

# DATA DESCRIPTION



# American Community Survey Five-Year Estimates for Coastal Geographies

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## Abstract

The American Community Survey (ACS) is an ongoing statistical survey that samples a small percentage of the population every year. These data for coastal geographies contain detailed demographic, social, economic, and housing characteristics. They represent five-year estimates derived from the ACS Block Group summary files.

Detailed information on the ACS data can be found at the Census Bureau’s American Community Survey website ([census.gov/programs-surveys/acs](http://census.gov/programs-surveys/acs)) and in the researcher’s guide entitled, “A Compass for Understanding and Using American Community Survey Data” ([census.gov/content/dam/Census/library/publications/2008/acs/ACSGeneralHandbook.pdf](http://census.gov/content/dam/Census/library/publications/2008/acs/ACSGeneralHandbook.pdf)). The entire ACS five-year summary file down to the block group is available in comma-delimited text format via the Census Bureau website ([census.gov/programs-surveys/acs/data/summary-file.html](http://census.gov/programs-surveys/acs/data/summary-file.html)).

## Geographic Coverage

### **Coastal Shoreline Counties**

A county is considered a Coastal Shoreline County if it is directly adjacent to the open ocean, major estuaries, or the Great Lakes. These counties are considered to be most directly affected by issues pertaining to the coast. For more information, visit [coast.noaa.gov/htdata/SocioEconomic/NOAA\\_CoastalCountyDefinitions.pdf](http://coast.noaa.gov/htdata/SocioEconomic/NOAA_CoastalCountyDefinitions.pdf).

### ***Coastal Watershed Counties***

A county is considered a Coastal Watershed County if one of the following criteria is met: (1) at a minimum, 15 percent of the county's total land area is located within a coastal watershed or (2) a portion of, or an entire county, accounts for at least 15 percent of a coastal watershed. The 15-percent rule was selected as an appropriate level for capturing counties with a significant impact on coastal and ocean resources. For more information, visit [coast.noaa.gov/htdata/SocioEconomic/NOAA\\_CoastalCountyDefinitions.pdf](https://coast.noaa.gov/htdata/SocioEconomic/NOAA_CoastalCountyDefinitions.pdf).

### ***Coastal States***

All states (30) that are directly adjacent to the open ocean or the Great Lakes, as well as Washington D.C., Puerto Rico, and the U.S. Virgin Islands.

### ***Coastal Portion of Coastal States***

A state-by-state aggregation of all Coastal Shoreline Counties (see definition above).

### ***Coastal Zone Boundaries***

The area contained within the coastal zone as defined by each state participating in the Coastal Zone Management Act (subject to change). For a complete description of the methods used by each state with a coastal zone management program see the coastal zone definition for each state ([coast.noaa.gov/czm/mystate](https://coast.noaa.gov/czm/mystate)).

### ***FEMA Special Flood Hazard Area***

Areas subject to 1-percent annual chance (100-year) coastal floods as determined by the Federal Emergency Management Agency (FEMA) through the National Flood Insurance Program (NFIP). For more information, visit [fema.gov/special-flood-hazard-area](https://fema.gov/special-flood-hazard-area).

### ***USGS 8-Digit Hydrologic Unit Code (HUC)***

The U.S. Geological Survey (USGS) has subdivided hydrologic units into a series of successively smaller levels, with the 8-digit HUC as the smallest. The 8-digit HUC is a geographic area representing part or all of a surface drainage basin, a combination of drainage basins, or a distinct hydrologic feature, often referred to as a watershed ([water.usgs.gov/GIS/huc.html](https://water.usgs.gov/GIS/huc.html)).

### ***National Estuarine Research Reserve System (NERRS) Target Watersheds***

The National Estuarine Research Reserve System ([coast.noaa.gov/nerrs/](https://coast.noaa.gov/nerrs/)) is a network of reserves dedicated to long-term research, monitoring, education and resource stewardship. Most NERRS units have delineated an associated target watershed that most directly impacts reserve. The remaining five NERRS units do not have a target watershed; they are Kachemak Bay, Mission-Aransas, Narragansett Bay, Waquoit Bay, and Lake Superior.

