TAKING ACTION

Positioning Low-Income Workers to Succeed in a Changing Economy

CONTENTS

ABOUT THIS REPORT

This report aims to shift the discussion about the changing nature of work from analysis and into action by showcasing strategies, policies and programs that already are improving the present and future for lower-wage workers and their families.

Though funded by the Annie E. Casey Foundation and the Joyce Foundation, the findings and conclusions presented here are those of the authors alone.

Loh-Sze Leung of Leung Consulting and Nancy Snyder of Nancy Snyder Consulting oversaw the project and provided significant input and guidance along the way. In developing this report, they interviewed a number of experts in the field and would like to thank all of them for generously sharing their time and insights. To select the featured case studies, the project directors issued an open call for submissions, reviewed a wide range of proposals and worked with foundation staff to select a diverse set of solutions and approaches to feature. The project directors would also like to thank all of the authors for their compelling case studies and framing pieces and for being thoughtful partners in producing this report. Finally, the project directors thank the foundations for their support but accept responsibility for all errors and omissions.

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INTRODUCTION

Responding to a Changing Economy: Promising Approaches to Advance Workplace Equity

With income, wealth and racial inequalities on the rise, the Annie E. Casey and Joyce foundations seek to understand what it would take to ensure that the next generation of workers—whom we know are increasingly diverse—have the opportunities they need to succeed in the face of a changing economy.

Unlike past decades, stable jobs and good wages today almost always require a post-secondary education. Those that do not, usually come with a price: greater instability and tenuous employment conditions.

These burdens disproportionately impact those already struggling to get by—including African American and Latinx workers who are overrepresented in entry-level, low-wage jobs. We must act—as some of the authors in this publication have—to ensure these racial inequities do not widen further.

Our goal in supporting this publication was to understand what people are already doing to address these weighty problems. After all, many of the best solutions stem from the everyday work being done by individuals in states, cities and nonprofits.

There are bright spots across the country that we wanted to shine a light on: a program in California that uses mobile technology to help janitors improve their English; an effort in Maine that helps fishermen transition to aquaculture; a national digital platform that allows house cleaners to access paid time off and insurance; and a makerspace in Baltimore supporting local entrepreneurs.

These and other case studies are organized into three types of strategies, though many could fit in more than one:

1. strategies that **higher education and workforce** leaders are using to prepare young people for jobs that increasingly require postsecondary education to earn family-sustaining wages;
2. responses from the field to long-standing, and perhaps intensifying, worries about worker **power and agency** at a time when gig and contract work appear to be rising; and
3. **state and local policies** that political leaders have enacted to address wages, work and our changing economic context.

But we acknowledge small-scale, innovative efforts will not be sufficient.

The labor market and education systems, including higher education, remain beset by severe race- and income-based inequities. Racial disparities in wealth building also have widened over the past three decades, as have race- and wealth-based gaps in college attainment. At the same time, there are deep ideological divides between political leaders across the country and, at times, their constituents, regarding the role of government in addressing these challenges. Leaders in Seattle, for example, adopted a policy to create more predictable work schedules despite objections from business associations, while a minimum wage battle in Missouri shows how state pre-emption laws may presage strife between city and state leaders in the years ahead.

While much work lies ahead to address our changing world, we hope you will find these stories as inspiring and thought-provoking as we do.

Allison Gerber
The Annie E. Casey Foundation

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EDUCATION AND SKILLS

Introduction to Education and Skills

Over the past several decades, we have seen a gradual increase in the level of education needed to make a family-sustaining wage—with a gradual erosion of jobs that pay good wages and offer stable employment but require little or no education beyond a high school diploma.

Automation and artificial intelligence are driving some of these shifts in occupations, industries and skills that are in demand. Educational credentials and degrees, and the skills they represent, appear to be a key differentiator between those who can thrive in the economy of the future and those who cannot. Unfortunately, existing educational systems are beset by racial and family wealth-based inequalities; higher education in particular has seen widening disparities in recent decades.

We need both policy solutions and new programmatic approaches to skill and credential attainment that create greater access to and completion of post-secondary education, especially for people of color and low-income families and youth; respond to the need for flexible, lifelong learning; and address the skills that workers of the future will need, including:

- a strong foundation of higher order literacy, numeracy and digital skills that enable critical thinking and creativity;
- social and emotional skills that facilitate work in a complex environment using communication, collaboration and self-management skills,
- the ability to know what you need to learn and how to access that learning and repeat that dynamic over a lifetime.

What needs to change about our education systems and policies in order to close disparities? What skills are/are not going to be in demand in the evolving labor market? What type of programs or approaches will work to help individuals acquire those skills? How do workforce and education programs need to evolve to help more individuals attain these skills? The authors in the section ahead are grappling with these challenges.

All One System: The Future of Education and Career Preparation

Anthony P. Carnevale / Tanya I. Garcia / Kathryn Peltier Campbell

The relationship between education and the economy has changed dramatically over the past four decades. Before the 1980s, a high school education was enough to provide middle-class earnings for most Americans. Nowadays, those without at least some college find themselves stuck. In today's economy, the only strategy more expensive than going to college is not going to college.

The new relationship between education and careers spans the traditional silos in American education, government and employment. As a result, no single sector can fully address the key challenge facing young Americans today: the transition from youth dependency to adult independence. Since 1980, the age at which individuals earn the median wage has increased from 26 to over 30.[1] With economic independence beginning later than ever, supporting youth transitions to adulthood requires us to connect education to careers much more deliberately than in the past. That's why, instead of treating the K–12, postsecondary and labor systems as separate, we need to take an "all-one-system" approach.

