Hurricane Henri Advisory #21

US Army Corps of Engineers
BUILDING STRONG®

For Planning Purposes Only!

WASHINGTON, DC	CHICAGO	LOS ANGELES
05:10:57	04:10:57	02:10:57
21 Aug 2021	21 Aug 2021	21 Aug 2021

https://go.usa.gov/xFsYr

Updated as of 21 Aug 2021 (4:10 AM Central Daylight Time)

Debris

740.9K cu. yd.

New York 740,936

| 0 | 100,000 | 200,000 | 300,000 | 400,000 | 500,000 | 600,000 | 700,000 | 800,000 |
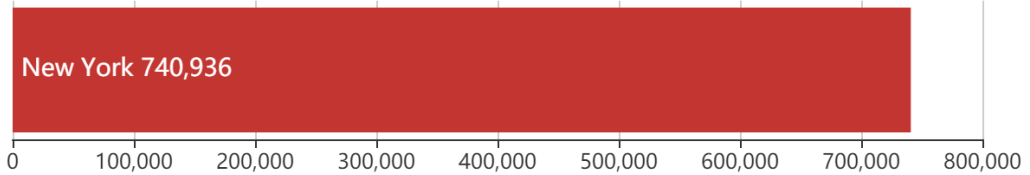
Est. Temp. Roofing

1.5K units

New York 1,520

| 0 | 300 | 600 | 900 | 1,200 | 1,500 | 1,800 |
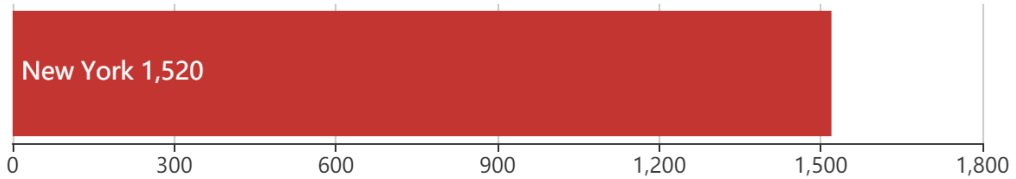
Act. Temp. Roofing

1.1K units

New York 1,064

| 0 | 200 | 400 | 600 | 800 | 1,000 | 1,200 |

Population

28.3M people

New York 14,574,404
New Jersey 6,616,271
Rhode Island 1,064,615
Connecticut 3,648,725
New Hampshire 76,576
Massachusetts 2,241,306
Vermont 81,321

| 0 | 3,000,000 | 6,000,000 | 9,000,000 | 12,000,000 | 15,000,000 |
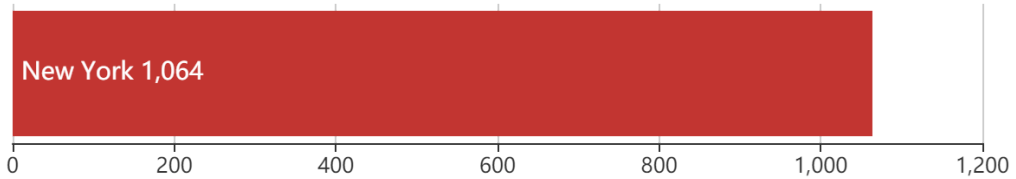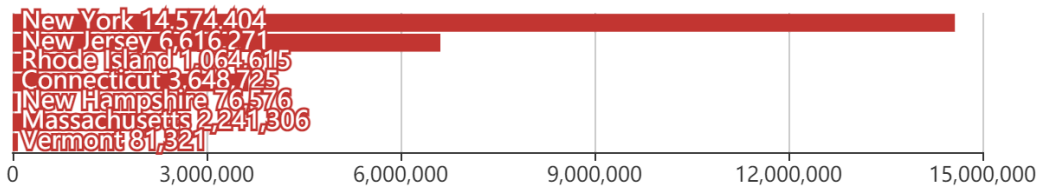
Households

10.1M households

New York 5,124,675
New Jersey 2,310,107
Rhode Island 413,600
Connecticut 1,371,087
New Hampshire 30,204
Massachusetts 841,272
Vermont 34,760

| 0 | 1,000,000 | 2,000,000 | 3,000,000 | 4,000,000 | 5,000,000 | 6,000,000 |
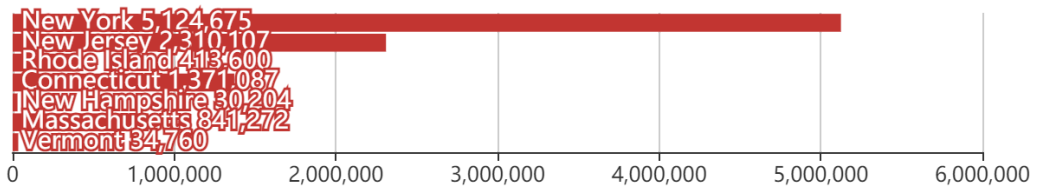
Mission Model Summary

Debris By USACE District

cu. yd.

