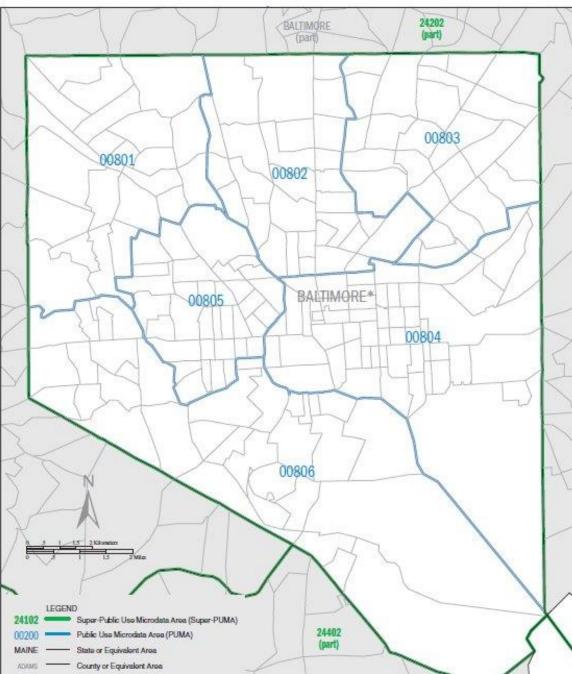
ACS USING PUBLIC USE MICRODATA FILES

WHAT IS PUMS?

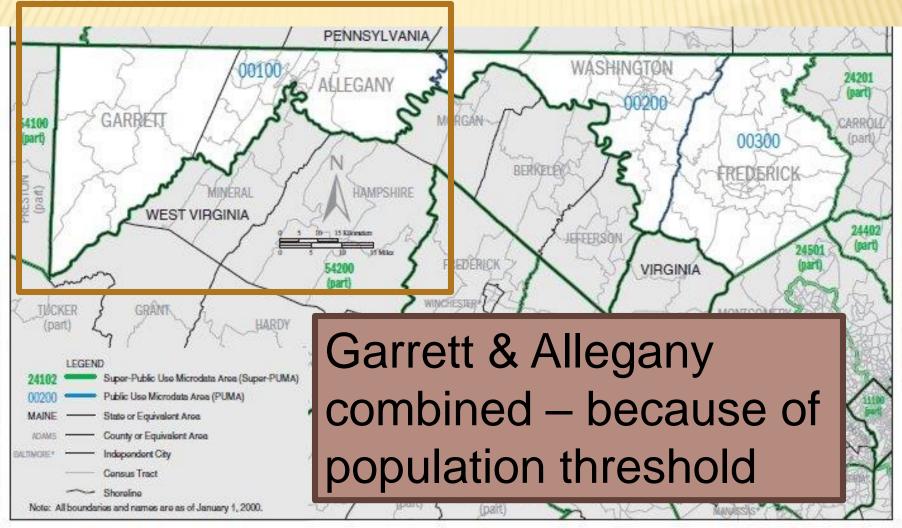
- Public Use Microdata Sample sample file of unaggregated raw data with no identifying information about an individual person or household (no addresses, names, etc)
- PUMAS Statistical areas of 100,000 or more population
- State Data Centers with support of the community define PUMAS
- × Will be redefined in Summer of 2011



Census 2000 PUMAS for Baltimore City

MARYLAND Super-PUMA 24300: Census 2000 Public Use Microdata Areas (PUMAs)

Western MD PUMAS



Public Use Microdata Sample (PUMS) files

Census 2000 Public Use Microdata Areas (PUMAs)

WHY USE MICRODATA FILES?

- Aggregated data such as the tables found in FactFinder are not sufficient; you need additional detail for characteristics –do it yourself tabulations
- May have less detail for geography however

WAYS TO PROCESS ACS MICRODATA

- Download the microdata file from FactFinder and use statistical software (SAS,SPSS,etc.)
- × Use an online microdata application such as:
 - + IPUMS (Integrated Public Use Microdata Series from the MN Population Center)
 - + DataFerrett US Census Bureau

POP	101	CINE	NCD.
PUP		- 101	IF R
1	1011		

FACT SHEET

PEOPLE

HOUSING

BUSINESS AND GOVERNMENT

ABOUT THE DATA

DATA SETS

- Decennial Census
- American Community Survey
- Puerto Rico Community Survey
- Annual Population Estimates
- Economic Census
- Annual Economic Surveys

DOWNLOAD CENTER

MAPS

TOOLS AND REFERENCES Main > Data Sets

AMERICAN COMMUNITY SURVEY

Load Query | Clear all selections

The American Community Survey is a nationwide survey designed to provide communities a fresh look at how they are changing. The Puerto Rico Community Survey is the equivalent of the American Community Survey for Puerto Rico. more...

