

PARTMENT OF COMMUNITY PLANNING, HOUSING & DEVELOPMENT
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POVERTY

2005-2009 AMERICAN COMMUNITY SURVEY

June 2011



Department of Community Planning, Housing and Development
Planning Division
Planning Research and Analysis Team

Arlington Vision

“Arlington will be a diverse and inclusive world-class urban community with secure, attractive residential and commercial neighborhoods where people unite to form a caring, learning, participating, sustainable community in which each person is important.”

— Arlington County Board

INTRODUCTION

2005-2009 American Community Survey

This report, *Poverty, 2005-2009 American Community Survey*, is the second in a series to examine the 2005-2009 American Community Survey (ACS) 5-Year Estimates for Arlington County, Virginia. This report compares the estimates of the 5-Year ACS to the 2000 Census long form survey. Other report topics in this series include: age, households and families, race and ethnicity, income, employment, education, housing, language, commuting, and foreign population.

The ACS is an annual survey, administered by the U.S. Census Bureau, that samples 3 million residential addresses throughout the United States. It replaces the long-form survey previously used in the decennial census. The 2005-2009 ACS is not an average of five years nor 60 months, rather the data collected are aggregated and spread evenly across the entire period represented without over-representing any particular month or year.

Availability

The ACS provides time period estimates on population characteristics that were collected over one, three, and five years. Figure 1 shows the collection dates for each of the published ACS data products. The data produced in the one-year estimate are most current to the year of collection. However, the 5-year estimate provides data that are not as current but more precise and reliable, due to a larger sample size.

Also shown in Figure 1, each period estimate is only published for areas with minimum population requirements. For example, the one-year estimate provides data annually for city/county geographic areas with populations of at least 65,000. The 2005-2009 ACS 5-year estimate, released in December 2010, is the first set of ACS data released at the Census tract and block group geographic level since the 2000 Census.

Figure 1: ACS Published Data

ACS Estimate	Data Collected	Published for Areas
2009 ACS (1-Year)	1/1/2009-12/31/2009	Populations 65,000+
2009 ACS (3-Year)	1/1/2007-12/31/2009	Populations 20,000+
2009 ACS (5-Year)	1/1/2005-12/31/2009	Almost any size

Sample Size

While the ACS replaces the decennial census long form, it is administered to a much smaller sample of the population. The 2005-2009 ACS 5-Year Estimate, data used for this and subsequent topic reports, sampled 12,285 individuals out of an estimated 206,405 Arlington residents. This sample size represents about 5.95 percent of Arlington's population. The sample size for the 2000 Census long form was more than double the ACS sample at 12.8 percent.

Margin of Error and Coefficients of Variation

Since the period estimates are based on a sample of the population, there is a margin of error (MOE) associated with each estimate. The MOE provides information on how much sampling error is associated with each estimate. A larger MOE indicates a less reliable estimate, relative to the size of the estimate. Since estimates vary, it can be difficult to decipher whether an estimate is reliable using the MOE.

Coefficients of variation (CV) are values that represent a percentage of variability and determine the reliability for an estimate. The CV is a ratio of the standard error to the estimated value. Estimates with lower CV are more reliable. For this series of reports, the CV will be used to determine if the estimates are reliable. Estimates with CV values below 5.00 are considered to be very reliable. For this and subsequent topic reports, estimates with CV values between 5.00 and 15.00 are considered slightly less reliable. Estimates with CV values higher than 15.00 are not considered reliable.

Significance Testing

Significance testing is important for determining whether the difference between the 2000 Census and 2005-2009 ACS 5-Year estimates are likely due to random chance (sampling error) or likely represent a true difference that exists in the population as a whole. This report identifies the statistical significance of the change in the estimates at a 90 percent confidence level. The U.S. Census Bureau uses standards set by the U.S. Office of Management and Budget for the categories of race and ethnicity listed on the survey.

