



US Army Corps
of Engineers®
BUILDING STRONG®

Hurricane Ian Advisory #28

For Planning Purposes Only!

WASHINGTON, DC
12:09:20
29 Sep 2022

CHICAGO
11:09:20
29 Sep 2022

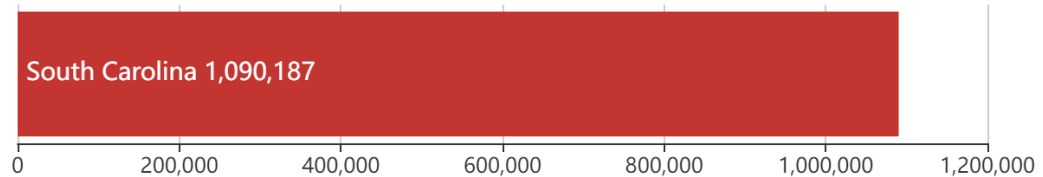
LOS ANGELES
09:09:20
29 Sep 2022

<https://simsuite.usace.army.mil/wab/v2.15/MissionModels/#advid=276&oid=84&name=Hurricane%20Ian&advisory=Advisory%20%2328&advlf=A>

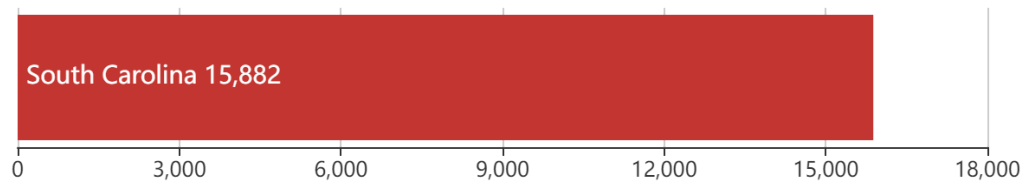
Updated as of 29 Sep 2022 (11:09 AM Central Daylight Time)

Debris

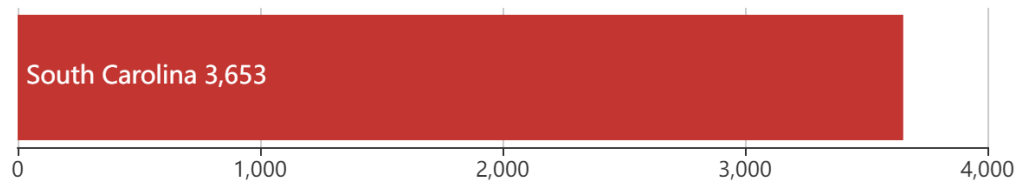
1.1M
cu. yd.



Est. Temp.
Roofing
15.9K
units

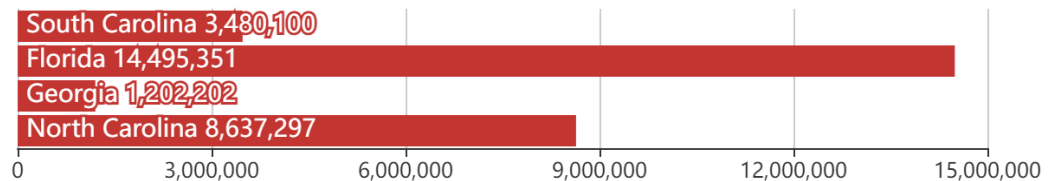


Act. Temp.
Roofing
3.7K
units



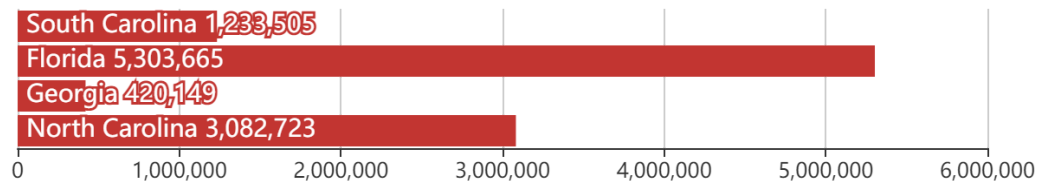
Population

27.8M
people



Households

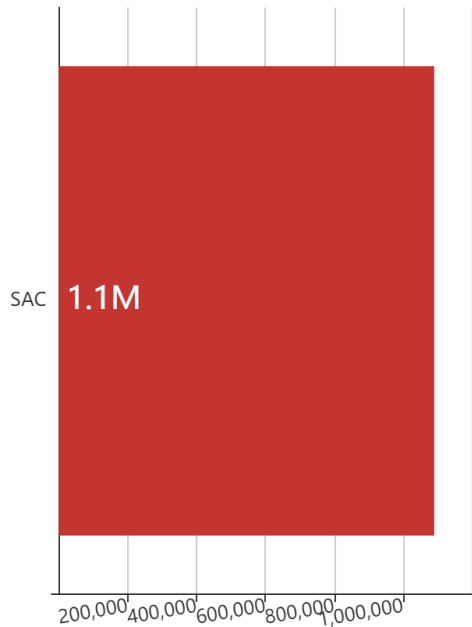
10M
households



Mission Model Summary

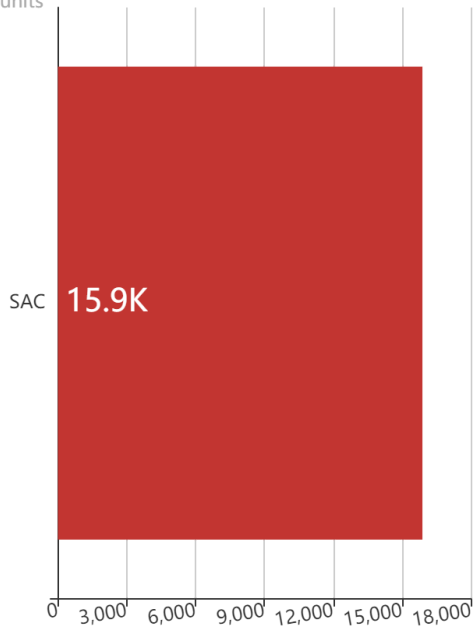
Debris By USACE District

cu. yd.

