## State of the Panhandle:

A Snapshot of Energy Codes in the Florida Panhandle

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### About the Southeast Energy Efficiency Alliance (SEEA)

The Southeast Energy Efficiency Alliance (SEEA) is a 501(c)(3) nonprofit organization headquartered in Atlanta, Georgia. Established in 2007, SEEA is a Regional Energy Efficiency Organization (REEO) serving eleven states across the Southeast, including Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee and Virginia.

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#### About SEEA's Built Environment Program

SEEA's Built Environment Program has a focus on energy codes and is a unique regional resource that serves as a "one-stop-shop" for code adoption, implementation and compliance efforts. Beginning early on in the adoption process, SEEA works closely with state energy offices, municipalities, industry groups, utilities, and other key stakeholders to provide technical assistance, ensure best practices are followed, and foster increased coordination between involved parties.

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#### Building Code Compliance in the Southeast

Building energy codes establish minimum requirements for the construction of new and renovated buildings. Building codes are typically established at the state and local level, guided by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90.1 and the International Energy Conservation Code (IECC), both widely recognized standards for the design and construction of residential and commercial buildings. Once a code has been adopted at the state or jurisdictional level, it becomes the legal standard to which homes and buildings are constructed. However, national studies show that the adoption of a code does not guarantee compliance.

There are several regionally-specific factors that serve as barriers to compliance with the energy code. Much of the Southeast is characterized by a lack of awareness and demand for energy code compliance, along with a lack of funding, training opportunities and real-world informational resources available to the construction industry and code inspectors. Much of the region is rural, and in many cases, trained and experienced personnel are simply not available to carry out enforcement activities. In general, the Southeast lacks empirical data on energy code compliance, although it is generally assumed that compliance across the region falls short of 100 percent<sup>1</sup>.

The Southeast region of the United States has made significant progress in advancing energy code adoption, with many states moving toward stronger codes and others adopting statewide codes for the first time. Recent advancements have opened the door to energy and cost savings, quality-of-life benefits, and new employment opportunities, of particular importance in a region that is marked by higher than average poverty rates. Despite progress, experience suggests that there are still substantial opportunities for capturing the full value of the energy savings available through robust, strategic energy code compliance efforts.

#### A. Building Code Compliance in Florida

SEEA began addressing the lack of energy code compliance data in 2015 with the Florida Circuit Rider Commercial Compliance Needs Assessment<sup>2</sup>. The bulk of the analysis was focused in the peninsula of Florida, and although the Panhandle was represented by one out of ten jurisdictions in the study, it helped to establish relationships.

<sup>2</sup><u>https://mk0Southeastene72d7w.kinstacdn.com/wp-content/uploads/2019-Florida-Circuit-Rider-Report.pdf</u>

<sup>&</sup>lt;sup>1</sup> Notable exceptions include Georgia, where the Department of Community Affairs conducted a commercial compliance analysis and Florida, where the Florida Solar Energy Center (FSEC) conducted both residential and commercial compliance analyses through funding received under the American Recovery and Reinvestment Act. In addition, the U.S. Department of Energy is now funding residential field studies in in Alabama, Arkansas, Georgia, Kentucky and North Carolina, which include a baselining component.



While this initial study was being conducted, the State of Florida enacted mandatory Air Infiltration Testing for residential buildings, which resulted in a two-year delay requested by the Florida Home Builders Association (FHBA). While the majority of their concern revolved around mechanical ventilation requirements, they also worried about the lack of home testers in the Panhandle and the Keys. The Circuit Rider began working with industry partners in the Panhandle to bring training to both regions during the delay, as well as to address how to effectively air seal Panhandle-specific building techniques, at the request of the FHBA president at the time and continues that work now.