District	Value
NAN	740.9K

(axis: 100,000 – 700,000)
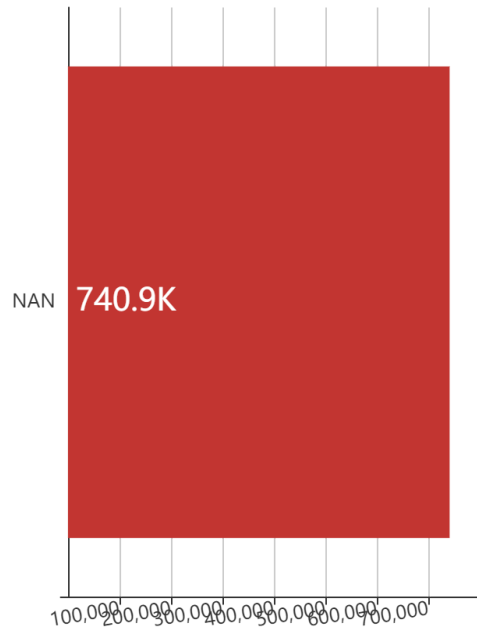
Est. Temp. Roofing By USACE District

units

District	Value
NAN	1.5K

(axis: 0 – 1,800)
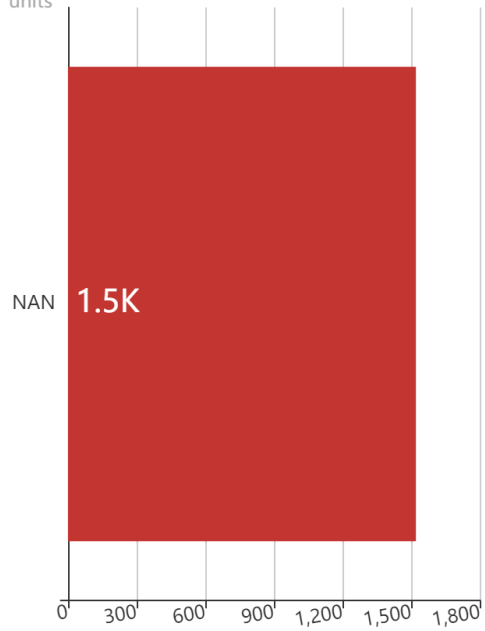
Population By USACE District

District	Value
NAN	19.9M
NAE	7.1M
NAP	1.3M

(axis: 5,000,000 – 20,000,000)
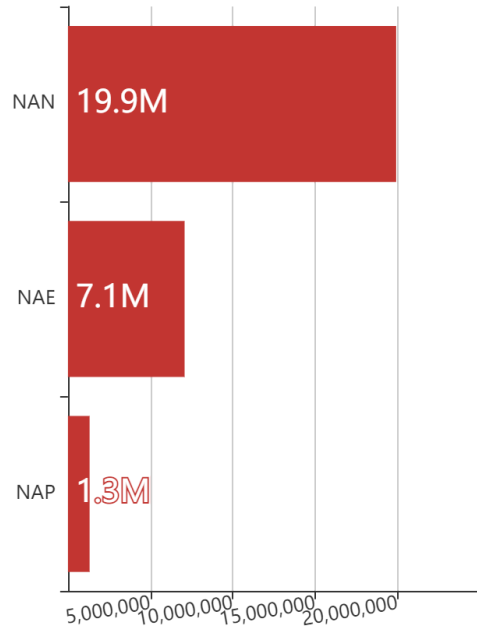
Households By USACE District

District	Value
NAN	7M
NAE	2.7M
NAP	485.2K

(axis: 1,000,000 – 7,000,000)

Critical Infrastructure Summary

Total

192
critical facilities

Power Requirements

6.5
MW
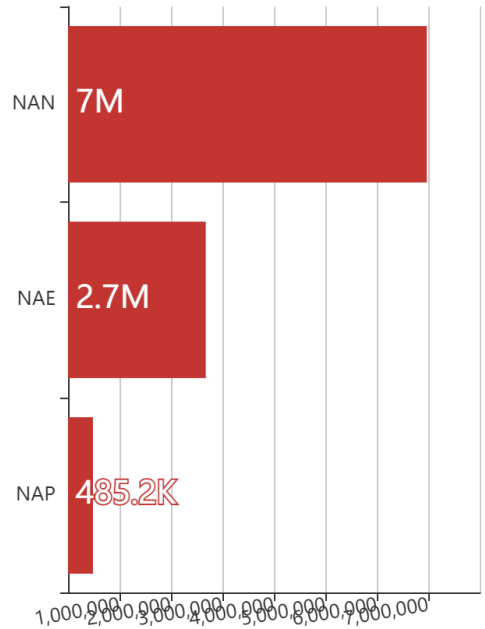
Generators
By Generator Count

Category	Value
Public Schools	13.8
Cellular Towers	4.2
Emergency Medical Service	3.2
Fire Stations	3
Wastewater Treatment Plants	1.2
Public-Use Airports	1.2
All Others	1.0
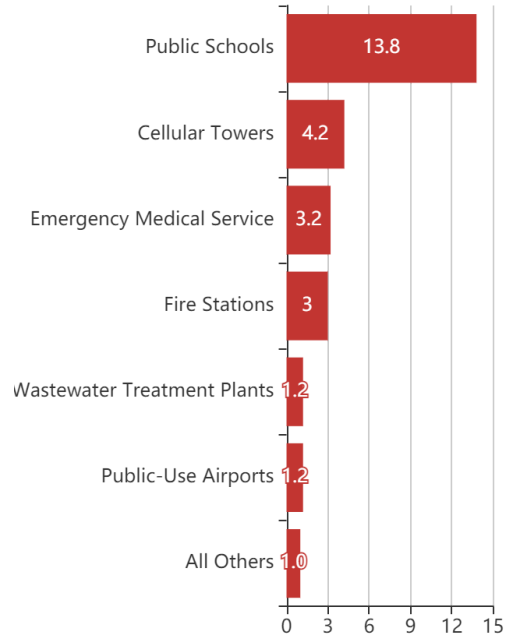
Generators
By Power Requirement

