

A REGION ON THE MOVE

Population Growth and Migration
in Northern Virginia | 2010-2019



NOVA
WORKFORCE

Overview

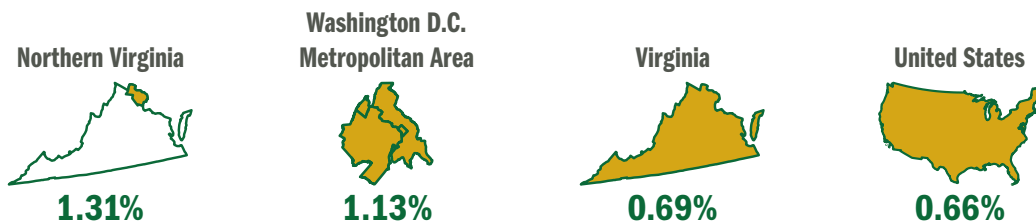
As northern Virginia (NOVA)¹ moves into a new decade, and as another ten-year (decennial) census approaches, it is important to examine how the region has grown since 2010, and what these trends might mean for its future workforce and economic vitality.

A Decade of Growth in Northern Virginia



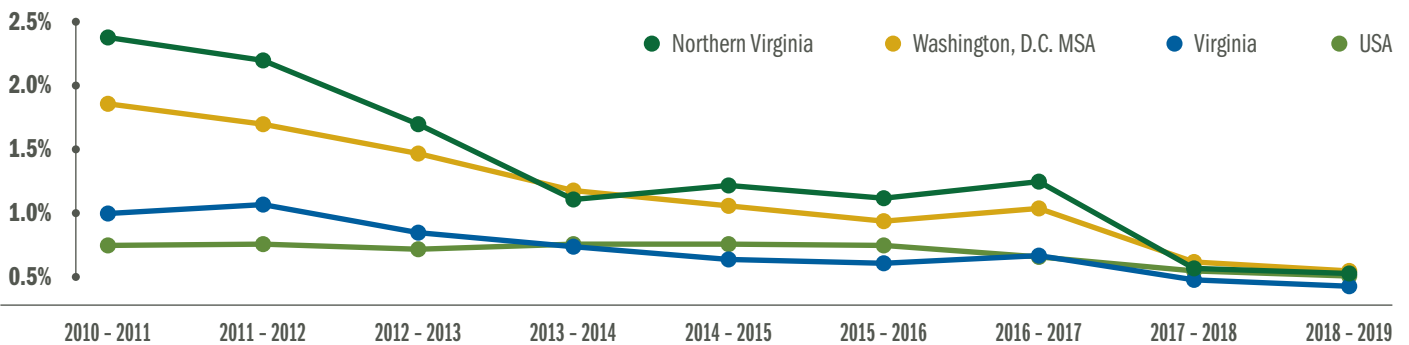
Since the last decennial census, the NOVA region has grown by over a quarter-million people, the equivalent of roughly 31,000 people per year, or 85 per day.

Average Annual Growth (2010-2019)



Over the last decade the NOVA region grew faster, on average, than the rest of the country, the state of Virginia, and the Washington D.C. metropolitan area. However, the rate of this growth has declined over time, with annual growth falling below average from 2013 on.

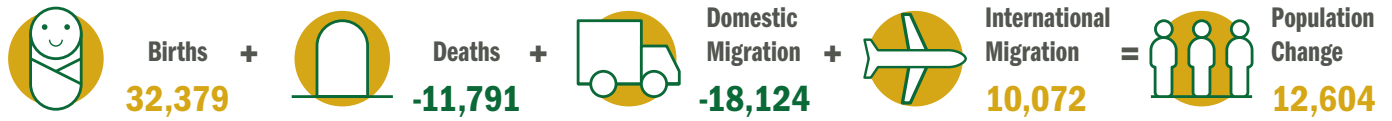
Year-Over-Year Percentage Change in Population



¹ The nine Virginia jurisdictions immediately adjacent to Washington D.C.: Alexandria City, Arlington County, Fairfax City, Fairfax County, Falls Church City, Loudoun County, Manassas City, Manassas Park City, and Prince William County.

Population growth from 2018-2019 was the lowest yet: 0.5%, well below average. Much of the growth that did occur was primarily due to births, with large losses due to domestic out-migration that were only partially offset by international in-migration.

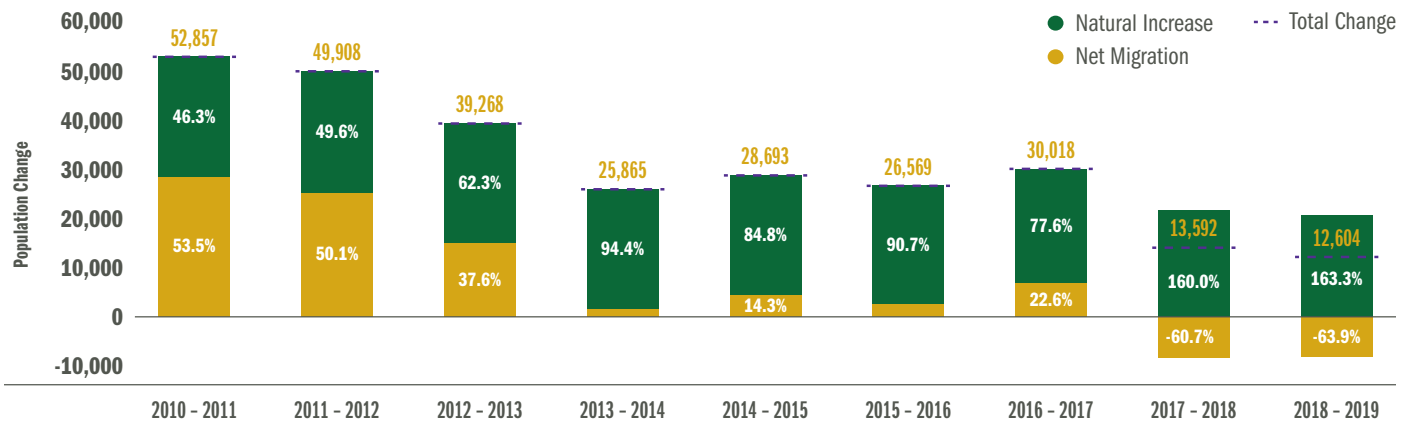
Components of Population Change in the NOVA Region (2018-2019)



