

A satellite image of Hurricane Andrew over Florida. The hurricane is shown as a large, dense, reddish-orange cloud mass with a distinct eye, positioned over the southern part of the state. The Florida coastline is outlined in yellow. In the top right corner, there is a black box with a red border containing yellow text. The text reads: "HURRICANE ANDREW", "24 AUGUST 1992", "5 AM EDT", and "926 MB".

HURRICANE ANDREW
24 AUGUST 1992
5 AM EDT 926 MB

June 27, 2012

Hurricane Andrew: 20 Year Comparisons for South Florida

FIU

Metropolitan
Center

Hurricane Andrew at 20: Risk Then, Risk Now, and

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Not in Andrew but

Managua 1972, Guatemala 1976, Chile 1985, Mexico City 1985, Colombia 1985, El Salvador 1986, Colombia 1994, Dominican Republic 1998, Central America 1998, Belize 2000, El Salvador 2001, and others, so let's face reality

The Basic Equations:

Hazard + Exposure x Vulnerability = Risk

Risk + Time = Emergency/Disaster/Catastrophe

Population and Housing Changes

- As evidenced by the table, both the population and number of housing units increased in each county from 1990 to 2010.
- Miami Beach and the Village of Pinecrest decreased in population during the twenty year period (population decreases of 5.2% and 2.6% for Miami Beach and Pinecrest respectively).
- Homestead's population grew by 125.2% during the twenty years while its housing stock increased by 117.3% during that period.

Population and Housing Units	Population				Housing Units			
	1990	2010	Change	% Change	1990	2010	Change	% Change
Broward County	1,255,488	1,748,066	492,578	39.2%	628,660	810,388	181,728	28.9%
Miami-Dade County	1,937,094	2,496,435	559,341	28.9%	771,288	989,435	218,147	28.3%
Palm Beach County	863,518	1,320,134	456,616	52.9%	461,665	664,594	202,929	44.0%
Homestead	26,866	60,512	33,646	125.2%	10,775	23,419	12,644	117.3%
Miami	358,548	399,457	40,909	11.4%	144,165	183,994	39,829	27.6%
Miami Beach	92,639	87,779	(4,860)	-5.2%	62,413	67,499	5,086	8.1%
Pinecrest*	18,701	18,223	(478)	-2.6%	--	6,619	--	--

Note: The Village of Pinecrest was incorporated on March 12, 1996.

Source: U.S. Census Bureau, State & County QuickFacts, 2012; U.S. Census Bureau, 1990 Census of Population and Housing Florida; CIR Search, 2010

Median Household Income Comparisons

- When adjusting 1990 median household income for 2010 inflation, Miami-Dade and Palm Beach residents fare worse than in 1990.

	1990 Median Household Income (in 2010 inflation-adjusted dollars)	2010 Median Household Income (in 2010 inflation-adjusted dollars)
Broward	\$51,003.75	\$51,694
Miami-Dade	\$44,894.18	\$43,605
Palm Beach	\$54,262.08	\$53,242

Source: US Census, 2010 Decennial Census; Demographia; Bureau of Labor Statistics, Inflation Calculator

Unemployment & Poverty Rates

- Despite the global recession, unemployment rate in April 2012 was lower in all three counties than April 1992. The same month was used for analysis in order to control for seasonal fluctuations in employment.
- Perhaps due to the Great Recession, poverty rates were higher in 2010 than in 1990.

Unemployment Rate	April 1992	April 2012
Broward	8.80%	7.20%
Miami-Dade	9.50%	9.00%
Palm Beach	9.90%	8.50%

Source: Bureau of Labor Statistics, 2012

Poverty Rate	1990	2010
Broward	10.20%	14.70%
Miami-Dade	17.90%	20.30%
Palm Beach	9.30%	14.30%

Source: USDA Economic Research Service, 1990-2010

Population Density and Average Commute Time

Density of Population per Square Mile of Land	1990	2010
Broward	1038.5	1,444.90
Miami-Dade	996.1	1,315.50
Palm Beach	424.5	670.2

Source: US Census, ,2010 Decennial Census; 1990 Decennial Census

Average Commute Time (min)	1990	2010
Broward	23	26.7
Miami-Dade	25	28.9
Palm Beach	20.9	24

Source: US Census, American Community Survey, 2010; Holly, 1992; Palm Beach MPO; Pazdera, 1992

- The three counties were significantly more densely populated in 2010 than in 1990.
- The average commute time to work increased in the twenty years for each county with Miami-Dade reaching a record high of 28.9 minutes.

Language Vulnerability

- The percentage of residents who speak English less than very well increased significantly in each county from 1990 to 2010.
- This should be taken into consideration when creating alerts and communicating to residents.

Percent Speaking English less than Very Well	1990	2010
Broward	6.86%	14.9%
Miami-Dade	31.30%	35.6%
Palm Beach	6.31%	13.2%

Source: US Census Bureau, 2010 Decennial Census; Census Scope, 2012

Hurricane Preparedness: Metropolitan Center Hurricane Mitigation Surveys 2010-2011

- As evidenced by our surveys, household preparation for hurricane season decreased from 2010 to 2011 in each county.
- However, the percentage intending to buy more supplies increased in each county from 2010 to 2011.