POVERTY OVERVIEW

2005-2009 American Community Survey

The U.S. Census Bureau follows the standards of the Office of Management and Budget to produce ACS poverty estimates, which are used to allocate funding for many federal programs. A set of dollar value thresholds based on family size and composition are used to determine poverty levels. If a family's total income is less than the dollar value for a specific threshold, then all members of that family are considered to be living below the poverty level. For example, the 2009 poverty threshold for a family of four people with two children under the age of 18 is \$21,756. If a family of that size and composition had an income of less than \$21,756, then all family members would be considered living below the poverty level.

The 2005-2009 ACS 5-Year Estimate shows that the

vast majority of Arlington residents live above the poverty levels, with only 7.2 percent of residents living below poverty. Figure 2 shows the share of those above and below the poverty threshold. There are 11.2 percent more females than males with incomes below the poverty level in Arlington County as Figure 4 shows. The CV values for poverty by sex are slightly high but can still be considered reliable estimates.

Most of the individuals determined to be living in poverty are between the ages of 18 to 64. Within this age group, those ages 18 to 34 represent 39.3 percent of those below poverty. Those ages 65 and over make up 12.2 percent of those with incomes below poverty. The CV values for poverty by age groups are low enough to be considered reliable estimates.

Figure 2: Income in the Past 12 Months

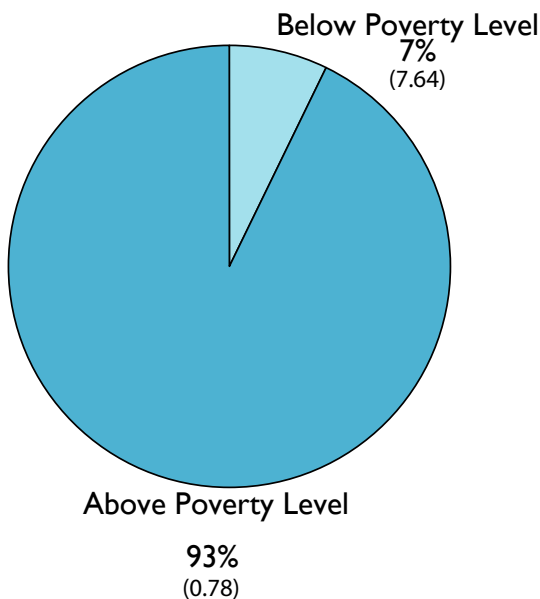
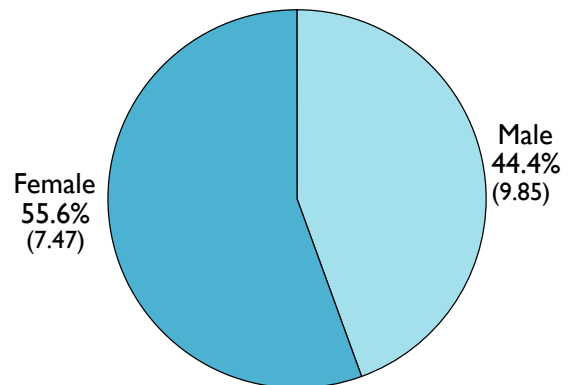


Figure 3: Below Poverty Level By Age

Below Poverty Level	Persons	Percent	CV
Under 18	3,158	21.7%	(7.52)
18 to 64	9,618	66.1%	(4.08)
65 and over	1,769	12.2%	(4.20)

