

The Great People Shortage and its Effects on the Hudson Valley



A research brief by Hudson Valley Pattern for Progress

April 2023

This research brief was inspired by a trend that elected leaders, economic development experts, and business owners have felt across the Hudson Valley for the past several years. Our neighbors often hint at this trend through a nagging set of questions they have been asking more frequently.

Why is there such a shortage of nurses, restaurant wait staff, and cashiers?

Why am I receiving fewer and fewer applications when I post a job?

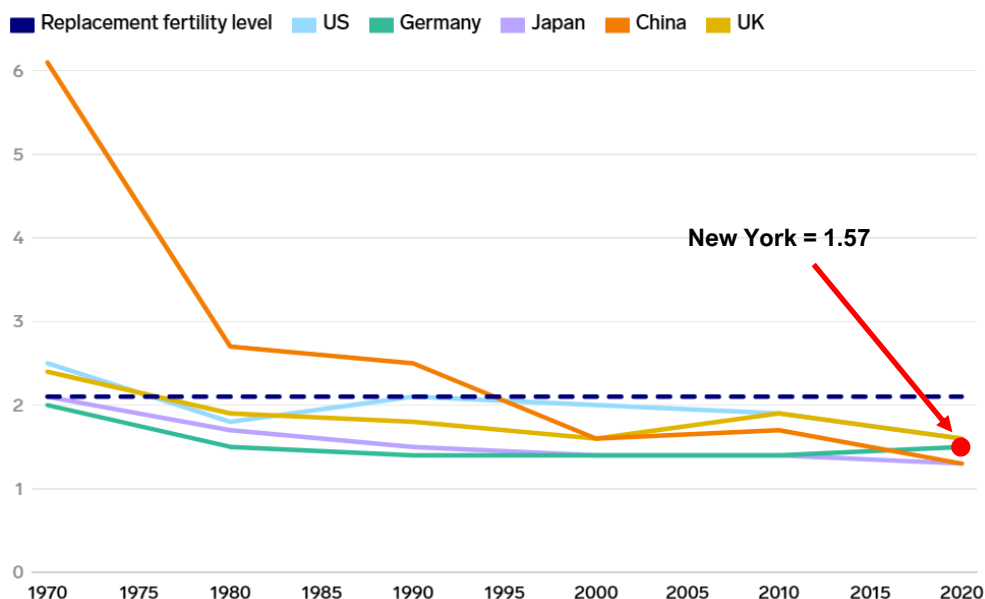
Have you noticed that it's taking months to get an appointment to fix your car, paint your house, or get your annual medical check-up?

Data show that the Hudson Valley is experiencing the start of The Great People Shortage, a term that demographers and economists are using for the steady trend toward global population decline. Higher living standards, rising costs, and other factors have pushed global birth rates below the threshold that is necessary to keep populations stable.¹

That means there are fewer of us to work, volunteer, and consume goods. That fact comes with many ramifications.

Some are good. For example, fewer people to feed and less travel would likely reduce emissions that cause climate change. But shrinking populations will also exacerbate labor shortages, shrivel markets for consumer goods, and put upward pressure on wages. **Data show that this trend is already happening in the Hudson Valley.** We will share the trends from our region in the pages that follow by tracking births, school populations, migration and labor cohorts. We will also share the consequences of The Great People Shortage in the Hudson Valley and potential solutions.

Total birth rates



¹ Data in the chart are from the United Nations Population Division, [as published in a 2022 story in Business Insider](#), and the CDC.