2008 Quick Guide | Errata Notes

2006-2008 American Community Survey 3-Year
 Estimates

- Data from the American Community Survey and the Puerto Rico Community Survey
- · Collected during calendar years 2006, 2007 and 2008
- Available for geographic areas with populations of 20,000 or more

Explain 1-year vs. 3-year estimates

C 2008 American Community Survey 1-Year Estimates

· Data from the American

Other Resources

- American Community Survey Main Page
- Quality Measures
- <u>Public Use Microdata Sample (PUMS)</u> download data and view documentation
- Download Center
- Download 1996-2004 data via FTP

D Explain Table and Map Formats

Select from the following:

Data Profiles

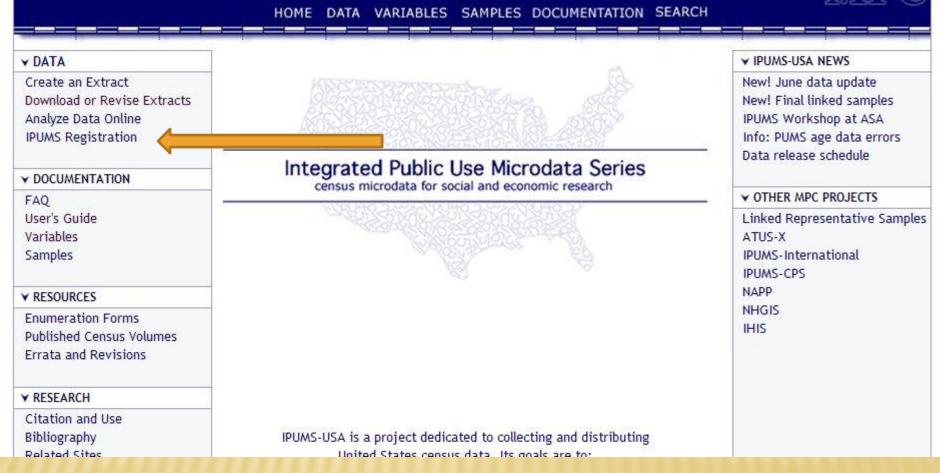
Selected Population Profiles Subject Tables Detailed Tables Geographic Comparison Tables Thematic Maps Reference Maps

Custom Table

Enter a table number List all tables List all maps Download PUMS data

2008

Minnesota Population Center



Use it for GOOD -- never for EVIL

http://usa.ipums.org/usa/

PUNSUSA



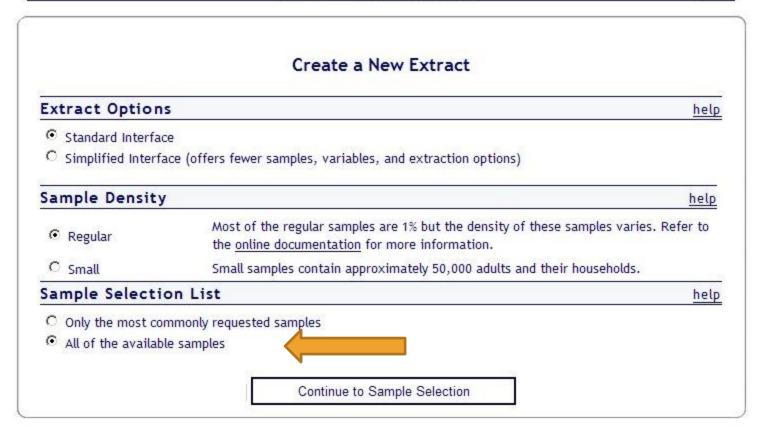
IPUMS-USA Registration

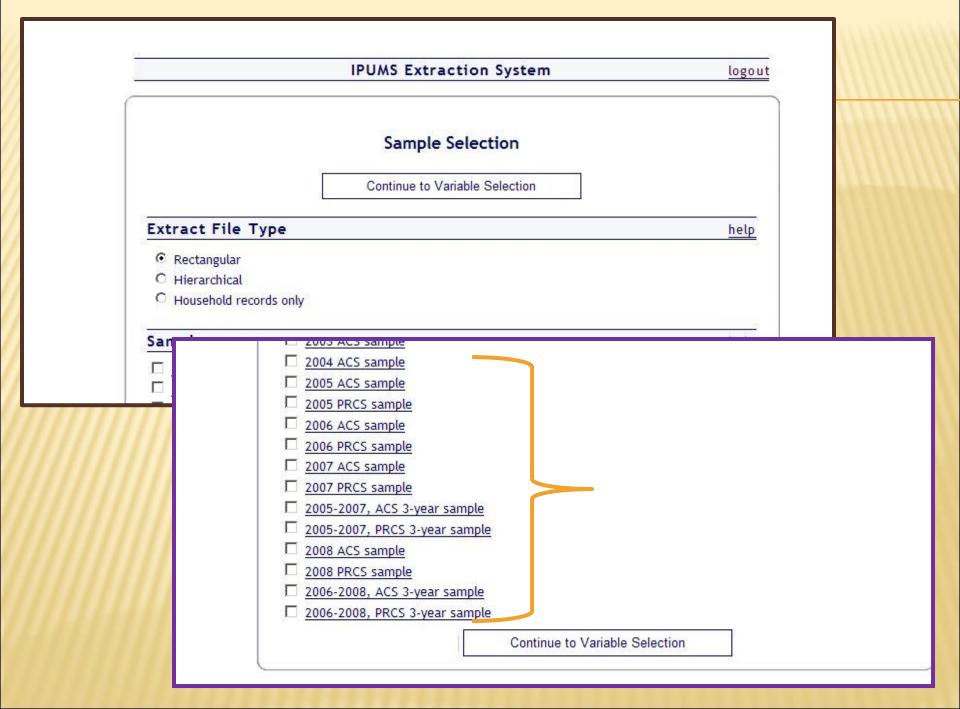
- Login
- Apply for access
- <u>View application form</u> (without applying)
- <u>Reset password</u> (forgot password)