The Changing Make-up of Population Growth

Population Change = Natural Increase + Net Migration

Population Change in the NOVA Region, 2010-2019



Natural Increase: Total births - Total deaths

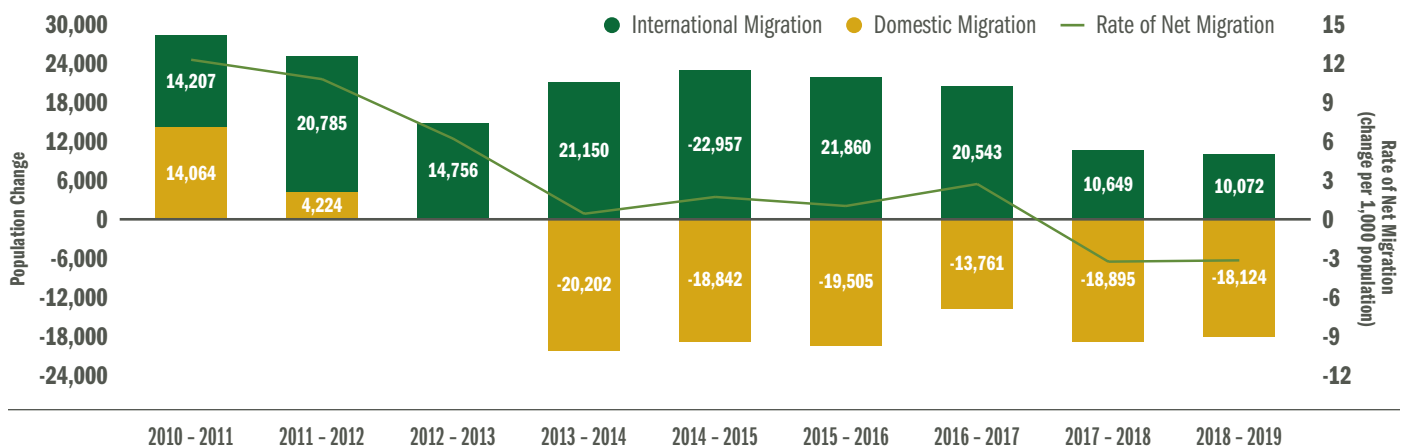
Net Migration: Domestic migration (population movement within U.S.) + International migration (movement to/from other countries)

NOTE: Values above may not sum exactly to 100% due to differences in aggregate and component estimation

At the start of the decade, natural increase and net migration each made up roughly half of annual population growth in NOVA. However, natural increase has become a larger component of overall change since 2012-2013, accounting for 3/4 of the region's total growth over the decade.

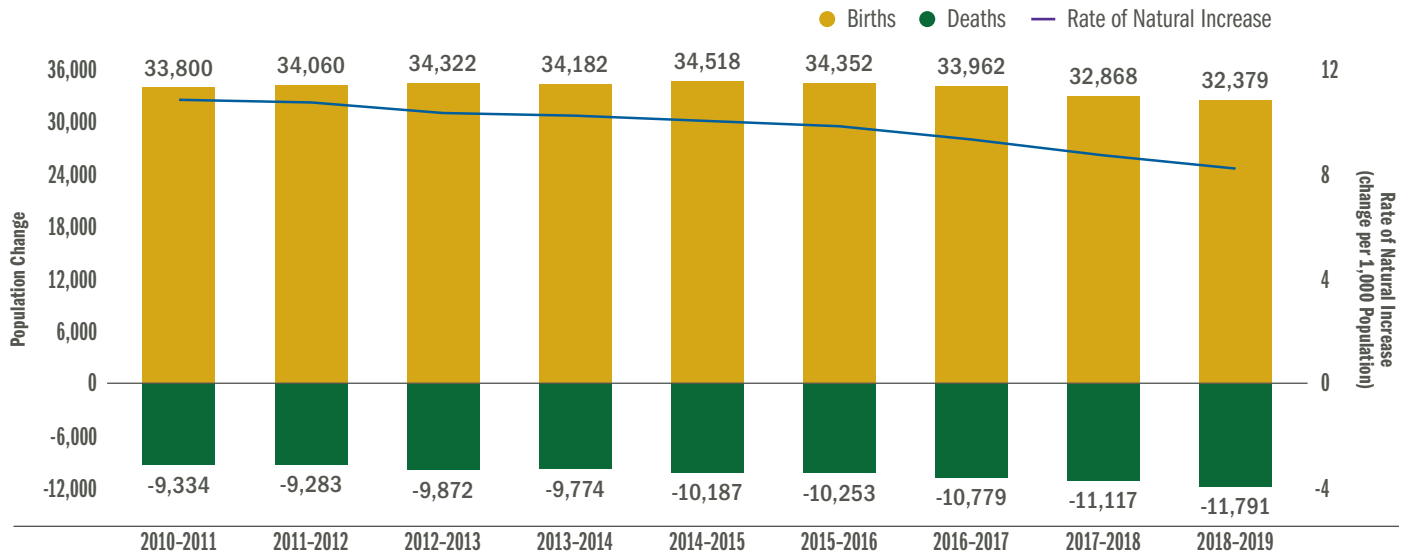
Net migration's declining contribution to population growth in the region is primarily due to the significant decline in domestic migration—from 2012 to 2013, NOVA lost as many people to other parts of the country as it gained. From 2013 onward, the region has consistently lost population through domestic out-migration.

Domestic & International Migration in the NOVA Region, 2010-2019



International migration remained high from 2013-2017 but has since declined by half. As a result, since 2017 migration has been a net loss, with population migrating to other areas (primarily other parts of the United States) at a rate of around 3 people per every 1,000 per year.

