

ACQUIRING GEOGRAPHIC DATA

The American Community Survey (ACS)

Olga Perez Rivera (2006)

Introduction; the U.S. Census Bureau data base

The United States Census Bureau is the governmental agency responsible for the instrumentation of the constitutional mandate to conduct a periodic count of total population. The Constitution mandates to provide population counts necessary to apportion the seats in the U.S. House of Representatives. . It established a mandatory enumeration every ten years. That is the decennial census. The results of the decennial census determines state's seat portion in the U.S. House of Representatives. The law requires that the voting districts boundaries be redrawn in accordance to the seats gained or loosed. Also, requires that this boundary provides equal representation to minorities. In addition, the census data is used by authorities to determine government expenditures, and public economical resources distribution. (Penn State On line GIS Education, 2007).

The census data provides the crucial foundation for social, economical and political decisions. In its quest for fulfilling its constitutional mandate the U.S. Census Bureau has become a rich source of attribute data. Fortunately for investigators, students and other data users around the world, this data is available on line on digital format. You can access valuable attribute data, and on line mapping tools on the [US Census Bureau](http://www.census.gov) web page; www.census.gov.

In the year of the first census (3.9 persons were counted. Now the number is more than 300 million,(The American Community Survey,2006). The complexities of the collecting process, the richness of data, and the geographical nature of the measured phenomena aroused the need to give the census data a geographical framework that helps its collection, interpretation, organization and presentation. This originated an attribute encoding system called, "Topologically Integrated Geographic Encoding and Referencing" (TIGER). The TIGER database automatically matches address-referenced attribute data with geographic location. The Census Bureau extracted from the TIGER database feature files that are called TIGER/Line files. These files are in vector format to facilitate the production of maps. In its pursuit of georeference the attribute data the Census Bureau has become a leader in reference and thematic maps production. On its web page you can download attribute data in digital formats for thematic and reference mapping,(Penn State On line GIS Education, 2007).

A reference map like the "Viejo San Juan Reference Map",(American Fact Finder, 2006) bellow is a valuable visual tool that presents a wide variety of attribute data from the historical urban district of Puerto Rico. As you can see the legend depicts a various boundaries and features. You can edit the boundaries, features and other accessing the tools on the [US Census Bureau](http://www.census.gov) web page.

Viejo San Juan Reference Map (street level)

source; American Fact Finder, (<http://factfinder.census.gov>)

map scale 1;11616 "Map scale calculated on the basis of pixel width of the image. The map will appear smaller or larger if viewed at higher or lower resolution."



Thematic maps like the "San Juan Total Population 2000", (American Fact Finder, 2006) bellow depicts a specific theme. Its purpose is to reveal a spatial distribution and relationship between data sets. That is why thematic maps presents mostly ratio level data like; counts, rates and densities.

San Juan Total Population 2000

source; American Fact Finder, (<http://factfinder.census.gov>)

map scale 1;211200 "Map scale calculated on the basis of pixel width of the image. The map will appear smaller or larger if viewed at higher or lower resolution."

The American Community Survey (ACS)

General Description

The American Community Survey (ACS) is part of the Decennial Census Program. The next decennial census is programmed for the 2010 to provide the mandatory population counts. The ACS will not provide that type of count. The ACS will provide annually updated characteristics of population and housing data. It published social, housing and economic

characteristics for demographic groups. Those demographic groups cover broad geographic areas including Puerto Rico. Now it is the largest household survey in the United States with an annual sample size of approximately three million addresses. The ACS will produce estimates for smaller geographic areas including census tracts and block groups. Also, it will make the 2010 census form shorter. The decennial census has consisted of two parts; the short form that counts the population and the long form which collected demographic, housing, social and economic information. Because this long form data is collected every 10 years it became quickly outdated. The ACS information will replace it,(American Community Survey,2006).

The ACS was developed from 1996 through 2004. In 2005 the Census Bureau expanded the sample to three million housing units. In 2006 the ACS included both housing unit and quarter group's people data. This evolution made of the ACS 2006 a more complete and precise data base, (American Community Survey,FAQ, 2006). In general, the ACS collected data from a relatively small population sample on a rotating basis over a one year period; its data is key to policy, programs and services decisions, and for federal funds distributions,(American Community Survey,2006).

