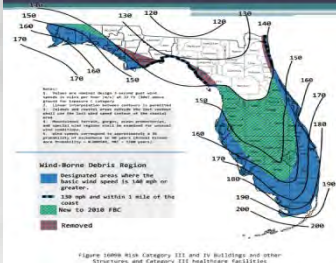


# Leadership Forum

## A County Commissioners' and Constitutional Officers' Guide to Wind Mitigation Programs and Applications



# Course Agenda

- Welcome
- Introduction of Course Participants
- Review of Course Outline and Expectations
- Why Is This Course Important
- Hazard Risk and Vulnerability Analysis
- Historical Impacts From Three Hurricanes
- Review of Wind Mitigation Opportunities
  - County Plans with Mitigation Components
  - Federal/State Wind Mitigation Programs
  - Provisions in State Statutes
- Mitigation Success Stories
- Conclusion and Wrap Up
- Course Evaluation

# Why Is This Course Important?

What if you were faced with this as a Commissioner or Constitutional Officer?



- Hundreds (or thousands, depending on county size) of displaced residents, some for extended periods of time.
- This shows Homestead mobile home park after Hurricane Andrew. 500 displaced residents.
- This is one of **many** destroyed communities.



# Why Is This Course Important?

What if you were faced with this as a Commissioner or Constitutional Officer?



- Widespread **infrastructure damages**
- (Hurricane Ivan - wind driven storm surge impacts)

# Why Is This Course Important?

What if you were faced with this as a Commissioner or Constitutional Officer?



**Major disruption to businesses and the economic engine of your county!**

(Hurricane Wilma, Ivan, Charlie damages to businesses)





# Why Is This Course Important?

What if you were faced with this as a Commissioner or Constitutional Officer?



- In Andrew, 25% of the severely damaged businesses never reopened.
- Hurricane Wilma resulted in 98% of all businesses without power, some for 20 days!
- Hurricane Ivan severely damaged Pensacola City Hall requiring COOP implementation for 2 years while major repairs were made.

# Why Is This Course Important?

What if you could reduce the amount of wind related damage in your county?

- Reduce the impact on **public** and **private infrastructure**;
- Reduce the impact on **residents**;
- Reduce the number of disrupted **businesses**;
- Reduce the overall risk and vulnerability of your county to future wind related disasters?  
.....would you be interested?



# Why Is This Course Important?

- **Remember**, initially all disasters are “local”!
- Florida’s 377 County Commissioners are charged by Chapter 252.38(3)(a)1 to:
  - *“...appropriate and expend funds; make contracts; obtain and distribute equipment, materials, and supplies for emergency management purposes; provide for the health and safety of persons and property, including emergency assistance to the victims of any emergency; and direct and coordinate the development of emergency management plans and programs in accordance with the policies and plans set by the federal and state emergency management agencies.”*



# Why Is This Course Important?

- Wind related damages can cripple a county's economy and residents for extended periods of time.
  - Recovery period can take up to 10 years or longer.
- Property damages can cause a county's tax base to temporarily decline.
- Mitigating even a small percentage of wind related damages from hazards can have a huge benefit for a county.

# Why Is This Course Important?

- Commissioners and Constitutional Officials have the unique ability to impact every business and individual in a county by participating in the mitigation programs currently available.
- The actions taken by you can ensure a very large return on your investment of time and energy.
- FEMA claims that for every **\$1** spent on mitigation, communities save on average **\$3-\$4** in repairs and replacement costs after a disaster.\*

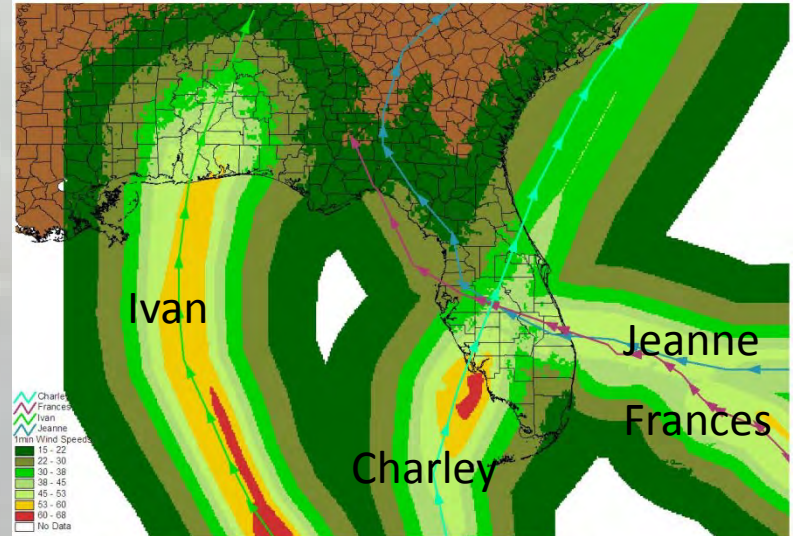
\* Source: National Institute of Building Sciences, Multihazard Mitigation Council, 2005, "Natural Hazard Mitigation Saves", Vol 1, page iii.

# Risk and Vulnerability

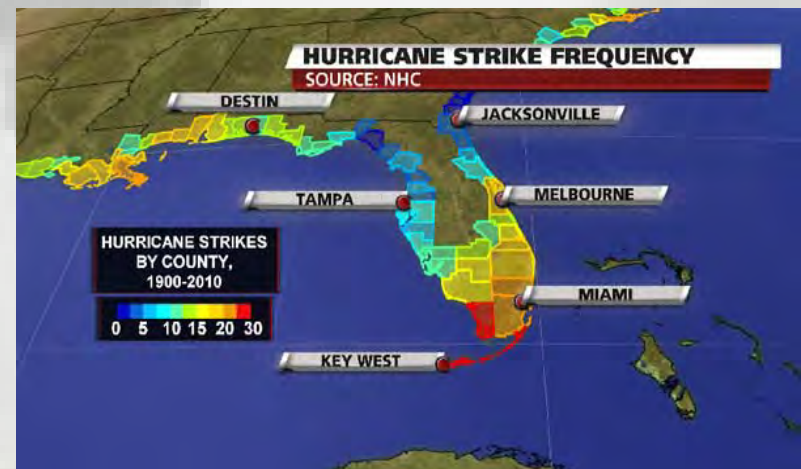


# Risk and Vulnerability

- No county in Florida is immune to wind impacts.
- **100%** of Florida's 67 counties will have wind related damages over the next 50 years, or sooner.
- Hurricanes, tornadoes, winter storms, cold fronts can all produce wind damages.
- Hurricanes normally produce the highest countywide damages.



