Casselberry Community Report

Central Florida Florida Disaster Resilience Initiative Phase 1 Stage 2 2019



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Executive Summary

The Florida Disaster Resilience Initiative consists of 5 phases:

- 1: Elevating the Voices of Vulnerable Communities
- 2: Collaborative Systems for Preparedness & Response
- 3: Resolving Mission Critical Gaps
- 4: Establishing Communities of Opportunity with Social Equity
- **5**: Building a Blue-Green Political Economy for Regeneration

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This report details work undertaken in Central Florida in 2019 as part of Phase I. This phase included training for Community Captains, community forums, and surveys conducted within each participating community. This report, and the accompanying online community presence in the Central Florida Resilience System comprise the documentation of these efforts.

Information included in this Community Report was gathered using the following methods:

- Formal and informal interviews with Organization Leads located in or serving the community;
- Community Forums where:
 - o Gaps and proposed solutions were discussed and recorded, and
 - Assets, hot spots (areas of concerns), and proposed resilience hubs were discussed and mapped.
- 27 Household Mission Critical Function Surveys: These surveys are designed to determine if the community is tending toward resilience or vulnerability. Survey respondents rated twenty six critical functions on the following scale:



 26 Household Housing and Emergency Services Surveys: Residents described their residence type, any damage to their home as a result of Hurricane Irma, the time taken to repair the damage, and funding sources for the repairs. This survey also documented where residents received information during and after Hurricane Irma, and their level of knowledge about disaster preparedness.



Household Skills and Equipment Inventory Surveys. These list residents who
have volunteered their services, skills, or property to be used in the community to
assist their neighbors in the event of a disaster, together with their contact
information. The information is confidential, and managed by the Community
Captain.

Community Leadership

Rafiq Rao Ruiz served as Community Captain for Casselberry, as well as serving as the Community Captain Lead responsible for supervising Community Captains in two additional communities. As Community Captain, Rafiq was responsible for holding and documenting a Community Forum; and for the completion and submission of community surveys.



Findings

Although there were varying vulnerability scores for the different Mission Critical Functions, residents scored all functions as Resilient and Sustainable. The 27 Household *Mission Critical Function Surveys* identified these top priority gaps in Casselberry and vicinity:

- Renewable vs Grid Energy
- Social Services
- Energy-Temperature Management
- Housing Safety
- Energy-Lighting and Cooking

Few respondents reported damage from Hurricane Irma. The top 3 types of damage reported by the 26 respondents to the Household *Housing and Emergency Services Surveys* were:

- Water damage (7.7%)
- Tree damage (7.7%)
- Electrical outage (7.7%)

Casselberry had 3 Brownfield sites, 8 Active Petroleum Cleanup Sites, 2 Pending Petroleum Cleanup Sites, 11 Active Other Waste Cleanup Sites, and four Pending Other Waste Clean-up Sites reported by the Florida Department of Environmental Protection In May of 2019.

Approximately two thirds of survey respondents reported that they had enough information to determine if they would shelter in place or evacuate, and almost 90 percent reported that they were able to get the supplies they needed to shelter in place.

However, there is a need for more preparedness education. Only 2.2% of survey respondents knew how to comply with a boil water order, and only 3.1% knew if their emergency shelter allowed pets, although slightly over half of respondents knew their evacuation zone (57.7%); and where their nearest approved emergency shelter was (53.8%). Less than half (42.3%) of respondents knew what to take to an emergency shelter.



Community Description

Location

The City of Casselberry is located in the Orlando Metropolitan Area in Seminole County, Florida. It includes Zip Codes 32701, 32707, 32708, 32730, 32750, 32751, and 32792. It has a population of 26,649 residents in 10,429 households. Census Tracts in Casselberry include: 022101, 022106, 021404 (Casselberry & parts of Winter Springs), 021802 (Casselberry, Fern Park & part of Altamonte Springs), 022001, 022002, 022004 (Casselberry, Fern Park & Winter Park), 022005 (Casselberry, Fern Park & Winter Springs), 022104, 022201, 022206 (Casselberry & Winter Springs), and 022208 (Casselberry & Goldenrod). The Census Tracts from which surveys were collected include: 022101, 021404, 022104, and 02206. Surveys were collected from neighboring tracts as well.

