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# March Diversity/Data Learning Collaborative

### Using the American Community Survey to Describe the Registered Nurse Workforce March 25, 2015

For live audio, you must use your phone and dial (866) 215-3402; passcode: 5343859

### **CCNA Staff**

# Winifred Quinn, PhD

Director, Advocacy & Consumer Affairs Center to Champion Nursing in America



### **Presenters**



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### **ACS Overview**

- Administered by US Census Bureau
  - Access data through American Fact Finder
- Conducted monthly and data released annually
- Pre-tabulated summary results
  - American Fact Finder

### **ACS Overview**

#### American Fact Finder website: http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml



### **ACS Overview**

- 1/3/5-year PUMS estimates
  - Public Use Microdata Sample (PUMS)
- Estimates by geography
  - Nation state county census tract block group
  - Availability depends on size of population
- Alternative to the NSSRN data
  - NCSBN RN workforce data

### American Community Survey website: http://www.census.gov/acs/www/



http://www.census.gov/acs/www/data\_documentation/public\_use\_microdata\_sample/

Main	About the Survey V	Guidance for Data Users ▼ Data & Documentation	on ▼ Methodology ▼ Library ▼				
Data		Public Use Microdata Sample (PUMS)					
Docun	nentation	🖶 Print   🕂 Share this page   🕂 Connect with us					
Data F	Releases	The American Community Survey (ACS) Public Use Micro	data Sample (PUMS) files are a set of untabulated records about				
Geogra	aphy	individual people or housing units. The Census Bureau produces the PUMS files so that data users can create custom tables that					
Downl	oadable data via FTP	are not available through pretabulated (or summary) ACS of	data products.				
Summ	nary File	Summary products, such as the tables and profiles	PUMS files, in contrast, include population and				
Public Use Microdata Sample (PUMS)		accessible via American FactFinder (AFF), show data that have already been tabulated for specific	housing unit records with individual response information such as relationship, sex, educational				
Abou	ut PUMS	geographic areas. attainment, and employment status.					
PUM	īdentiality of PUMS IS Data IS Documentation IS on DataFerrett		gh a variety of means, ensuring that it is impossible to identify individuals a still useful. The PUMS records do not contain names, addresses, or roup quarter, or person.				
PUM	IS FAQs	Why Use PUMS?					
Custom Tabulations		PUMS files are perfect for people, such as students, who are looking for greater accessibility to inexpensive data for research projects. Social scientists often use the PUMS for regression analysis and modeling applications.					
		What's Available and How Can I Access PUMS?					
		combinations of the 1-year PUMS file with appropriate adju	CS PUMS files. The 3-year and 5-year PUMS files are multiyear ustments to the weights and inflation adjustment factors. The PUMS files au's FTP site, and DataFerrett. Statistical software is needed to use the				

#### http://www.census.gov/acs/www/data\_documentation/pums\_data/

	Burvey > Data & Documentation: Public Use M mmunity Surve		ta		
Main About the Survey V	Guidance for Data Users ▼	Data & Documentation ▼	Methodology V	Library 🔻	
<ul> <li>Data</li> </ul>	PUMS Data				
<ul> <li>Documentation</li> </ul>	🖶 Print   🕂 Share this page   🕂	Connect with us			SEARCH
<ul> <li>Data Releases</li> </ul>	Supporting documentation for the d	lata below is available on the P	UMS Documentation	page.	Current Data Profiles
<ul> <li>Geography</li> </ul>					Social, Economic, Housing and
Downloadable data via FTP	PUMS Data 2000 - current	PUMS Data fo	r AC S 1998		Demographic Characteristics
<ul> <li>Summary File</li> </ul>	Available through the America	n Florida (EXE	328KB1		United States 🔻 💁
Public Use Microdata	FactFinder website:	Nebraska (E)	xE 224KB]		Website Feedback
Sample (PUMS)	2009-2013 ACS 5-year PUMS	New York [E)	XE 142KB]		Tell us how to
About PUMS	2011-2013 ACS 3-year PUMS	Ohio [EXE 49	95KB1		make this website
Confidentiality of PUMS	2013 ACS 1-year PUMS	Oregon [EXE	-		better.
<ul> <li>PUMS Data</li> </ul>	2008-2012 ACS 5-year PUMS		na [EXE 372KB]		🜃 Data by Topic
PUMS Documentation	2010-2012 ACS 3-year PUMS	Texas [EXE 1			
PUMS on DataFerrett	2012 ACS 1-year PUMS	ional Level			People
PUMS FAQs	2007-2011 ACS 5-year PUMS	PUMS Data fo	r AC S 1997		Age and Sex / Aging     Ancestry
Custom Tabulations	2009-2011 ACS 3-year PUMS	Florida [EXE	398KB]		Disability
<ul> <li>Oustom rabulations</li> </ul>	2011 ACS 1-year PUMS	Nebraska (E)	XE 973KB]		Commuting to Work

