



COMPTROLLER OF MARYLAND

STATE OF THE ECONOMY SERIES: IMMIGRATION AND THE ECONOMY

APRIL 2024



State of the Economy Series

In January 2024, the Office of the Comptroller released the inaugural State of the Economy Report that examined economic trends in Maryland compared to the U.S. and neighboring states. This brief is the first in a series that further examines key findings from the report to inform policymakers and the public.

INTRODUCTION

The national discourse on immigration centers on unauthorized border crossings, but the vast majority of immigrants enter the United States (U.S.) legally under visas or another lawful non-citizen status. Immigrants from around the world come to the U.S. in search of more opportunity for themselves and their families – to improve their health, safety, economic state, and overall well-being. They contribute to Maryland's economy as workers, entrepreneurs, consumers, and taxpayers. They strengthen the workforce and communities as biotech engineers, nurses, teachers, crab pickers, and much more.

Their contributions also come with sacrifices, as they often take the most challenging and dangerous jobs in the economy. The tragic collapse of the Francis Scott Key Bridge on March 26, 2024, solemnly reminded Marylanders and the nation that immigrants are over-represented in high-risk and physically demanding jobs. All six road construction workers killed in the collapse were immigrants from Latin America. These six men and hundreds of thousands of additional immigrant workers have bolstered Maryland's economy for decades and their contributions warrant a deeper analysis and understanding.

The Office of the Comptroller's [State of the Economy Report](#), released earlier this year, identified stubborn economic headwinds that have constrained Maryland's growth prior to and coming out of the pandemic, despite the overall strength and resilience of the state's economy. Notably, **population growth** has been nominal or negative for each of the past five years¹ and **labor force participation** has not recovered from a four percentage-point decline at the onset of the pandemic.² Together, these trends have stymied Maryland's post-pandemic

recovery, continuing a streak of sluggish economic performance that began in 2016. Since the end of 2016, Maryland’s gross domestic product (GDP) has grown by 1.6% and employment by 1.0%. During the same period, overall U.S. GDP has grown by 13.9% and employment by 7.4%.³

The trends in Maryland’s population and labor force diverge when comparing U.S.-born to foreign-born residents. While Maryland’s U.S.-born population and labor force grew by 1% and 0%, respectively since 2016, the state’s foreign-born population and labor force grew by 12% and 8%, respectively. Immigrants boosted overall population and labor force growth to 2% between 2016 and 2022. See Figure 1.

Figure 1:

Maryland’s Total Population, Actual and Percent Change (2016 - 2022)

Year	U.S.-Born	Foreign-Born	Total
2016	5,094,577	921,870	6,016,447
2022	5,134,950	1,029,710	6,164,660
Percent change, 2016 - 2022	1%	12%	2%

Maryland’s 16+ Civilian Labor Force, Actual and Percent Change (2016 - 2022)

Year	U.S.-Born	Foreign-Born	Total
2016	2,600,983	646,089	3,248,650
2022	2,601,472	697,392	3,297,993
Percent change, 2016 - 2022	0%	8%	2%

Source: U.S. Census Bureau, American Community Survey

Following the themes of the State of the Economy Report, this brief takes a closer look at recent population and labor force trends of Maryland’s immigrants compared to the U.S. overall and neighboring states. In summary:

1. **Population:** Immigrants have long bolstered Maryland’s population. Over the past decade, in the face of natural population decline and increasing domestic outmigration, immigrants have been a source of stability for the state. **As of 2022, immigrants represented 16.7% of Maryland’s population.**⁴
2. **Labor force:** Immigrants are more likely to participate in the labor force than U.S.-born Marylanders. This is particularly meaningful in the current economic climate, as Maryland struggles with a labor shortage that began during the pandemic. **As of 2022, immigrants represented 21.1% of Maryland’s labor force.**⁵

Compared to neighboring states and the U.S., Maryland’s population and labor force have more immigrants as measured by overall percentage. See Figure 2.

Figure 2: Comparative Immigrant Population and Labor Force Trends (2022)

	Immigrants as a Percent of the Population	Immigrants as a Percent of the Labor Force	Foreign-Born Labor Force Participation Rate
Maryland	16.7%	21.1%	72.2%
Virginia	12.7%	16.7%	70.9%
Pennsylvania	7.5%	9.5%	69.0%
United States	13.9%	17.3%	66.7%

Source: U.S. Census Bureau, American Community Survey

Immigration has been one of – if not the – most important factors for the nation’s strong workforce expansion coming out of the pandemic. In the early stages of the pandemic, labor force participation dropped sharply across the nation which created a gap between the number of available workers and job openings. Increased international migration closed the pandemic-induced U.S. labor force gap by mid-2022, and immigrants filled 50% of the 2.7 million jobs added to the U.S. economy in 2023.⁶

Despite Maryland’s outsized share of immigrants, the labor force gap persists, and the economy remains stagnant. **Immigrants have, however, played a key role in keeping Maryland’s economy on a positive trajectory during a challenging period of slow growth and population loss.** This brief explores how immigrants have fortified Maryland’s economy in recent years and identifies legal and procedural barriers - mostly at the federal level but some at the state and local levels - that impede immigrants from growing Maryland’s economy even more.

Definitions and Methodology

This brief uses federal datasets – primarily the U.S. Census Bureau’s American Community Survey (ACS) – that define “foreign-born” or “immigrant” as U.S. residents who were not born in the U.S. There are numerous classifications of immigrants, which are listed and defined below. Federal datasets and other sources note that given the difficulty in tracking and measuring immigrant populations, data for similar immigrant groups can vary across datasets.

Naturalized residents: People who go through the naturalization process to become U.S. citizens.

Permanent residents (commonly referred to as green card holders): People who live in the U.S. permanently and legally by way of employment, family relationships, or another channel. This status is typically a prerequisite to naturalization (citizenship), but many with green cards that do not expire never take the final step of naturalization.

Temporary residents or “non-immigrants”: People who are residing in the U.S. temporarily through various (over 60) different visa types, all with clear departure dates. This includes groups like students, tourists, business travelers, diplomats, and temporary or seasonal workers and their dependents.

Refugee and asylees: People who are forced out of their home country due to persecution or well-founded fear of persecution based on race, religion, ethnicity, political beliefs, or membership in a social group. Once in the U.S., they can petition to obtain legal status.

Twilight status holders: People provided legal status via specific programs including those who receive Temporary Protected Status (TPS), Deferred Action for Childhood Arrivals (DACA), and asylum seekers with pending applications.

Unauthorized residents: People with no legal protection via the classifications above who entered the country unlawfully or overstayed their visa, also referred to as undocumented.

