch burning ships from their beaches. Germans saw an opportunity to prey on tankers plying the crowded and narrow shipping lanes off the Florida coast, where traffic ranked second in the United States and sixth in the world. Reports said about one of every 12 ships sunk worldwide in 1942 went down in Florida waters leaving hundreds dead and sending millions of dollars in cargo and oil to the bottom.

Emergency workers at Good Samaritan Hospital in West Palm Beach saw as many as 50 seamen in a night, some foreigners unable to describe injuries ranging from broken bones to oil burns. Many who could speak English were too busy screaming in agony.
The first Florida victim of Operation Drumbeat was the Pan Massachusetts, hit in broad daylight off Cape Canaveral on Feb. 19.

Two days later, at 11 p.m. Feb. 21, the first sinking along Palm Beach County and the Treasure Coast: the Republic was hit 3½ miles northeast of the lighthouse.

"After 150 seconds, two detonations, under the bridge and astern in the engine room, where the sparks fly around the air," U-504 commander Fritz Poske noted in German in his war diary, later translated by historians. The engine room blast killed five of the 34 crewmen.

Stuart insurance agent Ralph Hartman recalled that night. It was his 18th birthday and he and friends went to Jensen Beach. As Hartman dropped a nickel in a jukebox, there was a dull boom. The building shook and windows rattled. Ralph and his pals dashed outside. Far out at sea, they saw a dull white glow.

"It was the first time," recalled Hartman, "that we knew the war was coming home to us."

At seven that same night, Feb. 22, the 21-year-old, 10,277-ton W.D. Anderson was heading north 12 miles north of Jupiter with a cargo of crude oil. The crew was at chow. Two men had already eaten and were on watch at the back of the 500-foot ship, swapping tales. One was Frank Leonard Terry, 23. He was sipping coffee when a torpedo hit the engine room with a dull thud. It was from U-504, killer of the Republic.

"The ship stood, in a fraction of a second, from forward to astern in flames," German commander Poske wrote. "After 12 seconds, second (torpedo) hits in the stern; the rear part broke off."

Terry jumped over a railing and dove into the water.

"There was heavy smoke all 'round and fire," the retired steelworker and part-time security guard, living near Philadelphia, recalled in 1992. "I heard a lot of screaming and hollering. I could feel heat and smoke."

Terry dragged a shipmate through the water, then had to let him go. He watched the man burn. He swam under the inferno until he thought his lungs would burst, then treaded freezing water with no shirt or shoes for three hours, coated in oil. He insisted to rescuers that sharks had bitten off his legs until they showed him his numb limbs.

Terry, who would die at 96 in 2014, was the only survivor of 36 men.

"It was my first trip to Florida. I didn't like the experience. When I finally thought of my pals, they were in my prayers. I was a nervous wreck. The Germans? I figure it was war. It was their duty."

Local media covered the sinkings but had to wait two days for the federal Office of Censorship to clear publication. A note assured Palm Beach Post readers the paper was on the job but hampered by government, reminding them, "If it's anything we can't print, you shouldn't be talking about it."

In May 10 ships sank in 10 days. Among them:

At 1 p.m. on May 4, the British tanker Eclipse, a mile off Boynton Inlet, never expected a torpedo from the direction of land, but U-564 had maneuvered between it and the coast a few hundred yards away. At 11 that night, near Jupiter Island, U-564 struck the Delisle.

At 11:45 p.m. on May 5, U-333 commander Peter Cremer targeted the Java Arrow off Fort Pierce. Four hours later, U-333 found the Amazone off Hobe Sound. Later, off Jupiter Island, U-333 claimed its third kill in five hours: the Halsey.

Two days later, on May 8, U-564 made a daring daylight attack on the Oholon off Boca Raton. At 3:20 a.m. on May 9, 3½ miles east of Delray Beach, U-564 made another strike: the Lubrafol.
By mid-May of 1942, the United States finally instituted convoys. Attacks tapered off; only four off Florida in 1943 and none in 1944 and 1945.

Ironically, the deadliest disaster of the war was caused only indirectly by the Germans. Two ships under wartime orders to travel without lights collided off Jupiter Inlet just before 11 p.m. on Oct. 20, 1943. The empty Gulf Bell rammed the Gulfland, filled with gasoline. Of 116 seamen on the two ships, 88 died. The Gulf Bell ran aground. The Gulfland burned off Hobe Sound for a remarkable seven weeks.

By war's end, the Allies had sunk many U-Boats, but apparently none off Florida. A 1945 U.S. Navy report said the Coast Guard cutter Nike "probably" sank a U-Boat off the Jupiter lighthouse on May 18, 1942. Neither U.S. nor German reports documented any such sinking.

