ADVANCING WORKFORCE EQUITY

IN SEATTLE

A BLUEPRINT FOR ACTION

PolicyLink











ACKNOWLEDGMENTS

The authors extend our gratitude to Sarah Treuhaft of PolicyLink and Joel Simon of Burning Glass Technologies who provided invaluable guidance, insights, and feedback on this research. We express our deep appreciation to Michelle Wilson, Jonathan Osei, Kelly Aiken, and Amanda Cage of the National Fund for Workforce Solutions for their partnership and close collaboration. Special thanks go to Manuel Pastor of the USC Equity Research Institute (ERI) and Michael McAfee and Josh Kirschenbaum of PolicyLink for their support. Thanks to Edward Muña, Thai Le, and Sarah Balcha of ERI and Jacob Shuman, Layla O'Kane, and Nyerere Hodge of Burning Glass Technologies for data support; to Carlos Delgado, Eliza McCullough, and Rosamaria Carrillo of PolicyLink for research assistance; to Heather Tamir of PolicyLink for editorial guidance; to Lisa Chensvold of the National Fund for Workforce Solutions, Vanice Dunn of PolicyLink, Scott Bittle of Burning Glass Technologies, and Jenifer Thom of Constellation Communications for lending their communications expertise; to Mark Jones for design; and to Monique Baptiste of JPMorgan Chase for her continued support.

This report was shaped, informed, and greatly enriched by the wisdom and contributions of the Workforce Development Council of Seattle-King County Equity Working Group and Strategic Planning Team, to whom we are immensely grateful: Ligaya Domingo, SEIU 1199NW; Theresa Fujiwara, United Way of King County; Bookda Gheisar, Port of Seattle; W. Tali Hairston, Equitable Development LLC, dba Root and Branch; Cat Martin, JPMorgan Chase; Jill Nishi, Principal—JTN Consulting; Cos Roberts, UrbanTech Systems; Sheila Sebron, Veteran Service Officer, All Home, American Legion; Rich Stolz, OneAmerica; Trang Tu, Tu Consulting; Jenee Myers Twitchell, Washington STEM; Bob Watrus; and Marie Kurose, Aara Shaikh, and other staff of the Workforce Development Council of Seattle-King County.

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

JPMORGAN CHASE & CO.

©2021 PolicyLink and USC Equity Research Institute. All rights reserved.

PolicyLink is a national research and action institute advancing racial and economic equity by **Lifting Up What Works**®.

http://www.policylink.org

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.

dornsife.usc.edu/eri

Burning Glass Technologies delivers job market analytics that empower employers, workers and educators to make data-driven decisions. The company's artificial intelligence technology analyzes hundreds of millions of job postings and real-life career transitions to provide insight into workforce patterns.

burning-glass.com

ADVANCING WORKFORCE EQUITY IN SEATTLE A BLUEPRINT FOR ACTION

Abbie Langston
Justin Scoggins
Matthew Walsh

This report was produced by the National Equity Atlas, a research partnership between PolicyLink and the USC Equity Research Institute.

CONTENTS

1.0	Foreword	page 6
2.0	Preface	page 8
3.0	Summary	page 9
4.0	Introduction	page 13
5.0	Structural Racism Drives Workforce Inequities	page 16
6.0	Demographic Change Underscores the Urgent Need for Racial Equity	page 19
7.0	Aggregate Growth Masks Entrenched Inequities	page 23
8.0	The Geography of Opportunity Is Vastly Uneven	page 35
9.0	Seattle Workers Face a Shortage of Good Jobs	page 40
10.0	The Early Covid-19 Recovery Is Leaving Workers of Color Behind	page 50
11.0	Accelerating Automation Puts Workers of Color at Risk	page 55
12.0	A Blueprint for Action in Seattle	page 60
13.0	Methodology	page 68
14.0	Notes	page 70
15.0	Author Biographies	page 72

1.0 Forfword

In this time of social upheaval and racial reckoning, Covid-19 has forced us to confront deep vulnerabilities in our economic system. The measures that have long been accepted as signaling a healthy economy—booming stock market, low unemployment, record corporate profits—hid the painful truth that the US economy is built on far too many low-wage, low-quality jobs and deeply entrenched racial occupational segregation that has left 100 million people in the US economically insecure.

Our nation cannot afford another inequitable "recovery" like the one that followed the Great Recession. Dismantling structural racism must be at the center of our response to this crisis, which presents an opportunity to redesign a more just, inclusive, and sustainable economy: one built around jobs that actually boost the economy, not just prop it up, and one that values the well-being and dignity of all workers so that they may achieve their full potential.

Racial inequities are entrenched in the workforce development system. While the problems of workforce inequity are national, many of the best solutions are local—and the *Advancing Workforce Equity* series represents the insights of disaggregated data and the transformative power of local leadership, design, and influence in five US regions that are poised to put this research into action: Boston, Chicago, Dallas, San Francisco, and Seattle.

Achieving workforce equity is a key component of building a thriving and inclusive economy that benefits all workers, residents, and communities. It will require coordination, collaboration, and integrated solutions across multiple systems. This calls for a systems thinking mindset and bold action. Business leaders and employers must adopt new mindsets and new practices that prioritize workforce equity and good jobs. Policymakers and philanthropic and community

organizations must align their resources and efforts toward ensuring that working people can be uplifted rather than dislocated and insisting on high standards of job quality for all workers. The time is now.

Michael McAfee, President and CEO, PolicyLink Amanda Cage, President and CEO, National Fund for Workforce Solutions

The Advancing Workforce Equity project supports regional workforce partners to develop explicit, data-driven equity strategies. The communities involved—Boston, Chicago, Dallas, San Francisco, and Seattle—are partners in the National Fund for Workforce Solutions national network of workforce practitioners. Each city formed equity workgroups to guide the work, identify the key drivers of inequity, and prioritize actionable strategies to advance equity through their policy efforts, programs, and investments.

The work is documented in this series of reports, which will serve as the basis for long-term equity-focused efforts. This work is a collaboration between the National Fund for Workforce Solutions and the National Equity Atlas, a partnership between PolicyLink and the USC Equity Research Institute.

2.0 PRFFACE

The Workforce Development Council of Seattle-King County (WDC-SKC) is committed to making racial equity and community partnership the cornerstones of how we approach our work and engage with our local workforce system. Since the onset of the Covid-19 pandemic, our residents have been hit hard by the virus's devastating effect on our regional economy, workforce, industry sectors, and public health—the most severe impacts have disproportionately affected our BIPOC (Black, Indigenous, and people of color), immigrant, and refugee communities.

We greatly appreciate the incredible opportunity to work with JPMorgan Chase, PolicyLink, the USC Equity Research Institute, and the National Fund for Workforce Solutions on the *Advancing Workforce Equity in Seattle: A Blueprint for Action* report. This project has given us a powerful platform to embed our regional strategic plan, which focuses on reducing racial disparities at a systems level and empowering local communities to drive meaningful change in our institutions. The racial equity metrics developed through this project will enable us to meaningfully measure our progress toward achieving equitable outcomes for all communities in our region.

This longstanding work would not be possible without the deep partnerships and valuable perspectives brought by our local BIPOC communities, as well as the enduring dedication of our equity workgroup, strategic planning team, our board, and WDC-SKC staff. Through these efforts, the WDC aims to remove barriers and build sustainable access to economic opportunities that have historically precluded communities of color and to foster an equitable approach to our region's economic recovery.

Workforce Development Council of Seattle-King County

3.0 SUMMARY

In Seattle, as in the rest of the nation, Covid-19 has wreaked havoc on public health and the economy, and people of color and immigrants have been hit the hardest. Workers of color have been overrepresented in the essential jobs most likely to put them at risk of exposure to the virus and in the nonessential jobs most deeply impacted by economic shutdown orders and business decline. The pandemic has also spurred the acceleration of automation and digitalization, putting workers of color at a higher risk of job dislocation than their White peers. As the Seattle metro grows more diverse, these racial inequities in workforce outcomes carry a heavy toll not only for workers and families but also for the regional economy as a whole.

This regional analysis is part of the Advancing Workforce Equity project building on the insights of our previous research, Race, Risk, and Workforce Equity in the Coronavirus Economy, and Race and the Work of the Future, to inform a tailored, ground-level blueprint for advancing workforce equity. It provides a data-driven evaluation of racial inequities in workforce outcomes in the Seattle metropolitan region, examining how systemic racism manifests in the labor market, how the Covid-19 pandemic is impacting these dynamics, and how automation is projected to affect industries and workers in the area. We analyzed 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 Burning Glass Technologies, and other sources of local data. Unless otherwise noted all data presented in this report are based on the authors' original analysis of these sources (further details can be found in the methodology). We also drew on original qualitative data gathered through interviews and focus groups with employers, job seekers, and workers in the region.

These are our key findings:

- As the workforce grows more diverse, racial inequity carries mounting economic costs.
 - People of color are one-third of the region's workforce, but they are not sharing equitably in its prosperity. Workers of color make up 34 percent of the Seattle workforce (ages 25–64 years), and nearly half of the next-generation workforce (the population younger than 25 years). But racial gaps in employment and wages remain entrenched, especially for Black and Latinx workers.
 - Racial economic exclusion hampers the region's economic growth. In 2018 alone, racial gaps in wages and employment for working-age adults cost the Seattle economy more than \$33 billion. With racial equity in income, the average annual income of Native Americans would nearly double, and the average incomes of Latinx residents would increase by almost 70 percent, to more than \$67,000.
- The structure of the regional economy and labor market reinforces racial gaps in employment and wages.
 - Occupational segregation is stark. Despite the growing diversity of the Seattle workforce, clear patterns of occupational segregation persist, with Black, Latinx, and immigrant workers crowded into lower paying occupations.
 - The region faces a shortfall of good jobs. Overall, only 44 percent of workers are in good jobs (defined as stable, automation-resilient jobs with family-sustaining wages). But the share drops to 13 percent among workers in jobs that require no more than a high school diploma. This good-jobs gap has significant racial equity implications, considering that 36 percent of Black adults, 32 percent of US-born Latinx adults, and 68 percent of immigrant Latinx adults have no college education.

- People of color face systemic and structural barriers to opportunity.
 - Equity in higher educational attainment is essential, but insufficient, to achieve racial economic inclusion. Higher education significantly narrows racial gaps in labor force participation and employment, but does not equalize income across racial/ethnic groups. On average, White workers with less than a high school diploma earn about the same median wage (\$20/hour) as Black workers with an associate's degree.
 - Systemic inequities in the social determinants of work reinforce racial gaps in workforce outcomes. Black, Latinx, and Native American workers in the Seattle region are more likely than other groups to experience housing-cost burden and transportation challenges that inhibit access to opportunity. Even among the lowest-income workers, Black residents are three times as likely as their White peers to rely on public transportation.
- 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.
 - The early recovery in labor-market demand has been concentrated in jobs that require little formal preparation. By September 2020, demand for jobs that require only some experience or education had recovered to February 2020 levels, while demand for jobs that require considerable preparation—and tend to provide higher wages and greater resilience to economic turbulence—was still down by nearly 30 percent.
 - Workers of color face a significant, disproportionate risk of automation-driven job displacement. In the Seattle region, Latinx workers make up just
 9 percent of the overall workforce, but 12 percent of workers in automation-vulnerable jobs, meaning they are overexposed to automation risk by
 33 percent.