Since the establishment of the Circuit Rider program in 2014, the relationship with both the Building Officials Association of Florida and FHBA, while informal, has strengthened. Consequently, for the writing of this report, FHBA has provided to SEEA a private study that they commissioned from AZS Consulting in 2006 on builder material, construction, and technique choices in the residential energy code.<sup>3</sup> While this document is not in the public domain, the data from which the analysis was conducted was obtained from the Shimberg Center for Affordable Housing at the University of Florida. Building Departments in Florida are required to send a copy of all their residential energy code compliance submittals to Shimberg, quarterly. Shimberg then selects a random sample set for inclusion in this database that is available to the public upon request. AZS Consulting used the dataset from 2004-05, at the height of the building boom, for the analysis. While the North Florida data is not exclusive to the Panhandle, it does show how builder choices have changed over 15 years as it pertains to the residential energy code.

#### 1. Impact of Hurricane Andrew (1992) on Energy Codes

In Florida, building code development and implementation are in direct response to the outcomes and challenges created by regional storm patterns. Health, safety and welfare is paramount in the minds of enforcement officials and public servants; consequently, the rest of the construction industry follows suit. From 2004-06, at the height of the building boom in the state, it was difficult to focus attention beyond the storm provisions in the new building code. The 2004 Florida Building Code was developed twelve years after Hurricane Andrew and was only the second uniform code that Florida had undertaken to write. At the time, the international codes (I-Codes) from the International Code Council (ICC) were not yet settled, having only merged with prominent building official and code administration groups a few years prior. It was a monumental challenge for Florida Building Commission Staff to merge I-code language with existing Florida language, complicated with a new internet computer intake system for code changes from stakeholders. Many stakeholders were highly critical of the 2004 code document, which led to a subsequent 'glitch' cycle to correct the many errors in the first draft.

For the first time since its inception in 1979, the Florida Thermal Efficiency Code was included in the building code adoption and enforcement process and building officials were the authority having jurisdiction to enforce the code, not merely collect the energy forms and send them to the Shimberg

<sup>&</sup>lt;sup>3</sup> An Analysis of Energy Code Compliance Options For Florida, 2006: Florida Home Builders Association



Center. Some building officials realized the Department of Community Affairs had ceded their authority to them with the creation of the Uniform Code, but most did not.

However, the shift into the Uniform Code was significant for the Energy Code for a number of reasons:

- It made the energy code more accessible to Stakeholders as meetings became a part of the larger Building Code Rule development workshop and more construction industry stakeholders attended the meetings which now rotated around the state;
- Energy stakeholders questioned code enforcement practices as manufacturers and other interested parties began asking questions of code officials in major markets when sales did not track with code implementation; and
- 3. Building envelope obsolescence appeared evident within the performance path.

The last of these reasons is most important to the Panhandle today. Since its inception, Florida had been a predominantly performance path state. For many years, the Florida Energy Office had relied on the U.S. Department of Energy's State Energy Program Grant to update the software that was used to support the software for this path. Before the energy code came into the current process, all five of the major utilities in the state had dedicated demand-side management funds to assist builders in filling out the energy calculations that were turned in for permitting. Often a builder would get a rebate on better SEER equipment as well as some advertising dollars.

However, the Florida Home Builders Association (FHBA) conducted independent research on builder choices to ascertain if builder choices did, in fact, vary significantly enough to warrant complex calculations and to determine if there were storm provisions that prevented a prescriptive path from being adopted due to added cost. The results of this study were significant in that of 1408 records that were accepted as compliant, 8% held errors of data omission. That raised the overall sample size error rate to mean that 32% of submissions accepted by building departments were invalid and thus non-compliant.

A true performance path calculation, done with the assistance of the utility company, allows for a trade down on building envelope wall performance and up on SEER performance, which assists the utility with handling the peak load without adversely affecting overall profits. Conversely, if overall building envelope were maximized, the building would track with national increases of efficiency; yet, if the envelope was traded down to start with, the envelope was rarely upgraded over the life of the home. This fact will prove critical for the rebuilding of the Florida Panhandle.

