



# Hurricane Ian Landfall

For Planning Purposes Only!

WASHINGTON, DC  
11:00:33  
29 Sep 2022

CHICAGO  
10:00:33  
29 Sep 2022

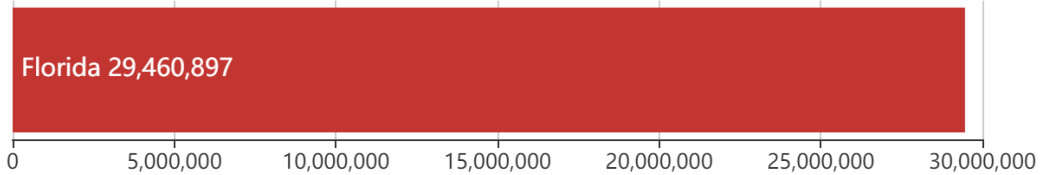
LOS ANGELES  
08:00:33  
29 Sep 2022

<https://simsuite.usace.army.mil/wab/v2.15/MissionModels/#advid=275&oid=84&name=Hurricane%20Ian&advisory=Landfall&advlf=G>

Updated as of 29 Sep 2022 (10:00 AM Central Daylight Time)

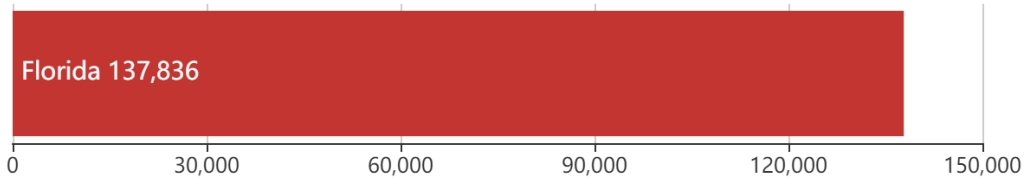
## Debris

29.5M  
cu. yd.



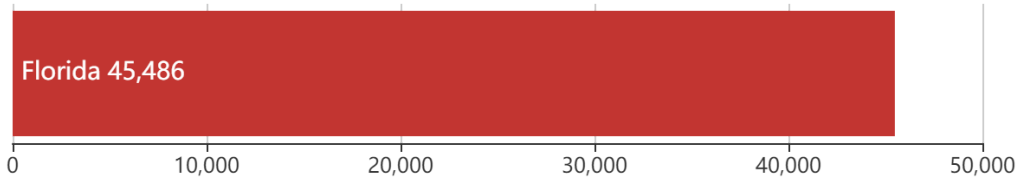
## Est. Temp. Roofing

137.8K  
units



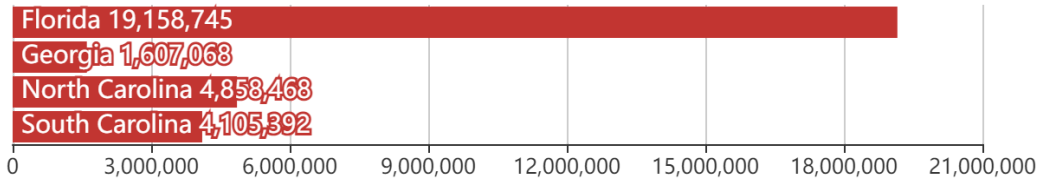
## Act. Temp. Roofing

45.5K  
units



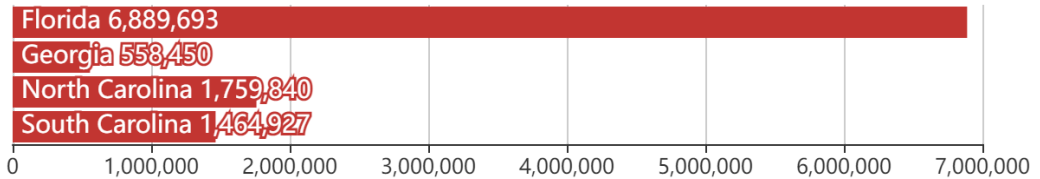
## Population

29.7M  
people



## Households

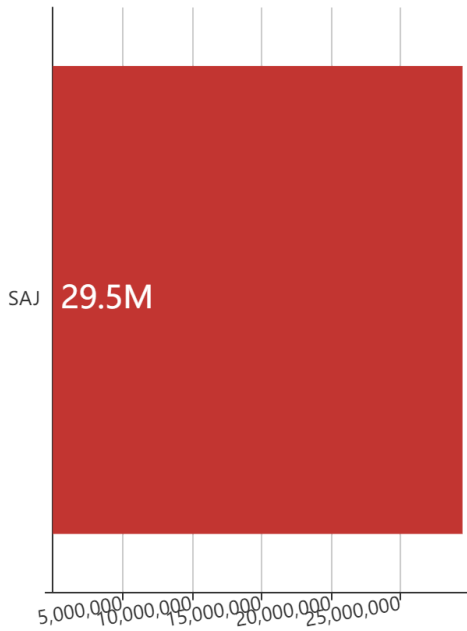
10.7M  
households



## Mission Model Summary

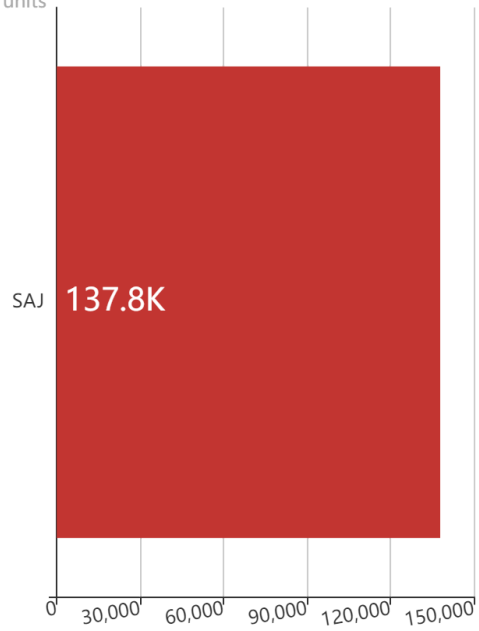
### Debris By USACE District

cu. yd.