The Blueprint for Action

The Workforce Development Council of Seattle-King County (WDC-SKC) Equity Working Group defines workforce equity as a state where longstanding systems of oppression no longer influence how communities fare in local economies. Workforce equity exists when all workers, regardless of race or ethnicity, have equitable access to high-quality jobs that provide safe and healthy working environments and offer opportunities for advancement and meaningful growth. Drawing on the data presented in this report, they have established the following blueprint to inform the efforts of funders, employers, labor organizations, community colleges, and other training providers and community-based organizations to advance this vision for all communities in the Seattle region.

- 1. Partner with employers and industry to implement equitable recovery commitments.
- 2. Develop systems to measure and track equity metrics as the economy recovers.
- 3. Invest in community-based research and collaboration to remove structural barriers to work.
- 4. Build meaningful and sustainable community influence and power in the workforce development system.
- 5. Advance sector-based strategies and partnerships that prioritize opportunity sectors in the region.
- 6. Co-create and co-invest in equitable, high-demand career pathways.

4.0 Introduction

In many ways, the Seattle economy is emblematic of the trends driving the growth and transformation of the US economy. Home to the headquarters of two big tech powerhouses (Amazon and Microsoft) and a major aerospace and advanced manufacturing sector led by Boeing, Seattle led all major US metropolitan areas in economic growth in 2018, and for two years in a row was ranked by *Forbes* as the best city for business and careers.³ Seattle boasts one of the largest ports in the world, and is a major node for national and international trade. The region's population grew by more than 15 percent from 2010 to 2020.⁴ It also grew more diverse, with Asian or Pacific Islander, Latinx, Black, and mixed/other race residents making up an increasing share of the population.⁵ Since 2000, much of King County's population growth has been due to an influx of foreign-born residents, increasing from 15 percent to 24 percent of the total population in 2018.⁶

This is one way to tell the story of Seattle: a robust regional economy shaped by technological advancement, global connectivity, and demographic change. Official measures suggested that Seattle had achieved "full employment" before the coronavirus pandemic began, with an overall unemployment rate of just 2.5 percent in February 2020.⁷ But another story has unfolded underneath the region's impressive growth in jobs, productivity, and population. Such topline measures mask racial gaps in employment and wages, and obscure entirely the intergenerational inequities that disadvantage communities of color. People of color continue to face significant barriers to accessing good jobs and opportunity, including discriminatory hiring practices, gaps in educational attainment, low job-quality standards, and housing and transportation inequities that create a vastly uneven geography of opportunity.

The data presented in this report reveal that Seattle's lopsided growth has deepened racial inequities— since 1980, low-wage job growth was more than twice as fast as high-wage job growth, but earnings grew 67 percent faster for high-wage compared with low-wage earners. And the spatial dynamics of the regional economy have pushed many low-income workers and people of color farther away from centers of opportunity, as gentrification and skyrocketing housing costs have accompanied Seattle's rising prosperity. While the metro area is diversifying, the Black population in the city of Seattle has fallen to its lowest share in decades.⁸

From 2010 to 2017, median rental costs in Seattle grew by nearly 42 percent—almost three times the national average over the same period. In 2019, the National Low-Income Housing Coalition calculated that workers in Seattle would need to earn close to \$37/hour to afford a two-bedroom apartment without being rent burdened (i.e., paying more than 30 percent of income on rent); meanwhile, workers of color in the city have an average wage of \$25/hour. While rents in Seattle have declined significantly over the course of the coronavirus pandemic, the market remains out of reach for low-income workers and families.

Since 2010, the share of Black and Native American workers who are working full-time but are still economically insecure (having a family income below 200 percent of the federal poverty level) has grown to 12 percent and 11 percent, respectively. This is not simply a matter of skills and job readiness, but a reflection of overlapping labor-market barriers facing people of color: educational inequities, lack of social capital, policy provisions that suppress job quality in occupations where workers of color are concentrated, bias and discrimination, and structural racism in housing and transportation. Considering the rapidly growing share of residents who are people of color, such inequities represent a serious challenge to the region's continued economic prosperity.

In the midst of these challenges and in the context of the Covid-19 recession, advancing an equitable economic recovery should be the North Star of workforce development. This means approaching recovery not as an effort to return to the previous status quo—which was itself a time of crisis for many low-income communities, people of color, and immigrants and refugees—but as an opportunity to rebuild better. To that end, the WDC-SKC is working to advance a transformative regional workforce plan that centers racial equity, amplifies the voices of communities of color in program design and policy advocacy, and answers the call for systems change while prioritizing the needs of workers and job seekers.

5.0 STRUCTURAL RACISM DRIVES WORKFORCE INEQUITIES



Inequitable workforce outcomes arise out of the deep-rooted history of racial exclusion in the region, including redlining, racial segregation, and disinvestment in communities of color; inequitable investments in education; discrimination, bias, and systemic racism in employment practices; and racial inequity in the criminal-legal system. The key dynamics perpetuating workforce inequity in the Seattle metro region include the following.

- Systemic inequities in the geography of opportunity exacerbate workforce inequities. The cost of housing in the Seattle metro region is a major financial stressor for many households; rising rents and gentrification have displaced many low- and middle-wage workers and people of color from their neighborhoods and away from employment centers, and housing instability is a serious barrier to finding and keeping a job. Residential segregation impacts workforce outcomes in other ways: residents of wealthy neighborhoods rich in opportunity benefit not only from quality schools, but also from access to the social capital of well-connected personal and professional networks, which can also play an important role in employment opportunities.
- Educational inequities perpetuate racial gaps in employment and wages. Higher educational attainment is associated with higher wages and lower joblessness for workers across all racial/ethnic groups, but it does not eliminate racial gaps. These gaps are rooted in racial and economic segregation that concentrates children of color and low-income children in schools that are systematically underfunded and neglected. Halack students in Seattle schools test more than 3.5 grade levels behind their White peers, and despite recent improvements in high school graduation rates, racial gaps remain pronounced. Along with rising costs and a growing racial wealth gap, these dynamics drive longstanding racial inequities in higher educational attainment, with lifelong implications for the economic prospects of workers and their families.
- Systemic and institutional racism persist in the labor market. National research indicates that racial bias and discrimination in recruitment and hiring remain significant barriers for people of color. With identical resumes, White applicants are called back 36 percent more often than Black applicants and 24 percent more often than Latinx applicants. A 2020 report detailing an investigation by Seattle's Office for Civil Rights reported similar trends. In auditing more than 100 restaurants in Seattle—an industry in which workers of color are significantly overrepresented—the Office for Civil Rights found that 49 percent of employers showed favoritism toward White job applicants,

and workers of color were less likely to earn a living wage than their White peers in the same jobs. 18 Other employer hiring practices, like credit checks and criminal background checks, disproportionately impact people of color, compounding inequities in the financial and criminal-legal systems. Black people are arrested at five times the rate of White people in the United States, 19 and studies demonstrated deep racial injustices throughout the criminal-legal system—from policing and arrests to convictions and sentencing—which can severely impact returning community members' ability to secure jobs and housing.

• A transgenerational wealth gap disadvantages people of color across the economic life course. Financial and social resources play a key role in both access to opportunity and the social determinants of work, and racial inequities in who has these resources are stark. The median net worth of Seattle's White residents is about \$456,000—nearly 20 times that of their Black counterparts (\$23,000) and five times that of Latinx residents (\$90,000).²⁰ This massive disparity in family wealth drives inequitable workforce outcomes because of the way it influences neighborhood and school quality, educational opportunities and college access, health outcomes, mobility, and the development of crucial social capital and networks.^{21,22,23,24} For many refugees and immigrants—especially those without documents—these inequities are compounded by their exclusion from many basic social programs (like unemployment insurance) and certain sectors of employment.

These manifestations of structural racism in Seattle continue to shape and constrain the opportunities available to workers and drive the racial inequities we see across workforce indicators.

6.0 DEMOGRAPHIC CHANGE UNDERSCORES THE URGENT NEED FOR RACIAL EQUITY



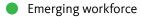
In a generation's time, the United States will be a majority people-of-color nation; the Seattle metro is slightly ahead of this national curve, and is projected to reach this demographic milestone by 2040.²⁵ The region is also home to more than 650,000 immigrants and more than one-third of Washington's considerable refugee population.^{26,27} This ongoing demographic transformation underscores the urgent need to center racial equity, not only as a moral imperative but also as a crucial ingredient for continued economic prosperity.

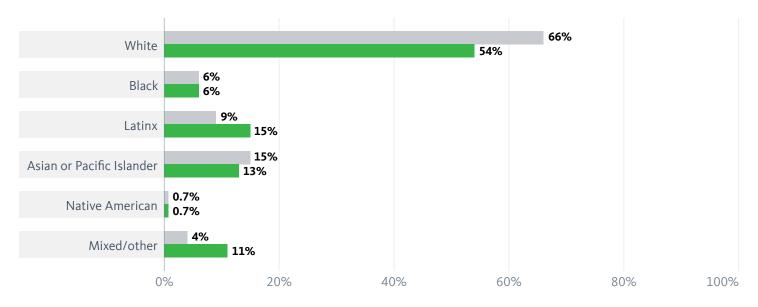
Workforce Demographics

One in three working-age adults in the Seattle region are people of color, along with 46 percent of youth under the age of 25 years.

Current and Emerging Workforce Demographics by Race/Ethnicity, Seattle Metropolitan Region, 2018

Current 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 current workforce includes the employed population between the ages of 25 and 64 years.

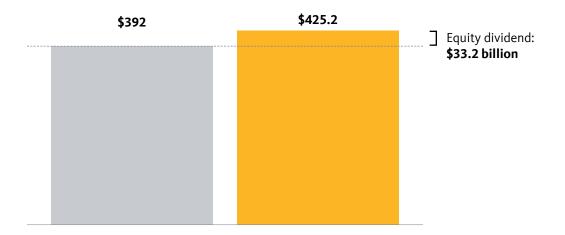
The region's workforce is already one-third people of color. White workers make up the majority racial/ethnic group (66 percent of the workforce), followed by Asian or Pacific Islander workers (15 percent). But these demographics will rapidly shift as older workers retire and younger people enter the labor force. Among the rising generation of workers under the age of 25 years, nearly half are youth of color—primarily Latinx and Asian or Pacific Islander.

Racial Equity Is a Win-Win for Workers and the Economy

The region's GDP could be more than \$33 billion larger if racial gaps in income were eliminated.

Actual GDP and Estimated GDP with Racial Equity in the Workforce (\$ Billions), Seattle Metropolitan Region, 2018

- GDP in 2018
- GDP if racial gaps in income were eliminated



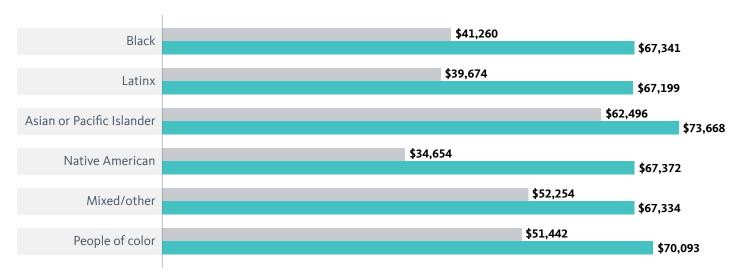
Source: Authors' analysis of the 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes the population ages 25–64 years. Data reflect a 2014–2018 average. Values are in 2018 dollars. See the methodology for details on the analysis.

Workforce equity and shared prosperity are essential to a strong, resilient economy—as the population becomes more diverse, this economic imperative will only escalate. In 2018 alone, the Seattle region's GDP could have been \$33 billion larger if there had been no racial gaps in either employment or wages for the working-age population.

Racial equity would increase the average annual incomes of people of color by 36 percent, from about \$51,400 to about \$70,000 per year.