Figure 4: Below Poverty Level By Sex



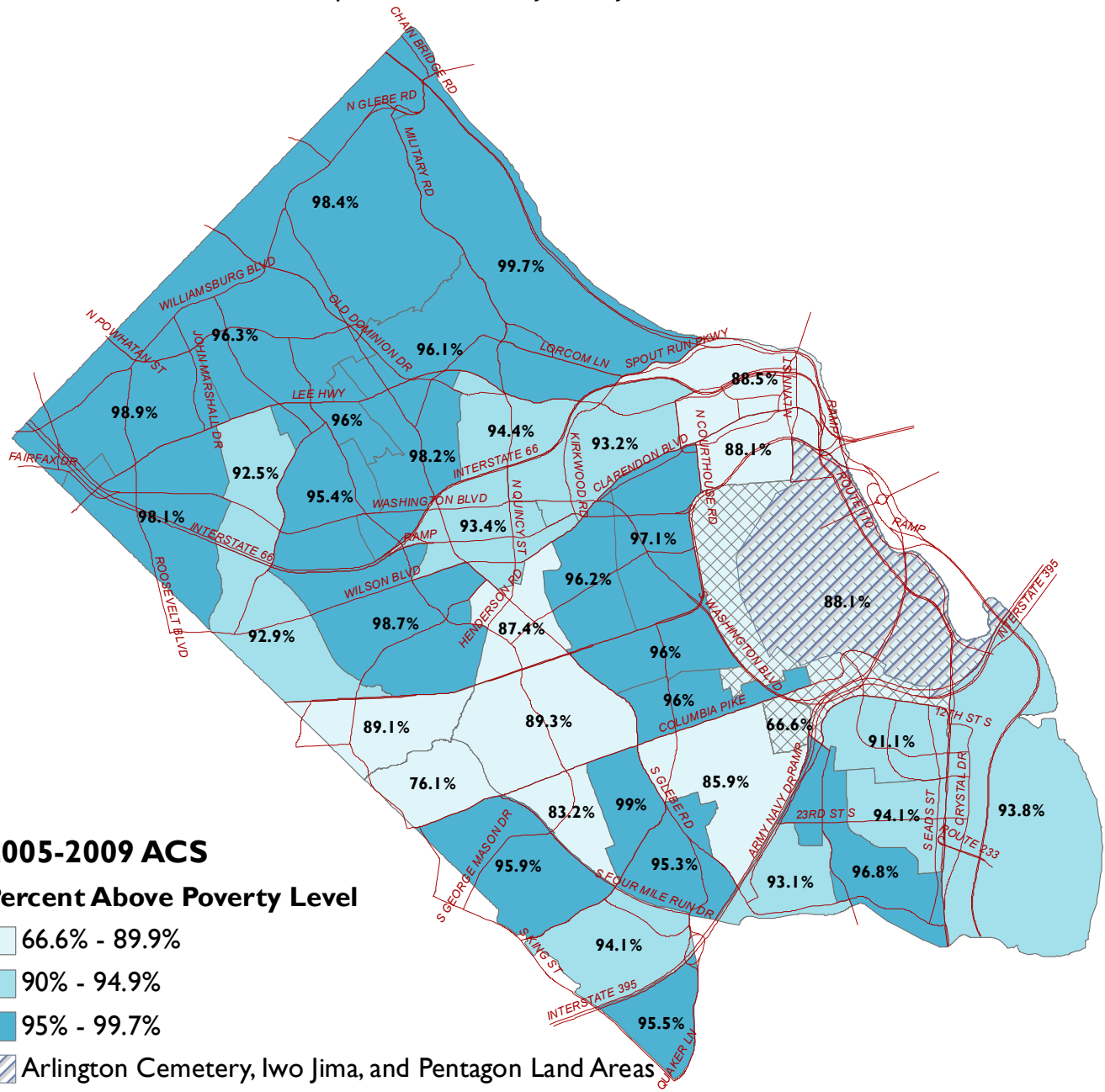
ABOVE POVERTY LEVEL

2005-2009 American Community Survey

According to the 2005-2009 ACS, the majority of Arlington residents live above the poverty level. The percentage of those living above the poverty level was mapped below due to high CV values (estimates not reliable) for those living below the poverty level. Most of the census tracts have above 90 percent

of its population living above the poverty level. The areas with lower percentages include Rosslyn, tracts around Columbia Pike, and the Buckingham area south of Ballston. It can be assumed that these areas have higher percentages of those living below the poverty level.