Operation Drumbeat had left its legacy: a line of ships lying on the bottom, cargo strewn on the ocean floor and oil oozing from ruptured tanks.

The militarization of Florida also left its mark. Many bases were transformed to public use. Soldiers heading home from the front got heroes' welcomes as their trains passed through West Palm Beach. Those men, and those who had been stationed in South Florida, went home with stories of the paradise they had left. Many later returned for good.
The future is now for robot cars

January 24, 2017 by Zachary Boehm in Technology / Hi Tech & Innovation

Tim Chapin, interim dean of the College of Social Science and Public Policy and professor of urban and regional planning at Florida State University. Credit: Florida State University

The prospect of self-driving vehicles has tantalized tech aficionados and car lovers for years, especially when there are industry rumblings that automation is on the cusp of a breakthrough.

Now, with recent important innovations from companies like Google, Tesla and Ford, driverless car expert Tim Chapin, interim dean of the College of Social Science and Public Policy and professor of urban and regional planning at Florida State University, believes that it may finally be time to start taking this technology seriously.

"Everything that I've heard from within the industry suggests we're not too far away," Chapin said. "I expect that over the next 20 years, a significant portion of cars on the road will begin to employ driverless technology."

Chapin, whose current research interests revolve around how Florida's demographic trends influence urban patterns and transportation systems in the state, believes that forward-thinking tech companies will be agents for dramatic change in an industry that, for decades, has been largely defined by slow and iterative progress.

"The real innovation in driverless technology resides in the tech companies," Chapin said. "We've had the same basic automotive technology for a century—four wheels, a steering wheel, breaks and an engine—and cars of the
future will have that same set of functions. The progress is on the software and remote sensing side, which makes sure we can operate the vehicle safely."

It's when large automotive firms begin to take notice of these software developments, Chapin said, that significant developments occur.

"The big tech companies like Google, Apple and Microsoft are drivers of autonomous technology development," Chapin said. "Increasingly, auto companies like Ford, Chevy and Tesla are partnering with these tech firms to use and integrate their technology."

With the notion of manually operated vehicles being so central to our perception of time and movement, the growth of automotive technology is certain to shake up long-harbored habits and preconceptions.

Driving demands a great deal of cognitive exertion: an attuned directional sense, an applied knowledge of road rules and customs and a keen awareness of changing and hazardous environments.

As more advanced driverless technology potentially frees us from much of this stress and cognition, Chapin expects fundamental changes in our attitudes and behavior.

"If you can be productive in a driverless car, that might change your sense of the time, distance and friction costs of travel," Chapin said. "If your commute is one on which you can work on a conference call or read or sleep, and not really have to monitor what you're doing, it makes travel a lot less onerous, and the expectation is that people may be willing to travel much longer distances for work or leisure."

Chapin is especially interested in how driverless cars may restructure our cities and public spaces.

Experts predict that the advent of refined autonomous technology will also herald a reduction in the demand for vast, dedicated urban parking areas. Technologists expect that autonomous vehicles will be engineered with the ability to park themselves into smaller, more compact spaces, and some even anticipate a future where a car drops its owner off and then returns home until called upon.

If intelligent driverless cars do eliminate the need for sprawling and unsightly parking lots, Chapin expects that these spaces will be salvaged for more dynamic and constructive purposes.

"I'm an avowed urbanist who believes that cities are the engines of our economy, and driverless cars are a neat opportunity to reclaim some of the dead spaces in our cities," Chapin said. "There are opportunities to promote more building and more attractive spaces in our urban centers because we won't need huge surface lots to house our cars."

While Chapin is bullish on the potential of driverless car technology, he acknowledged there are legitimate concerns that should be addressed.

For many, the term "automation" has become synonymous with corporate cost-cutting and job loss. As autonomous vehicles continue to increase in precision, efficiency and reliability, there is a growing anxiety that driving professions will become vulnerable to displacement.

"There are many industries where technology has been introduced and that has eliminated the need for human labor," Chapin said. "Between truckers, cab drivers, public transportation drivers, there's a real possibility that these kinds of jobs may be displaced."

With these trepidations in mind, Chapin expects that the introduction of this technology will mirror that of similar innovations in the past: a surge of ardent first adopters followed by a more gradual acceptance by the larger public.

"I suspect there will be an initial wave of users who jump on this technology and use it aggressively, but there may be a lot of people who sit on the sidelines for a while," Chapin said. "There will be groups who want to make sure that the technology is safe and useful, and once the technology proves itself, usage will really ramp up."