

How Has Maryland Changed Over the Last Decade?

Recently released data from the 2000 Census offers a snapshot of Maryland and how it has changed over the last 10 years. In general, the data reveals that Maryland residents are now, compared to 10 years earlier:

- more educated
- more likely to be from abroad
- less likely to be in the labor force
- more likely to be driving to work alone, less likely to be using carpools and public transportation, and, taking longer to get to work
- have more income but also to be slightly more likely to be in poverty if you are neither young nor old
- live in homes that are worth a little less, but cost a little more

But these are just broad averages. The data also reveals that Maryland is a very diverse state with large differences in income, housing values and poverty rates between its jurisdictions. The rich jurisdictions are still rich, and the poor jurisdictions are still poor. But there has been some modest progress. Jurisdictions like Allegany and Garrett counties, which have been on the bottom in many socioeconomic indicators like poverty and income, seem to have made some progress, while others, like Baltimore City and Somerset County may have fallen further behind.

What follows are highlights of some of the key socioeconomic characteristics for Maryland's jurisdictions.

I. Maryland Residents Have Become More Educated

Educational attainment in Maryland increased significantly during the 1990 – 2000 time period. Nearly one out of three residents ages 25 or older (31.4%) had a bachelor's degree or higher in 2000, up from just over one out of five (26.5%) in 1990. Although data for the entire U.S. is not yet available, it most likely that Maryland's share of residents who are college educated will be near the top of all states as it was in 1990.

Remarkably, over one-half of the residents ages 25 and older in Montgomery (54.6%) and Howard (52.9%) counties have a bachelor's degree or higher. These two jurisdictions, which also have the State's highest incomes, are far and away above the rest of the State, with the next highest shares of college-educated residents in Anne Arundel and Baltimore counties (30.6% each).

Every jurisdiction in Maryland increased their share of college-degreed adults during the 1990s. However, the greatest increases were in Frederick (plus eight percentage points) and in Worcester (an increase of 6.9 percentage points) counties. Both counties grew significantly during the 1990s from in-migration from other parts of Maryland. For Frederick, the bulk of the net gains from migration came from Montgomery County. For Worcester, the largest source of new residents was from jurisdictions in the Baltimore and Suburban Washington regions.

The increase in college-educated residents also correlates well with the gains in income, with Frederick and Worcester experiencing the largest and fifth largest gains, respectively, in median household income (see Section VI below).

While the share of adults having a college degree went up, the proportion of adults ages 25 and older without a high school diploma declined from just over one out of five in 1990 (21.6%) to just under one out of six (16.2%) in 2000. Those jurisdictions with the highest proportion of adults without a high school diploma tend to be the poorer and/or more rural jurisdictions, including: Baltimore City (31.6%), and Somerset (30.5%), Dorchester (25.8%) and Caroline (25.0%) counties.

It is a bit unusual that Montgomery County was the only jurisdiction in the State, which experienced any increase in adult residents without a high school diploma, rising from 9.4 percent in 1990 to 9.7 percent in 2000. This negligible increase may be the result of the tremendous foreign immigration experienced by the County during the 1990s. However, Montgomery County still had the next to lowest share of adults without a high school diploma in 2000, with only Howard County (6.9%) lower.

Both Worcester and Garrett counties saw a 10.9 percentage point drop in the share of adults without a high school diploma – more than twice the average statewide change. Both of these drops probably were influenced by the population gains through in-migration.

II. Foreign Born Increases Significantly

Nearly one out of 10 Marylanders (9.8%) were born overseas, up from 6.6 percent in 1990. What is most remarkable, however, is that of the over 500,000 foreign born residents in 2000, over four out of 10 (44.1%) entered the U.S. within the last decade. The nearly 228,000 foreign immigrants during the decade of the 1990s represented a 54 percent increase over the nearly 148,000 total from 1980 to 1990.

Although the overwhelming majority of foreign immigrants still reside in Montgomery and Prince George's counties, the concentration is less than it once was. For example, over three quarters (76.2%) of all foreign immigrants during the decade of the 1980s settled in either Montgomery or Prince George's counties. During the following 10 years, this share was reduced to just over two-thirds (68.3%). Baltimore, Howard, Anne Arundel and Frederick counties picked up most of the lost share from these two jurisdictions.

