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# Social Capital Report

**Building Disaster Resilience and Sustainability in Rural  
Communities in Central Florida**

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# Social Capital Report

## Building Disaster Resilience and Sustainability in Rural Communities in Central Florida

### Executive Summary

In 2005, the Survey Research Laboratory in the Institute of Social and Behavioral Sciences at the University of Central Florida conducted the Central Florida Social Capital Survey. Supervised by Dr. James Wright and Dr. Jana Jasinski, the institute conducted telephone interviews with residents in Brevard, Lake, Polk, Orange, Osceola, Seminole and Volusia Counties. The major finding of their study is that Central Floridians have an “abundance of social capital” (Wright & Jasinski 2005, p. 7).

Social capital measures how connected people are to friends, family, and their communities. Overall, social capital is a measure of the health of a community’s social fabric (Wright & Jasinski 2005). Communities with strong social health may be more resilient in times of strain. Particularly, communities with high social capital may be the most resilient in the aftermath of disasters such as hurricanes or tornados. Previous research has identified women, racial and ethnic minorities, and individuals with low socio-economic status as being the most vulnerable to such disasters (Bolin 2006, Elliot & Pais 2006, Ursano et al. 2008). In the following analyses we test the influence of such characteristics on some social capital components such as social trust, political distrust, and informal social interactions.

### Key Findings

- There are no statistically significant differences between urban and rural residents in terms of social trust, political distrust, or informal social interaction.
- There are no statistically significant differences between counties in terms of social trust, political distrust, or informal social interaction.
- Age, gender, race, ethnicity, and household income are significant predictors of social trust. Specifically, women, older, white respondents with higher incomes have greater social trust.

## **Methods & Data**

The Central Florida Social Capital Survey was a computer-assisted telephone survey conducted by the Survey Research Laboratory in the Institute for Social and Behavioral Sciences at the University of Central Florida. To assure adequate sample sizes, the seven counties were sampled at different rates and the results are therefore weighted to compensate for sampling disproportions. In total, 1,467 resident completed the survey. For the purposes of our analyses, we have dropped all cases which had missing values for any of the dependent or independent variables leaving a total sample of 1,031. All analyses were conducted using Stata 9 SE, a statistical software package.

## **Measures**

In our analyses we test the influence of living in rural community on social trust, political distrust, and informal social interaction controlling for age, gender, race, ethnicity, level of education, and household income. For the purposes of our analyses, Orange County has been defined as an urban community, whereas Brevard, Lake, Osceola, Polk, Seminole, and Volusia County have been defined as rural communities.

When interviewed, respondents were asked to report one of the following racial categories: White, Black, Asian, multi-racial, Native American, or other. Because there were few Native American respondents in the sample, this category was combined with the category of other. In the Ordinary Least Square regression analyses presented later in this report, Black respondents are compared to all other racial categories. In addition to reporting a racial category, respondents were whether or not they are Hispanic. Thus respondents may be both White and Hispanic or any other combination thereof.

*Social Trust.* Respondents were asked a series of seven questions about how much they trust members of their community. First, respondents were asked, “Would you say most people can be trusted?” Responses were coded as follows: people can be trusted (1), you can’t be too careful (2) and depends (3). The second item asked respondents how much they trust people in their neighborhoods. Responses were coded as follows: trust a lot (1), trust some (2), trust a little (3) and not at all (4). This coding scheme was also used for survey questions about trust in coworkers, members of their congregation, people working in local stores, the local news media and local law enforcement. Wright and Jasinski (2005) created a social trust index using z-scores of responses to the aforementioned survey items. Higher scores on the social trust index reflect higher social trust.

*Political Trust.* In addition to social trust items, respondents were also asked a series of three questions about how much they trust National, State and Local government officials. Specifically, respondents were asked, “How much of the time can you trust the National/State/Local government to do what is right?” Responses were coded as follows: just about always (1), most of the time (2), some of the time (3) and hardly ever (4). As with the social trust measures Wright and Jasinski (2005) created a z-score index of political trust. In this case it is an index of political distrust, with high scores reflect higher levels of distrust.