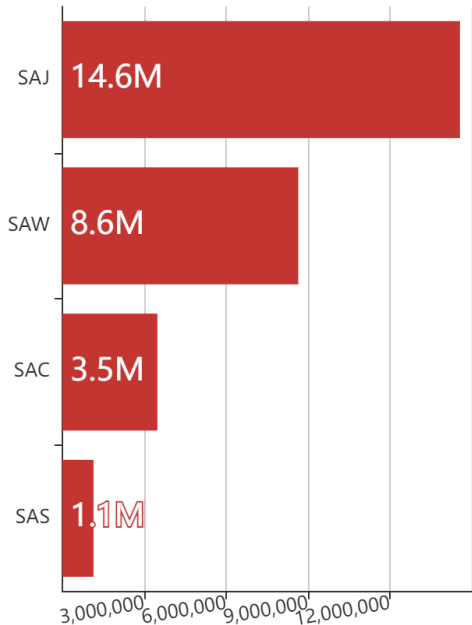


Est. Temp. Roofing By USACE District

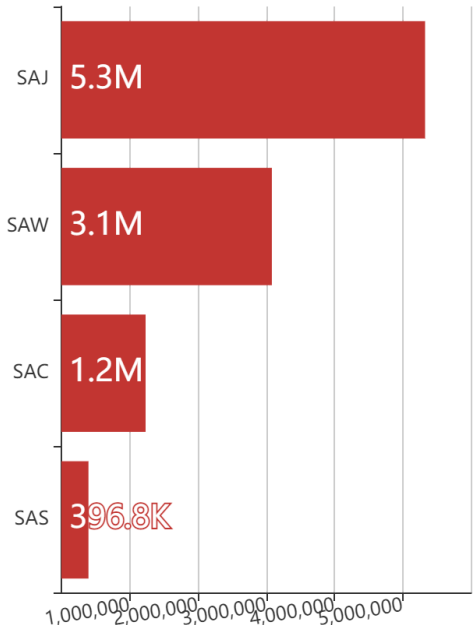
units



Population By USACE District



Households By USACE District



Critical Infrastructure Summary

Total

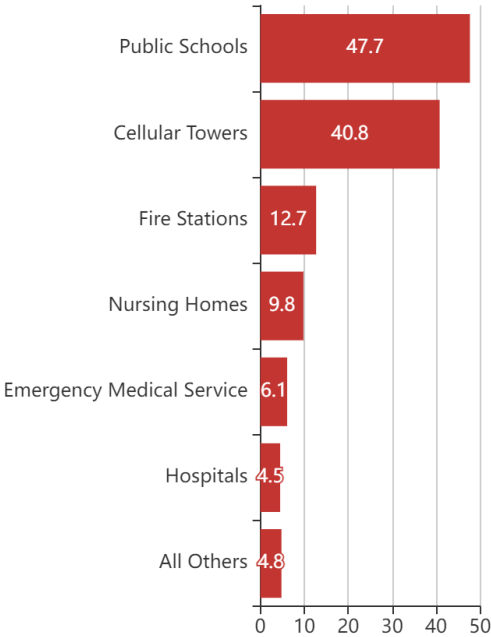


Power Requirements



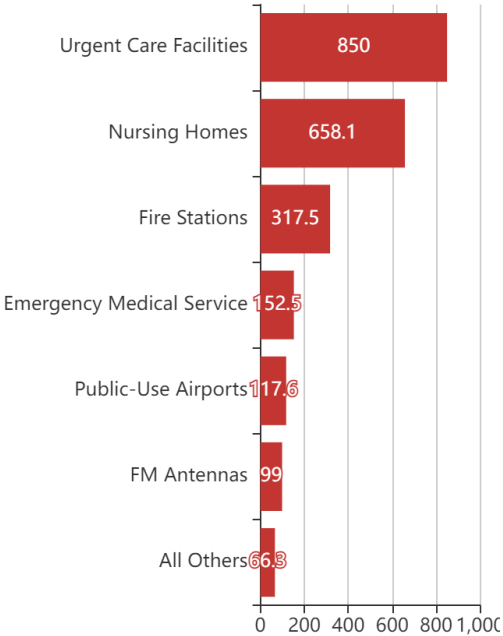
Generators

By Generator Count



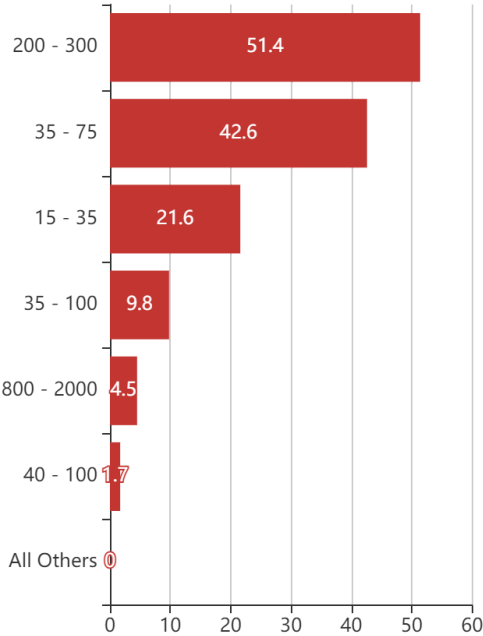
Generators

By Power Requirement



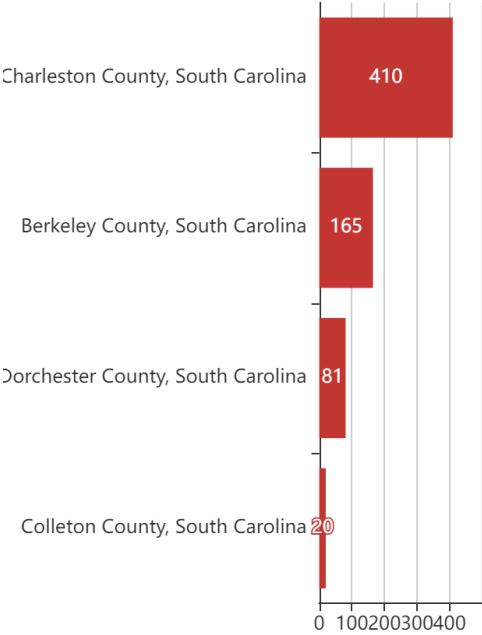
Generators

By Range



