Using American Community Survey Summary File Data

Gretchen Gooding American Community Survey Office January 25, 2017



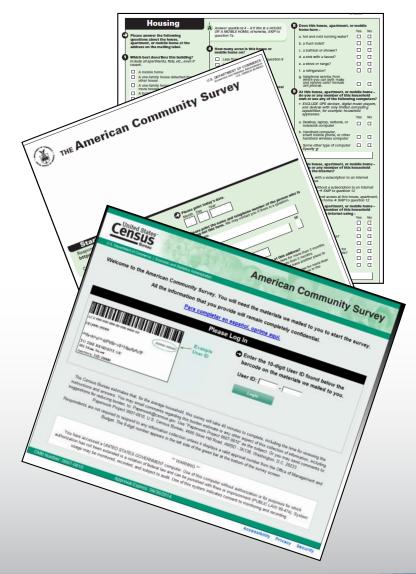
Outline

- American Community Survey (ACS) basics
- American FactFinder Download Center
- Overview of ACS Summary File (ACS SF)
- Ways to access the ACS SF
 - Summary File Retrieval Tool
 - DataFerrett
 - Census API
 - FTP site
 - TIGER/Line Shapefiles
- Wrap up



ACS Basics

- Ongoing monthly survey sent to 3.5 million addresses per year to produce detailed population and housing estimates each year
 - Visit 20,000 Group Quarter facilities and sample approximately 194,000 residents each year
- Designed to produce critical information on small areas and small population groups previously collected on the decennial long form
- Covers 35+ topics and supports over 300 known Federal Government uses
- Data released twice annually
 - 1-year estimates (12 months of data)
 - 5-year estimates (60 months of data)





ACS Content

Social

Ancestry Citizenship Disability Educational Attainment Fertility Grandparents Language Spoken at Home Marital Status Migration School Enrollment Veterans

Demographic

Age Hispanic Origin Race Relationship Sex

Economic

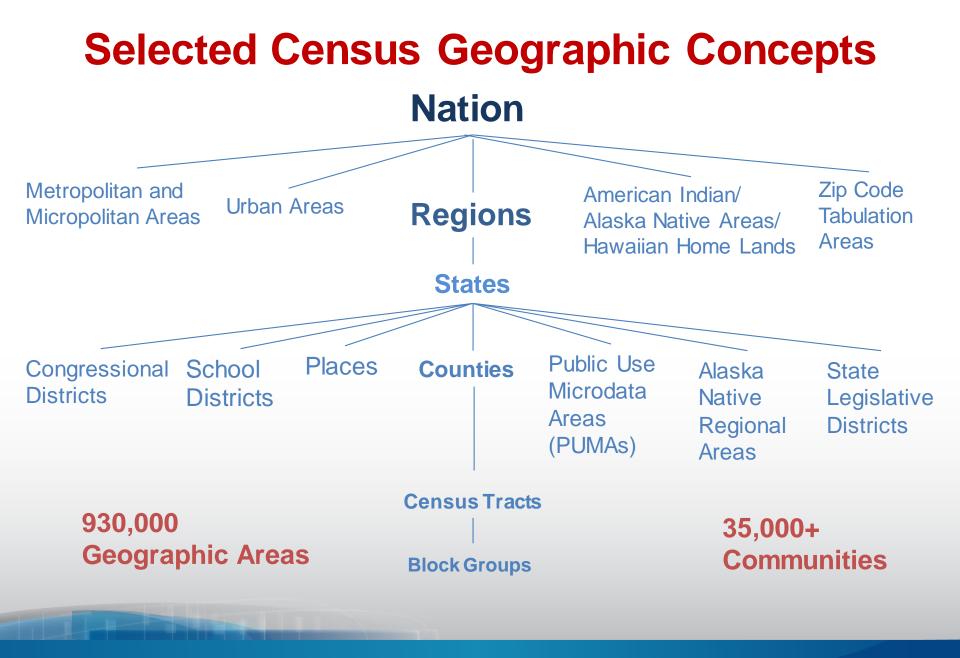
Class of Worker Commuting Employment Status Food Stamps (SNAP) Health Insurance Hours/Week, Weeks/Year Income Industry & Occupation

Housing

Computer & Internet Use Costs (Mortgage, Taxes, Insurance) Heating Fuel Home Value Occupancy Plumbing/Kitchen Facilities Structure Tenure (Own/Rent) Utilities Vehicles Year Built/ Year Moved In

35+ Topics → 1000+ Tables → 11 Billion Estimates





Census Bureau

Availability of ACS Data Products

Estimated Population of Geographic Area	1-Year Estimates	1-Year Supplemental Estimates	5-Year Estimates
65,000 or more	Х	Х	Х
20,000 to 64,999		Х	Х
Less than 20,000			Х
Planned Release Date	September	October	December

census.gov/programs-surveys/acs/news/data-releases.html



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AFF Download Center

Census Bureau	AMERICAN FactFin	der 🔘	SAS		
MAIN	COMMUNITY FACTS	GUIDED SEARCH	ADVANCED SEARCH	DOWNLOAD CENTER	
Download Center - A step-	by-step guide to do	ownloading dat	a		
1 Start 2 Dataset	Geographies 4	Search Results			
Choose from one of th	e following and click N	ext.			
I know the dataset or	table(s) that I want to d	ownload.			
I want to find prepact	kaged data that I can do	ownload.			
The Download Center is de groups of geographies and tell me more »		ers, providing quick a	access to downloadable o	data for predefined	
				PREVIOUS NEXT	CANCEL

factfinder.census.gov



2-Dataset

Cens	AMERICAN FactFin	der 🤇	SAS	
	MAIN COMMUNITY FACTS	GUIDED SEARCH	ADVANCED SEARCH	DOWNLOAD CENTER
Download	Center - A step-by-step guide to de	ownloading dat	a	
1 Start	2 Dataset 3 Geographies 4	Search Results		
Sele	ect the program and dataset you're intere	sted in. Click Nex	t.	
•	Select a program: American Community Survey	•	Your Selection	
	Select a dataset and click Add to Your Selection	ons:	Tour Selections	is empty
	2014 ACS 5-year estimates 2014 ACS 1-year estimates 2013 ACS 5-year estimates 2013 ACS 3-year estimates 2013 ACS 1-year estimates 2012 ACS 5-year estimates 2012 ACS 3-year estimates 2012 ACS 1-year estimates 2012 ACS 1-year estimates 2011 ACS 5-year estimates 2011 ACS 3-year estimates 2011 ACS 3-year estimates		PREVIOUS	NEXT > CANCEL



