TRACKING WHO WE ARE AND WHERE WE ARE GOING

An Example of Using the American Community Survey

In Calvert and Prince George's Counties, MD

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Introduction

"Who are we and where are we going?" Many jurisdictions ask those questions because the characteristics of their population, housing, and economy, and the changes they undergo, shapes their choices and have a profound impact on what happens. The questions are not easy to answer, however. Some liken their situation to Alice in Wonderland's reply when the Caterpillar asked: "Who *are* you?"

> "I hardly know, Sir, just at present – at least I know who I *was* when I got up this morning, but I think I must have changed several more times since then."
>
> --Lewis Carroll

In the past, the only statistical information counties and cities and towns have had for considering these questions have been censuses taken once every ten years, estimates of population change, and the partial information their own administrative records provide about their population and economy. Decisionmakers have had to guess about changes and how their policy objectives are affected by such trends. They did not have the information they needed to function in a modern and fast-changing world. Problems and resources are not evenly distributed across people or space. When public and private decisionmakers consider jobs, schools, safety, family issues, and economic investment, they need current information to make responsible and strategic investments in their communities and target resources to the people and areas of greatest need. They also need to understand the community and contextual factors that influence peoples' daily lives, such as housing affordability, economic stability, the environment, and education.

The Census Bureau developed the American Community Survey (ACS) to respond to the need to know who, what, where, when, why, and how much. This report uses statistics from the ACS for two Maryland counties outside of Washington, DC—Calvert and Prince George's—to introduce you to the ACS data Survey and to show you how to use statistics from the survey for your area. We use the American Community Survey for 2000, 2001, 2002, and 2003, along with population estimates and historical decennial information[1] for these two counties, to illustrate the identification of population and housing trends, both current and future. We provide a recent profile of these two very different counties to better understand the demographics of Calvert County, an exurban county undergoing rapid change, and the slower-growing suburban county of Prince George's.

The basics of the American Community Survey are described in Appendix A, and detailed information is available on the Census Bureau's website at www.census.gov/acs/www/index.html. The statistics for other jurisdictions are available on the website and through the Census Bureau's American FactFinder (http://factfinder.census.gov). See Appendix B for information about the accuracy of the data, and Appendix C for tips on how to use the FactFinder.

Summary of Findings

A simplistic summary of the findings in this report tells us that the residents of Calvert County, compared with Prince George's County are more likely to be:

- White and not of Hispanic or Latino origin;
- Born in the United States;
- Speak English only at home;
- Married-couple families;
- Homeowners; and
- Higher-income households.

This summary, with its rough averages, fits the stereotypes we have of these two counties. While each point is correct, they reveal little about the levels or directions of trends or the issues behind them. In fact, this is not a simple tale of the rich and the poor—far from it. As we can appreciate from this report, the American Community Survey provides abundant information about such topics.

A principle theme that emerges from our review of the new statistics from the American Community Survey is that the migration patterns and the characteristics of migrants into the two counties give us clues about the differences we see between them. The information about migration into and out of counties is one of the most valuable aspects of the American Community Survey. Below are highlights of some of the key indicators from the report:

- *Calvert County has remained racially and ethnically homogeneous while Prince George's County has grown more diverse:* As a jurisdiction experiences rapid growth, the usual notion is that its population will become noticeably more diverse. What is startling about Calvert County is less its speedy growth than that, despite the many people who have moved into the county, it remains a demographically homogenous, mostly white, county with a relatively young population; less than 1 percent of residents were foreign-born and most were born in Maryland. Prince George's County, which also has a relatively young population, is mostly black and has continued to lose its white non-Hispanic population. It has become, however, markedly more diverse with the movement into the county of immigrants from Latin American, African, and Asian nations.

- *In both counties, most residents speak only English at home, but 15 percent in Prince George's speak some other language and many have trouble with English or do not speak it at all*.

- *Both counties have relatively younger populations than the average for Maryland now, but it seems likely that there will be significant increases in the elderly population*. The baby-boom generation, those roughly 35 to 54 years old, makes up one-third of their populations. Only about 8 percent are age 65 and older now, but over the next two

decades, as the Baby Boom generation ages, both counties should expect sharp increases in the proportion age 65 and older unless large numbers move elsewhere.

- *The families of Calvert County are more likely to be married couples with children and to own their home. A Calvert parent was more likely to stay out of the labor force if they had preschool children than a parent living in Prince George's County.*

- *The great majority of workers in both Prince George's and Calvert counties traveled outside their home counties to work and drove alone in their cars to get to work.*

- *Prince George's County residents were more likely to have a college degree and to be enrolled in college than were Calvert residents. Nevertheless, Calvert had a larger percentage of higher-income households and a slightly smaller percentage of poor households.*

- *About 4 in 10 workers in both counties were in management, professional, and related occupations.*

- *The average value of housing in Calvert County is higher than in Prince George's.* Calvert's housing was generally built more recently than the stock in Prince George's. Very few in either county paid less than $1,000 a month for housing.

Different Rates of Growth

Calvert County, an exurban county in Maryland's southern region, was the fastest growing county in Maryland between 2000 and 2003 with an estimated population growth of 12 percent and a 9-percent increase in housing units. By comparison, Prince George's County, a large and well-established suburban county in the Washington Metropolitan region, had a population growth rate of 4 percent and increased their housing stock by less than 3 percent.[2]

The difference in the speed of growth is partly a reflection of the relative sizes of the two counties. Prince George's County, the second largest county in Maryland, was about ten times the size of Calvert County in 2003 (an estimated 838,700 and 84,100 people respectively). The faster growth rate of Calvert County also reflects its change from a farming area and "a Sunday drive out to the country" for city folks, to a "bedroom community" with strong economic ties to the Washington Metropolitan region.

The label of "bedroom community" and the rapid growth are issues the county's Comprehensive Plan addresses. Objectives in the plan for Calvert County include the adoption of policies that manage the amount and rate of residential growth, preserve the county's rural character, and promote economic alternatives to functioning primarily as a bedroom community.[3] Prince George's General Plan for 2002[4] seeks to slow growth in the farmland bordering Charles County and along the Patuxent River.

A picture that emerges from the statistics that follow is a relatively homogeneous Calvert County despite its fast growth. The more slowly growing Prince George's County, on the other hand, has an increasingly diverse population.

The historical background of the two counties gives us some clues about the differences we see today. The American Community Survey tells us about current population and housing trends and about homogeneity and diversity. The survey provides guidance for assumptions about the future.

History and Geography Matter

History and geography give us the basic roots of the demographic differences between the two counties. Both counties were established in the late 1600s and started out with a tobacco economy and the economic and cultural life of plantations and slave labor. The proximity of Prince George's County to the national government, and the involvement of its well-educated population in running the government, led to differences in the path and pace of population growth and the diversity of their economies.

Calvert County

Calvert County was officially established in 1654, but settlements began as early as 1630 on the lower Patuxent River and St. Leonard's Creek by well-educated white colonists, primarily Puritans, Quakers, and Scotsmen. Before the Civil War, Calvert was a plantation society. The 1790 Census recorded nearly 8,700 people living in the county.

While plantations were abandoned after the Civil War, Calvert County's economy was dominated by agriculture (especially tobacco) and work related to the water until early in the 20th century when seasonal tourism and recreation became more important along the Chesapeake Bay and the Patuxent River. The economic shift affected the patterns of work, but not the size of the population.[5] The population stayed steady at about 8,000-to-12,000 people through the 1950s.

Between 1960 and 1980, thousands of people moved from the Washington, D.C. metropolitan area to live in Calvert County, and the population more than doubled, from about 16,000 to 35,000 people. To support the new growth, Calvert's economy began to shift toward trade, services, government, and construction. Many of the newcomers commuted to their work in the metropolitan area, including to Prince George's County.[6] As we will see later, the economy shifted again, starting in the 1980s, to include more workers in industries and jobs that require higher educational levels. Between 1980 and 2003, the population increased from about 35,000 people to 84,000, an average growth rate of about 6 percent a year.

The current town centers in Calvert County in 2000 are: Dunkirk, Owings, Huntingtown, Prince Frederick, St. Leonard, Lusby, and Solomons. North Beach and Chesapeake Beach are municipalities with their own governments. These are the designated growth areas in the county's Comprehensive Plan.

Prince George's County[7]

What is now Prince George's County was first inhabited by the Piscataway and the Susquehannock tribes. In 1696, Prince George's County was established as Maryland's frontier county from parts of Calvert and Charles counties. About 1,700 people lived there at the time. Like Calvert, it was primarily a tobacco economy although it was also a trading center with a professional and merchant class. By 1790 the population was 21,000. Prince George's County had continuous social and economic interactions with the District of Columbia from the start of the national government. Prince George's County ceded most of the land needed to establish the District and residents of the county were involved in establishing the national government. The economy became more varied and more prosperous in the 19th century with cotton mills, fisheries, rail lines, telegraph lines, and diverse agriculture and research. Sixty percent of the population was black in 1860 and most were slaves. The end of the Civil War marked a major change in the population and economy of Prince George's County.[8]

At the start of the 20th century, 30,000 people lived in Prince George's and the economy had changed to local commerce and small farms, most of which were operated by freed blacks and newcomers to the county. The federal government expanded greatly and so did Prince George's County. New towns were built along the county's borders with the District. Prince George's County's population started out much larger than Calvert's. By 1920 the population had grown to 43,000 people.

As the century progressed, government installations were placed in Prince George's County. The private automobile and improved roads made it practical to establish new communities further out in the county. Growth took off in the 1930s. Despite the Depression, the population continued to grow from about 60,000 people in 1930 to nearly 90,000 by 1940 and then more than doubled again in just a decade. Between 1960 and 1970, the population grew from 357,000 to 661,000 people, and then remained stable through the 1990s at around 700,000 people. In 2003, the population reached about 839,000 people.

Cities and towns in Prince George's County include: the early towns of Marlborough, Nottingham, Bladensburg, Queen Anne, and Piscataway; towns that shared a border with the District such as Takoma Park, Mount Ranier, Colmar Manor, Cottage City, Brentwood, Capitol Heights, Fairmount Heights, and Seat Pleasant; and communities established with the freedom provided by better roads and automobiles, including Greenbelt, Cheverly, District Heights, New Carrollton, Glenarden, Bowie, Kettering, and others.[9]

Sources of Population Change, 2000 to 2003

What are the sources of recent change in the population? At the beginning of the 21st century, the sources of change differed between the two counties and will likely affect their demographic prospects for years to come. Migration was important to both counties, but for very different reasons.

Migration was the most important component of population change between 2000 and 2003 for Calvert County, as we learn from administrative records through the Census Bureau's Population

Estimates Branch,[10] which estimates population change each year. The population of Calvert County increased by more than 9,500 people between 2000 and 2003, a 13-percent increase. Only about 16 percent of that gain came from natural increase (3,171 births minus 1,660 deaths). Migration into the county from other U.S. counties accounted for about 81 percent of the population gain, with about 7,700 people moving into Calvert during that period. Less than 2 percent of the total population gain came from international migrants.

By contrast, births and international migrants were the most important factors driving the increase in Prince George's population. Between 2000 and 2003, Prince George's County had a net gain of 37,200 people, a change of less than 5 percent. The major source of population gain was the nearly 24,780 people from natural increase (41,654 births and 16,874 deaths). The county lost about 3,300 people because of migration to other countries. Nearly 16,700 international migrants more than made up for that loss, and they represented 45 percent of the county's population gain.

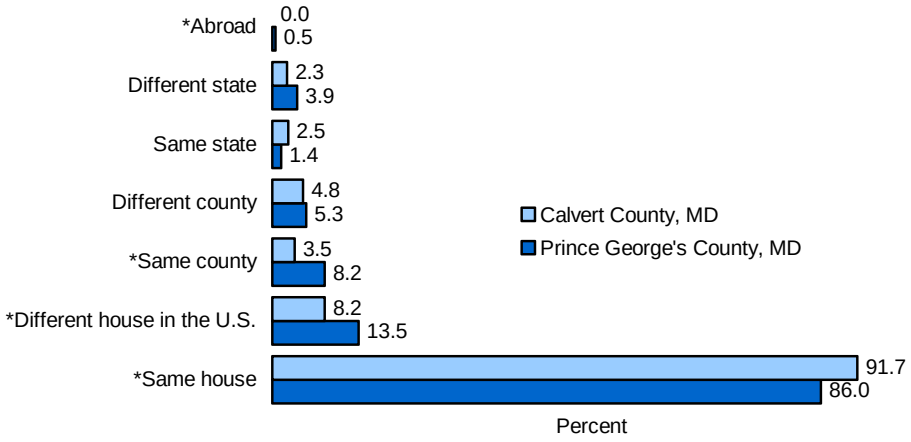
The Movers

The migration patterns and the characteristics of migrants provide us with information about the differences we see between the two counties. In general, migration is closely tied to changes in life events such as schooling, creating new family structures, and work and retirement. Migration often contributes to the diversity of an area, and so, generally, we expect that a jurisdiction experiencing fast growth will become more diverse. We can use the American Community Survey to see whether this generalization holds up for Calvert County compared with Prince George's County.