Despite their decline in the share of total foreign immigration in the 1990s, Montgomery and Prince George's counties did have the largest, and third largest increase, respectively, in the proportion of their residents that are foreign born. For Montgomery County in 2000, just over one out of four residents (26.7%) were foreign born, up from less than one out of five (18.6%) in 1990. For Prince George's County, the increase in the foreign born rose from just under one out of 10 (9.6%) to just under one out of eight (13.8%). The second largest increase was in Howard County where the share of foreign-born residents more than doubled from 5.3 percent in 1990 to 11.3 percent in 2000.

The impact of foreign immigrants in the 1990s on the State's population growth is quite dramatic. Statewide, over four out of 10 (44.3%) can be attributed to foreign immigrants.¹ For some jurisdictions, the impact is even more dramatic. In Montgomery County, nearly nine out of 10 (89.1%) can be attributed to the foreign born. In Prince George's it was just over seven out of 10 (71.9%) and in Baltimore County over 4 out of 10 (43.8%). The high proportion in Montgomery and Prince George's counties is partly due to the fact that each experienced significant net domestic out-migration during the 1990s making foreign immigration that much more important as a source of population growth. For Montgomery, nearly 74,000 residents (net) left the County during the 1990s and for Prince George's almost 59,000 residents.

Even in jurisdictions which barely grew in the 1990s, the proportion of the foreign born to total change was significant. On the Eastern Shore, Dorchester (43.8%), Somerset (30.8%) and Kent (19.3%) could all attribute a large portion of their total population growth to foreign immigrants.

For Baltimore City, which lost nearly 85,000 residents during the 1990s, the over 14,000 foreign immigrants who entered the City during the decade was an important source of growth for some parts of the City.

III. More Have a Problem with Speaking English "Very Well"

Coinciding with the increase in foreign immigrants over the 1990s has been an increase in the share of the population that speaks English, "less than very well." The 5.0 percent share statewide is up from 3.4 percent in 1990. As expected, this population is highly concentrated in the few jurisdictions with the highest proportion of the foreign born, with Montgomery and Prince George's counties accounting for nearly two-thirds (64.5%) of the State total. Within Montgomery County, 12.9 percent of the resident population is reported to speak English less than very well, up from 8.6 percent in 1990. For Prince George's County the 2000 rate is 7.2 percent, up from 4.6 percent ten years earlier. Howard County, which has the third highest concentration of the foreign born,

¹ This figure is arrived at by dividing the total number of foreign born who entered Maryland during the 1990s by the total population change. It does not take into account births, which would be attributable to these foreign immigrants.

also had the third highest proportion of residents which speak English less than very well (4.8%).

IV. Labor Force Growth Slows as Participation Rate Drops

A drop in the overall labor force participation rate, perhaps for the first time since the end of WWII, has yielded a much smaller increase in the total labor force in the 1990s than was the case in the previous two decades. Maryland's labor force grew by just under 130,000 (4.9%) over the last decade compared to a gain of 532,000 (25.2%) in the 1980s and 453,000 (27.3%) in the 1970s. The labor force growth in the 1990s does not match up well with the job growth for the decade – which is reported to be between 195,000 for wage and salary jobs (U.S. Bureau of Labor Statistics), and 350,000 for wage and salary jobs and proprietors (U.S. Bureau of Economic Analysis). If the labor force data is accurate, then there is either a large increase in multiple job holders in the 1990s, and/or there has been a significant change in the net commuting patterns of workers between Maryland and neighboring states with a smaller net commuting outflow from Maryland than in the past.

The labor force participation rate – or the proportion of the population ages 16 and over which is in the labor force – dropped from 70.6 percent in 1990 to 67.8 percent in 2000. Drops were experienced for both males (-5.3 percentage points) and females (-0.6 percentage points). For females, whose participation rate is five points below males, the small decline in the 1990s represents an end to the trend of rapidly increasing participation rates that went from 44.3 percent in 1970 to 63.4 percent in 1990 before falling to 62.8 percent in 2000. Male participation has dropped before – in the 1970s, but at a much smaller pace (-2.8 percentage points) than the most recent decline.