Category	Value
Hospitals	420
Urgent Care Facilities	250
Cellular Towers	231
Prison Points	100
Public-Use Airports	84
Nursing Homes	81
All Others	18.3

Generators
By Range

Category	Value
200 - 300	14.8
15 - 35	6.7
35 - 75	5.0
800 - 2000	1.5
40 - 100	1.2
35 - 100	1.2
All Others	0

Structures
By County

| Suffolk, New York | 192 |

0 30 60 90 120 150 180 210
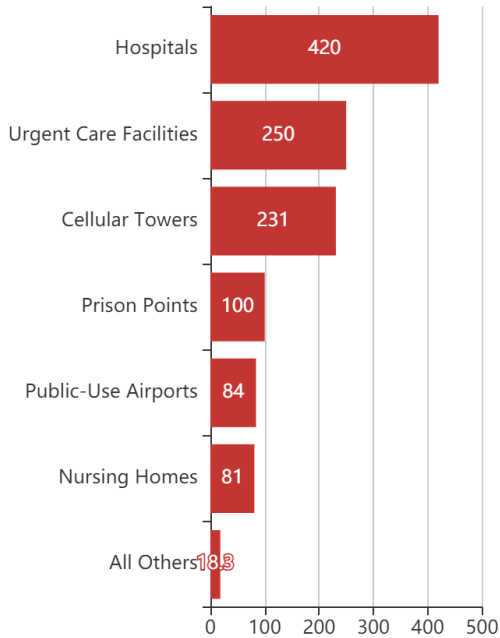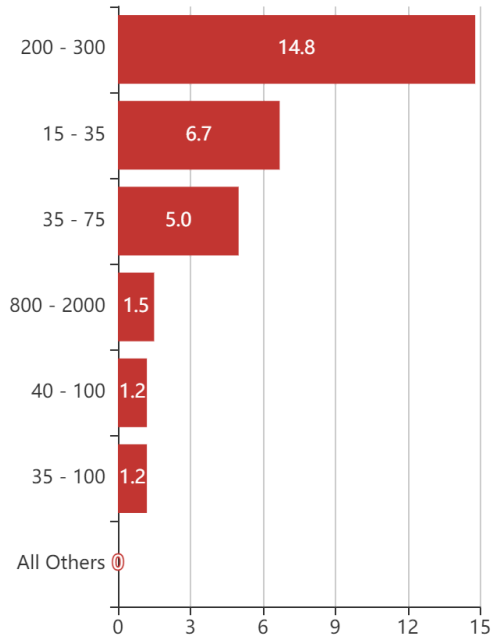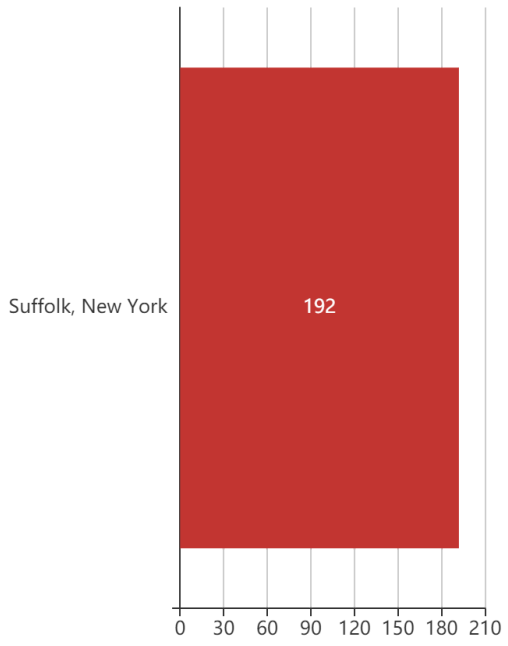
Structures
By Intensity

