

TABLE DOCUMENTATION

Woods and Poole 1970-2040

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1. DATASET IDENTIFICATION

1.1 Title of Catalog document

Woods and Poole Economic and Demographic Data Projections, 1970-2040

<http://stics/noaa.gov>

1.2 Authors of the Catalog entry

Percy A. Pacheco

1.3 Catalog revision date

January 10, 2012

1.4 Dataset names

Woods and Poole data aggregated by caf watersheds: wp_caf_watersheds

Woods and Poole data aggregated by fema special flood hazard area: wp_fema_sfha

Woods and Poole data aggregated by nep study areas: wp_nep_stdyareas

Woods and Poole data aggregated by nep watersheds: wp_nep_watersheds

Woods and Poole data aggregated by nerrs targets: wp_nerrs_targets

Woods and Poole data aggregated by nerrs watersheds: wp_nerrs_watersheds

Woods and Poole data aggregated by coastal zone boundaries: wp_cz

Woods and Poole data aggregated by usgs 6-digit accounting units: wp_usgs_accunits

Woods and Poole data aggregated by usgs 8-digit hucs: wp_usgs_hucs

Woods and Poole data aggregated by a 50 Mile Buffer Area from the Coastline: wp_50miles

Woods and Poole data aggregated by Hurricane Prone Areas: wp_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) Division”.

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) Division

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

2.2 Sample Collection Investigators
N/A

2.3 Sample Processing Investigators
N/A

3. DATASET ABSTRACT

3.1 Abstract of the Dataset
The Woods & Poole (version 2012) Economic and Demographic Projections Data has been derived from County Level data from Woods & Poole Economics, Inc., an independent corporation that specializes in long-term county economic and demographic projections. The STICS web site makes use of 42 variables out of the 900 variables in the Woods and Poole database from 1970 to 2040. The regional projection methods are revised somewhat year to year to reflect new computational techniques and new sources of regional economic and demographic information. Each year, a new projection is produced based on an updated historical database and revised assumptions. All data files are referenced to the selected jurisdictions in STICS except political boundaries (ex. Counties and States). For more information about the database and data methodology, refer to the [detailed technical description](#) of the Woods & Poole economics, Inc. 2012 regional Projections and Database

3.2 Keywords for the Dataset
socioeconomic, economic, population, coastal economics, projections

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. Woods and Poole data (1970-2040) economic and demographic projections 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

1970-2040 County Level Economic and Demographic Projections data were provided by:

Woods & Poole economics, Inc.
 1794 Columbia Road NW, Suite 4
 Washington Dc 20009-2808
 Telephone: 800-786-1915
 Web Site: <http://www.woodsandpoole.com/>

4.4 Summary of Dataset Parameters

The Woods and Poole database provides data by County. A detailed description of these data can be obtained from the Woods and Poole web site at (<http://www.woodsandpoole.com/pdfs/SP10.pdf>).

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
wp001	Total Population	Total Population	persons
wp002	Age Population	Under 4 Years	persons
wp003	Age Population	5 to 9 Years	persons
wp004	Age Population	10 to 14 Years	persons
wp005	Age Population	15 to 19 Years	persons
wp006	Age Population	20 to 24 Years	persons
wp007	Age Population	25 to 29 Years	persons
wp008	Age Population	30 to 34 Years	persons
wp009	Age Population	35 to 39 Years	persons
wp010	Age Population	40 to 44 Years	persons
wp011	Age Population	45 to 49 Years	persons
wp012	Age Population	50 to 54 Years	persons
wp013	Age Population	55 to 59 Years	persons
wp014	Age Population	60 to 64 Years	persons
wp015	Age Population	65 to 69 Years	persons