Female participation declined in eight of Maryland's 24 jurisdictions. The three largest declines occurred in Prince George's (-4.7 percentage points), Howard (-3.4 percentage points) and Montgomery (-3.1 percentage points) counties. More detailed age-related data is necessary to gain insight into these declines but it can be speculated that since these counties are all economically advanced with plenty of job opportunities, the drops in participation may be the result of mothers with children retiring (at least temporarily) from the labor force based on personal choice and the financial ability to do so.

Of the 16 jurisdictions that saw gains in female labor force participation over the 1990s, the largest increases were in Allegany, Garrett, Washington, Cecil and Wicomico counties. All of these jurisdictions had participation rates that were below the statewide average in 1990 and all but Cecil remained so by 2000. In these jurisdictions the increased female participation rate may have been driven by economic necessity as all had median household incomes below the statewide average.

All jurisdictions in Maryland showed a decline in male labor force participation during the 1990s with the largest drops occurring in the two most urban jurisdictions, Prince George's (-8.8 percentage points) and Baltimore City (-8.4 percentage points).

Rounding out the top five are Allegany (-6.5 percentage points), Talbot (-6.2 percentage points) and Worcester (-5.9 percentage points) counties. The drop in Allegany County is most likely due to the addition of over 3,000 group quarters population from the new federal and state correctional facilities built during the 1990s – a population which, by definition, is not in the labor force. The declines for both Talbot and Worcester may well be linked to the large increases in the elderly population during the 1990s.

V. More Commuters Drive Alone

All measures of commutation coming out of the 2000 Census are illustrative of a continuation of the suburbanization of both population and jobs that has been occurring in the State since the 1950s. Nearly three quarters (73.7%) of all workers now drive alone to work in Maryland, up from 69.8 percent in 1990 and 60.7 percent in 1980. With more people driving alone, the share of commuters who carpool has dropped to 12.4 percent in 2000 from 15.2 percent in 1990 and 23.1 percent in 1980. Use of public transportation has also declined, to 7.2 percent in 2000, down from 8.1 percent in 1990 and 8.8 percent in 1980. These trends in transportation mode has coincided with an increase in the average travel time to work, reaching 31.2 minutes in 2000, compared to 27.0 minutes in 1990 and 26.6 minutes in 1980.

While the use of public transit fell statewide, there were some jurisdictions in which usage actually increased. Increases were largest in Charles, Calvert, St. Mary's and Anne Arundel counties most likely signifying a greater share of commuters working either in Washington D.C. or Montgomery and Prince George's counties.

It is interesting to note that four of the five jurisdictions which had the largest increases in average travel time (Dorchester, Caroline, Somerset and Garrett) are all rural counties, indicating perhaps a more scattered link between jobs and workers seeping into the more rural environments.

While all of the above measures of commutation are indications of the trend of increasing suburbanization of employment and households, there is one item that is also an indication of the changing nature of work that is being encouraged by advancing technology. The total number of people who worked at home increased by 33.7 percent between 1990 and 2000. While only representing 3.3 percent of all commuters in 2000 (up from 2.6% in 1990), it nonetheless is an area that will continue to expand as technology and the Internet continue to evolve. Expanded opportunities to work at home in an increasingly technological society will have an impact on the future location decisions for both households and firms. Whether these opportunities will exacerbate or combat current sprawl tendencies is unknown at this time.

VI. Growth in Median Household Income Slows

Maryland's median household income in 2000 reached \$52,868, up \$1,750, or 3.4 percent, from 1990 (after adjusting for inflation). The gain during the 1990s was much smaller than in the previous decade when median household incomes grew by nearly

\$8,000, or 18.5 percent (also measured in constant dollars). The larger increase during the 1980s can be attributed to a more vibrant economy as well as to an increasing share of woman participating in the labor force throughout the decade. The smaller increase in median household income during the 1990s seen in Maryland is most likely a national trend that will be confirmed when the full set of data is released.

Median household incomes vary widely among Maryland's jurisdictions with the highest median about 2.5 times the lowest. The highest medians in 2000 were found in Howard (\$74,167), Montgomery (\$71,551), Calvert (\$65,945), Charles (\$62,199) and Anne Arundel (\$61,768) counties. These same five metropolitan jurisdictions also had the five highest median incomes in 1990.

Jurisdictions with the lowest median incomes include Somerset County (\$29,903), Baltimore City (\$30,078) as well as Allegany (\$30,821) and Garrett (\$32,238) counties. Besides Baltimore City, all are rural jurisdictions located either in Western Maryland or on the Eastern Shore.