| Cat 1 | 192 |

0 30 60 90 120 150 180 210
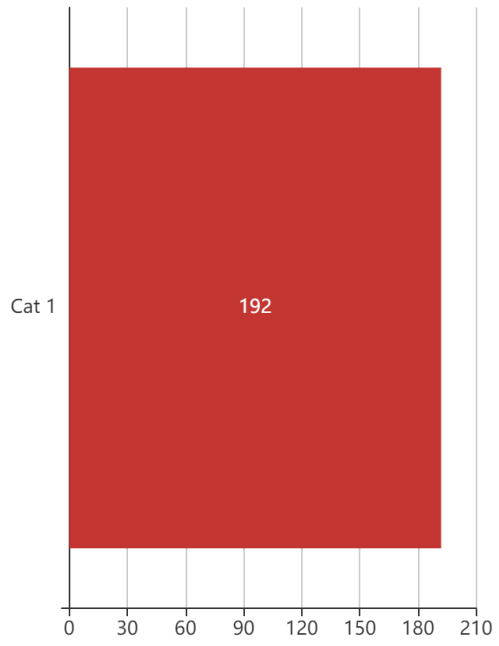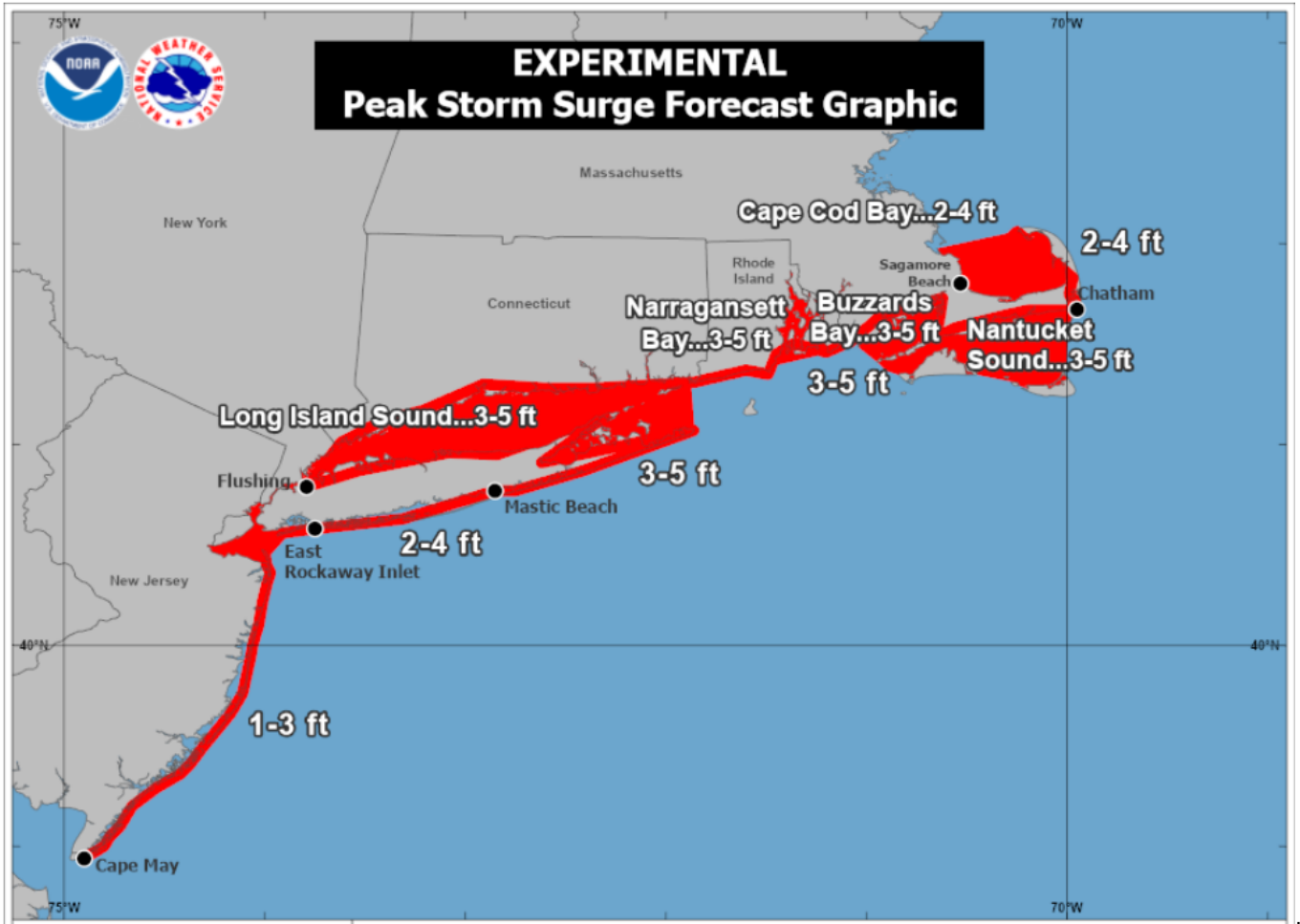
Key Messages for Tropical Storm Henri
## Advisory 22: 5:00 AM EDT Sat Aug 21, 2021

1. Dangerous storm surge inundation is expected to begin late tonight or Sunday in portions of Long Island, Connecticut, Rhode Island, and southeastern Massachusetts, where a Storm Surge Warning has been issued. Dangerous storm surge is possible beginning late tonight or Sunday in western portions of Long Island and Connecticut in the Storm Surge Watch area. Residents in these areas should follow any advice given by local officials.

2. Hurricane conditions are expected to begin late tonight or Sunday in portions of Long Island and Connecticut, where a Hurricane Warning has been issued. Hurricane conditions are possible late tonight or Sunday across portions of Rhode Island.

3. Heavy rainfall may lead to considerable flash, urban, and small stream flooding, along with the potential for widespread minor and isolated moderate river flooding, over portions of Long Island, New England, southeast New York and northern New Jersey.

