

ADVANCING WORKFORCE EQUITY IN COLUMBUS

A BLUEPRINT FOR ACTION

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ACKNOWLEDGMENTS

The authors would like to extend our deep gratitude to Justin Scoggins of the USC Equity Research Institute (ERI) for extensive data preparation, analysis, and careful review of this research, and to Sarah Treuhaft of PolicyLink and Joel Simon of Emsi Burning Glass Technologies, who provided invaluable guidance, insights, and feedback. Special thanks to Manuel Pastor of ERI and Michael McAfee and Josh Kirschenbaum of PolicyLink for their support. Thanks to Thai Le and Sarah Balcha of ERI for data support; to Eliza McCullough and Rosamaria Carrillo of PolicyLink and Carlos Delgado, formerly of PolicyLink and now at Clear Impact, for research assistance; to Heather Tamir of PolicyLink for editorial guidance; to Vanice Dunn of PolicyLink and Scott Bittle of Emsi Burning Glass for their communications expertise; and to Mark Jones for design.

This report was shaped, informed, and greatly enriched by the wisdom and contributions of a diverse advisory group of workforce stakeholders in the Columbus region, to whom we are immensely grateful: Scot McLemore, American Honda Motor Company; Mary Tebeau, Builders Exchange of Central Ohio; Floria Washington, Columbus Regional Airport Authority; Monica Jones, Central Ohio Transit Authority (COTA); Brett Johnson, Circle270Media; John Hambrick, Educational Service Center of Central Ohio (ESCCO); Rodney Harrelson, Equity Now Coalition; Craig Lomonico, Groveport Madison Schools; Bruce Luecke, Homeport; Tariq Mohamed, Jewish Family Services; Perry Gregory, National Center for Urban Solutions; Shawn Hendrix, Nissen Chemitec America; Chip Holcombe, David White, Jung Kim, and Tammy Palasigue, One Columbus; Guadalupe Velasquez, Welcoming City; Kier Scott and Stephanie Robinson, Workforce Development Board of Central Ohio; Carol Ventresca and Tim Harman, Workforce Innovation Center; and Jennifer Savage, Worthington Industries.

This work was generously supported by JPMorgan Chase & Co. The views expressed in this report are those of PolicyLink, ERI, and Emsi Burning Glass, and do not reflect the views or opinions of, or represent endorsement by, JPMorgan Chase Bank, N.A., or its affiliates.

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The USC Dornsife Equity Research Institute (formerly known as USC PERE, the Program for Environmental and Regional Equity) seeks to use data and analysis to contribute to a more powerful, well-resourced, intersectional, and intersectoral movement for equity.

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CONTENTS

1.0	Forewords	page 6
2.0	Preface	page 9
3.0	Summary	page 10
4.0	Introduction	page 14
5.0	Structural Racism Drives Workforce Inequities	page 16
6.0	The Face of the Region Is Changing	page 25
7.0	Aggregate Growth Masks Entrenched Inequities	page 29
8.0	Workers Face a Shortage of Future-Ready Jobs	page 37
9.0	The Wavering Covid-19 Recovery Is Leaving Workers of Color Behind	page 47
10.0	Accelerating Automation Puts Workers of Color at Risk	page 51
11.0	A Framework for Action to Advance Workforce Equity	page 55
12.0	Methodology	page 66
13.0	Notes	page 69
14.0	Author Biographies	page 71

1.0 FOREWORDS

As we enter the third year of the global coronavirus pandemic, its health and economic consequences continue to mount. While top-line measures indicate that the US economy has largely bounced back from Covid-19, millions of workers and families across the nation are still reeling. As detailed in a recent PolicyLink report (*Coming Back Better: Leveraging Crisis-Response Task Forces to Advance Racial Equity and Worker Justice*), nearly a quarter of the US workforce experienced at least some period of unemployment due to the pandemic. Millions of parents—especially women—left the workforce to care for their children. Nearly six million households are still behind on rent. And all of these impacts have been disproportionately felt by low-wage workers and workers of color.

Across the nation, policymakers and local leaders are plotting the course for economic recovery. But the Covid-19 crisis laid bare the deep-seated roots of racial inequities in our economy—built on far too many low-wage, low-quality jobs and deeply entrenched occupational segregation by race and gender. To advance an equitable recovery and lay the foundation for a thriving and inclusive future economy that benefits all workers and communities, we need to prioritize strategies that dismantle structural racism and promote shared prosperity.

Workforce equity means a labor market in which racial income gaps are eliminated, all jobs are good jobs, and everyone who wants to work has access to family-supporting employment. Employers, policymakers, community organizations, funders, education and training providers, and intermediaries all have important roles to play in bringing this vision to life: uplifting worker voice; cultivating diverse, thriving regional economies that support high-quality jobs; and proactively fostering a just transition and an equitable future of work in the face of accelerating automation and technological change.

As businesses and jobs continue to rebound, racial equity must be at the center of coordinated efforts and collaboration across the workforce ecosystem. To support this important work, the reports in the Advancing Workforce Equity series put the power of disaggregated data into the hands of local leaders working to foster a more just and sustainable economy through their policy efforts, programs, and investments.

Sarah Treuhaft, Vice President of Research, PolicyLink

Joel Simon, Vice President of Workforce Strategies, Emsi Burning Glass

As one of Central Ohio's largest employers, it's imperative to focus on what is needed to continuously build and support a growing and thriving workforce. JPMorgan Chase has been deeply rooted in Central Ohio for more than 150 years, and now employs more than 18,000 employees. As a firm, JPMorgan Chase remains laser-focused on building an inclusive future that benefits all workers and communities.

In many ways, the pandemic exacerbated historic challenges facing cities and communities across the region, and shed light on the particular challenges facing workers of color. Now, more than ever, businesses have a responsibility to step up and help solve the pressing challenges around the world. Together, we can help foster an economy where disparities in compensation and employment are eliminated for all demographic groups and across all occupations and industries. It's not just the right thing to do, it's essential for future growth and prosperity.

An inclusive economy, in which there is equal access to opportunity, is a stronger, more resilient economy. A critical component of this work is ensuring that all individuals, regardless of education, background, or zip code, have the skills they need for a successful future. Working with civic leaders, nonprofit partners, and employers across the business community, we can develop, test, and scale innovative efforts that prepare individuals with the resources and experiences they need to advance their careers and meet full earning potential. Together, these efforts have the potential to create inclusive growth that will serve this community for years to come.

The data, industry, and human capital insights from this report help us better understand the need for a more inclusive and equitable tomorrow. Equipping our region's business, government, and nonprofit leaders with the data presented here will pay dividends for our community going forward.

These findings will be a critical component of the on-going regional conversation and common goal of building a Columbus that is equitable and prosperous for all. We know we cannot do it alone, but collectively, we can make Columbus one of the strongest and most forward-thinking cities in the world.

Corrine Burger, Columbus Location Leader, Chief Control Officer
JPMorgan Chase

2.0

PREFACE

The Columbus metropolitan area is a diverse, dynamic, and growing economy. The region has seen some of its fastest population and economic growth over the past decade and is poised for that growth to continue. The diversity of our population and workforce is matched only by the diverse industries that call the area home. The region is a major automotive manufacturing center. Thanks to Honda, it has grown to be the third-largest retail and fashion center in the United States. The e-commerce boom has naturally grown here because of the large distribution and logistics operations that have located here to take advantage of our proximity to key markets, and the finance and insurance industry is anchored by large operations from JPMorgan Chase and Nationwide.

Developing and supplying talent to this growing economic base is a challenge in the best of times. The challenges created by the Covid-19 public health crisis and subsequent social and economic obstacles, have only accelerated the ability to deliver basic workforce services and to build a more equitable economy. Restaurateurs, manufacturers, technology firms, and health-care providers have all experienced workforce shortages and continue to face an uphill labor market to fill entry level and experienced talent to their organizations.

This report offers data, practitioner insight, and some hard truths about the obstacles that face our employers and those seeking employment in our community. This report does not offer a roadmap or a long list of solutions to the many challenges our workforce system faces. Our hope is that this will shed additional light on some basic facts and provide additional fuel for our hardworking workforce, business, and government leaders to address this opportunity to achieve more equitable outcomes in the years to come.

One Columbus

3.0

SUMMARY

Columbus, Ohio, is one of the fastest-growing economies in the nation, and community leaders working in economic and workforce development aim to make it the nation's most prosperous region. But while the tremendous growth of the Columbus metro area has generated prosperity for some, the abundance has not been shared equitably with all workers. The region has seen strong growth in middle-wage jobs, but incomes are growing much more quickly at the top end of the spectrum, and a training bottleneck constrains access to jobs that pay living wages and offer opportunities to grow. Columbus is characterized by stark residential segregation, with Black residents concentrated in certain neighborhoods within the city of Columbus as a result of inequitable policies both past and present, and increasingly separated from the growth in good jobs in the surrounding suburban community. With ongoing demographic changes toward a more diverse workforce and community, the economic costs of racial inequities to the Columbus region continue to mount. Closing racial gaps in economic outcomes and fostering greater upward mobility for low-income residents are essential ingredients for building a Columbus economy in which all can participate and thrive.

This report is one of nine regional analyses in the Advancing Workforce Equity project, building on the insights of our previous research to inform a tailored, ground-level blueprint for advancing workforce equity.^{1,2} It provides a data-driven evaluation of racial inequities in workforce outcomes in the Columbus region, examining how systemic racism manifests in the labor market, the impacts of the Covid-19 pandemic, and how automation may affect industries and workers in the area. Our findings are based on an analysis of labor force data from the Bureau of Labor Statistics, disaggregated data on wages and employment from the 2018 5-year American Community Survey microdata from IPUMS USA, data on current and historical job demand and automation risk in the United States from Emsi Burning Glass, and other sources of local data, as well as interviews and insights offered by the regional advisory group.

Our key findings include the following.

- **As the workforce grows more diverse, racial inequity carries mounting economic costs.**

- People of color make up a rapidly growing share of Columbus’s workforce but are not benefiting equitably from its economic prosperity. Workers of color make up about 25 percent of the workforce between the ages of 25 and 64 in the Columbus region, and more than a third of the population under the age of 25. But Black and Latinx workers are significantly less likely than their white counterparts to be earning at least \$15/hour—a bare minimum living-wage level in the region.
- Racial economic exclusion hampers the region’s economic growth. In 2018 alone, racial gaps in wages and employment for working-age people cost the region about \$10 billion in unrealized GDP. With racial equity in income, the average annual income of Latinx adults would be 59 percent higher, while the average annual income of Black adults would increase by 68 percent.

- **The structure of the regional economy and evolving labor market demand reinforce racial gaps in employment and wages.**

- The workforce remains deeply segregated by occupation. Despite the growing diversity of the Columbus workforce, workers of color tend to be crowded in lower paying, and lower opportunity, occupational groups, while white workers are overrepresented in many higher paying professions.
- The region has a shortfall of future-ready jobs that do not require a college degree. Overall, only 42 percent of workers are in future-ready jobs (defined as stable, automation-resilient jobs with family-sustaining wages); the share drops to just 12 percent among workers in jobs that require only a high school diploma or less. This good-jobs gap has significant racial equity implications, considering that over 40 percent of Black adults and nearly 70 percent of Latinx immigrant adults have no college education.

- **Equity in higher educational attainment is essential, but insufficient, to achieve racial economic inclusion.** Higher education significantly narrows racial gaps in labor force participation, employment, and earnings, but does not close racial income gaps. On average, white workers with only a high school diploma earn the same median wages as Black workers with an associate's degree (\$18/hour). Among those with a bachelor's degree or higher, white workers are paid at least 20 percent more than workers of color.
- **The Covid-19 pandemic is compounding pre-existing racial inequities and economic inequality and is likely to further disrupt the labor market by accelerating automation and digitalization.**
 - Black unemployment rates have been volatile. While the Black-white gap in unemployment briefly closed around February 2021, by August 2021, the difference was more than 10 percentage points as white unemployment in the region stabilized at around 5 percent, and Black unemployment spiked to 15 percent.
 - Black and Latinx workers face a disproportionate risk of automation-driven job displacement. In the Columbus region, Latinx workers and Black workers are 25 percent, and 20 percent, more likely, respectively, than white workers to be in occupations at risk of automation (based on the likelihood that the underlying tasks of the job will be computerized).

Policymakers, employers, educators, training providers, and community-based organizations all have important roles to play to advance workforce equity in the Columbus region and to ensure that all workers, including those who face the additional burdens of systemic racism, are prepared for the jobs of tomorrow with the skills, supports, and access they need to fully participate and thrive in the local economy. Our recommendations for designing and activating such a racial equity agenda include the following action items:

1. Center racial equity, community voice, and neighborhood needs in the workforce development system, and unify economic development and workforce development strategies.
2. Lean into regional partnerships to break silos in workforce development.
3. Bring jobs to the people and people to the jobs.
4. Engage employers to adopt best practices in hiring, retaining, and promoting workers of color.
5. Dramatically expand apprenticeships, and develop targeted strategies to support people of color through these programs.
6. Cater services to immigrant workers and workers for whom English is a second language.
7. Expand on career pathways that start with entry-level positions in target sectors proven to have good employment prospects.

4.0

INTRODUCTION

Economic and community development in the Columbus region is often characterized by the “Columbus Way,” which describes an environment of close collaboration between business, city, and regional leaders and academic and nonprofit institutions.³ The Harvard Business School study that coined the term described the region as having a distinctive environment of deep cross-sector partnerships and sustained civic engagement. But even as civic and business leaders enjoy strong partnerships, workforce development in the region operates in a fragmented way that incentivizes different actors in it—community colleges, other training providers, intermediary organizations—to silo their operations.

Training providers and workforce intermediaries interviewed for this report communicated their frustrations with this ecosystem. Workforce service providers are rewarded for keeping job seekers confined to their programs when it would otherwise be better for that job seeker to transfer to another provider. Funding streams often have reporting requirements that make collaboration difficult, to the detriment of participants. Some people fall through the cracks of the fragmented ecosystem, and their negative experiences reduce trust in the overall system. Collaboration in economic development efforts has generated prosperity for the largely white population by creating good jobs for those with college degrees and legacy attachments to well-paying middle-skill jobs. In contrast, the workforce development system remains too fragmented to address the upstream drivers of racial inequities in the labor market and ensure that people of color can share equitably in the region’s growth.

Recognizing that this fragmentation disincentivizes interagency collaboration and is an anathema to the Columbus Way, community leaders are working to mold the workforce system in its image, with equity at the center. This report provides data indicators that measure the state of equity in the region's labor market, an analysis of the root causes of those inequities, and a blueprint for transformative collaboration to proactively embed racial equity in the Columbus economy.

The region is well-positioned to advance shared prosperity by leveraging its many growing economic sectors. As the seat of the Ohio state government, public sector employment is strong. Columbus is a regional center for headquarters and business services, especially in finance and insurance. It is an important hub for transportation, distribution, and logistics, and the region is leveraging that specialization to invest in e-commerce and smart transportation. The region has a rich history in manufacturing, as well, and economic development organizations like One Columbus are investing in advanced computing services, automotive manufacturing, and biomedical manufacturing. The construction sector is also booming as people and businesses move into the region.

But despite strong job growth, economic insecurity is also increasing in the Columbus region. The share of people living below 200 percent of the federal poverty level increased from 24 percent to 29 percent since 2000, primarily due to rising rates among Black and Latinx residents.⁴ This report offers a data-driven examination of the state of racial equity in the Columbus labor market, the historical and ongoing drivers of inequity, and tailored strategies to promote shared prosperity.

The following section is a narrative account of the lasting legacy of structural racism in Columbus. The five sections after that demonstrate how the effects of structural racism manifest in today's workforce. The final section describes a framework for advancing workforce equity, developed in collaboration with the Columbus regional advisory committee. Methodological details are available at the end of the report.

5.0
**STRUCTURAL RACISM DRIVES
WORKFORCE INEQUITIES**



Advancing workforce equity requires an understanding of the past, present, and possible future of workforce inequities. Below we describe how the history and legacy of structural racism have produced and reinforced many of the inequities that persist in the region today. Like many other cities in the US, Columbus declared racial inequality a public health crisis in 2020, as the Covid-19 pandemic brought the ongoing social, economic, and health impacts of structural racism into clear focus.⁵ Racial inequity is also an economic crisis. Patterns of residential segregation and inequitable community development policies have led to periods of disinvestment and reinvestment that have disadvantaged families of color at all stages. As the economist Darrick Hamilton and others have described, the racial wealth gap perpetuates economic inequities, as people of color have fewer resources with which to invest in themselves, their businesses, and their communities.⁶ The uneven geography of opportunity in Columbus also contributes to racial inequities in the labor market, as Black workers have been and remain spatially disconnected from high-quality employment opportunities.