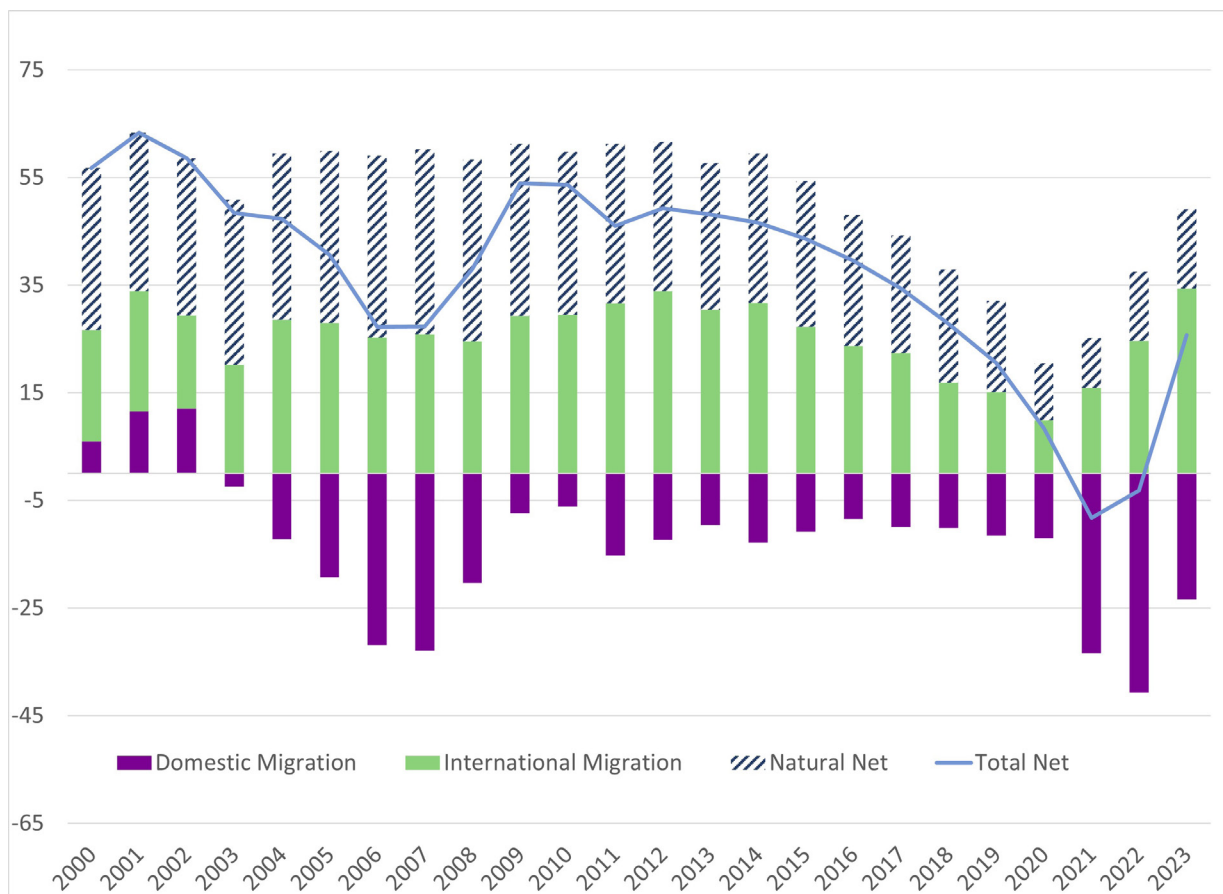
Sources: Migration Policy Institute, “Who Is An Immigrant?”;
U.S. Census Bureau, “Foreign-Born”

Immigrant Population and Migration Trends

International migration is offsetting large declines in domestic migration and natural population growth rates in Maryland.

Since recovering from the Great Recession of 2007-08, Maryland has experienced a steady slowdown in population growth, culminating in 2021 and 2022 when the state lost population for the first time since World War II. Year-to-year population change is the product of: a) natural change (births minus deaths), b) net domestic migration (change in people moving into the state from elsewhere in the U.S., compared to people moving out of state to other U.S. states), and c) net international migration (change in people moving into the state from outside the U.S. compared to people leaving the state to foreign countries). As Figure 3 illustrates, the trends across these three categories have varied leading up to and since the pandemic.

Figure 3: Maryland's Population Growth Profile (Thousands)



Source: Office of the Comptroller, "State of the Economy" report

[View Chart Data](#)

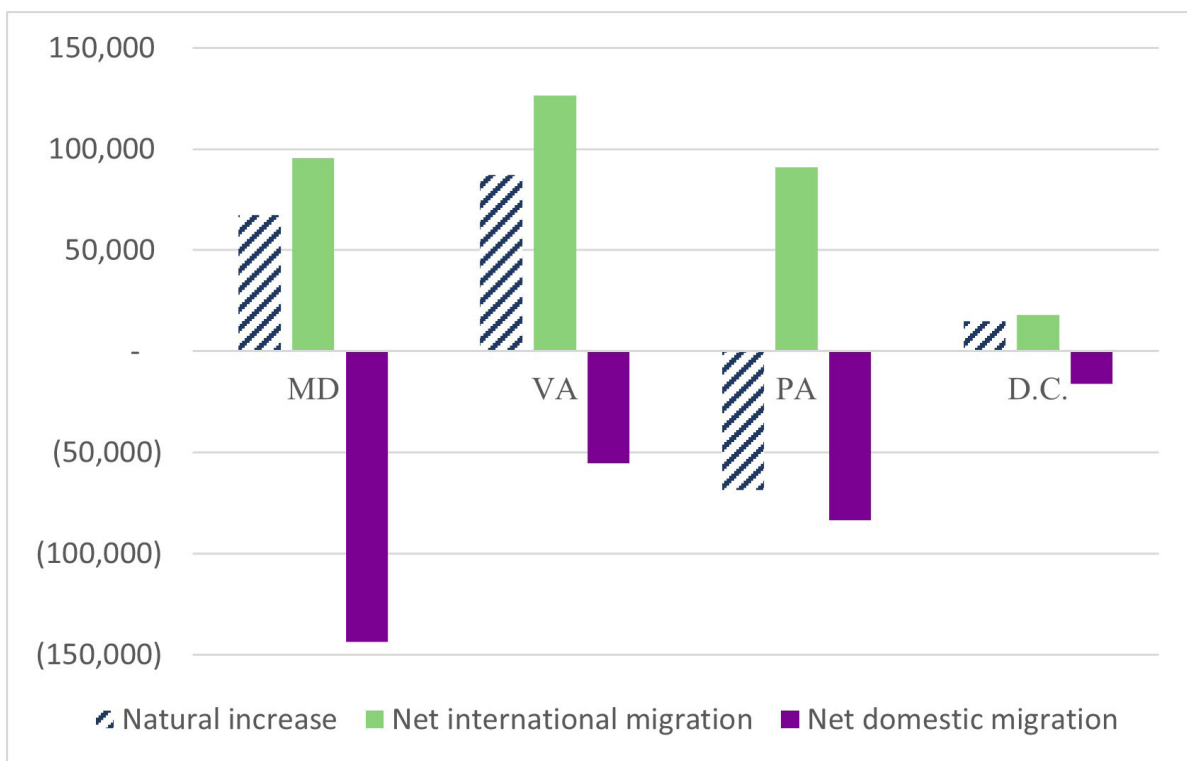
Domestic outmigration: Maryland is at the epicenter of a national trend of people moving from higher cost of living states to lower cost of living states. As Figure 4 depicts, **over the past five years**, Maryland lost a net 144,000 residents to domestic outmigration, nearly the same as D.C., Virginia, and Pennsylvania combined. **From 2021 to 2022**, Maryland ranked 7th among states for net loss of residents to domestic migration, at nearly 46,000. **From 2022 to 2023**, the state ranked 6th by this metric, at a net loss of nearly 31,000 residents.⁷

Natural population change: Natural population in Maryland has been on the decline due to an aging population and decreased birth rates. In 2005, Maryland’s natural population grew by 32,000. By 2022, natural population grew by only 13,000. These trends are expected to continue as Maryland’s 65 and older population, currently 17% of the overall population, is forecasted to reach 20% of the state population by 2035, nearly twice the level it was in 2005.⁸

International migration: In recent years, immigration has “bailed out” Maryland and other states from experiencing negative or flat population growth.⁹ After a temporary slowing of international immigration in the U.S. and Maryland (as illustrated in Figure 3) due to Trump administration policies and the pandemic, immigration picked back up starting in 2021 and has since been a buoy for the state and nation. Even with the relative slowdown in 2019 and 2020, **over the past five years**, Maryland gained a net 95,000 residents via international migration (see Figure 4). **From 2022 to 2023**, Maryland ranked 8th in the nation for net gain of international migrants at nearly 33,000 residents.¹⁰

Census data reveals that if it were *not* for international migration, Maryland would have lost population for a third straight year in 2023. Immigration gains flipped population loss to population growth for Maryland last year.