Figure 5: Percent of 2005-2009 ACS Population Above Poverty Level by Census Tract



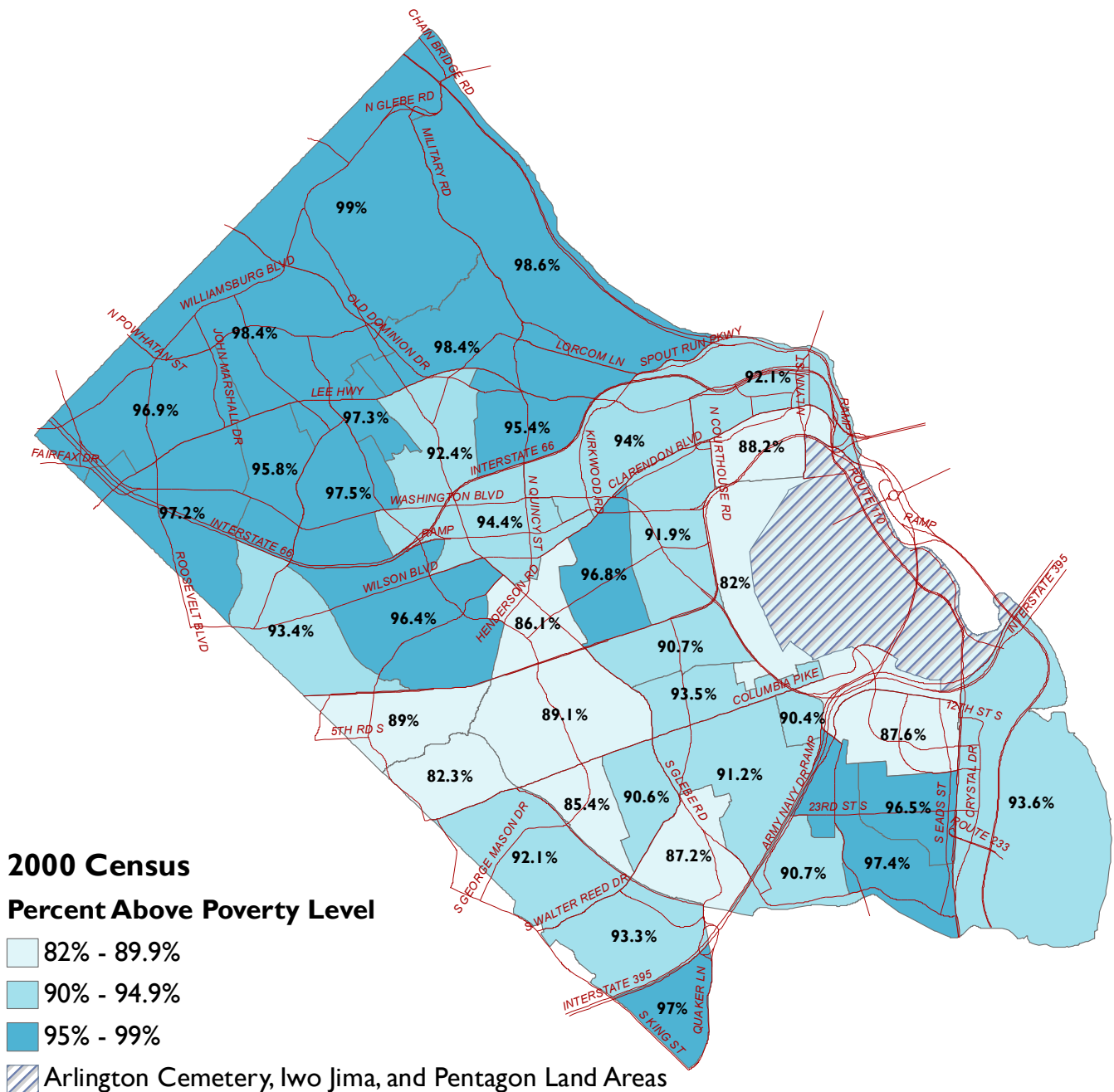
ABOVE POVERTY LEVEL

2000 Decennial Census

Figure 6 below maps the percentage of the population above the poverty level by census tract for the 2000 Census. This map is very similar to the 2005-2009 ACS map on the previous page. However, the tracts to the north and south of Columbia Pike had a smaller