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IPUMS Extraction System

logout





Selecting the number of rooms by heating costs

echni	cal Var	iables (Hou	isehold)					to	<u>P</u>	
Detailed Version	<u>General</u> <u>Version</u>	Variable		Label <u>Ca</u> Selec				2008	8	
•		YEAR	Census year					x		
		MULTYEAR	Actual year o	f survey,	multi-year ACS/	PRCS		0	-1	
		DATANUM	Data set num	iber				x	-1	
		SERIAL	Household se	rial numb	er		1 ! !	x	-1	
		NUMPREC	Number of pe	erson reco	ords following			x		
		SUBSAMP	Subsample nu	umber				x		
		HHWT	Household we	eight				x		
		HHTYPE	Geogra	aphic V	'ariables (H	ousehold)				
		REPWT AD IUST	Detailed Version	<u>General</u> Version	Variable			Lab	el	<u>Case</u> Selection
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		1111			CITY	City				
					CITYPOP	City popula	tion			
					PUMA	Public Use /	Microdata	Area		
					PUMASUPR	Super Publi	c Use Mic	rodata	Area	

top

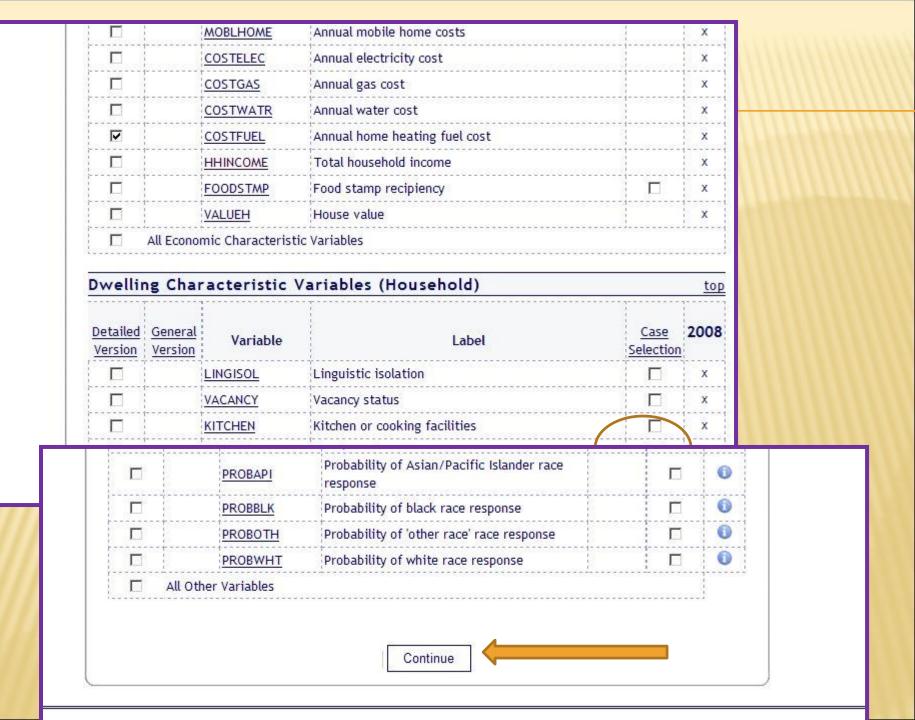
2008

0

x

×

X



Number of rooms (Household)

00 N/A	
01 1 room	
022	
033	
044	
055	
06 6	
077	
088	
09 9 (9+, 1960	-2007) -

State (FIPS code) (Household)

