

Using Data to Improve Health Services

A workshop for Community Supported Clinics



Charles Rynerson
Sheila Martin
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Population Research Center
PORTLAND STATE UNIVERSITY

Why can data help you serve your
community?

Workshop Agenda

- Important sources of Demographic data
- Important sources of health data
- Community Profiles: Review of data points and sources
- Discussion of community profiles
- Step-by-step instructions for obtaining and mapping similar data
- Brainstorming and discussion

INTRODUCTION TO DEMOGRAPHIC DATA SOURCES

Charles Rynerson

Decennial Census: Historical Perspective

- Short Form
 - Questions asked of all persons residing in U.S.
 - Age, Gender, Race/Hispanic origin, Household relationship, Housing Tenure
 - 100% Data Products
- Long Form (1940-2000)
 - Questions asked of a sample of 1 of 6 Housing Units; 15% of the population in 2000
 - Economic, Social, and Housing Information
 - Sample data products

2010 Census

- April 1, 2010
- An “actual enumeration” (The 2010 Census aims to count all U.S. residents—citizens and non-citizens alike)
- **Only 10 questions on the 2010 Census form**
NO LONG FORM!
- population and housing counts and basic characteristics (sex, age, race/ethnicity, household composition, vacant/occupied and owner/renter units)

2010 Census: Race and Ethnicity

	2000		2010		change	
HISPANIC OR LATINO AND RACE¹						
Total population	3,421,399	100.0%	3,831,074	100.0%	409,675	12.0%
Hispanic or Latino (of any race)	275,814	8.0%	450,062	11.7%	174,248	63.5%
Not Hispanic or Latino	3,146,085	92.0%	3,381,012	88.3%	234,927	7.5%
White Alone	2,857,616	83.5%	3,005,848	78.5%	148,232	5.2%
Black or African American Alone	53,325	1.6%	64,984	1.7%	11,659	21.9%
American Indian and Alaska Native Alone	40,130	1.2%	42,706	1.1%	2,576	6.4%
Asian Alone	100,333	2.9%	139,436	3.6%	39,103	39.0%
Native Hawaiian and Other Pacific Islander Alone	7,398	0.2%	12,697	0.3%	5,299	71.6%
Some Other Race Alone	4,550	0.1%	5,502	0.1%	952	20.9%
Two or More Races	82,733	2.4%	109,839	2.9%	27,106	32.8%

RACE ALONE OR IN COMBINATION²						
Total population	3,421,399	100.0%	3,831,074	100.0%	409,675	12.0%
White	3,055,670	89.3%	3,337,309	87.1%	281,639	9.2%
Black or African American	72,647	2.1%	98,479	2.6%	25,832	35.6%
American Indian and Alaska Native	85,667	2.5%	109,223	2.9%	23,556	27.5%
Asian	127,339	3.7%	186,281	4.9%	58,942	46.3%
Native Hawaiian and Other Pacific Islander	16,019	0.5%	25,785	0.7%	9,766	61.0%
Some Other Race	176,866	5.2%	231,789	6.1%	54,923	31.1%

ACS

Use data from the American Community Survey to obtain detailed demographic, social, economic, and housing characteristics, such as income, poverty, employment, and educational attainment.

ACS

- An ongoing survey that provides data every year
- A sample of the population
- **All ACS data are survey *estimates*.** To help you interpret the reliability of the estimate, the Census Bureau publishes a margin of error (MOE) for every ACS estimate.

Subjects Included in the Survey

Demographic

Age and Sex

Group Quarters Population

Hispanic or Latino Origin

Race

Relationship

Total Population

Economic

Class of Worker

Commuting to Work/Journey to Work

Employment Status

Food Stamps/Supplemental Nutrition Assistance Program (SNAP)