Births & Deaths in the NOVA Region, 2010-2019



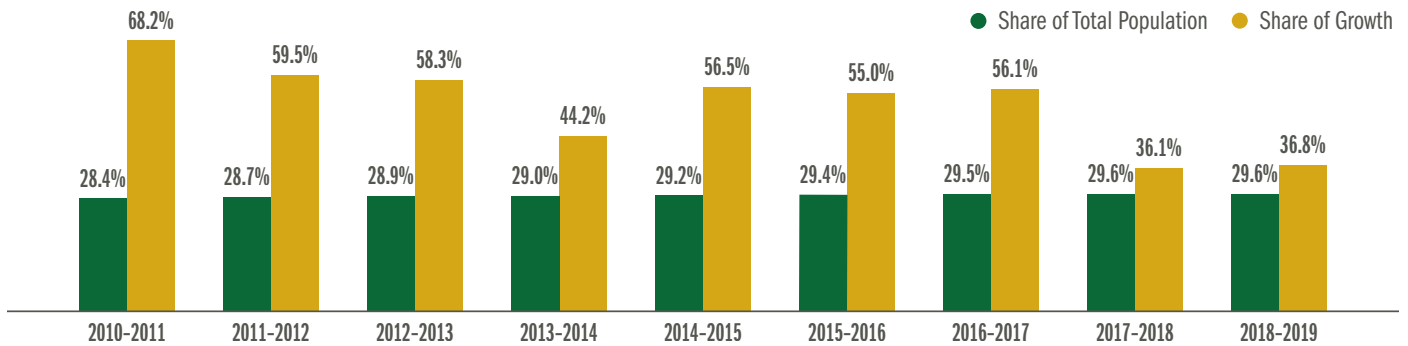
Despite natural increase making up a larger and larger share of population growth in the region over the decade, the number of annual births has declined slightly, while deaths have increased. Overall, this led to a slight decline in the rate of natural increase (change due to births and deaths per 1,000 people) between 2010 and 2019.



Northern Virginia's Growth in Context

While the NOVA region experienced greater overall growth than most other areas in the United States, over the course of the decade this growth has slowed significantly. This decline matches national trends, particularly in other urban and metropolitan areas (Frey, 2020). However, the decline in Northern Virginia's population growth was initially more rapid—just over half the region's population gains for the decade occurred in the first three years, while other metropolitan areas with over one million people gained just over a third (36.4%) of their total growth for the decade in the same period.

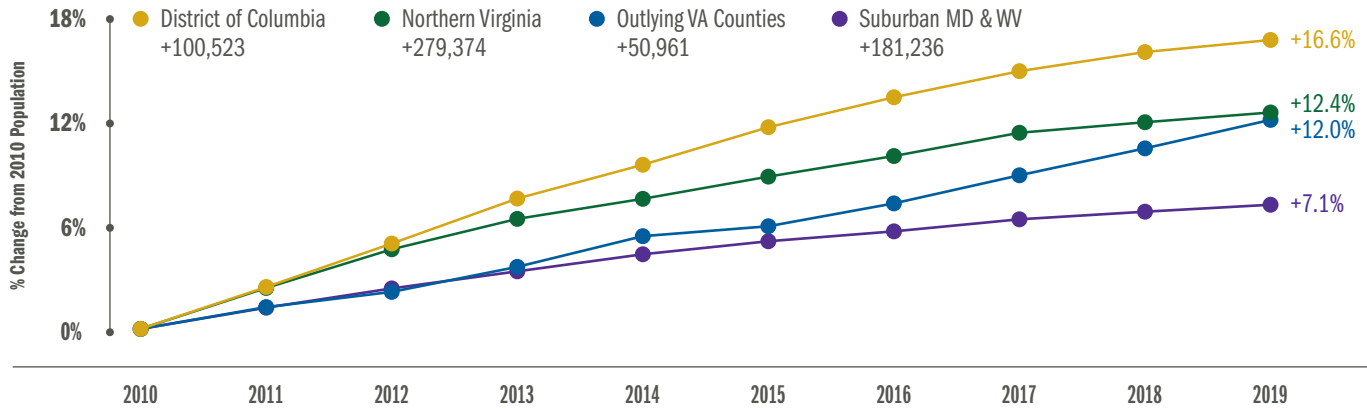
NOVA Region as a Share of Total Population vs. Growth in Virginia, 2010-2019



This rapid decline in growth is also apparent when comparing the region with the state of Virginia as a whole. While NOVA makes up about 30% of the state's population and made up (on average) just over half of the state's population growth over the decade, this share of growth declined from nearly 70% in 2010-2011, to a little over one third in 2018-2019. While growth has been declining across the state as well (Lombard, 2020), it has been doing so more rapidly (albeit from a much higher initial rate) in the NOVA region.

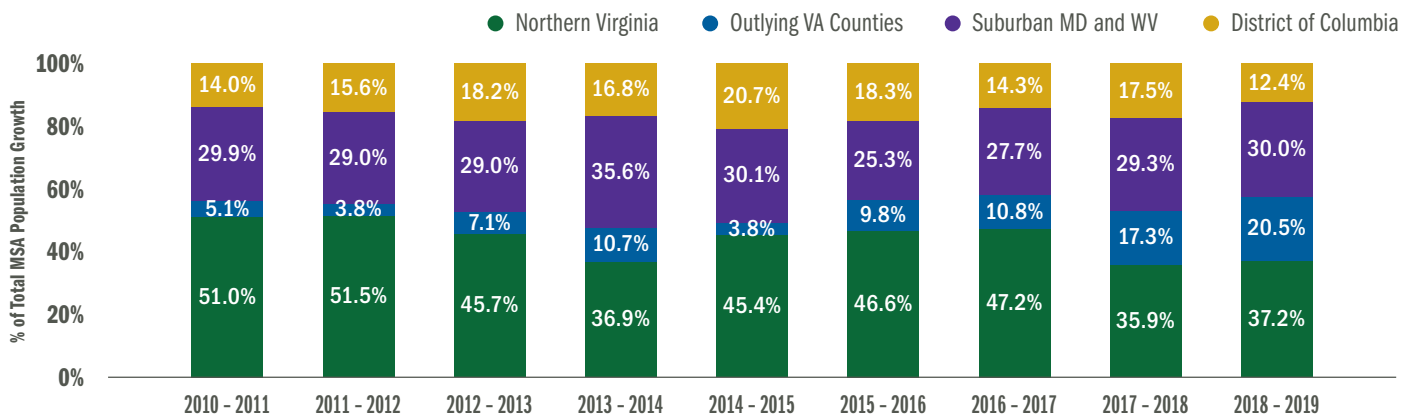


Population Growth for Sub-Regions of Washington D.C. MSA, 2010-2019



This trend further aligns with research from the Brookings Institution that decelerating growth in urban and metropolitan areas has been accompanied by increasing growth in non-metro and outlying areas of the country (Frey, 2020). This is evident when comparing the NOVA region to other sub-regions within the Washington, D.C. metropolitan area. While growth in the urban and suburban core has been declining, growth in outlying Virginia counties (e.g. Stafford, Fauquier, and Rappahanock) has sped up.