Absolute change in median household income over the course of the decade was strongest in Frederick (\$6,568), St. Mary's (\$6,480), Queen Anne's (\$6,174), Carroll (\$5,020) and Worcester (\$4,847) counties. Migrations of higher income households from other parts of Maryland or from other states were the primary factors behind these gains. For example, the gain to Frederick County can be directly attributed to in-migration from Montgomery County, the second wealthiest county in the State, which raised Frederick's median income to the sixth highest in 2000, up from the ninth highest in 1990. The income growth in St. Mary's County was chiefly due to expansion of the Patuxent River Naval Air Station which brought approximately 3,000 high-paying jobs from Virginia, Pennsylvania and New Jersey. Queen Anne's median income growth was principally fueled by families migrating from Anne Arundel County, while the source of Carroll's growth was families from Baltimore and Howard counties. Much of Worcester's median income gain can be attributed to in-migration of the elderly from the Baltimore and Washington Suburban regions.

Three jurisdictions experienced declines in their median household incomes: Baltimore City (-\$1,129), Prince George's County (-\$717) and Somerset County (-\$440). The decline in Baltimore City is linked to the City's overall population decline and the continued loss of its middle class families, many of which move to Baltimore County. For Prince George's County, migration also plays a role. The incomes of the two largest sources of in-migrants, foreign immigrants and residents of Washington, D.C., have lower incomes than the residents of Prince George's County which moved out of the County during the 1990s, mostly to jurisdictions in the Southern Maryland Region.

VII. Gap Between Male and Female Workers Narrows

Substantial progress seems to have been made between the compensation gap between male and female workers. In 2000, year round, full-time female workers earned 77.2 cents for every dollar of year-round, full-time male workers, up from 69.7 cents in

1990.² This ratio was highest in Prince George's County (91.8%), Baltimore City (84.5%) and Somerset County (83.8%). The high relative equality between male and female earnings in these jurisdictions may have something to do with the relative earnings of African-American men and women as these three jurisdictions have the highest concentrations of African-Americans in the State.

VIII. Poverty Rate Rises Slightly

Both the total number of people in poverty and the poverty rate increased in Maryland during the 1990 to 2000 decade. There were 438,700 individuals in poverty in Maryland in 2000, or 8.5 percent of the population, compared to 385,300, or 8.3 percent of the population in 1990.

Despite this overall increase, there were some successes in fighting poverty. Both the poverty rate of the elderly and of related children under 18 years of age declined during the decade. The elderly poverty rate (ages 65 and over) dropped from 10.5 percent in 1990 to 8.5 percent in 2000 while the poverty rate of children went from 10.9 percent to 10.3 percent. Although not shown in the data, it can be assumed that there was an increase in working-age poor, and perhaps in the working poor.

More than one out of five residents (22.9%) of Baltimore City were in poverty in 2000, the highest in the State and up from the 21.9 percent rate in 1990. Historically, Baltimore City has always contained a disproportionate share of the State's poor. This is still true although less so than in the recent past. In 2000, with 12.3 percent of the State's population, Baltimore City had 32.7 percent of the State's poor. In 1990, Baltimore City had 15.4 percent of the State's population and 40.6 percent of the State's poor and in 1980, 18.7 percent of the State's population and 43.6 percent of the State's poor.

With less of the poor concentrated in Baltimore City, proportionately more are residing in the older suburban jurisdictions of Prince George's, Baltimore, Montgomery and Anne Arundel counties. Each of these jurisdictions had increases in their poverty rate that was above the statewide increase.

Somerset County had the second highest poverty rate in 2000 (20.1%), and also the greatest increase in the poverty rate over the decade (4.1 percentage points). One of only three counties to also experience a decline in inflation-adjusted median household income, a "poorer" Somerset County is most likely tied to the decline in the seafood and agricultural industries in the County.

Nine of Maryland's 24 jurisdictions experienced a decline in their poverty rates. The top three declines were in Allegany (-1.7 percentage points), Worcester (-1.4

² Caution should be used in drawing conclusions from the data in that the measures for the two time periods are not directly comparable. Earnings are defined as the sum of wage and salary income and net income from self-employment. Income includes earnings plus other sources of income, such as dividends, interest and rent, social security income, etc.

percentage points) and Garrett (-1.4 percentage points) counties. All of these declines in poverty are consistent with the gains in median household incomes during the decade.