Peak 1min Hurricane Winds over Florida, 2004



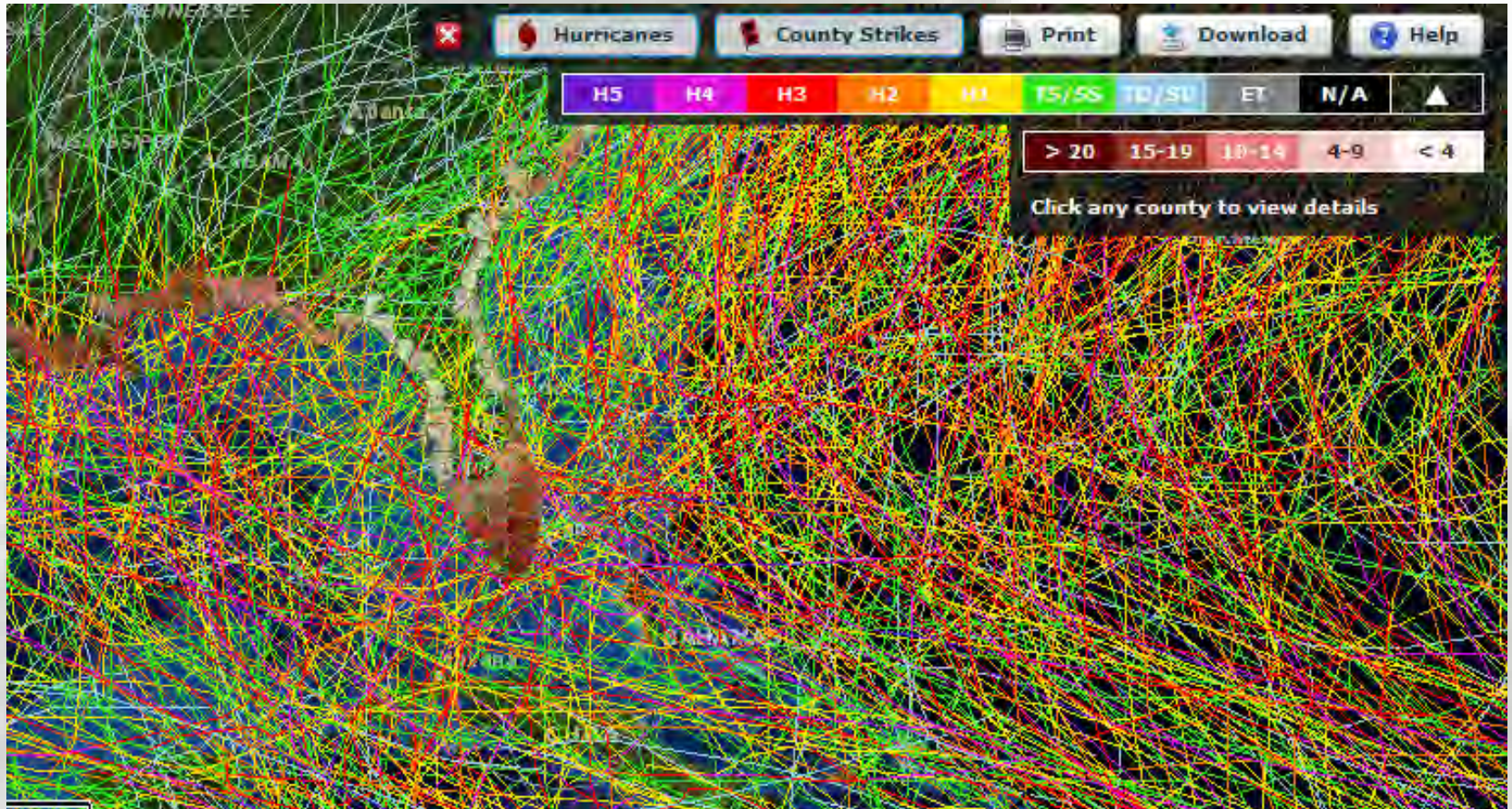
# Risk and Vulnerability

How likely is Florida to be impacted by a tropical storm of any size?

**You decide!**



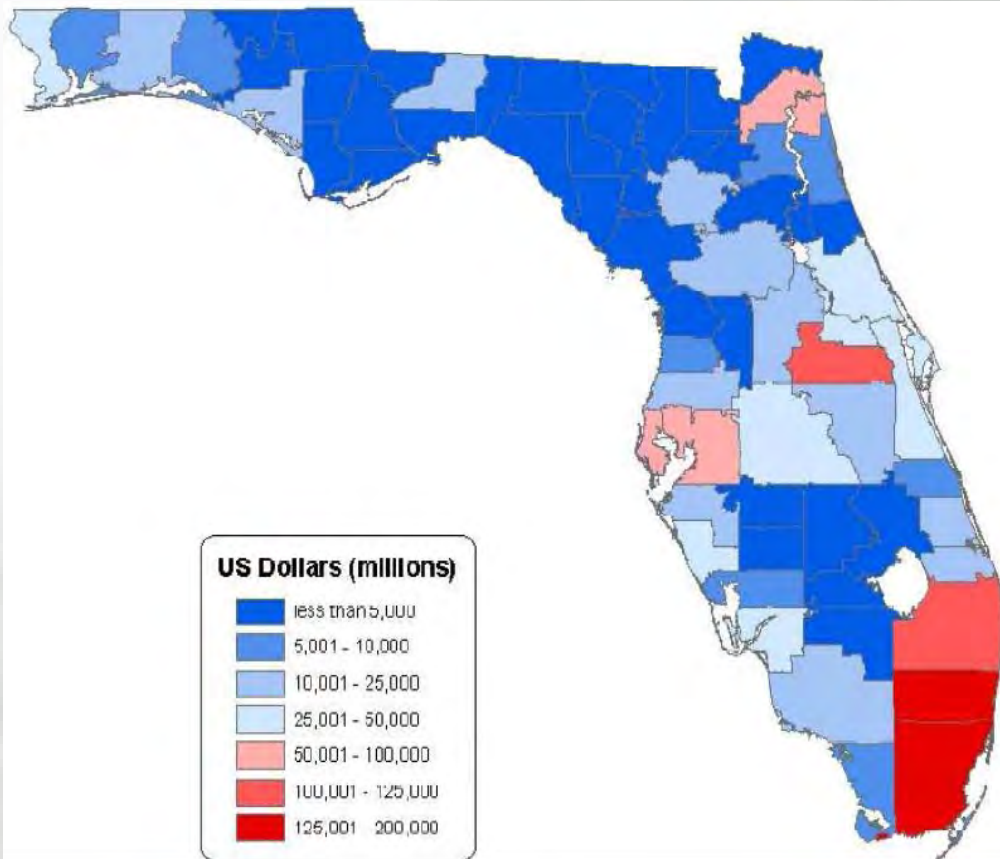
# Risk and Vulnerability



All Tropical Systems 1850 - 2008 (NOAA)  
([www.csc.noaa.gov/hurricanes/#](http://www.csc.noaa.gov/hurricanes/#))



# Risk and Vulnerability



- Commercial Buildings losses from hurricane induced wind damages
- Represents statewide total of \$1.3 trillion.
- Majority of uses include retail trade and general services.

Source: FDEM Hurricane Loss Mitigation Study for Commercial Risks in Florida, 2009  
(<http://www.floridadisaster.org/mitigation/pubs.htm>.)

# Risk and Vulnerability

- In 2010, 80% (15,041,048) of Florida's total population (18,801,310) reside within 10 miles of the coast. (Source: FDEP)
- 95% of all Floridians live within 35 miles of the shoreline, making millions of residents highly vulnerable, and at risk of wind related damages from hurricanes.
- According to VISIT FLORIDA, 85.9M visitors came to Florida in 2011, a 4.4% increase from 2010.
- All of this represents a significant number of people, infrastructure and residential structures vulnerable to wind impacts.

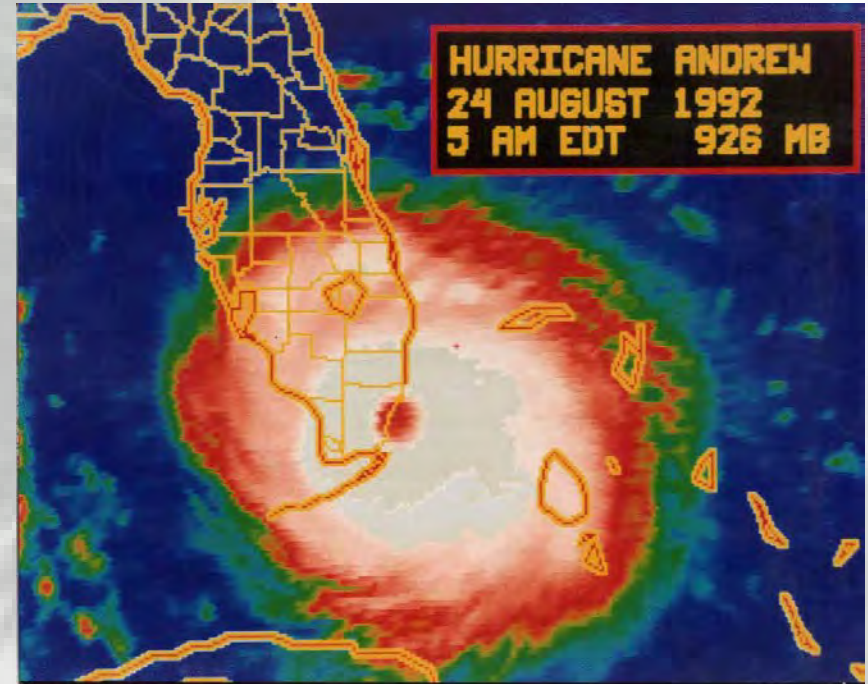


# Historical Impacts



# Historical Impacts

- Hurricane Andrew (1992) was a Cat 5 hurricane.
- Wind related damages were extensive.
- Made landfall in Miami-Dade County and exited in Collier County.



# Historical Impacts

- Andrew made landfall at 5am, and exited the State around 9am....a little more than a **4 hour** event.
- Yet the damages caused by Andrew crippled much of South Florida for many months.
- Although coastal damages were also impacted by the storm surge, the majority of damages were *wind* related.

