

Income Gains from Migration Greatest in Newer Suburban Counties

The largest differences between the incomes of in-migrants and out-migrants – where newcomer’s incomes exceed the incomes of those who are leaving - were found in the fast-growing, newer suburban counties of Carroll, Calvert and Queen Anne’s. At the opposite end of the spectrum – where the incomes of those leaving exceed those of newcomers - the greatest differences of out-migrant incomes exceeding in-migrant incomes were found in Baltimore City as well as the older suburban jurisdictions of Baltimore, Prince George’s and Montgomery counties.

Incomes of non-movers, or non-migrants, are highest in Howard, Calvert, Montgomery, and Carroll counties, and lowest in Somerset, Dorchester, Garrett and Allegany counties and in Baltimore City.

By and large, relative age and household type among migrants and non-movers can explain much of the differences in incomes among the jurisdictions and among the in and out-migrants.

These conclusions can be drawn from 10 years of county-to county income data from the U.S. Internal Revenue Service’s migration files (income years 1995 to 2004 for migration years 1996 to 2005). Median adjusted gross income (AGI) per income tax return can be analyzed for non-migrants, in-migrants and out-migrants along with the relationship between these three groups.¹

Highest Non-Migrant Income in Howard, Calvert and Montgomery Counties

The relative rankings of the non-migrants by jurisdiction (i.e. those that did not move at all or if they moved to another residence, did not leave their jurisdiction) have remained fairly stable over the 10-year period. (See [Table 1A](#).) The top four jurisdictions were nearly the same in both 1995 and in 2004 - Howard, Calvert, Montgomery, and Carroll, with Calvert ranked number two the last three years and Montgomery ranked third. The fifth through tenth wealthiest jurisdictions – Frederick, Charles, Anne Arundel, St. Mary’s, Harford and Queen Anne’s counties in 2004 – had more movement over the last 10 years with greater gains among some newer suburban jurisdictions compared to older suburban jurisdictions. For example, Frederick’s number five rank in 2004 was up from eighth in 1995 and Harford’s relative rank of ninth in 2004 was well below its rank of fifth in 1995. In addition, St. Mary’s (ranked eighth) and Queen Anne’s (ranked 10th) were ranked 11th and 12th respectively in 1995. Prince George’s and Baltimore County, on the other hand, were ranked ninth and tenth, respectively, in 1995, but 12th and 13th in 2004.

The eight jurisdictions with the lowest median AGIs were the same in 2004 and 1995, although with the exception of the poorest - Somerset – were in a different order for the two

¹ The income reported in the IRS series is median adjusted gross income of income tax returns. As such it does not represent household income, a more typical income measure. In general, the adjusted gross income measure will be well below the household measure because of multiple returns per household.

years. The jurisdiction with the most consistent improvement over time was Worcester, going from 20th in 1995 to 17th in 2004. The jurisdictions with the most consistent lower relative ranking was Wicomico County, which went from 17th to 19th, and Baltimore City which went from 21st to 23rd.

Enormous Gap Between Highest and Lowest Incomes

The non-migrant income data also reveals the enormous gap between the richest and poorest jurisdictions in Maryland. In 2004 Howard County's median AGI for returns was \$61,771, or 2.5 times Somerset's \$24,640. There was even a relatively large gap of \$9,143 (17.4%) between Howard County and number two Calvert County (\$52,628) in 2004. (See [Chart 1.](#))

This sort of divergence in income between the top two jurisdictions is also evident in a different income measure – median household income. Estimates by the Maryland Department of Planning for income year 2004 show the top median household incomes in Howard County (\$86,900) to be 2.5 times the estimated lowest median household incomes in Somerset County (\$34,150). (See [Median Household Income Estimates.](#)) Additionally, Howard County's median household income is estimated to be \$4,700 (5.7 percent) higher than number two Montgomery County (\$82,200). It is interesting to note that in 1989 the difference in median household incomes between Howard and Montgomery counties was only \$259, or 0.5 percent. The relative growth in incomes for these two counties, as well as the rest of Maryland over the last 15 years, is partly a function of the in and out-migration flows that took place during this time period (as is discussed beginning on page 3).