TOPICS

According to the "2006 Data Users Handbook "on page 2, the topics covered on the ACS are as follows:

Social Characteristics

School enrollment, educational attainment, marital status, fertility, grandparents caring for children, veteran status, disability status, residence one year ago, place of birth, U.S. citizenship status, year of entry, world region of birth of the foreign born, language spoken at home, relationship, households by type, and ancestry

Economic Characteristics

Employment status, commuting to work, occupation, industry, class of worker, income and benefits, and poverty status

Housing Characteristics

Housing occupancy, units in structure, year structure built, number of rooms, number of bedrooms, housing tenure, year householder moved into unit, vehicles available, house heating fuel, utility costs, occupants per room, housing value, mortgage status and costs, and gross rent

Demographic Characteristics

Sex, age, race, and Hispanic origin

STATISTICS

The statistics that the ACS produces describe the characteristics of population and housing in the U.S. and Puerto Rico. It permits the U.S. Census Bureau to create estimates of these characteristics. The ACS releases statistics in the following forms; totals, proportions, percentages, means, medians, averages and ratios.

Totals

Estimated totals include estimates of the total population and its subsets. For example, the ACS produces estimates of total households and subsets such as total family households with female householders. The purposes of the totals are mainly to define the universe. But the objective of the ACS is to describe that universe in detail. Then the importance of the statistics is not the total housing units estimates, but its characteristics. However if you are looking for official most current estimates of total population and housing for the nation, states, counties and other you will find it in another program called Population Estimates Program. The ACS uses that information on its estimates. When that information is available the ACS provides the links on its web page.

Estimated Proportions

These are specific characteristics of the estimates totals displayed as percents. For example, the population 3 year and over enrolled in school is expressed in percentage of this population enrolled in public school or private school. This information is released by county, national and other.

Medians, Means and Averages

Medians describe the middle of a distribution of a certain value for a given universe (for example, median family income).

Means describe the average of a certain value in a given universe. For example, mean retirement income.

Ratios

The ratios describe the relationship between two quantities. In the "occupied housing units" universe a ratio example is the average household size of occupied housing units by tenure, (2006 Data Users Handbook).

The most recent ACS 2006 collected data is available through the U.S Census Bureau web page; www.census.gov/acs/www. The ACS collects data from a sample of housing units, group quarters and persons in the U.S. and Puerto Rico. The population estimates are produced from this data. As I said before, these estimates are; totals, proportions, percentages, means, medians and ratios. Interview and residence rules define the target population or universe of the ACS. It interviews the population resident of U.S. and Puerto Rico regardless of the person legal status or citizenship. The ACS collects survey information continuously during the selected period. For example, the 2006 ACS collected information for the time period that spans January through December 2006 to represent the entire year, (2006 Data Users Handbook).

To correctly interpret and use the ACS data is important to understand that since it is a survey based on a sample of the population the estimates are subject to error. ACS takes many quality measures because errors can directly affect the precision, quality and completeness of the data; or on the contrary, some errors are not significant. The agency made that data available on its web site for revision. Also the measurements are explicit on the published data tables, so that users can use and interpret data with awareness of the extent and nature of the errors.

MEASURES OF QUALITY

According to the ACS "2006 Data Users Handbook" the measures of quality are as follows;

Sampling Error

Sampling error occurs when a survey produces estimates of the whole population using only a portion of that population. This means that the estimates from the sample will be different from the values that would have been obtained if the entire population were consulted on the survey. Consequently, as the sample size increases the sample error is reduced.

Two related measure of sampling error on the ACS data are the standard error and the margin of error. The standard error measures the variability of an estimate that is due to the sampling. The standard error estimates are included in the survey statistics to help the user understand the precision of the estimate. Since the estimate is based on the results of a sample, users need to know how precisely the sample results reflect the characteristics of the complete population.

The margin of error describes the precision of the estimate at a given level of confidence. The confidence level is a measure of the likelihood that the real value is within certain distance of the results of a sample estimate. The standard level of confidence of the ACS data is 90 percent. That means that if the survey were conducted 100 times, then about 90 percent of the confidence intervals would contain the real percentage. The margin of error helps define the range of values that may contain the real population values, so that it prevents the users from interpreting small differences as important.

Sample Size

The sample size measure summarizes information for the housing unit sample and group quarter sample. It displays the number of initial addresses selected for housing units and the number of final survey interviews for housing units and group quarters people by state. These measure permits to identify ineligible addresses (for example, commercial units), sample units not selected in the subsample, non-response, non-existent people, not included people and people not interviewed, among other factors.

