

Should I Stay or Should I Go? Trends in Out-Migration from Montgomery County

Stephen Roblin

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OLO Report 2024-15

EXECUTIVE SUMMARY

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This Office of Legislative Oversight (OLO) report responds to the County Council's request to analyze out-migration and net out-migration trends from Montgomery County. The report draws on the latest data from the Census Bureau's American Community Survey (ACS), Population Estimates Program (PEP), and the Internal Revenue Service (IRS) to describe where former County residents have relocated and their demographics. It compares Montgomery County's trends in the out-migration of individuals and income to its suburban neighbors, including Frederick, Howard, and Prince George's Counties in Maryland and Fairfax and Loudoun Counties in Virginia. The report concludes with key findings and discussion points for Council consideration.

Background on Internal Migration in the United States

Since the 1980s, internal migration has been steadily declining across the U.S., a trend that continued during the pandemic. Internal migration patterns have been shaped by housing, family, and employment considerations, along with demographic, racial, and political preferences. In recent years, states in the Sunbelt and Northwest have seen significant net gains, while California and states in the Northeast, Rust Belt, and Midwest have experienced substantial net losses. Additionally, there has been a notable shift toward exurban areas and smaller cities, likely driven by rising housing costs in large metropolitan areas and increased telework opportunities. This shift, which began before the pandemic, accelerated during it, as suburban counties saw net out-migration and exurban counties experienced net in-migration.

Internal Migration of Individuals

Recent County-to-County migration data provide detailed information on the movement of people and income but lack demographic variables, such as age, gender, and race. While this limits the ability to analyze *who* has out-migrated in terms of their personal attributes, the data allowed OLO to identify the states and counties *where* Montgomery County residents have relocated and how these trends compare across neighboring suburban counties.

To compare the counties, OLO examined *total levels* of out-migration, in-migration, and net internal migration and these variables as *percentages of each county's population*. By examining internal migration from Montgomery County within a regional framework, this analysis reveals several ways in which the County's migration trends have been both distinct and part of a broader regional pattern. The key findings include:

 Montgomery County has retained a larger share of its residents compared to neighboring suburban counties. From 2012 to 2022, an average of 53,113 residents moved out annually, but out-migrants represented only 5.1% of the County's population each year, a lower percentage than most neighboring counties except Frederick.

- Montgomery County attracted fewer new residents relative to its population size. On average, 4.4% of Montgomery County's population consisted of in-migrants each year, the lowest among its neighbors.
- Montgomery County experienced modest net losses from internal migration, with an average annual net loss of 7,409 residents. This ranks second behind Fairfax County. Frederick, Howard, and Loudoun Counties consistently saw net in-migration.
- Recent trends show growing net out-migration over time in most counties in the region, except Frederick County, where net in-migration has risen since 2021.
- Interstate moves have primarily driven Montgomery County's out-migration and in-migration patterns. From 2017 to 2022, the County had moderate levels of *out-of-state* out-migration and in-migration. In contrast, it had the lowest levels of *in-state* out-migration and in-migration.
- Montgomery County's top out-migration destinations before and during the Pandemic are identified below. Within the region, the County saw net gains from Washington, D.C., but net losses to Frederick, Howard, and Fairfax Counties.

Most Popular Destinations f Resider	• •	Destination Resulting in Largest Net Losses fo Montgomery County					
County/City, State	State	County/City, State	State				
Prince George's County, MD	Virginia	Frederick County, MD	Florida				
Frederick County, MD	District of Columbia	Howard County, MD	Virginia				
Howard County, MD	Florida	Anne Arundel County, MD	Texas				
Fairfax County, VA	California	Washington County, MD	North Carolina				
Anne Arundel County, MD	Texas	Fairfax County, VA	Delaware				
Baltimore City, MD	New York	Sussex County, DE	South Carolina				
Baltimore County, MD	Pennsylvania	Loudoun County, VA	Pennsylvania				

Internal Migration of Income

OLO used IRS data to examine the internal migration of income, measured as Real Adjusted Gross Income (AGI) in 2022 inflation-adjusted dollars. To compare the counties, the analysis evaluates total outflows and inflows of Real AGI as well as percentages of Gross Domestic Product (GDP) and Total Personal Income. Key findings from this analysis include:

 Montgomery County had low levels of Real AGI outflows and the lowest levels of inflows compared to its suburban neighbors. From 2012 to 2022, the County averaged \$3.3 billion in

¹ AGI is defined as gross income from all sources minus certain adjustments or expenses not subject to taxation.

outflows and \$2.5 billion in inflows annually, with lower percentages relative to GDP than other counties.

- Montgomery County experienced the second-largest net losses of Real AGI, averaging \$800 million per year. Net outflows grew by an average of \$80.3 million annually, with only Frederick County continuing to see increases in net inflows of Real AGI over time.
- Montgomery County experienced the largest net losses of Real AGI from internal migration relative to its GDP. Montgomery County experienced the largest net losses, with an average annual net loss of 0.81% of GDP, compared to 0.79% and 0.77% for Prince George's and Fairfax Counties, respectively.
- For all counties, per capita Real AGI for people leaving was higher than for people moving in, but lower than for residents who stayed. Montgomery County had the second-largest gap in average per capita income. Out-migrants had an average per capita income of \$61,540, while inmigrants had \$54,636, resulting in a net loss of \$6,905. The County had the third-largest income gap between out-migrants and non-migrants, behind Fairfax and Howard Counties.
- Interstate moves were the primary driver of Montgomery County's Real AGI outflows and inflows. From 2017 to 2022, the County saw high levels of *out-of-state* Real AGI outflows and inflows. In contrast, Montgomery County had the lowest levels of *in-state* outflows and inflows.
- Montgomery County's top destinations for Real AGI outflows before and during the Pandemic are identified below. From 2020 to 2022, Montgomery experienced its largest net losses to Florida (\$930 million), Delaware (\$190 million), Texas (\$150 million), and Virginia (\$130 million).
- During the pandemic, high-income households from Montgomery County predominantly relocated to Florida, with Palm Beach County seeing the largest influx, followed by Miami-Dade and Sarasota Counties.

Most Popular Destinations for Real AGI Ou	• •	Destination Resulting in Largest Net Losses in Real AGI for Montgomery County					
County/City, State	State	County/City, State	State				
District of Columbia	Virginia	Frederick County, MD	Florida				
Frederick County, MD	Florida	Palm Beach County, FL	Delaware				
Prince George's County, MD	District of Columbia	Anne Arundel County, MD	Texas				
Fairfax County, VA	California	Sussex County, DE	Virginia				
Palm Beach County, FL	Texas	Howard County, MD	North Carolina				
Howard County, MD	New York	Miami-Dade County, FL	California				
Anne Arundel County, MD	Pennsylvania	Fairfax, VA	South Carolina				

OLO Discussion Items

OLO identified three discussion items for the Council to consider when evaluating the policy implications of the findings presented in this report.

- 1. Why has the County retained a higher share of its residents than other jurisdictions?
- 2. Why has the County attracted fewer new residents compared to its neighbors? And what policies could the Council pursue to make the County more attractive to households from elsewhere in the United States?
- 3. Why has the County struggled to attract Real AGI inflows compared to neighboring areas? And what are the tax and other implications of net outflows of Real AGI for the County?

For a complete copy of OLO-Report 2024-15, go to: https://www.montgomerycountymd.gov/OLO/Reports/CurrentOLOReports.html

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Introduction

Internal migration, or residents of one jurisdiction relocating to another jurisdiction within the same country, can be an important source of social, economic, and political change at the local level. In the United States, internal migration can affect local jurisdictions by shaping their demographic characteristics, local government revenues, demand for services, economic performance, and even outcomes of elections. Thus, local government leaders can gain valuable, policy-relevant insights by understanding who has been moving in and out of the jurisdictions they represent, along with the origins and destinations of these residents.

Internal migration has two main components: out-migration, where people move away from a specific jurisdiction, and in-migration, where people move into it. When more people leave a place than move in, this is called "net out-migration." Conversely, "net in-migration" occurs when more people move into a jurisdiction than leave. This report focuses on out-migration and net out-migration from Montgomery County. The County Council requested the Office of Legislative Oversight (OLO) to use the latest data to describe the demographics of residents who moved out and where they relocated. To this end, this OLO report:

- Provides an overview of internal migration by defining core concepts related to this study and highlighting recent trends across the United States;
- Draws on the most recent data on county-to-county migration from the Census Bureau's American Community Survey (ACS) and Population Estimates Program (PEP) and data from the Internal Revenue Service (IRS), which provides insight into the out-migration of *individuals* and *income*; and
- Performs statistical analyses on these data to compare how Montgomery County's trends in the out-migration of individuals and income compared to its suburban neighbors, namely Frederick, Howard, and Prince George's Counties in Maryland and Fairfax and Loudoun Counties in Virginia.

The report is organized as follows:

Chapter 1 – Background on Internal Migration: Provides background on internal
migration by defining key concepts in demography, reviewing patterns of internal
migration across the United States, and exploring some of the common causes of
internal migration from survey data and peer-reviewed literature.

- Chapter 2 Methodology: Lays out the framework for comparing out-migration trends in individuals and income across the six counties in subsequent chapters by defining key concepts in statistics, explaining the data used in this analysis, highlighting their important similarities and differences, and describing the statistical methods and approaches used in the analysis.
- Chapter 3 Out-Migration of Individuals: Findings from Census Data: Presents
 the data analysis on the out-migration of individuals, using the migration data from
 the Census's ACS and PEP. The chapter describes the data tables and visualizations
 presented and outlines key findings, focusing on how Montgomery County compares
 with its neighbors.
- Chapter 4 Out-Migration of Individuals: Findings from IRS Data: Presents the data analysis on the out-migration of individuals, using the migration data from the IRS. Again, the chapter describes the data tables and visualizations and outlines key findings with a focus on Montgomery County.
- Chapter 5 Out-Migration of Income: Findings from IRS Data: Presents the data analysis on the out-migration of income, specifically real Adjusted Gross Income, using the migration data from the IRS.
- Chapter 6 Summary Findings and Discussion Items: Synthesizes the findings from the data analyses on the migration of individuals and income and presents discussion items for Councilmembers to consider.

Office of Legislative Oversight staff member Stephen Roblin conducted this study, with assistance from Kristen Latham and Karen Pecoraro.

For access to the replication data for the data analysis performed in this report, please contact Stephen Roblin at stephen.roblin@montgomerycountymd.gov.

Chapter 1. Background on Internal Migration

In this chapter, OLO provides background on internal migration by defining key concepts in demography, such as internal migration, out-migration, and net out-migration. It then examines patterns of internal migration across the United States, highlighting the overall decline in migration in the country, disparities among demographic groups and regions, and the impacts of the pandemic. Finally, the chapter draws from survey data and empirical studies to explore the common drivers of internal migration.

A. Internal Migration Definitions

Demography is the statistical study of human populations. There are several concepts in the field that are essential for understanding and interpreting data on internal migration.

A **population** refers to the total number of individuals who live within certain political or geographic boundaries at a specific point of time. ¹ Populations change through three components—fertility, mortality, and migration. Typically, the difference between births and deaths within a population is positive, meaning "more babies are being born than people are dying."

For advanced industrialized countries like the United States, migration has arguably become the predominant factor responsible for population change due to historic decreases in fertility and mortality. Migration differs from fertility and mortality in an important way: every migrant is both an in-migrant/immigrant and an out-migrant/emigrant, whereas those who were born or died can only be one of those things.

A common definition of **migration** used by demographers is the spatial movement of a person that involves both:

- Change in the place of usual residence ("residence"); and
- Crossing of a legally recognized geographic boundary.

¹ "Population," World Health Organization, accessed November 8, 2023, https://www.who.int/data/gho/indicator-metadata-registry/imr-details/1121.

² Luke Rogers and Peter Borsella, "Growth or Decline: Understanding How Populations Change," *Census Bureau* (blog), March 24, 2016, https://www.census.gov/newsroom/blogs/random-samplings/2016/03/growth-or-decline-understanding-how-populations-change.html.

³ Richard E. Bilsborrow, "Concepts, Definitions and Data Collection Approaches," in *International Handbook of Migration and Population Distribution*, ed. Michael J. White (Dordrecht: Springer Netherlands, 2016), 109–56, https://doi.org/10.1007/978-94-017-7282-2_7.

Thus, migration is distguinshed from other forms of human mobility, such as commuting or tourism, which do not involve, both a change of usual residence and movement across a border.⁴

In general, demographers distinguish between two broad categories of migration—international and internal migration. **International migration** refers to migration from one country to another—i.e., a change in residence that involves crossing national borders. **Internal migration**, also called "domestic migration," refers to migration *within the same country*—i.e., a change in residence that inolves crossing legally recognized boundaries within a country.

The U.S. Census Bureau refers to sub-national boundaries within the U.S. that are defined in official documents, such as charters, legislation, and ordinances as "legal/administrative geographic entities" or "legal/administrative areas." They include regions, states, counties (and equivalents), municipatilies, census tracts, etc. In this report, OLO uses "jurisdiction" in place of these terms for the sake of brevity.

As shown in **Figure 1.1**, migration includes additional subterms based on the movement of people across boundaries – for international migration, **emigration** refers to someone moving away from their country to settle in a different country, whereas **immigration** refers to someone moving into a different country.

The equivalent to these terms within the domain of internal migration are in-migration and out-migration. **In-migration** refers to movement of people away from a particular jurisdiction where they have resided to settle in a different jurisdiction within the same country. **Out-migration** refers to someone moving away from a jurisdiction where one has resided to settle in a different area within the same country. For the purposes of analyzing internal migration, individuals who engage in these migratory behaviors may be referred to as "in-migrants" and "out-migrants."

⁵ Ibid.

⁴ Ibid.

⁵ US Census Bureau, "Legal/Administrative and Statistical Geographic Entities," Census.gov, October 8, 2021, https://www.census.gov/programs-surveys/geography/about/training/legal-and-geographic-entities.html.

⁶ "Hierarchy Diagrams," U.S. Census Bureau, October 8, 2021, https://www.census.gov/programs-surveys/geography/guidance/hierarchy.html; and "Terms and Definitions," U.S. Census Bureau, December 16, 2021, https://www.census.gov/programs-surveys/popest/guidance-geographies/terms-and-definitions.html.

⁷ Bilsborrow, "Concepts, Definitions and Data Collection Approaches."

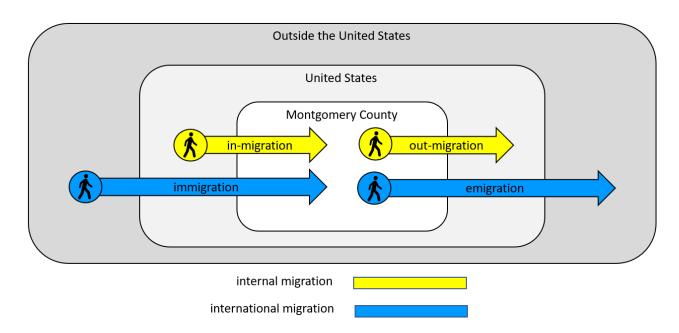


Figure 1.1. Differences in Terminology Between Internal and International Migration

Based on the above definition, internal migration includes **intra-county migration**. This form of migration refers to someone moving from one residence to another within the same county and crossing a sub-county boundary, like a municipal border.⁸ For example, intra-county migration would involve a Montgomery County resident who moves from outside an incorporated city like Silver Spring to a residence within the incorporated City of Rockville.

It should be noted that internal migration does <u>not</u> include migration with the same county in which no sub-county boundary is crossed. For example, a resident who moves from one residence within Rockville to another is definitionally excluded from internal migration (as well as intra-county migration as defined above).

For the purposes of this report, two additional concepts are essential to understand. Counties typically experience, both, in-migration and out-migration on an annual basis. **Net internal migration** is the difference between the number of individuals who move into a given jurisdiction and the number of individuals who move out of the jurisdiction during a specified time period. The formula is as follows:

Net internal migrants = number of in-migrants – number of out-migrants

When a jurisdiction sees more in-migrants than out-migrants during a specific period, the result is **net in-migration**, or positive net internal migration. Conversely, when a jurisdiction

⁸ Georg Grassmueck, "What Drives Intra-County Migration: The Impact of Local Fiscal Factors on Tiebout Sorting," *Review of Regional Studies* 41, no. 2,3 (June 1, 2011): 119–38, https://doi.org/10.52324/001c.8152.

sees more out-migrants than in-migrants, the result is **net out-migration**, or negative net internal migration.

Importantly, net internal migration does <u>not</u> account for international migration (i.e., County residents who move to different countries or citizens of different countries moving into the County) or intra-county migration (i.e., County residents who move within the jurisdiction).

It should be noted that the direction of net internal migration for a particular jurisdiction does <u>not</u> necessarily correspond with the direction of its total population growth. For example, a jurisdiction that has experienced net out-migration still may have an increase in total population due to an influx of international migrants or if the number of births significantly increased.

Another key concept relevant for this report is demographics. A common definition of **demographics** is information, typically quantitative, that describes the characteristics of a population. These characteristics may include age, sex, race, ethnicity, family size, civil status, income, employment, and location of residence.⁹

B. Internal Migration in the United States

Before analyzing out-migration from Montgomery County, it is informative to present patterns of internal migration for people in the United States over the last half century. This section reviews findings from peer-reviewed studies, white papers, and policy briefs on internal migration published over the last 15 years.

Historic Declines in Internal Migration

Internal migration in the U.S. has been steadily declining since the 1980s, as visualized in **Figure 1.2**. In his review of Census data, Riordan Frost, senior research analyst with Joint Center for Housing Studies of Harvard University, documents how the national mobility rate had decreased from around 18 percent in the mid-1980s to less than 10 percent in 2019, an almost 50 percent decline over 35 years.¹⁰

Internal Migration," in *Handbook of Population*, ed. Dudley L. Poston (Cham: Springer International Publishing, 2019), 383–419, https://doi.org/10.1007/978-3-030-10910-3_16.

⁹ "Demographics," Oxford Reference, accessed August 23, 2024, https://doi.org/10.1093/oi/authority.20110803095709788; Michael J. White and David P. Lindstrom, "15

¹⁰ Riordan Frost, "Are Americans Stuck in Place? Declining Residential Mobility in the US" (Joint Center for Housing Studies of Harvard University, May 4, 2020), https://www.jchs.harvard.edu/research-areas/research-briefs/are-americans-stuck-place-declining-residential-mobility-us.

In his analyses, Frost has also identified the segments of the population most likely to move in recent years. Young adults, college graduates, renters, low-income adults, and multiracial adults. ¹¹ (There have been only minor differences in the likelihood of moving by different racial and ethnic groups.) Interestingly, however, some of these segments have been simultaneously driving the steady decline in internal mobility.

 Young People: Compared to middle-aged and older adults, young adults have been much more likely to move. Between 2017 and 2018, 25 percent of individuals aged 18-24 moved compared to six percent of individuals aged 65 and older.¹²

Despite being more mobile than their older counterparts, young adults have experienced the sharpest declines in internal migration compared to other generations. The percentage of young adults (20-24 years old) who moved decreased from around 40 percent in 1976 to less than 25 percent in 2016.¹³

• **Renters:** Compared to homeowners, renters have been far more likely to move. In 2018, 24 percent of renter households moved in the last year, compared to six percent of homeowner households.¹⁴

Despite being more mobile than homeowners, renters have experienced sharper declines in internal migration compared to them. While the number of renters has grown by over seven million between 2006 and 2018, the share of renter households who moved each year dropped from 32 percent to 24 percent during this time.¹⁵

• Local Movers: Most moves occur over short distances. Between 2018 and 2019, 82 percent of all moves in the United States were either within the same county (65 percent) or between counties within the same state (17 percent). In contrast, 18 percent of moves were either interstate (14 percent) or abroad (four percent). 16

Despite the prevalence of short moves over long-distance moves, there has been a decline in local mobility among people in the United States. Indeed, the percentage of people who moved locally decreased from around 15 percent in the 1980s to eight percent in 2019.¹⁷

¹² Ibid.

¹¹ Ibid.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Ibid.

The Geography of Internal Migration

As internal migration in the United States has been decreasing overall for four decades, important geographical differences in internal migration patterns at the state- and county-levels have emerged.

From 2015 to 2019, states in the Sunbelt and Northwest experienced significant gains in net in-migration, whereas California and states in the Northeast, Rust Belt, and Midwest experienced net out-migration. As highlighted in **Figure 1.3**, states that saw the largest net in-migration were: ¹⁸

Florida

Texas

Arizona

North Carolina

Washington

In contrast, states that experienced the largest net out-migration were:

New York

California

Illinois

New Jersey

Pennsylvania

At the county-level, medium and small metropolitan counties generally experienced net inmigration during this period. Counties that experienced net out-migration generally included suburban counties in large metropolitan areas as well as counties in largely rural areas.¹⁹

¹⁸ Riordan Frost, "Did More People Move During the Pandemic?" (Joint Center for Housing Studies of Harvard University, March 2023), https://www.jchs.harvard.edu/blog/have-more-people-moved-during-pandemic.

¹⁹ Ibid.; Frost, "Are Americans Stuck in Place?"

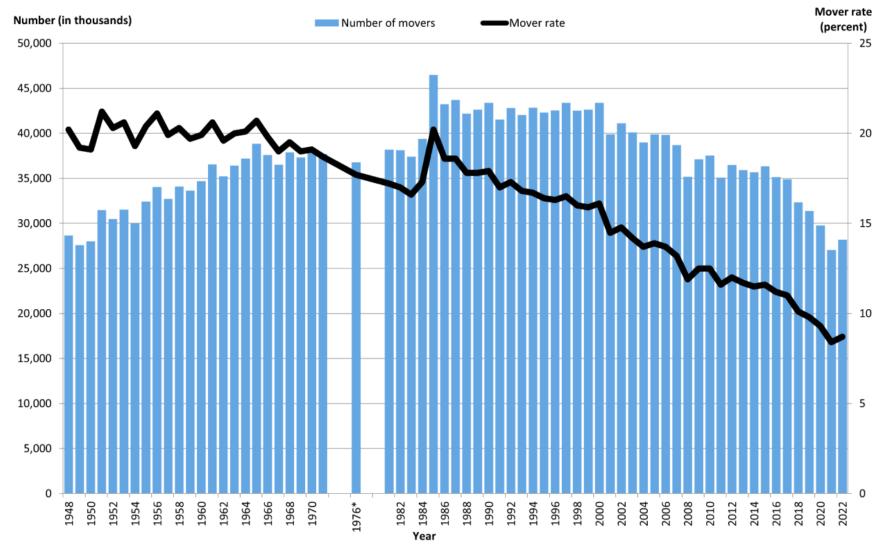


Figure 1.2. Number of Movers and Mover Rate

Source: "Figure A-1.1. Number of Movers and Mover Rate: 1948-2022," U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement (CPS ASES) 1948-202

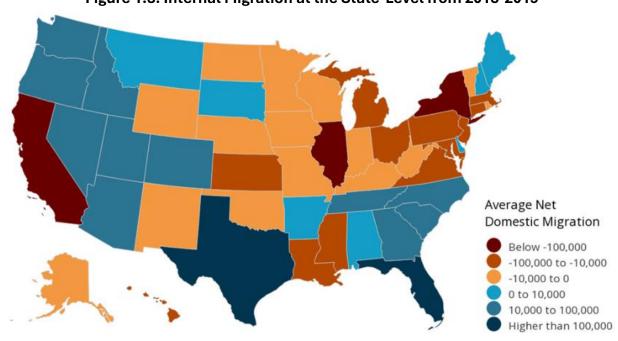


Figure 1.3. Internal Migration at the State-Level from 2015-2019

Source: Frost (2023), "Figure 4. Domestic Migration Gains Were Concentrated in the Sunbelt and Northwest Before the Pandemic," JCHS tabulations of US Census Bureau, 2015–2019 Population Estimates Program

Internal Migration During the Pandemic

Patterns of internal migration in the United States largely continued during the pandemic. Internal migration continued its long-term decline, falling from around 13 percent in 2019 to 12 percent in 2021.²⁰ Internal migration rates continued to decline during this period for the following segments of the population:

- Young adults;
- Renters;
- Low-income households (and middle-income households); and
- All racial and ethnic groups.²¹

The internal migration rate stayed steady for college graduates and households in the highest income quartile.²²

Also, Census data indicates that homeowner household internal migration dropped by one percentage point from 2022 to 2023. In this review of the data, Frost attributes this drop to

²⁰ Frost, "Have More People Moved During the Pandemic?"

²¹ Ibid.

²² Ibid.

rising interest rates and high home prices that priced out many would be homeowners and the "lock in effect" in which homeowners who purchased early in the pandemic with historically low interest rates have not moved due to the mismatch between previously low mortgage interest rates and recent rates.²³

The pandemic appears to have had a meaningful impact on the geography of internal migration, particularly on "exurban" jurisdictions. Exurban jurisdictions are considered "transitional" jurisdictions between suburban jurisdictions surrounding large cities and rural jurisdictions. They are largely residential, less dense than suburban jurisdictions, and have a mix of rural and urban uses.²⁴

Recently released Census data indicate that "the country's fastest-growing places are increasingly likely to be far-flung exurban communities on the outer margins of metro areas." Meanwhile, growth slowed for inner suburbs near large cities. 26

In their review of this data, Lindsay Spell and Marc Perry from the Census Bureau identify two potential causes for the dramatic growth of exurban jurisdictions—increasing housing costs and opportunities to telework:

Multiple factors are likely behind the increased growth of exurbs. Among them: Rising housing costs after the start of the pandemic, which drove some people farther away from cities toward exurbs in search of cheaper homes. Greater opportunities to work from home also likely contributed. Before the pandemic, telework and remote work options were much less common.²⁷

In addition to exurban jurisdictions, other analysts from the Census have found that "many small and midsize U.S. cities with populations under 50,000 saw relatively higher growth rates in 2023 than in 2019 before the pandemic hit while large cities generally grew at slower rates."²⁸

²³ Riordan Frost, "Homeowner Mobility Stalls Amid Rising Interest Rates," *Joint Center for Housing Studies* (blog), December 13, 2023, https://www.jchs.harvard.edu/blog/homeowner-mobility-stalls-amid-rising-interest-rates.

²⁴ "Defining Exurbia," Department of Agricultural, Environmental, and Development Economics, Ohio State University, accessed September 4, 2024, https://aede.osu.edu/node/1534.

²⁵ Lindsay Spell and Marc Perry, "More Exurban Communities Now Among Nation's Fastest Growing Places," *U.S. Census Bureau* (blog), May 16, 2024, https://www.census.gov/library/stories/2024/05/exurbs-city-population.html.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Amel Toukabri et al., "New Estimates Show Population Recovered for Large Cities and Grew in Small Places on Outskirts of Urban Areas in 2023," *U.S. Census Bureau* (blog), May 16, 2024, https://www.census.gov/library/stories/2024/05/sun-belt-cities-and-towns.html.

C. Explaining Internal Migration

For perspective on the causes of internal migration, this report summarizes findings from the Census's Current Population Survey (CPS) and several empirical studies on the topic. Overall, internal migration is shaped by various factors, including housing, family, and employment considerations. Demographic, racial, and political preferences also play a significant role, which have contributed to changes in racial segregation and political polarization at local levels.

