

2006 Data Users Handbook

Puerto Rico Community Survey

INTRODUCTION

The Puerto Rico Community Survey is an islandwide survey designed to provide communities with a fresh look at how they are changing. As the island expands, so do its needs, specifically the need for more current and up-to-date information. The Census Bureau is using a powerful new tool to adjust to this increased need - the Puerto Rico Community Survey.

The Puerto Rico Community Survey (PRCS) is a part of the Decennial Census Program. It is a critical element in the U.S. Census Bureau's reengineered census. The decennial census takes place every ten years, the next being conducted in 2010. The 2010 Census will continue to count the population to support the Constitutional mandate to provide population counts needed to apportion the seats in the U. S. House of Representatives. The Municipios develop redistricting plans based on this important information. The PRCS will not provide these counts. The PRCS will provide annually updated data on the characteristics of population and housing. The Text Box, *What is the Puerto Rico Community Survey?* provides more information on the PRCS.

This guide includes a broad set of information relating directly to the 2006 PRCS. It covers the type of information produced from the PRCS, including measures of quality that are critical for users to consider. It explains specifically which geographic areas will receive data products from the 2006 PRCS and how users can determine if a specific area is eligible to receive PRCS products in 2006. This guide includes details on each of the specific 2006 PRCS data products, along with tips on how to access and use these products. A timetable for the 2006 PRCS data releases is included. This document includes guidance on the use and interpretation of PRCS estimates along with references and contacts for users who need additional help.

What is the Puerto Rico Community Survey?

The Puerto Rico Community Survey (PRCS) and the American Community Survey (ACS) are a new approach to producing critical information about the characteristics of local communities in Puerto Rico and the United States. They will eliminate the need for a long form in the 2010 Census and are a key part of the Census Bureau's Decennial Census Program. The PRCS publishes social, housing, and economic characteristics for demographic groups covering a broad spectrum of geographic areas in Puerto Rico. The collection for the PRCS began in January 2005 with an annual sample size of about 36,000 addresses. Every year the PRCS can support the release of single-year estimates for geographic areas with populations of 65,000 or more. The PRCS will accumulate sample over 3-year and 5-year intervals to produce estimates for smaller geographic areas including census tracts and block groups. For more information about the PRCS, refer to the *ACS Design and Methodology* report at www.census.gov/acs/www/Downloads/tp67.pdf. This paper describes the design and methodology of both ACS and the PRCS.

INFORMATION PRODUCED FROM THE PRCS

When discussing the type of information produced by the PRCS, two things should be considered - the specific topics covered in the PRCS and the type of statistics that are produced for these topics. Understanding the information contained within the PRCS data will go a long way in helping you to use the data to fit your individual needs.

Topics Covered

The topics covered by the PRCS focus on demographic, social, economic, and housing characteristics. These topics are virtually the same as those covered by the Census 2000 long form sample. Details are provided in the Text Box, *What Topics are Included in the PRCS?*

What Topics are Included in the PRCS?

Demographic Characteristics

Sex, age, relationship, households by type, race, and Hispanic origin

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 foreign born, language spoken at home, 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, utility costs, occupants per room, housing value, mortgage status and costs, and gross rent

Statistics Produced

The statistics produced from the PRCS are meaningful because they describe the characteristics of population and housing in Puerto Rico. The Census Bureau uses the data collected by the PRCS to create estimates and variances, which are termed statistics, for these characteristics. The PRCS releases statistics in several forms: totals, proportions, percentages, means, medians, averages, and ratios.

Totals

Estimated totals include estimates of the total household population and its subsets. Examples include the total male household population, the total population 3 years and over enrolled in school, the total foreign-born household population, the total household population below the poverty level, and much more. *Figure 1* shows an example of the total household population 3 years and over enrolled in school (737,794) for San Juan-Caguas-Guaynabo, in the Puerto Rico Metropolitan Statistical Area, based on the 2006 PRCS Estimate.

Figure 1. Total Household Population 3 Years and Over Enrolled in School and the Percentage of that Population Enrolled in Public or Private School for San Juan-Caguas-Guaynabo, PR Metropolitan Statistical Area, based on the 2006 PRCS Estimate.

San Juan-Caguas-Guaynabo, PR Metropolitan Statistical Area						
S1401. School Enrollment 						
Data Set: 2006 American Community Survey						
Survey: 2006 Puerto Rico Community Survey						
NOTE: For information on confidentiality protection, sampling error, nonsampling error, and definitions, see Survey Methodology .						
Subject	Total	Margin of Error	Percent of enrolled population			
			In public school	Margin of Error	In private school	Margin of Error
Population 3 years and over enrolled in school	737,794	+/-8,033	65.1%	+/-0.9	34.9%	+/-0.9
Nursery school, preschool	41,916	+/-2,702	61.7%	+/-3.8	38.3%	+/-3.8
Kindergarten	34,002	+/-3,082	67.6%	+/-3.7	32.4%	+/-3.7
Elementary: grade 1 to grade 4	149,083	+/-4,406	74.5%	+/-1.7	25.5%	+/-1.7
Elementary: grade 5 to grade 8	161,506	+/-5,002	77.1%	+/-1.6	22.9%	+/-1.6
High school: grade 9 to grade 12	164,140	+/-4,133	74.6%	+/-1.5	25.4%	+/-1.5
College, undergraduate	157,433	+/-6,310	40.6%	+/-1.6	59.4%	+/-1.6
Graduate, professional school	29,714	+/-2,820	31.1%	+/-3.8	68.9%	+/-3.8

Similarly, estimates are produced of total households and subsets such as total family households and total family households with female householders with no husband present. Estimates are made of total housing units along with estimates of occupied housing units, owner-occupied, and renter-occupied housing units.

Although totals may have meaning alone, the major reason they exist in the PRCS is to define a universe that will be described in detail. For example, the population of Puerto Rico is not the important information coming from PRCS data – it’s information on the percent of the population 16 years and over and in the labor force and employed. This also applies to housing data where the PRCS releases an estimate of total housing units, but the important PRCS information is the characteristics of these housing units - the percent of vacant housing units, mobile homes, or homes built in 1939 or earlier.

The Census Bureau produces official estimates of total population and housing for the Puerto Rico Municipios. The Census Bureau uses the most current population estimates from the Population Estimates Program as controls to reduce variance and coverage bias in the PRCS estimates. That is why many of the totals produced from the PRCS are identical to the population estimates and why some totals do not have associated margins of error. Whenever you see a PRCS total with a series of asterisks in the margin of error column, you can conclude that this is a controlled estimate. Data users should always refer to the Population Estimates Program for estimates of the total population by age, sex and race when available. When these estimates are available, you will see links to the population estimates from the PRCS data products (see *Figure 4*). For some geographic areas and some population totals, the Census Bureau does not release population estimates (e.g., Urban Areas, workers age 16 years and over). In these instances, the totals provided in the PRCS may be the only available estimates.

This is not to say that totals are not meaningful on their own. Local governments use population

totals for forecasting needs for services such as police and fire protection. Local communities do need to know the total population, so they can plan and prepare for responding to natural disasters or other emergencies.

For instance, one of the challenges in responding to a hurricane is to determine the location and size of the population at risk. Using PRCS data, hospitals and other public health agencies can use PRCS population totals to estimate the size of the population in the affected area. Agencies can use this information to predict how many patients the hospital can expect, so the hospital is able to plan for the magnitude of the response. It is especially critical in situations like this to have up-to-date population data.

Estimated Proportions

Estimated proportions include specific characteristics of the estimated totals displayed as percentages. For example, the PRCS estimates the proportion of the total household population under 5 years of age, the proportion of the population 16 years and over in the labor force, and the proportion of households with food stamp benefits. Many PRCS estimates are proportions.

Figure 1 displays an example of proportions produced from the PRCS displayed as percentages. In this example, the top row of the table displays the total household population 3 years and over enrolled in school. To the right, the table displays the percentages of the population enrolled in public or private school. The 2006 PRCS estimated that 63.6 percent of the household population 3 years of age and over was enrolled in public school in the San Juan-Caguas-Guaynabo, Puerto Rico Metropolitan Statistical Area.

Medians, Means, and Averages

Medians describe the middle of a distribution of a certain characteristic for a given universe. Examples of medians include median age of Puerto Rico's population, median family income, median value of owner-occupied housing units, and median selected monthly owner costs for units with a mortgage. Means describe the average of a certain characteristic for a given universe. Examples of means include mean travel time to work, mean earnings for full-time, year-round workers, and mean retirement income. Some items use the term, "average" to describe the mean, such as the average household size. *Figure 2* shows the median age at first marriage for the household population, 15 to 54 years of age, for Puerto Rico based on the 2006 PRCS.

Figure 2. Median Age at First Marriage for the Household Population, 15 to 54 years of Age, for Puerto Rico, Based on the 2006 PRCS

B12007. MEDIAN AGE AT FIRST MARRIAGE - Universe: POPULATION 15 TO 54 YEARS
 Data Set: [2006 American Community Survey](#)
 Survey: 2006 Puerto Rico Community Survey

NOTE: For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

Puerto Rico		
	Estimate	Margin of Error
Median age at first marriage --		
Male	28.3	+/-0.5
Female	26.1	+/-0.4

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

It is important to recognize the universe for any mean, median, or average. In this example the universe (shown in the table title) is the population 15 to 54 years old in Puerto Rico. Unlike in previous ACS releases, the 2006 data display estimates for the entire resident population, including both the households and the group quarters population. This is important to keep in mind if you are making any comparisons of the PRCS data with data from other sources.

