

# School Enrollment & Demographic Trends in Virginia

NOVEMBER 17, 2022

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PRESENTATION FOR THE SENATE FINANCE & APPROPRIATIONS COMMITTEE

Hamilton Lombard

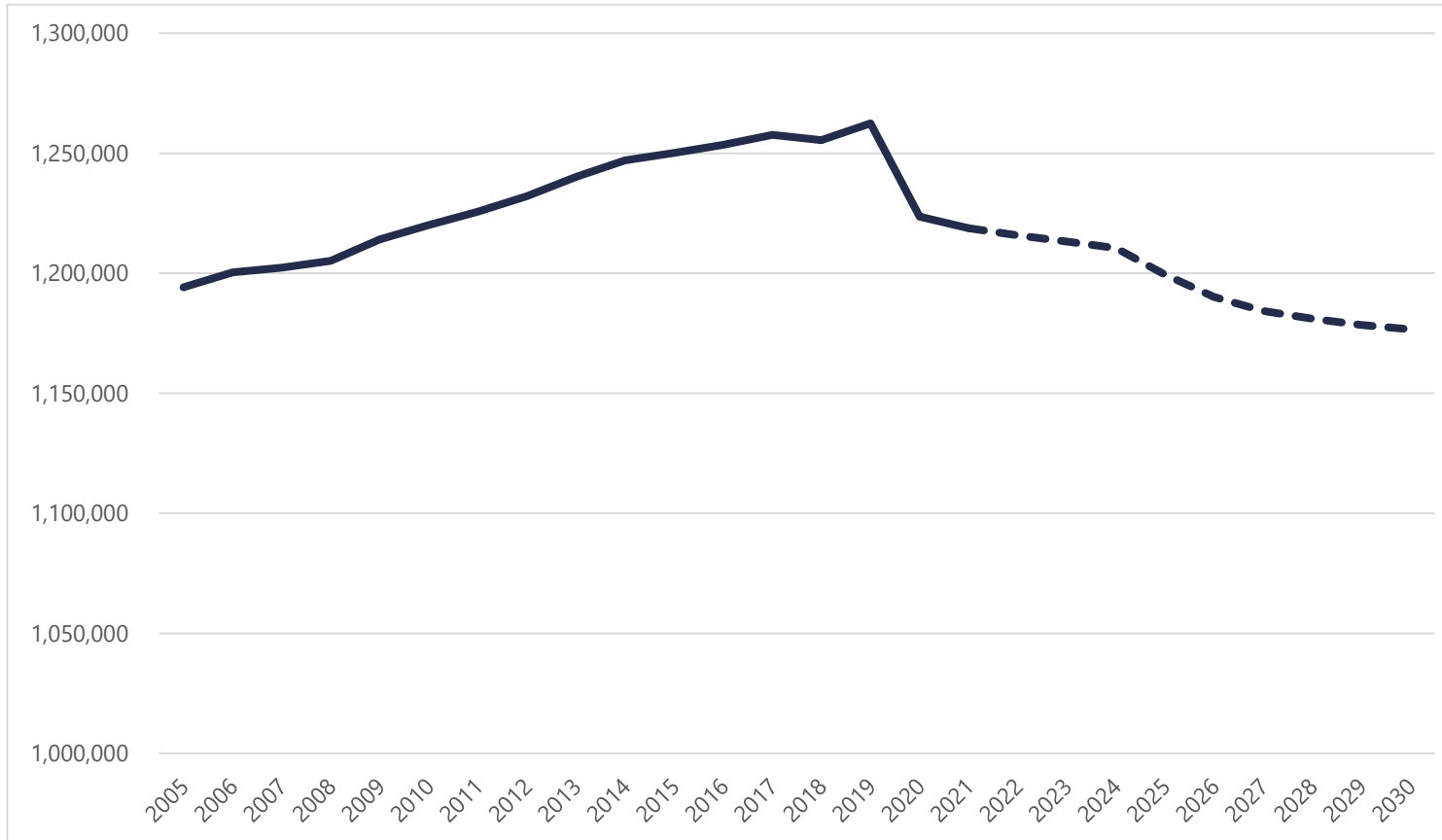
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# Virginia's public K-12 enrollment will decline during the 2020s

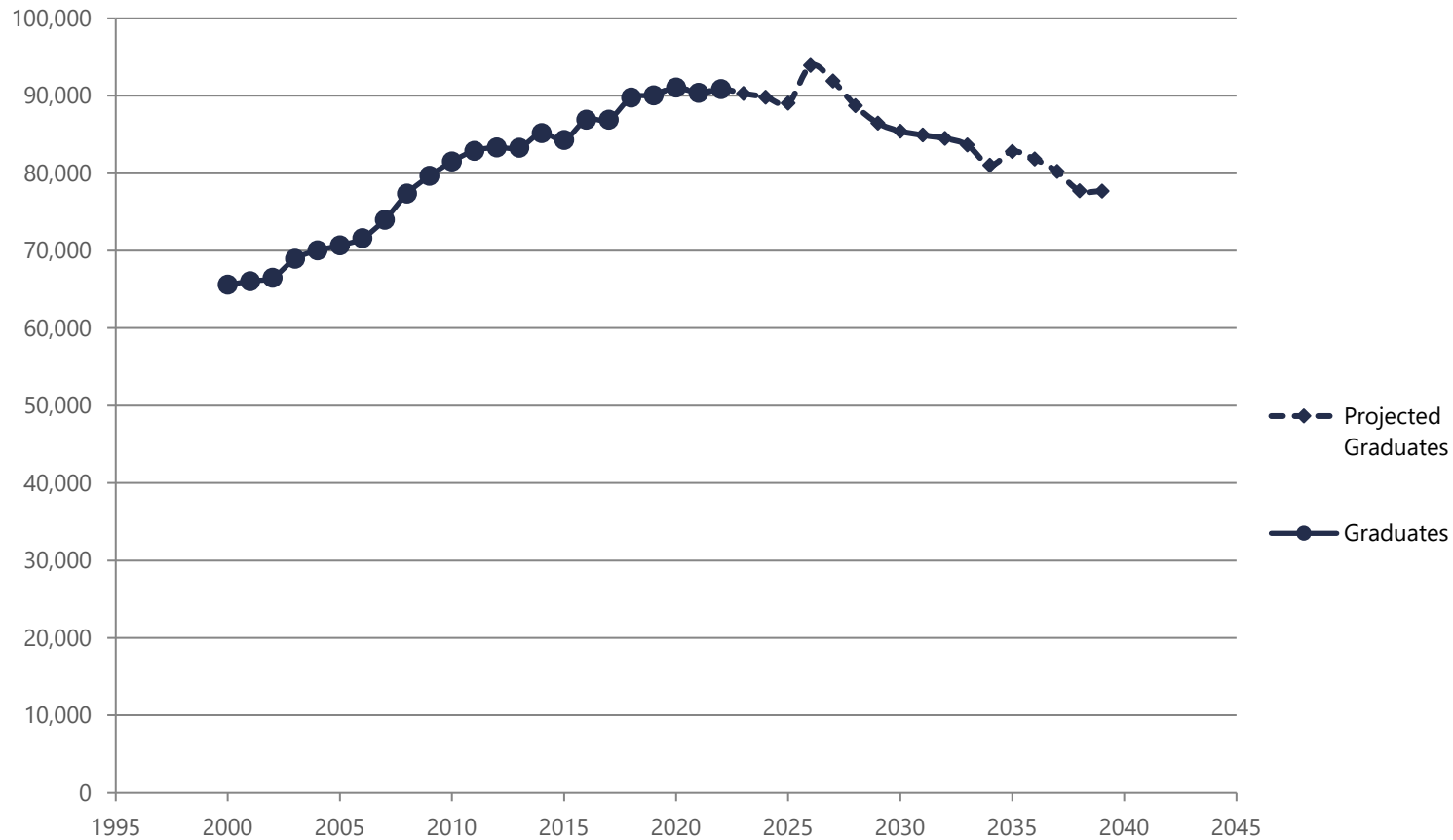


Virginia's public K-12 student enrollment grew every year between 1984 and 2018.

The pandemic caused enrollment to decrease by 45,000 students between 2019 and 2021.

As a result of pre-pandemic trends, Virginia's public school enrollment will likely decline by another 45,000 students.

# Virginia's decades long growth in high school graduates is ending

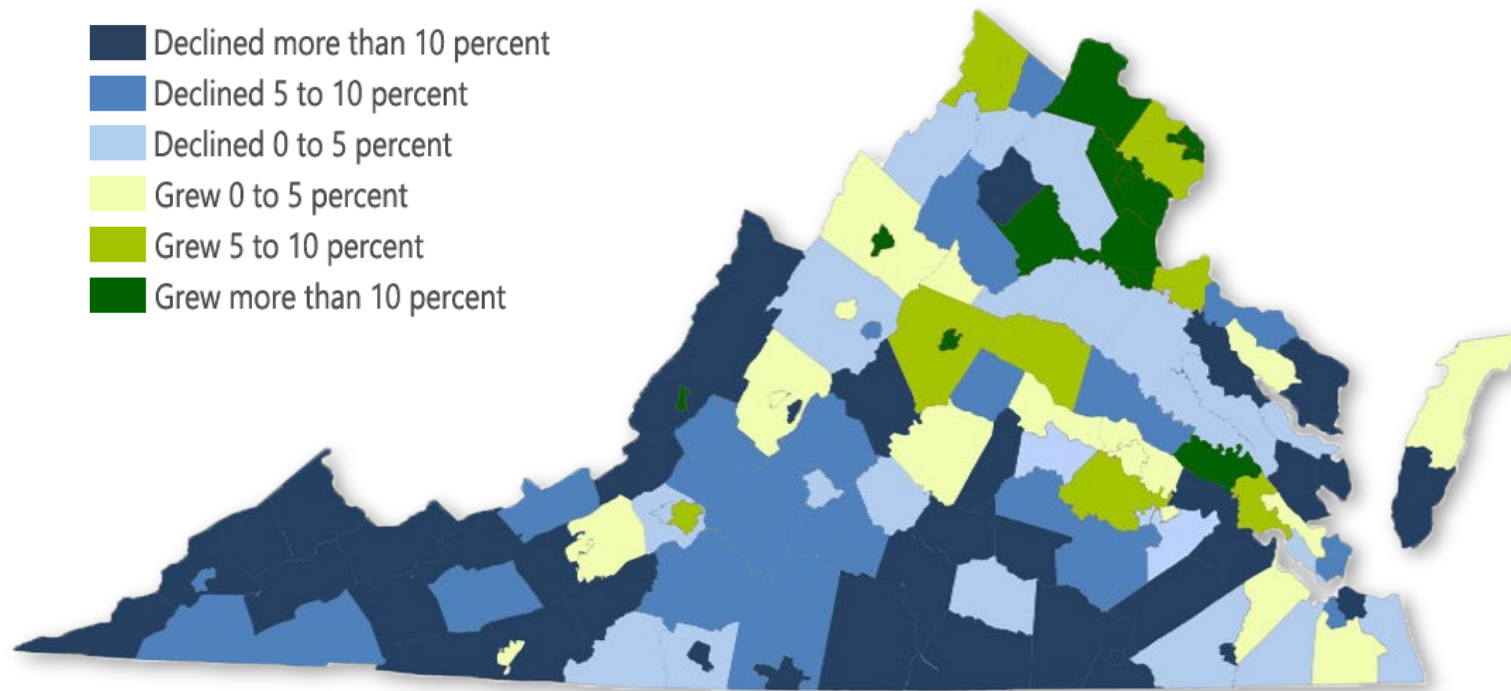


The number of students who graduated from Virginia's public high schools has grown since the early 1990s.

After the mid-2020s, fewer students are expected to graduate from Virginia's high schools.

Virginia's young adult population will likely decline after the mid-2020s, impacting universities and the workforce.