4. Swells from Henri will continue to affect much of the east coast of the U.S. through the weekend. These swells could cause life-threatening surf and rip currents.
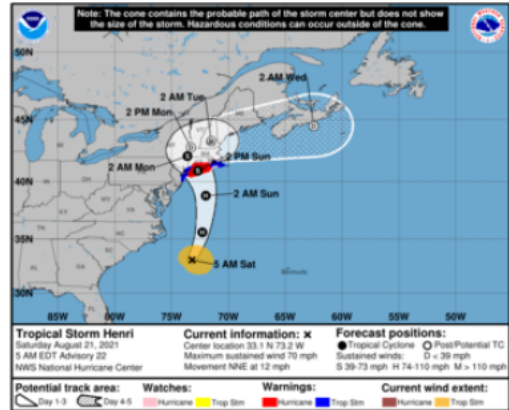
For more information go to hurricanes.gov
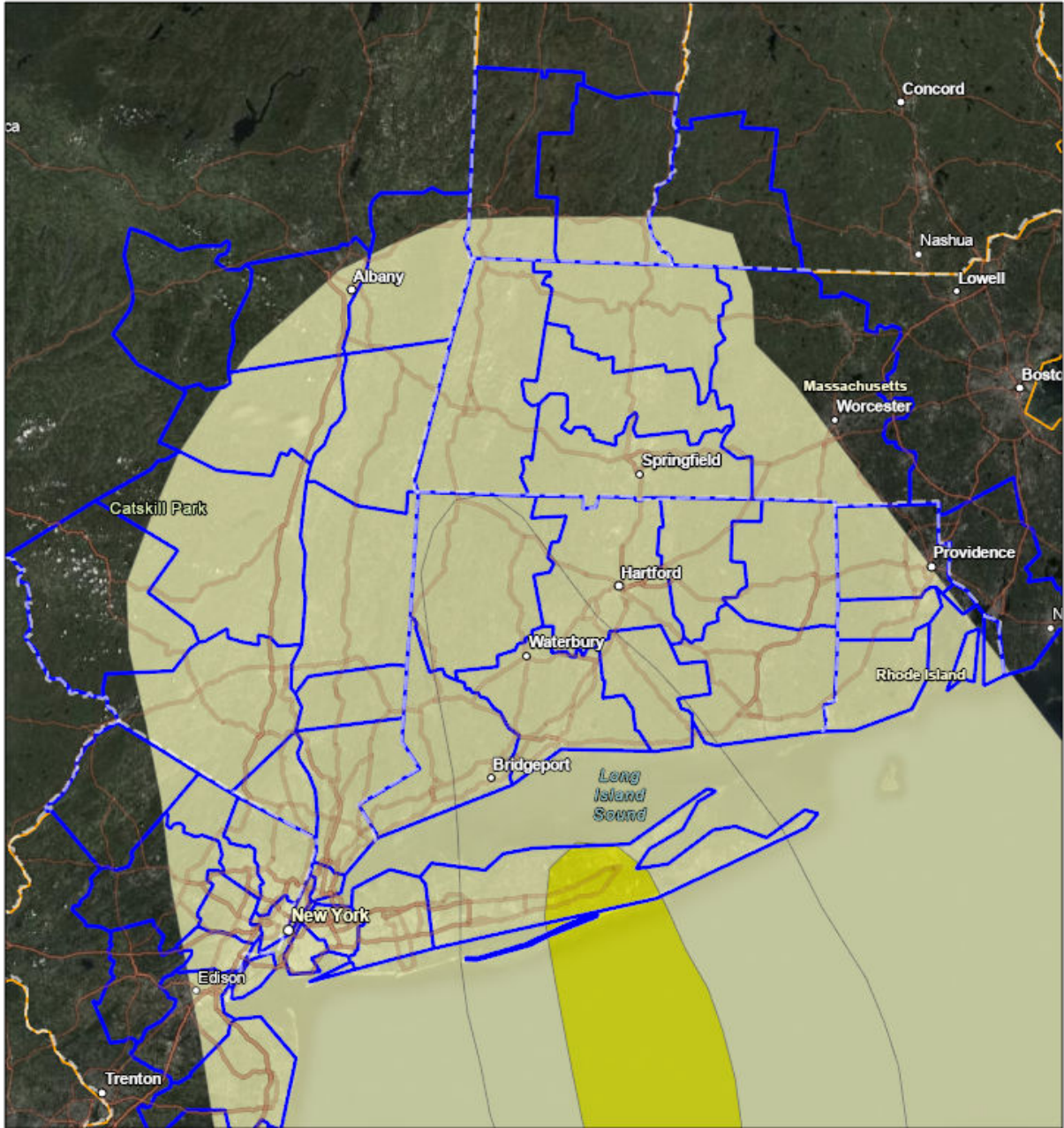
Counties

State Boundaries

Mission Model Swaths

TS

Cat 1

1:2,495,739

0   15   30   60 mi

0   25   50   100 km
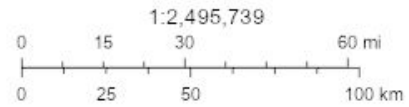
Esri Canada, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS, Source:
NOAA, Esri, NOAA/NOS/OCS nowCOAST, NOAA/NWS/NHC, NOAA/NWS/
CPHC, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/
Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Created by SimSuite