Health Insurance Coverage

Income and Earnings

Industry and Occupation

Poverty

Work Status

Social

Ancestry

Citizenship Status

Disability Status

Educational Attainment

Fertility

Field of Degree

Grandparents as Caregivers

Language

Marital History

Marital Status

Place of Birth

School Enrollment

Residence 1 Year Ago/Migration

Veterans

Year of Entry

Housing

Computer Ownership & Internet Access

House Heating Fuel

Kitchen Facilities

Occupancy/Vacancy Status

Occupants per Room

Owner Monthly Costs

Plumbing Facilities

Rent Statistics

Rooms

Bedrooms

Telephone Service Available

Tenure

Units in Structure

Value of Home

Vehicles Available

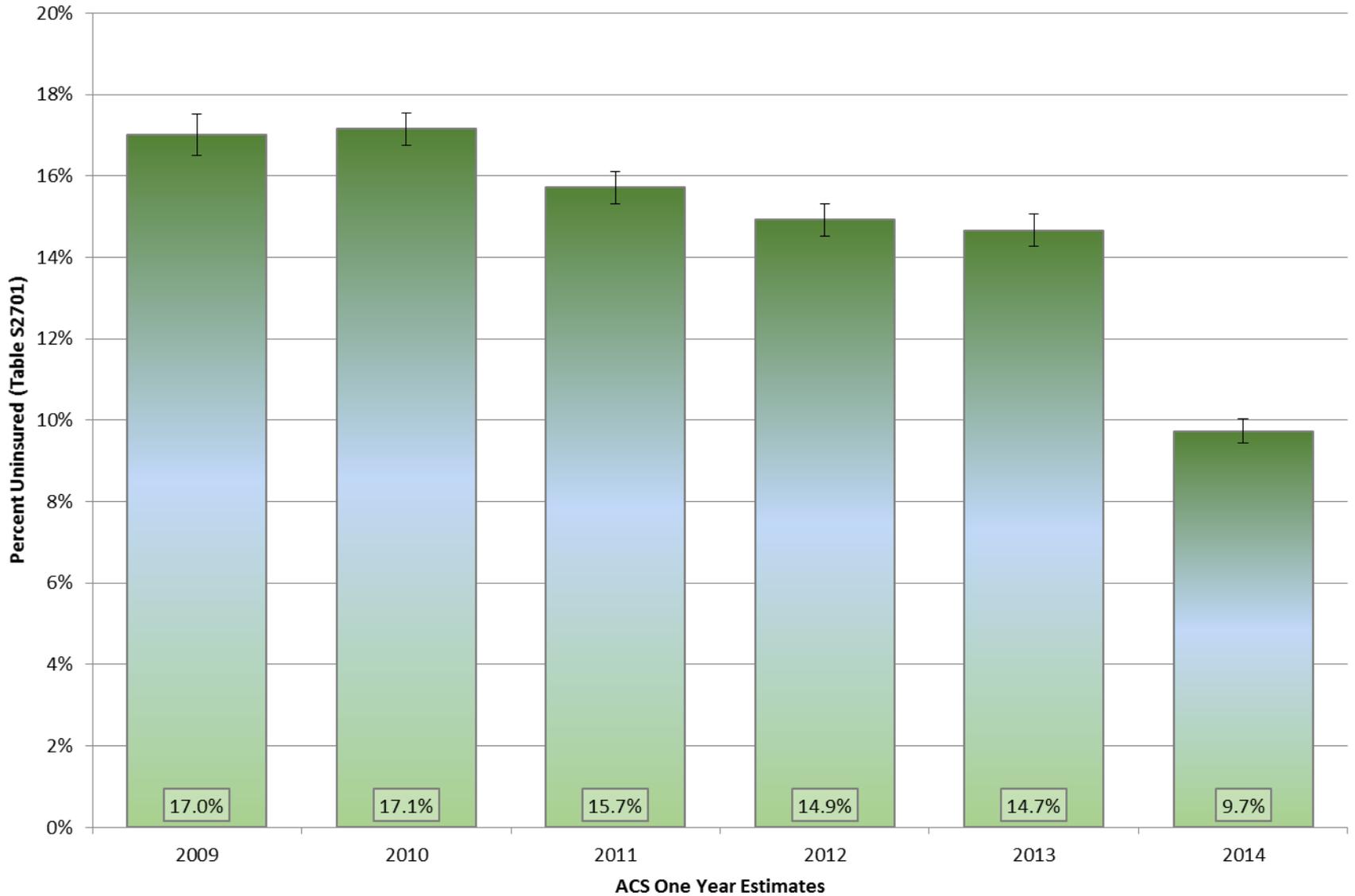
Year Householder Moved Into Unit

Year Structure Built

ACS Topics: Notable Additions and Improvements

- Disability (new questions introduced 2008)
 - Hearing difficulty
 - Vision difficulty
 - Cognitive difficulty
 - Ambulatory difficulty
 - Self-care difficulty
 - Independent living difficulty
- Health Insurance (2009)
- Field of Bachelor's Degree (2009)

Percent Uninsured, Total civilian noninstitutionalized population State of Oregon, 2009-2014 ACS



2013 and 2014 insurance coverage, Oregon

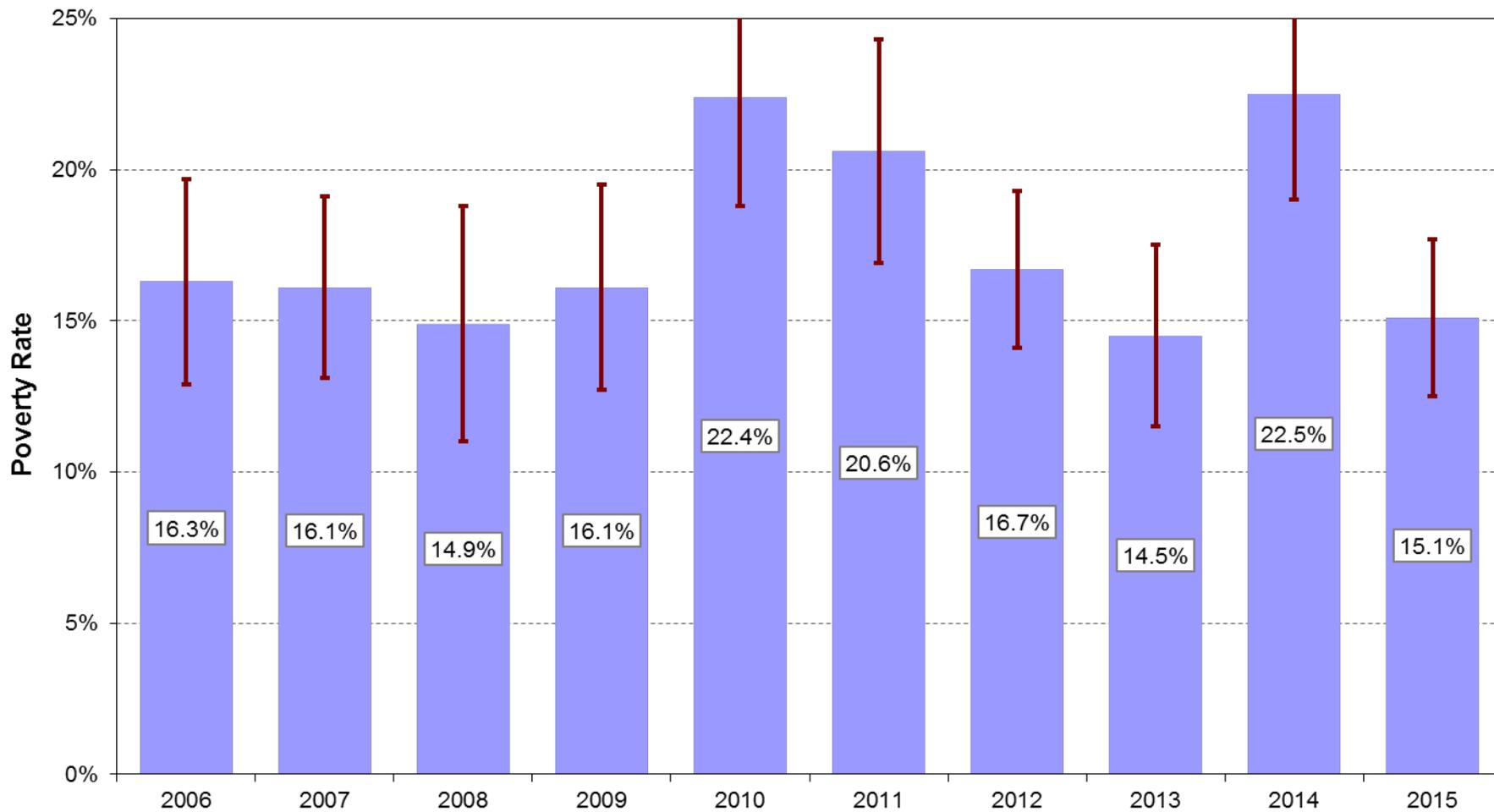
	Total Civilian Noninst	<u>with Insurance</u>		<u>no Insurance</u>		With Medicaid/ Means Tested	With Medicaid/ Means Tested Alone
2013	3,893,092	3,322,210	85.3%	570,882	14.7%	662,038	475,351
2014	3,931,306	3,548,645	90.3%	382,661	9.7%	897,812	667,749
chg.	38,214	226,435		-188,221		235,774	192,398

U.S. Census Bureau, ACS 1 year estimates, Table S2701

Population Thresholds for ACS Estimates

Annual Release:	September	December
	1-year estimates	5-year estimates
Areas with 65,000 + people	X	X
All Geographic Areas		X

Cowlitz County Poverty Rate, All Persons *American Community Survey 1 Year Estimates*

