



5.0 Shelter Analysis

5.1 Purpose

The Behavioral Analysis provides data on where evacuees intend to stay when they leave their homes to seek shelter elsewhere. One destination sought is public shelters. Therefore the purpose of the shelter analysis is to estimate the number of evacuees that will be seeking public shelter and determine the number of shelter spaces available. State and County emergency management offices then use this information to anticipate sheltering needs and to develop plans to insure that evacuees seeking public shelter will have adequate and safe shelter space.

5.2 General

The shelter analysis, performed by the United States Army Corps of Engineers (USACE), considers shelter locations, vulnerability to storm surge, capacities for each location, demand for shelter spaces, and shelter inventories. Data developed in the hazards, vulnerability and behavioral analyses is also used to perform the shelter evaluation. It is important to note that the identification of a shelter in this report does not indicate that the facility will be open and available for every hurricane evacuation event. The choice of public shelters for a specific evacuation is a state and local emergency management decision. Local authorities will open shelters based on a variety of circumstances including storm intensity, storm direction, and availability of qualified shelter operators. Furthermore, shelter designation may change based on new construction, structure modifications, ownership changes or other factors impacting shelter selection. This chapter will discuss shelter vulnerability, shelter demand (number of evacuees seeking public shelter) and shelter inventories and capacities.

5.3 Shelter Vulnerability

Criteria contained in American Red Cross (ARC) publication 4496, Guidelines for Hurricane Evacuation Shelter Selection, are considered when evaluating shelters. The standards were developed from hurricane studies, hazard information, and research into the structural soundness of potential public shelters. The ARC, in coordination with local emergency management officials, only opens shelters as necessary. It is vitally important that any government or private entity intending to operate a public hurricane shelter carefully consider the ARC guidelines to ensure the public's safety. Hazards such as rainfall flooding and high winds are also evaluated for the safety of evacuees seeking shelter. Additionally, hurricane evacuation shelters should be located in areas above any potential storm surge elevations.

Nonetheless, in preparing this shelter analysis, the USACE, as well as the other parties involved with this specific study, did not conduct any ARC 4496 type inspection of shelter facilities. Therefore any public shelter listed in the inventories below, or included in the shelter capacity figures does not necessarily reflect that the facility is in compliance with those guidelines.



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5.4 Shelter Demand

Public shelter demand is the number of evacuees expected to seek public shelter. Based on the behavioral data received and discussed in Chapter 4 of this report, shelter demand was assigned to various populations based on the evacuation scenarios (A, B and C) during low and high tourist occupancy periods. This demand has been estimated for each hurricane evacuation scenario for each community. Evacuation scenarios are discussed in Chapter 3. The percent of permanent resident evacuees planning to use public shelters was varied from five to ten percent depending on the evacuation zone; generally five percent was assigned to the surge vulnerable zones and 10 percent to the inland areas, which encompass mostly mobile home evacuees. Again based on behavioral results, those percentages and their distributions did not vary from response scenario to response scenario or community to community.

For tourist populations, again there was consistency from community to community and from response scenario to response scenario, but the percentages going to public shelter did vary based on evacuation zones. In similar fashion as for permanent residents, the coastal zones had slightly lower shelter use percentages than the inland ones. Also the population associated with seasonal and vacation units was slightly higher than those for hotels and motels. Given that the former types of tourist units were usually leased for a longer period (i.e., a week or more) the assumption was that those occupants would be slightly less likely to totally abandon their units in favor of evacuating back to their home once an evacuation of their area was ordered.

Tables 5-1 through 5-5 show the shelter demand for each evacuation scenario by community, aggregated alphabetically by county. These tables also show the total shelter capacities for each community as provided by the American Red Cross (ARC) National Shelter System (NSS), regardless of scenario. These figures reflect the capacities for those facilities outside the surge evacuation zones (A, B and C) with a planning shelter space allocation of 20 square feet per person.

Please note that these shelter demand figures do not take into account special needs and elderly populations which could increase the demand, albeit only slightly; these individuals may have wheelchairs, walkers, or other special requirements that in many cases will need to be accommodated for in specialized facilities separate from general population shelters.



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Table 5-1: Public Sheltering Demand and Sheltering Capacity – Bristol County

Community	Scenario A Low Occ	Scenario A High Occ	Scenario B Low Occ	Scenario B High Occ	Shelter Capacities*
Barrington	587	592	673	678	300
Bristol	276	288	479	493	300
Warren	287	291	359	364	250
Totals	1,150	1,171	1,511	1,535	850

* Based on American Red Cross National Shelter Survey (NSS) database shelter capacities.

Table 5-2: Public Sheltering Demand and Sheltering Capacity – Kent County

Community	Scenario A Low Occ	Scenario A High Occ	Scenario B Low Occ	Scenario B High Occ	Shelter Capacities*
East Greenwich	77	79	214	217	718
Warwick	1,018	1,056	1,869	1,919	1,795
Totals	1,095	1,135	2,083	2,136	2,513

* Based on American Red Cross National Shelter Survey (NSS) database shelter capacities.

Table 5-3: Public Sheltering Demand and Sheltering Capacity – Newport County

Community	Scenario A Low Occ	Scenario A High Occ	Scenario B Low Occ	Scenario B High Occ	Shelter Capacities*
Jamestown	91	109	136	157	0
Little Compton	54	81	92	125	330
Middletown	142	166	313	345	2,098
Newport	462	547	664	763	336
Portsmouth	291	323	448	485	797
Tiverton	184	196	345	359	350
Totals	1,224	1,422	1,998	2,234	3,911

* Based on American Red Cross National Shelter Survey (NSS) database shelter capacities.



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Table 5-4: Public Sheltering Demand and Sheltering Capacity – Providence County

Community	Scenario A Low Occ	Scenario A High Occ	Scenario B Low Occ	Scenario B High Occ	Scenario C Low Occ	Scenario C High Occ	Shelter Capacities*
Cranston	515	523	1,337	1,346	0	0	1,968
East Providence	440	444	945	949	0	0	3,122
Pawtucket	410	414	1,143	1,149	0	0	2,144
Providence	1,078	1,128	2,947	3,010	2,996	3,059	6,482
Totals	2,443	2,509	6,372	6,454	2,996	3,059	13,716

* Based on American Red Cross National Shelter Survey (NSS) database shelter capacities.