3-Geographies

Deleas				
MAIN	COMMUNITY FACTS	GUIDED SEARCH	ADVANCED SEARCH	DOWNLOAD CENTER
ownload Center - A step-b	oy-step guide to do	wnloading data	1	
Start 2 Dataset 3	Geographies 4	Search Results		
Select geographies to ad	ld to Your Selections.	Click Next.		
The download center allows y			as all counties in a state. 1	o select from all available
geographies, use Advanced		, goog. op. 100, 000110		
Select a geographic typ	pe:		0	Your Selections
Block Group	p - 150		•	Search using
Select a state:				Dataset: 2014 ACS 5-year estimates 🕄
Michigan 🚽	•			Tables matching your selections: 2,282
				lables matching your selections. 2,202
Select a county:	7			
select a county 👻				
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select a county 👻	ographic areas and click A	dd to Your Selectior	15:	
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select a county 👻	ographic areas and click A	dd to Your Selectior	15:	
select a county 👻	ographic areas and click A Michigan	dd to Your Selectior	15:	PREVIOUS NEXT ► CANC CANC



4-Search Results

AMERICAN FactFinder	
Download Center - A step-by-step guide to downloading data 1 Start 2 Dataset 3 Geographies 4 Search Results Select table(s) to download:	
Search Results: 1-1 of 1 tables and other products match 'Your Selections' per page: 25 Refine your search results:	Your Selections Search using Search: b23025 😵
1 Selected: Download	Dataset: 2014 ACS 5-year estimates 😵 Block Group within Census Tract All Block Groups within Michigan 😒 Tables matching your selections: 1



Table B23025

	А	В	С	D	E	F	G
1	GEO.id	GEO.id2	GEO.display-label	HD01_VD01	HD02_VD01	HD01_VD02	HD02_VD02
2	Id	Id2	Geography	Estimate; Total:	Margin of Error; Total:	Estimate; In labor force:	Margin of Error; In labor force:
3	15000000	2.6E+11	Block Group 1, Census Tract 1, Alcona County, Michigan	595	74	174	41
4	15000000	2.6E+11	Block Group 2, Census Tract 1, Alcona County, Michigan	1040	100	365	60
5	15000000	2.6E+11	Block Group 1, Census Tract 9701, Alcona County, Michigan	959	79	375	52
6	15000000	2.6E+11	Block Group 2, Census Tract 9701, Alcona County, Michigan	1136	99	442	65
7	15000000	2.6E+11	Block Group 1, Census Tract 9704, Alcona County, Michigan	1191	111	523	77
8	15000000	2.6E+11	Block Group 2, Census Tract 9704, Alcona County, Michigan	1228	118	627	93
9	15000000	2.6E+11	Block Group 1, Census Tract 9705, Alcona County, Michigan	610	121	250	74
10	15000000	2.6E+11	Block Group 2, Census Tract 9705, Alcona County, Michigan	528	78	213	50
11	15000000	2.6E+11	Block Group 3, Census Tract 9705, Alcona County, Michigan	707	87	215	51
12	15000000	2.6E+11	Block Group 1, Census Tract 9706, Alcona County, Michigan	859	101	313	75
13	15000000	2.6E+11	Block Group 2, Census Tract 9706, Alcona County, Michigan	571	90	299	61
14	15000000	2.6E+11	Block Group 0, Census Tract 9900, Alcona County, Michigan	0	10	0	10

Complete instructions at:

census.gov/programs-surveys/acs/technical-documentation/summary-filedocumentation.html



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What is the ACS Summary File?

- Set of comma-delimited text files that contain all of the Detailed Tables
- Stored in a series of files on the FTP site
- Files contain only the data from the tables (no information such as table title, description of the rows, etc)
- Data have already been tabulated for specific geographic areas



AFF vs. Summary File

B23025

EMPLOYMENT STATUS FOR THE POPULATION 16 YEARS AND OVER Universe: Population 16 years and over
()
2010-2014 American Community Survey 5-Year Estimates

< 1 7 of		Block Group 1, Census Tract 1, Alcona County, Michigan			
7		Estimate	Margin of Error		
Ť	Total:	595	+/-74		
	In labor force:	174	+/-41		
	Civilian labor force:	174	+/-41		
	Employed	168	+/-40		
	Unemployed	6	+/-6		
	Armed Forces	0	+/-10		
	Not in labor force	421	+/-55		

📄 e20145mi0078000.txt - Notepad
File Edit Format View Help
File Edit Format View Help 217,433,62,25,37,371ACSSF,2014e5,mi,000,0078,0006574,2704,467,117,42,0,41 0,1432,754,341,54,27,22,0,5,0,0,0,21,9,0,0,0,8,4,6,6,0,0,0,0,0,287,413,47 34,1058,733,360,373,325,461,327,260,67,134,366,207,128,79,159,159,15,15,0 595,174,174,168,6,0,421,139,180,27,18,13,0,0,5,0,0,9,3,0,0,0,3,3,0,0,0,0 45,210,121,89,35,246,135,97,38,111,270,135,61,74,135,97,25,18,7,72,210,22 7,0,0,0,0,0,6,3,0,0,0,0,3,144,707,29,17,0,17,12,7,0,0,0,7,108,86,61,25,22 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,



How to Use the ACS SF

1—Verify table is available at geography level of interest (not all tables are published for every geography)

2—Use appropriate tool to access ACS SF Summary File Retrieval Tool DataFerrett Census API FTP site TIGER/Line Shapefiles Pre-joined with Demographic Data