Segregation past and present

Many workforce intermediaries and leaders in business and education are familiar with the history of segregation in Columbus, and local residential patterns bear out the lasting effects of those historical practices. (See the box below for more information on the history of segregation in Columbus.) In a report by Richard Florida and Charlotta Mellander measuring the extent to which US metropolitan areas are segregated by wealth, income, educational attainment, and occupational composition, Columbus was ranked among the top 10 most segregated metropolitan areas on most of those lists.⁷

Other research has linked racial and economic segregation to historical practices of redlining. The National Community Reinvestment Coalition found that 91 percent of the tracts in neighborhoods that were historically rated as the “best” investments are now middle-to-upper income, and 74 percent of tracts in redlined neighborhoods (those rated “hazardous”) are low-to-moderate income.⁸ Integration has yet to be realized in Columbus, and the region remains highly segregated by race and class.

Revisiting the History

During the first waves of the Great Migration from southern states, Black people migrated to Columbus in large numbers from 1910 to 1930 and settled in communities such as Hilltop and Franklinton that still exist today. During the 1930s, the Home Owners' Loan Corporation (HOLC), the government corporation responsible for expanding home buying opportunities, created maps for Columbus and other American cities that color-coded majority Black neighborhoods as “hazardous” for investment, a practice known as “redlining.” Banks and lending institutions, therefore, rarely did business with the residents of these neighborhoods. This disinvestment trapped Black families in communities with little financial support. The neighborhoods suffered as a result.

When Black families attempted to move out of redlined neighborhoods, they were often met with bylaws in other neighborhoods that restricted selling homes to people of color. Nearly two-thirds of subdivisions in Central Ohio had these arrangements, referred to as “restrictive covenants.”⁹ When Black families were able to relocate, white residents often abandoned the neighborhood—a phenomenon commonly referred to as “white flight.” To take advantage of this phenomenon, realtors would engage in a practice called blockbusting—selling a home on an all-white street to a Black family—to accelerate white flight and drive down housing market values. Speculators would then buy homes at low prices, then inflate the costs again when renting or selling to Black families who had relatively fewer options due to discriminatory policies and practices.¹⁰

Despite the lack of financing and prevailing racist attitudes prior to the Civil Rights Movement of the 1960s, there were successful enterprises in redlined neighborhoods. Black businesses often catered to Black clientele and operated within Black networks. For example, in 1962, the Franklin Park Medical Center was founded by five Black medical professionals who bought property from a Black business owner and secured financing through a Black attorney.¹¹ These economic achievements are a testament to the strength of local neighborhoods and communities. Today, after historical practices concentrated people of color in these neighborhoods, new practices threaten to push them out.

Reinvestment today in majority people-of-color neighborhoods in Columbus benefits in some ways from the disinvestment that came before it. A 2021 report by the Kirwan Institute for the Study of Race and Ethnicity found that homes in Black neighborhoods routinely sell for under their appraisal value.¹² Research from the *New York Times*, using data from the US Census and the Home Mortgage Disclosure Act, shows that white homebuyers in the majority-Black Near East neighborhood often have incomes 50 percent higher than the existing homeowners.¹³

To ensure equitable development, policies that aim to channel resources into disinvested neighborhoods should be paired with strong protections to ensure against displacement and gentrification, actively direct incoming resources to long-time residents in the community, and spur the development of local future-ready jobs. Policy Matters Ohio advises that these measures should be targeted to genuinely disinvested communities, realistic in their estimates of job creation, transparent when negotiated, and enforceable.¹⁴ However, inequitable design hampers the potential positive impact of targeted policies. For example, the income calculations used for affordable housing policies are based on a geographic footprint that includes wealthy Columbus subareas, which raises the median family income threshold to a point where many families of color have a hard time affording rent even when rates are targeted to 70 or 80 percent of the area median income.

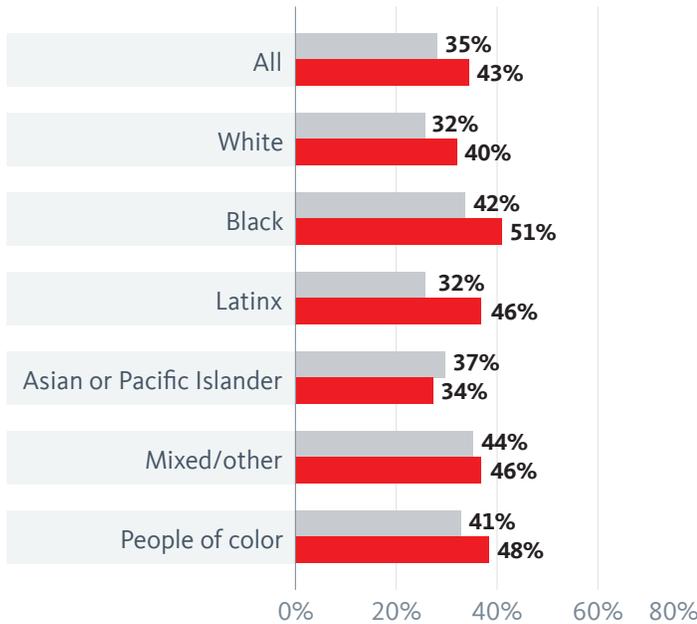
Without pairing investment with protection, the effects of segregation will continue unabated to the detriment of people of color. At present, rates of gentrification and displacement in Columbus are low compared to other large metropolitan areas such as Denver, Boston, New Orleans, and Phoenix.¹⁵ Instead of becoming dispersed or dislocated, poverty in Columbus has concentrated and expanded.¹⁶ In the Columbus metro, 25 percent of the Black population lives in high-poverty neighborhoods, up from 19 percent in 2000 (the figure for the white population increased from 4 percent to 7 percent). Rent burden is also up for Black families, while homeownership is down. In 2000, 42 percent of Black renters paid more than 30 percent of their income in rent, compared to 51 percent by 2019 (the white rent burden increased from 32 percent to 40 percent during that time).¹⁷ That increase is likely higher now due to the rapid increase in rents in Columbus. Homeownership has declined for Black residents from 40 percent in 2000 to 33 percent in 2019, while steadily two-thirds of the white population owned their homes throughout that period. By empowering and protecting workers and communities, Columbus can achieve development without displacement and ensure that resources are directed to the most vulnerable and historically marginalized people in the region.

Rent burden has increased for all racial/ethnic groups, but most dramatically for Black and Latinx households—who are also least likely to own their homes.

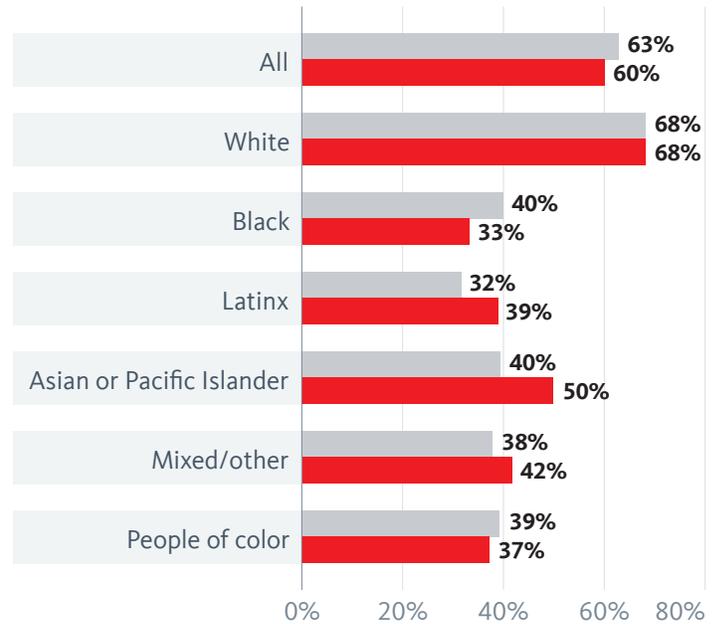
Rates of rent burden and homeownership by race/ethnicity, Columbus metro region, 2000 and 2019

● 2000
● 2019

Rent burden



Homeownership



Source: Authors' analysis of 2000 and 2019 5-year American Community Survey microdata from IPUMS USA. Rent burdened indicates households that spend more than 30 percent of income on housing costs.

Geography of opportunity

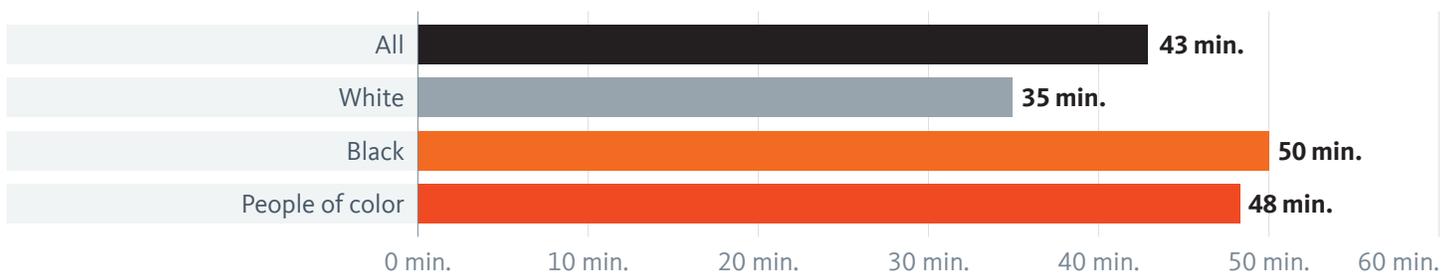
Structural racism has also affected the geography of opportunity in the Columbus region. Policies and practices by civic leaders help determine where good jobs are located. In one high-profile case from Columbus history, this process played out when elected leaders directed the construction of interstate highways I-70, I-71, and I-670 through the redlined neighborhoods discussed above. The construction dislocated one entire neighborhood and divided another—a thriving middle-class enclave. The good jobs affected by this construction were at best relocated and at worst destroyed.¹⁸

When a spatial mismatch occurs between the location of good jobs and the location of affordable housing, access to reliable and efficient transportation becomes a critical connector. In Columbus, racial inequities in transportation are apparent in both vehicle ownership and the amount of time it takes workers to get to their jobs. Across the region, the average commute time for those taking public transportation is 35 minutes for white workers and 50 minutes for Black workers. Among those driving to work, average commute times are similar across racial/ethnic groups—around 24 minutes. But Black residents in Columbus are nearly three times as likely as their white counterparts to live in households without a vehicle: about 5 percent of white households lack access to a car, compared with 14 percent of Black households.¹⁹

Without significant investment in public infrastructure, these inequities are likely to increase. About 79 percent of the region’s Black population lives within the city of Columbus compared with 34 percent of the white population; between 2010 and 2019, demand for jobs grew 1.3 times faster in the metropolitan perimeter than in the city of Columbus, especially in New Albany (3.6x), Groveport (2.6x), Grove City (2.1x), and Hillard (2x). The city of Columbus was adding more jobs overall, but these perimeter cities added jobs more quickly.

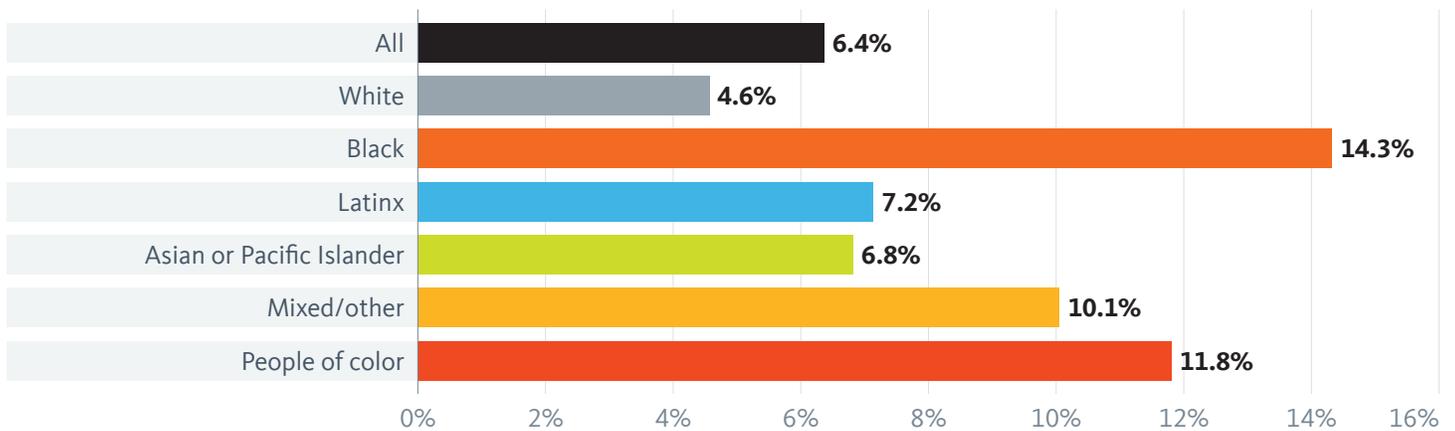
Transportation equity is key to upward mobility for people of color.

Commute time on public transportation by race/ethnicity, Columbus metro region, 2019



Source: Authors’ analysis of the 2019 5-year American Community Survey microdata from IPUMS USA.

Percent of households without a vehicle by race/ethnicity, Columbus metro region, 2019



Source: Authors' analysis of the 2019 5-year American Community Survey microdata from IPUMS USA.

Place matters, both for the immediate employment opportunities available to local residents and for the long-term prospect of raising the next generation to further prosperity. A 2014 study by economists from Harvard University and the University of California at Berkeley found that low-income children in metro Columbus had just a 4.9 percent chance of reaching the top fifth of household income by age 30, a much lower rate than in other metros, such as Seattle (10.9 percent), Pittsburgh (9.5 percent), and Fort Worth (9.1 percent).²⁰

Policies can also affect the geography of opportunity, and important trade-offs must be considered. Disinvested communities have fewer good jobs, and they also have lower property values and, therefore, less funding available for schools relative to wealthier communities. Our research shows persistent gaps in educational attainment by race/ethnicity in the Columbus metropolitan region. The regional advisory group that supported this report described lack of funding as one of the primary problems facing schools in disinvested communities. Policies in Columbus that aim to attract jobs and revenue to disinvested communities often include abatements on the property tax that businesses will owe in the future, and these abatements can result in less funding for local schools. Policy Matters Ohio found that forgone tax revenue in the Columbus City School District amounted to \$29.6 million in 2019.²¹

Racial wealth gap

The factors above contribute to a large racial wealth gap in Columbus as people of color have fewer resources with which to invest in themselves, their businesses, and their communities. A City of Columbus report on financial empowerment found that 33 percent of Black households and 31 percent of Latinx households have zero net wealth, compared to only 17 percent of white households.²²

Black and Latinx families also have less connection to the financial system than their white counterparts. The same report found that one in five Black and Latinx households are unbanked, which is five times the rate of white households. Being unbanked leads to paying higher transaction fees that further shave buying power in already limited household budgets. At the same time, in majority people-of-color zip codes, 28 percent of households have medical debt in collections. Due to the wealth gap, debt, and disconnection from the financial system, families and people of color experience financial pressures that constrain their ability to invest in education and training or to afford stable housing, reliable transportation, and other foundational elements of economic mobility.