While Calvert has a faster pace of growth than does Prince George's, the American Community Survey shows us that the proportion of Prince George's County residents that moved into the county the year before the survey was somewhat larger than in Calvert. Likewise, a slightly higher proportion of the residents of Prince George's were likely to have arrived there from abroad (Figure 1) than to Calvert County the year before the survey. In 2003, about 14 percent of Prince George's County residents lived in a house that was different from the one in which they had lived in 2002, compared with only 8 percent of Calvert County residents. In both counties, approximately 5 percent of residents had lived in a different county in 2002.

Figure 1

Residence in 2002 of Calvert and Prince George's County Residents Age 1 and Older in 2003

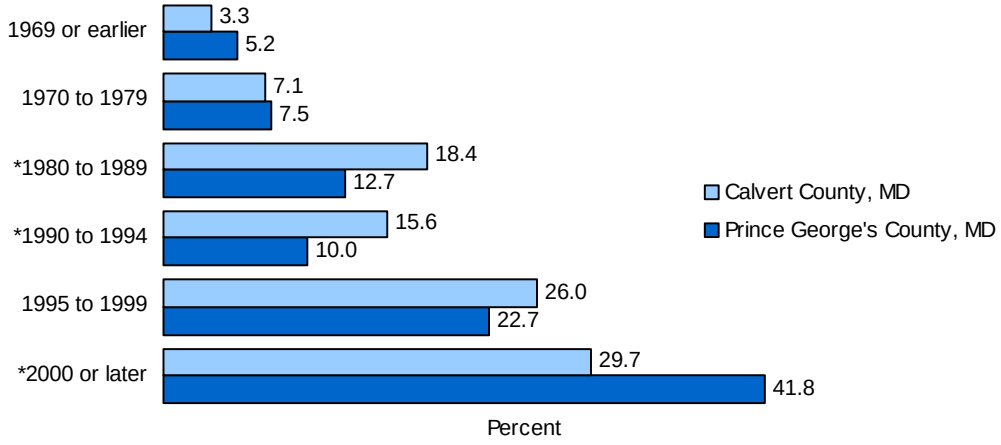


* Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons are *not* statistically different.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 2.

More than four in 10 householders moved into their homes in Prince George's County since 2000 compared with about three in 10 in Calvert County. Only about one in 10 have lived in their homes since 1979 or earlier (see Figure 2).

Figure 2

Calvert and Prince George's County Householders in 2003, by Year Householder Moved Into Unit



* Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons are *not* statistically different.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 4.

Foreign-born population and problems speaking English

Migration has long been a strategy to improve the economic well-being of individuals, and this is especially true for foreign immigrants. The American Community Survey gives us information about the current social and economic characteristics of foreign immigrants. With more years of data collection, we will be able to describe the economic characteristics of new immigrants and those who have been in the United States longer.

Two-thirds of Maryland's foreign-born[11] population lives in Prince George's or Montgomery counties. About 115,000 residents of Prince George's in 2003 were born outside of the United States, compared with roughly 700 of Calvert's 84,000 residents. A reflection of the change occurring is that about 10 percent of Prince George's population was foreign born in 1990 compared with 14 percent in 2003. Because Calvert's foreign-born population is so small, it will take more years of data collection before we can examine their characteristics.

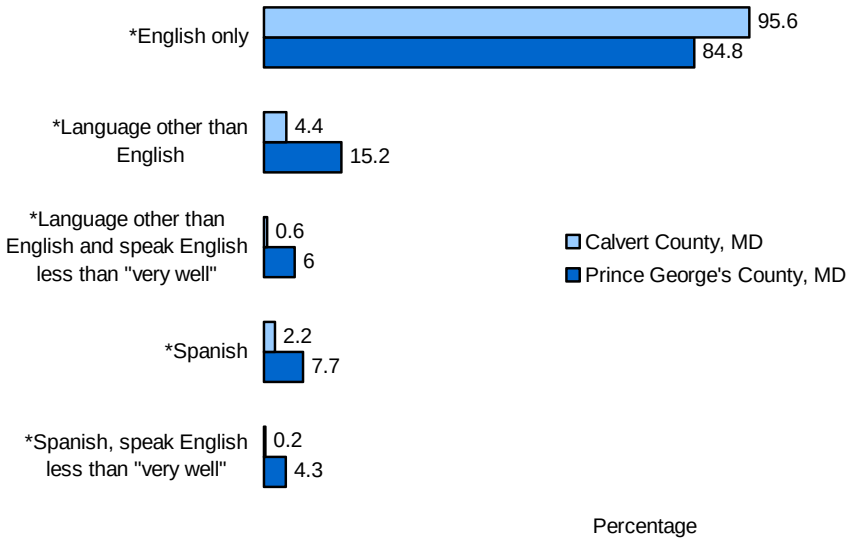
About 3-in-5 foreign-born residents of Prince George's County were not citizens in 2003, about the same proportion as in 2000. It is remarkable that half of this county's foreign-born population entered the United States after 1990. About half of the foreign immigrants were born in Latin America and most of the remaining came from Asia (19 percent) or Africa (19 percent).[12] Migration is a social process that involves networks of families and groups. The countries from which the immigrant population of Prince George's came are likely to send many more immigrants to the county in the coming years. Unless there are major changes in U.S. government policies or conditions in the counties of origin, the immigrant population is likely to continue growing.

While the majority of the residents of both counties speak only English at home, Prince George's County has a lower percentage of residents who speak English only (85 percent), compared to Calvert County (96 percent) (see Figure 3). In 1990, about 31,000 people age 5 and older in Prince George's reported that they spoke another language at home *and* that they spoke English "less than very well." In 2003, that number had increased to about 46,000 people, about 6 percent of the total population.

In the small percentage of Calvert homes where another language was spoken, about half spoke Spanish in 2003. Spanish was also the most prevalent non-English language in Prince George's County, and half of those in Spanish-speaking homes reported that they speak English less than "very well." These statistics point to potential challenges for schools, businesses, and health-care programs that serve the counties' Spanish-speaking residents.

Figure 3

Language Spoken at Home by Calvert and Prince George's County Residents Age 5 and Older: 2003



*Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons are *not* statistically different.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 2.

The Demographics

Children, Working-Age Adults, and Older Adults

The age composition of a population has economic and social significance, and provides clues about the potential economic burden of educating and caring for children, the potential number of workers, the types of housing needed, and the needs of older adults.

The United States is experiencing a widespread demographic shift—a decreasing proportion of children and an increasing proportion and number of older people. Populations are thought of as "older" or "younger" depending on shifts in the proportions of people in different age groups. In 2003, about 12 percent of the U.S. population was age 65 and older, a proportion that will increase with the aging of the baby-boom generation.[13] People ages 65 and older account for the largest share of adults out of the labor force, although the age of complete retirement is becoming more elastic, as are the ages of dependency for both the young and the old. Older workers account for an increasing proportion of Maryland's workforce.[14]

The aging of a population affects nearly all social, economic, and political institutions. Depending on where we as individuals are in the life cycle, our educational, health, housing, and economic needs and resources differ. Likewise, the distribution of a jurisdiction's population

across the age spectrum affects policy options because of differences in needs, wealth, options, and costs.

Both Calvert and Prince George's have a relatively younger population than Maryland as a whole. The median[15] age of Calvert held steady at about 36 years old over the 2000 to 2003 period. The median for Prince George's county residents increased slightly over that period to nearly 35 years. By comparison, the median age of all Maryland residents was nearer to 37 years old in 2003.

There is little difference between the broad age distributions of Calvert and Prince George's (see Table 1). Nearly two-thirds of their populations were in the traditional working-ages, 18 to 64, and just over one-fourth were under age 18 in 2003.

The baby-boom generation accounted for nearly one-third of the 2003 population of Calvert and Prince George's counties, slightly higher than the U.S. average (29 percent). Baby boomers are in their economically most productive years and have been preparing their children to support themselves. The baby-boom generation made up a higher percentage of the populations of Calvert (36 percent) and Prince George's (38 percent) counties in 1990 when they were 25 to 44 years old.

Both counties have higher than average proportions of young people and working-age adults. About 27 percent of the population is under age 18 in both counties compared with 26 percent in the United States (see Table 1). About 62 percent of U.S. residents are ages 18 to 64 compared with about 65 percent for Calvert and Prince George's counties. Around 7 percent of the populations of both counties are ages 20 to 24, an age when some get their first foothold in the labor market, while others continue their education and economic dependence on their parents.

About 8 percent of each county's population is 65 years and older, compared with 11 percent in Maryland. There were about 12 to 13 people age 65 and older to 100 working-age adults (ages 18 to 64) in each county in 2003 compared with a ratio of 18 people age 65 and older to 100 working-age adults in Maryland.

In 2003, about 10 percent of the population of both counties was in the 55-to-64 age group. Unless a large portion of the 55-to-64-year-old group move out of the counties in the next decade, or there is a sudden increase in death rates at the older ages, both counties will experience a sharp increase in the younger elderly, the 65-to-74-year-olds. Both counties could see their older population reach 12 percent to 13 percent in the next decade.[16] If either county follows the practice of some other counties that are recruiting the wealthier, active young-old residents,[17] the proportion of residents ages 65 to 74 could increase.

Both counties must address the policy question of what services are needed for the older residents in comparison with resources. In both counties, roughly 1-in-3 elderly living in households had a disability that had lasted 6 or more months.[18] The ACS tells us that just under one in five households in each county had at least one person age 65 or older and that most of those households had two or more people in the household.[19] With its larger population, Prince George's had about six times as many people age 85 and older than Calvert.[20]

Table 1
Major Age Groups in Calvert and Prince George's Counties, MD, 2003

	Percentage of population	
	Calvert	**Prince George's**
Age group		
Under 18 years old	27.1	26.9
18-64 years old	64.5	65.0
35-54 years old	32.0	31.7
65 years and older	8.3	8.1
Ratio: Under 18/18-64	42.2	41.4
Ratio: 65+/18-64	12.9	12.4
Median age	35.9	34.6

Note: Apparent differences between the two counties in each category (rows) are not statistically significant at the 90-percent level.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 1.

Race and Ethnicity

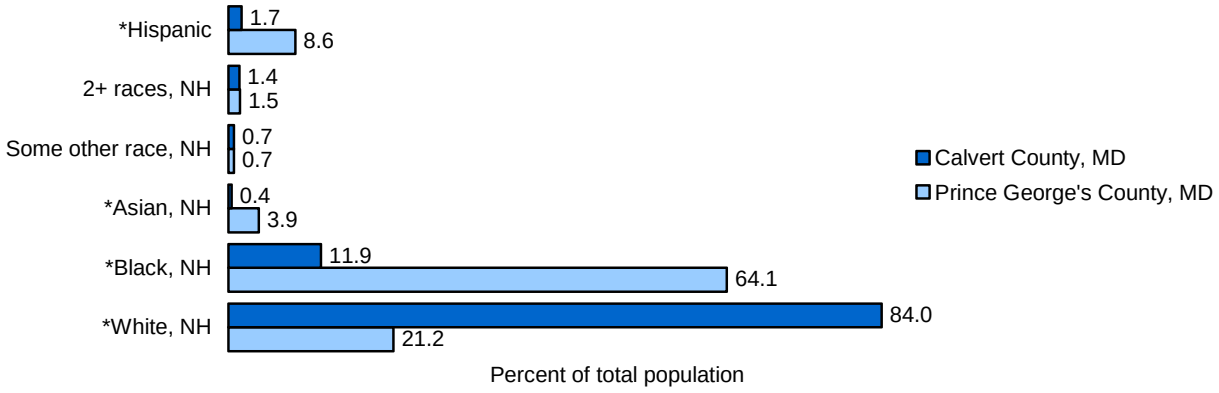
There has been no significant change in the racial composition of Calvert County between 2000 and 2003, even though its population was growing rapidly over that period.[21] Calvert's population was 84 percent white, not Hispanic or Latino according to the 2003 American Community Survey (see Figure 4), compared with 83 percent in 2000.

The predominant population in Prince George's County in 2003 was black or African American, not of Hispanic origin, just as it was in 2000. Only 21 percent of the population of Prince George's County reported their race and ethnicity as white, not Hispanic or Latino in 2003, a statistically significant drop from the 24 percent in 2000 (see Figure 5).

The Asian, non-Hispanic population constitutes about 4 percent of Prince George's total population and less than 1 percent of Calvert's, about the same as in 2000.