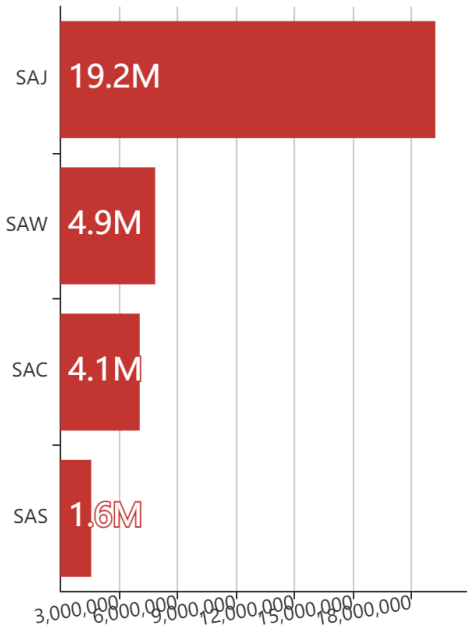


### Est. Temp. Roofing By USACE District

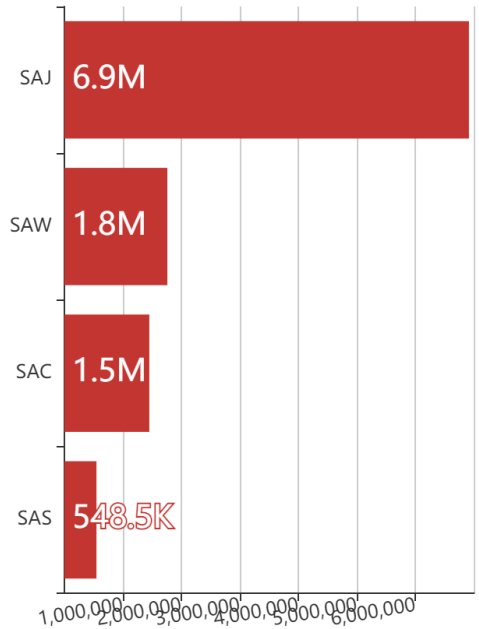
units



### Population By USACE District



### Households By USACE District



# Critical Infrastructure Summary

## Total

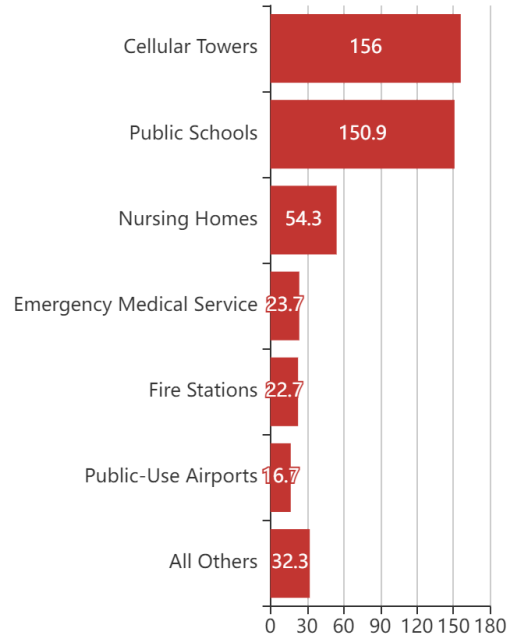


## Power Requirements



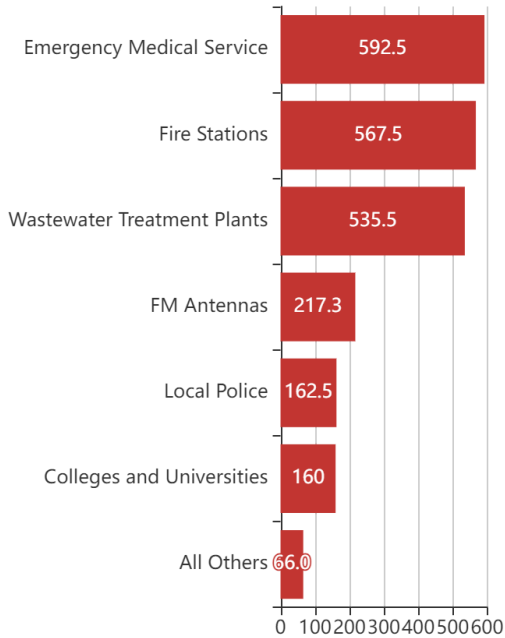
## Generators

By Generator Count