Systemic and institutional racism in the labor market

Racial bias and discrimination in recruitment and hiring remain significant barriers for people of color. National research has indicated that with identical resumes, white applicants (or applicants with “white-sounding names”) are called back 36 percent more often than Black applicants, and 24 percent more often than Latinx applicants.²³ And, seemingly race-neutral employer hiring practices like credit checks and criminal background checks erect barriers that are felt disproportionately by people of color relative to their white counterparts. In Columbus, for example, Black residents face disproportionate arrests relative to white residents.²⁴ These interactions with police unnecessarily disqualify Black residents from jobs that use a background check as a screen, as well as many jobs that require an occupational license. Credit checks conducted as part of a job-application process also unduly burden Black and Latinx candidates, who are less likely than other groups to have access to safe and affordable banking that supports wealth and credit building.²⁵

Structural changes in the economy and labor market demand

The broad decline in American manufacturing has affected all of Ohio, including Columbus. The manufacturing sector had traditionally been a good source of employment for workers without a college degree, but many of the advanced manufacturing sectors that are growing today have a higher barrier to entry than traditional manufacturing. Further, manufacturing employers often ask for skills that are rarely developed in the secondary school system, and even more rarely in schools in disinvested communities. A 2016 Ohio survey found that while 70 percent of parents are looking for career-focused options in schools, only 56 percent of teachers are confident integrating career content into their courses.²⁶

Employment growth in Columbus is bifurcated by income. Lower income jobs in warehousing and material moving are growing, as are high-income jobs in corporate headquarters. The jobs projected to add the most Black and Latinx workers in Columbus over the next 10 years are personal care aides, cooks, home health aides, and laborers and material movers. Employment practices are also changing. Employers in Columbus are hiring more temporary workers, and they are favoring a temp-to-permanent arrangement that defers the benefits of full employment.²⁷ Gig work is growing, which creates more jobs that are not protected by federal labor standards, such as minimum-wage and overtime laws, and that do not offer benefits, such as health insurance or paid family leave.

6.0
THE FACE OF THE REGION
IS CHANGING



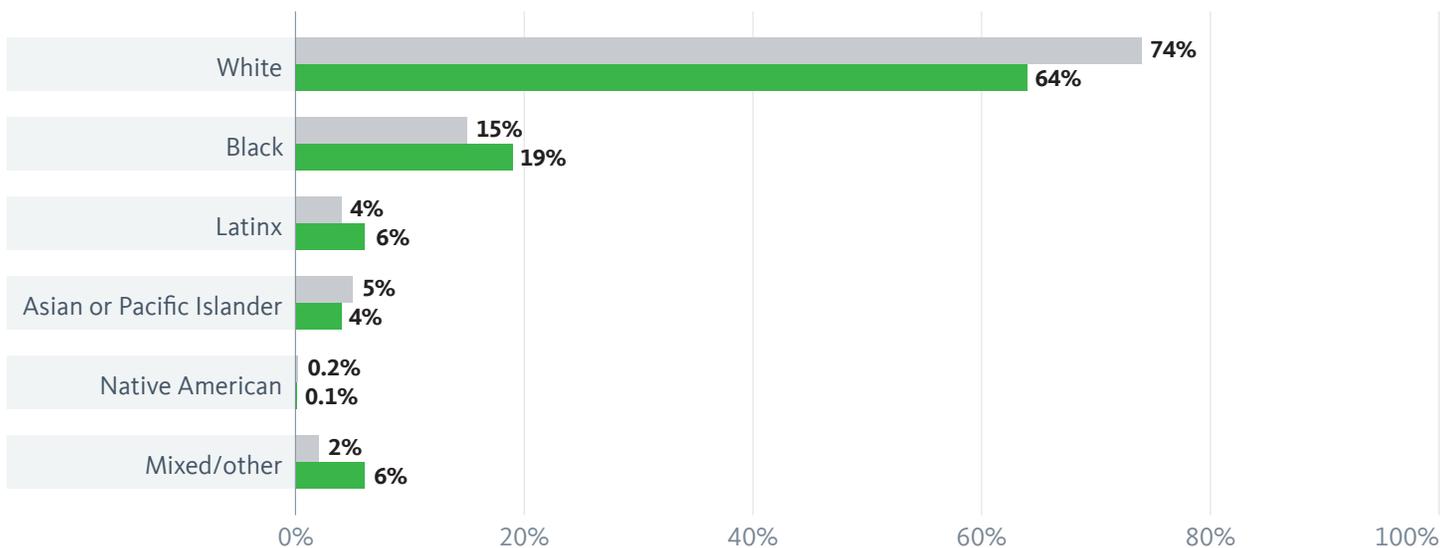
Workforce equity is an imperative in part because the population in Columbus is growing increasingly diverse: from 2010 to 2019, as the total population in Columbus grew by 10 percent, the Black population grew by 18 percent, the Latinx population by 30 percent, the Asian or Pacific Islander population by 53 percent, and the mixed/other population by 52 percent. This trajectory of increasing diversity is expected to continue: by 2050, as the total population in Columbus grows another 29 percent, the Black population will grow by 71 percent, the Latinx population by 122 percent, the API population by 154 percent, and the mixed/other population by 142 percent.

Currently, a little more than a quarter of the workforce in the Columbus region comprises workers of color. But among residents under the age of 25, more than a third are people of color. This diverse population represents the next generation of the Columbus workforce.

The Columbus region’s workforce is steadily growing more diverse.

Current and emerging workforce demographics by race/ethnicity, Columbus metro region, 2018

- Current workforce
- Emerging workforce



Source: Authors’ analysis of the 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe of emerging workforce includes all people under the age of 25 years old, while the current workforce includes the employed population between the ages of 25 and 64.

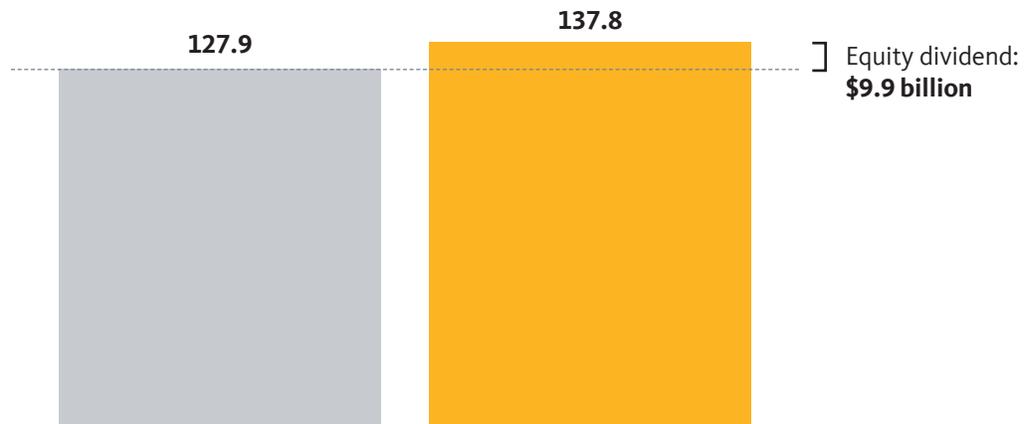
Racial equity is a win-win for workers and the economy

The region's GDP could be about 8 percent greater if racial gaps in income were eliminated.

Actual regional gross domestic product and estimated regional gross domestic product with racial equity in the workforce (billions), Columbus metro region, 2018

● GDP in 2018

● GDP if racial gaps in income were eliminated



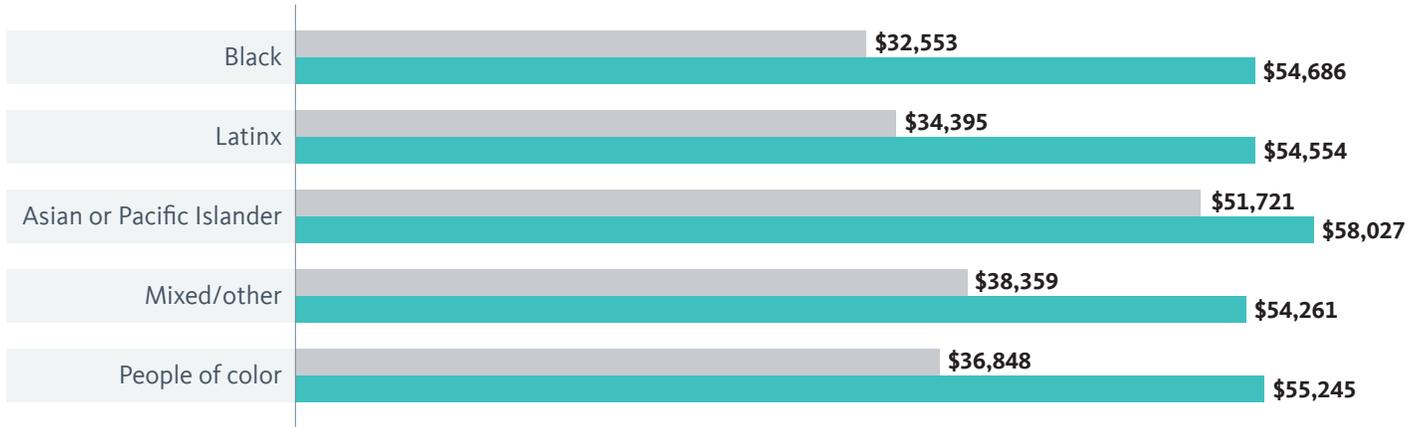
Source: Authors' analysis of the 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes the population ages 25–64. Data reflect a 2014–2018 average. Values are in 2018 dollars. See the methodology for details on the analysis.

Equity is a necessary component for a strong and sustainable economy, and, as the population becomes more diverse, the costs of inequity will only grow. In 2018, the gross domestic product of Columbus would have been nearly \$10 billion greater (around 8 percent greater) if there had been no racial gaps in employment or in wages for the working-age population (i.e., if workers in all racial/ethnic groups were employed at the same rate as their white peers and earned at least the same average wages as their white peers, adjusted for age).

With racial equity in employment and wages, average incomes would increase by 68 percent for Black workers and by 59 percent for Latinx workers.

Income gains with racial equity in the workforce, Columbus metro region, 2018

- Average income
- Average income with racial equity



Source: Authors' analysis of the 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes the population ages 25–64. Data reflect a 2014–2018 average. Values are in 2018 dollars. See the methodology for details on the analysis.

7.0 AGGREGATE GROWTH MASKS ENTRENCHED INEQUITIES

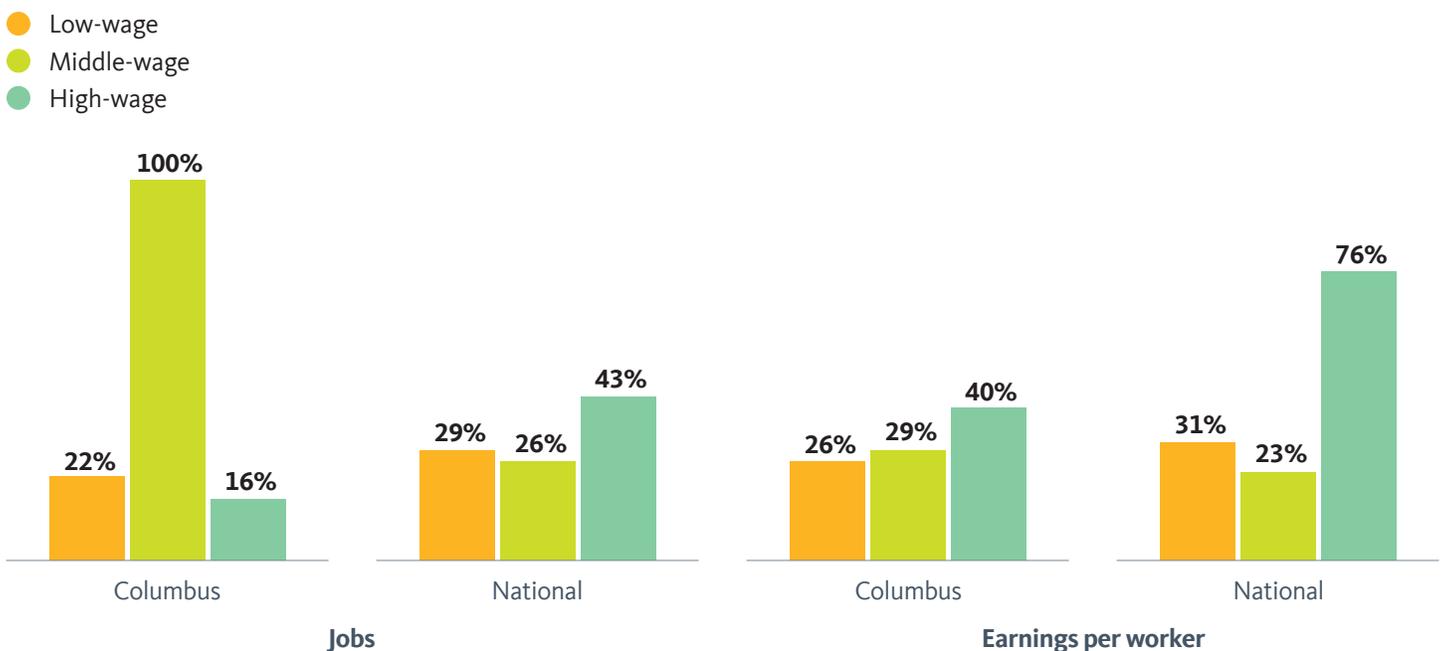


Growth by wage level

Columbus experienced strong growth relative to the nation in middle-wage jobs between 1990 and 2020, with an increase of 100 percent compared to only 26 percent at the national level. Growth in middle-wage jobs is critical to developing career scaffolding out of low-wage occupations. Growth in high-wage jobs is also important to the region because higher regional income means more spending on services and more jobs needed to support that spending.

Jobs growth has been disproportionately captured by middle-wage workers and earnings growth by high-wage workers.

Growth in jobs and earnings by wage level, United States and Columbus metro region, 1990–2020



Source: National Equity Atlas (PolicyLink and USC Equity Research Institute), www.nationalequityatlas.org. Available at https://nationalequityatlas.org/indicators/Job_and_wage_growth#. **Note:** Universe includes all jobs covered by the federal Unemployment Insurance (UI) program.

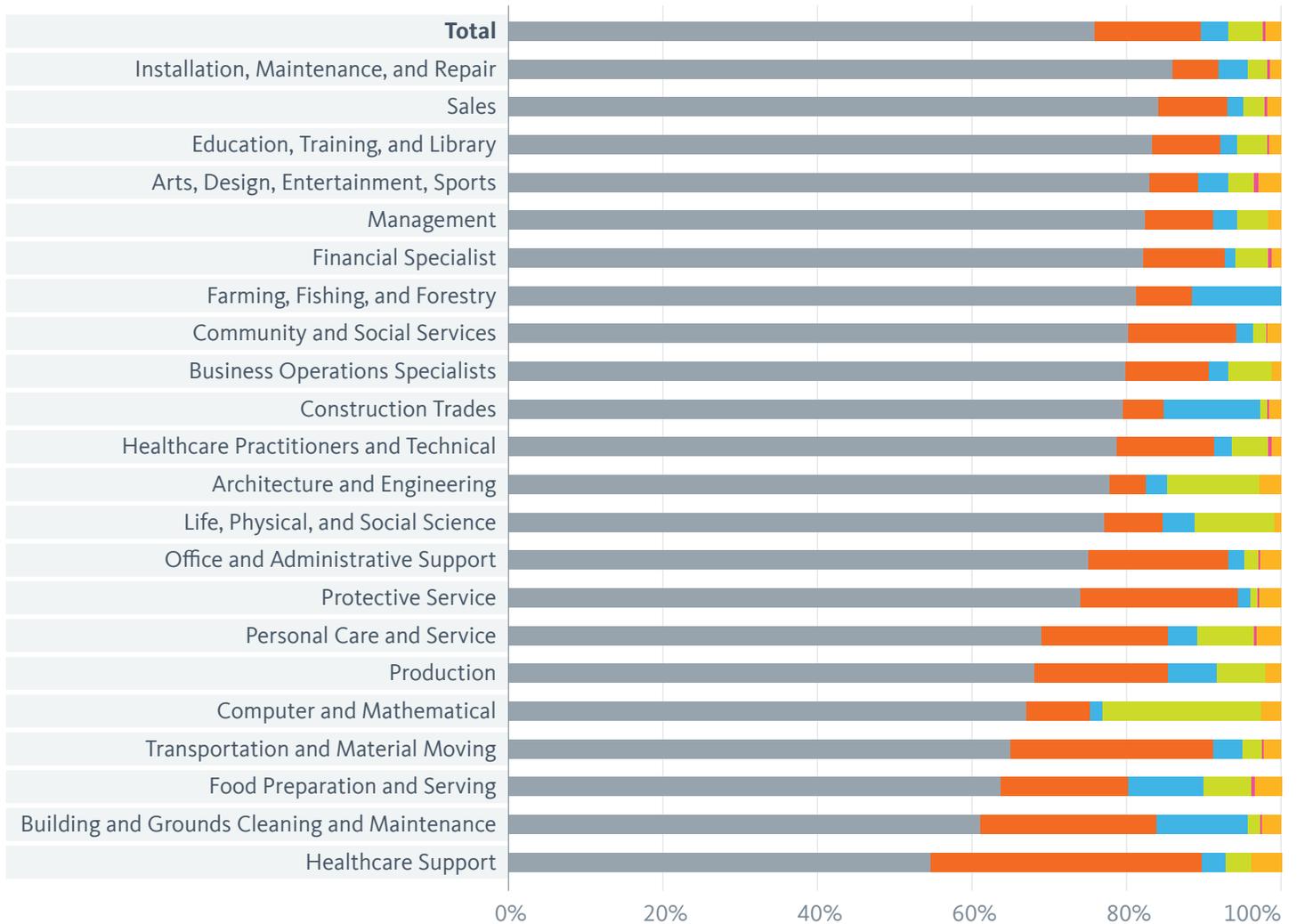
In the Columbus region, high-income jobs have grown by 16 percent relative to 43 percent nationally. Meanwhile, earnings growth in Columbus has been concentrated among high earners, with high-wage earnings growing by 40 percent compared to 29 percent and 26 percent among middle-wage and low-wage earnings, respectively. Earnings growth among middle-wage and low-wage earners in Columbus is comparable to the national average, but high-wage earnings growth was muted relative to the national average of 76 percent among high earners.