Figure 4

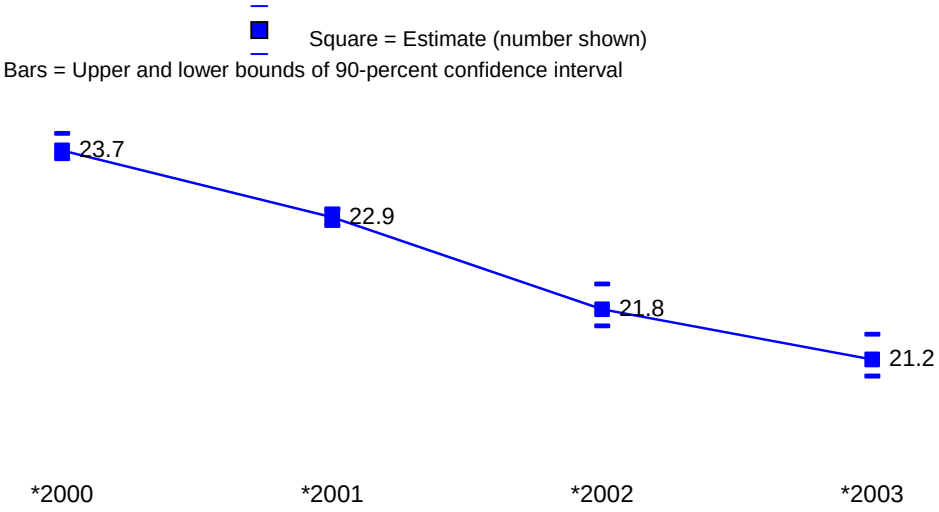
Racial and Hispanic Composition of the Population in Calvert and Prince George's Counties: 2003



*Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons are *not* statistically different. "NH" indicates people who reported they were not of Hispanic origin. People of Hispanic origin may be of any race.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 1.

Figure 5

Percent of Prince George's County Population Reporting White Alone, not Hispanic or Latino, 2000 to 2003



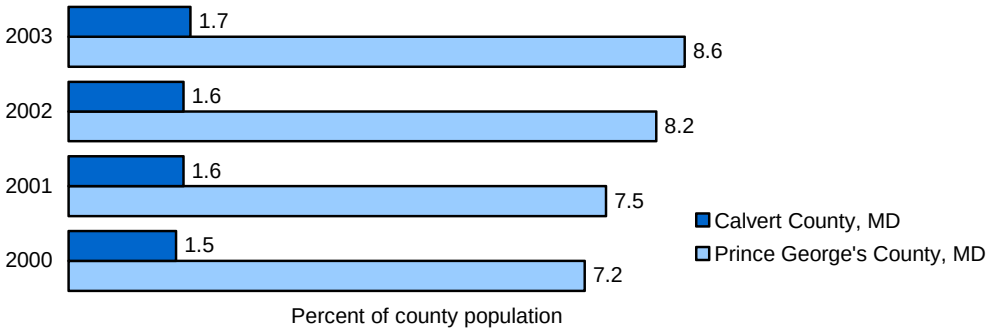
*Indicates the apparent differences between years are statistically significant at the 90-percent level.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 1.

Hispanic or Latino origin (of any race)

The Hispanic population in Prince George's numbered about 71,000 in 2003 compared with about 1,400 in Calvert. Calvert's Hispanic population is less than 2 percent of the total population and barely changed between 2000 and 2003. Prince George's Hispanic population is nearly 9 percent of its total population, an increase from about 7 percent in 2000 (see Figure 6).

The Hispanic population is diverse. The American Community Survey reveals that about 2 percent of Prince George's total population reported their nationality as Mexican, 1 percent said they were Puerto Rican, and about 6 percent identified with some other Hispanic group.

Figure 6
Percent of Calvert and Prince George's County Populations Reporting Hispanic Origin: 2000 to 2003



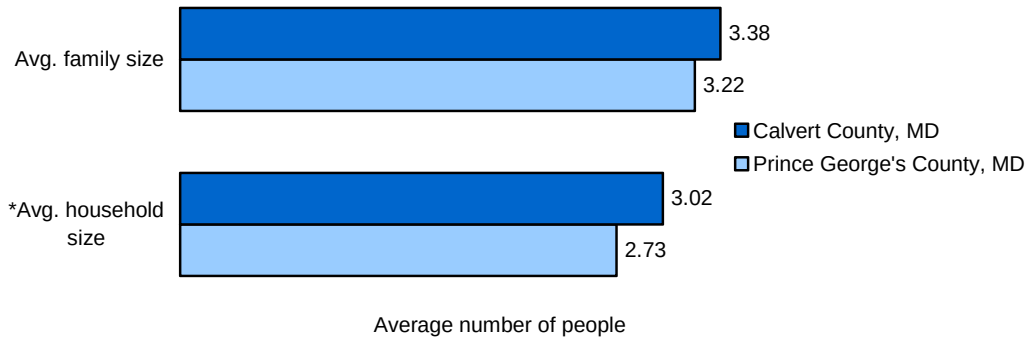
Note: The comparisons among the years for each county and between the counties are controlled to independent estimates and are therefore statistically different.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 1.

Families and Home Ownership

The average family[22] size in both Calvert and Prince George's counties was just over three people (see Figure 7), about the same as for Maryland. In both counties, approximately four in 10 households have children under age 18, while less than half that many households include people age 65 and older (see Figure 8).

Figure 7

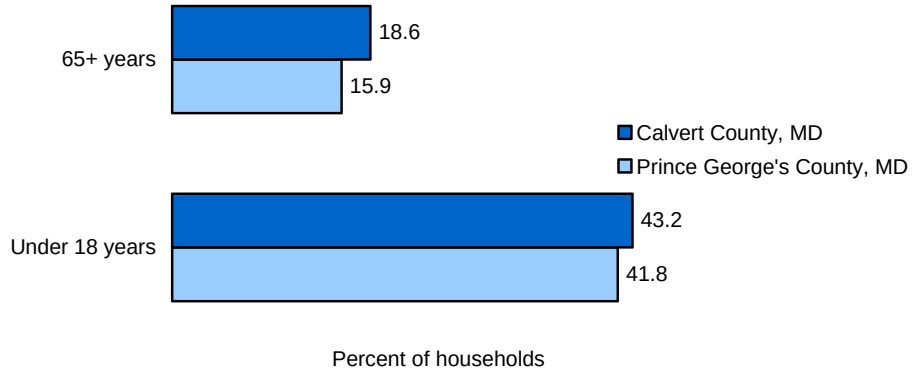
Average Household and Family Size in Calvert and Prince George's Counties: 2003



*Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons are *not* statistically different.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics at (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 1.

Figure 8

Percent of Households With One or More People Under Age 18 or Age 65 and Older in Calvert and Prince George's Counties: 2003



Note: Apparent differences between counties are not statistically significant at the 90-percent level.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics, (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 1.

Across America, there has been an increase in the share of people who have never married, especially among blacks. The men and women of Prince George's are more likely to have never married than is the case in Calvert County (see Figures 9 and 10). While there is no significant difference in the percentage who are widowed or divorced, the women of Prince George's are less likely to have been married (42 percent) at the time of the survey than the women of Calvert (55 percent) while just over half of the men in both counties were married.

Black men and women were less likely to be married than were white non-Hispanic men and women living in Prince George's County (see Figure 11). These differences in marital status are important because they can contribute to racial gaps in household income, which is discussed later in this report.

Neither county has seen significant changes in family structure since 2000.

Figure 9

Marital Status of Men Age 15 and Older in Calvert and Prince George's Counties: 2003

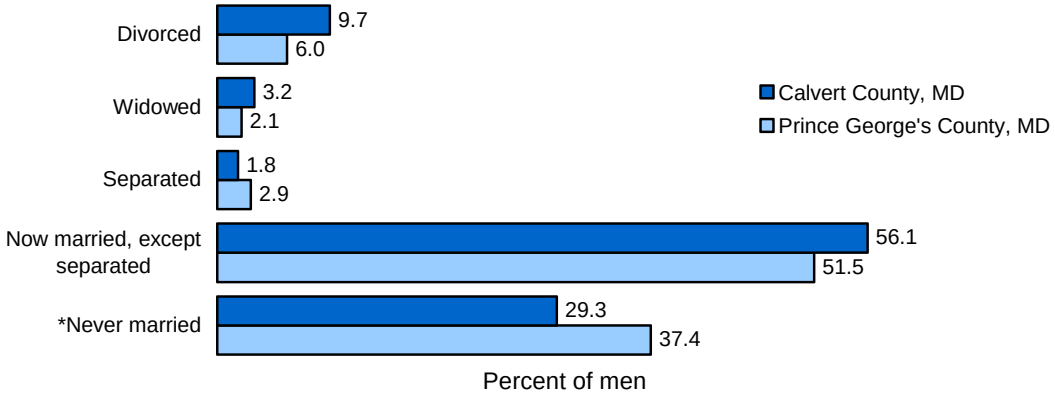
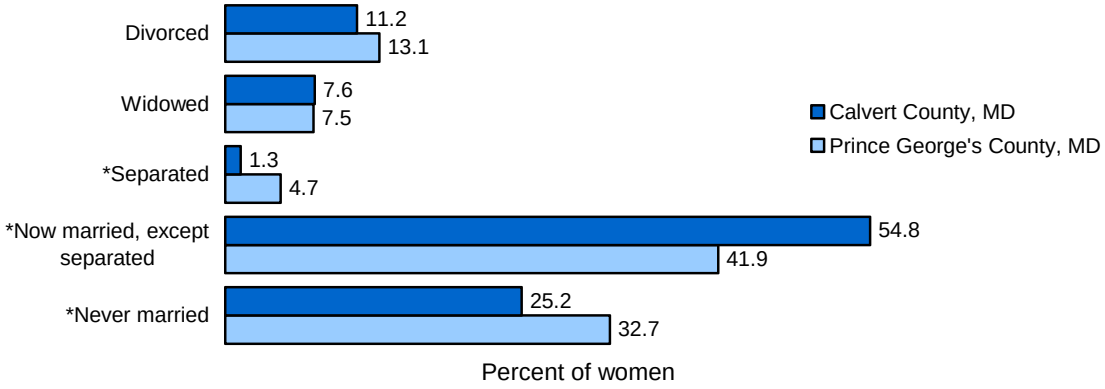


Figure 10

Marital Status of Women Age 15 and Older in Calvert and Prince George's Counties: 2003



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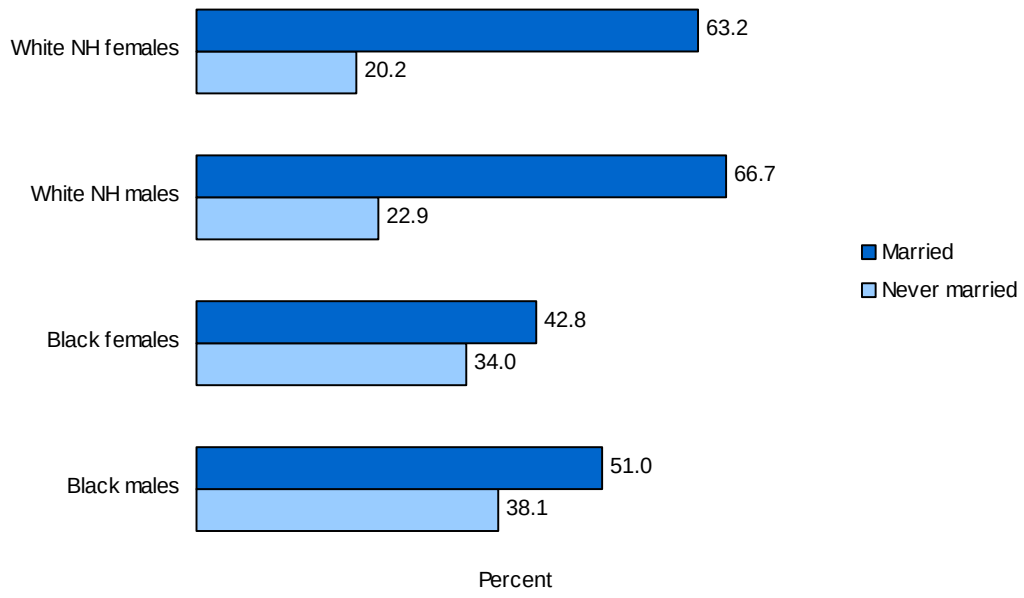
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 2.

Figure 11

Marital Status of Population, 15 Years and Over, by Race and Sex, in Prince George's County, MD: 2002



The following comparisons were not statistically different for the "Never married" and for the "Now married": Black males compared with Black females; White NH males compared with White NH females. "NH" indicates people who reported they were not of Hispanic origin.
Source: U.S. Census Bureau American FactFinder, American Community Survey 2002, Table P031B (Black or African American) and Table P031K (White, non-Hispanic).