A single, integrated system could help us address the structural shift from an industrial to post-industrial economy and the challenges it entails.

Challenge 1: Postsecondary education combined with some high-quality work experience is now the entry-level standard for most jobs.

In the 1970s, three out of four jobs required a high school education or less; today, two out of three jobs require at least some postsecondary education or training.[2] That's because a high school diploma combined with on-the-job training is simply no longer enough for most people to get the general and specific skills they need. The majority of entry-level jobs require a richer mix of formal postsecondary education and high-quality work experience, preferably matched to an individual's career pathway or postsecondary field of study.[3]

The education system is attempting to keep up with the times, but for the most part, it's falling behind. Economic demand for postsecondary skills has been increasing at a rate of about 2.5 percent per year, while the supply of postsecondary opportunities that develop those skills has been increasing by about 1 percent per year.[4] In addition, almost half of high school graduates never get a postsecondary certificate or degree,[5] and students from low-income families are less likely to attain a postsecondary credential than their higher-income peers.[6] The result has been a massive increase in intergenerational economic inequality between the college haves and have-nots.[7]

Challenge 2: Navigating between college and careers has become increasingly complex, making the American higher education system a risky business for students and taxpayers.

Given the intricacies of the system, it's no surprise that a 2017 Gallup poll found that 51 percent of college graduates would change their degree type, institution or major if they could do it all over again.[8] Students might navigate the system by choosing wisely, but the variety of postsecondary programs and credentials has become too vast to easily comprehend. Postsecondary programs of study more than quintupled from 1985 to 2010, from 410 to 2,260; since 1950, the number of colleges and universities has more than doubled; and the number of distinct occupations has tripled to more than 800 in a 60-year period.[9] Meanwhile, colleges and other postsecondary providers are issuing a blizzard of degrees, certificates, licenses, certifications, badges and other micro-credentials to meet rising demand.

With this array of options, investing in college is not as straightforward as it used to be. College is expensive for students and their families, and its relative cost has risen rapidly: since 1980, tuition and fees at public four-year colleges have grown 19 times faster than median family incomes.[10] And while it was once true that more education generally led to higher income, today, there are many exceptions to this rule. Some one-year certificates pay more than associate degrees. More than 30 percent of associate degree holders make more than the average bachelor's degree recipient,[11] while 40 percent of bachelor's degree recipients make more than the average person with a master's degree.[12] In addition, degrees in different fields result in different earnings.[13]

Challenge 3: The youth labor market has collapsed, denying opportunities for young people to earn and learn on the job.

The collapse of the youth labor market, which began in the 1980s and intensified during the recessions of the 2000s, limited young people's opportunities to work. Today, only a quarter of teenagers have held a job, compared to more than half in the 1970s. This is in part because tasks previously performed by low-skill workers have been automated, resulting in a massive decline in jobs for teenagers.[14] Economic cycles have also played a role: during the Great Recession, workers with a high school education or less lost more jobs than workers with higher levels of education, and they barely gained any new jobs in the recovery.[15] In addition, employers have shifted the provision of on-the-job training to workers with at least some postsecondary education rather than to those still in or fresh out of high school.[16] At the same time, government support for youth employment has declined: in 1998, federal funding for youth summer jobs was eliminated, and federal funding for year-round youth employment programs has been falling since 2000.[17]

These connected trends have had several effects. They have closed off youth earnings sufficient to fund college, thereby contributing to the growing education gap. They have also narrowed access to high-quality applied learning on the job necessary for career exploration and the development of general skills, including soft skills such as active listening and social skills. Finally, they have led to a youth work-experience gap: the demand for both specific and general skills in entry-level jobs is rising just as opportunities to develop those skills are disappearing.[18]

Challenge 4: Advantaged and disadvantaged students have different opportunities for work and learning.

The decline in earnings and accessible high-quality work experiences makes schooling more valuable than work as an investment in future earnings. While they have access to better jobs than low-income youth, affluent youth are spending more time in advanced classes, in summer programs, and in other kinds of enriching developmental experiences.[19] Given the increased value of college, these youth have rationally decided to pursue alternatives to work that make them more attractive college applicants.[20] When they do choose to work, 14 percent of high-income students work in a lucrative career field like STEM, business or healthcare, while only 6 percent of low-income students work in these fields.[21]

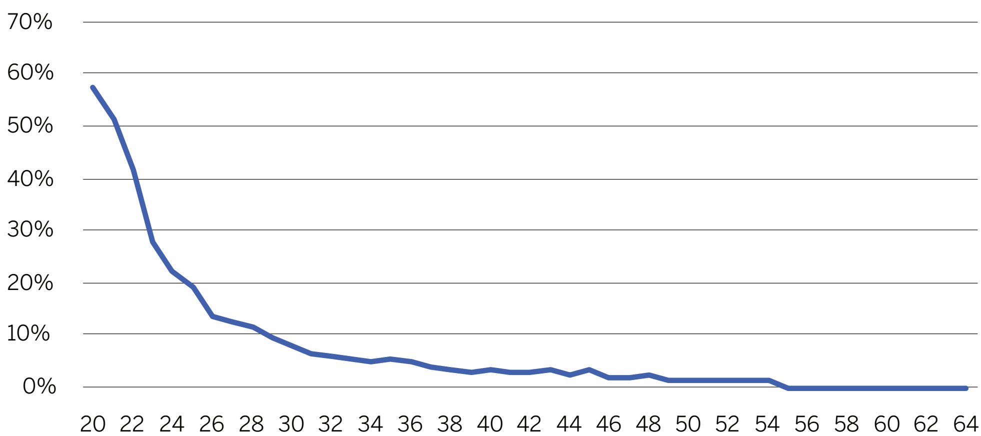
In short, for disadvantaged youth, both educational enrichment and relevant work experiences are often out of reach.[22] Low-income students are more likely than high-income students to work in food service, sales and administrative support fields.[23] They are also less likely than their more affluent peers to go to college and therefore have fewer incentives (and more barriers) to opt into academic and extracurricular activities that will improve their chances of getting into a selective college.[24]

Challenge 5: Workers need the ability to upskill and reskill as they progress through their working lives, but the related infrastructure does not exist.