Occupational segregation

Occupational segregation remains a significant challenge for achieving workforce equity.

Occupational groups by race/ethnicity, Columbus metro region, 2018

- White
- Black
- Latinx
- Asian or Pacific Islander
- Native American
- Mixed/other



Source: Authors' analysis of the 2018 5-year American Community Survey microdata from IPUMS USA. Note: Universe includes the employed population ages 25–64. Data reflect a 2014–2018 average.

As the population in Columbus becomes more diverse so too will the workforce, and, although people of color make up nearly a quarter of the workforce in Columbus, they are still underrepresented in many occupations. In Columbus, Black people make up only about 8 percent of workers in computer and mathematical and life, physical, and social science occupations and 9 percent of those in management occupations, but they are 14 percent of the total workforce. By contrast, Black people make up a disproportionate amount of the workers in building, grounds cleaning, and maintenance and in transportation and material moving and protective services occupations. There is also a concentration of Black immigrants in health-care support where they make up over 10 percent of the workforce.

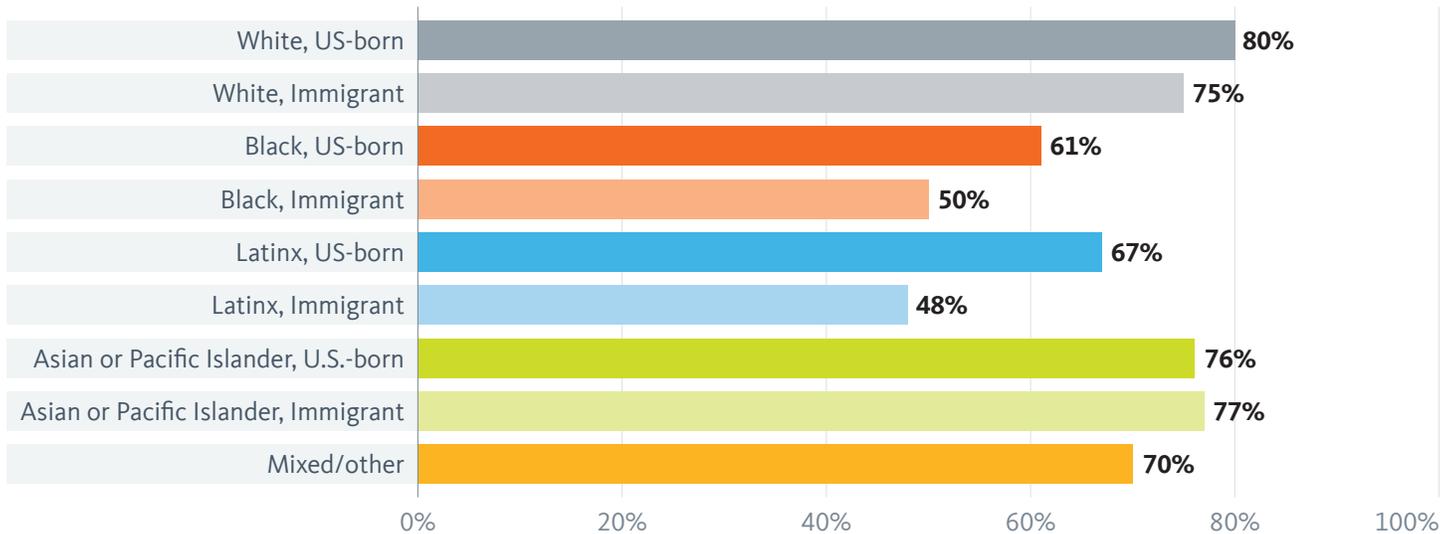
Latinx adults in Columbus are a small share of the workforce at only 4 percent, but they are overrepresented in many of the same occupations that tend to have low rewards. Latinx workers account for 12 percent of building and grounds cleaning and maintenance, 10 percent of food preparation and serving, and 11 percent of farming occupations. They are the most underrepresented in higher wage occupations such as finance specialist occupations (2 percent) and computer and mathematical occupations (less than 2 percent). Immigrants account for around half of the Latinx population, but more than 85 percent of Latinx workers in building, grounds cleaning, and maintenance and construction occupations.

Asian Americans and Pacific Islanders also make up only 5 percent of the population and are a diverse population with varying degrees of education. This diversity is reflected in the differential occupations they are in relative to their overall proportion of the population. While Asian Americans are overrepresented in higher paying occupations such as computer and mathematical jobs, architecture and engineering, and life, physical, and social science, they are also present in higher numbers in personal care and service occupations, which also tend to pay lower wages.

Wages

Four-fifths of US-born white workers earn at least \$15 an hour, compared to less than half of Latinx immigrants.

Share of workers earning at least \$15/hour by race/ethnicity and nativity, Columbus metro region, 2019



Source: Authors' analysis of the 2019 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes civilian noninstitutionalized full-time wage and salary workers ages 25–64. Data reflect a 2014–2018 average. The \$15/hour wage threshold is based on 2018 dollars.

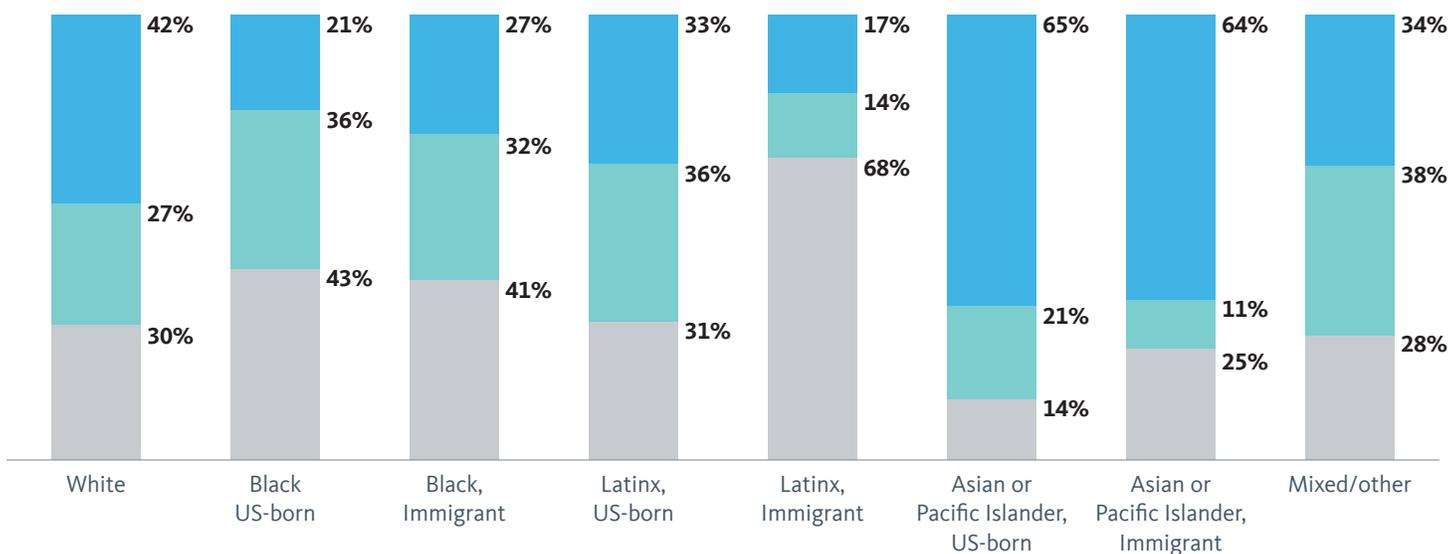
More than three-quarters of white immigrant and Asian and Pacific Islanders workers earn at least \$15 an hour. Black and Latinx workers are less likely to earn these wages, with Latinx immigrants being the least likely to earn \$15 per hour at 48 percent. Fifty percent of Black immigrant workers earn this wage as well. By contrast, their US-born counterparts are more likely to earn at or above this wage threshold, signaling that nativity also plays a role in wages. Sixty-seven percent of US-born Latinx workers and 61 percent of US-born Black workers earn at least \$15 per hour. These inequities are especially concerning given that the living wage in Columbus for two working adults and two children is \$15.73.

Higher education

About one in five Latinx immigrants and US-born Black adults in the Columbus region have a bachelor's degree.

Educational attainment by race/ethnicity, Columbus metro region, 2018

- High school diploma or less
- Some college or associate's degree
- Bachelor's degree or higher



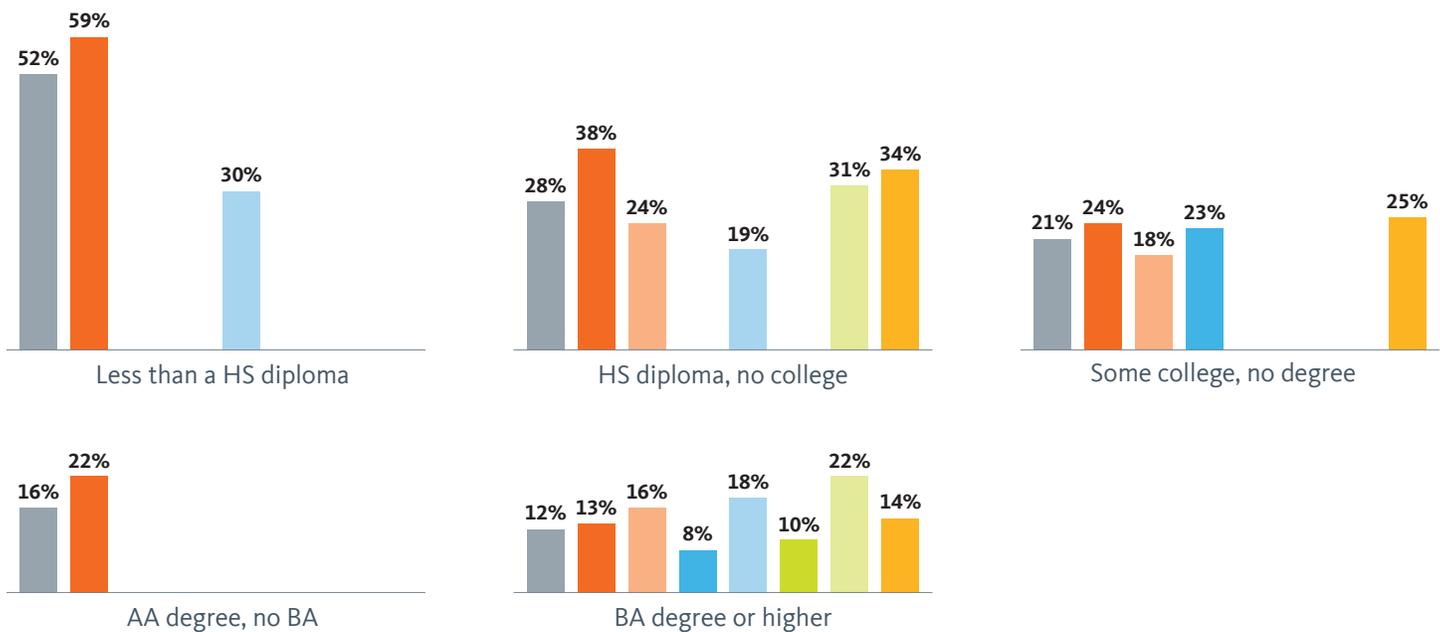
Source: Authors' analysis of the 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes the population ages 25–64. Data reflect a 2014–2018 average.

Around 65 percent of Asian and Pacific Islander adults have a bachelor's degree or higher, along with 42 percent of white workers. Black and Latinx workers are less likely to have a college degree, with Latinx immigrants being the least likely to hold a bachelor's degree (17 percent), followed by US-born Black adults (21 percent), Black immigrant adults (27 percent), and US-born Latinx adults (33 percent). Around 34 percent of multiracial/other workers have a bachelor's degree or higher.

Higher educational attainment narrows racial gaps in employment, but Black workers without a bachelor’s degree still face increased rates of joblessness.

Joblessness by educational attainment, race/ethnicity, and nativity, Columbus metro region, 2018

- White
- Black, US-born
- Black, Immigrant
- Latinx, US-born
- Latinx, Immigrant
- Asian or Pacific Islander, US-born
- Asian or Pacific Islander, Immigrant
- Mixed/other



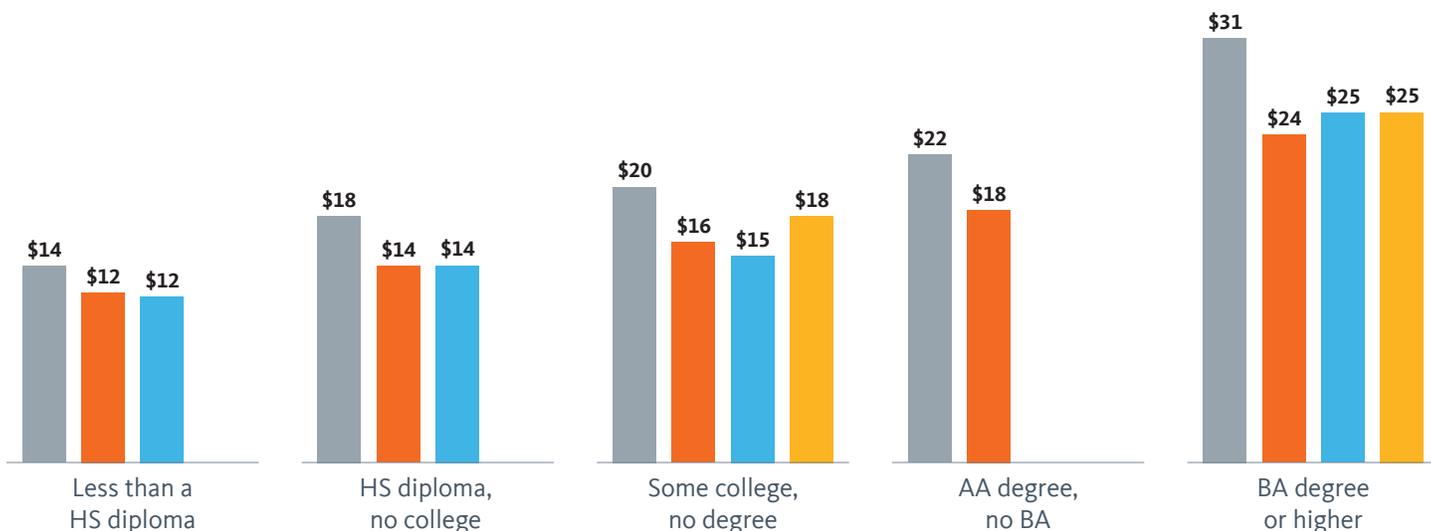
Source: Authors’ analysis of the 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes the civilian noninstitutional population ages 25–64. Joblessness is defined as those unemployed or not in the labor force as a share of the total population. Data reflect a 2014–2018 average.

Educational attainment and joblessness seem to have an inverse relationship, with joblessness decreasing as education increases. Despite this relationship, Black workers still experience higher joblessness rates than workers of other races or ethnicities within education groupings. Black workers with less than a high school diploma are the most likely to experience joblessness at 59 percent, followed by white workers without a high school diploma (52 percent) and Black high school-educated workers (38 percent). Joblessness is 16 percentage points lower for Black workers with an associate’s degree than Black workers with only a high school diploma (22 percent for those with an associate’s degree compared to 38 percent for those with just a high school diploma).