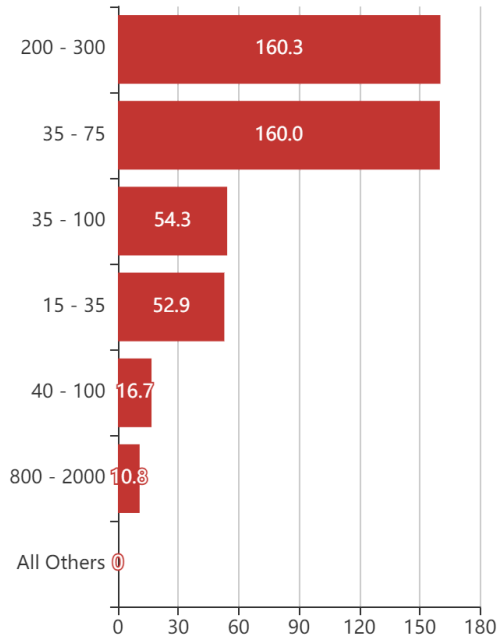
## Generators

By Power Requirement



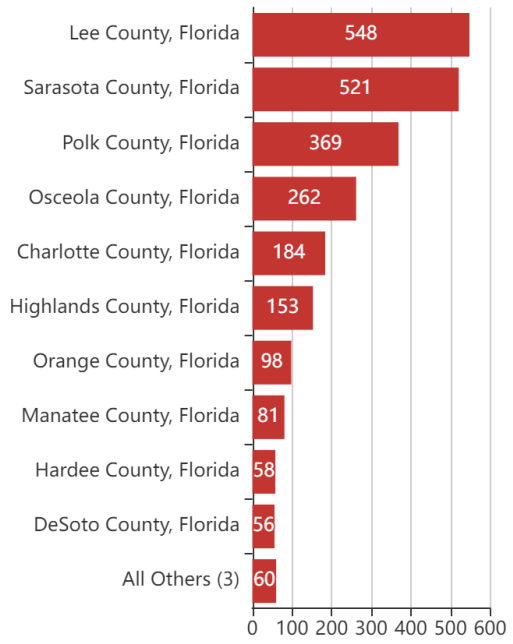
## Generators

By Range



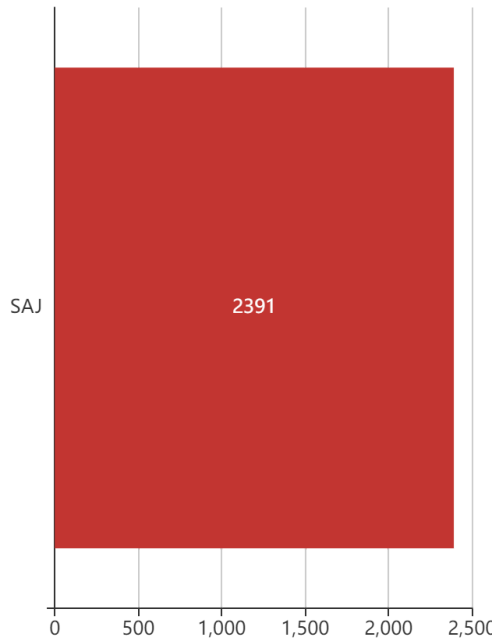
## Structures

By County



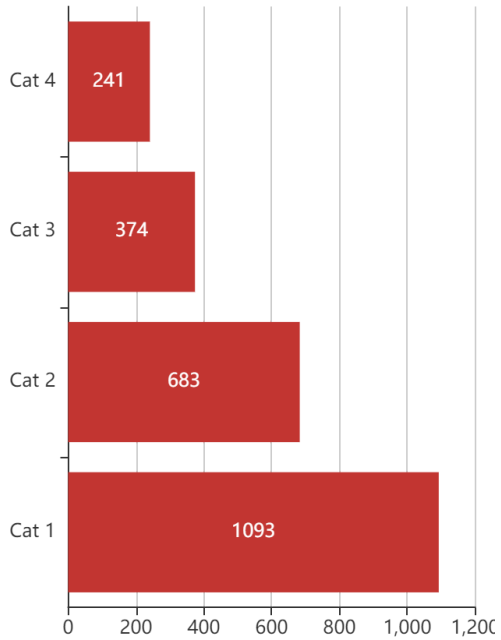
## Structures

By USACE District

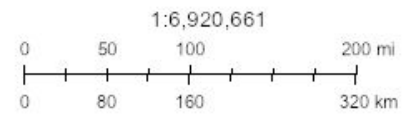
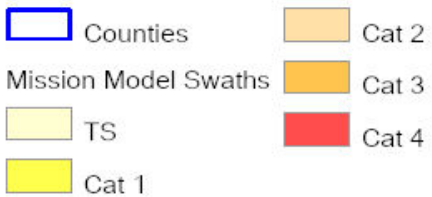
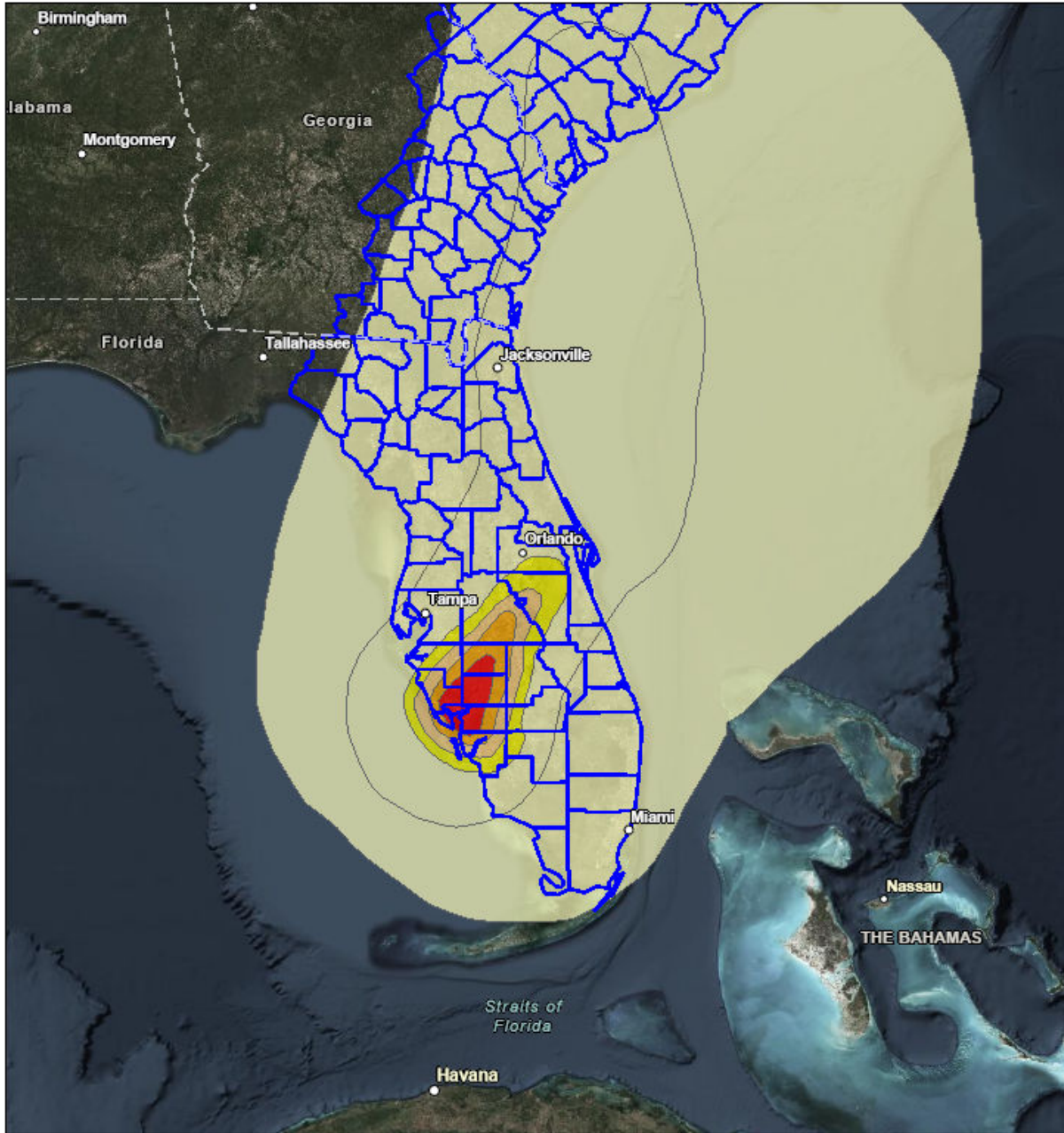