Wekiwa Longwood Springs Winter Springs Sanlando Casselberry Cranes Roost Park 436 Altamonte Maitland 424 Eatonville Goldenrod Aloma Winter Park (441) Fairview Orlando Science Center 😑 Harry P Leu Gardens Lake Eola Park **Q** (526) Azalea Park Orlando

Map 1. The City of Casselberry is in Seminole County, North of Orlando



Table 1. Geography of Census Block Groups Surveyed

*Surveyed Census Blocks within Casselberry appear in blue below

Surveyed Cerisus I	Blocks within Casselberry appear in blue below
121170203021	Population 2,141 ➤ Country Club Dr. and W 20th St to the North ➤ W 25th St to the South ➤ S French Ave to the East (Rt 17) ➤ CSX Transportation Rail line to the West
121170209022	Population 1,107 ➤ W 25th St, 27th St, and Wylly Ave to the North ➤ E Airport Blvd to the South ➤ Depot Ave to the East ➤ S Orlando Ave (Rt 17) to the West
12117 021401 2	Population 1,625 ➤ State Rd 419 to the North ➤ State Rd 434 to the South ➤ Shelly Ave to the East ➤ MacGregor Rd to the West
Winter Springs 12117 021403 3	Population 2,077 ➤ Trotwood Blvd to the North ➤ E Lake Dr to the South ➤ Tuskawilla Rd to the East ➤ Bird Rd and Dunmafr Cir, Dunmar Way, and Night Owl Ln to the West
121170214042	Population 1,235 ➤ E State Rd 434 to the North ➤ Wintergreen to the South ➤ Hayes Rd to the East ➤ S Moss Rd to the West
121170221012	Population 2,811 ➤ W State Rd 434, Bee Creek Ln, and 7th St to the North ➤ Laura St and Seminola Blvd to the South ➤ Timberlane Trail and Murphy Rd to the East ➤ US-17-19 and Sundown Trail to the West



121170221041	Population 1,227 ➤ Seminola Blvd to the North ➤ South Winter Park Dr to the South ➤ South Winter Park Dr to the East ➤ Ivey Rd, Triplet Lake, and Casselberry Golf Club to the West
121170221042	Population 1,179 ➤ Seminola Blvd to the North ➤ Guinevere Dr to the South ➤ Sterling Oaks Dr to the East ➤ S Winter Park Dr to the West
121170221044	Population 1,825 ➤ Guinevere Dr to the North ➤ Red Bug Lake Dr to the South ➤ Eagle Circle and Sandpiper Dr to the East ➤ Benedict Way and Brittany Circle to the West
121170221051	Population 2,007 ➤ Eagle Cir to the North ➤ Eagle Cir to the South ➤ Eagle Cir to the East ➤ Eagle Cir to theWest
121170221052	Population 1,708 ➤ E Lake Dr to the North ➤ Eagle Cir to the South ➤ E Lake Dr to the East ➤ Sterling Oaks Dr and Sandpiper Dr to the West
121170222064	Population 1,905 ➤ Howell Creek to the North ➤ Howell Branch Rd to the South ➤ Lake Ann Ln and Bells Lage Cir to the East ➤ Semoran Blvd (436) to the West



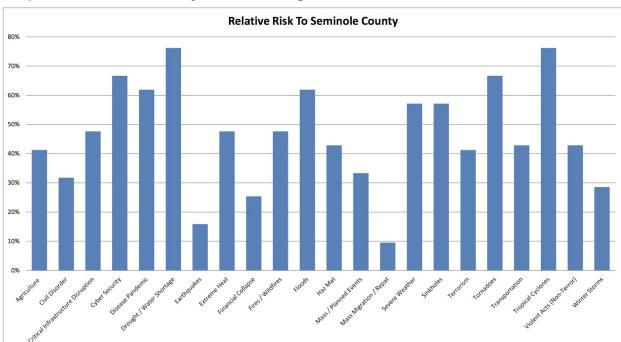
School and Legislative Districts

Casselberry is served by the Seminole County Unified School District, Congressional District FL-7, State Senate District FL-9, and State House Districts FL-28, FL-29 and FL-30.



Seminole County Local Mitigation Strategy 2015-2020 (LMS) Identified Risks

The Local Mitigation Strategy identifies Drought/Water Shortage (76%), Tropical Cyclones (76%), Cyber Security/Cyber Attack (67%), Tornadoes (67%), Disease and Pandemic Outbreak (62%), and Flooding (62%) as the risk hazards with the highest risk.