Wages tend to increase with education, but Black and Latinx workers often experience lower wage premiums for their educational attainment compared with white workers.

Median hourly wages by educational attainment and race/ethnicity, Columbus metro region, 2018

- White
- Black
- Latinx
- Mixed/other



Source: Authors' analysis of the 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes civilian noninstitutional full-time wage and salary workers ages 25–64. Data reflect a 2014–2018 average. Values are in 2018 dollars.

Educational attainment is associated with higher earnings and wages. The wage premium from earning a bachelor's degree compared with having less than a high school diploma is highest for white workers with an increase of \$17 per hour (a 121 percent increase). The same level of educational attainment carries a much smaller comparative wage increase for Black and Latinx workers, at \$12 and \$13 per hour, respectively. In addition, wages for Black and Latinx workers are the lowest within their respective education groupings, with Black and Latinx workers without a high school diploma earning the least at \$12 per hour. White workers earn the highest wages among every educational group.

8.0

WORKERS FACE A SHORTAGE OF FUTURE-READY JOBS



As the data above reveal, not everyone who wants to work in Columbus has a job, and not all workers are paid equitably. As the economy and labor market evolve toward advanced industries and services, far too few workers are benefiting from the region’s growth and the higher incomes that characterize that growth. Workforce development agencies, intermediaries, and policymakers need to work to increase the quality of jobs, grow the number of good jobs, and ensure equitable access to those jobs.

To better understand the shortage of future-ready jobs in the region, we analyzed access to those jobs in Columbus by race, ethnicity, and level of required education, using the localized definition of future-ready jobs summarized in the table below.

Characteristics and examples of future-ready jobs by typical education requirements, Columbus metro region, 2019

Characteristics of future-ready jobs:

- Living wage compensation: Average wage for the occupation is sufficient to sustain a working family of two working adults and two children—\$32,718 in Columbus²⁸
- Stable or growing base of employment: The number of jobs is projected to grow or to remain relatively stable for the next decade—employment in the occupation is not declining by more than 10 percent over 10 years, or more than 2 percent over 10 years for small occupations
- Automation resilient: The occupation has a probability of computerization lower than 50 percent, given the full array of tasks that compose the role

Example occupations accessible to workers with a high school diploma or less:

- Food service managers
- Sales representatives of services, except advertising, insurance, financial services, and travel
- First-line supervisors of production and operating workers

Example occupations accessible to workers with a postsecondary certificate or license or vocational training through an apprenticeship:

- Licensed practical and licensed vocational nurses
- Electricians
- First-line supervisors of construction trades and extraction workers

Example occupations accessible to workers with an associate’s degree:

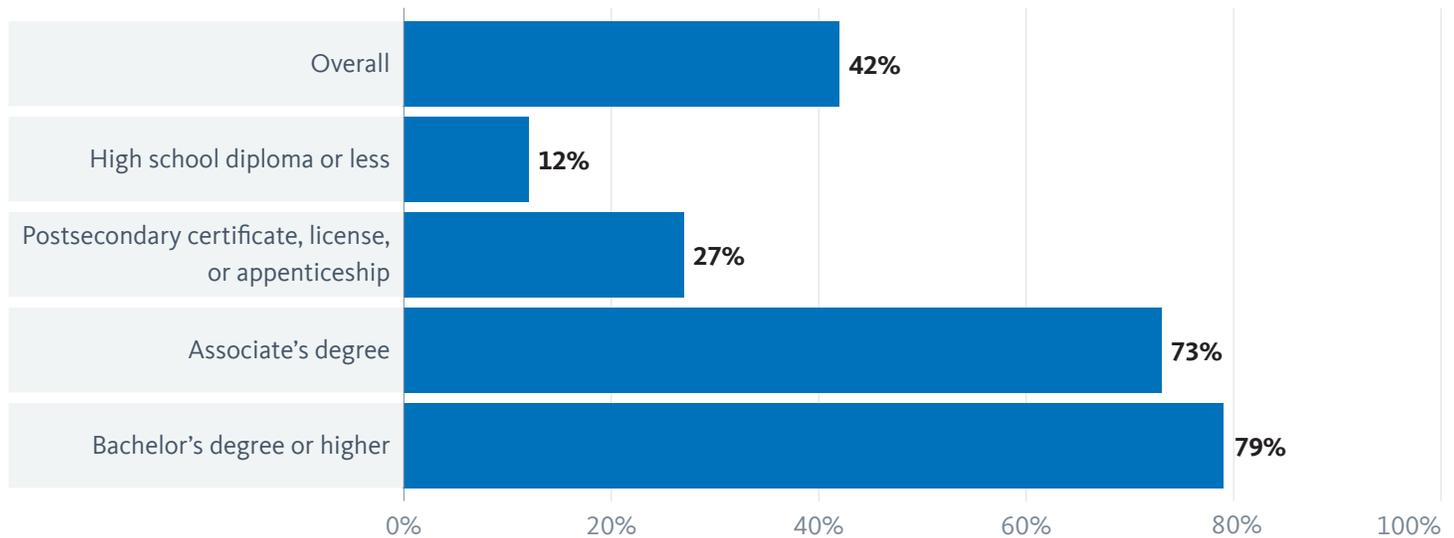
- Registered nurses
- Chefs and head cooks
- Radiologic technologists and technicians

Example occupations accessible to workers with a bachelor’s degree or higher:

- Elementary and middle school teachers
- Financial managers
- Software developers

More than 500,000 workers in the region are not in future-ready jobs Just two in five jobs in Columbus are future-ready.

Share of workers in future-ready jobs, overall and by educational requirements, Columbus metro region, 2018



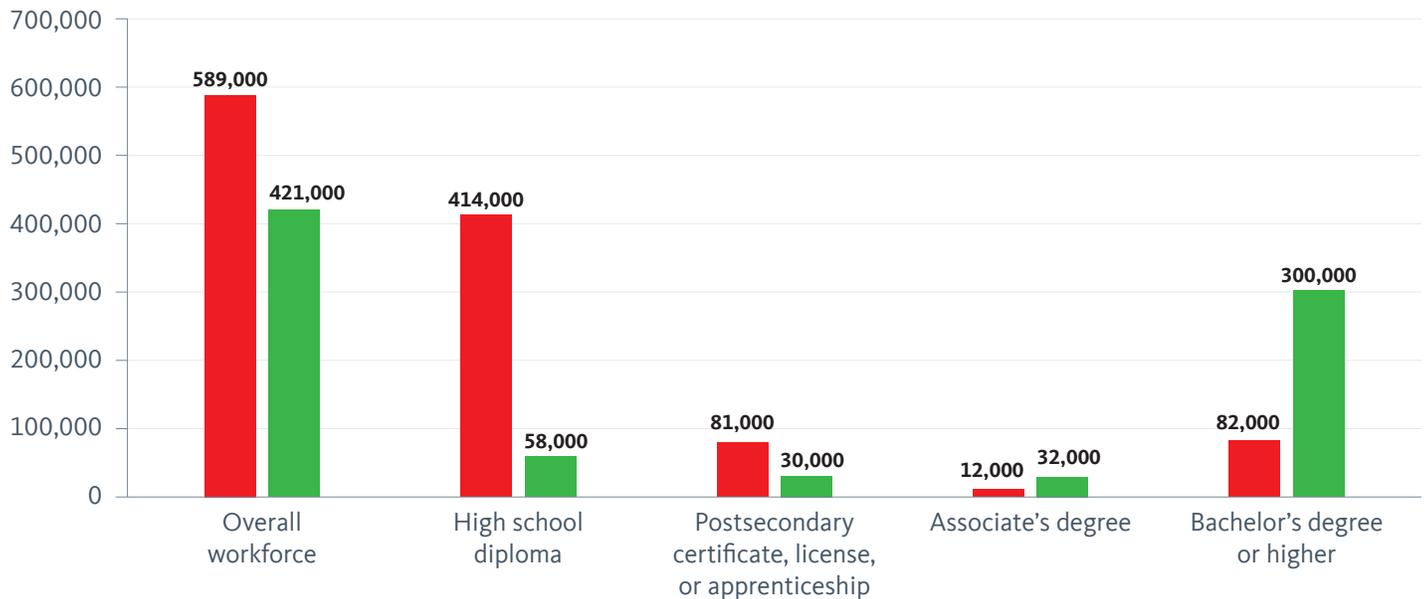
Sources: Employment from 2018 5-year American Community Survey microdata from IPUMS USA, and occupational characteristics from Burning Glass job posting data and 2018 5-year American Community Survey microdata from IPUMS USA.

The deficit of future-ready jobs in Columbus is deep: only 42 percent of the region's one million workers are in such roles. The share of workers in future-ready jobs increases as the level of education required for the job increases, but even among occupations that require non-degree postsecondary certifications, licenses, or apprenticeships, just 27 percent of workers have these jobs. The vast majority of jobs that require postsecondary degrees (associate's and higher) meet our definition of future readiness, but these educational requirements are a systemic barrier for many.

Nearly 500,000 Columbus jobs require no more than a high school diploma, but only 12 percent of them are future-ready.

Distribution of employment by educational requirements and job quality, Columbus metro region, 2018

- Workers not in future-ready jobs
- Workers in future-ready jobs



Sources: Employment from 2018 5-year American Community Survey microdata from IPUMS USA, and occupational characteristics from Burning Glass job posting data and 2018 5-year American Community Survey microdata from IPUMS USA.

The distribution of Columbus's future-ready jobs by education underscores the importance of a multifaceted approach to create more such jobs, upgrade existing jobs, and develop race-conscious workforce development strategies to ensure people of color can access high-quality employment. Given that fewer than a third of Black and Latinx adults in Columbus have a bachelor's degree, workforce intermediaries must consider interventions that will improve the quality of the jobs available to these workers, as well as develop strategies to increase their levels of educational attainment.

One approach is to grow employment in the occupations that provide the largest number of future-ready jobs that do not require a college degree. These include supervisory positions in retail, food service, manufacturing, construction, and other industries; several trades; nursing; and other occupations described in the table below. Presently, workers of color are underrepresented in 14 of the largest 15 future-ready occupations that do not require a college degree. The lone exception is licensed practical and licensed vocational nurses.

Future-ready, entry-level positions in Columbus exist but are disproportionately held by white workers.

Future-ready jobs that do not require a college degree, with occupational characteristics, by race and ethnicity, Columbus metro region, 2018

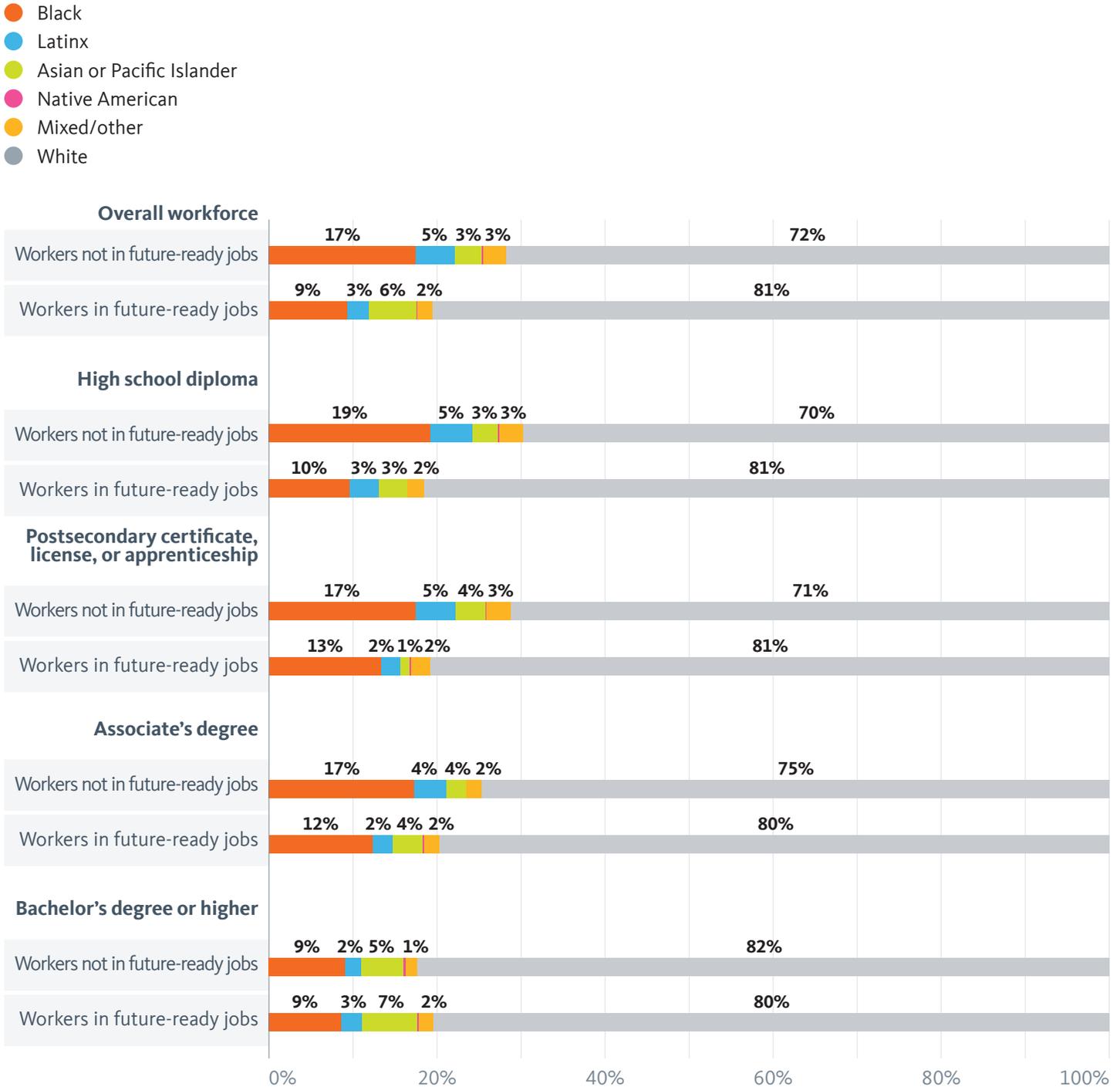
Occupation	Total Employment	10-Year Growth Rate	Automation Score (Probability of Computerization)	Average Income in Columbus	% Workers of Color
First-line supervisors of retail sales workers	19,195	-2%	28%	\$55,584	15%
First-line supervisors of non-retail sales workers	9,042	-3%	8%	\$94,481	11%
Food service managers	7,666	5%	8%	\$45,274	28%
Licensed practical and licensed vocational nurses	6,437	5%	6%	\$33,002	47%
Sales representatives of services, except advertising, insurance, financial services, and travel	6,101	4%	39%	\$84,498	16%
First-line supervisors of production and operating workers	5,896	1%	2%	\$51,580	22%
Police officers	3,740	0%	10%	\$68,154	17%
Electricians	3,541	9%	15%	\$44,930	11%
First-line supervisors of construction trades and extraction workers	2,977	9%	17%	\$57,962	4%
Firefighters	2,733	1%	17%	\$78,969	6%
Plumbers, pipefitters, and steamfitters	2,376	7%	35%	\$49,449	10%
Supervisors of transportation and material moving workers	1,883	4%	22%	\$50,810	23%
Securities, commodities, and financial services sales agents	1,512	5%	2%	\$107,273	13%
First-line supervisors of mechanics, installers, and repairers	1,457	2%	0%	\$61,860	17%
Miscellaneous installation, maintenance, and repair workers, including, wind turbine service technicians	1,293	7%	47%	\$47,306	10%

Sources: Employment from 2018 5-year American Community Survey microdata from IPUMS USA, and occupational characteristics from Burning Glass job posting data and 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Cells highlighted in red indicate under-representation of this race/ethnicity group relative to their representation in all occupations that do not require a college degree.

Major racial inequities exist in access to future-ready jobs

White workers are overrepresented in future-ready jobs overall and particularly overrepresented in those that do not require any postsecondary education.

Distribution of workers by race/ethnicity, job quality, and educational requirements, 2018



Sources: Employment from 2018 5-year American Community Survey microdata from IPUMS USA, and occupational characteristics from Burning Glass job posting data and 2018 5-year American Community Survey microdata from IPUMS USA.