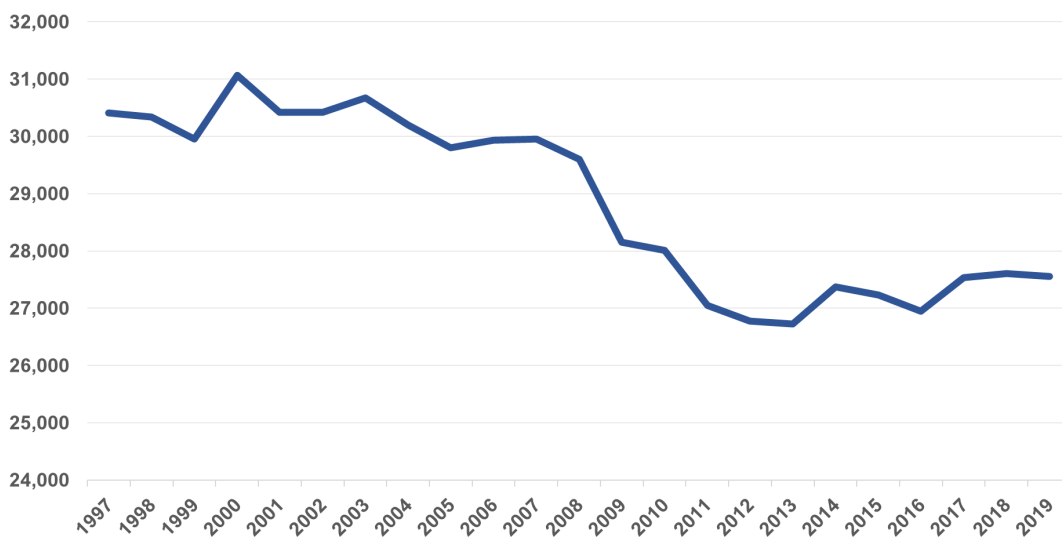
Births in the Hudson Valley

Change in Annual Live Births 1997-2019

County	1997	2019	Difference	Percent change
Columbia	664	479	-185	-27.8%
Dutchess	3,399	2,699	-700	-20.5%
Greene	491	360	-131	-26.6%
Orange	4,869	5,192	323	+6.6%
Putnam	1,227	797	-430	-35.0%
Rockland	4,341	5,721	1,380	+31.7%
Sullivan	839	877	38	+4.5%
Ulster	1,922	1,520	-402	-20.9%
Westchester	12,655	9,906	-2,749	-21.7%

Source: New York State
Department of Health Vital Statistics

Total Live Births in the Hudson Valley 1997-2019



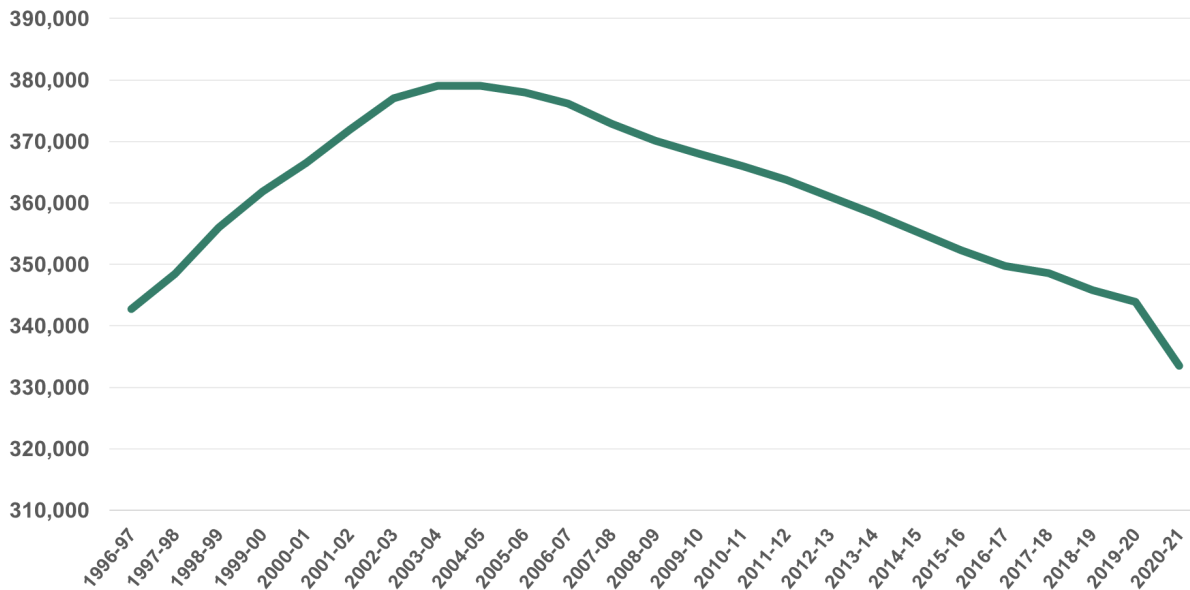
Key Takeaways

- Total annual births are down about 3,000, or about 10% since 1997. The year-over-year decline has been relatively steady from 1997-2019.
- Individually, most counties in the Hudson Valley have seen their annual number of births decline by 20-35% over the past two decades.
- The only counties with increasing annual births are those with year-round Orthodox Jewish communities. Data show that births in those counties (Orange, Rockland and Sullivan) would also be declining without those Orthodox Jewish towns or villages. Rockland County is one example. The Town of Ramapo, home to most of the Rockland's Orthodox communities, saw its births increase by 41% from 2002-2015. Births in the other four towns in Rockland declined by 10-32%. The same is true in Orange County, where births in the Village of Kiryas Joel increased by 84% but practically all the remaining towns in the county declined by double-digit percentages.