Summary File Page

	Topics Population, E	Geogi Economy Maps, Pi		brary ographics, Publications	Data Tools, Developers	Surveys/P Respond, Surv		Newsroom News, Blogs	About Us Our Research
ensus.gov Our Surveys & Program	ns American Community Surve	ey (ACS) Technical	Documentation	Summary File Docume	entation				
American Com	munity Surve	ey (ACS)							
About the Survey	Summary Fi	ile Docume	ntation						
Respond to the Survey	Tweet Sha								
News & Updates									
Data	The American Co	mmunity Survey	(ACS) Sum	nmary File is a set o	of comma-delimit	ed text files t	hat contain	all of the Detai	led Tables for th
Guidance for Data Users		ar, and 5-year d	ata releases	. Summary File es					
Geography & ACS				files with only the d					
Fechnical	description of the reproduce full tab		iphic identifie	ers. That informatio	on is located in ot	her files that	the user mu	ust merge with	the data files to
Documentation									
Documentation Code Lists, Definitions, and Accuracy				ta release, block g ck groups are avai					CS, are available
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Code Lists, Definitions, and Accuracy User Notes Errata Data Suppression Table & Geography Changes Summary File	in American Fact 2015 Technical Doc Core technical do 2014 Co La 2014 Co	2014 2014 cument cument contains ore Tech Doc [1.0 ons on How to R	information 20 MB] ead the ACS	ck groups are avai	able only in the / 2011 ne ACS Summary o Excel [<1.0 ME	ACS 5-year S	Summary Fil		CS, are available

census.gov/programs-surveys/acs/technical-documentation/summary-file-documentation.html



Check Appendix for Table

	A	В	С	D	E
				Summary File	Summary File
1	Table Number	Table Title	Geography Restrictions	Sequence Number	Starting and Ending
680	B23025	Employment Status For The Population 16 Years And Over		0078	38-44
		Sex By Work Status In The Past 12 Months By Usual Hours Worked Per Week In The			
		Past 12 Months By Weeks Worked In The Past 12 Months For The Population 65			
681	B23026	Years And Over		0078	45-93
		Full-Time, Year-Round Work Status In The Past 12 Months By Age For The			
682	2 B23027	Population 16 Years And Over		0078	94-129
		Occupation By Median Earnings In The Past 12 Months (In 2014 Inflation-Adjusted			
683	B24011	Dollars) For The Civilian Employed Population 16 Years And Over	No Blockgroups	0079	7-42



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Summary File Retrieval Tool

- Includes datasets through 2012 (i.e., 2008-2012 ACS 5-year estimates)
- Allows users to load tables from the ACS SF into an Excel spreadsheet
- Must have Excel 2007 or newer to run tool
- You can access all tracts and block groups per table per state

census.gov/programs-surveys/acs/data/tools/summary-file-retrieval-tool.html

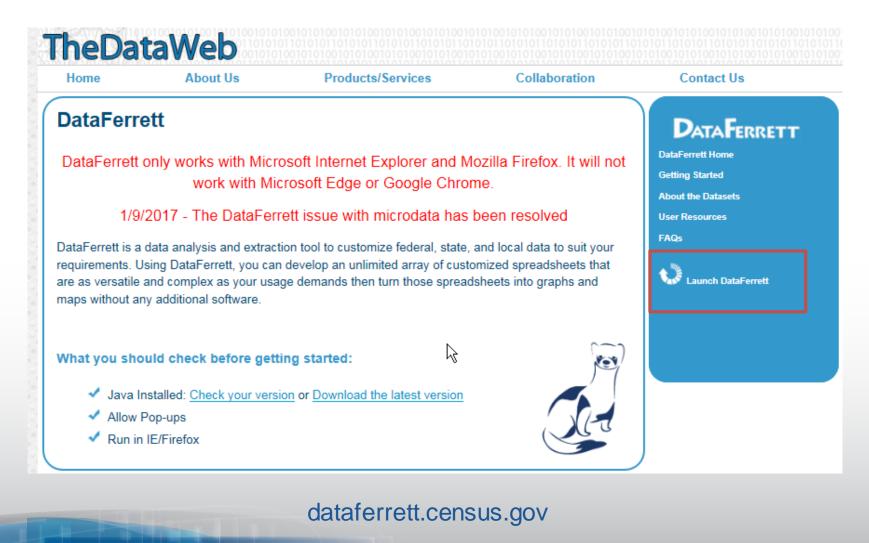


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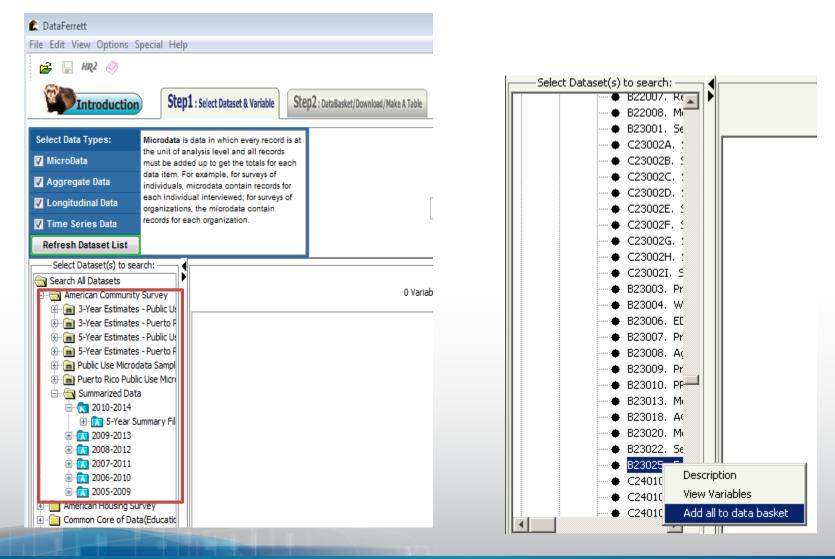


