

DEVELOPMENT, CODE COMPLIANCE, AND REDEVELOPMENT COMMITTEE

### Friday, November 8, 2024 10:00 a.m. – 2:00 p.m. ET

### Meeting Room: Florida Ballroom 5-7 Hilton Orlando

6001 Destination Parkway Orlando, FL 32819

FLC Staff Contact: David Cruz





## Agenda



#### Development, Code Compliance, and Redevelopment Legislative Policy Committee Friday, November 8, 2024, from 10:00 a.m. to 2:00 p.m. Hilton Orlando – Meeting Room: Florida Ballroom 5-7 6001 Destination Parkway, Orlando, Florida

#### AGENDA

I.	Introduction and Opening I			
II.	Potential 2025 Priority and	Policy Issues	Mayor, City of Aubunidate	
	a. Affordable Housi	ing Update		
	i. Live Loc	cal Act	David Cruz, FLC StafF	
	ii. National	Housing Preemptions	David Cruz, FLC Staff	
	b. Vacation Rentals	Update	David Cruz, FLC Staff	
	c. Impact Fees Upd i. Impact F		David Cruz, FLC Staff	
	ii. Eligible	Uses of Impact Fee Revenue	<b>Joseph McMullen</b> Commissioner, Town of Oakland	
	d. HB 1621(2024) U	Unlawful Demolition of Historical S	Structures <b>Nancy Sikes-Kline</b> Mayor, City of St. Augustine <b>David Birchim</b> City Manager, City of St. Augustine	
	e. Farmworker Hou	ising	<b>Hugo Vargas</b> Commissioner, City of La Belle	
	f. Building Code: H	High Velocity Windstorm Ratings		
III. IV. V.	Other Business Additional Information a. <u>FLC Legislative</u> b. <u>Key Legislative</u> c. Key Contacts – <u>C</u> d. <u>2024 Legislative</u> Closing Remarks	Conference Registration Dates Click HERE to sign-up Session Final Report	David Cruz, FLC Staff David Cruz, FLC Staff David Cruz, FLC Staff David Cruz, FLC Staff 	
VII.	Adjournment *Breakfast and Lunch provided by the Florida League of Cities*			
		WiFi is Available	6	

Wifi is Available Network: FLCPC1124 Access Code: FLCPC1124



### Committee Roster



#### 2024-2025 Legislative Policy Committee Development, Code Compliance, and Redevelopment

Staffed by: David Cruz, Legislative Counsel

#### CHAIR:

**The Honorable Dorothea Taylor Bogert** Mayor, City of Auburndale

VICE CHAIR:

The Honorable Morris West Vice Mayor, City of Haines City

#### **MEMBERS:**

**The Honorable Antonio Arserio** Commissioner, City of Margate

**The Honorable Vincent Barile** Commissioner, Town of Sewalls Point

**Lana Beck** Communications and Govt Relations Administrator, City of Pinellas Park

The Honorable Ray Beliveau Councilman, City of Seminole

The Honorable Liston Bochette III Councilmember, City of Fort Myers

**The Honorable Samson Borgelin** Mayor, City of North Lauderdale

**Michael Bornstein** Village Manager, Village of Palm Springs

**The Honorable Woody Brown** Mayor, City of Largo

**Jeff Burton** Executive Director, CRA/Economic Development, City of Bradenton **Patrick Callahan** Community Development Director, City of Satellite Beach

**The Honorable Traci Callari** Commissioner, City of Hollywood

**Leondrae D. Camel** City Manager, City of South Bay

**The Honorable Jolien Caraballo** Vice Mayor, City of Port St. Lucie

The Honorable Theresa Carli Pontieri Council Member, City of Palm Coast

The Honorable Joy Carter Commissioner, City of Coral Springs

**The Honorable Melissa Castro** Commissioner, City of Coral Gables

**Pamela Cichon** City Attorney, City of Temple Terrace

The Honorable Jeremy Clark Vice Mayor, City of Davenport

**The Honorable Gary Coffin** Commissioner, Town of Longboat Key

**Nick Colonna** Community Development Administrator, City of Pinellas Park

The Honorable Bradley T. Dantzler Commissioner, City of Winter Haven

**The Honorable Dennis Dawson** Councilmember, City of Mount Dora **The Honorable Jack Dearmin** Commissioner, City of Lake Alfred

**The Honorable Alison Dennington** Mayor, Town of Melbourne Beach

**The Honorable Susy Díaz** Council Member, City of Greenacres

**The Honorable Ed E. Dodd** Mayor, City of Sebastian

The Honorable Debbie Dolbow Councilwoman, City of Edgewater

**Pamela Durrance** City Manager, City of Bowling Green

**Krista Ellingson** Code Compliance Manager, City of Satellite Beach

**The Honorable Alex Fernandez** Commissioner, City of Miami Beach

**The Honorable Josh Fuller** Mayor, Town of Bay Harbor Islands

**The Honorable Marge Herzog** Vice Mayor, Town of Loxahatchee Groves

**Jay Hubsch** Community Development Director, Village of Tequesta

**The Honorable Linda Hudson** Mayor, City of Fort Pierce

**The Honorable Terry Hutchison** Vice Mayor, City of Naples

**Heather Ireland** Director, Planning and Development, City of Jacksonville Beach

**The Honorable Dan Janson** Councilman, City of Jacksonville Beach **The Honorable Michael Jarman** Vice Mayor, City of Panama City Beach

**The Honorable Rahman K. Johnson, Ph.D** Councilmember, City of Jacksonville

**The Honorable Debra Jones** Councilmember, City of Williston

**The Honorable N'Kosi Jones** Mayor, City of Bowling Green

**The Honorable Barbara King** Commissioner, City of South Bay

**The Honorable Greg Langowski** Vice Mayor, City of Westlake

**The Honorable William "B.J." Laurie** Commissioner, City of Crescent City

**Kelly Layman** Legislative & External Relations, Town of Jupiter Island

**Max Lohman** City Attorney, City of Palm Beach Gardens

**The Honorable Karen Lythgoe** Mayor, Town of Lantana

The Honorable Kelli Marks Council Member, City of Orange City

**The Honorable Michael McComas** Councilman, City of Everglades City

**The Honorable Debbie McDowell** Commissioner, City of North Port

**The Honorable Matthew McMillan** Mayor, City of Longwood

**The Honorable Joseph McMullen** Commissioner, Town of Oakland **The Honorable Everett McPherson** Commissioner, City of Pahokee

The Honorable Michael Miller Vice Mayor, City of Sanibel

The Honorable Janice D. Mortimer Commissioner, City of Starke

The Honorable Fran Nachlas Council Member, City of Boca Raton

**The Honorable Karen M. Ostrand** Mayor, Town of Ocean Breeze

**The Honorable John Penny** Vice Mayor, City of Holly Hill

**The Honorable Karen Rafferty** Vice Mayor, City of Belleair Bluffs

**The Honorable Chelsea Reed** Mayor, City of Palm Beach Gardens

**The Honorable Paula Reed** Commissioner, City of Daytona Beach

The Honorable Thomas Reid Commissioner, City of South Pasadena

**The Honorable Betty Resch** Mayor, City of Lake Worth Beach

**The Honorable Cora Perry Roberson** Council Member, Town of Lake Hamilton

**The Honorable Marie Rosner** Commissioner, Town of Jupiter Inlet Colony

**The Honorable Dylan Rumrell** Mayor, City of St. Augustine Beach

**The Honorable Daniel Saracki** Mayor, City of Oldsmar **The Honorable William Schaetzle** Councilman, City of Niceville