Figure 4: Population Change - Maryland, Virginia, Pennsylvania, and District of Columbia (cumulative, 2019 - 2023)



Source: U.S. Census Bureau, Population and Housing Estimates; Brookings Institute

[View Chart Data](#)

Demographics of immigrants in Maryland

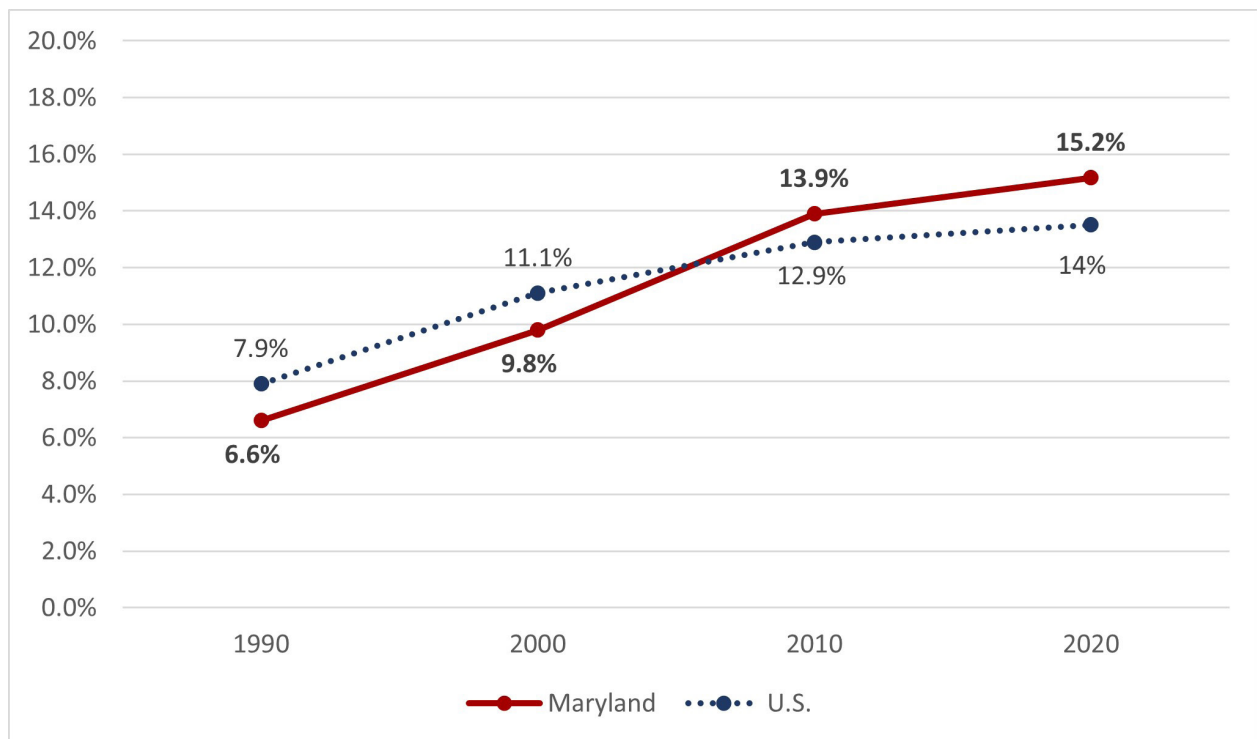
As of 2022, there were just over one million foreign-born residents in Maryland, representing 16.7% of the total population¹¹ – a larger share than neighboring states and the U.S. as a whole (see column E in Figure 5). Maryland has long led the pack on this indicator compared to its neighbors, but it wasn't until the 2000s that it surpassed the U.S. See Figure 6.

Figure 5: Foreign Born Population Statistics

	A	B	C	D	E	F
Year	1990 (percent)	1990 (number)	2000 (percent)	2000 (number)	2022 (percent)	2022 (number)
Maryland	6.6%	313,494	9.8%	518,315	16.7%	1,029,710
Virginia	5.0%	311,809	8.1%	570,279	12.7%	1,105,028
Pennsylvania	3.1%	369,316	4.1%	508,291	7.5%	978,173
United States	7.9%	19,767,316	11.1%	31,107,889	13.9%	46,182,177

Source: U.S. Census Bureau, Moody's, and the Bureau of Revenue Estimates

Figure 6: Foreign-Born Residents as a Percent of Total Population - Maryland and the United States (1990 - 2020)



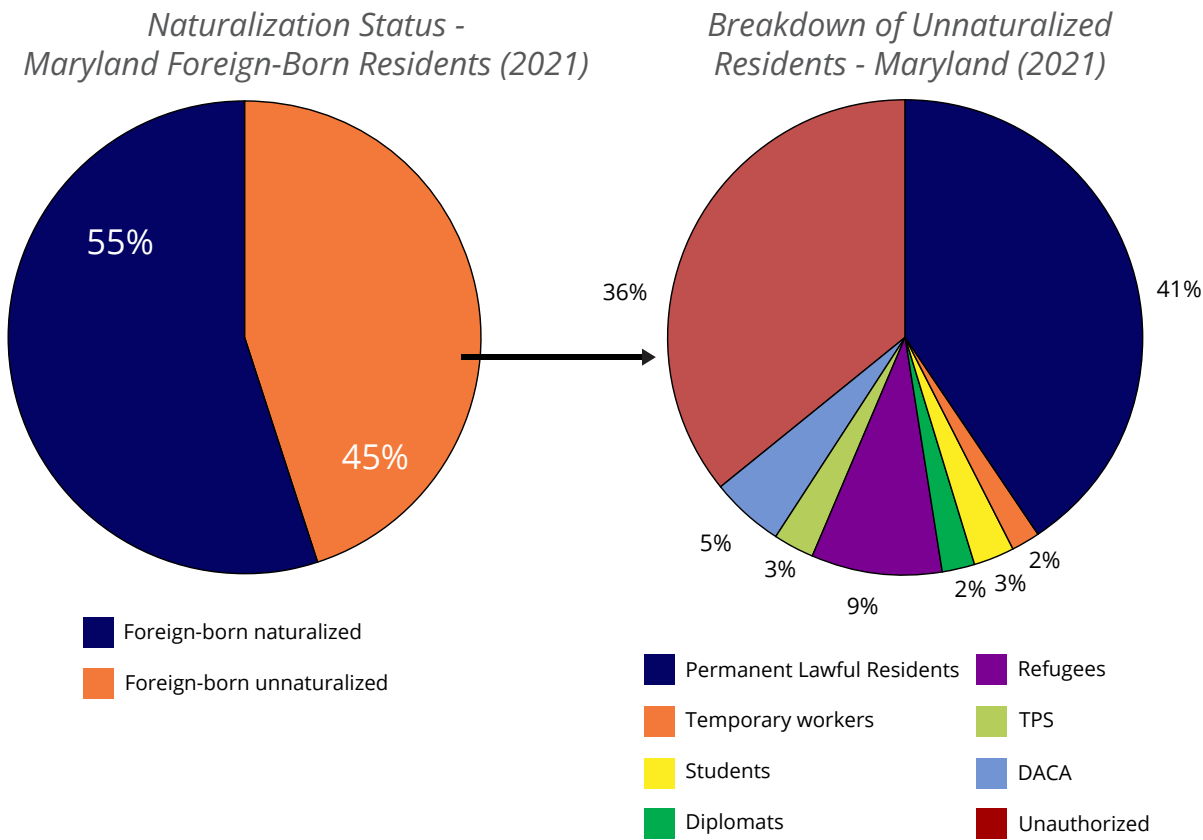
Source: U.S. Census Bureau, American Community Survey; Maryland Department of Legislative Services