Annual Income Gains with Racial Equity in the Workforce, Seattle Metropolitan 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 years. Data reflect a 2014–2018 average. Values are in 2018 dollars. See the methodology for details on the analysis.

Achieving racial equity in income relies on closing racial gaps in both employment and wages. Native Americans stand to make the greatest gains in annual income with racial equity, from about \$35,000 to over \$67,000 (a 94 percent increase). Incomes for Latinx residents would increase by almost 70 percent, from \$40,000 to about \$67,000 a year. Overall, racial gaps in wages account for about 80 percent of income inequity for people of color, while racial gaps in employment account for 20 percent.

7.0AGGREGATE GROWTH MASKS ENTRENCHED INEQUITIES



Over the last 30 years, the Seattle region has enjoyed strong job growth across all wage levels. Especially for people without a bachelor's degree—a group that includes over two-thirds of US-born Latinx adults, three-quarters of Black adults, and about six out of seven immigrant Latinx and Native American adults—too few good jobs are available to go around, even as housing and other basic costs have climbed. The data presented in this section illustrate three significant vectors of workforce inequity: limited opportunities in high-wage jobs, dangerously low standards of job quality at the bottom of the wage distribution, and a growing chasm of income inequality.

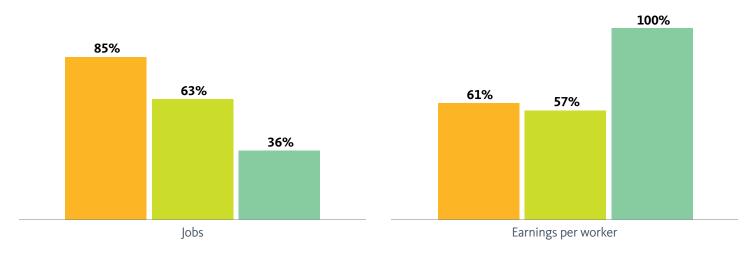
Job growth over the past 30 years has been concentrated among low-wage jobs, while wage growth has disproportionately accrued to high-wage workers.

Growth in Jobs and Earnings by Wage Level, Seattle Metropolitan Region, 1990-2018



Middle-wage

High-wage



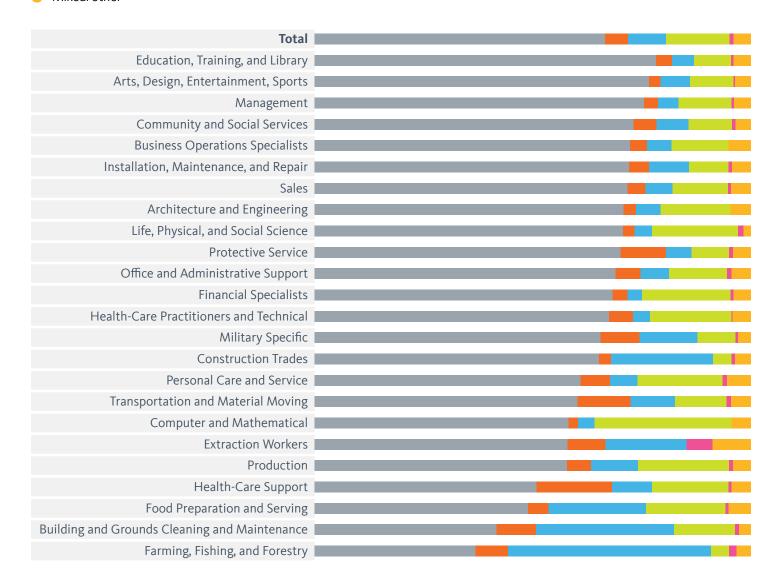
Source: PolicyLink/USC Equity Research Institute, National Equity Atlas, www.nationalequityatlas.org. Available at: https://nationalequityatlas.org. Available at: https://nationalequityatlas.org. Org/indicators/lob and wage growth#. **Note:** Universe includes all jobs covered by the federal Unemployment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

Over the past three decades, high-wage job growth in Seattle has trailed the national rate (36 percent compared to 43 percent for the US as a whole), while low- and middle-wage jobs have grown nearly twice as fast as the national average. During the same period, earnings for high-wage workers have increased 39 to 43 percentage points faster than those for low- and middle-wage workers, respectively.

Occupational segregation remains a significant challenge for achieving workforce equity.

Occupational Groups by Race and Ethnicity, Seattle Metropolitan 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 years. Data reflect a 2014–2018 average.

The Seattle labor market is characterized by occupational segregation that crowds many workers of color into low-wage jobs. One focus group participant noted, "It is hard to get out of the field you're in, and it's hard to advance."²⁸

Latinx workers are significantly concentrated in a handful of occupations: while they account for just 9 percent of the workforce overall, Latinx workers hold 47 percent of jobs in farming, fishing, and forestry occupations; 32 percent of building, grounds cleaning, and maintenance jobs; 24 percent of construction trades jobs; and 22 percent of food service and preparation jobs. In all of those occupations, the vast majority of Latinx workers are immigrants (upward of 75 percent) while immigrants make up just over half of all Latinx workers (54 percent). Latinx workers are most underrepresented in financial specialist jobs (3 percent); computer and mathematical jobs; life, physical, and social science jobs (4 percent); and health-care practitioners and technical occupations (4 percent). In these occupations, immigrants comprise only about one-third of Latinx workers.

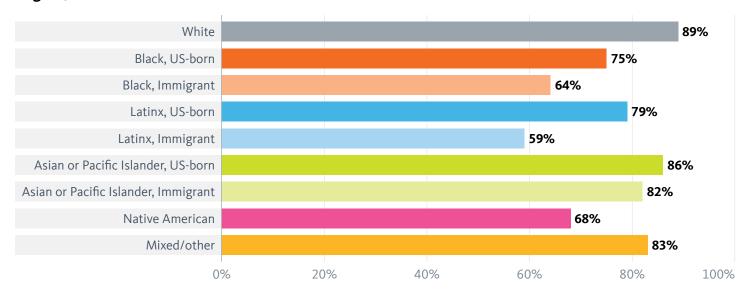
Asian or Pacific Islander immigrants make up 15 percent of the Seattle region's workforce, and three-quarters of them are immigrants. Overall, Asian or Pacific Islander workers in Seattle tend to fare better than their Latinx, Black, and Native American peers in employment and wage outcomes, but this group includes a broad diversity of experiences. For example, about 6 percent of all Asian or Pacific Islander workers are working poor (economically insecure, despite working full time)—but the rate is nearly three times as high among Pacific Islanders and workers of Cambodian ancestry.²⁹ In the Seattle region, Asian or Pacific Islander immigrants are most overrepresented among high-wage computer and mathematical jobs (27 percent of the workforce) as well as low-wage personal care and service jobs (17 percent), and production jobs (17 percent).

Black workers make up about 6 percent of the total workforce in the region and about one-third of them are immigrants. However, Black workers are more than triple that share of health-care support workers (17 percent) and double or more that share among transportation and material moving jobs (12 percent) and protective services jobs (10 percent). Immigrants comprise about 60 percent of all Black health-care support workers and over 40 percent of Black protective service workers. Black workers are most deeply underrepresented in computer and mathematical jobs and construction trades (2 percent).

Wages

White workers are 50 percent more likely than Latinx immigrants to earn at least \$15/hour.

Share of Workers Earning at Least \$15/Hour by Race/Ethnicity and Nativity, Seattle Metropolitan Region, 2018

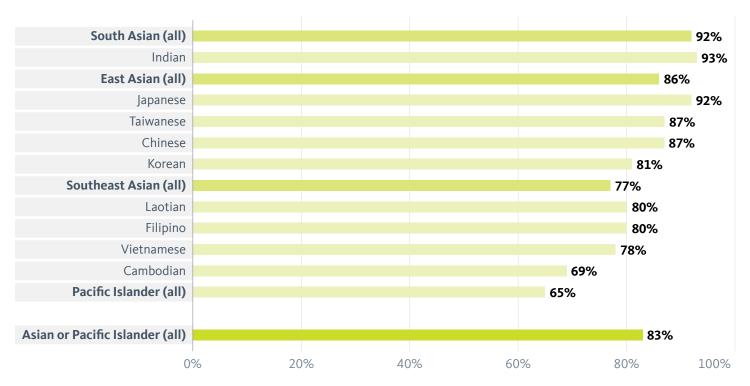


Source: Authors' analysis of the 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes civilian noninstitutional full-time wage and salary workers ages 25–64 years. Data reflect a 2014–2018 average. The \$15/hour wage threshold is based on 2018 dollars.

Racial gaps in the share of workers earning at least \$15/hour have been stubbornly persistent over the past several decades. Nearly 90 percent of White workers are paid at least \$15/hour, compared to just 59 percent of Latinx immigrants, 64 percent of Black immigrants, and 68 percent of Native Americans. Along with occupational segregation, exclusions in wage laws and labor standards that disproportionately disadvantage agricultural, food service, and domestic workers reinforce these racial gaps. Research suggests that employer bias and discrimination in hiring, pay, and promotion practices are also important contributing factors. One focus group participant remarked, "If you're talking about making \$15-\$18 an hour, that's not enough to live in Seattle. Even if you are making rent, you are just making rent. If anything happens, if your car breaks down, and you're not in some kind of low-income [housing], forget it. You're just doomed."

The likelihood of being paid a living wage varies widely among the diverse Asian or Pacific Islander population.

Share of Workers Earning at Least \$15/Hour, Asian or Pacific Islanders by Ancestry, Seattle Metropolitan Region, 2018



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 years. Data reflect a 2014–2018 average. The \$15/hour wage threshold is based on 2018 dollars.

Overall, about 83 percent of Asian or Pacific Islander workers earn at least \$15/hour, but this share varies between different ancestry groups. More than 90 percent of South Asian and Japanese workers earn at least this basic wage threshold, compared to just 65 percent of Pacific Islanders and 69 percent of Cambodian workers.

Racial gaps in median wages are narrowest within the public services industry, and most pronounced in professional services.

Median Wages by Race/Ethnicity and Industry, Seattle Metropolitan Region, 2018

- White
- Black
- Latinx
- Asian or Pacific Islander
- 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 years. Data reflect a 2014–2018 average; Native American workers are not included because of small sample size.

Racial gaps in median wages vary widely by industry. This gap is narrowest among public services workers, but Black workers in that industry are still paid an average of just 80 cents for every dollar paid to their White counterparts. In the entertainment industry, which has the lowest median wages overall, White workers earn about 43 percent more than Latinx workers. The racial wage gap is most pronounced in professional services: the median wage for White workers is double that of Latinx workers and 54 percent higher than that of Black workers.

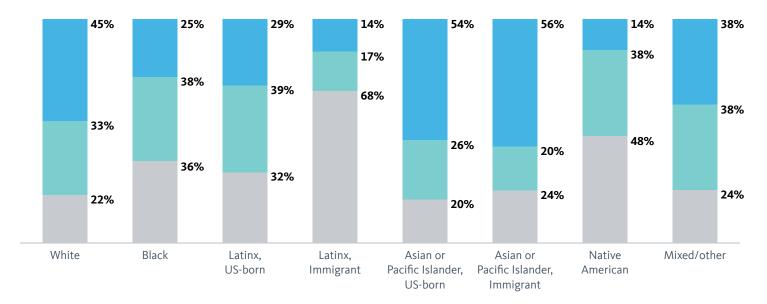
Even within a given industry or occupation, changing employment structures can dramatically impact workers' wages and other measures of job quality. One focus group participant described her experience of transitioning to contract-based work after she was laid off from a corporate position, and the job-quality challenges faced by gig workers, independent contractors, and third-party contracted workers. "I call it the gated community of full-time employment, and once you [are out] there are all these barriers to getting back in. [...] No opportunity for advancement. No PTO [paid time off]. No stability so that one bad day doesn't put your job at risk."³²

Higher Education

Just one in seven Native Americans and Latinx immigrants and one in four Black adults in the region have a four-year degree.