Shares of Yearly Population Change by Washington, D.C. MSA Sub-Region, 2010-2019



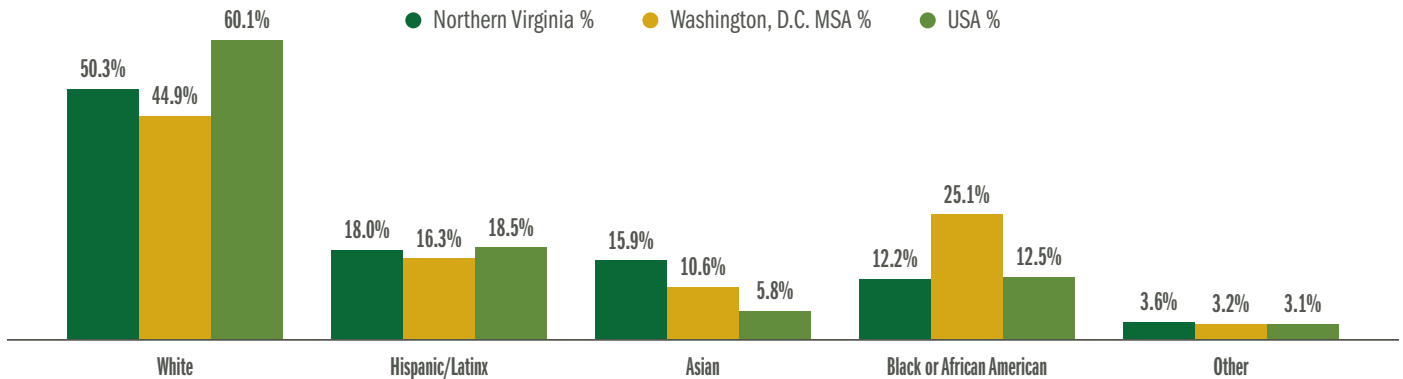
As a result, these outlying counties have made up an increasing share of population growth in the metropolitan area over time. While the NOVA region and D.C. still make up most of the metro area’s population and overall growth, outlying counties in Virginia have quadrupled their share of that growth over the course of the decade.

The NOVA region and the District of Columbia (D.C.) have made up less of the metropolitan area’s overall growth over time, while suburban Maryland and West Virginia (including Prince George’s, Montgomery, Frederick, Charles, Calvert, and Jefferson Counties) has remained relatively constant (hovering around 30% of total growth).

Demographic Trends

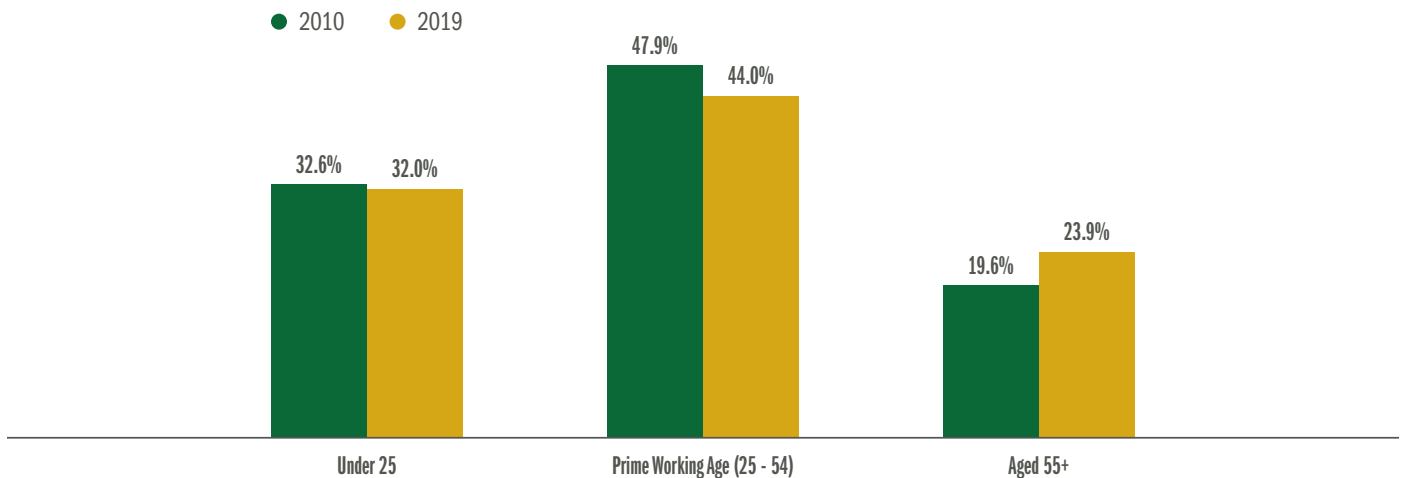
Estimates for 2019 indicate that the NOVA region is more racially and ethnically diverse than the United States as a whole, with around half of the population categorized as non-white compared to 40% nationally. Over the past decade, population growth among non-white groups has far outpaced that of whites, with the latter group leveling off over the last few years while minority populations continue to grow.

Population by Race/Ethnicity as a Percentage of Total Population (2019)



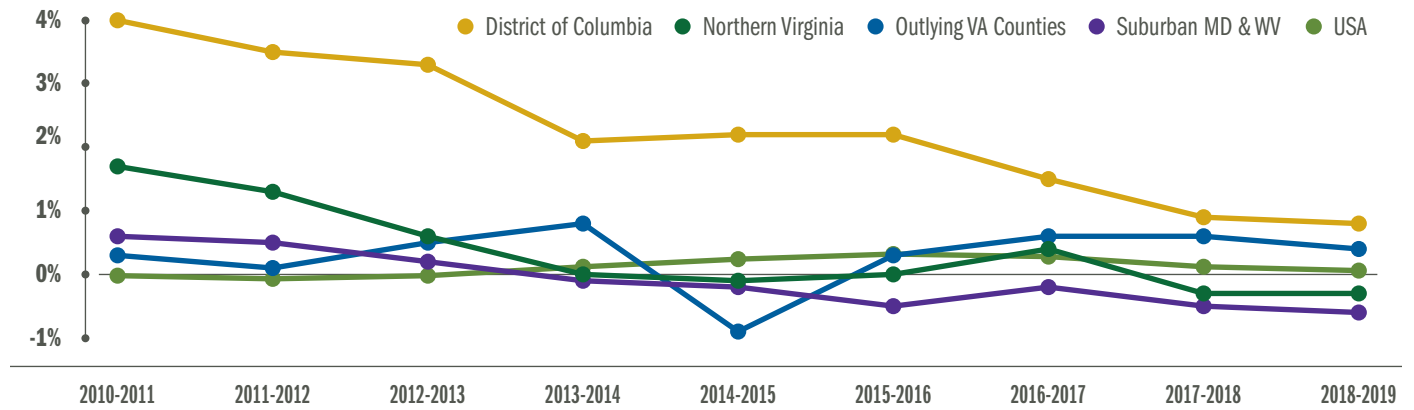
Next to Hispanics/Latinx populations, Asians are the largest minority group in the NOVA region, making up a larger share of the total population than at either the national or metropolitan level. This is unsurprising given the degree to which immigration from these countries has contributed to the region's growth (see page 13).