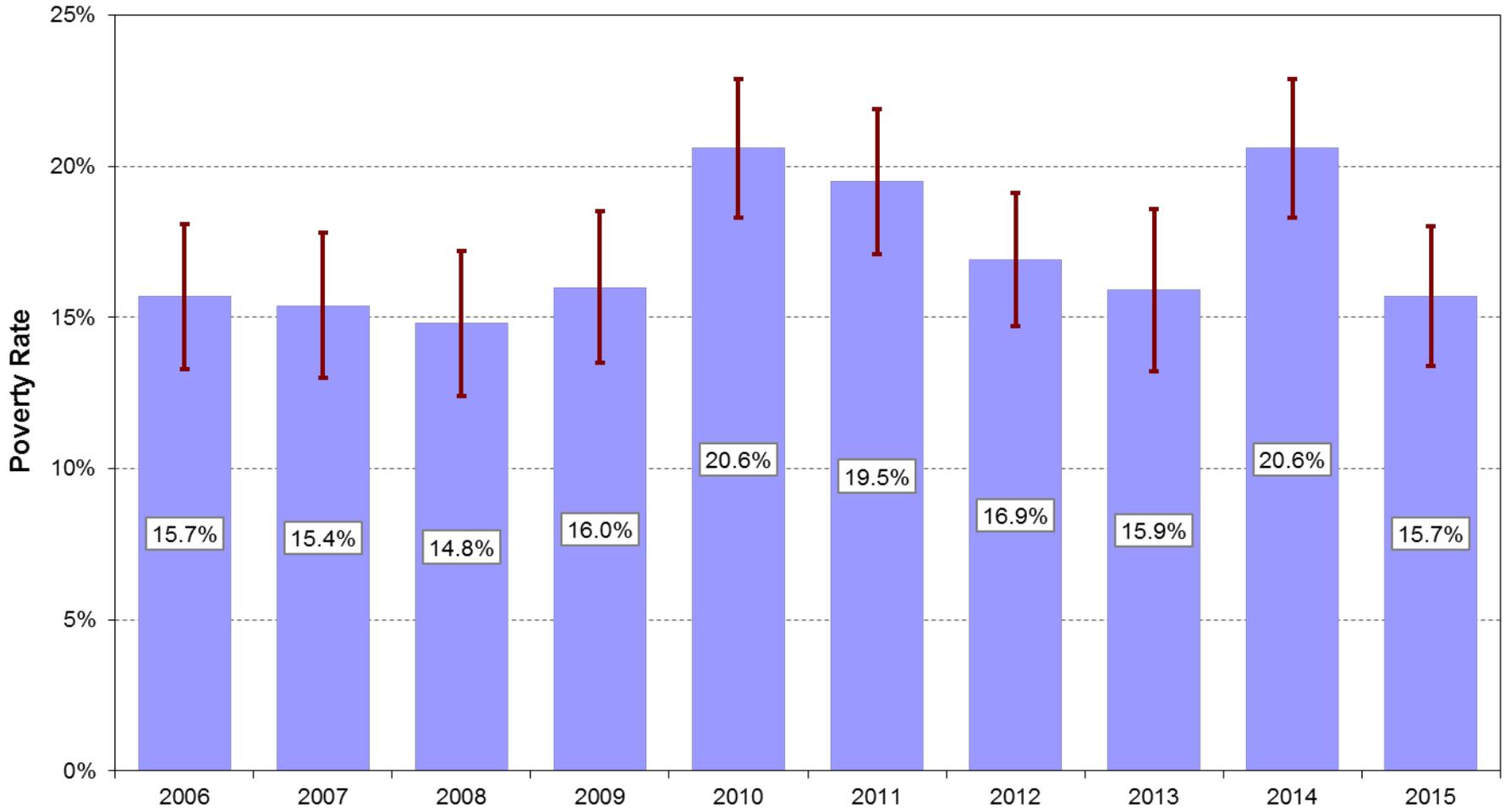


I-beam bars show margin of error at the 90% confidence level.

ACS Response Year

Cowlitz County Poverty Rate, All Persons

Small Area Income and Poverty Estimates (SAIPE)

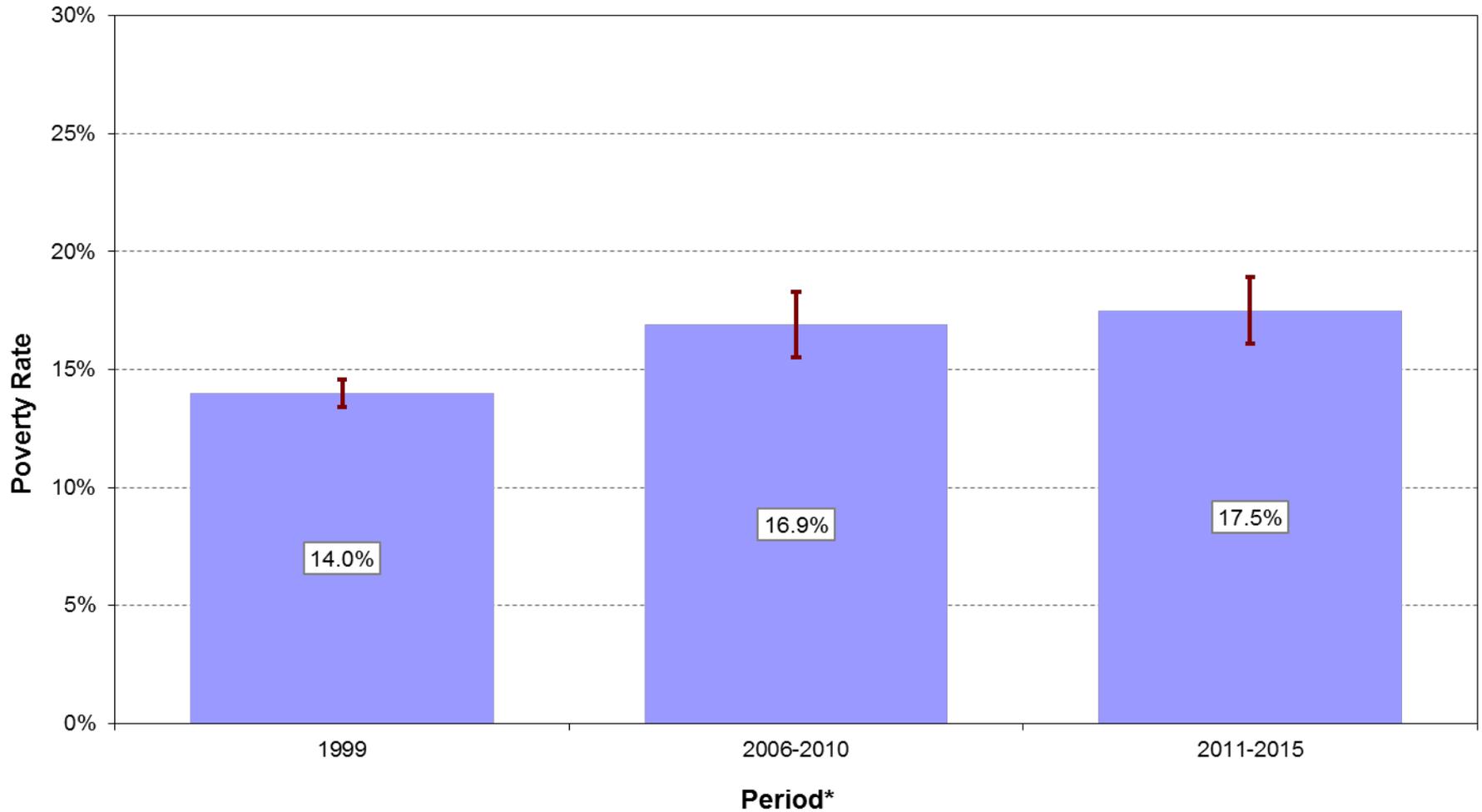


I-beam bars show margin of error at the 90% confidence level.