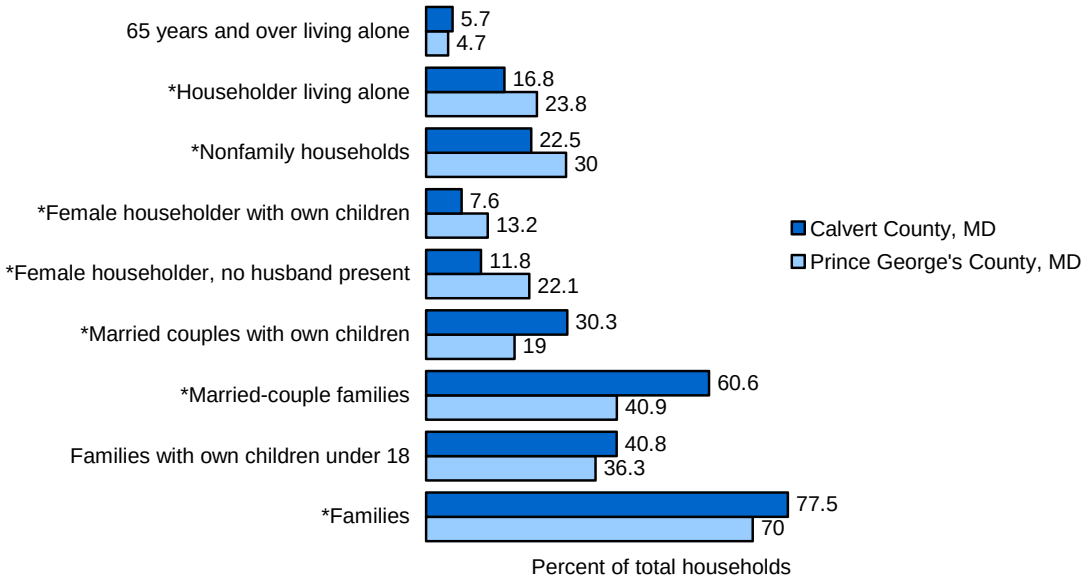
The variety of household types has changed a great deal in recent years in the United States. The American Community Survey allows us to monitor the direction of such change at the local level. At the time of the 1990 census, five in 10 households in Prince George's, and seven in 10 households in Calvert, were made up of married couples.[23] By 2003, these proportions had decreased in both counties (see Figure 12). Four in 10 households in Prince George's County were made up of married couples in 2003 compared with six in 10 in Calvert. Half of the married-couple families in both counties had children in 2003.

Women in Prince George's County are twice as likely as the women of Calvert to be running homes on their own. Just over one in five Prince George's County households were headed by women without a spouse in the home in 2003 compared with about one in six in 1990. About 8 percent of Calvert's households are headed by single women with children, about the same as for all of Maryland, compared with about 13 percent in Prince George's County.

Working-age adults in Prince George's County are more likely to live alone than are those in Calvert County. Reflecting their smaller-than-average older populations, only about 5 percent to 6 percent of the households in both counties are headed by people age 65 and older living alone, compared with an average of 8 percent of Maryland households.

Figure 12

Family Composition in Calvert and Prince George's Counties: 2003



*Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons are *not* statistically different.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 1.

The Homefront

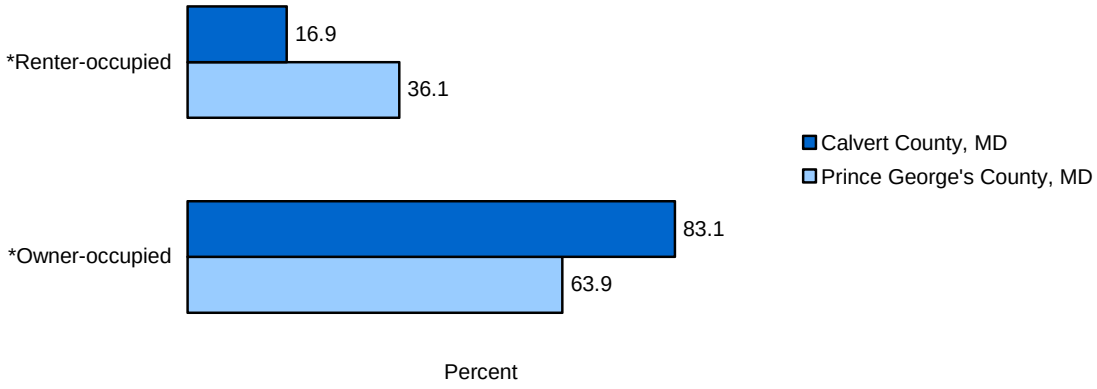
Home Ownership

Reflecting differences in family composition, about four in five households own their homes in Calvert compared with three in five in Prince George's County (see Figure 13).

Of homes with a mortgage, the median cost of the mortgage and other selected costs[24] was around $1,500 a month in both counties, a level that had not changed since 2000 (in 2003 dollars). About one-fifth of households in both counties paid $2,000 or more a month for these bills. Very few enjoyed home costs of less than $1,000 a month. Homes that had no mortgage had median costs of about $360 a month in Calvert and $430 a month in Prince George's County.

Figure 13

Percentage of Housing Units Occupied by Owners and Renters in Calvert and Prince George's Counties: 2003



*Indicates the apparent difference between counties is statistically significant at the 90-percent level.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 1.

An indicator of a mismatch between housing costs and income, or the affordability of housing, is the share of households that use 35 percent or more of their income to pay for their housing. The share in Calvert County is too small to measure reliably. In Prince George's, about one-fifth of homeowners used at least 35 percent of income for housing in 2003, among the highest percentages in Maryland.[25]

Calvert had about 4,700 rental units in 2003 compared with nearly 109,000 in Prince George's County. The median rental in both counties was about $900 a month, among the highest in Maryland. There was no statistical difference between the median rents in Calvert for 2000 and 2003, but in Prince George's, the median increased significantly, from just under $800 in 2000. A rental of less than $500 is rare in both counties. Four in 10 renter households in both counties use 30 percent or more of their income just to pay the rent while about one in six renters use less than 15 percent of their income that way.

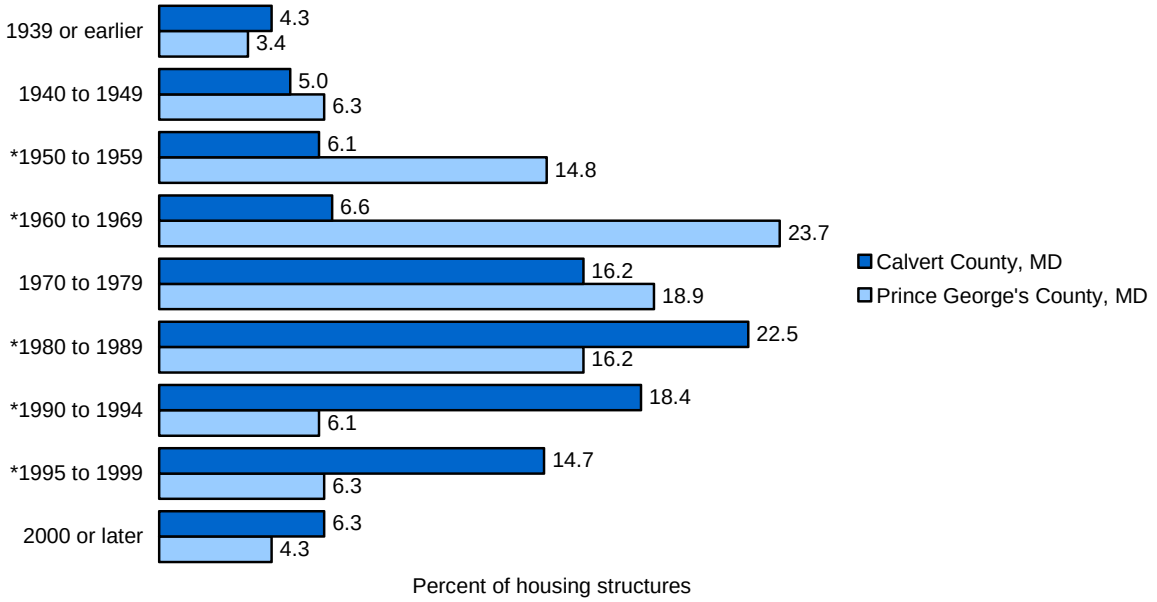
Housing costs are more of a burden to renters than to homeowners; more renters face monthly housing costs that exceed 35 percent or more of household income. In 2003, about one-fourth of the renters in Calvert paid at least 35 percent of their household income for gross rent, compared with more than one-third of renters in Prince George's. There was no significant change in this percentage in Calvert County between 2000 and 2003. In Prince George's County, however, the percentage had increased from one-fourth of renters in 2000.[26]

The housing stock of Prince George's is different in substantial ways from that in Calvert County. About nine in 10 houses in Calvert are single, detached units compared with only half of the housing stock of Prince George's. Four in 10 houses in Calvert have been built since 1990

compared with about half that in Prince George's. The majority of homes in Prince George's County were built between 1960 and 1990 (see Figure 14).

Figure 14

Housing Structures in Calvert and Prince George's Counties, by Year Built: 2003



*Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons are *not* statistically different.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 4.

The housing of Calvert generally has a higher value than in Prince George's County, a likely reflection of the difference in age of the housing and the larger proportion of houses that are single detached units. In 2003, the median value[27] of owner-occupied homes in Prince George's County was about $182,000 compared with $219,000 in Calvert, a county that has had among the highest housing values in Maryland since 1990. The value gap and these medians are up considerably from 2000 when they were about $158,000 and $179,000 respectively (in 2003 dollars based on the consumer price index for urban residents). About 4 percent of Calvert's homes were valued at $500,000 or more compared with about 2 percent of the homes in Prince George's County. At the other end of the scale, 30 percent of Prince George's homes were valued at less than $150,000 compared with less than one-fifth of Calvert homes.

With rising energy costs, the type of fuel in one's home is an important cost factor. While seven in 10 homes in Calvert are heated by electricity, only about one-third were heated that way in Prince George's. Utility gas was more common in Prince George's. Nearly one-fifth of Calvert homes were heated by fuel oil or kerosene.

A small share of homes lacked certain basic features. About 3 percent of the homes in Prince George's were without a telephone and about 2 percent lacked complete plumbing facilities or complete kitchens. In Calvert, every home had a telephone, but about 1 percent did not have complete plumbing facilities or complete kitchens (not statistically different from the Prince George's proportion).

Education and Economic Circumstances

Education

Higher education is seen as a path that generally leads to equal economic opportunity, an increased likelihood of moving to a different state from one's place of birth, a greater probability of owning a home, higher life expectancy, and improved health throughout one's life. The American Community Survey provides information about enrollment at different school levels as well as formal educational attainment. The statistics on formal education tell us nothing about the quality of the education people received, but research shows that educational attainment is strongly related to variations in wages and income, wealth, health, life expectancy, and the ability of young adults to build a future that is different from what older, less educated family members experienced.

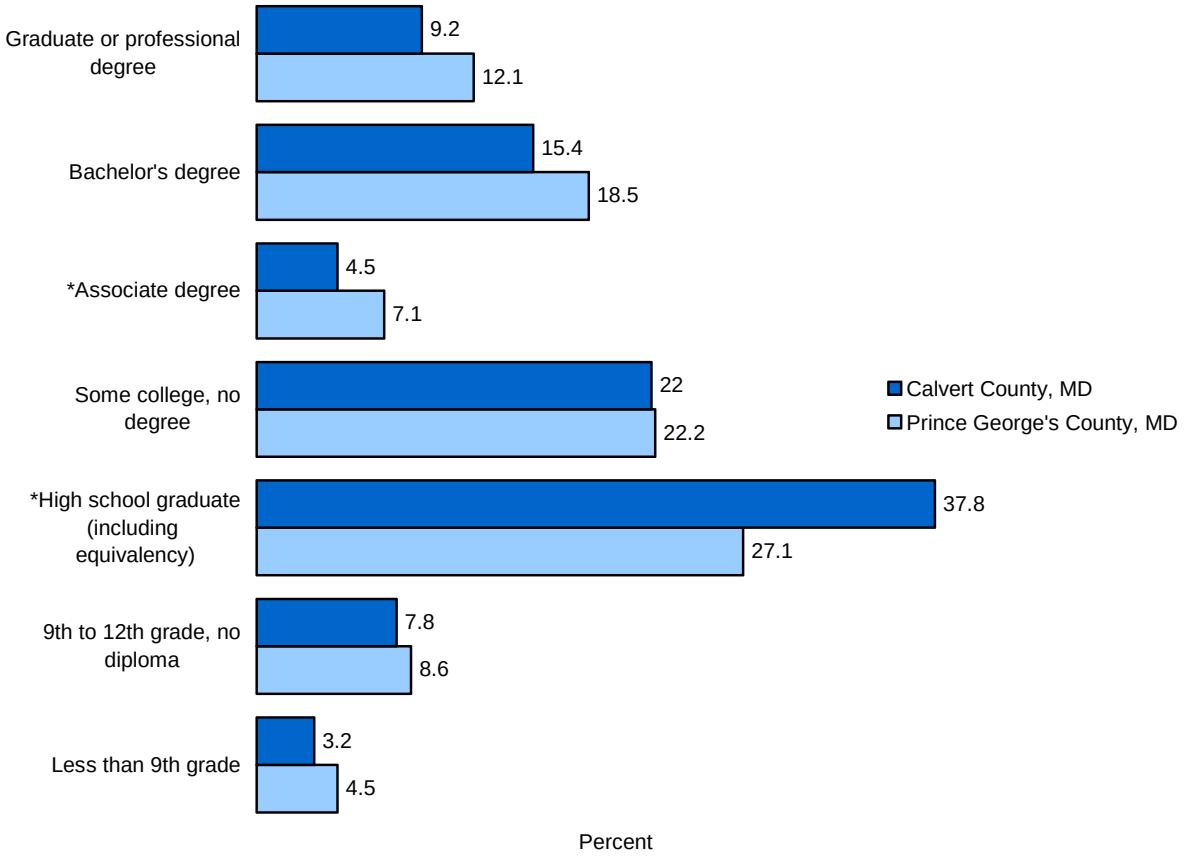
Nearly nine in 10 people age 25 and older in Maryland, Calvert County, and Prince George's County had a high school or greater education in 2003. About 38 percent of the adults in Calvert County did not receive a degree beyond a high school diploma, compared with 27 percent in Prince George's (see Figure 15) and Maryland as a whole. Data compiled by the National Center for Health Statistics shows that the mortality rates of Americans ages 25 to 64 with only a high school education are double the rates of those who have attended college.[28]