Debris

Debris

■ < 100,000 cubic yards

■ 500,000 - 999,999 cubic yards

1:2,567,963

0   15   30   60 mi

0   25   50   100 km

Created by SimSuite

Est. Temp. Roofing

Est. Temp. Roofing

< 2,000 units
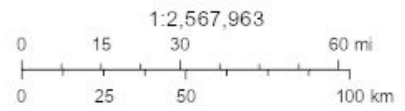
1:2,567,963

| 0 | 15 | 30 | 60 mi |
| 0 | 25 | 50 | 100 km |

Created by SimSuite

Population

Population

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

1:2,567,963

| 0 | 15 | 30 | 60 mi |

| 0 | 25 | 50 | 100 km |

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

Created by SimSuite

Households

1:2,567,963

Households

- █ < 7,500 Households
- █ 15,000 - 24,999 Households
- █ 25,000 - 49,999 Households
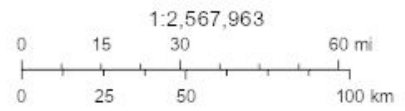
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Created by SimSuite
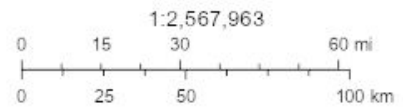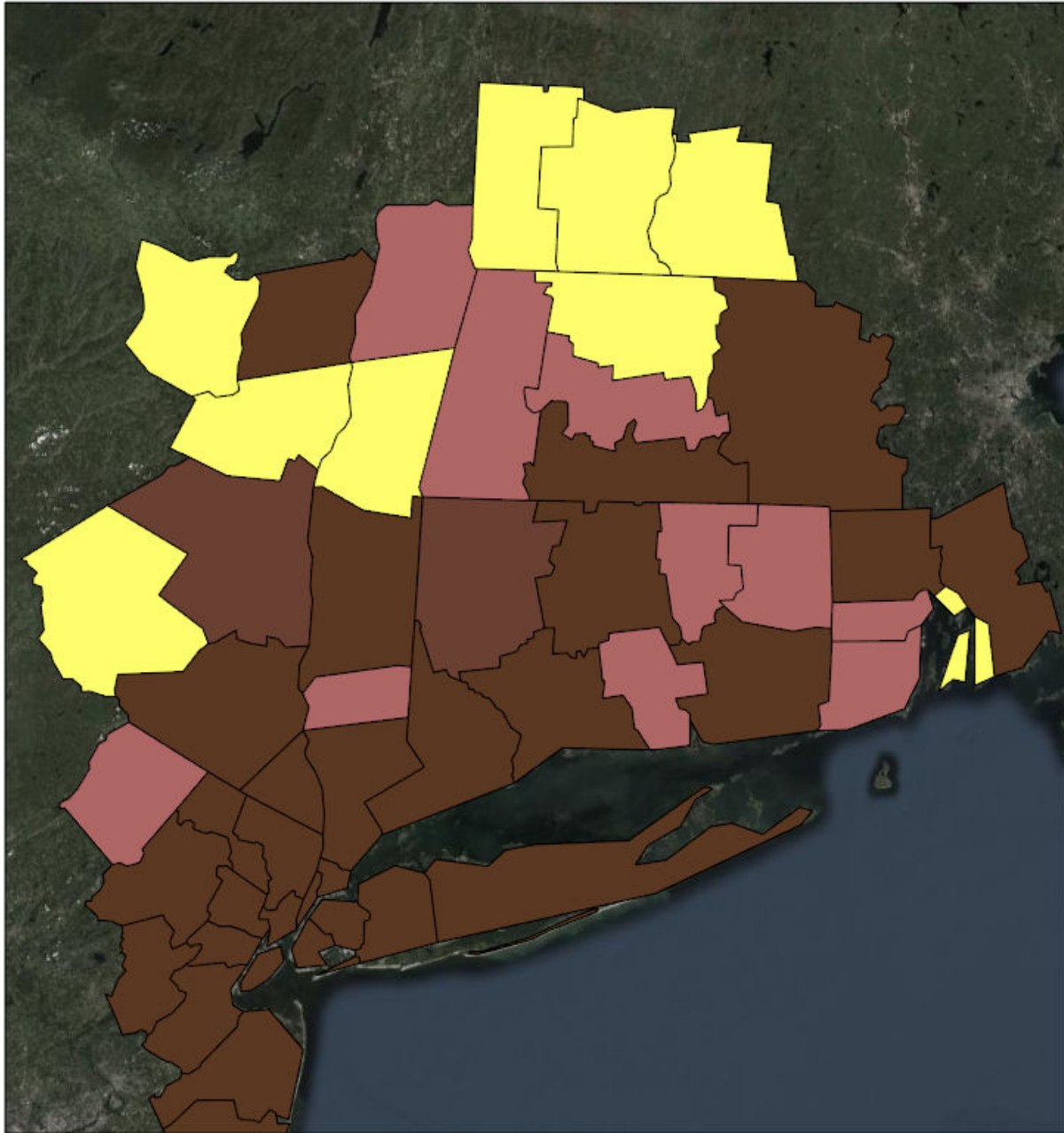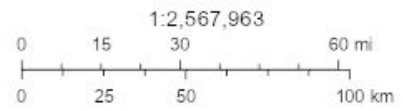
Mission Summary