The Current Population Survey sheds light on the primary reasons people moved, both before and during the pandemic. The survey asks respondents who lived in a different residence one year before about their primary reason for moving, which falls into four general categories: housing-related; family-related; employment-related; and other.²⁹

Figure 1.4 presents the share of reasons for moving as reported by respondents in the survey from 1999 to 2022. The most common reasons for moving were housing-related, which includes wanting a newer, better, or larger home; wanting cheaper housing; becoming a homeowner; and wanting a better neighborhood/less crime. Housing factors were especially common for local moves. The second most common reasons were family-related, which includes establishing one's own household, a change in marital status, etc. This was followed by job-related reasons, which includes getting or losing job, living closer to home, and looking for work. Employment factors were especially common for long-distance moves.³⁰

The CPS data reveal a minor shift in reasons for moving during the pandemic. Housing- and family-related reasons were still primary. However, the share of moves for job-related reasons fell from 20 percent of moves in 2019 to 17 percent in 2022 and was replaced by "other" reasons, particularly moving in with an unmarried partner.³¹

²⁹ Kristin Kerns-D'Amore, "Change in Marital Status Became More Common Reason for Moving from 2021 to 2022, Housing/Neighborhood Improvement Reasons Declined," *Census.Gov* (blog), September 19, 2023, https://www.census.gov/library/stories/2023/09/why-people-move.html.

³⁰ Ibid; Frost, "Have More People Moved During the Pandemic?"

³¹ Frost, "Have More People Moved During the Pandemic?"

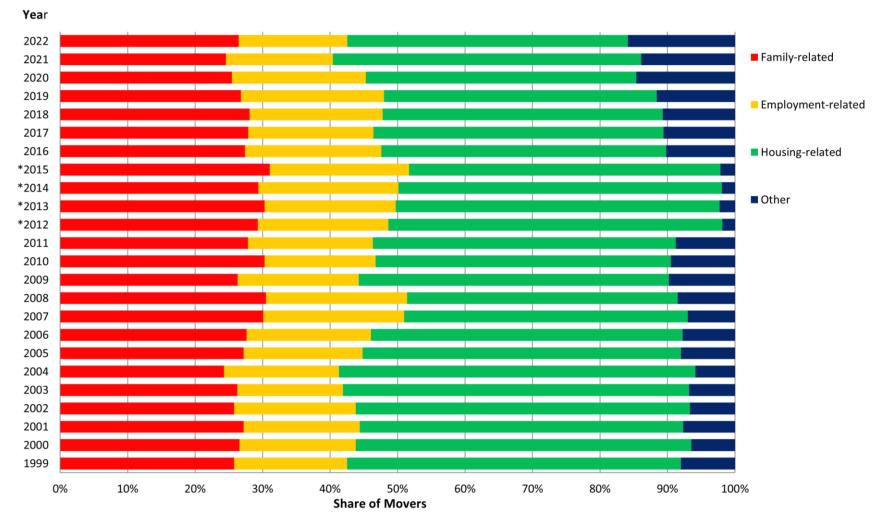


Figure 1.4. Reasons for Moving in the Current Population Survey

Source: "Figure A-5. Collapsed Reason for Move: 1999-2022," U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement (CPSa ASES) 1999-202

Empirical studies have also shed light on the causes of internal migration in the United States. Economics research on the topic generally has linked internal migration to labor market conditions, with economic incentives (like higher wages) driving migration decisions. ³² Other economic factors that influence internal migration are regional differences in the cost-of-living, particularly housing costs. ³³

Labor and housing market conditions may also explain declining internal mobility in the United States. After the Great Recession, there was a sharp decrease in intra-county mobility due to housing shortages and intensified competition, particularly among millennials, which exacerbated the affordable housing crisis. These conditions delayed and discouraged moving for housing-related reasons, thereby decreasing migration.³⁴

Other studies have pointed to factors beyond labor and housing market considerations, claiming intercounty migration has been more common among demographically, politically, and socially similar counties. For example, studies have found that internal migration is motivated by racial considerations, with lower levels of migration having occurred among counties with dissimilar racial compositions. This has contributed to county-level racial segregation.³⁵ Other studies have found partisan preferences influence internal migration, with migration more common among counties with similar partisan profiles, particularly among extreme partisan counties. This has contributed to more county-level political polarization over time.³⁶

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³² Ning Jia et al., "The Economics of Internal Migration: Advances and Policy Questions," *Journal of Economic Literature* 61, no. 1 (March 2023): 144–80, https://doi.org/10.1257/jel.20211623; Raven Molloy, Christopher L. Smith, and Abigail Wozniak, "Internal Migration in the United States," *Journal of Economic Perspectives* 25, no. 3 (September 2011): 173–96, https://doi.org/10.1257/jep.25.3.173.

³³ Jia et al., "The Economics of Internal Migration."

³⁴ Dowell Myers, JungHo Park, and Seongmoon Cho, "Housing Shortages and the New Downturn of Residential Mobility in the U.S.," *Housing Studies* 38, no. 6 (July 3, 2023): 1088–1109, https://doi.org/10.1080/02673037.2021.1929860.

³⁵ Peng Huang and Carter T. Butts, "Rooted America: Immobility and Segregation of the Inter-County Migration Networks" (arXiv, September 14, 2023), http://arxiv.org/abs/2205.02347.

³⁶ Xi Liu, Clio Andris, and Bruce A. Desmarais, "Migration and Political Polarization in the U.S.: An Analysis of the County-Level Migration Network," *PLOS ONE* 14, no. 11 (November 22, 2019): e0225405, https://doi.org/10.1371/journal.pone.0225405.

Chapter 2. Methodology

The previous chapter highlighted a recent trend in internal migration: Leading into the pandemic, suburban counties in large metropolitan areas across the country had experienced net out-migration while the pandemic induced net in-migration into exurban counties farther away from large cities, likely due to their relatively lower housing costs and the significant expansion of remote work.¹

This finding raises the importance of examining internal migration from Montgomery County—a suburban County in the seventh largest metro area in the country as of 2023²—within a regional context. Doing so will shed light on whether migration trends for the County are distinct or part of a larger regional story.

To provide this regional context, this OLO report compares internal migration for Montgomery County and its neighboring, suburban counties. They include:

- Frederick, Howard, and Prince George's Counties in Maryland; and
- Fairfax and Loudoun Counties in Virginia.

This report analyzes the most recent data on county-to-county migration in the United States, using data from the Census's American Community Survey and Population Estimates Program and data from the Internal Revenue Service.³

Importantly, while these datasets detail the movement of people and income, it is important to note they lack variables on several demographic characteristics such as age, gender, race, or education level. This limits the ability to analyze *who* has out-migrated in terms of their personal attributes. However, these data sources offer valuable insights into the destinations of out-migration, allowing us to identify the states and counties *where*

stuck-place-declining-residential-mobility-us; Lindsay Spell and Marc Perry, "More Exurban Communities Now Among Nation's Fastest Growing Places," *U.S. Census Bureau* (blog), May 16, 2024, https://www.census.gov/library/stories/2024/05/exurbs-city-population.html; Amel Toukabri et al., "New

¹ Riordan Frost, "Did More People Move During the Pandemic?" (Joint Center for Housing Studies of Harvard University, March 2023), https://www.jchs.harvard.edu/blog/have-more-people-moved-during-pandemic; Riordan Frost, "Are Americans Stuck in Place? Declining Residential Mobility in the US" (Joint Center for Housing Studies of Harvard University, May 4, 2020), https://www.jchs.harvard.edu/research-areas/research-briefs/are-americans-

Estimates Show Population Recovered for Large Cities and Grew in Small Places on Outskirts of Urban Areas in 2023," *U.S. Census Bureau* (blog), May 16, 2024, https://www.census.gov/library/stories/2024/05/sun-belt-cities-and-towns.html.

² Annual Estimates of the Resident Population for Metropolitan Statistical Areas in the United States and Puerto Rico: April 1, 2020 to July 1, 2023, U.S. Census Bureau, June 25, 2024, https://www.census.gov/data/tables/time-series/demo/popest/2020s-total-metro-and-micro-statistical-areas.html.

³ Excluded from this analysis is data on the intra-county and international migration patterns for these counties.

Montgomery County residents have relocated and how these trends compare across neighboring suburban counties.

While the primary focus of this report is on out-migration trends, this report also considers in-migration and net internal migration for a more comprehensive analysis. Failing to account for in-migration makes it impossible to determine whether the counties examined here have experienced *net* out-migration, that is, whether out-migration has outpaced in-migration.

The more comprehensive view enhances the policy significance of the data analyses presented in later chapters. For example, comparing out-migration with in-migration on individuals reveals whether internal migration has contributed to population growth or decline in the counties and region. Additionally, examining where residents have been moving to and where new residents have come from offers insights into the counties' appeal as places to live and work.

Furthermore, analyzing inflows and outflows of income highlights whether migration is increasing or reducing total income, with significant implications for local economies and government services. This is particularly important for Maryland Counties, which rely on local income taxes as a key revenue source, unlike their Virginia counterparts (including Fairfax City and Falls Church) where no local income tax is collected.⁴

In this chapter, OLO first describes and compares the sources of migration data used in this analysis to help understand how they provide different insights into the migratory patterns of the counties investigated here. This section defines basic concepts in statistics that are helpful for understanding the data analysis presented in subsequent chapters. In the second section of this chapter, OLO identifies some of the key differences between the counties examined and explains how OLO accounts for them in the data analyses presented in later chapters in order to conduct a more "apples-to-apples" comparison.

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⁴ For local income tax rates, see "Maryland Income Tax Rates and Brackets," Comptroller of Maryland, accessed September 6, 2024, https://www.marylandtaxes.gov/individual/income/tax-info/tax-rates.php.

A. Data Sources

This report draws on the following three sources for data on internal migration at the County-level: the American Community Survey (ACS) and Population Estimates Program (PEP) by the U.S. Census Bureau and the U.S. Internal Revenue Service (IRS). The remainder of this section summarizes and compares these two data sources.

ACS Migration Data

The ACS is an annual, nationwide survey with a representative sample of around 3.5 million households in the U.S.⁵ The ACS attains a representative sample by selecting a random sample of household addresses to survey. This method, in addition to making statistical adjustments to address sample imbalances,⁶ provide confidence that the ACS sample data produces estimates that accurately reflect a broad range of demographic, housing, social, and other characteristics of larger populations.⁷ ACS data is available at the federal, state, and local level.

This analysis focuses on the ACS's County-level data. One of the characteristics of county populations measured in the ACS is their migratory behavior. The ACS household surveys track the migration of individuals between counties in the U.S. by asking respondents whether each member of the household lived in their current home or apartment one year ago, and, if not, where they lived.8

Key Statistical Concepts

Sample refers to a sub-set of observations collected from a larger group that you want to draw conclusions about.

Population refers to all observations from the group.

Representative sample is a sample that accurately reflects the characteristics of the population.

⁵ "Understanding and Using American Community Survey Data: What All Data Users Need to Know" (U.S. Census Bureau, September 2020),

https://www.census.gov/content/dam/Census/library/publications/2020/acs/acs_general_handbook_2020.pdf.
⁶ ACS uses weighting to address imbalances in the sample. For more on weighting, see Andrew Mercer Kennedy Arnold Lau and Courtney, "1. How Different Weighting Methods Work," *Pew Research Center* (blog), January 26, 2018, https://www.pewresearch.org/methods/2018/01/26/how-different-weighting-methods-work/.

⁷ "Understanding and Using American Community Survey Data: What All Data Users Need to Know";

[&]quot;Understanding and Using American Community Survey Data: What Researchers Need to Know" (U.S. Census Bureau, March 2020),

 $https://www.census.gov/content/dam/Census/library/publications/2020/acs/acs_researchers_handbook_2020.pd f.$

⁸ For example, see question 15 on page 13 here: "2024 American Community Survey Questionnaire" (U.S. Census Bureau, n.d.), https://www2.census.gov/programs-surveys/acs/methodology/questionnaires/2024/quest24.pdf.

This analysis uses the "County-to-County Net and Gross Migration" datasets for the 2016-2020 period, the most current estimates available. ^{9,10} For each county in this analysis, the dataset contains 5-year point estimates and their respective margins of error for the total population of internal migrants, where they out-migrated to, and where they in-migrated from during the 2016-2020 period. The 5-year point estimates have larger samples and lower margins of error than the 1-year estimates. As a result, the 5-year estimates have increased statistical reliability and precision, which is especially important when assessing data for smaller geographic areas, such as county-to-county migration flows. ¹¹ (See "Methodology Detail for ACS Data" for a more detailed discussion.)

PEP Net Internal Migration Data

Every year, the Census Bureau's PEP releases its county-level population estimates and components of change. ¹² The data include annual figures on net internal migration for counties. However, the data does <u>not</u> provide figures on out-migration or in-migration, nor the destinations of out-migrants or origins of in-migrants.

To calculate net internal migration, the PEP uses four sources of information:

- 1. Internal Revenue Service tax return data for ages 0 to 64;
- 2. Medicare enrollment data for the population aged 65 and older;
- 3. Social Security Administration's Numerical Identification File for all ages; and
- 4. Change in the Group Quarters population (e.g., nursing homes, college/university student housing, military barracks) from Census Group Quarters Reports.¹³

PEP has provided data on net internal migration at the county-level up to 2023. OLO uses the "County Population Totals and Components of Change: 2020-2023" to supplement its analysis on ACS data.

It should be noted that PEP does not provide margins of error.

⁹ For a more detailed description of the structure of the datasets, see "2016-2020 ACS Migration Flow Files Documentation" (U.S. Census Bureau, n.d.),

https://www.census.gov/content/dam/Census/topics/population/migration/guidance-for-data-users/acs-migration-tutorial/2016-2020-Migration-Flows-Documentation.pdf.

¹⁰ The data can be found here: "County-to-County Migration Flows: 2016-2020 ACS," U.S. Census Bureau, January 17, 2023, https://www.census.gov/data/tables/2020/demo/geographic-mobility/county-to-county-migration-2016-2020.html.

¹¹ "Understanding and Using American Community Survey Data," March 2020.

¹² U.S. Census Bureau, "County Population Totals and Components of Change: 2020-2022," Census.gov, accessed July 24, 2023, https://www.census.gov/data/tables/time-series/demo/popest/2020s-counties-total.html.

¹³ U.S. Census Bureau, "Methodology for the United States Population Estimates: Vintage 2023," December 2023, https://www.census.gov/programs-surveys/popest/technical-documentation/methodology.html.

Methodological Detail for ACS Data

For each variable, the dataset includes a point estimate and margin of error. A point estimate, or estimate, is an approximate value of a population characteristic that is attained from a sample. For example, in the ACS sample data, the estimate for the number of individuals from Montgomery County who migrated to Frederick County during 2020 aims to approximate the value of all individuals who migrated in this manner during this time (those included and not included in the survey).

Margin of error is a measure of the precision or variability of an estimate. 14 It indicates how far an estimate attained from a sample differs from the real population value. In other words, the margin of error can provide "a range of values within which the actual, 'real-world' value is likely to fall."15 For example, the margin of error for the estimated number of individuals who out-migrated from Montgomery County to Frederck County during 2020 would indicate how far this estimate likely differs from the actual number of out-migrants in this period.

The Census includes margin of errors in the ACS sample data for users to measure the imprecision around its estimates. 1 As stated in an ACS users guide for researchers, "[b]ecause the ACS is based on a sample, rather than all housing units and people, ACS estimates have a degree of uncertainty associated with them, called sampling error."16

In this report, OLO uses the estimates and margin of error provided in the ACS county-tocounty migration data to calculate range of values, or range, for each of the migration variable estimates.¹⁷ The Census calculates margins of errors at the 90 percent confidence level. Thus, a range for a particular estimate tells readers that we can be 90 percent confident that the true population value lies within this range.

To illustrate, let's consider again the estimated number of individuals who out-migrated from Montgomery County to Frederck County during 2020. If OLO calculated a range of 85 to 105, this would indicate that we can be 90 percent confident that the actual number of outmigrants to Frederick County during this time is somewhere within this range.

OLO presents the ranges for the ACS migration estimates for the following reasons: First, the ranges make explicit that there is error around the estimates, sometimes considerable error. Presenting the estimates without them may suggest to readers an inflated sense of precision that the data does not permit. Second, the ranges provide insight into whether there are actual differences between estimates. To illustrate, if the estimated range of out-migrants from Montgomery County were 1,000 to 1,250 and from Howard County were 1,100 to 1,350, we would not be confident that there is a meaningful difference in the number of outmigrants between the two counties.

¹⁴ Sirius Fuller, "Using American Community Survey Estimates and Margins of Error," https://www.census.gov/content/dam/Census/programs-surveys/acs/guidance/trainingpresentations/20180418 MOE Webinar Transcript.pdf.

¹⁵ "Understanding and Using American Community Survey Data," March 2020.

¹⁷ This is the same as "confidence intervals." I use the term, "range," to help minimize statistical jargon.

IRS Migration Data

The second data source used in this analysis is IRS migration data. The IRS Statistics of Income Division (SOI) collaborates with the Census to release migration data for the United States. SOI tracks migration based on year-to-year changes to mailing addresses reported on Forms 1040, which taxpayers use to file annual income tax returns. SOI matches year-to-year returns using taxpayer identification numbers (TIN) for primary, secondary (e.g., spouses), and dependent (e.g., children) filers.

From this information, the migration status of each return is assigned as either:

- Non-migrant individual returns where the state and county in one year match the state and county in another year;
- Migrant, different state individual returns where the state and county in one year do not match the state and county in another year;
- Migrant, same state, different county individual returns where the states match between the two years, but the county in one year differs from the county in another year; or
- Migrant, foreign individual returns where the state is in the U.S. in one year and foreign in another year.²⁰

From the filed tax returns, SOI measures the migration of households, individuals, and adjusted gross income. *Household migration* is approximated by the number of returns filed. *Individual migration* is approximated by the number of personal exemptions claimed. *Adjusted gross income migration* for each return is calculated from Form 1040.²¹ **Adjusted gross income** (AGI) is defined as gross income, or total income from all sources (e.g., wages, capital gains, business and retirement income), minus "adjustments" or expenses

¹⁸ "About Form 1040, U.S. Individual Income Tax Return," U.S. Internal Revenue Service, July 18, 2024, https://www.irs.gov/forms-pubs/about-form-1040.

¹⁹ Kevin Pierce, "SOI Migration Data: A New Approach" (U.S. Internal Revenue Service, Summer 2015), https://www.irs.gov/pub/irs-soi/soi-a-inmig-id1509.pdf; "Taxpayer Identification Numbers (TIN)," U.S. Internal Revenue Service, August 22, 2024, https://www.irs.gov/individuals/international-taxpayers/taxpayer-identification-numbers-tin.

²⁰ "Migration Data Users Guide, 2020-2021" (U.S. Internal Revenue Service, n.d.), https://www.irs.gov/pub/irs-soi/2021inpublicmigdoc.pdf.

²¹ See line 11 on Form 1040, https://www.irs.gov/pub/irs-pdf/f1040.pdf.

paid for that the government does not tax (e.g., student loan interest paid, contributions to certain retirement accounts). ²²

This analysis uses "County-to-County Outflow" and "County-to-County Inflow" files for each year from 2011 to 2022, the most recent year available. From these datasets, OLO created a yearly time series dataset that includes Montgomery County and its neighboring counties. It should be noted that OLO did not use IRS migration prior to 2011 because methodological improvements made that year make the pre- and post-2011 data "not directly comparable." All the pre- and post-2011 data "not directly comparable."

For each county in this analysis, the dataset that OLO created includes six variables that measure internal migration on an annual basis:

- Out-Migration of Individuals
- In-Migration of Individuals
- Net Migration of Individuals

- Out-Migration of AGI
- In-Migration of AGI
- Net Migration of AGI

Critical Differences in Data

To understand how to properly interpret the findings from the data analyses performed in this report, it is important to highlight two ways that the ACS and IRS county-to-county migration data differ from each other.

First, the data represent different populations. As described above, the ACS sample data represent the population of *all* migrants. The IRS migration data, in contrast, represents the population *tax filing migrants*.

The population of tax filing migrants is a sub-set of all migrants. According to the IRS, "Generally, most U.S. citizens and permanent residents who work in the United States need to file a tax return if they make more than a certain [gross income] amount for the year." However, depending on their filing status and age, individuals who make less income than certain thresholds are not required to file. This results in the migration data under-

²² "Definition of Adjusted Gross Income," IRS, February 28, 2024, https://www.irs.gov/e-file-providers/definition-of-adjusted-gross-income.

²³ The files for data years 2011 to 2022 can be found here: "SOI Tax Stats - Migration Data," U.S. Internal Revenue Service, July 29, 2024, https://www.irs.gov/statistics/soi-tax-stats-migration-data.

²⁴ Pierce, "SOI Migration Data: A New Approach."

²⁵ "Who Needs to File a Tax Return," U.S. Internal Revenue Service, July 3, 2024, https://www.irs.gov/newsroom/who-needs-to-file-a-tax-return.

representing the poor and elderly. ²⁶ SOI makes no statistical adjustments to correct for these biases.

Second, the data differ in how they account for their respective populations. ACS relies on a representative *sample* of household surveys to estimate the total number of individual migrants at the county-level. In contrast, SOI relies on the *population* of all annual income tax returns, from which SOI approximates the migration of households, individuals, and AGI at the county-level, as previously described.

B. County Comparisons

To provide regional context, this report compares out-migration trends from Montgomery County and its neighboring, suburban counties, namely Frederick, Howard, and Prince George's Counties in Maryland and Fairfax and Loudoun Counties in Virginia.

Accounting for County-Level Differences

In subsequent chapters, this report presents total levels of out-migration, in-migration, and net internal migration of individuals and AGI in dollars for each county. These figures demonstrate meaningful differences in the magnitude of internal migration across counties. However, alone they do not capture the whole context of migration. The counties differ significantly in the sizes of their total populations, Gross Domestic Product (GDP), Total Personal Income, and Per Capita Personal Income.

It is important to account for these differences when comparing internal migration trends across the counties. To illustrate, a net out-migration of 10,000 individuals for the largest county examined here, Fairfax, would amount to 0.8% of its total population in 2022. The same level of net out-migration, in contrast, would represent almost 3.5% of Frederick County's population that same year. Similarly, a net outflow of \$1 billion for Fairfax would amount to 0.7% of its total GDP that year, whereas the same outflow would represent 5.8% of Frederick County's total GDP.

The larger shares of net out-migration of individuals and income for Frederick County in this illustration would likely have more significant demographic, social, fiscal, economic, or political impacts. Thus, without accounting for the relative sizes of their populations and local economies, the potential implications of net out-migration could be overlooked.

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²⁶ Emily Gross, "U.S. Population Migration Data: Strengths and Limitations" (Statistics of Income Division, Internal Revenue Service, n.d.), https://www.irs.gov/statistics/soi-tax-stats-migration-data.

Definitions from U.S. Bureau of Economic Analysis

Gross Domestic Product (GDP) by county and metropolitan area is the measure of the market value of all final goods and services produced within an area in a particular period of time. In concept, an industry's GDP by county and metropolitan area, referred to as its "value added", is equivalent to its gross output (sales or receipts and other operating income, commodity taxes, and inventory change) minus its intermediate inputs (consumption of goods and services purchased from other U.S. industries or imported). GDP by county and metropolitan area is the local area counterpart of the nation's GDP, BEA's featured measure of U.S. production.

Total Personal Income consists of the income that persons receive in return for their provision of labor, land, and capital used in current production as well as other income, such as personal current transfer receipts. In the state and local personal income accounts the personal income of an area represents the income received by or on behalf of the persons residing in that area. It is calculated as the sum of wages and salaries, supplements to wages and salaries, proprietors' income with inventory valuation (IVA) and capital consumption adjustments (CCAdj), rental income of persons with capital consumption adjustment (CCAdj), personal dividend income, personal interest income, and personal current transfer receipts, less contributions for government social insurance plus the adjustment for residence.

Per Capita Personal Income is the personal income of a given area divided by the resident population of the area.

Source: U.S. Bureau of Economic Analysis, Regional Glossary.

Tables 2.1 through 2.4 on pages 23 and 24 summarize various population and economic characteristics of each jurisdiction examined. Highlights include:

Total Population: Population varies significantly, ranging from 290,000 residents in Frederick County to 1.8 million residents in Fairfax County in 2023. Frederick County experienced the fastest population growth while Fairfax County was the only county to experience a decline. Montgomery County had the second most residents in 2023 and growth has been relatively stagnant.

Economic Output: The counties also vary significantly in terms of economic output. In 2022, economic output ranged from \$17 billion in Frederick County to \$152 billion in Fairfax County, which also had the highest average annual economic growth rate. Montgomery County had the second largest economic output but saw the slowest economic growth.

Total Personal Income: Personal income ranged from \$21 billion in Frederick County to \$119 billion in Fairfax County in 2022. From 2017 to 2022, Frederick County had the highest average annual growth of total personal income. Montgomery County had the second largest total personal income in 2023, but the County experienced the slowest growth in total personal income.

Per Capita Personal Income: Montgomery County had the second highest per capita personal income behind Fairfax County but had the slowest rate of growth. The Virginia Counties experienced the highest average annual growth rates.

Methods of Accounting for These Differences: To ensure a more accurate comparison of out-migration trends across the counties, this report accounts for the relative sizes of their populations, economic outputs, and total personal incomes. In addition to presenting the totals for the out-migration, in-migration, and net internal migration of individuals and AGI, subsequent chapters present the following indicators:

- Out-migration, in-migration, and net internal migration of individuals as *percentages* of total population; and
- Out-migration, in-migration, and net internal migration of AGI as *percentages of total* economic output, measured by Gross Domestic Product (GDP), and *percentages of total personal income*.

This approach provides a more direct "apples-to-apples" comparison, in which the impacts of out-migration are evaluated relative to the scale of the counties' population and local economies. Focusing on proportional trends, rather than absolute numbers, provides deeper insights into the significance of out-migration for each county.