Educational Attainment by Race/Ethnicity and Nativity, Seattle Metropolitan Region, 2018

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



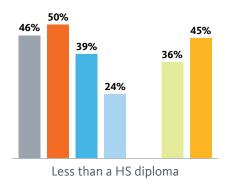
Source: Authors' analysis of the 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes the population ages 25–64 years. Data reflect a 2014–2018 average.

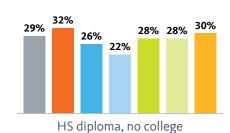
The attainment of a bachelor's degree is strongly correlated with lower unemployment, higher wages, and lesser vulnerability to automation-related job disruptions. About 45 percent of White adults and 55 percent of Asian or Pacific Islander adults in the Seattle metro have a bachelor's degree or higher. In contrast, just 14 percent of immigrant Latinx adults, 29 percent of US-born Latinx adults, and 25 percent of Black adults in the Seattle region have a bachelor's degree. A focus group participant expressed that she believes the value of her degree is also declining: "The whole hiring system is changing, so with this job market, they want certifications now, even if you have all the skills."

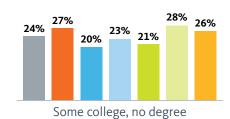
Higher educational attainment narrows racial gaps in employment, but benefits too few Black and Latinx workers.

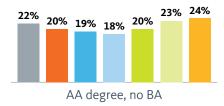
Joblessness by Educational Attainment, Race/Ethnicity, and Nativity, Seattle Metropolitan Region, 2018

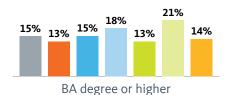
- White
- Black
- Latinx, US-born
- Latinx, Immigrant
- Asian or Pacific Islander, US-born
- Asian or Pacific Islander, Immigrant
- Mixed/other











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 years. 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; Native American workers, and Asian or Pacific Islander workers at certain educational levels, are not included because of small sample size.

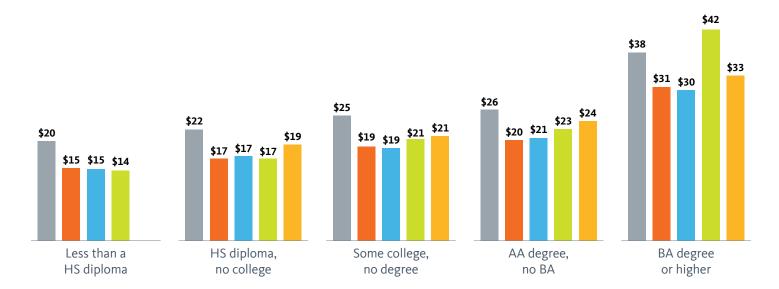
Across racial/ethnic groups, joblessness declines steadily as educational attainment increases, but racial inequities remain. It is important to note that 68 percent of immigrant Latinx adults and 36 percent of Black adults have a high school diploma or less, meaning that these populations are concentrated among the educational groups with the highest rates of joblessness. Interestingly, jobless rates are relatively low across all education levels for Latinx immigrants and only surpass the White jobless rate among those with a bachelor's degree or higher. Among those with a bachelor's degree or higher, immigrant Asian or Pacific Islanders have the highest jobless rate.

One focus group participant described the stigma of being an unemployed job seeker, explaining "[Employers] don't like it when you're out of work. It's harder to get a job, and it's discouraging because the longer you're unemployed, the more unemployable you are."³⁴

Black and Latinx workers earn substantially less than their White counterparts at every level of educational attainment.

Median Hourly Wages by Educational Attainment and Race/Ethnicity, Seattle Metropolitan Region, 2018

- White
- Black
- Latinx
- Asian or Pacific Islander
- 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 years. Data reflect a 2014–2018 average; Native American workers, and mixed/other race workers at certain educational levels, are not included because of small sample size. Values are in 2018 dollars.

Higher educational attainment is associated with higher median wages across all racial/ethnic groups, but racial gaps are also evident at each level of education. White workers in Seattle with no high school diploma earn the same median hourly wage as Black workers with an associate's degree (\$20/hour) and only one dollar less than Latinx workers with an associate's degree (\$21/hour).

White workers earn more than people of color across educational cohorts, except among those with a bachelor's degree or higher, where Asian or Pacific Islander workers have the highest median wage. And the relative wage gains are not equivalent: the median hourly wage premium for earning an associate's degree as opposed to a high school diploma is highest for Asian or Pacific Islander individuals, at \$6/hour (a 35 percent increase). The same educational achievement carries just a \$3/hour (18 percent) median wage increase for Black workers. The gap in wage gains from a high school diploma to bachelor's degree or higher is even more pronounced: a 147 percent gain for Asian or Pacific Islander workers, compared to a gain of about 76 percent for Latinx workers.

8.0

THE GEOGRAPHY OF OPPORTUNITY IS VASTLY UNEVEN

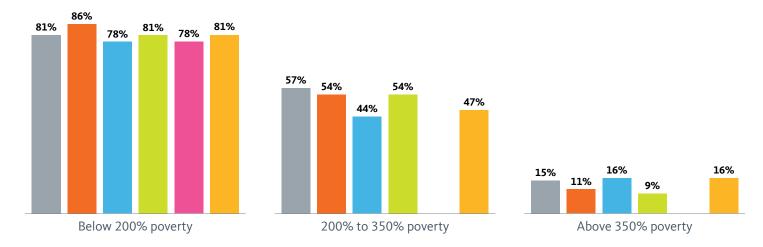


In a large regional economy where opportunities and resources are significantly concentrated in certain areas and neighborhoods, housing and transportation are significant determinants of economic and workforce outcomes. In the Seattle metropolitan region, both housing affordability and access to transportation are marked by deep inequities, impacting the ability of low-income residents and people of color to access economic opportunities.

Four out of five economically insecure renter households are housing-cost burdened.

Rent Burden by Race/Ethnicity and Poverty Level, Seattle Metropolitan Region, 2018

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



Source: Authors' analysis of data from the 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes renter households for whom poverty is determined; no group quarters. Rent burden is defined as paying more than 30 percent of income on rent. Data reflect a 2014–2018 average; some data for Native American workers are not included because of small sample size.

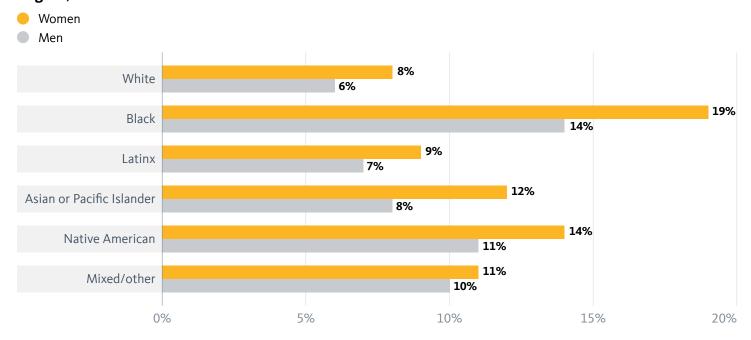
Housing costs are a significant barrier for many workers and job seekers in Seattle, especially for renter households. In the face of rising rents and stagnant wages, about 86 percent of economically insecure Black renters and 81 percent of economically insecure Asian or Pacific Islander and White renters are housing burdened, meaning they spend more than 30 percent of their income on housing costs. While racial differences in rent burden are muted when focusing only on economically insecure households, it is important to note that nearly half of all Black, Latinx, and Native American renter households are economically insecure

compared with less than one-third of White renter households. Considering all renter households together, 58 percent of Black, 54 percent of Native American, and 53 percent of Latinx households are rent burdened compared with 44 percent of White households. Even with the City of Seattle's enhanced minimum wage of \$16, a renter needs to work about 91.5 hours per week to afford a fair-market rate on a two-bedroom apartment.³⁵

Housing affordability and neighborhood quality are important upstream drivers of lifetime economic workforce outcomes. Workers who grew up in some of the region's predominantly White, high-opportunity neighborhoods went on to earn double the median wages of their counterparts who grew up in some majority-people-of-color neighborhoods in South Seattle.³⁶ One focus participant described looking for housing when she moved to Seattle, and the advice she received from her family: "They asked, 'What street is it on? What's the intersection?' Because if you live on one side, [your daughter] is going to Harvard. If you live on the other side, she's probably going to jail."³⁷

Households headed by people of color, particularly women of color, are least likely to have access to a personal vehicle.

Share of Households Without Access to a Vehicle by Race/Ethnicity and Gender, Seattle Metropolitan Region, 2018



Source: Authors' analysis of data from the 2018 5-year American Community Survey microdata from IPUMS USA. Universe includes all households; no group quarters. Vehicle access is defined as having at least one vehicle at home for use by household members. Data reflect a 2014–2018 average.

In the Seattle metro, nearly one in five households headed by Black women, 14 percent of those headed by Black men or Native American women, and 12 percent of those headed by Asian or Pacific Islander women do not have access to a personal vehicle. Without a car, residents may struggle to connect to jobs, schools, and other resources throughout the region—particularly if they live in low-opportunity neighborhoods not well-served by public transportation.

Low-income Black workers are most likely to rely on public transportation for their commute, including one-fourth who earn less than \$15,000 per year.

Percent of Workers Using Public Transit by Race/Ethnicity and Annual Income, Seattle Metropolitan Region, 2018

- White
- Black
- Latinx
- Asian or Pacific Islander
- People of color



Source: Authors' analysis of data from 2018 5-year American Community Survey microdata from IPUMS USA. **Note:** Universe includes persons age 16 years or older who worked outside the home during the week prior to the survey. Data reflect a 2014–2018 average; Native American workers and other/mixed race workers are not included because of small sample size.

Overall, lower income workers in Seattle are significantly more likely than higher income workers to rely on public transportation to commute to work. One in four Black workers earning less than \$15,000 per year, along with 13 percent of Black workers who earn between \$15,000 and \$35,000 per year, rely on public transit. Workers who rely on public transportation spend about 60 percent more time traveling to work than those who drive a private vehicle, on average, which

represents a substantial economic cost in terms of uncompensated commute time.³⁸ The difference of about 36 minutes per day (round trip) adds up to nearly four 40-hour work weeks annually (assuming 50 weeks commuting five days per week). A focus group participant shared, "I was cleaning offices and I had to start at 5:30 at night. So, I had to leave home in West Seattle by 3:00. I would get done around 5:00 in the morning and still have to make my way home."³⁹

9.0 SEATTLE WORKERS FACE A SHORTAGE OF GOOD JOBS



As the data above reveal, not everyone who wants to work in the Seattle region has a job, and not all workers are paid a basic living wage. As the economy and labor market evolve toward advanced industries and services, far too few workers are benefiting from the region's growth. Workforce development agencies, intermediaries, and policymakers need to both grow the quantity of good jobs and ensure equitable access to those jobs.

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

Characteristics and Examples of Good Jobs by Typical Education Requirements, Seattle Metropolitan Region, 2019

Characteristics of good jobs:

- Living-wage compensation: Average annual wage for the occupation is at or above \$52,291—the self-sufficiency standard for King County.
- 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 comprise the role.

