



US Army Corps of Engineers  
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# Hurricane Henri Advisory #20

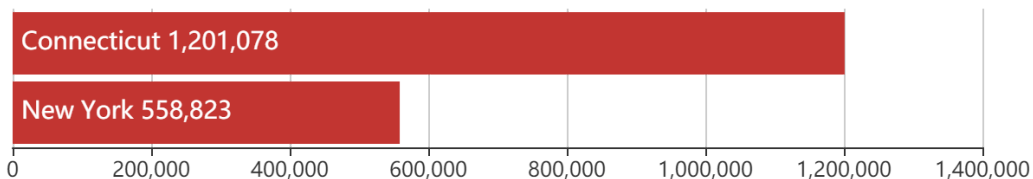
For Planning Purposes Only!

WASHINGTON, DC <b>18:19:17</b> 20 Aug 2021	CHICAGO <b>17:19:17</b> 20 Aug 2021	LOS ANGELES <b>15:19:17</b> 20 Aug 2021
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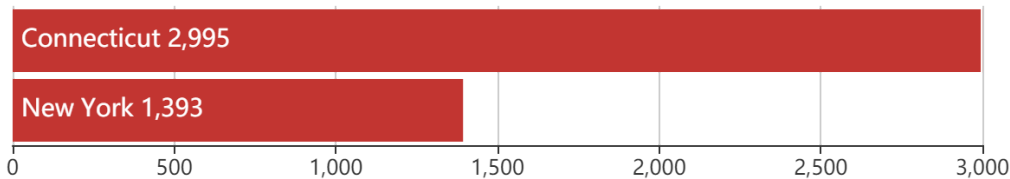
<https://go.usa.gov/xFA6g>

Updated as of 20 Aug 2021 (5:19 PM Central Daylight Time)