Graph 1. Seminole County Identified High Risk Hazards¹

¹ Seminole County Local Mitigation Strategy 2015-2020 https://www.seminolecountyfl.gov/core/fileparse.php/3333/urlt/LMS-2015-2020.pdf



Drought is the assigned the highest risk in the LMS:

One of the major bodies of water providing a water source for much of our crops and agriculture territory in Seminole County is the St. Johns River. During long periods of drought, a disruption in the watering cycle can have potentially damaging effects including substantial crop loss in the northwestern portion of the County. In addition to the crop loss and live stock reductions, drought in Seminole County is associated with increase in wildfire threat which in turn, places both human and wildlife populations at a higher risk.

In partnership with County and municipal staff and the St. Johns River Water Management District, a contingency plan is in place to restrict water use across the county in an effort assist with water conservation efforts during periods of drought.

Some direct impacts related to drought include reduced crop production, increased fire hazard, reduced water levels at major lakes and rivers, damage to fish habitat, and income loss for the agriculture industry. These impacts have been recorded as a result of historic events including the extreme drought conditions of 2010-2012.

The Office of Emergency Management regularly monitors the National Oceanographic and Atmospheric Administration, National Weather Service, United States Geological Survey, and the Southeast River Forecast Center for water, river, and lake levels. Activation of public information messages may be necessary if water levels become dangerously low. Seminole County and all of its municipalities may be affected by drought conditions. Structures are not vulnerable to the consequences of drought; therefore do not have a potential dollar loss. Consequences associated with drought can be public health, agricultural loss, economic recovery assistance programs, mass care, and notification and warning.

The Local Mitigation Strategy recognizes that with a changing climate, there is the potential for an increasing risk of environmental impacts from



drought and water shortages and that future mitigation and adaptation strategies related to this hazard should be considered.²

Flood

Casselberry participates in the National Flood Insurance Program (NFIP). There are 345 NFIP policies in force in Casselberry, with \$74,807,800 of Insurance In-Force and \$180,016 of Written Premiums In-Force as of 8/31/2014.

Casselberry doesn't participate in the voluntary Community Rating System program, which provides reduced insurance premium discount incentives to participating municipalities and counties based on floodplain management requirements.

Heat

The Seminole County Local Mitigation Strategy (LMS) also addresses Heat and Flood Hazards. With respect to heat, the LMS states:

With its location in Central Florida, Seminole County is susceptible to periods of extreme heat. The greatest vulnerability to extreme heat events is the public health of the citizens of Seminole County. While anyone can be affected by extreme heat, the most vulnerable are the elderly, lower income, and homeless populations. Seminole County currently implements a cooling station plan in the event of an extreme heat event. One of the great challenges to implementing this plan would be notification and transportation of individuals to cooling facilities that do not have means of transportation. In a recent study conducted by the Florida Council on Homelessness, Seminole county recorded 842 citizens who were either homeless or staying in emergency housing. Seminole County School Board notes almost 2,000 students are homeless and 45% are now on free-reduced lunch. Based on current census data 13.8% of Seminole County's population is 65 years old or older. In addition to physical health risks (mainly heat stroke), extreme heat can also cause physiological strain. Higher electrical demand during extreme heat often

https://www.seminolecountyfl.gov/core/fileparse.php/3333/urlt/LMS-2015-2020.pdf



These materials were developed by Health Initiatives Foundation, Inc. in 2019. Surveys were conducted under the auspices of Health Initiatives Foundation, Inc.'s Florida Disaster Resilience Initiative, with funding from The Miami Foundation.

² Seminole County Local Mitigation Strategy 2015-2020, p. 17

causes power outages that further exacerbate the impact of the event. Extended periods of high heat can also have a negative impact wildlife and fishery habitats.

The Natural Resources Defense Council projects an average of 13.8 summer days of extreme heat for Seminole County. The LMS also includes a history of Seminole County's hottest days, and this acknowledgement that the climate is changing, and we must develop mitigation and adaptation strategies:

Consequences associated with extreme heat are notification and warning, economic disruption, mass care, economic recovery assistance program, and activation of the cooling plan.