Ratios

Ratios describe the relationship between two quantities, such as the number of occupants per room. Figure 3 shows an example of several ratios produced from the PRCS. Figure 3 displays the sex ratio, which is the distribution for the ratio, “males per 100 females” for the Ponce, Puerto Rico Urbanized Area. You see that ratio is 94.1.

Figure 3. Sex Ratio (Males per 100 Females) for the Ponce, Puerto Rico Urbanized Area, Based on the 2006 PRCS

Ponce, PR Urbanized Area
S0101. Age and Sex
 Data Set: [2006 American Community Survey](#)
 Survey: [2006 Puerto Rico Community Survey](#)

NOTE: Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the [official estimates of the population for the nation, states, counties, cities and towns](#) and estimates of housing units for states and counties.

For more information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

Subject	Total	Margin of Error	Male	Margin of Error	Female	Margin of Error
Total population	189,720	+/-2,943	91,968	+/-1,787	97,752	+/-1,566
SUMMARY INDICATORS						
Median age (years)	34.2	+/-0.5	32.4	+/-0.7	36.2	+/-0.7
Sex ratio (males per 100 females)	94.1	+/-1.6	(X)	(X)	(X)	(X)
Age dependency ratio	67.3	+/-1.7	(X)	(X)	(X)	(X)
Old-age dependency ratio	22.7	+/-0.7	(X)	(X)	(X)	(X)
Child dependency ratio	44.6	+/-1.5	(X)	(X)	(X)	(X)

WHAT MEASURES OF QUALITY ARE PRODUCED AND HOW SHOULD THEY BE USED?

The 2006 PRCS collected data from a sample of housing units and persons living in housing units in Puerto Rico. The data are used to produce estimates of the actual figures that would have been obtained by interviewing the entire housing unit population. As noted earlier, these estimates consist of totals, percentages, means, medians, and ratios.

PRCS users come from many different disciplines. A user can be an individual who has the responsibility of formulating policy, or an individual who works in a local government evaluating the effects of a social or economic intervention. Even a student in a statistical course wanting to use PRCS data for developing a case study or a statistical application can be a user.

The purpose of this section is to help users to correctly interpret and use the PRCS data. It is important to understand that the PRCS estimates are subject to sampling error and that sampling error is a source of variability that exists in the 2006 PRCS estimates. It is not necessary for users to become experts in statistical methods to understand the PRCS data. To ensure that data users report data accurately, they should become familiar with the concepts of both sampling and nonsampling error.

This section will discuss sampling error measures, such as the standard error, and margin of error. In addition, this section discusses the steps required to perform a statistical test of significance. The section concludes with the statistics used to inform users about the quality of the data, including potential nonsampling errors. The Text Box, *Where can I find more technical information about the design and quality of the PRCS?* includes additional references and links about sampling error and statistical testing. See page 13.

Sampling Error

Sampling error results when a survey produces estimates of the whole population using only a portion of the population. Since the PRCS is a survey based only on a sample of the population, the estimates will contain sampling error. This means that the estimates derived from the sample will differ from the values that would have been obtained if the whole population were included in the survey. The estimates would be different if the survey had selected another sample.

The sampling error is reduced as the sample size increases, so that, if a census or a 100 percent sample is performed there will be no sampling error. There is still error in census data, but it is referred to as non-sampling error as the error is not related to sampling. The decennial long form estimates had a smaller amount of sampling error than the 2006 PRCS because the census long form sample was much larger than the 2006 PRCS sample. Although the Census 2000 long form sample data included sampling error, the data tables did not display it, and many users were unaware of this important information. Two related measures of sampling error are the standard error and the margin of error.

Standard Error

The standard error measures the variability of an estimate due to sampling. The standard error is commonly used to measure how precisely one can estimate a population value from a given

sample. The Census Bureau produces standard error estimates to accompany survey statistics to help users understand the sampling variability associated with each estimate.

The standard error of an estimate depends on the sample size. In general, the larger the sample size, the smaller the standard error of the estimates produced from the sample. Table 1 shows an example of estimates with their standard errors.

Table 1. Example of Standard Errors - Educational Attainment of Population 18-24 Years

Subject	Estimate (Percent of total)	Standard Error
High school graduate or higher	66.4	0.2
Bachelor's degree or higher	20.8	0.2

Margin of Error

The margin of error describes the precision of the estimate at a given level of confidence. The confidence level measures the likelihood that the true value is within a certain distance of the results of a sample estimate. The Census Bureau statistical standard for published data is to use the 90 percent confidence level. However, practitioners can use other confidence levels, such as 95 or 99 percent. The confidence level chosen is usually a matter of preference, balancing risk for the specific application.

The margin of error is an alternative measure of sampling error. Since the estimate is based on a sample and not the entire population, it is necessary to know how precisely the results of the sample reflect the characteristics of the entire population. The Census Bureau chose to use the margin of error to define the range of values that may contain the true population value. The margin of error is important because relying on statistical inference can save you from drawing incorrect conclusions from data based on a sample. It can help prevent you from interpreting small or nonexistent differences as important. The margin of error will help in drawing conclusions.

The formula for the margin of error is

$$\text{Margin of Error} = 1.65 \times \text{Standard Error.}$$

The Census Bureau uses a constant value of 1.65 for the 90 percent confidence level. If you prefer to use a 95 or 99 level of confidence, you would multiply by a larger value.

Table 2 shows an example of an estimate with its margin of error. By adding and subtracting the margin of error from the point estimate, you produce the range around it called the confidence interval. With 90 percent confidence, the interval 6.5 – 6.7 contains the true percentage of the population under 5 years of age.

Table 2. Example of Margin of Error – Age

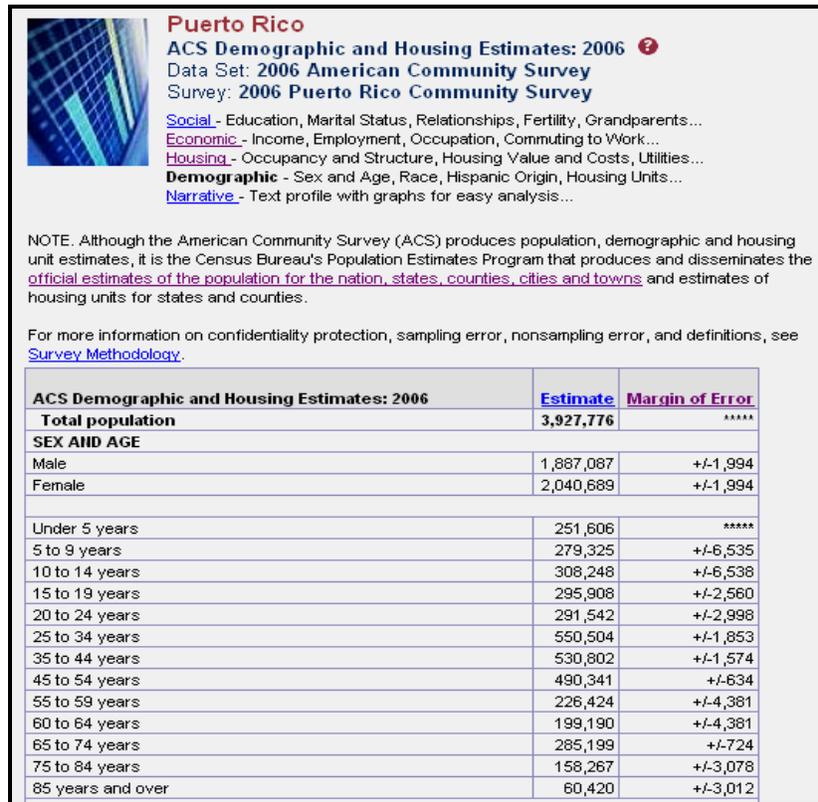
Subject	Estimate (Percent of total)	Margin of Error (MOE)
Under 5 Years	6.6	+/- 0.1

In general, larger samples are more likely to yield results closer to the target population quantity and therefore have smaller margins of error than smaller samples. Estimates for small population groups for which we would expect smaller sample sizes would have relatively large margins of error. Estimates for large population groups for which we would expect larger sample sizes would have relatively small margins of error. For example, estimates of the population 65 years and older who attend school will have larger margins of error than estimates of the population 18 to 29 years old who attend school.

Most PRCS products display a margin of error. Some PRCS tables indicate the margin of error by the term “MOE.” Tables will show estimates “plus or minus” the margin of error. For example, 50 percent of the respondents in a survey say that they are employed in the labor force, and the 90 percent confidence level is cited as plus or minus 2 percent. This information means that if we conducted the survey 100 times, the percentage of respondents who say that they are in the labor force would range between 48 and 52 percent most (90 percent) of the time. *Figures 1-4* all include examples of the margins of error found in 2006 PRCS data products.

In *Figure 4* the total population row does not have a margin of error, since it is fixed to the population estimate that was used as a control during weighting. In this case, there will be a series of asterisks instead of the MOE. The Census Bureau’s Population Estimates Program produces this estimate of the total population of Puerto Rico. This program produces official Census Bureau estimates of the population for selected geographic areas. These estimates are used in funding allocations, in setting the controls of surveys, and in monitoring recent demographic changes. Since the total population in the table is a controlled estimate, it is not subject to sampling error, and there will not be a margin of error associated with the estimate.