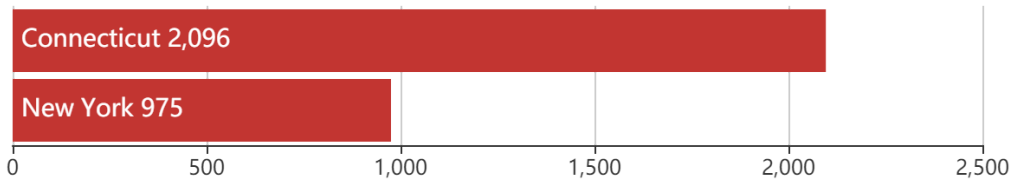
## Debris



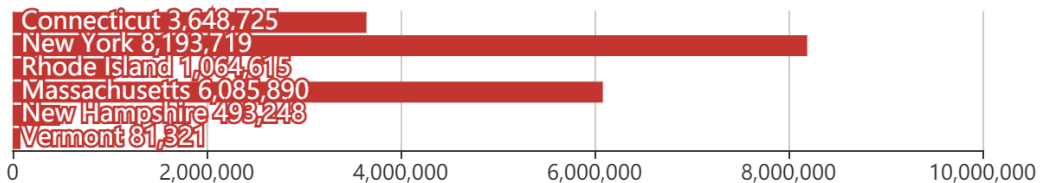
## Est. Temp. Roofing



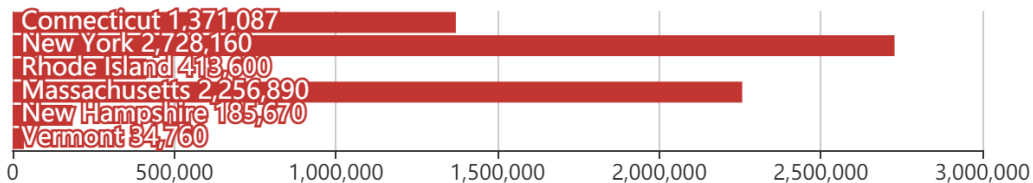
## Act. Temp. Roofing



## Population



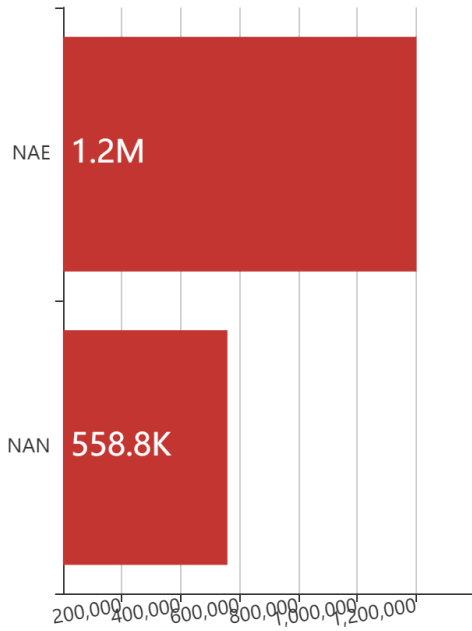
## Households



## Mission Model Summary

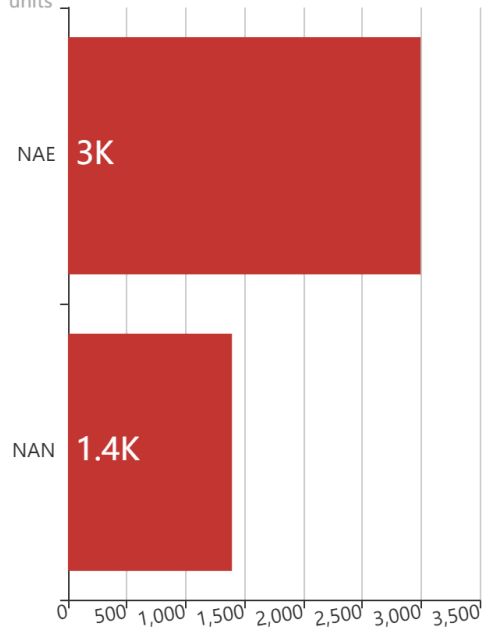
### Debris By USACE District

cu. yd.