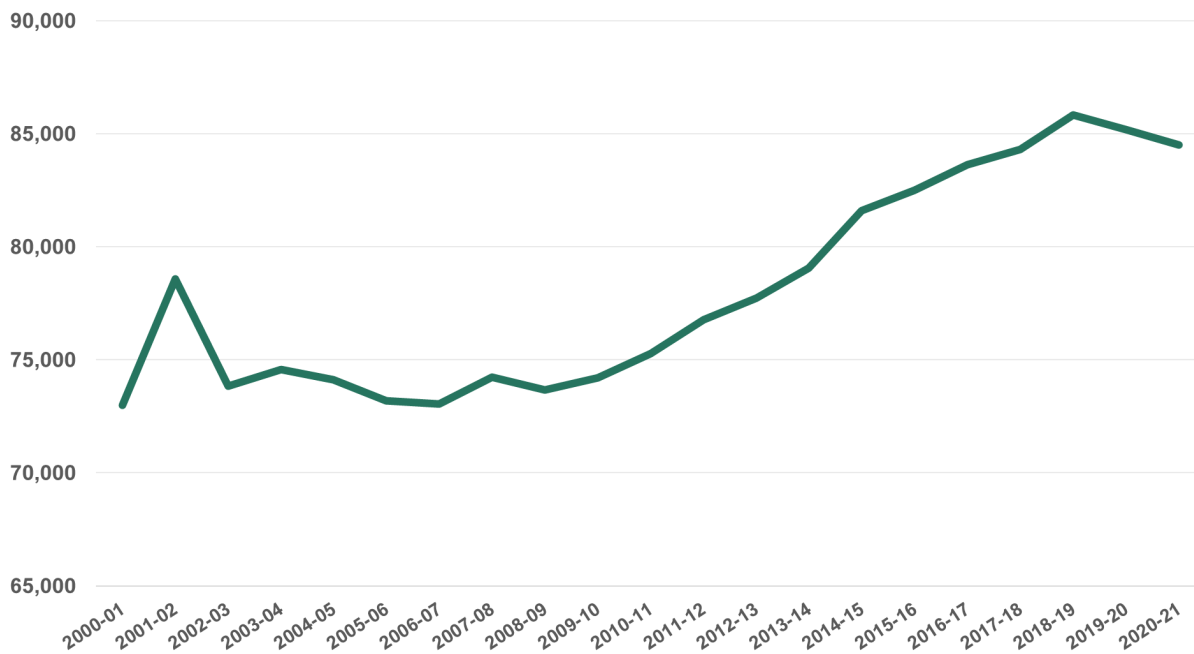


School populations

Pre-K Through 12th Grade Total Public Enrollment in the Hudson Valley



Pre-K Through 12th Grade Total Non-Public Enrollment in the Hudson Valley



Source: New York State Department of Education

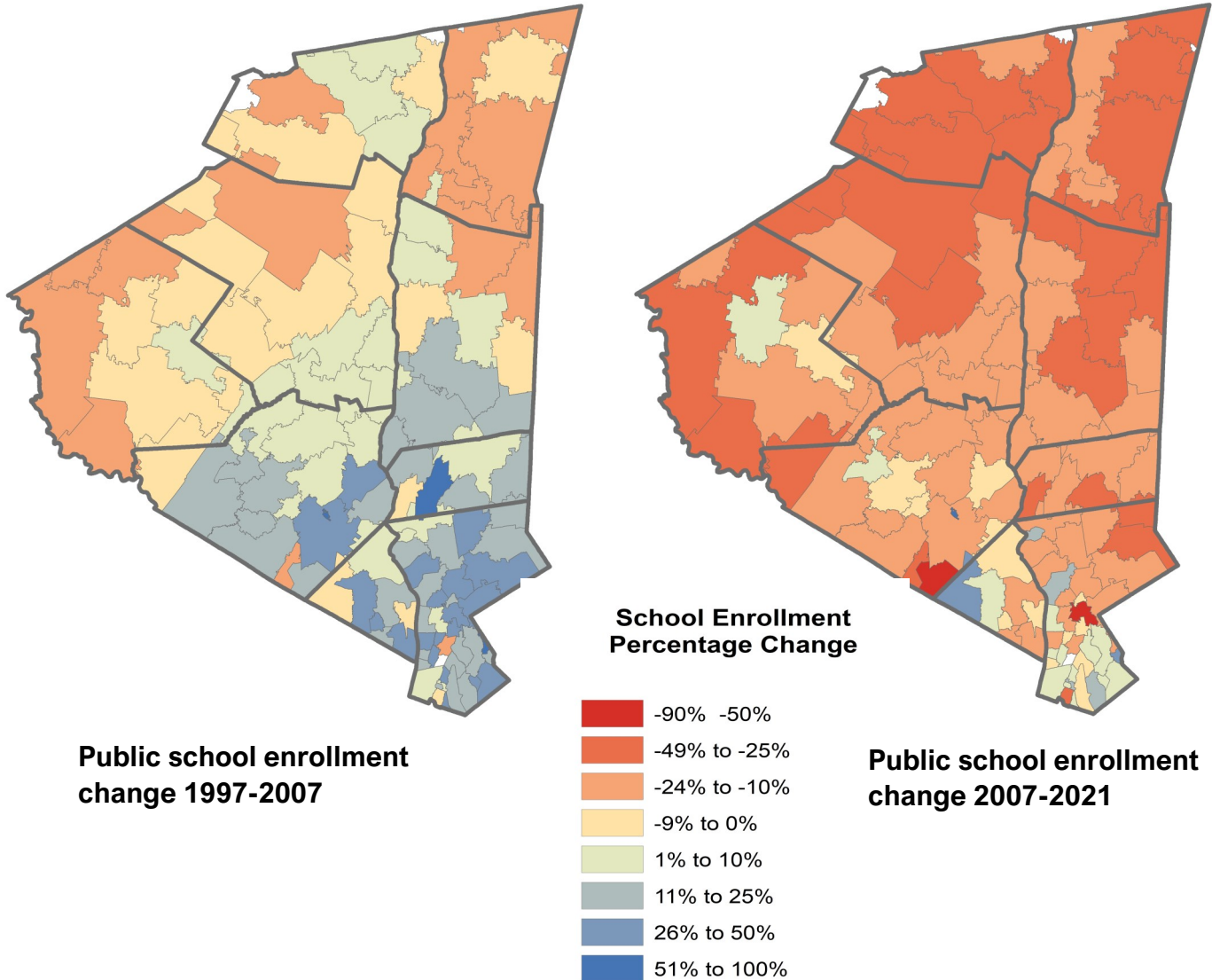
Key Takeaways

- Public school enrollment across the Hudson Valley is down 45,597 students, or 12%, from its peak in 2003.
- Private school enrollment is up by 11,509 students, or about 15% since 2000. Again, these data are influenced by growth in the region's Orthodox Jewish communities, where many children attend private schools. However, there is also modest growth in secular private schools.
- In total, the Hudson Valley has seen its primary- and secondary-school population decline by a total of 34,088 students. Experts interviewed for this project said the sharp decline in public enrollment seen at the start of the pandemic is likely exacerbated by the number of families that switched to home-schooling.



School populations

Source: New York State
Department of Education



Key Takeaways