DataFerrett





Finding Summary Data





Select Geographies

Introduction	Step	1 : Select Dataset & Variable Step	2 : DataBasket/Download/Make A Table					
Select Data Types:	MicroData at the unit of analysis level and all records must be added up to get the totals for each data item. For example, for surveys of individuals, microdata contain records for		Variable 💿 🔽	Labels 🗖	Names 🗖 Topics	C Question Tex	t 🗖 Values	Instructions
 ✓ Longitudinal Data ✓ Time Series Data ✓ Refresh Dataset List 	organizatior	ns, the microdata contain each organization.	6	match ANY	word C match ALL	words	Search	Empty DataBasket
Select Dataset(s) to sear	rch: — 🔤 📢		Highli	ght the variab	les you are interested in			
● B2300 ● B2300 ● B2300	16. EL 17. Pr	REQUIRED VARIABLES	7 Variables returned from sear	ch. 8 variable	s selected in DataBasket	High	e/Select lighted ables	
• B2300	18. A(
● B2300		Selected	Topic Name	Availab				
- + B2301			ou Selectable Geographies COMPC					
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+ B2301	8. A(
+ B2302								
• B2302								
• C2401								
• C2401								
• C2401								
• C2401	.0C. :	REGULAR VARIABLES						
- • C2401		Topic		Name	Availability	Variable Label		Mergeat
		B23025. Employment Status for	the Population 16 Years and Ove	r B23025_001	E 2007-2011 - 2007-201	1 Total:		No
• C2401		B23025. Employment Status for	the Population 16 Years and Ove	r B23025_002	E 2007-2011 - 2007-201	1 In labor force:		No
• C2401		B23025. Employment Status for	the Population 16 Years and Ove	r B23025_003	E 2007-2011 - 2007-201	1 In labor force:!!Civ	vilian labor force:	No
	юн. 💶	B23025. Employment Status for	the Population 16 Years and Ove	r B23025_004	E 2007-2011 - 2007-201	1 In labor force:!!Civ	ilian labor force:!!Employe	d No
- + C2401		B23025. Employment Status for	the Population 16 Years and Ove	r B23025_005	E 2007-2011 - 2007-201	1 In labor force:!!Civ	ilian labor force:!!Unemplo	yed No
• B2401		B23025. Employment Status for	the Population 16 Years and Ove	r B23025_006	E 2007-2011 - 2007-201	1 In labor force:!!Ar	med Forces	No
• B2401		B23025. Employment Status for	the Population 16 Years and Ove	r B23025_007	'E 2007-2011 - 2007-201	1 Not in labor force		No
• C2402								
• B2402								
• B2402								
• C2403								
• B2403	1. In 🚽							
	•							• •

Census Bureau

Select Geographies

🕼 Ferrett Geography Codebook				×
i Browse/Select Geog	graphies	Instructions: Select the type geography from left list. Once selected, either double click or select the "Use Hierarchy" button to navigate tha		
Types of geography available:		Hierarchies:	Selected Ge	ographic Areas:
United States	State (FIPS Code) > County > Cen:	sus Tract > Block Group		
American Indian/Alaska Native Area and H				
Block Group				
Combined Statistical Area				
Congressional District County				
County Subdivision				
Division				
Legislative District				
Metro Area				
Place				
Public Microdata Use Area				
Region				
School District				
		Search Use Hierarchy	Cancel Dela	te Selection Clear All Finish



Next Level-State

😰 Ferrett Geography Codebook



Select State (FIPS Code)



Instructions: Drag geographies to drop into to the right list. Drag final selections to the "Selected Geographic Areas" list. Clicking a link at the top will drop directly into that level of the hierarchy. ×

Home >> State (FIPS Code) >> County >> Census Tract >> Block Group

Select State (FIPS Code)	State (FIPS Code)(s) to drop into.	Selected Geographic Areas:
Iowa 🔺	Clear All Delete Selection	
Kansas		
Kentucky	Michigan	
Louisiana		
Maine		
Maryland		
Massachusetts		
Michigan		
Minnesota		
Mississippi		
Missouri 🚽		
Search:		
	Search Previous Level Next Level Cancel	Delete Selection Clear All Finish



Next Level-County

🕼 Ferrett Geography Codebook

i





Instructions: Drag geographies to drop into to the right list. Drag final selections to the "Selected Geographic Areas" list. Clicking a link at the top will drop directly into that level of the hierarchy. X

Home >> State (FIPS Code) >> County >> Census Tract >> Block Group

Select County	County(s) to drop into.	Selected Geographic Areas:
Select All	Clear All Delete Selection	FIPS State Code Count: 1
	Clear All Delete Selection	Michigan
Alcona County, Michigan	Alcona County, Michigan	
Alger County, Michigan	Alger County, Michigan	
Allegan County, Michigan	Allegan County, Michigan	
Alpena County, Michigan	Alpena County, Michigan	
Antrim County, Michigan	Antrim County, Michigan	
Arenac County, Michigan	Arenac County, Michigan	
Baraga County, Michigan	Baraga County, Michigan	
Barry County, Michigan	Barry County, Michigan	
Bay County, Michigan 📃 🚽	Bay County, Michigan	
Search:	Benzie County, Michigan	
	Berrien County, Michigan	
	Search Previous Level Next Level Cancel	Delete Selection Clear All Finish



Next Level-Census Tract

😰 Ferrett Geography Codebook

i

Select Census Tract



Instructions:

Drag geographies to drop into to the right list.
 Drag final selections to the "Selected Geographic Areas" list.
 Clicking a link at the top will drop directly into that level of the hierarchy.

X

Home >> State (FIPS Code) >> County >> Census Tract >> Block Group

Select Census Tract	Census Tract(s) to drop into.	Selected Geographic Areas:
Select All	Clear áll Delete Selection	FIPS State Code Count: 1 Michigan
Census Tract 1, Alcona County, Michigan	Census Tract 1, Alcona County, Michigan	
Census Tract 9701, Alcona County, Michi	Census Tract 9701, Alcona County, Michigan 🚽 🚽	
Census Tract 9704, Alcona County, Michi	Census Tract 9704, Alcona County, Michigan	
Census Tract 9705, Alcona County, Michi	Census Tract 9705, Alcona County, Michigan	
Census Tract 9706, Alcona County, Michi	Census Tract 9706, Alcona County, Michigan	
Census Tract 9900, Alcona County, Michi	Census Tract 9900, Alcona County, Michigan	
Census Tract 1, Alger County, Michigan	Census Tract 1, Alger County, Michigan	
Census Tract 2, Alger County, Michigan 🛛 🖵	Census Tract 2, Alger County, Michigan	
	Census Tract 3, Alger County, Michigan	
Search:	Census Tract 9900, Alger County, Michigan	
	Census Tract 302, Allegan County, Michigan	
	Search Previous Level Next Level Cancel	Delete Selection Clear All Finish



Next Level-Block Group

😰 Ferrett Geography Codebook

i

Select Block Group



Instructions:

Drag geographies to drop into to the right list. Drag final selections to the "Selected Geographic Areas" list. Clicking a link at the top will drop directly into that level of the hierarchy. X