Figure 4. Example of PRCS Presentation of Margins of Error



Statistical Testing

Users should conduct statistical testing to determine if two estimates are statistically different from one another. Two estimates are "significantly different" at the 90 percent confidence level if the difference between them is large enough to infer that there was a less than 10 percent chance that the difference was purely random. Users may want to compare estimates across years or geographies. It is important to note that small differences, which may be statistically significant, may not have any practical significance. A conservative test is to determine if the difference is less than the sum of the two margins of error. However, this may lead you to assume that the difference is not significant when this may in fact not be the case.

There is a more efficient method to determine if two estimates are significantly different from each other. The first step is to state that two estimates are statistically different if the difference between the two estimates is statistically different from zero. The second step is to calculate the standard error of the difference. The third step is to calculate the margin of error of the difference. Finally, the original difference between the estimates is compared to the margin of error of that difference. If the difference is greater than the margin of error, then you conclude that the two estimates are significantly different. If the difference is less than the margin of error, you conclude that the two estimates are not significantly different.

The following example will show how to conduct a statistical test. Suppose you want to know if the percentage of those enrolled in high school in one geographic area is significantly different from the percentage in another geographic area. Table 3 shows the estimates and margins of

error for the two geographic areas. The difference between the two estimates seems large, but the margins of error are also quite sizeable relative to the difference.

Table 3. Example of Statistical Testing – Percent of Those Enrolled in High School

Geographic Area	Estimate (Percent of total)	Margin of Error
Area 1	20.0	+/-5.0
Area 2	12.3	+/-4.7

To calculate the standard error of the difference you must calculate the standard error for each estimate. For margins of error calculated at the 90 percent confidence level, we can define the standard error for each estimate as the margin of error divided by 1.645.

$$SE(estimate) = \frac{MOE(estimate)}{1.645}$$

$$SE(Area 1) = \frac{5.0}{1.645} = 3.04$$

$$SE(Area 2) = \frac{4.7}{1.645} = 2.86$$

The standard error of the difference is the square root of the sum of the squares of the two standard errors (assuming the estimates are uncorrelated). The standard error of the difference for this example is equal to 4.16 as shown below.

$$SE(Diff) = \sqrt{SE(Area 1)^2 + SE(Area 2)^2}$$

$$SE(Diff) = \sqrt{3.04^2 + 2.86^2} = 4.16$$

To calculate the margin of error of the difference, simply multiply the standard error of the difference by 1.645. This is shown below.

$$MOE(Diff) = 1.645 \times SE(Diff)$$

$$MOE(Diff) = 1.645 \times 4.16 = 6.86\%$$

Finally, you should compare the difference of the estimates to the margin of error of the difference.

$$Diff = 20.0 - 12.3 = 7.7\%$$

$$MOE(Diff) = 6.9\%$$

The difference between the estimates is greater than the margin of error of the difference. Therefore, one can conclude that the two estimates are significantly different with 90 percent

confidence.

Quality Measures

In addition to the demographic, social, economic, and housing characteristics produced from the PRCS each year, the Census Bureau produces four statistics - sample size, coverage rates, response rates, and item allocation rates to help inform users of the quality of the ACS and PRCS estimates. The Census Bureau produces these quality measures annually at national and state levels to accompany each data release. Some of the quality measures describe nonsampling error. Examples of nonsampling error include errors due to respondent misinterpretation of a question, interviewer errors in asking the questions incorrectly or not asking them at all, and the inability to obtain information about all cases in the sample. The Text Box, *Where can I find more technical information about the design and quality of the PRCS?* includes additional references and links to the Quality Measures website.

Sample Size

The sample size measures on the ACS Quality Measures website summarize information for the housing unit sample and group quarters sample. Specifically, the website displays the number of initial addresses selected for housing units, the number of initial sample selected for group quarters people and the number of final survey interviews for housing units and group quarters people by state and Puerto Rico. The number of initial addresses selected for housing units is the sum of the 12 monthly address samples selected from the Master Address File for a given year. The number of initial sample selected for group quarters people is the sum of people living in group quarters that we did contact and those we expected to contact over the 12 months. The number of final interviews is the total number of interviews successfully completed by mail, telephone, or personal visit between January 1 and December 31 of a year. The difference between these two counts is accounted for by several factors including initial sample addresses that were determined to be ineligible for the survey (for example, they were found to be nonexistent or commercial units rather than housing units), sample addresses not selected in the subsample for personal visit follow up, and survey nonresponse.

You can find additional detail about the sample sizes used to produce 2006 PRCS estimates on the ACS homepage. If you click on the *About the ACS* tab at the top of the page, you will see a list of topics for which greater information is available. The *Sample Size* option, which you will find in the *Available in this Section* column on the left, will link you to a list of the 2006 PRCS sample sizes for all published counties and county equivalents. Puerto Rico Municipios are at the bottom of the list. You can also find sample size information on the number of initial addresses selected compared to number of final interviews by clicking on the *Quality Measures* link listed under *Technical Products* on the ACS homepage.

Coverage Error

There are two kinds of coverage error, under-coverage and over-coverage. Under-coverage exists when housing units or people do not have a chance of being selected in the sample. This includes people who were not selected to be part of the survey, and those who refuse to answer the questions in the survey. Over-coverage exists when housing units or people have more than one chance of selection in the sample, or are included in the sample when they should not have been. It is important to measure coverage error, because if the characteristics of under-covered or

over-covered housing units or individuals differ from those that are eligible to be selected, the PRCS may not provide an accurate picture of the population prior to the coverage adjustment.

The Census Bureau adjusts the final PRCS estimates for coverage error by controlling specific survey estimates to independent population controls. The Census Bureau's Population Estimates Program produces these independent estimates.

The Quality Measures website displays coverage rates as a measure of survey coverage. We currently produce these measures for Puerto Rico overall and by sex. We calculate coverage rates as the ratio of the PRCS estimate of the population for an area or group to the Population Estimates Program's independent estimate of the population for that group, times 100.

Nonresponse Error – Unit Level

The Census Bureau calculates survey response rates to measure unit nonresponse in the PRCS. Unit nonresponse is the failure to obtain the minimum required information from a housing unit in the sample for it to be counted as an interview. It occurs when respondents are unable or unwilling to participate; interviewers are unable to locate addresses or respondents; or when other barriers exist to completing the interview.

It is important to measure unit nonresponse because it has a direct effect on the quality of the data. If the rate of unit nonresponse is high, it increases the chance that the final survey estimates may contain bias. This will happen if the characteristics of nonresponding units differ from the characteristics of responding units.

The PRCS calculates a weighted survey response rate as the ratio of the estimate of housing units interviewed after data collection is complete to the estimate of all units that the survey should have interviewed. Separate rates are calculated for housing unit response and GQ person response. For housing units, this means all interviews after mail, telephone and personal visit follow-up. For GQ persons, this means all interviews after the personal visit. Interviews include complete and partial interviews with enough information to be processed. Unit nonresponse is the complement of the response rate. You arrive at it by subtracting the response rate from 100. We weight the survey response rate because not all housing units have the same probability of selection. These weights account for the probability of sampling and subsampling.

Nonresponse Error – Item Level

Item nonresponse occurs when a respondent fails to provide an answer to a required item, or when the answer given is inconsistent with other information. When data are missing, and the correct answers cannot be determined from other answers on the form, the Census Bureau uses imputation methods to determine acceptable answers. Imputation methods may use information from the person or from other household members. Imputation may also use answers from similar people or housing units that correctly provided this information. Imputation helps to reduce bias but does not eliminate it. The imputation rates for the PRCS are lower than for most other Census Bureau surveys, so the opportunity for bias to occur in the estimates is also low.

It is important to measure item nonresponse so data users can judge the completeness of the data on which the survey estimates are based. Final estimates can be adversely impacted when item

nonresponse is high, since bias can be introduced if the actual characteristics of the people who do not respond differ from those reported by respondents. Users should consider levels of item and unit nonresponse when judging any sample survey estimates.

The Quality Measures website displays item allocation rates for Puerto Rico. We define item allocation rates as the ratio of the total number of responses allocated for an item to the total number of required responses to that item. The 2006 item allocation rates are for the total resident population, which includes the housing unit, and group quarters populations. The 2000-2005 item allocation rates are for the housing unit only population.

Where can I find more technical information about the design and quality of the PRCS?

You can find more detailed information about the sample design, accuracy of the data, and estimation methodology at this link to the Accuracy of Data Statement:

<http://www.census.gov/acs/www/UseData/Accuracy/Accuracy1.htm>.

You can find more detailed information about the Quality Measures at this link to the Quality Measures Website:

<http://www.census.gov/acs/www/UseData/sse/index.htm>.

WHAT GEOGRAPHIC AREAS DO THE 2006 PRCS DATA PRODUCTS SUPPORT?

The Census Bureau strives to produce information for the geographic areas that are useful to a wide spectrum of data users. For example, the Census Bureau presents data summaries for Puerto Rico's legal and administrative entities such as Puerto Rico as a whole, *Municipios*, places and congressional districts.

Data products are also available for other geographic entities. In cooperation with state and local agencies, the Census Bureau identifies and delineates geographic entities referred to as, "statistical areas." These include *zonas urbanas*, Public Use Microdata Areas (PUMAs), census tracts and block groups, and more. The data user community, composed of individuals, businesses, and agencies at all levels of government, each with somewhat different needs, can select the geographic entity or set of entities that most closely represent their geographic area of interest.