- From 1997-2007, the student populations at more than half the districts in the Hudson Valley were growing. A list of the changes for each district can be found by [clicking here](#).
- There are 120 public school districts in the Hudson Valley. Of those, 97 districts (81%) have seen their students populations shrink since 1997. Only 23 districts have grown.¹
- Every school district in the counties of Columbia, Dutchess, Greene, Putnam and Ulster have seen their enrollments decline since 2007.
- From 1999-2012, at least 25 public school buildings totaling more than 1.1 million square feet of space closed across the Hudson Valley because of shrinking enrollments². Many more have closed since. The trend of fewer births and shrinking enrollments, paired with budget pressures, will likely force additional districts to close school buildings and shrink their physical footprints.

¹ The region saw a small number of school district consolidations during this time. In those cases, Pattern measured the percent change by using enrollment numbers pre- and post-consolidation.

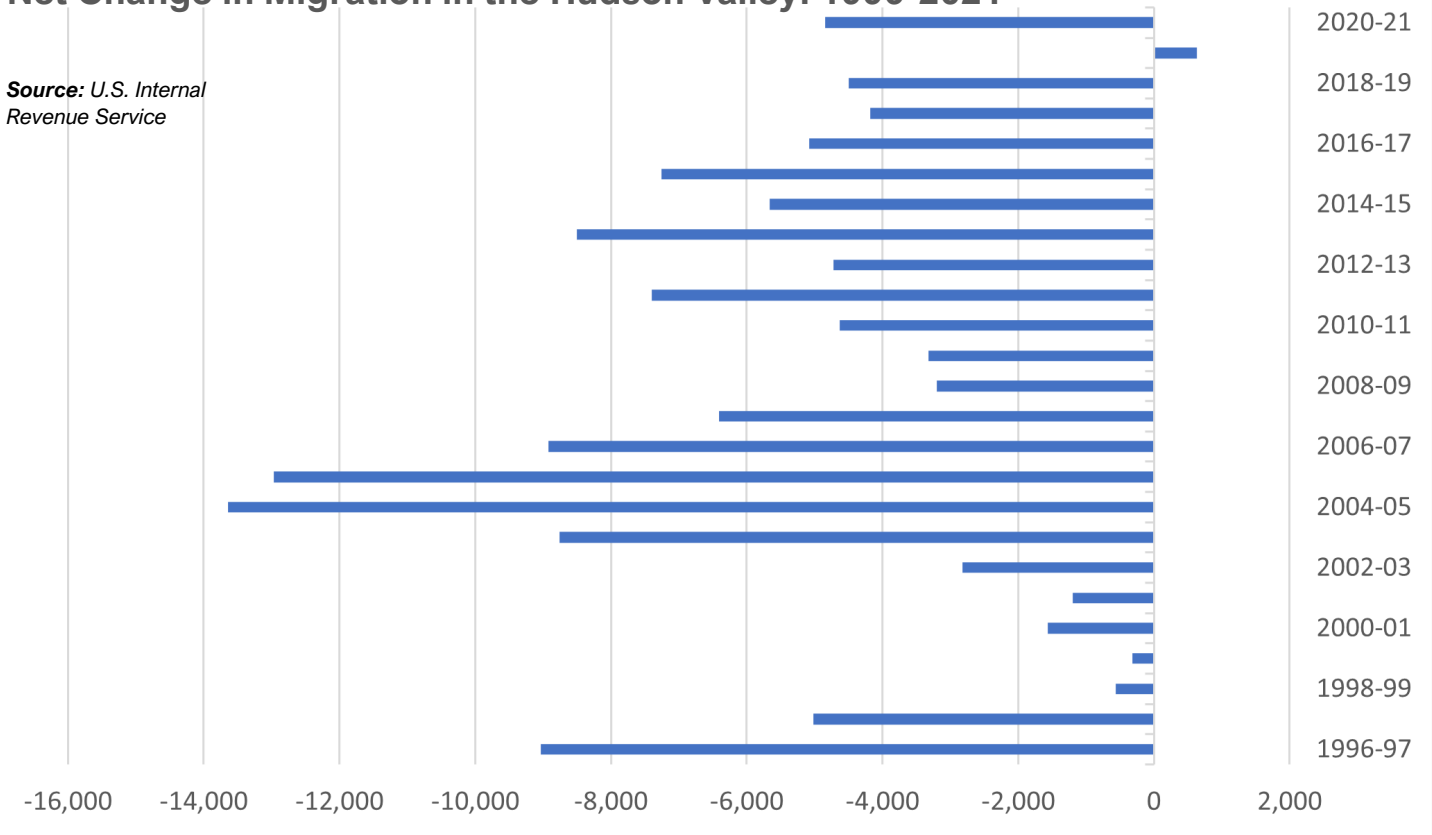
² Information from "Closed Schools, Open Minds," a research report by Pattern in 2012.