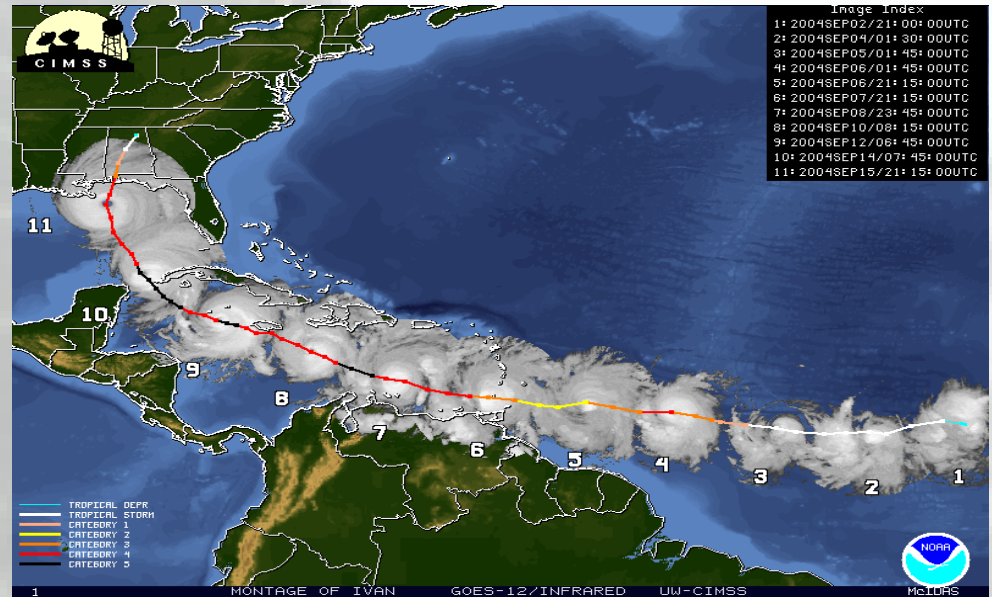
# Historical Impacts

- Consider the following impacts from Andrew:
  - 28,066 homes destroyed
  - 107,380 homes damaged
  - 180,000 persons left homeless
  - 82,000 businesses destroyed or damaged
  - 120,000 jobs temporarily or permanently lost
  - 32,900 acres of farmland damaged
  - 31 public schools destroyed or severely damaged
  - 59 health care facilities and hospitals damaged
  - 9,500 traffic signals and signs destroyed
  - 1.4 M residents loss power for extended periods of time
  - 80,000 residents lost telephone service
  - \$41+ B in damages (today's dollars)



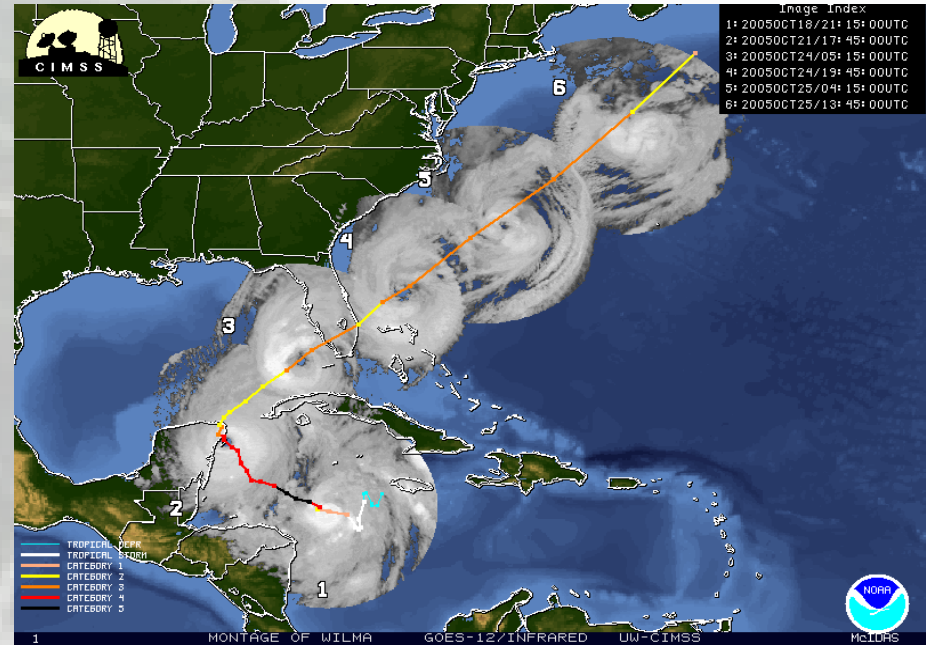
# Historical Impacts

- **Hurricane Ivan (2004)** had similar types of damages.
  - Impacted Bay to Escambia Counties and inland to Alabama line.
  - \$14B in damages
  - 14 fatalities
  - 135,800 residents with home damages.
  - 56 public shelters hosted over 28,900 residents.
  - Large scale evacuations were ordered



# Historical Impacts

- **Hurricane Wilma(2005)** was primarily a “*wind*” event.
  - Entered the State as a Cat 3 storm, exited as a Cat 2 storm
  - \$19B in damages in Florida. \$29B storm wide
  - Was basically a 4 county event, yet 3<sup>rd</sup> most costly hurricane in history.
  - 6,000,000+ Floridians lost power for extended periods of time.
  - 6 deaths in Florida



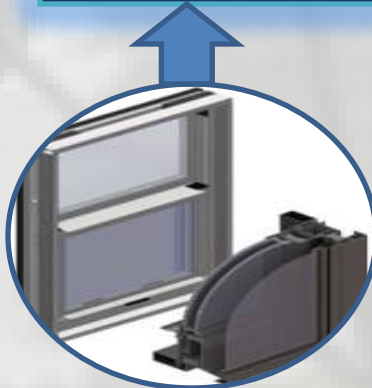
# Wind Mitigation Opportunities



# What Is Wind Mitigation?



Any activity taken by private or public stakeholders to reduce the risk and vulnerability of people and infrastructure to wind related damages and/or injuries.



# Wind Mitigation Opportunities

## Examples

- Increase wind resistance of window assemblies on public facilities.
- Increase wind resistance of roof structures.
- Increase public/government stakeholders awareness of wind mitigation provision of the Florida Building Code.
- Construction of safe rooms to protect against hurricane/tornado winds.
- Increase regulatory standards for construction in wind-hazard areas.
- Retrofitting homes using recommended mitigation techniques to make them more wind resistant.
- Ensure mobile homes are anchored securely to resist wind damages.
- Increasing integration of wind mitigation into comprehensive planning and mitigation strategies.
- Retrofit shelters to improve relative safety and reduce the emergency shelter space deficit.
- Early warning systems to reduce loss of life from associated wind events.
- Conduct vulnerability assessments of structures, and recommend mitigation options to reduce wind related damages.