### **Sample Count of RNs in ACS PUMS**

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	2013	2011-2013		2013	2011-2013
State	1-year	3-year	State	1-year	3-year
Alabama	596	1,739	Montana	123	325
Alaska	55	146	Nebraska	265	744
Arizona	671	1,881	Nevada	242	657
Arkansas	315	934	New Hampshire	227	656
California	3417	9,804	New Jersey	1,049	3,087
Colorado	543	1,598	New Mexico	155	516
Connecticut	479	1,301	New York	2,233	6,619
Delaware	102	336	North Carolina	1,191	3,374
DC	26	64	North Dakota	86	264
Florida	2,129	6,402	Ohio	1,584	4,492
Georgia	996	2,798	Oklahoma	354	1,085
Hawaii	133	382	Oregon	424	1,246
Idaho	117	407	Pennsylvania	1,687	5,022
Illinois	1,479	4,319	Rhode Island	172	468
Indiana	757	2,333	South Carolina	534	1,638
lowa	384	1,255	South Dakota	122	363
Kansas	385	1,133	Tennessee	815	2,250
Kentucky	549	1,596	Texas	2,493	6,985
Louisiana	496	1,426	Utah	241	751
Maine	190	570	Vermont	81	261
Maryland	691	2,100	Virginia	989	2,737
Massachusetts	971	2,867	Washington	740	2,196
Michigan	1,189	3,410	West Virginia	208	663
Minnesota	793	2,260	Wisconsin	752	2,209
Missouri	354	1,038	Wyoming	62	172

### **ACS PUMS Data Documentation**

#### http://www.census.gov/acs/www/data\_documentation/pums\_data/

	Survey > Data & Documentation: Public Use M mmunity Surve	• • •	ta		
Main About the Survey <b>V</b>	Guidance for Data Users ▼	Data & Documentation ▼	Methodology V	Library <b>V</b>	
<ul> <li>Data</li> </ul>	PUMS Data				
Documentation	🗟 Print   🕂 Share this page   🕂	Connect with us			SEARCH
<ul> <li>Data Releases</li> </ul>	Supporting documentation for the	data below is available on the P	UMS Documentation	page	Current Data Profiles
<ul> <li>Geography</li> </ul>	supporting documentation for the		ente boounontation	rugo.	Social, Economic, Housing and
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<ul> <li>Summary File</li> </ul>	Available through the America	n Florida (EXE	328KB]		United States 🔹 🐨
Public Use Microdata	FactFinder website:	Nebraska [E]	xE 224KB]		Website Feedback
Sample (PUMS)	2009-2013 ACS 5-year PUMS	New York [E]	KE 142KB]		Tell us how to
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	2008-2012 ACS 5-year PUMS		na [EXE 372KB]		🜃 Data by Topic
PUMS Documentation	2010-2012 ACS 3-year PUMS	Texas [EXE 1			
PUMS on DataFerrett	2012 ACS 1-year PUMS	TONIO (EVE			People
PUMS FAQs	2007-2011 ACS 5-year PUMS	PUMS Data fo	r AC \$ 1997		<ul> <li>Age and Sex / Aging</li> <li>Ancestry</li> </ul>
Custom Tabulations	2009-2011 ACS 3-year PUMS	Florida [EXE	398KB]		Disability
	2011 ACS 1-year PUMS	Nebraska [E	KE 973KB]		Commuting to Work

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

Your Selections	Search Results: 1-2 of 2 tables and other products match 'Your Selections'							
Search using Product Type: Public Use Microdata Sample 😵 Dataset: 2013 ACS 1-year estimates 😢	Refine your search results:       topic or table name       state, county or place (optional)         Image: Comparison of the place of th							
clear all selections and start a new search	Selected: 🖹 View 📔 Download 🛛 🐔 Compare 📄 Clear All 🕜							
Search using the options below:								
Topics	ID $\Leftrightarrow$ Table, File or Document Title $\Leftrightarrow$ Dataset $\Leftrightarrow$ About	t						
(age, income, year, dataset,)	PUMS-CSV 2013 ACS 1-year Public Use Microdata Samples (PUMS) - CSV format 2013 ACS 1-year estimates 🕖							
Geographies	PUMS-SAS 2013 ACS 1-year Public Use Microdata Samples (PUMS) - SAS format 2013 ACS 1-year estimates 👔							
(states, counties, places,)	Selected: 🖹 View 📄 Download 🛛 🙀 Compare 📄 Clear All 📀							
Race and Ethnic Groups (race, ancestry, tribe)								
Industry Codes (NAICS industry,)								
EEO Occupation Codes (executives, analysts,)								
	12							