A further impact that Hurricane Andrew had on Florida's Energy Code occurred in the late 1990s during the hurricane recovery. The Thermal Efficiency Statute 553.901 in the Florida Building Code indicates that, where changes are less than 30% of the assessed value of the structure, the energy code does not apply. While it is likely that this was initially intended only for the Andrew rebuild, in the late 1990's the attorney for the Department of Community Affairs interpreted this statute to apply to any type of construction work on existing buildings, not only full rehabilitations. In addition to catastrophes and restorations, this includes voluntary replacement for aesthetics, replacements due to age and wear, and remodels. This interpretation has caused no small amount of headache for the building code community, the construction community, and the efficiency community. The latest position, that few seem to like, was



made via declaratory statement<sup>4</sup> by Palm Beach County that upheld this 30% rule. However, many members of the building industry have suggested the need for legislative action to remove the 30% rule and refer repair, remodels and alterations back to the Florida Building Commission code for correct clarification and enforcement, which includes correct alignment of the energy code with the existing building code. Again, this will prove critical for the rebuilding of the Florida Panhandle.

#### Florida Circuit Ride Assessment Methodology

The Circuit Rider conducted two trips to the Florida Panhandle, one in March 2019 and one in October 2019. Each visit included the following:

- 1. Introductory communication between Circuit Rider and Home Builder Associations Executive Officers about the about the site visit and its goals;
- 2. Identification of construction professionals and leaders in the community for follow up;
- 3. Site survey of the buildings under construction in the region; and
- 4. Discussion with construction professionals or homeowners about energy codes.

A follow up survey was sent to construction professionals with whom the Florida Energy Code Circuit Rider spoke and jurisdictions where the circuit rider visited. However, surveys were not as successful for gathering data as before. Research was conducted on permitting materials that were available at the building departments. Because many contractors and owners from out of state were involved in repair efforts after the storm, we had to consider what type of information these groups, who have less knowledge of the Florida Building Code, would be able to access. It was important to know how prominent the energy code was within general building code permitting, especially compared to where the Circuit Rider Program had done extensive training in the previous five years. Information was also gathered about the status of insurance claims in the Panhandle from the Department of Insurance.

#### Energy Code Environment in the Panhandle

The impact of Hurricane Michael in 2018 irreversibly changed the Panhandle region of Florida. The visits to the region were drastically different than the site visits in the 2014 study that SEEA conducted. As the first Category 5 hurricane to strike the contiguous United States since Hurricane Andrew, residents predict the region will not fully recover for a decade. Indeed, if history is any indicator, lessons learned from Michael will affect future buildings like Andrew and Katrina.

Of the 67 counties in Florida's footprint, the Panhandle makes up between 8 to 10 percent of both residential and commercial building permits pulled in Florida since 2005, underscoring the energy-saving opportunity available through building codes and the importance of targeted resources like circuit riders

<sup>&</sup>lt;sup>4</sup> http://www.floridabuilding.org/fbc/commission/FBC\_1218/DEC\_Statements/DS2018-072.pdf



in facilitating compliance.<sup>5</sup> The construction type and requirements in Panhandle sets it apart from the rest of Florida. In many ways, construction is more similar to Georgia, Alabama, and Mississippi than the Florida peninsula. Though it is in a high wind zone, the building code did not reflect this until 2007. Since then, wind considerations have played a key role in dictating first decisions by builders. As in all regions of Florida, wind considerations always dictate first decisions among builders.

#### **B. Cessation of "Free Energy Calculations"**

When energy codes are mentioned, the first comment in the Panhandle tends to be "you should talk to Gulf Power." However, in leading up to October 2019, it was released that Gulf Power was ending their work around energy calculations. In January 2019, Florida Power and Light (FP&L) purchased Gulf Power, and while the large investor-owned utilities had been steadily reducing their demand side management programs as part of their mandatory Public Service Commission requirements, Gulf Power, as part of Southern Company, had been the lone utility to maintain that service. As of November 30, 2019, the service officially ended. To say that Panhandle builders relied on this service is an understatement.

"I will tell you this gulf power not doing energy sheets anymore and them not doing anything for anyone is not a good thing. I wish they had never sold the company. I would fire the CEO and everyone else responsible for all the last year actions. – Builder in Okaloosa County

It was widely expected that the Florida Public Service Commission would approve Florida Power and Light's (FP&L) request to reduce the utilities' energy saving goal to zero and raise rates. Instead, in a surprise vote, the FL PSC voted 4-1 to reject the staff recommendation, and to maintain the current energy saving goals until 2025. The Southern Alliance for Clean Energy<sup>6</sup> reports this is a reprieve for six million consumers and businesses. It is unknown whether any of FP&L's programs will come back to the Panhandle.