ACS Response Year

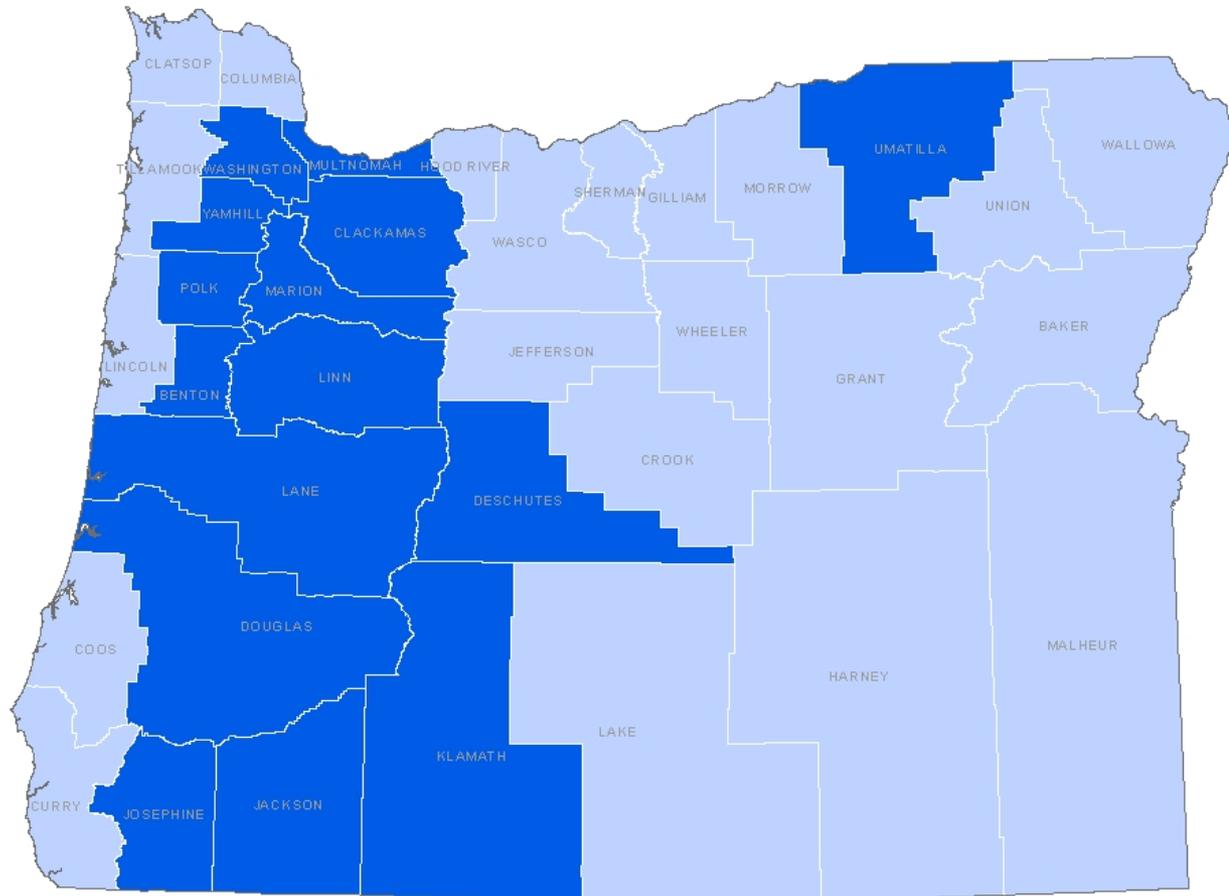
Cowlitz County Poverty Rates

2000 Census and 2006-2015 American Community Survey Estimates

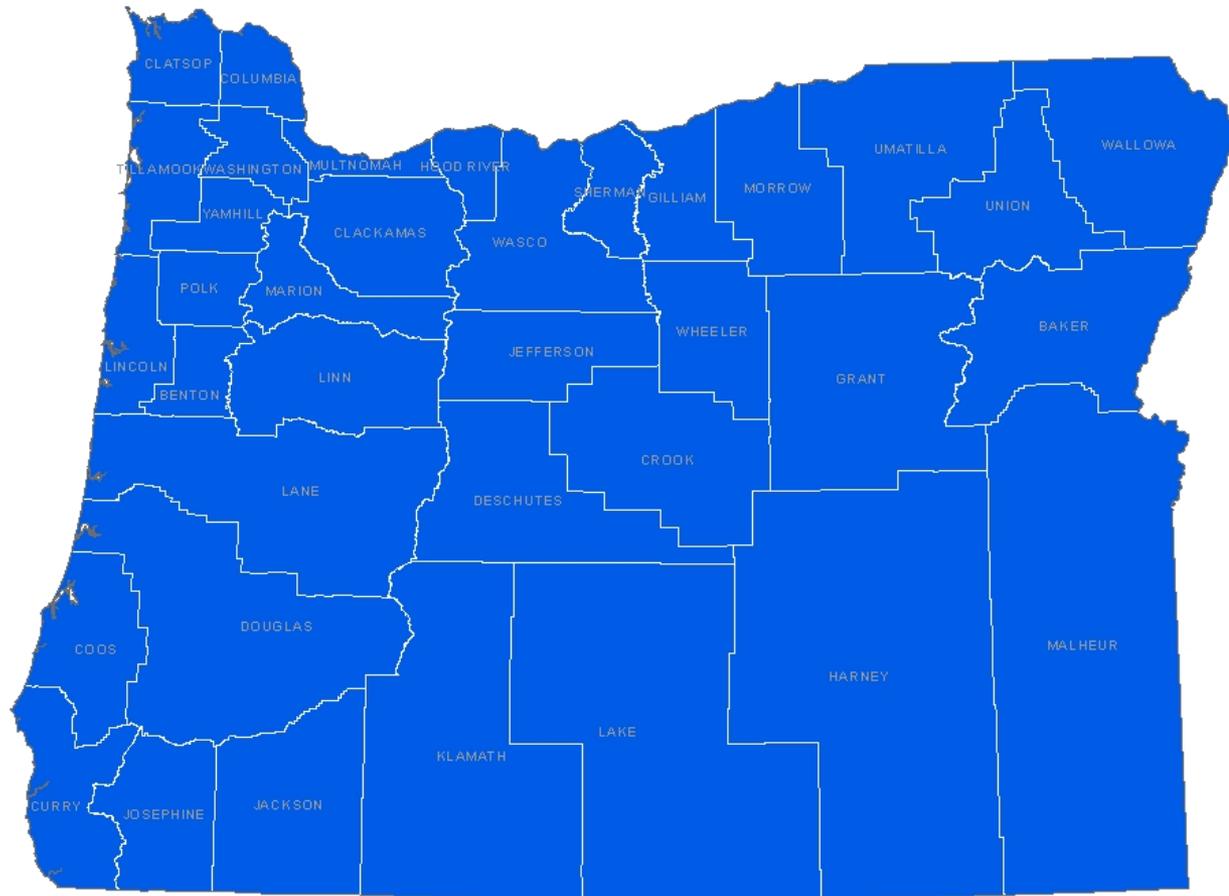


**All data are estimates. The 2000 Census long form asked respondents to report calendar year 1999 income; American Community Survey responses were collected over a five year period, asking respondents to report income over the previous 12 months. I-beam bars show margin of error at the 90% confidence level.*