Examining future-ready roles by race and education requirements, we find large inequities. White workers are overrepresented in such jobs overall, and particularly overrepresented in such jobs that do not require a college degree—the very jobs that the vast majority of workers of color are qualified to obtain given the barriers to higher education described above. Only 8 percent of workers of color in jobs that require only a high school degree are in future-ready jobs, relative to 14 percent of white workers. And, 20 percent of workers of color in jobs that require non-degree postsecondary training, such as a certificate or apprenticeship, are in future-ready jobs, compared to 30 percent of white workers.

Employment opportunities posted in 2019 could have closed racial gaps in access to future-ready jobs.

In 2019, there were enough openings for future-ready roles over the year to close the racial equity gaps in future-ready jobs at each level of educational attainment. For example, to close the racial gap in future-ready occupations that require no more than a high school degree, 6,200 workers of color would need a job upgrade; in 2019, there were 18,000 openings for future-ready jobs at this educational level.

Still, 77 percent of the 152,000 future-ready jobs available in 2019 required a bachelor's degree or more, underscoring the need for workforce intermediaries and employers to reexamine credentialing requirements and design pathways into these jobs for workers without a four-year degree, wherever possible, as well as increase postsecondary attainment and affordability for people of color.

Access to the three key dimensions of future-readiness (family-sustaining wages, large or stable base of employment, and automation resiliency) varies between racial/ethnic groups. We found systematic inequities that have important implications for equitable workforce strategies:

- Crowding in low-wage occupations is the largest reason that workers of color without a college degree face an equity gap in future-ready jobs. Only 33 percent of workers of color in jobs that require no more than a high school diploma are in occupations with average wages above the regional living wage, compared to 44 percent of white workers. That gap grows for workers in jobs that require non-academic postsecondary training such as a certification,

license, or apprenticeship: 54 percent of workers of color are in above-living wage occupations compared to 72 percent of white workers. Workforce intermediaries must ensure that non-academic postsecondary training diminishes racial gaps, rather than expanding them.

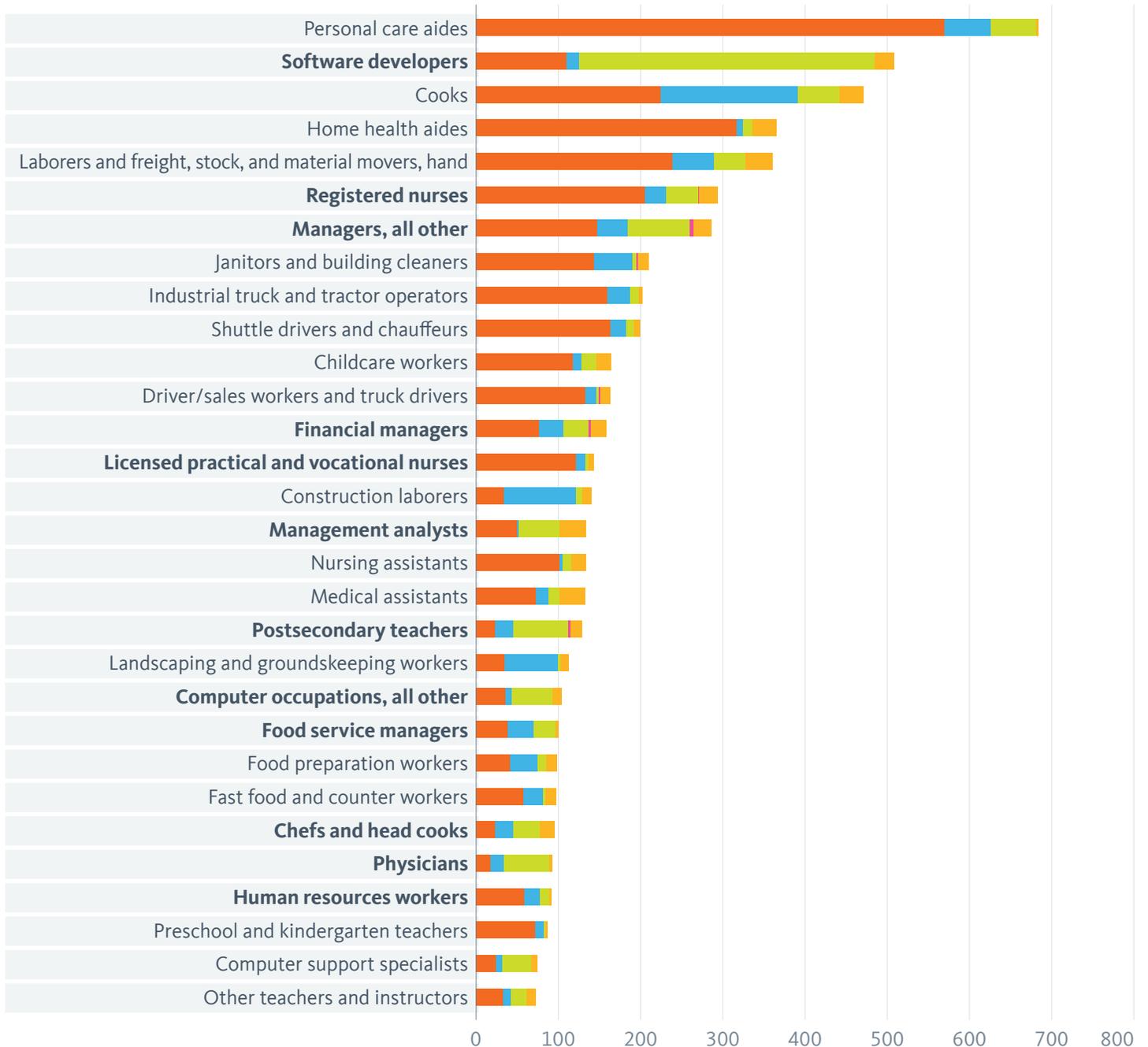
- Workers of color, especially Latinx workers, are in occupations that are growing quickly but face elevated automation risk relative to their white colleagues. In jobs that require no more than a high school diploma, for instance, 78 percent of Latinx workers are in stable or growing occupations, compared to 62 percent of white workers. However, 87 percent of Latinx workers are in occupations that are more likely than not to experience disruption due to automation, compared to 79 percent of white workers. Absent appropriate safety nets and employment transition strategies, decisions to advance automation will leave a disproportionate number of Latinx workers struggling to find employment. Critically, interventions to mitigate automation risk should include language and accessibility features that take into consideration the high concentration of Latinx workers in at-risk jobs.

Delivering workforce equity in the Columbus region will require not only generating more future-ready jobs, but also ensuring that people of color are hired into them. Without policies and programs that connect workers of color to growth in such jobs that do not require a college degree, these opportunities will disproportionately benefit white workers. Additionally, programs and policies that benefit all workers should take into account accessibility constraints faced disproportionately by people of color, such as language, transportation, and lack of cultural awareness on the part of employers.

Projected job growth for Latinx and Black workers is heavily concentrated in more vulnerable occupations.

Occupations projected to add the most workers of color, by race/ethnicity, Columbus metro region, 2020–2030

- Black
- Latinx
- Asian or Pacific Islander
- Native American
- Mixed/other



Sources: Burning Glass modeling for occupational growth, and 2018 5-Year ACS microdata from IPUMS for demographic characteristics of occupations.

Note: Occupations marked in bold are classified as future-ready jobs.

The Columbus workforce is projected to grow 2 to 5 percent over 10 years, and most of that growth (61 percent) is expected to add future-ready jobs. This new employment is expected to grow the proportion of workers in such jobs, but if occupational segregation remains as it is today, these roles will continue to be concentrated among white and Asian or Pacific Islander workers. Just one of the 10 occupations projected to add the most Latinx workers and two of the 10 occupations projected to add the most Black workers are future-ready. Seven of the top 10 growing occupations for Asian or Pacific Islander workers are future-ready, along with six of the top 10 for white workers.

9.0

THE WAVERING COVID-19 RECOVERY IS LEAVING WORKERS OF COLOR BEHIND



Overall, the labor market turbulence caused by the Covid-19 pandemic has largely subsided in the Columbus metro. The unemployment rate in the region reached 14.1 percent in April 2020 but has been between 4.1 percent and 5.2 percent from October 2020 to August 2021. However, the early recovery has unfolded unevenly across gender and race/ethnicity. Across the US, women’s labor force participation fell to a 35-year low in April of 2020.²⁹ Mothers—particularly Black single mothers without a college degree—have been most likely to leave the labor force amid ongoing challenges accessing childcare.³⁰

Employment trends have also varied considerably between Black and white workers. The Black unemployment rate reached nearly 20 percent in the summer of 2020, before declining precipitously to around 6 percent between November 2020 and February 2021, and then spiking again through the summer of 2021 to over 15 percent in July and August. The unemployment rate for white workers peaked very early in the pandemic period, but has been significantly lower, and less volatile, than that of their Black counterparts.

Black workers have experienced higher unemployment rates through the pandemic.

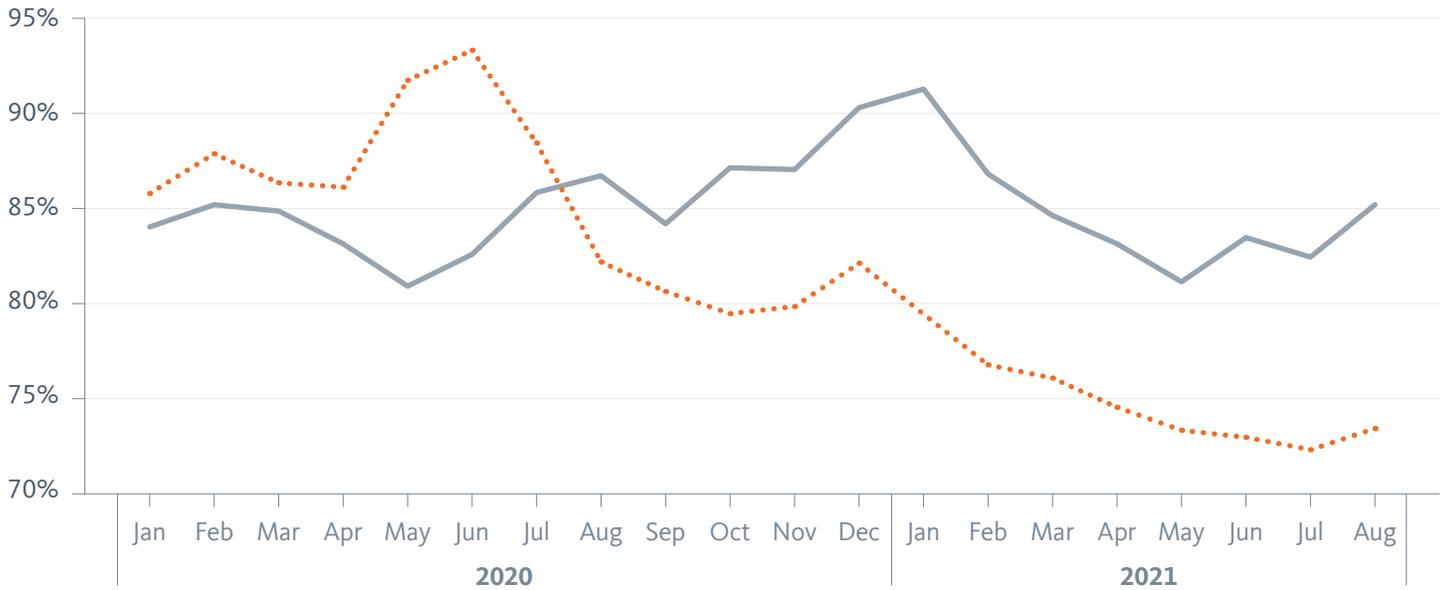
Unemployment rates by race/ethnicity, Columbus metro region, January 2020–August 2021



Source: Unemployment estimates from the Current Population Survey (CPS) microdata from IPUMS USA. **Notes:** Sample-size constraints permit a comparison between Black and White workers but preclude an analysis of Asian or Pacific Islander, Native American, and mixed/other race workers. Dotted line denotes four-month rolling average of rates due to small sample sizes.

Prime-age labor force participation rates by race/ethnicity, Columbus metro region, January 2020–August 2021

- White
- Black



Source: Labor force participation estimates from the Current Population Survey (CPS) microdata from IPUMS USA. Population includes individuals ages 25–54, known as the “prime-age” workforce. **Note:** Dotted line denotes four-month rolling average of rates due to small sample sizes.

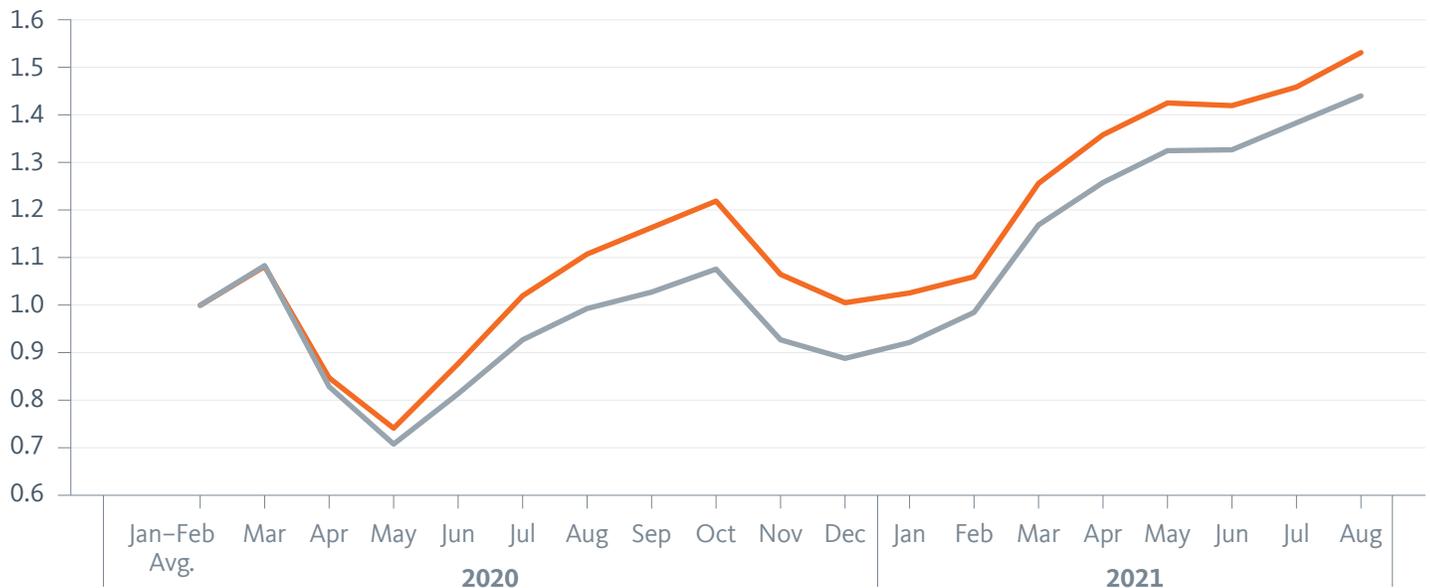
Despite a spike in unemployment during the onset of the Covid-19 pandemic, more prime-age Black workers were entering the labor force than leaving it. Following a peak Black prime-age labor force participation rate of 93 percent in the middle of 2020, the figure dropped steadily to under 75 percent in the summer of 2021. White prime-age labor force participation also declined between January 2021 and May 2021, but has since stabilized to close to pre-pandemic levels.

Since the end of 2020, prime-age Black workers have been leaving the labor force. Among Black individuals still engaged in the labor force, an increasing percentage are job seeking as opposed to being actively employed.

Demand for workers has more than recovered, and online job postings for positions held by Black workers prior to the crisis are recovering more quickly than for those held by white workers.

Job postings relative to January–February 2020 baseline by pre-crisis occupational demographics (race/ethnicity), Columbus metro region, March 2020–August 2021

- White
- Black



Source: Authors' analysis of Burning Glass job posting data (January 2020–August 2021), with job postings allocated according to occupational race and ethnicity characteristics from 2018 5-year American Community Survey (ACS) microdata from IPUMS USA.