Age Group Share of NOVA Population in 2010 and 2019



Even more relevant to our region's workforce concerns is that the share of the total population made up of individuals aged 25-54 ("prime working age") has declined over the past decade, while the share of those aged 55+ has increased.

Year-Over-Year Change in Prime Working Age Population (25-54) by D.C. MSA Sub-Region, 2010-2019



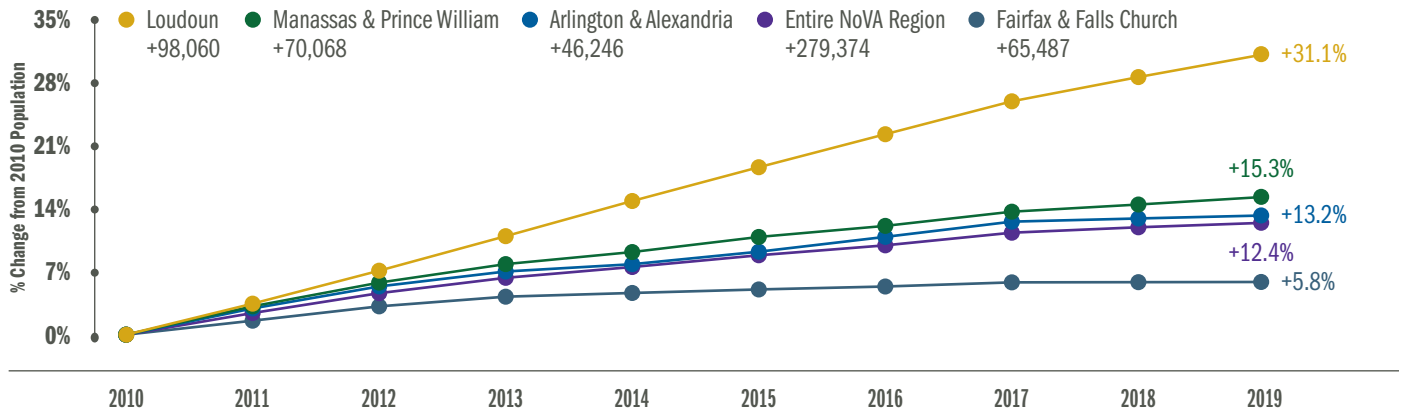
In fact, since 2017, the prime working age population in the NOVA region has been shrinking slightly. By contrast, this age group has continued growing in the outlying Virginia counties of the D.C. MSA and in the District of Columbia (although this growth has slowed significantly in the District since the start of the decade). Despite a dip in growth from 2014-2015, the outlying counties are the only area where this age segment has seen increased year-over-year growth for more than half of the previous decade.



Growth by Jurisdiction

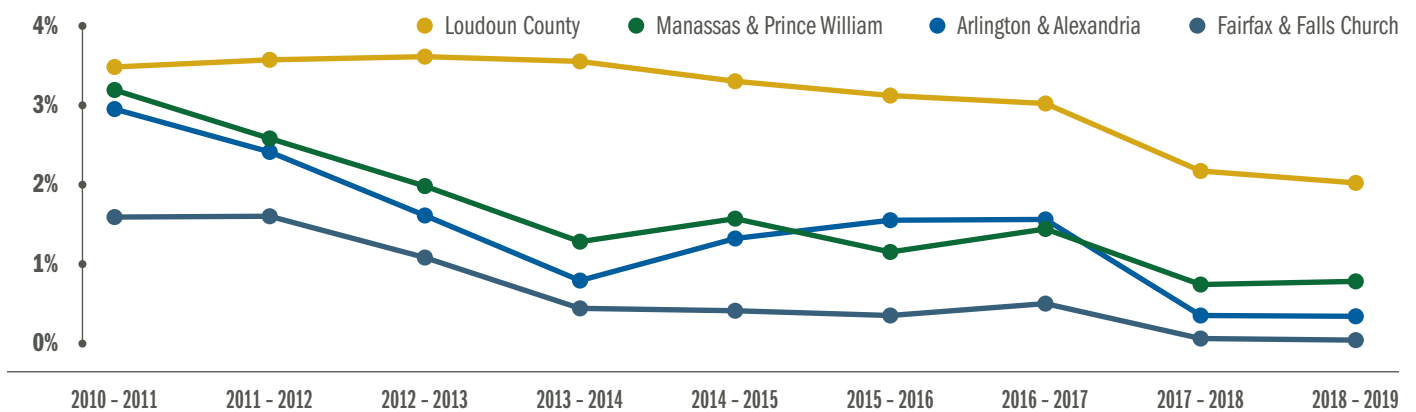
Within the NOVA region, Loudoun County has consistently experienced the most significant growth in the region.

Population Growth for NOVA Counties & Cities, 2010-2019



In comparison, Fairfax County (including Fairfax City and Falls Church City) had the lowest overall growth rate in the region over the course of the decade. This included a net loss of population in 2018-2019, largely due to significant domestic out-migration. Over the same time period, Loudoun gained population due to domestic migration—the only jurisdiction in the region to do so. Still, due to its large population (2x that of either Arlington/Alexandria or Prince William/Manassas) even with lower overall growth rates, Fairfax County still grew significantly over the decade (+65,000).