One Year ACS Estimates for 15 Oregon Counties



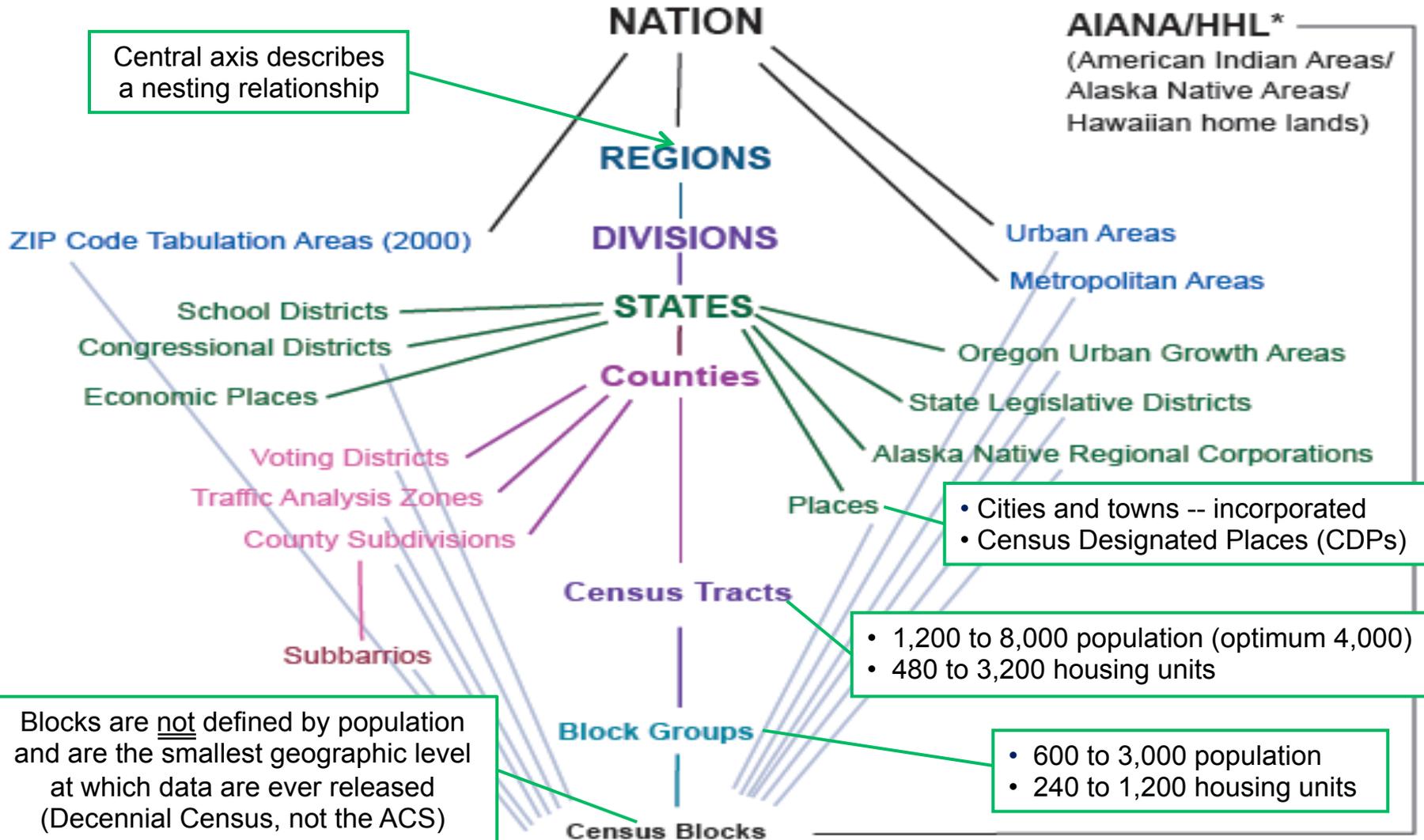
Five Year ACS Estimates for all 36 Oregon Counties



Census Geography Hierarchy

(with 2010 Statistical Area Criteria)