The chart showing job postings relative to the pre-pandemic baseline uses job postings data to measure the change in demand since the onset of the Covid-19 pandemic in March 2020. Labor market demand in Columbus recovered quickly after a low in May 2020, and the return in online job ads was more concentrated in the jobs that previously employed more Black workers than white workers. Over the course of 2021, labor market demand met and surpassed pre-pandemic levels. At all times, demand was greater for jobs where Black employment was more concentrated than white employment. If recovering jobs had been proportionately filled by the workers who held those jobs prior to the crisis, Black workers' return to work would have closely tracked and slightly outpaced that of white workers. In reality, however, unemployment data show that Black workers have not experienced the same rebound as their white counterparts, signaling racial inequities in job access throughout the recovery.

10.0

ACCELERATING AUTOMATION PUTS WORKERS OF COLOR AT RISK



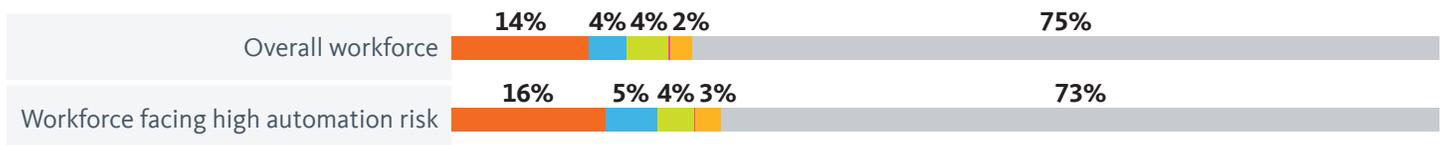
Automation, digitalization, and computerization are radically transforming work and jobs around the world. Certain occupations will become obsolete; others will be profoundly changed, expanded, or combined; and technological advancement, especially in artificial intelligence, is likely to create entirely new roles across industries and fields. Some of these processes cannot be reliably predicted, but given the current trajectory of automation-driven job change, it is clear that people of color are at increased risk of job disruption that may push them into more precarious, marginalized, lower-paid work or displace them from the labor market altogether.

Automation risk is best calculated in terms of the likelihood of computerization of the underlying tasks that make up a given occupation, which can lead to worker displacement.³¹ Very few jobs consist *entirely* of tasks that can be computerized,³² but most occupations include enough automatable tasks to be considered at risk of automation. The national average risk is about 52 percent, indicating that about half of job tasks performed by the US workforce can be automated.³³

Black workers are slightly overrepresented in automation-vulnerable jobs.

Automation risk by race/ethnicity, Columbus metro region, 2018

- Black
- Latinx
- Asian or Pacific Islander
- Native American
- Mixed/other
- White



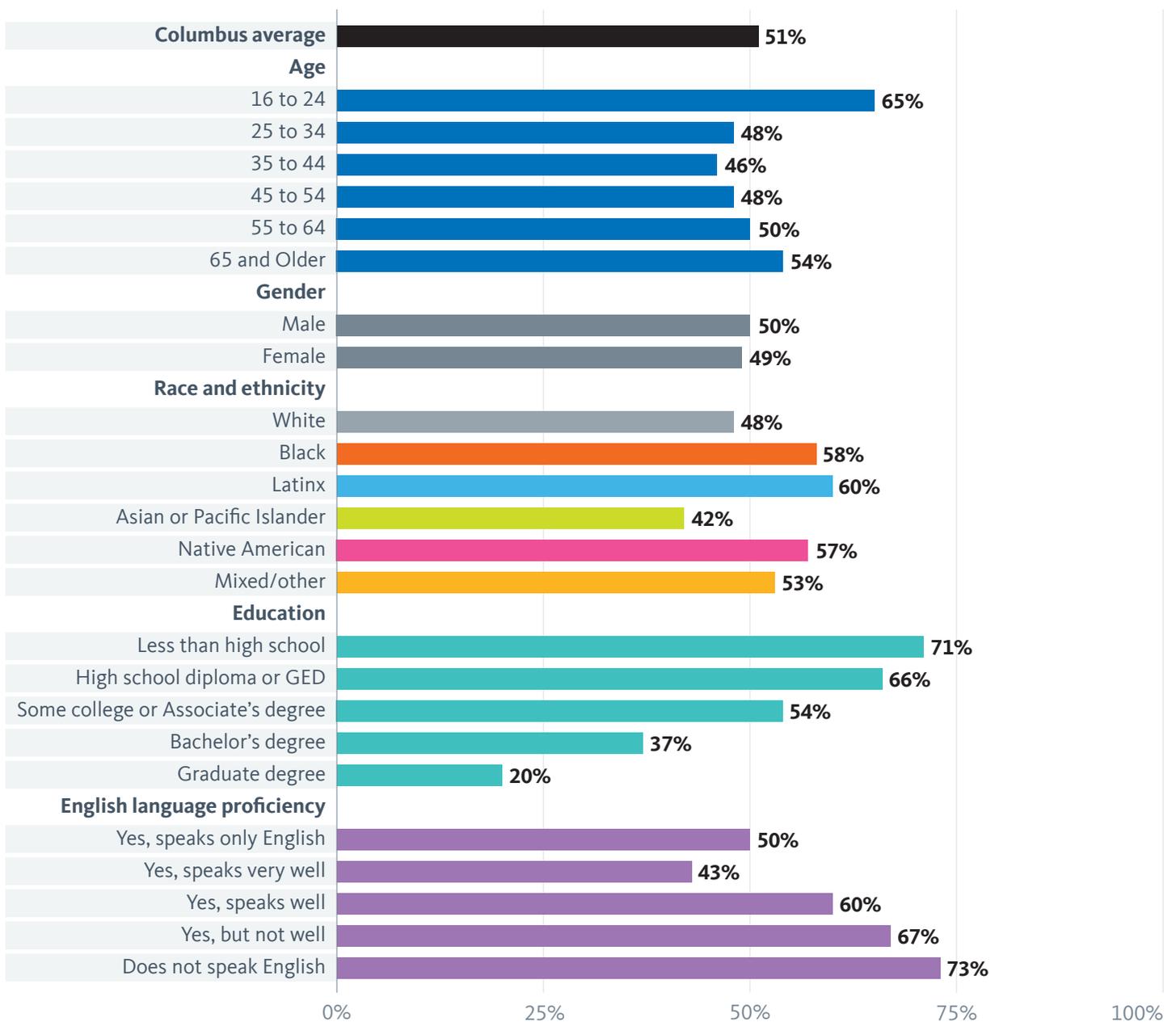
Sources: Authors' analysis of the 2018 5-year American Community Survey microdata from IPUMS USA and automation scores from "The Future of Employment: How Susceptible Are Jobs to Computerisation" (Frey and Osborne, 2013). **Note:** Universe includes the employed civilian noninstitutionalized population ages 16 or older.

Automation is a threat to employment growth in the Columbus region. Black workers make up 14 percent of the workforce overall but 16 percent of automation-vulnerable workers. Latinx workers make up 4 percent of the workforce overall and 5 percent of automation-vulnerable workers. Mixed/other

race workers make up 2 percent of the workforce overall and 3 percent of automation-vulnerable workers. Only white and Asian or Pacific Islander workers are less concentrated in automation-vulnerable work relative to their representation in the workforce overall.

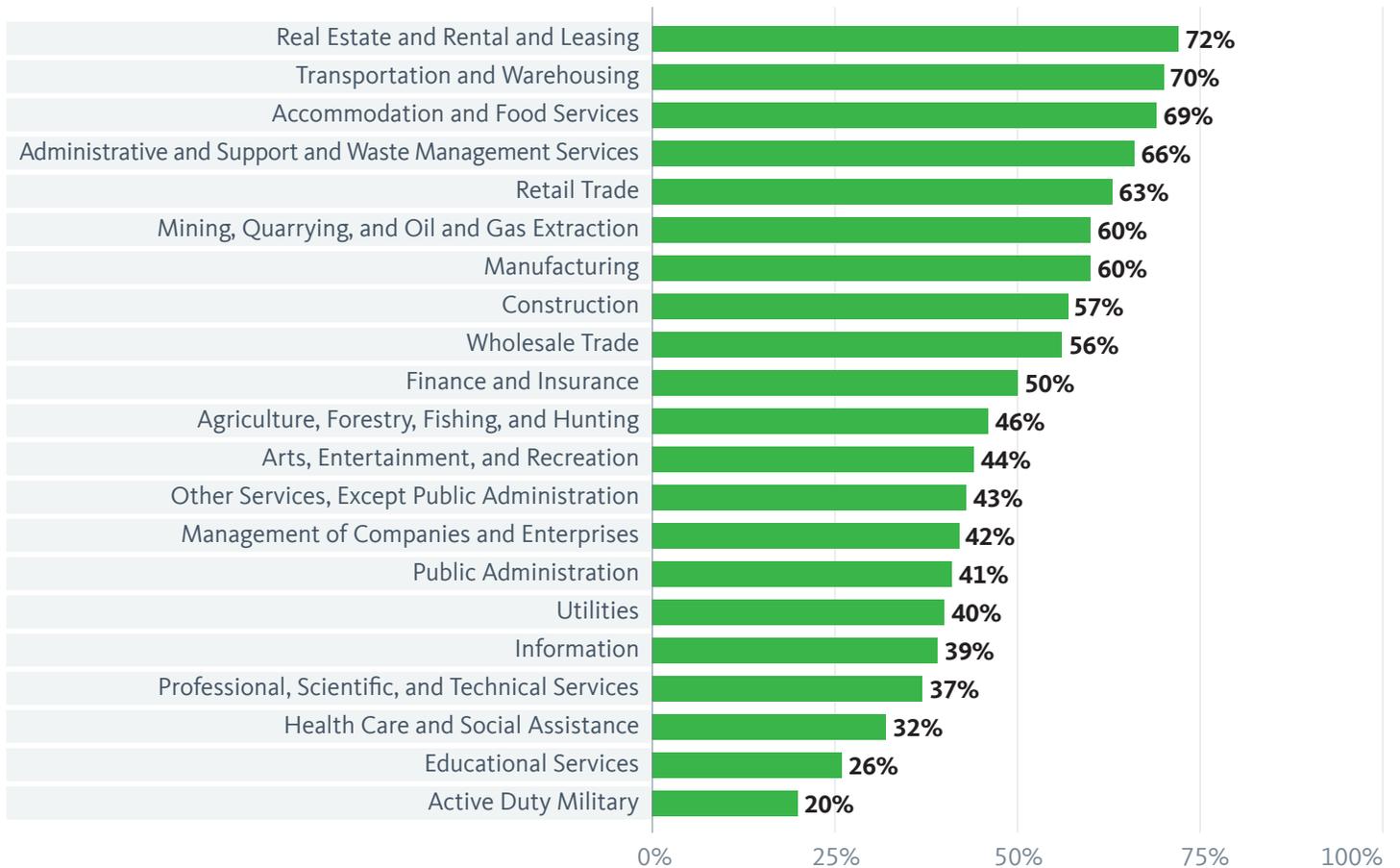
Workers of color, those with less than a high school diploma, and non-English speakers are most vulnerable to automation-driven job disruption.

Automation vulnerability by worker characteristics, Columbus metro region, 2018



Sources: Occupation-level automation scores from “The Future of Employment: How Susceptible Are Jobs to Computerisation” (Frey and Osborne, 2013), and worker characteristics from 2018 5-year American Community Survey (ACS) microdata from IPUMS USA.

Automation vulnerability by industry, Columbus metro region, 2018



Sources: Occupation-level automation scores from “The Future of Employment: How Susceptible Are Jobs to Computerisation” (Frey and Osborne, 2013), and industry characteristics from 2018 5-year American Community Survey (ACS) microdata from IPUMS USA.

Black workers are 10 percentage points more likely than white workers to be affected by automation, and Latinx workers are 12 percentage points more likely. In addition to race and ethnicity, a variety of other worker characteristics correlate with high automation risk. English language fluency is associated with automation resiliency: workers whose primary language is not English are twice as likely to face automation risk. Increasing educational attainment is another pathway to jobs that enjoy automation resiliency. The degrees that affect the greatest level of change are bachelor’s and graduate degrees, each of which drop automation risk by 17 percentage points relative to the preceding level of education.

11.0

A FRAMEWORK FOR ACTION TO ADVANCE WORKFORCE EQUITY



Policymakers, employers, educators, training providers, and community-based organizations all have important roles to play to advance workforce equity in the Columbus region and to ensure that workers are prepared for the jobs of tomorrow with the skills, supports, and access they need to fully participate and thrive in the local economy.

A racial equity agenda to transform workforce ecosystems—centering the needs of those most impacted to maximize benefits for all—is the key to advancing a lasting recovery and a resilient future economy. This advancement will require private and public investment, changes in how we prepare workers for jobs, increasing overall job quality, and action to dismantle systemic racism and reimagine high-quality jobs and equitable talent development as an imperative for social equity.

The data in this report illustrate that workforce development is inextricably intertwined not only with community and economic development strategies but also with housing, criminal justice, transportation, childcare, and other issues. Achieving workforce equity will require coordination, collaboration, and population-level solutions across multiple systems. As the Covid-19 pandemic has exacerbated inequities in both health and the economy, a cross-cutting racial equity agenda for the region's workforce should be the cornerstone of an inclusive recovery for a thriving Columbus economy in which all can participate, prosper, and reach their full potential. Our seven recommendations for designing and activating a racial equity agenda to transform the workforce system in Columbus are described below.

1. Center racial equity, community voice, and neighborhood needs in the workforce development system, and unify economic development and workforce development strategies.

The workforce advisory group that was consulted for this report frequently remarked on the broken trust between the workforce system and the people and neighborhoods it aims to serve. These comments echo similar sentiments expressed in other workforce surveys of the Columbus region; in a 2019 report, the Franklin County Board of Commissioners also cited broken trust as a core challenge to the regional workforce system.³⁴ Fortunately, Columbus has a plethora of support services, and the people engaged in workforce development are eager to improve their ecosystem. Three related actions can rebuild trust in workforce development.

First, training and placement providers and intermediary organizations should engage workers, residents, families, and neighborhoods in developing strategies and solutions. The workforce advisory committee shared that their organizations are excellent at *giving* information to people who seek services, but that they are less practiced in *receiving* information from the community about priorities, feedback, successes, and challenges. A number of practices can create a virtuous cycle between workforce intermediaries and the populations they should serve:

- Invite workers, residents, families, and neighbors to identify strengths in the system and prioritize efforts to address weaknesses.
- Use techniques such as “snowball sampling” to survey the attitudes of hard-to-reach populations by incentivizing each person from this population to bring additional members in for a survey, questionnaire, or listening session.
- Tap into existing social networks including ethnic chambers, faith-based organizations, immigrant organizations, grassroots organizations, arts centers, nonprofits, health centers, financial service providers, and community centers.
- Staff tables in popular areas or at popular events, and create materials that provide promotional information and solicit feedback in multiple languages, taking care that translations are competent and accurate, and leverage social media to push pulse surveys.
- Reflect priority feedback through official channels, such as the mayor’s state of the city address; on local news stations; and at public events, such as community festivals (e.g., Comfest, GermanFest, ItalianFest, Juneteenth community festival, and Picnic with the Pops), to demonstrate that community input is being heard.

Second, local leaders should set race-forward goals for the workforce development system. The feedback described above can help the workforce system diagnose barriers to opportunity, and decision makers should set goals based on dismantling those barriers. High-priority equity goals might include disaggregating program enrollment and job placement data by race/ethnicity, gender, and nativity; translating marketing and outreach materials into appropriate languages; partnering with community-based organizations and other institutions in communities of color, such as churches or markets; and auditing client experiences and comparing results by race/ethnicity, gender, ancestry, and nativity to inform the development of tailored and targeted workforce services.

Third, policymakers, businesses, and intermediaries should work to align stakeholders in workforce development and economic development. Workers and residents should be included in transparent planning and negotiation processes. Planning and development agencies can request more detailed reporting on economic development proposals, and the project review process can be more accountable if mitigations are triggered when goals such as job creation or median wage for new jobs are not met. Some municipalities have encouraged a rubric-based approach for community engagement, such as with the Peaslee Neighborhood Center in Cincinnati.³⁵ The rubric goes beyond reporting the number of jobs created by hourly wage category or the number of full-time jobs created, and allocates points based on a project's contribution to equity across class and race. Given concentrated job growth in areas like Rickenbacker and New Albany, stakeholders in workforce development and economic development have a unique opportunity to collaborate on employment standards for new jobs. Groups that evaluate the efficacy of business attraction strategies, such as the Tax Incentive Review Council, rarely benefit from the public attention that would promote greater participation. Building capacity in these organizations can help to improve accountability and foster trust in planning and development processes.