[View Chart Data](#)

As of 2021, the top five home countries for Maryland immigrants were: El Salvador (11.7%), India (6.3%), China (4.7%), Nigeria (4.7%) and Guatemala (4%).¹² The three Maryland counties with the highest immigrant populations are: Montgomery County (32.5%), Prince George’s County (22.5%), and Howard County (20.9%).¹³

As of 2021, over half (55% or 543,000) of Maryland immigrants were naturalized – meaning they were born outside of the U.S. and have become U.S. citizens. Less than half (45% or 436,000) were unnaturalized.¹⁴ **Unnaturalized residents** include permanent legal residents (green card holders), international students, temporary workers, diplomats, refugees, holders of other visas or designations (like DACA and TPS), as well as unauthorized residents – those who entered the country unlawfully or entered lawfully but remained in the country after their visas expired. The majority of unnaturalized residents are permanent legal residents (green card holders) at 41% and unauthorized (undocumented) residents at 36%. See Figure 7.

Figure 7: Immigrant Population by Status



Sources: Department of Homeland Security (“Study in the States”; “Yearbook of Immigration Statistics”; “Estimates of Lawful Permanent Resident Population in the U.S.”) and American Immigration Council (“Map the Impact”); U.S. Census American Community Survey.¹⁵

[View Chart Data](#)

The age demographics of Maryland’s immigrants vary considerably compared to U.S.-born residents. Whereas Maryland’s U.S.-born population is equally distributed across three age groups, 0-24, 25-54, and 55 and over, the state’s immigrant population is concentrated in the prime-age worker group of 25-54. Over half (56%) of immigrants in Maryland are between the ages of 25 and 54 (see Figure 8), which helps explain significantly higher labor force participation rates than U.S. born residents, as discussed in the next section.¹⁶

Figure 8: Share of U.S.-Born and Foreign-Born Population in Maryland by Age Bracket (2022)

	0-17	18-24	25-54	55-64	65+
U.S.-born	24.7%	9.1%	35.9%	13.0%	17.2%
Foreign-born	7.6%	6.3%	55.7%	15.1%	15.1%

Source: U.S. Census Bureau, American Community Survey

Maryland’s future population growth depends on immigration. With foreseeable declines in natural population growth and ongoing trends with domestic outmigration, a direct path for Maryland to substantively grow its population in the near-term is through immigration. Growth in the immigrant population comes with obvious economic benefits in the form of additional workers, entrepreneurs, consumers, and taxpayers. In addition, immigrants have children born in the U.S. who fuel the economy for goods and services and also become the future workforce. There will be an upper limit to this solution, however: barriers to lawful entry – chiefly annual caps on certain visa types, the congressionally mandated lottery limit, and delays – restrict immigration into the U.S. and therefore Maryland’s population growth.

Immigrant Labor Force Trends

Immigrants make up 21% of Maryland’s labor force and have a significantly higher labor force participation rate than U.S.-born Marylanders, but their economic potential is constrained due to legal and procedural restrictions in industries that factor prominently in Maryland’s growth.

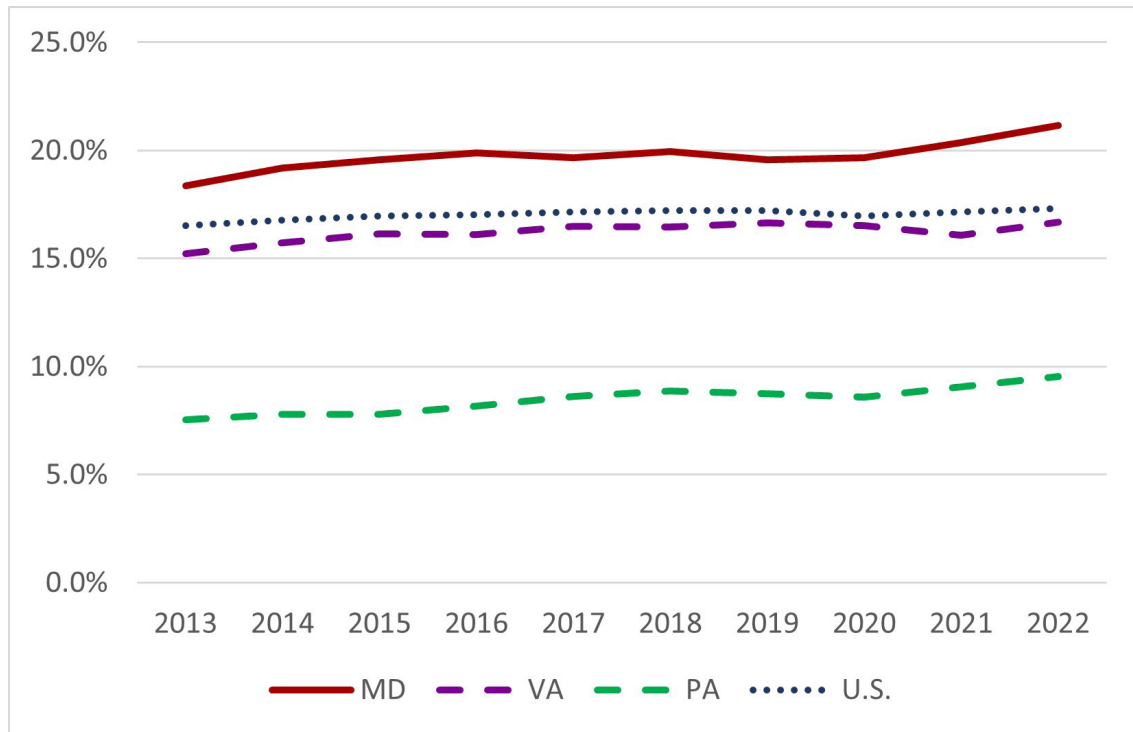
Labor Force Statistics

Throughout 2023, Maryland had the tightest labor market in the country, defined by its unemployment rate, which was at or below 2.3% for the majority of the year.^{17, 18} Maryland currently ranks fourth in the nation with an unemployment rate of 2.4% (as of February 2024).¹⁹

Another measure of a tight labor market is the ratio of job openings to job seeker. In January 2024, Maryland ranked second in the U.S. in the most job openings per job seeker at 3 to 1. The U.S. overall ratio was 1.4 to 1.²⁰ The other states joining Maryland at the top of this list of most job openings per job seeker are states that, unlike Maryland, are predominantly rural and sparsely populated, including (in order of ranking) South Dakota, North Dakota, Vermont, and New Hampshire.²¹ Driving Maryland’s tight labor marker is a labor force participation rate (LPR) of 65%, which is the lowest for the state since the 1970s and remains four percentage points below pre-pandemic levels.²² (The LPR is the percentage of the population either working (employed) or actively looking for work (unemployed)).