The Census Bureau will only release 2006 PRCS data for legal, administrative, or statistical areas with estimated populations of 65,000 or more. The estimated populations used are the most recent estimates from the Census Bureau's Population Estimates Program. The thresholds for the 2006 ACS data products are based on the estimated total populations as of July 1, 2006. The next few sections will detail the types and numbers of geographic areas covered by the 2006 PRCS data products and will explain how to determine the geographic areas, for Puerto Rico, that are available.

Geographic Areas Published in 2006

Table 4 provides a list of the various geographic areas in Puerto Rico for which the Census Bureau will release 2006 PRCS estimates. The table also includes counts of the number of published entities by type of geographic area. Each of these areas has a total population of 65,000 or more. This table also provides total counts for each type or geographic area. From this information you can determine the percentage of all such geographic areas that qualify for single year estimates.

Next year, in addition to the 1-year estimates, the Census Bureau plans to release 3-year period estimates. These estimates will allow for the release of data for more geographic areas – areas with a population of 20,000 or more. Table 4 compares information about the geographic areas that will receive 1-year estimates this year with geographic areas that will receive 3-year estimates next year. For many types of geographic areas the release of 3-year estimates will allow a much larger number of geographic areas to qualify for data.

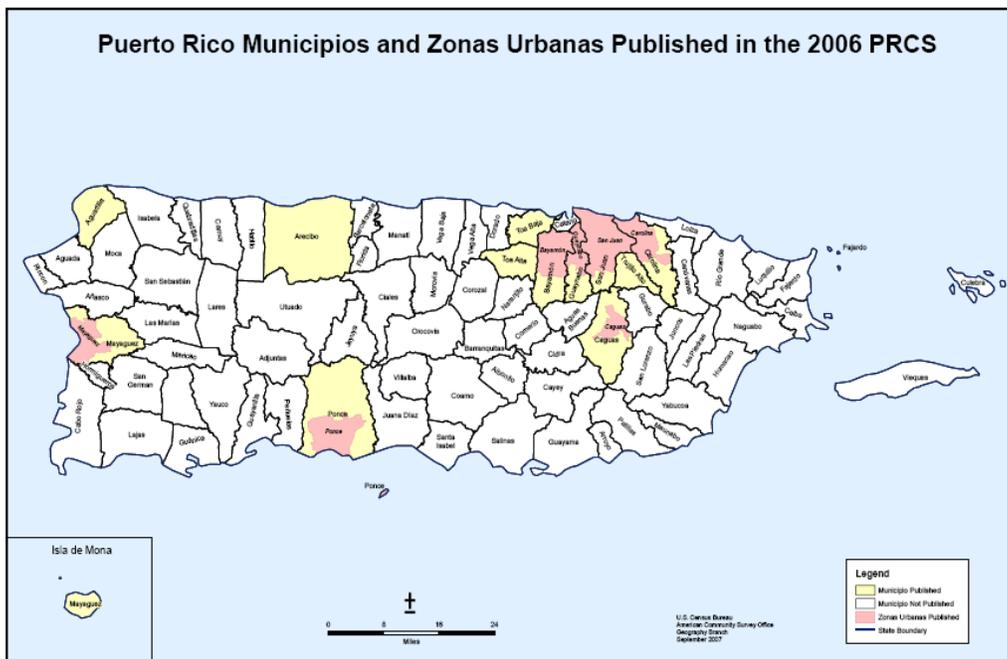
Table 4. Geographic Summary Levels receiving 2006 PRCS data

Code	Type of Geographic Area	Number of Geographic Areas with population of 65,000 or more *		Number of Geographic Areas with population of 20,000 or more *		Total Number of Entities for this type of Geographic Area
		Count	Percent of All Such Areas	Count	Percent of All Such Areas	
<i>Geographic Summary Levels</i>						
040	State	1	100.0	1	100.0	1
050	County (Municipios)	12	15.4	64	82.1	78
160	Places	7	3.1	16	7.1	226
500	Congressional District – 109 th	1	100.0	1	100.0	1
970	School District- Unified	1	100.0	1	100.0	1
795	Public Use Microdata Area	30	100.0	30	100.0	30
330	Combined Statistical Area	3	75.0	4	100.0	4
310	Metropolitan Statistical Area/ Micropolitan Statistical Area	8	57.1	12	85.7	14
312	Principal City	5	2.1	24	10.0	240
400	Urban Area	10	52.6	14	73.7	19
<i>Geographic Component – Each is applied to Puerto Rico as a whole</i>						
01	Urban	1	100	1	100	1
43	Rural	1	100	1	100	1
52	In Metropolitan or Micropolitan Statistical Area	1	100	2	100	2
55	Not in Metropolitan or Micropolitan Statistical Area	---	---	1	100	1
56	In Metropolitan Statistical Area	1		1	100	1
57	In Metropolitan Statistical Area- in Principal City	1		1	100	1
58	In Metropolitan Statistical Area- Not in Principal City	1		1	100	1
60	In Micropolitan Statistical Area	1		1	100	1

61	In Micropolitan Statistical Area- in Principal City	---		1	100	1
62	In Micropolitan Statistical Area- Not in Principal City	1		1	100	1
	TOTAL	86	---	178	---	625

Figure 5 identifies the 12 Puerto Rico *Municipios* receiving 2006 PRCS products. As this map indicates, *Municipios* that can receive PRCS estimates based on a single year sample are clustered in the more densely populated parts of the country. This leaves some areas without PRCS estimates for 2006. How can we provide more data for these areas? In the next few sections, we describe some of the additional geographic areas with a population of 65,000 or more that will receive 2006 PRCS data products.

Figure 5. *Municipios* and Zonas Urbanas with an Estimated Population of 65,000 or More



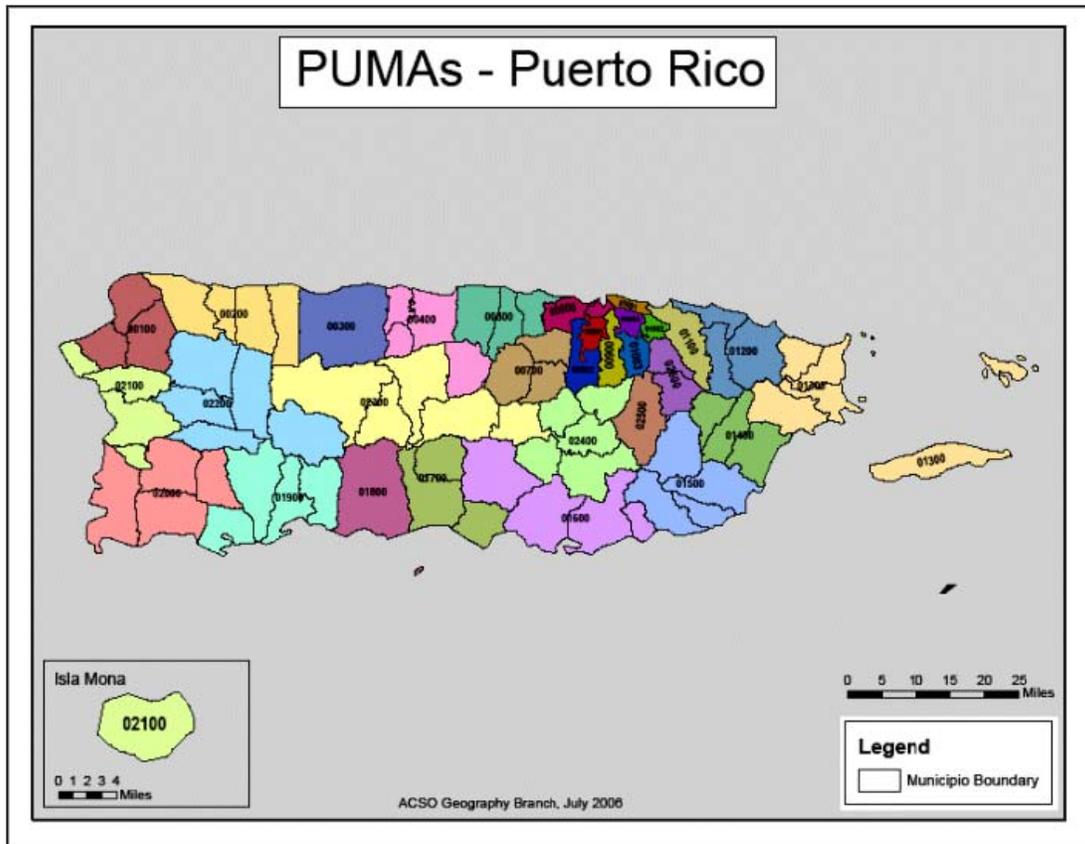
Public Use Microdata Areas (PUMAs)

Beginning in August 2006, the primary way to access data for rural areas in the PRCS will be through Public Use Microdata Areas (PUMAs), which are special, non-overlapping areas that partition Puerto Rico. Each PUMA contains a population of about 100,000. Puerto Rico’s governments drew the PUMA boundaries for the Census 2000 sample PUMS files. The Census Bureau will produce 2006 PRCS data products for all 30 PUMAs. Because Puerto Rico users defined these areas for the Census Bureau, they should be meaningful areas to many data users.

PUMAs allow us to publish data for additional areas aside from the 65,000 population threshold. Puerto Rico has 78 *Municipios*, but only twelve of these are large enough to receive estimates

from the 2006 PRCS. However, because Puerto Rico is also partitioned into 30 PUMAs, each of these areas will receive 2006 PRCS estimates. *Figure 6* illustrates this point.