Table 5-5: Public Sheltering Demand and Sheltering Capacity – Washington County

Community	Scenario A Low Occ	Scenario A High Occ	Scenario B Low Occ	Scenario B High Occ	Shelter Capacities*
Charlestown	124	191	208	286	0
Narragansett	454	542	604	697	1,142
New Shoreham	65	156	82	174	475
North Kingstown	332	347	623	642	1,344
South Kingstown	325	412	629	728	1,521
Westerly	267	348	487	580	759
Totals	1,567	1,996	2,633	3,107	5,241

* Based on American Red Cross National Shelter Survey (NSS) database shelter capacities.



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5.5 Shelter Capacities and Inventories

Tables 5-6 and 5-7 provide an inventory of potential hurricane evacuation shelters and capacities throughout the study area that might be used during an evacuation. The table shows the shelter name, community, the Hurricane Evacuation Zone in which each facility is located (A, B, C or Inland), along with any other information that was provided in the source tables. The source of the data in Table 5-6 comes from the ARC National Shelter Survey (NSS) database. Data for Table 5-7 was provided by RI Emergency Management Agency (RIEMA).

Tables 5-8 through 5-12 are an assessment of sheltering capabilities by community and by county. The tables provide an overview of shelter capacities from the NSS relative to the shelter demand figures derived from the behavioral survey data. Basically, the figures reflect the difference between the predicted shelter demand and the shelter capacity. The numbers in black reflect those communities where shelter capacity exceeds local shelter demand. The red figures in parentheses indicate those communities with shelter shortfalls (i.e., shelter demand > shelter capacity).

Figures 5-1 through 5-5 displays the location of all identified shelters and the location of the evacuating population seeking public shelter resulting from a Scenario B hurricane with high tourist occupancy.



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Table 5-6: Shelter Inventory – American Red Cross

County	Community	Zone	Shelter Name ¹	Address	ARC Shelter #	Usable Sq Ft	Evacuation Capacity	Post Impact Capacity
Bristol County	Barrington	A	Atria Bay Spring Village	147 Bay Spring Ave	150618	-	300	150
	Barrington	Inland	Primrose Hill School ¹	60 Middle Highway	59756	-	300	0
	Bristol	Inland	Mount Hope High School	199 Chestnut St	138177	-	300	150
	Warren	A	Hugh Cole School	40 Asylum Rd	14436	-	121	60
	Warren	A	Kickemuit Middle School ¹	525 Child St	37471	6,956	345	170
	Warren	Inland	Mary V. Quirk School	790 Main St	37469	-	250	125
	Warren	B	Warren Senior Center	514 Main St	150619	-	0	35
Kent County	Coventry	Inland	Coventry Department Of Human Services	50 Wood St	58118	5,000	250	125
	Coventry	Inland	Coventry High School ¹	40 Reservoir Rd	141198	-	450	250
	East Greenwich	Inland	East Greenwich High School ¹	300 Avenger Dr	59747	-	718	359
	Warwick	Inland	Met Life	700 Quaker Lane	75986	10,000	0	250
	Warwick	Inland	Pilgrim High School ¹	111 Pilgrim Pkwy	54611	-	690	345
	Warwick	Inland	Veterans Memorial High School	2401 W Shore Rd	54622	-	769	384
	Warwick	Inland	Winman Junior High School	575 Centerville Rd	54619	-	336	168
	West Greenwich	Inland	Exeter / West Greenwich Junior / Senior High School	930 Nooseneck Hill Rd	67319	160,000	8,000	0
	West Warwick	Inland	John F. Derring Middle School	Webster/Knight Dr	64470	-	0	250
	West Warwick	Inland	Roberts Street Manor	62 Roberts St	78242	5,000	55	0
	West Warwick	Inland	West Warwick Civic Center Arena	100 Factory St	78268	2,500	125	62

1. Shelter facility is common to both the American Red Cross (NSS) inventory and the shelter list is provided by the Rhode Island Emergency Management Agency.



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Table 5-6: Shelter Inventory – American Red Cross (continued)

County	Community	Zone	Shelter Name ¹	Address	ARC Shelter #	Usable Sq Ft	Evacuation Capacity	Post Impact Capacity
Newport County	Jamestown	Inland	Melrose Elementary School ¹	76 Melrose Ave	55045	-	0	500
	Little Compton	Inland	Wilbur and McMahon Schools	28 Commons	73937	4,950	330	123
	Middletown	Inland	Joseph H. Gaudet Middle School ¹	1113 Aquidneck Ave	10680	-	1,098	549
	Middletown	Inland	Middletown FOP Lodge #21	464 Mitchells Lane	78713	1,500	0	37
	Middletown	Inland	Middletown High School ¹	130 Valley Rd	59750	-	1,000	500
	Newport	Inland	Florence Gray Center	120B Hillside Ave	137824	5,000	0	125
	Newport	Inland	Martin Luther King Center	20 Dr Marcus Wheatland Memorial Blvd	64969	3,225	104	0
	Newport	Inland	Thompson Middle School	55 Broadway	66329	-	232	116
	Portsmouth	Inland	Portsmouth High School	120 Education Lane	54886	23,762	297	0
	Portsmouth	Inland	Portsmouth Middle School ¹	125 Jepson Lane	59755	1,000	500	250
Tiverton	Inland	Tiverton Middle School ¹	10 Quintal Dr	59770	-	350	175	
Providence County	Burrillville	Inland	Burrillville High School ¹	425 East Ave	75874	47,793	2,389	769
	Central Falls	Inland	Earl Calcutt Middle School ¹	112 Washington St	78448	-	0	150
	Cranston	Inland	Cranston Senior Services	1070 Cranston St	58723	-	0	266
	Cranston	Inland	Hope Highlands Elementary School	300 Hope Rd	77823	-	440	220
	Cranston	Inland	Park View Middle School ¹	25 Park View Blvd	77826	-	1,128	438
	Cranston	Inland	Western Hills Middle School ¹	400 Phenix Ave	77824	-	400	200

1. Shelter facility is common to both the American Red Cross (NSS) inventory and the shelter list is provided by the Rhode Island Emergency Management Agency.