# Wind Mitigation Opportunities

## Examples - Shutters





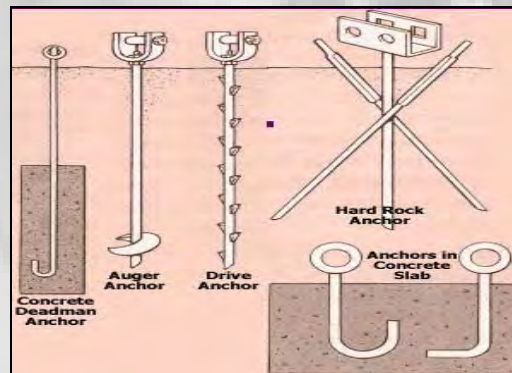
# Wind Mitigation Opportunities

## Examples - Window Glazing



# Wind Mitigation Opportunities

## Examples - Tie Downs



# Wind Mitigation Opportunities

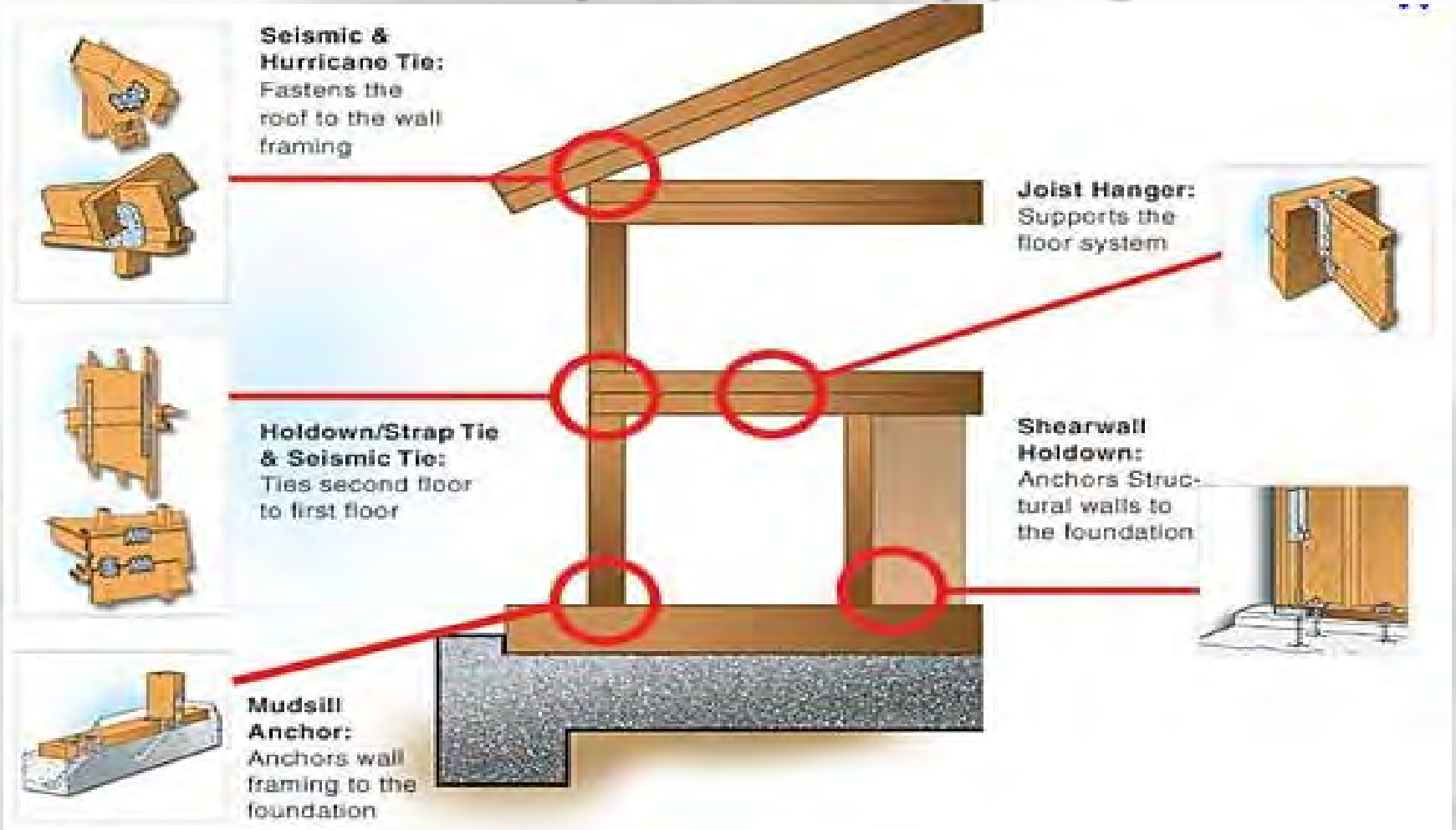
## Examples - Enhanced Roofing





# Wind Mitigation Opportunities

## Examples - Strapping



# Wind Mitigation Opportunities

- **County Plans with Wind Mitigation Components**
  - Local Mitigation Strategies
  - Comprehensive Emergency Management Plans
  - Comprehensive Plans - LDRs
  - Post Disaster Redevelopment Plan
- **State and Federal Mitigation Programs**
  - Community Development Block Grants
  - Hazard Mitigation Grant Program
  - Public Assistance Program - Sec 406 Migration
  - Residential Construction Mitigation Program
  - State Housing Initiative Partnership - Disaster Funding
  - Weatherization Assistance Program
- **Mitigation Provisions within State Statutes**
  - Coastal Construction Control Line
  - Florida Building Code

# Wind Mitigation Opportunities

- **Appendix 1** of the Handout Materials has all plans, programs, and provisions in statute summarized for quick reference.

Appendix 1  
Wind Mitigation Resources At a Glance

| Program Name Reference/Source                             | Wind Mitigation Requirement  | Method of Implementation   | Funding/Incentives Available  | Potential Mitigation Impact  |
|---|--|--|---|--|
| <b>State and Federal Mitigation Programs</b>              |  |  |   |  |
| <b>Hazard Mitigation Grant Program - (Sec 404)</b>        | <ul style="list-style-type: none"> <li>• State <del>must be declared</del> in a presidential disaster declaration.</li> <li>• Counties in PDD are eligible for Tier I and II funds; non-declared counties are eligible for Tier III funds, if available.</li> <li>• Must have an approved Local Mitigation Strategy in order to apply</li> </ul> | <ul style="list-style-type: none"> <li>• All applicants (i.e. counties, others) must apply for HMGP funds.</li> <li>• County must develop projects consistent with the HMGP guidance.</li> <li>• Once awarded, applicant implements the HMGP grant through closeout procedures.</li> </ul> | <ul style="list-style-type: none"> <li>• 20% times total of county damages is amount available to fund projects minus certain earmarks, (state initiatives, SMAC, 7% planning projects)</li> <li>• Applicant <del>must</del> provide 25% non federal share of the project costs.</li> </ul> | <ul style="list-style-type: none"> <li>• Significant benefit on county's ability to reduce <del>impacts</del> of future disaster damages.</li> </ul>   |
| <b>Public Assistance Program – Sec 406 Mitigation</b>     | <ul style="list-style-type: none"> <li>• County must be included in a presidential disaster declaration.</li> <li>• Project is an add-on feature of Public Assistance Project Worksheet</li> </ul>   | <ul style="list-style-type: none"> <li>• Complete a Hazard Mitigation Proposal for each mitigation enhancement wanted on a project worksheet (PW).</li> <li>• State/FEMA must <del>concur</del> project if valid. FEMA approves extra HM costs for the PW.</li> </ul>                      | <ul style="list-style-type: none"> <li>• Project must be cost effective</li> <li>• Project is cost shared by FEMA (75%), State (12.5%), and applicant (12.5%)</li> <li>• Applicant match can be in-kind services/resources.</li> </ul>  | <ul style="list-style-type: none"> <li>• Significant benefit on county's ability to reduce <del>impacts</del> of future disaster damages.</li> <li>• <del>Potentially available on every project worksheet developed.</del></li> </ul>         |
| <b>Pre-Disaster Mitigation Program [PDM]</b>              | <ul style="list-style-type: none"> <li>• Designed to minimize risk of hazards to property and people</li> <li>• Must have an approved Local Mitigation Strategy in order to apply</li> </ul>   | <ul style="list-style-type: none"> <li>• State applies as the applicant. Counties provide projects for inclusions to State application.</li> <li>• These funds are available annually regardless of declarations.</li> </ul>   | <ul style="list-style-type: none"> <li>• Applicant must provide full 25% non-federal share. State will not provide matching funds.</li> </ul>   | <ul style="list-style-type: none"> <li>• <del>Can reduce a county's risk to damages caused by wind.</del></li> <li>• Provides 75% of the funding if county is awarded project funds, which is a significant benefit for the county.</li> </ul> |
| <b>Residential Construction Mitigation Program (RCMP)</b> | <ul style="list-style-type: none"> <li>• <del>Must be used</del> for wind mitigation projects that reduce wind risk to eligible applicant.</li> <li>• Funds can be used for retrofit or</li> </ul>   | <ul style="list-style-type: none"> <li>• Funds issued once a year, and are on an annual cycle. They <del>must be used</del> by 6/30.</li> <li>• Funding is competitive. County can submit up to two applications per cycle, but only</li> </ul>  | <ul style="list-style-type: none"> <li>• Project funding limited to maximum grant award that is <del>established</del> annually.</li> <li>• Although no match is required, extra</li> </ul>   | <ul style="list-style-type: none"> <li>• This grant program allows for projects that educate key officials on wind mitigation, thereby have global benefit.</li> <li>• Grant can have an impact on reducing the</li> </ul>                     |



# County Plans with Mitigation Components

# County Plans with Mitigation Components

## Local Mitigation Strategies

- **Wind Mitigation Requirements**
  - Every county is required to have an approved LMS or forfeit certain federal program funding.
  - LMS must identify viable mitigation strategies and projects the County has identified.
  - Must be updated once every five years
- **Method of Implementation**
  - Strategies and projects are to be implemented as soon as possible.
  - County Commission decides which projects to fund based on the disaster event, or the priority established through the LMS.



