

PORTSMOUTH, RI

SOCIOECONOMICS OF SEA LEVEL RISE COASTAL FACTSHEET



PROJECT OVERVIEW

Rhode Island's municipalities are in the preliminary stages of integrating planning for sea level rise and climate change into their comprehensive planning process. To support these planning efforts of RI cities and towns, RISPP developed the Socioeconomics of Sea Level Rise project. The project aims to assist coastal municipalities in their long-term planning by attempting to identify population characteristics of **the people** located within sea level rise (SLR) inundation zones 1, 3, 5 and 7 FT. The data presented in this factsheet places a focus on Environmental Justice and Title VI populations.

METHODOLOGY

The RISPP utilized 2010 Decennial Census data and the latest American Community Survey (ACS) estimates to conduct an extensive data analysis. Staff also utilized CRMC's STORMTOOLS GIS shapefiles to identify the SLR inundation zones. In addition, RI Geographic Information Systems (RIGIS) e-911 data was utilized to identify single family, multi-family and mobile home residential points located within each SLR inundation zone. For more information on the methodology, please reference the [full report](#) on our website.

PORTSMOUTH QUICK FACTS

17,389

2010 Census Population

44.8

2010 Census Median Age

\$77,483

2014 ACS Median Household Income

PORTSMOUTH'S OCCUPIED RESIDENTIAL UNITS & POPULATION ESTIMATES

Portsmouth is one of Rhode Island's 21 coastal communities, and one of three municipalities which comprise Aquidneck Island in Newport County, Rhode Island.

The Town of Portsmouth has an average household size of 2.44 (2010 Census). The average household size and the percentage of occupied housing units were used to calculate a population estimate per scenario. Approximately 67-70% of the residential units located within SLR inundation

zones 3, 5 and 7 FT. are occupied units. Single family, multi-family, and mobile home residential units were identified in GIS using the e-911 shapefile. The majority of the residential units located in the SLR inundation zones are single family units. There is a significant change between the estimated population located in the 3 and 5 FT. inundation zone, with an additional 151 people estimated in the 5 FT. zone. The 7 FT. inundation zone has the greatest population and number of residential units, with 368 people estimated within the zone and 151 occupied residential units.

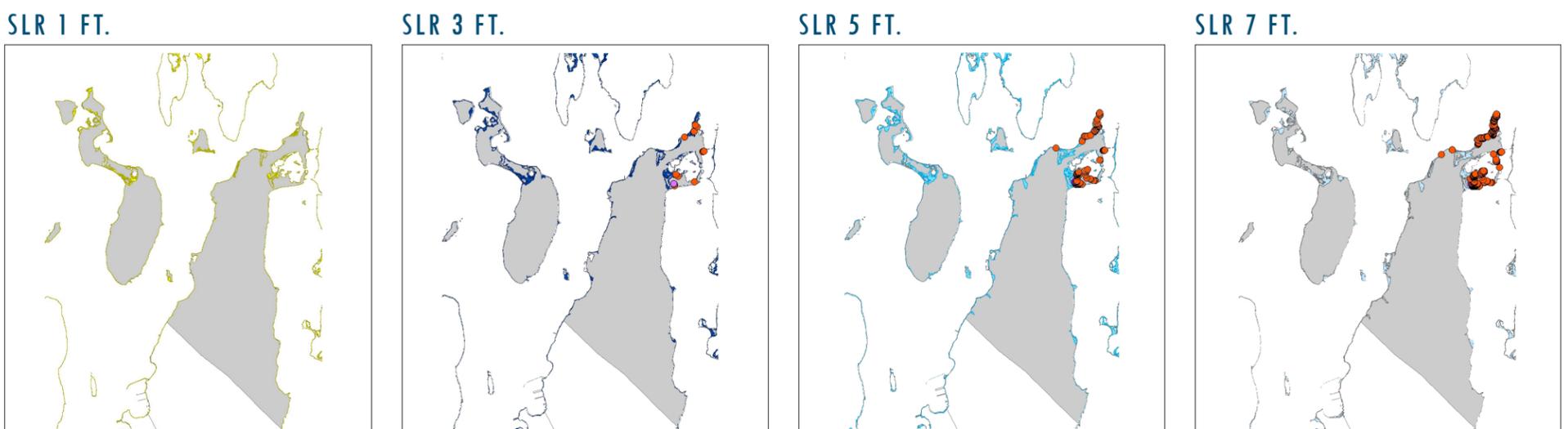
SLR Inundation zone	Residential Units	Occupied Unit calculation (Total Units (x) Occ. Housing Unit Rate in SLR zone)	Population calculation (Occupied Units (x) Portsmouth Avg. HH Size)
1FT.	0	0	0
3FT.	11 SF, 2 Mobile	9 (67% occ. HU)	22
5FT.	92 SF, 11 Mobile	71 (69% occ. HU)	173
7FT.	202 SF, 1 MF, 13 Mobile	151 (70% occ. HU)	368