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Table 5-6: Shelter Inventory – American Red Cross (continued)

County	Community	Zone	Shelter Name ¹	Address	ARC Shelter #	Usable Sq Ft	Evacuation Capacity	Post Impact Capacity
Providence County	Cumberland	Inland	Joseph L McCourt Middle School	45 Highland Ave	59739	-	300	150
	Cumberland	Inland	North Cumberland Middle School	400 Nate Whipple Hwy	59753	-	300	150
	East Providence	Inland	East Providence High School ¹	2000 Pawtucket Ave	54607	-	2,000	1,000
	East Providence	Inland	East Providence Senior Center	610 Waterman Ave	141197	-	400	200
	East Providence	Inland	Riverside Middle School	179 Forbes St	54610	-	722	361
	Foster	Inland	Captain Isaac Paine School ¹	160 Foster Center Rd	69402	-	400	200
	Foster	Inland	Moosup Valley Volunteer Fire Company	53 Mossup Valley Rd	10674	-	0	25
	Lincoln	Inland	Lincoln High School	135 Old River Rd	67006	200,000	400	200
	North Providence	Inland	Birchwood Middle School	10 Birchwood Dr	65735	-	156	0
	North Providence	Inland	North Providence High School ¹	1828 Mineral Spring Ave	65727	-	412	0
	North Providence	Inland	Ricci Middle School	51 Intervale Ave	65723	-	156	0
	North Providence	Inland	Salvatore Mancini Resource And Activity Center	2 Atlantic Blvd	66642	-	200	0
	North Smithfield	Inland	North Smithfield High School ¹	412 Greenville Rd	10667	50,000	2,500	1,250

1. Shelter facility is common to both the American Red Cross (NSS) inventory and the shelter list is provided by the Rhode Island Emergency Management Agency.



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Table 5-6: Shelter Inventory – American Red Cross (continued)

County	Community	Zone	Shelter Name ¹	Address	ARC Shelter #	Usable Sq Ft	Evacuation Capacity	Post Impact Capacity
Providence County	North Smithfield	Inland	North Smithfield Middle School ¹	1850 Providence Pike	138178	105,850	500	250
	Pawtucket	Inland	Curvin - Mccabe Elementary School	466 Cottage St	37145	-	344	177
	Pawtucket	Inland	Elizabeth Baldwin Elementary School	50 Whitman St	29892	5,000	250	125
	Pawtucket	Inland	Francis J. Varieur Elementary School	486 Pleasant St	31370	4,000	200	100
	Pawtucket	Inland	Jeanne Jugan Residence Of The Little Sisters Of The Poor	964 Main St	66330	-	500	0
	Pawtucket	Inland	Joseph Jenks Junior High School ¹	350 Division St	31364	12,000	600	300
	Pawtucket	Inland	Nathaniel Greene Elementary School	285 Smithfield Ave	31368	5,000	250	125
	Pawtucket	Inland	Salvation Army Bldg	102 High St	151350	-	0	100
	Providence	Inland	Alfred Lima Elementary School	234 Daboll St	7772	4,000	200	100
	Providence	Inland	Anthony Carnevale Jr. Elementary School	50 Springfield St	10685	2,000	100	50
	Providence	Inland	B JAE Clanton Elementary School	672 Prairie Ave	10701	-	350	175
	Providence	Inland	DelSesto-Springfield Middle School ¹	152 Springfield St	59769	-	750	375
	Providence	Inland	Hope High School	324 Hope St	59749	-	500	250

1. Shelter facility is common to both the American Red Cross (NSS) inventory and the shelter list is provided by the Rhode Island Emergency Management Agency.



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Table 5-6: Shelter Inventory – American Red Cross (continued)

County	Community	Zone	Shelter Name ¹	Address	ARC Shelter #	Usable Sq Ft	Evacuation Capacity	Post Impact Capacity
Providence County	Providence	Inland	Mount Pleasant High School	434 Mount Pleasant Ave	59752	-	500	250
	Providence	Inland	Neutaconkanut Recreation Club ¹	675 Plainfield St	72408	11,000	550	275
	Providence	Inland	Providence Career & Technical Academy ¹	41 Fricker St	136699	-	2,800	1,400
	Providence	Inland	Wheeler School	216 Hope St	139499	-	732	256
	Smithfield	Inland	Anna M. McCabe School	100 Pleasant View Ave	136704	-	100	200
	Smithfield	Inland	Old County Elementary School	200 Old County Rd	136701	-	0	246
	Smithfield	Inland	Raymond C. Lapearch School	11 Limerock Rd	136705	-	219	110
	Smithfield	Inland	Smithfield High School	90 Pleasant View Ave	78255	15,500	775	285
	Smithfield	Inland	Vincent J. Gallagher Jr. High School	10 Indian Run Trail	136706	-	275	137
	Woonsocket	Inland	Crepean Court Community Rm	100 Front St	71103	2,156	107	53
	Woonsocket	Inland	Kennedy Manor Community Room	547 Clinton St	10713	-	100	50
	Woonsocket	Inland	Morin Heights Community Room	66 Morin Heights Blvd	71111	3,200	160	80
	Woonsocket	Inland	Parkview Community Room	218 Pond St	10712	-	100	50
	Woonsocket	Inland	St. Germain Manor Community Room	429 East School St	71102	2,156	107	53
Woonsocket	Inland	Veterans Memorial Community Room	2 Bourdon Blvd	71104	856	42	21	

1. Shelter facility is common to both the American Red Cross (NSS) inventory and the shelter list is provided by the Rhode Island Emergency Management Agency.