wp016	Age Population	70 to 74 Years	persons
wp017	Age Population	75 to 79 Years	persons
wp018	Age Population	80 to 84 Years	persons
wp019	Age Population	85 Years and Over	persons
wp021	Race Population	White	persons
wp022	Race Population	Black or African American	persons
wp023	Race Population	Native American	persons
wp024	Race Population	Asian and Pacific Islander	persons
wp025	Race Population	Hispanic, any race	persons
wp030	Sex Population	Male	persons
wp031	Sex Population	Female	persons
wp032	Employment	Total Employment	Number of jobs
wp056	Earnings of Employees	Total Earnings of Employees	X 1,000 of 2004 dollars
wp080	Personal Income	Total Personal Income	X 1,000 of 2004 dollars
wp097	Household Income	Number of Households	households
wp098	Household Income	State and local	households
wp099	Household Income	Under \$10,000	households
wp100	Household Income	\$10,000-\$19,999	households
wp101	Household Income	\$20,000-\$29,999	households
wp102	Household Income	\$30,000-\$44,999	households
wp103	Household Income	\$45,000-\$59,999	households

wp104	Household Income	\$60,000-\$74,999	households
wp105	Household Income	\$75,000-\$99,999	households
wp106	Household Income	\$100,000-\$124,999	households
wp107	Household Income	\$125,000-\$149,999	households
wp108	Household Income	\$150,000-\$199,999	households
wp109	Retail and Food Service Sales	Total Retail and Food Service Sales	1,000 of 2004 dollars
avghhsize	Average household size (computed)	Average household size	Persons per household
avghhpov	Average household poverty (computed)	Average household poverty	dollars
year	year	year	

The variables that occur only within the data aggregated by NERRS Large Estuary Watershed (wp_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 (wp_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 (wp_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 (wp_nep2_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) (wp_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) (wp_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) (wp_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)	
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The variables that occur only within the data aggregated by NOAA's Coastal Assessment Framework Regions (wp_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 USGS's 2-digit Regions (wp_usgs_regions) table are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
REGIONUSGS	USGS Region Code	USGS 2-digit Region Code	
LANDSQMI	Region Land Area	Region Land Area (sqmi)	sqmi

The variables that occur only within the data aggregated by USGS's 4-digit Sub-Regions (wp_usgs_subregions) table are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
SUBREGION	USGS Subregion Code	USGS 4-digit Subregion Code	
LANDSQMI	Subregion Land Area	Subregion Land Area (sqmi)	sqmi

The variables that occur only within the data aggregated by USGS's 6-digit Accounting Units (wp_usgs_accunits) table are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
ACC_UNIT	USGS Accounting Unit Code	USGS 6-digit Accounting Unit Code	
LANDSQMI	Accounting Land Area	Accounting Land Area (sqmi)	sqmi

The variables that occur only within the data aggregated by USGS's 8-digit Hydrologic Cataloging Units (wp_usgs_hucs) table are shown below.

Field Name	Description/Long Name	Definitions/Contents	Units
HUC	8-digit USGS Cataloging Unit code	8-digit USGS Cataloging Unit (numeric field)	
HHUC	8-digit USGS Cataloging Unit code	8-digit USGS Cataloging Unit (character field)	
HUC_NAME	8-digit USGS Cataloging Name	8-digit USGS Cataloging Unit Name	
REGIONUSGS	USGS Region Code	Water Resource Region Code (2 first digits of HUC)	
REG_NAME	USGS Region Name	Water Resource Region Name	
SUBREGION	USGS Subregion Code	Sub-region Code (4 first digits of HUC)	
ACC_UNIT	USGS Accounting Unit Code	Accounting Unit code (6 first digits of HUC)	
USGSSQMI	USGS Cataloging Unit Area	USGS 8-digit Cataloging Unit Area	sqmi

The variables that occur only within the data aggregated by State-Hurricane Prone Areas (areas vulnerable to hurricane-force winds) (wp_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 (wp_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 area within a coastal zone boundary (wp_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 boundary	Area within a coastal zone boundary 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