Maryland’s labor shortage would be more severe if it were not for immigrants. Immigrants represented 21% of Maryland’s labor force in 2023, a greater share than neighboring states and the U.S. See Figure 9. Further, immigrants participate in the labor force at higher rates than U.S.-born Marylanders and have for decades. Over the past 10 years, the **LPR for foreign-born Marylanders has ranged from 7 to 9 percentage points higher than the LPR for U.S.-born Marylanders.** See Figure 10.

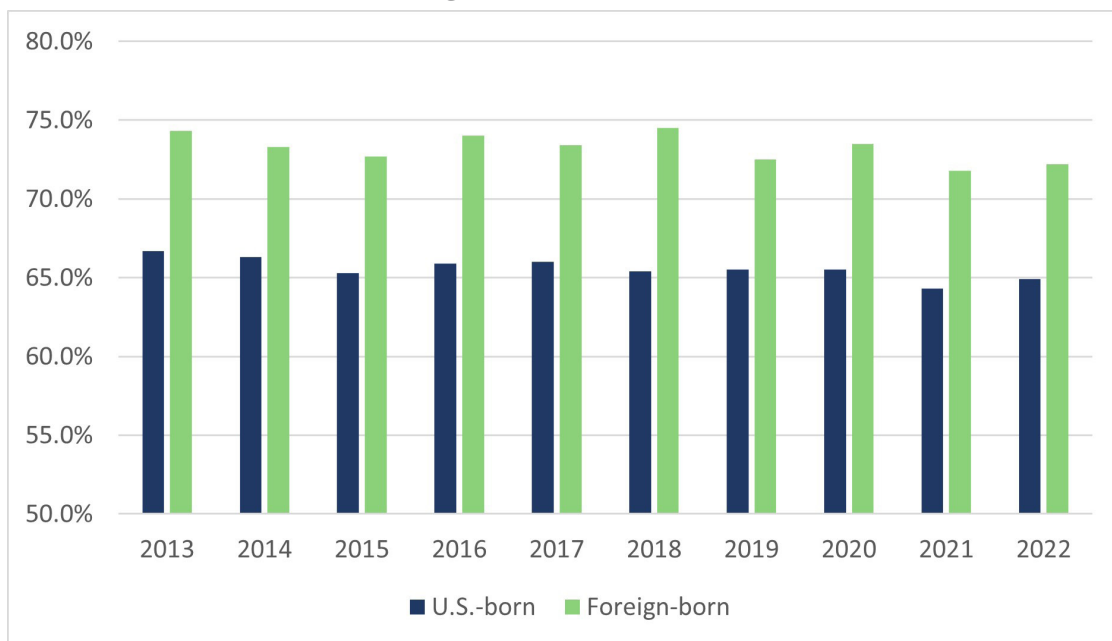
Figure 9: Immigrants as a Percent of the Labor Force - Maryland, Virginia, Pennsylvania, and District of Columbia (2013 - 2022)



Source: U.S. Census Bureau, American Community Survey

[View Chart Data](#)

Figure 10: Labor Force Participation Rates in Maryland - U.S.-Born versus Foreign-Born (2013 - 2022)



Source: U.S. Census Bureau, American Community Survey

[View Chart Data](#)

Industries Where Immigrants Work

Immigrants fill a range of jobs across industries and occupations in the U.S. and Maryland. Immigrants in Maryland make up over 50% of the workforce in several occupations including home health aides, taxi drivers, housekeepers, and carpenters. They also make up 23% of the science, technology, engineering, and math (STEM) workforce and 23% of registered nurses in Maryland.²³

Nationally, foreign-born residents are more highly represented than U.S.-born residents in agriculture, construction, professional services, and the arts. They are less represented in retail, finance/ insurance/ real estate, government, and healthcare. **In Maryland**, foreign-born and U.S.-born residents are more evenly represented across industries than the U.S. as a whole. See Figure 11. However, immigrants tend to be over-represented in high-risk and physically demanding fields in Maryland. For example, 12% of foreign-born Marylanders hold jobs in construction compared to just 5.8% of U.S.-born residents.²⁴

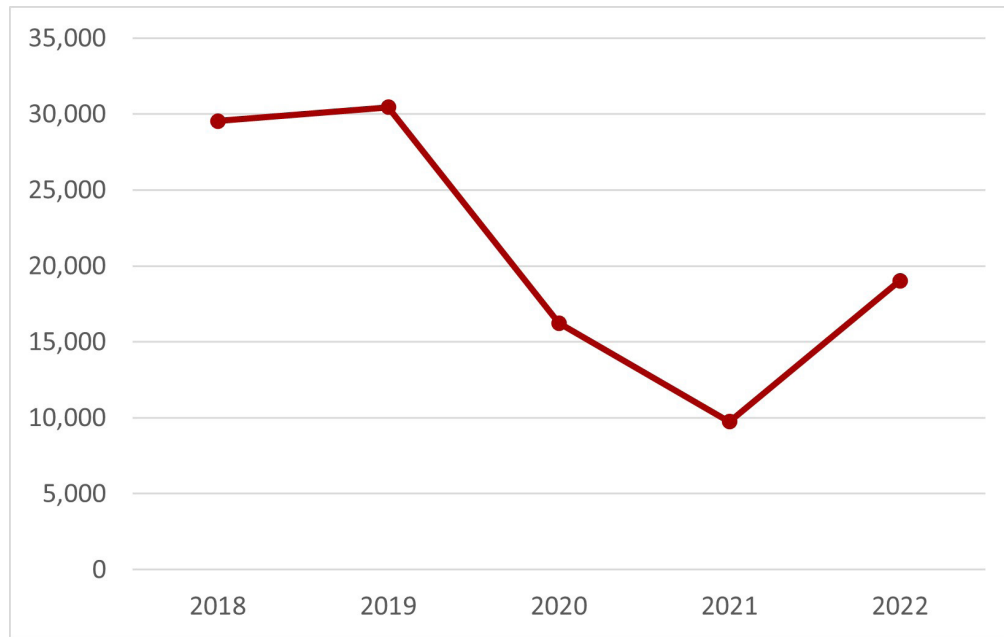
Figure 11: Share of U.S.-Born and Foreign-Born Workforce by Industry in Maryland (2022)

Industry	U.S.-born	Foreign-born	Difference
Educational services, and health care and social assistance	24.3%	22.7%	-1.6%
Professional, scientific, and management, and administrative and waste management services	16.4%	17.8%	1.4%
Construction	5.8%	12.0%	6.2%
Arts, entertainment, and recreation, and accommodation and food services	7.6%	7.8%	0.2%
Retail trade	8.9%	7.7%	-1.2%
Public administration	12.0%	7.7%	-4.3%
Other services (except public administration)	4.8%	6.6%	1.8%
Transportation and warehousing, and utilities	5.3%	6.0%	0.7%
Finance and insurance, and real estate and rental and leasing	5.9%	4.5%	-1.4%
Manufacturing	5.0%	4.2%	-0.8%
Wholesale trade	1.4%	1.3%	-0.1%
Information	1.9%	1.3%	-0.6%
Agriculture, forestry, fishing and hunting, and mining	0.6%	0.3%	-0.3%
Totals	99.9%	99.9%	0.0%

Source: U.S. Census Bureau, American Community Survey

The labor force includes immigrants who come to Maryland each year as temporary or seasonal workers,²⁵ via various federal work visas. They work on farms and professional sports teams; in hospitals and meat processing facilities; for global corporations, landscapers, resorts, and country clubs.^{26, 27} The number of temporary admitted workers annually in Maryland reached 30,000 in 2019, just before the pandemic. The number dipped to below 10,000 in 2021 before beginning to rebound in 2022 at 19,000.²⁸ See Figure 12.