Coverage Error

The under-coverage error occurs when housing units or people do not have the chance to be selected on a sample. The over-coverage error exists when housing units or people have multiple chance of been selected on a sample.

Non-response error

Sometimes problems to complete the interviews arouse. For example, maybe the respondents of a given housing units are unable or unwilling to participate in the interview; or the census takers are unable to locate address. In such cases a non-response error unit level occurs.

A non response error item level occurs when a respondent fails to provide an answer to a required item or when the responses are inconsistent. In such cases the Bureau uses imputation methods. For example, an imputation can be to use answers from similar people to determine an acceptable answer for the missing ones.

GEOGRAPHIC AREAS

The ACS include a wide geographic area coverage of legal and administrative entities like; states, American Indian and Alaska Native, Puerto Rico, counties, "municipios", incorporated places and others. The data products are available also for "statistical areas", like; census regions and divisions, "zonas urbanas" and Public Use Micro data sample (PUMAS), among others. To qualify for data the ACS only release the data for legal, administrative or statistical areas with estimated population of 65,000 or more annually. The Census Bureau is planning to release a 3 year period estimates. This will allow to release data for areas with estimated population of 20,000 or more, (2006 Data Users Handbook).

The PUMAS are special, non-overlapping areas that partition a state. The PUMAS contains a population of about 100,000. This is very useful for accessing data for rural areas, and for the sub-state area data publication. In addition to the PUMAS the ACS breaks down the geographical areas in metropolitan and micropolitan. These are statistical areas with a core area that contain a significant nucleus, together with adjacent communities highly social and economically integrated. The ACS also provides information for components of the state summary levels. For example, urban/rural, or inside/outside a micropolitan area, (2006 Data Users Handbook).

Data Products

The ACS provides 10 data products that in accordance with the "2006 Data Users Handbook" are described as follows:

BASE TABLES

The base tables provide the most detailed data for the distribution of population and household characteristics. The topics encompass demographic, social, economic and housing characteristics. The table title describes the variables in the table, the combination of estimates variables and the universe. Every table has unique reference number indicated before the title. The level of geography is in the first row of the table. The tables include a column that indicates the margin of error. These tables are the base data to estimate the other ACS data products.

DATA PROFILES

The data profiles are tables that summarize key social, economic, housing and demographic set of characteristics for each geographic area.

NARRATIVE PROFILES

These profiles include data profile information in narrative format. These are plain -language description with simple graph to complement the standard Data Profiles.

SUBJECT TABLES

These tables' shows more detail than the Data Profiles. For example, they include percent distributions, estimates for every universe total and the margin of error.

SELECTED POPULATION PROFILES

They are ready-made data tabulation on specific population groups. These profiles can be created when the population group is 65,000 or more. The data is available for; characteristics of race, ethnic and ancestry groups, age groups and other characteristics. For example, "workers 16 years and over", people at specified levels of poverty, native populations, etcetera.

GROUP QUARTERS

A group quarter is non-typical living arrangement. It is defined as a "place where people live or stay, in a group living arrangement that is owned or managed by an entity or organization that provides housing or services for the residents". The GQ are classified in two groups; institutionalized (Adult Correctional, Mental Hospital, etcetera) and non-institutionalized (College Housing, Job Corps, etcetera). The population living in group quarters is included for the first time on the 2006 ACS.

It is interesting to point here that as part of the Group Quarters data collection the ACS will be gathering information about the Gulf Coastal Areas. The ACS is partnering with the Brookings Institution to provide detailed data on the affected areas (American Community Survey,FAQ, 2006).

GEOGRAPHIC RANKING TABLES AND CHARTS

The Geographic Ranking tables compare about 80 population characteristics across the nation and all states, including Puerto Rico and the District of Columbia. The tables and charts describe a single characteristic and the geographical areas are ranked from highest to the lowest.

THEMATIC MAPS

The bases for the Thematic Maps are the state-level Geographic Ranking Tables. The shading intensity of the Thematic Map indicates the value associated to the data classes. For example, darker shading indicates an increase in the values.

GEOGRAPHIC COMPARISON TABLES

The Geographic Comparison Tables complements the Geographical Ranking Tables. The GC Tables show the characteristics for diverse geographic levels. For example, the user can compare PUMAS, counties, "municipios", and others.

PUBLIC USE MICRODATA SAMPLE (PUMS)

These are data files that contain the records of a sample of all housing units and groups quarter persons interviewed for the survey.

ANALYTIC REPORTS

The Analytic Reports provide detailed analyzes of the ACS data.