Home >> State (FIPS Code) >> County >> Census Tract >> Block Group

Select Block Group	Block Group(s) to drop into.	Selected Geographic Areas: 8205 Block Group(s) added.
Select All	Clear All Delete Selection	Block Group Count: 8205
		Block Group 1, Census Tract 29.02, Ingham County, Mich—
Block Group 1, Census Tract 29.02, Ingha	Please drag wanted geographies to "Selected Geographies" panel to the right.	Block Group 2, Census Tract 29.02, Ingham County, Mich
Block Group 2, Census Tract 29.02, Ingha		Block Group 3, Census Tract 29.02, Ingham County, Mich
Block Group 3, Census Tract 29.02, Ingha		Block Group 1, Census Tract 31.03, Ingham County, Mich
Block Group 1, Census Tract 31.03, Ingha		Block Group 2, Census Tract 31.03, Ingham County, Mich
Block Group 2, Census Tract 31.03, Ingha		Block Group 3, Census Tract 31.03, Ingham County, Mich
Block Group 3, Census Tract 31.03, Ingha		Block Group 4, Census Tract 31.03, Ingham County, Mich
Block Group 4, Census Tract 31.03, Ingha		Block Group 5, Census Tract 31.03, Ingham County, Mich
Block Group 5, Census Tract 31.03, Ingha 🖵		Block Group 6, Census Tract 31.03, Ingham County, Mich
		Block Group 1, Census Tract 32, Ingham County, Michigar
Search:		Block Group 2, Census Tract 32, Ingham County, Michigar
		Block Group 1 Census Tract 33.01 Topham County Mich
	Search Previous Level Next Level Cancel	Delete Selection Clear All Finish



Step 2



Step1 : Select Dataset & Variable

Step2 : DataBasket/Download/Make A Table

Review your variables then go back to select more variables or go on to get data





Current Query Variables	from ACS Summarized Data ((5-Year Summary File): -
-------------------------	----------------------------	--------------------------

Name	Variable Label	Availability	
B23025_001E	Total:	2007-2011 -	current
B23025_002E	In labor force:	2007-2011 -	current
B23025_003E	In labor force:!!Civilian labor force:	2007-2011 -	current
B23025_004E	In labor force:!!Civilian labor force:!!Employed	2007-2011 -	current
B23025_005E	In labor force:!!Civilian labor force:!!Unemployed	2007-2011 -	current
B23025_006E	In labor force:!!Armed Forces	2007-2011 -	current
B23025_007E	Not in labor force	2007-2011 -	current
COMPONENT	Geographic Component	2005-2009 -	current
GEOG-101	Block Group	2007-2011 -	current



Make Table

	2
1220025_001E 1	Total:
B23025_002E1	In labor force: In labor force:!!Ovilian labor force:
C9 C10 C11 C12 C13 C14 C15 C16 C17 B23025 004 1	In labor force: If Civilian labor force: If Empl
 B23025 005£ 1 	In labor force: HOvilian labor force: HUner
B23025_006E1	In labor force: Il Armed Forces Not in labor force
	seographic Component
(HOOSDERS)	ck Group
	P§
4	
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to a column o	or row.
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Results

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		10 10 10	<u> </u>									B23025_001E Total:	
Col C9												B23025_001E Total: B23025_002E In labor force:	
Pivot(s) can be dropped on pivot image above R1.	C2 C3	C4	C5	C6	C7	C8	C9	C10	C11	C12 C13	0.14	B23025_003E In Jabor force: []Ci	vilian labor fo
جيا C1 R81 _ Block Group 3. Census Tract 66. Jackson County. Michigan	1.499	975	975	LO	C/		C9	C10	C11		5 014	B23025_004E In labor force:!!Cl	
R82 Block Group 1, Census Tract 1, Alcona County, Michigan	595	174	174			_		1				B23025_005E In labor force:!!Civ B23025_006E In labor force:!!Ar	
R83 Block Group 2, Census Tract 1, Alcona County, Michigan	1,040	365	365	_								B23025_007E Not in labor force	incorr or ceb
R84 Block Group 1, Census Tract 9706, Alcona County, Michigan	859	313	313			_						COMPONENT Geographic Compo	nent
R85 Block Group 2, Census Tract 9706, Alcona County, Michigan	571	299	299				_					GEOG-102 Block Group	
R86 Block Group 1, Census Tract 2, Alger County, Michigan	1,393	597	597		_		_					-	
R87 Block Group 2, Census Tract 2, Alger County, Michigan	1,054	618	618		-							-	
R88 Block Group 1, Census Tract 302, Allegan County, Michigan	1.850	1,198	1.198									-	
R89 Block Group 2, Census Tract 302, Allegan County, Michigan	934	551	551									-	
R90 Block Group 1, Census Tract 307.03, Allegan County, Michigan	1,156	673	673									-	
R91 Block Group 2, Census Tract 307.03, Allegan County, Michigan	702	360	360									-	
R92 Block Group 1, Census Tract 313, Allegan County, Michigan	1,059	726	726									-	
R93 Block Group 2, Census Tract 313, Allegan County, Michigan	1,661	1,103	1,103									-	
R94 Block Group 3, Census Tract 313, Allegan County, Michigan	1,011	701	701									-	
R95 Block Group 1, Census Tract 322, Allegan County, Michigan	2,211	1,414	1,414										
R96 Block Group 2, Census Tract 322, Allegan County, Michigan	837	400	400									-	
R97 Block Group 3, Census Tract 322, Allegan County, Michigan	907	509	509									-	
R98 Block Group 1, Census Tract 5, Alpena County, Michigan	540	352	352										
R99 Block Group 2, Census Tract 5, Alpena County, Michigan	500	336	321										
R100 Block Group 3, Census Tract 5, Alpena County, Michigan	472	297	297										
R101 Block Group 0, Census Tract 9900, Alpena County, Michigan	0	0	0									•	b.
R102 Block Group 1, Census Tract 9606, Antrim County, Michigan	596	290	290										
R103 Block Group 2, Census Tract 9606, Antrim County, Michigan	438	256	256									Universe: (COMPONEN)	1 1n (~
R104 Block Group 3, Census Tract 9606, Antrim County, Michigan	690	368	368									Weight used: DataSet(s) selected	
R105 Block Group 4, Census Tract 9606, Antrim County, Michigan	950	492	492									↓ III	+ × × × × ×
R106 Block Group 0, Census Tract 9900, Arenac County, Michigan	0	0	0										
R107 Block Group 1, Census Tract 1, Baraga County, Michigan	470	183	183									_	
R108 Block Group 2, Census Tract 1, Baraga County, Michigan	1,024	515	515									_	
R109 Block Group 3, Census Tract 1, Baraga County, Michigan	1,023	579	579										
R110 Block Group 4, Census Tract 1, Baraga County, Michigan	762	423	423										
R111 Block Group 0, Census Tract 9901, Baraga County, Michigan	0	0	0										
•	11												
													:52 PM 21/2016