Table 2.1. Population by County (2018-2023)

	Total Population							Percent Change from Preceding Year						
County	2018	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	Average		
Montgomery	1,048,478	1,050,688	1,060,904	1,056,193	1,053,067	1,058,474	0.21	0.97	-0.44	-0.30	0.51	0.19		
Frederick	254,943	259,547	272,786	280,647	287,540	293,391	1.81	5.10	2.88	2.46	2.03	2.86		
Howard	322,621	325,690	332,814	335,328	335,366	336,001	0.95	2.19	0.76	0.01	0.19	0.82		
Prince George's	909,619	909,327	965,365	956,451	946,980	947,430	-0.03	6.16	-0.92	-0.99	0.05	0.85		
Fairfax	1,186,655	1,186,168	1,187,485	1,181,072	1,178,550	1,181,707	-0.04	0.11	-0.54	-0.21	0.27	-0.08		
Loudoun	405,522	413,538	422,705	428,764	432,792	436,347	1.98	2.22	1.43	0.94	0.82	1.48		

Source: Census

Table 2.2. Gross Domestic Product (GDP) by County (2017-2022)

	Total Real GDP (current year dollars, in thousands)							Percent Change from Preceding Year					
County	2017	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	Average	
Montgomery	93,542,842	95,122,803	95,157,048	94,007,911	100,597,916	106,777,850	1.69	0.04	-1.21	7.01	6.14	3.42	
Frederick	13,461,065	14,156,698	14,711,564	14,328,878	15,831,265	17,123,433	5.17	3.92	-2.60	10.49	8.16	6.29	
Howard	26,193,676	27,161,213	28,506,041	28,707,349	31,194,471	32,403,984	3.69	4.95	0.71	8.66	3.88	5.47	
Prince George's	44,874,740	47,042,761	48,578,207	47,589,181	51,403,580	55,894,241	4.83	3.26	-2.04	8.02	8.74	5.70	
Fairfax	114,188,029	120,738,631	129,015,685	130,155,397	141,142,785	151,888,956	5.74	6.86	0.88	8.44	7.61	8.87	
Loudoun	26,813,789	28,526,449	30,410,096	29,892,427	33,614,262	37,558,714	6.39	6.60	-1.70	12.45	11.73	7.38	

Source: U.S. Bureau of Economic Analysis

Table 2.3. Total Personal Income by County (2017-2022)

	Total Personal Income (current year dollars, in thousands)							Percent Change from Preceding Year					
County	2017	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	Average	
Montgomery	86,645,875	88,559,517	89,885,661	90,565,341	96,133,196	98,300,546	2.21	1.50	0.76	6.15	2.25	2.57	
Frederick	14,785,020	15,642,812	16,547,857	17,864,769	19,587,024	20,713,005	5.80	5.79	7.96	9.64	5.75	6.99	
Howard	23,571,169	24,328,471	25,531,870	27,058,069	29,036,622	29,827,252	3.21	4.95	5.98	7.31	2.72	4.83	
Prince George's	42,403,255	43,924,918	45,338,929	48,455,083	50,984,848	49,958,493	3.59	3.22	6.87	5.22	-2.01	3.38	
Fairfax	92,353,090	97,242,394	101,676,540	104,837,081	114,844,824	119,424,465	5.29	4.56	3.11	9.55	3.99	5.30	
Loudoun	30,041,689	31,913,668	34,006,073	36,092,801	39,485,918	41,852,457	6.23	6.56	6.14	9.40	5.99	6.86	

Source: U.S. Bureau of Economic Analysis

Table 2.4 Per Capita Personal Income by County (2017-2022)

	Per Capita Personal Income (current year dollars, in thousands)								Percent Change from Preceding Year					
County	2017	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	Average		
Montgomery	82,175	83,790	84,779	85,373	91,042	93,395	1.97	1.18	0.70	6.64	2.58	2.61		
Frederick	57,705	59,773	61,868	65,495	69,851	72,151	3.58	3.50	5.86	6.65	3.29	4.58		
Howard	73,049	74,479	77,325	81,308	86,602	88,927	1.96	3.82	5.15	6.51	2.68	4.03		
Prince George's	44,600	45,909	47,101	50,197	53,317	52,756	2.93	2.60	6.57	6.22	-1.05	3.45		
Fairfax	77,860	81,955	85,499	88,291	97,278	101,400	5.26	4.32	3.27	10.18	4.24	5.45		
Loudoun	75,632	78,609	81,966	85,393	92,163	96,862	3.94	4.27	4.18	7.93	5.10	5.08		

Source: U.S. Bureau of Economic Analysis

Chapter 3. Out-Migration of Individuals: Findings from Census Data

This chapter compares the internal migration of individuals from Montgomery County with its neighboring suburban counties, based on the latest county-to-county migration data from the Census Bureau's American Community Survey (ACS)'s 2016-2020 five-year estimates. It supplements this analysis with net internal migration figures from the Census Bureau's Population Estimates Program (PEP) from 2020 to 2023. The counties are compared for out-migration, in-migration, and net internal migration. As previously discussed, although out-migration is the primary focus of this report, examining in-migration and net internal migration is essential for assessing whether the counties have experienced net out-migration.

In comparing the counties using the ACS and PEP data, OLO uses the following approach:

- Comparing Total Levels of Migration: Using the ACS data, the analysis compares the *total levels* of out-migration, in-migration, and net internal migration to evaluate absolute differences in internal migration between counties from 2016 to 2020. Using PEP data, the analysis also compares net internal migration from 2020 to 2023. This highlights the overall magnitude of migration for each county.
- Comparing Migration Relative to County Population Size: Because the counties differ significantly in population size, the analysis examines the data as *percentages* of each county's population. This provides a clearer picture of migration trends relative to population size and allows for a more accurate comparison.
- Comparing Migration Ranges: To highlight imprecision and uncertainty in the ACS sample estimates, OLO presents point estimates and their ranges. Comparing ranges provides insight into whether we can be confident that counties differ from each other on a particular indicator. Overlapping ranges suggest less certainty that the actual migration figures differ between counties, while non-overlapping ranges provide greater confidence that differences exist.¹

¹ As discussed in the previous chapter, the "ranges" are confidence intervals calculated at the 90% level, the standard threshold the Census uses in calculating margin of error for ACS estimates. Comparing the ranges on a particular indicator is <u>not</u> equivalent to performing a test of statistical significance. In fact, comparing ranges at the 90% confidence interval is a more conservative assessment than testing for statistical significance at the standard 95% level. For this reason, this chapters avoids using the term "statistically significant" when presenting the results. Toby Bolsen and Judd R. Thornton, "Overlapping Confidence Intervals and Null Hypothesis Testing," *Newsletter of the APSA Experimental Section* 4, no. 1 (2014): 12--16; Mark E. Payton, Matthew H. Greenstone, and Nathaniel Schenker, "Overlapping Confidence Intervals or Standard Error Intervals: What Do They Mean in Terms

• Identifying State and County Destinations: The analysis examines trends in out-ofstate and in-state internal migration and identifies the primary state and County destinations for Montgomery County residents.

This chapter is organized as follows:

- **Section A** examines the overall population and total internal out migration patterns of the six counties;
- Section B summarizes the in-migration patterns for the six counties;
- Section C provides an overview of net migration for the six counties; and
- Section D explores county-level and state-level destinations of out-migrants.

Summary of Key Findings

The analysis of internal migration data from the ACS for the 2016-2020 period and PEP for the 2020-2023 period reveals several important insights about trends for Montgomery County relative to its suburban neighboring counties.

Montgomery County retained a larger share of its residents compared to its neighboring suburban counties, with fewer residents moving away relative to its population size. From 2016 to 2020, the County had the second largest population among the six counties reviewed during this period. Similarly, it ranked second in the number of out-migrants, following Fairfax County. Between 56,916 and 63,116 residents left Montgomery County, with a point estimate of 60,016 out-migrants. Fairfax County had the highest number of out-migrants, with a point estimate of 86,301.

However, when adjusting for its population size, Montgomery County had relatively low levels of out-migration during this period. Between 5.4% and 6.0% of Montgomery County's population left during this period, with a point estimate of 5.7%. Fairfax, Howard, and Loudoun Counties saw larger shares of their populations leave. In contrast, Prince George's and Frederick Counties saw similar levels of out-migration as a percentage of population to Montgomery County.

Montgomery County attracted fewer new residents compared to neighboring suburban counties, with the lowest level of in-migration relative to its population size. From 2016 to 2020, Montgomery County, along with Prince George's County, had the second highest number of in-migrants, trailing only Fairfax County. Between 48,424 and 53,806 residents moved into Montgomery County during this period, with a point estimate of 51,115 in-

of Statistical Significance?," *Journal of Insect Science* 3, no. 1 (January 1, 2003): 34, https://doi.org/10.1093/jis/3.1.34.

migrants. Prince George's County had similar levels of in-migration. Both counties had fewer in-migrants than Fairfax County, with a point estimate of 70,409.

However, when adjusting for its population size, Montgomery County's had the lowest level of in-migration during this period, with Prince George's County having the second lowest. Between 4.6% and 5.1% of Montgomery County's population moved into the County during this period, with a point estimate of 4.9%. All other counties saw significantly higher levels of in-migration relative to their populations. Howard County had the highest influx of in-migrants, with a point estimate of 6.4%.

The region mostly saw net losses of residents from internal migration, with more residents leaving than those moving in. Net losses for Montgomery County have been moderate compared to other jurisdictions. From 2020 to 2023, the region experienced increasing net losses from internal migration. Prince George's County surpassed Montgomery County in net out-migration, recording the second largest net losses behind Fairfax County. On average, Montgomery County lost 10,366 residents from internal migration each year, while Prince George's and Fairfax Counties lost an average of 12,310 and 13,764 residents. Loudoun County also experienced net out-migration.

When adjusting for its population size, Montgomery County's had moderate net losses during this period, representing 1.0% of its population. Fairfax and Prince George's Counties net losses represented 1.2% and 1.3% of their populations, respectively. Loudoun and Howard Counties also had net losses relative to their respective populations.

Frederick County was the only jurisdiction to see net gains in residents from internal migration during this period.

Interstate moves were a key driver of Montgomery County's internal migration patterns. From 2016 to 2020, Montgomery County had the second-highest level of out-of-state out-migration, behind only Fairfax County, and the lowest level of in-state out-migration, followed by Frederick and Prince George's Counties. Interstate moves also contributed to migration into Montgomery County. Although it saw moderate levels of out-of-state in-migration, it recorded the lowest level of in-state in-migration, followed by Prince George's

and Fairfax Counties.

Montgomery County, along with Howard and Fairfax Counties, was one of three counties that experienced net losses both in-state and out-of-state. Compared to Howard and Fairfax Counties, Montgomery County net losses in both categories were modest. Loudoun and Frederick Counties experienced net gains from within their respective states but net losses to other states. Prince George's County was unique in seeing net gains from other states, but net losses to other areas in Maryland.

Montgomery County, like other nearby jurisdictions, saw surrounding states and counties as the most popular destinations for its residents, but had varying net migration patterns with its neighbors. For Montgomery County, the top out-of-state destinations included nearby states like Virginia and Washington, D.C., along with states in the Northeast (Pennsylvania, New Jersey, and New York), the South (Florida, North Carolina, and Texas), and California. The county experienced its largest net losses to California, Florida, Washington, North Carolina, and Texas.

At the county level, the top destinations for Montgomery County residents were primarily local, with the District of Columbia, Frederick County, Fairfax County, Howard County, and Baltimore City ranking as the most popular. Similarly, Montgomery County consistently ranked as one of the top five destinations for residents from other counties, particularly those from Frederick and Prince George's Counties.

Montgomery County experienced varying net migration flows with local areas, seeing net gains from Washington, D.C., but net losses to Prince George's and Frederick Counties, as well as Baltimore City and Anne Arundel County. Migration between Montgomery and both Fairfax and Howard Counties was more balanced. Beyond the local region, Montgomery County saw substantial net losses to Bergen County (NJ), Sussex County (DE), and Los Angeles County (CA).

Key Findings for Montgomery County

Out-Migration	 Second Largest Number of Residents and Out-Migrants Low Out-Migration Relative to Population
In-Migration	 Second Highest In-Migrant Total, Alongside Prince George's County Lowest In-Migration Relative to Population
Net Internal Migration	 Followed Regional Trends, Experiencing Net Losses from Internal Migration Moderate Net Losses from Internal Migration Relative to its Population
State Destinations	 Interstate Moves Drove Out-Migration and In-Migration Patterns One of Three Jurisdictions with Net Out-Migration Both In-State and Out-of-State Most Popular Out-of-State Destinations Were Virginia, District of Columbia, California, and Texas
County Destinations	 Surrounding Counties Were Most Popular Destinations Most Popular County Destinations for Montgomery County Were Prince George's County, District of Columbia, Frederick County, Fairfax County, and Howard County Montgomery County Had Net Out-Migration to Frederick and Prince George's Counties and roughly balanced internal migration with the other counties.

A. Summary of Out-Migration

This section provides the following tables and charts to summarize the out-migration patterns in Montgomery County and the five local comparison counties.

Figure/Table	Description
Figure 3.1	Total population
Figure 3.2	Total number of out-migrants
Figure 3.3	Total out-migrants as a percentage of population
Table 3.1	Total population
Table 3.2	Point estimates and ranges for total number of out-migrants and
14016 3.2	total out-migrants as a percentage of population

Regarding out migration patterns, OLO identified the following highlights:

Montgomery County Had the Second Largest Number of Residents and Out-Migrants: With a population of 1.05 million, Montgomery County was the second largest County, (behind Fairfax County) during the 2016 to 2020 period (Figure 3.1 and Table 3.1). It should be noted that the ranking of counties by population is consistent with the 2018 to 2023 population figures presented in the previous chapter (Table 2.2).

In absolute terms, Montgomery County had the second largest estimated number of out-migrants (Figure 3.2 and Table 3.2). The ACS estimated that between 56,916 and 63,116 residents moved outside the County during this period, with a point estimate of 60,016 out-migrants. Fairfax County had the highest number of out-migrants, with an estimate ranging from 82,454 to 90,160 and a point estimate of 86,301.

Montgomery County Had Low Out-Migration Relative to its Population: When accounting for population size, Montgomery County ranked fourth in out-migration as a percentage of its population (Figure 3.3 and Table 3.2). Between 5.4% and 6.0% of Montgomery County's population relocated outside the County during this period, with a point estimate of 5.7%. Fairfax and Howard Counties saw the largest shares of their populations leave, followed by Loudoun County. In contrast, Prince George's and Frederick Counties had lower point estimates than Montgomery County. However, their ranges overlap, making it unclear whether there were real-world differences in the shares of their populations that left.

Figure 3.1. Total Population by County (2016-2022)

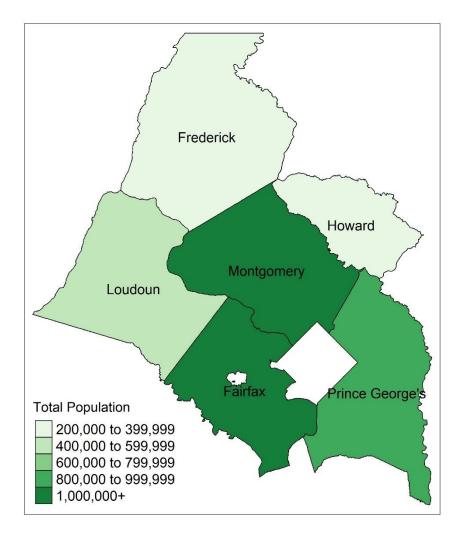


Table 3.1. Total Populations of Counties

County	Total Population (Ranked)
Fairfax	1,149,439
Montgomery	1,047,661
Prince George's	910,551
Loudoun	405,312
Howard	322,407
Frederick	255,955

Figure 3.2. Total Out-Migrants by County (2016-2020)

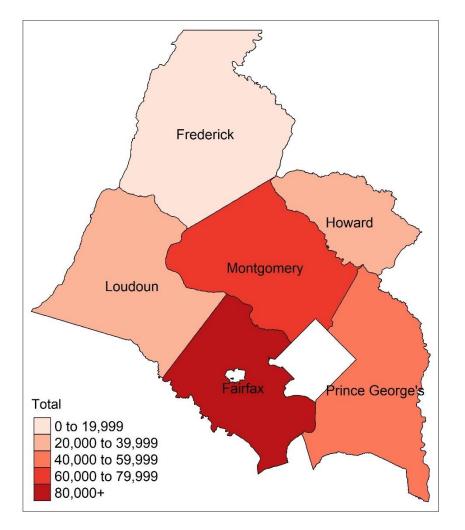


Figure 3.3. Out-Migrants as a Percentage of County Population (2016-2020)

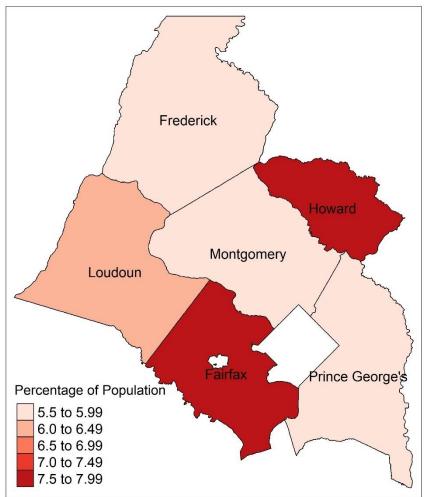


Table 3.2. Out-Migrants by County (2016-2020)

	Total Ou	t-Migrants	Percentage of Popu	ılation (Ranked)
County	Estimate	Range	Estimate (%)	Range (%)
Fairfax	86,307	82,454 to 90,160	7.5	7.2 to 7.8
Howard	24,208	22,319 to 26,097	7.5	6.9 to 8.1
Loudoun	26,084	24,205 to 27,963	6.4	6.0 to 6.9
Montgomery	60,016	56,916 to 63,116	5.7	5.4 to 6.0
Prince George's	50,832	47,996 to 53,668	5.6	5.3 to 5.9
Frederick	14,149	12,692 to 15,606	5.5	5.0 to 6.1

B. Summary of In-Migration

This section provides the following tables and charts to summarize the in-migration patterns in Montgomery County and the five local comparison counties.

Figure/Table	Description
Figure 3.4	Total number of in-migrants
Figure 3.5	Total in-migrants as a percentage of population
Table 3.3	Point estimates and ranges for the total number of in-migrants
Table 3.3	and total in-migrants as a percentage of population

Regarding in-migration patterns, OLO identified the following highlights:

Montgomery County Had the Second Largest Number of In-Migrants, Alongside Prince George's County: In absolute terms, Montgomery and Prince George's Counties had the second largest numbers of estimated in-migrants (Figure 3.4 and Table 3.3). Between 48,424 and 53,806 residents moved into Montgomery County during this period, with a point estimate of 51,115 in-migrants. Prince George's County saw between 48,829 and 54,147 in-migrants, with a point estimate of 51,488. Both counties had fewer in-migrants than Fairfax County, which had the largest influx in the region, with estimates ranging between 67,567 and 73,351, and a point estimate of 70,409.

Montgomery County Had the Lowest In-Migration Relative to its Population: When accounting for population size, Montgomery County experienced the lowest level of inmigration, with Prince George's County having the second lowest (Figure 3.5 and Table 3.3). Between 4.6% and 5.1% of Montgomery County's population moved into the County during this period, with a point estimate of 4.9%. All other counties saw significantly higher levels of in-migration relative to their populations. Howard County saw the highest influx of inmigrants, with estimates ranging between 5.9% to 7.0% of its population, and a point estimates of 6.4%.

Figure 3.4. Total In-Migrants by County (2016-2020)

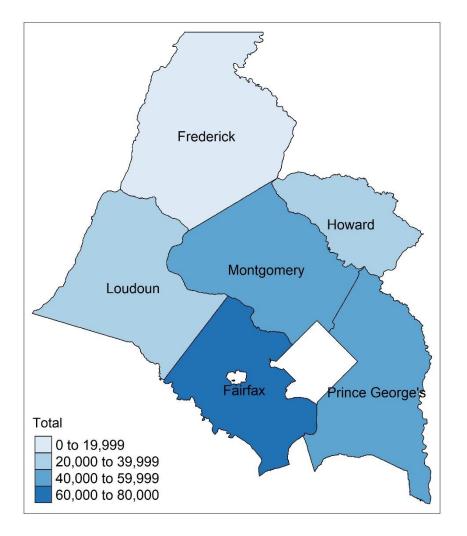


Figure 3.5. In-Migrants as a Percentage of County Population (2016-2020)

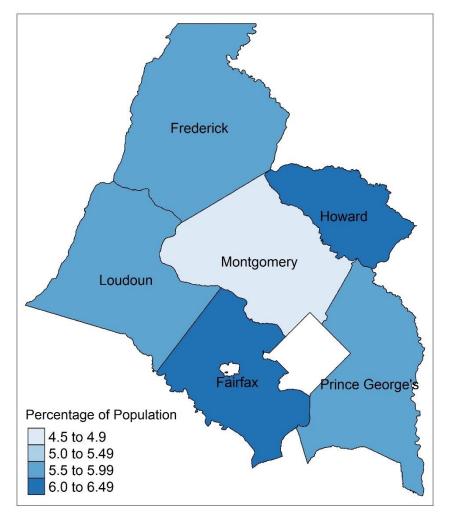


Table 3.3. In-Migrants by County (2016-2020)

	Total	In-Migrants	Percentage o	of Population (ranked)
County	Estimate	Range	Estimate (%)	Range (%)
Howard	20,768	18,894 to 22,642	6.4	5.9 to 7.0
Fairfax	70,409	67,467 to 73,351	6.1	5.9 to 6.4
Loudoun	24,018	22,015 to 26,021	5.9	5.4 to 6.4
Frederick	15,05 6	13,777 to 16,335	5.9	5.4 to 6.4
Prince George's	51,488	48,829 to 54,147	5.7	5.4 to 5.9
Montgomery	51,115	48,424 to 53,806	4.9	4.6 to 5.1

C. Summary of Net Internal Migration

This section provides the following tables and charts to summarize the net internal migration patterns in Montgomery County and the five local comparison counties.

Figure/Table	Description
Figure 3.6	Total net internal migrants (2016-2020)
Figure 3.7	Net internal migrants as a percentage of population (2016-2020)
Figure 3.8	Net internal migration by county (2020-2023)
Figure 3.9	Net internal migration as a percentage of county population (2020-2023)
Table 3.4	Point estimates and ranges for total net internal migrants and net internal
14016 3.4	migrants as a percentage of population (2016-2020)
Table 3.5	Cumulative and average annual total net internal migrations (2020-2023)

Regarding net migration patterns, OLO identified the following highlights:

Montgomery County Followed Regional Trends, Experiencing Net Losses from Internal Migration. The ACS data shows that from 2016 to 2022, Montgomery County experienced the second largest net losses from internal migration (Figure 3.6 and Table 3.4). Between 4,840 and 12,962 more residents left the County than moved in, with a point estimate of 8,901 net out-migrants. The data suggests Fairfax County experienced a larger net loss of residents, with a point estimate of 15,898 net out-migrants, though its range somewhat overlaps with Montgomery County's range. Howard County was the other jurisdiction in which the data clearly indicate experienced net out-migration during this period.

Although the point estimates for Prince George's and Frederick County are positive and the point estimate for Loudoun County is negative, their ranges span both positive and negative values. This makes it unclear whether these counties experienced a net gain or net loss of residents from internal migration during the period.

The PEP data shows that from 2020 to 2023, the region saw greater net losses from internal migration (Figure 3.8 and Table 3.5). Prince George's County surpassed Montgomery County in net out-migration, recording the second largest net losses behind Fairfax County. On average, Montgomery County lost 10,366 residents from internal migration each year, while Prince George's and Fairfax Counties lost an average of 12,310 and 13,764 residents. Loudoun County also experienced net out-migration. Frederick County was the only jurisdiction to see net gains in internal migrants during this period.

Montgomery County Had Moderate Net Losses from Internal Migration Relative to its Population. From 2020 to 2023, Montgomery County had the third largest net losses relative to its population, behind Fairfax and Prince George's Counties (Figure 3.9 and Table 2.5). Montgomery County's net losses represented 1.0% of its population, compared to 1.2% for Fairfax County and 1.3% for Prince George's County. Loudoun and Howard Counties also had net losses relative to their respective populations. Frederick County was the only jurisdiction to experience net gains as a percentage of its population.

Figure 3.6. Net Internal Migrants by County (2016-2020)

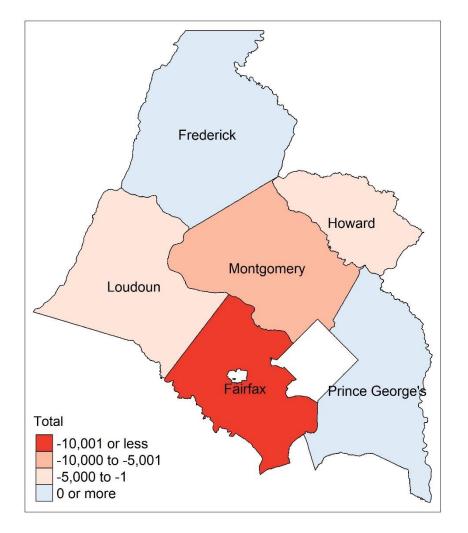
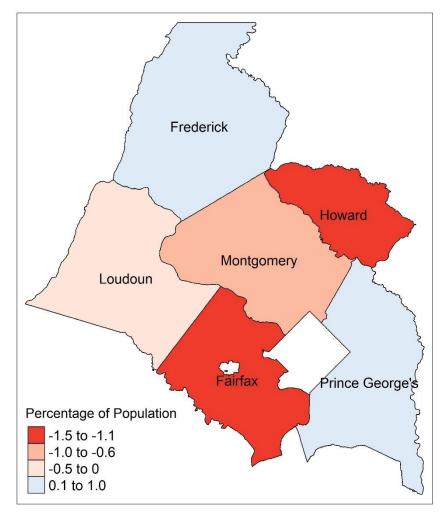


Figure 3.7. Net Internal Migrants as a Percentage of County Population (2016-2020)



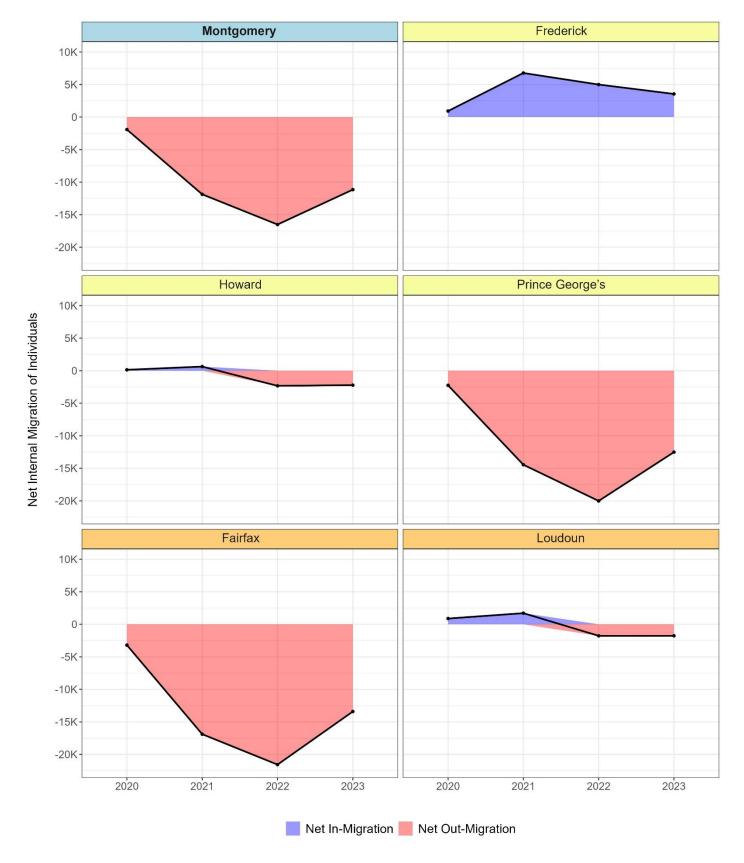


Figure 3.8. Net Internal Migration by County (2020-2023)

Figure 3.9. Net Internal Migration as a Percentage of County Population (2020-2023)

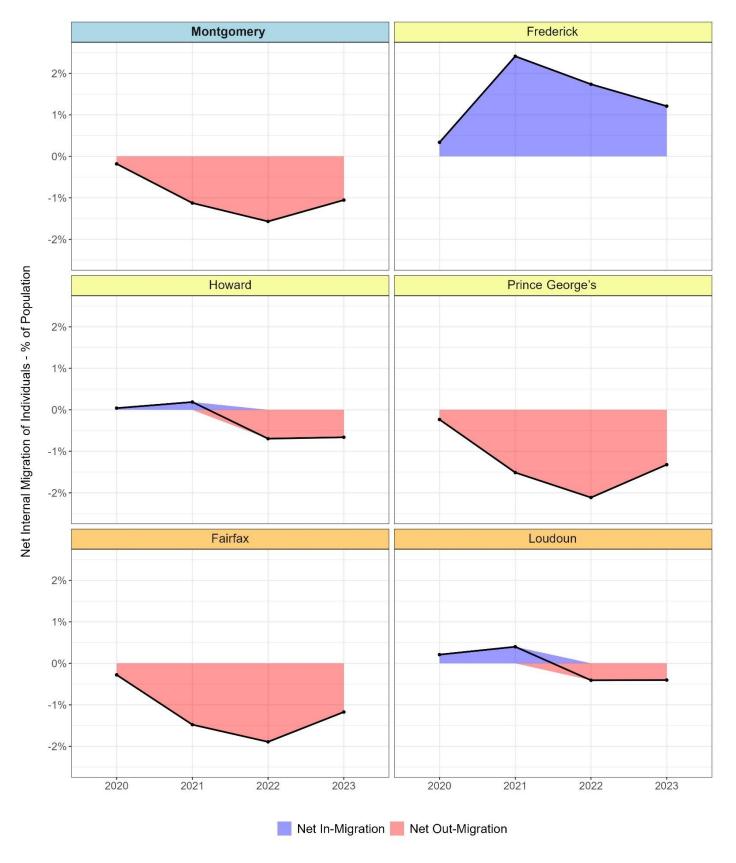


Table 3.4. Net Internal Migrants by County (2016-2020)

	Total Net	Internal Migrants	Percentage o	of Population (Ranked)
County	Estimate	Range	Estimate (%)	Range (%)
Frederick	907	-1,041 to 2,855	0.4	-0.4 to 1.1
Prince George's	656	-3,233 to 4,545	0.1	-0.4 to 0.5
Loudoun	-2,066	-4,831 to 699	-0.5	-1.2 to 0.2
Montgomery	-8,901	-12,962 to -4,840	-0.8	-1.2 to -0.5
Howard	-3,440	-6,131 to -749	-1.1	-1.9 to -0.2
Fairfax	-15,898	-20,757 to -11,039	-1.4	-1.8 to -1.0

Table 3.5. Net Internal Migration by County (2020-2023)

			Average Annual as a Percentage of Population
County	Cumulative	Average Annual	(Ranked)
Frederick	+16,237	+4,059	+1.4
Loudoun	-937	-234	-0.1
Howard	-3,788	- 947	-0.3
Montgomery	-41,465	-10,366	-1.0
Fairfax	-55,055	-13,764	-1.2
Prince George's	-49,241	-12,310	-1.3

D. Destinations of Out-Migration

This section presents data on the primary destinations of out-migrants from the six counties relocated during the 2016-2020 period. The analysis references the following tables:

Figure/Table	Description
Table 3.6	Out-migration, in-migration, and net migration data at the <i>state level</i> ; levels of out-of-state and in-state migration by County. Includes point estimates with ranges and internal migrants as a percentage of County population.
Table 3.7	Out-migration data at the <i>state level;</i> top ten state destinations for out-migration and net out-migration for Montgomery County residents. Includes point estimates and ranges for the total number of out-migrants.
Table 3.8	Out-migration data at the <i>county level</i> ; top ten county/city destinations for out-migration and net out-migration for Montgomery County residents. Includes point estimates and ranges for net out-migration.
Table 3.9	Out-migration data at the <i>state level;</i> top five destination states for out-migrants. Includes point estimates and ranges for the total number of out-migrants by state, the percentage of total out-migrants each state accounts for, and net internal migration figures for each state.
Table 3.10	Out-migration data at the <i>county level</i> ; top five destination counties for out-migrants. Includes point estimates and ranges for total out-migrants by county, the percentage of total out-migrants each county accounts for, and net internal migration totals for each county.