The Puerto Rico Community Survey

The "2006 Puerto Rico Community Survey", (ACS,2006) is identical to the "2006 Data Users Handbook" revised above. There are only slight adaptations to the geographic areas. For example, the "municipios" stands for the counties. The topics, the statistics, the quality measures and the data products are identical to the ACS's.

The purpose of the PRCS is the same of the general ACS; to collect and produce up to date data for informed decision making. In Puerto Rico's case the local government and "municipios" are administering federal funds that were traditionally administered by the federal government. The data collected will be useful for the agencies that assign funds. The U.S. Census selects a random sample from its housing unit addresses files. When an address has been selected they communicate via traditional mail with the respondents. Because it is part of the census, responding to the survey is required by the law. The PRCS will eventually replace the decennial census long form,(PRCS A Handbook for Government Officials,2006).

Web Access to the American Community Survey Data Products and Information

You can access the ACS data through the US Census Bureau web page; www.census.gov.

On the ACS main page follow the link to American Fact Finder. Once you are on the American Fact Finder page look for the Data Sets. Select the American Community Survey or the Puerto Rico Community Survey. From this page you can select the ACS data sets and data products from various years depending on your interest. On the "2006 American Community Survey" you can see a list of data products like; Data Profiles, Selected Population Profiles, Ranking

Tables and other. Note that the ACS includes the data for the Puerto Rico Community Survey.

For my specific area of interest I will select data about Puerto Rico to determine the availability of data. For that purpose I went to the Data Set PRCS that in the web page is the same as the ACS. There I selected the Detailed Tables data product. Those are the Base Tables mentioned above. I verified that the Detailed Tables are available for the Puerto Rico state for the total population. If I select the geographic area "county" I did not find data for my hometown of Lares. The reason is that Lares total population is only about 30,000 habitants.

[B01001. SEX BY AGE - Universe: TOTAL POPULATION](#)

Data Set: [2006 American Community Survey](#)

Survey: 2006 Puerto Rico Community Survey

	Puerto Rico	
	Estimate	Margin of Error
Total:	3,927,776	*****
Male:	1,887,087	+/-1,994
Under 5 years	130,058	+/-1,612
5 to 9 years	142,686	+/-5,073
10 to 14 years	156,463	+/-5,136
15 to 17 years	92,410	+/-1,065
18 and 19 years	58,914	+/-1,535
20 years	32,701	+/-2,448
21 years	30,319	+/-2,655
22 to 24 years	83,330	+/-3,155
25 to 29 years	139,146	+/-903
30 to 34 years	129,281	+/-1,126
35 to 39 years	121,267	+/-4,025
40 to 44 years	132,796	+/-4,090
45 to 49 years	117,647	+/-659
50 to 54 years	107,868	+/-455
55 to 59 years	106,397	+/-2,965
60 and 61 years	39,046	+/-2,219
62 to 64 years	48,949	+/-2,468
65 and 66 years	32,571	+/-1,984
67 to 69 years	40,192	+/-1,977
70 to 74 years	56,092	+/-2,266
75 to 79 years	39,291	+/-2,108
80 to 84 years	25,665	+/-1,702
85 years and over	23,998	+/-2,083
Female:	2,040,689	+/-1,994
Under 5 years	121,548	+/-1,612
5 to 9 years	136,639	+/-4,527
10 to 14 years	151,785	+/-4,563
15 to 17 years	87,069	+/-1,064
18 and 19 years	57,515	+/-2,041
20 years	32,176	+/-2,776
21 years	28,265	+/-2,457
22 to 24 years	84,751	+/-3,688

	Puerto Rico	
25 to 29 years	144,421	+/-960
30 to 34 years	137,656	+/-886
35 to 39 years	133,605	+/-3,913
40 to 44 years	143,134	+/-3,895
45 to 49 years	137,240	*****
50 to 54 years	127,586	*****
55 to 59 years	120,027	+/-2,896
60 and 61 years	46,037	+/-2,412
62 to 64 years	65,158	+/-2,899
65 and 66 years	32,911	+/-1,952
67 to 69 years	50,891	+/-2,360
70 to 74 years	72,542	+/-2,757
75 to 79 years	52,935	+/-2,431
80 to 84 years	40,376	+/-2,226
85 years and over	36,422	+/-2,238

Source: U.S. Census Bureau, 2006 American Community Survey

I looked the Data Product "Data Profiles" and I found data for the Puerto Rico state social, economic, housing, and demographic characteristics, including the Narrative Profile. The Narrative Profile presents a plain narrative of the data and a very simple and helpful graphic. The table bellow shows the social characteristics including; education, marital status, relationships, fertility and others for Puerto Rico state. As you can see the table includes the margin of error. You can really find very interesting data about Puerto Rico's population characteristics. There is no data available for my hometown Lares.