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Census API

Census.gov > Data > Developers

Developers

About this Section	The Census Bureau has begun rolling out our datasets via APIs. Check out our Discovery Tool. Sign up for our newsletter to get the latest updates and newest dataset addition. We also invite you to make
API Forum	requests for features / data via our forum.
App Gallery	Read More
Available APIs	
Geography	C T Y S D K
News	
Terms of Service	
Updates	MYOM: Make Your Developers' Forum Join the Mailing List
	Own Maps! (Gitter.im)
Request	
b a	
KEV	
	Latest
mDevelopers	Available APIs News Updates
	Population Estimates and Projections (2012 - 2016) December 21, 2016
	Both programs use births, deaths, and migration to gauge population change since 2010. Estimates are past and
	present. Projections are future. Geographies vary.
	Annual Survey of Manufactures API (Time Series: 2002-2015)
	December 16, 2016 Sample estimates of statistics for all manufacturing establishments with one or more paid employee.
	Sample estimates of statistics for an manufacturing establishments with one of more paid employee.
	Decennial Census Surname Files (2010, 2000)
	December 15, 2016 Tabulations of all surnames occurring 100 or more times in the 2010 Census and Census 2000 returns are provided
	at the national level only.
	View All Available APIs

census.gov/developers



Available APIs

Census.gov > Data > Developers > Available APIs > American Community Survey 5-Year Data (2009-2015)

About this Section

American Community Survey 5-Year Data (2009-2015)

September 15, 2016



Request

KEN

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API Forum

App Gallery

News Terms of Service

Updates

The American Community Survey (ACS) is an ongoing survey that provides data every year -- giving communities the current information they need to plan investments and services. The ACS covers a broad range of topics about social, economic, demographic, and housing characteristics of the U.S. population.

The 5-year estimates from the ACS are "period" estimates that represent data collected over a period of time. The primary advantage of using multiyear estimates is the increased statistical reliability of the data for less populated areas and small population subgroups.

The 5-year estimates are available for all geographies down to the block group level. In total, there are 87 different summary levels available with over 578,000 geographic areas. Unlike the 1-year estimates, geographies do not have to meet a particular population threshold in order to be published. Summary files, Subject tables, Data Profiles, and Comparison profiles include the following geographies: nation, all states (including DC and Puerto Ricc), all metropolitan areas, all congressional districts (114th congress), all counties, all places, all tracts and block groups.

- Summary files contain the most detailed cross-tabulations, many of which are published down to block groups. The data are
 population counts. There are over 64,000 variables in this dataset.
- Subject tables provide an overview of the estimates available in a particular topic. The data are presented as population counts and percentages. There are over 66,000 variables in this dataset.
- Data profiles contain broad social, economic, housing, and demographic information. The data are presented as population counts and percentages. There are over 2,400 variables in this dataset.
- Comparison profiles are similar to data profiles but also include comparisons with past-year data. The current year data are
 compared with prior 5-Year data and include statistical significance testing. There are over 3,000 variables in this dataset.

For more information about the data available in the ACS, please visit their data users page.

Comparing American Community Survey Data

ACS has non-overlapping datasets that allow comparisons of current ACS data to past ACS data. The 2011-2015 ACS 5-Year estimates can be compared with 2006-2010 ACS 5-Year estimates. For information on comparability of the 2011-2015 ACS 5-Year estimates to the 2006-2010 estimates by topic, go to Comparison Guidance for 5-Year data.

www.census.gov/programs-surveys/acs/guidance/comparing-acs-data/2015.html

	2015	2014	2013	2012	2011	•
--	------	------	------	------	------	---

"If you have previously used variables in prior year releases, check the ACS product changes webpage for source table changes. If the variable you have been using comes from a table that has changed from the prior year, check the variables ist (variables.html) and compare the variable concept and label to be sure you are requesting the correct estimate.

Use this Data Profile Variable Comparison table to check if your Data Profile variable has changed from 2014 to 2015:

Data Profile Comparison [<1.0 MB]

Summary File

- Example Call: api.census.gov/data/2015/acs5?get=NAME,B01001_001E&for=state:*&key=...
- · 2015 ACS Summary File Variables [html | xml | json]
- ACS Technical Documentation
- Examples and Supported Geography



Table B23025

i) api.census.gov/data/2014/acs5?get=NAME,B23025_001E&for=block+group:*&in=state:26+county:001

[""NAME", "B23025_001E", "state", "county", "tract", "block group"], ["Block Group 1, Census Tract 1, Alcona County, Michigan", "595", "26", "001", "000100", "1"], ["Block Group 2, Census Tract 1, Alcona County, Michigan", "1040", "26", "001", "000100", "2"], ["Block Group 1, Census Tract 9701, Alcona County, Michigan", "1959", "26", "001", "970100", "1"], ["Block Group 2, Census Tract 9701, Alcona County, Michigan", "1136", "26", "001", "970100", "2"], ["Block Group 1, Census Tract 9704, Alcona County, Michigan", "1191", "26", "001", "970400", "1"], ["Block Group 2, Census Tract 9704, Alcona County, Michigan", "1191", "26", "001", "970400", "2"], ["Block Group 1, Census Tract 9704, Alcona County, Michigan", "128", "26", "001", "970400", "2"], ["Block Group 1, Census Tract 9705, Alcona County, Michigan", "610", "26", "001", "970500", "1"], ["Block Group 2, Census Tract 9705, Alcona County, Michigan", "610", "26", "001", "970500", "2"], ["Block Group 3, Census Tract 9705, Alcona County, Michigan", "610", "26", "001", "970500", "2"], ["Block Group 3, Census Tract 9705, Alcona County, Michigan", "528", "26", "001", "970500", "2"], ["Block Group 1, Census Tract 9706, Alcona County, Michigan", "707", "26", "001", "970600", "3"], ["Block Group 1, Census Tract 9706, Alcona County, Michigan", "859", "26", "001", "970600", "1"], ["Block Group 2, Census Tract 9706, Alcona County, Michigan", "571", "26", "001", "970600", "2"], ["Block Group 0, Census Tract 9706, Alcona County, Michigan", "571", "26", "001", "970600", "2"],