Island Park Beach, Portsmouth RI
Sept. 2015 King Tide, Photo Courtesy of Mycoast.org,
submitted by Thurston Gray

SLR INUNDATION ZONES

The maps above illustrate each of the SLR inundation zones. Single family units are represented by orange points in the SLR inundation zone maps, while multi-family units are represented by green points. Purple points signify mobile home units.



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SLR 1

EST. POPULATION: 0
EST. OCCUPIED HOUSEHOLDS: 0

There were zero residential units located within the e-911 shapefile in the 1 FT. SLR inundation scenario. Please note, a zero value does not imply that zero people or structures will be impacted in a 1 FT. SLR scenario.

SLR 3

EST. POPULATION: 22
EST. OCCUPIED HOUSEHOLDS: 9

96% or 21 - White
1% or 0.2% - Black
0% - American Indian/
Alaska Native
1% or 0.3 - Asian
2% or 0.4 - Hispanic
5% or 1 - Minority



SLR 5

EST. POPULATION: 173
EST. OCCUPIED HOUSEHOLDS: 71

96% or 166 - White
1% or 2 - Black
0% - American Indian/
Alaska Native
1% or 2 - Asian
2% or 3 - Hispanic
5% or 9 - Minority



SLR 7

EST. POPULATION: 368
EST. OCCUPIED HOUSEHOLDS: 151

96% or 352 - White
1% or 4 - Black
0.3% or 1 - American
Indian/Alaska Native
1% or 4 - Asian
2% or 7 - Hispanic
6% or 21 - Minority



RACE &
AGE

SOCIAL
CHARACTERISTICS

HOUSEHOLD
INCOME

HOUSEHOLD
CHARACTERISTICS



8% or 1 are Individuals with Disabilities

8% or 9 are Individuals with Disabilities

9% or 20 are Individuals with Disabilities

2% or 0.2 are Limited English Proficiency Households

2% or 1 are Limited English Proficiency Households

2% or 3 are Limited English Proficiency Households

9% or 2 are Unemployed

9% or 13 are Unemployed

9% or 26 are Unemployed

9% or 2 are Individuals Below Poverty Level

9% or 15 are Individuals Below Poverty Level

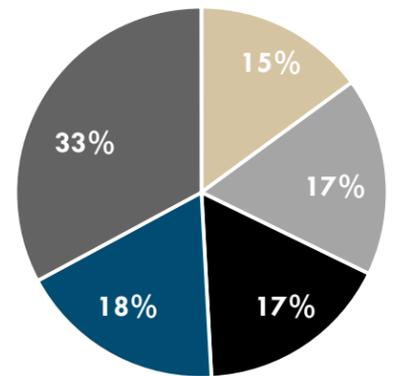
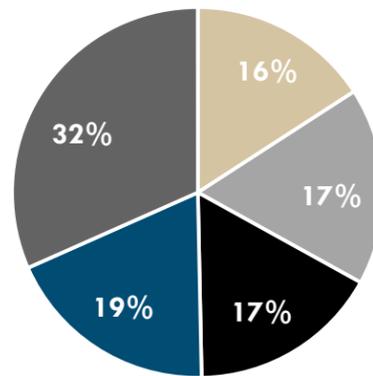
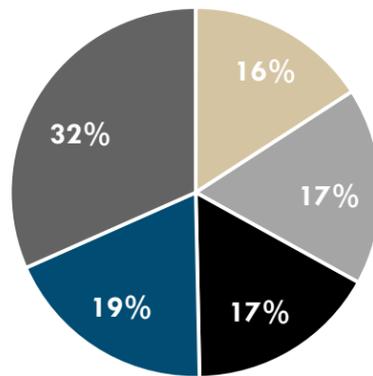
8% or 30 are Individuals Below Poverty Level

3% or 0.3 Households receive SSI

3% or 2 Households receive SSI

4% or 6 Households receive SSI

- In Estimated Occupied Housing Units



■ Less than 24,999K ■ 25,000 to 49,999 ■ 50,000 to 74,999 ■ 75,000 to 124,999 ■ 125,000 and up