Revised 10-29-11



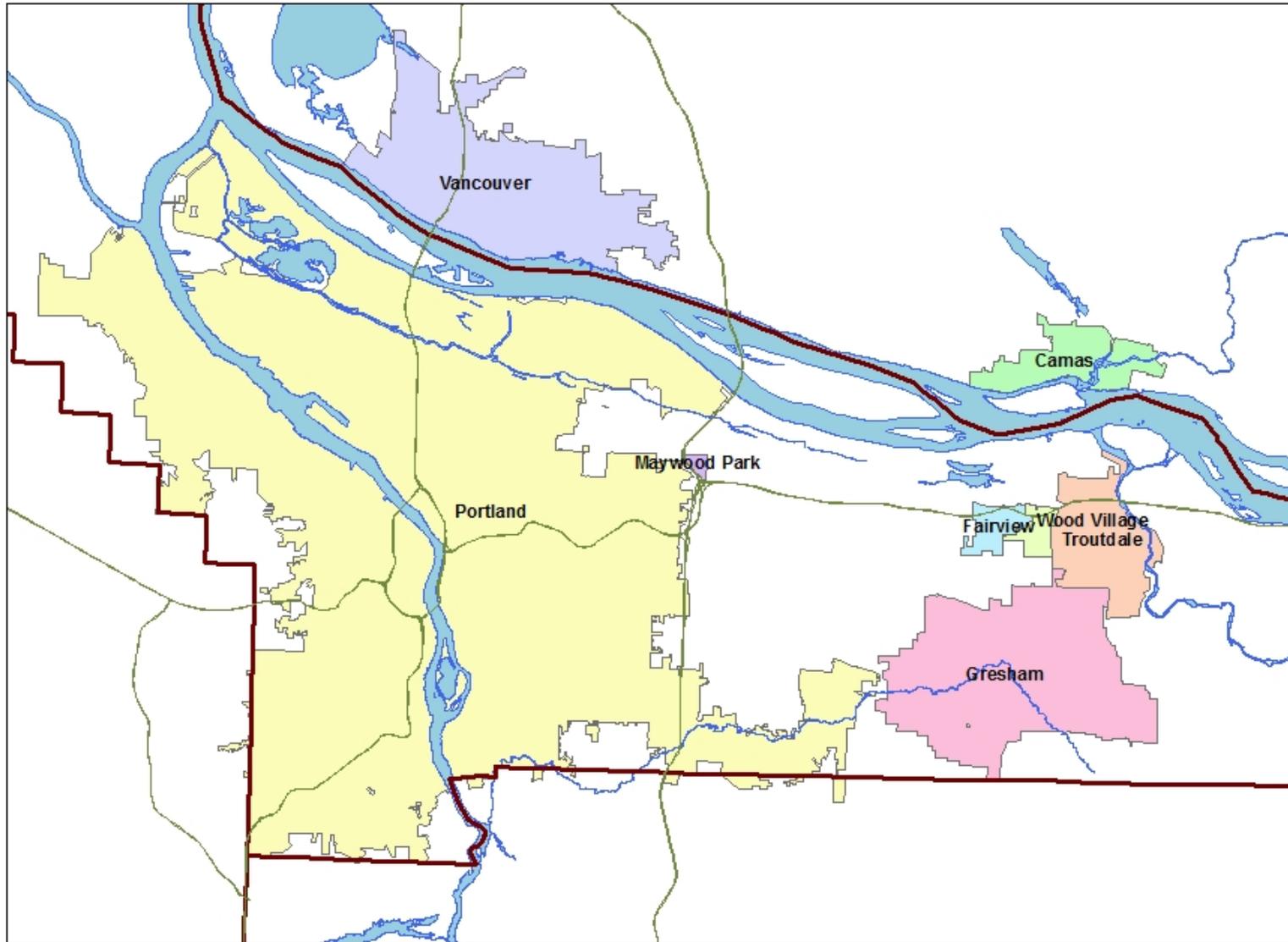
Census Geography

- **Census Tracts**—small, relatively permanent statistical subdivisions of a county or equivalent area [usually 2,500-8,000 people, PDX MSA avg. ~ 4,400]
- **Block Groups (BG)**—a subdivision of Census Tracts containing a cluster of Census Blocks [usually 600-3,000 people, optimum size 1,500]
- **Blocks**—smallest geographic area; bounded on all sides by visible features (e.g. streets, streams, railroad tracks) and by invisible boundaries (e.g. city, town, and county limits)

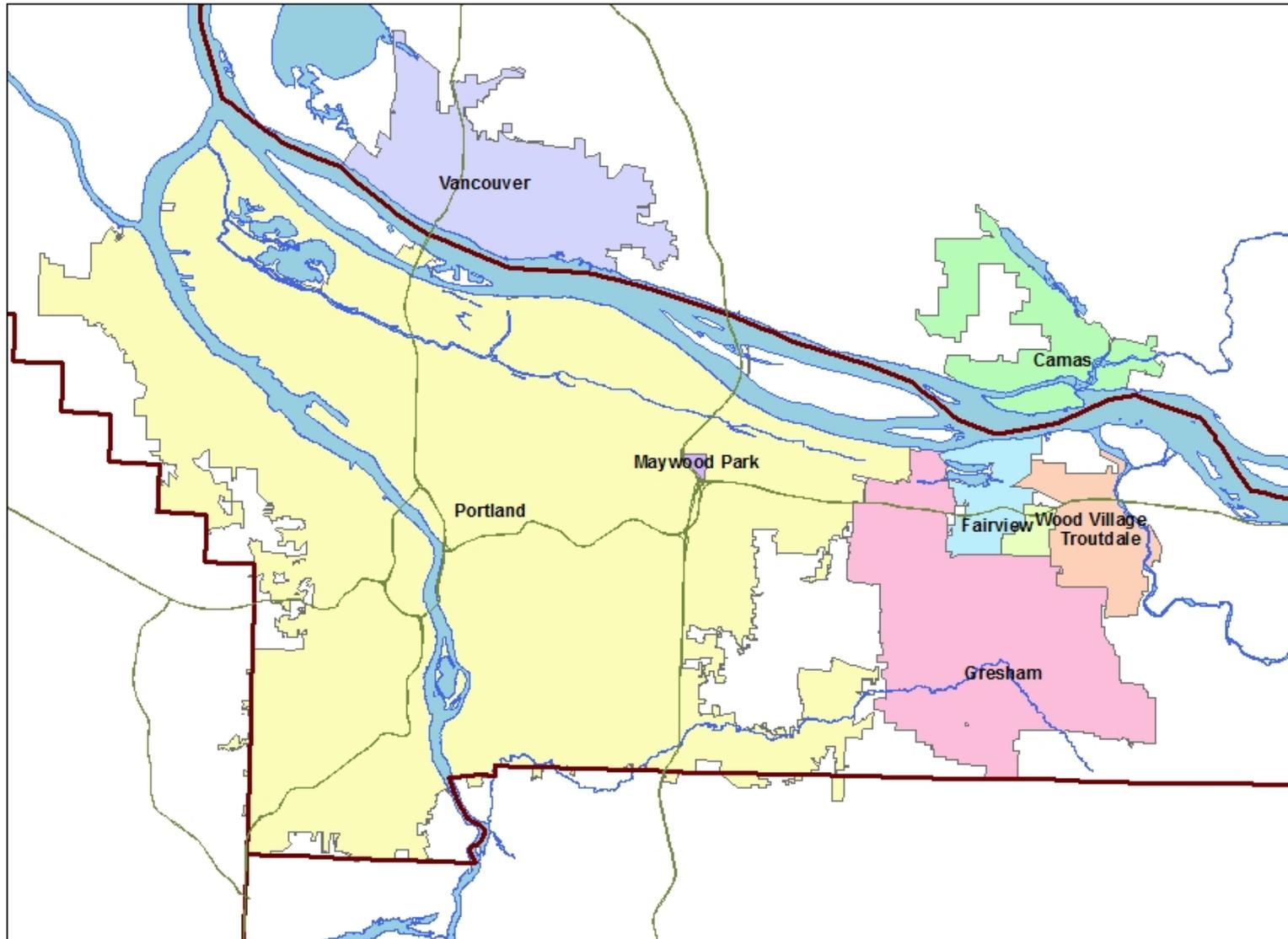
Census Geography

- **Place**—Places, for the reporting of census data, include census designated places (CDP), consolidated cities, and incorporated places (cities, towns, villages, etc.).
- **ZCTA**—A ZIP Code[®] tabulation area (ZCTA[™]) is a statistical geographic entity that approximates the delivery area for a U.S. Postal Service five-digit ZIP Code. ZCTAs do not precisely depict ZIP Code delivery areas, and do not include all ZIP Codes used for mail delivery.