Regarding the *state-level destinations* of out-migrants in all six counties, OLO identified the following highlights (Tables 3.6, 3.7 and 3.9):

Interstate Moves Drove Montgomery County's Out-Migration and In-Migration Patterns: Montgomery County had the second highest level of *out-of-state* out-migration, trailing only Fairfax County, while also having the lowest level of *in-state* out-migration, followed by Frederick and Prince George's Counties. In Montgomery County, 3.6% of the population moved out of state, while 2.1% relocated within the state.

Interstate moves also drove migration into Montgomery County. While it had moderate levels of out-of-state in-migration, Montgomery County had the lowest level of in-state in-migration, followed by Prince George's and Fairfax Counties. In Montgomery County, 1.6% of its population arrived from within Maryland, while 3.3% came from outside the state.

Montgomery County Was One of Three Jurisdictions with Both In-State and Out-of-State Net Out-Migration: Montgomery County had moderate levels of in-state and out-of-state net out-migration, trailing behind Howard and Fairfax Counties. Loudoun and Frederick Counties had net gains from their respective states, while having net losses to other states. Prince George's County was the only jurisdiction to have net gains from other states, but net losses to other jurisdictions in Maryland.

Surrounding States Were Most Popular Out-of-State Destinations: For all counties, surrounding states, including Washington, D.C., were common destinations for out-migrants. For Montgomery County, the top out-of-state destinations included nearby states like Virginia and Washington, D.C., as well as states in the Northeast (Pennsylvania, New Jersey, and New York), the South (Florida, North Carolina, and Texas), and California. The County experienced the largest net losses to California, Florida, Washington, North Carolina, and Texas.

Regarding the *county/city-level destinations* of out-migrants in all six counties, OLO identified the following highlights (Tables 3.8 and 3.10):

Surrounding Counties Were Most Popular Destinations: For all counties, the majority of top five county destinations for out-migrants were within their respective states. The top destinations for Montgomery County residents were District of Columbia, Frederick County, Fairfax County, Howard County, and Baltimore City. Similarly, Montgomery County consistently ranked as one of the top five destinations for residents from other counties, especially those from Frederick and Prince George's Counties.

Montgomery County Had Varying Net Migration Patterns with Nearby Counties: While Montgomery was a popular destination, it experienced varying net migration flows with local areas. Montgomery County had net gains from Washington, D.C., but net losses to Prince George's and Frederick Counties, as well as Baltimore City and Anne Arundel County. Migration between Montgomery and both Fairfax and Howard Counties was more balanced, with net flows ranging between slight gains and losses. Beyond the region, Montgomery County experienced large net losses to Bergen County (NJ), Sussex County (DE), and Los Angeles County (CA).

Table 3.6. Out-of-State vs. In-State Internal Migration by County

	In-State			Out-of-State			Total	
	Estimate		%			%	9/	of Population
County	(Range)	% of Population	Rank	Estimate	% of Population	Rank	Estimate	(Rank)
				Out-Migrants				
Fairfax	40,403	3.5%	2	45,904	4.0%	1	86,307	7.5%
	37,965 to 42,841	3.3% to 3.7%		42,051 to 49,757	3.7% to 4.3%			
Howard	14,654	4.5%	1	9,554	3.0%	4	24,208	7.5%
	13,052 to 16,256	4.0% to 5.0%		7,665 to 11,443	2.4% to 3.5%			
Loudoun	11,712	2.9%	3	14,372	3.5%	3	26,084	6.4%
	10,533 to 12,891	2.6% to 3.2%		12,493 to 16,251	3.1% to 4.0%			
Montgomery	22,294	2.1%	6	37,722	3.6%	2	60,016	5.7%
	20,239 to 24,349	1.9% to 2.3%		34,622 to 40,822	3.3% to 3.9%			
Prince George's	25,793	2.8%	4	25,039	2.7%	6	50,832	5.6%
	23,715 to 27,871	2.6% to 3.1%		22,203 to 27,875	2.4% to 3.1%			
Frederick	6,811	2.7%	5	7,338	2.9%	5	14,149	5.5%
	5,833 to 7,789	2.3% to 3.0%		5,881 to 8,795	2.3% to 3.4%			
				In-Migrants				
Howard	12,511	3.9%	1	8,257	2.6%	5	20,768	6.4%
	11,026 to 13,996	3.4% to 4.3%		6,383 to 10,131	2.0% to 3.1%			
Fairfax	30,920	2.7%	4	39,489	3.4%	1	70,409	6.1%
	29,145 to 32,695	2.5% to 2.8%		36,547 to 42,431	3.2% to 3.7%			
Loudoun	13,349	3.3%	3	10,669	2.6%	4	24,018	5.9%
	11,971 to 14,727	3.0% to 3.6%		8,666 to 12,672	2.1% to 3.1%			
Frederick	8,577	3.4%	2	6,479	2.5%	6	15,056	5.9%
	7,591 to 9,563	3.0% to 3.7%		5,200 to 7,758	2.0% to 3.0%			
Prince George's	20,956	2.3%	5	30,532	3.4%	2	51488	5.7%
	19,039 to 22,873	2.1% to 2.5%		27,873 to 33,191	3.1% to 3.6%			
Montgomery	16,937	1.6%	6	34,178	3.3%	3	51,115	4.9%
	15,358 to 18,516	1.5% to 1.8%		31,487 to 36,869	3.0% to 3.5%			

Table 3.6. cont.

	In	In-State			Out-of-State			Total	
		% of	%		% of	%			
County	Estimate	Population	Rank	Estimate	Population	Rank	Estimate	% of Population	
				Net Migrants					
Frederick	+1,766	+0.7%	1	-859	-0.3%	2	+907	+0.4%	
	+355 to +3,177	+0.1% to +1.2%		-2,807 to +1,089	-1.1% to +0.4%				
Prince George's	-4,837	-0.5%	4	+5,493	+0.6%	1	+656	+0.1%	
	−7,688 to −1,986	-0.8% to -0.2%		+1,604 to +9,382	+0.2% to +1.0%				
Loudoun	+1,637	+0.4%	2	-3,703	-0.9%	6	-2,066	-0.5%	
	-212 to +3,486	-0.1% to +0.9%		-6,468 to -938	-1.6% to -0.2%				
Montgomery	-5,357	-0.5%	3	-3,544	-0.3%	3	-8,901	-0.8%	
	-7,913 to -2,801	-0.8% to -0.3%		-7,605 to +517	-0.7% to 0.0%				
Howard	-2,143	-0.7%	5	-1,297	-0.4%	4	-3,440	-1.1%	
	-4,369 to +83	-1.4% to 0.0%		-3,988 to +1,394	-1.2% to +0.4%				
Fairfax	-9,483	-0.8%	6	-6,415	-0.6%	5	-15,898	-1.4%	
	-12,535 to -6,431	-1.1% to -0.6%		-11,274 to -1,556	-1.0% to -0.1%				

Table 3.7. Top 10 State Destinations for Out-Migration from Montgomery County

Total Out-Migrants			Net Out-N	Migrants	
State	Estimate	Range	State	Estimate	Range²
Maryland	22,294	20,239 to 24,349	Maryland	-5,357	-7,913 to -2,801
Virginia	6,593	5,679 to 7,507	California	-1,043	-2,108 to +22
District of Columbia	4,380	3,798 to 4,962	Florida	-798	–1,464 to –132
California	3,117	s2,269 to 3,965	Washington	-651	-1,222 to -80
Texas	2,625	1,790 to 3,460	North Carolina	-623	–1,196 to –50
Florida	2,443	1,901 to 2,985	Texas	-620	-1,795 to +555
Pennsylvania	2,303	1,901 to 2,705	South Carolina	-584	−870 to −298
North Carolina	1,676	1,246 to 2,106	Virginia	-580	-1,838 to +678
New Jersey	1,634	811 to 2,457	Colorado	-543	–1,025 to –61
New York	1,596	1,208 to 1,984	Delaware	-534	−809 to −259

² Note that the net out-migration ranges overlap with positive upper bound estimates for California, Texas, and Virginia, indicating uncertainty on whether Montgomery County actually experienced net out-migration to these states.

Table 3.8. Top 10 County/City Destinations for Out-Migration from Montgomery County

	Total Ou	ıt-Migrants		Net Out-N	1igrants
County/City, State	Estimate	Range	County/City, State	Estimate	Range³
Prince George's County, MD	9,030	7,626 to 10,434	Prince George's County, MD	-1,852	-3,540 to -164
District of Columbia	4,380	3,798 to 4,962	Frederick County, MD	-1,003	–1,989 to –17
Frederick County, MD	3,204	2,533 to 3,875	Baltimore City, MD	-933	–1,449 to –417
Fairfax County, VA	2,195	1,663 to 2,727	Anne Arundel County, MD	-902	–1,626 to –178
Howard County, MD	2,167	1,538 to 2,796	Bergen County, NJ	-844	–1,583 to –105
Baltimore City, MD	2,021	1,586 to 2,456	Sussex County, DE	-549	-808 to -290
Anne Arundel County, MD	1,814	1,095 to 2,533	Los Angeles County, CA	-420	–757 to –83
Baltimore County, MD	1,617	909 to 2,325	King County, WA	-407	-945 to +131
Bergen County, NJ	913	174 to 1,652	Washington County, MD	-396	-643 to -149
Harris County, TX	858	366 to 1,350	Fresno County, CA	-390	–1,027 to +247

³ Note that the net out-migration ranges overlap with positive upper bound estimates for King County, WA and Fresno County, CA, indicating uncertainty whether Montgomery County saw net out-migration to these counties.

Table 3.9. Top 5 State Out-Migration Destinations by County (2016-2020)

	Total Out-M	igrants (Rank)	Percentage of Tota	al Out-Migrants	Net Int	ernal Migration
State	Estimate	Range	Estimate (%)	Range (%)	Estimate	Range
Montgomery						
Maryland	22,294 (1)	20,239 to 24,349	37.1	33.7 to 40.6	-5,357	-7,913 to -2,801
Virginia	6,593 (2)	5,679 to 7,507	11.0	9.5 to 12.5	-580	-1,838 to 678
District of Columbia	4,380 (3)	3,798 to 4,962	7.3	6.3 to 8.3	1,238	355 to 2,121
California	3,117 (4)	2,269 to 3,965	5.2	3.8 to 6.6	-1,043	-2,108 to 22
Texas	2,625 (5)	1,790 to 3,460	4.4	3.0 to 5.8	-620	-1,795 to 555
Total	39,009		65.0		-6,362	
Frederick						
Maryland	6,811 (1)	5,833 to 7,789	48.1	41.2 to 55.0	1,766	355 to 3,177
Pennsylvania	959 (2)	697 to 1,221	6.8	4.9 to 8.6	-192	-565 to 181
Virginia	840 (3)	578 to 1,102	5.9	4.1 to 7.8	424	-11 to 859
West Virginia	716 (4)	466 to 966	5.1	3.3 to 6.8	-304	-630 to 22
New York	579 (5)	220 to 938	4.1	1.6 to 6.6	-79	-529 to 371
Total	9,905		70.0		1,615	
Howard						
Maryland	14,654 (1)	13,052 to 16,256	60.5	53.9 to 67.2	-2,143	-4,369 to 83
Virginia	1,388 (2)	960 to 1,816	5.7	4 to 7.5	445	-295 to 1,185
Florida	1,172 (3)	831 to 1,513	4.8	3.4 to 6.2	-759	-1,162 to -356
Pennsylvania	856 (4)	614 to 1,098	3.5	2.5 to 4.5	-400	-809 to 9
District of Columbia	608 (5)	362 to 854	2.5	1.5 to 3.5	-419	-705 to -133
Total	18,678		77.0		-3,276	

Table 3.9. cont.

State	Total Out-Mi	igrants (Rank)	Percentage of Total (Out-Migrants	Net Intern	al Migration
	Estimate	Range	Estimate (%)	Range (%)	Estimate	Range
Prince George's						
Maryland	25,793 (1)	23,715 to 27,871	50.7	46.7 to 54.8	-4,837	-7,688 to -1,986
District of Columbia	5,604 (2)	4,625 to 6,583	11.0	9.1 to 13.0	5,126	3,635 to 6,617
Virginia	5,486 (3)	4,555 to 6,417	10.8	9.5 to 12.6	852	-462 to 2,166
North Carolina	1,541 (4)	967 to 2,115	3.0	1.9 to 4.2	-262	-911 to 387
Texas	1,406 (5)	990 to 1,822	2.8	1.9 to 3.6	-595	-1,109 to -81
Total	39,830		78.3		284	
Fairfax						
Virginia	40,403 (1)	37,965 to 42,841	46.8	44 to 49.6	-9,483	-12,535 to -6,431
Maryland	7,599 (2)	6,416 to 8,782	8.8	7.4 to 10.2	-1,976	-3,332 to -620
Florida	4,453 (3)	3,573 to 5,333	5.2	4.1 to 6.2	-1,772	-2,873 to -671
Texas	4,194 (4)	3,302 to 5,086	4.9	3.8 to 5.9	-2,446	-3,434 to -1,458
North Carolina	2,702 (5)	2,169 to 3,235	3.1	2.5 to 3.7	-751	-1,415 to -87
Total	59,351		68.8		-16,428	
Loudoun						
Virginia	11,712 (1)	10,533 to 12,891	44.9	40.4 to 49.4	1,637	-212 to 3,486
Texas	1,726 (2)	1,150 to 2,302	6.6	4.4 to 8.8	-545	-1,423 to 333
Florida	1,648 (3)	1,130 to 2,166	6.3	4.3 to 8.3	-522	-1,319 to 275
Maryland	1,362 (4)	886 to 1,838	5.2	3.4 to 7.0	311	-305 to 927
North Carolina	1,153 (5)	749 to 1,557	4.4	2.9 to 6.0	-623	-1,084 to -162
Total	17,601		67.4		258	

Table 3.10. Top 5 County/City Out-Migration Destinations by County (2016-2020)

	Total Out-Migr	ants (Rank)	Percentage of Total	al Out-Migrants	, Net	Migrants
County/City	Estimate	Range	Estimate (%)	Range (%)	Estimate	Range
Montgomery						
Prince George's County, MD	9,030 (1)	7,626 to 10,434	15.0	12.7 to 17.4	-1,852	-3,540 to -164
District of Columbia	4,380 (2)	3,798 to 4,962	7.3	6.3 to 8.3	1,238	355 to 2,121
Frederick County, MD	3,204 (3)	2,533 to 3,875	5.3	4.2 to 6.5	-1,003	-1,989 to -17
Fairfax County, VA	2,195 (4)	1,663 to 2,727	3.7	2.8 to 4.5	92	-648 to 832
Howard County, MD	2,167 (5)	1,538 to 2,796	3.6	2.6 to 4.7	328	-646 to 1,302
Total	20,976		34.9		-1,197	
Frederick						_
Montgomery County, MD	2,201 (1)	1,540 to 2,862	15.6	10.9 to 20.2	1,003	17 to 1,989
Washington County, MD	1,766 (2)	1,287 to 2,245	12.5	9.1 to 15.9	-1,014	-1,545 to -483
Baltimore County, MD	652 (3)	412 to 892	4.6	2.9 to 6.3	55	-326 to 436
Baltimore City, MD	507 (4)	272 to 742	3.6	1.9 to 5.2	-211	-504 to 82
Mohave County, AZ	458 (5)	0 to 1,089	3.2	0.0 to 7.7	-458	-1,089 to 173
Total	5,584		39.5		-625	
Howard						
Anne Arundel County, MD	2,930 (1)	1,960 to 3,900	12.1	8.1 to 16.1	-980	-2,095 to 135
Baltimore County, MD	2,655 (2)	1,904 to 3,406	11.0	7.9 to 14.1	-652	-1,596 to 292
Montgomery County, MD	2,495 (3)	1,754 to 3,236	10.3	7.2 to 13.4	-328	-1,302 to 646
Prince George's County, MD	2,103 (4)	1,727 to 2,479	8.7	7.1 to 10.2	765	-235 to 1,765
Baltimore City, MD	1,175 (5)	928 to 1,422	4.9	3.8 to 5.9	427	-66 to 920
Total	11,358		47.0		-768	

Table 3.10 cont.

	Total Out-Migra	nts (Rank)	Percentage of To	tal Out-Migrants	Net N	1igrants
County/City	Estimate	Range	Estimate (%)	Range (%)	Estimate	Range
Prince George's						
Montgomery County, MD	7,178 (1)	6,174 to 8,182	14.1	12.1 to 16.1	1,852	164 to 3,540
Anne Arundel County, MD	6,101 (2)	4,983 to 7,219	12.0	9.8 to 14.2	-3,175	-4,628 to -1,722
District of Columbia	5,604 (3)	4,625 to 6,583	11.0	9.1 to 13.0	5,126	3,635 to 6,617
Charles County, MD	3,352 (4)	2,563 to 4,141	6.6	5.0 to 8.1	-1,527	-2,465 to -589
Howard County, MD	2,868 (5)	2,006 to 3,730	5.6	3.9 to 7.3	-765	-1,765 to 235
Total	25,103		49.3		1,511	
Fairfax						
Loudoun County, VA	8,358 (1)	7,189 to 9,527	9.7	8.3 to 11.0	-4,700	-6,062 to -3,338
Prince William County, VA	7,823 (2)	6,581 to 9,065	9.1	7.6 to 10.5	-3,525	-4,982 to -2,068
Arlington County, VA	4,513 (3)	3,580 to 5,446	5.2	4.1 to 6.3	2,849	1,592 to 4,106
Alexandria City, VA	2,750 (4)	2,237 to 3,263	3.2	2.6 to 3.8	1,337	465 to 2,209
Montgomery County, MD	2,287 (5)	1,608 to 2,966	2.6	1.9 to 3.4	-92	-832 to 648
Total	25,731		29.8		-4,131	
Loudoun						
Fairfax County, VA	3,658 (1)	3,010 to 4,306	14.0	11.5 to 16.5	4,700	3,338 to 6,062
Prince William County, VA	1,337 (2)	906 to 1,768	5.1	3.5 to 6.8	-548	-1,109 to 13
Frederick County, VA	955 (3)	392 to 1,518	3.7	1.5 to 5.8	-840	-1,414 to -266
Albemarle County, VA	568 (4)	331 to 805	2.2	1.3 to 3.1	-534	-771 to -297
Montgomery County, MD	544 (5)	167 to 921	2.1	0.6 to 3.5	198	-271 to 667
Total	7,062		27.1		2,976	

Chapter 4. Out-Migration of Individuals: Findings from IRS Data

The previous chapter compared the internal migration of individuals from Montgomery County with its neighboring, suburban counties using the most recent ACS data. This chapter builds on that analysis by examining internal migration using the latest county-to-county migration data from the Internal Revenue Service (IRS) from 2012 to 2022.

Understanding two key differences between the ACS and IRS data is essential for interpreting the analysis of the IRS data accurately:

- The IRS data that OLO presents includes annual figures on internal migration from 2012 to 2022, whereas the ACS data has five-year estimates for the 2016-2020 period.¹
- 2. The IRS data presented here does <u>not</u> include ranges. Unlike the ACS data, it is <u>not</u> based on a sample; instead, it includes counts of migration status of individuals based on all tax returns. Therefore, there is no "sampling error" to account for. (See "Methodological Detail for ACS Data" in Chapter 2.)

Due to these differences, OLO adopted a different approach to analyzing the IRS data. Like the previous chapter, the approach here involves:

- Comparing Total Levels of Migration: The analysis compares the *total levels* of outmigration, in-migration, and net internal migration to evaluate absolute differences in internal migration between counties.
- Comparing Migration Relative to County Population Size: The analysis also examines these dimensions as *percentages of each county's population*.
- Identifying State and County Destinations: The analysis examines trends in out-ofstate and in-state internal migration and identifies the primary state and County destinations for Montgomery County residents.

However, the approach differs in this way:

 Assessing Migration Trends Over Time: Because IRS data includes annual figures over the 2012 to 2022 period, OLO assessed how levels of internal migration have

¹ In other words, the IRS data is time series cross-sectional, whereas the ACS data is cross-sectional.

changed over time. This allows us to answer whether out-migration has increased, decreased, or remained stable over the period.

It should also be noted that to be consistent with the data sources presented in the subsequent chapter, Fairfax County, Fairfax City, and Falls Church are included in the analysis and described as "Fairfax County."

This chapter is organized as follows:

- Section A summarizes the total levels of internal migration;
- Section B presents data on internal migration as percentages of counties' populations; and
- **Section C** provides information on the top destinations, both in state and out of state, for out-migration.

Methodological Detail on Assessing Internal Migration Trends

OLO assessed trends in out-migration, in-migration, and net internal migration in two ways:

- (1) OLO calculated **average annual changes** in migration variables from the previous year. This indicator measures how much, on average, the variables have changed over the 2012 to 2022 period. To illustrate, an average annual change in out-migration of +100 would mean the number of out-migrants, on average, increased by 100 per year, indicating an *upward trend*. In contrast, an average annual change of -100 would mean that the number of out-migrants, on average, decreased by 100 per year, indicating a *downward trend*.
- (2) OLO performed statistical tests to determine whether there is **statistically significant** evidence that the migration variables trended downward or upward during this period. In statistics, an observed pattern in data is "statistically significant" if there is evidence that it is due to some causal factor of interest and unlikely a result of chance.² OLO tested whether there are statistically significant relationships between time and the migration indicators by performing linear regression and Mann-Kendal analyses.

In the data tables presented below, an asterisk (*) indicates that there is statistically significant evidence of an upward or downward trend. Figures without an asterisk indicate no evidence of an upward or downward trend.³

² For a non-technical discussion of statistical significance, see Amy Gallo, "A Refresher on Statistical Significance," *Harvard Business Review*, February 16, 2016, https://hbr.org/2016/02/a-refresher-on-statistical-significance.

³ For simplicity, OLO does <u>not</u> adopt the convention providing one, two, or three asterisks depending on the p-value threshold ($P > 0.05 *, P \le 0.05 **, P \le 0.01 ***$).

Summary of Findings

The analysis of internal migration data from the IRS from 2012 to 2022 reveals several important insights about trends for Montgomery County relative to its suburban, neighboring counties.

Montgomery County retained a larger share of its residents compared to most of its neighboring suburban counties, with fewer residents moving away relative to its population size. From 2012 to 2022, Montgomery County consistently ranked second in total number of out-migrants, with a cumulative 584,240 out-migrants and an average of 53,113 residents relocating outside the County each year. Only Fairfax County had more out-migrants, with 950,990 people moving out over the period, averaging 86,454 per year.

However, when accounting for the size of its population, Montgomery County's had the second *lowest* levels of out-migration compared to the other counties, behind Frederick County. On average, 5.1% of Montgomery County's population moved out per year. Only Frederick County had a lower percentage at 4.8%. In contrast, Fairfax experienced the highest level of out-migration, with an annual average of 7.3% of its population leaving, followed by Howard and Loudoun Counties.

Montgomery County attracted fewer new residents compared to neighboring suburban counties, with the lowest level of in-migration relative to its population size. From 2012 to 2022, Montgomery County ranked second in total number of in-migrants, with an average 45,705 moving in each year. Fairfax County, in comparison, had 807,939 in-migrants, averaging 73,449 annually. When adjusting for its population size, Montgomery County had lowest level of in-migration compared to other counties, followed by Prince George's County. On average, 4.4% of Montgomery County's population moved in per year, compared to 4.9% for Prince George's County. In contrast, Loudoun had the highest in-migration as a percentage of its population at 7.2%, followed by Howard and Fairfax Counties.

Montgomery County experienced net losses of residents from internal migration, consistently recording the second-largest losses. However, in recent years, it was surpassed by Prince George's County, moving to third behind Fairfax and Prince George's Counties. From 2012 to 2022, Montgomery County experienced a net loss of 81,495 people over the period, with an average annual net loss of 7,409. Prince George's and Fairfax Counties also faced net out-migration, with Fairfax experiencing the largest net loss—143,051 individuals in total, or an average of 13,005 per year. In contrast, Frederick, Howard, and Loudoun Counties consistently saw net in-migration.