**Brian Sherman** City Attorney, Goren, Cherof, Doody, & Ezrol

**Shari Simmans** Economic Development, Communications, Govt Affairs Director, City of DeBary

The Honorable Jordan Smith Commissioner, City of Lake Mary

**The Honorable Bill Steinke** Councilmember, City of Cape Coral

The Honorable Sarah Stoeckel Councilmember, City of Titusville

The Honorable Larisa Svechin Mayor, City of Sunny Isles Beach

**The Honorable Christa Tanner** Vice Mayor, City of Brooksville

**The Honorable Judith Thomas** Commissioner, Town of Lake Park

**The Honorable Debbie Trice** Commissioner, City of Sarasota

**The Honorable Hugo Vargas** Clerk-Commissioner, City of LaBelle

**Steven Weathers** Director, Economic Development, City of Fort Myers

**The Honorable Jiana Williams** Mayor, Town of Micanopy

**The Honorable Evelyn Wilson** Mayor, City of Groveland

**The Honorable Janet Wilson** Vice Mayor, City of Indian Rocks Beach

#### The Honorable Normita Woodard

Mayor Pro-Tem, City of Dade City

#### Latricia Wright

City Clerk, City of Williston



# Affordable Housing



#### **Draft Statement:**

The Florida League of Cities **SUPPORTS** legislation that respects the unique housing needs and character of each city by empowering local decisions to address each cities affordable housing needs. "One-size-fits-all" state preemptions, including expansions within the Live Local Act, restrict municipalities' ability to plan and regulate for sustainable, affordable, and workforce housing tailored to fit their communities.

#### Affordable Housing Update:

Affordable housing remains a pressing issue in Florida, with cities facing increasing demand for housing alongside rising land and construction costs. This challenge is worsened by rapid population growth, putting significant strain on both the housing market and local infrastructure. In many areas of the State low- to moderate-income households struggle to find affordable, quality housing, placing the burden on city governments to address these needs. State legislators are likely to introduce additional affordable housing measures in the 2025 Legislative Session.

#### **Recent Legislation: The Florida Live Local Act**

In response to the growing crisis, the Florida Legislature passed the Live Local Act in 2023, aiming to tackle affordable housing through incentives and policy reforms. The law promotes affordable housing development by offering tax credits, expediting project approvals, and requiring local governments to approve certain high-density developments in areas zoned for commercial, industrial, or mixed-use purposes. It also limits the ability of local governments to impose development restrictions on projects that include affordable rental housing. This has sparked concerns from cities over balancing growth with infrastructure capacity and the compatibility of these developments in certain areas.

In 2024, the legislature revisited the Live Local Act, passing **CS/CS/SB 328**. This bill further refines land use regulations attempting to clarify density, floor area ratios, and height entitlements for qualifying projects, while reducing parking requirements for projects near transit hubs.

These legislative changes offer both opportunities and challenges for cities, which must balance growth, community concerns, and infrastructure limitations.

Additional amendments to the Live Local Act are likely during the 2025 session. Likely areas of focus include:

- Application of the Act to Planned Unit Developments (PUDs)
- Penalties for local governments that fail to comply with the Act
- Restrictions on the use of moratoriums by local governments to halt projects
- Clarifications on what qualifies as mixed-use zoning

#### National Trends in Affordable Housing Legislation:

Nationally, there is a trend toward zoning reform aimed at increasing housing density and affordability. For example, in 2020, Minneapolis became the first major U.S. city to eliminate single-family zoning. This change

allows for more diverse housing types—such as duplexes and triplexes—in areas previously restricted to singlefamily homes, thereby increasing housing supply. Cities like Portland, Oregon, and states like California have implemented similar reforms to reduce barriers to higher-density development.

These national trends could preview future legislative proposals in Florida, underscoring the ongoing tension between state-level initiatives and local control, a key issue for Florida cities navigating affordable housing challenges.



### Vacation Rentals



#### **Draft Statement:**

The Florida League of Cities **SUPPORTS** legislation that protects local decision-making authority over short-term rental properties, allowing cities to address unique community needs and neighborhood character. State preemptions that impose uniform regulations on vacation rentals statewide, as a "one-size-fits-all" approach undermine city ability to balance each community's unique character and residential quality of life.

#### Vacation Rentals Background:

Before 2011, Florida cities had broad authority under home rule to regulate vacation rentals. This included control over the duration and frequency of stays, as well as the ability to prohibit vacation rentals in certain areas. In 2011, the Legislature passed HB 883, which preempted local governments from regulating vacation rentals based on their classification, use, or occupancy. This law effectively removed local governments' authority to prohibit or limit the proliferation of vacation rentals. However, a grandfather clause in HB 883 allowed local regulations adopted before June 1, 2011, to remain in effect if they specifically regulated vacation rentals.

HB 883 sparked significant concern among citizens and lawmakers, leading the Legislature to revisit the issue in 2014. During that year's legislative session, SB 356 was passed and signed into law. SB 356 repealed the complete preemption of vacation rentals, allowing local governments to regulate them under certain conditions. However, local governments were still prohibited from banning vacation rentals outright or regulating them based on the frequency or duration of stays. The bill did authorize cities to create local vacation rental registration programs and establish maximum occupancy limits for rentals.

Since 2014, the Florida Legislature has repeatedly attempted to further restrict local control overvacation rentals, with previous bills failing to pass. However, during the 2024 Legislative Session, SB 280 was passed, marking a significant shift in vacation rental regulations.

SB 280 was comprehensive, preempting vacation rental licensing and regulation to the state and establishing guidelines for local registration programs, including conditions for suspending or revoking a vacation rental's registration. The bill also allowed local governments to charge fees for processing individual vacation rental registrations and conducting certain inspections. Additionally, SB 280 transferred the regulation of advertising platforms to the state and granted the Division of Hotels and Restaurants (the Division) enforcement powers over unlicensed advertising activities. The bill further required the Division to establish a statewide system enabling local governments and advertising platforms to verify the licensing and registration status of vacation rentals.

Although SB 280 passed the Legislature, it was vetoed by the Governor. In his veto message, the Governor expressed concerns about fully preempting local regulation of vacation rentals, noting that the vacation rental market is not uniform across Florida. It remains uncertain whether further legislation will be introduced during the 2025 Session to restrict local control of vacation rentals.



## Impact Fees Update



#### **Draft Statement:**

The Florida League of Cities **SUPPORTS** legislation that protects local authority to set impact fees, ensuring that new developments contribute fairly to the cost of their essential infrastructure. Restrictive state preemptions on impact fees limit cities' ability to address evolving community needs; taxpayers should not bear the burden of subsidizing infrastructure costs for developers. Appropriate impact fees are necessary to recover the true costs associated with new development infrastructure needs.

#### **Impact Fees Summary:**

Impact fees are charges imposed by local governments on new development projects to help fund the cost of infrastructure and services, such as roads, schools, and parks, that support the growing population. In Florida, these fees are governed by both state law and local ordinances, with a primary goal of ensuring that new developments pay for the additional public services they necessitate without overburdening existing residents.

Florida Impact Fee Act (Section 163.31801, F.S.) outlines the requirements for imposing and administering impact fees. It requires that impact fees be:

- Based on a reasonable connection between the need for additional capital facilities and the new development.
- Appropriately allocated so that new developments are paying their fair share.
- Supported by data that demonstrates the need and amount of the fee.

Use of Impact Fees:

• Collected fees must be used for capital facilities that benefit the new development. They cannot be used for operational expenses or general government functions unrelated to the development.