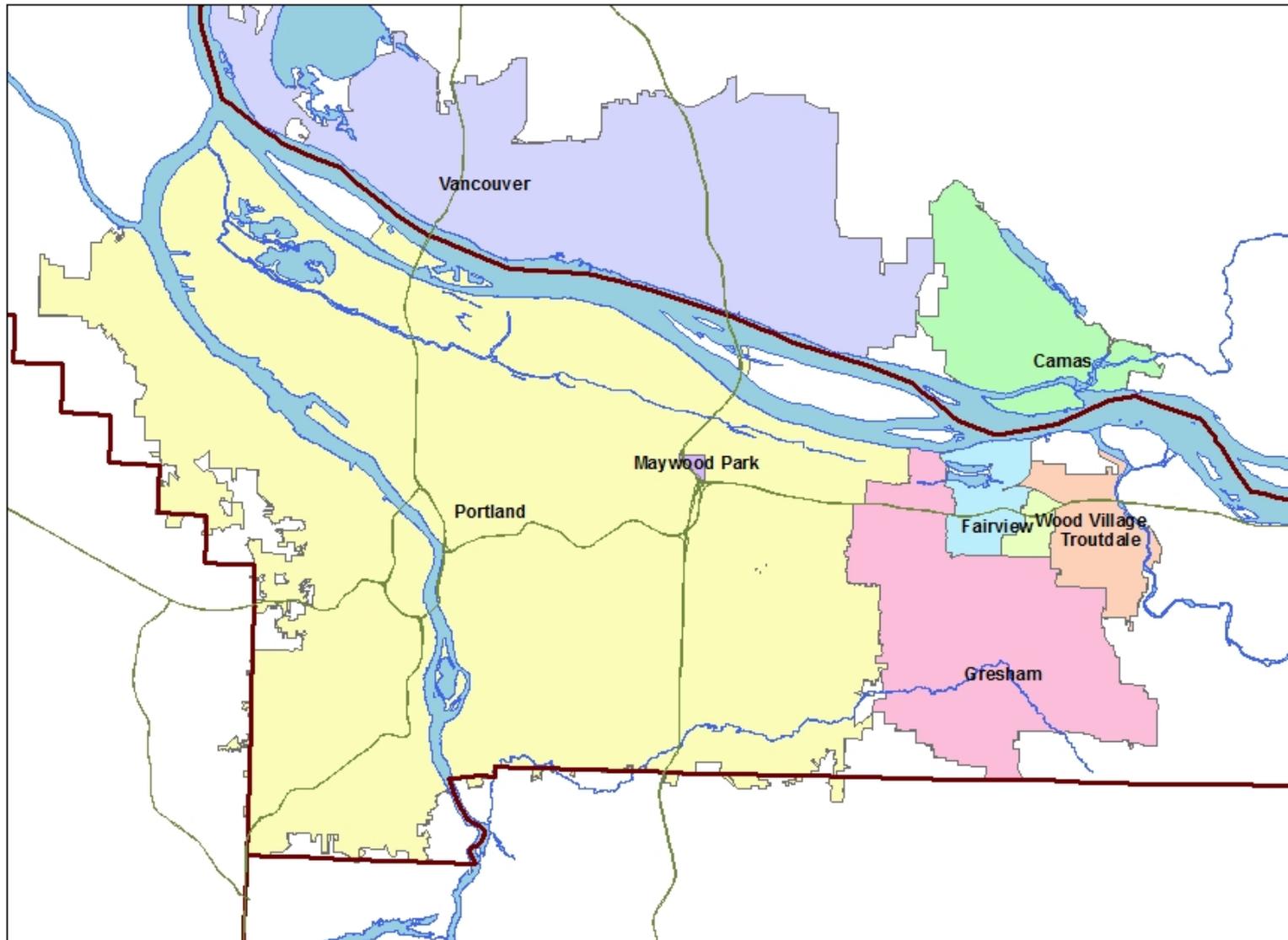
Selected Incorporated Cities, 1980



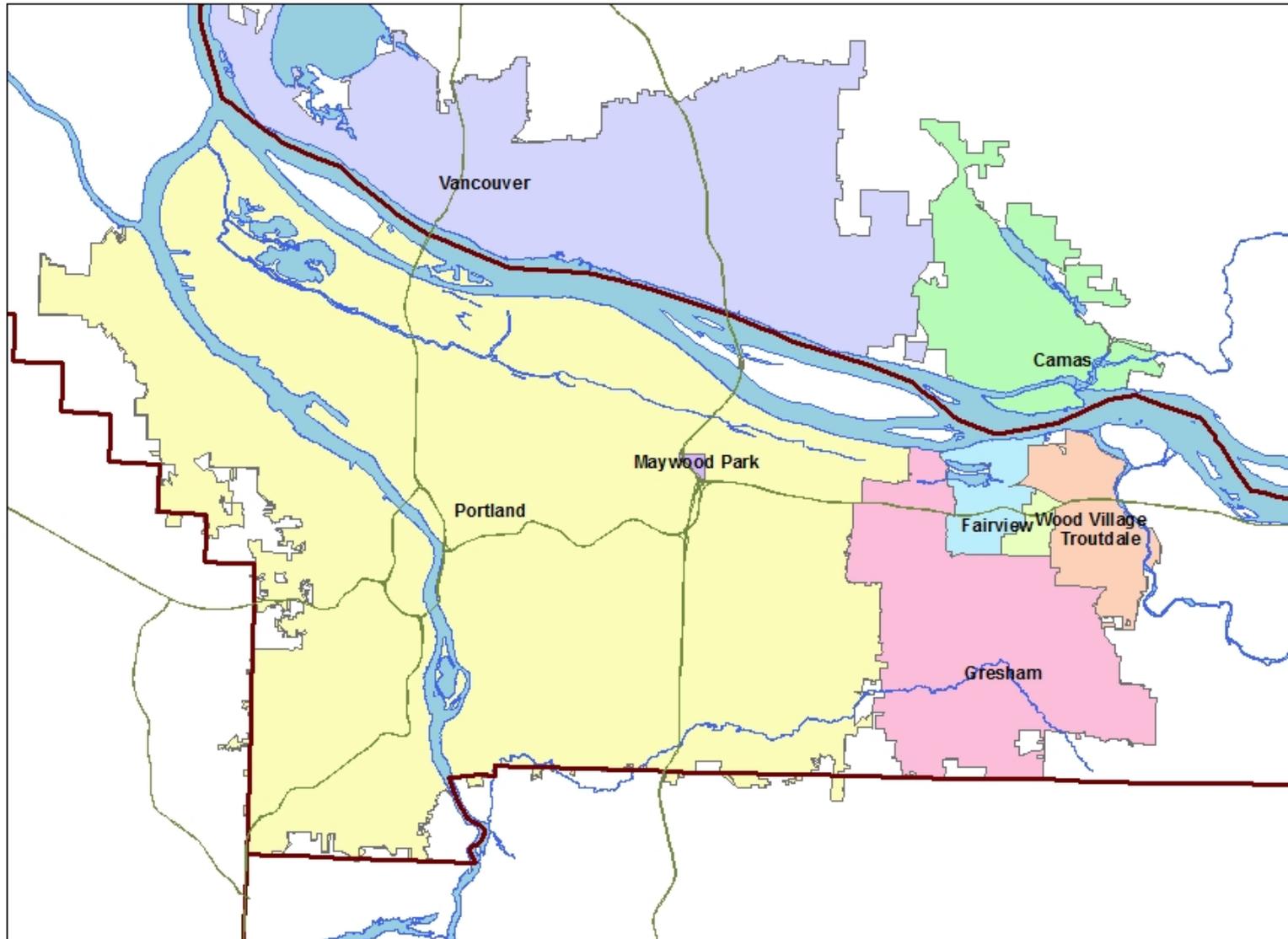
Selected Incorporated Cities, 1990



Selected Incorporated Cities, 2000



Selected Incorporated Cities, 2010



Resources for Data Users

- factfinder.census.gov - American FactFinder
- <http://www.census.gov/data/data-tools/cbb.html> -
Census Business Builder
- censusreporter.org
- pdx.edu/prc – Population Research Center
- portlandpulse.org