Selected Social Characteristics in Puerto Rico: 2006	<u>Estimate</u>	<u>Margin of Error</u>
HOUSEHOLDS BY TYPE		
Total households	1,240,456	+/-7,941
Family households (families)	939,600	+/-8,997
With own children under 18 years	396,968	+/-7,116
Married-couple families	587,870	+/-8,472
With own children under 18 years	231,678	+/-5,916
Male householder, no wife present	63,486	+/-3,282
With own children under 18 years	21,095	+/-2,248
Female householder, no husband present	288,244	+/-6,580
With own children under 18 years	144,195	+/-5,452
Nonfamily households	300,856	+/-6,472
Householder living alone	263,258	+/-6,069
65 years and over	107,575	+/-3,802
Households with one or more people under 18 years	481,688	+/-7,708
Households with one or more people 65 years and over	362,978	+/-3,215
Average household size	3.13	+/-0.02
Average family size	3.64	+/-0.03

Selected Social Characteristics in Puerto Rico: 2006	<u>Estimate</u>	<u>Margin of Error</u>
RELATIONSHIP		
Household population	3,881,002	*****
Householder	1,240,456	+/-7,941
Spouse	586,995	+/-8,600
Child	1,472,586	+/-13,925
Other relatives	419,960	+/-12,447
Nonrelatives	161,005	+/-8,638
Unmarried partner	61,965	+/-4,191
MARITAL STATUS		
Males 15 years and over	1,457,880	+/-1,067
Never married	562,450	+/-8,163
Now married, except separated	667,471	+/-8,574
Separated	45,677	+/-3,759
Widowed	44,415	+/-2,994
Divorced	137,867	+/-4,440
Females 15 years and over	1,630,717	+/-1,063
Never married	507,834	+/-8,714
Now married, except separated	656,925	+/-10,226
Separated	73,136	+/-3,927
Widowed	181,109	+/-4,381
Divorced	211,713	+/-6,792
FERTILITY		
Number of women 15 to 50 years old who had a birth in the past 12 months	44,623	+/-3,052
Unmarried women (widowed, divorced, and never married)	19,860	+/-2,067
Per 1,000 unmarried women	34	+/-3
Per 1,000 women 15 to 50 years old	44	+/-3
Per 1,000 women 15 to 19 years old	35	+/-7
Per 1,000 women 20 to 34 years old	78	+/-6
Per 1,000 women 35 to 50 years old	14	+/-2
GRANDPARENTS		
Number of grandparents living with own grandchildren under 18 years	120,475	+/-4,619
Responsible for grandchildren	59,171	+/-3,700
Years responsible for grandchildren		
Less than 1 year	11,450	+/-1,836
1 or 2 years	11,770	+/-1,734
3 or 4 years	6,917	+/-1,216
5 or more years	29,034	+/-2,930
Characteristics of grandparents responsible for own grandchildren under 18 years		
Who are female	63.5%	+/-2.0
Who are married	66.0%	+/-2.9

Selected Social Characteristics in Puerto Rico: 2006	<u>Estimate</u>	<u>Margin of Error</u>
SCHOOL ENROLLMENT		
Population 3 years and over enrolled in school	1,119,076	+/-8,330
Nursery school, preschool	62,914	+/-3,538
Kindergarten	51,389	+/-3,594
Elementary school (grades 1-8)	476,075	+/-5,176
High school (grades 9-12)	258,471	+/-5,030
College or graduate school	270,227	+/-7,182
EDUCATIONAL ATTAINMENT		
Population 25 years and over	2,501,147	+/-1,362
Less than 9th grade	580,668	+/-10,834
9th to 12th grade, no diploma	267,624	+/-7,891
High school graduate (includes equivalency)	629,888	+/-9,764
Some college, no degree	296,034	+/-9,129
Associate's degree	208,153	+/-6,757
Bachelor's degree	390,700	+/-9,400
Graduate or professional degree	128,080	+/-6,702
Percent high school graduate or higher	66.1%	+/-0.5
Percent bachelor's degree or higher	20.7%	+/-0.5
VETERAN STATUS		
Civilian population 18 years and over	2,907,774	+/-528
Civilian veterans	125,474	+/-4,769
DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION		
Population 5 years and over	3,646,609	+/-685
With a disability	946,419	+/-14,529
Population 5 to 15 years	647,924	+/-2,838
With a disability	66,480	+/-4,290
Population 16 to 64 years	2,500,501	+/-3,031
With a disability	567,717	+/-12,216
Population 65 years and over	498,184	+/-533
With a disability	312,222	+/-4,468
RESIDENCE 1 YEAR AGO		
Population 1 year and over	3,879,708	+/-3,012
Same house	3,569,140	+/-13,617
Different house in Puerto Rico or the U.S.	305,271	+/-13,051
In Puerto Rico	274,764	+/-13,006
Same municipio	176,123	+/-10,802
Different municipio	98,641	+/-7,664