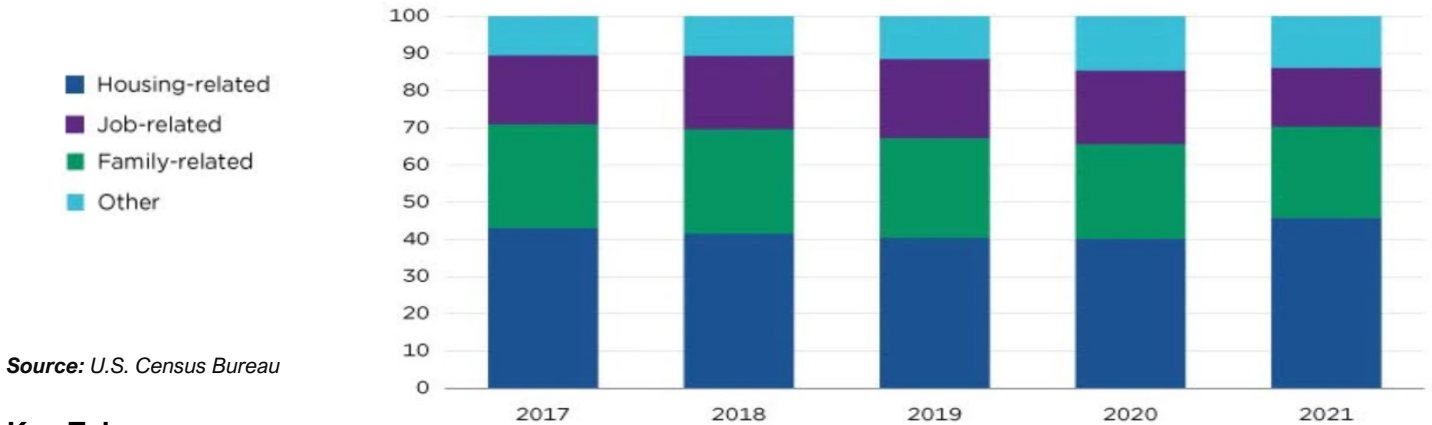
Migration in the Hudson Valley

Net Change in Migration in the Hudson Valley: 1996-2021

Source: U.S. Internal Revenue Service



Reason for Moving Among all U.S. Movers: 2017-2021 (in percent)



Source: U.S. Census Bureau

Key Takeaways

- The Internal Revenue Service uses tax returns to accurately measure the movement of people, county by county, throughout the United States. Migration is the movement of people into and out of each county.
- The nine counties of the Hudson Valley have lost a net of 134,505 people to migration from 1996-2021. In other words, thousands more people have moved out of our region than into it over the past 25 years.
- 2019-2020 was the only year since 1996 that the region gained people from migration. It gained a net of 629 people. The data from that year included the first several months of the Covid-19 pandemic, which resulted in a large migration of people into the Hudson Valley, especially north of Route 84.
- Data collected by the U.S. Census Bureau found that nearly 50 percent of people who migrated throughout the country did so because of reasons related to housing.



Workforce effects

Mid-Hudson Valley Population by Age Group : 2010-2021

YEARS	2010		2021	
	#	% of Total	#	% of Total
Under 5	148,160	6%	143,163	6%
5 to 9	160,378	7%	148,685	6%
10 to 14	170,138	7%	165,694	7%
15 to 19	177,397	7%	172,196	7%
20 to 24	142,988	6%	159,997	6%
25 to 34	260,489	11%	288,800	12%
35 to 44	345,733	15%	303,356	12%
45 to 54	374,377	16%	341,828	14%
55 to 59	157,052	7%	180,153	7%
60 to 64	126,217	5%	169,945	7%
65 to 74	165,098	7%	243,891	10%
75 to 84	109,229	5%	121,526	5%
85 +	46,567	2%	58,928	2%

Source: U.S. Census Bureau decennial data and 5-year ACS.