All workers need a combination of general and specific knowledge and skills to be successful, and postsecondary education is increasingly the only route for them to acquire these skills.[25] Those with both types of skills typically obtain them through a bachelor's degree program, and the combination allows them to be flexible and adaptable to changing job requirements. Workers who begin their postsecondary journeys with a certificate or an associate degree are more likely to obtain the specific skills they need in the workforce sooner than those on the bachelor's degree path, but their program of study may offer less opportunity to develop broad knowledge and general skills.

Workers who need to reskill or upskill are highly unlikely to do so once they reach their 40s. After age 37, less than 5 percent of workers enroll in a college or university as their training option; after age 55, enrollment in college is virtually nonexistent (Figure 1).[26] To compound matters, only 16 percent of workers ages 36 to 64 obtain any formal workforce training at all, whether it's employer-provided or on-the-job.[27] Older workers with bachelor's degrees are best positioned to weather changes in the economy, in part because their employers are more likely to invest in their on-the-job training (Figure 2).[28] Such opportunities may be few and far between for workers with less than a bachelor's degree. If they find that the specific skills they obtained earlier in their working lives are no longer useful, whether due to dramatic change in their industry or a decision to change careers, their path ahead will be much more difficult.

Figure 1. **Postsecondary enrollment of workers drops to less than 5 percent at age 37 and flatlines by age 55**



Source: Georgetown University Center on Education and the Workforce analysis of US Census Bureau Current Population Survey, 2017.

Figure 2. The United States spends $1.1 trillion on formal and informal post-secondary workforce and education training annually.

Source: Georgetown University Center on Education and the Workforce analysis of data from the Department of Education, Bureau of Labor Statistics, and Government Accountability Office. Originally published in Anthony P. Carnevale, Jeff Strohl, and Artem Gulish, *College Is Just the Beginning: Employers' Role in the $1.1 Trillion Postsecondary Education and Training System* (Washington, DC: Georgetown University Center on Education and the Workforce, 2015).

Challenge 6: Race-based gaps are set in stone in K-12, and they persist as students go to college and enter the labor market.

What happens to students in high school matters because finishing high school is the first step that students must take before applying to college. The good news is that high school graduation rates have been going up for every single racial and ethnic group for at least a decade. The bad news is that the rates for African Americans and Latinos lag behind those of Whites in every state.[29]

The public postsecondary system is more and more complicit as a passive agent in the systematic reproduction of White racial privilege across generations.[30] College has become a barrier to opportunity because it takes K-12 inequalities and projects them into the labor market, creating a self-sustaining intergenerational transmission of race and class advantage. Despite African Americans and Latinos making up 36 percent of the college-age population, they make up only 19 percent of first-year enrollment at selective public colleges, where they are just as likely as Whites to graduate from college, earn a bachelor's degree and reap higher lifetime earnings.[31] Separate and unequal public college systems increase earnings disparities and hurt the careers of African Americans and Latinos.

All workers, no matter their race or ethnicity, see a huge earnings boost from completing a bachelor's degree compared to those who at most completed a high school education, though educational attainment by itself does not close income disparities. While African Americans and Latinos with bachelor's degrees still earn less than Whites, their percentage gains in earnings are greater after they earn the degrees. In 2015, for African Americans, the median earnings for a prime-age working adult were 67 percent higher for those with a bachelor's degree than for those who had only a high school diploma.[32] The jump in earnings between a high school diploma and a bachelor's degree was even larger for Latinos: 78 percent. For Whites, a bachelor's degree resulted, on average, in a 59 percent boost in earnings.

AN ALL-ONE-SYSTEM APPROACH

An all-one-system approach could address the challenges outlined above by holding the K-12, postsecondary and employment systems collectively accountable for career preparation. At present, however, these three sectors lack a shared approach, with major gaps in accountability arising as a result.

The trouble begins in K-12. Ever since the seminal Department of Education report *A Nation at Risk* laid bare the fact that vocational education had become a dead-end track for low-income, African American, Latino and female students, high schools across the nation have focused on academic preparation at the expense of career preparation. Today, career-related courses comprise only 2.5 out of 27 high school credits, while 23 credits are academic in nature.[33] While it's imperative to avoid any system that tracks students by race, class and gender, the current one-dimensional approach to "college for all" gives no guarantees that students will earn their college credentials. Thus, the K-12 system needs to facilitate students' exploration of many possible career pathways even as it ensures that college is an option for all students.

The postsecondary system compounds the problem by failing to take adequate responsibility for career development, even as career preparation and training have moved almost completely into the postsecondary realm. In recent years, "completion" has become the watchword of higher education, but the acceptance of the completion standard is somewhat self-serving, allowing the postsecondary community to dodge accountability for employment outcomes. To remedy this, the postsecondary system needs to measure how well it supports students' career outcomes, including through earnings data at the program level. It also needs to admit and support students equitably across racial, ethnic and socioeconomic groups so that it interrupts systemic racial- and class-based disparities instead of magnifying them.