## Growth was concentrated in large divisions during the 2010s



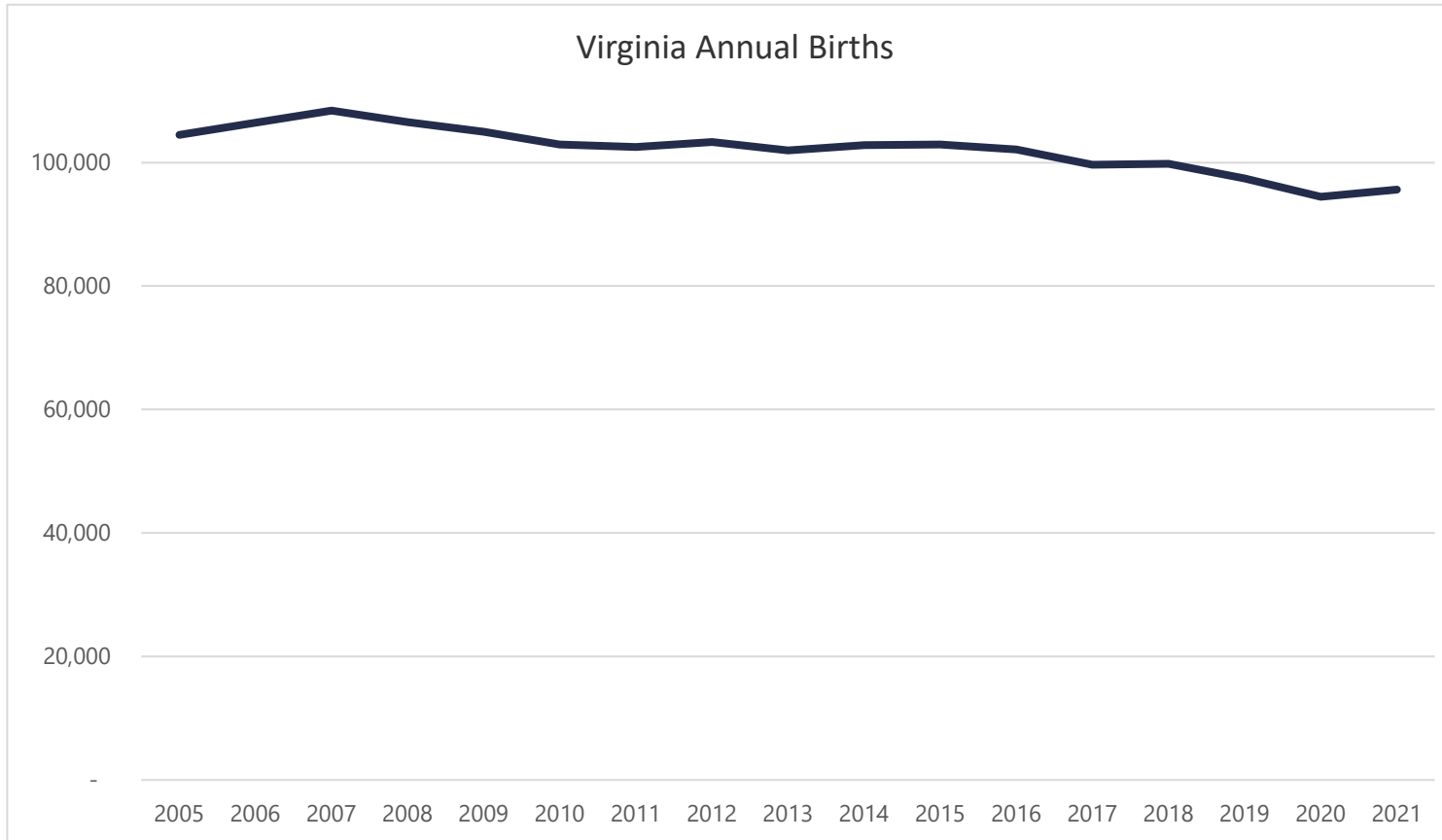
Change in Public K-12 Enrollment, 2010 to 2019

Virginia's public K-12 enrollment growth during the 2010s was driven almost entirely by Northern Virginia.

Enrollment in 69 of Virginia's 95 counties declined.

Rural divisions experienced the largest enrollment declines with some losing over a quarter of their students during the 2010s.

## Births in Virginia have declined nearly every year since 2007

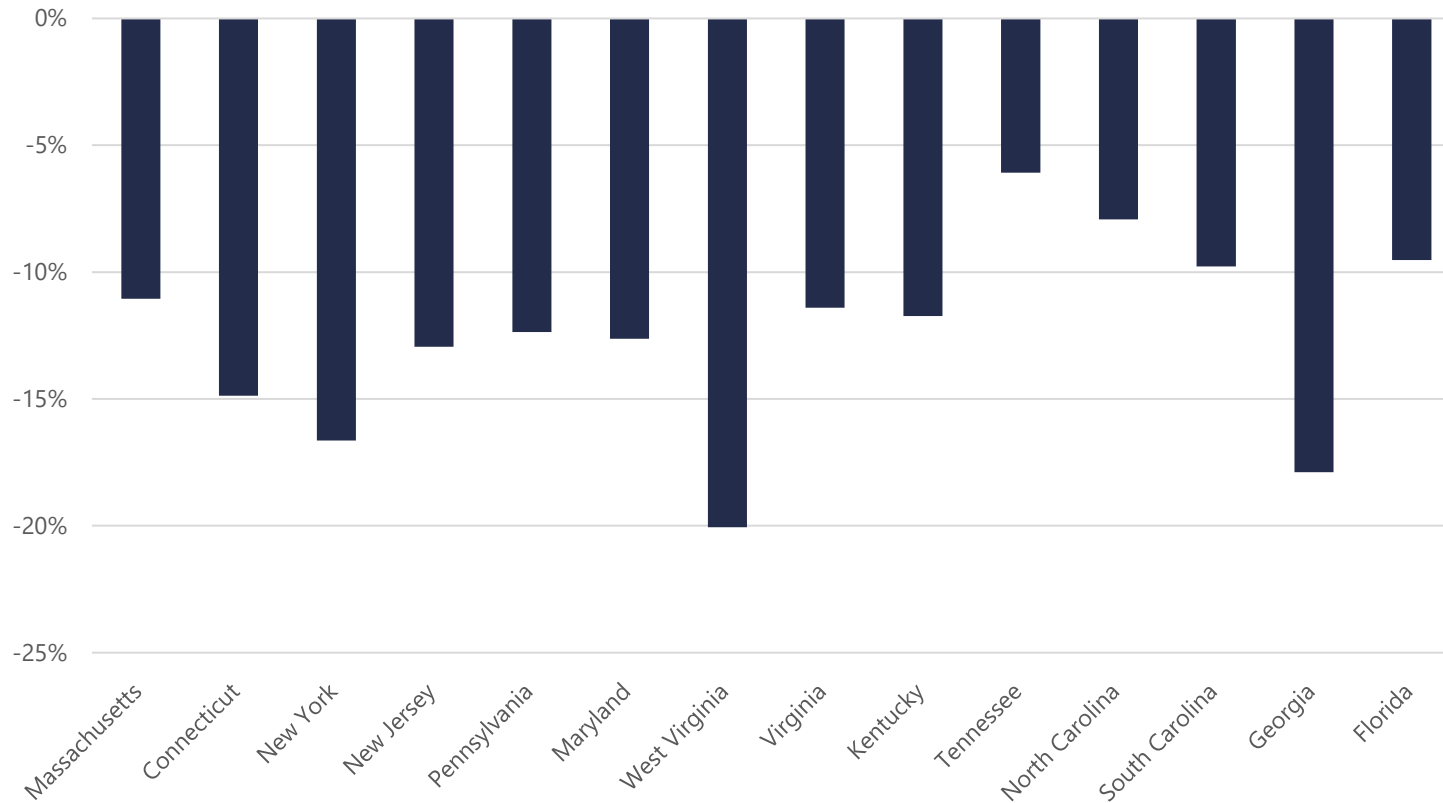


The decline in births since 2007 is the primary reason for projected declines in K-12 enrollment and high school graduates.

Annual Births have declined by 11 percent in Virginia since 2007.

After the fewest births in 2020 since the 1990s, the number of births in Virginia rebounded slightly in 2021.

## Virginia's decline in births is not unique



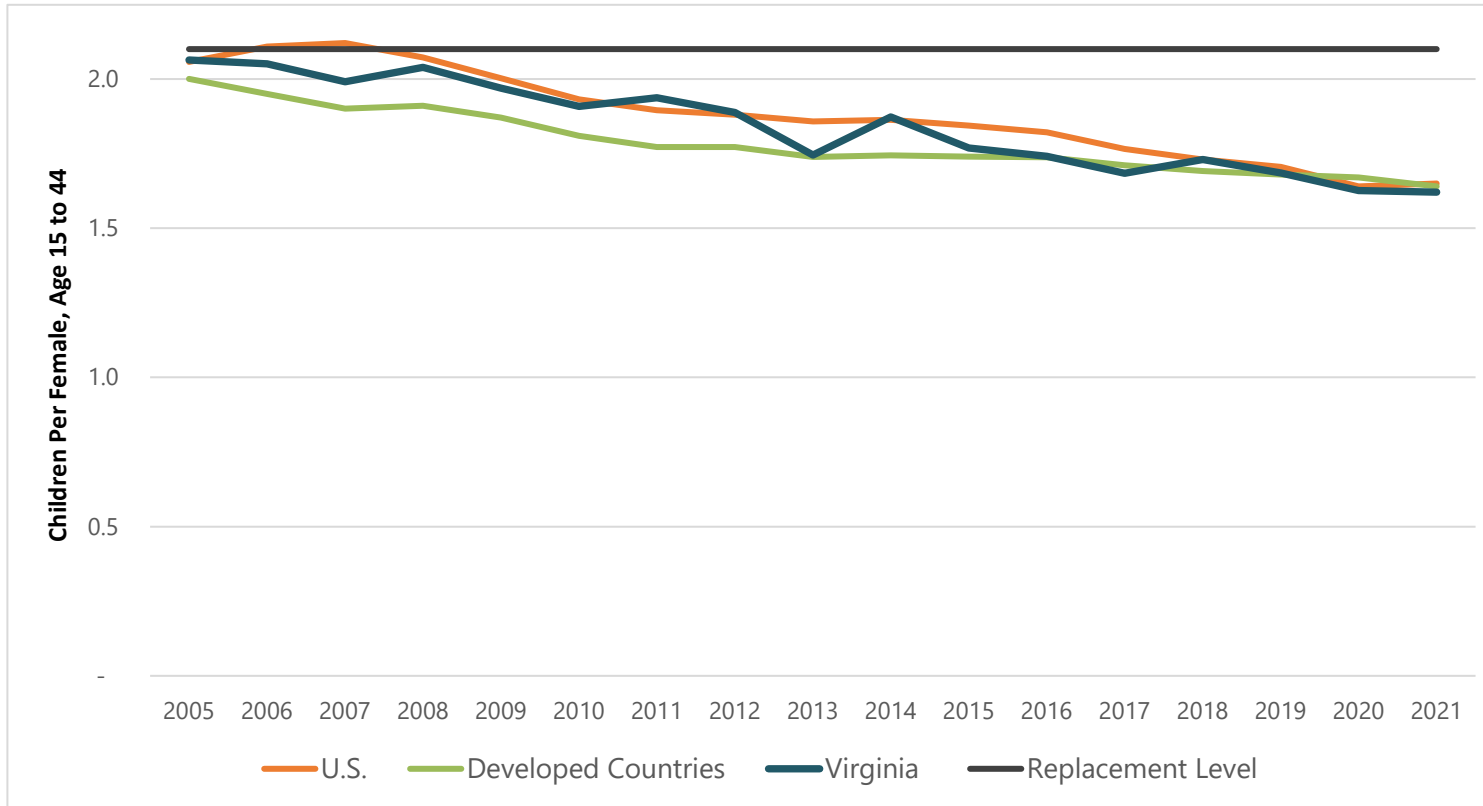
Change in Number of Births since 2007

Every state, except North Dakota, had fewer births in 2021 than 2007.

Virginia has experienced a more moderate decline in births than the U.S. as a whole (-11% vs -15%).

Northeast states have tended to experience a larger decline in births than Southeast states.