## Structures

By Intensity

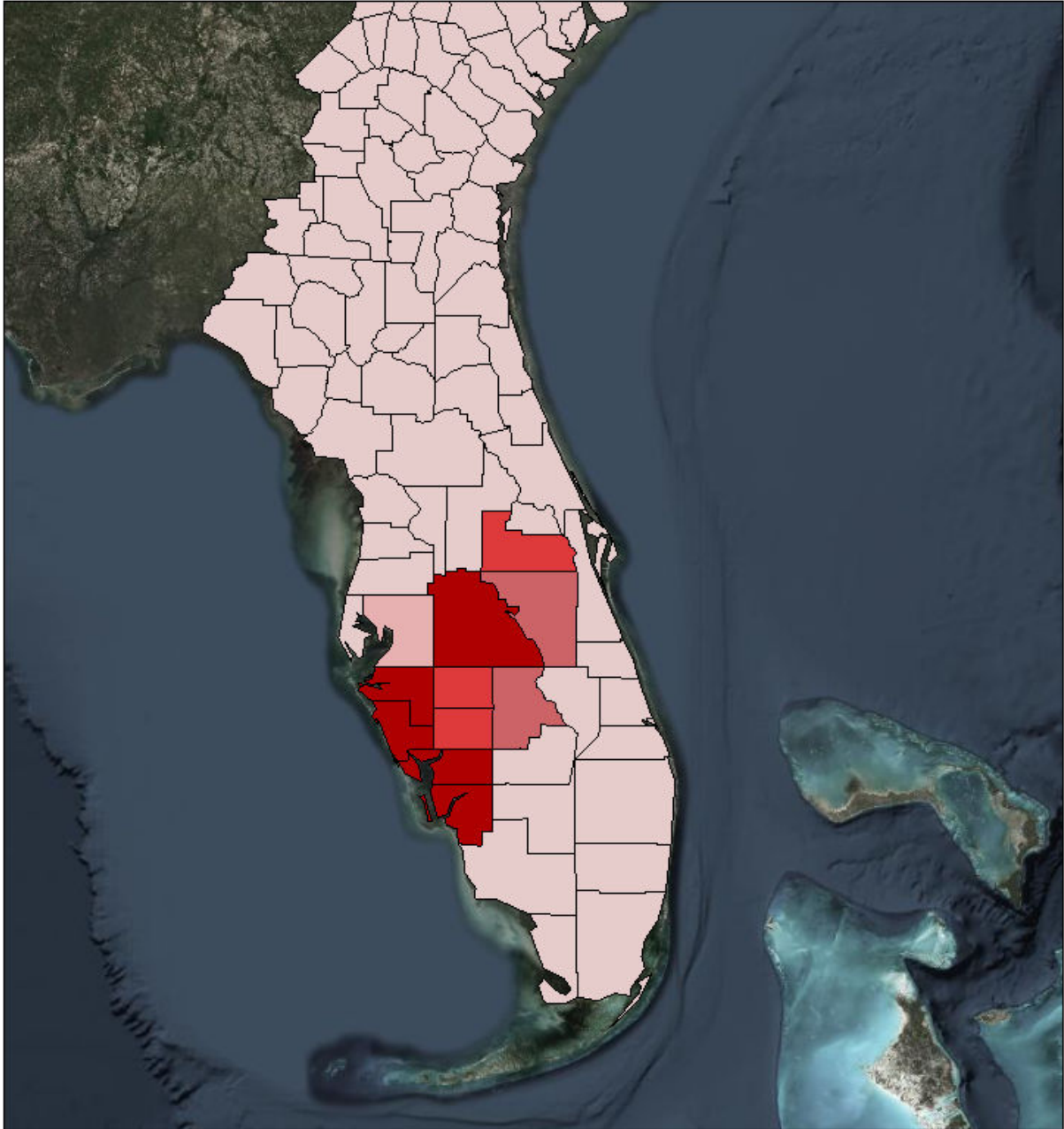


# Letter ANSI A Portrait

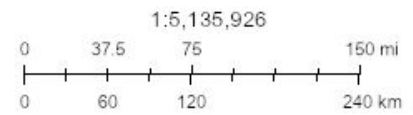


FDEP, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

# Debris



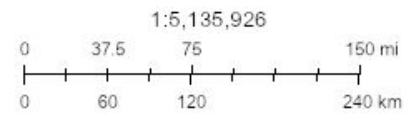