However, from 2020 to 2022, Prince George's County surpassed Montgomery County in total net losses. Over the three years, Montgomery County had a net loss of 32,131, compared to 36,640 for Prince George's County and 44,814 for Fairfax County. Frederick and Loudoun Counties were the only jurisdictions to see net gains in internal migrants during this period.

Relative to its population size, Montgomery County had moderate net losses. However, net losses increased over time, meaning the gap between out-migrants and in-migrants grew as time went on. During the entire period, Montgomery County experienced the third highest level of net out-migration as a percentage of its population. On average, it had a net loss of 0.7% of its population from internal migration per year, compared to 1.1% and 0.8% for Fairfax and Prince George's Counties, respectively. In contrast, Loudoun, Frederick and Howard Counties experienced net gains in internal migration relative to their populations. From 2020 to 2022, Frederick and Loudoun Counties were the only jurisdictions to see net gains in residents from internal migration.

In Montgomery County, net losses increased from the previous year by an average of 904 individuals. Prince George's County was the only jurisdiction that had higher average annual increases in net out-migration, losing an average of 1,066 more residents than the previous year. Despite consistently experiencing net gains, Howard and Loudon Counties saw significant declines in net gains. Only Frederick saw net gains increase over time.

Interstate moves drove Montgomery County's out-migration and in-migration patterns before and during the Pandemic. During the entire period (2017-2022), Montgomery County had the third highest level of out-of-state out-migration, trailing Fairfax and Loudoun Counties, and the lowest level of in-state out-migration, followed by Frederick and Prince George's Counties. While it had moderate levels of out-of-state in-migration, Montgomery County had the lowest level of in-state in-migration, followed by Prince George's and Fairfax Counties.

Montgomery County, along with Fairfax and Prince George's Counties, was one of three counties that experienced, both, in-state and out-of-state net losses. During the entire period (2017-2022), Montgomery County had moderate levels of in-state and out-of-state net out-migration, alongside Fairfax and Prince George's Counties. From 2020 to 2022, Frederick, Howard, and Loudoun Counties had net gains from their respective states, while all counties had net losses to other states.

Montgomery County, like other nearby jurisdictions, saw surrounding states and counties as the most popular destinations for its residents, but had varying net migration patterns with its neighbors. For Montgomery County, the top destinations included nearby states like Virginia and Washington, D.C., as well as states in the Northeast (Pennsylvania, New Jersey, and New York), the South (Florida, North Carolina, and Texas),

and California. The County experienced the largest net losses to Florida, Virginia, Texas, and North Carolina.

At the county level, the top destinations for Montgomery County residents were Prince George's County, Frederick County, District of Columbia, Howard County, and Fairfax County. Similarly, Montgomery County consistently ranked as one of the top five destinations for residents from other counties, especially those from Prince George's and Frederick Counties.

Montgomery County experienced varying net migration flows with local areas, seeing net gains from Washington, D.C., Prince George's County, and Arlington County, but net losses to Frederick, Howard, Anne Arundel, Fairfax, and Loudoun Counties. Beyond the local region, Montgomery County experienced large net losses to Sussex County (DE) and Palm Beach (FL).

Key Findings for Montgomery County

Out-Migration	 Second Largest Number of Residents and Out-Migrants Second Lowest Out-Migration Relative to Population
In-Migration	Second Largest Number of In-MigrantsLowest In-Migration Relative to Population
Net Internal Migration	 Moved from Second to Third Highest Net Out-Migration Third Highest Net Out-Migration Relative to Population Net Out-Migration Grew Over time
State Destinations	 Interstate Moves Drove Montgomery County's Out-Migration and In-Migration Patterns Before and During the Pandemic Most Popular Out-of-State Destinations were Virginia, District of Columbia, Florida, and California Largest Net Losses to Florida, Virginia, Texas, and North Carolina
County Destinations	 Most Popular County Destinations were Prince George's County, Frederick County, District of Columbia, Howard County, and Fairfax County Net Out-Migration to Frederick, Howard, Fairfax, and Loudoun Counties, with Net In-Migration from Prince George's County

A. Total Levels of Internal Migration

This section presents IRS data on the total levels on out-migration, in-migration, and net migration of individuals from 2012 to 2022. The analysis references the following figures and table:

Figure/Table	Description		
Figure 4.1	Total number of out-migrants and in-migrants 2012-2022		
Figure 4.2	Net internal migration 2012-2022		
Table 4.1	Cumulative internal migration from 2012-2022 and 2020-2022		
Table 4.2	Point estimates and ranges for the total number of out-migrants and total out-migrants as a percentage of population 2012-2022		
Table 4.3	Average annual changes in migration from the previous year. An asterisk (*) is used to show that there is statistically significant evidence of an internal migration indicator increasing or decreasing as time went on.		

Some highlights from the data include:

From 2012 to 2022, Montgomery County Had the Second-Highest Total Out-Migrants, In-Migrants, and Net Out-Migrants, Behind Fairfax County. Montgomery County had 584,240 out-migrants, with an average of 53,113 relocating outside the County each year, and 502,745 in-migrants, with an average 45,705 moving in each year (Figure 4.1 and Table 4.1). Fairfax County, in comparison, had 950,990 out-migrants, with an average of 86,454 moving out per year, and 807,939 in-migrants, averaging 73,449 annually.

In terms of net migration, Montgomery County experienced a net loss of 81,495 people over the period, with an average annual net loss of 7,409. Prince George's and Fairfax Counties also faced net out-migration, with Fairfax experiencing the largest net loss—143,051 individuals in total, or an average of 13,005 per year. In contrast, Frederick, Howard, and Loudoun Counties consistently saw net in-migration, with more people moving in than leaving throughout the period.

From 2020 to 2022, Montgomery County Moved from Second to Third Highest Net Out-Migration. Consistent with the PEP data presented in the previous chapter, Montgomery County was surpassed by Prince George's County in net out-migration and moved from second to third highest net losses (Table 4.1). Over the three years, Montgomery County saw

a net loss of 32,131, compared to 36,640 for Prince George's County and 44,814 for Fairfax County. Frederick and Loudoun Counties were the only jurisdictions to see net gains in internal migrants during this period.

Montgomery County saw net losses increase over time, meaning the gap between outmigrants and in-migrants grew as time went on. In Montgomery County, net out-migration increased from the previous year by an average of 904 individuals. The data suggest that this finding was driven by a stable divergence of out- and in-migration (as opposed to a significant increase in out-migration). Prince George's County was the only jurisdiction that had higher average annual increases of net out-migration, losing an average of 1,066 more residents than the previous year. Fairfax County also experienced average annual increases in net out-migration, but due to the variability over time, as seen in Figure 4.2, the trend was statistically insignificant.

Despite having mostly positive net migration during this period, Howard and Loudon Counties saw significant declines in net gains. These trends were likely driven by significant increases in out-migration for the counties, which reduced net in-migration over time.

Frederick County was alone in experiencing a significant upward trend in net in-migration during the period.

Note: There were sharp increases in the out- and in-migration of individuals for all counties from 2015 to 2017 and subsequent decreases from 2017 to 2018 (Figures 4.1 and 4.2). OLO was unable to find an explanation for this phenomenon in IRS documentation. But OLO suspects this may be partly due to misclassifying individuals/tax returns during this time.

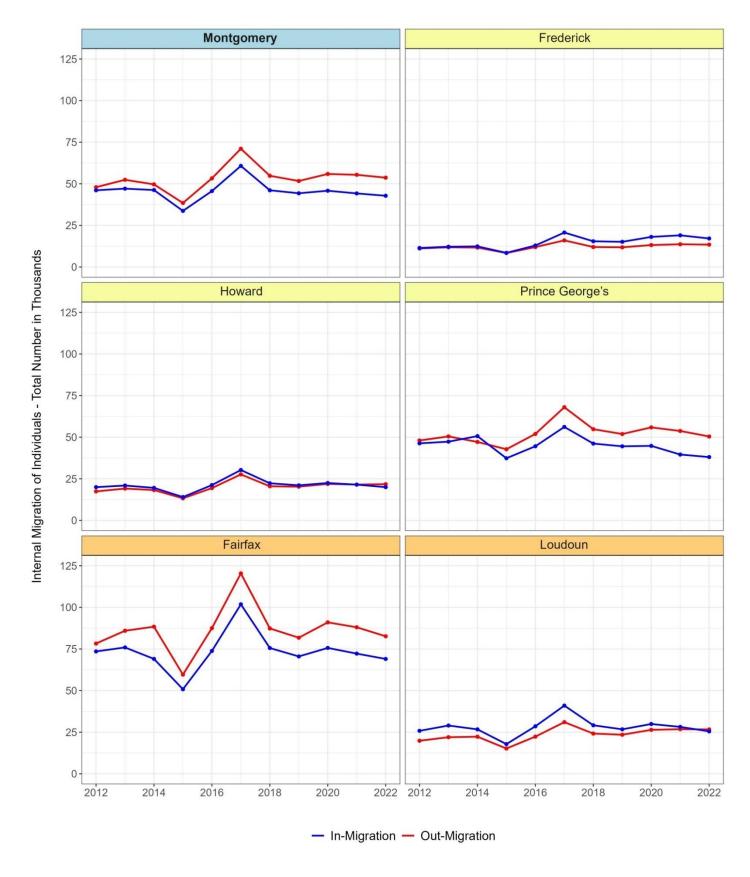


Figure 4.1. Total Out-Migration and In-Migration by County (2012-2022)

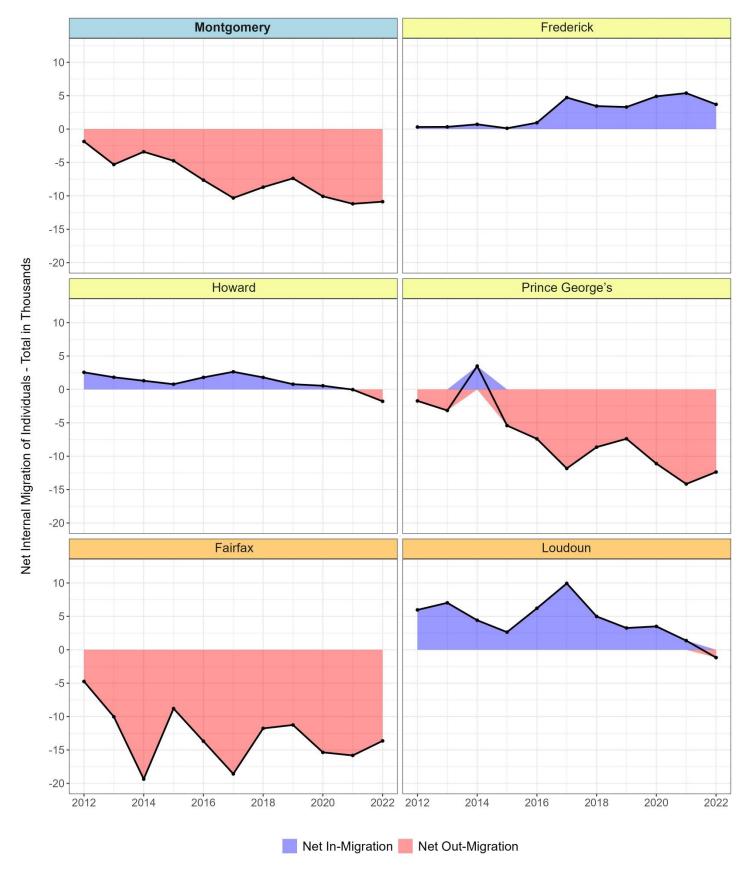


Figure 4.2. Net Internal Migration by County (2012-2022)

Table 4.1. Cumulative Internal Migration by County (2012-2022 & 2020-2022)

2012-2022			2020-2022				
County	In-Migrants	Out-Migrants	Net Migrants (Rank)	County	In-Migrants	Out-Migrants	Net Migrants (Ranked)
Fairfax	807,939	950,990	-143,051 (1)	Fairfax	216,867	261,681	-44,814 (1)
Montgomery	502,745	584,240	-81,495 (2)	Prince George's	122,411	160,051	-37,640 (2)
Prince George's	495,426	575,099	-79,673 (3)	Montgomery	132,838	164,969	-32,131 (3)
Howard	233,352	221,112	+12,240 (4)	Howard	63,948	65,188	-1,240 (4)
Frederick	162,979	135,119	+27,860 (5)	Loudoun	83,593	79,902	+3,691 (5)
Loudoun	308,389	260,247	+48,142 (6)	Frederick	54,262	40,281	+13,981 (6)

Table 4.2. Average Annual Internal Migration by County (2012-2022)

County	In-Migrants	Out-Migrants	Net Migrants (Rank)
Fairfax	73,449	86,454	-13,005
Montgomery	45,705	53,113	-7,409
Prince George's	45,039	52,282	-7,243
Howard	21,214	20,101	+1,112
Frederick	14,816	12,284	+2,532
Loudoun	28,035	23,659	+4,377

 Table 4.3. Trend Analysis for Internal Migration (2012-2022)

	Average Annual Change from Previous Year						
County	In-Migration	Out-Migration	Net Migration (ranked)				
Prince George's	-826	240	-1,066 *				
Montgomery	-330	571	- 901 *				
Fairfax	-453	437	-889				
Loudon	-34	680 *	-714 *				
Howard	0	434 *	-434 *				
Frederick	571 *	233 *	+338 *				

^{*}Statistically Significant

B. Internal Migration as a Percentage of Population

The analysis on internal migration as a percentage of County population references the following figures and tables:

Figure/Table	Description					
Figure 4.3	Out-migrants and in-migrants as a percentage of county population					
Figure 4.4	Figure 4.4 Net internal migration as a percentage of the total county population					
Table 4.4	Average annual levels of internal migration as a percentage of county population					
Table 4.5	Average annual changes in migration as percentages of population from the previous year. An asterisk (*) is used to show that there is statistically significant evidence of an internal migration indicator increasing or decreasing as time went on.					

Some highlights from the data include:

Montgomery County Experienced the Second Lowest Out-Migration Relative to its Population: When accounting for the size of its population, Montgomery County experienced low levels of out-migration compared to the other counties (Figure 4.3). On average, 5.1% of its population moved out per year (Table 4.4). Only Frederick County saw a lower level of out-migration as a percentage of its population at 4.8%. In contrast, Fairfax had the highest level of out-migration as a percentage of its population, with annual average of 7.3% of its population leaving, followed by Howard and Loudoun Counties.

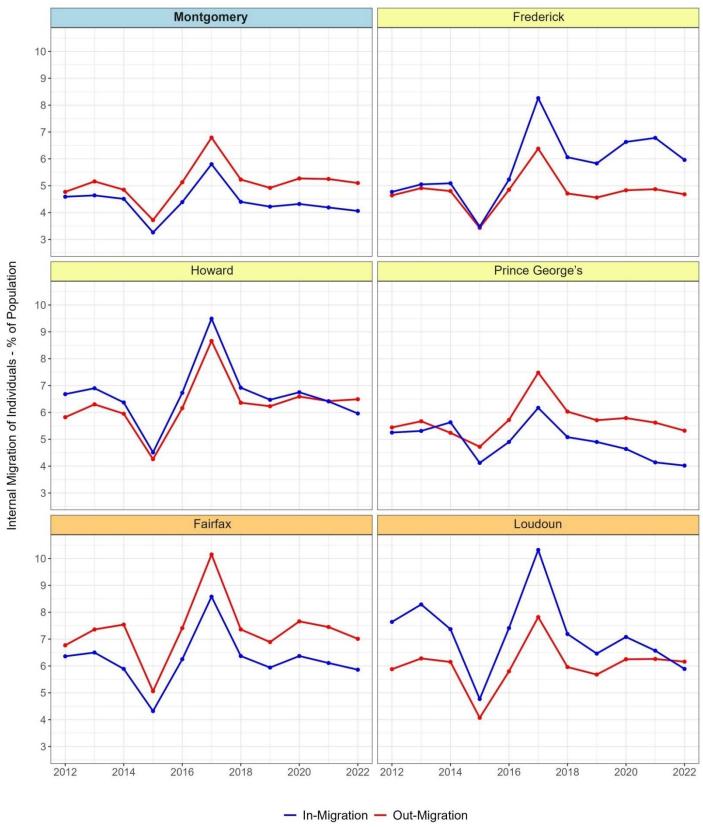
Montgomery County Had the Lowest In-Migration Relative to its Population: Montgomery County experienced the lowest level of in-migration as a percentage of its population compared to other counties (Figure 4.3). On average, 4.4% of its population moved in per year (Table 4.4). Prince George's County saw the second lowest in-migration, with an average of 4.9% of its population moving in per year. In contrast, Loudoun had the highest in-migration as a percentage of its population at 7.2%, followed by Howard and Fairfax Counties.

Montgomery County Had the Third Largest Net Out-Migration as a Percentage of its Population: During the entire period, Montgomery County experienced the third highest level of *net out-migration* as a percentage of its population compared to other counties (Figure 4.4). On average, it had a net loss of 0.7% of its population (Table 4.4). Fairfax and Prince George's Counties experienced greater net losses relative to their populations, with

averages of 1.1% and 0.8% of their populations moving out per year, respectively. In contrast, Loudoun, Frederick and Howard Counties experienced net gains in internal migration relative to their populations.

Montgomery County's Net Out-Migration as a Percentage of Population Grew Over Time: During this period, Montgomery County saw net out-migration as a percentage of its population increase over time—meaning the percentage of residents who left increased over time (Table 4.5). Net out-migration as a percentage of population increased an average of 0.08 percent from the previous year. Loudoun, Howard, and Prince George's Counties also saw net out-migration increase over time, relative to the size of their populations. In contrast, Frederick County saw increasing net in-migration as a percentage of its population during this period.

Figure 4.3. Out-Migration and In-Migration of Individuals as a Percentage of County Population (2012-2022)



Montgomery Frederick 3 2 0 -1 Net Internal Migration of Individuals - % of Population Prince George's Howard 3 2. 1 0--1 -2 Fairfax Loudoun 3 2 0 2012 2014 2016 2018 2020 2022 2012 2014 2016 2018 2020 2022 Net In-Migration Net Out-Migration

Figure 4.4. Net Internal Migration as a Percentage of County Population (2012-2022)

Table 4.4. Average Annual Levels of Internal Migration as a Percentage of Population (2012-2022 & 2020-2022)

		2012-2022		2020-2022				
County	In-Migrants	Out-Migrants	Net Migrants (ranked)	County	In-Migrants	Out-Migrants	Net Migrants (Rank)	
Fairfax	6.2	7.3	-1.1 (1)	Prince George's	4.3	5.6	-1.3 (1)	
Prince George's	4.9	5.7	-0.8 (2)	Fairfax	6.1	7.4	-1.3 (2)	
Montgomery	4.4	5.1	-0.7 (3)	Montgomery	4.2	5.2	-1.0 (3)	
Howard	6.7	6.3	+0.4 (4)	Howard	6.4	6.5	-0.1 (4)	
Frederick	5.7	4.8	+1.0 (5)	Loudoun	6.5	6.2	+0.3 (5)	
Loudoun	7.2	6.0	+1.2 (6)	Frederick	6.5	4.8	+1.7 (6)	

Table 4.5. Trend Analysis for Internal Migration as a Percentage of Population (2012-2022)

	Average Annual Change from Previous Year								
County	In-Migration	Out-Migration	Net Migration (ranked)						
Loudoun	-0.18	0.03%	-0.20% (1) *						
Howard	-0.07	0.07%	-0.14% (2) *						
Prince George's	-0.12	-0.01%	-0.11% (3) *						
Montgomery	-0.05	0.03%	-0.08% (4) *						
Fairfax	-0.05	0.02%	-0.07% (5)						
Frederick	0.12	0.00%	+0.12% (6) *						

^{*}Statistically Significant

C. Destinations of Out-Migration

This section presents data on the primary destinations of out-migrants from the six counties relocated before and during the pandemic, specifically from 2017 to 2019 and 2020 to 2022. The analysis references the following tables:

Figure/Table	Description
Table 4.6	Comparison of out-of-state and in-state internal migration
Table 4.7	Top five destination states for out-migrants and net out-migrants
	for each county
Table 4.8	Top five destination <i>counties/cities</i> for out-migrants and net out-
14016 4.0	migrants for each county
Table 4.9	Top ten counties/cities for out-migrants and net out-migrants for
Table 4.9	Montgomery County from 2020 to 2022

Regarding the *state-level destinations* of out-migrants in all six counties, OLO identified the following highlights (Tables 4.6 and 4.7):

Interstate Moves Drove Montgomery County's Out-Migration and In-Migration Patterns Before and During the Pandemic: During the entire period (2017-2022), Montgomery County had the third highest level of *out-of-state* out-migration, trailing Fairfax and Loudoun Counties, while also having the lowest level of *in-state* out-migration, followed by Frederick and Prince George's Counties (Table 4.6). From 2020 to 2022, 3.2% of Montgomery County's population moved out of state, while 2.0% relocated within state.

Interstate moves also drove migration into Montgomery County. While it had moderate levels of out-of-state in-migration, Montgomery County had the lowest level of in-state in-migration, followed by Prince George's and Fairfax Counties. From 2020 to 2022, 1.3% of Montgomery County's population arrived from within Maryland, while 2.9% came from outside the state.

Montgomery County Was One of Three Jurisdictions with Both In-State and Out-of-State Net Out-Migration: During the entire period (2017-2022), Montgomery County had moderate levels of in-state and out-of-state net out-migration, alongside Fairfax and Prince George's Counties. From 2020 to 2022, Frederick, Howard, and Loudoun Counties had net gains from their respective states, while all counties had net losses to other states.

Montgomery County has a Variety of Popular Out-of-State Destinations: In both periods, most out-migrants from Montgomery County relocated in Maryland, Virginia, District of

Columbia, Florida, and California. From 2020 to 2022, the County saw the largest net out-migration losses to Maryland, Florida, Virginia, Texas, and North Carolina (Table 4.7).

Surrounding States Were Most Popular Out-of-State Destinations: For all counties, surrounding states, were common destinations for out-migrants. For Montgomery County, the top out-of-state destinations included nearby states like Virginia and Washington, D.C., as well as states in the Northeast (Pennsylvania, New Jersey, and New York), the South (Florida, North Carolina, and Texas), and California. The County experienced the largest net losses to Florida, Virginia, Texas, and North Carolina.

Regarding the *county/city-level destinations* of out-migrants in all six counties, OLO identified the following highlights (Tables 4.8 and 4.9):

Surrounding Counties Were Most Popular Destinations: For all counties, the majority of top five county destinations for out-migrants were within their respective states. The top destinations for Montgomery County residents were Prince George's County, Frederick County, District of Columbia, Howard County, and Fairfax County. Similarly, Montgomery County consistently ranked as one of the top five destinations for residents from other counties, especially those from Prince George's and Frederick Counties.

Montgomery County Had Varying Net Migration Patterns with Nearby Counties: While Montgomery was a popular destination, it experienced varying net migration flows with local areas. Montgomery County had net gains from Washington, D.C., Prince George's County, and Arlington County, but net losses to Frederick, Howard, Anne Arundel, Fairfax, and Loudoun Counties. Beyond the region, Montgomery County experienced large net losses to Sussex County (DE), and Palm Beach (FL).

Table 4.6. Out-of-State and In-State Internal Migration by County (2017-2019 & 2020-2022)

	ln-	-State		Out-	of-Stat	te		In-	State		Out-	of-Sta	te
	Average	% of	%	Average	% of	%		Average	% of	%	Average	% of	%
County	Annual	Pop	Rank	Annual	Pop	Rank	County	Annual	Pop	Rank	Annual	Pop	Rank
		2017-2	019					20	20-202	22			
Out-						Out-N	1igrants						
Montgomery	22,507	2.1	6	36,671	3.5	3	Montgomery	21,579	2.0	6	33,411	3.2	3
Frederick	5,669	2.2	5	7,609	2.9	6	Frederick	5,640	2.0	5	7,787	2.8	5
Howard	13,224	4.0	1	9,591	2.9	5	Howard	12,577	3.8	1	9,152	2.7	6
Prince George's	28,063	2.9	4	30,174	3.2	4	Prince George's	26,487	2.8	4	26,863	2.8	4
Fairfax	46,657	3.9	2	49,860	4.2	1	Fairfax	43,294	3.7	2	43,933	3.7	1
Loudoun	11,993	3.0	3	14,231	3.5	2	Loudoun	12,247	2.9	3	14,387	3.4	2
						In-M	igrants						
Montgomery	16,263	1.5	6	34,115	3.2	3	Montgomery	14,129	1.3	6	30,150	2.9	2
Frederick	10,014	3.8	3	7,084	2.7	6	Frederick	10,939	3.9	2	7,149	2.6	5
Howard	15,621	4.8	1	8,933	2.7	5	Howard	13,528	4.0	1	7,788	2.3	6
Prince George's	18,862	2.0	5	30,091	3.2	4	Prince George's	15,773	1.7	5	25,030	2.6	4
Fairfax	35,970	3.0	4	46,675	3.9	1	Fairfax	32,757	2.8	4	39,532	3.3	1
Loudoun	18,007	4.4	2	14,280	3.5	2	Loudoun	15,718	3.7	3	12,147	2.8	3
						Net M	1igrants						
Montgomery	-6,244	-0.6	4	-2,555	-0.2	5	Montgomery	-7,450	-0.7	4	-3,260	-0.3	3
Frederick	+4,345	+1.7	1	-525	-0.2	4	Frederick	+5,299	+1.9	1	-638	-0.2	2
Howard	+2,396	+0.7	3	-658	-0.2	3	Howard	+951	+0.3	3	-1,364	-0.4	5
Prince George's	-9,202	-1.0	6	-84	-0.0	2	Prince George's	-10,714	-1.1	6	-1,833	-0.2	1
Fairfax	-10,687	-0.9	5	-3,185	-0.3	6	Fairfax	-10,536	-0.9	5	-4,402	-0.4	4
Loudoun	+6,014	+1.5	2	+48	+0.0	1	Loudoun	+3,471	+0.8	2	-2,240	-0.5	6

Table 4.7. Top <u>State</u> Destinations for Out-Migration and Net Out-Migration by County (2017-2019 & 2020-2022)

	Out-			Net Out-		Out-			Net Out-
State	Migrants	Percentage	State	Migrants	State	Migrants	Percentage	State	Migrants
		2017-2019					2020-2022		
				Montg	omery				
Maryland	67,154	42.7	Maryland	-18,653	Maryland	64,424	-44.6	Maryland	-22,315
Virginia	21,924	13.9	Virginia	-3,310	Virginia	18,799	-13.0	Florida	-4,788
District of Columbia	12,218	7.8	Florida	-2,898	District of Columbia	9,674	-6.7	Virginia	-3,782
Florida	7,827	5.0	California	− 2,075	Florida	8,709	-6.0	Texas	-1,574
California	7,413	4.7	North Carolina	-1,474	California	5,714	-4.0	North Carolina	-1,520
Total	116,536	74.1		-28,410	Total	107,320	-74.3		-33,979
	Frederick								
Maryland	16,367	63.8	West Virginia	-639	Maryland	16,359	-61.4	West Virginia	-1,145
Pennsylvania	2,186	8.5	Pennsylvania	-631	Pennsylvania	2,247	-8.4	Pennsylvania	-833
Virginia	1,912	7.5	Florida	– 491	West Virginia	2,067	- 7.8	Florida	-685
West Virginia	1,725	6.7	North Carolina	-228	Virginia	1,926	-7.2	North Carolina	-314
Florida	892	3.5	Delaware	-226	Florida	1,077	-4.0	Delaware	-251
Total	23,082	90.0		2,215	Total	23,676	-88.9		-3,228
				Hov	vard				
Maryland	39,282	73.2	Florida	- 957	Maryland	37,356	- 72.9	Florida	-1,499
Virginia	2,973	5.5	Delaware	– 455	Virginia	2,453	-4.8	Texas	-861
Florida	1,811	3.4	Texas	- 419	Florida	2,277	-4.4	Delaware	- 728
California	1,313	2.5	California	-301	Texas	1,533	-3.0	North Carolina	-512
Texas	1,246	2.3	Pennsylvania	-203	Delaware	1,040	-2.0	Pennsylvania	-229
Total	46,625	86.9		2,335	Total	44,659	-87.1		-3,829

Table 4.7 cont.