*Informal Social Interactions.* We measure the number of informal social interactions reported by respondents using an index variable created by Wright and Jasinski (2005) in which higher scores reflect more informal social interactions. Types of interactions included in the index are socializing with neighbors, co-workers, and friends outside of formal organizations.

Socio-Demographic characteristics of Central Florida and Sample Characteristics

Table 1 presents the socio-demographic characteristics of Central Florida using population estimates from the 2009 American Community Survey. With the exception of Orange and Osceola Counties, Central Florida tends to have less racial diversity compared to the state and country as a whole. Similarly, with some exceptions, Central Florida counties tend to be older and have lower incomes than the Florida and U.S. averages.

Table 2 presents weighted sample characteristics for the Social Capital Survey. The table presents characteristics by county as well as the sample as a whole. The mean age of the sample is 51.1 years and 49.75% of respondents are women. In terms of race, the sample is predominantly White. Eighty-five percent of respondents are white, 5.77% are African-American, 1.32% are Asian, and 1.99% are Multiracial and 5.74% report being of some other race. 7.79% of respondents are Hispanic.

In terms of income, the majority of respondents report household incomes of less than \$60,000 per year. Roughly fourteen percent of respondents report a household income of less than \$20,000 per year. Roughly 22% of respondents report an annual household income of \$20,001 to \$40,000 or \$40,001 to \$60,000. Sixteen percent of respondents report their annual household income to be \$60,001 to \$80,000. Roughly 10% of respondents report annual household incomes of \$80,001 to \$100,000 or \$100,001 to \$150,000. About 5% of respondents report annual household incomes greater than \$150,000 per year.

In terms of education, respondents appear to be highly educated. Less than four percent of respondents reported having less than a high school education and 23.4% of respondents report having a high school diploma or GED. Nearly 40% of respondents have had at least some college education. About twenty percent of respondents hold a Bachelor's degree and

about 10% have a graduate or professional degree. Just fewer than three percent of respondents reported having some graduate education but no graduate degree.

Individual counties respondents appear to be more similar to each other and the region as a whole than dissimilar. In terms of mean age all counties are within a range for upper 40's to mid 50's. Gender proportions vary only slightly between the sample counties, with women making up between 47% and 52% of respondents in each county. Respondents in each county are overwhelmingly White. Osceola County however has the largest Hispanic population of all counties. Additionally, there appear to be only slight variations in household income and level of education across counties.

In addition to these socio demographic indicators, we included property and violent crime reports for 2005 and 2009 for the selected counties in our study. (See appendix A). Previous research suggests an association between strong social capital and lower crime reports (Blaine and Pettinicchio, 2011). The tables indicate higher reported crime rates in more populated counties (e.g. Orange, Marion and Brevard) and lower reports in less populated counties (e.g. Citrus, Levy, Sumter). It is important to consider the influence of crime on social capital, as it might influence a community's sense of trust and informal social interactions. Unfortunately, the social capital data did not measure crime reports and thus, we are unable to statistically test the relation between crime and social capital.

### **Findings**

Table 3 presents the results of OLS regression analyses for each of the dependent variables. In terms of political distrust, the model was not statistically significant, thus we will not discuss the model here, the results however are included in the table.

The first model measures the influence of the independent variables on the social trust index variable. Overall the model is statistically significant and explains roughly 14% of the variance ( $R^2=0.139$ ,  $p<0.001$ ). Several independent variables were significant in this model including age, gender, race and ethnicity, and income. Specifically, older respondents have greater social trust than younger respondents ( $B=0.01$ ,  $p<0.001$ ). Additionally, women appear to have greater social trust than men ( $B=.16$ ,  $p<.001$ ). African American respondents have lower social trust than White, Asian, multi-racial and other races ( $B= -0.38$ ,  $p<0.001$ ). Similarly, Hispanic respondents have lower social trust than non-Hispanics ( $B= -0.23$ ,  $p<0.01$ ). In terms of income, respondents at the lowest end of the income distribution (HH income less than \$20,000 per year) have lower social trust than those at the highest end of the income distribution (more than \$150,000 per year) ( $B= -0.28$ ,  $p<0.01$ ). Respondents living in rural counties were not statistically significant from those living in Orange County in terms of social trust. Additionally, level of education is not a significant predictor of social trust in this model.