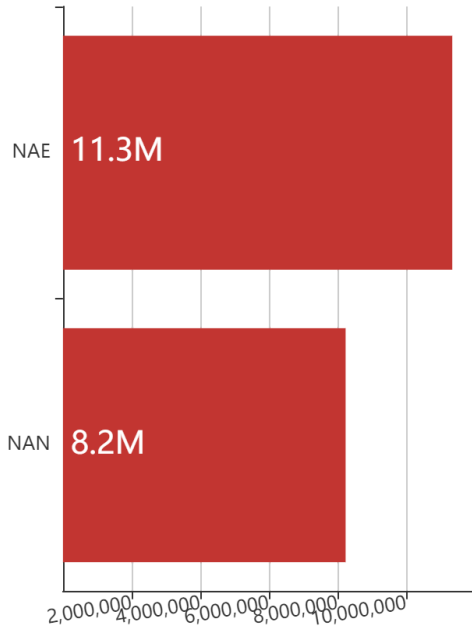


### Est. Temp. Roofing By USACE District

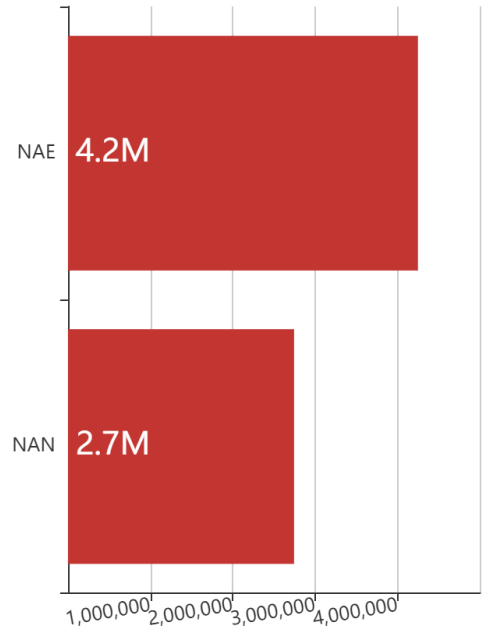
units



### Population By USACE District



### Households By USACE District



## Critical Infrastructure Summary

### Total

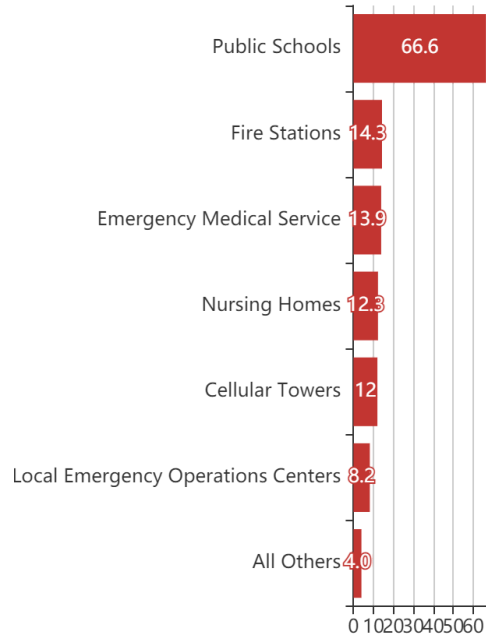


### Power Requirements



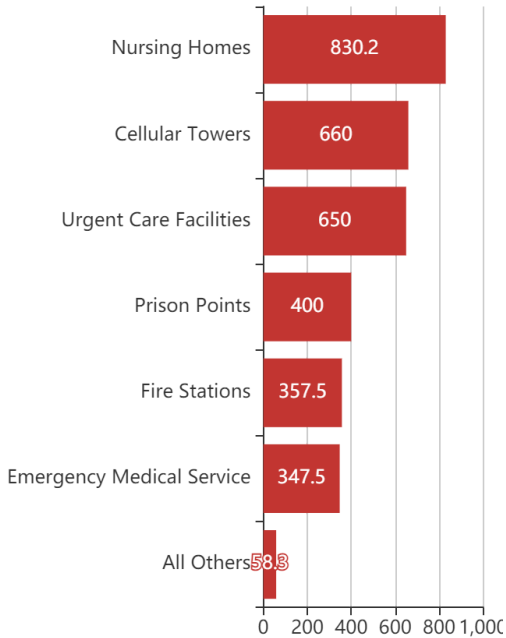