- Percent of Population in Housing Type

23% Renter Occupied
16% Owned Outright

23% Renter Occupied
16% Owned Outright

24% Renter Occupied
17% Owned Outright



PORTSMOUTH (3FT, 5FT, 7FT)*

*No Residential Units within 1FT SLR Scenario

Variable Name	Sea Level Rise (SLR)						Count
	SLR 3	SLR 3 %	SLR 5	SLR 5 %	SLR 7	SLR 7 %	
e911 Housing Unit Total							
Single Family (R1) Units	11		92		202		
Multifamily (R2) Units with Calculation (*2)	0		0		1*2=2		
Mobile Home (R3) Units	2		11		13		
Total Units: Single Family (R1), Multifamily (R2), Mobile Home (R3)	13		103		217		
Note: Multifamily unit totals are multiplied by 2 based on the presumption that there are a minimum of two units within each multifamily e911 point							
Variable Name	Sea Level Rise (SLR)						Count & Percentage
e911 Housing Unit Calculation	SLR 3	SLR 3 %	SLR 5	SLR 5 %	SLR 7	SLR 7 %	
Total Units: Single Family (R1), Multifamily (R2), Mobile Home (R3)	13	100%	103	100%	217	100%	
Estimated Occupied Units - Count and Percentage	9	67%	71	69%	151	70%	
Population Calculation	SLR 3	SLR 3 %	SLR 5	SLR 5 %	SLR 7	SLR 7 %	
Estimated Occupied Units	9	100%	71	100%	151	100%	
Population Estimate= Occupied Units (x) Municipal Avg. Household Size (2.49)			9*2.44=22		71*2.44=173		151*2.44=368
Race/Hispanic Ethnicity	SLR 3	SLR 3 %	SLR 5	SLR 5 %	SLR 7	SLR 7 %	
Total Population (in Occupied Housing Units)	22	100%	173	100%	368	100%	
White	21	96%	166	96%	352	96%	
Black or African American	0.2	1%	2	1%	4	1%	
American Indian and Alaska Native	0	0%	0	0%	1	0.3%	
Asian	0.3	1%	2	1%	4	1%	
Some Other Race	0	0%	1	0.3%	1	0.4%	
Hispanic	0.4	2%	3	2%	7	2%	
Non-Hispanic, White Population	21	95%	164	95%	347	94%	
Minority Population (Total Population minus Non-Hispanic, White Population)	1	5%	9	5%	21	6%	
Age	SLR 3	SLR 3 %	SLR 5	SLR 5 %	SLR 7	SLR 7 %	
Total Population (in Occupied Housing Units)	22	100%	173	100%	368	100%	
Young Children (<5)	1	4%	7	4%	13	4%	
School-Age Children (5-17)	4	18%	30	17%	61	17%	
Age 18-24	1	6%	11	6%	40	11%	
Age 25-44	4	18%	33	19%	66	18%	
Age 45-64	8	37%	63	36%	127	35%	
Age 65-74	2	10%	17	10%	35	10%	
Age ≥75	2	8%	13	7%	26	7%	
Population 16-64 (For Individuals with a disability variable)†	14	62%	107	62%	227	62%	
Population ≥25 (For educational attainment variable)	16	73%	125	73%	254	69%	
Population ≥16 (For employment variable)†	18	81%	141	81%	299	81%	
Population ≥65 (For age ≥65 in group quarters variable)†	2	9%	30	17%	61	17%	
Disability	SLR 3	SLR 3 %	SLR 5	SLR 5 %	SLR 7	SLR 7 %	
Total Population (in Occupied Housing Units, age 16-64)	14	100%	107	100%	227	100%	
Individuals with Disabilities	1	8%	9	8%	20	9%	
Limited English Proficiency (LEP)	SLR 3	SLR 3 %	SLR 5	SLR 5 %	SLR 7	SLR 7 %	
Estimated Occupied Housing Units	9	100%	71	100%	151	100%	
Limited English Proficiency Households	0.2	2%	1	2%	3	2%	
Educational Attainment	SLR 3	SLR 3 %	SLR 5	SLR 5 %	SLR 7	SLR 7 %	
Total Population (in Occupied Housing Units, age ≥25)	16	100%	125	100%	254	100%	
Less than a High School Diploma or Equivalent	1	7%	8	7%	16	6%	
High School Diploma or GED	4	23%	29	23%	59	23%	
Professional School	1	3%	4	3%	8	3%	
Associate's/Bachelor's	5	34%	42	34%	88	34%	
Master's/PhD	3	17%	22	17%	45	18%	
Other (Some College)	3	16%	20	16%	39	15%	