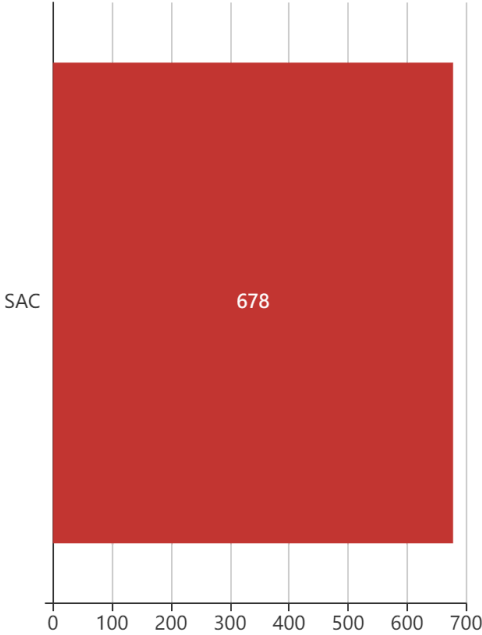
Structures

By County



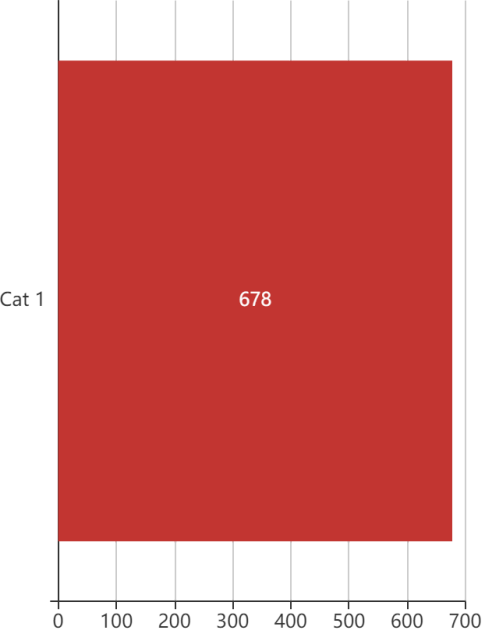
Structures

By USACE District



Structures

By Intensity





Key Messages for Tropical Storm Ian

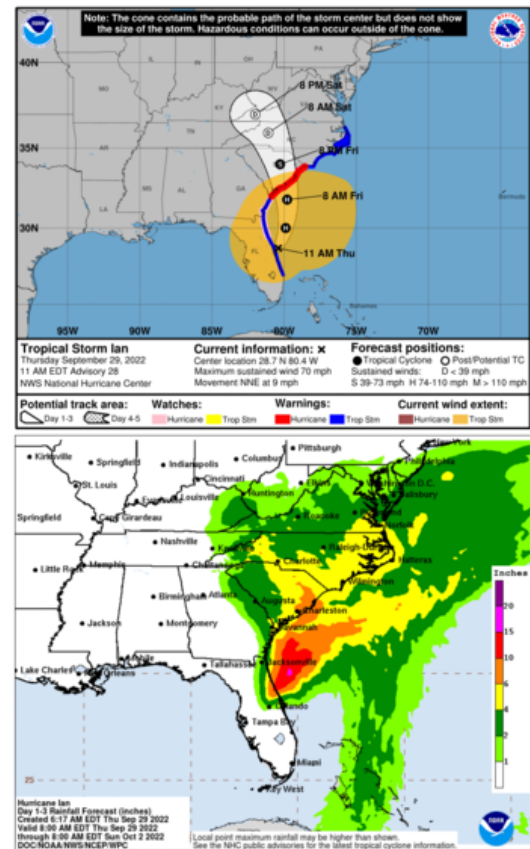
Advisory 28: 11:00 AM EDT Thu Sep 29, 2022



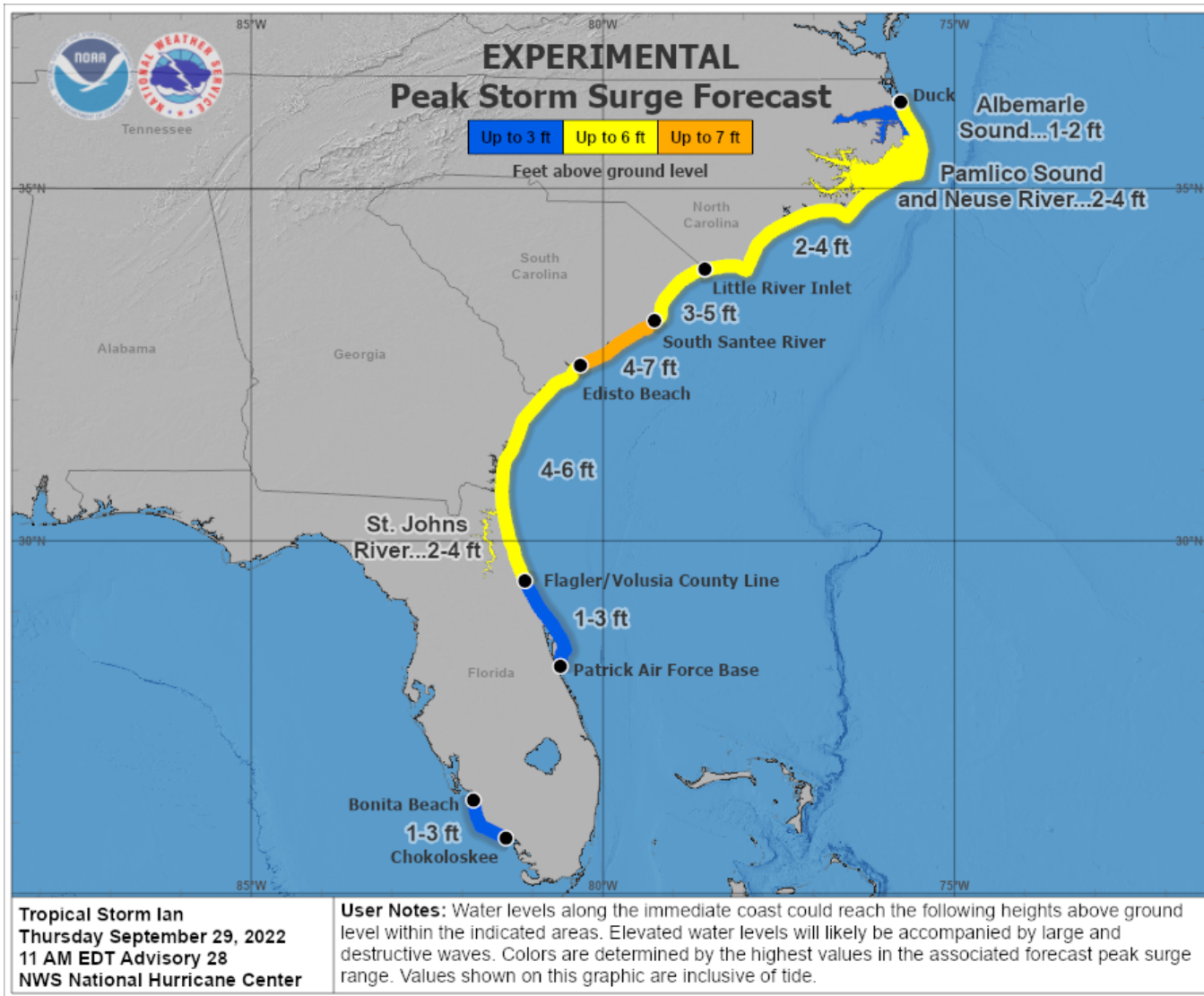
1. There is a danger of life-threatening storm surge through Friday along the coasts of northeast Florida, Georgia, and South Carolina. Residents in these areas should follow any advice given by local officials.