Non-Migrant Income Growth Greatest in Newer Suburban Jurisdictions

Although the relative rankings of median incomes of non-migrants did not change appreciably over the eight-year period, there were large differences in the growth of the median incomes of returns for non-migrants among the jurisdictions. For the most part, the largest absolute gains were in the newer suburban jurisdictions with Howard (\$17,586), St. Mary's (\$16,308), Calvert (\$16,040), Frederick (\$15,456), and Queen Anne's (\$15,346) counties leading the way.² The jurisdictions with the smallest absolute gains were all rural and/or poor: Somerset (\$6,556), Baltimore City (\$6,582), Allegany (\$6,678), and Wicomico (\$7,304). (See [Chart 2.](#))

The change in the median income of non-migrants varies by year and more or less corresponds to the economic vitality of the State. In general, growth in the statewide median

² For analysis purposes counties are classified as “newer suburban jurisdictions,” “older suburban jurisdictions, and “rural.” The four older suburban jurisdictions – Anne Arundel, Baltimore in the Baltimore Region and Montgomery and Prince George's counties in the Washington Suburban Region – represent the counties which surround central cities and were the recipients of the first wave of suburbanization following World War II. The nine newer suburban jurisdictions – Carroll, Harford and Howard in the Baltimore Region; Frederick in the Washington Suburban Region; Calvert, Charles, and St. Mary's in the Southern Maryland Region; and Cecil and Queen Anne's in the Eastern Shore Region, generally are adjacent to older suburban jurisdictions and were the recipient of the second major wave of suburbanization which began in earnest in the 1970s. The remaining jurisdictions (with the exception of Baltimore City) are mostly rural and located either in Western Maryland or on the Eastern Shore.

income of non-migrants (unadjusted for inflation) peaked at \$1,939 between 1999 and 2000, before dropping sharply to a gain of \$929 in 2001 and just \$575 in 2002. The recovery from the 2001 recession seems to have finally kicked in by 2003, with a statewide median income change for non-migrants of \$1,005, and accelerated in 2004, with that year's gain (\$1,901) the second largest in the 10 years of the data series. (See [Table 1B](#).) This pattern corresponds to other measures of income and job growth for Maryland which illustrate the State's economy peaking in the 1999 to 2000 period before beginning to feel the effects of the 2001 national recession and recent rebound. (See: [Jobs and income estimates through 2005](#).)

The percentage change of the jurisdictional median income of the non-migrants fits a similar, but not identical, pattern as the absolute change data. Most of the fastest growing jurisdictions still tended to be newer suburban counties - St. Mary's (54.5%), and Queen Anne's (51.4%) counties were ranked first and third respectively - but the second and fourth fastest were Worcester (53.3%) and Talbot (49.4%), respectively, both rural counties on the Eastern Shore. (See [Table 1C](#) and [Chart 3](#).) Both of these Eastern Shore jurisdictions were still relatively low ranked in terms of median AGI in both 1995 and 2004, but Worcester County did move up from 20th in 1995 to 17th in four out of the last five years. Talbot County moved from 15th in 1995 up to 14th in 1998, and has been there ever since.³

The smallest percentage increase in the median AGI for non-migrants were in the metropolitan jurisdictions of Prince George's County (28.9%), Baltimore County (30.7%) and Baltimore City (32.7%) and the rural counties of Allegany (31.6%) and Wicomico (32.5%). (See [Chart 3](#).) As a result, all five of these jurisdictions had a decline in their relative ranking of non-migrant income over the 1995 to 2004 time period.

Fast-Growing Counties Have Largest Difference Between In and Out Migrants

The change in the median adjusted gross income of tax filers for non-migrants over time is largely a function of the relative incomes of the in-migrants and out-migrants. As such, it is not surprising that the largest gains of non-migrants were mostly in the newer suburban jurisdictions as these jurisdictions in general had the largest difference between the incomes of in-migrants and out-migrants. In fact, over the 1995-2004 period, the three greatest differences between the incomes of in-migrants and out-migrants averaged over the 10-year period were all newer suburban jurisdictions: Carroll (\$9,486), Calvert (\$8,650) and Queen Anne's (\$8,350). The next largest differences were the rural jurisdictions of Talbot (\$5,792) and Kent (\$8,350) counties. (See [Table 2A](#) and [Chart 4](#).)

³ By another income measure, per-capita personal income, Talbot County is relatively wealthy. Talbot County's per-capita personal income in 2004 of \$48,501 was substantially above the State average of \$33,090 and was ranked third overall in the State. The relatively high per-capita personal income figure is in contrast with the relatively low median total adjusted gross income per return as well as median household income (\$51,700 in 2004, or 83.3% of the Statewide median of \$62,050) and is the result of a high degree of income inequality in the County. That is, a relatively small portion of the County's population controls a disproportionate share of the County's income. For example, in 2000, the latest data available, the top 20 percent of households controlled 54.9 percent of all aggregate income, the highest share in Maryland. (See [Income Inequality Continues to Grow in Maryland](#).)