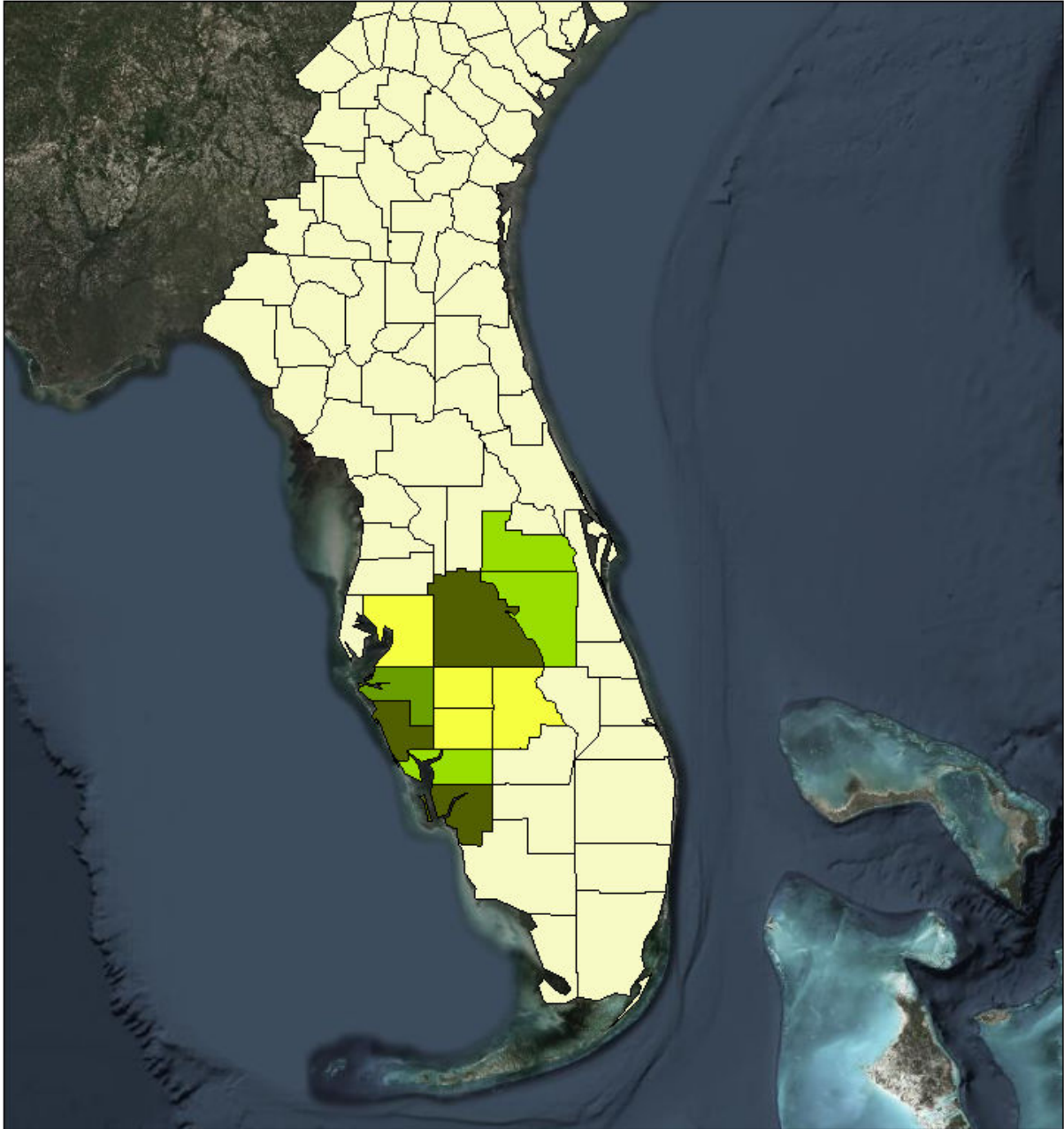
## Debris



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Created by SimSuite

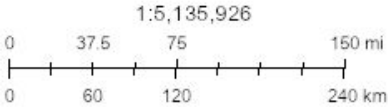
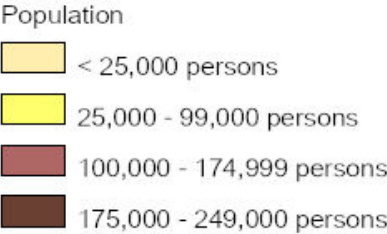
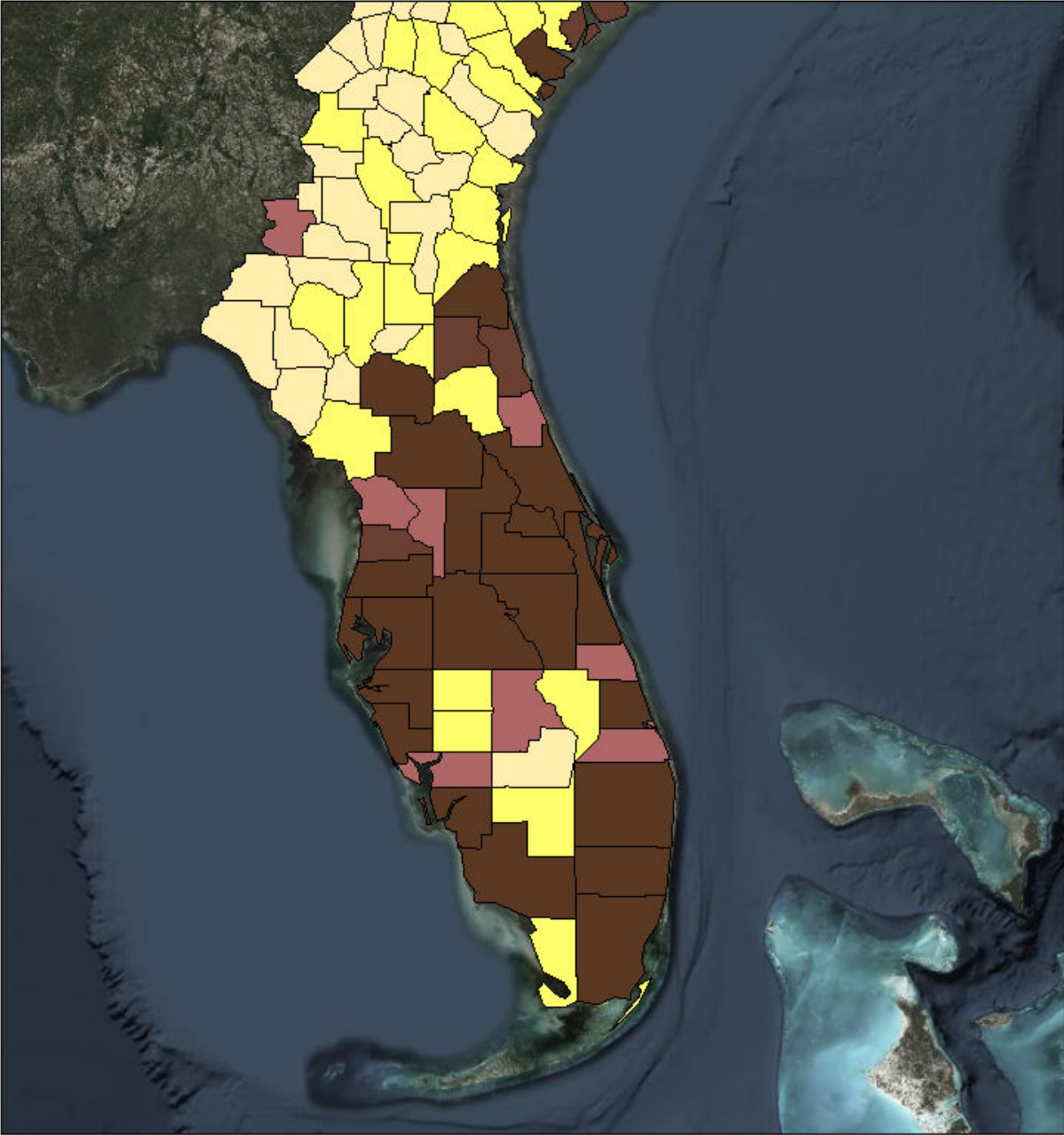
# Est. Temp. Roofing