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Advanced	Search - Search all data in American FactFinder	
1 Advance	ed Search 2 Table Viewer	Result 1 of 1
PUMS-CSV	2013 ACS 1-year Public Use Microdata Samples (PUMS) - CSV format 🏼 🔞	
	2013 ACS 1-year estimates	BACK TO ADVANC

The ACS Public Use Microdata Sample files (PUMS) are a sample of the actual responses to the American Community Survey and in tabulations and can be used for detailed research and analysis. Files have been edited to protect the confidentiality of all individuals a Microdata Area (PUMA).

For complete PUMS documentation, visit the ACS PUMS documentation page.

All files below are provided in comma separated value (CSV) format. The 2013 ACS 1-year PUMS are also available in SAS format.

United States Population Records	United States Housing Unit Records
Alabama Population Records	Alabama Housing Unit Records
Alaska Population Records	Alaska Housing Unit Records
Arizona Population Records	Arizona Housing Unit Records
Arkansas Population Records	Arkansas Housing Unit Records
California Population Records	California Housing Unit Records
Colorado Population Records	Colorado Housing Unit Records
Connecticut Population Records	Connecticut Housing Unit Records
Delaware Population Records	Delaware Housing Unit Records
District of Columbia Population Records	District of Columbia Housing Unit Records
Florida Population Records	Florida Housing Unit Records
Georgia Population Records	Georgia Housing Unit Records

### **ACS PUMS Data Documentation**

http://www.census.gov/acs/www/data\_documentation/public\_use\_microdata\_sample/

Main	About the Survey V	Guidance for Data Users V Data & Documentation	n ▼ Methodology ▼ Library ▼					
Data		Public Use Microdata Sample (PUMS)						
Docum	mentation	🔿 Print   🕂 Share this page   🕂 Connect with us						
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Geogr	aphy		duces the PUMS files so that data users can create custom tables that					
Downl	oadable data via FTP	are not available through pretabulated (or summary) ACS of	ata products.					
Summ	nary File	Summary products such as the tables and sufficient	DUMS flog is contract include conviction and					
Public	c Use Microdata	Summary products, such as the tables and profiles accessible via American FactFinder (AFF), show data						
Samp	ole (PUMS)	that have already been tabulated for specific	information such as relationship, sex, educational					
About PUMS		geographic areas.	attainment, and employment status.					
Cont	fidentiality of PUMS							
PUM	IS Data	Confidentiality of PUMS						
PUM	IS Documentation	The confidentiality of ACS respondents is protected through a variety of means, ensuring that it is impossible to identify individuals who provide any response, yet making sure the results are still useful. The PUMS records do not contain names, addresses, or any information that can identify a specific housing unit, group quarter, or person.						
PUM	IS on DataFerrett							
PUM	IS FAQs	Why Use PUMS?						
Custo	m Tabulations	WNY USE POINS? PUMS files are perfect for people, such as students, who are looking for greater accessibility to inexpensive data for research projects. Social scientists often use the PUMS for regression analysis and modeling applications.						
		What's Available and How Can   Access PUMS?						
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		are accessible via American FactFinder, the Census Burea PUMS files from American FactFinder and the FTP site.	au's FTP site, and DataFerrett. Statistical software is needed to use the					