2. Hurricane-force winds are expected across the South Carolina coast beginning early Friday, where a Hurricane Warning has been issued. Hurricane conditions are possible by tonight along the coasts of northeastern Florida and Georgia, where a Hurricane Watch is in effect. Preparations should be rushed to completion since tropical-storm-force winds will begin well before the center approaches the coast.

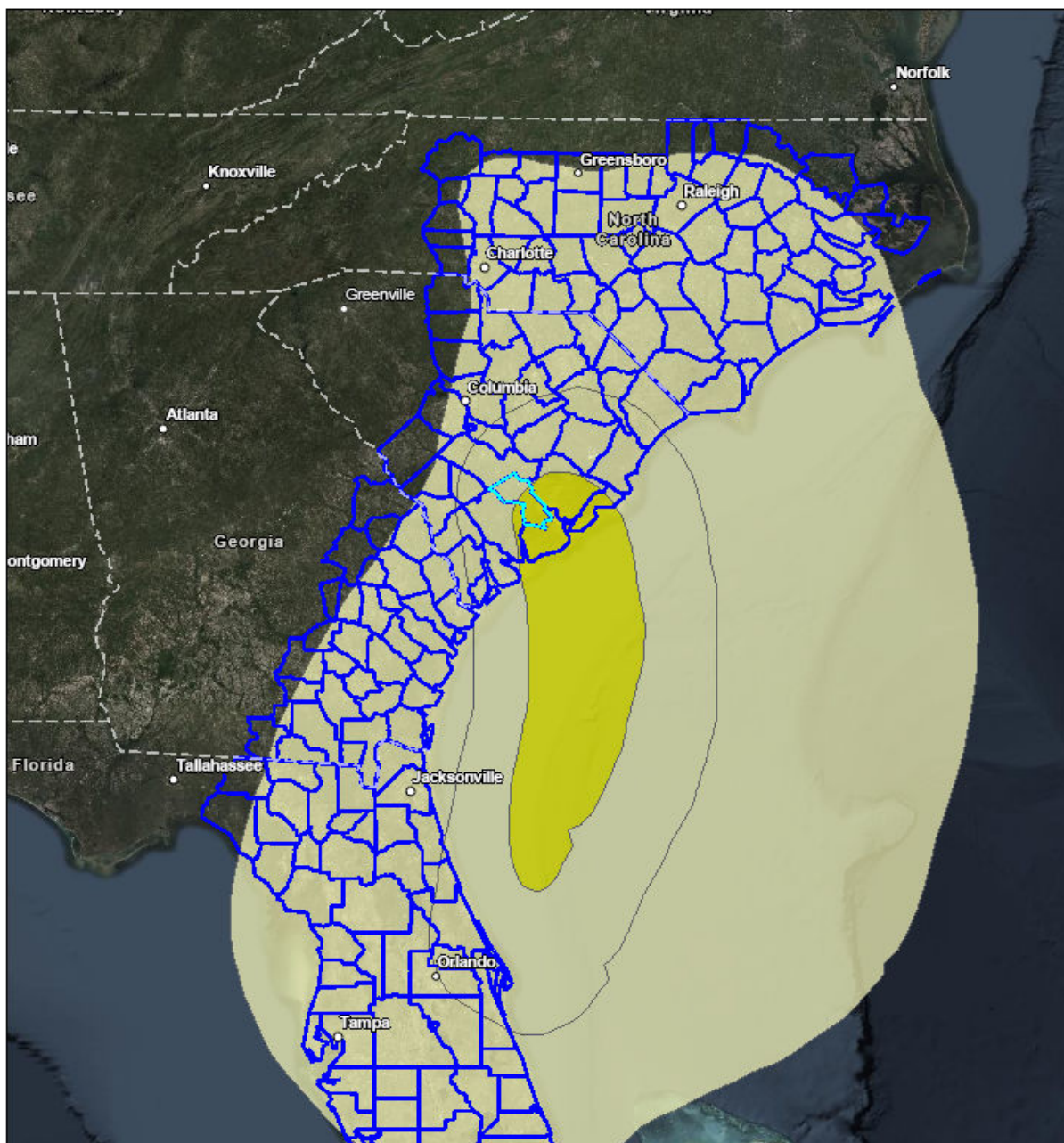
3. Ongoing major-to-record river flooding will continue across portions of central Florida, with considerable flooding in northern Florida. Considerable flash and urban flooding is expected across coastal portions of northeast Florida through Friday. Local significant flooding in southeastern Georgia and eastern South Carolina is expected through the end of the week.