## Births are below replacement level in most developed economies



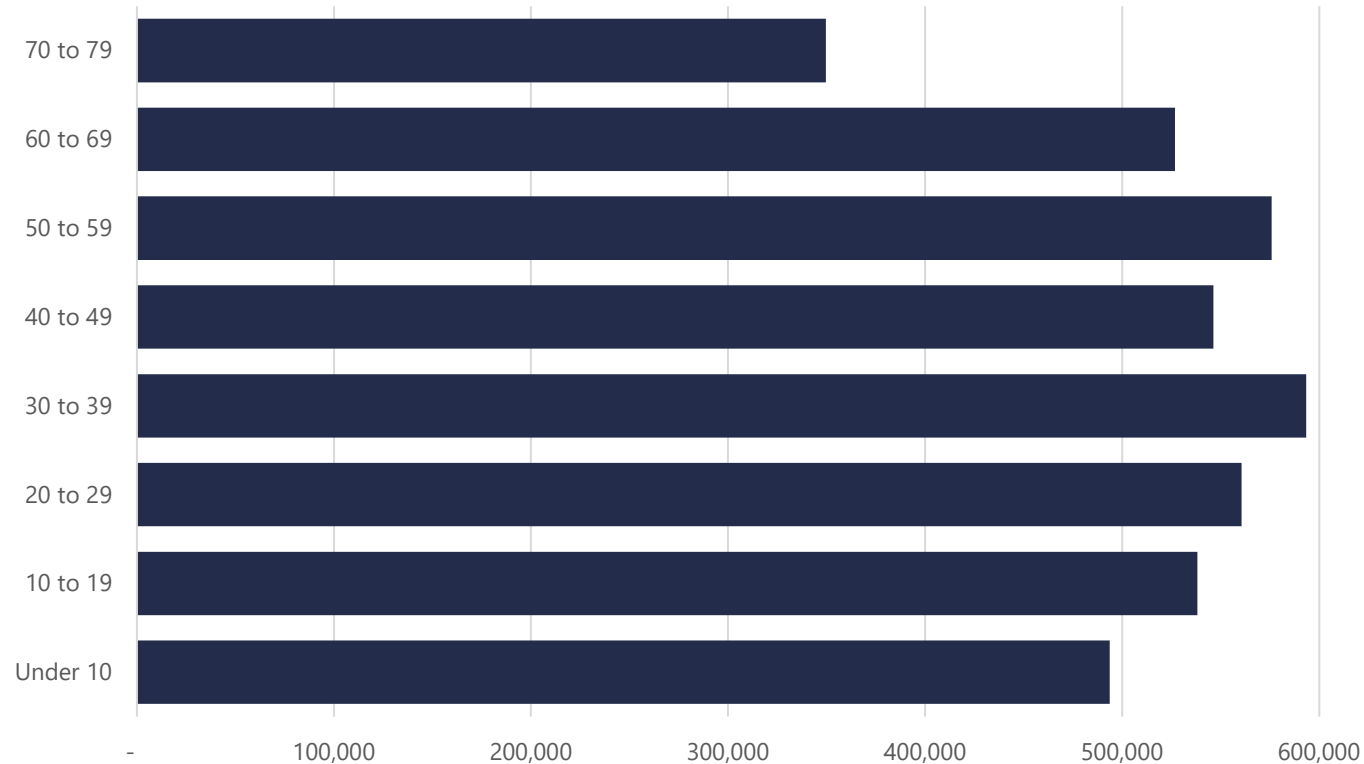
Total Fertility Rates

Since the 2000s, fertility rates have declined in the U.S. and most developed countries.

Every member of the Organisation for Economic Co-operation and Development (OECD) had a birth rate below the replacement level (2.1) in 2021, except Israel.

Fertility rates in Virginia and the U.S. are over 20 percent below levels needed to prevent population decline.

## Virginia's age structure puts it at risk of a further decline in births



Virginia Population by Age, 2021

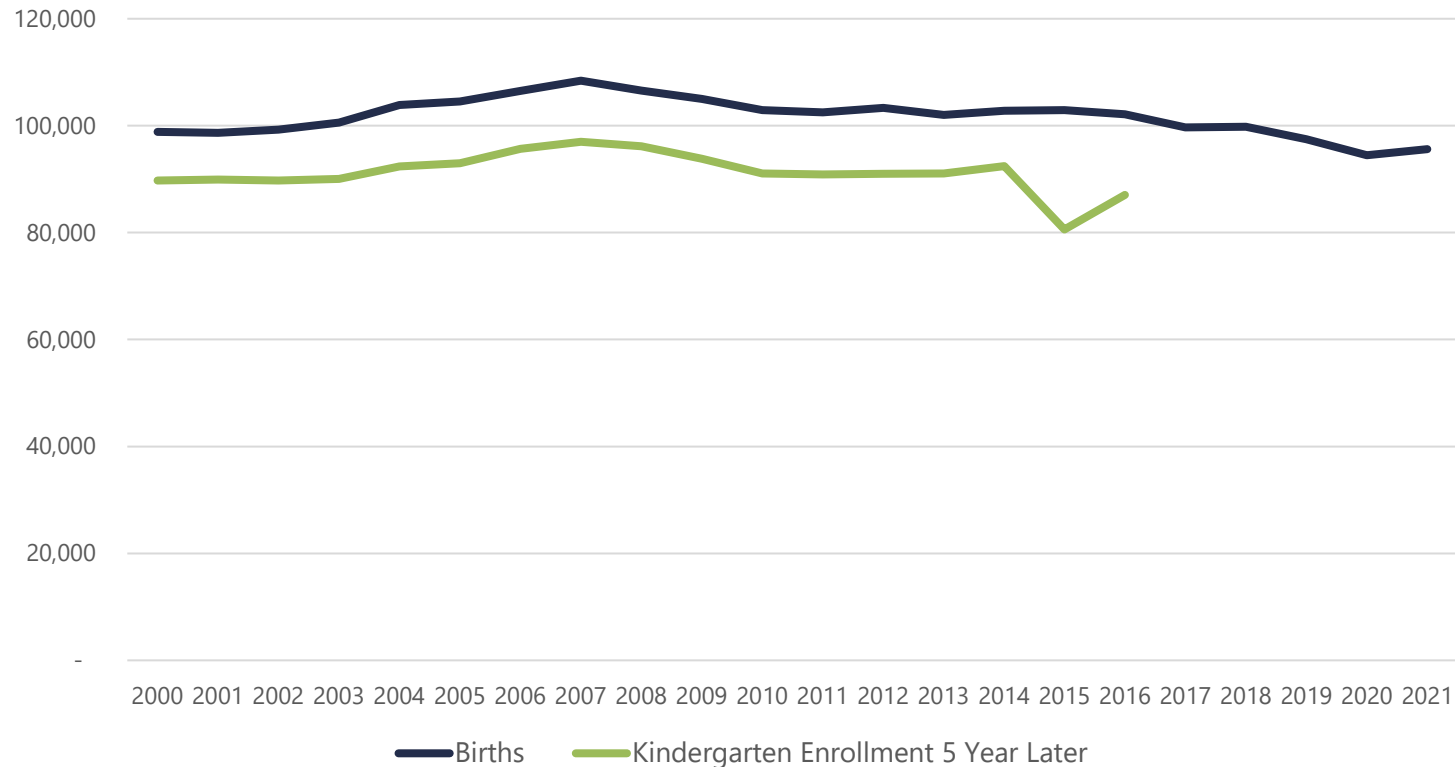
So far, Millennials are having fewer children than their parents, likely lowering Virginia's future K-12 enrollment.

With low birth rates since the 2000s, Virginia's labor force is no longer growing.

Sustained low fertility rates risk pulling Virginia and many OECD countries into a cycle of population decline.



# Birth rates are highly predictive of future school enrollments



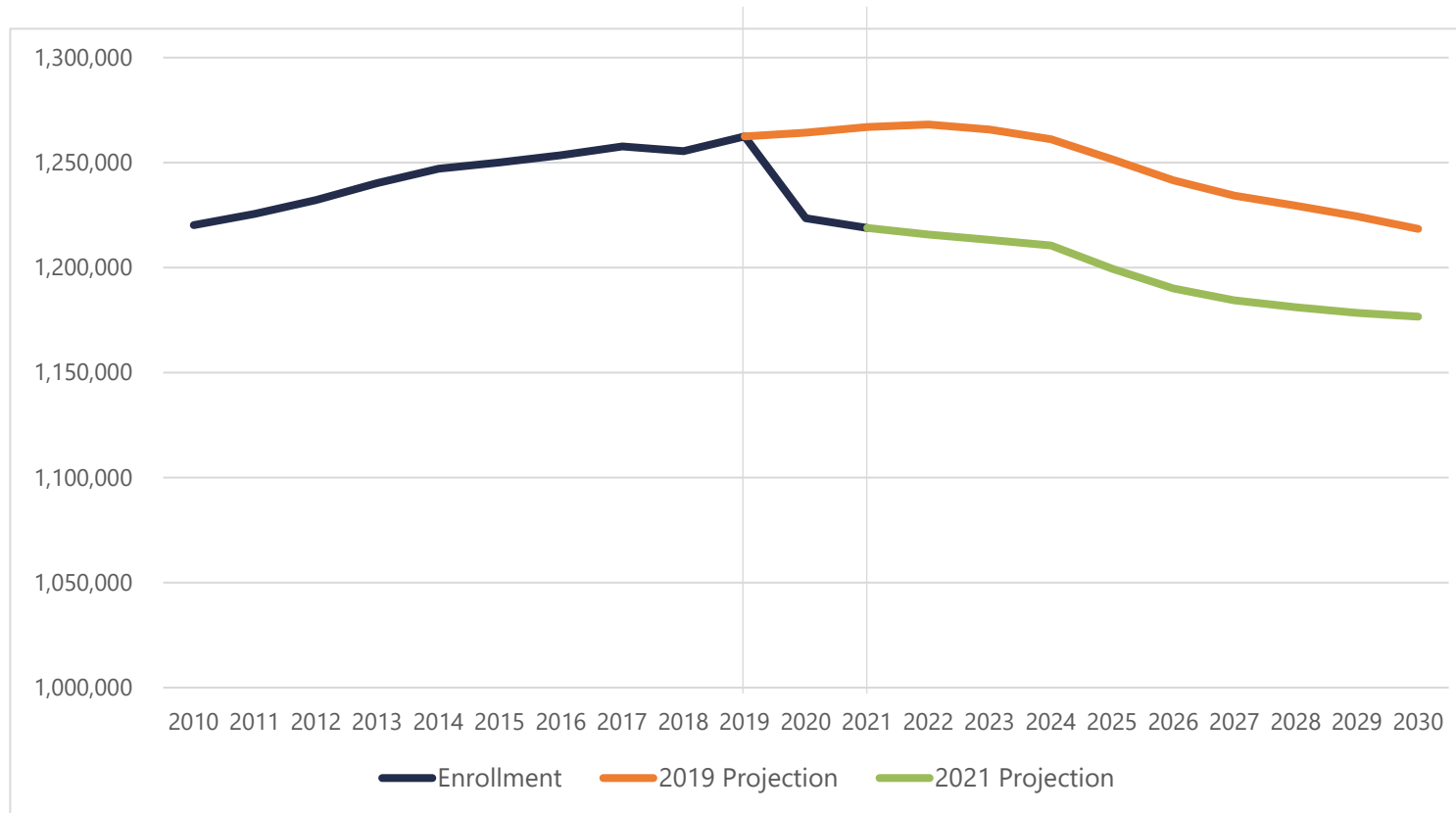
Virginia

Fewer births has meant fewer Kindergartners in Virginia.

Five years after births peaked in Virginia in 2007, Kindergarten class sizes began declining.

As the smaller student cohorts progressed Virginia's elementary enrollment began to decline in 2015. Middle school enrollment was expected to decline in 2020.