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Created by SimSuite

# Population

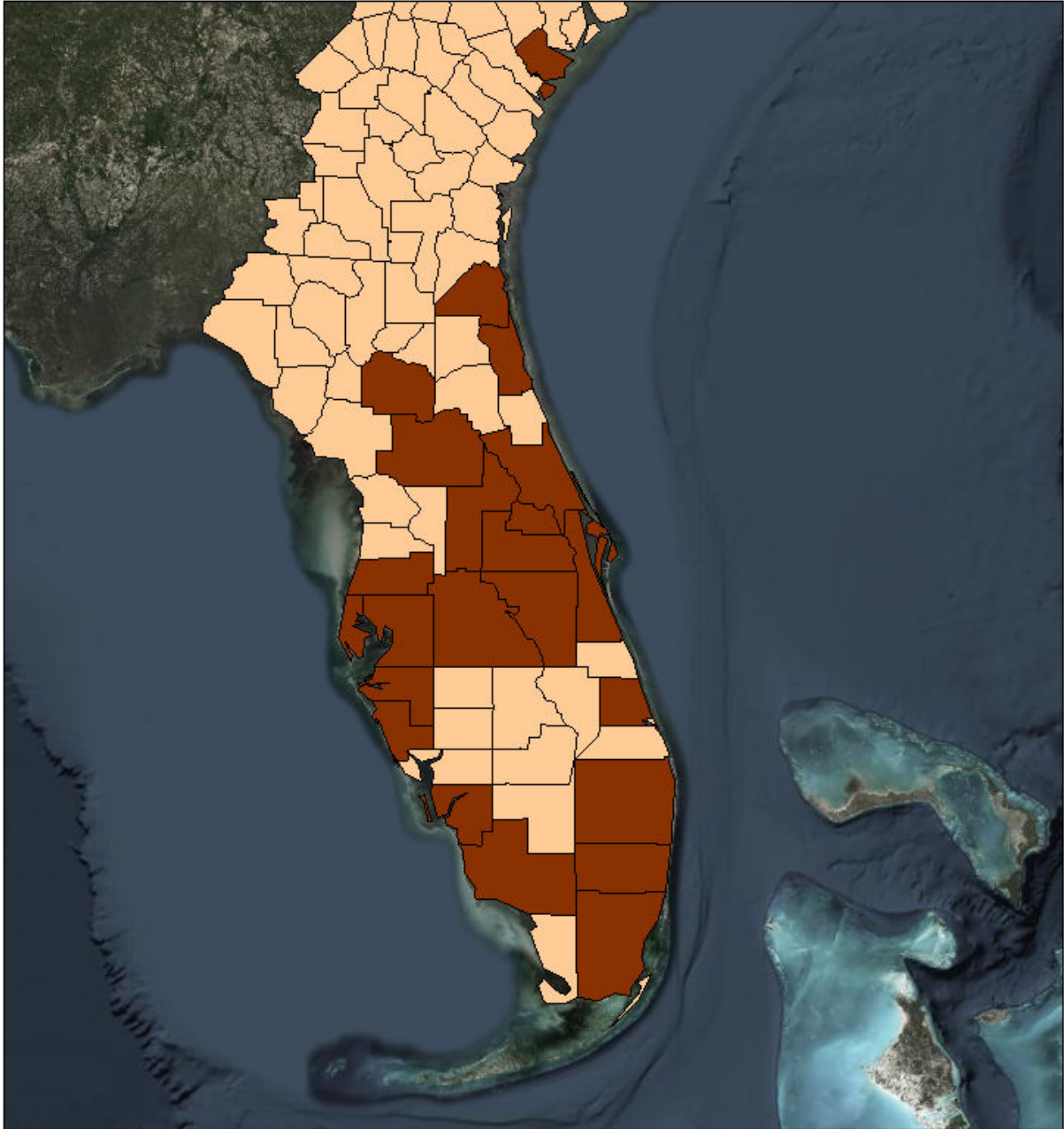


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Created by SimSuite

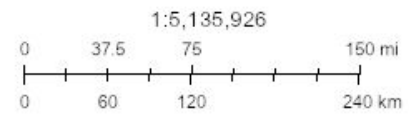


# Households



## Households

-  < 7,500 Households
-  15,000 - 24,999 Households
-  25,000 - 49,999 Households



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

## Mission Summary



The mission models account for storm surge and wind damage only, but do not account for other related storm hazards that may affect the mission estimates.

Mission Summary	
Total Counties	15
Debris (cu. yd.)	29,460,897
Est. Temp. Roofing (units)	137,836
Act. Temp. Roofing (units)	45,486
Population	29,729,673
Households	10,672,910

Population Distribution	
Tropical Storm	25,416,786
Category 1	1,351,173
Category 2	805,755
Category 3	526,685
Category 4	304,364

FLORIDA	Yds of Debris (29,460,897)	Est. Roof Units (137,836)	Act. Roof Units (45,486)	Population (19,158,745)	Households (6,889,693)
Alachua	0	0	0	262,216	100,516
Baker	0	0	0	28,042	8,772
Bradford	0	0	0	26,996	9,479
Brevard	18	0	0	578,927	229,692
Broward	0	0	0	1,883,555	686,047
Charlotte	5,265,817	9,191	3,033	173,978	73,370
Citrus	0	0	0	144,825	63,304
Clay	0	0	0	209,524	68,792
Collier	9,464	174	57	368,652	133,179
Columbia	0	0	0	69,419	24,941
DeSoto	951,014	1,240	409	36,506	11,445
Dixie	0	0	0	16,299	6,316
Duval	0	0	0	932,755	342,450
Flagler	0	0	0	108,166	39,186
Gilchrist	0	0	0	17,436	6,121
Glades	6,335	91	30	13,588	4,533
Hamilton	0	0	0	14,344	4,617
Hardee	536,335	1,442	476	28,518	8,245
Hendry	8,087	149	49	39,553	12,025
Hernando	0	0	0	182,273	71,745
Highlands	417,287	3,910	1,290	102,012	42,604
Hillsborough	238,787	4,142	1,367	1,382,695	474,030