In 2021, the Florida legislature passed legislation limiting impact fee increases by local governments. This legislation was largely in reaction to cities that had not increased impact fees in over a decade requiring large increases to in their fees to reflect actual costs.

HB 337 (2021) significantly curbed the ability of local governments to raise impact fees. Local governments are limited to raising impact fees by no more than:

- 50% of the existing rate over a four-year period.
- 25% in a two-year period.

Increases beyond these thresholds must be supported by "**extraordinary circumstances**" and require at least two-thirds approval from the local governing body. HB 337 (2021), did not provide a detailed definition of what constitutes "extraordinary circumstances" for purposes of increasing impact fees beyond the prescribed limits.

Fee increases must be phased in over time. An increase of up to 25% can be implemented in one year, while a 50% increase must be phased in over four years.

Developments that had already received their building permits before the fee increase cannot be retroactively charged higher fees.

Proponents of these legislative changes claim these changes were enacted to promote predictability and fairness in development costs, providing certainty to developers and businesses while ensuring that new developments still contribute to necessary infrastructure improvements. However, local governments argue that the caps may limit their ability to fully recover the costs associated with growth, leading to potential funding shortfalls for critical public services.



## HB 1621 (2024) Unlawful Demolition of Historical Structures



#### **Draft Statement:**

The Florida League of Cities **SUPPORTS** legislation to enhance penalties for the unauthorized demolition of buildings contributing to the history of Florida. Protecting these structures for future generations is vital for maintaining the character and heritage of our communities.

#### **Unlawful Demolition of Historical Structures:**

CS/CS/HB 1621 (2024 Session) tried to enhance penalties for the unauthorized demolition of buildings listed on the National Register of Historic Places in Florida. The bill aimed to protect historic structures by allowing local governments to impose significantly higher fines when these buildings are demolished without proper permits.

Local governments cannot prevent or restrict private property owners from obtaining permits to demolish single-family homes, if the home is in a flood-prone area and meets building and safety code requirements. However, demolition permits can be restricted for homes that are listed on the National Register of Historic Places or designated as historic.

Under current law, local governments in Florida rely on code enforcement boards to investigate and address violations of municipal codes, including unauthorized construction and demolition. These boards can impose fines ranging from \$250 per day for first-time violations to \$5,000 for violations deemed irreparable or irreversible. In larger municipalities (over 50,000 residents), fines can be increased, with potential fines of up to \$15,000 for severe violations.

However, the current penalties have proven insufficient in some cases to prevent unlawful demolitions, particularly in areas where redevelopment is lucrative.

Supporters, including the City of St. Augustine back the bill as a critical measure to preserve Florida's historical assets. Although it did not advance to the House floor in the 2024 session, there are plans to reintroduce it in the 2025 legislative session with hopes of securing broader support.

The goal would be to reintroduce a bill to enhance penalties specifically for the unauthorized demolition of structures listed on or contributing to the National Register of Historic Places. The legislation will authorize that if a demolition occurs without proper approvals and is not the result of a natural disaster, a code enforcement board or special magistrate can impose fines of up to 20% of the property's fair market value, based on the property appraiser's evaluation.



## Farmworker Housing



#### **Draft Statement:**

The Florida League of Cities **SUPPORTS** legislation that allows municipalities to effectively designate the use of single-family homes for migrant farmworker housing, ensuring the preservation of residential neighborhood integrity.

#### Farmworker Housing Summary:

Several cities in Florida are facing challenges as agricultural companies purchase residential properties and convert them into housing for large groups of migrant farmworkers. A common scenario involves turning single-family homes, typically designed for a small family, into crowded residences for up to 20 workers. This trend has raised concerns among these local governments and residents about safety, zoning compatibility, and the preservation of residential neighborhood integrity. However, local authorities feel constrained by Florida Statute 381.00896, which preempts municipalities from enacting discriminatory land-use ordinances targeting farmworker housing.

Under Florida law, section 381.00896, municipalities must permit and encourage the development of farmworker housing to meet local needs. The statute broadly prohibits discriminatory zoning practices based on the occupation, race, or income of migrant workers. The Attorney General's Opinion (**AGO 99-18**) clarifies that while municipalities retain the authority to enforce zoning regulations for public safety and orderly development, such rules cannot prohibit or unduly restrict the placement of farmworker housing. Cities must ensure that they do not discriminate or limit the availability of sufficient housing for migrant workers, even in residential neighborhoods.

Proponents argue that local regulations should be allowed to limit the use of singlefamily homes as housing for large groups of farmworkers. The current statutory definitions of "migrant labor camp" and "residential migrant housing" should be amended to specifically exclude single-family residences. When these homes are repurposed to accommodate multiple unrelated workers, the boundaries between residential use and migrant labor camp use become blurred. As such, cities are proposing amendments to section 381.008 to clarify that singlefamily homes cannot be converted into migrant labor camps.

The proposed amendment seeks to adjust the definitions to prevent the use of singlefamily homes as migrant labor camps by restricting housing to traditional family use. This revision would allow cities to enforce local zoning laws more effectively while still adhering to the overarching goal of providing adequate and non-discriminatory farmworker housing. The balance between promoting sufficient housing for migrant workers and maintaining the character of residential neighborhoods remains at the core of this legislative issue.



# Building Code: High Velocity Windstorm Ratings



#### **Draft Statement:**

The Florida League of Cities SUPPORTS amendments to the Florida Building Code adopting and enforcing the stringent High Velocity Hurricane Zone (HVHZ) standards to apply to all of Florida. Adopting and enforcing the HVHZ standards may help lower homeowner and commercial insurance costs and will result in resilient structures that can withstand future hurricanes and storms.

#### History:

The South Florida Building Code was developed in the 1950s to address the needs of the area, specifically hurricane resistance. It was adopted by Miami-Dade in 1957 and later by Broward County. The Code was eventually retired in 2002, with the implementation of the statewide Florida Building Code (FBC), which unified building codes across the state.

Nevertheless, distinctions still exist between South Florida's building standards and the remainder of the state. Those distinctions are memorialized in what is know as the High Velocity Hurricane Zone (HVHZ), which is a cut-out within the FBC specifically for Miami-Dade and Broward County.

#### Key Differences between Florida Building Code and High Velocity Hurricane Zone:

#### 1. Materials and Construction Techniques

FBC: The FBC allows a range of materials and construction methods, focusing on overall safety, durability, and energy efficiency across various building types.

HVHZ: The HVHZ mandates the use of specific materials and construction techniques that enhance wind resistance. For example, roofs must be more securely anchored, and impactresistant windows and doors are required to minimize damage from flying debris.

#### 2. Inspection and Certification

FBC : Inspections are generally mandated throughout the construction process to ensure compliance with the code, but procedures can vary by locality.

HVHZ: The HVHZ has more rigorous inspection and certification processes due to the heightened risks associated with hurricanes. Buildings often need to undergo special certification to verify compliance with HVHZ standards.

#### Benefits of widespread adoption of the HVHZ:

<u>1. Reduced Risk of Structural Damage</u>: The HVHZ building standards require that structures be constructed with materials and methods proven to withstand high winds caused by Hurricanes. This has helped reduce the risk of severe damage to properties during storms, which can lower

the risk for insurers. This reduced risk may lead to better insurance rates for policyholders living in HVHZ-compliant homes.

<u>2. Initial Premium Increase, Long-Term Savings:</u> Building to HVHZ standards tends to raise construction costs, which can initially increase home values and subsequently insurance premiums. However, homes built to HVHZ standards have better durability and survivability in hurricanes. As a result, insurers are more likely to provide discounts on premiums for newer, compliant homes, which can mean long-term savings for homeowners.