Survey Results Preparation by County	Broward		Miami-Dade		Palm Beach	
	2010	2011	2010	2011	2010	2011
Inadequate household preparation	4.1%	17.6%	5.6%	18.0%	1.5%	10.9%
Have hurricane supplies for at least 3 days	81.9%	70.3%	82.2%	68.9%	84.4%	70.7%
Have not prepared any hurricane supplies	12.3%	26.6%	13.3%	21.5%	9.1%	23.1%
Intend to buy more supplies	39.1%	50.0%	49.4%	59.4%	44.3%	55.7%

Source: Metropolitan Center, 2010-2011

Average Price of Lumber

	24-Aug-92	8-Jun-12
Futures Price of Lumber	\$222	\$283.50

Source: CME Group, 2012; Chicago Tribune, Sept. 5, 1992

- The average price of lumber like other commodities is determined by the global trading of the commodity on a futures exchange.
- The average price of lumber trading on the CME futures market increased by 27.7% from August 1992 to June 2012.

Type of Property Insurance by County

- According to the results of our survey, the percentage of households with homeowners insurance decreased dramatically from 2010 to 2011 in all 3 counties while the percentage of households without insurance increased during this time period.

Survey Results Insurance by County	Broward		Miami-Dade		Palm Beach	
	2010	2011	2010	2011	2010	2011
Homeowners Insurance	83.3%	69.8%	67.0%	57.4%	84.6%	76.2%
Renters Insurance	5.6%	5.8%	4.5%	8.5%	4.6%	6.3%
None	11.1%	24.4%	28.5%	34.1%	10.8%	17.5%

Source: Metropolitan Center, 2010-2011

Top 25 Homeowners' Insurance Companies in Florida, Year-End 2011

- As can be gauged in the chart, Citizens has the largest property insurance market share at 23.6%.
- The next largest carrier, Universal Property & Casualty has less than half of that market share (9.5%).

-- Florida Office of Insurance Regulation --

Top 25 -- Policies in Force
Personal & Commercial Residential

Data as of December 31, 2011

Rank	Insurer Name	Policies in Force	
1	CITIZENS PROPERTY INSURANCE CORPORATION	1,443,936	23.6%
2	UNIVERSAL PROPERTY & CASUALTY INSURANCE COMPANY	578,825	9.5%
3	STATE FARM FLORIDA INSURANCE COMPANY	491,623	8.0%
4	ST. JOHNS INSURANCE COMPANY, INC.	174,021	2.8%
5	SECURITY FIRST INSURANCE COMPANY	147,080	2.4%
6	UNITED SERVICES AUTOMOBILE ASSOCIATION	142,733	2.3%
7	CASTLE KEY INDEMNITY COMPANY	131,759	2.2%
8	CASTLE KEY INSURANCE COMPANY	127,540	2.1%
9	HOMEOWNERS CHOICE PROPERTY & CASUALTY INSURANCE COMPANY, INC.	122,737	2.0%
10	ASI ASSURANCE CORP.	113,603	1.9%
11	FLORIDA PENINSULA INSURANCE COMPANY	112,038	1.8%
12	AMERICAN INTEGRITY INSURANCE COMPANY OF FLORIDA	106,052	1.7%
13	TOWER HILL PRIME INSURANCE COMPANY	104,594	1.7%
14	AMERICAN BANKERS INSURANCE COMPANY OF FLORIDA	96,381	1.6%
15	UNITED PROPERTY & CASUALTY INSURANCE COMPANY, INC.	95,036	1.6%
16	FLORIDA FAMILY INSURANCE COMPANY	87,059	1.4%
17	ASI PREFERRED INSURANCE CORP.	78,977	1.3%
18	TOWER HILL SIGNATURE INSURANCE COMPANY	78,816	1.3%
19	UNIVERSAL INSURANCE COMPANY OF NORTH AMERICA	76,887	1.3%
20	SOUTHERN FIDELITY INSURANCE COMPANY	74,556	1.2%
21	AMERICAN STRATEGIC INSURANCE CORP.	71,831	1.2%
22	CYPRESS PROPERTY & CASUALTY INSURANCE COMPANY	67,412	1.1%
23	OLYMPUS INSURANCE COMPANY	64,765	1.1%
24	USAA CASUALTY INSURANCE COMPANY	63,126	1.0%
25	LIBERTY MUTUAL FIRE INSURANCE COMPANY	61,151	1.0%
Total for top 25 companies		4,712,538	77.0%
Grand Total for all companies writing in Florida		6,120,219	100.0%

Quarterly Supplemental Report (QUASRng)
Updated 04/04/2012
Data are reported by each company to the Office and have not been audited.

Insurance Rates by County, 2012

- As can be gauged from the table, Miami-Dade County has the highest insurance rate for new and old construction both with and without wind mitigation.

2012 Average Insurance Rates by County	\$150,000 Value Pre-2001 Construction Rate		\$300,000 Value -- New Construction
	Rate w/no wind mitigation	w/max wind mitigation	
Broward	\$4,900	\$2,240	\$3,935
Miami-Dade	\$5,859	\$2,765	\$4,787
Palm Beach	\$4,524	\$2,011	\$3,815

Source: Florida Office of Insurance Regulation, 2012

» Thank You for your
gracious attention!