Selected Social Characteristics in Puerto Rico: 2006	<u>Estimate</u>	<u>Margin of Error</u>
In the United States	30,507	+/-3,805
Elsewhere	5,297	+/-1,255
PLACE OF BIRTH		
Total population	3,927,776	*****
Native	3,813,289	+/-6,991
Born in Puerto Rico or the United States	3,801,799	+/-7,414
In Puerto Rico	3,601,391	+/-10,783
In the United States	200,408	+/-7,359
Born in U.S. Island Areas, or born abroad of American parents	11,490	+/-1,739
Foreign born	114,487	+/-6,991
U.S. CITIZENSHIP STATUS		
Foreign-born population	114,487	+/-6,991
Naturalized U.S. citizen	43,337	+/-3,726
Not a U.S. citizen	71,150	+/-5,476
YEAR OF ENTRY		
Population born outside Puerto Rico	326,385	+/-10,783
Native	211,898	+/-7,702
Entered 2000 or later	41,660	+/-4,612
Entered before 2000	170,238	+/-6,720
Foreign born	114,487	+/-6,991
Entered 2000 or later	21,625	+/-2,909
Entered before 2000	92,862	+/-5,663
WORLD REGION OF BIRTH OF FOREIGN BORN		
Foreign-born population, excluding population born at sea	114,487	+/-6,991
Europe	5,385	+/-1,128
Asia	4,306	+/-1,580
Africa	183	+/-225
Oceania	149	+/-175
Latin America	104,178	+/-6,265
Northern America	286	+/-215
LANGUAGE SPOKEN AT HOME		
Population 5 years and over	3,676,170	*****
English only	171,595	+/-8,583
Language other than English	3,504,575	+/-8,578
Speak English less than "very well"	2,975,665	+/-14,812
Spanish	3,500,128	+/-8,639
Speak English less than "very well"	2,973,290	+/-14,659
Other Indo-European languages	3,167	+/-927

Selected Social Characteristics in Puerto Rico: 2006	<u>Estimate</u>	<u>Margin of Error</u>
Speak English less than "very well"	1,282	+/-632
Asian and Pacific Islander languages	1,070	+/-783
Speak English less than "very well"	922	+/-767
Other languages	210	+/-224
Speak English less than "very well"	171	+/-212
ANCESTRY		
Total population	3,927,776	*****
American	55,216	+/-4,727
Arab	2,099	+/-1,118
Czech	251	+/-195
Danish	0	+/-275
Dutch	426	+/-359
English	740	+/-354
French (except Basque)	3,598	+/-794
French Canadian	208	+/-185
German	2,456	+/-883
Greek	364	+/-288
Hungarian	246	+/-247
Irish	1,363	+/-577
Italian	5,436	+/-1,232
Lithuanian	49	+/-81
Norwegian	0	+/-275
Polish	630	+/-461
Portuguese	407	+/-244
Russian	898	+/-743
Scotch-Irish	27	+/-49
Scottish	368	+/-395
Slovak	0	+/-275
Subsaharan African	3,877	+/-1,269
Swedish	378	+/-269
Swiss	0	+/-275
Ukrainian	324	+/-302
Welsh	74	+/-87
West Indian (excluding Hispanic origin groups)	3,028	+/-1,056

Source; U.S. Bureau of the Census, American Community Survey,2006

Bellow I present an example of a Narrative Profile for Puerto Rico,(U.S. Bureau of the Census, American Community Survey,2006).

HOUSEHOLDS AND FAMILIES: In 2006 there were 1.2 million households in Puerto Rico. The average household size was 3.1 people.