The Local Mitigation Strategy recognizes that with a changing climate, there is the potential for an increasing risk of environmental impacts from extreme heat and that future mitigation and adaptation strategies related to this hazard should be considered.³

https://www.seminolecountyfl.gov/core/fileparse.php/3333/urlt/LMS-2015-2020.pdf



³ Seminole County Local Mitigation Strategy 2015-2020, p. 20

Casselberry and Vicinity Demographics

The EPA EJSCREEN tool uses Census and American Community Survey data. The minority population in the Census Block Groups surveyed ranges from 21% to 63%. The low income population in each Census Block Group ranged from 7% to 57%. The percentage of linguistically isolated residents is very low, with the exception of Census Block Group 121170209022, with 9% of the Population Linguistically Isolated. Census Block Groups 121170209022 and 121170214012 and 121170214042 have high concentrations of residents over age 64. The population of residents under 5 years old is concentrated in Census Block Groups 121170221012, 121170221041 and 121170222064.

Table 2. Demographics in Census Block Groups Surveyed (Census Block Groups located in Casselberry are highlighted in blue in the table below.)

Census Block Group	Minority Population	Low Income Population	Linguistically Isolated Population	Population with Less Than High School Education	Population under Age 5	Population over Age 64
12117 020302 1	63%	50%	8%	19%	6%	9%
12117 020902 2	47%	47%	9%	18%	0%	25%
12117 021401 2	52%	49%	6%	6%	2%	21%
12117 021403 3	25%	21%	0%	0%	6%	13%
12117 021404 2	22%	57%	0%	15%	5%	40%
12117 022101 2	55%	48%	6%	5%	10%	12%
12117 022104 1	25%	52%	0%	6%	10%	19%
12117 022104 2	21%	7%	4%	0%	0%	9%
12117 022104 4	28%	33%	2%	5%	2%	16%
12117 022105 1	27%	31%	0%	3%	6%	19%

⁴ EPA EJSCREEN: Environmental Justice Screening and Mapping Tool https://www.epa.gov/ejscreen



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12117 022105 2	35%	13%	1%	2%	4%	12%
12117 022206 4	46%	45%	1%	4%	11%	7%



Environmental Health Concerns

The following table summarizes environmental indicators in Casselberry Census Block Groups surveyed. In addition there are many homes constructed prior to the 1960's, which appear in the table below as the lead paint indicator. Note that in addition to possibly having lead paint, homes of this age are particularly vulnerable to wind damage, as they were constructed prior to changes in Florida's building code that were designed to make homes better able to withstand hurricanes. Census Block Groups 121170203021 and 121170209022 are in the 60th and 64th percentile in the US respectively for Lead Paint. Traffic Proximity and Volume are in the 93rd percentile in the US in Census Block Group 121170222064. Proximity to a Superfund Site, and to sites required to submit Risk Management Plans is elevated in all Census Groups surveyed.⁵

Table 3. Percentile in the US for Environmental Indicators (Census Block Groups located in Casselberry are highlighted in blue in the table below.)

				DOIC DOIGW	,			
Census Block Group	NATA Diesel PM (ug/m3)*	NATA Air Toxics Cancer Risk (risk per MM)*	NATA Respirator y Hazard Index*	Traffic Proximity and Volume (daily traffic count/dista nce to road)	Lead Paint Indicator (% pre-1960s housing)	Superfund Proximity (site count/km distance)	RMP Proximity (facility count/km distance)	Hazardous Waste Proximity (facility count/km distance)
	60-70th	50-60th	60-70th	68th	60th	93rd	84th	55th
	Percentile	Percentile in	Percentile	Percentile in	Percentile in	Percentile in	Percentile in	Percentile in
12117 020302 1	in US	US	in US	US	US	US	US	US
	60-70th	50-60th	60-70th	51st	64th	89th	79th	37th
	Percentile	Percentile in	Percentile	Percentile in	Percentile in	Percentile in	Percentile in	Percentile in
12117 020902 2	in US	US	in US	US	US	US	US	US
	60-70th	50-60th	60-70th	76th	56th	95th	97th	51st
	Percentile	Percentile in	Percentile	Percentile in	Percentile in	Percentile in	Percentile in	Percentile in
12117 021401 2	in US	US	in US	US	US	US	US	US
	50-60th	<50th	50-60th	16th	10th	82nd	93rd	32nd
	Percentile	Percentile in	Percentile	Percentile in	Percentile in	Percentile in	Percentile in	Percentile in
12117 021403 3	in US	US	in US	US	US	US	US	US
	50-60th	50-60th	60-70th	74th	10th	92nd	97th	44th
	Percentile	Percentile in	Percentile	Percentile in	Percentile in	Percentile in	Percentile in	Percentile in
12117 021404 2	in US	US	in US	US	US	US	US	US
	60-70th	60-70th	70-80th	75th	32nd	91st	99th	44th
	Percentile	Percentile in	Percentile	Percentile in	Percentile in	Percentile in	Percentile in	Percentile in
12117 022101 2	in US	US	in US	US	US	US	US	US