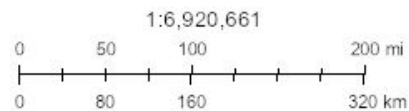
For more information go to hurricanes.gov



Letter ANSI A Portrait



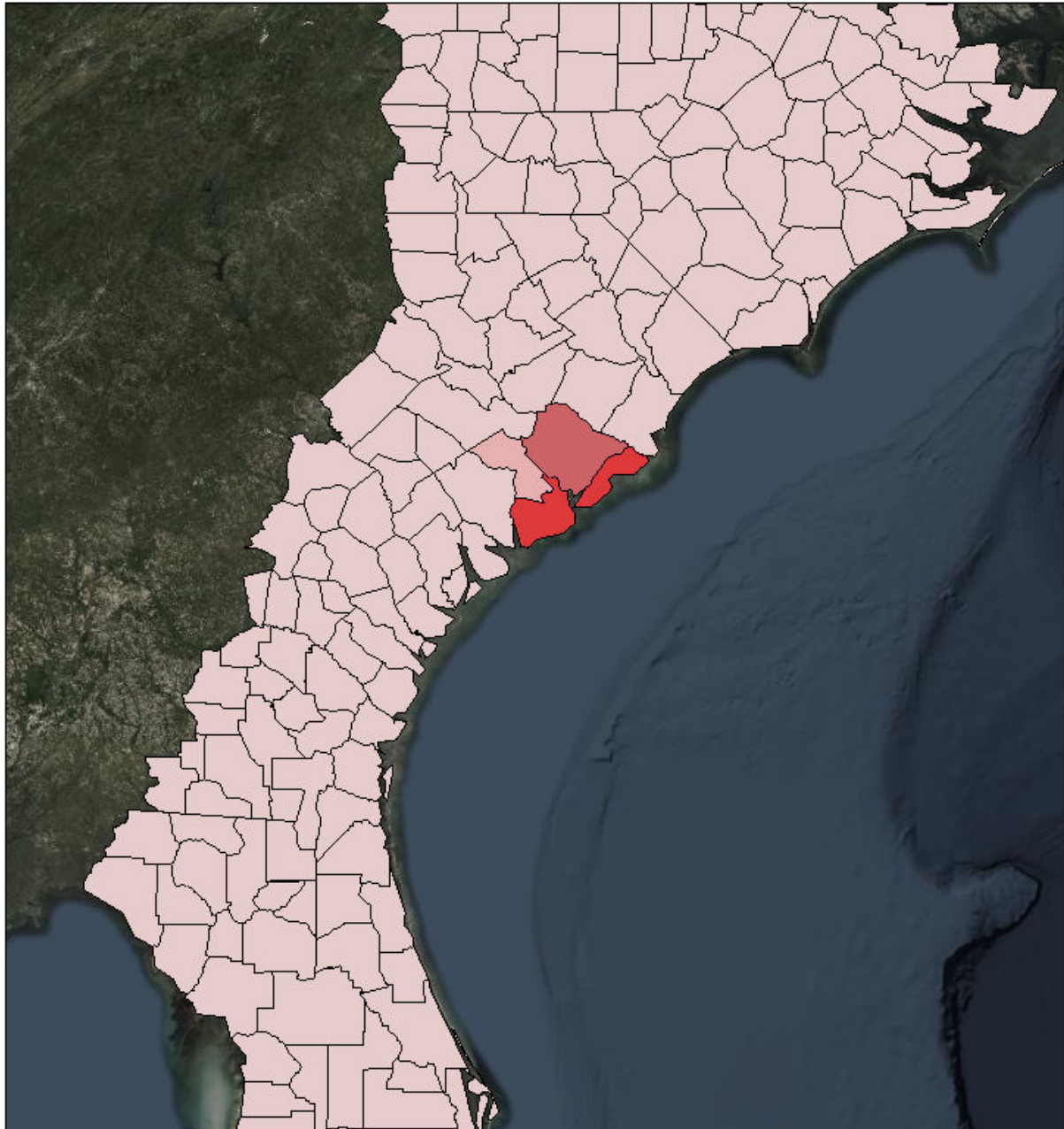
-  Counties
- Mission Model Swaths
-  TS
-  Cat 1



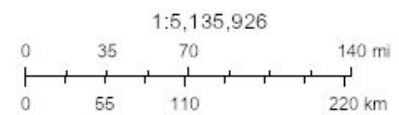
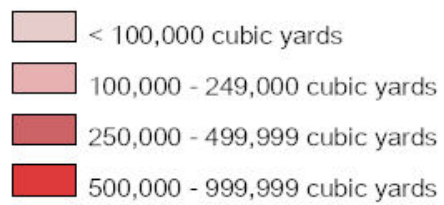
Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Created by SimSuite