With an increasingly complex economy, and with more occupations requiring technical skills, a growing proportion of the population has pursued degrees beyond high school. Nearly 35 percent of Maryland's population had a bachelor's degree or higher in 2003, an increase of 3 percentage points since 2000. By contrast, only 25 percent of Calvert's population and 31 percent of Prince George's population had received a bachelor's degree or higher, levels that have increased since 1990 but have not changed significantly since 2000. As a point of comparison, about half of the residents of Montgomery and Howard counties had at least a bachelor's degree, the highest percentages in Maryland.[29] About 31 percent of Prince George's population 3 years and older was enrolled in college or graduate school at the time of the 2003

survey, compared with only 22 percent in Calvert.[30]

Figure 15

Educational Attainment of the Population 25 Years and Over in Calvert and Prince George's Counties, 2003



*Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons are *not* statistically different.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 2.

Labor Force

A fundamental economic resource in any area is its people. Just as for Maryland as a whole, roughly seven in 10 adults in both Calvert and Prince George's counties were in the labor force in 2003.[31] About two-thirds of women in both counties were in the labor force between 2000 and 2003. A high proportion of women in the labor force, especially those in higher status jobs, and a high proportion of dual-earner families have been related to an increased likelihood of families staying put rather than moving to some other area to advance the career of just one of the workers.[32]

In Calvert County, about two-thirds of families with children under age six had both parents in the labor force compared with about four in five families in Prince George's with young

children. In families with school-age children (ages 6 to 17), both counties had about four in five families with two parents in paid employment.

Most men and women work year-round and full-time in both counties. Of those who had worked in the 12 months before they answered the survey, in both counties, about seven in 10 men worked year-round and full-time in 2002 compared with six in 10 women.[33] Men in both counties were more likely than their female counterparts to have incomes of $100,000 or more. Calvert men (12 percent) were more likely than Prince George's men (7 percent) to have incomes of $100,000 or more while the difference between the women of Calvert (4 percent) and of Prince George's County (2 percent) were statistically indistinguishable.[34]

A diversified economy provides choices to workers and can cushion the overall effects of recessions and sudden changes to industries and occupational categories. With information from the American Community Survey, an area can judge whether they have sufficient diversification to withstand economic flare-ups and disruptions.

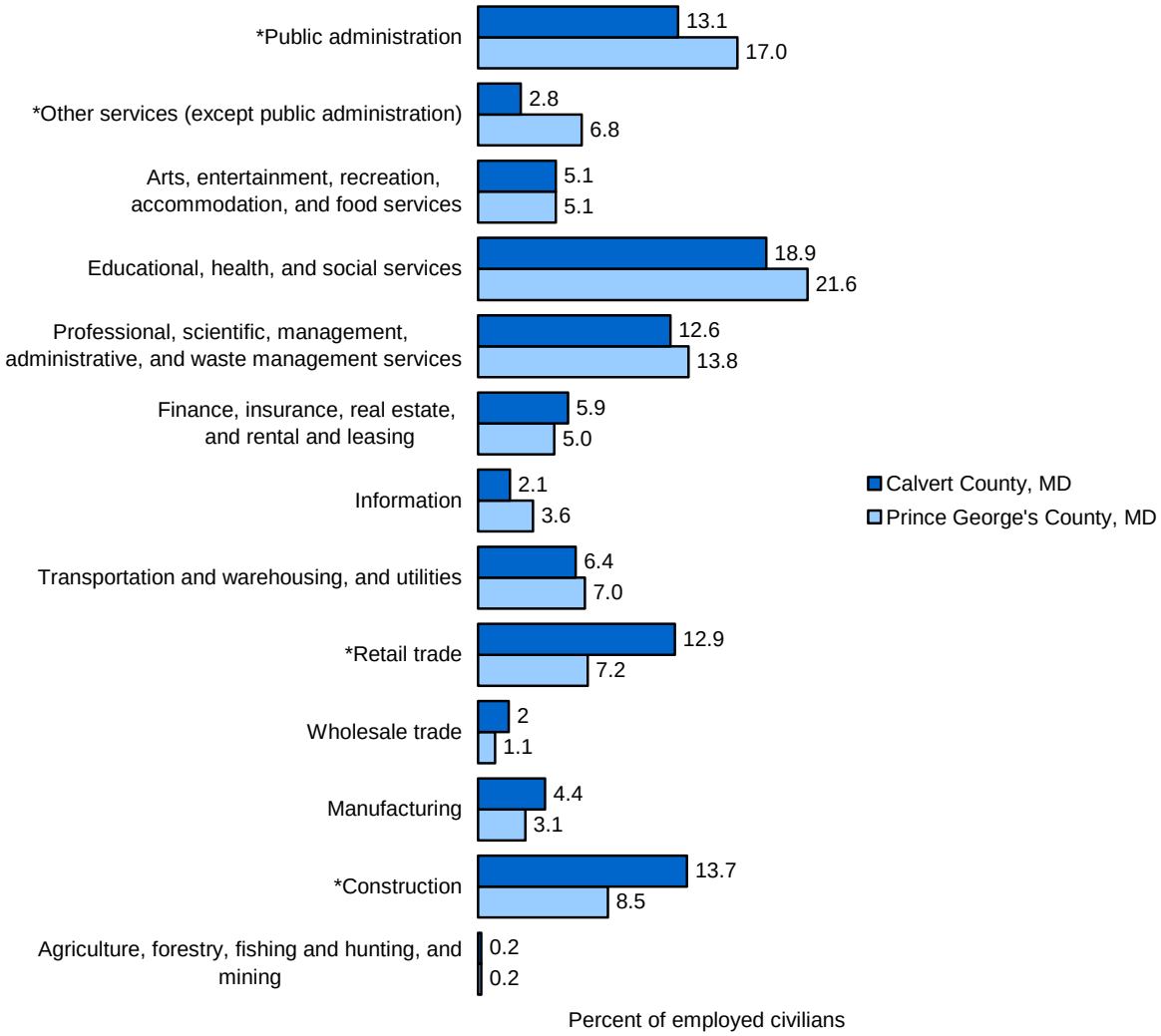
The early agrarian economy of the two counties is no more. There were not enough people in farming, fishing, or forestry occupations to measure reliably. The distribution of general occupational categories in the two counties is remarkably similar. The major source of work in both counties are the high-social-status management, professional, and related occupations, where about four in 10 people age 16 and older are employed. About one in four are in sales and office occupations. Service and construction occupations follow with just over one in eight people in each of those categories.

As Figure 16 shows, the distribution of industries in which workers from the two counties are employed are similar except that Calvert County workers are more likely to have been employed in the construction, public administration and other services, and retail trade industries.[35] About one in five workers in both counties are employed in the educational, health, and social services industries. Public administration as well as professional, management, and administrative industries are all important sources of work for those living in Calvert and Prince George's Counties.

About two-thirds of workers are private wage and salary workers and about one in four work for a federal, state, or local government agency. About 5 percent were self-employed workers in their own (unincorporated) business.[36]

Figure 16

Industry of Employed Civilians 16 Years and Over in Calvert and Prince George's Counties: 2003



*Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons are *not* statistically different.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics, (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 3.

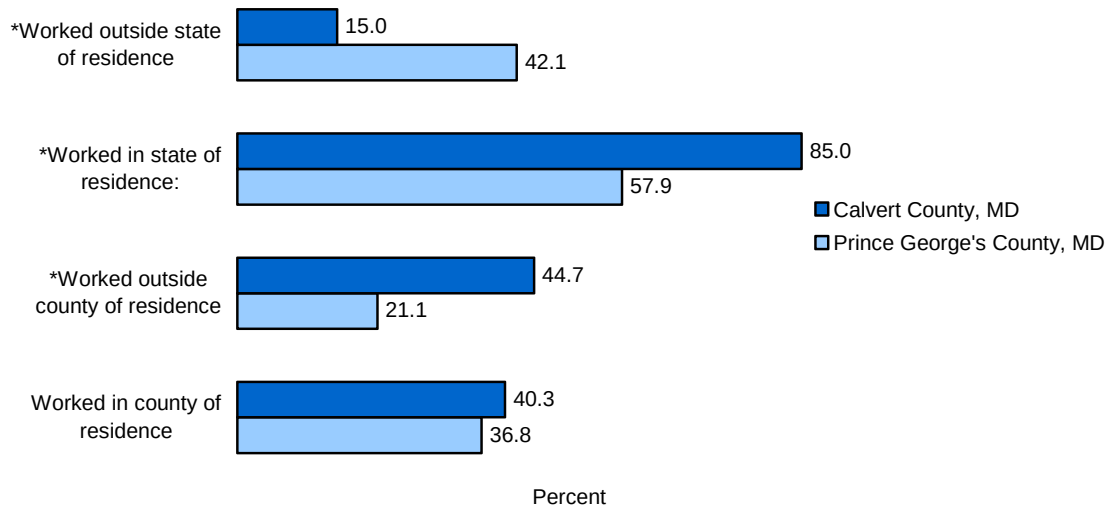
The Commute to Work: Driving Alone

With its rapid growth, an issue in Calvert County's Comprehensive Plan is to promote economic alternatives to its functioning primarily as a bedroom community. How difficult is the task? The American Community Survey provides relevant facts policymakers can use to establish concrete objectives and directions for their policies.

The workers of Calvert and Prince George's are somewhat more likely than other Maryland workers to drive beyond the county in which they live to get to their jobs. Nearly half of all Marylanders work outside their county of residence compared with about six in 10 workers in both Calvert and Prince George's counties (see Figure 17). Only 15 percent of workers from Calvert County travel outside of Maryland to work. In Prince George's County, it was 42 percent, which is not surprising, given its proximity to Washington, D.C. and Virginia.

Figure 17

State and County of Work for Workers 16 Years and Over in Calvert and Prince George's Counties: 2002



*Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons are *not* statistically different.
Source: U.S. Census Bureau, American Community Survey 2002, Table P043.

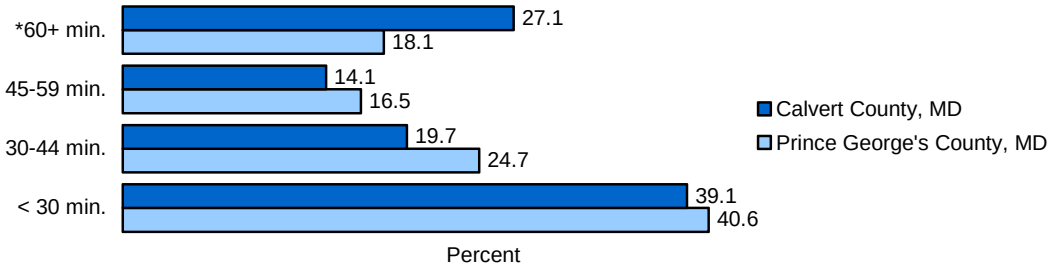
The mean travel time to work stayed steady in both counties since 2000. In Calvert in 2003, the mean commuting time was 38 minutes and in Prince George's it was 36 minutes, compared with about 30 minutes for all of Maryland.[37] These averages place both counties among the highest travel times in the nation. For example, workers in the Bronx, Queens, Richmond, and Kings—all New York counties—faced the worst commutes with averages of about 40 to 42 minutes to travel to work.[38]

The 2002 American Community Survey shows that about 60 percent of the residents of both Calvert and Prince George's counties spent 30 or more minutes commuting to work, compared with nearly half of all commuting workers in Maryland (see Figure 18). More than one in four Calvert workers commuted 60 or more minutes each way to work compared with nearly one in five workers living in Prince George's County and about one in eight workers in Maryland.[39]

Figure 18

Travel Time to Work for Workers 16 Years and Over in Calvert and Prince George's Counties: 2002

(Workers outside the home only)



*Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons are *not* statistically different.
Source: U.S. Census Bureau, American Community Survey 2002, Table P049.