Figure 6. Puerto Rico PUMAs Receiving 2006 PRCS Estimates



Metropolitan and Micropolitan Statistical Areas

Another geographic breakdown is metropolitan and micropolitan statistical areas. The general concept of a metropolitan or micropolitan statistical area is that of a core area containing a substantial population nucleus, together with adjacent communities having a high degree of social and economic integration with that core.

Metropolitan and micropolitan statistical areas comprise one or more entire counties. A metropolitan statistical area contains at least one population nucleus with a population of 50,000 or more. A micropolitan statistical area contains at least one population nucleus with 10,000 to 49,999 people. Like all other 2006 PRCS products, these areas must meet the population threshold of 65,000. Of the total 14 metropolitan/micropolitan areas in Puerto Rico, 8 are large enough to be published in the 2006 PRCS.

Components of the State Summary Levels

Another way that we can provide data for geographies that include areas that have not met the

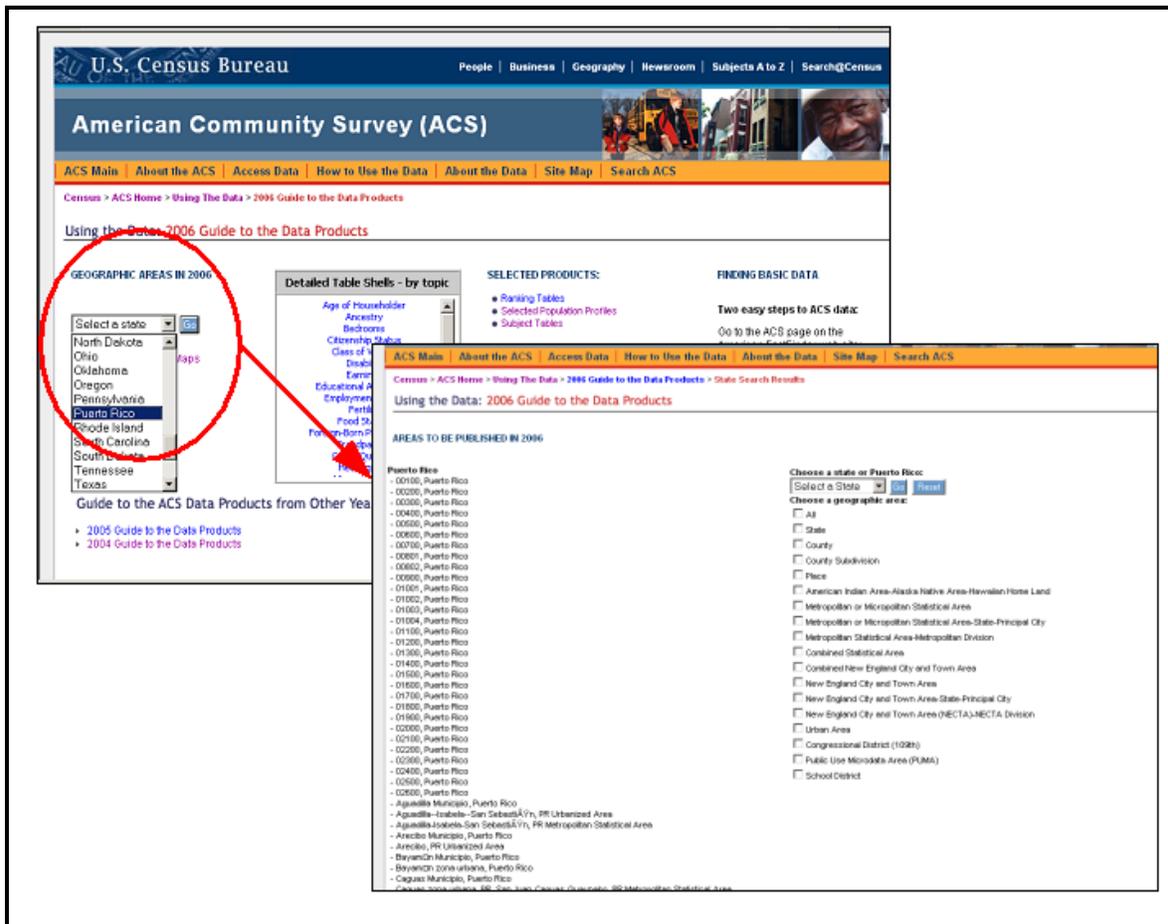
minimum population threshold is through components of the state summary levels. Some examples of these components are urban/rural, inside/outside a metropolitan statistical area, and inside/outside a micropolitan statistical area. For example, the urban/rural component will provide data on the urban versus rural area for Puerto Rico.

How Can Users Determine the Specific Geographic Areas that are Available?

Many users want to know what is available for their area. The PRCS homepage has tools to help you determine the geographic areas supported by the 2006 PRCS data products. You can check to see what is available for Puerto Rico or check to see if a specific area is included.

Begin by going to the main ACS website, www.census.gov/acs/www. The section titled “2006 ACS Data Products” provides a link to the “2006 Guide to the Data Products.” Clicking on this link directs you to a page where you are able to view a list of geographic areas published within each state including Puerto Rico by selecting a state from the dropdown menu. As seen in *Figure 8*, we have selected Puerto Rico. It is found alphabetically on the state list under Pennsylvania. Clicking on Puerto Rico creates a list of geographic areas that will be published for Puerto Rico based on the 2006 PRCS. Also, notice that on the right side of the screen, you can filter on areas below the state level.

Figure 8. Determining Which Geographic Areas are Included in the 2006 PRCS



THE 2006 PRCS DATA PRODUCTS

The 2006 PRCS release includes nine different data products. Similar to some of the products produced for the 2000 decennial census, the PRCS products show the characteristics of the Island's population and housing.

This section will describe the various 2006 PRCS data products. The descriptions highlight information on each product so that you can determine which product fits your particular need. Additionally, we provide tips for accessing and using the data. These products are available through the *American FactFinder* (AFF), accessible on the main Census Bureau website. The Text Box, *What are the Various PRCS Data Products?*, provides a basic description of each of these products.

What are the Various ACS Data Products?

Detailed Tables provide the most detailed data on all topics and geographic areas and are the foundation on which all other ACS data products are built.

Data Profiles summarize key demographic, social, economic, and housing characteristics.

Narrative Profiles provide information in a user-friendly text and graphic form that puts into words the main topics of the data profiles.

Subject Tables provide more detail than the data profiles and present over 40 summarized topic-specific tables.

Selected Population Profiles provide tabular profiles for about 200 different race, Hispanic origin, ancestry groups, and other groups such as children under 18 and people over 60.

Ranking Tables compare 81 population characteristics for the U.S., all states, the District of Columbia, and Puerto Rico.

Thematic Maps present information in the Geographic Ranking Tables on a map to show geographic relationships for these population characteristics.

Geographic Comparison Tables complement Geographic Ranking Tables by showing key population characteristics for geographic areas beyond the state and county level.

Public Use Microdata Samples provide data files that contain records of a sample of all housing units who responded to the survey.

Detailed Tables

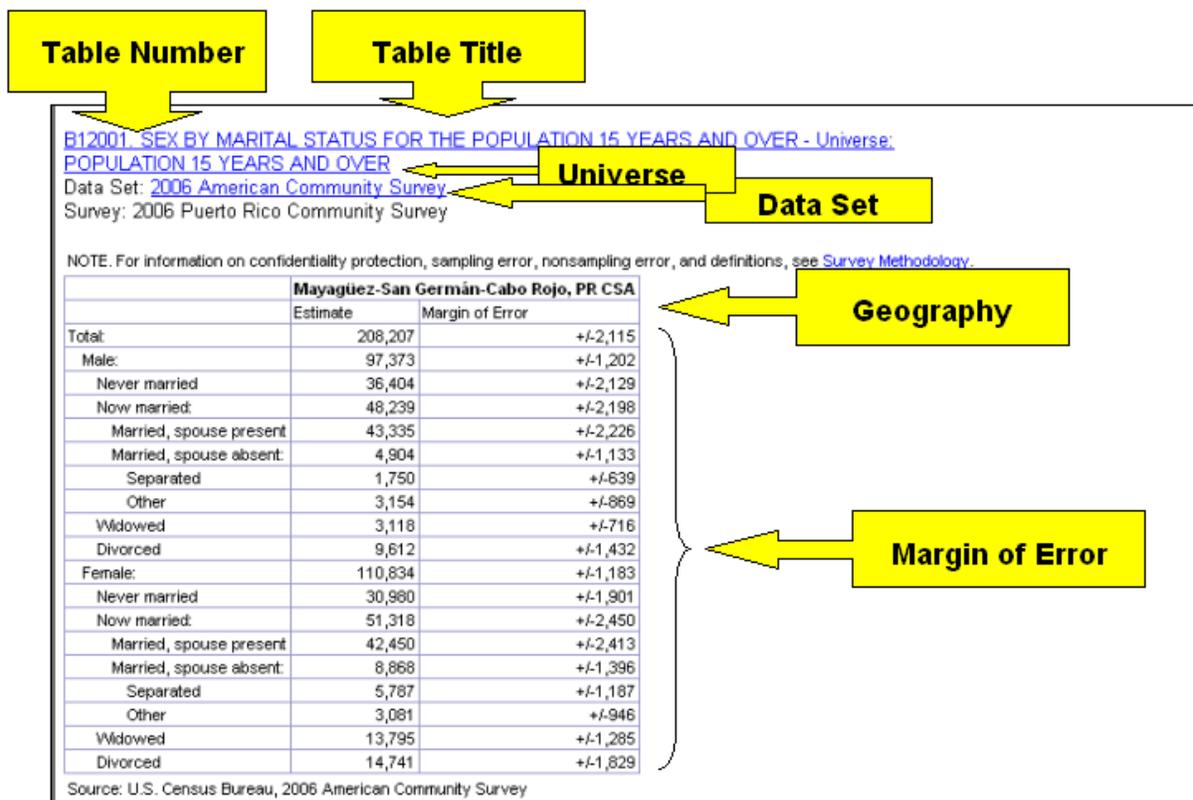
Detailed Tables show basic distributions of population and housing characteristics. These tables provide the most detailed data and are the basis for other PRCS products. Detailed Tables include selected tables iterated for race and Hispanic origin universes and tables that show imputation (allocation) rates for selected variables. We will release approximately 1,200 Detailed Tables for the 2006 PRCS.