Families made up 76 percent of the households in Puerto Rico. This figure includes both married-couple families (47 percent) and other families (28 percent). Nonfamily households made up 24 percent of all households in Puerto Rico. Most of the nonfamily households were people living alone, but some were composed of people living in households in which no one was related to the householder.

On the Selected Population Profiles Data Product I request data for Black or African American alone and I found this interesting data. From the total population only 303,000 reported to be African American. That is very illustrative, since every native puertorrican has African American inheritance.

Puerto Rico

S0201-PR. Selected Population Profile in Puerto Rico

Population Group: **Black or African American alone**

Data Set: 2006 American Community Survey

Survey: 2006 Puerto Rico Community Survey

Subject	Total population	<u>Margin of Error</u>	Black or African American alone	<u>Margin of Error</u>
Total population	3,927,776	*****	303,274	+/-11,748
SEX AND AGE				
Male	48.0%	+/-0.1	49.1%	+/-1.2
Female	52.0%	+/-0.1	50.9%	+/-1.2
Under 5 years	6.4%	*****	4.4%	+/-0.6
5 to 17 years	19.5%	*****	17.7%	+/-1.0
18 to 24 years	10.4%	+/-0.1	11.1%	+/-0.9
25 to 34 years	14.0%	+/-0.1	16.0%	+/-1.1
35 to 44 years	13.5%	+/-0.1	14.6%	+/-0.9

Subject	Total population	Margin of Error	Black or African American alone	Margin of Error
45 to 54 years	12.5%	+/-0.1	13.9%	+/-0.8
55 to 64 years	10.8%	*****	10.8%	+/-0.7
65 to 74 years	7.3%	+/-0.1	6.7%	+/-0.6
75 years and over	5.6%	+/-0.1	4.7%	+/-0.5
Median age (years)	34.7	+/-0.2	35.5	+/-1.1
18 years and over	74.1%	*****	77.8%	+/-1.2
21 years and over	69.4%	+/-0.1	73.5%	+/-1.3
62 years and over	15.7%	+/-0.1	14.3%	+/-0.9
65 years and over	12.8%	*****	11.4%	+/-0.8

The Ranking Tables ask you to select a subject and automatically provides you a ranked table. Note that Puerto Rico data is included but is not ranked inside the table.

R1001. Percent of Grandparents Responsible for their Grandchildren: 2006

Universe: Grandparents living with grandchildren <!--[if !vml]--> <!--[endif]-->

Data Set: 2006 American Community Survey

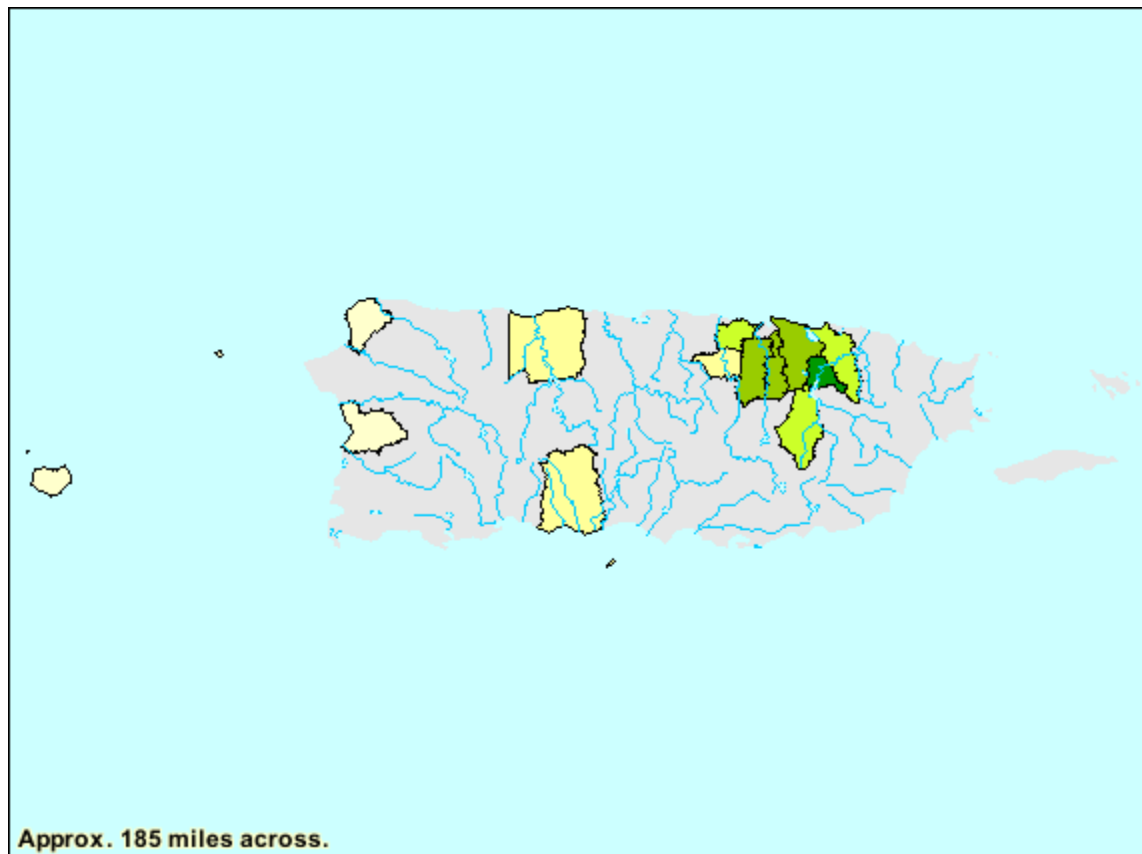
Survey: 2006 American Community Survey, 2006 Puerto Rico Community Survey