Jurisdictions where the incomes of in-migrants are exceeded to the greatest degree by the incomes of out-migrants include three out of the four older suburban jurisdictions: Montgomery (-\$4,208), Prince George's (-\$3,340), and Baltimore (-\$2,802) counties, as well as Baltimore City (-\$3,356).

Howard County, a newer suburban jurisdiction, also had a fairly large difference in the median incomes of in-migrants and out-migrants (-\$2,208). For Howard County, this “loss” is a function of the County having the highest median income of non-migrants, which become the out-migrants.

Life-Cycle Changes Help Explain Migrant Income Differences

In general, the larger median incomes of in-migrants compared to out-migrants for the newer suburban jurisdictions, and the higher incomes of out-migrants over in-migrants for Baltimore City and most of the older suburban jurisdictions, can be explained by development patterns that have been in place for years. Typically, migrants into the newer suburban jurisdictions are often from central cities or older suburban jurisdictions and are more likely to be already established households “moving up” to better housing and/or better public school choices. These households are more likely to have two adults with workforce experience and thus would have higher incomes.

The reverse flow of migrants into older suburban jurisdictions or central cities is more likely to be younger individuals or households in the early stages of household formation. These individuals are more likely to be just starting out in the world of work and thus would have lower incomes. The motivation for these people to migrate into central cities and older suburban jurisdictions is to be closer to available jobs and less expensive housing choices, including multi-family housing.

Comparisons of “exemptions per return” of in-migrants and out-migrants from the IRS data tend to support the above arguments. As can be seen in [Table 3](#) and [Chart 5](#), all of the newer suburban jurisdictions have larger in-migrant “households” (as proxied by exemptions per return) than out-migrant “households.” For Baltimore City and the four older suburban jurisdictions, the opposite is true, that is, in-migrant “households” are smaller than out-migrant “households.”

Census Data on Age Adds Evidence to Life Cycle Movement

Indirect additional evidence on the characteristics of the migrants described in the IRS data can also be found in data from the 2000 census. The long-form of the 2000 census (completed by approximately one in six households) asks the question, “Where did you live five years ago,” and so in essence represents a snapshot of where people lived in 2000 compared to 1995, along with the characteristics of these movers and non-movers. [Chart 6](#) shows the median age of in and out-migrants by location from the 2000 Census. The median age of in-migrants into the newer suburban jurisdictions (32.0 years) is greater than the median age of in-migrants into the older suburban jurisdictions (30.5 years). Additionally, the median age of in-migrants into the newer suburban jurisdictions (32.0) is greater (by 0.9 years) than the out-migrants from

the newer suburban jurisdictions (31.1). In contrast, the median age of in-migrants into the older suburban jurisdictions (30.5) is less than the age of out-migrants from the older suburban jurisdictions (32.0). (Three-page profiles on migrants and non-migrants developed from Census 2000 data can be found at [Selected General Characteristics of 1995 to 2000 Migrants and Non-Movers](#).)

Individual county-level data generally supports these observations. [Chart 7](#) shows that all of the jurisdictions where incomes of out-migrants are higher than the incomes of in-migrants also have higher median ages of out-migrants when compared to in-migrants.⁴

Greatest Share of In-Migrants to Newer Suburban Jurisdictions are Married Families

Additional indirect evidence of the characteristics of IRS movers can also be found from Census data showing the percent of the migrant household population that were in married family households (the household type with the largest median incomes). [Chart 8](#) shows that nearly seven out of 10 (69.5%) of the in-migrants moving into the newer suburban jurisdictions were in married couple family households, compared to just over one-half (55.3%) for the in-migrants into the older suburban jurisdictions. Additionally, this share of the population was higher for in-migrants than out-migrants (61.9%) for the newer suburban jurisdictions, while for the older suburban jurisdictions, it was just the opposite – more of the out-migrant household population (58.4%) was in married couple families than was the in-migrant population (55.3%). Married couple family households will on average have higher incomes than other family households or non-family households. (See [Chart 9](#).)