Both Okaloosa Walton and Bay County Building Industry Association executive officers report that after an initial period of panic, the area appears to be getting back to normal. Gulf Power employees that previously completed the energy calculations for builders appear to have been offered a retirement package by FP&L and are moving into private business. However, one builder reported they are less than happy with the new cost, ranging as high as \$250 per calculation.

<sup>&</sup>lt;sup>5</sup> Between 2005 – 2017 the Panhandle was 8% of residential construction permits pulled, and between 2007 and 2017 it was 10.2% of commercial construction permits pulled. See <u>https://www.seealliance.org/initiatives/built-environment/regional-trends-analysis/commercial-building-reports/florida-commercial-building-report/; https://www.seealliance.org/initiatives/built-environment/regional-trends-analysis/residential-building-report/; https://www.seealliance.org/initiatives/built-environment/regional-trends-analysis/residential-building-report/; https://www.seealliance.org/initiatives/built-environment/regional-trends-analysis/residential-building-report/; https://www.seealliance.org/initiatives/built-environment/regional-trends-analysis/residential-building-report/; https://www.seealliance.org/initiatives/built-environment/regional-trends-analysis/residential-building-report/; https://www.seealliance.org/initiatives/built-environment/regional-trends-analysis/residential-building-report/; https://www.seealliance.org/initiatives/built-environment/regional-trends-analysis/residential-building-report/; https://www.seealliance.org/initiatives/built-environment/regional-trends-analysis/residential-building-report/; https://www.seealliance.org/initiatives/built-environment/regional-trends-analysis/residential-building-report/; https://www.seealliance.org/initiatives/built-environment/regional-trends-analysis/residential-building-report/</u>

<sup>&</sup>lt;sup>6</sup> https://cleanenergy.org/blog/florida-psc-holds-the-line-on-energy-efficiency/



#### Lost Energy Opportunity

#### **C. The Existing Building Code**

For all the building codes that deal with new construction, by far the most activity is in the existing building code because existing structures out number new construction. When a catastrophic storm blows through a region, the extent of improvements needed can provide an opportunity to increase energy efficiency. However, this is too often a lost opportunity since the energy code does not have to be applied in instances where the cost of the improvement is less than 30% of the assessed value for the year.

It is hard to argue that emergency management preparedness is not a wise return on investment with an extremely high yield, both in dollars and lives. Where governments and communities have made serious efforts in emergency managements and building codes to prepare for storms, losses to life and property have been an order of magnitude less. The University of Florida Department of Coastal Construction, conducts research studies on Category 3 Hurricanes in Florida at the behest of the Florida Building code made since Hurricane Andrew and suggest where deficiencies lie. David O. Prevatt's report<sup>7</sup> on Hurricane Michael is clear: retrofitting pre-2004 code properties is of utmost important because those are the ones that are failing.

In the years after Andrew and the exodus of insurance companies leaving Florida, a consumer program for hardening structures existed in Florida. It is possible that a similar program would gain popularity again with insurers. Assuming that the Public Service Commission will also look at expanding the tests for efficiency measures, it bears watching that in the next few years there may be incentives for consumers to fix their building envelopes either for energy or storm purposes.

In the permitting process, energy simply gets lost by the time Construction and Enforcement Professionals get to it. The same can be said for consumers who tend to run out of money and patience. By the time the energy code comes into play on an existing building project, there likely already have been several problems already lined up in codes, and fatigue makes it difficult to bring yet another issue code in that may disrupt all the carefully aligned parts. Looking for a way out of the energy code is common, which may be why building departments are happy with the 2018 30% declaratory statement. Removing the renovated building definition and referring the energy code back to the Florida Building Commission would allow for a better integration with the existing building code. It would be beneficial to have this clarification in education as well .

