

TABLE DOCUMENTATION
Coastal Economy (1990-2010) Data from the
National Ocean Economics Program (NOEP)

TABLE OF CONTENTS

1. DATASET IDENTIFICATION
2. INVESTIGATOR INFORMATION
3. DATASET ABSTRACT
4. OBJECTIVES AND INTRODUCTION
5. DATA ACQUISITION AND PROCESSING METHODS
6. DATA MANIPULATIONS
7. DATA DESCRIPTION
8. GEOGRAPHIC AND SPATIAL INFORMATION
9. QUALITY CONTROL AND QUALITY ASSURANCE
10. DATA ACCESS AND DISTRIBUTION
11. REFERENCES
12. TABLE OF ACRONYMS
13. PERSONNEL INFORMATION

1. DATASET IDENTIFICATION

1.1 Title of Catalog document
NOEP Coastal Economy, 1990-2010

1.2 Authors of the Catalog entry
Percy A. Pacheco

1.3 Catalog revision date
August 23, 2011

1.4 Dataset names

NOEP data aggregated by counties: noep_cnty

NOEP data aggregated by state: noep_ce_st

NOEP data aggregated by caf regions: noep_ce_caf_regions (eda's only)

NOEP data aggregated by caf watersheds: noep_ce_caf_watersheds (eda's only)

NOEP data aggregated by fema coastal flood hazard area: noep_ce_fema_cfha

NOEP data aggregated by fema special flood hazard area: noep_ce_fema_sfha

NOEP data aggregated by nep study areas: noep_ce_nep_stdyareas

NOEP data aggregated by nep watersheds: noep_ce_nep_watersheds (no estimates for Columbia River and Mississippi River)

NOEP data aggregated by nep large aquatic areas: noep_ce_nep_lae (no estimates for Columbia River)

NOEP data aggregated by nerrs targets: noep_ce_nerrs_targets

NOEP data aggregated by nerrs watersheds: noep_ce_nerrs_watersheds

NOEP data aggregated by CZMA coastal zoner boundaries: noep_ce_cz

NOEP data aggregated by a 50 Mile Buffer Area from the Coastline: noep_ce_50miles

NOEP data aggregated by Hurricane Prone Areas: noep_ce_hurricane

1.5 Task Group

NOS/Special Projects – Socioeconomic Trends Project

1.6 Dataset identification code

001

1.7 Version

001

1.8 Request for Acknowledgment

NOAA requests that all individuals who download Socioeconomic data acknowledge the source of these data in any reports, papers, or presentation. 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 through the National Ocean Service (NOS)’ Special Projects (SP) Office”.

2. INVESTIGATOR INFORMATION (for full addresses see Section 13)

2.1 Principal Investigators

Percy A. Pacheco, Project Leader, National Oceanic and Atmospheric Administration (NOAA), Special Projects (SP) Office

Brent Ache, National Oceanic and Atmospheric Administration (NOAA), Special Projects (SP) Office.

2.2 Sample Collection Investigators

N/A

2.3 Sample Processing Investigators

N/A

3. DATASET ABSTRACT

3.1 Abstract of the Dataset

The market data of the National Ocean Economics Program (NOEP) provides a comprehensive set of measures of changes in economic activity throughout the coastal regions of the United States. The market data of the NOEP provides 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). These data series also is known as the ES-202 data. These data 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. For more information about the database and data methodology, refer to the User Guide document entitled “ [A Guide to the Measurement of the Market Data for the Ocean and Coastal Economy](#)” or the NOEP [Market Data FAQs](#) document or the [NOEP web site](#).

3.2 Keywords for the Dataset

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

4. OBJECTIVES AND INTRODUCTION

4.1 Program Objective

Special Projects (SP) is one of seven Divisions within the Office of Management and Budget of the National Ocean Service (NOS). This mission of Special Projects is to promote the NOS coastal stewardship mission by providing NOS and its partners with integrated approaches to planning and management, a national assessment capability complementary to other NOS programs, and an innovative program of information synthesis and dissemination.

4.2 Dataset Objective

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. NOEP data derived from County Level data are provided for several selected jurisdictions in STICS in a format that facilitates comparisons across time and space.

