Coastal Towns Population
Northeast United States
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Prepared for:
Northeast Regional Ocean Council (NROC)

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1. **INTRODUCTION**
This data product depicts population data and change statistics for 2000 and 2013 from the U.S. Census Bureau and National Ocean Economics Program by coastal town in the northeast United States, from Maine to New York. For more information, users are encouraged to consult the Northeast Ocean Planning Baseline Assessment report.

2. **PURPOSE**
This data product was prepared for the Northeast Ocean Planning Baseline Assessment.

3. **SOURCES AND AUTHORITIES**
   - U.S. Census Bureau TIGER/Line® Shapefiles 2010 County Subdivisions
     http://www.census.gov/geo/maps-data/data/tiger-line.html
     http://www2.census.gov/geo/pdfs/maps-data/data/tiger/tgrshp2010/TGRSHP10SF1.pdf
   - NOAA Composite Shoreline
     http://shoreline.noaa.gov/data/datasheets/composite.html
   - U.S. Census Bureau American FactFinder for Decennial Census 2000 Summary File 1 and American Community Survey 5-Year Estimates 2009-2013
     http://www.census.gov/
     http://factfinder2.census.gov
   - Charles Colgan, National Ocean Economics Program (NOEP), Center for the Blue Economy (CBE), Middlebury Institute of International Studies at Monterey
     http://oceaneconomics.org/Demographics/

4. **DATABASE DESIGN AND CONTENT**
Native storage format: ArcGIS File Geodatabase – simple feature class

Data Dictionary:

Line	Name	Definition	Type	Size
1	OBJECTID_1	Uniquely identifies a feature	Object ID	*
2	Shape	Geometric representation of the feature	geometry	*
3	OBJECTID	Uniquely identifies a feature in TIGER data	long	*
4	STATEFP10	2010 Census state Federal Information Processing Standards (FIPS) code	text	2
5	COUNTYFP10	2010 Census county Federal Information Processing Standards (FIPS) code	text	3
6	COUSUBFP10	2010 Census county subdivision Federal Information Processing Standards (FIPS) code	text	5
7	COUSUBNS10	2010 Census county subdivision ANSI code	text	8
8	GEOID10	County subdivision identifier; a concatenation of 2010 Census state Federal Information Processing Standards (FIPS) code, county FIPS code, and county subdivision FIPS code	text	10
9	NAME10	2010 Census county subdivision name	text	100
10	NAMELSAD10	2010 Census name and the translated legal/statistical area description code for county subdivision	text	100
11	LSAD10	2010 Census legal/statistical area description code for county subdivision	text	2
12	CLASSFP10	2010 Census Federal Information Processing Standards (FIPS) class code	text	2
13	MTFCC10	MAF/TIGER feature class code (G4040)	text	5
14	CNECTAFP10	2010 Census combined New England city and town area code	text	3
15	NECTAFP10	2010 Census New England city and town area code	text	5
16	NCTADVFP10	2010 Census New England city and town area division code	text	5
17	FUNCSTAT10	2010 Census functional status	text	1
18	ALAND10	2010 Census land area (square meters) before clipping to shoreline	double	*
19	AWATER10	2010 Census water area (square meters) before clipping to shoreline	double	*
20	INTPTLAT10	2010 Census latitude of the internal point	text	11
21	INTPTLON10	2010 Census longitude of the internal point	text	12
22	Shape_Leng	Measurement in spherical coordinates before clipping to shoreline	double	*
23	OID	Uniquely identifies a feature in source table	long	*
24	POP00	Population in 2000	double	*
25	fips	Federal Information Processing Standard	text	10

		(FIPS) 10-digit code concatenation of state, county, and town		
26	POP13	Population in 2013	double	*
27	ME13	Margin of Error for 2013 Population	double	*
28	fips_st	Federal Information Processing Standard (FIPS) 2-digit state code	text	10
29	fips_cty	Federal Information Processing Standard (FIPS) 3-digit county code	text	10
30	fips_town	Federal Information Processing Standard (FIPS) 5-digit town code	text	10
31	NAME	Town name	text	100
32	popch	Population Change 2000 to 2013	double	*
33	poppch	Percentage Change Population 2000 to 2013	double	*
34	Shape_Length	Measurement in spherical coordinates	double	*
35	Shape_Area	Measurement in spherical coordinates	double	*

Feature Class Name: CoastalTownsPopulation
Total Number of Unique Features: 281

5. SPATIAL REPRESENTATION

Geometry Type: Polygon

Reference System: Geographic Coordinate System
Horizontal Datum: North American Datum 1983
Ellipsoid: Geodetic Reference System 1980

XY Resolution: 0.000000000899322 degree
XY Tolerance: 0.000000008983153 degree

Geographic extent: -73.96 to -66.95, 40.54 to 45.19

6. DATA PROCESSING

Processing environment: ArcGIS 10.2.2, Windows 7 Enterprise SP1, Intel Xeon E3-1270 V2 CPU

	Process Step Description
1	Downloaded TIGER/Line® shapefiles 2010 of county subdivisions for each northeast ocean state and imported to file geodatabase.
2	Selected initial set of coastal county subdivisions by state using NOAA Coastal Zone Management Act boundary from ftp://ftp.csc.noaa.gov/pub/MSP/CoastalZoneManagementActBoundary.zip and exported to new feature classes.

3	Merged (union) coastal county subdivision feature classes of individual states into one feature class, copied values, and removed redundant fields.
4	Downloaded NOAA Composite Shoreline, clipped to northeast ocean states, removed bridges and several man-made features (dikes, docks, etc.), and connected all shoreline segments, using F_Code = 200 for edits and additions.
5	Connected ends of the edited composite shoreline to create large polygon encompassing the northeast states.
6	Clipped coastal county subdivisions using the edited composite shoreline polygon to create new feature class of coastal towns with high resolution shoreline. NOTE: As a result, the ALAND10 and AWATER10 field values might not match with calculated polygon values.
7	National Ocean Economics Program prepared table of population data from U.S. Decennial Census 2000 and American Community Survey 2013 for northeast ocean coastal towns and calculated change variables.
8	Imported table of population data received from National Ocean Economics Program, joined table to coastal towns (using GEOID10 and fips fields), and exported to final feature class.
9	Checked feature class geometry and attribute records for missed joins and missing values, correcting as needed.

7. QUALITY PROCESS

Attribute Accuracy: Original content was acquired from authoritative sources – no new testing was done to cross reference or confirm field or geometry values in TIGER/Line® or NOAA GIS files. Spot checks and corrections were done on FIPS codes and names as part of data table join process. Attribute values from population table were spot-checked and corrected as necessary.

Logical Consistency: Tested through visual inspection of geometry and through inspection of attribute table.

Completeness: All known records acquired and visual inspection conducted at geographic extent of the data.

Positional Accuracy: Various with source materials. For details, refer to sections 2.5-2.8 of TIGER/Line® Shapefiles 2010 Technical Documentation and Scale and Accuracy sections of NOAA Composite Shoreline online description cited under Sources and Authorities.

Timeliness: Based on best available data as of Jan 29, 2016 for time periods 2000 and 2013.

Use restrictions: Not for navigation.