<sup>&</sup>lt;sup>7</sup> http://www.floridabuilding.org/fbc/commission/FBC\_1218/STEER\_Hurricane-Michael-P-VAT-Report.pdf



#### **D. Rebuilding Florida**

Fourteen months after Hurricane Michael hit landfall, all insurance claims have yet to be filed. Lawsuits are still pending. It would be a disservice to consumers if public officials allow for homes swept off foundations to be restored to 1950s energy performance. In the aftermath of a storm, officials may need to fight the battles they know they have to win and energy tends not to be among them. For stakeholders that know that energy is important, it rankles.

A permit can include many actions, including the two separate actions of energy and demolition. When water enters a house, it is essential that the water is removed quickly in order to salvage as much of the structure as possible. Hence, if the homeowner is able, they may pull the demolition permit or attempt to get the closest contractor they can hire. However, the demolition removes any evidence of what was there before. If there is no documentation or proof of any improvement, like insulation in the walls, then there is little a home owner can do if they had a house built in the 1950s. Insurance companies are required to put the home back to pre-loss condition, but most, if not all of the homes affected in the Panhandle can be considered no longer code compliant. It has been unclear to many in the Panhandle if this would be considered a repair due to storm damage or a renovation because of rebuilding the house at a cost that is greater than 30% of the assessed value of the original structure.

For instance, reports indicated that some jurisdictions interpreted that the lot pictured to the right would constitute a repair and therefore would not be subject to any energy code requirement. Still, others would want to enforce the 30% rule, but would find themselves arguing with cash strapped homeowners who want citations for where exactly the R-value was for what they needed. It is apparent that there are multiple 'percentage' rules in play across different regulations: flood, energy, roofing replacement, window replacement, etc. Audience populations frequently get the rules mixed up. Energy gets swept along and grouped in with another code's threshold.



Mexico Beach is the outlier on the Panhandle coast. Ground zero for Hurricane Michael, this jurisdiction recognized the practical aspects of recovering from a catastrophic event with limited access to stable internet and power. In one conversation, the building official took the energy code hassle out of the permitting process for builders and merely made sure that the energy code was complied with during the build.

When the Florida Energy Code Circuit Rider arrived to survey the town, none of the homeowners, contractors or owner/builders understood any of the direct code questions Stewart asked of them. Yet, all the structures had all the provisions that were required. Stewart specifically did not ask about the compliance paths in the interview with the Mexico Beach Building Official, but when the survey was returned, the jurisdiction only did insulation table requirements. While the builders indicated they were not filling out paperwork directly, it made the most practical sense for enforcement in a jurisdiction with



that level of catastrophic damage where one could not rely on a copier, computer program, or a cell signal in order to obtain or create a compliance document.

To the Circuit Rider's knowledge, no one voiced any complaints likely because the building materials selected for resiliency doubled for energy efficiency, such as two by six walls and metal roofs. If anything, at least one property in the jurisdiction even appeared to be approaching the Zone 3 prescriptive requirements.

There were still issues around the energy code, though. Confusion continues to exist regarding HVAC sizing. One vacation rental homeowner in Mexico Beach voiced concern to Stewart about having a zoned system, instead of having independent HVAC systems on each floor. Similarly, a building official in a neighboring jurisdiction to Mexico Beach believed that the buildings were being made too tight and that additional ventilation was necessary. Both of these comments indicate a base level misunderstanding of the sensible heat ratio in Florida buildings and the need for moisture removal. Education is critically needed on this front.

A more robust understanding of how the sensible heat ratio on the building shifts between the prescriptive path and the performance path is also needed. In the prescriptive path, while the building envelope improves, the same amount of moisture exists in the air.

Efficient HVAC systems function better with more efficient building envelopes. Specifying higher SEER ratings for HVAC systems in order to boost efficiency sounds ideal, but it has practical drawbacks for durability in Florida that are being misappropriated. For longer use, it is better to have a tighter envelope and less efficient equipment. However, the high SEER units are better for demand-side management for the utility. The cost is also less for a low SEER and high functioning envelope, than for a high functioning envelope with high SEER, plus needing mechanical ventilation and a dehumidifier to remove excess moisture from the whole package.