4.3 Background Discussion

1980-2008 County Level Market Data of the NOEP were provided by:

Charles S. Colgan
 Chief economist, Market Data
 National Ocean Economics Program
 Email: csc@usm.maine.edu

4.4 Summary of Dataset Parameters

The NOEP 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 common variables that are available for the data aggregated by selected based management places, floodplains, and watersheds are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
IC	Code indicating that data is based on NAICS or SIC	Code indicating that data is based on the North American Industry Classification System (NAICS) or on the Standard Industrial Classification (SIC)	
year	Year	Year	
coastal_sector	Coastal Sector Code	Coastal Sector Code	
sector_name	Coastal Sector Name	Coastal Sector Code	

estab	Establishment	Establishment	dollars
emp	Employment	Employment by Place of Work	persons
wages	Wages	Wages	dollars
rwages	Wages in 2010 dollars	Wages in 2010 dollars	dollars
gdp	Gross Domestic Product	Gross Domestic Product	dollars
rgdp	Gross Domestic Product in chained 2005 dollars	Gross Domestic Product in chained 2005 dollars	dollars
population	Population	Population	persons
housing	Housing	Housing	housing units

The variables that occur only within the data aggregated by NERRS Large Estuary Watershed (noep_nerrs_watersheds) table are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
WSHDCODE	Large Estuary Watershed Code	4-digit Large Estuary Watershed Code	
WSHDNAME	NERRS Large Estuary Watershed Name	National Estuary Research Reserve System (NERRS) Large Estuary Watershed Name	
LANDSQMI	Land Area	Land Area of the NERRS Large Estuary Watershed	sqmi

The variables that occur only within the data aggregated by NERRS Target Watershed (noep_nerrs_targets) table are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
WSHDCODE	Target Watershed Code	4-digit Target Watershed Code	
WSHDNAME	NERRS Target Watershed Name	National Estuary Research Reserve System (NERRS) Target Watershed Name	
LANDSQMI	Land Area	Land Area of the NERRS Target Watershed	sqmi

The variables that occur only within the data aggregated by NEP Watersheds (noep_nep_watersheds) table are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
NEP_ID	Watershed ID	6-digit Watershed ID.	
NEP_NAME	Watershed	National Estuary Program (NEP) Watershed Name	
LANDSQMI	Land Area	NEP Watershed Land Area (sqmi)	sqmi

The variables that occur only within the data aggregated by NEP Study Areas (noep_nep_studyareas) table are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
NEP_ID	Study Area ID	6-digit Watershed ID.	
NEP_NAME	NEP Study Area Name	National Estuary Program (NEP) Watershed Name	

LANDSQMI	Land Area	NEP Watershed Land Area (sqmi)	sqmi
----------	-----------	--------------------------------	------

The variables that occur only within the data aggregated by County in FEMA's 100-Yr Coastal Flood Hazard Area (CFHA) (noep_fema_cfha) table are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
FIPS_FEMA	FIPS Code	Federal Information Processing Standard (FIPS) Code (2-digit state and 3-digit county)	
CTYSTATE	County Name and State Abbreviation	County Name and State Abbreviation	
LANDSQMI	Area (sqmi) of FEMA's CFHA in the county	Area (sqmi) of FEMA's 100-yr Coastal Flood Hazard Area (CFHA) in the county	sqmi

The variables that occur only within the data aggregated by County in FEMA's 100-Yr Special Flood Hazard Area (SFHA) (coastal+riverine) (noep_fema_sfha) table are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
FIPS_FEMA	FIPS Code	Federal Information Processing Standard (FIPS) Code (2-digit state and 3-digit county)	
CTYSTATE	County Name and State Abbreviation	County Name and State Abbreviation	
LANDSQMI	Area (sqmi) of FEMA's CFHA in the county	Area (sqmi) of FEMA's 100-yr Coastal Flood Hazard Area (SFHA) in the county	sqmi