Finally, the gutting of federally supported job training and youth employment and training programs has undermined the ability of employers to help prepare both adults and youth for the future of the workforce. The federal government should restore funding for these programs, incentivizing partnerships between employers and both K-12 and postsecondary educators that offer opportunities for on-the-job learning using curricula that align with the needs of the workforce.[34] The future of work lies less in brand-new occupations requiring new skills for novel tasks, and more in the changing work requirements within occupations that already exist.

An all-one-system approach would allow us to refocus K-12, postsecondary and workforce reforms to address the gaps between educational and workforce preparation. It would help ensure accountability based not just on college readiness or program completion, but on differences by major and program in learning, employability, earnings and whether students end up working in their field of study. And it would increase transparency, making more granular information available to individuals navigating between college and careers.

The case studies featured in this volume represent innovations that seek to improve the lives of younger and older workers in the short term. But they will only succeed to the extent to which we break down the silos separating education, government and employment.

If students are not equipped with the knowledge and skills necessary to get—and keep—a good job, they are denied the genuine social inclusion that is the real test of full citizenship.[35] To empower Americans to live and work in the world, policymakers, educators and employers need to share the responsibility for education and career preparation.

ABOUT THE AUTHORS

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An Unequal Future of Work Requires Different Training Strategies for Vulnerable Workers

Andy Van Kleunen / Molly Bashay / Spencer Overton / Harin Contractor

The public narrative about the technological impact on the future of work had become less panicked as of mid-2019. Initial fears of mass job loss to robots have faded with new analyses about the larger number of jobs that will substantially *change* but not disappear. In this depiction of the future, specific tasks within many jobs will be automated, requiring employees to learn new skills to harness or work alongside the new tech.

For Americans with ready access to a traditional college education or an employer's subsequent investment in their professional development, the future of work may present a challenge, but at least for now it is less dire than originally expected. For tens of millions of U.S. workers who have traditionally been *excluded* from robust education or training options because of their race, income or prior schooling, however, the proposed "lifelong learning" solution to the future of work could be an empty promise.

Unequal investments in workers' skills will lead to an unequal workforce in the future unless those inequities are addressed. Additionally, we need better and job-connected education models responsive to the needs of low-wage workers who cannot afford to sacrifice work or family time to participate in training. The case studies in this section illustrate some new strategies to address the future of work challenges faced by these doubly vulnerable workers. This includes people who are both disproportionately affected by new workplace technologies and are traditionally excluded from the upskilling needed to help them respond.

DISPROPORTIONATE IMPACT ON WORKERS WITH LIMITED UPSKILLING OPTIONS

Experts now anticipate a future of work defined less by automatable job elimination than by job transformation.[1] However, this is hardly a comfort to the anticipated 23 percent of U.S. workers facing potential automation-related displacement by 2030 and the tens of millions more barely keeping pace in a changing economy.[2]

Displacement and job transformations are unevenly spread across the U.S. workforce. They disproportionately impact workers already on the margin, including adults without a high school equivalency, with low literacy or numeracy skills, and people working in low-wage jobs.[3] For example, the 30 occupations that employ the most people in the U.S. and have a high probability of automation are mostly low-wage with a predominantly African American and Latino workforce. Over 31 percent of all Latino workers and 27 percent of African American workers are concentrated in these at-risk jobs like cashiers, cooks and laborers.[4]

Women, particularly older women, are more likely than men to work in highly automatable occupations vulnerable to elimination such as clerical and administrative roles.[5] Male-dominated jobs like route drivers and assembly line workers are similarly at risk.[6] The elimination of these jobs will have disproportionate impacts on the gender balance in existing and emerging occupations.[7] [8] Without strategic interventions — like targeted re-training and a committed approach to addressing hiring biases — displacements could exacerbate unequal unemployment and underemployment disparities, causing further economic disruption.[9]

Highly automatable jobs abound in service sector industries like retail, health and social assistance, and leisure and hospitality. These sectors employ one-third of the U.S. workforce. Yet two-thirds (62 percent) of service-sector workers have limited literacy skills and three-quarters have limited numeracy (74 percent) or digital problem-solving skills (73 percent), making these workers particularly vulnerable to new technologies being introduced at their jobs. Additionally, their foundational skill levels limit their success with some of the new, scalable and lower-cost online training options being deployed in their workplaces.[10]

WORKERS STRUGGLE TO UPSKILL AHEAD OF THE TECHNOLOGICAL CURVE

Traditional education and training programs underserve workers at highest risk of job automation, despite workers' desire to upskill. Survey research documents workers' demand for more opportunities to retrain, advance their careers, increase wages and increase job security against technological displacement. Job security remains the highest priority, particularly among African American workers, while having options for job training and incorporating digital skills training is widely popular with respondents, regardless of race or ethnicity. Workers of all racial backgrounds feel that financial constraints are their greatest impediment to upskilling.[11]

To date, the private sector, which spends nearly $650 million a year on formal post-secondary education and training for its employees, has overlooked most of these vulnerable workers. Private sector investment in training and education is heavily weighted towards higher-skilled workers. For example, while 60 percent of the U.S. population over 25 has college experience or a degree, this group receives 83 percent of employer tuition reimbursement and on-the-job training.[12] Private employers make minimal investment in workers with a high school equivalency or less, which further exacerbates gaps in the labor and skills market.[13]

The public sector's investments in low-wage worker education has not been much better. For example, public aid (e.g., federal Pell Grants) chiefly benefits traditional college-age students who go to school at least half-time in pursuit of two- or four-year degrees.[14] Successes in diversifying college attendance by race and socioeconomic status have largely missed nontraditional students. Low-wage, full-time workers have significant competing demands on their time and stand to gain the most from federal tuition aid being made available for high-quality short-term college training programs.[15]

Public investments in community-based education and training options responsive to the needs of such workers have likewise lagged. The U.S. ranks next to last among OECD countries in investments in workforce training. Between the declining public funding for workforce development programs like the Workforce Investment and Opportunity Act (WIOA) and tight restrictions on training allowances under anti-poverty programs like Temporary Assistance for Needy Families (TANF), community-based providers are constrained in what they can achieve to help lower-income workers prepare for digitalizing occupations.