- Topics
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Maps, Products
- Library
Infographics, Publications
- Data
Tools, Developers**
- Surveys/Programs
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Introducing a Mobile Friendly on Census.gov

Our new mobile friendly experience provides access to statistics on America's peo... economy from your laptop, tablet, or s...



Population Clock

U.S. Population
321,895,036

World Population
7,277,232,016

Oct 05, 2015 23:27 UTC (+7) [Learn More >>](#)

QuickFacts

Quick, easy access to facts about people, business, and geography.

Select a state to begin

U.S. Census Bureau Economic Indicators

	Manufacturers' Goods August 2015 Report Released 10:00 AM EDT, 10/2/15	N
	Construction Spending August 2015 Report Released 10:00 AM EDT, 10/1/15	\$
	Advance International Trade: Goods	

[View All](#) * change not sta... significance not

Latest News



Economic Census Data on Accommodations and Food Services
October 02, 2015
 The 2012 Economic Census concludes the Geographic Area Series for establishments primarily engaged in providing customers with lodging and/or preparing meals.



Manufacturing Day: Oct. 2
October 02, 2015
 In recognition of this fourth annual observance, the Census Bureau provides resources relevant to Manufacturing Day.

Stat of the Day

Accomodation and Food Services

The accommodation and food services sector establishments primarily engaged in providing lodging and/or preparing meals, snacks and b... immediate consumption.

[Read More](#)



American FactFinder may be unavailable periodically from 9am EST October 10th until 9am EST October 11th while we perform system maintenance. We apologize for any inconvenience.

Community Facts

Find popular facts (population, income, etc.) and frequently requested data about your community.

Enter a state, county, city, town, or zip code:

e.g., Atlanta, GA [GO]

Guided Search

Advanced Search

Download Center



Popular Tables

Population and Housing

- Annual Population Estimates (2014 PEP, PEPANNRES)
Demographic and Housing Estimates (2013 ACS, DP05)
General Housing Characteristics (2013 ACS, DP04)
General Demographic Characteristics (2010 Census, DP-1)

Poverty and Income

- General Economic Characteristics (2013 ACS, DP03)

Age, Race, Sex and Education

- Selected Social Characteristics (2013 ACS, DP02)
Educational Attainment (2013 ACS, S1501)

American FactFinder provides access to data about the United States, Puerto Rico and the Island Areas. The data in American FactFinder come from several censuses and surveys. For more information see Using FactFinder and What We Provide.

News and Notes

GET EMAIL UPDATES



September 17, 2015

The 2014 American Community Survey 1-year estimates are now available....

Search - Use the options on the left (topics, geographies, ...) to narrow your search results

Your Selections

'Your Selections' is empty

Search using the options below:

Topics

(age, income, year, dataset, ...)

Geographies

(states, counties, places, ...)

Race and Ethnic Groups

(race, ancestry, tribe)

Industry Codes

(NAICS industry, ...)

EEO Occupation Codes

(executives, analysts, ...)

To search for tables and other files in American FactFinder:

1

Enter search terms and an optional geography and click **GO**

-- or --

Select from **Topics, Race and Ethnic Groups, Industry Codes, EEO Occupation Codes.**

- these are added to 'Your Selections'
- the Search Results are updated

2

Next, select **Geographies** (states, counties, cities, towns, etc.)

- these are added to 'Your Selections'
- the Search Results are updated

3

Select one or more Search Results and click **View**

INTRODUCTION TO HEALTH DATA SOURCES

Sheila Martin

There are many sources of health data!

- National Center for Health Statistics, CDC
- Behavioral Risk Factors Surveillance System, CDC
- National Center for HIV/Aids, Viral Hepatitis, STD, and TB Prevention
- Claims data
- Census Bureau, ACS and SAHIE
- Safe drinking water information system
- Etc etc

How do we know what to use???

Evaluating the usefulness of potential health data

- What is the data source?
- How are the data collected?
- For what geography?
- Over what time period? What has changed?
- How current are the data? How often are they collected and what is the lag in their release?

Data collection methods

- Administrative records
 - Created for an administrative purpose
 - Claims data, tax data, birth and death records
- Survey data
 - Usually collected specifically to answer a research question
 - May have problems with response rates and data reliability

Questions to ask about survey data

- Who is being surveyed (what is the universe)?
- What percentage of the universe is sampled?
- What is the sampling method (phone, mail, web)?
- What kind of sampling bias might be introduced by the sampling method?

Key health data sources

- Vital records (births and deaths)
 - National Center for Health Statistics or the state health department
 - Can be used to calculate premature death, cause of death, low birth weight babies, teen births.
- Behavioral Risk Factor Surveillance System, CDC
 - Phone survey conducted by state health departments
 - National sample of about 500,000 adults living in households (>18)
 - Set of surveys about a variety of health topics
 - Sample sizes can be low for counties
- State health departments
 - Disease incidence, etc.

Other Health data sources

- Census Bureau, American Community Survey
 - **Insured and uninsured** by age, sex, and race, education, and income
 - Disability information
- Health Resources and Services Administration
 - Health Center Program Grantee Data for FQHC's
 - 2012- 2015
 - Characteristics of service area, patients, services, clinical data, cost, etc.

Data aggregators

- Web sites or reports that produce a specific set of health data or indicators by aggregating a lot of different sources of data, Examples:
 - [Greater Portland Pulse](#) (Portland metro counties only)
 - [County Health Rankings](#) (National county-level data)
 - [State of Oregon's Health](#) (County-level data)
 - [500 Cities Project](#)

Profile Review

Discussion

- What can I say about my community based on these data?
- What other data would I like to have?
- How are these data useful for my clinic:
 - For targeting services?
 - For identifying partners?
 - For locating new services?

Building your own profile

- Step by step instructions for:
 - American Factfinder
 - Greater Portland Pulse
 - County Health Rankings
 - UDS Mapper (if we have time)

Brainstorming and Discussion

- What are the most important ways I can think of to use these data?
- What is missing that I might need to know?
- What other data might we want to combine with these data to learn more?

Contacts

- Population Research Center
www.pdx.edu/prc/
- Charles Rynerson rynerson@pdx.edu
503-725-5157
- Sheila Martin sheilam@pdx.edu
503-725-5170