Key Takeaways

- Fewer births and outward migration have created a long-term workforce mathematics problem for the Hudson Valley.
 - Current residents ages 25-44 = 592,156
 - Current residents ages 45-64 = 691,926
- When the prime age range for our regional labor pool is divided by half, **the older half outnumbers the younger by 99,770 people**. As years and decades pass, this trend shrinks the pool of people from which the Hudson Valley can draw its labor force.
- In every age cohort under the age of 19 there are fewer people in 2021 than 2010. The net decline in these age groups is 26,335 people. The most substantial difference is among kids ages 5-9. Our region in 2021 was home to 11,693 fewer kids in that cohort than 2010. As these cohorts age up, the number of people in the prime working ages will continue to decline. This presents a significant challenge for the regional workforce in the years and decades ahead.



What the experts say...

What are the consequences of fewer births, outward migration and a shrinking labor pool in the Hudson Valley? Pattern shared the data in this report with 20 economists, demographers, economic development specialists, school administrators, and other subject matter experts. We asked them to think about how these trends affect the future of the region. The experts contributed different ideas and warnings based on their expertise. Here's what they said.

THE ECONOMY

- **Labor shortages:** The Hudson Valley is already afflicted by labor shortages. Just ask anyone who has tried to hire nurses, teachers, or line cooks. The trends outlined in this report will likely exacerbate our hiring troubles in the years and decades ahead.
- **Upward wage pressure:** Labor shortages generally create upward pressure on wages. Employers will need to compete for a smaller pool of workers, and that competition will likely push wages up. Higher wages can also make goods and services more expensive.
- **Business closures:** We are likely to see more business closures, especially among small businesses, experts said. That includes diners, dry cleaners, childcare centers, and similar hometown businesses. There are several reasons for this. For one, customer bases are shrinking as our population declines. Second, the longtime owners of some of these businesses are preparing to retire and many are choosing to liquidate rather than pass the business along to the next generation. Why? In many cases, the next generation has moved to another part of the state or country, or they have chosen a different career path. The goods and services provided by these business might still be available in the Hudson Valley, but you will probably need to drive farther or pay a premium to get them.
- **Potential stressor for business attraction:** The Hudson Valley has been good at attracting and expanding jobs since the Great Recession. Our economic development agencies have successfully hooked national and regional businesses that want to build or expand their companies in our communities. But businesses cannot survive or thrive without workers, and some who've built here recently are still struggling to find employees. Regional leaders expressed concern that the demographic trends outlined in this report could eventually cause our economic development success to fizzle.
- **Fewer consumers:** Our economy relies on people buying goods and services. The demographic trends could put stress on the consumer side. Fewer residents could mean fewer purchases, which would strain local businesses.



What the experts say...

SCHOOLS

- **More school closures ahead?** The ongoing decline in public school enrollment will put pressure on districts to close additional buildings. It is hard to justify keeping buildings open when the space is underutilized and budget pressures call for savings.
- **School budgets:** Relatively few voters show up for school budget votes nowadays. But these budgets could become harder to pass in the future if there are fewer residents who are directly connected to the schools through their children.
- **Hiring and program offerings:** Schools are among the employers that are having a hard time finding the quantity and quality of candidates they need. School administrators said this presents a particular problem in areas where they would like to expand programming - especially for technology, engineering, and career-specific classes. Some districts are not able to expand or maintain these specialized classes for lack of teaching candidates. One administrator said he used to receive nearly 50 applications for an open teaching position; he is now receiving five or six.

HEALTHCARE

- **A strained healthcare system:** The aging Baby Boomer population is putting big demands on a healthcare system that is struggling to find the next generation of doctors, nurses, lab techs and more. The region also has a shortage of home-health aides. Experts are concerned that our shifting demographics - especially the aging of the Hudson Valley - points toward an increase in demand for care but a decrease in the supply of workers to provide it.
- **Challenging finances:** A study by the Kaiser Family Foundation¹ found that private insurers paid on average between 143% to 264% more for medical services than Medicare. Our aging population in the Hudson Valley means that a bigger slice of the overall population pie will be on Medicare, which pays about 70 cents on the dollar for health services. With the demographic scales tipping away from younger people on private insurance and toward older people on Medicare, this could signal tough time for our medical centers and hospitals.

SOCIETY

- Experts shared many societal concerns about the current population trends. They expect the pool of volunteers to shrink for local fire companies, ambulance corps and other services that are struggling to find members. And many wondered if employees might be required to work more hours each day and each week to cover for the lack of workers - a scenario that would sap their free time and stretch their employer's overtime budgets.