Debris



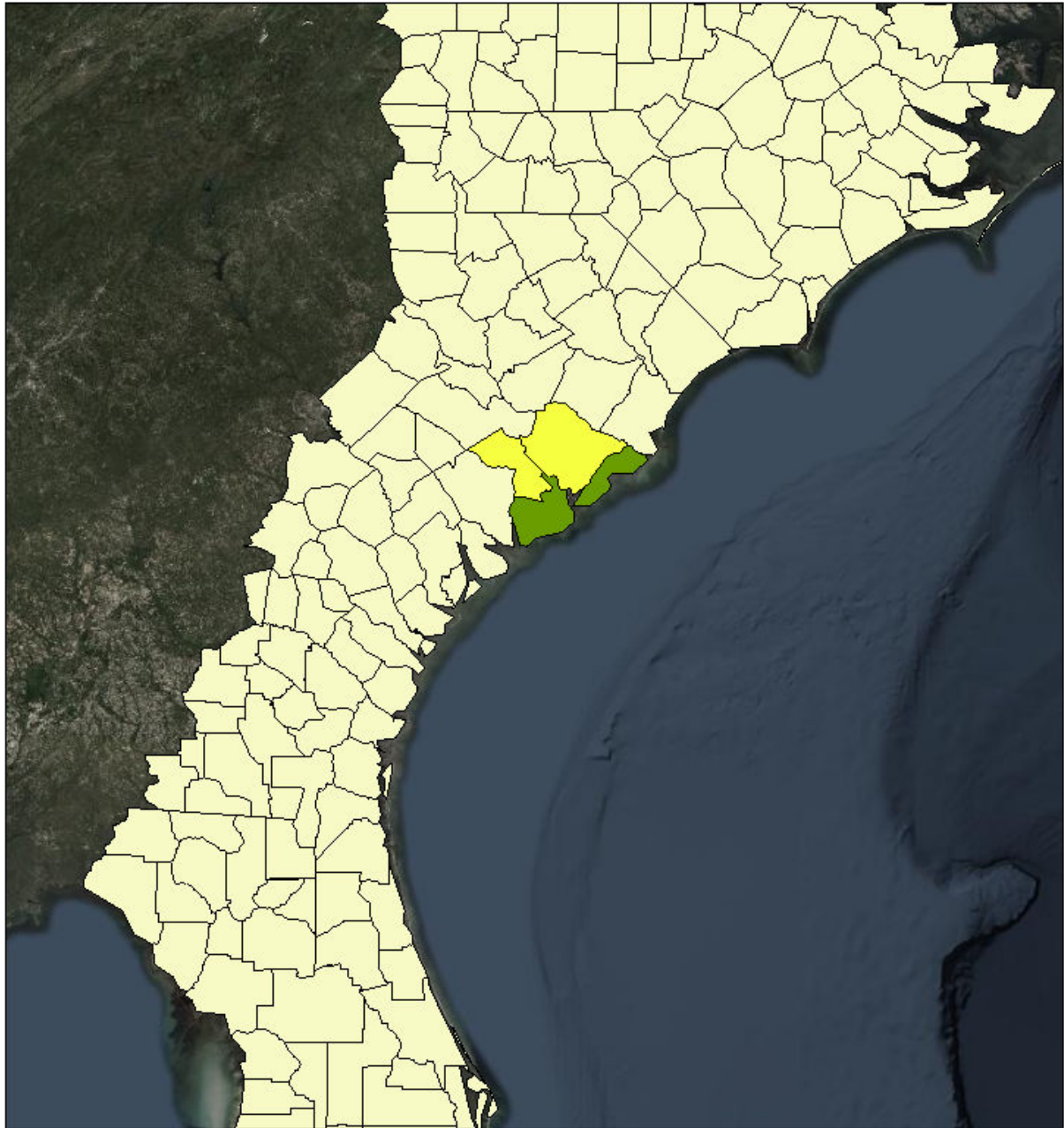
Debris



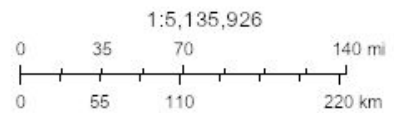
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Created by SimSuite

Est. Temp. Roofing



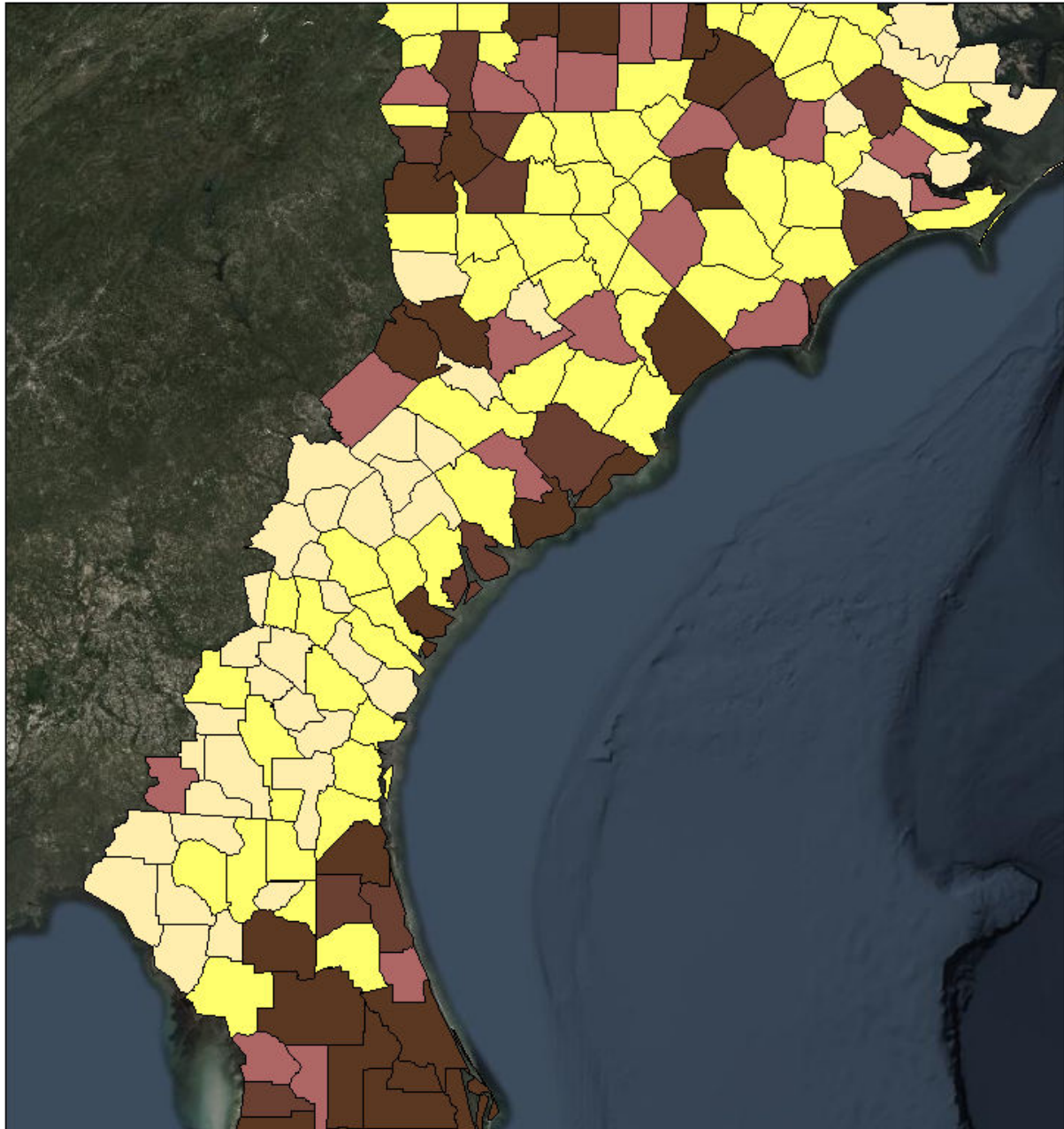
Est. Temp. Roofing



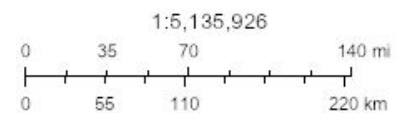
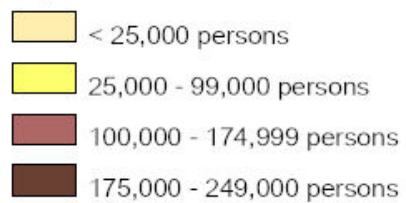
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Population