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

- First-line supervisors of retail sales workers
- First-line supervisors of nonretail sales workers
- Sales representatives of services, except advertising, insurance, financial services, and travel

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

- Electricians
- First-line supervisors of construction trades and extraction workers
- Plumbers, pipefitters, and steamfitters

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

- Registered nurses
- Surveyors, cartographers, and photogrammetrists
- Air traffic controllers and airfield operations specialists

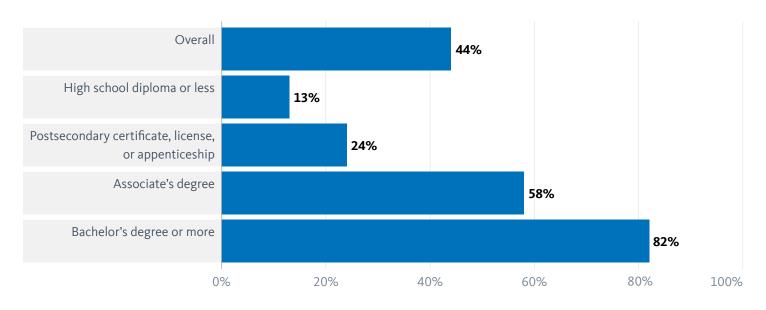
Example occupations accessible to workers with a bachelor's degree or higher:

- Elementary and middle school teachers
- Software developers
- Civil engineers

More Than 850,000 Seattle Workers Do Not Have Good Jobs

Less than half of Seattle workers are in good jobs.

Share of Workers in Good Jobs, Overall and by Educational Requirements, Seattle Metropolitan Region, 2019



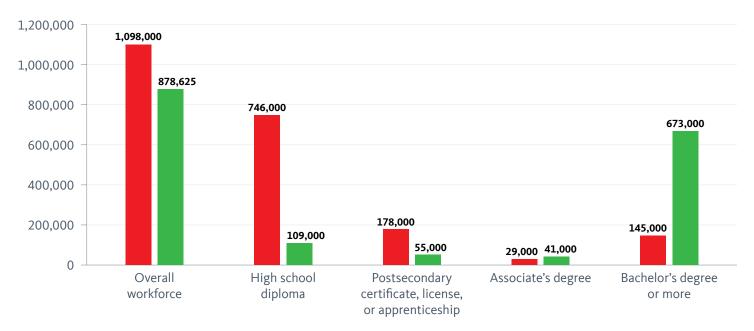
Source: Employment from 2018 5-year American Community Survey microdata from IPUMS USA, and occupational characteristics from Burning Glass job posting data and 2018 5-year American Community Survey microdata from IPUMS USA.

In the Seattle region, only 44 percent of the region's two million workers are in good jobs. The share of workers in good jobs increases as the level of education required for the job increases, but even among occupations that require nondegree postsecondary certifications, licenses, or apprenticeships, just 24 percent of workers are in good jobs. The vast majority of jobs that require postsecondary degrees (associate's and higher) are good jobs, but these educational requirements are a systemic barrier for many.

Nearly 850,000 Seattle jobs require no more than a high school diploma, but only 13 percent of them are good jobs.

Distribution of Employment by Educational Requirements and Job Quality, Seattle Metropolitan Region, 2018

- Workers not in good jobs
- Workers in good 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 Seattle's good jobs by education underscores the importance of a multifaceted approach to create more good jobs, upgrade existing jobs, and develop race-conscious workforce development strategies to ensure people of color can access good jobs. Given that only one-fourth of Black and Latinx adults in Seattle have a bachelor's degree, workforce intermediaries must consider interventions that will improve the quality of the jobs available to these workers.

One approach is to grow employment in the occupations that provide the largest number of good jobs that do not require a college degree. Some of these occupations require just a high school diploma, while others require a certification, license, apprenticeship, or other short-term training. Workforce intermediaries can develop pathways into these jobs, and these jobs can form a rung in a career-pathway approach to workforce development. Relevant occupations 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 13 of the 15 largest occupations that provide good jobs that do not require a college degree. The two exceptions are food service managers, where people of color comprise 40 percent of the workforce, and licensed practical and licensed vocational nurses, where people of color again make up 40 percent of the workforce.

Good Jobs that Do Not Require a College Degree, with Occupational Characteristics, by Race and Ethnicity, Seattle Metropolitan Region, 2018

Occupation	Total Employment	10-Year Growth Rate	Automation Score (Probability of Computerization)	Average Income in Seattle	% Workers of Color
First-line supervisors of retail sales workers	39,953	4%	28%	\$74,499	30%
First-line supervisors of nonretail sales workers	16,383	6%	8%	\$109,264	24%
Food service managers	11,076	24%	8%	\$48,553	40%
Electricians	10,749	17%	15%	\$66,136	21%
Sales representatives of services, except advertising, insurance, financial services, and travel	9,172	5%	39%	\$111,487	23%
First-line supervisors of construction trades and extraction workers	9,046	19%	17%	\$77,044	23%
First-line supervisors of production and operating workers	8,031	5%	2%	\$69,776	34%
Licensed practical and licensed vocational nurses	5,795	1%	6%	\$41,013	40%
Police officers	5,719	5%	10%	\$83,894	28%
Plumbers, pipefitters, and steamfitters	5,208	15%	35%	\$67,476	26%
Firefighters	3,991	10%	17%	\$88,534	14%
Supervisors of transportation and material moving workers	3,243	12%	22%	\$69,533	29%
First-line supervisors of mechanics, installers, and repairers	2,896	17%	0%	\$68,957	23%
Flight attendants	2,666	31%	35%	\$56,943	33%
Financial clerks, all other	2,641	22%	39%	\$118,234	37%

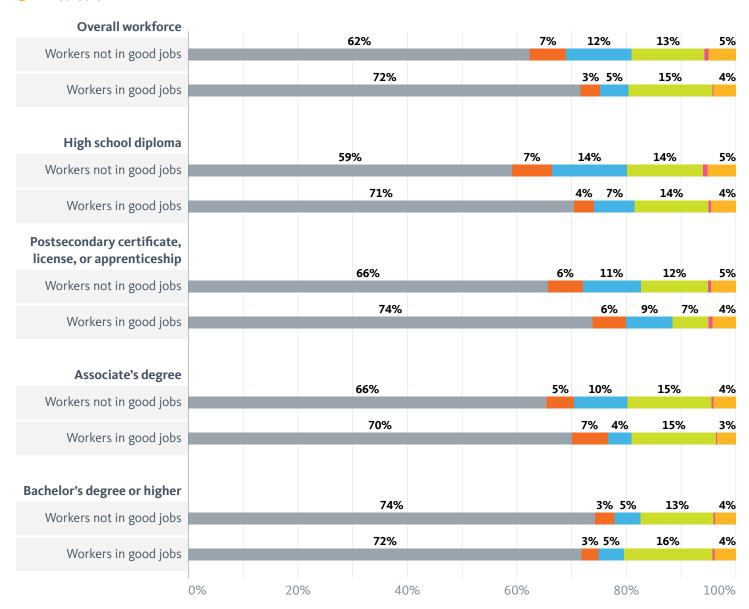
Sources: Employment from 2018 5-year American Community Survey microdata from IPUMS USA, and occupational characteristics from Burning Glass job posting data and 2018 5-year American Community Survey microdata from IPUMS USA.

Major Racial Inequities Exist in Access to Good Jobs

White workers are overrepresented in good jobs overall and particularly overrepresented in good jobs that do not require any postsecondary education.

Distribution of Workers by Race/Ethnicity, Job Quality, and Educational Requirements, Seattle Metropolitan Region, 2018

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



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 good jobs by race and education requirements, we find large inequities: White workers are overrepresented in good jobs overall, and particularly overrepresented in good 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. Among workers in nondegree jobs, Black and Latinx workers are only half as concentrated in good jobs as in other jobs. Only 10 percent of workers of color in jobs that require only a high school degree are in good jobs, relative to 15 percent of White workers. And 19 percent of workers of color in jobs that require nondegree postsecondary training, such as a certificate or apprenticeship, are in good jobs, compared to 26 percent of White workers.

Available jobs in 2019 could have closed racial gaps in access to good jobs.

In 2019, there were enough openings for good jobs over the year to close the racial equity gap in good jobs at each level of educational attainment. For example, to close the racial gap in good jobs for jobs that require no more than a high school diploma, 11,000 workers of color would need a job upgrade (a 34 percent increase); in 2019, there were 31,000 openings for good jobs at this educational level.

Still, 79 percent of the 340,000 good 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.

Access to the three key dimensions of good jobs (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 good jobs. Only 14 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 self-sufficiency standard,
compared to 21 percent of White workers. Jobs that require nondegree

postsecondary training, such as a certificate or apprenticeship program, pay a self-sufficiency wage more often, but the equity gap widens in these jobs, where just 32 percent of workers of color earn a self-sufficiency wage compared to 50 percent of White workers. Workforce intermediaries must ensure that nonacademic postsecondary training diminishes racial gaps, rather than expanding them.

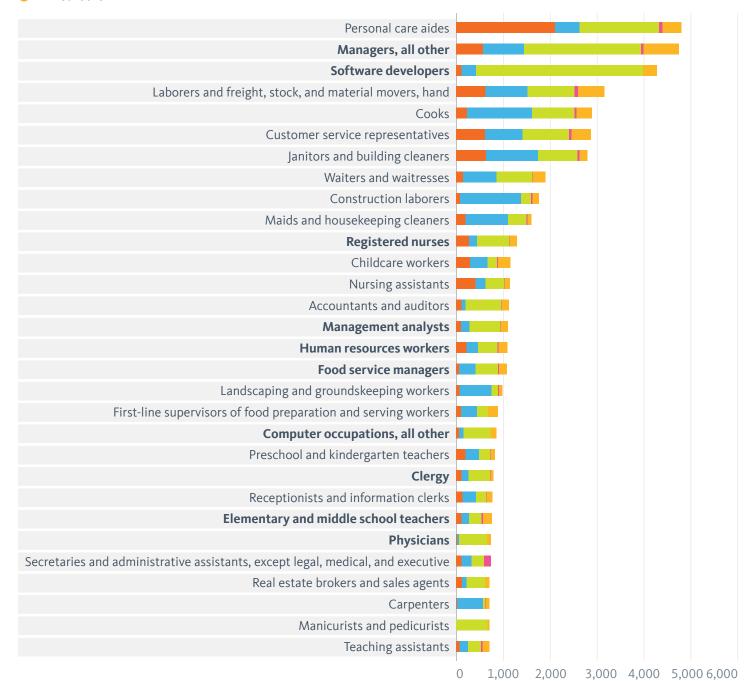
 Latinx workers face greater automation risk than their peers in jobs that do not require an academic degree. For example, 14 percent of Latinx workers in occupations that require no more than a high school diploma are in automationresilient jobs, compared to 22 percent of White workers. Interventions to mitigate automation risk, such as expanded unemployment for automationinduced job displacement and career pathway programs that shift workers away from at-risk careers, should include language and accessibility features that take into consideration the high concentration of Latinx workers in at-risk jobs.

Delivering workforce equity in Seattle will require not only generating more good jobs, but also ensuring that people of color are hired into them. Without policies and programs that connect workers of color to growth in good 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 and transportation.

Projected job growth for Latinx and Black workers is heavily concentrated in low-quality jobs.

Occupations Projected to Add the Most Workers of Color, by Race/Ethnicity, Seattle Metropolitan 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 good jobs.

The Seattle workforce is growing quickly, at a projected rate of 13 percent over 10 years. However, growth in good jobs lags behind growth in all other jobs: 46 percent of new employment is projected to be in good jobs. Not all workers are poised to benefit from the growth in good jobs. If occupational segregation remains as it is today, four of the 10 occupations that are projected to add the greatest number of White workers in the region over the next decade are good jobs, compared to three of the 10 occupations that are projected to add the most Asian workers, two of 10 for Black workers, and one of 10 for Latinx workers.