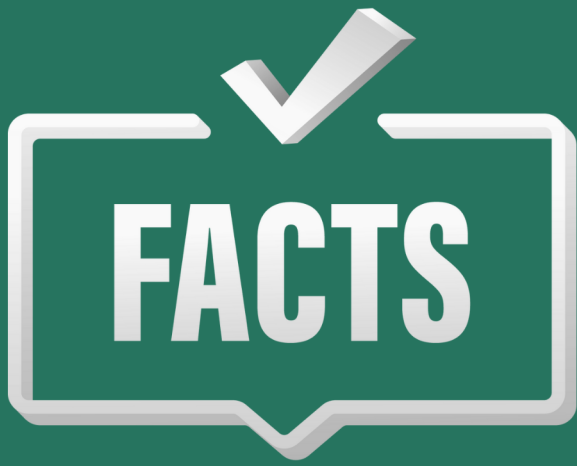
What the experts say...

TAXING AND MUNICIPAL FINANCE

- **The effect of aging on municipal revenue:** The increasing age of the Hudson Valley could present a challenge for municipal finances and credit ratings. Budget experts and financial analysts said that local governments are generally loathe to raise taxes if a large portion of their population is on a fixed income. That is increasingly the case across the Hudson Valley. As a result, local governments might hesitate to take on new capital projects, or they could eventually struggle to pay off the debts they have already incurred. Analysts said they examine these demographic factors closely when they determine bond ratings for local governments and schools.
- **A warning about the proportion of second-home owners:** In many parts of the Hudson Valley, a significant portion of residential property tax revenue comes from people who own second homes or short-term rentals. Analysts warned that these sources of revenue can be fickle because they are directly tied to a region's popularity. The Hudson Valley and Catskills have seen their popularity skyrocket since the Great Recession of 2008, which compelled families to forgo air travel and opt for "staycations." The trend toward cheaper, driving-distance vacations brought millions of people to our region. (The Covid-19 pandemic gave rocket fuel to this trend.) In turn, many chose to buy a second home here. Others saw the uptick in visitation as an opportunity to purchase homes and rent them to visitors through Airbnb, VRBO, or similar services. But analysts warned that property tax revenue generated by these properties is less reliable over the long term than revenue from full-time residents. What happens if our tourism spotlight dims in the years ahead? Will second homeowners flock to a different region? Will short-term rentals wane? Will the dwindling number of full-time residents be enough to fortify the tax base? Analysis warned that these trends deserve careful monitoring because they can affect the long-term fiscal health and solvency of local governments. The same can be said for the overall wellness and vibrancy of communities when a significant proportion of its homes are owned by people who are only living there part of the time.

TRANSPORTATION

- Public transportation is one of the Hudson Valley's biggest challenges. In fact, 15 percent of job seekers in the Hudson Valley said transportation was a barrier in their search for employment, according to a 2022 survey by the state. Experts said a dwindling workforce will make it harder to fund transportation because of the potential for lower demand. But it could increase the need for transportation, too, as workers find themselves having to travel farther from places with affordable housing to places with jobs.



The demographic trends outlined in this report can often be misunderstood. A few of them have become the subject of myths that, repeated often enough throughout the Hudson Valley, begin to pose as facts that people use to make decisions.

Pattern's research team compiles reports like this to help our local leaders make decisions from a solid foundation of facts. So, in that spirit, there are four bits of information that deserve to be highlighted as we factcheck the region's understanding of its school and labor populations.

FACT CHECK: "We cannot afford to have more kids in the schools." This is a statement we hear dozens of times each year across the Hudson Valley. It is wrong. The data show that 97 of our 120 school districts have shrinking enrollments. Some have been shrinking for nearly three decades. As we look ahead, our labor force and civic society cannot afford to have so few children in our schools. Too many kids in the schools is a false argument that is often used to oppose economic development projects, including new housing. The data do not support this argument, and neither should our regional leaders.

FACT CHECK: "People just don't want to work anymore." This is another myth that pops up in regional discussions. Labor participation plummeted during the worst of the Covid-19 pandemic. That is true. The employment-to-population ratio measures the proportion of working-age people who are employed. During the worst of the pandemic, only 47.3 percent of our population was working, according to statistics from the state Department of Labor. That number rose to 58 percent by the start of 2023 - a proportion that is consistent with the average workforce participation since the 1970s. The percentage of people working in New York today is actually higher than much of the 1970s, 1980s, 1990s, and 2010s. People want to work. The trends outlined in this report point to a different problem - over time there will just be fewer people.

FACT CHECK: People are leaving New York because the taxes are too high. This is likely true. Families often cite housing, jobs and weather when they are asked about leaving New York. "You should see what I can get here for \$200,000 compared to back home," they have told journalists in the past. Taxes loom large as a factor in home affordability. Pattern used the property tax calculator at SmartAsset, an online education site that tracks tax rates nationwide, to compare our tax burden to others. We examined taxes for a home assessed at \$400,000, the typical cost of a home in the Hudson Valley now. Our neighbors would pay about \$10,000 in property tax on that home - a little higher or lower depending on exactly where you live. An owner of the same home would pay \$6,000 in property tax near Boston or Philadelphia; \$4,600 near Washington D.C.; and \$7,200 in Connecticut. Thousands of Hudson Valley migrants have gone to the South and West. Property taxes in those destinations are even lower, ranging from \$1,500 to \$4,000. Several of those states also do not have payroll taxes. High taxes make housing more expensive, and they reduce access to mortgage. When we see that our neighbors are leaving because of housing, taxes are likely part of the mix.