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Table 5-6: Shelter Inventory – American Red Cross (continued)

County	Community	Zone	Shelter Name ¹	Address	ARC Shelter #	Usable Sq Ft	Evacuation Capacity	Post Impact Capacity
Washington County	Exeter	Inland	Canonicus Conference Center	54 Exeter Rd	67322	-	200	0
	Exeter	Inland	Delmyra Kennels	191 Ten Rod Rd	67324	-	50	0
	Exeter	Inland	Exeter Chapel	765 Ten Rod Rd	67323	-	100	0
	Exeter	Inland	Metcalf Elementary School	30 Noosneck Hill Rd	67320	75,420	3,760	0
	Exeter	Inland	Wawaloam Elementary School	100 Victory Hwy	67321	28,100	1,400	0
	Narragansett	Inland	Narragansett High School ¹	245 S Pier Rd	54614	20,150	1,007	503
	Narragansett	Inland	Narragansett Pier School ¹	235 South Pier Rd	59754	-	135	67
	New Shoreham	Inland	Block Island School	High St	69386	-	475	215
	North Kingston	Inland	North Kingstown High School ¹	150 Fairway Dr	54005	-	1,000	500
	North Kingston	Inland	Wickford Middle School ¹	250 Tower Hill Rd	59771	-	344	172
	Richmond	Inland	Chariho High School ¹	453 Switch Rd	55206	-	500	250
	Richmond	Inland	Chariho Middle School ¹	455B Switch Rd	55208	-	665	332
	South Kingston	Inland	Broad Rock Middle School	315 Broad Rock Rd	59735	-	200	100
	South Kingston	Inland	Curtis Corner Middle School	301 Curtis Corner Rd	59745	-	345	172
	South Kingston	Inland	South Kingstown Senior High School ¹	215 Columbia St	59767	-	976	488
	Westerly	Inland	Springbrook Elementary School	43-45 Springbrook Rd	55727	-	239	0
	Westerly	Inland	Westerly Armory	6 Dixon St	75875	6,000	300	150
	Westerly	Inland	Westerly Senior Center ¹	39 State St	64263	4,400	220	110

1. Shelter facility is common to both the American Red Cross (NSS) inventory and the shelter list is provided by the Rhode Island Emergency Management Agency.



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Table 5-7: Shelter Inventory – Rhode Island Emergency Management Agency

County	Community	Zone	Shelter Name ¹	Address	Description
Bristol County	Barrington	Inland	Primrose Hill School ¹	60 Middle Hwy	Local Shelter
	Warren	A	Kickemuit Middle School ¹	525 Child St	Regional Shelter
Kent County	Coventry	Inland	Coventry High School ¹	40 Reservoir Rd	Local Shelter & POD site
	East Greenwich	Inland	East Greenwich High School ¹	300 Avenger Dr	Local Shelter
	Warwick	Inland	Pilgrim High School ¹	111 Pilgrim Pkwy	Regional Shelter
	Warwick	Inland	Warwick Veterans Memorial High School	2401 West Shore Rd	Regional & Local Shelter
Newport County	Jamestown	Inland	Melrose Avenue School ¹	76 Melrose Ave	Local Shelter
	Middletown	Inland	Joseph H. Gaudet Middle School and Learning Academy ¹	1113 Aquidneck Ave	Regional Shelter
	Middletown	Inland	Middletown High School ¹	130 Valley Rd	Local Shelter
	Portsmouth	Inland	Portsmouth Middle School ¹	125 Jepson Lane	Regional Shelter
	Tiverton	Inland	Tiverton Middle School ¹	10 Quintal Dr	Regional & Local Shelter
Providence County	Central Falls	Inland	Earl F. Calcutt Middle School ¹	112 Washington St	Local Shelter
	Cranston	Inland	Park View Middle School ¹	25 Park View Blvd	Local Shelter
	Cranston	Inland	Western Hills Middle School ¹	400 Phenix Ave	Local Shelter
	Cumberland	Inland	Cumberland High School ¹	2600 Mendon Rd	Regional & Local Shelter, POD site
	East Providence	Inland	East Providence High School ¹	2000 Pawtucket Ave	Local Shelter
	Foster	Inland	Captain Isaac Paine School ¹	160 Foster Center Rd	Regional Shelter
	Harrisville	Inland	Burrillville High School ¹	425 East Ave	Local Shelter
	Johnston	Inland	Nicholas A. Ferri Middle School	10 Memorial Ave	Regional Shelter
	Lincoln	Inland	Lincoln High School	135 Old River Rd	Local Shelter & POD site

1. Shelter facility is common to both the American Red Cross (NSS) inventory and the shelter list is provided by the Rhode Island Emergency Management Agency.



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Table 5-7: Shelter Inventory – Rhode Island Emergency Management Agency (continued)

County	Community	Zone	Shelter Name ¹	Address	Description
Providence County	North Providence	Inland	Dr. Edward A. Ricci Middle School	55 Intervale Ave	Local Shelter
	North Providence	Inland	North Providence High School ¹	1828 Mineral Spring Ave	Local Shelter
	North Smithfield	Inland	North Smithfield High School ¹	412 Greenville Rd	Regional Shelter
	North Smithfield	Inland	North Smithfield Middle School ¹	1850 Providence Pike	Local Shelter
	Pawtucket	Inland	Joseph Jenks Junior High School ¹	350 Division St	Regional & Local Shelter
	Providence	Inland	DeSesto-Springfield Middle School ¹	152 Springfield St	Regional Shelter
	Providence	Inland	Neutaconkanut Recreation Club ¹	675 Plainfield St	Regional Shelter
Washington County	Narragansett	Inland	Narragansett High School ¹	245 South Pier Rd	Local Shelter
	Narragansett	Inland	Narragansett Pier Middle School ¹	235 South Pier Rd	Local Shelter
	North Kingstown	Inland	North Kingstown Senior High School	50 East Court	Local Shelter
	North Kingstown	Inland	Wickford Middle School ¹	250 Tower Hill Rd	Local shelter
	Richmond	Inland	Chariho High & Middle School ¹	453 Switch Rd	Regional Shelter
	South Kingstown	Inland	South Kingstown High School ¹	215 Columbia St	Regional Shelter
	Westerly	Inland	Westerly Senior Center ¹	39 State St	Regional Shelter

1. Shelter facility is common to both the American Red Cross (NSS) inventory and the shelter list is provided by the Rhode Island Emergency Management Agency.