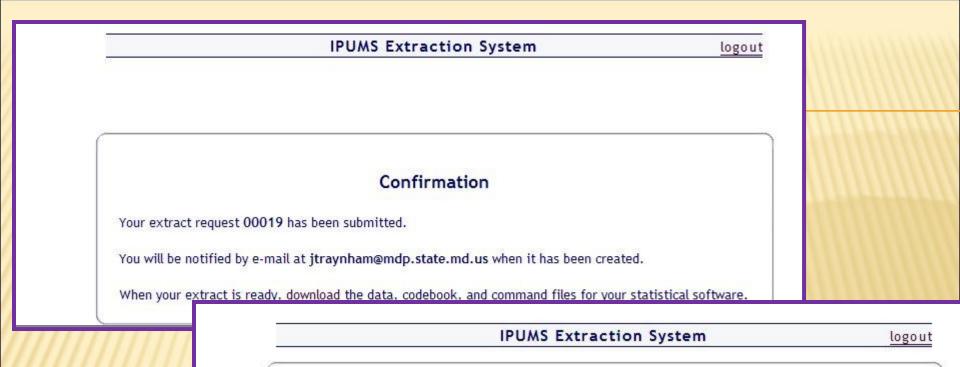
25 Massachusetts	•
24 Maryland	
23 Maine	
22 Louisiana	
21 Kentucky	
20 Kansas	
19 lowa	100
18 Indiana	
17 Illinois	
16 Idaho	•

Continue to Extract Request Summary

Selecting the cases to include for # of rooms and for the State of interest

A review of the file selected; the variables chosen and an opportunity to make a change if you need to

Extrac	t File Type		
rectangu	lar		
Variab	les and Case S	election	
Туре	Variable	Label	Case Selection
н	YEAR	Census year	20
н	HHWT	Household weight	- 22
н	STATEFIP	State (FIPS code)	<u>details</u>
н	PUMA	Public Use Microdata Area	
н	COSTFUEL	Annual home heating fuel cost	55
н	ROOMS	Number of rooms	details
P	PERWT	Person weight	
		e only those persons meeting case selection cr	
_	Change Density	Change V	/ariable Selection
	Change Sample	Change Ca	se & Flag Selection



Download or Revise Extracts

Use the links provided below to download a data extract (right-click the links for the data, command files, and codebook) or to revise an extract (that is, use a previous extract as the basis for defining a new extract). For instructions on downloading and opening a data extract on your computer go <u>here</u>. Note: data files will be available for 72 hours, after which they are subject to deletion.

Request	Created	Description	Data	Codebook	Command
<u>00019</u>	08-24-10	Example of heating costs by number of rooms - up to 7 rooms for SDC meeting	data	<u>codebook</u>	<u>SPSS SAS STATA</u>
00018	08-03-10	Revision of (Household income for baby boomers MD PUMAs)		1	
			Zipp	ed ASC	Il file

yr	nhwt	st te code	PUMA	fuelcost	no.rooms	per wt
200	2500	24	1004	9993	7	2600
2008	2500	24	1004	9993	7	2600
2008	2500	24	1004	9993	7	2600
2008	2500	21	1004	9993	7	2800
2008	2500	24	1004	9993	7	2800
2008	2500	24	1004	9993	7	2600
2008	4100	24	901	5993	3	4100
2008	4100	24	901	9993	3	3700
2008	2300	24	1500	534	6	2200
2008	2300	24	1500	534	6	2500
2008	2000	24	100	9993	7	2000
2008	2000	24	100	9993	7	2500
2008	2300	24	1104	9993	4	2200
2008	2300	24	1004	9993	4	2300
2008	2300	24	1004	9993	4	3500
2008	3100	24	601	9993	5	3100
2008	3100	24	601	9993	5	3100
2008	1100	24	200	9993	6	1100
2008	1100	24	200	9993	6	1400
2008	1100	24	200	9993	6	1500

Initial file from IPUMS is available in either SAS, SPSS or ASCII

This file was converted to EXCEL and has over 98,000 records

Implied 2 decimal pts, ie 25.00 not 2500 wt per hh

Pros: easy to use, but ultimately need expertise in SAS/SPSS or database software to be able to "collapse" categories within PUMAs

Cons: can not easily"recode" or aggregate variables or geographies; need to submit data request and wait to receive the completed file – which is normally only a few minutes, but may need to do this several times to "get it right"

yr	h	hwt	PUMA	fı	uelcos	t	no.ro	oms	
(///	2008	6600		100	9	993		-	1
////	2008	6900		100	9	993		:	1
(///	2008	7800	1111	100	9	993		í	1
////	2008	2100		100	9	993		-	1
////	2008	2100		100	9	993		-	1
(///	2008	6600		100	9	993		-	1
////	2008	2000		100	9	997		í	1
///	2008	4200		100	9	993		:	1
///	2008	1000		100	9	993		-	1
///	2008	3600		100	9	993		-	1
////	2008	3600		100	9	993		-	1
///	2008	3600		100	9	993		-	1
	2008	3600		100	9	993		:	1
	2008	7800		100	9	993		-	1
[]]	2008	7800		100	9	993			1
///	2008	7800		100	9	993		1	1
	2008	700		100	9	993			1
	2008	16800		100	9	997		-	1
total		946							

PUMA 100 (Alle/Garr co); 1 room – all have either no charge or no solid fuel used or their fuel is included in their rent or condo fee