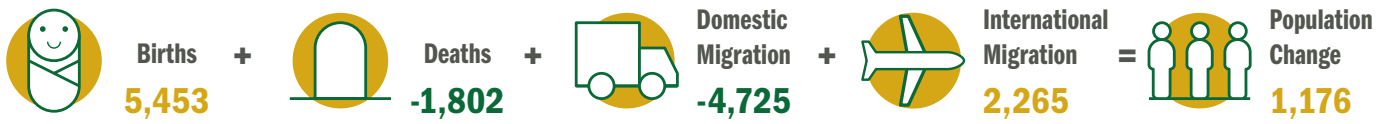
Year-Over-Year Percentage Change in County & City Population, 2010-2019



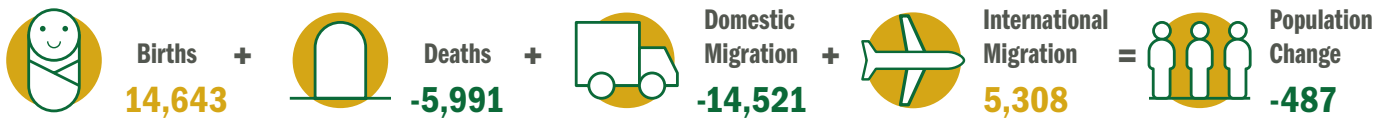
The combined areas of Arlington/Alexandria and Prince William/Manassas were relatively similar in terms of total growth over the decade. Growth in the latter, more outlying jurisdictions, declined less steeply between 2017 and 2018.

Components of Population Change in NOVA Cities & Counties (2018-2019)

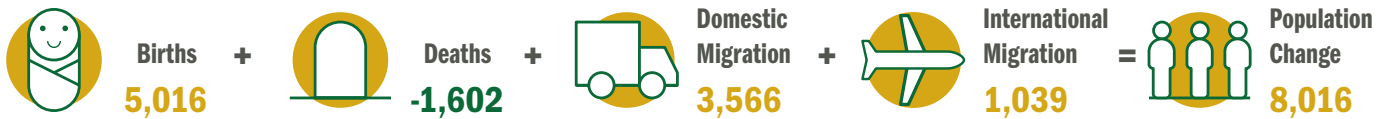
Arlington & Alexandria



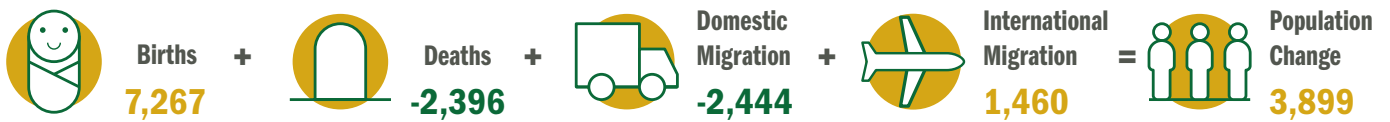
Fairfax & Falls Church



Loudoun County



Manassas & Prince William

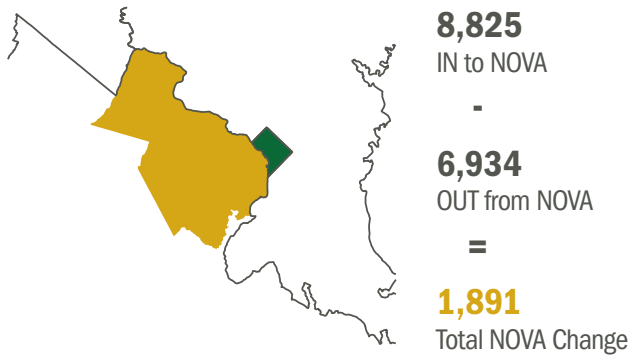


Regional and National Population Flows

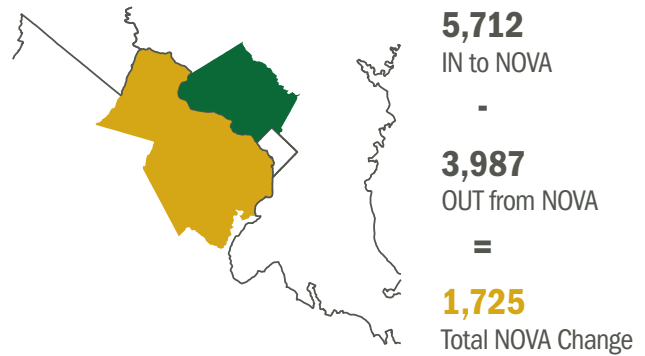
Aside from movement within the NOVA region, gross migration, (i.e. the total of all in- and out-migration between two areas) is greatest between NOVA and the District of Columbia—approximately 15,000 people moved between the two from 2014-2018 (the most recent period for which there is data). This is followed by Montgomery and Prince George’s Counties in Maryland, and Stafford County in Virginia. Montgomery County and the District of Columbia are the two largest net contributors of migrants to the NOVA region from elsewhere in the Washington metropolitan area, while more people move from NOVA to Prince George’s and Stafford Counties than vice-versa.