The variables that occur only within the data aggregated by NOAA's Coastal Watershed (estuarine and coastal drainage areas) (noep_caf_watersheds) table are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
SPATLINK	Link Code to Geography	Link Code to Geography (EDASUBEDA + DR_CODE)	
EDASUBEDA	EDA and SUB-EDA Code	EDA/CDA/FDA Watershed Code	
DR_CODE	EDA/FDA Code	Drainage code indicating unique is in an Estuarine Drainage Area (EDA), Fluvial Drainage Area (FDA) or interior	
SUB_NAME	EDA and SUB-EDA Name	EDASUBEDA Sub-system Name	
EDACODE	Watershed Code	4-digit Watershed Code (no subsystems)	
EDA_NAME	Watershed Name	4-digit Watershed Name (no subsystems)	
LANDSQMI	EDASUBEDA Land Area	EDASUBEDA Land Area (sqmi)	sqmi
WATRSQMI	EDASUBEDA Water Area	EDASUBEDA Water Area (sqmi)	
REGION	Coastal Assessment Framework Region Code	NOAA Coastal Assessment Region; (N = North Atlantic Region, S= South Atlantic, G = Gulf of Mexico, P = Pacific, L = Great Lakes, U = Interior, X = International)	

The variables that occur only within the data aggregated by NOAA's Coastal Assessment Framework Regions (noep_caf_regions) table are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
REGION	Coastal Assessment Framework Region Code	NOAA Coastal Assessment Framework (CAF) Region	
LANDSQMI	Region Land Area	Region Land Area (sqmi)	sqmi

The variables that occur only within the data aggregated by State-Hurricane Prone Areas (areas vulnerable to hurricane-force winds) (noep_hurricane) table are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
ST_ABBR	State Abbreviation Code	The 2 digits USPS State Abbreviation Code	
LANDSQMI	Area of Hurricane Prone	Area vulnerable to hurricane-force winds in the State	sqmi

The variables that occur only within the data aggregated by the area within a 50 mile fixed-distance from the coastline (noep_50miles table) are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
ST_ABBR	State Abbreviation Code	The 2 digits USPS State Abbreviation Code	
LANDSQMI	Area of 50 mile buffer	Area within a 50 mile fixed-distance from the coastline in the State	sqmi

The variables that occur only within the data aggregated by the CZMA Coastal Zone state boundaries (noep_cz table) are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
ST_ABBR	State Abbreviation Code	The 2 digits USPS State Abbreviation Code	
LANDSQMI	Area of coastal zone	Area within a coastal zone in the state	sqmi

5. DATA ACQUISITION AND PROCESSING METHODS

5.1 Data Acquisition / Field Sampling

N/A

5.1.1 Sampling Objective

N/A

5.1.2 Sample Collection: Methods Summary

N/A

5.1.3 Beginning Sampling Date

N/A

5.1.4 Ending Sampling Dates

N/A

5.1.5 Sampling Platform

N/A

5.1.6 Sampling Equipment

N/A

5.1.7 Manufacturer of Sampling Equipment

N/A

5.1.8 Key Variables

N/A

5.1.9 Sample Collection: Methods Calibration
N/A

5.1.10 Sample Collection: Quality Control
N/A

5.1.11 Sample Collection: References
N/A

5.1.12 Sample Collection: Alternate Methods
N/A

5.2 Data Preparation and Sample Processing
N/A

5.2.1 Sample Processing Objective
N/A

5.2.3 Sample Processing: Methods Calibration
N/A

5.2.4 Sample Processing: Quality Control
N/A

5.2.5 Sample Processing: References
N/A

5.2.6 Sample Processing: Alternate Methods
N/A

6. DATA ANALYSIS AND MANIPULATIONS

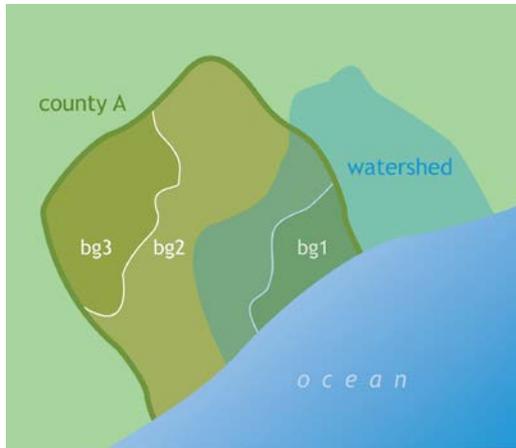
6.1 Name of New or Modified Values
N/A

6.2 Data Manipulation: Description
The county level NOEP (BLS) data 1990-2008 were obtained from Charles Colgan while the 2009 and 2010 BLS data were retrieved from the BLS public web site (<http://ftp.bls.gov/pub/special.requests/cew/>). The GDp and RGDP data were obtained from the BEA public site at the State level (<http://www.bea.gov/regional/gsp>). The method of disaggregating State level data to County level data is explained in "[A Guide to the Measurement of the Market Data for the Ocean and Coastal Economy](#)". The files were then imported into the Statistical Analysis System (SAS) software for further processing and analysis.