⁵ EPA EJSCREEN: Environmental Justice Screening and Mapping Tool https://www.epa.gov/ejscreen



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12117 022104 1	60-70th	60-70th	60-70th	36th	10th	86th	98th	44th
	Percentile	Percentile in	Percentile	Percentile in				
	in US	US	in US	US	US	US	US	US
12117 022104 2	60-70th	60-70th	60-70th	29th	42nd	85th	97th	29th
	Percentile	Percentile in	Percentile	Percentile in				
	in US	US	in US	US	US	US	US	US
12117 022104 4	60-70th	60-70th	60-70th	38th	10th	83rd	97th	29th
	Percentile	Percentile in	Percentile	Percentile in				
	in US	US	in US	US	US	US	US	US
12117 022105 1	60-70th	50-60th	60-70th	24th	10th	82nd	95th	21st
	Percentile	Percentile in	Percentile	Percentile in				
	in US	US	in US	US	US	US	US	US
12117 022105 1 12117 022105 2	Percentile	Percentile in	Percentile in US 60-70th	Percentile in				

^{*}The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.



Contaminated Sites

Brownfield Sites Casselberry has 3 Brownfield Areas and 3 Brownfield Cleanup Sites.⁶

Table 4. Brownfield Areas and Brownfield Sites in Casselberry and Vicinity

Area ID	Area Name	Site ID	Site Name
BF590810000	Casselberry City Properties / S.E.E.D.		
BF590802000	Casselberry CRA /S.E.E.D	BF590802002	Casselberry Former Shell Station Site
		BF590802001	Casselberry Police Department Site
BF590701000	Former Microvia Brownfield Area	BF590701001	Former Microvia Facility

Contaminated Sites

In addition to the Brownfields, Casselberry has 8 Active Petroleum Cleanup Sites, 2 Pending Petroleum Cleanup Sites, 11 Active Other Waste Cleanup Sites, and four Pending Other Waste Clean-up Sites.(5/2019)⁷

Active Petroleum Cleanup Sites include:

- 7-ELEVEN FOOD STORE #10056 at 1145 HWY 436/SEMORAN BLVD, Facility Id: 8516550
 Watch This Site
 Documents
- > 7-ELEVEN FOOD STORE #32865 at 5811 HWY 17-92 S, 5811 HWY 17-92 S CASSELBERRY, FL 32807; Facility Id: 8516780 Watch This Site Documents

http://prodenv.dep.state.fl.us/DepClnup/welcome.do



⁶ Florida Department of Environmental Protection Brownfields Area and Site Documentation https://floridadep.gov/waste/waste-cleanup/content/florida-brownfields-area-and-site-documentation

⁷ Florida Department of Environmental Protection Contamination Locator Map

- > AUTO SERVICE STATION at 17-92 & MELODY LANE; CASSELBERRY, FL 32707, Facility Id: 8516552 Watch This Site Documents
- CASSELBERRY CITY-SEWER TREAT PLT at 700 CROSS ST, CASSELBERRY, FL 32707, Facility Id: 8631355 Watch This Site Documents
- > CHEVRON-CASSELBERRY #357 at 2995 S HWY 17-92, CASSELBERRY, FL 32707, Facility Id: 8516544 Watch This Site Documents
- CUMBERLAND FARMS #0980 at 100 N WINTER PARK DR, CASSELBERRY, FL 32707, Facility Id: 8520658
 Watch This Site
 Documents
- ➤ **GENERAL ROOFING IND OF ORLANDO INC at** 1251 SEMINOLA BLVD, CASSELBERRY, FL 32707, Facility Id: 8622634 Watch This Site Documents
- ➤ MASCHMEYER CONCRETE-CASSELBERRY at 1601 CR 427, CASSELBERRY, FL 32707, Facility Id: 8622553 Watch This Site Documents