The third model measures the influence of the independent variables on the informal social interaction index variable. Overall the model is statistically significant and explains roughly 15% of the variation on the dependent variable ( $R^2=0.153$ ,  $p<0.001$ ). In model three, age, race, and income are significant predictors of informal social interaction. Specifically, older respondents have fewer informal social interactions ( $B= -0.01$ ,  $p<0.001$ ). Similarly, African American respondents have fewer informal social interactions ( $B= -0.18$ ,  $p<0.05$ ). Finally, respondents with household incomes of less than \$20,000 per year have fewer informal social interactions than those with household incomes greater than \$150,000 per year. Rural

residents are not statistically different from urban residents in this model. Similarly, gender, Hispanic ethnicity, and level of education are not significant predictors of informal social interactions.

### **Conclusion**

We analyzed different measures of social capital utilizing data from the 2005 Central Florida Social Capital survey. We found some differences by race, gender, age and income levels, but overall most counties (both rural and urban) reported similar high levels of social capital. We must note that the data was not collected during a non-emergency context and thus we are unable to assess if these levels of social capital will remain the same during an emergency event. In addition, the social and political context in the U.S. has dramatically changed since 2005, thus it is not unreasonable to believe a substantial difference in social capital levels. Nonetheless, the results provide a snap shoot of Central Florida's social capital levels and are a resource for emergency management personnel on the demographic and social context of the Central Florida region.



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### Advisory Board Members

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# Results Tables and Appendix A

**Building Disaster Resilience and Sustainability in Rural Communities in Central Florida**

**Table 1. Selected 11 Central Florida Counties Population 2009 Population Estimates**

	Total	65 and older	Female	White Non-Hispanic	Hispanic	Black	Median HH Income (2007)
Brevard	536,357	20.90	50.90	78.80	7.30	9.70	\$50,000
Citrus	140,357	30.90	52.0	89.80	4.20	3.20	\$37,000
Flagler	91,622	24.70	51.40	77.70	8.20	10.30	\$46,000
Lake	312,119	30.20	51.80	77.40	10.60	8.90	\$47,000
Levy	39,147	18.60	51.50	81.60	6.10	10.30	\$34,000
Marion	328,547	24.50	51.40	75.80	9.60	11.50	\$39,000
Orange	1,086,480	9.60	50.30	48.90	25.70	19.10	\$51,000
Osceola	270,618	12.0	50.10	43.40	41.80	9.30	\$47,000
Seminole	413,204	11.70	50.70	67.40	16.20	10.90	\$56,000
Sumter	77,681	20.80	46.0	78.40	8.10	11.50	\$43,000
Volusia	495,890	21.0	51.00	76.10	10.0	10.80	\$42,000
Florida	18,537,969	17.40	50.90	60.30	21.00	15.90	\$48,000
U.S.	307,006,550	12.60	50.70	65.90	15.10	12.10	\$52,000