16 households with no chg/no fuel; 2 w/ fuel included in rent or condo fee

Codes 0000 = N/A0002 = \$1 or \$2 (2000)9993 = no charge or no solid or liquid fuel used (2003-2007 ACS) 9997 = fuel included in rent or in condo fee (2003-2007 ACS)

	ł	nhwt I	PUMA	fuelcost	no.rooms
	2008	6600	100	9993	3 1
	2008	6900	100	9993	3 1
	2008	7800	100	9993	3 1
	2008	2100	100	9993	3 1
	2008	2100	100	9993	3 1
	2008	6600	100	9993	3 1
	2008	2000	100	9997	7 1
	2008	4200	100	9993	3 1
	2008	1000	100	9993	3 1
	2008	3600	100	9993	3 1
	2008	3600	100	9993	3 1
	2008	3600	100	9993	3 1
	2008	3600	100	9993	3 1
	2008	7800	100	9993	3 1
	2008	7800	100	9993	3 1
	2008	7800	100	9993	3 1
	2008	700	100	9993	3 1
	2008	16800	100	9997	/ 1
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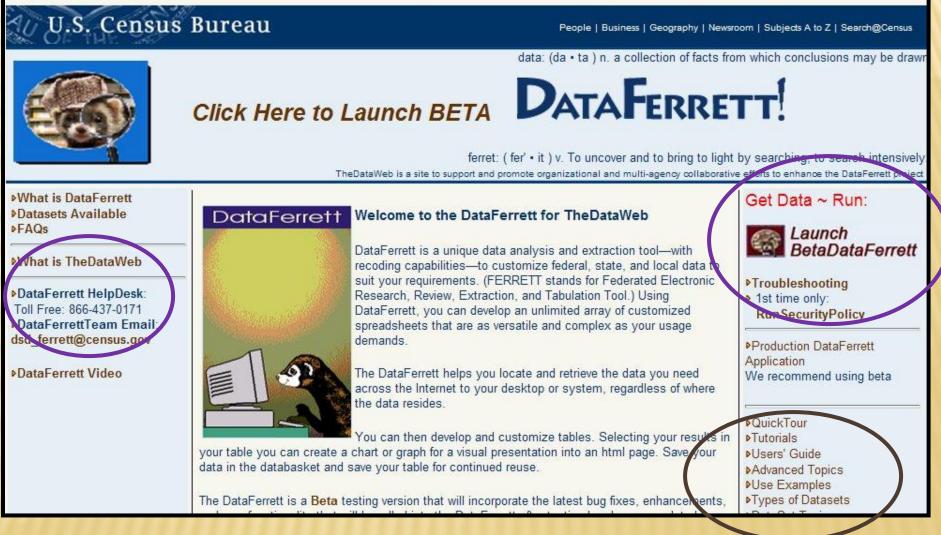
yr

to

18 * 946 = 17,028 units in Allegany & Garrett that are 1 room that do not pay a separate bill for heating costs