10.0

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

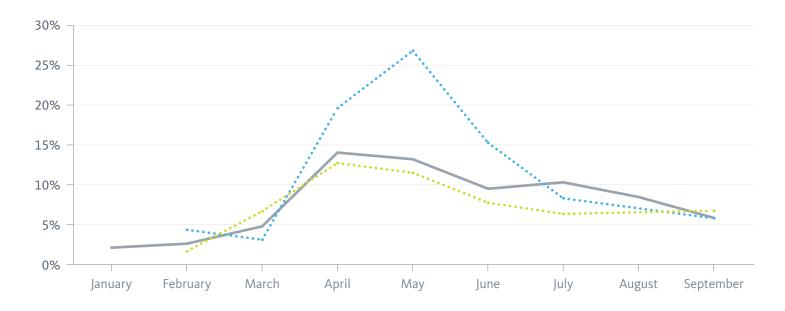


In the midst of the Covid-19 pandemic, the labor market remains turbulent. The unemployment rate in the Seattle region reached 17.3 percent in April 2020 and dropped to 5.9 percent in October 2020. The early recovery also unfolded unevenly across the labor market. Considering the racial stratification of different occupational groups in the region, these gaps have significant consequences for racial economic equity.

People of color have experienced greater unemployment volatility compared to White workers.

Unemployment Rates by Race/Ethnicity, Seattle Metropolitan Region, January-September 2020

- White
- Latinx
- Asian or Pacific Islander



Source: Authors' analysis of the Current Population Survey (CPS) microdata from IPUMS USA. **Note:** Dotted lines denote two-month rolling average of unemployment rates due to small sample sizes.

Unemployment rates rose for all workers in the Seattle region during 2020, peaking in April at 12.8 percent for Asian or Pacific Islander workers and 14.0 percent for White workers, and peaking at a substantially higher rate of 26.9 percent for Latinx workers in May. The jump in unemployment was delayed slightly for Latinx workers relative to White and Asian workers, but was significantly steeper. This highlights the precariousness of much of the Latinx workforce, which includes both a greater fraction of workers who face health risks in essential jobs, and a greater

fraction of workers laid off from jobs that are vulnerable to business cycle swings and Covid impact. As of September 2020, the unemployment rate for all workers decreased substantially to a range of 5.8 percent for Latinx workers to 6.6 percent for Asian or Pacific Islander workers.

The impact of the pandemic on immigrant workers is particularly difficult to quantify: undocumented workers are excluded from federal relief, and even many eligible immigrant workers face challenges to accessing unemployment insurance, such as language or technology barriers.

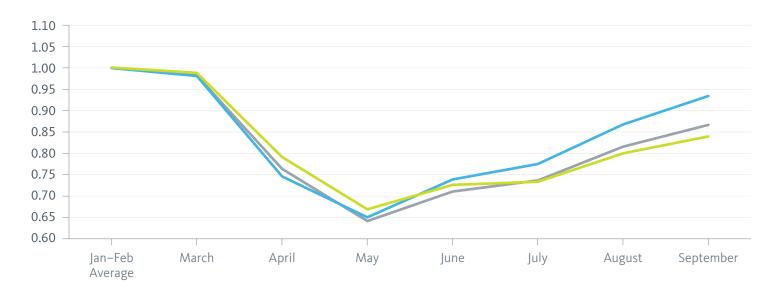
Demand for positions typically held by Latinx workers prior to the Covid-19 crisis is recovering more quickly than for those held by White workers.

Job Postings Relative to January/February Baseline by Pre-crisis Occupational Demographics (Race/Ethnicity), Seattle Metropolitan Region, March-September 2020

White

Latinx

Asian or Pacific Islander



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

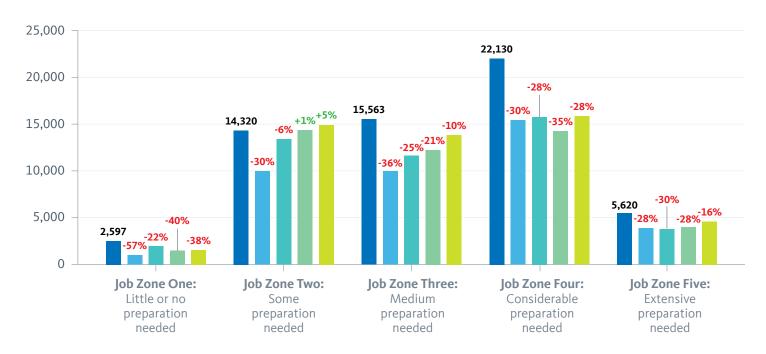
The chart above shows how employment recovery would have been allocated to different racial and ethnic groups if recovering jobs went proportionately to the workers who held those jobs pre-crisis. This chart uses job postings data to measure the change in demand over 2020 for jobs relative to the beginning of the year.

Over the course of the pandemic, Latinx workers experienced a higher increase in unemployment and then a faster return to work than other racial/ethnic groups, which is mirrored by the return in online job postings for jobs that were disproportionately held by Latinx workers before the pandemic.

The early labor-market recovery has been concentrated in jobs that require the least preparation and training. Postings for higher skills jobs remain down significantly from the February 2020 baseline.

Monthly Job Postings by Degree of Preparation Required, Seattle Metropolitan Region, February–October 2020

- February
- April
- June
- August
- October



Source: Authors' analysis of Burning Glass Technologies data on monthly job postings, using O*NET occupational classifications. **Note:** For more information on job zone definitions, see https://www.onetonline.org/help/online/zones.

In the early months since the coronavirus pandemic struck, jobs requiring less experience and education have rebounded most quickly, suggesting that Seattle may be in a low-wage recovery.⁴⁰ Postings for jobs that require some preparation—generally a high school diploma and/or some minimal work experience—have fully recovered to above their February 2020 baseline, and the pandemic has

highlighted the immense importance of many jobs that require little formal preparation as frontline care workers, gig workers, production workers, and service workers have kept the economy afloat.

Meanwhile as of October 2020, demand for jobs that require considerable or extensive preparation—often a bachelor's or advanced degree and significant specialized skills or experience—remained down 28 percent and 16 percent, respectively, compared to February 2020. Workers in jobs that require greater experience and education are often more insulated from economic volatility than other workers, but this trend suggests that many workers may be reentering the labor market as "underemployed"—taking jobs for which they are overqualified.

11.0ACCELERATING AUTOMATION PUTS WORKERS OF COLOR AT RISK



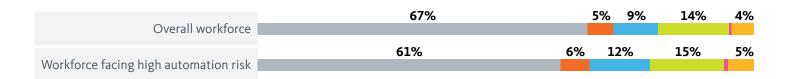
Automation, digitalization, and computerization are on course to radically transform work and jobs in the United States. Certain occupations will become obsolete; others will be profoundly changed, expanded, or combined; and technological advancement, especially in artificial intelligence, is likely 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 an increased risk of job disruption that may push them into more precarious, marginalized 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.⁴¹ Very few jobs consist *entirely* of tasks that can be computerized,⁴² 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.⁴³ The average risk for workers in the Seattle metro region is slightly lower at 48 percent.

Latinx workers are overrepresented in automation-vulnerable jobs by more than onethird compared to their representation in the overall workforce.

Automation Risk by Race and Ethnicity, Seattle Metropolitan Region, 2018

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

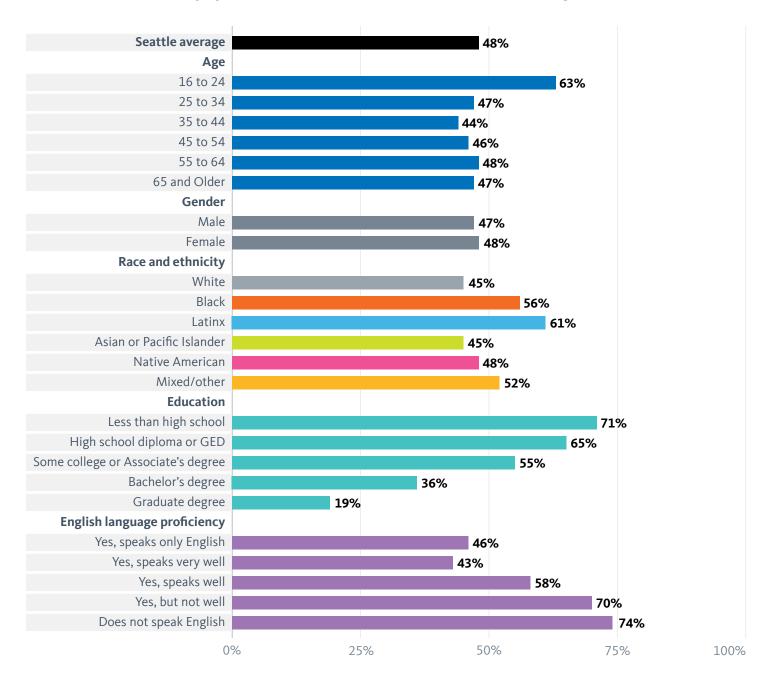


Sources: Authors' analysis of the 2018 5-year American Community Survey microdata from IPUMS USA and automation scores from "The Future of Employment: How Susceptible Are Jobs to Computerisation?" (Carl Benedikt Frey and Michael A. Osborne, 2013). **Note:** Universe includes the employed civilian noninstitutionalized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

The risk of automation is acute for workers of color, who are overrepresented in jobs susceptible to automation. White people in the Seattle area constitute 67 percent of the workforce, but only 61 percent of workers in jobs with high automation risk. Inversely, Latinx workers make up 9 percent of the workforce overall but 12 percent of automation-vulnerable workers. The concentration of workers of color in jobs with elevated automation risk is projected to continue over time.

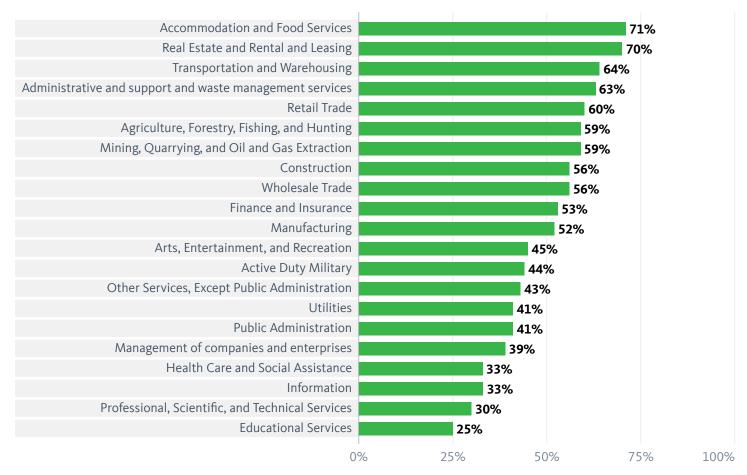
Workers of color, those with less than a high school diploma, and non-English speakers are most vulnerable to automation-driven job disruption.

Automation Vulnerability by Worker Characteristics, Seattle Metropolitan Region, 2018



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

Automation Vulnerability by Industry, Seattle Metropolitan Region, 2018



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

In addition to race and ethnicity, a variety of other worker characteristics correlate with high automation risk. English-language proficiency is associated with automation resiliency: workers who speak English well face one-third less automation risk than workers who do not speak English, a difference of 31 percentage points. Increasing educational attainment is another pathway to jobs that enjoy automation resiliency. The degree that affects the greatest level of change is a bachelor's degree. Bachelor's degree holders face one-third less automation risk—a difference of 19 percentage points—compared to workers with some college experience or an associate's degree. Black workers are 11 percentage points more likely than White workers to be in jobs that are susceptible to automation, and Latinx workers are 16 percentage points more likely.