FACT CHECK: If we have fewer people, why do we need more housing? Housing is one of the keys to reversing this trend. Over the past 15 years, the Hudson Valley has built about 0.45 units of housing for every new job we have created. Data also show that thousands of families in the Hudson Valley are actively looking for housing, or cohabitating with other families. U.S. Census data indicate that the size of families is shrinking as people have fewer kids. This math points toward the need for more housing. Think of the region like a pie. If the population is flat, the pie is the same size. But if families are smaller, the pie is cut into more slices, which means we need more housing to meet the needs of more individual families.

Ideas and Solutions



Solutions to alleviate the Hudson Valley's people shortage are not easy, obvious or guaranteed to work. However, we can learn a lot from places that have grown and states that have lured thousands of our former neighbors from the region. We can also take some common-sense actions to pitch the Hudson Valley as a great place to live, work and raise a family.

The following is a list of ideas that experts said would help to steady our population, attract new residents, and stop the loss of people from our communities and workforce. These actions should be priorities for our leaders in the Hudson Valley to strengthen our communities, economic future, and quality of life.

Housing - The Hudson Valley's housing problems can be summarized in three simple sentences. We do not have enough housing. The housing we have is too expensive for most of our neighbors. And our local codes and review processes make it very difficult to build more of the housing we direly need. Through policy, incentives and updated zoning codes, our communities must encourage the development of more housing for people across the entire spectrum of age and income. We also need to be creative. Housing in 2023 looks like limited equity land trusts, shared equity co-ops, smaller homes on smaller lots, mobile home parks, and additional rental units in all their potential forms. The Hudson Valley cannot have a strong economy without a robust workforce - and we cannot maintain a workforce without good, affordable places for people to live. Our regional leaders must put housing at the top of their priority lists. Otherwise, states that have built more housing than us will continue to lure away our neighbors.

Taxes - Experts interviewed for this report mentioned the New York State Tax Cap for two reasons. First, experts said that our already-high taxes would be likely be worse without the cap. Many also said that New York has not seriously pursued spending cuts or tax-reduction plans since the cap was passed in 2012. To be clear, there is a tension between keeping taxes low and our need to invest in things like infrastructure, which requires us to spend more than we have been. State lawmakers should empanel a group of experts to recommend strategies to reduce our overall tax burden. The high cost of living, driven in large part by taxes, has already caused too many people to vote with their feet and leave New York.

Marketing - Other states advertise on YouTube, social media, and New York television stations to attract our neighbors to live in their parts of the country. New York employs this strategy to attract new business, but not families. Our state is home to some of the greatest marketing companies in the world. We should work on a comprehensive campaign that tells people why it's great to live in New York.

Keeping college students in the Hudson Valley - Higher education is the second largest industry cluster in our region, after healthcare. Yet our region does not have a coherent plan to reach these young people, introduce them to jobs in the region, and convince them to stay after their studies are finished. Empire State Development, SUNY, I LOVE NY, and workforce experts should collaborate on a comprehensive plan to reach all our college students at the start of their junior years to introduce them to companies, apprenticeships or internships, and jobs throughout the region.

Ideas and Solutions



Immigration - Every person interviewed for this report mentioned immigration as a feasible solution to the Hudson Valley's people shortage. Forget the politics for a moment, and just think of our demographics like a mathematical problem. Our region needs people. There are lots of hardworking people who want a place to live in our country. A rational immigration policy at the federal level could help regions like the Hudson Valley, whose significant labor shortages could be allayed by the next wave of new Americans.

Automation, robotics and A.I. - When the state surveyed business owners in 2022, only 9 percent statewide said they were considering automation and robotics. Still, automation could change the contours of our workforce. Many wonder if advanced automation will reduce our need for people or merely change the profile of the jobs we need. In other words, if trucks will be loaded by robots in the future, does that eliminate the need for warehouse workers? Or does it change those jobs into instrumentation specialists who maintain and calibrate the robots?

About this Report

This report, *The Great People Shortage and its Effects on the Hudson Valley*, was made possible by Pattern members who generously support our nonprofit with annual donations. Those donations allow Pattern to provide independent research and planning, which support informed decision making and our quality of life throughout the Hudson Valley.

The data cited in this report came from the U.S. Census Bureau, NYS Department of Health, NYS Department of Labor, NYS Department of Education, Empire State Development, The Business Council of New York State, the U.S. Internal Revenue Service, the United Nations, and the U.S. Centers for Disease Control and Prevention.

The data and interviews for this report were compiled by three members of the Pattern research and planning team: Yasmine Aziz, Adam Bosch and Kate Stryker.

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