INVESTING IN WHAT WORKS FOR FUTURE LOW-WAGE WORKERS

Clearly, we need to see new large-scale responses—from both public policy and private industry—if we're going to help tens of millions of vulnerable workers stay ahead of the technological curve. Increased public and private investments specifically focused on the needs of these workers must be a fundamental first step.

Second, we need to make sure we're investing in strategies that work for these groups of workers. Training cannot be "one size fits all." Cultural competence is increasingly important to programs being able to provide successful training and promote retention after a worker is placed in a job.[16] In this context, there are several lessons to learn from the case studies in this section.

EMPLOYER-BASED UPSKILLING CONNECTS TRAINING TO WORK

Several of the cases focus on developing employer connections, not only to ensure quality and employment outcomes, but to help embed worker instruction in tangible on-the-job learning environments for maximum impact. For example, Per Scholas not only partners with large tech companies to meet their workforce needs but also encourages tech firms to redefine skill requirements from credentials to competencies attainable in an intensive 18-week course versus a four-year degree. Likewise, College for America partners with 80 companies on tailored competency and skills training, most of whom pay for the upskilling instruction of current employees.

Additionally, lower-wage workers need to work and earn while they learn in order to support themselves today while preparing for the future. To that end, the Building Skills Partnership brings skills training to worksites, both during and after work hours, eliminating the need for additional transportation and allowing workers to earn regular wages while enrolled. Similarly, YEP Design Works' programs for young people in the creative fields are specifically structured for students to manage job commitments that "pay the rent" and train for the creative careers that drive them. Open Works Baltimore is a makerspace that is incubating small businesses and teaching hands-on skills to every age group.

DIGITAL LEARNING HOLDS PROMISE, BUT WORKERS MAY NEED ADDITIONAL SUPPORT

Working adults learn best when foundational skills and technical training are integrated with practical, on-the-job instruction and contexts. Successes in the outlined cases demonstrate how using digital learning tools to improve both technical and digital skills is increasingly a fundamental best practice.

However, not every worker and context are the same. The case studies showcase several programs that have integrated new digital learning tools with classroom instruction and guidance to account for different learning styles and skill levels. College for America partners with community-based non-profit organizations to provide online instruction in local, in-person settings with instructional staff and peers on-hand. Per Scholas partnered with General Assembly to create CodeBridge, an accelerated learning program that fast-tracks low-income adults into high-wage tech jobs. Building Skills Partnership deployed stand-alone app-based learning modules to trainees' smartphones but experienced better outcomes when these tools were combined with classroom instruction and in-person support. And Open Works Baltimore maintains facilities with electronics, 3D printing, digital media and a computer lab with CAD and graphic design software for hands-on learning. Each approach confirms why digital proficiency is an important need to be addressed to enable millions of current workers to become applied users of such technologies in the workplace of the future.

Each organization in the case studies grapples with the challenge of applying learning to a work setting to generate lasting impact with workers. Through varying approaches and by embedding the technological, interpersonal and practical skills workers need to succeed on the job with accessible instruction, each case elevates rote coursework into an opportunity for lifelong learning and lasting professional impact.

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CASE STUDY

Challenging the Traditional Higher Education Model: College for America at Southern New Hampshire University

Brian Fleming

In 2011 higher education was facing a perfect storm of concerns about access, cost, learning outcomes, completion rates and quality. The standard higher education model based on the credit hour and lecture method of content delivery relies heavily on individual faculty expertise, is expensive and often requires students to go into considerable debt and is markedly inflexible for students. Curriculum is not explicitly geared toward developing the skill sets that drive employment such as interpersonal communication, drive and grit, and grades do not communicate mastery of concepts. The result is that a large population of potential college students are underserved, particularly working adults who lack the time and resources to attend expensive, time-bound classes that may not improve employment outcomes.[1] Southern New Hampshire University (SNHU) decided to challenge this paradigm by creating the competency-based education model known as College for America (CfA).

SNHU's CfA turns the traditional higher education model on its head. It was built around student and workforce needs; from the outset, the CfA team viewed both students and major employer workforce partners as key customers to serve.[2] Instead of structuring courses to measure the accumulation of credit hours, CfA is self-paced and designed to measure acquisition of competencies. By building the program online and basing it on well-defined, workforce-informed competencies instead of pre-defined course credit hours, CfA dramatically drives down costs. And by employing direct assessment that requires students to achieve mastery of each competency, the CfA model minimizes the lack of transparency and potential for bias that can be found in traditional grading systems.

In 2013, the U.S. Department of Education accepted CfA's direct assessment model as an accredited learning model, making the program eligible for Title IV financial aid.[3] CfA was the first program to receive federal approval for direct assessment on an experimental basis; gaining access to Title IV funding for CfA was key to meeting the SNHU mission of offering accessible, affordable degrees.[4]

Building College for America

In November 2011, SNHU created the CfA pilot.[5] Concrete goals included launching an Associate of Arts (A.A.) degree, achieving a 75 percent completion rate and capping tuition at $2,500 per year. The project created efficiencies by developing curriculum in-house and using open source materials instead of traditional textbooks. Four SNHU-based staffers who specialized in online course development were tasked with launching the project and given the space to tinker and test models, curriculum, subject-matter expertise and support services.[6]

Student-centered support services are a key part of SNHU's mission and are kept top-of-mind when conceptualizing new models. The CfA model could not simply be an inexpensive online degree; it needed to reflect SNHU's core value of providing the best support in higher education, including advising, tutoring and career services.