### ***National Estuarine Research Reserve System (NERRS) Large Watersheds***

For each of the National Estuarine Research Reserve System ([coast.noaa.gov/nerrs/](https://coast.noaa.gov/nerrs/)) units and their target watersheds (where applicable), large estuarine watersheds have been delineated using a flow analysis based on a 30-meter digital elevation model corresponding most closely to the boundaries of U.S. Geological Survey 8-digit Hydrologic Unit Code (HUC) watersheds.

### ***U.S. Environmental Protection Agency National Estuary Program Study Areas***

The mission of the National Estuary Program (NEP) is to protect and restore America's nationally significant estuaries. Each NEP has a designated study area and develops and implements a comprehensive conservation and management plan for that area. Each NEP has a single study area, with the exception of the Puget Sound NEP, which has divided its study area into seven sub-systems. Visit [water.epa.gov/type/oceb/nep/](http://water.epa.gov/type/oceb/nep/) for more information.

### ***U.S. Environmental Protection Agency National Estuary Program Watersheds***

The National Estuary Program (NEP) has identified the estuarine and fluvial drainage areas associated with each of its program unit study areas. These larger watersheds were delineated so the NEPs can better understand pressures created upstream of their study areas, providing critical information to successfully implement their comprehensive conservation and management plans. Visit [water.epa.gov/type/oceb/nep/](http://water.epa.gov/type/oceb/nep/) for more information.

### ***50-Mile Buffer Area from the Coastline***

The area within a 50-mile fixed distance from the coastline.

### ***Hurricane-Prone Areas***

The American Society of Civil Engineers (ASCE) delineates hurricane-prone areas of the eastern U.S. that are vulnerable to hurricane-force winds (90 mph or greater basic wind speed).

## **Data Analysis and Manipulations**

The 2010 Census Block Group polygons were imported into a GIS system to assign these polygons to political, place-based management program boundaries, and watershed/other jurisdictions. Estimates were obtained through a GIS overlay operation of Census Block Groups with all boundaries or study areas of interest. Block groups that fell partially in the areas of interest were prorated by area to be included in the estimates.

The ACS five-year demographic variables data of block groups were then merged with the 2010 block group file containing the proration factors, adjusted by the proration factors, and then summarized to the study areas of interest. The exception of this process is county- and state-level estimates, which were obtained by summarizing the ACS five-year demographic variables by the existent appropriate geography code in the file associated to each Census Block Group data.

All data manipulation was done using the Statistical Analysis System (SAS) software. The data are kept as SAS files and exported out as Comma Separated Value files.

## **Quality Control and Quality Assurance**

Data estimated for counties and states compared well with data reported in the U.S. Census Bureau site. ACS five-year data estimated in other coastal geographies of interest (e.g., watershed) were compared against data estimated for the same geographies of interest when using Census 2010 estimates. The differences found were in the range of 2%.

All of the data reported in these data files met the quality assurance specifications.

## Request for Acknowledgment

NOAA requests that all individuals who download data acknowledge the source of these data in any reports, papers, or presentations. If you publish these data, please include a statement similar to: *U.S. National Oceanic and Atmospheric Administration (NOAA). American Community Survey Five-Year Estimates for Coastal Geographies. Charleston, SC: NOAA Office for Coastal Management.*

## Keywords

socioeconomic, economic, population, age, racial and ethnic compositions, income distribution, block group, American Community Survey

## Data Access

Data can be downloaded from the web at [coast.noaa.gov/dataregistry/search/collection/info/acs](https://coast.noaa.gov/dataregistry/search/collection/info/acs).

A full data dictionary can be found at

[coast.noaa.gov/htdata/SocioEconomic/AmericanCommunitySurvey/AmericanCommunitySurvey\\_DataDictionary.pdf](https://coast.noaa.gov/htdata/SocioEconomic/AmericanCommunitySurvey/AmericanCommunitySurvey_DataDictionary.pdf).