percentage of those living above the poverty level in 2000 compared to 2005-2009. It can be assumed that in 2000, there were more residents living below the poverty level in the tracts along Columbia Pike, than there were in 2005-2009.

Figure 6: Percent of 2000 Census Population Above Poverty Level by Census Tract



AGE

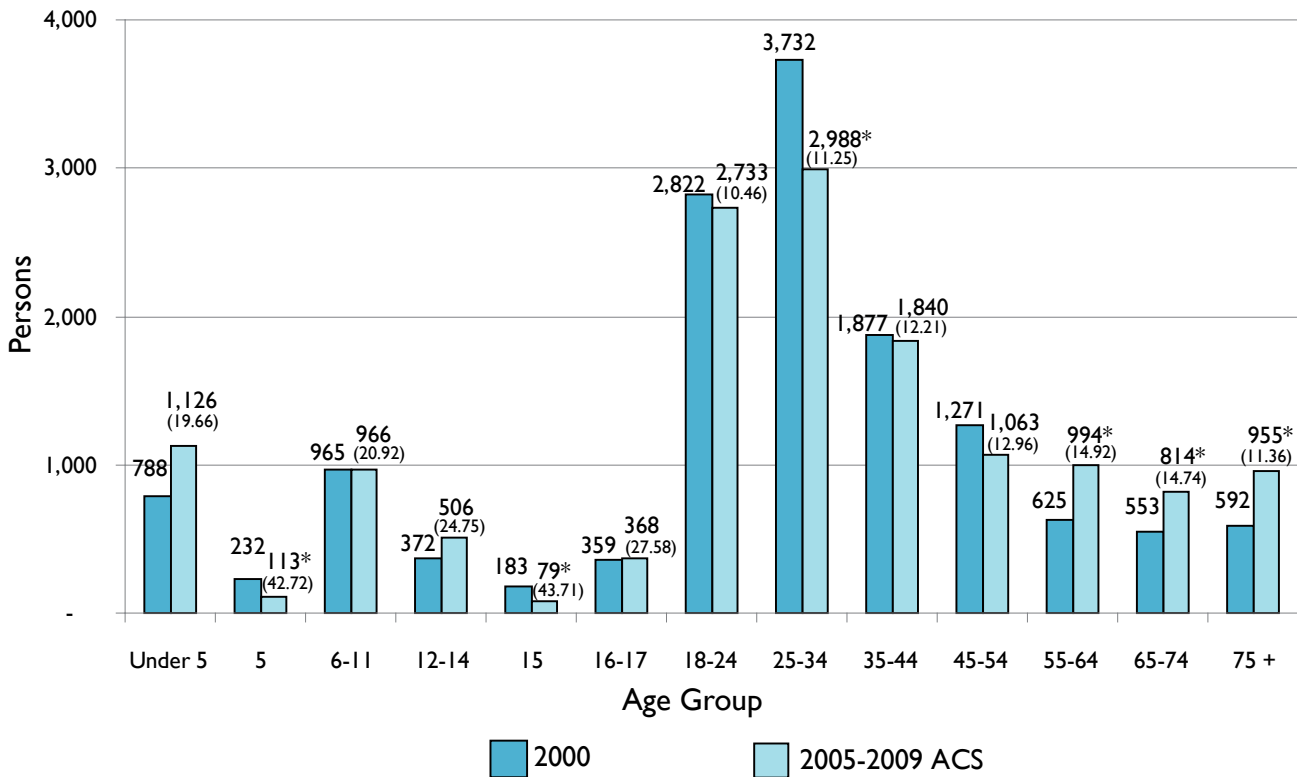
The 2005-2009 ACS reports poverty status by age group. Figure 7 below shows the breakdown by age for those living below the poverty level. All estimates for age groups below the age of 18 are not considered reliable due to high CV values. Among those living below the poverty level, over 78 percent are age 18 years or above. The age group of 25-34 has the largest share of those living below the poverty level at 2,988 persons or 20.5 percent.