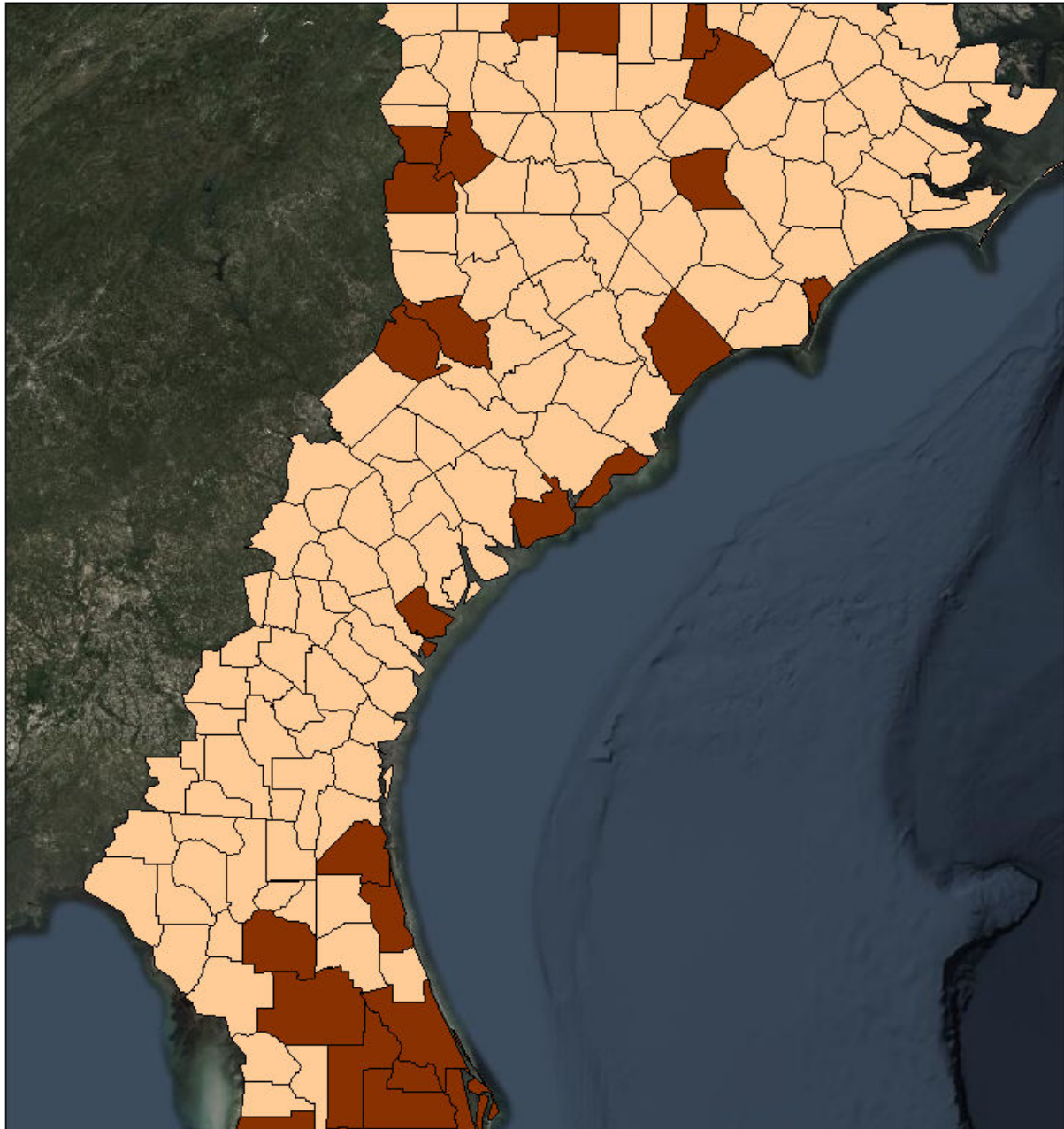
Population



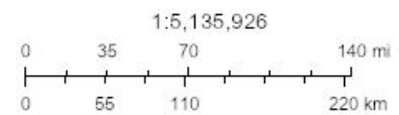
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Created by SimSuite

Households



Households



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

Created by SimSuite

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	4
Debris (cu. yd.)	1,090,187
Est. Temp. Roofing (units)	15,882
Act. Temp. Roofing (units)	3,653
Population	27,814,950
Households	10,040,042

Population Distribution	
Tropical Storm	27,992,379
Category 1	609,949

FLORIDA	Yds of Debris (0)	Est. Roof Units (0)	Act. Roof Units (0)	Population (14,495,351)	Households (5,303,665)
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	0	0	0	578,927	229,692
Charlotte	0	0	0	173,978	73,370
Citrus	0	0	0	144,825	63,304
Clay	0	0	0	209,524	68,792
Collier	0	0	0	368,652	133,179
Columbia	0	0	0	69,419	24,941
DeSoto	0	0	0	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	0	0	0	13,588	4,533
Hamilton	0	0	0	14,344	4,617
Hardee	0	0	0	28,518	8,245
Hendry	0	0	0	39,553	12,025
Hernando	0	0	0	182,273	71,745
Highlands	0	0	0	102,012	42,604
Hillsborough	0	0	0	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	0	0	0	720,426	259,818

Levy	0	0	0	41,097	16,404
Madison	0	0	0	18,862	6,985
Manatee	0	0	0	376,566	135,729
Marion	0	0	0	350,915	137,726
Martin	0	0	0	156,333	63,899
Nassau	0	0	0	80,628	28,794
Okeechobee	0	0	0	39,837	14,013
Orange	0	0	0	1,332,714	421,847
Osceola	0	0	0	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	0	0	0	662,431	227,485
Putnam	0	0	0	74,098	29,409
Sarasota	0	0	0	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

GEORGIA	Yds of Debris (0)	Est. Roof Units (0)	Act. Roof Units (0)	Population (1,202,202)	Households (420,149)
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
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
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
Screven	0	0	0	14,427	5,596
Tattnall	0	0	0	25,147	8,210
Toombs	0	0	0	27,659	10,375
Ware	0	0	0	35,094	13,654
Wayne	0	0	0	29,612	10,562