a) NOEP county level data were disaggregated to several place based management boundaries (ex. NERRS, NEP), Floodplains (ex. FEMA Coastal Flood Hazard Area), NOAA and CAF watersheds, and other boundaries using a **block group area proration-county disaggregation methodology** 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 (ex. watershed) using the ESRI ArcGIS software. Any block group that was partially included in the geography of interest was areally prorated.

An example follows:



NOEP 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

NOEP Wages in Watershed is calculated as follows:

$$\begin{aligned} \text{nopebg1} &= (200/600) * 1000 * (100/100) = 333.33 \\ \text{nopebg2} &= (300/600) * 1000 * (40/100) = 200.00 \\ \text{nopebg3} &= (100/600) * 1000 * (0/100) = 0.00 \end{aligned}$$

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

b) Estimates for the following cases were entered as missing because the county level file did not include all the counties intersecting the named jurisdictions/geographies;

- NEP Watersheds: No estimates are included for Columbia River (NEP_ID=07) because the county level data contained data only for counties in the States of OR and WA. No estimates are included for Mississippi River (NEP_ID=nep29) because the county level data contained only counties in few states that intersected the MS River boundary.

- NEP Large Aquatic Areas: No estimates are included for Columbia River (NEP_ID=07) because the county level data contained data only for counties in the States of OR and WA.

- CAF Drainage Areas: Estimates for Fluvial Drainage Areas (dr_code=F) and Interior Watersheds (dr_code=I) were entered as missing data because of the missing county information.

- CAF Regions: Estimates for Fluvial Drainage Areas (dr_code1=FCDA, FEDA) and Interior Watersheds (dr_code=INT) were entered as missing data because of the missing county information.

- No estimates are provided for the USGS 8, 6, 4, or 2-digit boundaries.

c) The NOEP county level file contains data for cases with FIPS with special definitions. FIPS in this document refers to the 2-digit state FIPS code plus the 3-digit county FIPS code. Data from these Special FIPS cases needed to be prorated to Census FIPS in order to prorate the county level data to other jurisdictions in STICS. These Special FIPS which are not in the STICS 2000 county reference table are:

- FIPS 02105 (created from remainder of 02232 when 02230) was created. It exists in 2008 and 2009 county lists.
- FIPS 02230 (partially created from 02232, rest is 02105). It exists in 2008 and 2009 county lists.
- FIPS 02231 (created from 02232 and 02282). It exists in 1970, 1980, and 1990 county lists.
- FIPS 51780 (independent city added to 51083). It exists in 1960, 1970, 1980, and 1990 county lists.
- FIPS 02195 (created from part of 02280) . It exists in 2008 and 2009 county lists.
- FIPS 02198 (created from remainder of 02201 after part was annexed by 02130, and another part was included in 02275). It exists in 2008 and 2009 county lists
- FIPS 02275 (created from part of 02280, and part of 02201). It exists in 2008 and 2009 county lists
- FIPS 08014 (created from 08001, 08013, 08059, and 08123). It exists in 2008 and 2009 county lists

Therefore, using county population proration factors::

- Data from FIPS 02105 and FIPS 02230 were added to FIPS 02232
- Data from FIPS 51780 were added in 1995 to FIPS 51083
- Data from FIPS 02231 were split in 1992 into FIPS 02232 and FIPS 02282
- Data from FIPS 02195 were added to FIPS 02280
- Data from FIPS 02275 were added to FIPS 02280 and FIPS 02201
- Data from FIPS 08014 were added to FIPS 08001, FIPS 08013, FIPS 08059, and FIPS 08123

c) Counties that had codes with "999" as the last three digits were ignored. These FIPS are:

01999 ,02999 ,06999 ,09999 ,10999 ,12999 ,13999 ,15999 ,17999 ,18999 ,22999 ,23999 24999
25999 ,26999 ,27999 ,28999 ,33999 ,34999 ,36999 ,37999 ,39999 ,41999 ,42999 44999 ,45999
48999 ,51999 ,53999 ,55999

These are the BLS category for establishments that cannot be located within a county in the state. This is almost always due to misreporting by employers. They are the geographic equivalent of the "unclassified industry". BLS includes the employment in the state totals only.

d) 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 (BLS). 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 \$ dollars are:

$rwages = \$100 \times (218.056 / 214.537) = \$ 101.64$

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 <ftp://ftp.bls.gov/pub/special.requests/cpi/cpiat.txt>

7. DATA DESCRIPTION

7.1 Description of Parameters

Please refer to section 4.4.

7.1.1 Components of the Dataset

Please refer to section 4.4.

7.1.2 Precision of Reported Values

Please refer to section 4.4.

7.1.3 Minimum Value in Dataset

The data varies per socio demographic variable

7.1.4 Maximum Value in Dataset

The data varies per socio demographic variable

7.2 Data Record Example

N/A

7.2.1 Column Names for Example Records

Please refer to section 4.4.

7.2.2 Examples of Data Records

Please refer to section 4.4

8. GEOGRAPHIC AND SPATIAL INFORMATION

8.1 Minimum Longitude (Westernmost)

-178.22

8.2 Maximum Longitude (Easternmost)

-66.97

8.3 Minimum Latitude (Southernmost)

18.93

8.4 Maximum Latitude (Northernmost)

71.41

8.5 Name of Region

United States

9. QUALITY CONTROL AND QUALITY ASSURANCE

9.1 Measurement Quality Objectives

These data are reported in a separate file.

9.2 Data Quality Assurance Procedures

Data estimated for geographies of interest (ex. watershed) from NOEP 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% difference.

9.3 Actual Measurement Quality

All of the data reported in these data files met the QA specifications.

10. DATA ACCESS

10.1 Data Access Procedures

Data can be downloaded from the web at

<http://stics.noaa.gov/socioeconomics/download/download2.html>

10.2 Data Access Restrictions

None

10.3 Data Access Contact Persons

Percy A. Pacheco, NOAA/NOS/MB/SP
301-713-3000, Percy.Pacheco@noaa.gov

10.4 Dataset Format

ASCII (tab delimited) and SAS Export files

10.5 Information Concerning Anonymous FTP

Not available

10.6 Information Concerning WWW

See Section 10.1 for WWW access

10.7 CD-ROM Containing the Dataset

Not available

11. REFERENCES

N/A

12. TABLE OF ACRONYMS

BEA	Bureau of Economic Analysis
BLS	Bureau of Labor Statistics
CDA	Coastal Drainage Area
CSV	Comma Separated Value
EDA	Estuarine Drainage Area
FEMA	Flood Emergency Management Agency
FIPS	Federal Information Processing Standard
FDA	Fluvial Drainage Area
GDP	Gross Domestic Product
GSP	Gross State Product
HUC	Hydrologic Unit Code
MB	Management and Budget
NEP	National Estuary Program
NERRS	National Estuary Research Reserve System
NOAA	National Oceanic and Atmospheric Administration
NOEP	National Ocean Economics Program
NOS	National Ocean Service
REIS	Regional Economic Information System
SAS	Statistical Analysis System (software)
SP	Special Projects

QA/QC	Quality Assurance/Quality Control
USGS	United States Geological Survey
USPS	United States Postal Service
WWW	World Wide Web

13. PERSONNEL INFORMATION

Percy Pacheco, Lead
NOAA/NOS/MB/Special Projects
1305 East West Highway, 9th Floor SSMC4, Silver Spring, MD 20910-3281
301-713-3000, 301-713-4384 (FAX), Percy.Pacheco@noaa.gov

Brent Ache
NOAA/NOS/MB/Special Projects
1305 East West Highway, 9th Floor SSMC4, Silver Spring, MD 20910-3281
301-713-3000, 301-713-4384 (FAX), Brent.Ache@noaa.gov