**Table 2. Sample Characteristics (n=1,031)**

	All Counties	Brevard	Lake	Orange	Osceola	Polk	Seminole	Volusia
Mean Age	51.1	51.13	55.72	47.56	45.62	55.15	48.8	55.71
Female	49.75	48.15	55.61	47.62	51.92	50.34	52.87	48.54
Race & Ethnicity								
White	85.17	88.61	94.38	78.56	66.06	92.46	86.07	89.47
Black	5.77	3.42	2.32	1	7.73	5.03	3.13	3.58
Asian	1.32	1.4	0	1.7	0	0	4.18	0.63
Other	5.74	2.8	2.32	7.37	23.1	2.51	4.59	4.63
Multiracial	1.99	3.76	0.98	2.38	3.1	0	2.02	1.69
Hispanic	7.79	5.44	2.32	10.67	26.56	3.22	6.61	5.06
Level of Education								
Less than High School	3.98	3.09	2.69	3.97	3.1	5.27	2.58	3.96
High School Diploma	23.44	25.87	29.8	21.57	21.73	29.27	13.23	31.68
Some College	38.82	40.68	38.82	38.24	39.64	37.25	39.13	18.81
Bachelor's Degree	20.13	15.88	16.85	24.42	21.37	14.94	2.64	15.84
Some Grad School	2.94	2.81	2.93	1.93	0.87	3.16	5.5	2.48
Grad./Prof. Degree	10.69	11.67	8.91	9.87	13.28	10.11	13.17	8.91
HH Income in Dollars								
Less than 20,000	14.13	10.38	14.53	12.27	12.57	16.63	10.1	7.64
20-40,000	21.59	21.83	27.21	16.8	20.87	30.95	18.03	30.56
40-60,000	22.51	19.3	28.32	23.26	26.36	18.95	17.41	18.06
60-80,000	16.64	21.77	13.32	19.03	14.51	14.52	18.94	14.58
80-100,000	9.12	10.16	6.59	10.46	13.28	6.94	10.8	7.64
100-150,000	19.64	12.35	8.68	11.93	10.18	7.36	15.39	6.94
More than 150,000	5.37	4.21	1.35	6.24	2.24	4.64	9.33	2.78

(N=1,031) All values reported are percentages except for the mean age

**Table 3. Dependent Variable Statistics by County (Weighted) (n=1,031)**

	All Counties	Brevard	Lake	Orange	Osceola	Polk	Seminole	Volusia
<b>Social Trust</b>								
Minimum	-2.64	-1.85	-2.64	-2.6	-2.45	-1.63	-2.57	-2.64
Maximum	0.97	0.9	0.9	0.97	0.87	0.99	0.9	0.9
Mean	0.03	0.08	0.2	-0.05	-0.21	0.07	0.07	0.09
SE	0.02	0.05	0.08	0.05	0.08	0.04	0.05	0.06
<b>Political Distrust</b>								
Minimum	-2.13	-2.13	-2.13	-2.13	-1.68	-2.13	-2.13	-2.13
Maximum	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72
Mean	0	-0.04	0.05	-0.03	0.1	0.05	-0.18	0.13
SE	0.03	0.07	0.09	0.06	0.08	0.07	0.07	0.08
<b>Informal Social Interaction</b>								
Minimum	-1.39	-1.37	-1.39	-1.39	-1.37	-1.29	-1.37	-1.37
Maximum	1.72	1.52	1.61	1.67	1.06	1.52	1.72	1.44
Mean	0.03	0	0.01	0.03	0	0.07	0.1	0
SE	0.02	0.05	0.08	0.04	0.06	0.05	0.05	0.05

(N=1,031)

There are no significant differences between counties in terms of social trust, political distrust, or informal social interaction