## Before 2020, K-12 enrollment was already expected to decline



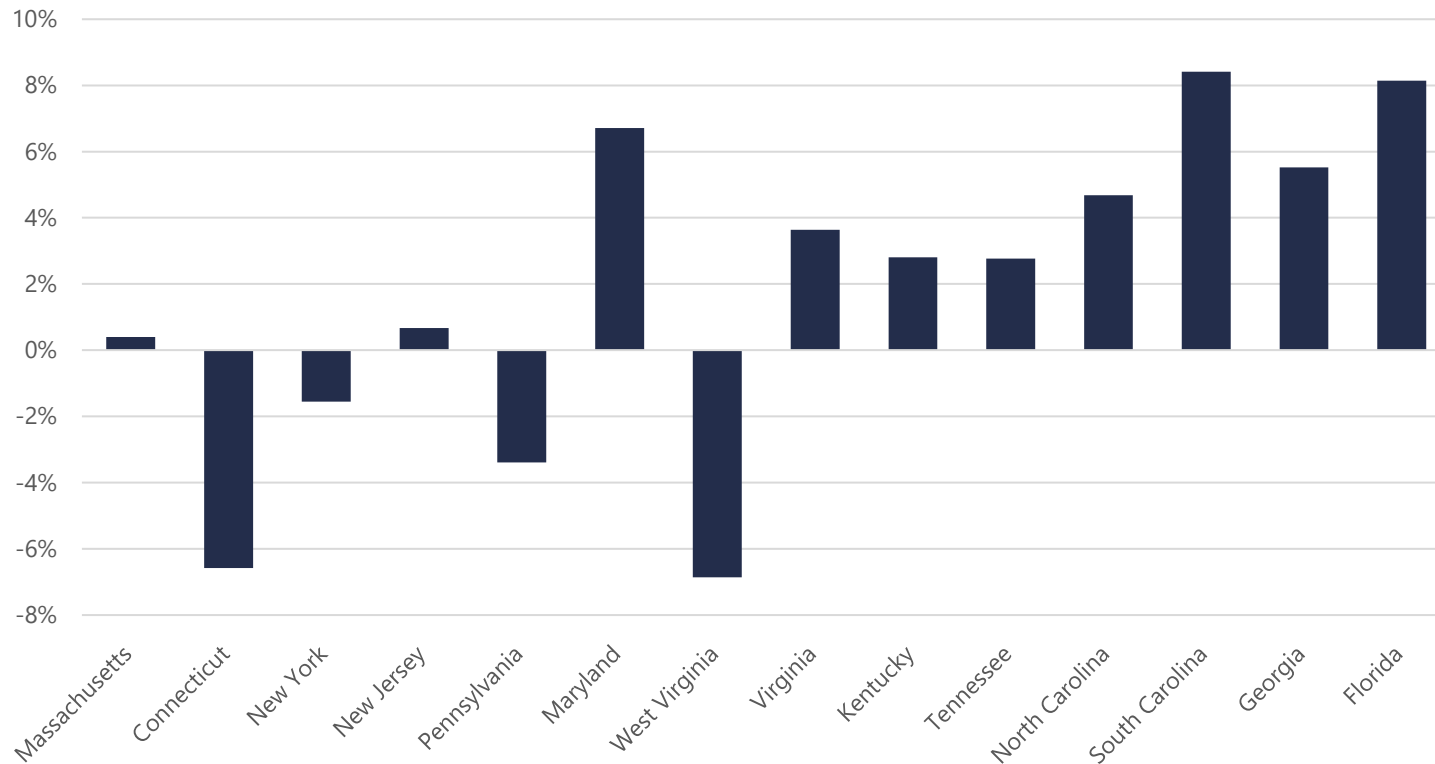
Virginia K-12 Public School Enrollment

Smaller student cohorts would have caused Virginia's total K-12 enrollment to begin declining in 2023.

Virginia's public schools in 2021 had nearly 50,000 fewer students than projected in 2019.

Pre-pandemic trends are expected to cause Virginia's public school enrollment to continue to decline for at least the next decade.

## K-12 enrollment trends varied among states during the 2010s



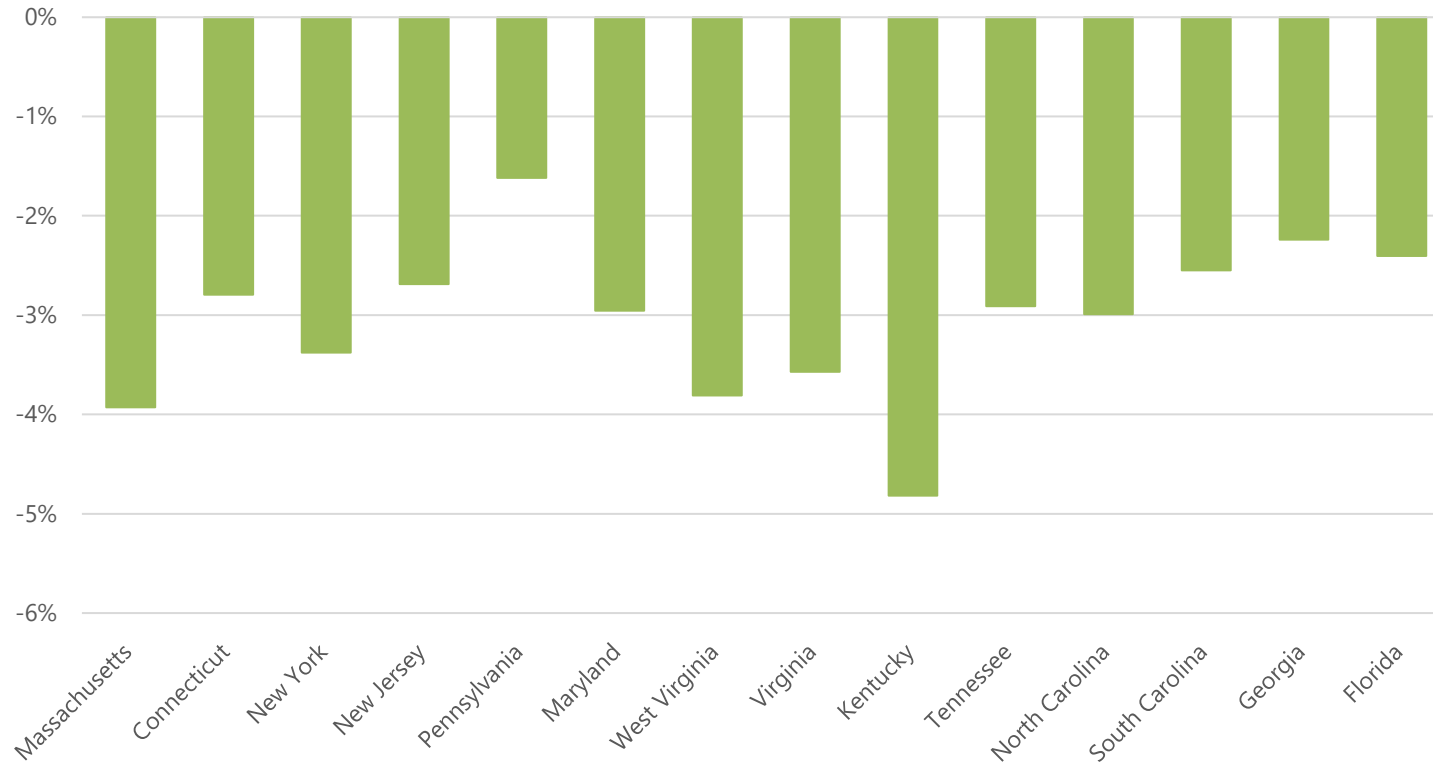
K-12 Percent Change, 2010 to 2019

Before the pandemic, student enrollment was growing in Southeastern States.

Student enrollment in Northeastern states was declining or growing slowly.

Virginia's enrollment growth was balanced between trends seen in its Northeastern and Southeastern neighbors.

## Public school enrollment declined nationally during the pandemic



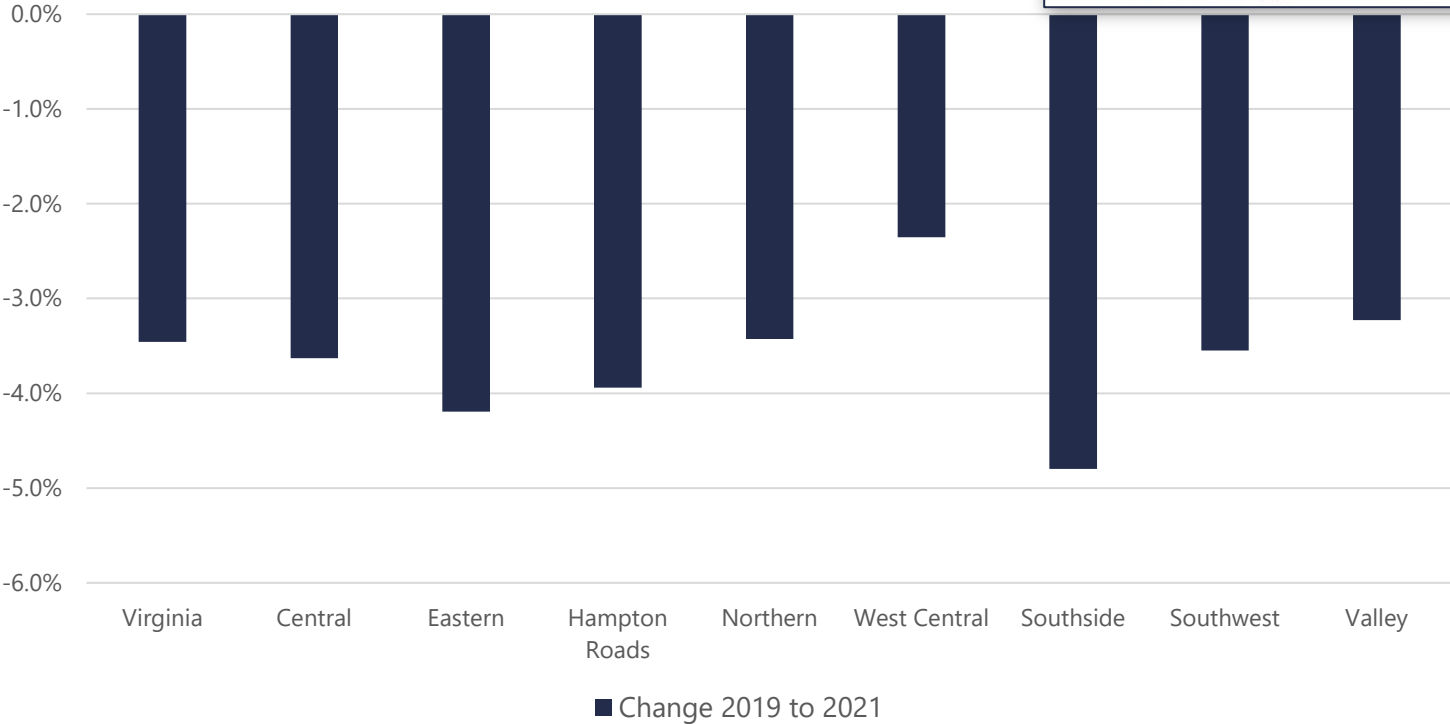
K-12 Percent Change, 2019 to 2020

Between the fall of 2019 and the fall of 2020, public school enrollment in every state declined.

Virginia's public school experienced the 12<sup>th</sup> largest percentage decline in enrollment among states.

Southeastern states experienced slightly smaller enrollment declines than Northeastern states.