Incomes of All Migrants Typically Below Incomes of Non-migrants

In general, migrants (both “in” and “out”) tend to be younger than non-movers and would therefore not have incomes as high as prime working-age non-movers. Although age-specific data on migrants is not available from the IRS migration data, information from the 2000 census does show the younger profile of movers as opposed to non-movers. [Chart 10](#) shows that the median age of both in-migrants (30.8) and out-migrants (31.6) for Maryland between the 1995 and 2000 period was well below the median age of non-migrants (40.5). Additionally, [Chart 11](#) illustrates that a disproportionate number of movers are in the younger cohorts (primarily in the 20 to 34 year age groups) compared to non-movers.

The IRS income data for the 10-year period generally coincides with the overall age profile of migrants from the 2000 census, as incomes of non-movers are higher than the incomes of in-migrants for all jurisdictions and for out-migrants for all but one jurisdiction. In general, the ratio of median incomes of in-migrants to non-migrants is closest to destination incomes (i.e. a ratio of 1.0) when that destination is a newer suburban jurisdiction (0.78), a rural jurisdiction (0.82), or Baltimore City (0.91), as opposed to an older suburban jurisdiction (0.69). (See [Table 2A](#).)

⁴ There may be some “distortion” of the data in some jurisdictions due to the movement of prisoners or students. This would be particularly true for Kent, Somerset and Allegany counties.

Specifically, for newer suburban jurisdictions like Queen Anne's (0.92) and Carroll (0.89) counties the relative closeness in median incomes between in-migrants and non-migrants is due to the fact that most of these in-migrants are coming from the older suburban jurisdictions (in the case of Queen Anne's from Anne Arundel County and in the case of Carroll from Baltimore County) with a high proportion of their in-migrant populations in married-couple families (nearly three out of four for each jurisdiction, the highest in the State). (See [Chart 12.](#))⁵

For Baltimore City (and other central cities) in-migrants tend to be younger with lower incomes seeking less costly housing opportunities and access to entry-level or the initial stages of professional jobs. Census data for the 1995-2000 period shows Baltimore City to have the smallest share in the State (31.3%) of its in-migrant population in married couple families. (See [Chart 12.](#)) Thus, incomes would be more aligned with the overall lower incomes of the non-mover residents.

For some rural counties like Kent (.88) and Talbot (.93, ranked first) the relatively high ratios of in-migrant income to non-migrant income may be a function of the attractiveness of these places to retirees or people commuting to work outside of these counties. With the prosperity of the latter half of the 1990s, rural communities may have benefited by attracting both groups. Growth of in-migrant income was the second highest in the State for Talbot County (\$11,274) and the sixth highest in the State for Kent County (\$9,910). (See [Table 4B.](#) Growth in out-migrant income is shown in [Table 5B.](#))

It is often the perception in rapidly suburbanizing jurisdictions that the income of new in-migrants are higher than the incomes of existing residents, with the new residents buying homes which are unaffordable to the existing residents. As mentioned above, in-migrants, in total, have lower incomes than non-migrants in every jurisdiction in Maryland for all years of the data series mainly due to the age profiles of the two groups.⁶

There is at least one example, however, - Washington County - where the incomes of in-migrants are becoming much closer to that of the non-migrants. Washington County has seen rapid increases in its population over the last several years, with much of this growth the result of in-migration from wealthier Frederick County. As a result, over the last two years the ratio of in-migrant income to non-migrant income was .89, up from what was consistently between .80 and .83 in the first five years of the data series. (See [Table 2B.](#))

In-Migrant Income Well Below Non-Movers in Howard and Older Suburban Jurisdictions

Howard County and the four older suburban jurisdictions make up five out of the bottom six jurisdictions with the lowest in-migrant to non-migrant income ratios. (See [Chart 13](#) and [Table 2A.](#)) For Prince George's (0.67), Montgomery (0.66), and Baltimore (0.71) counties, the low relative incomes of in-migrants compared to non-migrants are most likely a function of the principal origins of these migrants; namely central cities and/or foreign immigrants as well as the

⁵ Again, using data from the 2000 census to impute characteristics of migrants and non-movers during the 10-year period covered by the IRS data.

⁶ Although there may well be instances where new developments may require incomes which are, by and large, higher than the existing residents of the immediate area.

likely age profile of these migrants. For both Prince George's and Montgomery counties the major in-migrant pool is from Washington, D.C. and from abroad with both tending to be lower income. For Baltimore County, the major flow is from Baltimore City. Howard County's relatively low ratio (0.65) is due to non-migrant incomes that are the highest in the State since the average median incomes of in-migrants to Howard County over the 1995–2004 period (\$34,344) were the fourth highest in Maryland. (See [Table 2A](#).)