### Generators

By Generator Count



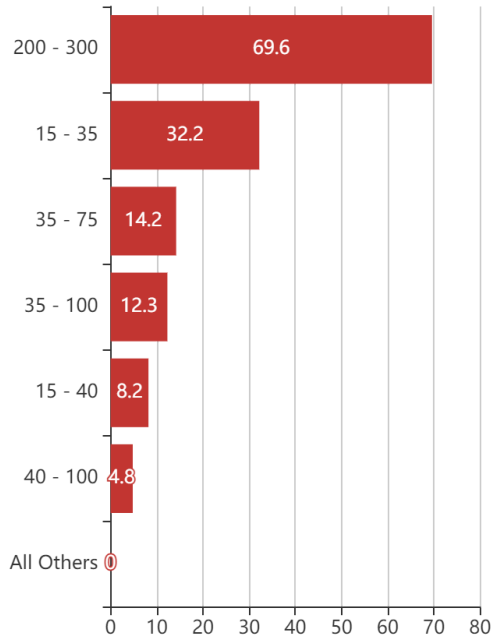
### Generators

By Power Requirement



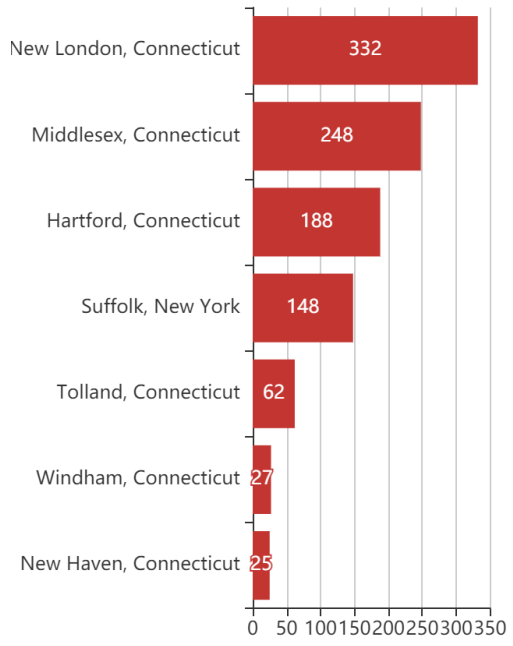
### Generators

By Range



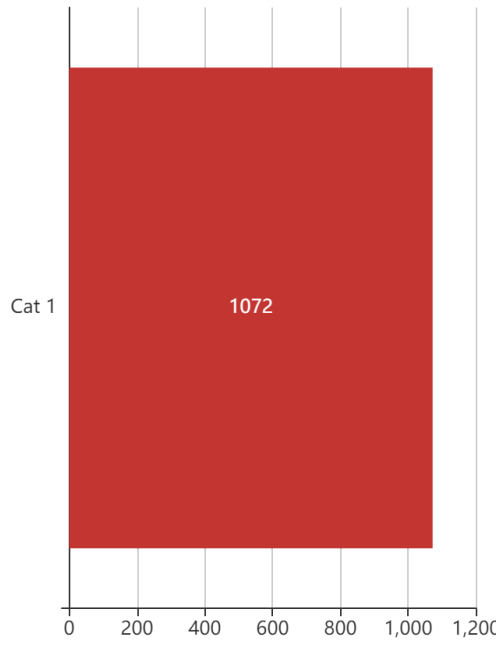
### Structures

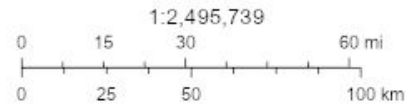
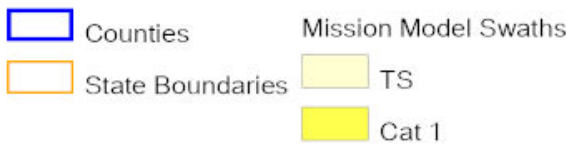
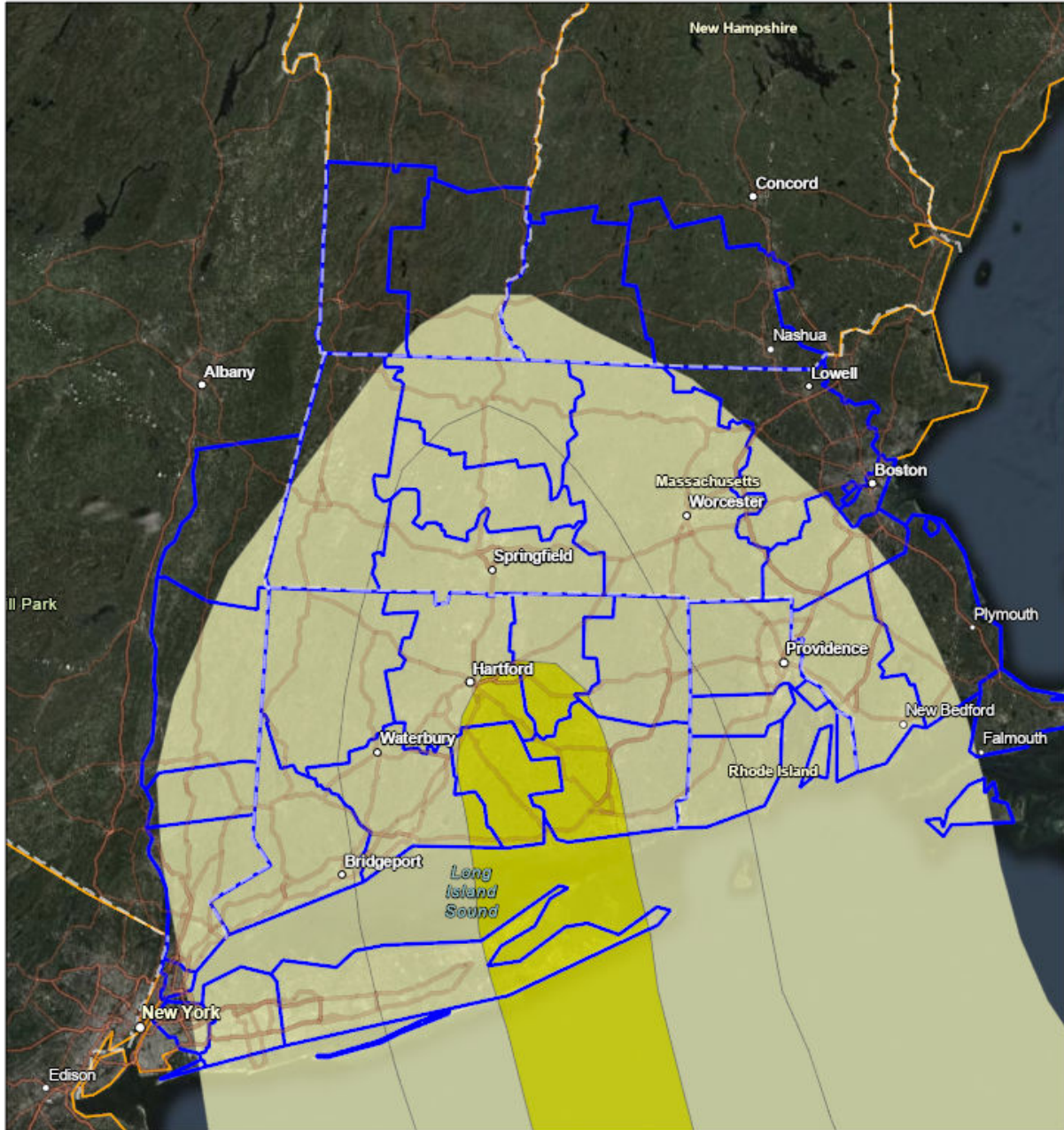
By County