IX. Housing Value Drops in Central Maryland

Statewide, median housing value declined slightly over the 1990-2000 decade. After adjusting for inflation, the median housing value of owner-occupied units fell from \$148,845 in 1990 to \$146,000 in 2000, a decline of \$2,845, or 1.9 percent.

Ten jurisdictions experienced declines in housing value, all but one (Talbot County) were metropolitan counties located in central Maryland (i.e., Baltimore, Suburban Washington or Southern Maryland regions). Surprisingly, the largest losses were in the Baltimore/Washington corridor that has some of the highest housing prices and most vibrant real estate markets. Montgomery County experienced the highest loss (-\$34,749 or -13.5%), followed by Prince George's (-\$11,038, -7.0%), Howard (-\$6,426, -3.0%) and Frederick (-\$5,254, -3.2%) counties.

It is difficult to determine the reasons behind these increases without more precise data. It could be partly a function of the product mix (e.g., more townhouses versus single-family detached added to the counties during the decade). Or it could be a result of the ups and downs of the real estate market which saw 1990 as a peak year in housing prices just before the State plunged into the 1990/1991 recession from which it did not fully recover for a number of years. By 2000 the State's economy was once again very vibrant, but that year did not represent a peak in prices that have continued to rise after 2000.

Whereas almost all the jurisdictions with declining values were in the central Maryland corridor, six of the top seven counties with gains in value were located either in Western Maryland or on the Eastern Shore. The top increases were in Worcester (\$14,817, or 13.9%), Allegany (11,434, 19.2%), St. Mary's (\$10,610, 7.6%), Somerset (\$10,063, 14.2%), Garrett (\$9,486, 12.3%), Queen Anne's (\$9,239, 6.1%) and Washington (\$8,956, 8.4%) counties. Of these seven counties, only three – Worcester, St. Mary's and Queen Anne's - had substantial population and housing growth that would put pressure on housing prices. Gains in housing value for some of the other jurisdictions may be a function of being in those parts of the State that did not fully participate in the economic boom of the 1980s with its accompanying run-up of housing prices, while showing some participation of the economic prosperity of the late 1990s as evidenced by relative gains in income and declines in poverty rates.

With all of the relative changes in housing values over the last decade as described above, there was not much movement in the relative ranking of housing value by County. Montgomery (\$221,800), Howard (\$206,300) and Calvert (\$169,200) still rank on top as they did in 1990, while Baltimore City (\$69,100), Allegany (\$71,100) and Somerset (\$81,100) still are on the bottom (but in a slightly different order than in 1990). The enormous difference between the most and the least costly housing still exists, although it has shrunk somewhat. In 2000, the average value of a home in Montgomery

County was 3.2 times the average price in Baltimore City. In 1990, this ratio (between Montgomery County and Allegany County) was 4.3

X. Monthly Owner Costs Increase, With an Increasing Burden

Whereas the median value of owner-occupied housing units fell slightly during the decade, average monthly owner costs (with a mortgage) increased by \$123, or 10.5 percent after adjusting for inflation. The largest increases were in Queen Anne's (\$204, or 19.0%), Carroll (\$193, 17.1 %), and Frederick (\$160, 13.7%) counties. The rise in monthly owner costs is heavily influenced by the age of the housing stock, with those jurisdictions with a greater share of new houses tending to have larger increases in monthly owner costs.

In a state where there are large differences in income and housing value between its jurisdictions, it follows that there would be large differences in monthly owner costs. For instance, average monthly owner costs in Montgomery County in 2000 amounted to \$1,577, or \$18,924 annually, compared to just \$728 monthly, or \$8,736 per year in Allegany County, less than one-half (46.2%) of the Montgomery average.

Traditionally, the affordability of housing is defined as consuming no more than 35 percent of the household's income. Between 1990 and 2000 the share of households statewide which spent more than 35 percent of their income on housing costs increased from 11.9 percent to 16.1 percent. By this measure Baltimore City has the largest mismatch between incomes and housing cost, where just over one out of five homeowners (20.5%) pay more than 35 percent of income for housing costs, up from 13.5 percent in 1990.