Migration Between NOVA Region and Surrounding Counties (2014-2018)*

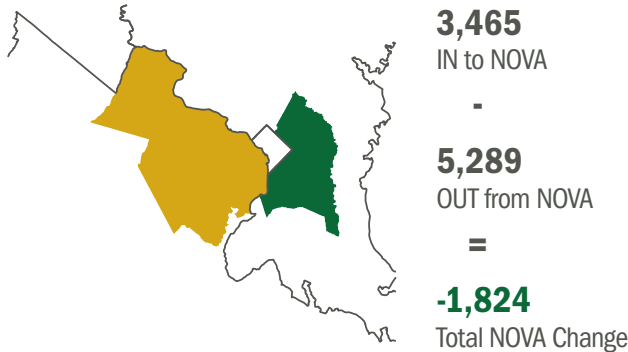
District of Columbia



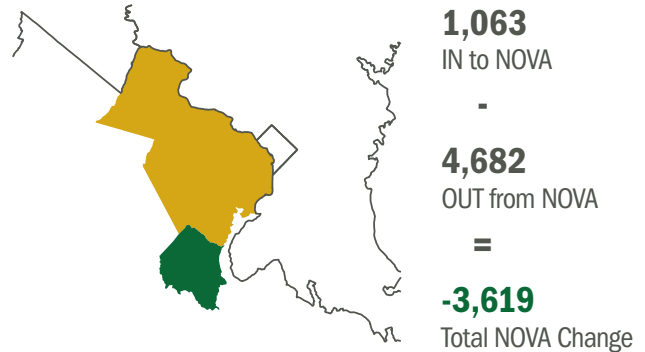
Montgomery County



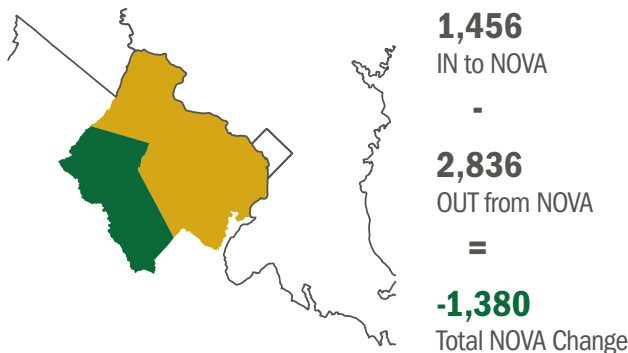
Prince George’s County



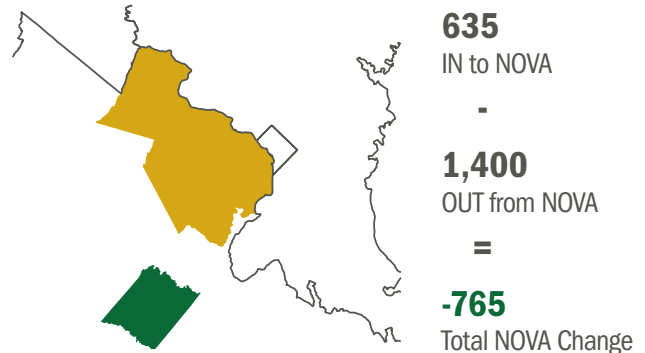
Stafford County



Fauquier County



Spotsylvania County

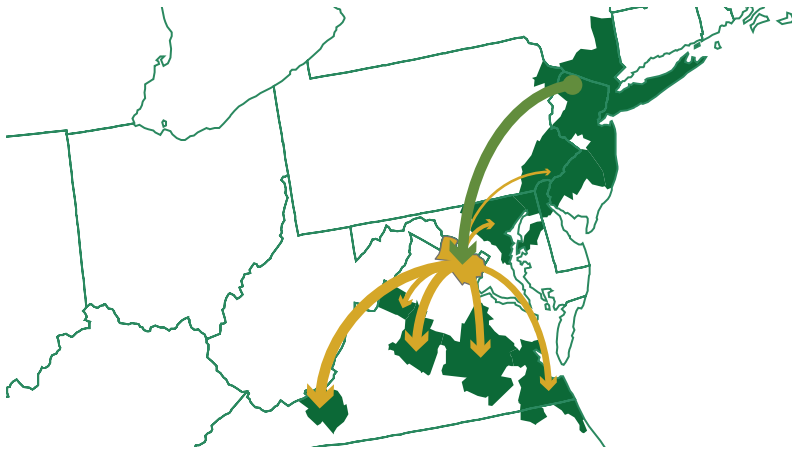


*All estimates are statistically significant at the 95% level.

Unsurprisingly, outside of the Washington D.C. metropolitan area, the greatest level of movement occurs between the NOVA region and Virginia Beach/Norfolk and Richmond areas, the second and third largest metropolitan regions in the state (respectively). New York City, Baltimore, Philadelphia, Blacksburg (VA), Atlanta, Boston, and Charlottesville (VA) are also among the metropolitan areas with the greatest amount of migration to and from the NOVA region.

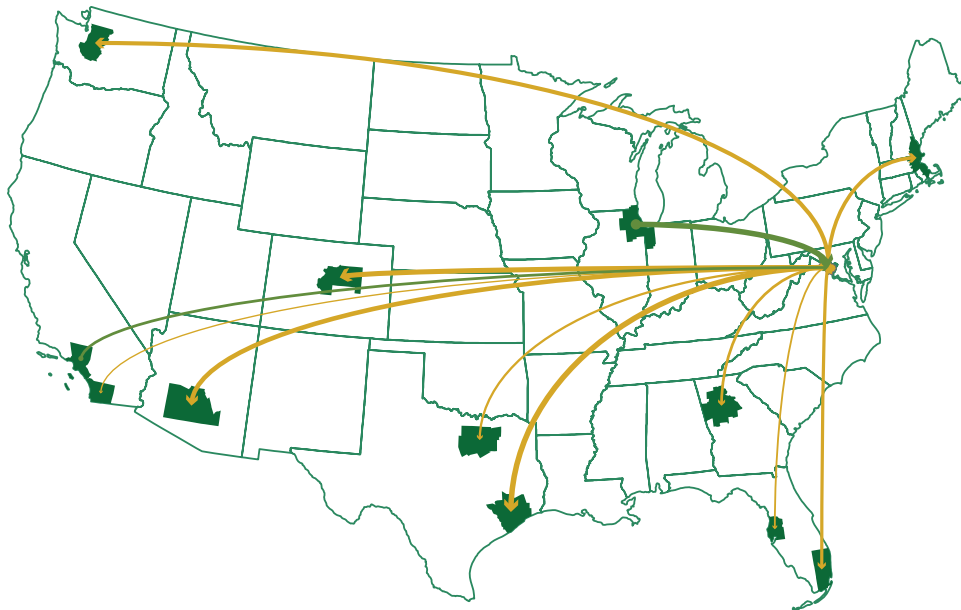
Net Migration between NOVA Region and Other Metropolitan Areas (2014-2018)

Mid-Atlantic Metropolitan Areas



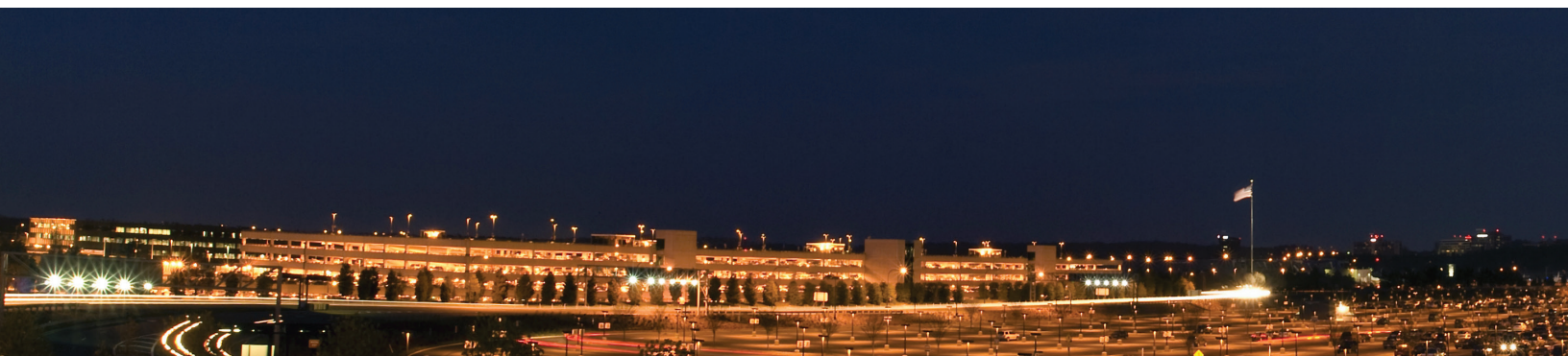
Metropolitan Area	Net Migration
New York City*	1,555
Philadelphia	-168
Baltimore*	-972
Harrisonburg*	-1,207
Virginia Beach-Norfolk*	-1,223
Charlottesville*	-1,249
Richmond*	-1,282
Blacksburg*	-2,183