Pending Petroleum Cleanup Sites include:

- ➤ MAPCO EXPRESS #8325-FORMER at 5201 S US 17TH & 92, CASSELBERRY, FL 32707, Facility Id: 8516618 Watch This Site Documents
- > SHELL-FIRST COAST ENERGY at 4355 S US 17-92, CASSELBERRY, FL 32707, Facility Id: 8516519 Watch This Site Documents

Active Other Waste Cleanup Sites include:

- > CASSELBERRY POLICE DEPARTMENT SITE at 4195 SOUTH U.S. HIGHWAY 17-92, Facility ID = COM 318719 Watch This Site Documents
- ➤ FOMER SHELL STATION AKA CASSELBERRY CITY CENTER at 4355 US HWY 17-92, Facility ID = COM_318134 Watch This Site Documents
- MICROVIA (FORMERLY CONTINENTAL CIRCUITS INC) (BF) at 1150 BELLE AVENUE, Facility Id: COM 24201Watch This Site Documents
- ➤ **436 Cleaners at** 1034 State Road 436, Facility Id: ERIC_5458 Watch This Site Documents
- ➤ Bee Clean Cleaners at 1271 State Road 436, Casselberry, FL 32707 Facility Id: ERIC_5461 Watch This Site Documents
- First Class Dry Cleaner at 591 State Road 436, Casselberry, FL 32707 Facility Id: ERIC 5489 Watch This Site Documents
- Park Avenue Cleaners II at 905 State Road 436, Casselberry, FL 32707
 Facility Id: ERIC 5502
 Watch This Site
 Documents



- > SIEMENS WESTINGHOUSE POWER at 261 LYMAN RD, CASSELBERRY, FL 32707, Facility Id: COM_275452 Watch This Site Documents
- Swan Cleaners at 918 State Road 436, Casselberry, FL 32707, Facility Id: ERIC_5492
 Watch This Site
 Documents
- ➤ **Technitronics at** 1041 & 1043 Seminola Blvd, Cassleberry, FL 32707 Facility Id: ERIC_3974, Watch This Site Documents
- ➤ **Tiffany Cleaners at** 670 State Road 436, Casselberry, FL 32707 Facility Id: ERIC_5486, Watch This Site Documents

Pending Other Cleanup Sites include:

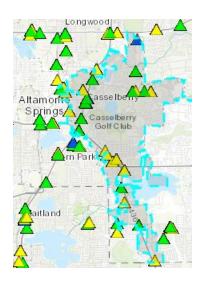
- ➤ EMERSON ELECTRIC CASSELBERRY (FORMER) at 95 PLUMOSA AVE, CASSELBERRY, FL, Facility Id: COM 335563Watch This Site Documents
- ➤ LAWTON PRINTERS AKA HAROLD DECKER DECKITRONICS at 185
 ANCHOR RD, CASSELBERRY, FL 32707, Facility Id: COM_275457
 Watch This Site Documents
- NATURALLY FRESH at 175 ANCHOR ROAD, CASSELBERRY, FL, Facility Id: COM_303778
 Watch This Site Documents
- > SOUTHWICK at 1430 SEMINOLA BLVD, CASSELBERRY, FL, Facility Id: COM_275451 Watch This Site Documents

Map 2. Casselberry and Vicinity: Contamination Locator Map⁸

Cleanup types: A Brownfields A Petroleum A Superfund A Other Waste Cleanup

⁸ Florida Department of Environmental Protection Contamination Locator Map http://prodenv.dep.state.fl.us/DepClnup/welcome.do





Surveying Completed

Survey Tools used in Casselberry appear in the Appendices. Twenty seven Mission Critical Function Surveys and 26 Housing and Emergency Services Surveys were collected in Casselberry and environs. Of those surveys, 18 Mission Critical Functions Surveys and 17 Housing and Emergency Services Surveys were collected within Cassleberry. They were collected in the Census Block Groups indicated below, with light green highlighting indicating Census Block Groups in Casselberry.⁹

Table 5. Number of Respondents to Surveys by Census Block Group*Census Block Groups located in Casselberry are highlighted in blue in the table below

Census Block Group	Mission Critical Functions Survey	Housing & Emergency Services Surveys
12117 020302 1	1	1
12117 020902 2	2	1
12117 021401 2	0	1
1211 7021403 3	0	1
12117 021404 2	2	1
12117 022101 2	1	1
12117 022104 1	1	1