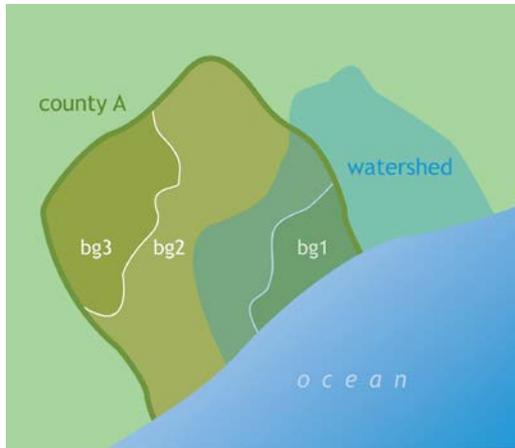
6.2 Data Manipulation: Description

The county level 1970-2040 Woods and Poole 2012 projections data were exported from the CD-ROM data provided by Woods and Poole Economics, Inc. as individual parameter (variable) comma separated value (CSV) files and then imported into the Statistical Analysis System (SAS) software for further processing and analysis. .

a) Woods and Poole 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 arealy prorated.

An example follows:



Woods and Poole Personal Income 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

Woods and Poole Personal Income in Watershed is calculated as follows:

$$\begin{aligned} \text{wpbg1} &= (200/600) * 1000 * (100/100) = 333.33 \\ \text{wpbg2} &= (300/600) * 1000 * (40/100) = 200.00 \\ \text{wpbg3} &= (100/600) * 1000 * (0/100) = 0.00 \end{aligned}$$

Woods and Poole Personal Income in Watershed = round (333.33 + 200.00 + 0.00) = \$ 533

b) The following method was used to estimate the “average household poverty threshold” variable. The poverty thresholds (pt) from Census available at <http://www.census.gov/hhes/www/poverty/data/threshld/index.html> were used as follows:

For 1970, 1975, 1980 use of oldest 1980 poverty thresholds available
 For 1985 use of 1985 poverty thresholds
 For 1990 use of 1990 poverty thresholds
 For 1995 use of 1995 poverty thresholds
 For 2000-2008 use of 2000-2008 poverty thresholds
 For 2009-2040 use of 2009 poverty thresholds

The algorithms used are:

$$\text{avghsize} = \text{wp001}/\text{wp097}$$

if avghsize >= 1 and avghsize <2 then avghpov = (pt1 + [(avghsize-1) * (pt2 - pt1)])
 if avghsize >= 2 and avghsize <3 then avghpov = (pt2 + [(avghsize-2) * (pt3 - pt2)])
 if avghsize >= 3 and avghsize <4 then avghpov = (pt3 + [(avghsize-3) * (pt4 - pt3)])
 if avghsize >= 4 and avghsize <5 then avghpov = (pt4 + [(avghsize-4) * (pt5 - pt4)])
 if avghsize >= 5 and avghsize <6 then avghpov = (pt5 + [(avghsize-5) * (pt6 - pt5)])

if avghhsize >= 6 and avghhsize <7 then avghhpov = (pt6 + [(avghhsize-6) * (pt7 – pt6)]
if avghhsize >= 7 and avghhsize <8 then avghhpov = (pt7 + [(avghhsize-7) * (pt8 – pt7)]
if avghhsize >= 8 and avghhsize <9 then avghhpov = (pt8 + [(avghhsize-8) * (pt9 – pt8)]
if avghhsize >= 9 then avghhpov = pt9

where:

avghhsize = persons per household
wp001 = total persons in Woods and Poole
wp097 = total number of households in Woods and Poole
avvhhpov = average household poverty threshold
pt=poverty threshold

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 the Woods and Poole projections data were compared against data estimated for the same geographies of interest when using Census 2000 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/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
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
HUC	Hydrologic Unit Code
MB	Management and Budget
NEP	National Estuary Program
NERRS	National Estuary Research Reserve System
NOAA	National Oceanic and Atmospheric Administration
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

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