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Table 5-8: Shelter Capabilities (Demand vs. Capacity) Summary – Bristol County ^{1,2}

Community	Scenario A Low Occ	Scenario A High Occ	Scenario B Low Occ	Scenario B High Occ
Barrington	(287)	(292)	(373)	(378)
Bristol	24	12	(179)	(193)
Warren	(37)	(41)	(109)	(114)
Totals	(300)	(321)	(661)	(685)

1. Based on American Red Cross National Shelter Survey (NSS) database shelter capacities.
2. Figures in red parentheses indicate communities with public shelter deficits and the amount of the shortfall relative to demand.

Table 5-9: Shelter Capabilities (Demand vs. Capacity) Summary – Kent County ^{1,2}

Community	Scenario A Low Occ	Scenario A High Occ	Scenario B Low Occ	Scenario B High Occ
East Greenwich	641	639	504	501
Warwick	777	739	(74)	(124)
Totals	1,418	1,378	430	377

1. Based on American Red Cross National Shelter Survey (NSS) database shelter capacities.
2. Figures in red parentheses indicate communities with public shelter deficits and the amount of the shortfall relative to demand.

Table 5-10: Shelter Capabilities (Demand vs. Capacity) Summary – Newport County ^{1,2}

Community	Scenario A Low Occ	Scenario A High Occ	Scenario B Low Occ	Scenario B High Occ
Jamestown	(91)	(109)	(136)	(157)
Little Compton	276	249	238	205
Middletown	1,956	1,932	1,785	1,753
Newport	(126)	(211)	(328)	(427)
Portsmouth	506	474	349	312
Tiverton	166	154	5	(9)
Totals	2,687	2,489	1,913	1,677

1. Based on American Red Cross National Shelter Survey (NSS) database shelter capacities.
2. Figures in red parentheses indicate communities with public shelter deficits and the amount of the shortfall relative to demand.



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Table 5-11: Shelter Capabilities (Demand vs. Capacity) Summary – Providence County ^{1,2}

Community	Scenario A Low Occ	Scenario A High Occ	Scenario B Low Occ	Scenario B High Occ	Scenario C Low Occ	Scenario C High Occ
Cranston	1,453	1,445	631	622		
East Providence	2,682	2,678	2,177	2,173		
Pawtucket	1,734	1,730	1,001	995		
Providence	5,404	5,354	3,535	3,472	3,486	3,423
Totals	11,273	11,207	7,344	7,262	3,486	3,423

1. Based on American Red Cross National Shelter Survey (NSS) database shelter capacities.
2. Figures in red parentheses indicate communities with public shelter deficits and the amount of the shortfall relative to demand.

Table 5-12: Shelter Capabilities (Demand vs. Capacity) Summary – Washington County ^{1,2}

Community	Scenario A Low Occ	Scenario A High Occ	Scenario B Low Occ	Scenario B High Occ
Charlestown	(124)	(191)	(208)	(286)
Narragansett	688	600	538	445
New Shoreham	410	319	393	301
North Kingstown	1,012	997	721	702
South Kingstown	1,196	1,109	892	793
Westerly	492	411	272	179
Totals	3,674	3,245	2,608	2,134

1. Based on American Red Cross National Shelter Survey (NSS) database shelter capacities.
2. Figures in red parentheses indicate communities with public shelter deficits and the amount of the shortfall relative to demand.



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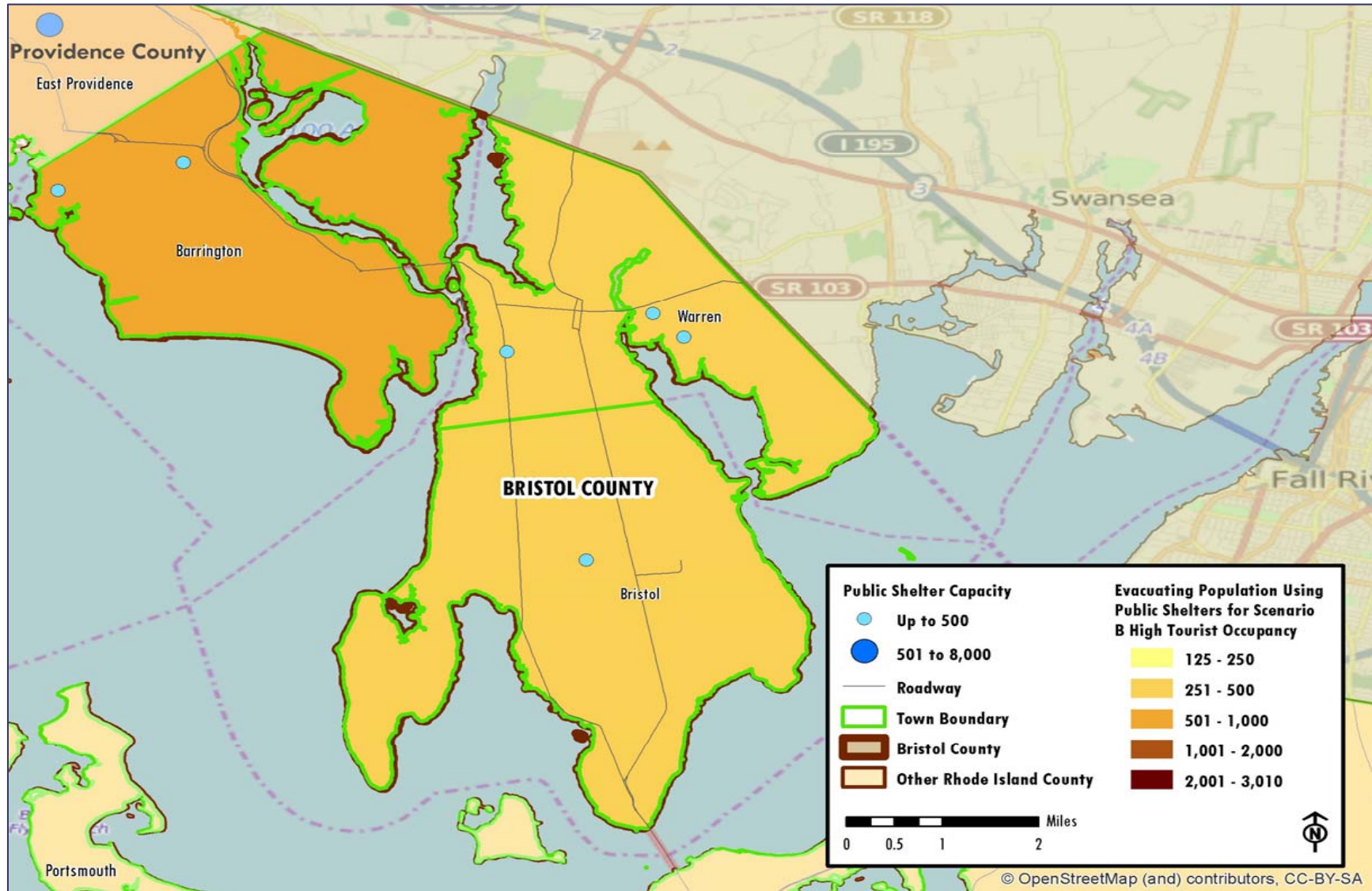