# County Plans with Mitigation Components

## Local Mitigation Strategies

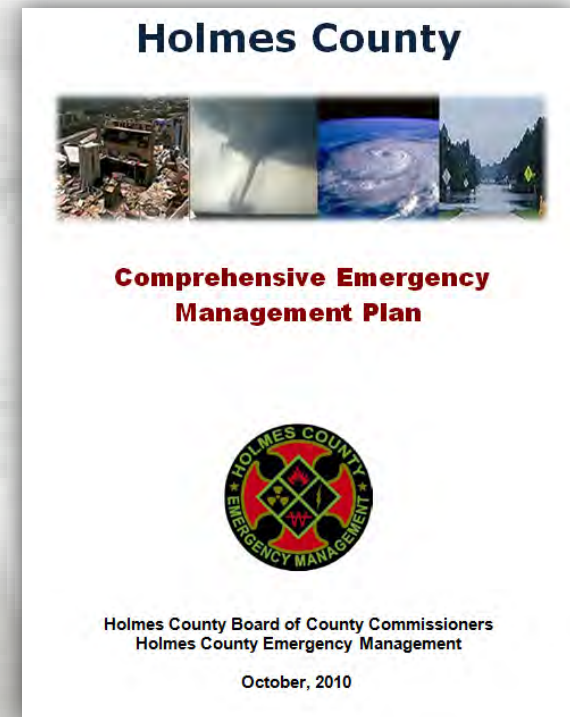
- **Funding/Incentives Available**
  - LMS must be current and approved by FDEM and FEMA in order to be eligible for mitigation funds.
  - Funding available via the HMGP is to be used to implement the LMS projects post-disaster.
- **Potential Mitigation Benefit for the County**
  - LMS acts as the official county blueprint for mitigation.
  - Local citizens are encouraged to participate in the LMS planning process to ensure county wide applicability.



# County Plans with Mitigation Components

## Comprehensive Emergency Management Plan

- **Wind Mitigation Requirements**
  - Every county is required by Ch 252, FS to have an approved CEMP.
  - Each CEMP is to have a mitigation section that describes how the county implements mitigation.
- **Method of Implementation**
  - County Commission through the County Emergency Management Agency
  - Must be updated every four years.



# County Plans with Mitigation Components

## Comprehensive Emergency Management Plan

- **Funding/Incentives Available**
  - No funding is available, but CEMP ensures key staff who are responsible for plan development and implementation are identified.
- **Potential Mitigation Benefit for the County**
  - Identifies how the county will implement the various mitigation measures.
  - Has ramifications for county mitigation efforts.

# County Plans with Mitigation Components

## Comprehensive Plans/Land Development Regulations

- **Wind Mitigation Requirements**
  - Most mitigation requirements occur in the Coastal Element of the COMP
  - Opportunities for enhanced wind mitigation provisions can occur in the Coastal Element.
- **Method of Implementation**
  - BOCC via the Planning Department (Zoning, Code Enforcement, etc) implement the COMP and wind mitigation components therein.

# County Plans with Mitigation Components

## Comprehensive Plans/Land Development Regulations

- **Funding/Incentives Available**
  - No funding is available, but COMP is the logical mechanism to reduce future wind related losses.
- **Potential Mitigation Benefit for the County**
  - The COMP has significant impact on everyone in the County, especially in coastal counties that have Coastal Elements.
  - The COMP is a mechanism at the disposal of the BOCC to enhance wind mitigation provisions for the benefit of all residents, especially those living near the coastline.



# County Plans with Mitigation Components

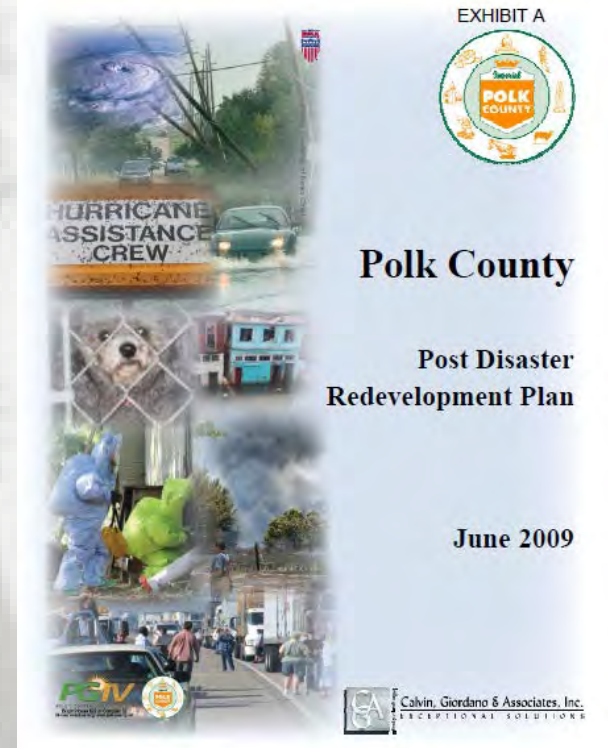
## Post Disaster Redevelopment Plan

- **Wind Mitigation Requirements**

Although there is no specific requirement to mitigate future wind related damages, the PDRP process can accommodate a local community's desire to enhance post-disaster rebuilding by, for example, rebuilding to current wind related codes or code plus, or another wind related project it want to accomplish.

- **Method of Implementation**

- Adopted in COMP, or CEMP, or stand alone Plan.
- BOCC will active the PRDP



# County Plans with Mitigation Components

## Post Disaster Redevelopment Plan

- **Funding/Incentives Available**
  - FDEM has developed a comprehensive list of all funding sources for PDRP and other mitigation grants.
  - Contact [Matt.Peterson@deo.myflorida.com](mailto:Matt.Peterson@deo.myflorida.com)
- **Potential Mitigation Benefit on the County**
  - Faster, more efficient recovery process
  - Eliminate the need to overly react to event
  - Allows for self determination in the recovery phase.

# State and Federal Mitigation Programs

# State and Federal Mitigation Programs

## Hazard Mitigation Grant Program - Sec 404 (HMGP)

- **Wind Mitigation Requirements**

- HMGP funding is a function of the State being included in a Presidential Disaster Declaration.
- HMGP is made available to every declared county first, then to non-declared counties pending fund availability.
- Projects are pre-identified in the LMS, or added to the LMS at the time of the disaster via the LMS Committee.

- **Method of Implementation**

- County receives announcement of available HMGP funding levels.
- BOCC ultimately determines what projects to fund from the LMS.
- Projects are submitted to the State for review. State submits project to FEMA for approval.
- Must meet federal HMGP requirements.





# State and Federal Mitigation Programs

## Hazard Mitigation Grant Program - Sec 404 (HMGP)

- **Funding/Incentives Available**
  - In Florida, each county is eligible for an amount of funding equivalent to all eligible county disaster recovery costs x 20%.
  - FEMA will provide 75% of funding. County must provide the matching 25% non-federal share. Match can be in-kind.
- **Potential Mitigation Benefit for the County**
  - HMGP is one of the most important mitigation programs available to a county.
  - It can be used for all aspects of wind mitigation.
  - It is an excellent way to get a mitigation project funded by the BOCC for 25% of the cost.

# State and Federal Mitigation Programs

## Public Assistance Program - Sec 406

- **Wind Mitigation Requirements**
  - Allows for replacement or repair of damaged public infrastructure to prevent/reduce future, similar damages from recurring.
  - Mitigation measure must be cost effective
- **Method of Implementation**
  - Extra mitigation measure written into an existing Public Assistance project through the Project Worksheet.
  - FEMA must approve of extra costs. Must be cost effective, technically feasible, compliant with regulatory requirements.
  - *Examples:* enhanced window protection; code-plus roofing; roof to foundation bracing for wind resistance, etc.



# State and Federal Mitigation Programs

## Public Assistance Program - Sec 406

- **Funding/Incentives Available**
  - No limits, as long as it is cost effective, and reasonable.
  - Funding is discretionary on part of FEMA who will balance the interests in disaster resistance with the proper stewardship of public funds.
- **Potential Mitigation Benefit for the County**
  - This can have huge impacts for any county. It brings in mitigation enhancements under the PA program which is matched at 75/12.5/12.5%.
  - It is critically important the county is fully aware of this provision in the law, and have staff trained in its implementation.