12.0 A BLUEPRINT FOR ACTION IN SEATTLE



The data presented in this report underscore the urgent need for policymakers, employers, educators, training providers, and community-based organizations to take bold action to advance workforce equity. This entails raising the floor on job quality for all workers and ensuring that all Seattle residents are prepared for the jobs of tomorrow with the skills, supports, and access they need to fully participate and thrive in the emerging economy.

Seattle was among the first places in the nation to issue widespread shutdown orders to slow the spread of Covid-19, and workers of color have been disproportionately impacted not only by the health risks of the pandemic but also by rippling economic and social effects, such as loss of income, lack of childcare, and cuts to public transportation.

Automation and digitalization are already transforming leading industries and occupations in the Seattle area labor market, as the region's changing demographics are transforming the labor force. Policymakers, employers, educators, training providers, and community-based organizations all have important roles to play 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 emerging economy.

A cross-cutting racial equity agenda for the region's workforce is the cornerstone of an equitable economic recovery and a Seattle economy in which all can participate, prosper, and reach their full potential. To design and activate such an agenda, the WDC-SKC Equity Working Group recommends the following.

1. Partner with employers and industry to implement equitable recovery commitments.

Workforce intermediaries should engage with employers to develop "inclusive economic recovery" commitments with an explicit focus on advancing racial equity in the workforce. Such commitments might be to bolster outreach and training in communities underrepresented in the workforce; establish practices and accountability mechanisms for diverse and inclusive hiring; implement skills-based hiring and relax credential requirements where required competencies can be demonstrated; embed racial equity and inclusion training in corporate governance and employer practices; and eliminate unnecessary screening barriers for job applicants, such as credit check, criminal background checks, or requirement of a driver's

license for nondriving positions. Funders and industry leaders can support these commitments by devoting resources both to build the capacity of local service providers and community-based organizations and to support the implementation of outreach, training, and pilot programs to assess outcomes and identify best practices.

2. Develop systems to measure and track equity metrics as the economy recovers.

Seattle area workforce funders and intermediaries can support an inclusive regional economy by establishing and appropriately resourcing systems to track key equity indicators, disaggregated by race, ethnicity, ancestry, and nativity. Building on the data insights in this report, workforce stakeholders should prioritize developing partnerships and data capacity aimed to craft a transformative rubric for measuring racial equity and inclusion in the Seattle economy. Such data should be deeply integrated into both the design and the assessment of policies and programs intended to advance racial equity, and should include multiple measures of job quality. To develop a strong and robust data system that captures and reflects the intersection of various systems that impact workforce outcomes, the WDC-SKC should lead a cross-sector partnership that includes education, business, labor, economic development, workforce development, and community-based organizations to identify shared equity indicators to track progress toward an equitable recovery and workforce equity in the region.

3. Invest in community-based research and collaboration to remove structural barriers to work.

Historically, the workforce development system has emphasized skills, training, and job placement. And too often, underserved communities are left out of the planning and implementation of policies and programs intended to serve or support them. Sometimes the omission is unintentional, but the consequence remains that people become recipients of interventions that are done "to" or "for" them. Opportunities to partner with organizations from communities of color, who usually know their communities best, are missed. And in many instances, this exclusive emphasis fails to achieve the intended outcome of facilitating the secure placement of workers in high-quality jobs. In the absence of addressing

the barriers to work and other challenges often facing low-income workers and workers of color, continuing this approach is likely to exacerbate existing income disparity and occupational segregation. Barriers to work include lacking the financial resources to pay for education and training, inability to access or afford the supports that enable work (such as childcare and transportation), and exclusionary policies that relegate workers of color to low-wage jobs with little to no opportunity for growth and advancement.

4. Build meaningful and sustainable community influence and power in the workforce development system.

Equity is measured not only by who pays and who benefits from a given policy or systems change—it is also about who decides. So it is imperative that the voices of workers and people of color be held at the center of imagining, prioritizing, planning, and evaluating workforce equity strategies. Workforce funders and intermediaries must invest in sustained capacity to support people of color, immigrant, and refugee-led research and workforce development policy and program design, and ensure that leaders from the communities most impacted by systemic inequities meaningfully participate in developing workforce initiatives and policy approaches. To build power among these workers, funders and industry leaders should be dedicated to building a multisector, publicprivate, and community-centered collaborative to incubate worker engagement and advocacy. Workers must be empowered to hold employers accountable to equity goals, create regional equity measures, and define equity standards at the sector and systems levels. Instead of an elongated information-gathering community-engagement approach, community building is an ongoing process of collecting data, providing recommendations on wealth and upward mobility, and alerting sectors on boundaries and barriers to employment in times of economic uncertainty.

5. Advance sector-based strategies and partnerships that prioritize opportunity sectors in the region.

Sector partnerships present an opportunity to approach workforce development challenges with an explicit systems-level lens—connecting job seekers to work, helping to meet the talent needs of firms and industries, and embedding racial equity in workforce development innovations. In Seattle, there are key opportunities to deepen such partnerships in the construction, information technology, and health-care sectors. Funders and workforce development organizations can promote these partnerships in the following ways.

a. Construction: Access to construction careers brings living-wage jobs to economically distressed communities—particularly for women and people of color—who have not seen that opportunity in the past. The construction sector has historically been and continues to be predominantly White and male: workers of color comprise 26 percent of the construction workforce in King County, compared to 34 percent of the workforce overall. However, in King County, the construction sector is well engaged on workforce development issues. The industry has many strong leaders and examples of race-centered approaches to workforce development that can be built on in construction and replicated in other industries.

One example is the Regional Public Owners and Regional Pre-Apprenticeship Collaborative. Many public agencies in the region have policy and investments in place that reduce economic inequities by opening doors to well-paying construction careers. The City of Seattle, King County, Sound Transit, Port of Seattle, Washington State Department of Transportation, Seattle Public Schools, and others are focused on leveraging their investments in public infrastructure to address race-based disparities in the construction industry and demonstrate actions toward achieving racial and economic justice in workforce development. These efforts can be expanded:

- Support and advance the work of Regional Public Owners and the Priority
 Hire program to advance racial equity in the construction sector.
- Increase partnership opportunities to advance the work of the Regional Public Owners collaborative and expand access and training to public-sector construction jobs.
- Support the development of digital skills curriculum and hybrid in-person and computer training.

- Provide regional workforce development backbone support: research, data, program development, and funding for pre-apprenticeship training and apprenticeship retention efforts.
- Align with labor, contractors, apprenticeship programs, and other partners to champion greater workforce diversification in the trades and develop policies to support worker retention.
- Support prison-to-construction career pathways.
- **b. Information Technology:** To advance equity in information technology (IT), sectoral partnerships should focus on creating robust pathways for workers of color into both the IT sector itself and tech occupations across sectors, to diversify the IT workforce. Funders, employers, and workforce intermediaries should:
 - Convene a BIPOC (Black, Indigenous, and people of color) IT summit to identify structural barriers and develop solutions led by and centered on people of color.
 - Identify and leverage the transferable skills of displaced workers to address
 IT supply gaps across industries.
 - Create equity-centered alternative points of entry and pathways into the IT sector.
 - Partner closely with education and training providers to communicate ongoing changes in IT skills requirements due to emerging technologies (Internet of things, artificial intelligence, cloud computing, and cyber security) and/or business needs.
- c. Health Care: Support and advance the work of the Healthcare Industry
 Leadership Table (HILT) to improve access to a skilled health-care workforce.
 The HILT was launched in May 2018 by a group of health-care leaders (King
 County Public Health, KinOn Assisted Living, International Community Health
 Services, Swedish Medical Center, Seattle Children's Hospital, Kaiser Permanente,
 and Seattle Cancer Care Alliance) as a way to identify shared priorities across
 the region's health-care providers, and mobilize around shared solutions. The
 health-care sector offers a major opportunity to address the longstanding
 shortage of health-care workers, while re-deploying those who are unemployed
 because of Covid-19. Strong sectoral collaboration should also focus on making
 high-wage, high-demand careers more accessible and navigable for underserved
 communities while simultaneously identifying strategies to improve the
 quality of low-wage, high-demand occupations. Finally, health-care institutions,
 funders, and workforce intermediaries should coordinate efforts to leverage
 recovery funds to create new transitional employment pathways in public

health jobs—such as testing, contact tracing, community health outreach, and new roles needed to ensure education and access to the vaccine—particularly in communities of color and other underserved communities.

6. Co-create and co-invest in equitable, high-demand career pathways.

Leveraging the resources of existing systems, workforce stakeholders in Seattle should deliberately identify priority areas for skilled workforce demand, build training programs designed to meet that demand, and remove barriers to worker participation. This includes creating on-ramps and integrating education and training, hands-on paid experience (such as apprenticeships), and wraparound supports into pathways that are responsive to specific circumstances and the needs of both employers and workers of color. Funders should also expand investments in existing pre-apprenticeship and apprenticeship programs with culturally competent organizations and/or organizations that are led or owned by communities of color. Another key priority is adapting and replicating the construction Priority Hire program for other sectors to establish pre-apprenticeship and apprenticeship programs focused on people of color and others living in economically distressed regions of King County. Finally, stakeholders should actively collaborate with the Healthcare Industry Leadership Table to integrate dual-language instruction apprenticeships into health-care pathways.

An equitable Seattle workforce will be one in which racial income gaps have been eliminated, all jobs are good jobs, and everyone who wants to work has access to family-supporting employment. Achieving this vision will require high-impact, large-scale, cross-system efforts to dismantle barriers and cultivate racial equity in education and training, hiring and 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. Amid the economic uncertainty of the current moment and the projected scale of technological transformation in the not-too-distant future, targeted strategies to improve job quality and ensure equitable access to safe and stable employment are essential to an equitable future of work and a thriving, inclusive economy in the Seattle region.

13.0 METHODOLOGY

The analyses presented here were drawn 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 sources and notes are included beneath each figure in the report, here we provide additional information on these two key data sources and methods used for the analysis of "good jobs," automation risk, and income/GDP gains with racial equity in the workforce. Unless otherwise noted, all data reflect the Seattle-Tacoma-Bellevue, WA Metropolitan Statistical Area, which includes King, Snohomish, and Pierce counties in the state of Washington.

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 as well as 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 used the 5-year sample of the microdata to achieve a larger sample size, and we used 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 was 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 were 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 "good 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 from close to 50,000 online job boards, newspapers, and employer sites daily. 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 good 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 Carl Benedikt Frey and Michael A. Osborne.⁴⁴

The income and GDP gains with racial equity in the workforce are based on a methodology used for the "racial equity in income" indicator on the National Equity Atlas. That analysis estimates aggregate income and income per person for the population ages 16 years 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 restricting it to the working-age population (ages 25–64). Care was taken to ensure that the percentage (and total) gain in GDP we estimated was 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 years.