Figure 5-1: Estimated Evacuation Population Using Shelters for Scenario B High Tourist Occupancy – Bristol County



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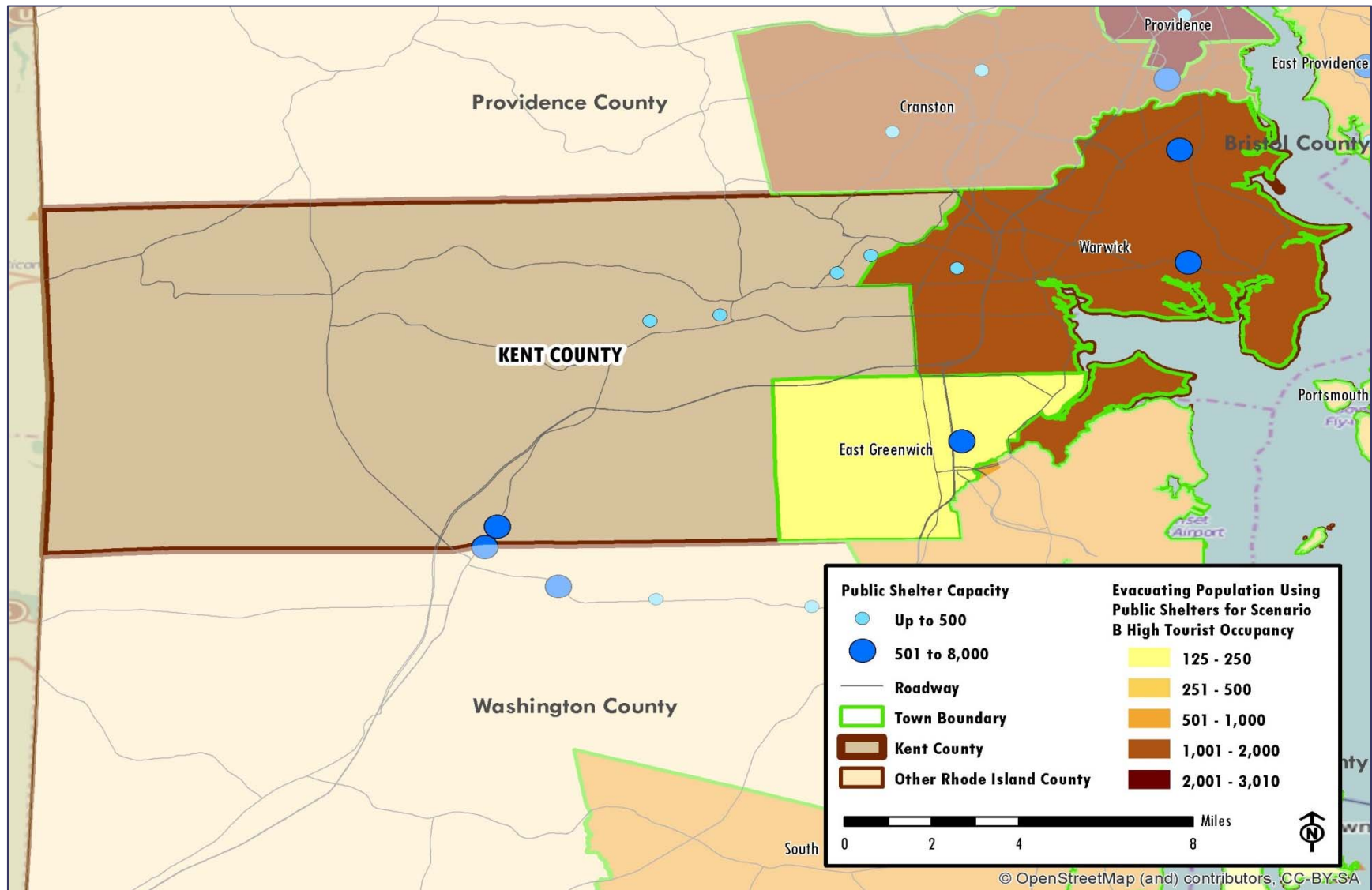


Figure 5-2: Estimated Evacuation Population Using Shelters for Scenario B High Tourist Occupancy – Kent County