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Summary File Organization

Name	Last modified	Size Description
Parent Directory		-
1_year_by_state/	31-Aug-2015 13:56	-
1_year_entire_sf/	31-Aug-2015 13:56	-
1_year_seq_by_state/	31-Aug-2015 15:16	-
5_year_by_state/	19-Nov-2015 09:19	-
5_year_entire_sf/	19-Nov-2015 09:58	-
5_year_seq_by_state/	20-Nov-2015 11:14	-
2014_1yr_Summary_FileTemplates.zig	p 14-Jan-2016 08:54	1.8M
2014_5yr_Summary_FileTemplates.zip	p 03-Dec-2015 13:44	1.3M

Name	Last modified	Size Description
Parent Directory		-
All_Geographies_Not_Tracts_Block_Groups/	20-Nov-2015 09:31	-
Tracts_Block_Groups_Only/	20-Nov-2015 09:27	-

www2.census.gov/programs-surveys/acs/summary_file/2014/data



File Naming

20145mi0075000.zip 20-Nov-2015 09:24 1.1M 20145mi0076000.zip 20-Nov-2015 09:24 1.1M 20145mi0077000.zip 20-Nov-2015 09:25 3.6M 20145mi0078000.zip 20-Nov-2015 09:24 2.3M 20145mi0079000.zip 20-Nov-2015 09:27 2.8M 20145mi0080000.zip 20-Nov-2015 09:25 2.1M 20145mi0081000.zip 20-Nov-2015 09:25 2.3M 20145mi0082000.zip 20-Nov-2015 09:25 1.4M 20145mi0083000.zip 20-Nov-2015 09:24 1.9M 20145mi0084000.zip 20-Nov-2015 09:25 69K 20145mi0085000.zip 20-Nov-2015 09:24 69K 20145mi0086000.zip 20-Nov-2015 09:24 59K 20145mi0087000.zip 20-Nov-2015 09:25 69K 20145mi0088000.zip 20-Nov-2015 09:24 69K 1 20145mi0089000.zip 20-Nov-2015 09:24 59K 20145mi0090000.zip 20-Nov-2015 09:25 69K

<u>2014 5 mi 0078 000</u>.zip

- 2014=reference year
- 5=period covered
- mi=state level
- 0078=sequence number
- 000=iteration ID



Estimate, MOE, Geography Files

e20145mi0078000.txt - Notepad

File Edit Format View Help 217,433,62,25,37,371ACSSF,2014e5,mi,000,0078,0006574,2704,467,117,42,0,42 0,1432,754,341,54,27,22,0,5,0,0,0,21,9,0,0,0,8,4,6,6,0,0,0,0,0,287,413,47 34,1058,733,360,373,325,461,327,260,67,134,366,207,128,79,159,159,159,15,15,0 III

m20145mi0078000.txt - Notepad File Edit Format View Help sśr 2014m5 m1 000 0078 0006584 62 36 26 10 10 10 10 26 30 25 10 25 2 0,10,8,10,10,8,10,10,10,35,101,48,24,10,24,46,44,40,13,38,13,44,44,35,30 8,10,28,28,4,18,109,97,10,97,95,127,30,130,101,101,97,21,10,74,52,288,6 76,60,83,58,52,32,63,73,57,46,39,41,55,14,10,10,52,56,17,10,17,52ACS5F 134.31.10.121.110.73.29.10.8.10.6.10.10.10.26.24.10.10.10.10.12.10.6.10.10 ;5F,2014m5,mi,000,0078,0006630,134,64,19,10,10,10,10,10,19,63,63,10,63,6 4 III

14000US26165380800	Census Tract 3808, Wexford County, Michigan
15000US260010001001	Block Group 1, Census Tract 1, Alcona County, Michigan
15000US260010001002	Block Group 2, Census Tract 1, Alcona County, Michigan
15000US260019701001	Block Group 1, Census Tract 9701, Alcona County, Michigan
15000US260019701002	Block Group 2, Census Tract 9701, Alcona County, Michigan
15000US260019704001	Block Group 1, Census Tract 9704, Alcona County, Michigan
15000US260019704002	Block Group 2, Census Tract 9704, Alcona County, Michigan
15000US260019705001	Block Group 1, Census Tract 9705, Alcona County, Michigan
15000US260019705002	Block Group 2, Census Tract 9705, Alcona County, Michigan
15000US260019705003	Block Group 3, Census Tract 9705, Alcona County, Michigan
15000US260019706001	Block Group 1, Census Tract 9706, Alcona County, Michigan
15000US260019706002	Block Group 2, Census Tract 9706, Alcona County, Michigan
15000US260019900000	Block Group 0, Census Tract 9900, Alcona County, Michigan