<u>3. Insurance Discounts for Compliance:</u> Insurance companies in Florida frequently offer discounts or premium reductions for homes that meet HVHZ or similar wind mitigation standards. Homes with features like impact-resistant windows, reinforced roofs, and specialized fasteners are often eligible for these discounts, directly affecting homeowner costs in a positive way. One such discount is the wind mitigation credit.

<u>4. Improved Insurance Market Stability:</u> HVHZ standards contribute to overall market stability. With reduced damage claims, insurance companies can maintain a more predictable risk profile. This predictability is essential in the Florida market, where frequent hurricanes pose ongoing challenges. Although the state's insurance market remains volatile, these building codes help insurers by reducing the frequency and severity of claims during hurricane seasons.

#### **Related Articles:**

Below is a selection of articles intended to provide background on the state of the insurance market in Florida, and the benefits of neighborhoods and developments built to withstand severe storms.

1. Florida Faces Exodus as Residents Declare Insurance Crisis Final Straw

2. When Hurricane Helene hit, this disaster proof Florida neighborhood kept the lights on

3. <u>How Newer-Construction Homes Fared in Florida's 2022 Hurricane Season - Urban Land</u> <u>Magazine</u>



### Changes to the Wind Speed Maps and Wind Design – 2010 Florida Building Codes<sup>1</sup>

#### **SCOPE AND ASCE 7**

The determination of wind loads on buildings has changed little since the inception of the *Florida Building Code*. However, the 2010 edition of the *Florida Building Code* introduces significant changes to wind load design, in particular the presentation of the wind speed maps. The key changes will be further discussed and are summarized as follows:

- New strength design-level wind speed maps
- Changes to the Wind-borne Debris Region
- Introduction of Exposure Category D for water surfaces in Hurricane-Prone Regions

The scoping section (Section 1609.1.1) for the determination of wind loads in *Florida Building Code, Building* (FBCB) states that wind loads on every building or structure is required to be determined in accordance with Chapters 26 through 30 of ASCE 7. This reference is to the 2010 Edition of ASCE 7 (ASCE 7-10). The changes to the wind loading criteria in the *Florida Building Code* are due almost exclusively to the changes to the wind provisions in ASCE 7-10.



While ASCE 7-10 provides the methodology for determining design wind pressures and forces, the design wind speeds, Exposure Categories and requirements for wind-borne debris protection are to be as specified in the Florida Building Code, Building and Florida Building Code, Residential (FBCR) as applicable. Section 1609.1.1 of the 2010 FBCB still maintains a list of exceptions to complying with ASCE 7 for the determination of wind loads. Many of the exceptions are for the prescriptive "high wind" standards developed for residential buildings. In the 2010 FBCB and FBCR, two new prescriptive standards are permitted to be used in lieu of designing in accordance with ASCE 7. ICC 600 replaces the *IBHS Guidelines* and provides prescriptive wind resistant design methodologies for wood-frame, concrete, steel and concrete masonry residential buildings. AISI S230 has been added for steel framed residential buildings. The 2010 FBCB permits the use of the Alternate All-Heights method provided in Section 1609.6 and discussed at the end of this document.

#### Wind Speed Maps - 2010 FBCB

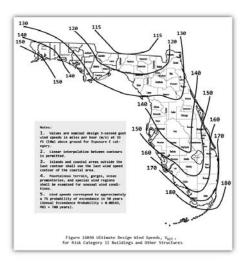
The wind speed maps in the 2010 FBCB have been revised significantly from the 2007 Florida Building Code. The primary changes are as follows:

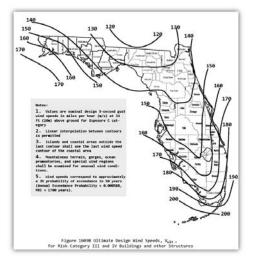
- Strength design-level (Ultimate) wind speeds replace the ASD-level wind speeds in the 2007 Florida Building Code.
- Wind speed maps are provided for each Risk Category (formerly Occupancy Categories) instead of applying an Importance Factor to the design pressure calculations for Risk Categories III and IV. The Importance Factor for wind loads has been deleted from ASCE 7-10.

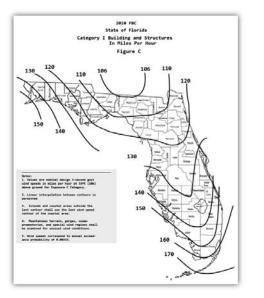
The term "Risk Category" replaces the term "Occupancy Category". For a full description of each Risk Category, refer to Table 1604.5 in the 2010 FBCB.

<sup>1</sup>DISCLAIMER – This piece is intended to give the reader only general factual information current at the time of publication. This piece is <u>not</u> a substitute for professional advice and should not be used for guidance or decisions related to a specific design or construction project. This piece is not intended to reflect the opinion of any of the entities, agencies or organizations identified in the materials and, if any opinions appear, are those of the individual author and should not be relied upon in any event. Applicable to the 2010 Florida Building Code.

See Figures 1609A, 1609B, and 1609C below:







It is important to note the wind speed maps in the 2010 FBCB are strength design level wind speeds. While not specifically stated, the wind speed maps in the 2007

FBCB and prior editions are ASD-level or nominal wind speeds. For strength design (Load and Resistance Factor Design), the load factor on wind is now 1.0. In the 2007 FBCB and prior editions, the load factor on wind for strength design is 1.6. For example, Equation 16-6 which specifies one of the load combinations required for strength design including dead, wind and lateral earth pressure loads is as follows:

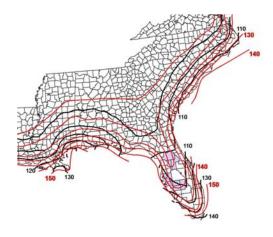
$$0.9D + 1.0W + 1.6H$$
 (Equation 16-6)

While the map values are much higher for most of the state, to appropriately compare the new map values with the 2007 wind speed maps, the new map values have to be converted to an ASD form. This can be accomplished by using Equation 16-32 in the FBCB.

$$V_{asd} = V_{ult} \sqrt{0.6}$$
 (Equation 16-32)

where  $V_{asd}$  represents the equivalent nominal or ASDlevel wind speed and  $V_{ult}$  is the design wind speed from Figures 1609A, 1609B, and 1609C. The terms "ultimate design wind speed" and "nominal design wind speed" are not used in ASCE 7-10 but were incorporated in the 2010 FBCB due to the significant number or provisions and "triggers" tied to the 2007 FBCB wind speeds. This specifically draws the user's attention to the different types of wind speeds – similar to what was done with the change from the fastest-mile to 3-sec. gust wind speeds in the first editions of the *Florida Building Code*.

The following figure shows a comparison of the 2010 FBCB wind speed map values for Risk Category II buildings with the 2007 FBCB wind speed map values. To make this comparison, the 2010 FBCB wind speed map values were converted to ASD-level wind speeds by multiplying the values by  $\sqrt{0.6}$  and redrawing the contours to align on whole numbers. The black contours represent the 2010 FBCB Risk Category II wind speed map values converted to ASD-level values, and the red contours represent the 2007 FBCB wind speed map values.



As shown, the equivalent wind speeds for the 2010 FBCB have actually decreased for most of the state when compared to the 2007 FBCB wind speeds. This is due to new data and better modeling techniques and represents the best scientific knowledge available.

For the specific location of a wind speed contour for a particular location, consult the local authority having jurisdiction as applicable.