⁹ US Statistical Atlas https://statisticalatlas.com/place/Florida/Holden-Heights/Overview



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12117 022104 2	11	9
12117 022104 4	4	5
12117 022105 1	1	1
1211 7022105 2	3	3
12117 022206 4	1	1
TOTAL	27	26



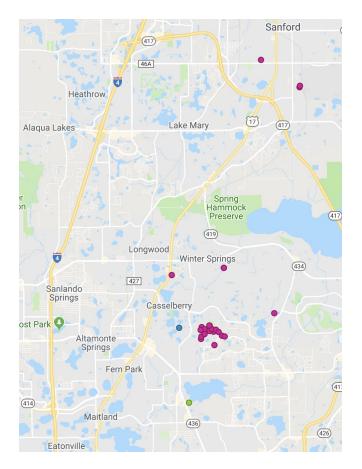
Mission Critical Functions Surveys:

Mission Critical Function Surveys are designed to determine if the community is tending toward resilience or vulnerability. Respondents rated twenty six societal functions on the following scale:



Map 3. Vulnerability Scores of Respondents in Casselberry

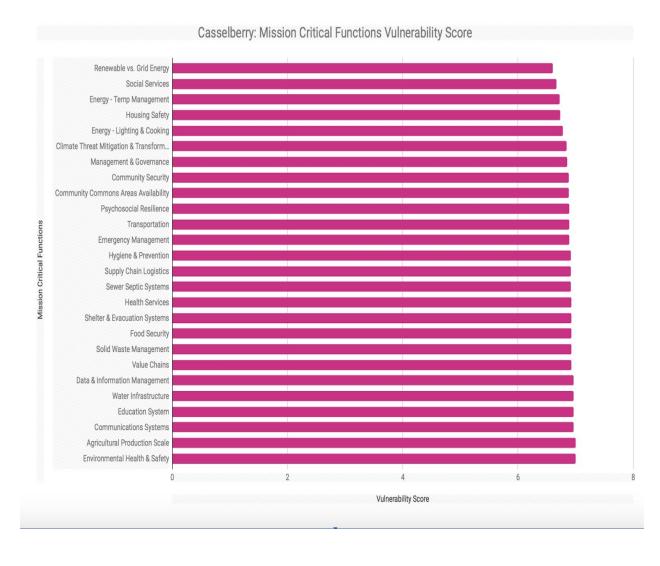
Note that the average Vulnerability Score, indicated by point color, across the 26 domains was between 5 and 7 for Casselberry and vicinity residents surveyed.





Graph 2. Average Mission Critical Function Ratings for Each Function

The legend above shows the Vulnerability Scores assigned to each Critical Function. Note that the average of all respondents' ratings was in the Resilient and Sustainable range for all critical functions. The lowest ranked functions were Renewable vs Grid Energy (6.60), Social Services (6.67), Energy-Temperature Management (6.72), Housing Safety (6.73), and Energy-Lighting & Cooking (6.78).



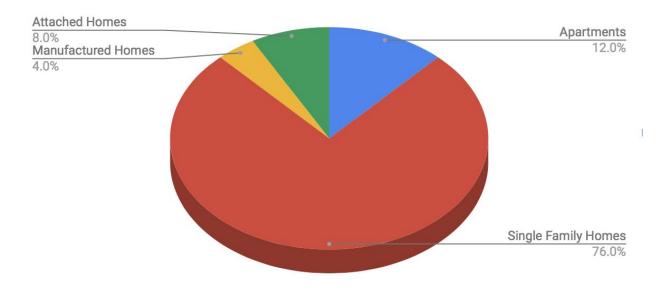


Housing and Emergency Shelter Survey

Type of Home: The majority of respondents to the survey reside in single family homes.

Graph 3.