CfA officially launched in the summer of 2012 with 100 students. Employer partners who were motivated to develop and retain talent stepped up to offer tuition benefits.[7] These partnerships helped steer frontline employees into CfA A.A. degrees to acquire additional skills and credentials, which created new career ladders for these employees who otherwise may not have been eligible for promotions. When SNHU later introduced competency-based Bachelor of Arts (B.A.) options, some graduates who had earned an associate degree returned to complete their B.A., indicating that the competency-based education model provided a format flexible enough for them to complete their degrees.

Key employers include Partners Healthcare, the largest private employer in Massachusetts, and Anthem Blue Cross and Blue Shield, which now has hundreds of SNHU graduates on staff. CfA's list of employer partners expanded from 20 in 2012 to more than 120 as of mid-2019.

CfA also works with community-based non-profit organizations (CBOs) such as Duet in Boston and Da Vinci Schools in Los Angeles, demonstrating that CfA can embed in communities of need and provide educational services to underserved populations. The CBO partnership model incorporates on-site wraparound supportive services for students such as recruiting, advising and financial aid application assistance, and provides a safe space with technology for students to come and complete assignments. CBO partners receive funding from SNHU based on enrollment.

Impact

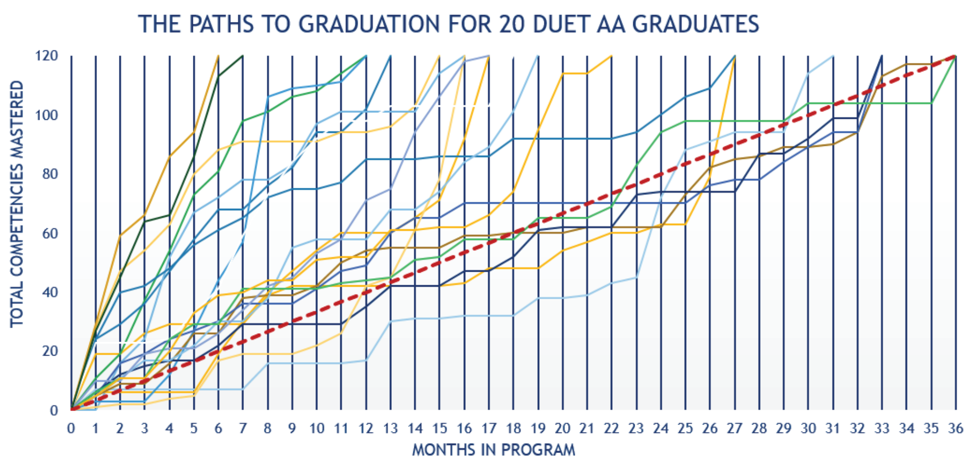
Six years after launch, CfA is achieving notable outcomes regarding access and equity. Of the students enrolled in CfA, 67 percent are first-generation college students, 96 percent are working adults, 84 percent are over the age of 24, 70 percent are women, 29 percent self-identified as African American and

18 percent self-identified as Latinx. In the employer workforce partnership programs, 80 percent of enrollees are women, many of whom are frontline customer service employees. Within the CBO model the gender split of enrollees is more balanced, but CfA is seeing up to 90 percent African American/Latinx enrollment. After piloting the CfA model from 2012 to 2014, enrollments have grown from 2,000 in 2015 to more than 8,000 in 2018.

The average pace of student progress through the A.A. is 2.5 years. For those students continuing to obtain a B.A., the average pace is 3.2 years after completing the A.A. The U.S. Department of Education's reporting standard is three years of data for A.A. degrees and six years of data for B.A. degrees. While CfA has been enrolling students since 2012, enrollments increased dramatically after 2015, and CfA does not yet have completion data for those students to report.

The self-paced nature of the CfA model is illustrated by Figure 1, which depicts the paths of 20 students enrolled through the CfA community partnership with Duet. "Sprinter" students finish their A.A. degree in under one year, and "crawler" students take up to three years to complete. What is notable in this sample is the low number of "walker" students—only three completed between 22 and 27 months—indicating that the standard two-year timeframe may not be that meaningful for working adults. Either they have time to power through the A.A. quickly, or they need to stretch out their education.

Figure 1. Months to Graduation for 20 CfA Students



The CfA learning model is externally validated. CfA students outperform Associate of Arts students in six of the seven ETS proficiency profile tests of core skills.[8]

In an April 2018 quarterly survey, 64 percent of students expected to graduate with no debt, 9 percent expected to graduate with less than $2,499 in debt and 7 percent expected to graduate with debt between $2,500 and $4,999. Participating employer partners typically pay most or all tuition costs, making the degree effectively free for many students, which is the only way some can access college.[9] For students enrolling through community-based partner organizations, more than 80 percent qualify for Pell grants, which cover the total cost of tuition—about $5,000 a year as of mid-2019.

In the April 2018 quarterly student survey, 27.1 percent of students report an increase in pay, promotion or new position; 81.2 percent agree CfA helps them in their current job; and students reported a 96.3 percent satisfaction rate.