### Structures

By Intensity

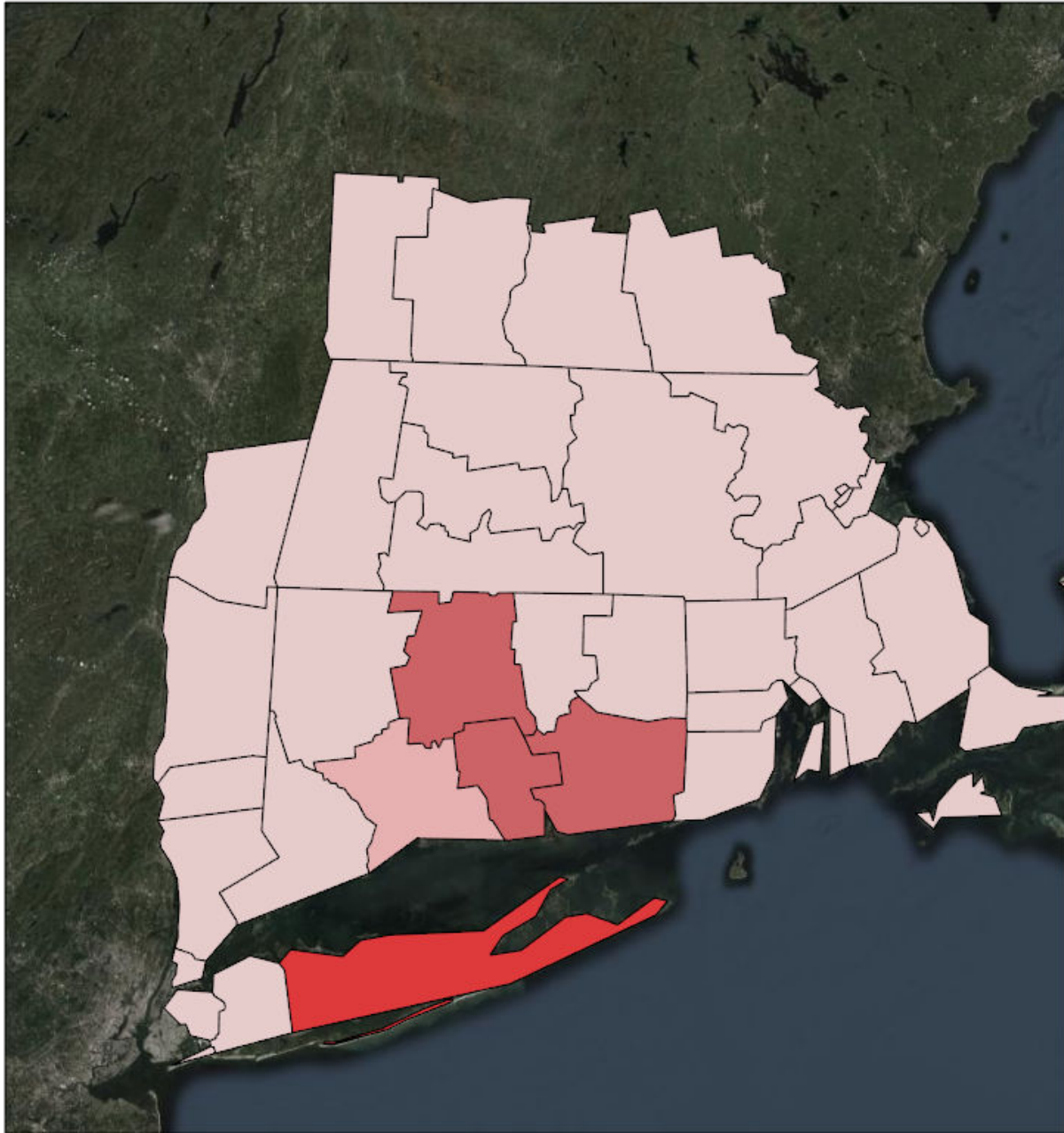








Esri Canada, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS, Source: NOAA, Esri, NOAA/NOS/OCs nowCOAST, NOAA/NWS/NHC, NOAA/NWS/CPHC, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

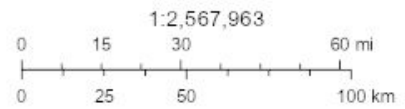
Created by SimSuite

# Debris



## Debris

-  < 100,000 cubic yards
-  100,000 - 249,000 cubic yards
-  250,000 - 499,999 cubic yards
-  500,000 - 999,999 cubic yards