**Table 4. OLS Regression Analyses for Social Trust, Political Distrust, and Informal Social Interaction**

	Social Trust			Political Distrust		Informal Interactions		
	B	SE		B	SE	B	SE	
Rural Residents	0.03	0.05		0.04	0.07	0.05	0.04	
Age	0.01	0.00	***	0.00	0.00	-0.01	0.00	***
Female	0.16	0.04	***	0.02	0.06	0.04	0.03	
Black	-0.37	0.10	***	0.14	0.13	-0.18	0.08	*
Hispanic	-0.23	0.09	**	-0.02	0.12	0.02	0.07	
Level of Education								
Less than High School	-0.06	0.13		-0.10	0.15	-0.17	0.10	
High School Diploma (Ref.)								
Some College	0.09	0.06		-0.07	0.08	0.06	0.05	
Bachelors Degree	0.10	0.07		-0.11	0.09	0.07	0.06	
Some Grad School	0.06	0.10		-0.15	0.17	0.10	0.10	
Grad./Prof. Degree	0.12	0.08		0.11	0.11	-0.09	0.06	
HH Income in Dollars								
Less than 20,000	-0.29	0.12	**	0.09	0.15	-0.27	0.09	**
20-40,000	-0.14	0.10		0.08	0.14	-0.05	0.08	
40-60,000	-0.13	0.10		0.08	0.13	-0.09	0.08	
60-80,000	-0.14	0.10		0.04	0.14	-0.11	0.08	
80-100,000	-0.07	0.10		-0.11	0.15	0.02	0.09	
100-150,000	-0.02	0.11		-0.16	0.14	0.00	0.09	
More than 150,000 (Ref.)								
Constant	-0.50	0.12	***	0.00	0.17	0.53	0.10	***
R <sup>2</sup>	0.139***			0.015		0.153***		

df= 1,010

\*p&lt;.05, \*\*p&lt;.01, \*\*\*p&lt;.001

## Appendix A

**Table 1. FBI Uniform crime reports information on 11 Central Florida counties (2005).** [The data shown in this table do not reflect county totals but are the number of offenses reported by the sheriff's office or county police department.]

Type of Crime	U.S	Florida	Brevard	Citrus	Flagler	Lake	Levy	Marion	Orange	Osceola	Seminole	Sumter	Volusia
Violent Crime*	1,390,695	125,957	1,064	325	197	905	156	1,468	6,351	677	623	181	935
Property Crime**	10,166,159	712,998	4,768	2162	1,381	3,706	729	4,864	28,749	5,524	3,815	734	4,903

\* Violent crimes include: murder and nonnegligent manslaughter, forcible rape, robbery, and aggravated assault.

\*\*Property crimes include: burglary, larceny-theft, motor vehicle theft, and arson

Sources: [http://www2.fbi.gov/ucr/05cius/data/table\\_01.html](http://www2.fbi.gov/ucr/05cius/data/table_01.html),  
[http://www2.fbi.gov/ucr/05cius/offenses/standard\\_links/county\\_agency.html](http://www2.fbi.gov/ucr/05cius/offenses/standard_links/county_agency.html),  
[http://www2.fbi.gov/ucr/05cius/data/table\\_05.html](http://www2.fbi.gov/ucr/05cius/data/table_05.html)



**Table 2. FBI Uniform crime reports information on 11 Central Florida counties (2009).** [The data shown in this table do not reflect county totals but are the number of offenses reported by the sheriff's office or county police department.]

Type of Crime	U.S	Florida	Brevard	Citrus	Flagler	Lake	Levy	Marion	Orange	Osceola	Seminole	Sumter	Volusia
Violent Crime*	1,318,398	113,541	1,044	497	216	711	199	1,836	5,885	954	725	160	848
Property Crime**	9,320,971	712,010	5,644	2,831	2,028	3,351	968	4,937	3,0070	6,195	3,468	761	5,813

\* Violent crimes include: murder and nonnegligent manslaughter, forcible rape, robbery, and aggravated assault.

\*\*Property crimes include: burglary, larceny-theft, motor vehicle theft, and arson

Sources: [http://www2.fbi.gov/ucr/cius2009/data/table\\_01.html](http://www2.fbi.gov/ucr/cius2009/data/table_01.html), [http://www2.fbi.gov/ucr/cius2009/data/table\\_05.html](http://www2.fbi.gov/ucr/cius2009/data/table_05.html), [http://www2.fbi.gov/ucr/cius2009/offenses/standard\\_links/county\\_agency.html](http://www2.fbi.gov/ucr/cius2009/offenses/standard_links/county_agency.html)