Rank <!--[if !vml]--> <!--[endif]-->	State <!--[if !vml]--> <!--[endif]-->	Percent	Margin of Error
1	West Virginia	61.3	+/-5.5
2	Arkansas	60.8	+/-3.7
3	Mississippi	60.5	+/-3.0
4	South Dakota	57.7	+/-8.3
5	Alabama	57.3	+/-2.4
6	Oklahoma	56.9	+/-2.9
7	Wyoming	56.7	+/-10.4
8	Kentucky	55.4	+/-3.2
9	South Carolina	55.3	+/-2.9
10	North Dakota	53.8	+/-13.0
11	Tennessee	52.5	+/-2.8
12	Louisiana	51.5	+/-2.9
13	Kansas	50.8	+/-4.0
14	New Mexico	50.7	+/-4.3
15	District of Columbia	50.1	+/-8.1
16	Idaho	49.3	+/-6.4
17	Indiana	49.0	+/-3.0
18	Iowa	48.9	+/-4.8
19	North Carolina	48.1	+/-2.3
19	Ohio	48.1	+/-1.7
21	Georgia	46.6	+/-2.1
22	Montana	46.5	+/-6.7
23	Missouri	45.3	+/-3.2
24	Texas	44.5	+/-1.3






Aguadilla Municipio	20.6	+/-5.3
Arecibo Municipio	29.0	+/-4.4
Bayamón Municipio	40.1	+/-2.9
Caguas Municipio	36.6	+/-3.4
Carolina Municipio	36.6	+/-4.1
Guaynabo Municipio	41.7	+/-4.8
Mayagüez Municipio	24.5	+/-4.3
Ponce Municipio	31.2	+/-4.2
San Juan Municipio	42.6	+/-2.6
Toa Alta Municipio	29.2	+/-6.3
Toa Baja Municipio	37.3	+/-6.3
Trujillo Alto Municipio	47.1	+/-7.0

Source: U.S. Census Bureau, 2006 American Community Survey





The page provides a tool to view the data as a thematic map. Bellow Im including an example.



Data Classes

Percent	
	20.6 - 24.5
	29.0 - 31.2
	36.6 - 37.3
	40.1 - 42.6
	47.1 - 47.1

Features

	Major Road
	Street
	Stream/Waterbody
	Stream/Waterbody

Items in gray text
are not visible
at this zoom level

The Public Use Microdata Samples (PUMS) are available for Puerto Rico in a downloadable format.

Sources

[U.S. Bureau of the Census \(2007\). *American FactFinder*. Retrieved December, 2007, from http://factfinder.census.gov](http://factfinder.census.gov)

[U.S. Bureau of the Census \(2007\). American Community Survey. "2006 Data Users Handbook" from, http://census.gov/acs/www](http://census.gov/acs/www)

[U.S. Bureau of the Census \(2007\). American Community Survey. "Frequently Asked Questions" from, http://census.gov/acs/www](http://census.gov/acs/www)

[U.S. Bureau of the Census \(2007\). American Community Survey. "PRCS A Handbook for Government Officials" from, http://census.gov/acs/www](http://census.gov/acs/www)