National Metropolitan Areas



Metropolitan Area	Net Migration
Chicago	131
San Diego	16
Los Angeles	-29
Tampa-St. Petersburg	-34
Dallas-Fort Worth	-306
Atlanta	-509
Miami-Fort Lauderdale	-520
Boston*	-656
Seattle*	-673
Phoenix*	-739
Denver*	-1,207
Houston*	-2,333

* Net migration estimate is statistically significant at the 90% level



It is notable that Virginia Beach/Norfolk, Richmond, Blacksburg, Charlottesville, and Harrisonburg are not only among the top 20 destinations for movers from the NOVA region, but also prominent centers of higher education in the state (each is home to one of its largest public universities, see Table 1). In fact, between 2011 and 2015 (the last period for which we have data broken down by age) over 60% of the population that moved from the NOVA region to these metros was aged 18-24, compared to less than 20% of the region's population that moved elsewhere. Yet, while over half of 18-19 year olds (i.e. new students) leaving NOVA in this time period moved to these higher education centers, only 8% of 20-24 year olds (i.e. graduated students) moving out of these centers were destined for the NOVA region. This suggests that NOVA loses a meaningful portion of its young adult population when those individuals do not return to the area after college.

Table 1. Largest Four-Year Public Universities in Virginia (> 20,000 enrolled students)

Institution	Location	Students
George Mason University	Northern Virginia	48,678
Virginia Tech	Blacksburg	36,882
Virginia Commonwealth University	Richmond	33,462
University of Virginia	Charlottesville	28,593
Old Dominion University	Norfolk	28,046
James Madison University	Harrisonburg	24,152

Source: IPEDS

Outside of the state of Virginia, New York City is the largest source of individuals moving to the NOVA region. Otherwise, net migration between NOVA and other MSAs in the top 20 (in terms of gross migration) was either negative (i.e. more people moving out of the NOVA region than moving in) or the difference between in- and out-flows was not statistically significant.² In most cases, out-migration from the NOVA region tended to be to metropolitan areas with lower costs of living, while in-migration tended to come from metropolitan areas with higher costs of living.

As the trends at the top of this report highlighted, international migration continues to be a major contributor to population growth in the NOVA region. The largest influx in immigration has been from Asian countries (around 18,000 people from 2014-2018), followed by those in Europe (roughly 7,000 over the same time frame).

² Migration flows are based on multi-year survey samples, which requires allowing for sampling error—while estimates of the number of people moving into the NOVA region from San Diego and Chicago exceeded the number moving out to these MSAs, the difference between the two estimates was not large enough to be statistically significant.



Conclusion

Over the last decade, the NOVA region has grown faster than the Washington D.C. metropolitan area, the state of Virginia, and the rest of the country. However, the fact that this growth has slowed over time, particularly among key demographics such as those of prime working age, has important implications for the region's economy and workforce. While international immigrants continue to make up a vital share of our region's growth, NOVA's economic reliance on the national security and federal government sectors—both of which often require workers who are readily able to obtain security clearances—means that there is a limit to which international immigration can address critical workforce demand.

The impact of COVID-19 on international travel could further restrict the extent to which the region can rely on immigration for further growth. However, the full effects of COVID-19 on our region's demographics and growth—as well as on the decennial census as the primary tool we use to measure that growth—still remain unclear (Shanholtz, 2020; Frey, 2020). Yet, what is clear is that without addressing significant out-migration and lack of in-migration from other parts of the country, we will likely be increasingly unable to fill our region's workforce gaps.

The trends highlighted in this report suggest a number of takeaways for regional leaders and policy makers in addressing this issue:

- 1. Developing a region-wide attraction strategy** – While some jurisdictions continue to benefit from domestic in-migration, significant overall out-migration will impact the entire NOVA region. Developing a more comprehensive regional strategy aimed at attracting talent (particularly young people and families) from across the country to NOVA will be critical to its continued growth.
- 2. Addressing affordability and cost of living (particularly housing)** – As with much of the country, the urban/suburban core of NOVA is primarily losing population to less-expensive outlying areas and mid-size cities. With one of the highest costs of living in the country, concerted, regionally-coordinated efforts to reduce the prices of amenities such as housing and transportation may encourage further population and workforce growth.
- 3. Further integrating regional higher-education to prevent loss of talent** – NOVA benefits both from one of the largest community colleges in the country and the largest public 4-year institution in the state. However, at least some of the region's out-migration is due to college students attending university elsewhere in the state then failing to return. Keeping this talent in the NOVA region from the start by further developing higher education offerings in the region, including further integration and improvement of pathways between 2-year and 4-year institutions, will continue to be one critical way of lessening this attrition of talent.

Ultimately, these strategies to strengthen northern Virginia's growth require significant regional cooperation and collaboration to guarantee success. Continuing to understand and approach growth regionally will be critical as we move into the coming decade.

Sources

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NOVA WORKFORCE

A map of Northern Virginia is shown in a light green color. A specific region in the center of the map is highlighted in a bright orange color, representing the area of focus for NOVA Workforce.

About NOVA Workforce

NOVA Workforce conducts research on economic conditions and the labor market in Northern Virginia to develop a robust talent pipeline that meets the needs of employers in the region. The research department produces downloadable dashboards, reports and publications on industry sectors, hiring trends and other economic indicators.

For more information

Find more data on labor market trends and occupations in the northern Virginia region on our website, www.nvcc.edu/lmi

For more information, or to request customized labor market information reports, e-mail us at novalmi@nvcc.edu