Figure 12: Number of Temporary Workers and Dependents Admitted to Maryland Annually (2018 - 2022)



Note: Here, temporary workers are defined by the Department of Homeland Security (DHS) as those holding the following visas types: CW1, CW2, E1, E1S, E1Y, E2, E2C, E2S, E2Y, E3, E3S, E3Y, H1B, H1B1, H2A, H2B, H2R, H3, H4, I1, L1, L2, L2S, L2Y, O1, O2, O3, P1, P2, P3, P4, Q1, R1, R2, TD, and TN.

Source: U.S. Department of Homeland Security (2022)

[View Chart Data](#)

Many temporary workers are supported by H-2A and H-2B visas, designed for seasonal agricultural, and nonagricultural services or labor. The H-2 visas are only made available to employers who attest they cannot find U.S. workers.²⁹ Over the past five years, there has been a significant jump in employers requesting workers through the H-2 programs, reflecting the state’s ongoing labor shortage. In 2023, 103 employers in Maryland applied for H-2B visas compared to 45 in 2018. For H-2A, 81 employers requested visas in 2023 versus 52 in 2019.³⁰

A prominent example of an industry reliant on seasonal workers is Maryland’s seafood industry, a pillar of the Eastern Shore’s economy. The industry receives approximately 500 seasonal worker visas per year through the H-2B program. In 2019, two thirds (or 363) of the 538 H-2B visas requested and granted to the seafood industry in Maryland went to crab processing companies. According to a 2020 survey, without H-2B workers, most crab processors in Maryland would shut down.³¹ Individual processors attest that they are forced to close their doors for the season if they are not granted H-2B workers through the nationwide lottery.

The J.M. Clayton Company in Cambridge hires approximately 75 H-2B workers during each peak crab processing season (September through mid-November). This represents up to 90% of the company's crab picking jobs in any given year. Company president Jack Brooks estimates that every H-2B job supports 2.5 local jobs in the region.³²

Most foreign-born workers who spend at least 31 days in the U.S. during the last tax year must file federal, state, and local income taxes. Some obtain a social security number alongside their work authorization; others file using an Individual Tax Identification Number (ITIN) in lieu of a social security number. There are more than 100,000 ITIN filers in Maryland, and they pay more than \$100 million in net state and local personal income taxes after refunds annually.³³ This number does not account for the immigrants that file taxes with a social security number, or the sales and use, motor fuel, property taxes, and other taxes and fees paid by immigrants, or corporate taxes paid by immigrant business owners. The American Immigration Council estimates that in 2021 Maryland's combined population of immigrants paid \$13.3 billion in federal, state, and local taxes and had total spending power of \$33.1 billion.³⁴

Industries Where Immigrants Are Restricted From Participating

The LPR and unemployment data indicate that most immigrants in Maryland have little difficulty finding work. For some, however, getting permission to work can be a challenge. Delays in adjudication of federal claims required for work authorization create long backlogs and barriers to any type of employment for many immigrants, including refugees, asylees, and those awaiting lawful permanent resident status. These backlogs constrict the labor supply and come with economic costs.³⁵ Even with work authorizations, there are specific jobs and industries that are restricted to many immigrants despite qualifications and degrees earned outside of the U.S. Notably, immigrants who are interested in careers in healthcare, federal government, federal contracting, and STEM occupations – and may have trained to fill those relatively high-wage roles in their country of origin – are legally or procedurally prohibited from filling these jobs. **These restrictions have the negative effect of constraining the state's economic growth.**

Healthcare

The healthcare and social assistance industry is Maryland's largest industry for employment, representing 12.3% of jobs in the state.³⁶ Many healthcare jobs, including all clinical roles, require industry-recognized certifications and often, frequent recertifications. Typically, credentialing does not translate smoothly across countries, and employers are often hesitant to hire healthcare professionals with degrees from institutions abroad.³⁷ Both serve as barriers to employment.

A general physician with a 30-year practice in his home country migrated to Maryland in 2018. He could not find a job in healthcare, according to a case navigator with the City of Annapolis, due to certification costs, language barriers, and discrimination. He spent most of his five years in Maryland working in low-skilled roles for Amazon and Uber. He was only able to land a healthcare job temporarily during the pandemic, through a program that hired immigrants with health degrees to educate communities about COVID-19. Once this program ended, he lost access to healthcare work and eventually left the state.³⁸

There are 35,000 immigrants with health-related degrees in Maryland, and 7,000 or 21% of them are underutilized, meaning they are working in lower-skilled jobs or are out of work. Maryland ranks in the top 10 of U.S. states with the greatest number of underutilized healthcare workers.³⁹ Underutilizing workers results in what is called brain waste and contributes to inefficiencies in the economy. The consequences of this are likely to intensify as the population ages, the nursing shortage grows, and more pressure is placed on the healthcare system. **This industry already has the most job openings in the state at 23,300.**⁴⁰ A 2022 report by the Maryland Hospital Association found a 25% vacancy rate in nursing positions across hospitals, and the shortfall needed to meet demand is getting worse.⁴¹ In recent years, states such as Utah, Nevada, and Illinois have passed legislation expanding access to health and other professional certifications by removing requalification requirements for foreign professionals licensed to practice outside the U.S. or allowing ITIN holders without social security numbers to qualify for professional licenses.⁴² In Maryland, all individuals applying for occupational licenses must provide a social security number.⁴³

Federal Government

The federal government plays an outsized role in Maryland's economy compared to the nation overall and neighboring states. Federal government employment makes up 5.7% of total Maryland employment, compared to 1.9% of total employment nationally.⁴⁴ However, roughly half of Maryland's immigrants - all who are unnaturalized - cannot access these jobs.

Only immigrants who have completed the process of becoming naturalized U.S. citizens can work for the federal government. Immigrants with a green card or any work visa / work authorization are excluded from federal government jobs, though green card holders can serve in the U.S. military. As a result, foreign-born residents are most underrepresented in the government sector compared to U.S.-born residents: 7.7% of foreign-born residents work in public administration versus 12% of U.S.-born residents. See Figure 11.

