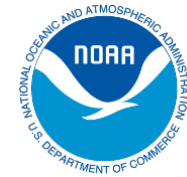**DATA DESCRIPTION**

Spatial Trends in Coastal Socioeconomics (STICS): Total Economy of Coastal Areas

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Contents

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*.

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*.

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*).

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). Visit *fema.gov/floodplain-management/special-flood-hazard-area* for more information.

USGS 8-DigitHydrologicUnitCode (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*).

National Estuarine Research Reserve System (NERRS) Target Watersheds
The National Estuarine Research Reserve System (*nerrs.noaa.gov*) 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 (*nerrs.noaa.gov*) 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/index.cfm* 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/index.cfm* 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).

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, "Some or all of the data described in this article were produced by the U.S. National Oceanic and Atmospheric Administration, National Ocean Service.

Abstract

These market data provide a comprehensive set of measures of changes in economic activity throughout the coastal regions of the United States. In regard to the sources of data, establishments, employment, and wages are taken from the Quarterly Census of Employment and Wages (QCEW). This data series also is known as ES-202 data, which are based on the quarterly reports of nearly all employers in the United States. These reports are filed with each state's employment or labor department, and each state then transmits the data to the Bureau of Labor Statistics (BLS), where the national databases are maintained. The data for the coastal economies have been taken from the national databases at BLS (except in the case of Massachusetts). Gross state product (GSP) data are taken from the Bureau of Economic Analysis (BEA), which develops the estimates of GSP from a number of sources. In regard to "employment," data are reported by employers, not employees, and do not contain any information about age. There is no difference between "employed" and "employment." The source is known as the payroll survey, a survey filed by employers every 3 months showing the number of people employed at each establishment in each of the preceding 3 months.

Many of the goals of those involved in environmental management and policy include finding the balance in the coexistence of natural ecosystems and human society; therefore, a complete picture of the geographic patterns of human activity and its relationship to the coastal environment is needed. BLS Economic Trends data derived from county-level data are provided for several selected jurisdictions in a format that facilitates comparisons across time and space.

Keywords
socioeconomic, economic, population, coastal economics, BLS, establishments, employment, wages, GDP, GSP

Data Set Parameters

The Economic Trends-Coastal Economy database provides data by county and by state. The county-level coastal economy data are highly subject to data suppressions because many sectors and industries have too few establishments in small counties to be shown. Users should always use the reported totals when available rather than attempting to sum sectors or industries at the county level.

The county-level (BLS) data 2005-2013 were obtained from the BLS' public website (*bls.gov/cew/datatoc.htm*). The gross domestic product (GDP) and regional GDP data were obtained from the BEA's public site at the state level (*bea.gov/regional/index.htm*).

Data Analysis and Manipulations

County-level data were disaggregated to several place-based management boundaries (e.g., NERRS, NEP), floodplains (e.g., FEMA Coastal Flood Hazard Area), USGS watersheds, and other boundaries using a block group area proration-county disaggregation method as follows: the county data were distributed accordingly to the population of block groups in the county. Then, the block group areas were intersected with the geography of interest (e.g., watershed) using the Esri ArcGIS software. Any block group that was partially included in the geography of interest was areally prorated.

An example follows:
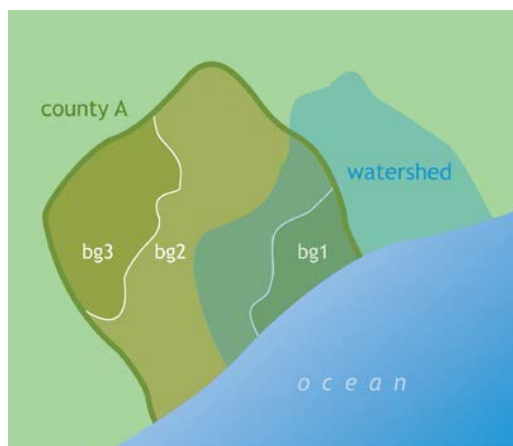
Wages in County A: $ 1,000
Population 2000 in County A: 600 persons

Block Group population in County A:
bg1: 200 persons
bg2: 300 persons
bg3: 100 persons

Block Group areas in watershed:
bg1: 100% in watershed
bg2: 40% in watershed
bg3: 0% in watershed

Wages in Watershed is calculated as follows:
bg1 = (200/600) * 1000 * (100/100) = 333.33
bg2 = (300/600) * 1000 * (40/100) = 200.00
bg3 = (100/600) * 1000 * (0/100) = 0.00

Wages in Watershed = round (333.33 + 200.00 + 0.00) = $ 533

Wages were also calculated to reflect 2010 dollars (variable name: rwages) by using the Consumer Price Index (CPI) benchmarked to the average of 1982-1984 as it is defined by the United States Bureau of Labor Statistics. Here it is used as a way to estimate a constant purchasing power of dollars over time in the prices paid by urban consumers for a market basket of consumer goods and services. It is used to convert dollars from one year to another to let users see earlier values as if they were in 2010 prices. An example of this calculation follows:

wages 2009 = $ 100
cpi 2009 = 214.537
cpi 2010 = 218.056 therefore, wages 2009 converted to 2010 dollars are
rwages = $100 x (218.056 / 214.537) = $101.64

This means that in order to have the same buying power in 2010 as one did in 2009, he or she would need $1.64 more in income.

The table with CPI values for all the years is at *bls.gov/cpi/tables.htm*.

Quality Control and Quality Assurance

Data estimated for geographies of interest (e.g., watershed) from BLS data were compared against data estimated for the same geographies of interest when using BEA estimates. The differences found were in the range of 2%. All of the data reported in these data files met the quality assurance specifications.

Data Access

Data can be downloaded from the web at
https://coast.noaa.gov/dataregistry/search/collection/info/coastaleconomy.

A full data dictionary can be found at
coast.noaa.gov/htdata/SocioEconomic/CoastalEconomy/CoastalEconomy_DataDictionary.pdf.