#### **High-Velocity Hurricane Zones**

The High-Velocity Hurricane Zones (HVHZ) are specifically defined as Miami-Dade and Broward Counties. As in previous editions of the FBCB, a single wind speed is used for the HVHZ for each Risk Category Map. The design wind speeds in the HVHZ are as follows:

#### **Miami-Dade County**

Risk Category I Buildings and Structures: 165 mph Risk Category II Buildings and Structures: 175 mph Risk Category III and IV Buildings & Structures: 185 mph

#### **Broward County**

Risk Category I Buildings and Structures: 156 mph Risk Category II Buildings and Structures: 170 mph Risk Category III and IV Buildings & Structures: 180 mph

#### Wind Speed Maps - 2010 FBCR

The wind speed map in the 2010 FBCR is in essence the wind speed map for Risk Category II (Figure 1609A) buildings and structures in the 2010 FBCB. Since the FBCR only applies to Risk Category II buildings (oneand two-family dwellings and townhouses not more than 3 stories in height), there is no need for additional maps. All of the information previously discussed regarding the maps in the 2010 FBCB applies equally to the wind speed map in the 2010 FBCR.



In the HVHZ, the 2010 FBCR specifies a wind speed of 175 mph in Miami-Dade County and 170 mph in Broward County.

#### Load Combinations

The changes to the load combinations highlight how the design pressures calculated from the new wind speed maps relate to the design pressures using the wind speed maps in the 2007 FBCB.

For strength design (or load and resistance factor design), the load factor on the wind load (W) has been changed to 1.0 reflecting the fact that the wind speed values are to be used directly with the strength design methodology. The maps in the 2007 FBCB were to be used directly with allowable stress design; hence the strength design methodology previously requiring the use of a 1.6 load factor on W. A few excerpts from the strength design load combinations in the 2010 FBCB are as follows:

 $1.2D + 1.0W + f_1L + 0.5(L_r \text{ or } R)$  (Equation 16-4)

0.9D + **1.0**W + 1.6H (Equation 16-6)

For allowable stress design, design wind loads have to be factored down to an allowable stress design level because the wind speed maps are to be used directly with strength design. This is accomplished by multiplying the wind load (W) by 0.6. A few excerpts from the allowable stress design load combinations in the 2010 FBCB are as follows:

D + H + F + 0.6W (Equation 16-12)

0.6D + 0.6W + H (Equation 16-14)

#### Design pressure comparisons

To make appropriate comparisons of the design pressures calculated from ASCE 7-10 to those calculated from ASCE 7-05, the ASCE 7-10 design pressures have to be adjusted. This adjustment is accomplished by multiplying the ASCE 7-10 design pressures by 0.6, as specified in the allowable stress design load combinations, which will present the design pressures in a form consistent with allowable stress design. The following table uses this approach to show the differences in design pressures for Risk Category II buildings for select cities in the State of Florida. The ASCE 7-10/2010 FBCB wind speed column represents estimated wind speeds for the sites selected. The wind speeds for the county-specific maps may vary somewhat. In the percent differences column, the percentage differences represent how the design pressures calculated from ASCE 7-10 and the 2010 FBCB compare to ASCE 7-05 and the 2007 FBCB.

#### Comparison of Design Pressures for Risk Category II Buildings

City	V ASCE 7- 05/2007 FBCB	V ASCE 7- 10/2010 FBCB (est.)	Percent Difference in Comparable Design Pressures	
			Exp B Inland	Exp D <sup>2,3,4</sup> Coastal
Pensacola	140	155	-27%	-12%
Tampa	123	145	-17%	0%
Orlando	110	135	-10%	NA
Miami- Dade <sup>1</sup>	146	175	-14% <sup>1</sup>	+3%
Broward <sup>1</sup>	140	170	-12% <sup>1</sup>	+6%
Tallahassee	110	118	-31%	NA
Gainesville	100	125	-7%	NA
Jacksonville	120	125	-35%	-22%

Notes:

- 1. Miami-Dade and Broward Counties require all buildings to be considered to be in Exposure Category C.
- ASCE 7-10 and proposed 2010 FBC requires all water surfaces, including hurricane prone regions, to be considered Surface Roughness D.
- 2007 FBC requires roof-to-wall uplift and roof sheathing uplift loads to be increased by 20% for buildings located within 600 ft of inland bodies of water that represent a fetch of 1 mile or more.
- The Exposure D analysis would also apply to inland bodies of water meeting the definition of Exposure Category D.

#### Wind-borne Debris Regions (WBDR)

The WBDR have historically been tied to a specific wind speed. The implementation of the new wind speed maps necessitates a recalibration of the WBDR triggers. In the 2010 FBCB and 2010 FBCR the new WBDR are defined as follows:

#### Areas located:

1. Within 1 mile (1.61 km) of the coastal mean high water line where the ultimate design wind speed, V<sub>ult</sub> is **130 mph** (48 m/s) or greater; or

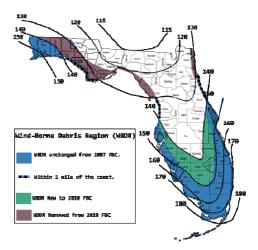
2. In areas where the ultimate design wind speed,  $V_{ult}$  is **140 mph** (53 m/s) or greater.

Additionally, the code adds a small wrinkle to the applicability of the maps to each Risk Category.

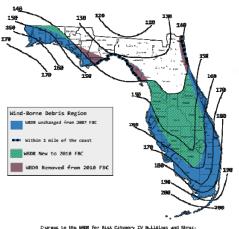
For Risk Category II buildings and structures, and Risk Category III buildings and structures, except health care facilities, the WBDR is to be determined using Figure 1609A (Risk Category II map).

For Risk Category III health care facilities and all Risk Category IV buildings and structures, the WBDR is to be determined using Figure 1609B (Risk Category III and IV map). So, for Risk Category III buildings excluding healthcare facilities, design wind speeds are required to be determined in accordance with Figure 1609B (Risk Category III and IV map), but the WBDR for such a structure is to be determined in accordance with Figure 1609 A (Risk Category II map).

The following maps show how the WBDR in the 2010 FBCB and 2010 FBCR has changed from the 2007 editions:



Unsuges to the MMAR For Mish Category II and III Mildings and Structures except health care facilities Includes Buildings access by the FBCR.



arges to the HEDR for Risk Category IV Buildings and S tures and Category III healthcare facilities

It is also worth noting the 2010 FBCR requires an additional area of a building to be protected from impact in WBDR. The 2007 FBCB and FBCR only require glazed openings (HVHZ requires the whole building envelope to be impact resistant) to be protected from impact due to wind-borne debris. The 2010 FBCR requires ventilation openings in an exterior wall into an

attic space in buildings located in WBDR have opening protection meeting the requirements of AMCA 540 or protected with an impact-resistant covering complying with ASTM E 1996 or other approved standards.

#### **Exposure Category D**

Since the first edition of the *Florida Building Code*, including ASCE 7-98, ASCE 7-02, and ASCE 7-05, in hurricane-prone regions, sites exposed to open water have been classified as Exposure Category C. This was based on research that, at the time, indicated the sea surface roughness in hurricanes increased as wind speed increased. Newer research has shown this not to be the case. The newer studies show the sea surface drag reaches a maximum when wind speeds are between 60 to 80 mph. Additionally, there was some evidence indicating the sea surface drag actually decreases as wind speed increases. In recognition of this research, the use of Surface Roughness D is now required for all water surfaces in hurricane-prone regions including coastal areas. Exposure D will apply where Surface Roughness D prevails in the upwind direction for at least 5000 ft (1524 m) or 20 times the height of the building whichever is greater. More simply put, Exposure D applies where the building or structure is exposed to wind over open water that extends 5000 ft or 20 times the height of the building in the upwind direction.