Figure 9 is an example of a Detailed Table. The PRCS table title describes the variables in the table, any combination of variables for which estimates are presented, and the universe. In this example the variable of interest is sex by marital status, and the universe is the population 15 years of age and over. It is important to refer to the universe to understand what the statistics are describing.

The number indicated before the title is the table number and is a reference unique to each table. The data set indicates the survey name and year the data were collected. For the 2006 PRCS data, the data set will always read *2006 American Community Survey*. However, the survey will be noted on the line below as the *2006 Puerto Rico Community Survey*. We display the level of geography on the first row of the table. In this example, statistics for Mayagüez-San Germán-Cabo Rojo, Puerto Rico CSA are displayed. The table has an additional column titled “Margin of Error.” As we discussed earlier, a margin of error is the difference between an estimate and its upper or lower confidence bounds. We base all published margins of error for the PRCS on a 90 percent confidence level.

Detailed Table topics are varied, encompassing demographic, social, economic, and housing characteristics. For example, you can retrieve tables for such characteristics as sex by age by race and Hispanic origin; means of transportation to work by travel time to work; median number of rooms in housing units; school enrollment by level of school; and poverty status in the past 12 months by sex and age.

Figure 9. Example of a 2006 PRCS Detailed Table as Displayed on the *American FactFinder*



Data Profiles

Data Profiles are tables that provide estimates of selected summary characteristics for each geographic area. They rely on the data tabulated in the Detailed Tables. We produce Data Profiles for four distinct sets of characteristics - demographic, social, economic, and housing. *Figure 4* shows a data profile for social characteristics.

Changes to 2006 PRCS Data Profiles

PRCS data profiles were reorganized and renamed for 2006. The “Demographic Characteristics Profile” was dropped and replaced with the “ACS Demographic and Housing Estimates” profile. PRCS estimates previously included in the Demographic Characteristics Profile were moved either to the “ACS Demographic and Housing Estimates” profile or to the “Social Characteristics” profile.

ACS Estimates Now Found in the ACS Demographic and Housing Estimates Profile:

- Sex and Age
- Race
- Hispanic Origin
- Total Housing Units

ACS Estimates Now Found in the ACS Social Characteristics Profile:

- Households by Type
- Relationships

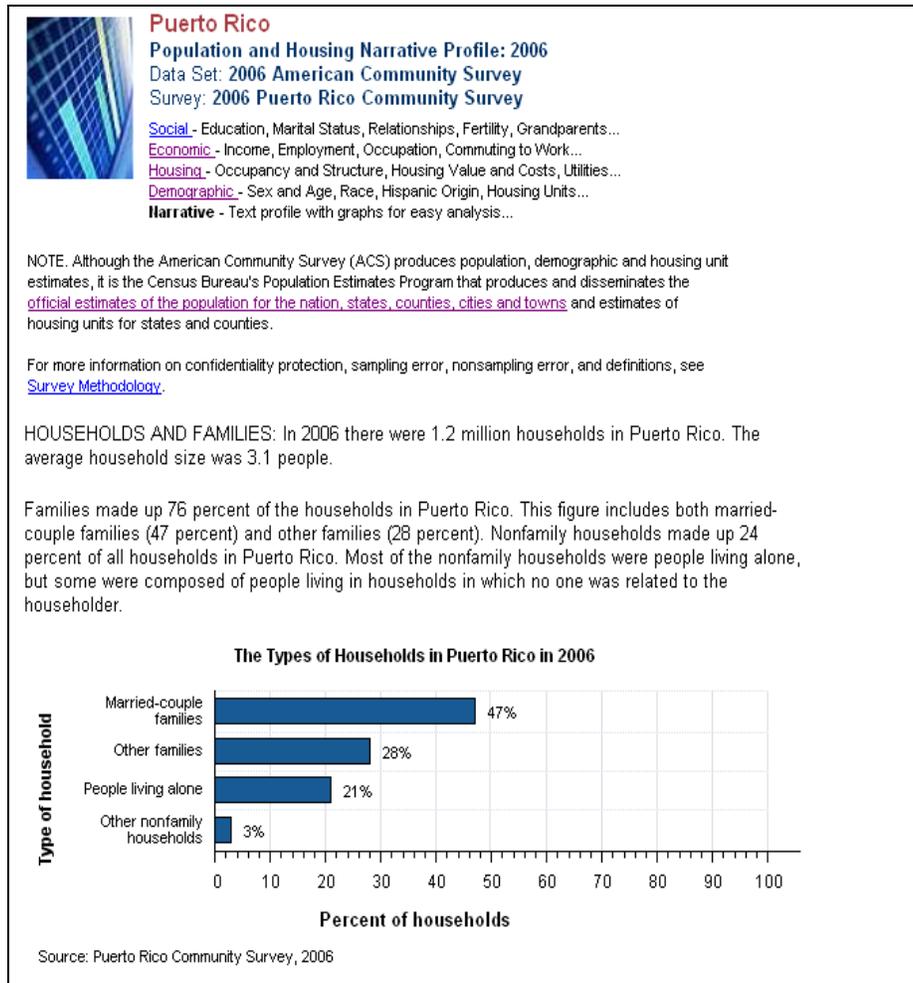
Narrative Profiles

Narrative Profiles include Data Profile information displayed in a narrative format that summarizes data on a wide array of subjects. These narratives are easy-to-read, computer-produced profiles that put into words the main topics from the Data Profiles for the general-purpose user. As illustrated in *Figure 10*, Narrative Profiles are plain-language descriptions with simple graphs to complement the standard Data Profiles.

Subject Tables

Subject Tables show more detail than is available in the Data Profiles. Generally, they present percent distributions for a few key universes, estimates of each universe total and the associated margins of error. Subject Tables display measures such as medians and ratios where appropriate. There are approximately 50 summarized topic-specific Subject Tables, which include such topics as housing financial characteristics, relationships by households and families, and means of transportation to work by selected characteristics. You will find a list of 2006 PRCS Subject Tables on the ACS homepage in the *2006 Guide to the Data Products*, which can be located under the *2006 ACS Data Products* heading.

Figure 10. Example of a 2006 PRCS Narrative Profile as Displayed on the American FactFinder



Selected Population Profiles

Selected Population Profiles provide the user with ready-made data tabulations on a specific population or group of interest. There are two types of Selected Population Profiles. The first type provides characteristics of race, ethnic and ancestry groups such as Dominicans. The second type provides characteristics for groupings that are based on age or other characteristics such as children under 18, and the population age 60 years and older. A Selected Population Profile can be created when the population group of interest is 65,000 or more and the geographic area of interest has a population of 1 million or greater. In 2006, we expect to produce most Selected Population Profiles for Puerto Rico at the Island level. The Text Box, *Which Selected Population Profiles are Being Produced in 2006?* lists some of the Selected Population Profiles that we plan to publish for Puerto Rico in 2006.

Which Selected Population Profiles are Being Produced in 2006?

- Various Race, Ethnic, and Ancestry Groups
- The Foreign-Born Population by Period of Entry and by Region of Birth
- The Native and Foreign-Born Populations
- People by Language Spoken at Home
- The Population 60 Years and Over
- The Population 65 Years and Over
- Children
- Teenagers
- Grandparents
- Grandchildren
- Civilian Noninstitutionalized Population by Disability
- Workers 16 Years and Over
- People at Specified Levels of Poverty in the Past 12 Months

Group Quarters

A group quarters is a place where people live or stay, in a group living arrangement that is owned or managed by an entity or organization providing housing and/or services for the residents. This is not a typical household-type living arrangement. These services may include custodial or medical care as well as other types of assistance, and residency is commonly restricted to those receiving these services. People living in group quarters are usually not related to each other. Group quarters are classified into two groups: institutionalized and noninstitutionalized.

Most 2006 ACS data products will include both the population in housing units and the population in group quarters. The two combined represent the total population. The 2005 ACS data products included only the population in housing units, and 2006 is the first year of expanded sample to include data for the group quarters population. The Text Box “Group Quarters” describes the types of group quarters.