Demographics and outcomes from one key partner, Anthem Blue Cross and Blue Shield, includes the following:

- 85 percent female, average age 45, 51 percent people of color.
- More than 30 percent of CfA students have been promoted.
- 73 percent of participants reported improvements in their foundational skills.
- 62 percent have applied new skills on the job within three months.
- Fewer than 5 percent of those who earned a CfA degree left Anthem.

Lessons and Observations

SNHU's willingness to innovate and pilot new ideas allows for flexibility and creativity that might otherwise not work within the confines of traditional academia. This is a model that corporations use to check for potential disruptions in the marketplace; SNHU similarly employs a separate physical location and reporting structure to allow pilots to start, fail or grow and collect data that will allow leadership and stakeholders to understand the potential value of an idea, known as the Innovation Lab.

By committing to a direct assessment model, staff quickly realized that they had created a crucible for the highly valued growth mindset. Students can resubmit assignments an unlimited number of times, get feedback and resubmit again until they achieve mastery. This "not yet" approach to assessment encourages grit and persistence and builds a student's ability to problem-solve. A student is an active participant in the process of accepting disappointment and dealing with obstacles, not just a passive recipient of grades.[10] Employers are increasingly asking for these non-cognitive, robot-proof skills.[11]

The national trend of women receiving more college degrees than men is echoed in the enrollment data from employer partners, who are seeing that women account for 80 percent or more of CfA program participants. While the CfA employer workforce model appears to meet the needs of women in entry-level jobs where desks and computers are available and employer partners are supportive, there is still a question about how to reach more men who may not be in customer service-type jobs but are still seeking validated credentials. The community-based organization model that is not tied to a specific workplace may begin to answer that question over the next few years.

Finally, flexibility appears to be a key asset for the program since motivated and supported students can sprint to an A.A. degree in well under a year. However, the concept of higher education is so wedded to the four-year model that the idea of a degree taking so much less time may still feel incomplete for some learners. Upcoming generations, such as post-Millennials, who are digital natives accustomed to nontraditional education through platform economies (think YouTube), may be more receptive to a new model for a college degree. As the pace of change in work and skill requirements quickens, the increasing need for lifelong learning solutions for adult learners may be well-served by a competency-based credential model.

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Brian Fleming is the executive director of the Sandbox ColLABorative, Southern New Hampshire University's innovation lab and internal research consultancy. In his work, Brian oversees innovation and design research projects for key strategic initiatives and focuses on guiding projects and initiatives through the lens of digital learning and business model transformation.

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CASE STUDY

Building New Partnerships to Address the Skill and Equity Gaps

Jake Schwartz / Plinio Ayala

The Bureau of Labor Statistics estimates that the information technology (IT) sector will need as many as 100,000 new employees each year through 2026. [1] As of 2018, however, only 60,000 new IT workers were entering the sector each year.

In addition to skill gaps, tech employers also face well-documented diversity challenges. Just 8 percent of workers in computer- and math-related jobs are African American, and less than 7 percent are Latinx, which means that the growth of tech jobs may compound already endemic equity gaps. [2] And employers' inability—or unwillingness—to hire and promote candidates from traditionally underrepresented backgrounds exacerbates the skill gaps they so often lament.

As it turns out, skill and equity gaps may be two sides of the same coin. Expanding access to tech training for historically underrepresented populations holds the potential to improve diversity in the workplace while helping to close skill gaps through the development of untapped talent.

Hiring Practices Are Part of the Problem

Diversity gaps are in many ways compounded by a stubborn adherence to legacy hiring practices. Some estimates suggest that as many as nine out of 10 jobs in the last year went to individuals with a college degree, [3] and the majority of employees at major tech firms like Apple and Google have a least a bachelor's degree. [4] Employers' persistent reliance on the college degree as a proxy for workforce readiness means that they not only screen out promising talent,[5] they also put their faith in higher education programs and curricula that often lag behind fast-paced technological change.[6]

This has led to a dynamic in which employers in a race for talent are forced to participate in an expensive, zero-sum game.[7] One company poaches a skilled employee from another, which poaches from another, and so on. Recruiting costs can reach $40,000 per hire for high-skilled jobs in fields like data science,[8] where demand has more than tripled since 2013.[9]

Imagine the possibilities for closing both the skill and equity gaps if just a fraction of that spending was allocated to investments in finding, training and retaining talent from less traditional sources.

New Partnerships Can Be the Solution

General Assembly and Per Scholas have joined forces to address the access gaps that continue to plague the tech sector. Founded in New York in 2011, General Assembly has now trained more than 70,000 adults for careers in technology, data, business and design, working closely with employers to develop curriculum aligned to the needs of the marketplace. Over the last seven years, General Assembly has grown to have a presence in 19 cities across the globe.

Founded in the South Bronx nearly 25 years ago, Per Scholas drives social change through intensive, tuition-free technology training. The organization prepares motivated and curious unemployed or underemployed adults for successful careers in tech, while connecting growing companies to diverse tech talent. Per Scholas is supported by both corporate and private philanthropy, local and federal government and individual donors. Additionally, Per Scholas offers a fee-for-service model that invites employers to customize curriculum relevant to their demands.

With training sites in eight cities across the U.S., Per Scholas offers training tracks ranging from entry-level IT support to data engineering courses that are customized for specific employer partners. Per Scholas actively engages with top companies to both inform their curriculum and help the program's graduates find work after graduation.