> *note: does not include analysis for Margins of Error

DATAFERRETT - U.S. CENSUS BUREAU



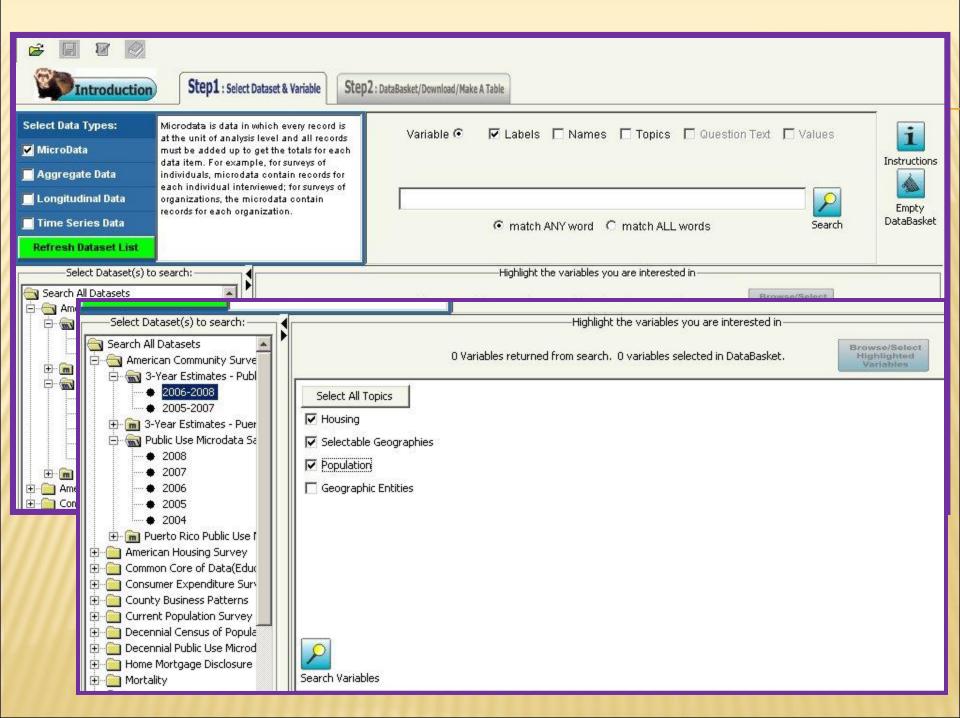
http://dataferrett.census.gov/



Step1 : Select Dataset & Variable

data: (da • ta) n. A collection of facts from which conclusions may be drawn **DataFerrett** Browser to TheDataWeb Tutorials Brand new to using DataFerrett Examples Sample Analysis and instruction ferret: (fer' · it) v. To uncover and to bring to light by searching; to search intensively Users' Guide Handbook on all DataFerrett functionality ... About TheDataWeb Kinds of Datasets A collaborative network Overview different Data Set types of internet data bases ... and how they behave ... Download Server Datasets Available Adding/Publishing your Datasets and topics data to TheDataWeb that are available ... Discussion Group Information sharing with other users ... Get Data Now

Example selecting specific ages for householders (reference person) by home ownership



lopic	Name	Availability	Variable L	abel
Housing	WGTP	2006-2008 - 2006	-2008 Housing W	reight
Population	PWGTP	2006-2008 - 2006	-2008 Person's w	reight
Housing	ACR	2006-2008 - 2006	ASSAL (2004) (1847) (2007) (6.1.1.)	
Housing	ADJHSG			nt factor for housing dollar amounts (6 implied decimal places)
Population Population	ADJINC AGEP	2006-2008 - 2006 2006-2008 - 2006		nt factor for income and earnings dollar amounts (6 implied decimal places)
Housing	AGEP			griculture Products
Pop	-	1		
Housing	PSF	2006-2008	3 - 2006-2008 Pre	esence of subfamilies in Household
Selectable	Geographies Geo	graphy 2006-2008	3 - 2006-2008 Ge	ographic Items
Population				vere's Weight verlieste 1
	Population	RACWHT	2006-2008 - 21	006-2008 White recode (White alone or in combination with one or more other races)
//////	Population	RC	2006-2008 - 21	006-2008 Related child
//////	Population	REL	2006-2008 - 20	006-2008 Relationship
//////	Housing	RESMODE	2006-2008 - 21	006-2008 Response mode
11111	Dopulation	Housing	TAXP	2006-2008 - 2006-2008 Property taxes (yearly amount)
() / / / / / /	11111	Housing	TEL	2006-2008 - 2006-2008 Telephone in Unit
	/////	Housing	TEN	2006-2008 - 2006-2008 Tenure
	11111	Housing	TYPE	2006-2008 - 2006-2008 Type of unit
	/////	Population	UWRK	2006-2008 - 2006-2008 Worked last week (UNEDITED - See"Employment Status Recode" (ESR))
	1111	Housina	VACS	2006-2008 - 2006-2008 Vacancy status

Variables selected – Housing weight; Age; Geography; Relationship in HH; Tenure (own/rent)

Click on

Browse/Select Highlighted Variables

i Browse/Select Variab	les & Values	
Your highlighted variables:		
ACS WGTP (2006-2008 - 2006-2008) Housing We	ight	
ACS AGEP (2006-2008 - 2006-2008) Age ACS TEN (2006-2008 - 2006-2008) Tenure	ОК	
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Select ALL Variables	Browse/Select Geographies	Geographies Selected:
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	FIPS State Code ST State Code Public Use Microdata Area (PUMA) PUMA	Pr
0001 to 9999 Integer weight of housing unit	Geographies>	<back next=""> Delete Cancel Finish</back>