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

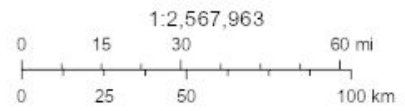
Created by SimSuite

# Est. Temp. Roofing



Est. Temp. Roofing

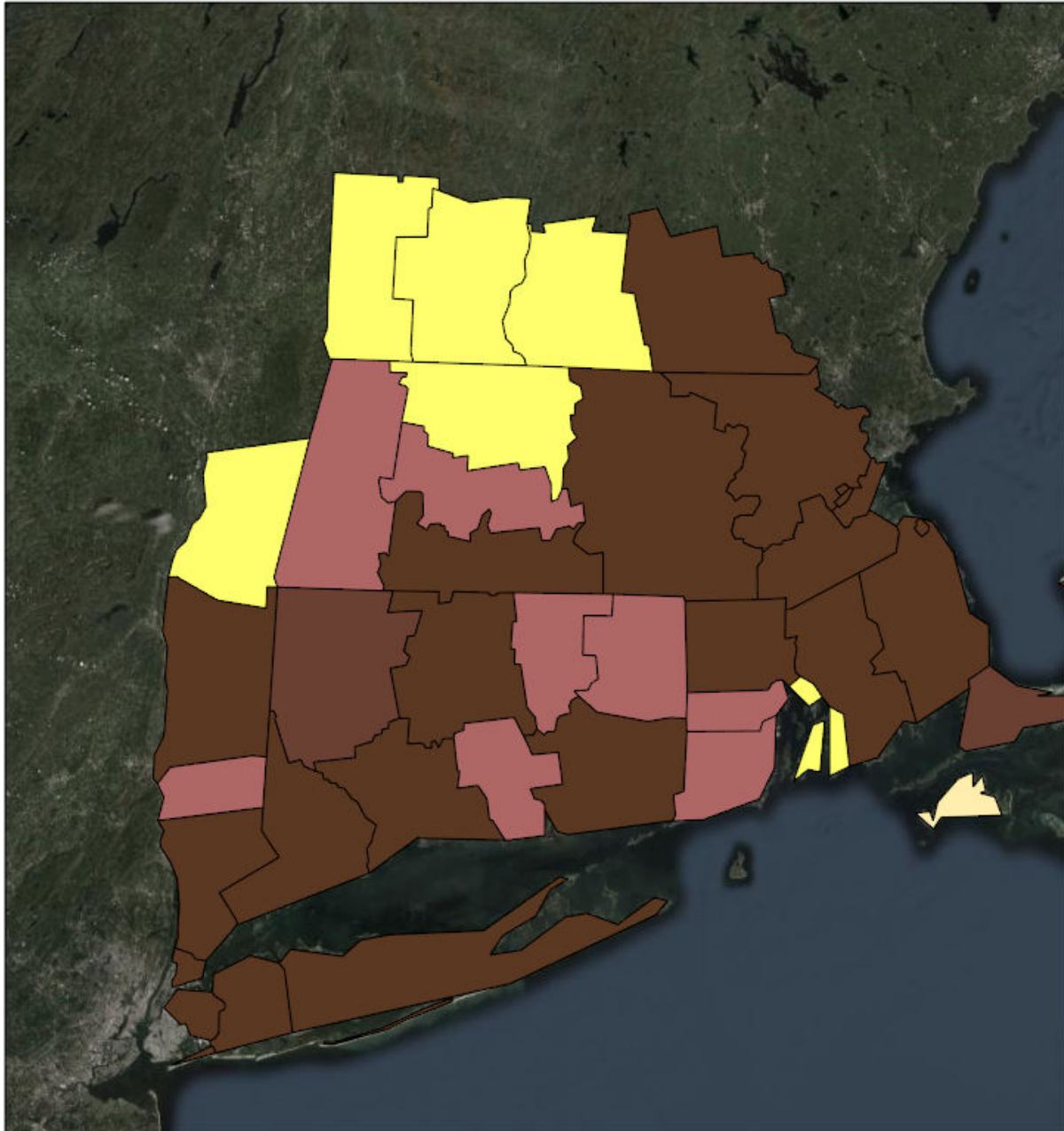
 < 2,000 units



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

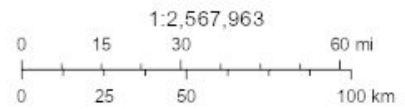
Created by SimSuite

# Population



## Population

- < 25,000 persons
- 25,000 - 99,000 persons
- 100,000 - 174,999 persons
- 175,000 - 249,000 persons