# K-12 enrollment declined throughout Virginia between 2019 and 2021



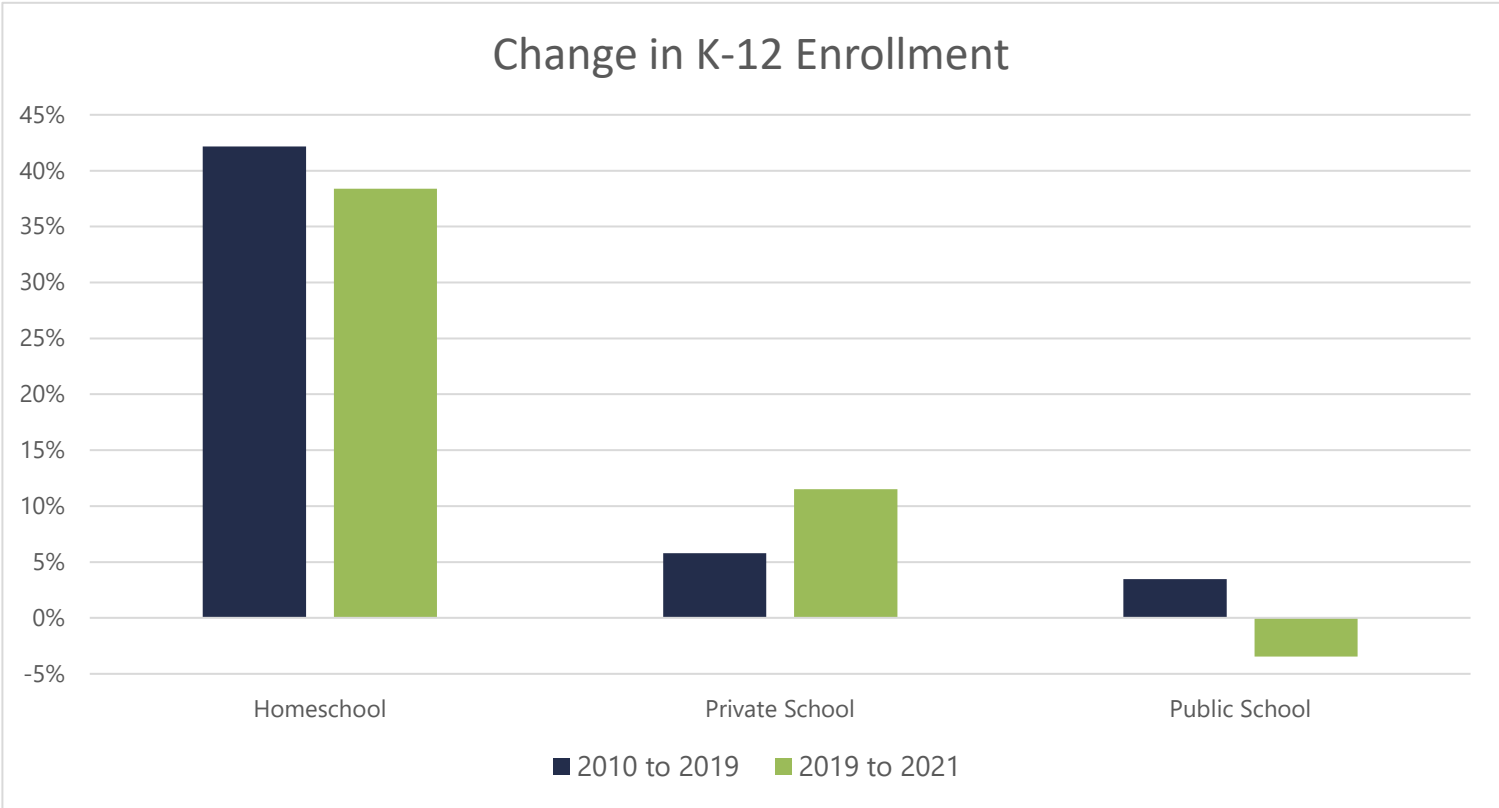
Enrollment in nearly every Virginia school division declined between 2019 and 2021.

Enrollment declines were concentrated in the elementary grades.

Initial Fall 2022 enrollment data indicates Virginia public schools have seen little recovery in enrollment.

K-12 Public School Enrollment Change, 2019 to 2021

Since 2020, tens of thousands of students continue to be educated at home or in private schools



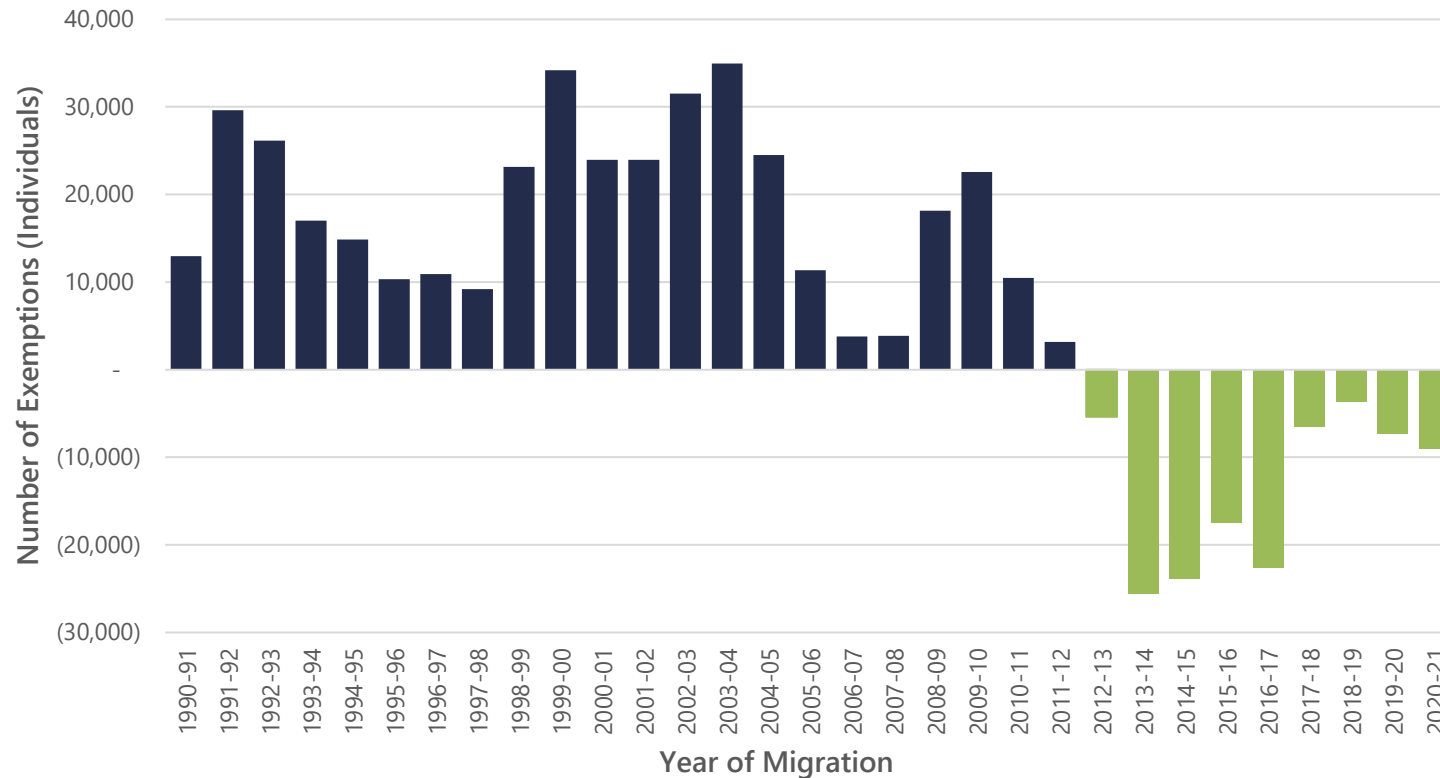
Home school enrollment in Virginia has grown steadily for decades. Helping increase the percent of Virginia children educated privately.

Home school enrollment in 2022 remained close to the record high set in 2020.

Enrollment in private schools continued to grow in 2022.

Change in K-12 Enrollment since 2010

# The shift to out-migration has slowed Virginia's population growth



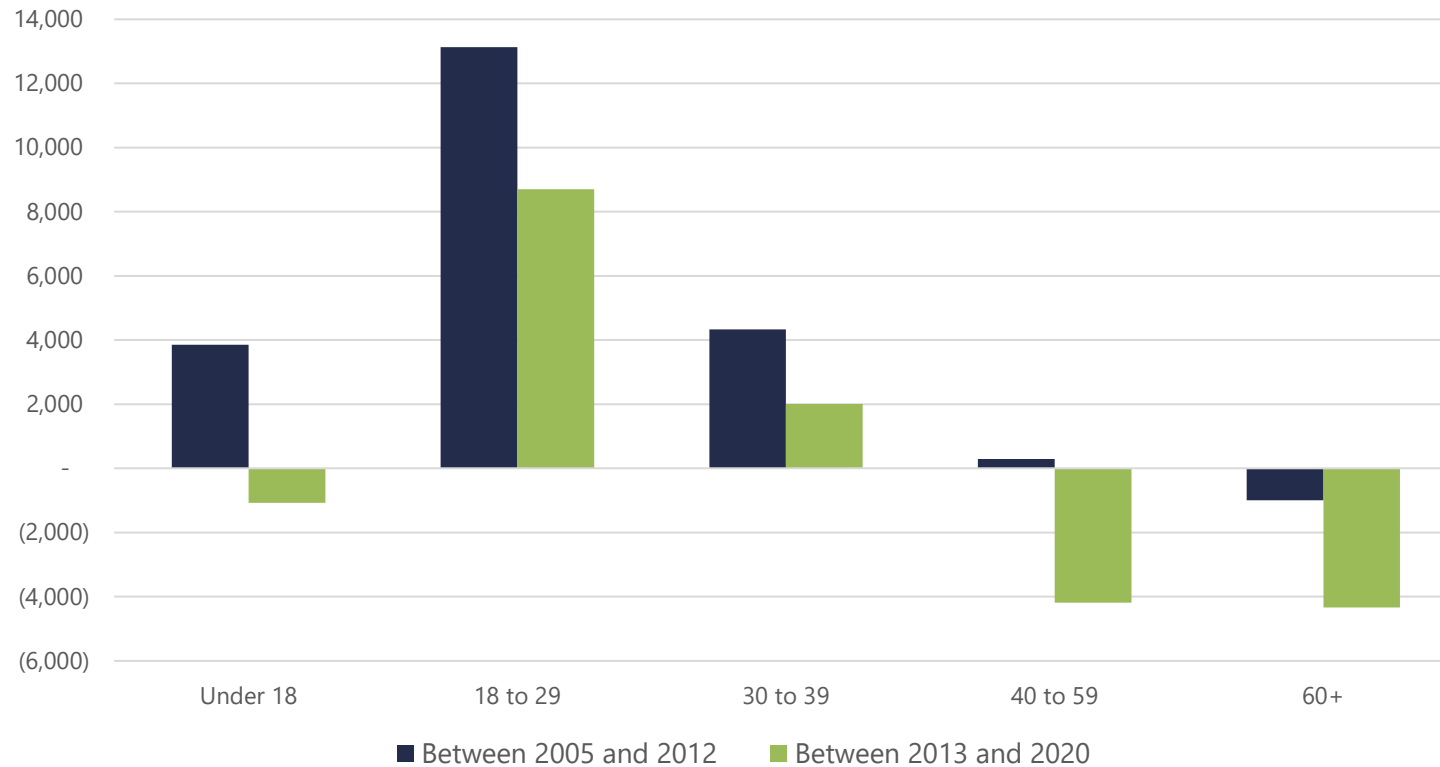
Virginia Net Migration

Before 2013, more people moved to Virginia from other states than out every year since the Second World War.

Virginia remains a gateway for new immigrants but older foreign born Virginians are increasingly leaving the commonwealth for other states.

Out-migration has slowed growth, causing Virginia to have 180,000 fewer residents in 2020 than would have been expected.

## More families with children and retirees are leaving Virginia



Average Annual Migration to Virginia by Age

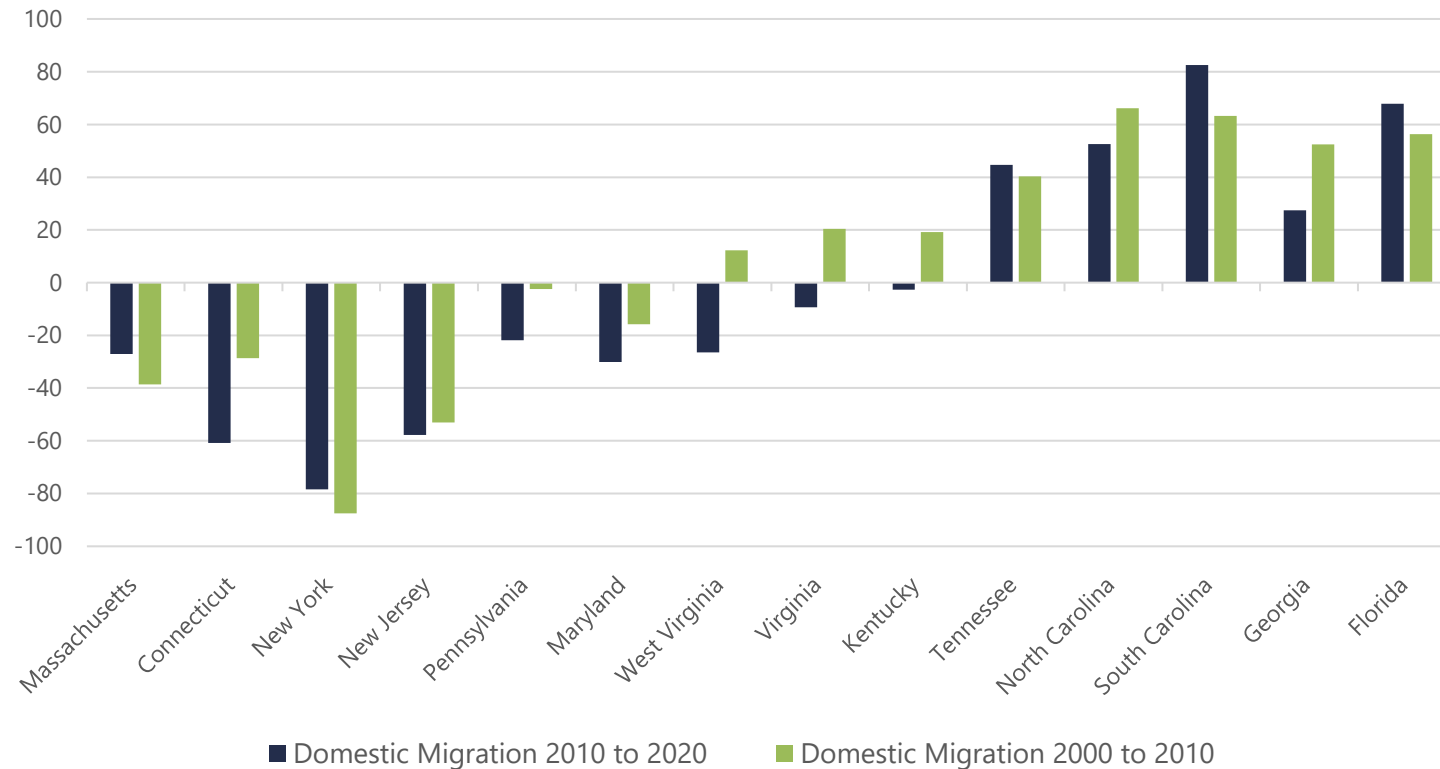
Virginia has experienced decline in in-migration across all age groups.