Other jurisdictions with relatively high shares include: Prince George's (20.0%), Queen Anne's (19.2%), Somerset (19.1%) and Kent (18.3%) counties. Baltimore City, Prince George's and Kent counties had the three highest percentage point increases in this share over the 1990 to 2000 period.

While Kent and Somerset counties, like Baltimore City, have double-digit poverty rates, and Prince George's County has a substantial number of poor for a suburban jurisdiction, Queen Anne's share may be a function of younger families moving into newly built houses over the past decade.

The best match between income and housing costs is in Allegany County where just over one out of 10 households (11.5%) pay more than 35 percent of their income for housing costs. Other counties with relatively low shares of households paying more than 35 percent of their income included: Harford (13.3%), Washington (13.8%), Wicomico (13.8%), St. Mary's (14.1%) and Howard (14.2%) counties. Howard County may be a bit of a surprise, given the high housing values, but really represents a market, which is relatively well matched between high incomes and high housing prices.

XI. Rental Costs and Burden Fall Slightly

In contrast to owner costs, the median monthly rent actually declined over the 1990 to 2000 period. Adjusted for inflation, statewide median monthly rent fell from \$700 in 1990 to \$689 in 2000. The \$11 drop represented a 1.6 percent decline in contrast to the 10.5 percent increase in median monthly owner costs.

While statewide median rent declined, among the individual jurisdictions median rent declined in only eight jurisdictions and rose in 16. Five out of the top six declines were in metropolitan jurisdictions with the largest declines in Prince George's (-\$83, or -10.1%) and Montgomery (-\$31, -3.3%) counties and in Baltimore City (-\$30, -5.7%). In contrast to what was happening in Central Maryland, the largest absolute increases in median monthly rent were found on the Eastern Shore, led by Worcester (\$66, or 13.0%), Somerset (\$43, 11.1%) and Caroline (\$37, 8.3%) counties. Harford County had the largest increase of the metropolitan counties (\$36, 5.9%), followed by Dorchester (\$34, 8.1%) also on the Eastern Shore.

Even though most of the largest increases in median rent were in rural counties, and most of the declines were in the metropolitan counties, there was no major shift in the rankings of median rent by jurisdiction. The top monthly rents in 2000 were in Montgomery, Howard, Charles, Calvert, Anne Arundel and Prince George's counties, the same as in 1990, although in a slightly different order. The lowest rents in 2000 were found in Allegany, Garrett, Somerset, Dorchester, Washington and Caroline counties – the same as in 1990 – although again in a slightly different order.

Similarly to monthly owner costs, there is a vast difference between the highest and lowest median rents. In 2000, Montgomery County's median rent was \$914, 2.4 times the median rent of Allegany County (\$381). This was down somewhat from the 1990 when Montgomery County's median rent was 2.6 times Allegany's median rent.

By and large, rent is more of a burden to renters than housing costs are to homeowners. In 2000, 27 percent of renters had rents that were greater than 35 percent of their incomes compared to 16.1 percent of homeowners. The statewide figure for renters was a slight improvement over 1990 (27.5%).

Rent burden is highest among the poorest jurisdictions. For example, in Somerset County and Baltimore City, which had the lowest and second lowest median household incomes, respectively, in 2000, one out of three renters (33.7% in Somerset and 33.0% in Baltimore City) pay more than 35 percent of their incomes for rent. Other high rent burdens for low-income jurisdictions were found in Allegany (29.1%), and Dorchester (28.0%) counties.

Two relatively poor jurisdictions did see some significant decline in their rental burden, however. In Caroline County, the share of renters paying more than 35 percent of incomes for rent dropped 6.3 percentage points, from 27.7% in 1990, ranked seventh

in the State, to 21.4 percent in 2000, ranked 24th in the State. In Garrett County, the shares dropped from 28.1 percent in 1990, ranked sixth, to 23.0 percent in 2000, ranked 20th. Both jurisdictions had fairly solid gains in median household income, exceeding the statewide gain during the decade, and also significant increases in the number of rental units.

Summary Tables, [2000, 1990 and Change](#)

Detailed County Tables, [2000, 1990 and Change](#)

For more information, contact Mark Goldstein at:

mgoldstein@mdp.state.md.us