# Hurricane Mitigation Research:

Resilience, Vulnerability and Risk Awareness



## Summary

- Annual Florida poll with 600 coastal county residents
- Poll conducted in the beginning of hurricane season (June)
- Track changes in homeowner perceptions of hurricane threat, risk and potential mitigation measures
- Sea Level Rise awareness and adaptation
- Trend analysis of hurricane risk in coastal counties



# Culture of Preparedness?

#### Sandy

	2006	2007	2009	2011	2013	2015	2016
Perception of vulnerability	46%	54%	48%	50%	57%	47%	46%
Information access	87%	90%	93%	90%	93%	91%	92%
Plan of action	85%	85%	87%	70%	75%	78%	61%
Evacuate if ordered	28%	37%	40%	40%	38%	26%	38%



## 2016 Results: Homeowners' Views: Preparedness

- Only 29 percent consider their homes prepared.
  - 56 percent would begin to prepare when a hurricane warning (23%) or a hurricane watch (32%) is issued.
  - Approximately nine percent will not make any additional preparations.

Although 87% of respondents reported their household's preparation as adequate, just 60% of respondents were actually prepared by objective measures, and only with the basics.

Flashlight: 81%

Water (one gallon per person per day): 72%

Food (three-day supply): 71%

First aid kit: 55%

Radio and batteries: 53%



#### 2016 Results:

#### Awareness

- One in eight (12%) do not know if their home is in a flood or evacuation zone. Additionally, of those who said they are not (59%), one third actually are.
  - Population in floodplain: Miami-Dade 48%, Broward 79%, Palm Beach 18%
- One in seven homeowners (16.4%) are without home insurance and of those who have it, 16% would cancel their insurance once their mortgage is paid off.
- 50% do not receive any discounts from their insurance company for mitigation, and 13% are not aware of any discounts being offered.

up from 9% in 2015

up from 13% in 2015



## 2016 Results: Sea Level Rise

Up from 52% in 2015

Up from 35%

Up from 41%

- Half either do not believe sea level rise is happening or they do not know.
- Only 22
   percent think
   they will be
   affected.

How much do you think each of these actors should do to reduce the effects of rising sea level in the future?

	A great deal (leading role)	Some (supporting role)	A little (minor role)	Nothing
Federal Government	52%	27%	6%	16%
State government and agencies	53%	26%	7%	14%
Local governments near the coast	61%	20%	5%	14%
Businesses near the coast	42%	30%	10%	17%
Homeowners near the coast	48%	26%	10%	16%
Real estate developers	48%	25%	7%	20%
General public	42%	30%	11%	17%
Scientists	66%	15%	6%	13%



#### 2016 Results:

# What should governments do reduce the effects of rising sea level in the future ?

Establish a legislative authority to better regulate development.

44%

Implement stricter elevation plans for homes in vulnerable areas.

40%

37%

Create a national fund to help homeowners and local governments take action on sea level rise.

Utilize private land for public good [i.e. natural buffers such as dunes]

25%

Develop a climate adaptation plan.

25%

Utilize land purchase/buyout programs.

17%

The majority of those who believe government should take the leading role are willing to have taxes increased.

- 8% income
- 31% property
- 19% both income and property



### Conclusions

- Coastal development continues despite the risk.
- There has been a decline in risk awareness and preparedness.
- The majority of Florida homeowners are not aware of the effect of sea level rise or they do not believe they will be affected.