	Out-			Net Out-		Out-			Net Out-	
State	Migrants	Percentage	State	Migrants	State	Migrants	Percentage	State	Migrants	
		2017-2019					2020-2022			
				Prince C	George's					
Maryland	83,884	54.3	Maryland	-27,746	Maryland	79,133	56.1	Maryland	-32,187	
District of Columbia	21,040	13.6	Florida	-1,478	Virginia	19,636	13.9	Virginia	-3,939	
Virginia	20,798	13.5	Texas	-1,202	District of Columbia	16,824	11.9	Florida	-1,986	
Florida	3,690	2.4	North Carolina	- 873	Florida	3,895	2.8	Texas	-1,602	
Texas	3,207	2.1	California	-849	Texas	3,341	2.4	North Carolina	-1,312	
Total	132,619	85.9		-32,148	Total	122,829	87.0		-41,026	
	Fairfax									
Virginia	136,764	53.9	Virginia	-31,374	Virginia	126,594	55.1	Virginia	-30,709	
Maryland	25,443	10.0	Florida	-4,329	Maryland	21,122	9.2	Florida	-6,989	
Florida	12,774	5.0	North Carolina	-2,510	Florida	13,702	6.0	North Carolina	-3,420	
California	9,949	3.9	Colorado	-1,524	Texas	8,732	3.8	Texas	-2,853	
Texas	8,784	3.5	Texas	-1,434	California	7,806	3.4	South Carolina	1,779	
Total	193,714	76.4		-41,171	Total	177,956	77.5		-45,750	
				Loud	doun					
Virginia	34,003	58.1	Florida	-1,311	Virginia	34,580	57.4	Florida	-3,022	
Maryland	4,775	8.2	North Carolina	-1,161	Florida	4,741	7.9	West Virginia	-1,645	
Florida	3,502	6.0	West Virginia	- 1,075	Maryland	4,280	7.1	North Carolina	-1,241	
California	2,367	4.0	Colorado	– 673	Texas	2,559	4.3	Texas	-1,064	
Texas	2,222	3.8	Texas	– 578	West Virginia	2,486	4.1	Colorado	– 498	
Total	46,869	80.0		-4,798	Total	48,646	80.8		-7,470	

Table 4.8. Top County Destinations for Out-Migration and Net Out-Migration by County (2017-2019 & 2020-2022)

				Net Out-		Out-			Net Out-
County, State	Out-Migrants	Percentage	County, State	Migrants	County, State	Migrants	Percentage	County, State	Migrants
		2017-2019					2020-2022		
				Montgor	nery				
Prince George's			Frederick		Prince George's			Frederick	
County, MD	25,496	16.2	County, MD	-10,653	County, MD	19,718	13.7	County, MD	-12,950
Frederick			Howard County,		Frederick			Howard County,	
County, MD	15,727	10.0	MD	-3,467	County, MD	17,740	12.3	MD	-3,458
District of			Anne Arundel		District of			Anne Arundel	
Columbia	12,218	7.8	County, MD	-2,282	Columbia	9,674	6.7	County, MD	-2,852
Fairfax County,			Fairfax County,		Howard County,			Washington	
VA	8,944	5.7	VA	-1,396	MD	7,726	5.4	County, MD	-1,731
Howard County,			Loudoun County,		Fairfax County,			Fairfax County,	
MD	8,177	5.2	VA	-1,204	VA	7,586	5.3	VA	-1,608
Total	70,562	44.9		-19,002	Total	62,444	43.2		-22,599
				Freder	ick				
Washington			Washington		Washington			Washington	
County, MD	5,218	20.3	County, MD	-1,914	County, MD	5,228	19.6	County, MD	-2,469
Montgomery			Berkeley County,		Montgomery			Berkeley County,	
County, MD	5,074	19.8	WV	-359	County, MD	4,790	18.0	WV	-783
Carroll County,			Adams County,		Carroll County,			Adams County,	
MD	1,983	7.7	PA	-308	MD	2,151	8.1	PA	– 481
Berkeley County,			Franklin County,		Berkeley County,			Jefferson	
WV	916	3.6	PA	-301	WV	1,277	4.8	County, WV	-362
Howard County,			Jefferson		Howard County,			Sussex County,	
MD	865	3.4	County, WV	-280	MD	915	3.4	DE	-300
Total	14,056	54.8		-3,162	Total	14,361	53.9		-4,395

Table 4.8. cont.

	Out-	_		Net Out-		Out-	_		Net Out-
County, State	Migrants	Percentage	County, State	Migrants	County, State	Migrants	Percentage	County, State	Migrants
		2017-2019					2020-202	.2	
				Hov	ward				
Anne Arundel			Carroll County,		Anne Arundel			Frederick	
County, MD	9,421	17.6	MD	-21,51	County, MD	9,020	17.6	County, MD	-2,124
Baltimore County,			Frederick		Baltimore			Carroll County,	
MD	8,080	15.1	County, MD	-14,74	County, MD	7,376	14.4	MD	-2,118
Prince George's			Anne Arundel		Prince George's			Anne Arundel	
County, MD	5,073	9.5	County, MD	-974	County, MD	4,382	8.6	County, MD	-1,609
Montgomery			Sussex County,		Montgomery			Sussex County,	
County, MD	4,710	8.8	DE	– 495	County, MD	4,268	8.3	DE	- 726
			Loudoun		Carroll			Wake County,	
Baltimore city, MD	3,831	7.1	County, VA	-331	County, MD	3,427	6.7	NC	268
Total	31,115	58.0		-5,425	Total	28,473	55.5		-6,845
				Prince (George's				
Montgomery			Anne Arundel		Montgomery			Anne Arundel	
County, MD	26,303	17.0	County, MD	-8,929	County, MD	21,904	15.5	County, MD	-9,634
District of			Charles County,		Anne Arundel			Charles County,	
Columbia	21,040	13.6	MD	− 7,939	County, MD	17,734	12.6	MD	-7,447
Anne Arundel			Howard		District of			Howard County,	
County, MD	18,196	11.8	County, MD	-4,591	Columbia	16,824	11.9	MD	-4,338
Charles County,			Calvert County,		Charles			Montgomery	
MD	14,979	9.7	MD	-1,458	County, MD	14,270	10.1	County, MD	-2,186
Howard County,			Montgomery		Howard			Baltimore city,	
MD	9,664	6.3	County, MD	-807	County, MD	8,720	6.2	MD	-1,723
Total	90,182	58.4		-23,724	Total	79,452	56.3		-25,328

Table 4.8. cont.

	Out-			Net Out-		Out-			Net Out-
County, State	Migrants	Percentage	County, State	Migrants	County, State	Migrants	Percentage	County, State	Migrants
		2017-2019					2020-2022	2	
				Fai	rfax				
Loudoun County,			Loudoun		Loudoun			Loudoun	
VA	36,982	14.6	County, VA	-20,649	County, VA	31,621	13.8	County, VA	-16,248
Prince William			Prince William		Prince William			Prince William	
County, VA	32,878	13.0	County, VA	-15,721	County, VA	30,704	13.4	County, VA	-15,766
Alexandria city,			Stafford County,		Arlington			Stafford County,	
VA	14,075	5.6	VA	-2,489	County, VA	11,980	5.2	VA	-3,568
Arlington County,			Spotsylvania		Alexandria city,			Spotsylvania	
VA	14,035	5.5	County, VA	-1,006	VA	11,483	5.0	County, VA	-1,389
Prince George's			Fauquier		Prince George's			Fauquier	
County, MD	8,593	3.4	County, VA	-961	County, MD	6,227	2.7	County, VA	-1,273
Total	106,563	42.0		-40,826	Total	92,015	40.0		-38,244
				Lou	doun				
			Frederick		Fairfax County,			Frederick	
Fairfax County, VA	15,738	26.9	County, VA	-1,316	VA	14,905	24.8	County, VA	-1,965
Prince William			Jefferson		Prince William			Prince William	
County, VA	5,026	8.6	County, WV	-753	County, VA	5,504	9.1	County, VA	-1,364
Frederick County,			Clarke County,		Frederick			Jefferson	
VA	2,031	3.5	VA	-676	County, VA	2,620	4.4	County, WV	-935
Arlington County,			Fauquier		Arlington			Clarke County,	
VA	1,956	3.3	County, VA	-433	County, VA	1,578	2.6	VA	-903
Montgomery			Wake County,		Jefferson			Berkeley	
County, MD	1,624	2.8	NC	-372	County, WV	1,506	2.5	County, WV	-710
Total	26,375	45.0		-3,550	Total	26,113	43.4		-5,877

Table 4.9. Top 10 County/City Destinations for Out-Migration from Montgomery County (2020-2022)

County/City, State	Out-Migrants	County/City, State	Net Out-Migrants
Prince George's County, MD	19,718	Frederick County, MD	-12,950
Frederick County, MD	17,740	Howard County, MD	-3,458
District of Columbia	9,674	Anne Arundel County, MD	-2,852
Howard County, MD	7,726	Washington County, MD	-1,731
Fairfax County, VA	7,586	Fairfax County, VA	-1,608
Anne Arundel County, MD	5,874	Sussex County, DE	-1,246
Baltimore City, MD	2,852	Loudoun County, VA	-1,186
Baltimore County, MD	2,793	Carroll County, MD	-969
Washington County, MD	2,484	Palm Beach County, FL	-588
Arlington County, VA	2,464	Baltimore City, MD	-568

Chapter 5. Out-Migration of Income: Findings from IRS Data

The previous chapters focused on the internal migration of individuals. This chapter compares the internal migration of *income* to and from Montgomery County with its neighboring suburban counties, using the most recent IRS data.

In this chapter, OLO measures "income" as inflation-adjusted Adjusted Gross Income, or "Real AGI." This chapter adopts a similar approach to analyzing the IRS data in Chapter 4.

- Comparing Migration of Total Real AGI: To evaluate absolute differences in the internal migration of income between counties, the analysis compares outmigration, in-migration, and net internal migration of total Real AGI.
- Comparing Migration of Per Capita Real AGI: To shed light on differences in the
 levels of incomes of individuals moving in and out of the counties, this analysis
 examines the internal migration of per capita Real AGI, defined as the average
 amount of income earned per person in each county. This part of the analysis also
 examines per capita Real AGI of individuals who remain in the counties ("nonmigrants") to determine whether people leaving had higher or lower average incomes
 than those who stayed.
- Comparing Migration of Total Real AGI Relative to County Economic Size: To
 determine the economic significance of the internal migration of income for the
 counties, this analysis examines the out-migration, in-migration, and net internal
 migration of Real AGI as percentages of county Gross Domestic Product (GDP) and
 total personal income. This analysis uses data from the U.S. Bureau of Economic
 Analysis on county-level GDP (2017-2022) and total personal income (2012-2022).
 GDP and total personal income figures are inflation-adjusted to 2022 U.S. dollars.
- Assessing Migration Trends Over Time: This analysis examines whether patterns in the internal migration of income have changed over time, using the same approach in Chapter 4, as described in the "Methodological Detail on Assessing Internal Migration Trends."
- Identifying State and County Destinations of Real AGI: The analysis examines trends in out-of-state and in-state internal migration of Real AGI and identifies the primary state and County destinations for Montgomery County real AGI outflows.

Methodological Detail on Measuring Income

In this chapter, "income" is measured as Real Adjusted Gross Income, or *Real AGI*. AGI is total income from all sources (gross income) minus expenses paid for that the government does not tax (adjustments). The IRS provides nominal AGI figures in current year U.S. dollars. They are not adjusted for inflation, i.e., the "overall general upward price movement of goods and services in an economy." Inflation causes nominal AGI to lose its purchasing power over time, making it useful for comparing income across time. To accurately compare AGI across different years, it must be adjusted for inflation to ensure that income values reflect a consistent price level. OLO adjusted AGI to 2022 U.S. dollars, the latest IRS data year, using the World Bank's global inflation data to ensure consistent comparison. The inflation-adjusted figures are called "Real AGI."

This chapter is organized as follows:

- Section A examines trends in the total levels of internal migration of Real AGI;
- **Section B** presents data on internal migration of income as percentages of counties' GDP and total personal income;
- Section C focuses on trends in per capita Real AGI; and
- **Section D** provides information on the top destinations, both in state and out of state, for the out-migration of income.

¹ "Definition of Adjusted Gross Income," IRS, February 28, 2024, https://www.irs.gov/e-file-providers/definition-of-adjusted-gross-income.

² U.S. Department of Labor, "Inflation and Consumer Spending," DOL, accessed October 4, 2024, https://www.dol.gov/general/topic/statistics/inflation.

³ Diego Mendez-Carbajo, "Adjusting for Inflation," Federal Reserve Bank of St. Louis, January 2023, https://research.stlouisfed.org/publications/page1-econ/2023/01/03/adjusting-for-inflation.

⁴ "A Global Database of Inflation," World Bank Group, April 23, 2024,

https://www.worldbank.org/en/research/brief/inflation-database; Jongrim Ha, M. Ayhan Kose, and Franziska Ohnsorge, "One-Stop Source: A Global Database of Inflation," *Journal of International Money and Finance* 137 (October 1, 2023): 102896, https://doi.org/10.1016/j.jimonfin.2023.102896.

Summary of Findings

The analysis of internal migration data on Real AGI from the IRS for the 2012-2022 period reveals several important insights about income trends for Montgomery County.

Montgomery County had low levels of Real AGI outflows relative to the size of its GDP and total personal income. From 2012 to 2022, Montgomery County consistently ranked second in total outflows of Real AGI, with an average outflow of \$3.3 billion per year. Only Fairfax County had larger outflows, with \$5.3 billion moving out over the period.

However, when accounting for its total economic output, Montgomery County had the lowest levels of Real AGI outflow from 2017 to 2022, the only years for which GDP data is available. On average, 3.4% of Montgomery County's total GDP moved out per year. Following the County was Prince George's and Frederick Counties, with average annual outflows accounting for 3.6% and 3.7% of GDP, respectively. In contrast, Loudoun County saw the largest outflows relative to its GDP at 5.1%, followed by Howard and Fairfax Counties.

Relative to total personal income, Montgomery County had the second lowest level of Real AGI outflow from 2012 to 2022, behind Frederick County. On average, 3.3% of Montgomery County's total personal income moved out per year, compared to 3.1% for Frederick County.

Montgomery County attracted the lowest levels of Real AGI relative to its GDP and total personal income. From 2012 to 2022, Montgomery County ranked second behind Fairfax County in total Real AGI inflows, with an average of \$2.5 billion moving in per year. Fairfax County averaged \$4.2 billion in Real AGI inflows annually.

However, when adjusting for its total economic output (2017-2022), Montgomery County had the lowest level of Real AGI inflows, followed by Prince George's County. On average, 2.5% of Montgomery County's total GDP moved in per year, compared to 2.8% for Prince George's County. In contrast, Loudoun had the largest Real AGI inflows as a percentage of its GDP at 5.3%, followed by Frederick and Howard Counties.

When considering total personal income (2012-2022), Montgomery County also had the lowest level of Real AGI outflow, followed by Prince George's County, with an average of 2.5% of Montgomery County's total personal income moving in per year, compared to 2.8% for Prince George's County.

Montgomery County had the second-largest net losses of Real AGI from internal migration, which grew over time. From 2012 to 2022, Montgomery County ranked second

behind Fairfax County in Real AGI net outflows, with an average net loss of \$800 million per year, compared to \$1.1 billion for Fairfax County. Prince George's and Howard Counties also faced net outflows, while Loudoun and Frederick Counties had Real AGI net inflows—an average annual of \$100 million, respectively.

Notably, by 2021, Frederick County was the only jurisdiction still experiencing net inflows of Real AGI, as Loudoun County's net gains gradually diminished over time.

In Montgomery County, net outflows of Real AGI increased over time by an average of \$80.3 million per year, marking the largest growth in net outflows among the counties. Loudoun County had the second-largest annual increase, averaging \$47.5 million. Frederick County was the only jurisdiction to experience growing net inflows of Real AGI, with an average annual increase of \$25.5 million.

Montgomery County experienced the largest net losses of Real AGI from internal migration relative to its GDP and second-largest relative to total personal income. When adjusting for its economic output (2017-2022), Montgomery County experienced the largest net losses, with an average annual net loss of 0.81% of GDP, compared to 0.79% and 0.77% for Prince George's and Fairfax Counties, respectively. When accounting for total personal income (2012-2022), Montgomery County had the second-largest net losses, behind Fairfax County, with an average of 0.8% of the County's total personal income per year, compared to 1.0% for Fairfax County.

For all counties, per capita Real AGI for people leaving was higher than people moving in, but lower than residents who stayed. Montgomery County had the second-largest gap in average per capita income between out-migrants and in-migrants. Out-migrants had an average per capita income of \$61,540, while in-migrants had \$54,636, resulting in a net loss of \$6,905. Howard County experienced the largest gap, with a net loss of \$8,147. Montgomery County had the third-largest gap in average per capita income between out-migrants and residents who remained, following Fairfax and Howard Counties. Non-migrants in Montgomery County had an average per capita income of \$71,080, creating a difference of \$9,539 compared to out-migrants.

Interstate moves drove Montgomery County's patterns of Real AGI outflows and inflows before and during the Pandemic, resulting in moderate net outflows outside and within Maryland. From 2017 to 2022, the County saw high levels of *out-of-state* Real AGI outflows and inflows, similar to Loudoun County. In contrast, Montgomery County had the lowest levels of *in-state* outflows and inflows. These trends led to moderate net outflows both outside and within Maryland. Fairfax and Prince George's Counties also saw net outflows for both categories, while Frederick, Howard, and Loudoun Counties had in-state net inflows alongside out-of-state net outflows.

Montgomery County, like other nearby jurisdictions, saw surrounding states and counties as the most popular destinations for Real AGI outflows, but had varying net flows with its neighbors. For Montgomery County, the top destinations of Real AGI outflows included nearby states like Virginia and Washington, D.C., as well as states in the Northeast (New Jersey and New York), the South (Florida, North Carolina, and Texas), and California. During the Pandemic (2020-2022), the County had the largest net losses of Real AGI to Florida, Delaware, Texas, and Virginia. Notably, there was a reversal in the flow of Real AGI with California, shifting from significant net outflows before the pandemic to net inflows during it.

At the county level, the top destinations of Real AGI outflows from Montgomery County were surrounding counties. Montgomery County had net losses to Frederick, Anne Arundel, Howard, Fairfax, and Loudoun Counties, and net inflows from Prince George's, Arlington County, and Alexandria City. Beyond the region, net losses to Palm Beach County (FL), Sussex County (DE), Miami-Dade County (FL), Travis County (TX).

High-income households from Montgomery County predominantly relocated to Florida, with Palm Beach, Collier, and Miami-Dade Counties being the top destinations during the Pandemic. Palm Beach and Collier Counties were top destinations for high earners from 2017 to 2019 as well.

Key Findings for Montgomery County

Out-Migration	 Second Largest Real AGI Outflows Lowest Real AGI Outflows as a Percentage of GDP Second Lowest Real AGI Outflows as a Percentage of Total Personal Income
In-Migration	 Second Largest Real AGI Inflows Lowest Real AGI Inflows as Percentages of GDP and Total Personal Income
Net Migration	 Second Largest Net Outflows of Real AGI Net Outflows of Real AGI Increased Over Time Led Counties in Real AGI Net Outflow as Percentage of GDP Second Highest Real AGI Net Outflow as Percentage of Total Personal Income
Per Capita Real AGI	 Average Incomes Were Higher for People Leaving the Counties Than Those Moving In Individuals Leaving Had Lower Average Incomes Than Residents Who Remained
State Destinations	 Interstate Moves Drove Montgomery County's Real AGI Outflows and Inflows Before and During the Pandemic Led in Out-of-State Real AGI Outflows and Inflows Second Highest Out-of-State Net Real AGI Outflows Highest Net Outflows of Real AGI to Florida, Delaware, Texas, and Virginia
County Destinations	 Largest Net Outflows of Real AGI to Frederick, Palm Beach, and Anne Arundel Counties Highest Income Earners Primarily Moved to Palm Beach and Collier Counties in Florida

A. Internal Migration of Total Real AGI

The analysis of the internal migration of *total Real AGI* from 2012 to 2022 references the following figures and tables:

Figure/Table	Description		
Figure 5.1	Out-migration and in-migration of total Real AGI from 2012 to 2022		
Figure 5.2	Net internal migration of total Real AGI from 2012 to 2022		
Table 5.1	Cumulative internal migration of Real AGI over the entire period, ordered		
Table 5.1	from highest net out-migrants to largest net in-migrants.		
Table 5.2	Average annual levels of internal migration of Real AGI over the period,		
Table 5.2	ordered from highest net out-migrants to largest net in-migrants.		
	Changes in total real AGI over time. An asterisk (*) is used to show that		
Table 5.3	there is statistically significant evidence of an internal migration indicator		
	increasing or decreasing as time went on.		

Some highlights from the data include:

From 2012 to 2022, Montgomery County Had the Second Highest Total Out-Migration, In-Migration, and Net Out-Migration of Real AGI: The County averaged \$3.3 billion in Real AGI outflows per year and \$2.5 billion in inflows annually (Figure 5.1 and Table 5.2). Only Fairfax County saw larger outflows, averaging \$5.3 billion per year, and larger inflows, with \$4.2 billion annually. In terms of net migration, Montgomery County lost a net total of \$8.6 billion in Real AGI, trailing Fairfax County with a cumulative net loss of \$11.7 billion. In comparison, Fairfax County saw an average of \$46.2 billion flow in and \$57.9 billion flow out per year, resulting in a net loss of \$11.7 billion.

Fairfax, Prince George's, and Howard Counties also experienced net out-migration of Real AGI, with Fairfax County experiencing the largest net losses. In contrast, Frederick and Loudoun Counties consistently experienced net in-migration of Real AGI during this period.

Montgomery County Saw Net Out-Migration of Total Real AGI Increase Over Time: Over the entire period, Montgomery County experienced the largest average annual increases in the net out-migration of Real AGI, with it increasing by an average of \$80.3 each year (Figure 5.2 and Table 5.3). Loudoun, Howard, and Prince George's Counties also saw significant increases in Real AGI net out-migration over time. The only county that saw increasing net in-migration of Real AGI over time was Frederick County.

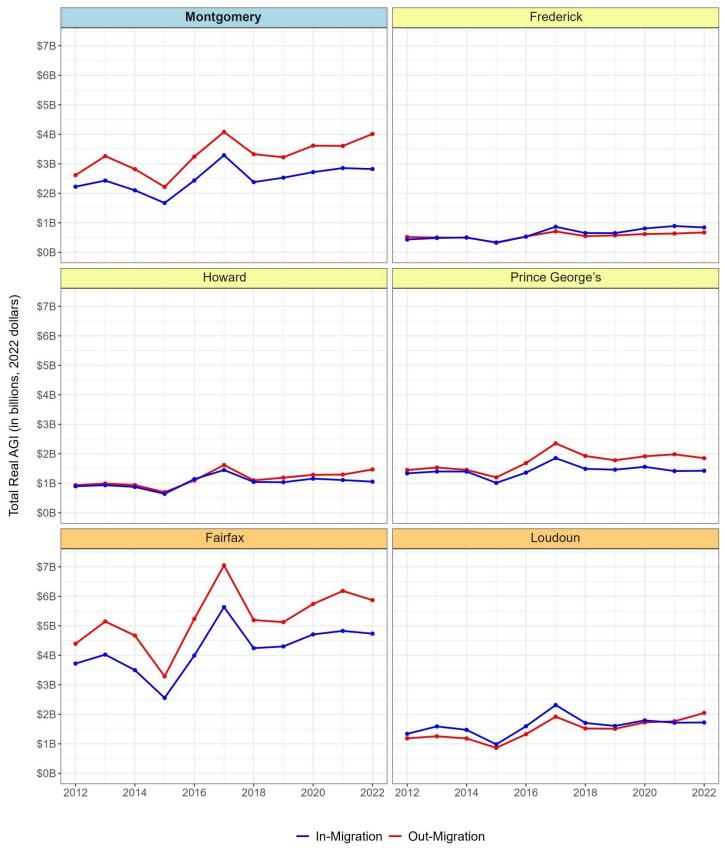


Figure 5.1. Total Out-Migration and In-Migration of Real AGI by County (2012-2022)

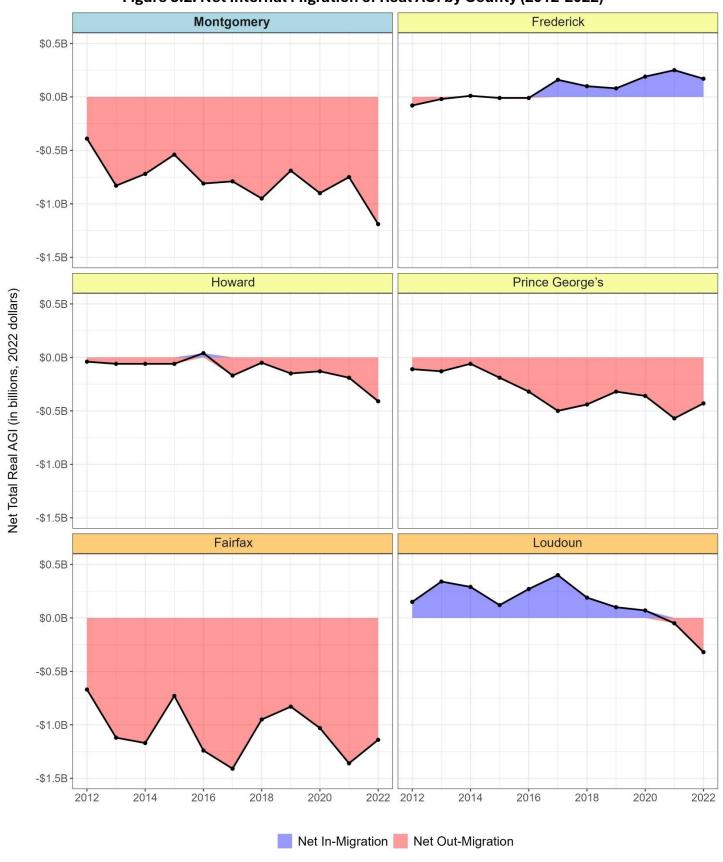


Figure 5.2. Net Internal Migration of Real AGI by County (2012-2022)

Table 5.1. Cumulative Internal Migration of Real AGI by County (in billions, 2022 US dollars)

County	In-Migration	Out-Migration	Net Migration (Rank)
Fairfax	\$46.2	\$57.9	-\$11.7
Montgomery	\$27.5	\$36.0	-\$8.6
Prince George's	\$15.7	\$19.1	-\$3.4
Howard	\$11.4	\$12.6	-\$1.3
Frederick	\$7.0	\$6.1	+\$0.8
Loudoun	\$17.8	\$16.3	+\$1.5

Table 5.2. Average Annual Levels of Internal Migration of Real AGI by County (in billions, 2022 US dollars)

County	In-Migration	Out-Migration	Net Migration (Rank)
Fairfax	\$4.2	\$5.3	- \$1.1
Montgomery	\$2.5	\$3.3	-\$0.8
Prince George's	\$1.4	\$1.7	-\$0.3
Howard	\$1.0	\$1.1	-\$0.1
Loudoun	\$1.6	\$1.5	+\$0.1
Frederick	\$0.6	\$0.6	+\$0.1

Table 5.3. Average Annual Change in Total Real AGI from Previous Year (in millions)

County	In-Migration	Out-Migrati	on Net Migration (Rank)
Montgomery	+\$59.7	+\$140.0*	- \$80.3* (1)
Loudoun	+\$38.5	+\$86.0*	- \$47.5* (2)
Fairfax	+\$101.0	+\$148.0	-\$46.4 (3)
Howard	+\$15.5	+\$53.4*	- \$37.9* (4)
Prince George's	+\$8.7	+\$40.3*	- \$31.6* (5)
Frederick	+\$41.0*	+\$15.5*	+\$25.5* (6)

^{*} Statistically Significant

B. Internal Migration of Real AGI as Percentages of County GDP and Total Personal Income

This section examines the economic significance of income flows for each county. It does so by presenting data on the out-migration, in-migration, and net internal migration of Real AGI as percentages of (1) County GDP from 2017 to 2022 and (2) total personal income from 2012 to 2022, using data from the U.S. Bureau of Economic Analysis.