# State and Federal Mitigation Programs

## Pre-Disaster Mitigation Program

- **Wind Mitigation Requirements**
  - Competitive program available pre-disaster.
  - Similar in scope to the HMGP in terms of program requirements
- **Method of Implementation**
  - FDEM is the applicant. County submits grant proposal for inclusion in FDEM's submission to FEMA.
  - State submittal is in competition with other states.
  - *Examples:* relocation of structures; acquisition of real property; construction of safe rooms; protective measures for utilities; etc.





# State and Federal Mitigation Programs

## Pre-Disaster Mitigation Program

- **Funding/Incentives Available**
  - Up to \$3M (federal share) per project sub-application (County)
  - Federal share is 75%, County share is 25%.
  - Must have an approved LMS to be eligible for funding.
- **Potential Mitigation Benefit for the County**
  - A mechanism to fund projects identified in the County LMS.
  - Depending on the project, can have substantial mitigation benefit for the county.

# State and Federal Mitigation Programs

## Hurricane Loss Mitigation Program

### Residential Construction Mitigation Program (RCMP)

- **Wind Mitigation Requirements**

- Proposed projects must either retrofit existing buildings or provide public outreach for wind mitigation.
- Retrofits must use the Florida Building Code as the standard for all retrofitting activities.

- **Method of Implementation**

- RCMP grants are issued on an annual cycle. A county can submit up to two applications (one in each category)



# State and Federal Mitigation Programs

## Residential Construction Mitigation Program (RCMP)

- **Funding/Incentives Available**
  - Up to \$150,000 (may change annually) per awarded grant/ up to two grants per applicant (different categories). Approximately \$3.5M appropriated annually.
  - No match requirements, but those with demonstrated match score higher in competition.
- **Potential Mitigation Benefit for the County**
  - Has potential to either retrofit buildings or educate many residents about wind mitigation and the Florida Building Code.

# State and Federal Mitigation Programs

## Residential Construction Mitigation Program (RCMP)

### Example from recent RCMP funding cycle:

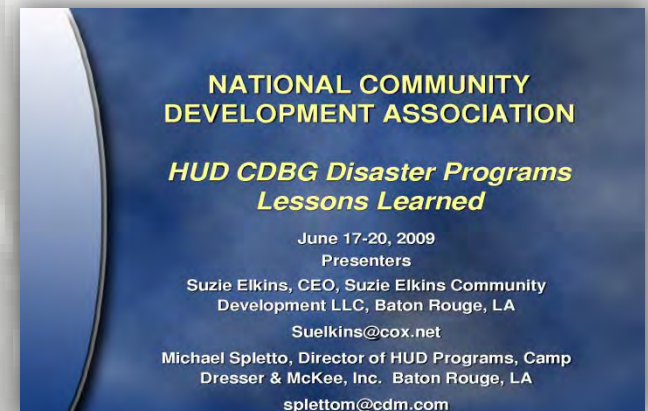
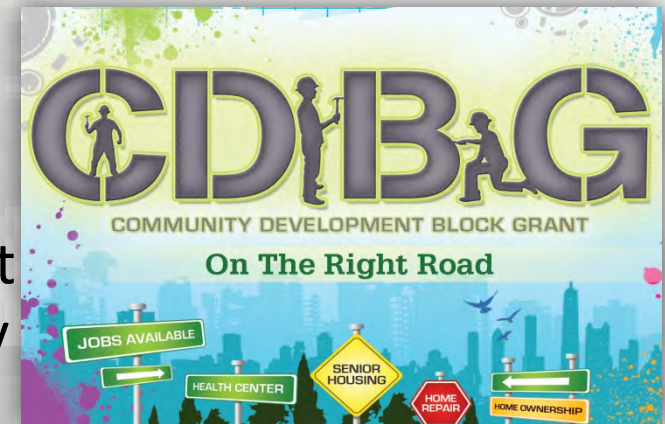
- Individual grants up to \$100,000 each were awarded to nine recipients to retrofit low to moderate income communities in: **Town of Century, Northeast Florida Community Action Agency, Community Action Committee Program, Inc., St. Lucie County, REBUILD Northwest Florida, Inc., Department of Financial Services, Okaloosa County, Santa Rosa County, and City of Jacksonville.**
- Projects utilized annual State Housing Initiatives Partnership program (SHIP), Hazard Mitigation Grant Program (HMGP), Home Investment Partnerships (HOME) and/or Community Development Block Grant (CDBG) allocations to **leverage RCMP funds**. A total of \$793,366 was spent on mitigation upgrades for approximately 104 residences.



# State and Federal Mitigation Programs

## Community Development Block Grant (CDBG) - Unmet Needs Disaster Recovery Assistance

- **Wind Mitigation Requirements**
  - Funds only available if in a Presidential Disaster Declaration.
  - County must demonstrate significant **unmet recovery needs**, and capacity to carry out initiative, if funded.
- **Method of Implementation**
  - HUD notifies eligible government that funds are available. County then develops an Action Plan, and submits it for funding consideration.



# State and Federal Mitigation Programs

## Community Development Block Grant (CDBG) - Disaster Recovery Assistance

- **Funding/Incentives Available**
  - Funding is dependant on the amount of supplemental funding HUD receives from Congress for the disaster at hand.
  - The amount of funding is driven by a formula used by HUD based on the need, and amount allocated by Congress to meet the unmet needs.
- **Potential Mitigation Benefit for the County**
  - This program can be used for wind mitigation projects, if the county submits an Action Plan with such a proposal in it.
  - It could have countywide impacts, if the application is designed to meet that type of need.

# State and Federal Mitigation Programs

## State Housing Initiative Partnership (SHIP)

- **Wind Mitigation Requirements**
  - SHIP can be used to fund emergency repairs, rehabilitation, match federal dollars for housing grants/programs, manufactured housing installation enhancements.
- **Method of Implementation**
  - Section 420.9078(8), F.S. provides for the distribution of appropriated SHIP funds from the Local Government Housing Trust Fund among counties and eligible municipalities for which an emergency or natural disaster has been declared by executive order and which have an approved local housing assistance plan to implement a local housing assistance strategy consistent with Section 420.907-9079, F.S.

# State and Federal Mitigation Programs

## State Housing Initiative Partnership (SHIP)



- **Funding/Incentives Available**
  - Under an emergency rule, the unencumbered county funds can be diverted to other disaster-related purposes.
  - Unencumbered statewide SHIP funds can be diverted to the disaster area as well. Amount depends on the unencumbered amount.
- **Potential Mitigation Benefit for the County**
  - Used creatively, SHIP funds can be used for wind mitigation projects that impact substandard housing in a county by bring structures up to current code.



# State and Federal Mitigation Programs

## Weatherization Assistance Program (WAP)

- **Wind Mitigation Requirements**
  - WAP funds are available to low income residents who qualify to weatherize their homes.
- **Method of Implementation**
  - Funds go directly from USDOE to the State, and given to an entity within each County to manage based on need and ability to expend the funds.
  - Individuals apply for the WAP funds to assist in weatherizing their homes through the county representative agency.



# State and Federal Mitigation Programs

## Weatherization Assistance Program (WAP)

- **Funding/Incentives Available**
  - Up to \$5,600 can be granted to a homeowner, but the average grant is \$2,600.
  - Funds can be used for specific purposes established by the State WAP (Florida Department of Economic Opportunity)
- **Potential Mitigation Benefit for the County**
  - WAP funding can be used to assist in replacement of doors, windows, repairs to roofs, ceilings, some of which can reduce the impacts of damaging winds on a home.

# State and Federal Mitigation Programs

## Program Funding

Here is an example of the funding available for the mitigation programs:

- **RCMP** - \$3.5 M annual appropriation
- **PDM** - \$40 M for FFY 12 (nationally, but Florida consistently receives their “fair share!”)
- **WAP** - \$175 M between FFY 09-12 for Florida
- **HMGP** - \$451.8 M for 2004-05 hurricanes
- **406 PA Mitigation** - \$117.19M for 2004-05 hurricanes
- **CDBG, SHIP, HOME** - all used as funding for local match in 04-05 hurricanes, and more recent events.