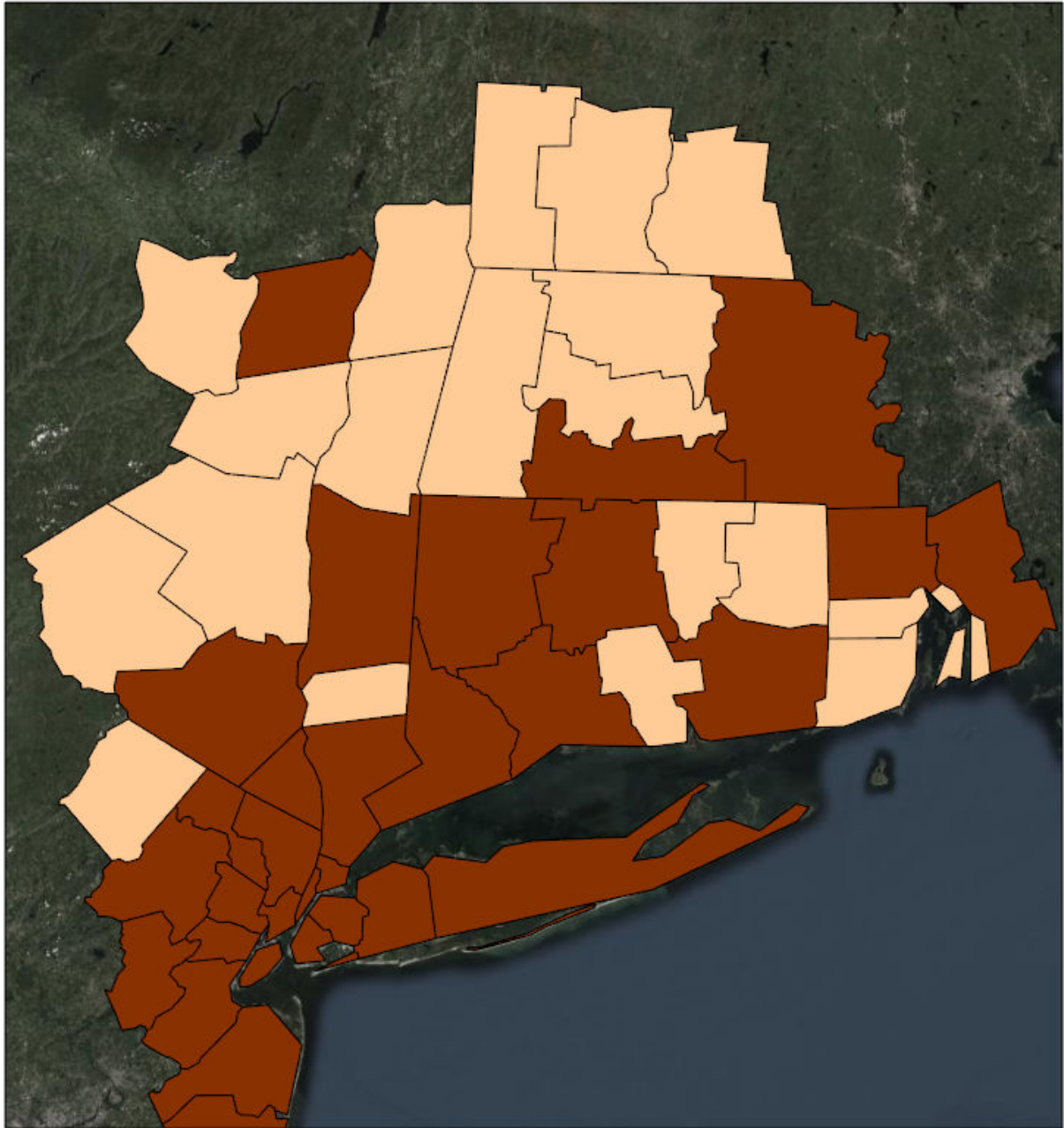The mission models account for storm surge and wind damage only, but do not account for other related storm hazards that may affect the mission estimates.

Mission Summary	
Total Counties	52
Debris (cu. yd.)	740,936
Est. Temp. Roofing (units)	1,520
Act. Temp. Roofing (units)	1,064
Population	28,303,218
Households	10,125,705

Population Distribution	
Tropical Storm	24,652,331
Category 1	443,587

CONNECTICUT	Yds of Debris (0)	Est. Roof Units (0)	Act. Roof Units (0)	Population (3,648,725)	Households (1,371,087)
Fairfield	0	0	0	964,796	335,545
Hartford	0	0	0	906,357	350,854
Litchfield	0	0	0	187,185	76,640
Middlesex	0	0	0	166,528	67,202
New Haven	0	0	0	873,829	334,502
New London	0	0	0	276,496	107,057
Tolland	0	0	0	154,772	54,477
Windham	0	0	0	118,762	44,810

MASSACHUSETTS	Yds of Debris (0)	Est. Roof Units (0)	Act. Roof Units (0)	Population (2,241,306)	Households (841,272)
Berkshire	0	0	0	128,457	56,091
Bristol	0	0	0	564,846	213,010
Franklin	0	0	0	70,837	30,462
Hampden	0	0	0	476,058	179,927
Hampshire	0	0	0	164,464	58,702
Worcester	0	0	0	836,644	303,080

NEW HAMPSHIRE	Yds of Debris (0)	Est. Roof Units (0)	Act. Roof Units (0)	Population (76,576)	Households (30,204)
Cheshire	0	0	0	76,576	30,204

NEW JERSEY	Yds of Debris (0)	Est. Roof Units (0)	Act. Roof Units (0)	Population (6,616,271)	Households (2,310,107)
Bergen	0	0	0	950,113	335,730
Essex	0	0	0	807,352	283,712
Hudson	0	0	0	689,758	246,437
Middlesex	0	0	0	855,458	281,186
Monmouth	0	0	0	638,272	233,983
Morris	0	0	0	505,067	180,534
Ocean	0	0	0	597,487	221,111
Passaic	0	0	0	518,361	166,785
Somerset	0	0	0	340,460	117,759
Sussex	0	0	0	147,826	54,752
Union	0	0	0	566,117	188,118