### **ACS PUMS Data Documentation**

#### Public Use Microdata Sample (PUMS):

http://www.census.gov/acs/www/data\_documentation/pums\_documentation/

<ul> <li>Data</li> </ul>	PUMS Documentation											
<ul> <li>Documentation</li> </ul>	🗟 Print   🕂 Share this page   🕂 Connect with us											
<ul> <li>Data Releases</li> </ul>	The docum	entation be	low is provi	ded in sup	oort of the	American C	Community	Survey PU	MS data			
<ul> <li>Geography</li> </ul>							,					
<ul> <li>Downloadable data via FTP</li> </ul>	2013	2012	2011	2010	2009	2008	2007	2006	2005	All		
<ul> <li>Summary File</li> </ul>	u											
Public Use Microdata	Subje	cts in the	PUMS				PUMS F	ReadMe				
Sample (PUMS)		of topics		n each of	the housi	ing and					ACS PUMS files,	
About PUMS	popul	population record files						aphies, an	d variable	e chang	jes.	
Confidentiality of PUMS	2009	2009-2013 5-year Subjects [PDF 47KB]						2013 5-ye	ar PUMS Re	eadMe [	PDF 99KB]	
PUMS Data		-2013 3-ye	-		<b]< td=""><td></td><td></td><td></td><td></td><td>-</td><th>PDF 229KB]</th></b]<>					-	PDF 229KB]	
<ul> <li>PUMS Documentation</li> </ul>	2013	1-year Su	bjects [PDF			1-year PUM		[PDF 1	14KB]			
PUMS on DataFerrett	Code I	Code Lists							Accuracy of the PUMS			
<ul> <li>PUMS FAQs</li> </ul>	numb	Detailed codes for variables that contain a large number of coded responses, such as ancestry and						A basic explanation of the sample design, estimation methodology, and accuracy of the				
<ul> <li>Custom Tabulations</li> </ul>	occupation				data							
	2009	2009-2013 5-year Code Lists [XLS 2.2MB]						2009-2013 5-year PUMS Accuracy [PDF 1.2MB]				
	2011	-2013 3-ye	ear Code Li	sts [XLS 7.	9MB]		2011-2013 3-year PUMS Accuracy [PDF 1.4MB]					
	2013	2013 1-year Code Lists [XLS 7.0MB]						2013 PUMS Accuracy [PDF 1.8MB]				
	PUMS Top Coded and Bottom Coded Values						PUMS E	PUMS Estimates for User Verification:				
	List of variables with responses exceeding a state-specific value that are replaced with a predetermined value						assist	data user	s in deter	mining	ristics provided to i if they are ompute estimates	
	2013	2013 Top and Bottom Coded Values [PDF 1.3MB]						Note that some of these estimates may be different from the estimates for the same characteristics published in the American				
	PUMS	PUMS Data Dictionary						FactFinder. For an explanation of these differences, see the Accuracy of the PUMS above.				
	relea	Includes variables available for each PUMS release and how each variable is coded					0	PUMS estir PUMS estir	mates [SAS mates [LST	5 160KE 180KE	3]	
		-2013 5-ye						PUMS estin	-	-	er Verification	
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### Key variables in the PUMS dataset:

OCCP – census occupation code SCHL – educational attainment ESR – employment status recode (employed/unemployed/not in labor force) FOD1P/FOD2P – field of degree for first and second bachelor's degrees PWGTP – individual person weight PWGTP1-PWGTP80 – replicate weights used for calculating variance

AGEP – age of person SEX – male/female HISP – Hispanic ethnicity INDP – census industry code RAC1P – person's reported race (distinct from Hispanic ethnicity)

### **ACS PUMS Data Demonstration**

- Stata software
- Using a "do"-file
- Creating new variables
- Basic descriptive analysis
  - Average age
  - Educational attainment
  - Racial & ethnic composition

### **Alternative Access to ACS PUMS Data**

### DataFerrett website: http://dataferrett.census.gov/

Home	About Us	Products/Services	Collaboration	Contact Us
DataFerr	ett			DATAFERRETT
DataFerrett is a	data analysis and extract	ion tool to customize federal, state, a	nd local data to suit your	DataFerrett Home
requirements. L	Jsing DataFerrett, you car	develop an unlimited array of custor	nized spreadsheets that	Getting Started
		ge demands then turn those spreads	heets into graphs and	About the Datasets
maps without a	ny additional software.			User Resources
				FAQs
What you sho	ould check before gett	ing started:	No.	Launch DataFerrett
🗱 Java I	nstalled: Check your vers	ion or Download the latest version		
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То	Run DataFerrett please	visit <sup>.</sup>		
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### **Questions or Comments?**

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# Use the "Raise Hand" option above the chat box OR Use the "chat" feature to send "everyone" a question.

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### **Campaign Resources**

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#### Visit us on the web at www.campaignforaction.org state action who's campaign about us evidence community involved coalitions progress FUTURE OF NURSING Campaign for Action AT THE CENTER TO CHAMPION MURCHUS IN AMERICA the our Transforming challenge progress Health Care for the 21st Century

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