# State and Federal Mitigation Programs

## Program Funding

| <b>406 Mitigation for 2004-05 Hurricane Declarations</b> |                 |           |                     |                        |                              |
|--|-----------------|-----------|---------------------|------------------------|------------------------------|
| <b>Year</b>  | <b>Disaster</b> | <b>DR</b> | <b>Total PA PWs</b> | <b>Total PWs w/406</b> | <b>Total 406 Added (\$M)</b> |
| 2004   | Charley         | 1539      | 9,908               | 615                    | \$6.60                       |
|  | Frances         | 1545      | 12,694              | 591                    | \$10.30                      |
|  | Ivan            | 1551      | 5,514               | 780                    | \$14.20                      |
|  | Jeanne          | 1561      | 8,597               | 220                    | \$8.50                       |
| 2005   | Dennis          | 1595      | 3,786               | 315                    | \$22.00                      |
|  | Katrina         | 1602      | 3,208               | 107                    | \$0.49                       |
|  | Wilma           | 1609      | 32,412              | 2,913                  | \$55.10                      |
| <b>TOTAL</b>   |                 |           | <b>76,119</b>       | <b>5,541</b>           | <b>\$117.19</b>              |



# State and Federal Mitigation Programs

## Program Funding

| HMGP for 2004-05 Hurricane Declarations |          |      |                  |
|---|----------|------|------------------|
| Year                                    | Disaster | DR   | Total HMGP (\$M) |
| 2004                                    | Charley  | 1539 | 74.1             |
|   | Frances  | 1545 | 83.60            |
|   | Ivan     | 1551 | 74.10            |
|   | Jeanne   | 1561 | 69.90            |
| 2005                                    | Dennis   | 1595 | 12.00            |
|   | Katrina  | 1602 | 7.80             |
|   | Wilma    | 1609 | 130.30           |
| TOTAL                                   |          |      | 451.80           |

# State and Federal Mitigation Programs

## Program Funding

- Example of Various Funding Sources Used to Leverage a recent HMGP Project in Lee County:
  - **Project:** Mitigate chronic flooding in Ft. Myers along Estero Boulevard
  - **Funding Sources:**
    - HMGP - \$1.2M
    - SFWMD - \$20K
    - City Utility Fund - \$20K
    - Road Impact Fees - \$81K
    - Gas Taxes - \$81K
    - Total - \$3.2M

# State and Federal Mitigation Programs

## Program Funding

### Tropical Storm Fay HMGP Distribution

| COUNTY    | FEDERAL ALLOCATION | 25% NON-FEDERAL MATCH |
|-----------|--------------------|-----------------------|
| Alachua   | \$ 105,929.84      | \$ 35,309.95          |
| Baker     | \$ 10,132.50       | \$ 3,377.50           |
| Bradford  | \$ 46,441.00       | \$ 15,480.33          |
| Brevard   | \$ 1,628,639.22    | \$ 542,879.74         |
| Calhoun   | \$ 103,522.60      | \$ 34,507.53          |
| Charlotte | \$ 100,967.62      | \$ 33,655.87          |
| Clay      | \$ 49,650.16       | \$ 16,550.05          |
| Collier   | \$ 909,618.18      | \$ 303,206.06         |
| Dixie     | \$ 28,094.11       | \$ 9,364.70           |
| Duval     | \$ 990,787.42      | \$ 330,262.47         |
| Flagler   | \$ 174,369.80      | \$ 58,123.27          |
| Gadsden   | \$ 63,198.29       | \$ 21,066.10          |
| Glades    | \$ 7,290.86        | \$ 2,430.29           |
| Gulf      | \$ 7,462.17        | \$ 2,487.39           |
| Hamilton  | \$ 15,744.84       | \$ 5,248.28           |
| Hardee    | \$ 126,844.74      | \$ 42,281.58          |
| Hendry    | \$ 69,731.90       | \$ 23,243.97          |
| Highlands | \$ 41,510.34       | \$ 13,836.78          |

|              |                         |                        |
|--------------|-------------------------|------------------------|
| Jefferson    | \$ 62,500.65            | \$ 20,833.55           |
| Lake         | \$ 75,263.20            | \$ 25,087.73           |
| Lee          | \$ 271,850.78           | \$ 90,616.93           |
| Leon         | \$ 2,136,136.94         | \$ 712,045.65          |
| Liberty      | \$ 44,984.76            | \$ 14,994.92           |
| Manatee      | \$ 120,235.47           | \$ 40,078.49           |
| Marion       | \$ 10,896.45            | \$ 3,632.15            |
| Martin       | \$ 161,175.75           | \$ 53,725.25           |
| Monroe       | \$ 202,500.21           | \$ 67,500.07           |
| Nassau       | \$ 193,359.03           | \$ 64,453.01           |
| Okeechobee   | \$ 134,190.83           | \$ 44,730.28           |
| Osceola      | \$ 48,537.81            | \$ 16,179.27           |
| Palm Beach   | \$ 1,013,911.57         | \$ 337,970.52          |
| Putnam       | \$ 240,218.91           | \$ 80,072.97           |
| Sarasota     | \$ 394,286.88           | \$ 131,428.96          |
| Seminole     | \$ 295,906.07           | \$ 98,635.36           |
| St. Johns    | \$ 260,477.95           | \$ 86,825.98           |
| St. Lucie    | \$ 1,373,127.04         | \$ 457,709.01          |
| Suwannee     | \$ 27,638.80            | \$ 9,212.93            |
| Taylor       | \$ 2,535.52             | \$ 845.17              |
| Union        | \$ 11,389.79            | \$ 3,796.60            |
| Volusia      | \$ 1,678,332.49         | \$ 559,444.16          |
| Wakulla      | \$ 101,859.48           | \$ 33,953.16           |
| <b>TOTAL</b> | <b>\$ 13,341,252.00</b> | <b>\$ 4,447,084.00</b> |

# State and Federal Mitigation Programs

## Program Funding - HMGP Distribution

**FEMA-1806-DR-FL Hurricane Gustav  
ALLOCATIONS**

| COUNTY       | FEDERAL ALLOCATIONS | 25% NON-FEDERAL MATCH |
|--------------|---------------------|-----------------------|
| Bay          | \$476,612           | \$158,871             |
| Escambia     | \$1,435,672         | \$478,557             |
| Franklin     | \$105,614           | \$35,205              |
| Gulf         | \$639,624           | \$213,208             |
| Okaloosa     | \$291,136           | \$97,045              |
| Santa Rosa   | \$123,460           | \$41,153              |
| Walton       | \$15,125            | \$5,042               |
| <b>Total</b> | <b>\$3,087,243*</b> | <b>\$1,029,081*</b>   |

**FEMA-1831-DR-FL  
Severe Weather and Floods  
3-Month Estimate**

| COUNTY       | FEDERAL ALLOCATION     | 25% NON-FEDERAL MATCH  |
|--------------|------------------------|------------------------|
| Bay          | \$ 73,767.58           | \$ 24,589.20           |
| Calhoun      | \$ 599,663.52          | \$ 199,887.89          |
| Dixie        | \$ 15,494.59           | \$ 5,164.86            |
| Escambia     | \$ 112,748.34          | \$ 37,582.79           |
| Franklin     | \$ 19,195.31           | \$ 6,398.44            |
| Gadsden      | \$ 29,138.48           | \$ 9,712.83            |
| Gilchrist    | \$ 13,592.51           | \$ 4,530.84            |
| Gulf         | \$ 77,810.11           | \$ 25,936.71           |
| Hamilton     | \$ 94,447.33           | \$ 31,482.45           |
| Holmes       | \$ 342,034.76          | \$ 114,011.62          |
| Jackson      | \$ 66,835.77           | \$ 22,278.60           |
| Jefferson    | \$ 17,002.05           | \$ 5,667.35            |
| Lafayette    | \$ 39,056.25           | \$ 13,018.75           |
| Leon         | \$ 103,477.64          | \$ 34,492.56           |
| Liberty      | \$ 326,294.96          | \$ 108,765.01          |
| Madison      | \$ 443,046.56          | \$ 147,682.22          |
| Okaloosa     | \$ 543,896.21          | \$ 181,298.78          |
| Santa Rosa   | \$ 141,855.01          | \$ 47,285.02           |
| Suwannee     | \$ 43,308.94           | \$ 14,436.32           |
| Wakulla      | \$ 8,455.98            | \$ 2,818.66            |
| Walton       | \$ 668,232.22          | \$ 222,744.13          |
| Washington   | \$ 150,413.89          | \$ 50,137.98           |
| <b>TOTAL</b> | <b>\$ 3,929,768.00</b> | <b>\$ 1,309,923.00</b> |

**FEMA-1840-DR-FL  
Severe Weather and Floods  
3-Month Estimate**

| COUNTY       | FEDERAL ALLOCATION     | 25% NON-FEDERAL MATCH |
|--------------|------------------------|-----------------------|
| Baker        | \$ 32,794.40           | \$ 10,931.47          |
| Clay         | \$ 48,003.62           | \$ 16,001.22          |
| Flagler      | \$ 359,779.56          | \$ 119,926.58         |
| Putnam       | \$ 397,966.35          | \$ 132,655.52         |
| Volusia      | \$ 1,126,809.06        | \$ 375,603.21         |
| <b>TOTAL</b> | <b>\$ 1,965,353.00</b> | <b>\$ 655,118.00</b>  |



The background of the slide is a blurred, grayscale image of palm trees, likely in a tropical or coastal setting. The trees are out of focus, creating a soft, atmospheric effect.