i Browse/	/Select Variables & Values				
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ACS WGTP (2006-2008 - 2006 ACS AGEP (2006-2008 - 2006-					
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ACS TEN (2006-2008 - 2006	a refrect Geography Codebook		^		
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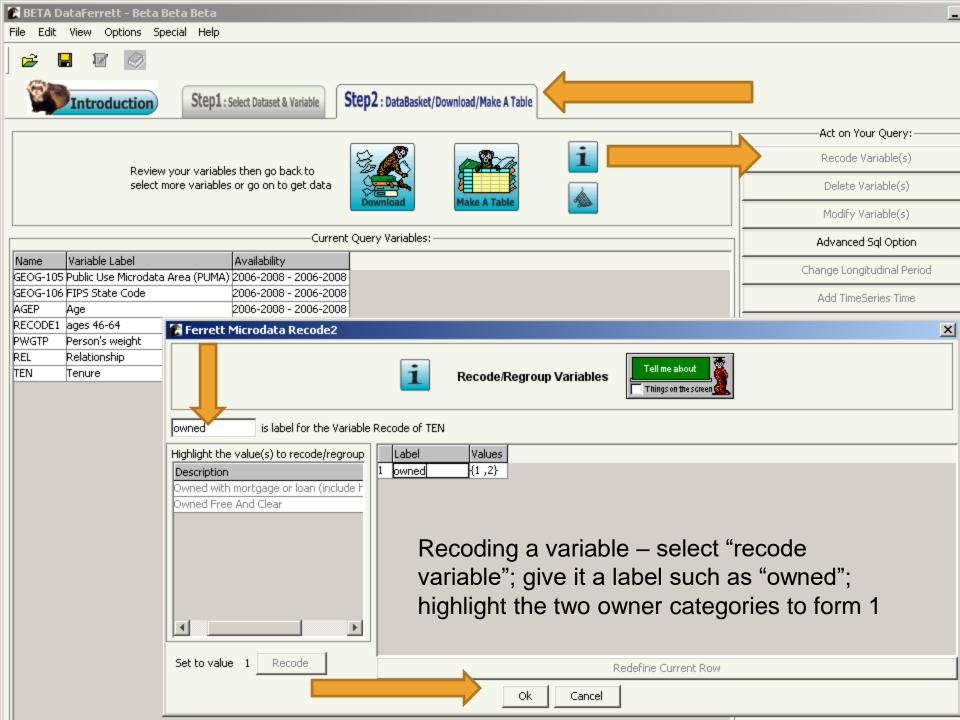
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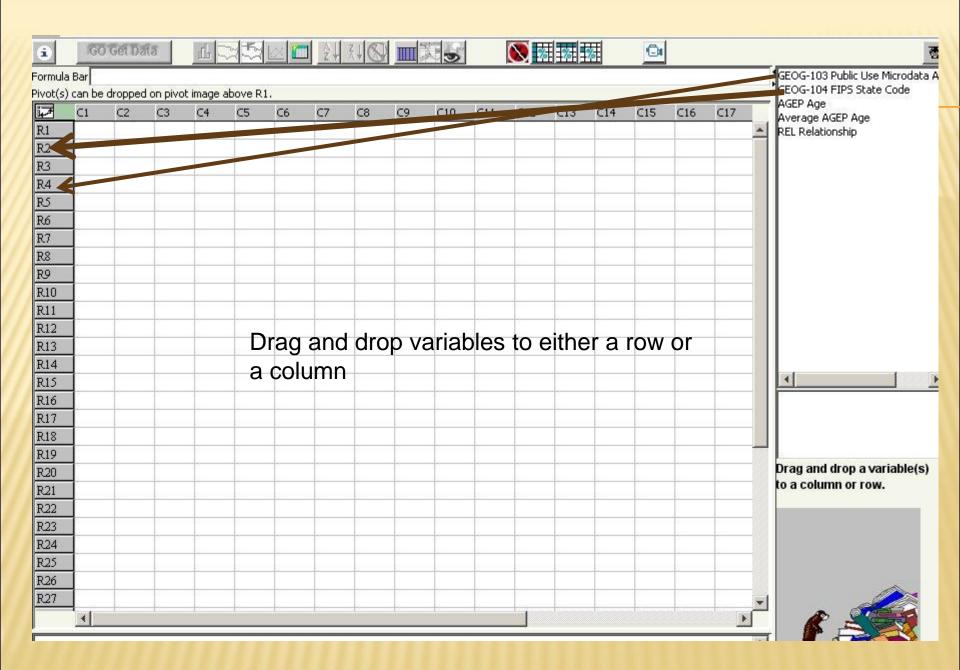
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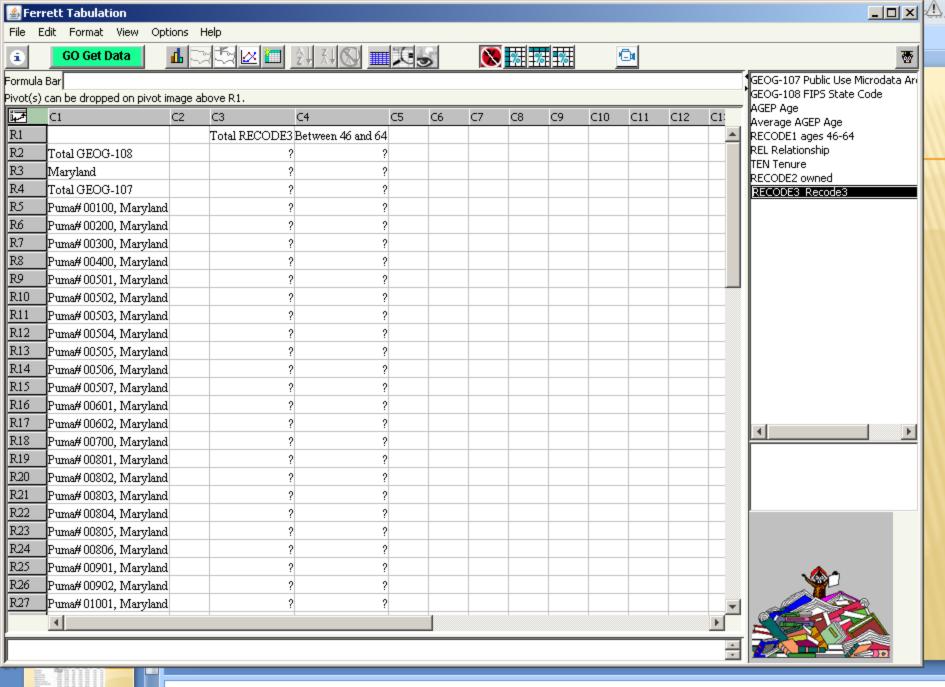
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	☑ 2) Owned Free And Clear	O3) Brother/sister O4) Father/mother	
	🗍 3) Rented	☐ 05) Grandchild □ 06) In-law	
	*******	Other relative	