The Census Bureau plans to release a number of national level selected population profiles describing the characteristics of the group quarters population. The profiles will include summaries of the following:

- characteristics of the total group quarters population
- characteristics broken out for the institutionalized group quarters population and the noninstitutionalized group quarters population
- characteristics for the group quarters population living in the three major group quarter types (adult correctional facilities, nursing facilities, and college/university housing)
- characteristics of the total group quarters population and the institutionalized and noninstitutionalized group quarters populations for census regions and divisions and other selected sub-national areas

GROUP QUARTERS

Institutionalized Group Quarters

Includes facilities for people under formally authorized, supervised care or custody at the time of interview

- Adult Correctional Facilities
- Nursing/Skilled Nursing Facilities
- In-patient Hospice Facilities
- Mental (Psychiatric Hospitals)
- Group Homes for Juveniles
- Residential Treatment Centers for Juveniles

Noninstitutionalized Group Quarters

Includes facilities that are not classified as institutionalized group quarters

- College/University Housing
- Group Homes Intended for Adults
- Residential Treatment Facilities for Adults
- Workers' Group Living Quarters
- Job Corps Centers
- Religious Group Quarters

Thirty-five states and Puerto Rico had large enough sample sizes to meet the 2006 ACS publication threshold. For next year's release of 3-year estimates (based on 2005-2007 data), we hope to release Group Quarters profiles for every state. The Text Box "*Characteristics For 2006 Group Quarters Data*" describes the group quarters information we plan to publish in 2006.

Characteristics for 2006 Group Quarters Data

National Level Selected Population Profiles Describing the Group Quarters Population

- Characteristics of the total group quarters population
- Characteristics broken out by institutionalized and noninstitutionalized group quarters populations

National Characteristics for the Three Major Group Quarter Types

- Adult Correctional Facilities
- Nursing/Skilled Nursing Facilities
- College/University Housing

Characteristics for Selected Sub-National Areas

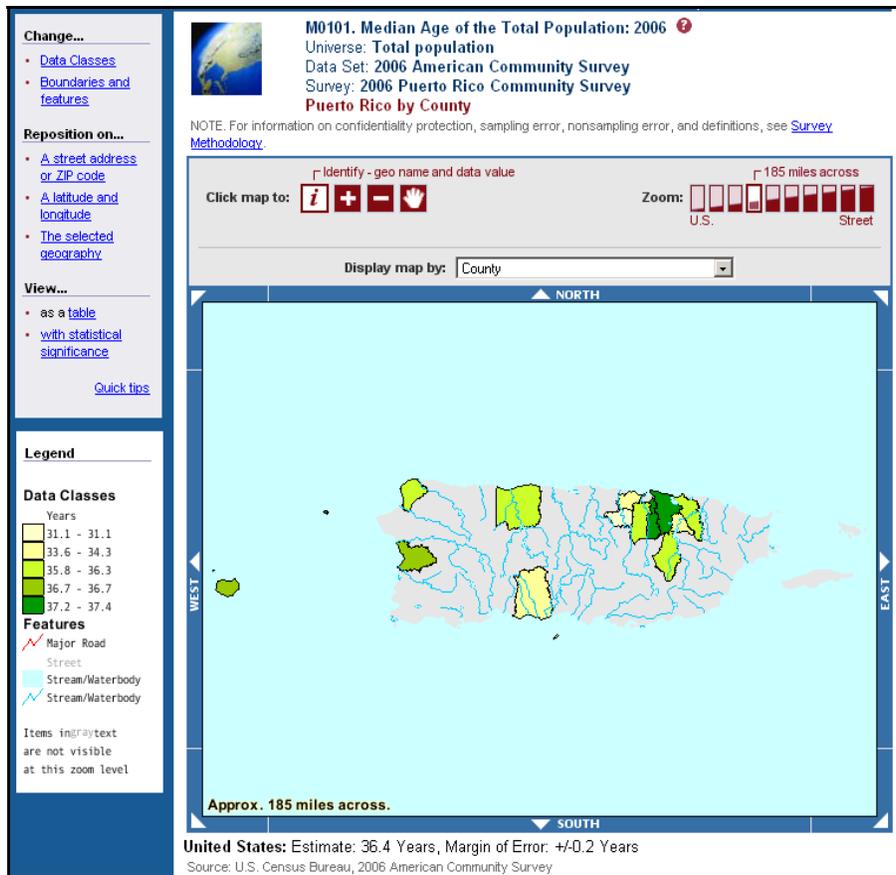
- 9 Census Divisions
- 35 States
- Puerto Rico

Thematic Maps

We base the Thematic Maps on the state-level Geographic Ranking Tables. They have the added advantage of visually displaying on a map the geographic variation and patterns of a key summary or derived measure. The shading intensity on a Thematic Map is directly related to the value associated with the derived measure listed in the map's legend under data classes. Lighter shading is used for the lower derived measure values. As the shading becomes darker and more intense, the derived measure's values increase.

Similar to the Geographic Ranking Tables, data users can easily view the statistical significance of comparisons among states by simply clicking the "with statistical significance" link to the left of the Thematic Map. *Figure 12* depicts an example of a Thematic Map, with statistical significance shown for Puerto Rico.

Figure 12. Example of a 2006 PRCS Thematic Map as Displayed on the *American FactFinder*



Geographic Comparison Tables

Geographic Comparison Tables complement Geographic Ranking Tables by showing characteristics for various geographic areas. You can use Geographic Comparison Tables to compare geographic levels beyond the Island level. For example, users can compare places, PUMAs, urban/rural areas, and areas inside versus outside metropolitan and micropolitan statistical areas.

Public Use Microdata Sample (PUMS)

Public Use Microdata Sample (PUMS) files are data files that contain records of a sample of all housing units that the survey interviewed. PUMS files are available as comma-delimited files and as SAS datasets and are available for downloading from the main AFF website. Simply select a data type, data format, and state, and you will have access to public-use 2006 PRCS data.

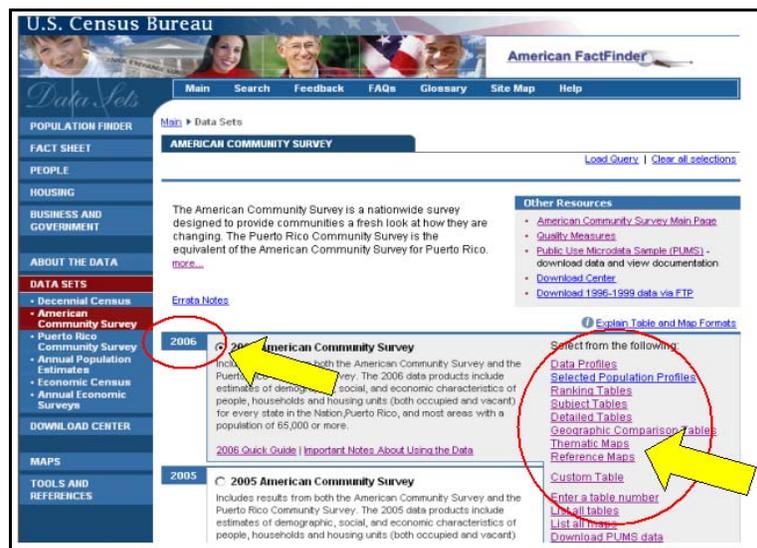
ACCESSING THE 2006 PRCS DATA PRODUCTS

To access the 2006 PRCS data products, begin by visiting the main Census Bureau website, www.census.gov. On the main page, you will see a link to the *American FactFinder*, which is the vehicle for accessing Census Bureau data products. On the AFF page, find the data title that says “American Community Survey,” and click on “get data.” Although it says American Community Survey, these are the steps to access the data for the PRCS, because we are accessing the data of the PRCS in English.

The following page, seen in *Figure 13*, will allow you to select the ACS data year of interest. To access the 2006 products, make sure you select, “2006 American Community Survey.” From there you will notice a list of products on the right: Data Profiles, Selected Population Profiles, Geographic Ranking Tables, etc., which are all available for the 2006 PRCS. Select the data product you are interested in retrieving.

For instance, if you are interested in comparing the average household size by Municipio for Puerto Rico you will want to create a Geographic Comparison Table. To access a Geographic Comparison Table you first need to select the geography of interest. For this example, you would select “State” under geographic type. The next box contains various geographic breakdowns for creating a Geographic Comparison Table. You can compare geographies other than counties, but for this example, you would select “State – County.” Then click “Next.”

Figure 13. Selecting 2006 PRCS Data Products from *American FactFinder*



By clicking “Next,” you arrive at the “Table” screen. Here you select your subject of interest. Because you are interested in comparing the average household size by Municipio for Puerto Rico, you highlight “Average Household Size.” To retrieve the data table, you click “Show Result.”

Figure 14 is the resulting Geographic Comparison Table. The table compares the average household size for each of the twelve Municipios, with a total population of 65,000 or more, in Puerto Rico. These estimates are based on the 2006 PRCS.

Figure 14. Example of a Geographic Comparison Table Comparing the Average Household Size by Municipio for Puerto Rico, Based on the 2006 PRCS

Puerto Rico -- County
GCT1105. Average Household Size: 2006
Universe: Households ⓘ
 Data Set: 2006 American Community Survey
 Survey: 2006 Puerto Rico Community Survey

NOTE: For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

Geographic area	Average	Margin of Error
Puerto Rico	3.13	+/-0.02
MUNICIPIO		
Aguadilla Municipio	3.35	+/-0.16
Arecibo Municipio	3.06	+/-0.13
Bayamón Municipio	2.96	+/-0.06
Caguas Municipio	2.90	+/-0.08
Carolina Municipio	2.94	+/-0.08
Guaynabo Municipio	2.95	+/-0.09
Mayagüez Municipio	2.82	+/-0.12
Ponce Municipio	3.12	+/-0.10
San Juan Municipio	2.73	+/-0.05
Toa Alta Municipio	3.61	+/-0.16
Toa Baja Municipio	3.14	+/-0.11
Trujillo Alto Municipio	3.27	+/-0.12

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

While other tabulations may be more complex, you would follow these basic steps to access most 2006 PRCS data products. For other useful tips on using the 2006 ACS data products, visit the Guide to the New ACS Data Products and the AFF Tutorial.