14.0

NOTES

- Abbie Langston, Sarah Treuhaft, Justin Scoggins, Joel Simon, and Matthew Walsh, Race, Risk, and Workforce Equity in the Coronavirus Economy (Oakland, Los Angeles, Boston: PolicyLink, USC Program for Environmental and Regional Equity, Burning Glass Technologies, June 2020), https://nationalequityatlas.org/ research/COVID-workforce.
- 2 Abbie Langston, Justin Scoggins, and Matthew Walsh, Race and the Work of the Future: Advancing Workforce Equity in the United States (Oakland, Los Angeles, Boston: PolicyLink, USC Equity Research Institute, Burning Glass Technologies, November 2020), https:// nationalequityatlas.org/research/race-and-the-work-of-the-future.
- 3 Samantha Sharf, "The Best Places for Business and Careers: Seattle Still On Top," *Forbes*, October 30, 2019, https://www.forbes.com/sites/samanthasharf/2019/10/30/the-best-places-for-business-and-careers-2019-seattle-still-on-top/?sh=11b165b53df2.
- 4 Stephen Fesler, "Seattle Tops 761,100 Residents, Four-County Region Grows to 4,264,200," *The Urbanist*, July 9, 2020, accessed December 15, 2020, https://www.theurbanist.org/2020/07/09/seattle-tops-761100-residents-four-county-region-grows-to-4264200/.
- 5 PolicyLink and USC Equity Research Institute, "Race/ethnicity," National Equity Atlas, accessed December 15, 2020, https://nationalequityatlas.org/indicators/Race-ethnicity#/.
- 6 The Office of Economic and Financial Analysis, "Demographic Trends of King County," King County Government, July 2020, https://kingcounty.gov/independent/forecasting/King%20 County%20Economic%20Indicators/Demographics.aspx.
- 7 "Local Area Unemployment Statistics," (Seattle-Bellevue-Everett, WA Metropolitan Division) U.S. Bureau of Labor Statistics, accessed December 15, 2020, https://data.bls.gov/timeseries/LAU DV534264400000003?amp%253bdata_tool=XGtable&output_view=data&include_graphs=true.
- 8 Gene Balk, "Percentage of Black Residents in Seattle Is at Its Lowest Point in 50 Years," *The Seattle Times*, June 16, 2020, accessed December 1, 2020, https://www.seattletimes.com/seattle-news/data/percentage-of-blacks-living-in-seattle-at-lowest-point-in-50-years/.
- 9 Hanley Wood Data Studio, "The Amazon Effect: Rising Rents," BUILDER Online, April 4, 2018, accessed December 5, 2020, https://www.builderonline.com/money/economics/the-amazon-effect-rising-rents_o.
- 10 Andrew Aurand, Abby Cooper, Dan Emmauel, and Diane Yentel, Out of Reach: The High Cost of Housing, 2019 (Washington, DC: National Low Income Housing Coalition, 2019), https://reports.nlihc.org/sites/default/files/oor/OOR_2019.pdf.

- 11 PolicyLink and USC Equity Research Institute, "Wages: Median," National Equity Atlas, accessed December 10, 2020, https://nationalequityatlas.org/indicators/Wages_Median#/?breakdown=2&geo=07000000005363000.
- 12 Chris Salviati, Igor Popov, and Rob Warnock, "Apartment List National Rent Report," Apartment List, November 30, 2020, https://www.apartmentlist.com/research/national-rent-data.
- 13 PolicyLink and USC Equity Research Institute, "Working Poor,"
 National Equity Atlas, accessed December 1, 2020, https://nationalequityatlas.org/indicators/Working_poor#/?breakdown=1
 &geo=03000000000042660.
- 14 Paxtyn Merten, "Seattle to Distribute Nearly \$100m to Support K-12 Students, Address Racial Disparities," *The Business Journals*, September 1, 2020, https://www.bizjournals.com/seattle/news/2020/09/01/seattle-disburses-nearly-100m-to-support-students.html.
- 15 Neal Morton, "Racial Equity in Seattle School Has a Long, Frustrating History—And Its Getting Worse," *The Seattle Times*, January 12, 2018 (updated February 1, 2018), https://www.seattletimes.com/education-lab/racial-equity-in-seattle-schools-has-a-long-frustrating-history-and-its-getting-worse/.
- 16 KING Staff, "Steady Rise in Graduation Rates at Seattle Public Schools," *King 5*, November 20, 2018, accessed December 10, 2019, https://www.king5.com/article/news/local/steady-rise-ingraduation-rates-at-seattle-public-schools/281-616438704.
- 17 Lincoln Quillian, Devah Pager, Arnfinn H. Midtbøen, and Ole Hexel, et al., "Hiring Discrimination Against Black Americans Hasn't Declined in 25 Years," *Harvard Business Review*, October 11, 2017, https://hbr.org/2017/10/hiring-discrimination-against-black-americans-hasnt-declined-in-25-years.
- 18 Gabe Guarente, "New Report Highlights Racial Inequities in the Seattle Restaurant Industry," *Eater Seattle*, July 24, 2020, https://seattle-restaurant-industry.
- 19 Angela Srikanth, "Black People 5 Times More Likely to be Arrested than Whites, According to New Analysis," *The Hill*, June 11, 2020, https://thehill.com/changing-america/respect/equality/502277-black-people-5-times-more-likely-to-be-arrested-than-whites.
- 20 Gene Balk, "Seattle Household Net Worth Ranks Among Top in Nation—But Wealth Doesn't Reach Everyone," Seattle Times, February 19, 2019, https://www.seattletimes.com/seattle-news/data/seattle-household-net-worth-ranks-among-top-in-nation-but-wealth-doesnt-reach-everyone/.
- 21 Chichun Fang, "Growing Wealth Gaps in Education," Institute for Social Research (blog), Survey Research Center, University of Michigan, June 20, 2018, https://www.src.isr.umich.edu/blog/growing-wealth-gaps-in-education/.

- 22 Paula Braveman, Julia Acker, Elaine Arkin, Dwayne Proctor, Amy Gillman, Kerry Anne McGeary, and Giridhar Mallya, *Wealth Matters for Health Equity* (Princeton, NJ: Robert Wood Johnson Foundation, September 1, 2018), https://www.rwjf.org/en/library/research/2018/09/wealth-matters-for-health-equity.html.
- 23 Breno Braga, Signe-Mary McKernan, Caroline Ratcliffe, and Sandy Baum, Wealth Inequality Is a Barrier to Education and Social Mobility (Washington, DC: Urban Institute, 2017), https://www.urban.org/sites/default/files/publication/89976/wealth_and_education_4.pdf.
- 24 Matthew Wright, "Economic Inequality and the Social Capital Gap in the United States Across Time and Space," *Political Studies*, 63, no. 3 (2014): 642-662, https://journals.sagepub.com/doi/10.1111/1467-9248.12113?icid=int.sj-abstract.similar-articles.2.
- 25 PolicyLink and USC Equity Research Institute, "Race/Ethnicity," National Equity Atlas, accessed December 1, 2020, https://nationalequityatlas.org/indicators/Race-ethnicity#/?g eo=03000000000042660.
- 26 PolicyLink and USC Equity Research Institute, "Nativity and Ancestry," National Equity Atlas, accessed December 1, 2020, https://nationalequityatlas.org/indicators/Nativity-and-ancestry#/?breakdown=2&geo=03000000000042660.
- 27 Gene Balk, "What King County's Refugee Populations Look Like: Interactive Map," *The Seattle Times*, November 19, 2015, https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiv_di5-M_tAhUyNX0KHZT5B58
 https://www.seattletimes.com%2Fseattle-news%2Fwhat-king-countys-refugee-populations-look-like-interactive-map%2F&usg=AOvVaw1HTIS4MzY1U_e2rl82MS2p.
- 28 Personal interview with focus group participant, Seattle, Washington, December 9, 2019.
- 29 PolicyLink and USC Equity Research Institute, "Working Poor."
- 30 Valerie Wilson and William M. Rodgers III, *Black-White Wage Gaps Expand with Rising Wage Inequality* (Washington, DC: Economic Policy Institute, September 20, 2016), https://www.epi.org/publication/black-white-wage-gaps-expand-with-rising-wage-inequality/.
- 31 Personal interview with focus group participant, Seattle, Washington, December 9, 2019.
- 32 Personal interview with focus group participant, Seattle, Washington, December 9, 2019.
- 33 Personal interview with focus group participant, Seattle, Washington, December 9, 2019.
- 34 Personal interview with focus group participant, Seattle, Washington, December 9, 2019.
- 35 Aurand, et al., Out of Reach.
- 36 Dylan Matthews, "America Has a Housing Segregation Problem. Seattle May Just Have the Solution," Vox, August 4, 2019, https://www.vox.com/future-perfect/2019/8/4/20726427/raj-chetty-segregation-moving-opportunity-seattle-experiment.

- 37 Personal interview with focus group participant, Seattle Washington, December 9, 2019.
- 38 Authors' analysis of data from 2018 5-year American Community Survey microdata from IPUMS USA. Universe includes persons age 16 or older who worked outside the home during the week prior to the survey. Data reflect a 2014–2018 average.
- 39 Personal interview with focus group participant, Seattle, Washington, December 9, 2019.
- 40 See the Opportunity Insights Recovery Tracker for updated information on job postings and other recovery indicators: https://tracktherecovery.org/.
- 41 Carl Benedikt Frey and Michael A. Osborne, "The Future of Employment: How Susceptible Are Jobs to Computerisation?" (Oxford: Oxford Martin School, September 17, 2013), https://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf.
- 42 James Manyika, Susan Lund, Michael Chui, Jacques Bughin, Jonathan Woetzel, Parul Batra, Ryan Ko, Saurabh Sanghvi, Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation (San Francisco, CA: McKinsey Global Institute, December 2017), https://www.mckinsey.com/~/media/McKinsey/Industries/Public%20and%20Social%20Sector/Our%20Insights/What%20the%20future%20of%20work%20will%20mean%20for%20jobs%20skills%20and%20wages/MGI-Jobs-Lost-Jobs-Gained-Executive-summary-December-6-2017.pdf.
- 43 Manyika et al., *Jobs Lost, Jobs Gained*. It is important to note that automation scores are not a probability that a given job will actually be automated. Because a job or task can technically be done by a computer does not mean that it will be. A range of legal, logistical, business, financial, political, and social factors could lower the real rate at which businesses and employers adopt technology and automate functions.
- 44 Frey and Osborne, "The Future of Employment."

15.0 AUTHOR BIOGRAPHIES

Abbie Langston is a Senior Associate at PolicyLink, where she leads the development of the National Equity Atlas. She holds a PhD from the Graduate Program in Literature at Duke University, where she specialized in American studies and critical race and ethnic studies.

Justin Scoggins is the Data Manager at the USC Equity Research Institute (ERI) and primary architect of the database behind the National Equity Atlas. He specializes in using data to illustrate patterns of social inequity in support of those working to reverse those patterns.

Matthew Walsh is a Research Lead at Burning Glass Technologies. Matthew oversees projects related to workforce development, regional industry strategies, mobility, and equity. Matthew was a co-author on an earlier piece in this series, *Race, Risk, and Workforce Equity in the Coronavirus Economy*.









Lifting Up What Works®

Headquarters

1438 Webster Street Suite 303 Oakland, CA 94612 t (510) 663-2333 f (510) 663-9684

Communications

75 Broad Street Suite 701 New York, NY 10004 t (212) 629-9570

Washington, DC

1301 K Street NW Suite 300W-414 Washington, DC 20005

www.policylink.org

Facebook: /PolicyLink Twitter: @policylink

Data and Analysis to Power Social Change

1149 South Hill Street Suite H340 Los Angeles, CA 90015 t (213) 740-3643

dornsife.usc.edu/ERI

Facebook: /equityresearchinstitute Twitter: @ERI_USC

Real-time Job Market Analytics

66 Long Wharf Floor 2 Boston, MA 02110 t (617) 227-4800

burning-glass.com

Twitter: @Burning_Glass LinkedIn: /Burning-Glass-Technologies

National Fund for Workforce Solutions

1250 Connecticut Ave. NW Suite 200 Washington, DC 20036 t (202) 223-8994

nationalfund.org

Facebook: /NFWorkforce Twitter: @National_Fund