Further, the federal government supports a robust ecosystem of private sector contractors in Maryland, where similar restrictions apply. In order to work on certain federal contracts, even employees of private companies must be naturalized U.S. citizens. This creates inefficiencies as well. There is an "earnings premium" attached to naturalization; controlling for many characteristics that predict wages, naturalization is correlated with an 8% to 11% increase in wages. The inability for many of Maryland's immigrants to work for the federal government has a ripple effect on the state's economy.⁴⁵

A representative from CASA de Maryland shared a recent example of an immigrant with a green card who made \$18 per hour for a private company that does business with the federal government. Because he was not a naturalized U.S. citizen, he was only permitted to work on non-governmental projects for the company. As soon as he became naturalized, he was able to work on federal projects and saw his wages increase to \$38 per hour - similar work, same skillset.⁴⁶

There are currently 160,000 immigrants in Maryland who are eligible to naturalize and become U.S. citizens but have not started this process.⁴⁷ Most immigrants who are permanent residents (with a green card) for at least 5 years (or 3 years if married to a U.S. citizen) are qualified for

naturalization. However, the process is expensive and time-consuming, as it requires an interview, civics and English tests, at least \$760 in application fees, and for many, thousands in legal fees.⁴⁸ **Although naturalization rates in Maryland are comparable to neighboring states, Maryland has a higher share of federal jobs that can only be filled by naturalized citizens.** As a result, there is a greater need, and opportunity, for Maryland to increase the number of naturalized citizens to fill federal government and contractor jobs to grow the economy. While the naturalization process is overseen by the federal government, states and municipalities have played a role in increasing naturalization rates by assisting with costs. Montgomery County, for example, offers a \$300 scholarship to green card holders making less than 300% of the federal poverty line. This program, operated by CASA, has helped hundreds of immigrants gain lawful access to federal government and contracting jobs.⁴⁹

There are also employment restrictions that affect immigrants in state and local government, which together represent 13.2% of employment in Maryland.⁵⁰ Although most state and local government jobs in Maryland do not require citizenship, law enforcement officers in the state must be citizens or green card holders who have been honorably discharged from the U.S. military. Some states, including California and Colorado have recently passed laws allowing noncitizens with work authorization, such as DACA recipients, to be employed in law enforcement.⁵¹ There are also restrictions on which types of business-owners can contract with the state. For example, only U.S. citizens and lawful permanent residents (green card holders) can get certified through Maryland's Minority Business Enterprise (MBE) program because it is tied to federal rules and regulations.

STEM

There are currently 21,297 international students studying across 98 Student and Exchange Visitor Program (SEVP) certified schools in Maryland.^{52,53} These students are legal, temporary residents through the F-1 visa program, which is available for international students pursuing full-time degrees in the U.S. The leading countries of origin for international students in Maryland are China (37%), India (24%), and South Korea (4%).⁵⁴

About 50% of these students are pursuing masters degrees, 20% doctorates, and 16% bachelors. Over a quarter (27% or 5,849) of all international students in Maryland are in STEM programs.⁵⁵ International students, especially those in advanced degrees, make significant contributions to research and innovation in STEM fields through their academic work. The U.S. Department of Commerce acknowledges the impact of their work on U.S. economic development and competitiveness.⁵⁶ But in most cases, due to visa restrictions, international students do not have the opportunity to establish careers in the U.S.

Upon graduating, students on F-1 visas can apply for an Optional Practical Training (OPT)⁵⁷ to extend their stay for **up to one year** if they find a job in the U.S. related to their degree, or for **up to three years** if they find a job in the STEM field. Between 2004 and 2016, approximately 60% of students who studied in the Baltimore region and 68% in the Washington region stayed in their respective areas for an OPT.⁵⁸ Employers in Maryland's STEM industries, where nearly one quarter of workers are immigrants,⁵⁹ are particularly impacted by the OPT program and visa policies. These industries are key to the future of Maryland's economy and include quantum computing, biotechnology and life sciences, and cybersecurity. Between 2004 and 2016, 56% of OPT employees in the Baltimore area and 49% in the Washington metro area worked in STEM fields. And unlike other temporary worker programs, the OPT program has a very high acceptance rate, especially for STEM jobs. In fact, 97% of STEM OPT applications are approved per year.⁶⁰

Even if the work experience adds value for both the employer and the employee, the time limitations on the OPT are rigid, and foreign-born residents can remain in the U.S. only if they obtain an H-1B work visa. The federal government issues only 85,000 H-1B visas per year for the entire country. In the most recent year, just 25% of eligible H-1B registrations were selected.⁶¹ In addition, the process for obtaining an H-1B can be expensive, complicated, and time consuming for both employer and employee. Many employers are unwilling or unable to go through the process and are forced to let go of workers after they have been trained and on the job for one to three years, creating disruptions and inefficiencies in their business operations. The U.S. does not create a bridge from its international student pipeline to its workforce; it is often easier for multi-national corporations to transfer employees whose OPT expires to offices in other countries rather than support them through the U.S. H-1B visa process.

An immigrant-owned IT firm based in Montgomery County has utilized the OPT program for years and has success stories of employees who have gone from the OPT through their F-1 student visa to H-1B visa holders to green card holders to U.S. citizens to successful business owners and job creators. The same business owner has seen even more workers exercising OPT leave his company just as they had become fully trained and valuable members of his team. The business recently lost one of its OPT employees after less than a year on the job when the employee returned to South Korea because he had limited long-term options in the U.S.⁶²

In essence, there is no clear path to permanent residency for most international students. Maryland loses top talent from the state each year from highly skilled jobs that are difficult to fill because of this barrier. Filling these jobs is critical to the future of Maryland's economy.

Conclusion: Looking Ahead

Immigrants have played an important role in elevating Maryland's economy in recent years, offsetting domestic outmigration and depressed labor force participation rates among U.S.-born Marylanders. Looking ahead, for Maryland's economy to thrive, there must be more pathways for immigrants to become lawful residents and full participants in the labor force. Several promising signs indicate that Maryland is competitively positioned to benefit from increased immigration.

First, the Congressional Budget Office's (CBO) revised economic outlook for 2024-2034 projects a greater surge in international migration through 2026 than previously anticipated. The CBO anticipates that the civilian population 16 years of age and older will be larger than their previous projection by 7.4 million people by 2033. Most of that increase (5.9 million) is due to an expected rise in the net number of people immigrating to the U.S.⁶³ This revised forecast should benefit Maryland, which has seen large inflows of immigrants since 2021.

Second, Maryland has recently been recognized as a welcoming state to immigrants. According to a 2022 ranking of the 100 largest metro areas where immigrants are thriving most, the Baltimore metro ranks second and the Washington metro (which includes Montgomery, Prince George's, Frederick, Calvert, and Charles Counties) ranks fifth (see Figure 13). The rankings, published in a report by the George W. Bush Institute-Southern Methodist University Economic Growth Initiative, are based on a composite scoring system that combines 12 measures focused on educational attainment, income, financial well-being, and living standards.⁶⁴

Figure 13: Where Immigrants are Thriving Best: Top 10 Large Metros
(out of America's 100 largest metro areas)

Ranking	Metro Area	Average z-score
1	San Jose-Sunnyvale-Santa Clara, CA	2.23
2	Baltimore-Columbia-Towson, MD	1.21
3	San Francisco-Oakland-Berkeley, CA	1.18
4	Seattle-Tacoma-Bellevue, WA	1.11
5	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.08
6	St. Louis, MO-IL	1.02
7	Pittsburgh, PA	1.01
8	Raleigh-Cary, NC	0.84
9	Jackson, MS	0.8
10	Cincinnati, OH-KY-IN	0.71

Source: George W. Bush Institute-Southern Methodist University Economic Growth Initiative