The car is critically important to the economic status of most workers and is an issue for those trying to move from welfare to work. Eight percent of Prince George's households had no vehicle in 2003 compared with 4 percent of Calvert households. Three-fourths of Calvert households have two or more cars compared with just over half of Prince George's households.[40]

There were further differences between the two counties in the commute to work. Two-thirds of workers in Prince George's County drove to work alone in 2003 and about 12 percent carpooled. About 86 percent of Calvert's workers drove to work alone while 10 percent carpooled, lower than in 2000, when about 15 percent traveled with at least one other worker.[41]

Prince George's County workers have access to public transportation within the county; 15 percent used it in 2003, but the vast majority with a commute of less than an hour use their car. Nearly half of Prince George's residents who travel for an hour or more to get to work use public transportation. Practically everyone in Calvert County travels to work by car, even if it is for more than an hour.

Income and Poverty Status

Per capita income

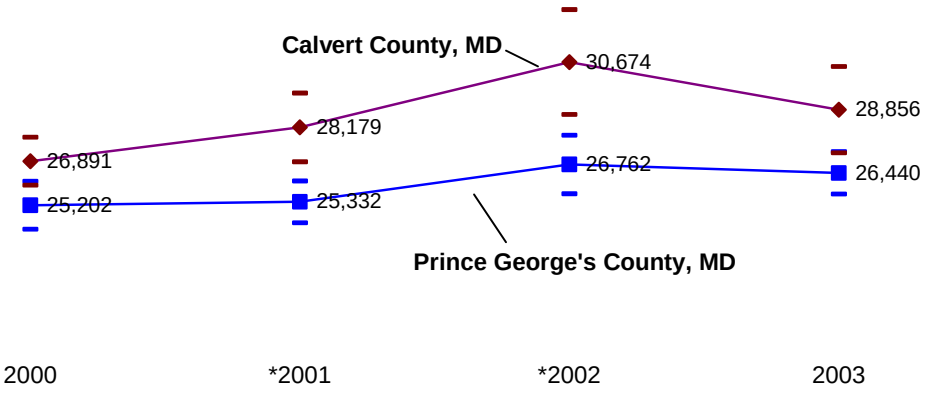
In 2003, per capita income was about $28,900 in Calvert County and $26,400 in Prince George's (see Figure 19), a statistically insignificant difference. There has been little or no difference in per capita income between the two counties since 2000 and it has not changed significantly in either county since 2000.

The American Community Survey allows us to look beyond overall averages. In Prince George's County in 2002, for example, per capita income for the white non-Hispanic population was about $32,200 compared with $25,700 for the black population and only $15,100 for the Hispanic or Latino population.[42]

Figure 19

Per Capita Income (in 2003 dollars) in Calvert and Prince George's Counties: 2000 -2003

Square or diamond = Estimate (number shown)
Bars = Upper and lower bounds of 90-percent confidence interval



*Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons between counties are *not* statistically different. The apparent different in per capita income across the years is not statistically significant for either county.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 3.

Household income

Calvert had a median household income of about $72,000 in 2003, one of the highest in Maryland. The 2003 median was about $60,000 in Prince George's. After adjusting for inflation, there was no statistically significant change in the medians for either county from 2000 to 2003.

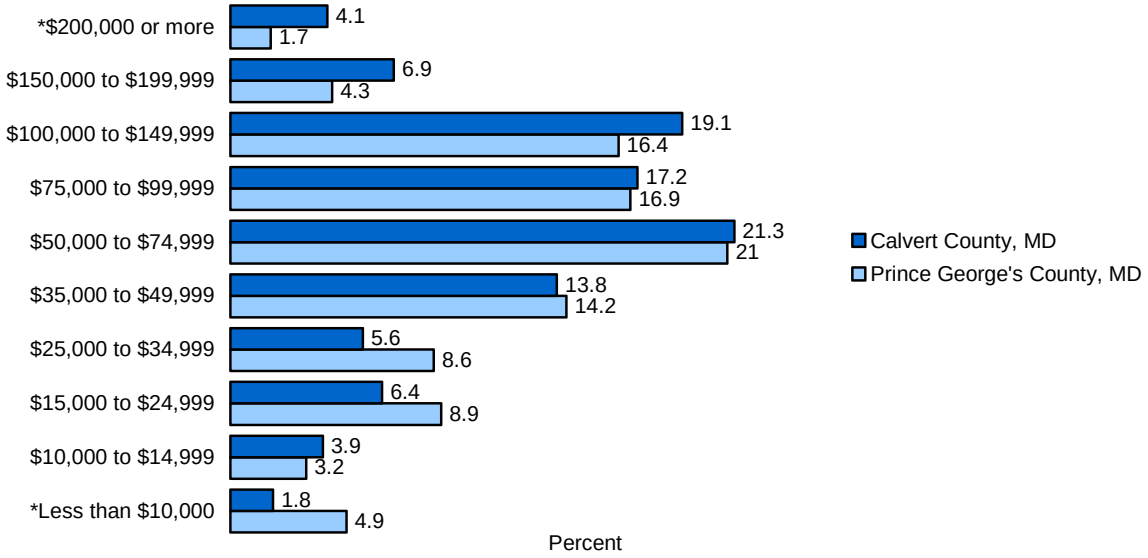
The distribution of households with incomes from $10,000 to $200,000 was similar for Calvert and Prince George's counties. Prince George's had a higher proportion of households with incomes less than $10,000 and Calvert had a higher proportion with incomes of $200,000 or more (Figure 20).

We can use the American Community Survey to examine differences in the distribution of income among groups. For example, in Prince George's County in 2002, we find that Hispanics were twice as likely as white non-Hispanics and blacks to have incomes of less than $25,000 (about 23 percent, 12 percent, and 12 percent respectively). At the higher end of the distribution, we find that Hispanics were about half as likely to have incomes of $100,000 or more as the other two groups (11 percent for Hispanics; and 28 percent for white non-Hispanics and 26 percent for blacks, a statistically insignificant difference between the last two groups).

We also learn more about the income of older people from these statistics. For example, about one-fifth of households in both counties received Social Security income. That was nearly 6,000 households in Calvert County and about 56,300 in Prince George's County.[43]

Figure 20

2002 Household Income in Calvert and Prince George's Counties



*Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons are *not* statistically different.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 3.

Earnings of men and women

The median earnings of men in Calvert and Prince George's did not change significantly between 2000 to 2003. The men in Calvert, on average, earned more than the men of Prince George's County. The median earnings of women in Calvert and Prince George's were statistically similar.

Women in Calvert County who worked year round and full time had noticeably lower median earnings than men in each year from 2000 to 2003. There was no statistical difference between the median earnings of total men and women in Prince George's County over that period. Black men in Prince George's County who worked year round and full time in 2002 had median earnings of $44,571 compared with $40,531 for black women, a statistically insignificant difference. The apparent difference between white men ($47,268) and white women ($40,424) was also statistically insignificant.

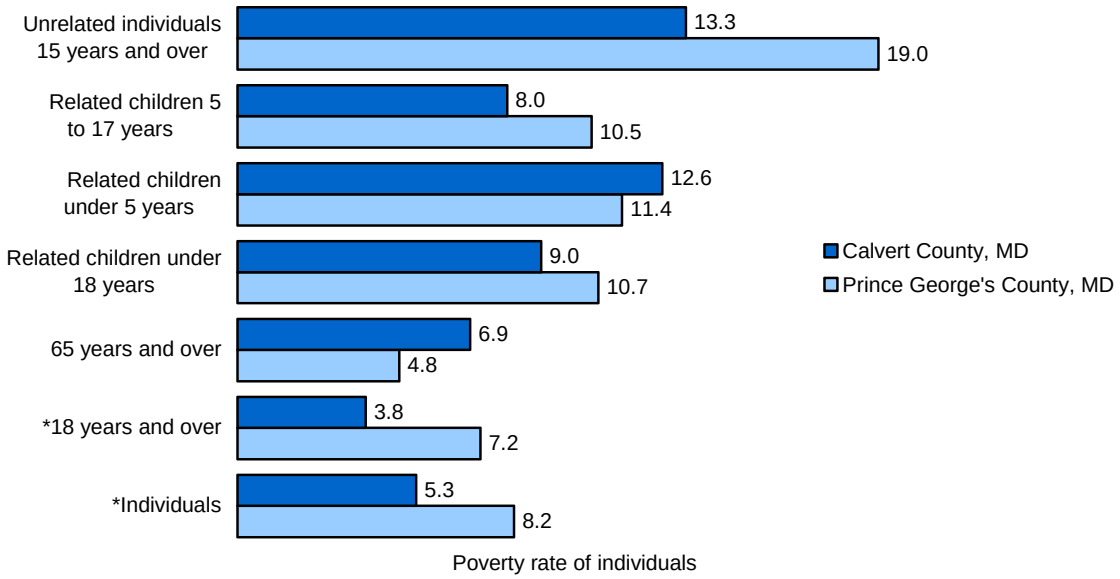
Poverty

About 7 percent of Prince George's population age 18 and older were poor compared with about 4 percent of Calvert's. Otherwise, there was no statistical difference for the other groups shown

in Figure 21. About 9 percent to 11 percent of children in both counties were poor. Roughly 5 percent to 7 percent of the older population were poor in both counties, and there was no statistical difference in either county between the poverty rates of children and persons age 65 and older.[44]

Figure 21

Percent Below Poverty in 2002 in Calvert and Prince George's Counties: 2003



*Indicates the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the comparisons are *not* statistically different.
Source: U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics (www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, accessed October 2004): table 3.

Developing the Future with the American Community Survey

The future of communities depends on the strategic development of their resources and capacities. To help policymakers with such responsibilities, the American Community Survey is providing current benchmarks to larger communities. Eventually, it will provide that same information for neighborhoods and the larger sample sizes under full implementation will let us identify trends and show their direction and level. Planners can use it to pinpoint persistent inequalities. It can be used to establish the basis of interactions among areas, appraise where there is a blend of interests, and ponder whether and how to integrate functions in ways that aid regions in realizing their potential for health and prosperity.

The information from the American Community Survey is available to everyone through the Internet and without cost. It provides facts a democratic society can use for long-term planning and to adjust to variations in economic, social, and housing conditions. The American Community Survey provides essential information for directing choices and developing awareness of an area's productive resources and of needs before problems become crises. It

serves as a guide to an area's potential and for what is attainable. It gives communities tools to develop the future they want.

For More Information

The American Community Survey population and housing statistics are available from the American FactFinder on the Internet (http://factfinder.census.gov). If you have questions about the survey, use these resources:

Internet, including information about data products from the American Community Survey, evaluation studies, copies of the questionnaire, and other documentation:

http://www.census.gov/acs/www/index.html

E-mail:

cmo.acs@census.gov

Phone:

Questions about the survey: 1-888-456-7215

Questions about the computation and use of standard errors to calculate confidence intervals:
Decennial Statistical Studies Division, 301-763-4242

Appendix A
The American Community Survey

The Basics

The decennial census has two parts: 1) the short form to count the population; and 2) the long form to obtain demographic, housing, social, and economic characteristics from a one-in-six sample of households. Information from the long form is used for the administration of federal programs and the distribution of billions of federal dollars. Since the census is conducted only once every 10 years, long-form information becomes out of date. Planners and other data users are reluctant to rely on it for decisions that are expensive and affect the quality of life of thousands of people. The American Community Survey[45] is a way to provide the data communities need every year instead of once in 10 years. Throughout the decade, the American Community Survey will provide updated estimates and long-term trends on the characteristics of the U.S. population and housing. It is a nationwide survey designed to provide communities a fresh look at how they are changing.

The American Community Survey is planned for every county of the United States. Starting in January 2005, the survey will include approximately 3 million households. Questionnaires are sent by mail, with Census Bureau staff contacting those who do not respond. The American Community Survey will provide estimates of demographic, housing, social, and economic characteristics every year for all states, as well as for all jurisdictions and population groups of 65,000 people or more.

For smaller areas, it will take three to five years to accumulate sufficient sample to produce reliable estimates for areas as small as census tracts. Analysts can use data averaged over three years for areas or population subgroups of 20,000 to 65,000 people. For rural areas and city neighborhoods or population groups of less than 20,000 people, it will take five years to accumulate a sample that is similar to that of the decennial census. These averages can then be updated every year.

The American Community Survey will provide direct estimates each year for states, populous counties, and other governmental units or population groups with a population of 65,000 or more within six to eight months of the end of data collection for the previous year. For smaller governmental units or population groups (those with a population of less than 65,000), it will take three to five years to produce estimates, which will be refreshed each year thereafter.

ACS results for 2000 through 2003 are available for the nation, most areas with a population of 250,000 or more, and selected areas with 65,000 or more residents.

The American Community Survey statistics are estimates based on a sample of the population. To learn about the accuracy of the data, see Appendix B. The Census Bureau shows the 90-percent confidence interval and the margin of error for published estimates, a measure of how precise, how good, the estimate is.