# **State and Federal Mitigation Programs**

## **Program Funding**

**Is Your County Getting It's Fair Share?**



# **State and Federal Mitigation Programs**

## **Program Funding**

### **Current Program Points of Contact**

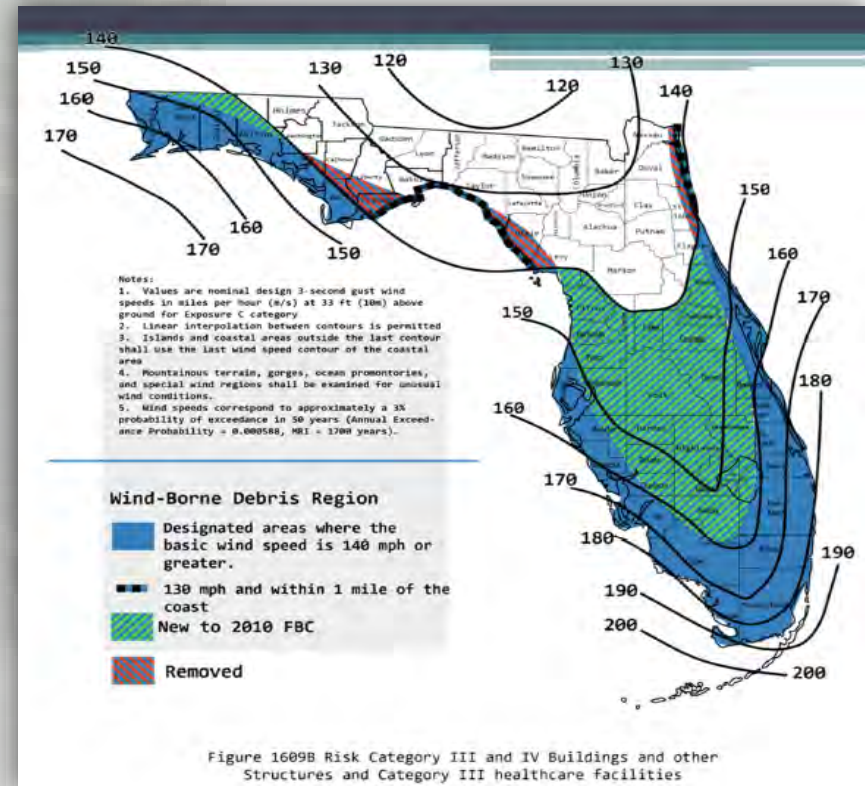
<http://www.floridadisaster.org/Mitigation/index.htm>

# Mitigation Provisions in State Statute

# Mitigation Provisions In State Statutes

## Florida Building Code (FBC)

- **Wind Mitigation Requirements**
  - FBC sets the minimum standards for design and construction
  - County governments can adopt and enforce higher standards
- **Method of Implementation**
  - County reviews all plans for construction pursuant to the FBC or adopted higher standards.






# Mitigation Provisions In State Statutes

## Florida Building Code (FBC)

- **Funding/Incentives Available**
  - No funding is associated with the enforcement of the FBC.
  - Incentives: In 2004-05 hurricanes, homes built to FBC received much less damages than those built before the enactment of the FBC.
- **Potential Mitigation Benefit for the County**
  - It enhances local government capacity to mitigate hazards;
  - It encourages the pursuit of mitigation as an ongoing, evolving, research dependent activity;
  - It prevents unwise expenditures that hinder mitigation efforts, and
  - It encourages/requires special siting, setback, and design criteria for construction related activities within high hazard areas.



# Mitigation Success Stories

# Mitigation Success Stories

- The Delray Beach Old School Square is a Cultural Art Center at the National Historic Site serving a large community in the area.
- The scope of work for this mitigation project was to provide protection to the Old School Square by installing impact resistant glass on three structures. The components used for this wind retrofit met The Florida Building Code Specifications.
- This project was completed in 2011.



# Mitigation Success Stories

## TAMPA GENERAL HOSPITAL

- The scope of work for this project was to provide protection for Tampa General Hospital by installing hurricane shutters on all windows, upgrade existing louvers, doors and roof.
- Wind protection was provided on any other openings such as skylights, vents and exhaust fans. All installations were done in strict compliance with the Florida Building Code or Miami Dade specifications.
- The project was completed in 2011.

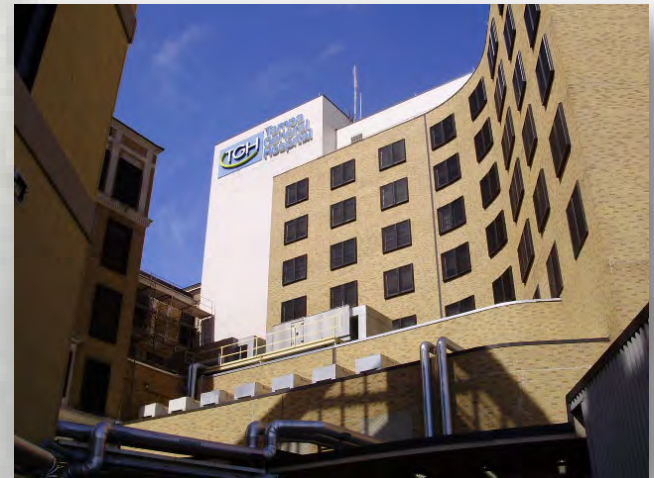




# Mitigation Success Stories

## TAMPA GENERAL HOSPITAL

- Tampa General is a private not-profit hospital and one of the most comprehensive medical facilities in West Central Florida serving a dozen counties with a population in excess of 4 million.
- As one of the largest hospitals in Florida, Tampa General is licensed for 1,018 beds, and with approximately 6,900 employees, is one of the region's largest employers.



# Conclusion

- Every county in Florida is susceptible to wind related damages.
- Mitigating their impacts ensures a quicker recovery for the county and its residents.
- Participating in, or taking advantage of the provisions provided in the course can empower elected officials to take decisive action to reduce future damages.

# Conclusion

## Next Steps

- **Prior to Next Event**

- Be engaged with the LMS process.
- Ensure you have projects listed on the Project List in the LMS reflective of the hazards the County is susceptible to.
- Contact your LMS Chairperson and schedule a meeting to review LMS process.
- Ensure you or someone on your staff is fully versed in the mitigation programs; how they work; funding availability; project eligibility criteria; etc.

# Conclusion

## Next Steps

- **After Next Event**

- Be represented the post-event LMS Committee Meetings. Funding levels, priorities, projects, etc. will be discussed at that time.
- Be prepared to discuss the merits of any project you have submitted on the Project List.
- Identify the source for the non-federal match requirement.



# Conclusion

- For additional information on wind related mitigation, go to:

[www.floridadisaster.org/Mitigation/index.htm](http://www.floridadisaster.org/Mitigation/index.htm)

- Or contact:



Miles E. Anderson, Chief  
Bureau of Mitigation/FDEM  
(850) 413-9816  
Miles.Anderson@em.myflorida.com



Eric Poole, Ast. Legislative Director  
Florida Association of Counties  
(850) 294-9405  
epoole@fl-counties.com

# Course Evaluation

- Please assist us in improving this course through your evaluation comments.
- Complete the quick evaluation and turn it in prior to your departure today.

**THANK YOU**