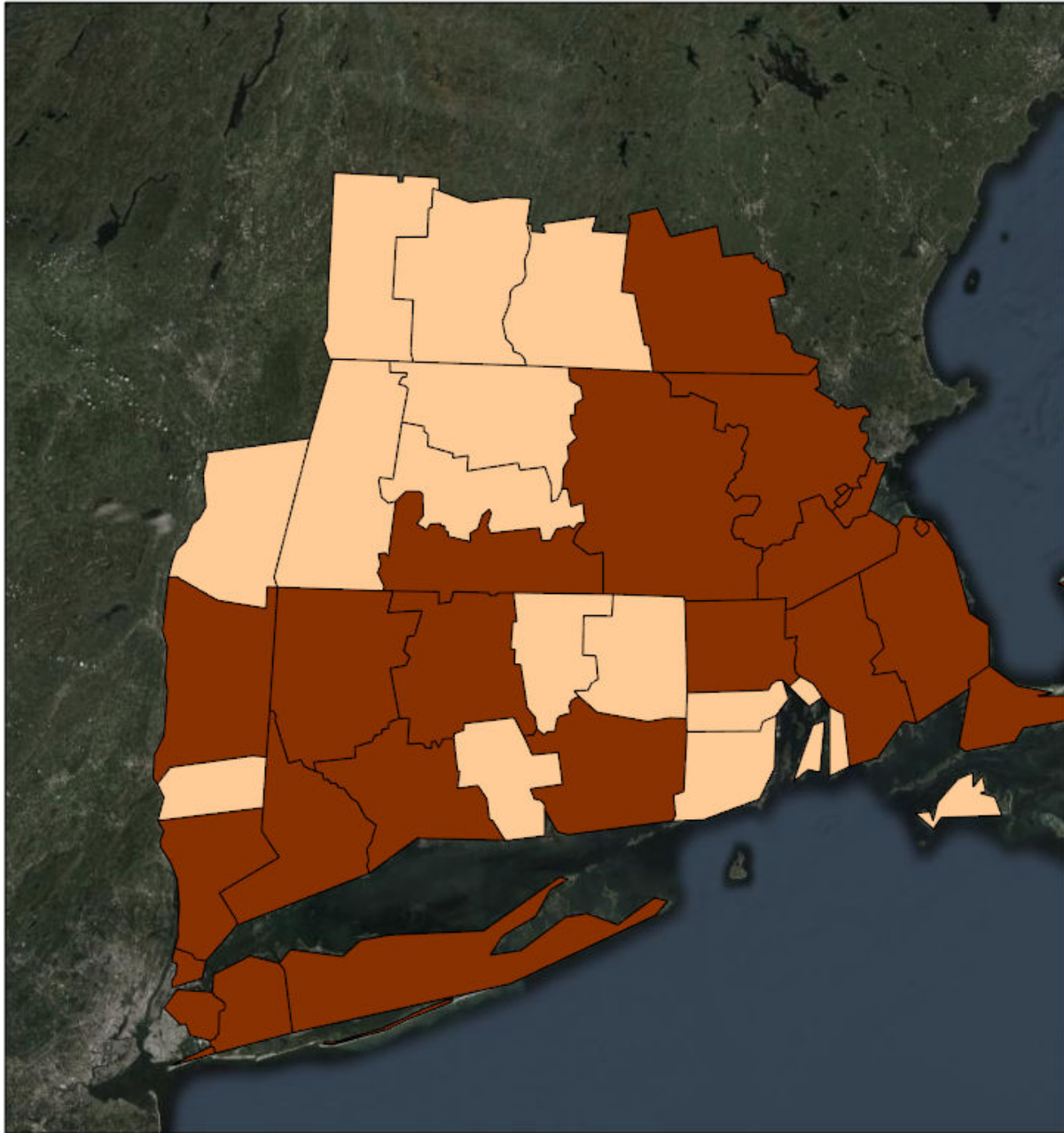


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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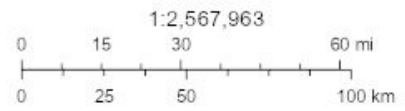


# Households



## 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

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## COVID-19

#	County	Cases
1	Queens	291,385
2	Suffolk	210,935
3	Nassau	193,731
4	Bronx	192,066
5	Middlesex	141,256
6	Westchester	134,833
7	Fairfield	104,359
8	Providence	102,857
9	Suffolk	97,190
10	New Haven	96,671
11	Hartford	88,969
12	Worcester	80,488
13	Bristol	70,305
14	Norfolk	57,396
15	Hampden	55,218
16	Plymouth	51,580
17	Hillsborough	37,783
18	Dutchess	31,087
19	New London	23,907
20	Kent	19,560
21	Litchfield	15,288
22	Barnstable	15,043
23	Middlesex	13,534
24	Windham	11,348
25	Putnam	11,081
26	Washington	10,725
27	Tolland	10,121
28	Hampshire	9,525
29	Newport	7,434
30	Berkshire	7,051
31	Bristol	5,352
32	Columbia	4,235
33	Cheshire	4,145
34	Franklin	2,728
35	Bennington	2,194
36	Windham	1,508
37	Dukes	0

## 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	37
Debris (cu. yd.)	1,759,901
Est. Temp. Roofing (units)	4,388
Act. Temp. Roofing (units)	3,072
Population	19,567,518
Households	6,990,167

Population Distribution	
Tropical Storm	12,180,440
Category 1	1,149,028

CONNECTICUT	Yds of Debris (1,201,078)	Est. Roof Units (2,995)	Act. Roof Units (2,096)	Population (3,648,725)	Households (1,371,087)
Fairfield	0	0	0	964,796	335,545
Hartford	276,127	689	482	906,357	350,854
Litchfield	0	0	0	187,185	76,640
Middlesex	280,294	699	489	166,528	67,202
New Haven	119,384	298	208	873,829	334,502
New London	446,526	1,113	779	276,496	107,057
Tolland	76,457	191	133	154,772	54,477
Windham	2,290	6	4	118,762	44,810

MASSACHUSETTS	Yds of Debris (0)	Est. Roof Units (0)	Act. Roof Units (0)	Population (6,085,890)	Households (2,256,890)
Barnstable	0	0	0	223,733	95,755
Berkshire	0	0	0	128,457	56,091
Bristol	0	0	0	564,846	213,010
Dukes	0	0	0	17,359	7,368
Franklin	0	0	0	70,837	30,462
Hampden	0	0	0	476,058	179,927
Hampshire	0	0	0	164,464	58,702
Middlesex	0	0	0	1,602,184	580,688
Norfolk	0	0	0	702,913	257,914
Plymouth	0	0	0	523,823	181,126
Suffolk	0	0	0	774,572	292,767
Worcester	0	0	0	836,644	303,080