Click to add notes

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Pivot(Сору	it im	nage abo	ve R1.									GEOG-108 FIPS State Code AGEP Age	
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	Select All	Цſ		Total		rence person		Total	Refe	rence person			REL Relationship	
<u>R1</u>	Hide	h	Fotal 🛛	RecodeValue_1	Total	RecodeValue_1	Total	$RecodeValue_1$	Fotal	RecodeValue_1			TEN Tenure RECODE2 owned	
R2	unHide 🕨 🕨	e	520,285	620,285	620,285	620,285	620,285	620,285	620,285	620,285			RECODE3 Recode3	
<u>R3</u> <u>R4</u>	Clear 🕨	e	520,285	620,285	620,285	620,285	620,285	620,285	620,285	620,285				
<u>R4</u> –		e	520,285	620,285	620,285	620,285	620,285	620,285	620,285	620,285				
RS	Delete	nd	11,012	11,012	11,012	11,012	11,012	11,012	11,012	11,012				
R6 -	Insert	nd	13,428	13,428	13,428	13,428	13,428	13,428	13,428	13,428				
R7 _		nd	26,173	26,173	26,173	26,173	26,173	26,173	26,173	26,173				
R8	Sort 🕨	nd	21,136	21,136	21,136	21,136	21,136							
<u>R9</u> R10	Column Spanners		17,496	17,496	17,496	17,496	17,496							
			12,205		12,205		12,205		12,205	12,205				
	Puma#00503, Maryla				12,546		12,546							
	Puma#00504, Maryla				11,363		11,363							
	Puma#00505, Maryla				12,253		12,253							
	Puma#00506, Maryla				10,623		10,623							
	Puma#00507, Maryla				11,320		11,320							
	Puma#00601, Maryla				18,335		18,335						Universe: ((AGEP be	
	Puma#00602, Maryla				11,371		11,371			11,371			Weight used: WGTP	
	Puma#00700, Maryla				12,616		12,616		12,616				DataSet(s) selected	
	Puma#00801, Maryla		8,415	8,415			8,415						Jacasectist selfercer	
	Puma#00802, Maryla		9,363	9,363										
	Puma#00803, Maryla				11,466		11,466		11,466					
	Puma#00804, Maryla		7,669	7,669					7,669					
	Puma#00805, Maryla		5,488	5,488									<u></u>	
	Puma#00806, Maryla		7,785	7,785										
R25	Puma#00901, Maryla	and	17,415	17,415	17,415	17,415	17,415	17,415	17,415	17,415				
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	Total 46-6	4			Percent		
	Total	owned	SE	90% CI	owned	SE	90% CI
Maryland	790,911	620,285	6007	9,881	78.4%	0.4%	0.7%
Alle,Garr	13,693	11,012	818	1,345	80.4%	3.1%	5.1%
Anne Arundel	73,402	62,179	1858	3,056	84.7%	1.2%	2.0%
Baltimore City	84,535	50,186	1808	2,975	59.4%	1.5%	2.5%
Baltimore Co.	111,560	87,806	2283	3,756	78.7%	1.1%	1.8%
Calvert, St. Mary's	24,788	21,277	1091	1,795	85.8%	2.0%	3.3%
Caroline,Dorc,QA,Talb	20,855	17,117	998	1,642	82.1%	2.4%	4.0%
Carroll	23,730	21,136	1058	1,740	89.1%	1.8%	3.0%
Cecil,Kent	15,477	12,616	863	1,419	81.5%	2.8%	4.7%
Charles	17,586	15,583	939	1,544	88.6%	2.2%	3.6%
Frederick	31,367	26,173	1213	1,996	83. <mark>4</mark> %	1.9%	3.1%
Harford	34,929	29,706	1283	2,111	85.0%	1.7%	2.9%
Howard	39,991	34,181	1365	2,245	85.5%	1.6%	2.6%
Montgomery	140,395	113,520	2505	4,121	80.9%	1.0%	1.6%
Prince George's	118,432	87,471	2264	3,724	73.9%	1.2%	1.9%
Some, Wico,Worc	22,117	16,894	1021	1,679	76.4%	2.6%	4.3%
Washington	18,054	13,428	918	1,510	74.4%	3.0%	4.9%

Copy spreadsheet from DataFerrett into blank Excel file , insert your calculations for SE and MOE