The American Community Survey provides summarized data through the American FactFinder and its own website (www.census.gov/acs/www/index.html) for sample economic, social, and housing estimates, cross tabulated by various characteristics. The products for summarized data include detailed summary tables, tabular and narrative profiles, year-to-year change profiles, and ranking tables. You can find statistics for your area from the Census Bureau's American FactFinder (http://factfinder.census.gov). At the end of this report, we give you tips for using FactFinder.

In addition, the American Community Survey provides a microdata file each year patterned after the decennial census five percent Public Use Microdata Sample (PUMS) file. The microdata file allows for two different units of analysis: housing unit and person. The microdata file includes as many records as possible and shows the lowest level of geography possible within confidentiality constraints. Users of the American Community Survey data can customize tabulations to examine the information in the way that best serves their needs.

These products and associated documentation are available electronically, on CD-ROM, as well as on the American Community Survey website (www.census.gov/acs/www/index.html).

You can learn more about the topics on the American Community Survey, and why the questions are asked on the American Community website:
(www.census.gov/acs/www/Sbasics/Squest/fact.htm).

To find additional resources that can help you to use the American Community Survey, see the information at the end of this report and the American Community Survey website (www.census.gov/acs/www/).

Questions and Answers About Analyzing Statistics from the American Community Survey

The questions and answers below are abstracted from a 2004 presentation to the New York State Data Center by Cynthia M. Taeuber and David Hubble of the U.S. Census Bureau. Some information is based on ideas developed by Charles Alexander Jr. and presented to the American Statistical Association in August 2002.

Question: What is the effect of sampling on the ACS estimates?

Answer: The larger the sample size, the smaller is the variation in the estimate. The Census Bureau publishes the upper and lower bounds of the 90-percent confidence interval around each ACS estimate to show you the range of possible values.

If you need to combine or subtract estimates, or if you compute percentages, you will need to compute the confidence interval yourself. The formula for doing that is in the "Accuracy of the Data" section on the American Community Survey website (www.census.gov/acs/www/UseData/Accuracy/Accuracy1.htm). There is also a discussion about the accuracy of the data in Appendix B of this report.

Question: I never used confidence intervals with the statistics from the decennial census long form. Why should I start now?

Answer: Actually, you should have calculated the confidence interval for the long form statistics because they are from a sample, as is the American Community Survey. Is it worth the trouble? Yes. The confidence interval may save you from making a mistake. If you know the range of the estimate, it may save you from saying something has changed when it hasn't, or that something is different when it isn't. The confidence interval helps you decide how confident you should be about the assertions you make.

A good practice to follow when using statistics from any sample is to be careful what you say is different. In the figures in this report, we use an asterisk to indicate that the apparent difference between counties is statistically significant at the 90-percent level. Otherwise, the apparent differences in the comparisons are *not* statistically different. Figure 19 is another example of how to chart the estimates with their upper and lower bounds.

Question: What is a confidence interval?

Answer: It is a way to express how "good" an estimate is. It is a range of values that describes the uncertainty that surrounds an estimate because it is based on a sample. Confidence intervals are reminders of the limitations of the estimates.

Question: What does a "90-percent" confidence interval represent?

Answer: The "90 percent" represents the level of certainty about the estimate. Over all possible samples, conducted with the same methods, 90 percent of the time, the range contains the actual population value. Ten percent of the time, the estimates will not be within the boundaries of the confidence interval.

Question: How does the uncertainty in the ACS estimates affect my work?

Answer: Rule #1: Do not make a big deal out of small differences.

Question: How do I know if estimates are different?

Answer: A quick way is to look at the confidence intervals. A better way is to conduct a mathematical test of statistical significance. Here is an example of the quick way:

AGE	ESTIMATE	CONFIDENCE INTERVAL
65-74 years	7.0%	6% – 8%
75-84 years	7.5%	5% – 10%
85+ years	13.0%	10% –16%

The percentage of 65-to-74-year-olds in this example is not statistically different from the percentage for the 75 to 84 year old group—but there is a real difference compared with the share of the population that is 85 years and older. That covers the issue of statistical significance. You should also consider whether there is any practical or meaningful significance to the difference. Whether 7 percent is a difference from 13 percent depends on the policy question being addressed and is an issue of judgment.

Question: What is the reference date for a single-year estimate from the American Community Survey?

Answer: The estimate is for the characteristic averaged over 12 months of a calendar year. Each month contributes equally. It is *not* an estimate of an implied beginning (such as January 1 or July 1), or of an end of the year characteristic.

Question: What is the reference date of a multi-year statistic?

Answer: The American Community Survey collects data from sample households that can be accumulated over multiple years to increase the effective sample size, and thereby decrease the range of the possible estimates (that is, the confidence interval). A three- or five-year average from the American Community Survey is an *average* estimate of a characteristic over the period. For example, just as a one-year estimate is the average of 12 months, a five-year estimate is the average of 60 months of estimates for a characteristic.

Question: How do I compare geographic areas that have one-year averages with those that have only three- and five-year averages?

Answer: Areas with less than 65,000 people will have only three- or five-year averages depending on their size. The answer of how to make comparisons among areas with different averages depends on your purpose. Are you looking for:

- Consistency? The data products will include five-year averages for all areas and three-year averages for areas of 20,000 or more people.
- Statistics to replace the decennial long-form estimates? The five-year estimates replace the decennial long-form statistics and are the basic product for all areas, regardless of size, from the American Community Survey.
- Reduce the lag time of the estimates? For larger areas, the three-year estimates have less lag than five-year estimates and reasonable reliability compared with one-year estimates.
- Stability? Reliability? Ask yourself how sure you need to be about the estimate because there is a tradeoff between timeliness and stability of the estimate.
    - One-year estimates are like a "finger on the pulse"—they are less stable (larger confidence interval) but more timely
    - Three-year estimates are more stable and reliable than one-year estimates
    - Moving averages always have lag—that is, they are "trailing indicators."

Question: How do I interpret a five-year average?

Answer: The answer varies depending on the change in the characteristics:

- For characteristics that change slowly or are stable, a five-year average is similar to using a larger single-year sample in the third year of the period.

- For dramatic change, an annual time series provides insight into change.

- Analysts may better interpret the five-year averages by review of single-year variations. To compare independent estimates, compare only periods with no overlap of the years (e.g., 2005 to 2009 and 2010 to 2014). A comparison of an estimate for 2005 to 2009 with an estimate for 2006 to 2010 is actually comparing the years 2005 and 2010 (because four of the five years are overlapping in the comparison).

Question: How should analysts use annually updated three- or five-year estimates?

Answer: Multi-year estimates can be used to monitor long-term trends and to look at the series of annually updated estimates to understand the magnitude and direction of a trend. We cannot measure year-to-year change precisely with multi-year estimates. They can help us to better understand the relative differences among areas or population groups.

When comparing estimates across time, check whether the population size has changed:

- If the change in the population size is drastic, be alert for likely changes in the estimates.

- If the change is not drastic, there is no issue in interpreting the five-year estimates because they are likely to be about the same, since four of the five years overlap with the previous five-year average.

- The series of five-year averages monitor trends in a characteristic. If they are available, use the one- and three-year averages to detect sudden and large changes.

    - If there is steady change up or down in a trend, the series gives a good description of the trend but with a lag and the trend may not be as steady as the averages suggest.

    - If, however, the trend is irregular over five years, the moving average will tend to smooth out the irregularities making the trend look steadier than it actually is.

    - If there is a sudden jump or drop in the size of the group over five years, the five-year averages will show an increase where there is a sudden change, but they will smooth it out, masking the suddenness of the change. If available, interpret the change with before and after profiles from the one- and three-year averages.

    - If change is irregular, that is, it is seemingly without pattern and it spikes over time, averages provide a more stable description of an area. This is one of the best uses of an average. Five-year averages give a blurred picture of the timing of change compared with a one-year estimate.

Question: Are multi-year estimates for income adjusted?

Answer: Income estimates from each year are adjusted to the most current year. For example, income estimates for 2005 to 2009 are in 2009 dollars.

Question: How do changes in geographic boundaries affect the estimates?

Answer: For one-year estimates, the geographic boundaries reflect those for an area at the beginning of the year. For multi-year estimates, all years are tabulated according to the boundaries for the most current year. Older estimates are not re-tabulated to reflect geographic changes.

Appendix B
THE ESTIMATES AND THEIR ACCURACY

The statistics from the American Community Survey and the decennial census long form are based on a sample of the population. Both data sets produce estimates with a margin of error—a measure of how precise, how good, the estimate is. In all sample surveys, including the American Community Survey and the decennial census long form, total error consists of "sampling error" plus "nonsampling error." The true number or percent of a characteristic may be higher or lower than the estimate shown in the data set.

Statistics based on questions asked of a sample will not be exactly equal to the number we would get if the entire population had been asked the survey questions. The margin of error describes the range of the typical difference between statistics based on a sample and the entire population. The margin of error provided by the Census Bureau is based on a 90-percent confidence interval (CI-90). The CI helps you decide how confident you can be about assertions you make from the statistics and whether an apparent change or difference is likely an actual change or difference.

The "90 percent" interval represents the level of certainty surrounding an estimate: over all possible samples, conducted with the same methods, the true number (or percentage) will fall within the confidence interval 90 percent of the time. For example, an estimate of 25.9 percent (+/-0.3) means that 90-percent of the time, the true number is in the range, 25.6 percent to 26.2 percent, and 10 percent of the time the true value is outside of that range. The products of the American Community Survey show the survey estimate and the upper and lower bounds of the 90-percent confidence interval.

Why should you care about statistical details like this? The margin of error indicates how different the sample estimate may be from the population value being estimated by sampling. The magnitude of the error could affect the conclusions you draw—or decide you cannot draw—from the survey. For smaller areas or population groups, the margins of errors can be large, so large that differences among them are statistically indistinguishable. The confidence interval is one tool you can use to determine whether the data provide strong or inconclusive evidence for the conclusions you draw.

The Census Bureau's research shows the American Community Survey and the census long forms are reliable and better than most sources. That is because the sample sizes are relatively large and the Census Bureau takes many steps to reduce nonsampling errors. ACS products inform you about the sampling error associated with the estimates, and evaluation studies provide information about some aspects of nonsampling errors.

The design of the American Community Survey allows samples for multiple years to be added together. Combining data from multiple years increases the effective sample size and thereby reduces the size of the confidence interval. For more information, see:

Accuracy of the American Community Survey Data:
www.census.gov/acs/www/UseData/Accuracy/Accuracy1.htm

How to calculate sampling errors and confidence intervals:
www.census.gov/acs/www/UseData/Accuracy/Accuracy1.htm

Appendix C
THE AMERICAN FACTFINDER: HOW TO FIND THE STATISTICS

Detailed summary tables showing statistics from the American Community Survey topics are available for geographic areas through the American FactFinder website (http://factfinder.census.gov). Statistics are available on the American FactFinder website in the summer following the year of data collection. For example, data collected in 2002 were released in summer 2003.

To *find statistics* from the American Community Survey:

- *Website*: http://factfinder.census.gov
- Click on **Data Sets** on the left menu of the homepage.
- *Data Set?* Click on the tab for **American Community Survey**.
- *Year?* Scroll down and choose the specific year for which you want statistics. For example, scroll down to "**2003 American Community Survey**." Click on **Detailed Tables** from the options on the right.
- *Geography?* From the first bullet, click the down arrow and highlight the geographic area for which you want statistical profiles (e.g., "county"). You can learn more about geographic concepts by clicking on they hyperlink, **Explain Census Geography**. If you click **Show all geography types**, the FactFinder expands the list of geographic types from which you can choose. Typically, more *parts* of geographic areas will be made available.
- Highlight the geography you want from the second bullet, and the third bullet if you chose a geography below the state level. Click **Add**. You can add up to 500 geographies. When you have listed all the geographic areas you need, click **Next**. That will take you to the page to choose the tables for the topics of interest to you.

  For definitions of the geographic levels available and their hierarchical relationships in census products, see the glossary of geographic terms at: www.census.gov/geo/www/tiger/glossary.html#glossary

  Every geographic entity has a unique numeric code, called a "FIPS code" (see Appendix A of the geographic glossary from the website above). FIPS codes are primarily used in data management software to identify geographic entities, but they also appear on reference maps in the American FactFinder.

  Census tract data from the American Community Survey is available for a few test sites and will eventually be available for all areas. *To find the census tract number* for a specific address, go to the American FactFinder's home page. Click on "**Enter a street address to find Census 2000 data**" and enter the address as instructed. That gives the county for an address and its county subdivision, census tract, block group, and block numbers.

- *Select Tables for Topics and Table Universes?* To select the topic and set of relevant tables from the American FactFinder, in the first bullet, click the tab to indicate how you want to search: "by subject," "by keyword," or "show all tables."