The findings on Real AGI as a Percentage of GDP references the following figures and tables:

Figure/Table	Description
Figure 5.3	Out-migration and in-migration of Real AGI as a percentage of County GDP from 2017 to 2022.
Figure 5.4	Net internal migration of Real AGI as a percentage of County GDP from 2017 to 2022.
Table 5.4	Average levels of internal migration of Real AGI as a Percentage of GDP (2017-2022)
Table 5.5	Average annual change in Real AGI as a Percentage of GDP from preceding year (2017-2022). An asterisk (*) is used to show that there is statistically significant evidence of an internal migration indicator increasing or decreasing as time went on.

OLO did not perform trend analysis on Real AGI as a percentage of GDP, as there are only six years of data. Due to the small number of observations, there is a lack of statistical power required to determine statistically significant trends.

For this reason, OLO also presents findings on Real AGI as a Percentage of Total Personal Income from 2012 to 2022. This analysis references the following figures and tables:

Figure/Table	Description
Figure 5.5	Out-migration and in-migration of Real AGI as a percentage of total personal income (2012-2022)
Figure 5.6	Net internal migration of Real AGI as a percentage of total personal income (2012-2022)
Table 5.6	Average levels of internal migration of Real AGI as a Percentage of total personal income (2012-2022)
Table 5.7	Average annual changes in Real AGI as a percentage of total personal income from the previous year for each county (2012-2022). An asterisk (*) is used to show that there is statistically significant evidence of an internal migration indicator increasing or decreasing as time went on.

Some highlights from the data include:

Montgomery County Led in Real AGI Outflow Relative to GDP: Relative to the size of its economic output, the outflow of Real AGI was most significant for Montgomery County (Figures 5.3 and 5.4). Montgomery County had the highest average annual outflow of Real AGI relative to its GDP (0.81%), followed by Prince George's (0.79%) and Fairfax (0.77%) Counties. Only Loudoun and Frederick Counties experienced net inflow levels (Table 5.4).

Montgomery County Had the Second Highest Real AGI Outflow Relative to Total Personal Income: The findings for Real AGI outflows as a percentage of total personal income are consistent with the findings on GDP (Figures 5.5 and 5.6). Relative to the size of its total personal income, Montgomery County had the second highest average annual outflow of Real AGI of -0.78% (Table 5.6). Only Fairfax County had a larger outflow, with an average annual Real AGI of -0.95% of total personal income. Again, only Loudoun and Frederick Counties saw average annual inflows.

Montgomery County Had Stable Levels of Real AGI Outflow as a Percentage of Personal Income: Although Montgomery County experienced negative average annual changes in Real AGI outflows relative to its total personal income (and economic output), the finding is statistically insignificant (Table 5.7). The counties that experienced significant increases in net outflow of Real AGI as a percentage of total personal income were Loudoun, Howard, and Prince George's Counties. Frederick County was the only one that experienced a significant increase in net inflows.

Figure 5.3. Out-Migration and In-Migration of Real AGI as a Percentage of County GDP (2017-2022)

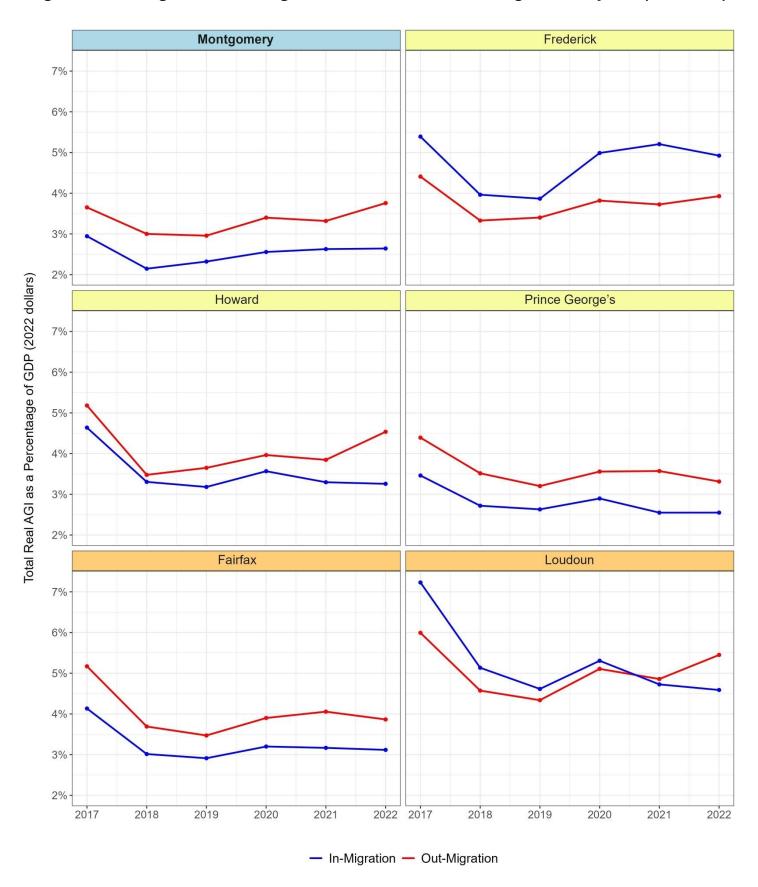


Figure 5.4. Net Internal Migration of Real AGI as a Percentage of Real GDP (2017-2022)

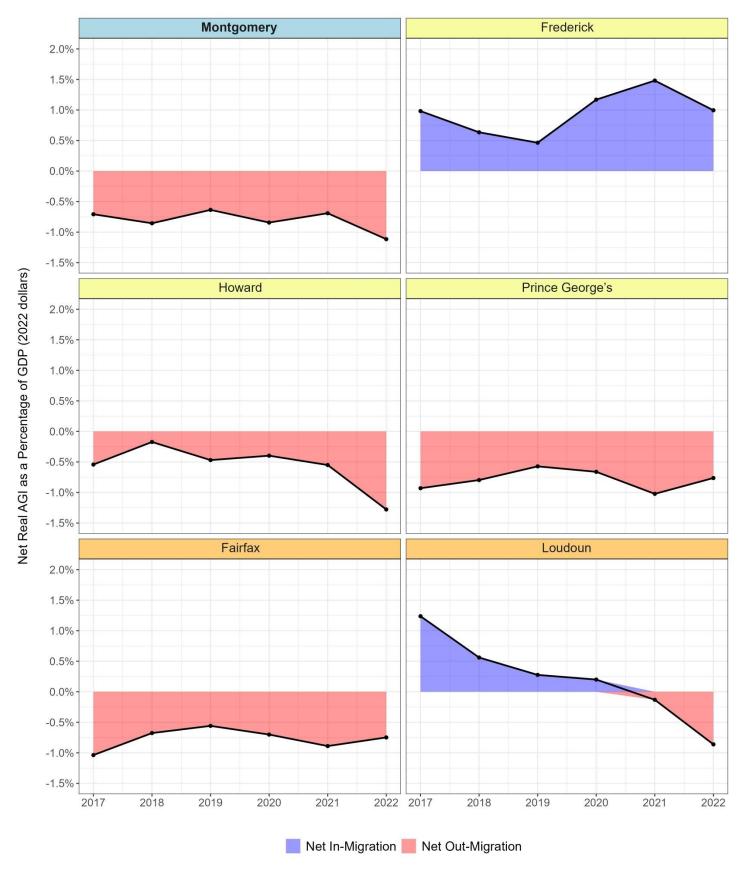


Table 5.4. Average Annual Real AGI as a Percentage of GDP (2017-2022)

County	In-Migration	Out-Migration	Net Migration (Rank)
Montgomery	2.54%	3.35%	-0.81% (1)
Prince George's	2.80%	3.59%	-0.79% (2)
Fairfax	3.26%	4.03%	-0.77% (3)
Howard	3.54%	4.11%	-0.57% (4)
Loudoun	5.27%	5.05%	+0.21% (5)
Frederick	4.72%	3.77%	+0.95% (6)

Table 5.5. Average Annual Change in Real AGI as a Percentage of GDP from Preceding Year (2017-2022)

County	In-Migration	Out-Migration	Net Migration (Rank)
Loudoun	-0.53	-0.11	-0.42 (1)
Howard	-0.28	-0.13	-0.15 (2)
Montgomery	-0.06	+0.02	-0.08 (4)
Frederick	-0.09	-0.10	0.00 (4)
Prince George's	-0.18	-0.22	+0.03 (5)
Fairfax	-0.20	-0.26	+0.06 (6)

Note: OLO did not calculate statistical significance due to the small number of observations

Figure 5.5. Out-Migration and In-Migration of Real AGI as a Percentage of Total Personal Income (2012-2022)

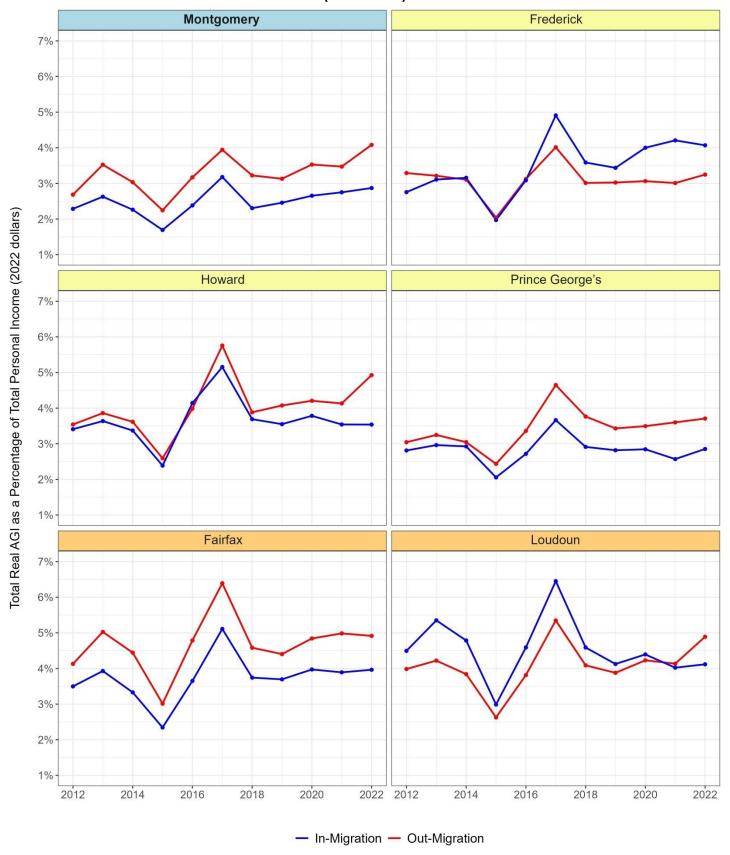


Figure 5.6. Net Internal Migration of Real AGI as a Percentage of Total Personal Income (2012-2022)

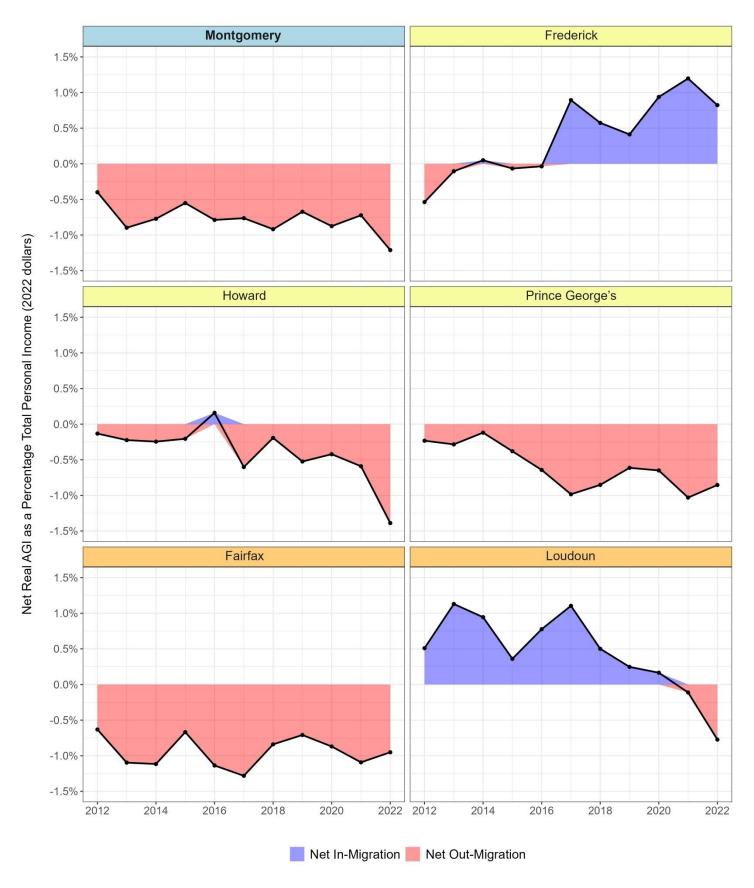


Table 5.6. Average Annual Real AGI as a Percentage of Total Personal Income (2012-2022)

County	In-Migration	Out-Migration	Net Migration (Rank)
Fairfax	3.74%	4.68%	-0.95% (1)
Montgomery	2.50%	3.28%	-0.78% (2)
Prince George's	2.83%	3.43%	-0.60% (3)
Howard	3.66%	4.05%	-0.40% (4)
Frederick	3.48%	3.10%	+0.38% (5)
Loudoun	4.54%	4.10%	+0.44% (6)

Table 5.7. Average Annual Change in Real AGI as a Percentage of Total Personal Income from Preceding Year (2012-2022)

County	In-Migration	Out-Migration	Net Migration (Rank)
Loudoun	-0.04%	+0.09%	-0.13%* (1)
Howard	+0.01%	+0.14%	-0.13%* (2)
Montgomery	+0.06%	+0.14%	-0.08% (3)
Prince George's	+0.00%	+0.07%	-0.06%* (4)
Fairfax	+0.05%	+0.08%	-0.03% (5)
Frederick	+0.13%*	-0.00%	+0.14%* (6)

^{*} Statistically Significant

C. Internal Migration of Per Capita Real AGI

This analysis of the internal migration of per capita Real AGI from 2012 to 2022 references the following figures and tables:

Figure/Table	Description
Figure 5.7	Out-migration and in-migration of per capita Real AGI from 2012 to 2022
Figure 5.8	Net internal migration of per capita Real AGI from 2012 to 2022
Table 5.8	Average annual per capita Real AGI for out-migrants and in-migrants
Table 5.9	Average annual per capita Real AGI between out-migrants and non-
Table 5.9	migrants in each county
	Average annual changes in per capita real AGI from the previous year for
Table 5.10	each county. An asterisk (*) is used to show that there is statistically
	significant evidence of an internal migration indicator increasing or
	decreasing as time went on.

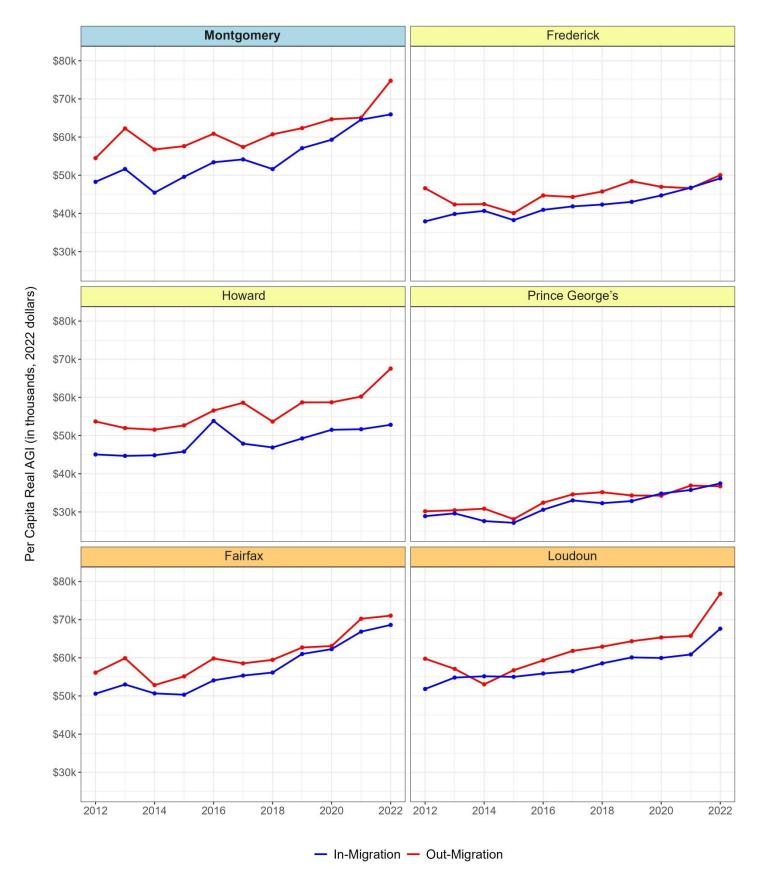
Some highlights from the data include:

Montgomery County Had the Second Largest Net Loss of Per Capita Real AGI: During this period, out-migrants had higher per capita Real AGI than in-migrants, resulting in consistent net losses in average income for the counties (Figures 5.7 and 5.8). Every County experienced an average annual net loss in per capita Real AGI (Table 5.4). Montgomery County experienced the second largest net losses. In-migrants had a per capita real AGI of \$54,646 per year, while it was \$61,540 for out-migrants, resulting in a net loss of \$6,904 (Table 5.8). Only Howard County experienced a larger net per capita loss (\$8,147).

Individuals Leaving Had Lower Average Incomes Than Residents Who Remained in the Counties: In every county, out-migrants had lower average annual per capita Real AGI than individuals who remained ("non-migrants") (Table 5.9). Montgomery County had the third-largest gap in average per capita income between out-migrants and residents who remained, following Fairfax and Howard Counties. Non-migrants in Montgomery County had an average per capita income of \$71,080, creating a difference of \$9,539 compared to out-migrants.

Montgomery County Experienced Stable Trends in Net Per Capita Real AGI: Per capita real AGI decreased from the previous year by an average of \$261 in Montgomery County (Table 5.10). Per capita Real AGI also decreased on average, while Prince George's, Fairfax, and Frederick Counties saw average annual increases. However, trends are statistically insignificant (except for Fairfax County). This appears to be a result of significant upward trends in both the in- and out-migration of per capita Real AGI, which offset each other.

Figure 5.7. Out-Migration and In-Migration of Per Capita Real AGI by County (2012-2022)



Montgomery Frederick \$5k \$0k -\$5k -\$10k -\$15k Net Per Capita Real AGI (in thousands, 2022 dollars) Prince George's Howard \$5k \$0k -\$5k -\$10k -\$15k Fairfax Loudoun \$0k -\$5k -\$10k -\$15k 2012 2014 2016 2018 2020 2022 2012 2014 2016 2018 2020 2022

Figure 5.8. Net Internal Migration of Per Capita Real AGI by County (2012-2022)

Net In-Migration Net Out-Migration

Table 5.8. Average Annual Per Capita Real AGI for In-Migrants and Out-Migrants

County	In-Migration	Out-Migration	Net Migration (Rank)
Howard	\$48,572	\$56,719	-\$8,147 (1)
Montgomery	\$54,636	\$61,540	-\$6,904 (2)
Loudoun	\$57,836	\$62,077	-\$4,241 (3)
Fairfax	\$57,166	\$60,798	-\$3,633 (4)
Frederick	\$42,311	\$45,295	-\$2,984 (5)
Prince George's	\$31,820	\$33,086	-\$1,266 (6)

Table 5.9. Average Annual Per Capita Real AGI for Non-Migrants and Out-Migrants

County	Non-Migrants	Out-Migrants	Net (Rank)
Frederick	\$48,660	\$45,295	+\$3,364 (1)
Loudoun	\$66,335	\$62,077	+\$4,258 (2)
Prince George's	\$39,242	\$33,086	+\$6,156 (3)
Montgomery	\$71,080	\$61,540	+\$9,539 (4)
Howard	\$66,475	\$56,719	+\$9,756 (5)
Fairfax	\$75,568	\$60,798	+\$14,769 (6)

Table 5.10. Average Annual Change in Per Capita Real AGI from Previous Year

County	In-Migration	Out-Migration	Net Migration (Rank)
Howard	+\$777*	+\$1,385*	-\$608 (1)
Montgomery	+\$1,767*	+\$2,208*	-\$261 (2)
Loudoun	+\$1,580*	+\$1,702*	-\$123 (3)
Prince George's	+\$857*	+\$656*	+\$201 (4)
Fairfax	+\$1,801*	+\$1,492*	+\$310* (5)
Frederick	+\$1,127*	+\$344*	+\$783 (6)

^{*} Statistically Significant

D. Destinations and Origins of Real AGI

This section examines the state- and county-level destinations and origins of the internal migration of income. The analysis references the following figures and tables:

Figure/Table	Description
Table 5.11	Internal migration of Real AGI by out-of-state and in-state (2022 US Dollars, in billions)
Table 5.12	Top states for net migration of Real AGI for Montgomery County (2022 US dollars, in billions)
Table 5.13	Top counties for net migration of Real AGI for Montgomery County (2022 US dollars, in million
Table 5.14	Top counties for out-migration of wealthy households in Montgomery County
Table 5.15	Top counties for net out-migration of wealth households in Montgomery County

Some highlights from the data include:

Interstate Moves Drove Montgomery County's Patterns of Real AGI Outflows and Inflows Before and During the Pandemic: From 2017 to 2022, the County saw high levels of *out-of-state* Real AGI outflows and inflows, similar to Loudoun County (Table 5.11). In contrast, Montgomery County had the lowest levels of *in-state* outflows and inflows.

Montgomery County Had Moderate In-State and Out-of-state Real AGI Net Outflows: Montgomery County followed Fairfax County in having the second highest out-of-state net outflows of Real AGI, with a net loss of \$820 million from 2020 to 2022 and \$1.16 billion from 2017 to 2019 (Table 5.11). However, when accounting for GDP, they amounted to moderate net outflows both outside and within Maryland. Fairfax and Prince George's Counties also saw net outflows for both categories, while Frederick, Howard, and Loudoun Counties had in-state net inflows alongside out-of-state net outflows.

Top Out-of-State Destinations for Real AGI Net Outflows from Montgomery County: From 2020 to 2022, the states where Montgomery County experienced the largest net losses of Real AGI due to internal migration were Florida, Delaware, Texas, and Virginia (Table 5.12). The County saw net gains from the District of Columbia, followed by New York, Illinois, New Jersey, and California. The patterns were largely similar from 2017 to 2019, with the notable exception of California being a top state for net losses in these years.

Top County Destinations for Real AGI Net Outflows from Montgomery County: From 2017 to 2022, Montgomery County had the largest net outflows of Real AGI to Frederick, Palm Beach (Florida), Anne Arundel, Fairfax, Loudoun, Sussex (Delaware), Howard, and Miami-Dade (Florida) Counties. The counties in the region where Montgomery County experienced net inflows were Prince George's County, Arlington County, and Alexandria City.

Households from Montgomery County with the Highest Average Incomes Mostly Moved to Florida: From 2020 to 2022, the top three destinations that received the highest average income earners from Montgomery County were Palm Beach, Collier, and Miami-Dade Counties in Florida, with average household incomes of \$610,272, \$415,976, and \$316,083, respectively. Palm Beach and Collier Counties were also in the top three from 2017 to 2019.

Table 5.11. Out-of-State and In-State Internal Migration of Real AGI by County (2022 US Dollars, in millions)

	Ir	n-State		Out-	of-State	!		lı	n-State		Out	-of-State	
County	Average Annual	% of GDP	% Rank	Average Annual	% of GDP	% Rank	County	Average Annual	% of GDP	% Rank	Average Annual	% of GDP	% Rank
		2017-2	019						2020-2	022			
						Outf	lows						
Montgomery	\$936	0.9	6	\$2,606	2.4	2	Montgomery	\$998	0.9	6	\$2,746	2.6	2
Frederick	\$240	1.5	5	\$371	2.3	4	Frederick	\$244	1.5	5	\$399	2.4	3
Howard	\$673	2.1	1	\$631	2.0	5	Howard	\$661	2.0	2	\$689	2.1	5
Prince George's	\$964	1.8	4	\$1,056	1.9	6	Prince George's	\$934	1.7	3	\$982	1.8	6
Fairfax	\$2,556	1.8	3	\$3,233	2.3	3	Fairfax	\$2,513	1.7	4	\$3,418	2.3	4
Loudoun	\$703	2.1	2	\$947	2.8	1	Loudoun	\$759	2.1	1	\$1,086	3.0	1
						Infl	ows						_
Montgomery	\$655	0.6	6	\$2,077	1.9	2	Montgomery	\$597	0.6	6	\$2,201	2.1	1
Frederick	\$434	2.6	2	\$290	1.8	4	Frederick	\$504	3.0	1	\$343	2.0	2
Howard	\$727	2.3	3	\$451	1.4	6	Howard	\$667	2.0	3	\$441	1.3	6
Prince George's	\$642	1.2	5	\$960	1.8	5	Prince George's	\$556	1.0	5	\$910	1.7	5
Fairfax	\$2,137	1.5	4	\$2,589	1.8	3	Fairfax	\$2,149	1.4	4	\$2,608	1.7	4
Loudoun	\$1,065	3.2	1	\$810	2.4	1	Loudoun	\$1,012	2.8	2	\$732	2.0	3
						Net I	Flows						
Montgomery	-\$281	-0.3	4	- \$529	-0.5	4	Montgomery	-\$401	-0.4	5	- \$545	-0.5	3
Frederick	+\$194	+1.2	1	-\$81	-0.5	5	Frederick	+\$260	+1.5	1	- \$56	-0.3	2
Howard	+\$54	+0.2	2	-\$180	-0.6	6	Howard	\$+6	+0.0	3	-\$249	-0.8	5
Prince George's	-\$322	-0.6	6	- \$96	-0.2	1	Prince George's	- \$378	-0.7	6	- \$72	-0.1	1
Fairfax	-\$419	-0.3	5	-\$644	-0.5	3	Fairfax	- \$364	-0.2	4	-\$810	-0.5	4
Loudoun	+\$363	+1.1	3	-\$137	-0.4	2	Loudoun	+\$253	+0.7	2	-\$355	-1.0	6

For Tables 5.12 & 5.13, red indicates counties with net out-migration from Montgomery County and blue indicates net in-migration.