#### Florida Buildings and BCEGS Rates

In 2017, the Florida Legislature decoupled the Florida Building Code from the International Body of Codes. While provisions remained for updates to "maintain eligibility for federal funding and discounts from the National Flood Insurance Program, the Federal Emergency Management Agency, and the United States Department of Housing and Urban Development," building officials and municipalities are nervous that their Building Code Effectiveness Grading Scale (BCEGS) scores will drop, causing their insurance rates to rise. Conversely, many builders believe they have adequately made provisions for keeping all necessary requirements to ensure that the BCEGS scores would not drop.

After Hurricane Andrew (1992) insurance carriers were pulling out of Florida, and eventually one of the only ways one could get insurance was from the state. Yet, experts estimated that between 25 to 40 percent of Hurricane Andrew losses were avoidable. According to a Dade County, Florida, grand jury



report, much of the damage was due to lax code enforcement.<sup>8</sup> Insurers had to be enticed to return to the state, but would only do so with lower risk or higher rates. Consumers could not afford higher rates, and the building industry faced stagnation. However, with the creation of the Building Code Effectiveness Grading Schedule systems, underwriters have insight to be able to write policies in jurisdictions for better rates where they feel they could prove that the building code was met or better. With 4,500 data points per inspection per jurisdiction, the rating affects new and existing buildings, residential and commercial. The rating is a function of the version of the building code on which the jurisdiction operates, how effectively the jurisdictions workforce is trained, and how effectively the jurisdiction can handle the amount of work it is tasked to undertake and execute consistently.

ISO (Insurance Services Office) inspections for BCEGS come up every five years, and Bay County was preparing for their inspection during the Circuit Rider visits. They were prepared for their score to drop, as a result of the changes to the Florida Building Commission and the volume of work due to the storm. There is an existing staff ratio formula to determine to optimum level of plan reviews to time, number of days available, and staff available to do the reviews. Couple that with Florida's demands for a turnaround time of just five days, and code officials start to feel incredible amounts of pressure.

Consider the information in the two tables that follow from the Florida Office of Insurance Regulation<sup>9</sup>. Beginning two days after the storm made landfall, the Insurance Commission held daily calls with insurers for a month, which then progressed to weekly, then became monthly. While many of the claims had to do with business interruptions and mobile homes, a majority of the claims touched the building departments in one form or another, whether in the Florida Building Code, code enforcement, zoning, or floodplain related.

| Lines of Business | Number of<br>Claims Reported | Claims Closed<br>with Payment | Claims Closed<br>without Payment | Number of Open<br>Claims | Percent of Claims<br>Closed |
|-------------------|------------------------------|-------------------------------|----------------------------------|--------------------------|-----------------------------|
| Residential       |                              |                               |                                  |                          |                             |
| Property          | 99,554                       | 74,363                        | 13,790                           | 11,401                   | 88.5%                       |
| Homeowners        | 73,222                       | 53,567                        | 10,528                           | 9,127                    | 87.5%                       |
| Dwelling          | 15,993                       | 11,950                        | 2,444                            | 1,599                    | 90.0%                       |
| Mobile            |                              |                               |                                  |                          |                             |
| Homeowners        | 9,423                        | 8,307                         | 657                              | 459                      | 95.1%                       |
| Commercial        |                              |                               |                                  |                          |                             |
| Residential       | 916                          | 539                           | 161                              | 216                      | 76.4%                       |
| Commercial        |                              |                               |                                  |                          |                             |
| Property          | 11,152                       | 5,042                         | 2,594                            | 3,516                    | 68.5%                       |
| Private Flood     | 242                          | 169                           | 53                               | 20                       | 91.7%                       |
| Business          |                              |                               |                                  |                          |                             |
| Interruption      | 872                          | 351                           | 250                              | 271                      | 68.9%                       |
| Other Lines of    |                              |                               |                                  |                          |                             |
| Business          | 37,953                       | 32,975                        | 4,293                            | 685                      | 98.2%                       |
| TOTAL             | 149,773                      | 112,900                       | 20,980                           | 15,893                   | 89.4%                       |

#### Claims Data as of October 25, 2019

Below is the Hurricane Michael claims data reported by insurers as of October 25, 2019.

Total Estimated Losses: \$7,439,396,739

<sup>&</sup>lt;sup>8</sup> National Building Code Assessment Report, 2019 edition.