  The default choice is a *list of all tables* in numerical order. Tables about population characteristics are listed first and housing characteristics follow. Below the housing tables are additional "PCT" tables on population and housing topics for which you can find information for areas as small as the census tract level (once that becomes available starting in 2010). Highlight the table(s) of your choice, click "Add," and when you have all the tables you need, click "Show result."

  The "*by subjects*" tab lists all the topics in the American Community Survey and is usually the easiest for those who are new to the data set. In the second bullet, click the down arrow, scroll down the list, and highlight the topic(s) of your choice. Click the **Search** button and all the tables related to that topic will appear in the third bullet. For example, if you want estimates of the number of people who served in World War II in your area, highlight "Period of military service for civilian veterans 18 years and over" and all the tables on that subject appear in the third bullet.

  You can also find tables through a *keyword* search. From the example above, type in "veterans." The keyword choice is most useful if you are familiar with census jargon. For example, the list of tables you get from the keyword "Migration" is different from those shown when you use "Residence" as a keyword.

  Sometimes you will be unsure from the short table title whether the information is what you want and for the correct universe. Save time by clicking **What's this?** to the right of the list of tables. That shows you the table outline *and* the universe for the table you highlighted. The table title may sound correct but if it isn't for the correct universe, you will waste time, or worse, show the wrong statistics.

  Once you highlight the table(s) you need, click **Add** and then **Show Table**. The next page will display the statistics you specified for the year and geographic areas you previously selected.

What is a universe?

The table title tells you the variables for which statistics are shown in the table, the year of the data set, and the table's universe. The universe for a table tells you the population group or housing type for a table. The universe tells you whether the distribution in the table is, for example, for the total population, all housing units, or a subset (that is, the specific population group or housing type to which a table refers).

A common error is to forget to check the universe statement at the end of the table title. You might, for example, choose a table that estimates the number of households (such as the number of *households* with poor families) when you want a table about people (the number of *people* in poor families). The universe for housing tables may be all housing units, occupied housing units, or vacant units only. Some tables are for the total population, while others are for specific groups, such as Hispanics or age groups.

To *check definitions* of the topics in the table:

Click the "Glossary" tab at the top of the web page or click on the table title and a table outline will appear. Just above the table outline is **Subject Characteristics** with a hyperlink to the definition and information about comparability of the statistics with other data sets.

What are the three columns showing the data?

The data for the American Community Survey are shown in three columns. The statistics in the first column are called the survey's "estimate" of a characteristic. The second and third columns are the lower and upper bounds of the 90-percent confidence interval.

To *change a selection*:

Go to the **You are here** line at the top of the web page and select what you wish to change (data sets, geography, or tables).

To *print or download* data from the tables, click the **Print/Download** box at the top of the page.

> *To print a table* displayed on the American FactFinder, click on **Print**. Depending on the size of the table displayed on American FactFinder, you may have to print in "landscape" (horizontal) to fit the table on the paper. If the table has too many columns to print in landscape (for example, if you are printing all the counties in a state or all the census tracts in a county), you can download the statistics into spreadsheet software and reformat, or more technically, "transpose" the rows and columns. For example, you can switch the columns of census tracts and make them rows in the spreadsheet.
>
> To *download the table(s) into spreadsheet software* so you can perform calculations or re-arrange the rows and columns of the table(s), click on **Download** and select the format for the comma delimited spreadsheet format (.csv file). Then save with a file name and extension for your particular spreadsheet software (e.g., for Excel: "Calvert_2002.xls").

To find products, tables, and maps related to your topic from the American Community Survey and the 1990 and 2000 censuses, click the **Related Items** box at the top of the American FactFinder page.

Endnotes

[1] The statistics from decennial censuses are not strictly comparable with the American Community Survey statistics because of important differences in the survey methods. Data users are advised to use proportions rather than numbers and to not make much of small differences.

[2]U.S. Census Bureau, Population Division, County population estimates for July 1, 2000 to July 1, 2003, Annual estimates of Housing Units for Counties in Maryland: July 1, 2000 to July 1, 2003 (HU-EST 2003-04-24), accessed online at www.census.gov/popest/counties/tables/CO-EST2003-02-24.xls, in October 2004.

[3] The 1997 Comprehensive Plan of Calvert County, MD, Chapter 1, accessed online at www.co.cal.md.us/planning (Documents>Zoning), in October 2004.

[4]Prince George's County Planning Department, accessed online at www.mncppc.org/cpd/generalplanmain.htm, in October 2004.

[5] Maryland State Data Center, Maryland Department of Planning at website: (www.mdp.state.md.us/msdc/census/historical_census/ histcens.xls). The State Data Centers often prepare convenient summary statistics for their jurisdictions. A list of State Data Centers is on the Census Bureau's website (http://www.census.gov/sdc/www/).

[6] The 2003 Comprehensive Plan of Calvert County, MD, Chapter 3. pp. 92-93, accessed online at www.co.cal.md.us/planning (Documents>Zoning), in October 2004.

[8] Alan Virta, "A County With Rich History: Prince George's County History," written for the Prince George's County Tricentennial in 1996, accessed online at www.pghistory.org/PG/PG300/history.html, in October 2004.

[9] Ibid.

[10] U.S. Bureau of the Census, Population Estimates Branch, April 2004. Accessed on the website of the Maryland Department of Planning, Planning Data Services at www.mdp.state.md.us/msdc/Pop_estimates/Estimate_03/county/dw_popest_cnty03.htm, in October 2004.

[11] The American Community Survey does not ask whether migrants are legal immigrants.

[12] U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics, Table 2, accessed online at www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, in October 2004.

[13] The Baby-Boom generation in the United States is defined as those born from 1946 to 1964, when 75 million babies were born.

[14] U.S. Census Bureau, Nick Carroll and Cynthia Taeuber, "A Profile of Older Workers in Maryland," LED/OW-MD, August 2004. For Quarterly Workforce Indicators about individual counties, see: http://lehd.dsd.census.gov.

[15] The median age is the age at which exactly half of the population of an area is younger and half is older.

[16] The Planning Data Services section of the Maryland Department of Planning projects that 12 percent of Prince George's population, and 13 percent of Calvert's population, will be 65 years and older in 2015(see www.mdp.state.md.us/msdc.htm).

[17] Allison Tarmann, "Older American a Growth Industry for Rural Areas?" Population Reference Bureau, accessed online at

www.prb.org/Template.cfm?Section=PRB&template=/ContentManagement/ContentDisplay.cfm&ContentID=9532, in October 2004.

[18] People 65 and over were classified as having a disability if they reported any one of five long-lasting conditions: a sensory, physical, mental, or self-care disability, or a disability that made it difficult to "go outside the home alone to shop or visit a doctor's office." Statistics from the U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics, Table 2, accessed online at www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, in October 2004.

[19] U.S. Census Bureau, American Community Survey 2003, Table P020 on the American FactFinder website.

[20] The American Community Survey for 2000 to 2003 surveyed only people living in households and did not include people living in group quarters, including institutional settings such as nursing homes. Under full implementation, the plan for the survey is to include the group quarters population.

[21] Race and ethnicity are not scientific concepts and are defined differently by different societies. The categories the Census Bureau uses are those that the Office of Management and Budget requires of all federal agencies. Survey respondents are asked to mark the categories with which they most closely identify. Starting with Census 2000, respondents could mark one or more races. "Hispanic or Latino" origin is treated as an ethnicity in federal statistics. That is, people of Hispanic origin may be of any race.

[22] A "household" is one or more people living in a housing unit. A "family" is two or more people who are related by birth, marriage, or adoption. A household may or may not include a family. "Nonfamily households" consist of people who live alone or live with people who are not related to them.

[23] U.S. Census Bureau, 1990 Census, Table DP-1.

[24] The Census Bureau defines selected monthly owner costs as "the sum of payments for mortgages, deeds of trust, contracts to purchase, or similar debts on the property (including payments for the first mortgage, second mortgages, and home equity loans); real estate taxes; fire, hazard, and flood insurance on the property; utilities (electricity, gas, and water and sewer); and fuels (oil, coal, kerosene, wood, etc.). It also includes, where appropriate, the monthly condominium fee for condominiums and mobile home costs (installment loan payments, personal property taxes, site rent, registration fees, and license fees) for mobile homes." The definitions for other subjects are on the website for the American Community Survey: www.census.gov/acs/www/UseData/Def.htm.

[25] U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics, Table 4, accessed online at www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, in October 2004.

[26] U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics, Table 4, accessed online at www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, in October 2004.

[27] Values are those reported by respondents.

[28] National Center for Health Statistics, Donna L. Lyert, Elizabeth Arias, et. al., "Deaths: Final Data for 1999," *National Vital Statistics Reports*, 49, no. 8 (2001), Table 23.

[29] Maryland State Data Center, Maryland Department of Planning, accessed online at www.mdp.state.md.us/msdc.htm, in October 2004.

[30] U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics, Table 2, accessed online at www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, in October 2004.

[31] Employment data from the American Community Survey are obtained from respondents in households and they differ from statistics based on reports from individual business establishments, farm enterprises, and certain

government programs. The Census Bureau states, “An additional difference in the data arises from the fact that people who had a job but were not at work are included with the employed in the census statistics, whereas many of these people are likely to be excluded from employment figures based on establishment payroll reports. Furthermore, the employment status data in tabulations include people on the basis of place of residence regardless of where they work, whereas establishment data report people at their place of work regardless of where they live. This latter consideration is particularly significant when comparing data for workers who commute between areas.”

We recommend using unemployment statistics from the Bureau of Labor (BLS) statistics rather than those from the American Community Survey. As the Census Bureau documentation states, “For several reasons, the unemployment figures of the Census Bureau are not comparable with published figures on unemployment compensation claims. For example, figures on unemployment compensation claims exclude people who have exhausted their benefit rights, new workers who have not earned rights to unemployment insurance, and people losing jobs not covered by unemployment insurance systems (including some workers in agriculture, domestic services, and religious organizations, and self-employed and unpaid family workers). In addition, the qualifications for drawing unemployment compensation differ from the definition of unemployment used by the Census Bureau. People working only a few hours during the week and people with a job but not at work are sometimes eligible for unemployment compensation but are classified as "Employed" in the census. Differences in the geographical distribution of unemployment data arise because the place where claims are filed may not necessarily be the same as the place of residence of the unemployed worker.”

[32] Allison Tarmann, “Is America Settling Down?” based on research of the American-born population by Kimberlee Shauman, University of California-Davis. Population Reference Bureau, accessed online at www.prb.org/Template.cfm?Section=PRB&template=/ContentManagement/ContentDisplay.cfm&ContentID=9532 , in October 2004.

[33] U.S. Census Bureau, American Community Survey 2002, Table P064 on the American FactFinder website. “Year round” is defined as 50 to 52 weeks and “full time” is defined as those who usually worked 35 or more hours per week.

[34] U.S. Census Bureau, American Community Survey 2002, Table PCT057 on the American FactFinder website.

[35] Another new data set being developed by the Census Bureau is the Local Employment Dynamics program. From this data set, one could learn the earnings, age, and sex distribution by industry category. See the website for these and additional Quarterly Workforce Indicators for counties (http://lehd.dsd.census.gov).

[36] U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics, Table 3, accessed online at www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, in October 2004.

[37] U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics, Table 3, accessed online at www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, in October 2004.

[38] U.S. Census Bureau, American Community Survey 2002 Ranking tables, accessed online at www.census.gov/acs/www/Products/Ranking/2002/R04T050.htm, in October 2004.

[39] U.S. Census Bureau, American Community Survey, Table P049 (available on the American FactFinder) for workers 16 years and over.

[40] U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics, Table 4, accessed online at www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, in October 2004.

[41] U.S. Census Bureau, American Community Survey 2003, Profile of General Demographic Characteristics, Table 3, accessed online at www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/index.htm, in October 2004.

[42] U.S. Census Bureau, American Community Survey 2002, American FactFinder Tables P109K (White non-Hispanic), P109B (Black or African-American), and P109J (Hispanic or Latino).

[43] U.S. Census Bureau, American Community Survey 2003, Table P079 on the American FactFinder website.

[44] When we have more years of data collection and larger sample sizes for relatively small groups, we will be able to tell more about the direction and level of poverty rates for various groups once the American Community Survey is fully implemented. For example, in Prince George's County, the 2003 sample was large enough to estimate that there were 700 to 5,000 elderly with incomes below the poverty level in 2002. With a larger sample, the range of the estimate will be smaller.

[45] The American Community Survey is conducted under the authority of Title 13, United States Code, Sections 141 and 193, and response is mandatory. According to Section 221, persons who do not respond shall be fined not more than $100. The U.S. Census Bureau may use this information only for statistical purposes. We can assure you that your confidentiality is protected. Title 13 requires the Census Bureau to keep all information about you and all other respondents strictly confidential. Any Census Bureau employee who violates these provisions is subject to a fine of up to $250,000 or a prison sentence of up to five years, or both. You may view Title 13 at the U. S. House of Representatives website at the following address: http://uscode.house.gov/Title_13.htm.