Table 5.12. Top States for Net Migration of Real AGI for Montgomery County (2022 US dollars, in billions)

	Net Migratio	on	Out-	Migration		In	-Migration	
State	\$ billion	Rank	\$ billion	%	%Rank	\$ billion	%	% Rank
2020-2022		<u>'</u>			•			
Maryland	- \$1.20	1	\$2.97	31.4%	1	\$1.77	23.8%	1
Florida	-\$0.93	2	\$1.21	12.8%	3	\$0.28	3.8%	6
Delaware	-\$0.19	3	\$0.24	2.5%	9	\$0.05	0.6%	16
Texas	- \$0.15	4	\$0.31	3.3%	6	\$0.16	2.2%	10
Virginia	- \$0.13	5	\$1.23	12.9%	2	\$1.10	14.7%	3
California	+\$0.02	33	\$0.45	4.8%	5	\$0.47	6.3%	5
New Jersey	+\$0.03	34	\$0.17	1.8%	12	\$0.19	2.6%	8
Illinois	+\$0.06	35	\$0.07	0.8%	17	\$0.13	1.7%	11
New York	+\$0.19	36	\$0.31	3.2%	7	\$0.50	6.7%	4
District of Columbia	+\$0.84	37	\$0.92	9.7%	4	\$1.76	23.7%	2
2017-2019								
Maryland	-\$0.83	1	\$2.77	30.1%	1	\$1.94	26.8%	1
Florida	-\$0.52	2	\$0.82	8.9%	4	\$0.30	4.2%	6
Virginia	-\$0.35	3	\$1.43	15.5%	2	\$1.08	14.9%	3
California	-\$0.17	4	\$0.53	5.8%	5	\$0.36	5.0%	5
North Carolina	-\$0.12	5	\$0.22	2.4%	9	\$0.11	1.5%	12
Illinois	+\$0.03	33	\$0.10	1.1%	16	\$0.13	1.8%	11
Connecticut	+\$0.04	34	\$0.05	0.5%	19	\$0.09	1.2%	14
New Jersey	+\$0.04	35	\$0.18	2.0%	10	\$0.22	3.0%	8
New York	+\$0.09	36	\$0.32	3.4%	6	\$0.40	5.6%	4
District of Columbia	+\$0.38	37	\$1.08	11.7%	3	\$1.46	20.1%	2

Table 5.13. Top Counties/Cities for Net Migration of Real AGI for Montgomery County (2022 US dollars, in millions)

		Net Migra	ation	Out-Migration			ln-	In-Migration		
County/City	State	\$ million	Rank	\$ million	%	% Rank	\$ million	%	% Rank	
2020-2022	•						•		-	
Frederick County	MD	-\$586	1	\$812	9.1%	2	\$226	3.06%	6	
Palm Beach County	FL	-\$355	2	\$429	4.81%	5	\$74	1.01%	17	
Anne Arundel County	MD	-\$233	3	\$391	4.38%	7	\$158	2.15%	9	
Sussex County	DE	-\$182	4	\$210	2.36%	8	\$28	0.38%	41	
Howard County	MD	-\$173	5	\$413	4.63%	6	\$241	3.26%	5	
Miami-Dade County	FL	-\$143	6	\$190	2.13%	10	\$47	0.64%	24	
Fairfax County	VA	-\$86	7	\$551	6.18%	4	\$466	6.32%	3	
Loudoun County	VA	- \$78	8	\$148	1.66%	11	\$71	0.96%	18	
Travis County	TX	-\$56	9	\$80	0.89%	21	\$24	0.32%	48	
Washington County	MD	-\$54	10	\$77	0.87%	22	\$23	0.31%	49	
Prince George's County	MD	+\$24	165	\$661	7.4%	3	\$685	9.3%	2	
Alexandria City	VA	+\$29	166	\$84	0.95%	19	\$113	1.54%	12	
Baltimore City	MD	+\$29	167	\$144	1.62%	13	\$173	2.35%	8	
Queens County	NY	+\$31	168	\$20	0.23%	75	\$51	0.7%	23	
Kings County	NY	+\$38	169	\$48	0.54%	34	\$86	1.17%	16	
Cook County	IL	+\$50	170	\$65	0.72%	26	\$115	1.56%	11	
San Francisco County	CA	+\$52	171	\$40	0.45%	44	\$92	1.25%	14	
New York County	NY	+\$80	172	\$146	1.63%	12	\$225	3.06%	7	
Arlington County	VA	+\$105	173	\$192	2.15%	9	\$296	4.02%	4	
District of Columbia	DC	+\$840	174	\$922	10.32%	1	\$1762	23.91%	1	

Table 5.13 cont.

		Net Migra	ation	Out-Migration			In-Migration		
County/City	State	\$ million	Rank	\$ million	%	% Rank	\$ million	%	% Rank
2017-2019		,	•				·		
Frederick County	MD	-\$459	1	\$697	7.84%	3	\$238	3.33%	6
Fairfax County	VA	-\$227	2	\$676	7.61%	4	\$450	6.3%	3
Palm Beach County	FL	-\$180	3	\$238	2.68%	7	\$58	0.81%	16
Anne Arundel County	MD	-\$144	4	\$311	3.49%	6	\$167	2.33%	7
Howard County	MD	-\$129	5	\$406	4.57%	5	\$277	3.88%	4
Sussex County	DE	- \$108	6	\$126	1.41%	13	\$18	0.25%	67
Loudoun County	VA	-\$94	7	\$182	2.05%	9	\$88	1.24%	13
San Diego County	CA	-\$53	8	\$103	1.16%	16	\$50	0.7%	21
King County	WA	-\$45	9	\$87	0.98%	17	\$41	0.58%	26
Los Angeles County	CA	-\$44	10	\$131	1.48%	12	\$88	1.23%	14
Nassau County	NY	+\$11	182	\$13	0.15%	105	\$25	0.35%	49
Arlington County	VA	+\$12	183	\$230	2.58%	8	\$242	3.38%	5
Queens County	NY	+\$12	184	\$24	0.27%	61	\$36	0.5%	30
Baltimore County	MD	+\$14	185	\$121	1.37%	14	\$135	1.89%	10
Kings County	NY	+\$15	186	\$42	0.48%	39	\$57	0.8%	17
Cook County	IL	+\$21	187	\$82	0.93%	18	\$103	1.45%	12
Prince George's County	MD	+\$21	188	\$798	8.97%	2	\$819	11.46%	2
Fairfield County	CT	+\$24	189	\$23	0.26%	62	\$47	0.66%	24
Alexandria City	VA	+\$25	190	\$105	1.18%	15	\$130	1.83%	11
District of Columbia	DC	+\$376	191	\$1,082	12.17%	1	\$1,458	20.41%	1

Table 5.14. Top Counties/Cities for Out-Migration of Wealthy Households in Montgomery County

		Out-Migration (Rank)		In-Mi	gration	Net Out-Migration			
		# of	Average		# of	Average		Net Income	
County/City	State	Households	Income	Rank	Households	Income	Rank	Loss	Rank
2020-2022									
Palm Beach County	FL	703	\$610,272	1	446	\$166,168	11	-\$444,104	1
Collier County	FL	111	\$415,976	2	54	\$285,299	2	-\$130,678	5
Miami-Dade County	FL	601	\$316,083	3	421	\$111,716	51	-\$204,367	2
Sarasota County	FL	118	\$296,004	4	42	\$233,953	4	-\$62,050	17
Charleston County	SC	213	\$287,739	5	101	\$88,369	100	-\$199,370	3
Barnstable County	MA	25	\$259,080	6	20	\$127,350	34	-\$131,730	4
Sussex County	DE	882	\$238,399	7	194	\$144,291	21	-\$94,108	10
Pinellas County	FL	259	\$228,701	8	119	\$106,280	58	-\$122,421	8
Queen Anne's County	MD	191	\$219,898	9	75	\$95,450	81	-\$124,448	7
Lee County	FL	192	\$217,418	10	109	\$92,751	88	-\$124,668	6
2017-2019									
Collier County	FL	145	\$407,745	1	88	\$274,252	1	-\$133,493	2
Palm Beach County	FL	593	\$401,398	2	432	\$133,178	24	-\$268,220	1
Ventura County	CA	32	\$269,529	3	24	\$269,032	2	-\$497	134
Sarasota County	FL	191	\$216,408	4	76	\$109,215	38	-\$107,194	3
Lee County	FL	203	\$200,236	5	93	\$98,312	60	-\$101,924	5
Sussex County	DE	652	\$192,843	6	151	\$116,671	29	-\$76,171	8
Talbot County	MD	77	\$192,400	7	58	\$159,282	10	-\$33,117	43
Chester County	PA	164	\$188,575	8	130	\$157,113	12	-\$31,463	46
Plymouth County	MA	25	\$180,665	9	21	\$139,235	20	-\$41,430	33
Delaware County	PA	115	\$168,459	10	147	\$95,483	66	-\$72,977	11

Note: Bold **counties/states** indicate they are not included in Table 5.15 below because they fall outside the top 10 for net out-migration.

Table 5.15. Top Counties/Cities for Net Out-Migration of Wealthy Households in Montgomery County

		Net Out-Migration (R	ank)	In-N	Migration		Out-N	1igration	
				# of	Average		# of	Average	
County/City	State	Net Loss	Rank	Households	Income	Rank	Households	Income	Rank
2020-2022									
Palm Beach County	FL	-\$444,104	1	446	\$166,168	11	703	\$610,272	1
Miami-Dade County	FL	-\$204,367	2	421	\$111,716	51	601	\$316,083	3
Charleston County	SC	-\$199,370	3	101	\$88,369	100	213	\$287,739	5
Barnstable County	MA	- \$131,730	4	20	\$127,350	34	25	\$259,080	6
Collier County	FL	- \$130,678	5	54	\$285,299	2	111	\$415,976	2
Lee County	FL	-\$124,668	6	109	\$92,751	88	192	\$217,418	10
Queen Anne's County	MD	-\$124,448	7	75	\$95,450	81	191	\$219,898	9
Pinellas County	FL	-\$122,421	8	119	\$106,280	58	259	\$228,701	8
Travis County	TX	-\$111,374	9	228	\$103,194	64	371	\$214,567	11
Sussex County	DE	-\$94,108	10	194	\$144,291	21	882	\$238,399	7
2017-2019									
Palm Beach County	FL	-\$268,220	1	432	\$133,178	24	593	\$401,398	2
Collier County	FL	- \$133,493	2	88	\$274,252	1	145	\$407,745	1
Sarasota County	FL	-\$107,194	3	76	\$109,215	38	191	\$216,408	4
Centre County	PA	-\$102,961	4	37	\$53,340	184	23	\$156,301	18
Lee County	FL	-\$101,924	5	93	\$98,312	60	203	\$200,236	5
Charleston County	SC	-\$79,036	6	101	\$79,263	124	209	\$158,299	14
Knox County	TN	-\$76,790	7	55	\$75,950	133	54	\$152,740	21
Sussex County	DE	-\$76,171	8	151	\$116,671	29	652	\$192,843	6
Snohomish County	WA	-\$73,858	9	20	\$37,668	191	34	\$111,527	74
Chatham County	GA	-\$73,338	10	47	\$83,915	107	42	\$157,252	17

Note: Bold **counties/states** indicate that they are not included in Table 5.14 above because they fall outside the top 10 for out-migration.

Chapter 6. Findings and Discussion Items

This chapter summarizes the major findings of this report and presents discussion items developed by the Office of Legislative Oversight (OLO). This chapter includes two sections:

- Section A. Major Report Findings; and
- Section B. OLO Discussion Items for Council Consideration.

In Section A, OLO synthesizes the findings from the IRS and Census's American Community Survey (ACS) and Population Estimates Program (PEP). The findings from the data sources are largely consistent with each other. However, there are some minor discrepancies between the ACS estimates and IRS data. In such cases, OLO places greater emphasis on the IRS findings due to the error in the ACS survey data, as explained in detail in Chapter 2. There are <u>no</u> notable discrepancies between the IRS and PEP findings.

A. Major Report Findings

Background on Internal Migration

Finding #1. Since the 1980s, internal migration has been steadily declining across the United States. During the pandemic, internal migration continued its long-term decline, with decreases seen across young adults, renters, low- and middle-income households, and all racial and ethnic groups.

Internal migration is shaped by various factors, including housing, family, and employment considerations along with demographic, racial, and political preferences. The following patterns emerged from internal migration trends since the 1980s:

- Specific groups, such as young adults, renters, and local movers, have historically been more mobile, but have seen declines in recent decades.
- Geographic patterns reveal that states in the Sunbelt and Northwest (i.e., Florida, Texas, Arizona, North Carolina, and Washington) have seen significant net gains from internal migration, while California and states in the Northeast, Rust Belt, and Midwest (i.e., Illinois, New Jersey, and Pennsylvania) have experienced substantial net losses.
- Notable shifts occurred toward exurban areas and smaller cities, likely driven by rising housing costs in large metropolitan areas and greater telework opportunities.

These patterns of internal migration in the United States largely continued during the pandemic.

Internal Migration of Individuals

Finding #2. Compared to its neighboring suburban counties, Montgomery County has retained a larger share of its residents, with fewer moving away relative to its population size.

Among the six counties reviewed, Montgomery County has had the second largest population and has consistently ranked second in the number of out-migrants, following Fairfax County. From 2012 to 2022, an average of 53,113 residents moved out of Montgomery County annually, while Fairfax County saw an average of 86,454 residents leave each year. Prince George's County recorded the third highest out-migrants, followed by Howard, Loudoun, and Frederick Counties.

However, when adjusting for its population size, Montgomery County's out-migration levels were relatively low. On average, out-migrants represented 5.1% of Montgomery County's population each year. Only Frederick County had a lower share, with out-migrants representing 4.8% of its population. Fairfax County saw the highest levels of out-migration relative to its population (7.3%), followed by Howard and Loudoun Counties.

Finding #3. Montgomery County has attracted fewer new residents compared to neighboring suburban counties, with the lowest level of in-migration relative to its population size.

Montgomery consistently ranked second in the largest number of in-migrants, behind Fairfax County. From 2012 to 2022, an average of 45,705 individuals moved into Montgomery County each year, while Fairfax County saw an average of 73,449 new residents annually. Prince George's County recorded the third highest number of in-migrants, followed by Loudoun, Howard, and Frederick Counties.

However, Montgomery County recorded the lowest levels of in-migration relative to its population size, followed by Prince George's County. On average, in-migrants accounted for 4.4% of Montgomery County's population each year, compared to 4.9% in Prince George's County. Loudoun County recorded the highest levels of in-migration at 7.2%, followed by Howard and Fairfax Counties.

Finding #4. Like Fairfax and Prince George's Counties, Montgomery County has experienced a net loss of residents from internal migration, with more residents leaving than those moving in. Relative to its population, Montgomery County's net out-migration has been modest. In contrast, Frederick, Howard, and Loudoun Counties have seen net in-migration, with more residents moving in than leaving.

Montgomery County consistently recorded the second largest net losses, trailing only Fairfax County. From 2012 to 2022, Montgomery County had an average net loss of 7,409 residents from internal migration each year, while Fairfax saw a larger average net loss of 13,005 residents per year. In recent years, Prince George's County surpassed Montgomery County in net out-migration. Between 2020 and 2022, Prince George's County recorded a cumulative net loss of 37,640 residents from internal migration, compared to 32,131 for Montgomery County.

Relative to its population size, Montgomery County consistently ranked third in net out-migration, behind Fairfax and Prince George's Counties. On average, Montgomery County's net loss represented 0.7% of its population, compared to 0.8% for Prince George's County and 1.1% for Fairfax County.

In contrast, Frederick, Howard, and Loudoun Counties consistently recorded net gains from internal migration. Loudoun County saw an average net gain of 4,377 new residents each year, compared to 2,532 for Frederick County and 1,112 for Howard County.

Finding #5. In recent years, most counties in the region have faced growing net outmigration, as the number of residents leaving has surpassed those moving in. Frederick County is the exception, where net in-migration has consistently risen.

Overall, the region has trended towards more residents leaving than moving in. From 2012 to 2022, Montgomery and Prince George's Counties experienced statistically significant annual increases in net out-migration. Montgomery and Prince George's Counties experienced statistically significant annual increases in net out-migration. On average, Montgomery County lost 901 additional residents each year, while Prince George's County lost an additional 1,066 residents.

Although Loudoun and Howard Counties generally saw net gains from internal migration, those net gains steadily declined over time. By 2022, they joined Montgomery, Prince George's, and Fairfax Counties in recording net losses from internal migration.

Frederick County stands out for its increasing net in-migration over time. On average, it gained 338 more residents each year due to internal migration. Since 2021, Frederick has been the only county in the region where more residents have moved in than out. This trend aligns with national studies showing a post-pandemic shift of individuals moving from metropolitan areas to exurban counties.

Finding #6. Interstate moves drove Montgomery County's out-migration and inmigration patterns before and during the Pandemic. Montgomery County, along with Fairfax and Prince George's Counties, experienced both instate and out-of-state net losses.

From 2017 to 2022, Montgomery County had moderate levels of *out-of-state* out-migration and in-migration. In contrast, it had the lowest levels of *in-state* out-migration and in-migration, followed by Prince George's and Fairfax Counties. In terms of net out-migration, Montgomery County had moderate in-state and out-of-state net losses, alongside Fairfax and Prince George's Counties. From 2020 to 2022, Frederick, Howard, and Loudoun Counties had net gains from their respective states, while all counties experienced net losses to other states.

Finding #7. Before and during the Pandemic, Montgomery County, like other nearby jurisdictions, saw surrounding states and counties as the most popular destinations for its residents. However, it had varying net migration patterns with its neighboring jurisdictions.

The top destinations for Montgomery County included nearby states like Virginia and Washington, D.C., as well as states in the Northeast (Pennsylvania, New Jersey, and New York), the South (Florida and Texas), and California. The County experienced the largest net losses to Florida, Virginia, Texas, and North Carolina.

At the county level, the top destinations for Montgomery County residents were Prince George's County, Frederick County, District of Columbia, Howard County, and Fairfax County. Similarly, Montgomery County consistently ranked as one of the top five destinations for residents from other counties, especially those from Prince George's and Frederick Counties.

Montgomery County experienced varying net migration flows with local areas, seeing net gains from Washington, D.C., Prince George's County, and Arlington County, but net losses to Frederick, Howard, Anne Arundel, Fairfax, Washington, as well as Loudoun Counties. Beyond the local region, Montgomery County experienced large net losses to Sussex County (DE) and Palm Beach (FL).

Most Popular Destinations f Resider	• • •	Destination Resulting in Largest Net Losses for Montgomery County			
County/City, State	State	County/City, State	State		
Prince George's County, MD	Virginia	Frederick County, MD	Florida		
Frederick County, MD	District of Columbia	Howard County, MD	Virginia		
Howard County, MD	Florida	Anne Arundel County, MD	Texas		
Fairfax County, VA	California	Washington County, MD	North Carolina		
Anne Arundel County, MD	Texas	Fairfax County, VA	Delaware		
Baltimore City, MD	New York	Sussex County, DE	South Carolina		
Baltimore County, MD	Pennsylvania	Loudoun County, VA	Pennsylvania		

Internal Migration of Income

Finding #8. Relative to its GDP and total personal income, Montgomery County had low levels of Real AGI *outflows* and the lowest levels of Real AGI *inflows* compared to its suburban neighboring counties.

From 2012 to 2022, Montgomery County consistently ranked second behind Fairfax County in, both, total Real AGI *outflows*, with an average outflow of \$3.3 billion per year, as well as total Real AGI *inflows*, with an annual average of \$2.5 billion. Fairfax County had larger outflows, with \$5.3 billion moving out over the period, and inflows, with an annual average of \$4.2 billion.

However, when accounting for its total economic output, Montgomery County had the lowest levels of Real AGI outflows from 2017 to 2022. On average, 3.4% of Montgomery County's total GDP moved out per year. Relative to total personal income, Montgomery County had the second lowest level of Real AGI outflows from 2012 to 2022, behind Frederick County.

Montgomery County also had the lowest levels of Real AGI inflows as percentages of GDP and total personal income, followed by Prince George's County. On average, 2.5% of Montgomery County's total GDP moved in per year.

¹ 2017 to 2022 are the only years for which GDP data is available.

Finding #9. Montgomery County had the second-largest net losses of Real AGI from internal migration, which grew over time. The County experienced the largest net losses of Real AGI from internal migration relative to its GDP and second-largest relative to total personal income.

From 2012 to 2022, Montgomery County ranked second behind Fairfax County in Real AGI net outflows, with an average net loss of \$800 million per year, compared to \$1.1 billion for Fairfax County. Prince George's and Howard Counties also faced net outflows, while Loudoun and Frederick Counties had Real AGI net inflows—an average annual of \$100 million, respectively. Notably, by 2021, Frederick County was the only jurisdiction still experiencing net inflows of Real AGI, as Loudoun County's net gains gradually diminished over time.

In Montgomery County, net outflows of Real AGI increased over time by an average of \$80.3 million per year, marking the largest growth in net outflows among the counties. Loudoun County had the second-largest annual increase, averaging \$47.5 million. Frederick County was the only jurisdiction to experience growing net inflows of Real AGI, with an average annual increase of \$25.5 million.

Relative to GPD, Montgomery County experienced the largest net losses, with an average annual net loss of 0.81% of GDP, compared to 0.79% and 0.77% for Prince George's and Fairfax Counties, respectively. Additionally, relative to total personal income, Montgomery County had the second-largest net losses, behind Fairfax County, with an average of 0.8% of the County's total personal income per year, compared to 1.0% for Fairfax County.

Finding #10. For all counties, per capita Real AGI for people leaving was higher than for people moving in, but lower than for residents who stayed.

While per capita Real AGI was higher for out-migrants than in-migrants across all counties, Montgomery County had the second-largest gap in average per capita income. Out-migrants had an average per capita income of \$61,540, while in-migrants had \$54,636, resulting in a net loss of \$6,905. Howard County experienced the largest gap, with a net loss of \$8,147.

Montgomery County also had the third-largest gap in average per capita income between out-migrants and residents who remained, following Fairfax and Howard Counties. Non-migrants in Montgomery County had an average per capita income of \$71,080, creating a difference of \$9,539 compared to out-migrants.

Finding #11. Interstate moves drove Montgomery County's patterns of Real AGI outflows and inflows before and during the Pandemic, resulting in moderate net outflows outside and within Maryland.

From 2017 to 2022, the County saw high levels of *out-of-state* Real AGI outflows and inflows, similar to Loudoun County. In contrast, Montgomery County had the lowest levels of *in-state* outflows and inflows. These trends led to moderate net outflows both outside and within Maryland. Fairfax and Prince George's Counties also saw net outflows for both categories, while Frederick, Howard, and Loudoun Counties had in-state net inflows alongside out-of-state net outflows.

Finding #12. Montgomery County, like other nearby jurisdictions, saw surrounding states and counties as the most popular destinations for Real AGI outflows, but had varying net flows with its neighbors.

The top destinations of Real AGI outflows from Montgomery County included nearby states like Virginia and Washington, D.C., in addition to states in the Northeast (New York and Pennsylvania), the South (Florida and Texas), and California. From 2020 to 2022, the County had the largest net losses of Real AGI to Florida (\$930 million), Delaware (\$190 million), Texas (\$150 million), and Virginia (\$130 million). Notably, there was a reversal in the flow of Real AGI with California, shifting from significant net outflows before the pandemic to net inflows during it.

At the county level, the top destinations of Real AGI outflows from Montgomery County were surrounding counties. The County had net losses to Frederick (\$588 million), Anne Arundel (\$233 million), Howard (\$173 million), Fairfax (\$86 million), and Loudoun Counties (\$78 million), and net inflows from Prince George's (\$24 million), Arlington County (\$105 million), and Alexandria City (\$29 million). The County saw \$840 million in inflows from the District.

Beyond the region, the County had significant net losses to Palm Beach County, Florida (\$355 million), Sussex County, Delaware (\$182 million), Miami-Dade County, Florida (\$143 million), Travis County, Texas (\$56 million).

Most Popular Destinations f Real AGI Ou	• • •	Destination Resulting in Largest Net Losses in Real AGI for Montgomery County			
County/City, State	State	County/City, State	State		
District of Columbia	Virginia	Frederick County, MD	Florida		
Frederick County, MD	Florida	Palm Beach County, FL	Delaware		
Prince George's County, MD	District of Columbia	Anne Arundel County, MD	Texas		
Fairfax County, VA	California	Sussex County, DE	Virginia		
Palm Beach County, FL	Texas	Howard County, MD	North Carolina		
Howard County, MD	New York	Miami-Dade County, FL	California		
Anne Arundel County, MD	Pennsylvania	Fairfax, VA	South Carolina		

Finding #13. During the Pandemic, high-income households from Montgomery County predominantly relocated to Florida.

Wealthy households from Montgomery County primarily relocated to several counties in Florida. Palm Beach County saw the largest influx, with 703 households moving and an average household income of \$610,272. Collier County attracted 111 households, with an average income of \$415,976, followed by Miami-Dade County, which received 601 households with an average income of \$316,083. Sarasota County also attracted 118 households, with an average income of \$296,004. These moves highlight a trend of high-income households relocating to affluent areas in Florida.

B. Discussion Items for Council Consideration

This section provides OLO's discussion issues based on the findings of the report.

Discussion 1: Why has Montgomery County retained a higher share of its residents than other jurisdictions?

Compared to its neighboring suburban counties, Montgomery County has retained a larger share of its residents, with fewer residents moving away relative to its population size. This raises the question of what factors contribute to the County's strong resident retention compared to nearby areas.

Discussion 2: Why has Montgomery County attracted fewer new residents compared to its neighbors? And what policies could the Council pursue to make the County more attractive to households from elsewhere in the U.S.?

Despite its strong retention, Montgomery County has drawn fewer new residents than neighboring counties, with the lowest levels of in-migration relative to its population size. This prompts an exploration of why the County has seen lower inflows of new residents in comparison to other suburban jurisdictions.

Discussion #3. Why has Montgomery County struggled to attract Real AGI inflows compared to neighboring areas? And what are the tax and other implications of net outflows of Real AGI for the County?

Compared to its suburban neighboring counties, Montgomery County has attracted lower levels of Real AGI inflows. While it saw some inflows from nearby areas like the District of Columbia, Arlington County, and Prince George's County, overall inflows were low relative to its GDP. The County also faced substantial net outflows to counties like Frederick, Anne Arundel, and Howard, and states, such as Florida, Delaware, and Texas. This raises the question of what factors are contributing to Montgomery County's difficulties in attracting Real AGI inflows compared to neighboring areas.