The largest decline in-migration was among the age 18 to 29 population, which is shrinking in Virginia.

Fewer young adults is causing Virginia's labor force to shrink and births to decline further.



## Southern states have attracted millions of residents from the North



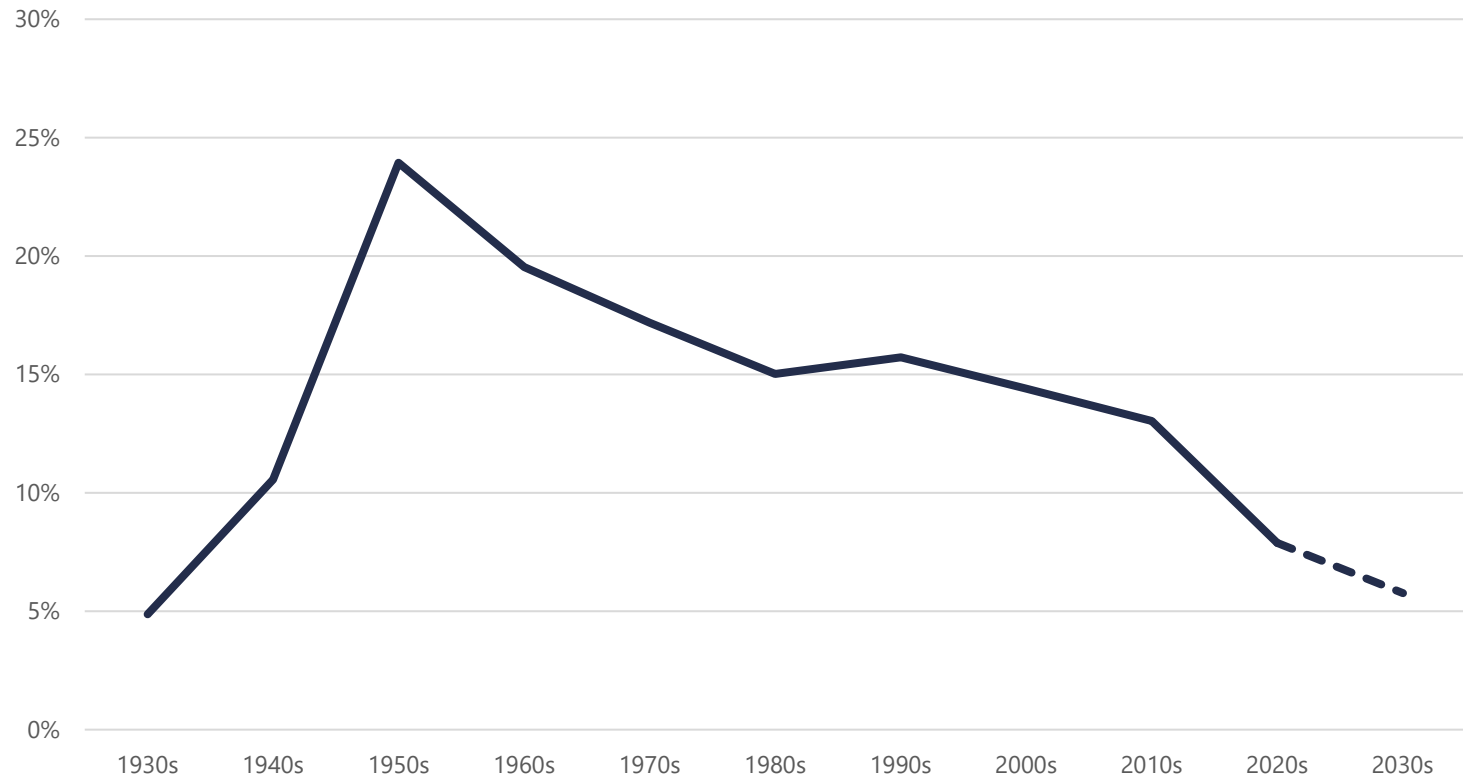
Domestic Migration, 2010 to 2020

During the 2010s, migration patterns in Virginia shifted to being more similar to its Northeastern neighbors.

Northeastern states' populations grew slowly or declined as many residents left.

Migration between states has helped drive K-12 enrollment and birth trends.

## Virginia's growth slowed sharply during the 2010s



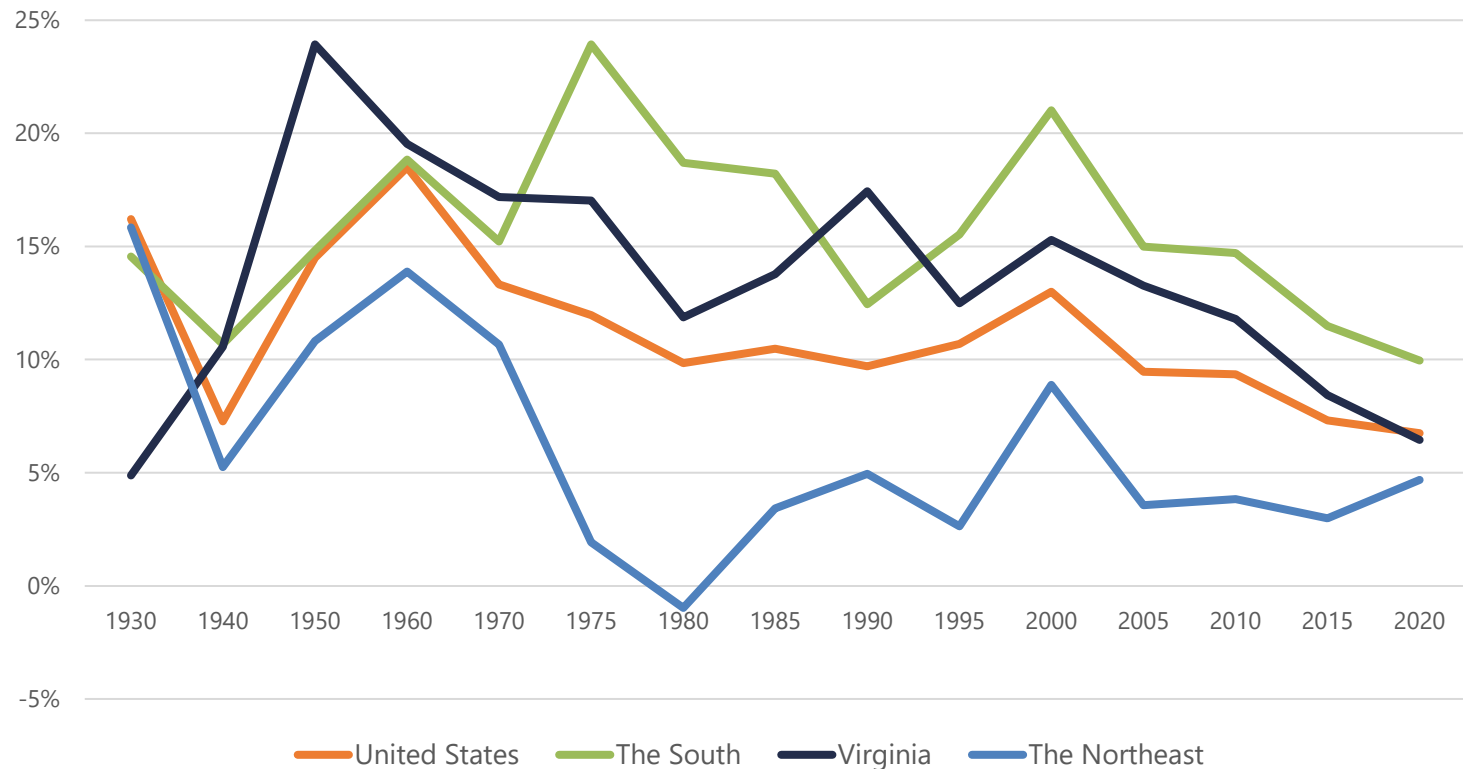
Virginia Population Change by Decade

Virginia's population growth accelerated after the Second World War, primarily by attracting new residents.

After peaking in the 1950s, growth has slowed each decade with the exception of a boost from the 1990s dot-com boom.

The shift to out-migration caused a sharp slowdown in growth during the 2010s. Growth will slow further in the 2020s.

## Virginia grew faster than the country for decades, until the 2010s



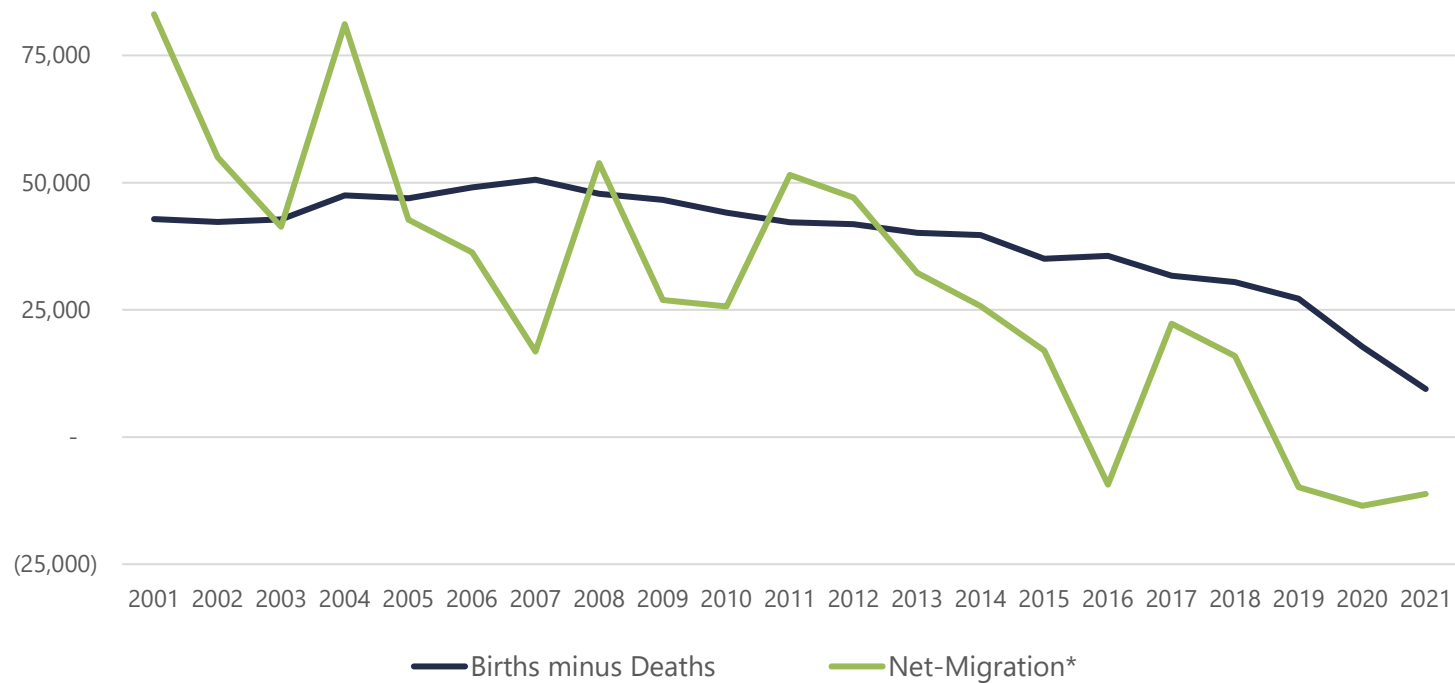
Decennial Population Change

Population growth has slowed in most of the country in recent decades.