NEW YORK	Yds of Debris (740,936)	Est. Roof Units (1,520)	Act. Roof Units (1,064)	Population (14,574,404)	Households (5,124,675)
Albany	0	0	0	316,846	126,251
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
Greene	0	0	0	49,876	19,823
Kings	0	0	0	2,688,928	916,856
Nassau	0	0	0	1,368,111	448,528
New York	0	0	0	1,664,404	763,846
Orange	0	0	0	390,634	125,925
Putnam	0	0	0	101,614	35,041
Queens	0	0	0	2,385,994	780,117
Rensselaer	0	0	0	162,365	64,702
Richmond	0	0	0	483,941	165,516
Rockland	0	0	0	328,296	99,242
Schoharie	0	0	0	32,274	13,166
Suffolk	740,936	1,520	1,064	1,517,429	499,922
Sullivan	0	0	0	77,508	30,139
Ulster	0	0	0	185,613	71,049
Westchester	0	0	0	985,735	347,232

RHODE ISLAND	Yds of Debris (0)	Est. Roof Units (0)	Act. Roof Units (0)	Population (1,064,615)	Households (413,600)
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

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

COVID-19

#	County	Cases
1	Kings	298,855
2	Queens	291,385
3	Suffolk	210,935
4	Nassau	193,731
5	Bronx	192,066
6	New York	150,046
7	Westchester	134,833
8	Bergen	109,069
9	Fairfield	104,359
10	Providence	102,857
11	Essex	98,355
12	New Haven	96,671
13	Middlesex	96,284
14	Hudson	91,328
15	Hartford	88,969
16	Monmouth	81,094
17	Ocean	80,725
18	Worcester	80,488
19	Richmond	80,249
20	Passaic	75,540
21	Union	74,265
22	Bristol	70,305
23	Hampden	55,218
24	Morris	52,309
25	Orange	50,837
26	Rockland	48,569
27	Somerset	31,611
28	Dutchess	31,087
29	Albany	26,017
30	New London	23,907
31	Kent	19,560
32	Litchfield	15,288
33	Ulster	14,749
34	Sussex	14,649
35	Middlesex	13,534
36	Rensselaer	11,955
37	Windham	11,348
38	Putnam	11,081
39	Washington	10,725

40	Tolland	10,121
41	Hampshire	9,525
42	Newport	7,434
43	Sullivan	7,092
44	Berkshire	7,051
45	Bristol	5,352
46	Columbia	4,235
47	Cheshire	4,145
48	Greene	3,568
49	Franklin	2,728
50	Bennington	2,194
51	Schoharie	1,820
52	Windham	1,508

Critical Infrastructure

Summary	
Total Critical Facilities	192
Power Requirements (kW)	6,516.8

Range (kW)	

Communications	# FED Gen Req	Range (kW)	Req kW
AM Antennas (2)	0.1	35 - 75	5.5
Cellular Towers (7)	4.2	35 - 75	231.0
FM Antennas (14)	0.7	35 - 75	38.5

Education	# FED Gen Req	Range (kW)	Req kW
Private Schools (6)	0.0	200 - 300	0.0
Public Schools (46)	13.8	200 - 300	3,450.0
Colleges and Universities (1)	0.0	200 - 300	5.0

Emergency Services	# FED Gen Req	Range (kW)	Req kW
911 Call Centers (1)	0.1	15 - 35	2.5
Emergency Medical Service (32)	3.2	15 - 35	80.0
Fire Stations (30)	3.0	15 - 35	75.0
Service Providers (0)	0.0	0 - 0	0.0

Healthcare	# FED Gen Req	Range (kW)	Req kW
Nursing Homes (8)	1.2	35 - 100	81.0
Hospitals (1)	0.3	800 - 2000	420.0
Urgent Care Facilities (5)	1.0	200 - 300	250.0

Military	# FED Gen Req	Range (kW)	Req kW
Air National Guard (ANG) Sites (1)	0.0	15 - 35	0.0
Army National Guard (ARNG) Sites (1)	0.0	15 - 35	0.0
National Security Government Military Facilities (11)	0.0	15 - 35	0.0

Law Enforcement	# FED Gen Req	Range (kW)	Req kW
Prison Points (1)	0.2	400 - 600	100.0
Local Police (3)	0.3	15 - 35	7.5
State Police (1)	0.1	15 - 35	1.3
Correctional Facilities (0)	0.0	400 - 600	0.0

State and Local EOC	# FED Gen Req	Range (kW)	Req kW
Local Emergency Operations Centers (1)	0.2	15 - 40	5.5
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 (0)	0.0	100 - 200	0.0

Transportation	# FED Gen Req	Range (kW)	Req kW
Ports (1)	0.0	600 - 1200	0.0
Amtrak Stations (0)	0.0	100 - 300	0.0
Bus Stations (6)	0.0	100 - 300	0.0
Intermodal Terminal Facilities (0)	0.0	100 - 300	0.0
Railroad Stations (0)	0.0	100 - 300	0.0
Public-Use Airports (10)	1.2	40 - 100	84.0

Water	# FED Gen Req	Range (kW)	Req kW
Water Treatment Facilities (0)	0.0	800 - 2000	0.0
Wastewater Treatment Plants (3)	1.2	800 - 2000	1,680.0

Report Generated by SimSuite
https://go.usa.gov/xFsYr