#### Alternate All-Heights Method

The 2010 FBCB does contain an alternative design method to designing strictly in accordance with ASCE 7-10. This method is contained in Section 1609.6 of the FBCB and requires the use of ASCE 7-10 for certain parts. It is not really a simplification, but is more of a different framework to use the equations and coefficients in ASCE 7-10. The method takes advantage of certain known variables for specific buildings and combines pressure coefficients to what is referred to as "collapsed"  $C_{net}$  values, or net pressure coefficients. Torsional effects and other variables have to be determined in accordance with ASCE 7-10. Most users will not find this method particularly more useful than using ASCE 7-10.

### Prescriptive Construction Provisions of the FBCR

The FBCR has historically contained prescriptive construction provisions for nonhurricane-prone regions that are derived from the base code (IRC) in addition to prescriptive provisions for hurricane-prone regions (developed by the Florida Building Commission). The provisions were distinguished according to the basic wind speed. For clarity and to prevent someone from inadvertently applying the prescriptive provisions for nonhurricane-prone regions in the State of Florida, these prescriptive provisions have been deleted from the 2010 FBCR. Only the prescriptive provisions that apply to structures in hurricane-prone regions remain in the 2010 FBCR.

#### Resources

Florida Building Commission www.floridabuilding.org

International Code Council www.iccsafe.org

American Society of Civil Engineers www.asce.org

Insurance Institute for Business and Home Safety www.ibhs.org

Miami-Dade County Building and Neighborhood Compliance Department, <u>www.miamidade.gov/building</u>

Significant Changes to the Wind Load Provisions of ASCE 7-10, T. Eric Stafford, <u>www.asce.org</u>

January 2012

Newsweek Follow	1.7M Followers							
Florida Faces Exodus as Residents Declare Insurance Crisis Final Straw								
Story by Aliss Higham • 1d • 5 min rea								
MARKETS TODAY	COMP ▼ -0.56%							

R on Velluci moved with his wife to Florida 20 years ago when they retired. But due to the state's home insurance crisis they, like several residents *Newsweek* spoke to, feel they may have to leave in the face of high premiums, hurricanes and "no solutions" in sight to fix the problem.



Alpha Health Secrets

#### Unlocking Strength After 60 Comes Down To This

The current home insurance crisis has been several years in the making, with many factors at play. Premiums have skyrocketed following numerous deadly hurricanes that have battered the state in recent memory. In 2022, Hurricane Ian caused a whopping \$112 billion in damage, the costliest storm in Florida's history. Recent storms Helene and Milton, which arrived within a fortnight of one another, have already resulted in \$1.4 billion and \$2.4 billion in losses respectively.

Ad

As if the threat of destructive hurricanes wasn't enough, the industry has in recent years been dealing with litigation from roof-insurance scams, as well as reinsurance costs having risen sharply. Reinsurance serves as backup coverage for insurance companies, offering a financial safety net to cover large or multiple payouts after events like storms or natural disasters.



Alpha Health Secrets

Unlocking Strength After 60 Comes Down To This

**More From Newsweek Vault:** HELOC vs. Home Equity Loan: How Do They Work?

Ad

Higher costs and payouts for insurance companies mean higher premiums for consumers. According to virtual insurance company Insurify, Florida homeowners paid an average annual premium of \$10,996 in 2023—the highest in the country. The exorbitant costs are forcing Florida homeowners to either selfinsure or under-insure because "insurance costs are so high and insurance companies have been pulling out of the state," Floridabased expert broker and real estate advisor at Sotheby's International Realty, Jenna Stauffer, told *Newsweek*.

### One in five seniors reportedly planning to move

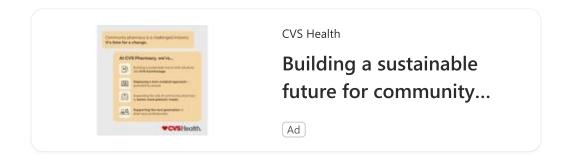
"Something terrifying is happening in the Sunshine State—one in five seniors I talk to are planning their move—or at least exploring options," Alex Schlesinger, founder and CEO of Active Mutual, told *Newsweek*. "These are desperate people watching their fixed incomes dissolve under astronomical costs."

### **More From Newsweek Vault:** How Much Equity Do You Need for a Mortgage Refinance?



Some homeowners who have been unable to find insurance on the private market have turned to the state's insurer of last resort— Citizens Property Insurance Corporation—but are now being turned back to the private market as it deals with a record number of policies.

With altogether few options left in terms of affordability, numerous Floridians have told *Newsweek* they are considering leaving altogether—and some already have.



#### More From Newsweek Vault: Current HELOC Rates

### "No solutions in sight"

Citizens currently holds the biggest share of homeowner policies in the state. Created by the Florida Legislature in 2002, it provides insurance to eligible Florida property owners who cannot find insurance coverage in the private market. As of the end of September 2024, Citizens had 1,263,055 policies in force, a considerable increase on the same time five years ago in September 2019, when it had 421,332 active policies.

To ease the burden, the state insurer has begun "depopulating" offering customers alternative coverage with private insurers, so long as it doesn't exceed more than 20 percent of their current coverage cost. It comes after Florida regulators approved eight new property insurers to write business in Florida in order to promote market stability. In June, the Citizens Board of Governors unanimously supported an increase of rates by 14 percent, bringing them closer to rates offered by private insurers in hopes of urging more policyholders to leave Citizens.

These higher costs are making residents consider moving elsewhere. Retiree Velluci purchased his home in St. Augustine earlier this year, and after his insurance broker shopped around for policies for his new home, he found that Citizens was the only coverage option.

Just months later, he was told he would be depopulated from Citizens and moved to another provider if the carrier's quote was less than 20 percent more than what he is currently paying Citizens, which he said has left him "stuck between a rock and a hard place." While the move won't take place until May 2025, he said the prospect could force him to make some difficult decisions.

"My wife and I moved to Florida twenty years ago from Maine and are now both retired and on a fixed income," he told *Newsweek*. "What we are currently paying for homeowners' insurance is within our budget, but with the cost of homeowners insurance rising so dramatically, and with no solutions to fix the problem in sight, we are faced with the possibility of having to either have no insurance—not a smart option—or to relocate to another state."

### "I'm not sure I'll be sad when I have to go"

Havana-based Henry Williams, who is also facing depopulation from Citizens and lives on a fixed retirement income, told *Newsweek* that in the face of his insurance premium rising, the "American dream to accrue wealth in owning a home is dead—at least for me in Florida."

"I could lose all that my husband and I worked so long and hard for swiftly with one storm, or drip by drip by through rising insurance costs," he said. "I am in a tough situation. I can't afford to leave and I can't afford to stay." "There is much I loved about life in Florida until recently. I'm not sure I'll be sad when I have to go."

Even those who only spend part of their time in Florida have given up. Canadian Frank Fulton and his wife enjoyed spending summers in West Palm Beach after purchasing a home there in 2019.

"We did not have any insurance on the house except for liability coverage," he told *Newsweek*. "I contacted insurance agents every year and was told every time that they could not get any quotes from any insurers for new policies. I did not contact Citizens. I spent summers and fall watching the Florida weather worrying that our place would be wiped out by the next hurricane."

The struggle to find insurance resulted in them selling up—and for a 10 percent loss on their original purchase as well.