Virginia's population grew faster than the rest of the country every decade after the Second World War.

Since the mid-2010s, Virginia's population has grown more slowly than the rest of the country.

# Migration and Virginia's birth/death balance are slowing growth



\*Net-migration includes an estimate of international migrants not counted by the IRS

## Virginia's Components of Population Change

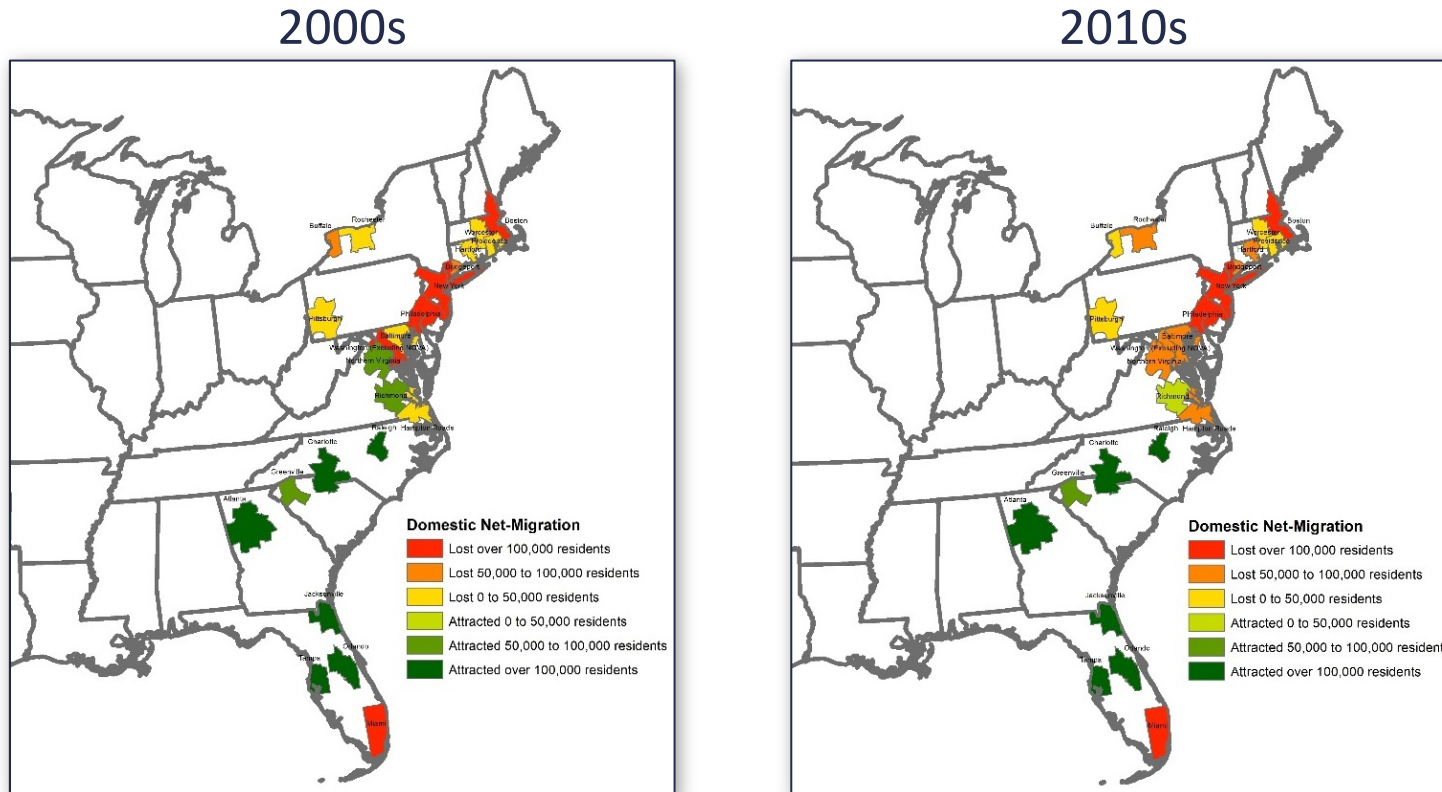
Virginia's aging population is helping increase death rates and lower birth rates.

Annual growth from having more births than deaths has nearly halved, from 50,580 in 2007 to 27,192 in 2019.

Virginia continues to attract immigrants but they have fewer children today than in the past.

# Northern Virginia caused Virginia's shift to out-migration

More people moved out of Northern Virginia than in during the 2010s.

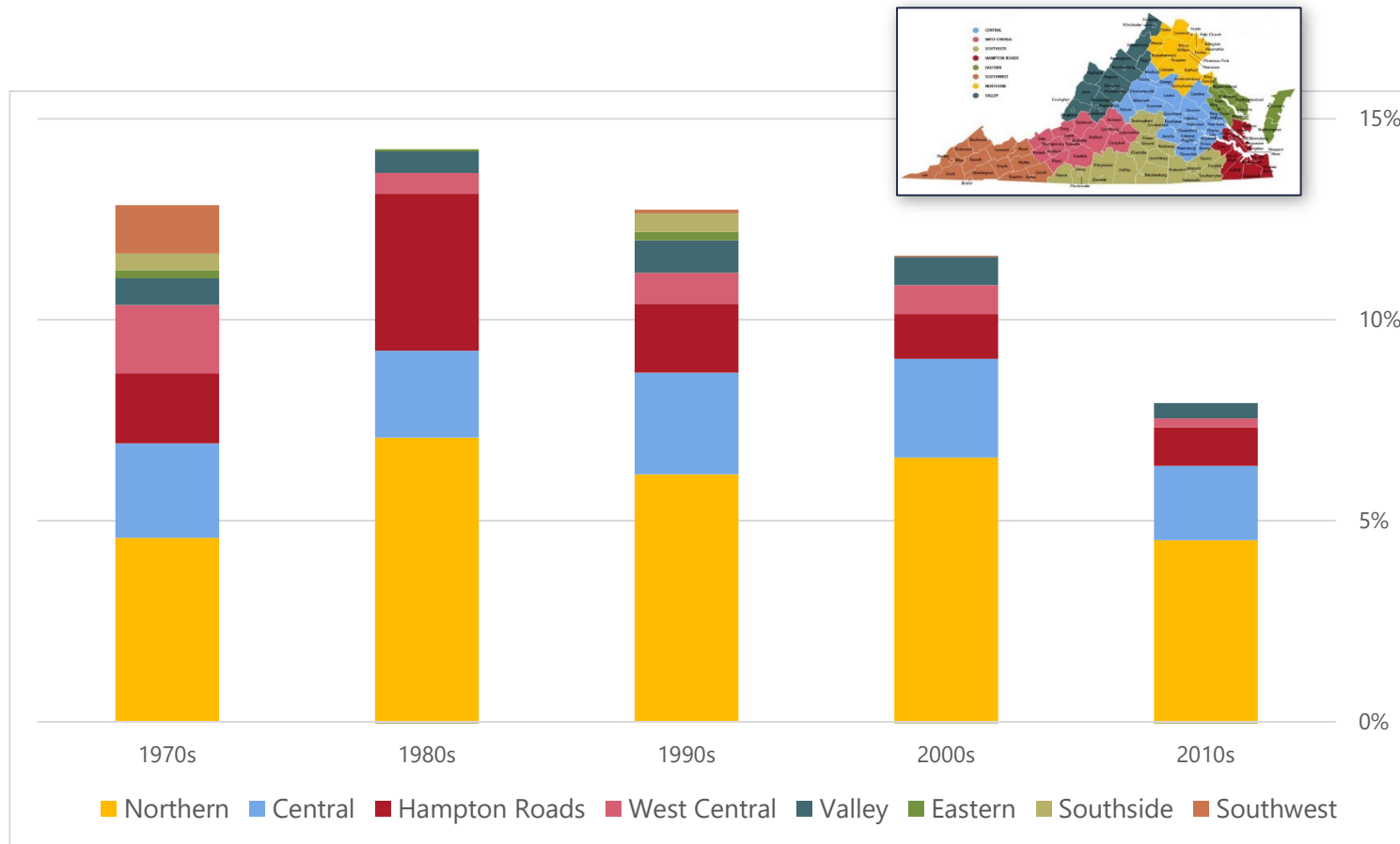


In 2019, Arlington and Fairfax had the highest median home values among East Coast counties, after only Martha's Vineyard and Nantucket.

Most Northern Virginians moved to southern metro areas with strong economies.

Domestic Migration

# Migration from Northern Virginia has slowed Virginia's population growth

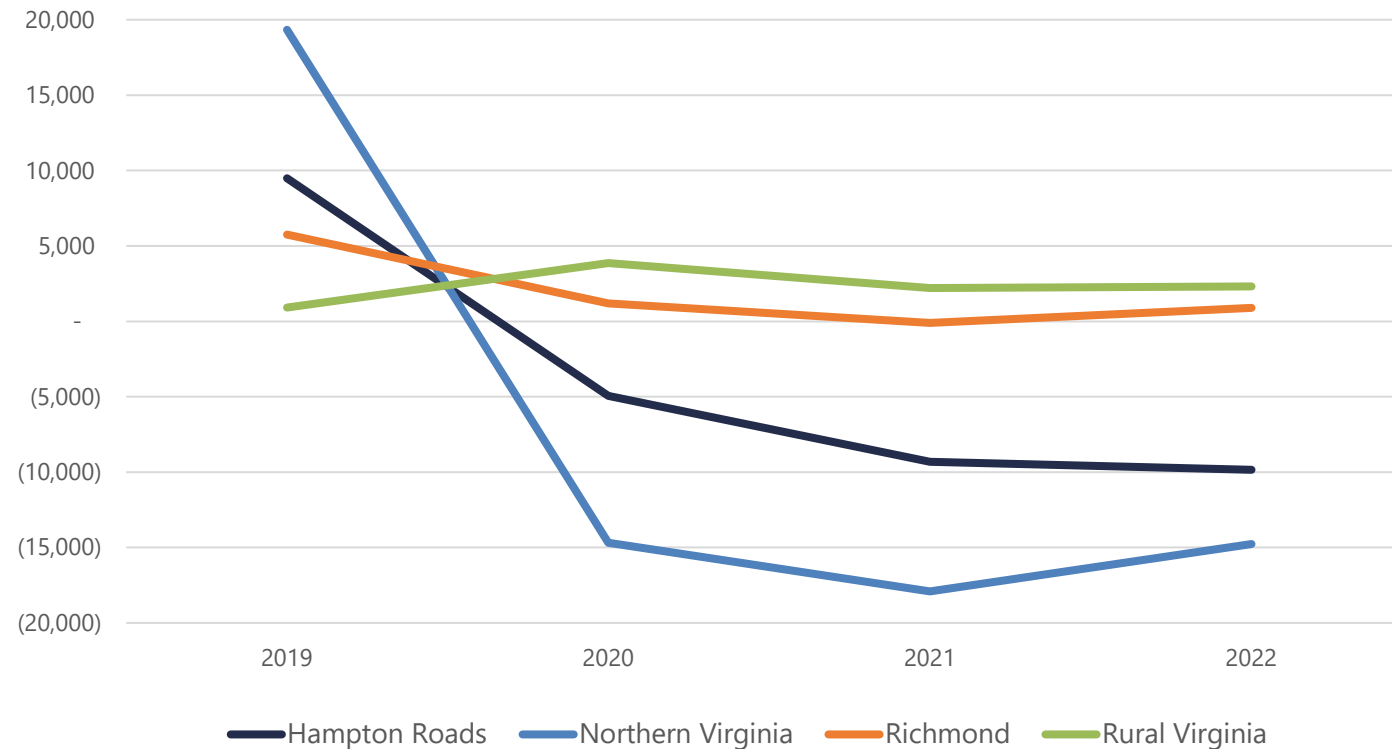


In the 2010s, Hampton Roads, Northern Virginia and Richmond accounted for 90 percent of Virginia's population growth.