5.0 Shelter Analysis

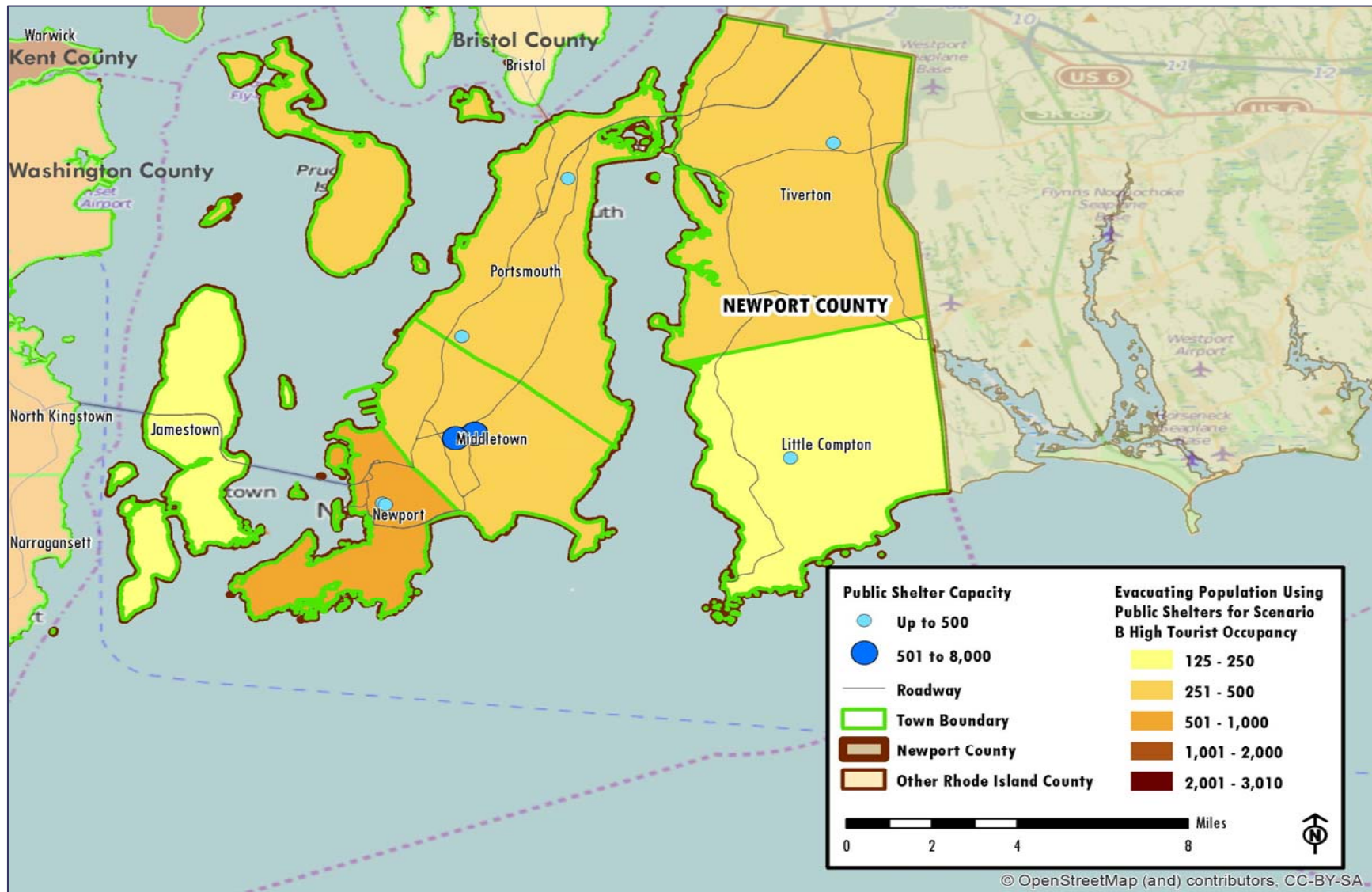


Figure 5-3: Estimated Evacuation Population Using Shelters for Scenario B High Tourist Occupancy – Newport County