<b>NEW HAMPSHIRE</b>	<b>Yds of Debris (0)</b>	<b>Est. Roof Units (0)</b>	<b>Act. Roof Units (0)</b>	<b>Population (493,248)</b>	<b>Households (185,670)</b>
Cheshire	0	0	0	76,576	30,204
Hillsborough	0	0	0	416,672	155,466

<b>NEW YORK</b>	<b>Yds of Debris (558,823)</b>	<b>Est. Roof Units (1,393)</b>	<b>Act. Roof Units (975)</b>	<b>Population (8,193,719)</b>	<b>Households (2,728,160)</b>
Bronx	0	0	0	1,468,348	483,449
Columbia	0	0	0	64,714	25,906
Dutchess	0	0	0	301,774	107,965
Nassau	0	0	0	1,368,111	448,528
Putnam	0	0	0	101,614	35,041
Queens	0	0	0	2,385,994	780,117
Suffolk	558,823	1,393	975	1,517,429	499,922
Westchester	0	0	0	985,735	347,232

<b>RHODE ISLAND</b>	<b>Yds of Debris (0)</b>	<b>Est. Roof Units (0)</b>	<b>Act. Roof Units (0)</b>	<b>Population (1,064,615)</b>	<b>Households (413,600)</b>
Bristol	0	0	0	49,181	19,150
Kent	0	0	0	166,449	68,645
Newport	0	0	0	83,346	34,911
Providence	0	0	0	639,055	241,717
Washington	0	0	0	126,584	49,177

<b>VERMONT</b>	<b>Yds of Debris (0)</b>	<b>Est. Roof Units (0)</b>	<b>Act. Roof Units (0)</b>	<b>Population (81,321)</b>	<b>Households (34,760)</b>
Bennington	0	0	0	37,178	15,470
Windham	0	0	0	44,143	19,290

## Critical Infrastructure

Summary			
Total Critical Facilities		1,072	
Power Requirements (kW)		26,953.8	
Range (kW)			
Communications	# FED Gen Req	Range (kW)	Req kW
AM Antennas (4)	0.2	35 - 75	11.0
Cellular Towers (20)	12.0	35 - 75	660.0
FM Antennas (39)	2.0	35 - 75	107.3
Education	# FED Gen Req	Range (kW)	Req kW
Private Schools (66)	0.0	200 - 300	0.0
Public Schools (222)	66.6	200 - 300	16,650.0
Colleges and Universities (21)	0.4	200 - 300	105.0
Emergency Services	# FED Gen Req	Range (kW)	Req kW
911 Call Centers (0)	0.0	15 - 35	0.0
Emergency Medical Service (139)	13.9	15 - 35	347.5
Fire Stations (143)	14.3	15 - 35	357.5
Service Providers (0)	0.0	0 - 0	0.0
Healthcare	# FED Gen Req	Range (kW)	Req kW
Nursing Homes (82)	12.3	35 - 100	830.2
Hospitals (8)	2.4	800 - 2000	3,360.0
Urgent Care Facilities (13)	2.6	200 - 300	650.0
Military	# FED Gen Req	Range (kW)	Req kW
Air National Guard (ANG) Sites (0)	0.0	15 - 35	0.0
Army National Guard (ARNG) Sites (7)	0.0	15 - 35	0.0
National Security Government Military Facilities (74)	0.0	15 - 35	0.0
Law Enforcement	# FED Gen Req	Range (kW)	Req kW
Prison Points (4)	0.8	400 - 600	400.0
Local Police (35)	3.5	15 - 35	87.5
State Police (9)	0.5	15 - 35	11.3
Correctional Facilities (0)	0.0	400 - 600	0.0
State and Local EOC	# FED Gen Req	Range (kW)	Req kW
Local Emergency Operations Centers (41)	8.2	15 - 40	225.5
State Emergency Operation Centers (EOCs) (0)	0.0	15 - 35	0.0

State Facilities	# FED Gen Req	Range (kW)	Req kW
Governors Mansion (0)	0.0	100 - 200	0.0
Major State Government Building (1)	0.1	100 - 200	15.0

Transportation	# FED Gen Req	Range (kW)	Req kW
Ports (65)	0.0	600 - 1200	0.0
Amtrak Stations (2)	0.0	100 - 300	0.0
Bus Stations (26)	0.0	100 - 300	0.0
Intermodal Terminal Facilities (2)	0.0	100 - 300	0.0
Railroad Stations (4)	0.0	100 - 300	0.0
Public-Use Airports (40)	4.8	40 - 100	336.0

Water	# FED Gen Req	Range (kW)	Req kW
Water Treatment Facilities (0)	0.0	800 - 2000	0.0
Wastewater Treatment Plants (5)	2.0	800 - 2000	2,800.0

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