Phil Jones, broker at Orange Park-based Your Choice Real Estate, has witnessed firsthand these kinds of scenarios. He said Florida is "now at the precipice and I've seen homeowners forced to sell, and buyers unable to buy homes because of this issue."

#### **Related Articles**

- Tropical Storm Patty Could Form in Days
- California Insurance Crisis Is Killing Home Sales
- Florida Hurricane Insurance Update: Claim Denials Surpass 50,000
- Donald Trump Asks Judge Chutkan for Court Delay Due to Hurricane Milton

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#### 09-30-2024 | IMPACT

Q

## When Hurricane Helene hit, this disaster-proof Florida neighborhood kept the lights on

A new development on Florida's coast was designed to be as hurricane-proof as possible. So far, it's working.



[Photo: courtesy Pearl Homes]

#### BY ADELE PETERS 3 MINUTE READ

Last Thursday, when Hurricane Helene hit the small town of Cortez, Florida—about four hours south of the eye of the storm—a storm surge filled the streets with waist-deep water near a new development. The grid lost power. But the new homes stayed dry and kept the lights on.

The development, called Hunters Point, was designed to be as hurricane-proof as possible. Since the first residents moved in, in 2022, the homes have survived three major hurricanes: Hurricane Ian, Hurricane Idalia, and now Helene. The project is still under construction, with 31 homes complete out of 86 that will eventually be there.



[Photo: courtesy Pearl Homes]

When the design process started, "hurricanes were our number one priority," says Marshall Gobuty, founder and president of Pearl

Homes, the developer that built the community. "How could we build to survive a Cat 5 hurricane?"

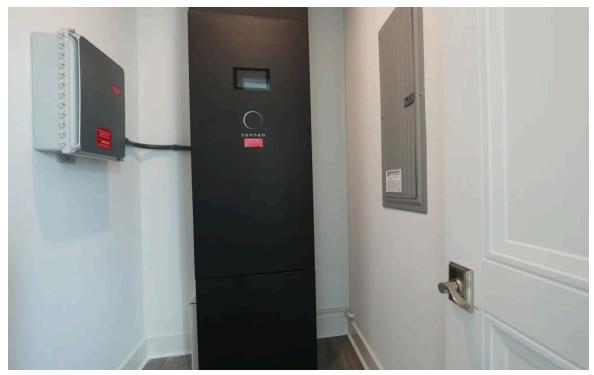


[Photo: courtesy Pearl Homes]

The team spent 18 months testing and tweaking the design of the first home inside a warehouse before beginning development. Steel straps connect each floor together for strength; the first floor is made of solid concrete. Inside the walls, the builders used two-by-six lumber for framing rather than standard two-by-fours, and the gaps are filled with hard foam insulation, adding more strength while making the home more energy efficient. The roof is made of steel with raised vertical seams; solar panels are connected to the seams. (On a normal roof, solar panels can fly off during a storm, but this design means that wind can't flow underneath and rip them off.)



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[Photo: courtesy Pearl Homes]

The solar panels are connected to batteries at each home for backup power. When they're in emergency mode, the batteries stay charged at 100% in case the grid goes down. On Thursday evening, when the power went out, the homes at Hunters Point automatically switched to battery power. On Friday morning, when the sun came out again, the power was still off, but the batteries started charging from the solar panels on the roof.



[Photo: courtesy Pearl Homes]

In tests on the first prototype home, the developers found that even if the sun didn't come out, the battery could keep limited power running in the house for as long as 10 days. The homes' ultra-efficient design also helps conserve power. With regular power use, the batteries could still work for as long as six days. In sunny weather, the solar panels can keep the batteries going longer. (When the grid is running normally, the solar panels still produce more energy than the houses need, so homeowners don't have to pay electric bills.)



[Photo: courtesy Pearl Homes]

Because the homes sit in a flood zone, the development had to be elevated to meet building codes. The new roads by the homes are also raised. But the team decided to go farther. "When you step into the first floor over the garage, you are 16 feet above the flood zone," says Gobuty. To meet requirements, the project needed to use three feet of fill dirt. They used seven feet instead.



Between the homes, swales are designed to carry water to a retention system. When the storm surge hit during Helene, water quickly rose. "We saw that Cortez Road, which is in front of us, was starting to go underwater," says Dave Randall, one of the homeowners. "It was more like a river out there. Then you start thinking, *well, I wonder if we're going to start getting water in here.*"



[Photo: courtesy Pearl Homes]

house would still stay dry.

The retention system worked as intended, filling up a pond with seven feet of water that quickly subsided in the morning. While the flooding came within a few feet of the Randalls' back patio, and around six feet from the garage door, the water ultimately stayed away from the homes. If a future storm went further, with the garage on the first level, the main part of the

The sustainability features of the homes add to the cost, and the houses aren't cheap, selling for \$1,250,000 and up. But Gobuty argues that the approach should be a model for new development in hurricane-prone areas, and he's incorporating some of the ideas into less expensive rental homes.

Because of the resilience of the design, insurance companies are willing to cover the properties—at the same time that some insurers are fleeing from Florida's increasing disasters. "I was on the phone with our insurance company this morning, and let them know I'm sending pictures, everything's great," Gobuty says. "She said, 'Finally, [some] good news.' Insurance is a big, big component in the future, because climate change is here. And we have to adapt."

#### ABOUT THE AUTHOR

Adele Peters is a senior writer at Fast Company who focuses on solutions to climate change and other global challenges, interviewing leaders from Al Gore and Bill Gates to emerging climate tech entrepreneurs like Mary Yap.. She contributed to the bestselling book *Worldchanging: A User's Guide for the 21st Century* and a new book from Harvard's Joint Center for Housing Studies called *State of Housing Design 2023* More

#### EXPLORE TOPICS

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**TOPICS // RESILIENCE AND SUSTAINABILITY** 

## How Newer-Construction Homes Fared in Florida's 2022 Hurricane Season

By <u>Jeff Zbar</u> March 17, 2023





A home in the Wildlight community near Jacksonville, Florida. (Raydient Places + Properties)

Along U.S. coastlines prone to hurricanes, developers have largely gotten the message from Mother re and the insurance industry: Harden your buildings or face future peril. The result is

Charlotte and Lee counties withstood hours of sustained winds over 100 miles per hour (161 kph) when Hurricane Ian made landfall in September 2022.

The damage was so minimal that inspectors from the Federal Emergency Management Agency determined that the storm had missed the 17,280-acre (6,993 ha) planned development. Don't associate the minimal impact with luck. Located miles from the coast, the community has an elevation that averages 30 feet (9.14 m), with many structures feet above streets that help channel rainwater toward natural and manmade retention ponds and flow ways.

Working closely with utility Florida Power and Light, a large solar farm, batteries, and transfer stations connected by buried power lines helped ensure the community's almost 5,000 residents never lost power. With homes and other buildings left mostly unscathed, residents were able to remain home after the storm, and the community welcomed storm refugees to its shelters.

"Storm safety was absolutely at the top of our list," says Syd Kitson, the former professional football player-turned-CEO of Kitson and Partners, developer of Babcock Ranch. "How could we convince people they could shelter in place? We knew if we did it right from the beginning, we could prove they could."

Florida's resilience continues to be a huge and growing practical and financial priority as existing buildings age and population growth across the state invites continued losses. Strategic planning focused on strength and durability is helping mitigate wind and flood damage and serving as lessons to other, more mature communities planning a more resilient future.

The state has near- and long-term interest in holding back mother nature. As with other states, Florida is planning for sea-level rise forecast to hit 17 inches (43 cm) by 2040, according to <u>The Business</u> <u>Case for Resilience in Southeast Florida</u>, a report from the Southeast Florida Regional Climate Change Compact, Urban Land Institute, and other partners.