In comparing the 2000 Census with 2005-2009 ACS estimates for age groups between 18-54, the only

statistically significant change was for age group of 25-35 years. However, it is important to look at the trend of all of the age groups 18-54. Since 2000, all of the age categories are shown to be declining in the number of people living below the poverty level.

For age groups 55 years and above, all changes since 2000 were considered to be statistically significant. All three age groups, 55-64, 65-74, and 75+, are shown to have increased in the number of persons living below the poverty level by 59.0 percent, 47.2 percent, and 61.3 percent.

Figure 7: Population Below Poverty Level By Age



*Statistically Significant

Coefficient of Variation (CV) = Percent of Variability

Reliable = CV < 5.00

Less Reliable = 5.00 < CV < 15.00

Not Reliable = CV > 15.00

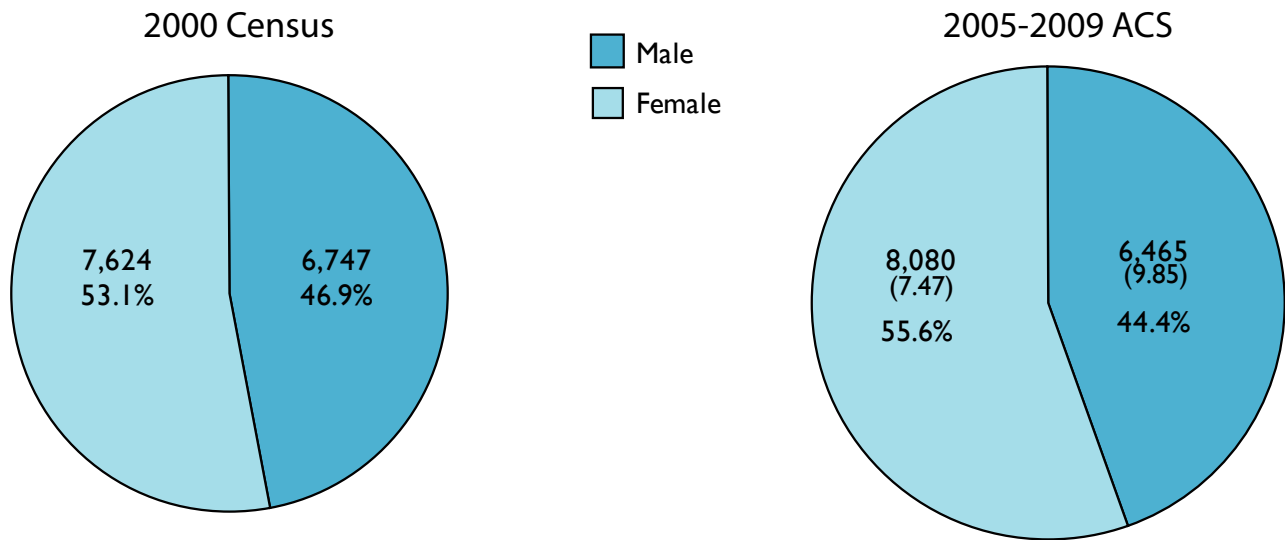
GENDER

According to the 2005-2009 ACS, of those living below the poverty level, 44.4 percent are male (6,465 males) and 55.6 percent are female (8,080 females). Both estimates have low CV vales and are considered reliable.