5.0 Shelter Analysis

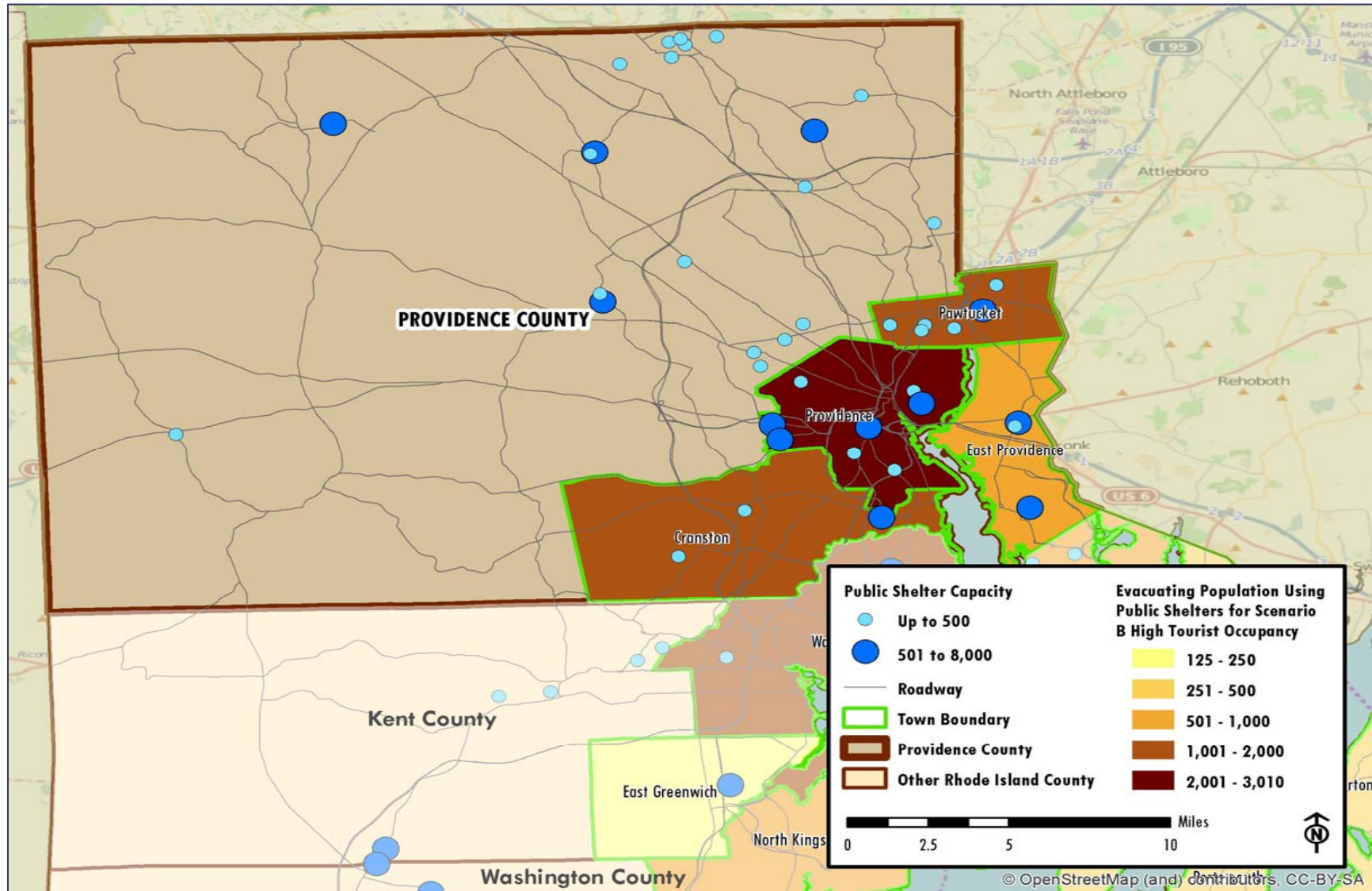


Figure 5-4: Estimated Evacuation Population Using Shelters for Scenario B High Tourist Occupancy – Providence County



5.0 Shelter Analysis

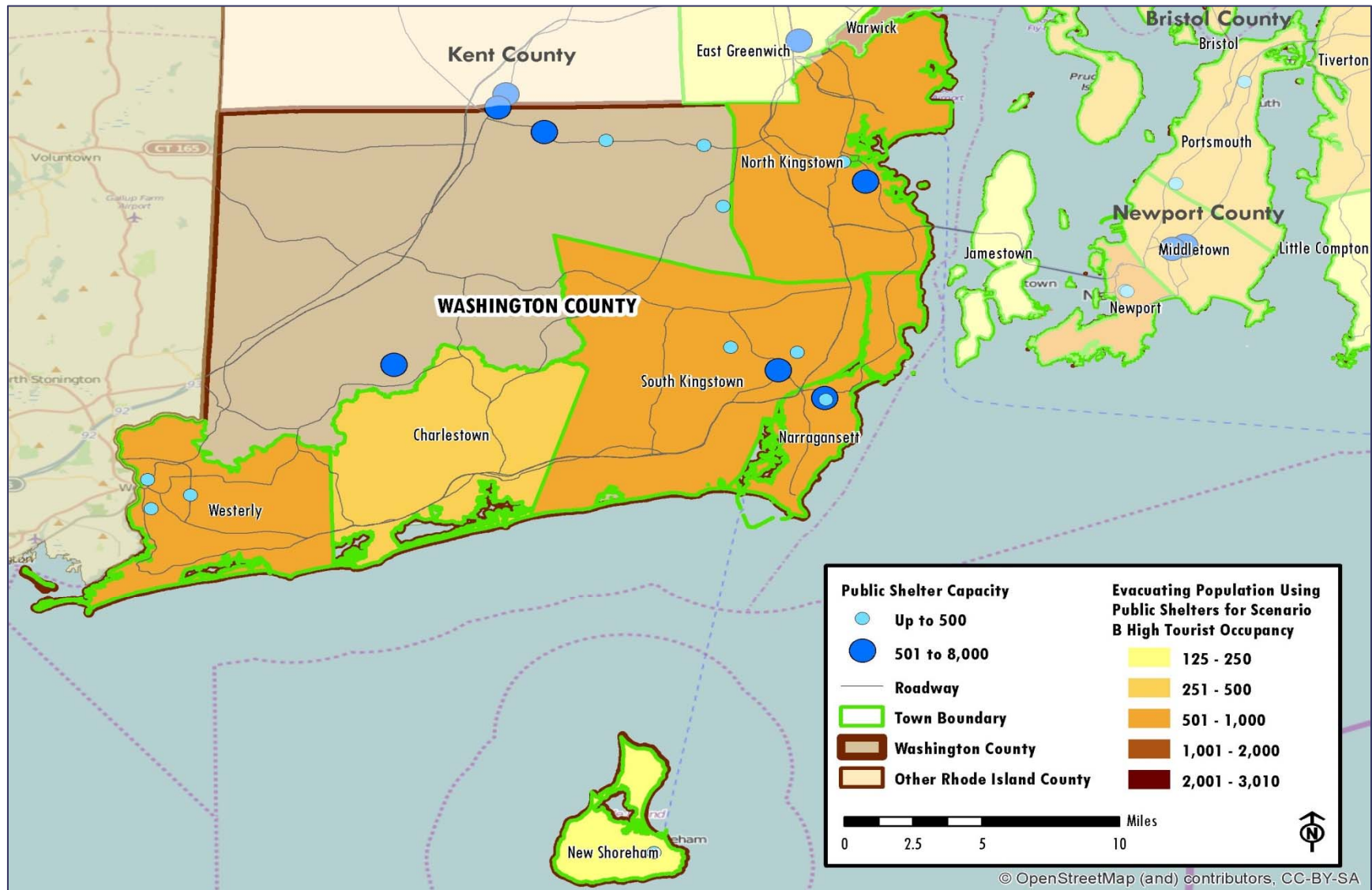


Figure 5-5: Estimated Evacuation Population Using Shelters for Scenario B High Tourist Occupancy – Washington County