NORTH CAROLINA	Yds of Debris (0)	Est. Roof Units (0)	Act. Roof Units (0)	Population (8,637,297)	Households (3,082,723)
Alamance	0	0	0	161,563	59,960
Alexander	0	0	0	37,998	14,425
Anson	0	0	0	26,294	9,755
Beaufort	0	0	0	49,465	19,941
Bertie	0	0	0	21,231	8,359
Bladen	0	0	0	35,031	14,430
Brunswick	0	0	0	129,300	46,297
Cabarrus	0	0	0	202,126	65,666

County	2019	2020	2021	2022, 120	2023, 120
Carteret	0	0	0	71,014	28,870
Catawba	0	0	0	158,261	60,887
Chatham	0	0	0	74,307	25,845
Columbus	0	0	0	57,071	22,489
Craven	0	0	0	105,595	40,299
Cumberland	0	0	0	329,248	122,431
Davidson	0	0	0	168,037	64,515
Davie	0	0	0	42,146	16,245
Duplin	0	0	0	60,130	22,495
Durham	0	0	0	313,764	109,348
Edgecombe	0	0	0	54,425	21,680
Forsyth	0	0	0	375,124	141,163
Franklin	0	0	0	65,061	23,023
Gaston	0	0	0	218,244	79,867
Granville	0	0	0	58,822	20,628
Greene	0	0	0	21,226	7,313
Guilford	0	0	0	522,957	196,628
Halifax	0	0	0	53,233	21,970
Harnett	0	0	0	133,215	41,594
Hoke	0	0	0	53,518	16,532
Hyde	0	0	0	5,432	2,119
Iredell	0	0	0	176,156	61,215
Johnston	0	0	0	192,615	61,909
Jones	0	0	0	10,345	4,167
Lee	0	0	0	60,024	22,058
Lenoir	0	0	0	58,621	24,327
Lincoln	0	0	0	82,758	30,343
Martin	0	0	0	23,847	10,318
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
Nash	0	0	0	95,557	37,782
New Hanover	0	0	0	225,895	86,046
Onslow	0	0	0	201,435	60,092
Orange	0	0	0	143,125	51,457
Pamlico	0	0	0	13,920	5,490
Pender	0	0	0	59,850	20,333
Pitt	0	0	0	177,895	67,577
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
Sampson	0	0	0	65,148	24,005

Scotland	0	0	0	36,435	13,614
Stanly	0	0	0	61,870	23,589
Union	0	0	0	230,722	67,864
Vance	0	0	0	45,186	17,395
Wake	0	0	0	1,061,504	345,645
Warren	0	0	0	20,620	8,321
Washington	0	0	0	12,442	5,526
Wayne	0	0	0	126,520	47,831
Wilkes	0	0	0	70,609	28,360
Wilson	0	0	0	83,196	31,962
Yadkin	0	0	0	37,954	15,486

SOUTH CAROLINA	Yds of Debris (1,090,187)	Est. Roof Units (15,882)	Act. Roof Units (3,653)	Population (3,480,100)	Households (1,233,505)
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	318,918	2,874	661	207,154	65,419
Calhoun	0	0	0	14,883	6,080
Charleston	516,037	11,221	2,581	403,176	144,309
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	10,220	159	37	38,408	15,131
Darlington	0	0	0	67,941	26,531
Dillon	0	0	0	31,456	11,923
Dorchester	245,013	1,627	374	157,283	50,259
Fairfield	0	0	0	23,515	9,419
Florence	0	0	0	140,540	52,653
Georgetown	0	0	0	62,847	24,524
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
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
Orangeburg	0	0	0	91,282	35,788
Richland	0	0	0	416,367	145,194
Sumter	0	0	0	109,033	40,398
Williamsburg	0	0	0	33,331	13,007
York	0	0	0	259,723	85,864

Critical Infrastructure

Summary			
Total Critical Facilities		678	
Power Requirements (kW)		22,856.0	
Range (kW)			
Communications	# FED Gen Req	Range (kW)	Req kW
Cellular Towers (68)	40.8	35 - 75	2,244.0
FM Antennas (36)	1.8	35 - 75	99.0
Education	# FED Gen Req	Range (kW)	Req kW
Private Schools (49)	0.0	200 - 300	0.0
Public Schools (159)	47.7	200 - 300	11,925.0
Colleges and Universities (15)	0.3	200 - 300	75.0
Emergency Services	# FED Gen Req	Range (kW)	Req kW
911 Call Centers (0)	0.0	15 - 35	0.0
Emergency Medical Service (61)	6.1	15 - 35	152.5
Fire Stations (127)	12.7	15 - 35	317.5
Healthcare	# FED Gen Req	Range (kW)	Req kW
Nursing Homes (65)	9.8	35 - 100	658.1
Hospitals (15)	4.5	800 - 2000	6,300.0
Urgent Care Facilities (17)	3.4	200 - 300	850.0
Law Enforcement	# FED Gen Req	Range (kW)	Req kW
Local Police (28)	2.8	15 - 35	70.0
Correctional Facilities (0)	0.0	400 - 600	0.0
State and Local EOCs	# FED Gen Req	Range (kW)	Req kW
Local Emergency Operations Centers (3)	0.6	15 - 40	16.5
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 (1)	0.1	100 - 200	15.0

Transportation	# FED Gen Req	Range (kW)	Req kW
Amtrack Stations (1)	0.0	100 - 300	0.0
Bus Stations (0)	0.0	100 - 300	0.0
Intermodal Terminal Facilities (12)	0.0	100 - 300	0.0
Railroad Stations (1)	0.0	100 - 300	0.0
Public-Use Airports (14)	1.7	40 - 100	117.6

Water and Wastewater	# FED Gen Req	Range (kW)	Req kW
Wastewater Treatment Plants (6)	0.3	35 - 70	15.8

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	Charleston	130,875
2	Dorchester	65,958
3	Berkeley	62,117
4	Beaufort	50,231
5	Colleton	10,574

Report Generated by SimSuite

<https://simsuite.usace.army.mil/wab/v2.15/MissionModels/#advid=276&oid=84&name=Hurricane%20Ian&advisory=Advisory%20%2328&advlf=A>