2. Lean into regional partnerships to break silos in workforce development.

Civic leaders in Columbus have long lamented the fragmented workforce development ecosystem. The regional advisory group that informed this report mentioned the following challenges:

- Training providers, such as Ohio Technical Centers and OhioMeansJobs centers, often operate in silos and can find themselves offering competing services.
- It is often advantageous for service providers to keep an individual in-house rather than refer that person to another organization, even if it might serve them better.
- Resources are lost on multiple intake procedures for the same individual across multiple organizations.
- Funding streams often have reporting requirements that make collaboration difficult.
- Some residents fall through the cracks of the fragmented workforce ecosystem, and their poor experiences translate to declining trust in the system.

Workforce service providers can take other steps to integrate and align their operations. The workforce advisory group advocated for a shared information system for client/customer relationship management. This information system could share baseline information about clients that is routinely needed across organizations, details about the service they've received, and a navigation model to systematize the provision of services and to make sure needed wraparound services are considered. Multiple organizations could manage such a tool to aid tracking and help tailor services, including the Franklin County Workforce Development Board, OhioMeansJobs, JobsOhio, or One Columbus. Consulting outfits, such as the Workforce Innovation Center, can aid in development and operations.

However, pre-existing challenges inhibit developing and managing such an information system, and workforce stakeholders will have to work through these problems. For example, government information systems can be slow to develop and slow to evolve. The benefit of a system comes from collective use, so organizations will have to buy into the system operationally. New systems have high development and onboarding costs. And finally, leaders often reasonably prioritize the discrete, short-term needs of their organization over a collective project with long-term benefits.

One way to mitigate some of these costs is to first focus on a pilot region. Organizations on Columbus's East Side or in another similarly sized geography where poverty is becoming increasingly concentrated could come together to pilot a shared information system. They could advocate collectively to secure funding and carve out time within their own operations to plan, develop, deploy, and assess the system. Many organizations in the East Side also have locations elsewhere in Columbus, so expansion would scale faster than the initial development.

This strategy is representative of how workforce development stakeholders can break silos by creating an action plan for a specific issue that affects many people or many organizations and tackling that issue collectively. Whether the collaboration is in the form of shared information systems, service flowcharts, or reporting mechanisms to better tailor services to participants, the key is targeted collaboration. Following a completed pilot, the participating organizations should plan to share observations, accomplishments, and challenges at convenings and in local publications to inform further iterations, modeling the Columbus Way in equitable workforce development.

3. Bring jobs to the people and people to the jobs.

As the seat of state government, Columbus is home to many public agencies that contract local services. Columbus can use public contracting power and the project bid process to channel business to entrepreneurs of color and women-owned businesses, especially those in disinvested communities. When it comes to hiring employees, public agencies can prioritize recruitment in disinvested neighborhoods and conduct targeted outreach through job fairs, career presentations, and engaging the local school system. The city can also encourage private developers to contract with firms owned by people of color. These efforts support bringing good jobs to people of color.

Workforce stakeholders and economic developers in Columbus should also engage organizations that support land banks, i.e., agencies that facilitate public or community ownership of real estate that can be leveraged for housing or business development. Such organizations, like the Affordable Housing Alliance of Central Ohio, can be critical partners to weigh in on worker needs and recommendations for right-sizing business-attraction strategies.

Another set of interventions involves connecting people of color to good jobs. The spatial mismatch between jobs and affordable housing is a key driver of inequity in the Columbus region. Employers and public sector actors are aware of the spatial mismatch and taking measures to correct it; as one example, the Central Ohio Transit Authority (COTA) is collaborating with other transportation providers to connect people to job sites.³⁶ COTA is also breaking ground on a full-service transit center with ancillary services in the Rickenbacker area. Expanding routes and services, especially in disinvested neighborhoods, is an important way to advance workforce equity in Columbus.

Employer behavior can also support the efforts to mitigate spatial mismatch. Employers can align shift times in specific corridors and warehouse districts with mass transit or microtransit to sync with worker transportation needs. Employers can intentionally locate or move jobs closer to the highest concentration of available workers of color. COTA can play a leading role in the creation of transit centers for buses, ride-shares, and microtransit that integrate childcare services, Wi-Fi, work stations, and workforce training classes. Finally, employers can facilitate transitions to remote work to extend job opportunities to people regardless of where they live. Employers can also proactively support programs to increase connectivity and technology access so that residents of low-income and underserved neighborhoods can benefit from remote work opportunities.

4. Engage employers to adopt best practices in hiring, retaining, and promoting workers of color.

The workforce advisory group underscored the importance of educating employers on cultural competency, an effort that community-based nonprofits are well positioned to lead. The workforce advisory group also discussed the importance of other equity-building practices:

- Shorten and simplify the hiring process.
- Set diversity targets for recruiting, and expand recruitment efforts in educational institutions serving communities of color.
- Use skill-based hiring instead of inflexible educational requirements.
- Locate worksites near where workers of color live or as near as possible to transportation from majority people-of-color neighborhoods.
- Build and promote internal career pathways for incumbent employees.
- Determine the level of English language required for various roles, and communicate those standards to job training organizations that work with limited-English-proficiency populations.

Economic development and workforce intermediaries can engage employers to adopt diversity targets for recruitment and support employers to audit their internal retention and promotion outcomes. Employers have a critical role to play in advancing workforce equity and redefining the Columbus Way to include standing commitments to cultural awareness and inclusion in decision-making and investments.

5. Dramatically expand apprenticeships, and develop targeted strategies to support people of color through these programs.

Ohio has a more robust apprenticeship system than most other states. The booming construction sector in Columbus provides unmet demand for skilled trades, and apprenticeships are needed to meet that demand. Intermediaries, training providers, and organizations, such as the Building Trades, the Builders Exchange, Associated Builders and Contractors, the Ohio Manufacturing Association, and the Ohio Trucking Association, could develop collaborative efforts to scale apprenticeships in the skilled trades. Employers and workforce intermediaries can connect people of color to apprenticeships through incentives, targeted recruitment, and wraparound services, and by locating these opportunities close to majority people-of-color neighborhoods.

Workforce advisory group members stressed the importance of developing high-quality pre-apprenticeship opportunities, including programs that connect high school students who are not immediately college-bound to good jobs. Many local organizations can support this work, including Tech Corps, Per Scholas, and Black Tech Columbus. Other organizations in the region, such as the United Way and Goodwill Columbus, can provide institutional support and promote critical resource efficiency. Further upstream, employers can get involved with the secondary school system to expose students to work-based learning to build equitable pipelines for homegrown talent.

6. Cater services to immigrant workers and workers for whom English is a second language.

The immigrant community and the Latinx community are two of the fastest-growing populations in the Columbus region. These communities' integration into the workforce is a critical factor of their civic engagement and active social participation, and can help to alleviate labor market demand.

The workforce advisory group mentioned language barriers, online connectivity issues for those with larger household sizes, gatekeeping at job sites, and implicit bias as challenges confronting immigrant and non-English-speaking communities. To address these barriers, educational institutions and training providers should expand English-language-learning opportunities outside of the K-12 system. A workforce English-as-a-second-language (ESL) program might be aligned to target jobs and industries such as customer service representatives, warehouse workers, health-care support roles, manufacturing, and truck driving. Programs should prioritize English-language skills to keep workers safe in the workplace, to help them interact with co-workers and customers, and to help increase their productivity and career mobility.

To inform the development of language-learning programs, employers within a given industry should collaborate to develop standard operating procedures and core job competencies. They can also survey their employees to learn the variety of native languages spoken by workers as well as the levels of English proficiency they already possess. In addition to supporting the development of English skills, employers should also proactively provide language access within the work environment, translating signs and other materials into languages commonly spoken by workers. Rickenbacker, with over 20,000 warehouse and light industry jobs in a 2- to 5-mile radius, and Beauty Park, with 5,000 logistics jobs in one 2-mile campus, are promising areas to pilot this type of system.

7. Expand on career pathways that start with entry-level positions in target sectors with good employment prospects.

Economic development and workforce development efforts should leverage sectoral partnerships to promote career pathways that build on quality entry-level opportunities available to those without a college degree. Sectoral partnerships provide a collaborative space for funders, employers, education and training providers, and workforce intermediaries to adopt a systems-change approach. With an explicit focus on racial equity, sectoral strategies focused on building career pathways between entry-level jobs and high-quality target occupations can help to close the future-ready-jobs gap for workers of color, meet the emerging needs of employers, and buoy the regional economy as a whole.

Programmatic approaches within sector-based planning should include targeted and well-resourced job training grants, expanded apprenticeship programs, and subsidized employment opportunities designed with specific equity targets to ensure that they benefit people of color and disadvantaged job seekers. Sectoral partnerships can also develop and disseminate career pathways; the tables below show how such a process could be carried out in Columbus's health-care sector.

The first table shows health-care occupations that require less than a bachelor's degree where workers of color are overrepresented; the second table shows target occupations that provide future-ready jobs in the Columbus region. Health-care-sector strategies should prioritize transitioning the workers represented in the first table into the jobs represented in the second table, opening entry-level jobs to sustain the development of equitable talent pipelines.

Health-care occupations in which workers of color are overrepresented, Columbus metro region, 2018

Occupation	Workers of Color	% Workers of Color	% Black	% Latinx	% Asian or Pacific Islander	% Native American	% Mixed/ Other
Nursing assistants	5,052	50%	39%	2%	4%	<1%	7%
Personal care aides	2,836	55%	46%	4%	4%	<1%	<1%
Home health aides	1,956	58%	51%	1%	2%	<1%	5%
Medical assistants	1,007	30%	17%	3%	3%	<1%	7%
Pharmacy technicians	682	26%	11%	1%	11%	<1%	3%
Clinical laboratory technologists and technicians	653	28%	18%	1%	9%	<1%	1%
Other health-care support workers	424	33%	23%	7%	1%	<1%	2%
Medical records specialists	422	29%	15%	10%	4%	<1%	<1%
Orderlies and psychiatric aides	399	41%	30%	<1%	5%	<1%	6%
Phlebotomists	368	53%	38%	11%	4%	<1%	<1%
Massage therapists	184	23%	15%	4%	4%	<1%	<1%
Dental hygienists	136	17%	2%	9%	7%	<1%	<1%
Psychiatric technicians	111	24%	3%	<1%	8%	<1%	12%
Dental assistants	106	8%	5%	1%	1%	<1%	<1%
Medical transcriptionists	98	48%	48%	<1%	<1%	<1%	<1%
Pharmacy aides	72	26%	17%	2%	7%	<1%	<1%
Dietetic technicians and ophthalmic medical technicians	56	33%	30%	<1%	<1%	<1%	4%

Source: Authors' analysis of the 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes the employed civilian population age 16 or older.

Occupations in the health-care sector that provide future-ready jobs and do not require a bachelor's degree, Columbus metro region, 2018

Occupation	Workers of Color	% Workers of Color	% Black	% Latinx	% Asian or Pacific Islander	% Native American	% Mixed/ Other
Registered nurses	4,960	20%	14%	2%	3%	<1%	2%
Licensed practical and licensed vocational nurses	3,046	47%	40%	4%	1%	<1%	2%
Miscellaneous health technologists and technicians	351	35%	27%	2%	6%	<1%	<1%
Veterinary technologists and technicians	153	19%	11%	<1%	8%	<1%	<1%
Surgical technologists	148	23%	11%	2%	3%	2%	5%
Radiologic technologists and technicians	69	4%	2%	1%	2%	<1%	<1%
Occupational therapy assistants and aides	22	5%	<1%	5%	<1%	<1%	<1%
Magnetic resonance imaging technologists	16	8%	8%	<1%	<1%	<1%	<1%
Respiratory therapists	15	3%	3%	<1%	<1%	<1%	<1%

Source: Authors' analysis of the 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes the employed civilian population age 16 or older.

The future of workforce equity in Columbus

An equitable Columbus workforce will be one in which racial income gaps are eliminated, all jobs are good jobs, and everyone who wants to work has access to inclusive and family-supporting employment. Achieving this vision will require cross-sector collaboration to dismantle barriers to racial economic inclusion and cultivate equity in education, training, hiring, advancement, and the social determinants of work that support positive economic outcomes for workers and families. Good jobs and inclusive growth are the foundation of an equitable economy. To foster an inclusive recovery and equitable future of work in the midst of ongoing technological transformation, targeted strategies to improve job quality and ensure equitable access to safe and stable employment are essential to a thriving, inclusive Columbus economy in which all can participate, prosper, and reach their full potential.

12.0

METHODOLOGY

The analysis presented here draws from two key data sources: the 2018 5-year American Community Survey (ACS) microdata from IPUMS USA and a proprietary occupation-level dataset from Burning Glass Technologies expressed at the six-digit Standard Occupational Classification (SOC) level. While detailed sources and notes are included beneath each figure in the report, here we provide additional information on these two key data sources and the methods used to analyze “future-ready jobs,” automation risk, and income/GDP gains with racial equity in the workforce. Unless otherwise noted, all data reflect the Columbus, OH Metropolitan Statistical Area, which includes Delaware, Fairfield, Franklin, Licking, Madison, Morrow, Pickaway, and Union counties in the state of Ohio; for the analysis of future-ready jobs, the economic recovery and automation risk, Hocking and Perry counties are also included.

The ACS is the largest annual survey of US households administered by the US Census Bureau, collecting a wealth of socioeconomic and demographic information. It is released in both a “summary file” format that includes a limited set of summary tabulations for a wide variety of geographies and a “microdata file” that includes individual-level responses for the survey and affords an analyst the flexibility to create custom tabulations. These files also come in both 1-year and 5-year versions, which cover about 1 and 5 percent of the US population, respectively. We utilize the 5-year sample of the microdata to achieve a larger sample size, and we use the version released by IPUMS USA because it has been harmonized to be more consistent over time and augmented with many useful variables.

Unless otherwise noted, the ACS microdata is the source of all tabulations of demographic and workforce equity metrics by race/ethnicity and nativity included in this report. Also, unless otherwise noted, racial/ethnic groups are defined such that all groups are non-Latino (excluding those who identify as Hispanic or Latino), leaving all persons identifying as Hispanic or Latino in the “Latinx” category. The term “US-born” refers to all people who identify as being born in the United States (including US territories and outlying areas) or born abroad of at least one US citizen parent, while “immigrant” refers to all people who identify as being born abroad, outside of the United States, of non-US citizen parents. The ACS microdata was aggregated to the detailed occupation level and merged with data from Burning Glass Technologies to conduct the “future-ready jobs” and “automation risk” analyses that appear in the report.

The proprietary data from Burning Glass Technologies is based on job postings by collecting data daily from close to 50,000 online job boards, newspapers, and employer sites. Burning Glass then de-duplicates postings for the same job, whether it is posted multiple times on the same site or across multiple sites. Finally, Burning Glass applies detailed text analytics to code the specific jobs, skills, and credentials requested by employers. The equity gap for future-ready jobs was calculated using occupation characteristics from the ACS (employment and average salary), Burning Glass data models (typical education requirements advertised on job postings and metropolitan-area occupational employment projections), and the automation risk associated with each occupation from the 2013 paper, “The Future of Employment: How Susceptible Are Jobs to Computerisation” by Frey and Osborne.³⁷

The income and GDP gains with racial equity in the workforce are based on a methodology used for the “racial equity in income” indicator in the National Equity Atlas. That analysis estimates aggregate income and income per person for the population ages 16 or older, by race/ethnicity, under the status quo and under a hypothetical scenario in which there is no inequality in age-adjusted average income and employment by race/ethnicity. That is, it assumes that all racial/ethnic groups have the same average annual income and hours of work, by income percentile and age group, as non-Hispanic whites. The aggregate income gains are then used to estimate the gain in GDP by applying the percentage increase in aggregate income (for all racial/ethnic groups combined) to actual GDP as reported by the US Bureau of Economic Analysis.

For the income and GDP gains with racial equity in the workforce analysis included in this report, we replicated the same methodology used in the National Equity Atlas but restricted it to the working-age population (ages 25–64 years). Care was taken to ensure that the percentage (and total) gain in GDP we estimate is based on the percentage gain in overall aggregate income (i.e., for the population ages 16 or older) that we would expect if there were racial equity in income for just the population ages 25–64.

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14.0

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