Indian River	0	0	0	149,718	60,176
Lafayette	0	0	0	8,476	2,580
Lake	0	0	0	339,742	121,289
Lee	5,577,506	36,630	12,088	720,426	259,818
Levy	0	0	0	41,097	16,404
Madison	0	0	0	18,862	6,985
Manatee	2,841,283	14,901	4,917	376,566	135,729
Marion	0	0	0	350,915	137,726
Martin	0	0	0	156,333	63,899
Miami-Dade	0	0	0	2,702,302	867,352
Monroe	0	0	0	77,537	32,629
Nassau	0	0	0	80,628	28,794
Okeechobee	0	0	0	39,837	14,013
Orange	510,406	9,390	3,099	1,332,714	421,847
Osceola	453,211	6,607	2,180	333,980	90,603
Palm Beach	0	0	0	1,441,728	544,227
Pasco	0	0	0	512,082	189,612
Pinellas	0	0	0	968,279	415,876
Polk	3,547,632	25,772	8,505	662,431	227,485
Putnam	0	0	0	74,098	29,409
Sarasota	9,097,714	24,198	7,985	414,899	175,746
Seminole	0	0	0	457,650	164,706
St. Johns	0	0	0	238,439	75,338
St. Lucie	0	0	0	302,601	108,523
Sumter	0	0	0	125,329	41,361
Suwannee	0	0	0	44,733	15,953
Taylor	0	0	0	22,641	7,920
Union	0	0	0	15,704	4,048
Volusia	0	0	0	528,719	208,236

<b>GEORGIA</b>	<b>Yds of Debris (0)</b>	<b>Est. Roof Units (0)</b>	<b>Act. Roof Units (0)</b>	<b>Population (1,607,068)</b>	<b>Households (558,450)</b>
Appling	0	0	0	18,451	6,969
Atkinson	0	0	0	9,278	2,983
Bacon	0	0	0	11,414	4,214
Brantley	0	0	0	18,729	6,885
Bryan	0	0	0	37,469	10,738
Bulloch	0	0	0	73,263	25,575
Burke	0	0	0	22,837	8,533
Camden	0	0	0	53,037	18,047
Candler	0	0	0	10,868	4,041
Charlton	0	0	0	13,121	3,927
Chatham	0	0	0	292,686	103,038
Clinch	0	0	0	6,915	2,572
Coffee	0	0	0	44,088	14,817
Columbia	0	0	0	153,260	44,898
Echols	0	0	0	4,137	1,329
Effingham	0	0	0	60,602	18,092
Emanuel	0	0	0	23,103	8,430
Evans	0	0	0	11,202	4,033
Glynn	0	0	0	84,625	31,774
Jeff Davis	0	0	0	15,280	5,689
Jefferson	0	0	0	16,389	6,241
Jenkins	0	0	0	9,170	3,192
Lanier	0	0	0	10,158	3,608
Liberty	0	0	0	64,510	22,155
Long	0	0	0	18,728	5,023
Lowndes	0	0	0	114,022	39,747
McIntosh	0	0	0	13,862	5,971
Montgomery	0	0	0	9,422	3,287
Pierce	0	0	0	19,286	7,083
Richmond	0	0	0	204,200	76,924
Screven	0	0	0	14,427	5,596
Tattall	0	0	0	25,147	8,210
Telfair	0	0	0	16,196	5,543
Toombs	0	0	0	27,659	10,375
Treutlen	0	0	0	6,916	2,543
Ware	0	0	0	35,094	13,654
Wayne	0	0	0	29,612	10,562
Wheeler	0	0	0	7,905	2,152

<b>NORTH CAROLINA</b>	<b>Yds of Debris (0)</b>	<b>Est. Roof Units (0)</b>	<b>Act. Roof Units (0)</b>	<b>Population (4,858,468)</b>	<b>Households (1,759,840)</b>
Alexander	0	0	0	37,998	14,425
Anson	0	0	0	26,294	9,755
Bladen	0	0	0	35,031	14,430
Brunswick	0	0	0	129,300	46,297
Burke	0	0	0	89,714	35,804
Cabarrus	0	0	0	202,126	65,666
Caldwell	0	0	0	82,269	33,388
Catawba	0	0	0	158,261	60,887
Cleveland	0	0	0	98,074	38,555
Columbus	0	0	0	57,071	22,489
Cumberland	0	0	0	329,248	122,431
Davidson	0	0	0	168,037	64,515
Davie	0	0	0	42,146	16,245
Forsyth	0	0	0	375,124	141,163
Gaston	0	0	0	218,244	79,867
Hoke	0	0	0	53,518	16,532
Iredell	0	0	0	176,156	61,215
Lincoln	0	0	0	82,758	30,343
McDowell	0	0	0	46,542	17,838
Mecklenburg	0	0	0	1,063,054	362,213
Montgomery	0	0	0	27,607	10,544
Moore	0	0	0	97,517	37,540
New Hanover	0	0	0	225,895	86,046
Pender	0	0	0	59,850	20,333
Randolph	0	0	0	145,537	55,373
Richmond	0	0	0	46,534	18,430
Robeson	0	0	0	136,600	47,997
Rowan	0	0	0	142,361	53,140
Rutherford	0	0	0	68,012	27,466
Scotland	0	0	0	36,435	13,614
Stanly	0	0	0	61,870	23,589
Union	0	0	0	230,722	67,864
Wilkes	0	0	0	70,609	28,360
Yadkin	0	0	0	37,954	15,486