The change since the 2000 Census for both males and females were determined not to be statistically

significant. In fact, the split between genders for those under the poverty level did not change considerably. The 2000 Census reports that of those living below the poverty level, 53.1 percent were females and 46.9 percent were males. In both surveys, 2000 Census and 2005-2009 ACS, there are more females than males living below the poverty level.

Figure 8: Population Below Poverty Level By Gender



*Statistically Significant

Coefficient of Variation (CV) = Percent of Variability

Reliable = CV < 5.00

Less Reliable = 5.00 < CV < 15.00

Not Reliable = CV > 15.00

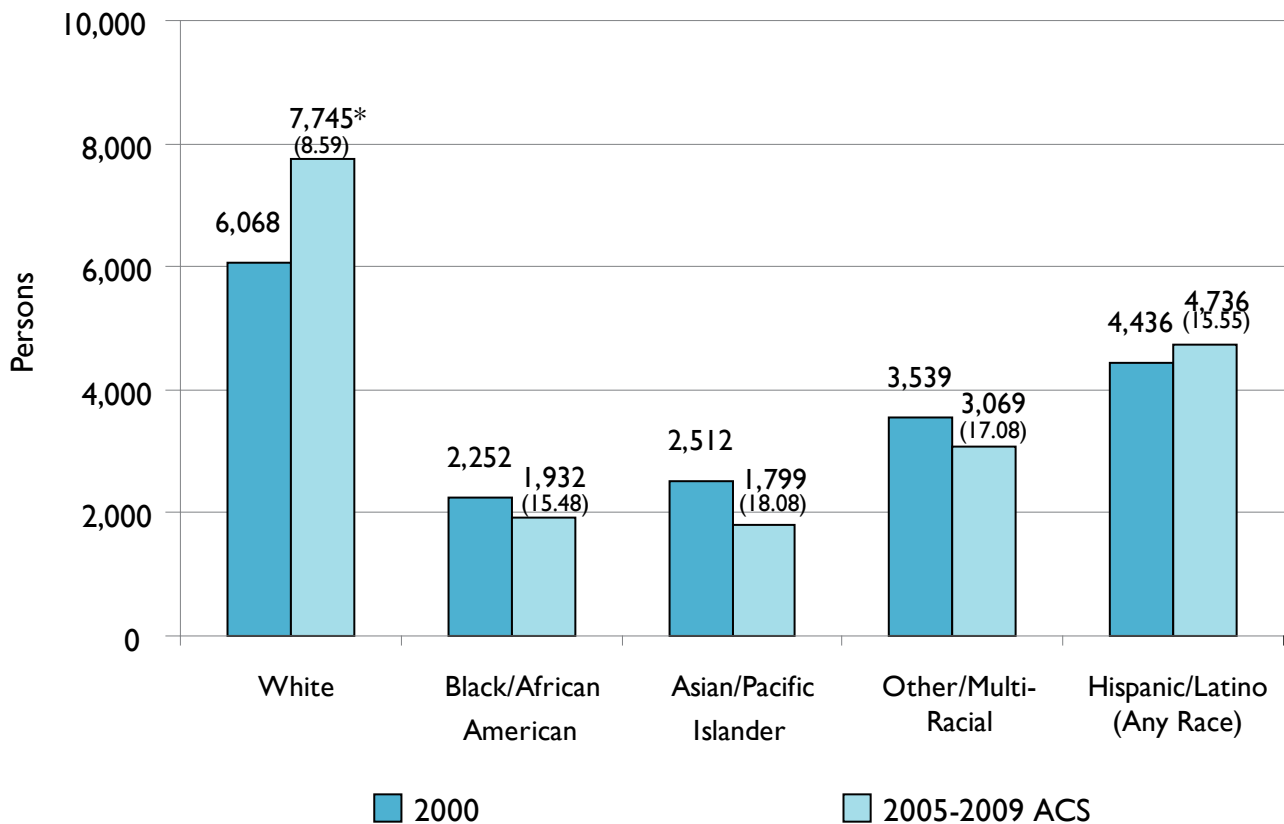
RACE AND ETHNICITY

The 2005-2009 ACS estimates those living below the poverty level by race or ethnic group. As figure 9 shows, among the race and ethnic categories, the White population has the largest amount of people living below the poverty level at 7,745 persons or 53.2 percent of all those living below the poverty level. The estimates for all other race and ethnic groups are not considered reliable due to high CV values.

2005-2009, the White race category showed to have the only change (+1,677 persons) considered to be statistically significant. However, it is still important to examine the overall trend for the rest of the groups. Black/African American, Asian/Pacific Islanders, and Other/Multi-Racial race categories all showed declines since 2000, while those of Hispanic or Latino origin saw a slight increase.

In comparing the change of those living below the poverty level by race and ethnic groups from 2000 to

Figure 9: Population Below Poverty Level By Race and Ethnicity



*Statistically Significant

Coefficient of Variation (CV) = Percent of Variability

Reliable = CV < 5.00

Less Reliable = 5.00 < CV < 15.00

Not Reliable = CV > 15.00

PLACE OF BIRTH

According to the 2005-2009 ACS, of the estimated 14,545 persons living below the poverty level, 37.4 percent are foreign born. The remaining 62.6 percent or 9,106 persons are native to the United States. For those living above the poverty level, there is a larger gap between native and foreign born at 77.9 percent and 22.1 percent respectively.