The ratio of incomes of out-migrants to non-migrants is much closer among the various types of jurisdictions than is the ratio between the incomes of in-migrants and non-migrants. There is not much difference in these ratios between older suburban (0.76), newer suburban (0.72) and more rural counties (0.76). (See [Table 2A](#) and [Chart 14](#). [Table 2C](#) has the annual data.)

Baltimore City Out-Migrant Income Greater Than Non-Movers

Baltimore City is the only jurisdiction in Maryland where out-migrants have median incomes higher than non-movers over the 1995 to 2004 time period. Although Baltimore City is a relatively low-income jurisdiction, which would tend to make movers and non-movers more alike, the income ratio of out-migrants to non-movers for the City over the 10-year period (1.05), far exceeds the same ratios for other low-income jurisdictions like Dorchester (0.79), Somerset (0.77), Allegany (0.76), and Garrett (0.71) counties.

This phenomenon of higher incomes for out-migrants than non-movers in Baltimore City seems to be primarily a function of who is leaving the City. Using data from the 2000 census, it can be surmised that a disproportionate share of the out-migrating population is in married couple families. For example, during the 1995 to 2000 period 50.7 percent of the out-migrating household population from Baltimore City were in married couple families; 12.4 percentage points higher than the proportion of City non-movers who are in married-couple families (38.3%). Baltimore City is the only jurisdiction in the State where this was the case, i.e. where the share of family households of out-migrants is higher than the share of family households of non-movers. (See [Chart 15](#).) [Chart 16](#) illustrates that most of this difference in Baltimore City has to do with married couple families with children under the age of 18. Just over one-third (34.0%) of the out-migrating household population is in this category, compared to just over one-fifth (21.8%) of non-migrants, a 12.2 percentage point difference.

From the above data it appears that stemming the outflow of families, and in particular families with children, will be a key component for Baltimore in stabilizing its future population and improving its relative income levels.

Is Baltimore City Improving?

The revitalization of Baltimore City has been subject to much speculation over the course of the current decade. The IRS data in this analysis covers the movement of tax filers through 2005 (and thus incomes through 2004) and should be able to provide some insight as to what sort of turnaround may be going on in the City.

Annual Exemptions per Return

Baltimore City has been successful in challenging the U.S. Census Bureau's population estimates four times this decade by using a housing unit methodology which has added approximately 30,000 to the City's population totals. Part of this process involves estimating net changes to the housing stock while holding the Census 2000 household size constant.⁷

The number of exemptions per return can be used as an indicator of the change in household size over time. For non-migrants, in-migrants and out-migrants, exemptions per return have all declined in the City. For non-migrants, exemptions per return have gone from a range of 2.06 to 2.08 in the first three years of the data series to a range of 2.02 to 2.03 in the last three years. (See [Chart 17](#).) This decline parallels, but exceeds, what was going on for the State as a whole where exemptions per return went from 2.18 in 1996 to 2.15 in 2005.

Although there are some variations in the exemptions per return for in and out-migrants over the course of the 10-year period, the trend has been downward for both. As a result, exemptions per return for out-migrants from Baltimore City are consistently higher than exemptions per return for in-migrants into the City. This difference has fluctuated between -0.19 to -0.22 (in-migration "household size" minus out-migration "household size") over the course of the decade indicating no appreciable change in the difference between household sizes of in and out migrants. (See [Chart 18](#).)

Annual In and Out Migrant Income

Out-migrant incomes have always been higher than in-migrant incomes in Baltimore City (as is the case for the older suburban jurisdictions), with this difference fluctuating somewhat over the last 10 years. In general, this difference was smaller in the first three years of the data series, became larger during the next three, and has shown some small signs of "improvement over the last four years. For income year 2004, in-migrant income was \$2,887 less than out-migrant income, the smallest difference over the last 10 years and a possible sign of the beginning of a permanent shrinking of the gap in income between out-migrants and in-migrants. (See [Chart 19](#). Also see [Table 2D](#) for annual ratio data of in-migrants and out-migrants and [Table 6](#) for the annual difference in incomes for in and out migrants..)

For more information, contact Mark Goldstein at mgoldstein@mdp.state.md.us

Back to [Tables and Charts](#)

⁷ Household size is generally believed to be declining in the City and elsewhere in Maryland.