Gulf Bay's Fiddler's Creek community, just one week after Hurricane Ian made landfall in 2022. (Gulf Bay Companies)

The stakes are high—and growing. Topping the list of costliest storms to hit Florida, in 2022 dollars, is Ian, at \$84 billion, according to the U.S. National Oceanic and Atmospheric Administration. That was followed by Irma in 2017 (\$59.5 billion), Andrew in 1992 (\$55.9 billion), Michael in 2018 (\$29 billion) and Wilma in 2005 (\$27.9 billion). Florida is hardly alone. The costliest storms to hit the U.S. include Hurricane Katrina in 2005 (\$186.3 billion), Harvey in 2017 (\$148.8 billion), Maria in 2017 (\$107.1 billion), Ian, and Sandy in 2012 (\$81.9 billion).

#### Learning from the Past

Some 80 percent of Florida's 22 million residents live within 10 miles (16.1 km) of the coast, said Mark Friedlander, a spokesman for the Insurance Information Institute. In the aftermath of 1992 Hurricane Andrew, Florida strengthened its building codes, which subsequently became a model for other states. These also helped drive laws requiring mandatory insurance premium discounts for hardening measures. Such regulations vary by state and range from 5 percent to 35 percent or more.

Structures at Babcock Ranch, including homes, commercial buildings, and the International Code Council-rated hurricane shelter, are designed to better withstand 160 mph winds (257.5 kmh). They

earned praise—and lower premiums—from insurance carriers.

built above grade and protected by mangroves and dunes, said Aubrey J. Ferrao, CEO, of the Gulf Bay Group of Companies. Another current project will be built three feet above FEMA-required elevation, he said.

"When put to the test, Gulf Bay's approach has proven correct," he said. "Our properties had nearly zero damage from Hurricane Ian."

The positive results of hardening practices were clear in Southwest Florida, where newer homes built to or above Florida's strict building code withstood storm winds better than those homes built before codes were strengthened following Hurricane Andrew, said John Meder, head of risk consulting and claims advocacy at national insurance brokerage Risk Strategies, based in Raleigh, North Carolina.

"It's really been a testament to the newer construction standards and how they're holding up better," said Meder, whose home under construction along the North Carolina coast will have a metal roof and a structure anchored 15 feet into the ground. "When I look at resiliency, everything gets back to construction standards, planning, and how an entire community comes together to meet those standards. It really doesn't happen by accident. You have to be thoughtful and plan accordingly."

Florida code and municipal inspections require that steel is laid throughout the solid concrete foundation then rises through the concrete block and ties into the engineered roof trusses with hurricane straps, said Josh Graeve, division president of Pulte Homes Southwest Florida, which is building in both Babcock Ranch and nearby master-planned community Lakewood Ranch.

"The entire home is tied together from foundation to roof," Graeve said.

#### **Beyond Southwest Florida**

Southwest Florida is not alone in such planning. Two master-planned communities from developer Raydient Places + Properties will rely on hardening to hold back natural forces. Its Wildlight community outside Jacksonville and Heartwood development outside Savannah both are about 10 miles from the Atlantic. Both adopted local architecture, like Wildlight's use of Florida "low country" style, which fits the local aesthetic and historically has fared better in tropical events, said Chris Corr,

Both communities have higher elevations than the prevailing terrain, which can help prevent flooding. The developer also worked with area utilities, including Florida Power and Light in Jacksonville, to bury power lines to help reduce disruption.

It helps that those post-Andrew building codes have been effective, and the expertise of civil engineers, architects, and environmental land planners has flourished around the idea of resilient development.

But are resilient communities affordable or available to lower-income communities? Raydient's homes in Wildlight and Heartwood range from over \$300,000 to more than \$800,000 and include a variety of home types. Following Ian, Pulte decided to make impact glass standard on every home it builds in Southwest Florida, Graeve said. It did not raise the base price of the home and instead has become a competitive advantage, he said.

Some banks, as well as the Inflation Reduction Act of 2022, offer loans, grants, and funding for hazard-resistant development and improvements. That's not necessarily storm-focused "hardening," said Jennifer L. Languell, founder and president of Trifecta Construction Solutions, which worked on Babcock Ranch's planners—and rode out Ian in her home there. Success comes from a layered approach that protects buildings, infrastructure, and quality of life, she said.

"Resilient doesn't have to be synonymous with unaffordable," she said. Others built similar homes a few miles from Babcock but suffered greater damage. "Building in that infrastructure is a low-cost way to [incorporate] resilience readiness."

Jeff Carney would like to see more development. As a professor at the University of Florida School of Architecture and former director of the Coastal Sustainability Studio at Louisiana State University, Carney believes sprawl must be replaced by master-planned development designed to withstand the growing perils of a changing climate.

Florida homes built since Andrew and the strengthened Florida Building Codes, especially those in greenfield developments where water management is planned, as opposed to piecemeal approaches found in urban infill development, fared better in Ian than those built before it. Deliberately higher tions and construction at or exceeding building codes "make a huge difference."



The Heartwood community near Savannah, Georgia. (Raydient Places + Properties)

#### **Still Selling**

One might think images of storm surge and wind damage from Hurricane Ian would discourage prospective buyers. That's not been the case. In the months following Ian, Babcock Ranch had record sales for its homes ranging from \$300,000s to over \$4 million. Lakewood Ranch saw a surge in home shoppers moving inland from Sarasota and the barrier islands, said Laura Cole, senior vice president with LWR Communities. The community saw 21 inches (53 cm) of rain, but no flooding and very little physical damage, added Anne Ross, who heads the stewardship district overseeing the development's water management.

Even Kitson's investor was sold on the idea of a sustainable and resilient community. Sure, it raised eyebrows, he said. It cost more in design, infrastructure, and materials. But he convinced them it

rtually would pay "huge dividends." That bore out with Ian. Today, Kitson has what he believes is rodel-hardened community of the future.



# Key Dates



#### 2024 - 2025 Key Legislative Dates

#### October 2024

4	FLC Policy Committee Meetings (Round 1) – Hilton Orlando, 6001
	Destination Parkway, Orlando, FL 32819

#### November 2024

5	General Election
8	FLC Policy Committee Meetings (Round 2) Hilton Orlando, 6001 Destination Parkway, Orlando, FL 32819
13-16	National League of Cities City Summit – Tampa, FL
December 2024	
2-6	Legislative Interim Committee Meetings (House of Representatives only)
4-6	FLC Legislative Conference – Hilton Orlando, 6001 Destination Parkway, Orlando, FL 32819; FLC Policy Committee Meetings on Dec. 5 (Round 3)
9-13	Legislative Interim Committee Meetings (Senate only)
January 2025	
13-17	Legislative Interim Committee Meetings
21-24	Legislative Interim Committee Meetings
February 2025	
3-7	Legislative Interim Committee Meetings
10-14	Legislative Interim Committee
17-21	Legislative Interim Committee
20	FLC Legislative Session Preview Webinar at 2:00 p.m. ET



#### March 2025

4	Regular Legislative Session Convenes
10-12	NLC Congressional City Conference – Washington, DC
24-26	FLC Legislative Action Days – Tallahassee, FL
May 2025	
2	Last Day of Regular Legislative Session
	Last Day of Regular Legislative Session
15	FLC Post Legislative Session Review Webinar at 2:00 p.m. ET

For further details about the mentioned events or legislative information, contact <u>medenfield@flcities.com</u>.



## Notes