Since 2000, the percentage of those living below the poverty level that are foreign born declined by 29.6 percent. While the native born living below the

poverty level increased by 37.1 percent. Both of these changes from 2000 to 2005-2009 were determined to be statistically significant.

For those living above the poverty level, the percentage distribution has not changed considerably, going from 74 percent to 77.9 percent for the native born and 26.0 percent to 22.1 percent for the foreign born. Overall, the native population living above the poverty level increased by 16.0 percent and the foreign population decreased by 6.5 percent.

Figure 7: Poverty Level By Place of Birth

	2000		2005-2009 ACS			Change		Statistically Significant
	Persons	Percent	Persons	Percent	CV	Persons	Percent	
Below Poverty Level	14,371	100.0%	14,545	100.0%	(7.64)	174	1.2%	NO
Native Born	6,641	46.2%	9,106	62.6%	(6.90)	2,465	37.1%	YES
Foreign Born	7,730	53.8%	5,439	37.4%	(10.32)	-2,291	-29.6%	YES
Above Poverty Level	170,924	100.0%	188,294	100.0%	(0.83)	17,370	10.2%	YES
Native Born	126,414	74.0%	146,671	77.9%	(0.98)	20,257	16.0%	YES
Foreign Born	44,510	26.0%	41,623	22.1%	(2.60)	-2,887	-6.5%	YES

Coefficient of Variation (CV) = Percent of Variability

Reliable = CV < 5.00

Less Reliable = 5.00 < CV < 15.00

Not Reliable = CV > 15.00

Published and Forthcoming Reports

A series of 2005-2009 ACS 5-Year Estimate reports will be released in 2011. Below is a list of ACS topics and release months.

Overview (January 2011)

Households and Families (February 2011)

Age (February 2011)

Race and Ethnicity (March 2011)

Language (March 2011)

Foreign Population (April 2011)

Employment (April 2011)

Education (May 2011)

Income (May 2011)

Journey to Work (June 2011)

Housing (July 2011)

Once published, copies of the reports may be downloaded at the following location:

www.arlingtonva.us/PRAT

The Planning Research and Analysis Team (PRAT) is part of Arlington County Planning Division and is responsible for maintaining, analyzing, and disseminating information related to planning development and demographics.

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