The Guide to the New ACS Data Products is accessible from the ACS homepage. The box in the top right-hand corner of the page will direct you to http://www.census.gov/acs/www/Products/users_guide/index.htm.

This link provides information on key points to note about the 2006 release, such as the geographic areas published, the topics covered, and new 2006 data products. This guide is a great resource for learning more about how to use the 2006 data products.

You can find additional user assistance at the AFF web site, which offers a set of tutorials that

focus on topics such as using AFF search features, working with AFF tables, creating custom tables, and creating and using maps. Look for these tutorials under the “Help” tab on the main AFF web page.

RELEASE SCHEDULE FOR THE 2006 PRCS DATA PRODUCTS

The release of 2006 ACS data products, for Puerto Rico, began in August 2006. The Census Bureau will release 2006 PRCS data in a phased approach. Table 5 provides a release schedule. We will release the data for Puerto Rico concurrent with the data for the United States. Each release includes various data products such as Detailed Tables, Geographic Ranking Tables, and Thematic Maps, among others.

Table 5. 2006 PRCS Data Product Release Schedule

Release Date	Type of Data Product
August 28	Income, Earnings and Poverty Data
September 12	Social, Economic, and Housing Characteristics; Demographic and Housing Estimates
September 27	Selected Population Profiles for Race, Ethnicity, and Ancestry Groups; Workplace Detailed Tables; Group Quarters Data Profiles

HOW SHOULD USERS INTERPRET PRCS RESULTS?

Data users have asked if they need to interpret PRCS data in a way that differs from how they interpreted Census 2000 long form sample data. While some differences are important to note, in many ways and in many areas the 2006 PRCS estimates will be quite similar to Census long form sample estimates in their interpretation. You should consider three factors when interpreting any survey or census results – the target population, the time period that the estimates describe, and the reference periods covered by the specific questions.

PRCS Target Population

Interview and residence rules define the universe – or target population – for a survey. These rules identify the collection units and the people eligible for inclusion in the survey; this is the universe that the survey is designed to describe. The sampling frame reflects this choice of universe, as do the instructions on the forms and in the procedures used by survey interviewers and survey respondents. The 2006 PRCS is restricted to the population living in housing units. Population living in group quarters - places such as dormitories, prisons, and nursing homes are NOT included in the 2006 PRCS. The PRCS universe contrasts with the resident population, which includes persons living in group quarters, and users need to be aware of this universe difference. Like the decennial census, the PRCS interviews the population residing in Puerto Rico without regard to the person’s legal status or citizenship.

The PRCS includes everyone who is living at the PRCS sample address unless this address is determined NOT to qualify as his or her current residence. We describe the PRCS residence rule

concept in detail in the Text Box, *Who is considered a PRCS Resident?*

Who is considered a PRCS Resident?

The goal of the PRCS is to be able to describe the characteristics of all types of communities every year. Given this goal, it is critical to decide whom the survey should treat as a resident of the community. We designed the PRCS to reflect the population that uses community resources.

The PRCS residence rules include as residents those people who are currently living or staying at the PRCS sample address and whose expected length of stay exceeds two months. The PRCS also includes people who are staying for less time but who have no other place to live or stay. Finally, the PRCS includes people who usually live at the sample address but are away for a short period of time (two months or less) when the household is contacted.

To avoid including people who are too transient, the PRCS does not consider people eligible to be interviewed if they live or stay at the sample address for two months or less or are currently away and plan to be away for more than two months.

All people staying in the GQ facility when the roster of residents is made and sampled are eligible to be interviewed in the ACS. The GQ sample universe will include all people residing in the selected GQ facility at the time of the interview, regardless of their length of stay in the GQ facility.

Period Estimates

The PRCS produces period estimates. Period estimates are designed to describe the characteristics of an area over a set time frame. The 2006 PRCS estimates describe the characteristics of the housing and population of an area for the time period that spans January through December of 2006. In order to estimate the characteristics that best represent 2006, the PRCS collects survey information continuously nearly every day of the year and aggregates the results over the entire time period, instead of choosing one particular point-in-time to collect the data, which may or may not represent the entire year very well. You can think of most 2006 PRCS estimates as representing the average characteristics of an area over calendar year 2006. Period estimates contrast with point-in-time estimates that describe the characteristics of an area on a specific date. The 2000 Decennial Census was designed to measure the count of the population and housing as of April 1, 2000.

We published the characteristics of many different types of areas in 2006. Some areas have consistent population characteristics throughout the entire calendar year. People may move in and out, but the overall population level and the characteristics of the area stay about the same throughout the year. Other areas may experience seasonal changes in population. These areas may include large numbers of people who stay only for a season. These areas might look very different depending on the time of year that a survey was taken. A third set of areas is the one that experience a dramatic change in the population during the course of the year. We designed the PRCS to estimate the characteristics of all these types of areas, recognizing the potential for change in population size and character over time. The period estimates produced from the

PRCS describe the average population and its characteristics for the full year.

Stable Areas

The 2006 PRCS data for areas with stable populations will be very similar to data from a decennial census. Neither the PRCS residence rules nor the use of period estimates in the PRCS should influence the interpretation of these data. We do not expect the population estimates used as survey controls for these areas to have an appreciable impact on the final estimates.

Seasonal Areas

In areas with large seasonal differences in population, the PRCS estimates will reflect the characteristics of the resident population who live there for a portion of the year as well as the resident population who live there year round. The PRCS estimates will reflect both groups in proportion to their length of stay in the area. The population estimates that control the final PRCS estimates are likely to influence the basic demographic characteristics of age, sex, race, and Hispanic origin estimated by the survey itself. This will be meaningful only when the seasonal population is large relative to the year round population and their basic demographic characteristics differ from the year round population. Because we will only release 2006 PRCS products for areas with populations of 65,000 or more, we do not expect seasonality to be a major issue. None of the geographic areas covered by the 2006 PRCS have substantial proportions of seasonal populations.

Reference Periods

Data users should look at each PRCS question and understand the reference period that is implied by the data. This will allow for a more complete understanding of how to interpret the results. Under the *Survey Basics* tab on the ACS homepage, you will find links to the 2006 PRCS questionnaire. Reviewing this questionnaire will allow you to understand better the specific reference periods. Keep in mind that all PRCS estimates are yearly averages that refer to some period of time relative to calendar year 2006.

Most PRCS questions do not stipulate a reference period. Whenever this is the case, the reference period is the interview date. This is true for questions such as tenure, citizenship, marital status, relationship, veterans' status, and more. Because we conduct PRCS interviews throughout the year, the estimates for these questions are reflective of the full year. Users should interpret these estimates (for example the proportion of renters) as describing the average proportion of renters in 2006. It is a yearly average measure of tenure.

Other questions specify a period of time (such as "last week" or "in the last 3 months") relative to the date of interview. This is true for the place of work, employment status, cost of electricity, school enrollment questions as well as other questions. You should still interpret these estimates as yearly averages but averages covering a slightly different period of time than the calendar year. For example, school enrollment asks if the person attended school or college in the last 3 months. The overall reference period for the 2006 PRCS estimates is therefore the entire calendar year 2006 plus the last few months of 2005.

Comparisons with Census 2000

There are global differences that exist between the PRCS and Census 2000. These include differences in residence rules, universes, and reference periods. The Census Bureau subject matter specialists have reviewed all of these factors and have determined that for most population and housing subjects, comparisons can be made.

Comparisons with 2005 ACS data

A primary limitation of comparing 2006 PRCS data with 2005 PRCS data is the differences in the target populations. The 2006 PRCS data include the population living in both housing units and group quarters. The 2005 PRCS only includes the housing unit population. In areas where you feel that the contribution from group quarters is limited, it is reasonable to make comparisons with the 2005 PRCS. For characteristics that the 2006 PRCS tabulated exclusively for the household population, such comparisons are also reasonable. The ACS homepage includes a link a comparison document that lends guidance on comparing the 2006 ACS and PRCS to other data sources.

ADDITIONAL RESOURCES

While we hope that this user guide has answered many of your questions about the 2006 PRCS data and how it should be used, we realize that many users will need additional resources in order to best use and interpret the 2006 PRCS data.

The Census Bureau has developed several additional tools that you can find on the ACS web site. The *ACS Design and Methodology* report describes the basic design of the ACS and PRCS and details the full set of methods and procedures used to collect, process, and produce 2006 PRCS data. The appendices contain replications of all of the materials used in data collection, including the questionnaire. You can find this report under the *Technical Products* tab on the ACS web site.

We discussed the *ACS Guide to New Data Products* earlier. It provides a wealth of information about the 2006 data products. You can access this information from the ACS main page.

The Partnership and Data Services Program in the Census Bureau's regional offices can provide assistance in accessing and using 2006 ACS and PRCS data. The Boston Regional Office manages the PRCS. You can reach your the partnership and data services specialists at the for the Boston Regional Offices at Boston 1-800-562-5721.