In addition, Baltimore has been recognized by the American Immigration Council as a national leader in promoting economic opportunity for immigrants.⁶⁵ Last year, Baltimore was designated as a refugee resettlement city by the Biden Administration. The Baltimore headquartered international refugee nonprofit, Global Refugee (formerly Lutheran Immigration and Refugee Service) opened its first Welcome Center in Baltimore last June to support refugees soon to be arriving in the Baltimore metro area from Asia and Africa.^{66,67}

Finally, a recent analysis by the Federal Reserve Bank of San Francisco found that states like Maryland with a high percentage of foreign-born workers tend to experience a tightening of the labor market when there is a decline in international migration. Maryland's labor market may be experiencing lingering effects of the steep decline in international migration leading up to and during the pandemic. This analysis suggests that as international migration continues to pick up, Maryland's labor supply will increase and likely alleviate the current shortages.⁶⁸

Increasing international migration will benefit Maryland's economy, leading to growth in population, labor force, consumers, and taxpayers. Although the federal government plays the largest role in managing the inflow of immigrants to the U.S. and determining the scale and scope of work authorization and visas, there is also a menu of actions that state and local governments can and have taken to support immigrant workers and communities. These actions include easing restrictions on professional certifications, lifting citizenship requirements on certain state and local government jobs, providing financial and technical support to green card holders eligible for naturalization, encouraging universities and employers to maximize utilization of temporary work visas for international students, and, more broadly, intentionally promoting an ecosystem of economic opportunity for immigrants. Maryland has a strong history of welcoming immigrants, from the Port of Baltimore to the Eastern Shore communities to the region surrounding the nation's capital. Maryland's economy will only benefit with continued international migration to its shores.

Appendix – Data Tables for Charts

Data Table for Figure 3: Maryland Population Growth Profile (Thousands)

Calendar Years	Domestic Migration	International Migration	Natural Net	Total Net
2000	5.901231562	20.75909762	30.09789817	56.75822735
2001	11.54748497	22.30750277	29.45875086	63.3137386
2002	12.02031638	17.29391329	29.30094462	58.61517429
2003	-2.442245098	20.18360402	30.67278248	48.4141414
2004	-12.17780153	28.55496993	30.93187237	47.30904076
2005	-19.34291422	27.95529939	32.02496361	40.63734877
2006	-31.88465159	25.25395849	33.87208124	27.24138814
2007	-32.91055541	25.84637649	34.38573145	27.32155254
2008	-20.34632313	24.55496142	33.82460382	38.03324211
2009	-7.34804115	29.24528571	32.0081561	53.90540067
2010	-6.134250627	29.48513427	30.29283147	53.64371512
2011	-15.25734635	31.58736288	29.70529732	46.03531385
2012	-12.33232216	33.83800921	27.79602797	49.30171502
2013	-9.596346865	30.44457502	27.25838615	48.1066143
2014	-12.86108225	31.68108718	27.77689307	46.59689799
2015	-10.7807064	27.25403289	27.10485418	43.57818067
2016	-8.500727986	23.68934673	24.36440737	39.55302611
2017	-9.911685446	22.39074715	21.89450561	34.37356732
2018	-10.13469599	16.80843419	21.14834115	27.82207935
2019	-11.5469764	15.09943703	17.01395004	20.56641067
2020	-12.07208418	9.887970338	10.55667897	8.37256512
2021	-33.43798956	15.92036959	9.270587934	-8.247032036
2022	-40.70300582	24.60011282	12.9011046	-3.201788395
2023	-23.40199202	34.37426325	14.72456798	25.69683922

Source: U.S. Census Bureau; Moody’s Analytics; Office of the Comptroller Bureau of Revenue Estimates (BRE)

[View Chart](#)

**Data Table for Figure 4: Population change - MD, VA, PA, and D.C.
(cumulative, 2019 - 2023)**

Population Change	MD	VA	PA	D.C.
Natural increase	67,231	87,049	(68,670)	14,944
Net international migration	95,389	126,408	90,941	18,135
Net domestic migration	(143,756)	(55,405)	(83,352)	(16,052)
Total net change	18,864	158,052	(61,081)	17,027

Source: U.S. Census Bureau, Population and Housing Estimates; Brookings Institute

[View Chart](#)

Data Table for Figure 6: Foreign-Born Residents as a Percent of Total Population - MD and the U.S. (1990 - 2020)

Year	1990	2000	2010	2020
Maryland	6.6%	9.8%	13.9%	15.2%
U.S.	7.9%	11.1%	12.9%	14%

Source: U.S. Census Bureau, American Community Survey; Maryland Department of Legislative Services

[View Chart](#)

Data Table for Figure 7: Naturalization Status - Maryland Foreign-Born Residents (2021), Breakdown of Unnaturalized Residents - Maryland (2021)

Type (naturalization Status)	Percent
Foreign-born naturalized	55%
Foreign-born unnaturalized	45%

Type of Unnaturalized resident	Description	Percent	Note
Permanent	Permanent Lawful Residents	41%	AKA green card holders
Temporary / Non-immigrants	Temporary workers	2%	11+ visa types including H-2
Temporary / Non-immigrants	Students	3%	
Temporary / Non-immigrants	Diplomats	2%	
Refugees	Refugees	9%	
Twilight status	TPS	3%	
Twilight status	DACA	5%	Eligible, granted, and recipients
Unauthorized	Unauthorized	36%	
	SUM, estimated total for unnaturalized residents	1	

Sources: Department of Homeland Security (“Study in the States”; “Yearbook of Immigration Statistics”; “Estimates of Lawful Permanent Resident Population in the U.S.”) and American Immigration Council (“Map the Impact”); U.S. Census American Community Survey.

[View Chart](#)

Data Table for Figure 9: Immigrants as a Percent of the Labor Force - MD, VA, PA, and the U.S. (2013 - 2022)

Year	MD	VA	PA	U.S.
2013	18.4%	15.2%	7.5%	16.5%
2014	19.2%	15.7%	7.8%	16.8%
2015	19.6%	16.1%	7.8%	16.9%
2016	19.9%	16.1%	8.2%	17.0%
2017	19.7%	16.5%	8.6%	17.1%
2018	19.9%	16.5%	8.9%	17.2%
2019	19.6%	16.6%	8.7%	17.2%
2020	19.7%	16.5%	8.6%	16.9%
2021	20.4%	16.1%	9.0%	17.1%
2022	21.1%	16.7%	9.5%	17.3%

Source: U.S. Census Bureau, American Community Survey (2013 - 2022)

[View Chart](#)

Data Table for Figure 10: Labor Force Participation Rates in Maryland U.S.-Born versus Foreign-Born (2013 - 2022)

Year	U.S.-born	Foreign-born
2013	66.7%	74.3%
2014	66.3%	73.3%
2015	65.3%	72.7%
2016	65.9%	74.0%
2017	66.0%	73.4%
2018	65.4%	74.5%
2019	65.5%	72.5%
2020	65.5%	73.5%
2021	64.3%	71.8%
2022	64.9%	72.2%

Source: U.S. Census Bureau, American Community Survey (2013 - 2022)

[View Chart](#)

Data Table for Figure 12: Number of Temporary Workers Admitted to Maryland Annually (2018 - 2022)

Year	Number of Workers
2018	29,530
2019	30,437
2020	16,242
2021	9,749
2022	19,028
2019	103.1
2020	95.0
2021	97.9
2022	100.1

Source: U.S. Department of Homeland Security (2022)

[View Chart](#)

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