Over half of growth since 1990 and over 60 percent of growth during the 2010s was in Northern Virginia.

During the 2010s, more Northern Virginians moved out of state and fewer moved to the rest of Virginia.

## The pandemic caused fewer people to move to Northern Virginia and Hampton Roads



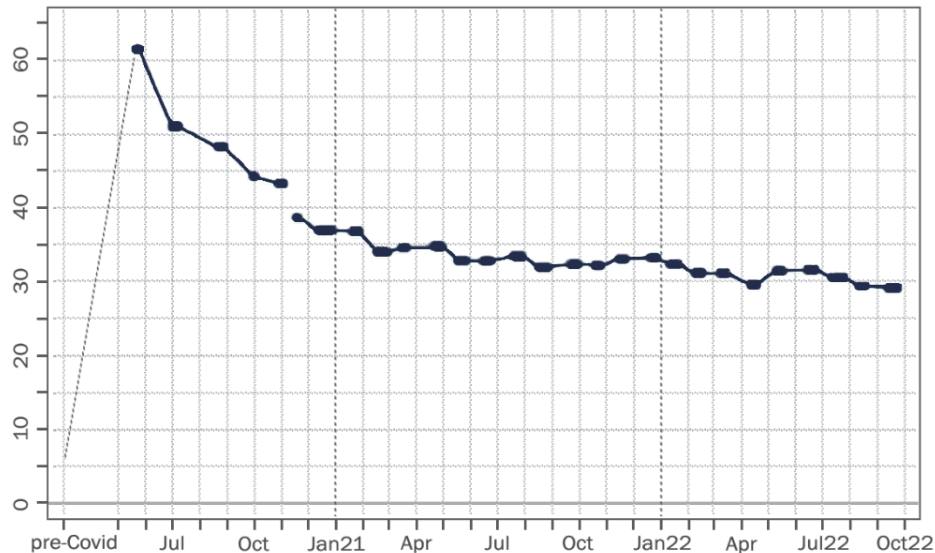
Change in Address due to Migration

Fewer people have moved to large U.S. metro areas since 2020.

Rural areas and most small metro areas in Virginia and across the country have attracted more residents since 2020.

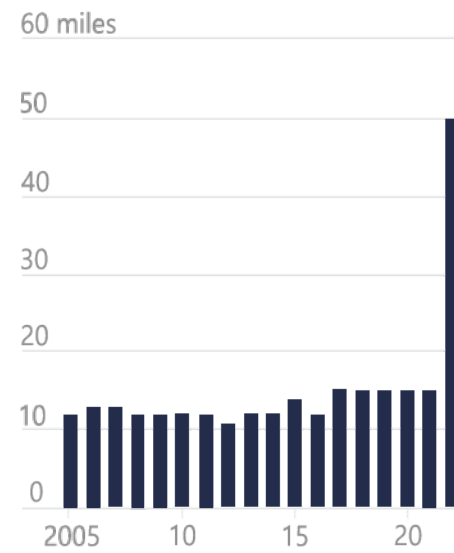
Postal Service change of address data shows little return to pre-2020 migration trends so far.

# Remote work has caused a lasting shift in demographic trends



Percent of Paid Full Days Worked from Home

Pre-COVID estimate taken from the 2017-2018 American Time Use Survey  
The break in the series in November 2020 reflects a change in the survey question.  
Source: Nick Bloom, Stanford University Work from Home Monthly Survey



Median distance between recently purchased home and previous residence

Note: Data are for years ended in June.  
Source: National Association of Realtors

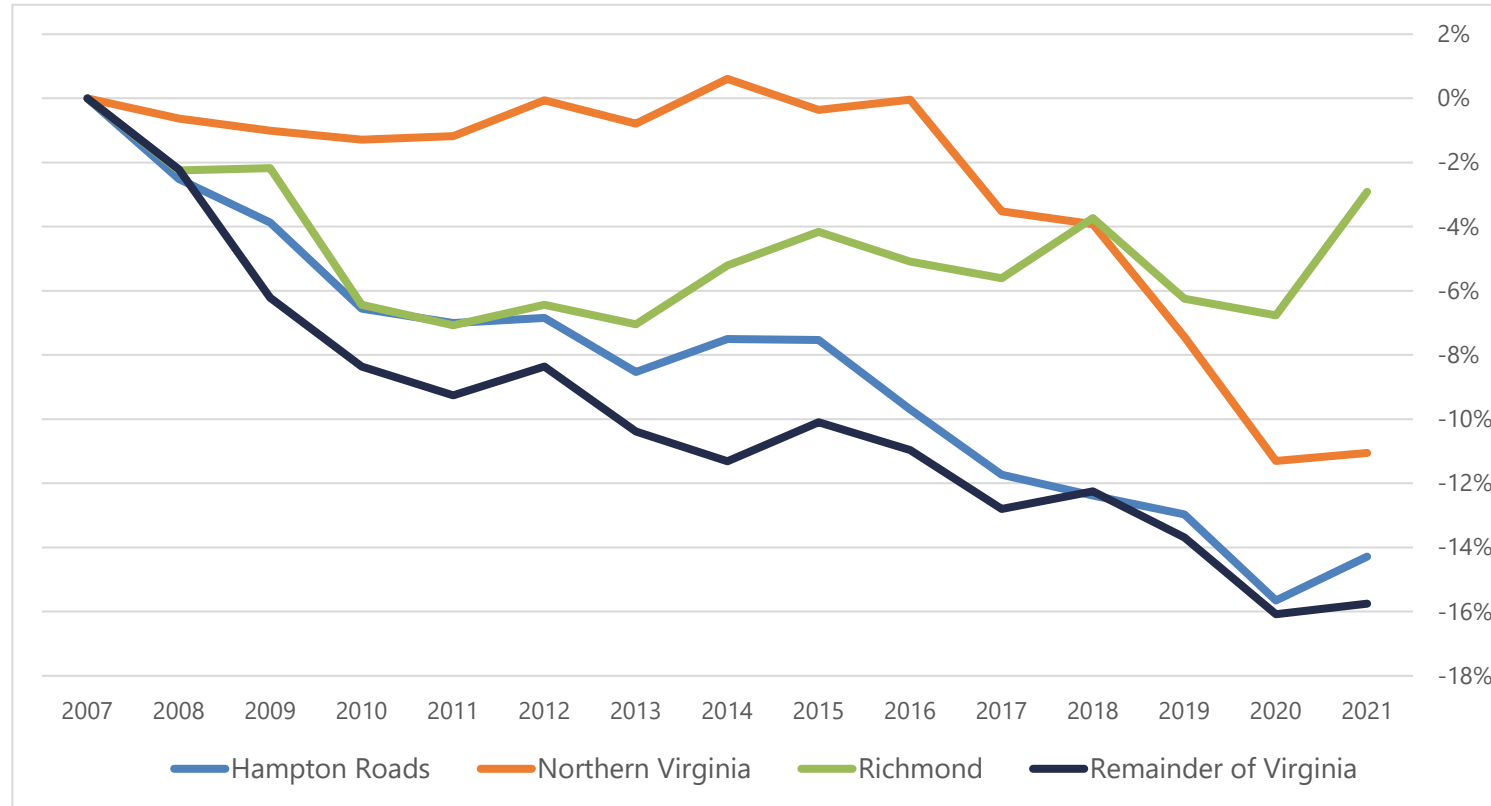
In October of 2022, close to a third of all work was still being done remotely, up from 6 percent in 2019.

Since 2020, the populations of 14 of the 25 largest U.S. metropolitan areas have declined, including the Washington D.C Metro Area.

Most popular vacation counties already had relatively high telecommuting rates during the 2010s. Since 2020, many have grown in population.



# Births have not declined evenly throughout Virginia



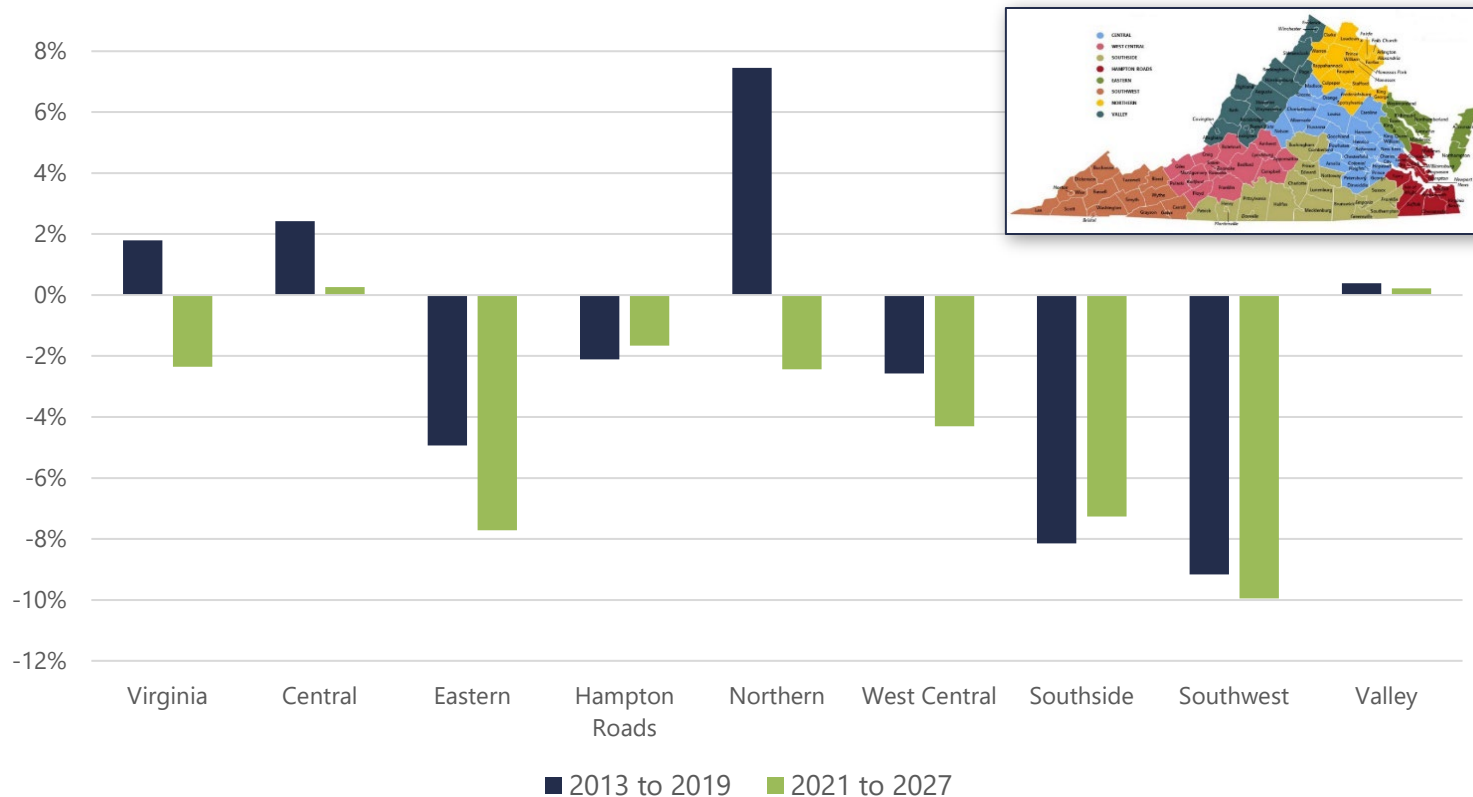
Change in Births since 2007

During the late 2000s recession, births initially declined the most in Virginia's rural communities and small metro areas.

In the Richmond Metro Area birth rates have nearly recovered to mid-2000s levels.

Since 2014, births have declined sharply in Northern Virginia. Births have fallen by 17 percent in Fairfax and by 23 percent in Arlington.

Virginia's K-12 enrollment trends for the 2020s are much more certain than its other population trends.



Fewer births will mean even more widespread enrollment decline during the 2020s than seen in the 2010s.

Northern Virginia is expected to experience a significant change in enrollment trends.

The shift to remote work has significantly changed Virginia's population trends, the long term impacts of the shift remain unclear.

Pre and Post Pandemic: K-12 Public School Enrollment Change

# Demographic Trends in Virginia

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