Employment	SLR 3	SLR 3 %	SLR 5	SLR 5 %	SLR 7	SLR 7 %	
Total Population (in Occupied Housing Units, age ≥16)	18	100%	141	100%	299	100%	
Employed	16	89%	125	89%	269	90%	
Unemployed	2	9%	13	9%	26	9%	
Job Industry ‡	SLR 3	SLR 3 %	SLR 5	SLR 5 %	SLR 7	SLR 7 %	
Total Population (age ≥16 and employed)	16	100%	125	100%	269	100%	
Agriculture, forestry, fishing & hunting, mining	0	0%	0	0%	1	0.3%	
Construction	1	5%	6	5%	14	5%	
Manufacturing	1	9%	11	9%	23	9%	
Wholesale trade	0.2	1%	2	1%	4	1%	
Retail trade	2	10%	12	10%	26	10%	
Transportation & warehousing, utilities	0.4	2%	3	2%	6	2%	
Information	0.2	1%	2	1%	4	1%	
Finance & insurance, real estate, rental & leasing	1	7%	8	7%	18	7%	
Professional, scientific, management, administrative, waste management services	2	14%	17	14%	37	14%	
Educational services, health care, social assistance	4	26%	33	26%	71	26%	
Arts, entertainment, recreation, accommodation & food services	2	12%	15	12%	32	12%	
Other services (except public administration)	1	5%	6	5%	14	5%	
Public administration	1	8%	10	8%	21	8%	
Income	SLR 3	SLR 3 %	SLR 5	SLR 5 %	SLR 7	SLR 7 %	
Estimated Occupied Housing Units	9	100%	71	100%	151	100%	
Less than \$24,999K	1	16%	11	16%	23	15%	
\$25,000 to 49,999	2	17%	12	17%	26	17%	
\$50,000 to 74,999	1	17%	12	17%	26	17%	
\$75,000 to 124,999	2	19%	13	19%	27	18%	
\$125,000 and greater	3	32%	22	32%	50	33%	
Total Population (in Occupied Housing Units)	22	100%	173	100%	368	100%	
Income Below Poverty Level	2	9%	15	9%	30	8%	
Income Above Poverty Level	20	91%	158	91%	338	92%	
Estimated Occupied Housing Units	9	100%	71	100%	151	100%	
With Social Security Income (SSI) Households	0.3	3%	2	3%	6	4%	
Without Social Security Income (SSI) Households	9	97%	69	97%	145	96%	
Housing Occupancy	SLR 3	SLR 3 %	SLR 5	SLR 5 %	SLR 7	SLR 7 %	
Total Housing Units	13	100%	103	100%	217	100%	
Occupied Housing Units	9	67%	71	69%	151	70%	
Vacant Housing Units	4	33%	32	31%	66	30%	
Estimated Occupied Housing Units	9	100%	71	100%	151	100%	
Owner-Occupied Housing Units	7	78%	55	78%	118	78%	
Renter-Occupied Housing Units	2	22%	16	22%	33	22%	
Total Population (in Occupied Housing Units)	22	100%	173	100%	368	100%	
Population in Group Quarters	0	0%	0	0%	19	5%	
Total Population (age ≥65)	2	100%	30	100%	61	100%	
Age ≥65 in Group Quarters†	0	0%	0	0%	5	8%	
Housing Tenure*	SLR 3	SLR 3 %	SLR 5	SLR 5 %	SLR 7	SLR 7 %	
Total Population (in Occupied Housing Units)	22	100%	173	100%	368	100%	
Population in Property Owned with mortgage or loan	13	60%	104	60%	216	59%	
Population in Property Owned free and clear	4	16%	29	16%	64	17%	
Population in Renter-Occupied Units	5	23%	41	23%	88	24%	
Employment and Business Unit Data‡							Count
Average Employment - Municipality							5742
Number of Units (Business - Private and Government)							530
Average Number of Workers per Unit (Business - Private and Government)							11
Workers Per Commercial Unit	SLR 3		SLR 5		SLR 7		
e911 Commercial Unit Total	1		6		11		
Average Number of Workers/Jobs per Commercial Unit	11		65		119		

HOUSING UNITS & POPULATION

DEMOGRAPHIC
Block Level and Block Group Data

SOCIAL
Block Group Data

ECONOMIC
Block Group Data and Municipal Level Data

HOUSING
Block Level and Block Group Data

JOBS
Municipal Data† & e911 Data