<sup>&</sup>lt;sup>9</sup> https://www.floir.com/Office/HurricaneSeason/HurricaneMichaelClaimsData.aspx



In Bay County alone, the total number of claims outweighed other counties, as can be seen in the chart below. It can be assumed that the normal level of housing starts for Bay County would have been significantly lower without the repairs from Hurricane Michael. This storm led to a large shift in the ratio for what the building department had to contend with in the time period it had to process. It is clear why there was a desire to look for a code citation, like the 30% rule, that would say that the code requirements were "met" by not having met them.



#### Total Number of Michael Claims in Panhandle Region

The above graph displays the total number of reported Hurricane Michael claims by county. (Data as of October 25, 2019)

# Energy Code Trainings for BCEGS Improvement & Licensure

Many professionals in the energy efficiency community do not think that building departments are inspected for energy code themselves. But, in the early 2000s, the technical director for Institute for Business and Home Safety successfully lobbied ISO<sup>10</sup> to add International Energy Conservation Code to the Building Code Effectiveness Grading Scale (BCEGS). The more than 15,000 jurisdictions in 45 states participating in the Grading Schedule<sup>11</sup> are in fact reviewed for their enforcement of the energy code in their district. However, the energy code does take a backseat to life safety issues.

<sup>&</sup>lt;sup>10</sup> <u>https://www.isomitigation.com/</u>

<sup>&</sup>lt;sup>11</sup> <u>https://www.isomitigation.com/bcegs/isos-building-code-effectiveness-grading-schedule-bcegs-update-project/</u>



Additionally, in December 2019, the Building Code Inspectors and Administrators Board of Florida has implemented two hours of mandatory energy code training for enforcement officials. Discussions with Santa Rosa County were undertaken during 2019, and trainings have often been held in the past with Okaloosa-Walton BIA. Likewise, very successful joint trainings with the Bay County Builders and Building Department have been held in the past, but the activity from the storm has made training difficult due to the volume of work to be accomplished. Training in the Panhandle is very well received in most jurisdictions through the Circuit Rider program when undertaken with a local partner. However, the local partner is critical for success as population centers are spread out and communities are tight knit. Word of mouth is essential to success. Without local approval and acceptance, program success is tentative at best.

It is SEEA's belief that training materials be developed to service multiple purposes, specifically:

- Meeting CILB credits (for builders);
- Meeting BCAIB credits (for enforcement officials);
- Meeting ICC credits (for enforcement officials from neighboring states);
- Meeting BCEGS requirements for trainings for reduce insurance rates; and
- Solving the latest questions from enforcement officials.

In order to do so in the Panhandle, the time and class sizes may be smaller than in other parts of the state. While Pensacola is six hours from Gainesville, the same distance as Miami, the population size is not the same to support the volume with the Florida Department of Business and Regulation grant or any for-profit organization that allows independent funding for other trainers. Many building departments are forced to train in house and code officials have suggested to Stewart that this may limit the quality of education the department receives. Conversely, this leaves an opportunity for energy to be the focus if funding allowed a trainer to be in the region.

In the building departments interviewed, most agreed that more energy code trainings are necessary. While many enforcement professionals continue to question the inclusion of the energy code in the main body of codes, they do concede that they require training in volume as well as a license dedicated to the profession. They express frustration that they are required to take time away from their life safety duties to inspect or review for energy. Training in the Panhandle will continue to be necessary, yet also difficult as building continues at a breakneck pace with spread population centers. This makes training expensive for independent providers. Additionally, SEEA has found in previous studies that energy code training has better retention when taught more frequently in shorter increments because the topic is intensive and often unfamiliar to code officials<sup>2</sup>.

One aspect of the BCEGS that may be underutilized is the Public Awareness Program. With funding, SEEA could capitalize on a number of issues outlined in this report related to increasing the energy code portion of the BCEGS, which would impact storm hardening requirements as well. Working with building departments on a public awareness campaign with a substantial energy component – in conjunction with the Gulf Power and the Public Service Commission- could be a win for all for the community across the Panhandle. However, each audience needs the appropriate materials and tools in the process.