Casselberry and Vicinity: Respondents' Type of Home

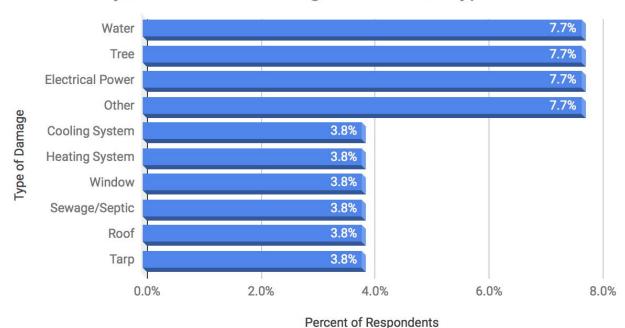




Type of damage to homes after Hurricane Irma: Few residents reported damage from Hurricane Irma, and those that had damage typically reported more than one type. Water, tree, electrical power damage or damage of other types not listed were each reported by 7.7% of respondents. Cooling or heating system damage, window or sewage/septic system damage, roof damage or the need for a tarp on the roof were each reported by 3.8% of respondents. Respondents reported that all repairs were completed within 6 months in Casselberry. Four households reported loss of electricity that was restored quickly

Graph 4.

Casselberry: Percent with Damage of Different Types

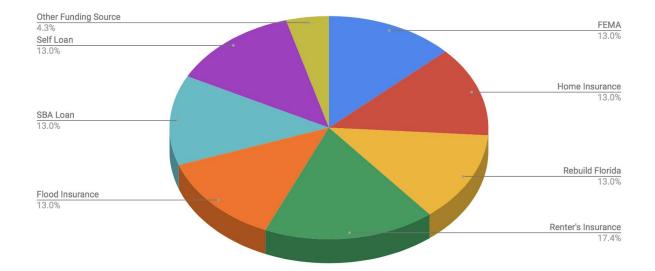




Source of Funds to Complete Repairs: The largest percentage (17.4%) of respondents used Renter's Insurance to affect repairs, followed by Home Insurance (13.0%), Rebuild Florida (13.0%), SBA Loans (13.0%), SELF Loans (13.0%), and FEMA (13.0%). The remaining 4.3% used other funding sources.

Graph 5.

Casselberry & Vicinity: Funding Source to Repair Damage During Hurricane Irma Recovery

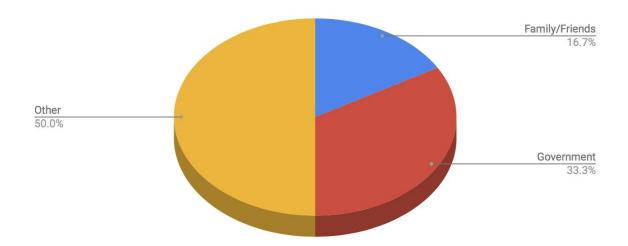




A third of respondents (33.3%%) indicated that they learned about funding sources from government, and 16.7% reported learning about funding from family and friends. Half of respondents heard about funding from Other sources.

Graph 6.

Casselberry & Vicinity: Source of Information About Funding During Hurricane Irma Recovery



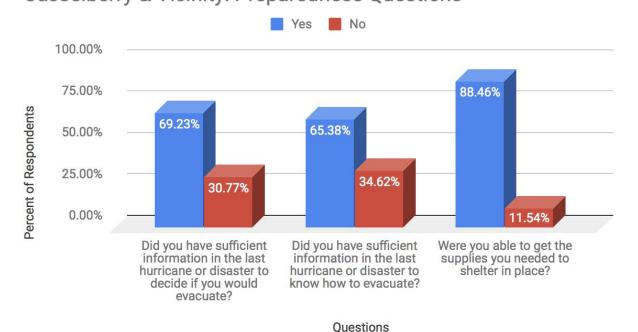


Preparedness Questions

Securing Information and Supplies: Over two thirds (69.23%) of all respondents had sufficient information to make appropriate decisions about whether they would Shelter in Place or Evacuate. Slightly less than two thirds (65.38%) of respondents said they had enough information about how to evacuate, such as appropriate evacuation routes. Fully 88.46% said they were able to get the supplies they needed to shelter in place.

Graph 7.

Casselberry & Vicinity: Preparedness Questions





Preparedness Knowledge: Over half of the respondents knew their evacuation zone (57.7%) and where their nearest approved emergency shelter was (53.8%). how to get to that emergency shelter, and where to get sandbags. More than a third (42.3%) of respondents knew what to take to an emergency shelter, and how to get to an emergency shelter (39.3%). Less than a quarter of respondents knew where to get sandbags (23.1%) or their emergency radio station (19.2%). Only 3.1% of respondents knew if they could take their pet with them to their emergency shelter, and only 2.2% of respondents knew how to comply with a boil water order.

Graph 8.

Casselberry & Vicinity: Preparedness Knowledge