<b>SOUTH CAROLINA</b>	<b>Yds of Debris (0)</b>	<b>Est. Roof Units (0)</b>	<b>Act. Roof Units (0)</b>	<b>Population (4,105,392)</b>	<b>Households (1,464,927)</b>
Aiken	0	0	0	170,230	64,253
Allendale	0	0	0	9,774	3,706
Bamberg	0	0	0	15,050	6,048
Barnwell	0	0	0	21,937	8,937
Beaufort	0	0	0	187,450	64,945
Berkeley	0	0	0	207,154	65,419
Calhoun	0	0	0	14,883	6,080
Charleston	0	0	0	403,176	144,309
Cherokee	0	0	0	57,032	21,519
Chester	0	0	0	33,257	12,876
Chesterfield	0	0	0	46,695	18,173
Clarendon	0	0	0	34,844	13,132
Colleton	0	0	0	38,408	15,131
Darlington	0	0	0	67,941	26,531
Dillon	0	0	0	31,456	11,923
Dorchester	0	0	0	157,283	50,259
Edgefield	0	0	0	27,396	9,348
Fairfield	0	0	0	23,515	9,419
Florence	0	0	0	140,540	52,653
Georgetown	0	0	0	62,847	24,524
Greenwood	0	0	0	70,166	27,547
Hampton	0	0	0	21,006	7,598
Horry	0	0	0	327,500	112,225
Jasper	0	0	0	30,101	8,517
Kershaw	0	0	0	64,654	23,928
Lancaster	0	0	0	90,715	29,697
Laurens	0	0	0	67,718	25,525
Lee	0	0	0	18,136	6,797
Lexington	0	0	0	291,357	102,733
Marion	0	0	0	32,432	13,058
Marlboro	0	0	0	28,023	10,383
McCormick	0	0	0	9,946	4,027
Newberry	0	0	0	38,634	14,709
Orangeburg	0	0	0	91,282	35,788
Richland	0	0	0	416,367	145,194
Saluda	0	0	0	20,270	7,527
Spartanburg	0	0	0	305,813	109,246
Sumter	0	0	0	109,033	40,398
Union	0	0	0	28,317	11,974
Williamsburg	0	0	0	33,331	13,007
York	0	0	0	259,723	85,864

## Critical Infrastructure

Summary			
Total Critical Facilities		2,391	
Power Requirements (kW)		70,753.7	
Range (kW)			
Communications	# FED Gen Req	Range (kW)	Req kW
Cellular Towers (260)	156.0	35 - 75	8,580.0
FM Antennas (79)	4.0	35 - 75	217.3
Education	# FED Gen Req	Range (kW)	Req kW
Private Schools (150)	0.0	200 - 300	0.0
Public Schools (503)	150.9	200 - 300	37,725.0
Colleges and Universities (32)	0.6	200 - 300	160.0
Emergency Services	# FED Gen Req	Range (kW)	Req kW
911 Call Centers (0)	0.0	15 - 35	0.0
Emergency Medical Service (237)	23.7	15 - 35	592.5
Fire Stations (227)	22.7	15 - 35	567.5
Healthcare	# FED Gen Req	Range (kW)	Req kW
Nursing Homes (362)	54.3	35 - 100	3,665.3
Hospitals (36)	10.8	800 - 2000	15,120.0
Urgent Care Facilities (44)	8.8	200 - 300	2,200.0
Law Enforcement	# FED Gen Req	Range (kW)	Req kW
Local Police (65)	6.5	15 - 35	162.5
Correctional Facilities (0)	0.0	400 - 600	0.0
State and Local EOCs	# FED Gen Req	Range (kW)	Req kW
Local Emergency Operations Centers (11)	2.2	15 - 40	60.5
State Emergency Operation Centers (EOCs) (0)	0.0	15 - 35	0.0
State Facilities	# FED Gen Req	Range (kW)	Req kW
Governors Mansions (0)	0.0	100 - 200	0.0
Major State Government Buildings (0)	0.0	100 - 200	0.0

<b>Transportation</b>	<b># FED Gen Req</b>	<b>Range (kW)</b>	<b>Req kW</b>
Amtrack Stations (6)	0.0	100 - 300	0.0
Bus Stations (11)	0.0	100 - 300	0.0
Intermodal Terminal Facilities (19)	0.0	100 - 300	0.0
Railroad Stations (6)	0.0	100 - 300	0.0
Public-Use Airports (139)	16.7	40 - 100	1,167.6



Water and Wastewater	# FED Gen Req	Range (kW)	Req kW
Wastewater Treatment Plants (204)	10.2	35 - 70	535.5

## Poverty Level

#	County	Cat	Pop. below Federal poverty line	% Population
1	Lee County	4	88,294	12
2	Manatee County	4	42,675	11
3	Sarasota County	4	36,496	9
4	Charlotte County	4	19,302	11
5	DeSoto County	4	9,200	26
6	Hardee County	4	6,189	25
7	Polk County	3	104,509	15
8	Highlands County	3	16,511	16
9	Hillsborough County	2	200,179	14
10	Osceola County	2	48,325	13
11	Hendry County	2	10,958	27
12	Glades County	2	2,127	17
13	Orange County	1	190,145	14
14	Collier County	1	41,222	11

# Social Vulnerability Index



Possible scores range from **0** (lowest vulnerability) to **1** (highest vulnerability).

#	Location	Cat	Overall SVI Score
1	Hardee County, Florida	4	0.983
2	DeSoto County, Florida	4	0.962
3	Lee County, Florida	4	0.552
4	Manatee County, Florida	4	0.52
5	Charlotte County, Florida	4	0.489
6	Sarasota County, Florida	4	0.254
7	Polk County, Florida	3	0.903
8	Highlands County, Florida	3	0.873
9	Hendry County, Florida	2	0.994
10	Glades County, Florida	2	0.905
11	Osceola County, Florida	2	0.818
12	Hillsborough County, Florida	2	0.67
13	Orange County, Florida	1	0.669
14	Collier County, Florida	1	0.462

## COVID-19

#	County	Cases
1	Hillsborough	455,614
2	Orange	454,463
3	Polk	245,072
4	Lee	229,428
5	Osceola	137,251
6	Manatee	117,012
7	Sarasota	114,303
8	Collier	100,123
9	Charlotte	45,089
10	Highlands	29,120
11	Hendry	13,278
12	DeSoto	10,790
13	Hardee	9,921
14	Glades	2,224

Report Generated by SimSuite

<https://simsuite.usace.army.mil/wab/v2.15/MissionModels/#advid=275&oid=84&name=Hurricane%20Ian&advisory=Landfall&advlf=G>