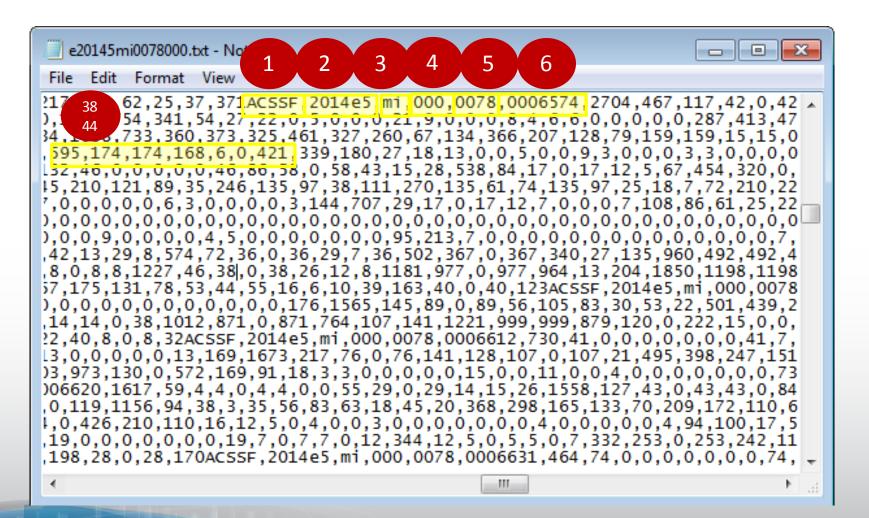
Estimate file e20145mi0078000.txt

Margin of error file m20145mi0078000.txt

Geography file g20145mi.csv or g20145mi.txt



Starting and Ending Position



Census Bureau

Templates

	A	В	С	D	E	F	AL	AM	AN	AO	AP	AQ	AR
1	FILEI	FILETYPE	STUSAB	CHARITER	SEQUENCE	LOGRECNO	B23025_001	B23025_002	B23025_003	B23025_004	B23025_005	B23025_006	B23025_007
											EMPLOYME		
											NT STATUS		
											FOR THE		
										EMPLOYMEN	POPULATIO		
										T STATUS	N 16 YEARS	EMPLOYMEN	
									EMPLOYMENT	FOR THE	AND	T STATUS	
									STATUS FOR	POPULATION	OVER% In	FOR THE	EMPLOYME
								EMPLOYMENT	THE	16 YEARS	labor	POPULATIO	NT STATUS
							EMPLOYMENT	STATUS FOR	POPULATION	AND OVER%	force:%	N 16 YEARS	FOR THE
							STATUS FOR THE	THE	16 YEARS AND	In labor	Civilian	AND OVER%	POPULATIO
							POPULATION 16	POPULATION	OVER% In	force:%	labor	In labor	N 16 YEARS
							YEARS AND OVER	16 YEARS AND	labor force:%	Civilian labor	force:%	force:%	AND OVER%
							for Population 16	OVER% In	Civilian labor	force:%	Unemploye	Armed	Not in labor
2	FILEI	FILETYPE	STUSAB	CHARITER	SEQUENCE	LOGRECNO	years and over	labor force:	force:	Employed	d	Forces	force
		F 2.01E+08		0	78	6581	595	174				-	421
		F 2.01E+08		0		6582	1040						
		F 2.01E+08		0			959						
		F 2.01E+08		0		6584	1136						
		F 2.01E+08		0		6585	1191						
		F 2.01E+08		0		6586							
		F 2.01E+08		0		6587							
282	23 ACSS	F 2.01E+08	mi	0	78	6588	528	213	213	170	43	0	315

www2.census.gov/programs-surveys/acs/summary_file/2014/data/ 2014_5yr_Summary_FileTemplates.zip



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TIGER/Line Shapefiles Pre-joined with Demographic Data

TIGER/Line[®] with Selected Demographic and Economic Data

A limited set of TIGER/Line Shapefiles are available pre-joined with data in geodatabase and shapefile format.

American Community Survey 5-Year Estimates — Geodatabase Format

- + 2010 2014 Detailed Tables
- + 2009 2013 Detailed Tables
- + 2008 2012 Detailed Tables
- + 2007 2011 Block Group Data
- + 2007 2011 Data Profiles
- + 2006 2010 Block Group Data
- + 2006 2010 Data Profiles

census.gov/geo/maps-data/data/tiger-data.html



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Summary File Documentation

Census.gov > Our Surveys & Programs > American Community Survey (ACS) > Technical Documentation > Summary File Documentation

American Community Survey (ACS)

About the Survey	Summary	File Docu	mentation					
Respond to the Survey	S Tweet Share							
News & Updates		onare						
Data	The American Community Survey (ACS) Summary File is a set of comma-delimited text files that contain all							
Guidance for Data Users	of the Detailed Tables for the ACS 1-year, 3-year, and 5-year data releases. Summary File estimates, margins of error, and geography files for each release are available via the Summary File Data page.							
Geography & ACS								
Technical Documentation	The Detailed Tables are stored in a series of files with only the data from the tables and without such information as the table title, description of the rows, or geographic identifiers. That information is located in other files that the user must merge with the data files to reproduce full tables.							
Code Lists, Definitions, and Accuracy	Starting with the 2009-2013 ACS 5-year data release, block groups, the lowest level of geography published by the ACS, are available in American FactFinder. For earlier years, block groups are available							
User Notes	only in the AC	only in the ACS 5-year Summary File.						
Errata								
Data Suppression	2015	2014	2013	2012	2011	•		
Table & Geography Changes	Technical D	ocument						
Summary File Documentation	Core technical document contains information about how to use the ACS Summary File							
PUMS Documentation								
Variance Replicate Tables Documentation	Instructions on How to Read the ACS Summary File into Excel [1.0 MB] Instructions on How to Access ACS Estimates Using the AFF Download Center [1.0 MB]							
Race/Ethnicity and AlAN Release Documentation	Instructions on Joining the ACS Summary File to TIGER/Line Shapefiles [<1.0 MB]							
Methodology	Appendices in for each relea		ence number and r	estrictions for all t	ables, as well as s	summary levels a	availa	
Library	I -year Appendices [<1.0 MB] I -year Appendices [<1.0 MB]							
Operations and Administration			-			-		
Contact Us	Summary F	ile User Tool	s					
	Table Shells Contains table ID, line number, unique ID (table ID + Line Number), stub, and data release Image: Table Shells [2.3 MB]							
Respond to the ACS Learn how								
	Sequence Number/Table Number Lookup File Contains information on the relationship between the sequences and the tables							

census.gov/programs-surveys/acs/technical-documentation/summary-filedocumentation.html



Options for Accessing Bulk Data

ΤοοΙ	Advantage of Using Tool
AFF Download Center	Download one geographic type at a time, maximum of 40 tables
SF Retrieval Tool	Looking for older datasets (through 2012)
DataFerrett	Downloading a large number of geographic areas for a small number of tables
Census API	Call only the variables and geographies you need
FTP Site	Includes every Detailed Table for every geography



Continue the Conversation #ACSdata



Sign up for and manage alerts at https://public.govdelivery.com/acco unts/USCENSUS/subscriber/new



facebook.com/uscensusbureau



twitter.com/uscensusbureau



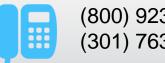
More information on the American Community Survey: http://www.census.gov/acs



youtube.com/user/uscensusbureau



instagram.com/uscensusbureau



(800) 923-8282 or (301) 763-1405



pinterest.com/uscensusbureau



linkedin.com/company/us-census-bureau





- Purpose:
 - Improve understanding of the value and utility of ACS data.
 - Promote information sharing among data users about key ACS data issues and applications
- Membership is free and open to all interested ACS data users
- Webinars and special sessions at professional meetings planned
- Users group website and online community

acsdatacommunity.prb.org



Need Local Stats?

Assistance Near You!

Our regional data staff can help you access local statistics from the ACS or offer training to help build your skills. Contact us at: 1-844-ASK-DATA (1-844-275-3282)

census.askdata@census.gov