In 2016 General Assembly and Per Scholas, with technical support from Jobs for the Future,[10] launched CodeBridge, an accelerated training program that prepares low-income adults in New York City and Atlanta for in-demand, high-wage tech jobs.[11] CodeBridge students attend 18 weeks of full-time, tuition-free tech training, beginning with six weeks of tech fundamentals at Per Scholas before they move on to General Assembly's immersive course in software engineering. The program provides students with an on-ramp to practitioner-led, career-focused training. Instructors from the program are web developers and software engineers who are recruited from private industry to teach and supported by a team of instructor managers and learning experts. CodeBridge provides access to supportive services through a case manager and financial coach who ensure students can complete the program and are set up for success when they enter the workforce.

CodeBridge was selected for a $5 million TechHire grant by the U.S. Department of Labor in 2016, and as of January 2019, more than 200 adults had completed the training. The demographics of CodeBridge students are more diverse than the workforce in the tech ecosystem: 26 percent are African American/Black, 24 percent are Latinx/Hispanic, less than 50 percent have their bachelor's degree and 60 percent are male. Federal support leveraged investments from AT&T, BNY Mellon, the Chubb Charitable Foundation, NewsCorp and Salesforce. Seventy-nine percent of those who have completed the program have secured employment using the skills acquired through CodeBridge and are working at companies like Barclays, Madison Square Garden and M.M. LaFleur, using their new skills in software engineering roles.

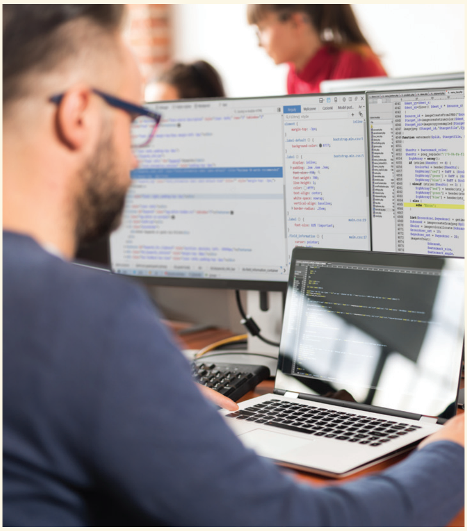
STUDENT STORIES: TRENIESE AND NESTOR

CodeBridge graduate Treniese Ladson works on the software engineering team at the major investment bank Barclays. A former diamond appraiser, Treniese does not have a college degree, a key barrier when she wanted to find a new career. She was one of the top performers in her class, and, after graduation, embarked on an intensive job search. Her hard work paid off, and she is now one of dozens of CodeBridge graduates who quadrupled their pre-training income by embarking on a new career in tech after graduation.

Among the first graduates of CodeBridge's Atlanta program was Nestor Mendoza, who first came to the U.S. from Venezuela in 2016.[12] Driven by both his curiosity and a desire to find better-paying work so he could support his mother, he enrolled in General Assembly's Front End Development course. He completed the course while working as a tutor and in a restaurant. He knew that to succeed in a new career he would need to keep learning and training, though he wasn't sure he could afford to take a full-time coding course.

He soon found CodeBridge and was able to enroll in the tuition-free program, later graduating as valedictorian. Nestor received a job offer one day after his final presentation, and he now works as a software engineer.

Nestor and Treniese show what students can accomplish when they have access to affordable educational programs aligned with today's most in-demand skills.



Conclusion

Employers and policymakers can learn from CodeBridge. Employers can widen their talent pipelines and eliminate unnecessary barriers for entry- and mid-level positions by identifying candidates that have desired skill sets and not simply hiring employees based on degree expectations. Employers can identify and work with partners such as Per Scholas and General Assembly that possess a deep knowledge of communities and individuals who are often overlooked by their organization and can serve as talent pools for technology roles. In the U.S., General Assembly and Per Scholas have physical locations in 19 major cities and are ready to work with employers to provide candidates with skills in cybersecurity, data, IT support, software engineering, system administration and UX/UI design, among others.

Federal and state policymakers can develop models and policies that encourage employers to evolve in their training and hiring practices. This could include new funding models like the Worker Training Tax Credit proposed by the Aspen Institute, which would incentivize employers to invest in training by covering educational programs that lead to an industry-recognized credential.[13] It could involve expanding employer education benefits, which have stagnated at $5,250 since the late 1980s, or creating a clearer regulatory framework around new funding models like income share agreements, which are gaining momentum among workforce development leaders as a way to reduce the up-front cost of training for students and working learners.[14] Many of these shifts will depend on policymakers' willingness to recognize the potential of workforce initiatives like Per Scholas that have demonstrated clear impact on earnings for low-income workers,[15] or like General Assembly that have made investments to ensure transparency about student outcomes—as opposed to only encompassing traditional, four-year degree programs.[16]

Such changes are necessary if we are to close the skill and equity gaps that continue to hold back our workforce and stifle economic vitality.

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Plinio Ayala became president and CEO of Per Scholas in November 2003 after having served as vice president of operations with oversight for most programs. Today he leads the organization in its national expansion. Ayala previously served as director of program operations at SOBRO and before that as chief program officer at Jobs for Youth.

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CASE STUDY

Building Skills and Social Capital in New Orleans' Design World

Brice White

While many young people are interested in creative industries and careers in marketing, product design, communications and film, few training programs target these careers, especially for opportunity youth. These are adults ages 16 to 24 who are not engaged in traditional school or work and are often dealing with such challenges as homelessness, justice system involvement and the responsibility of caring for children or other family members. Additionally, these industries, which are less susceptible to automation and which will continue to be important in the future of work,[1] are highly networked and difficult for "outsiders" to navigate successfully.

YEP Design Works: Engaging Opportunity Youth

In New Orleans, Youth Empowerment Project's Design Works program engages opportunity youth who are interested in pursuing careers in creative fields. Design Works is a design agency where young designers, under the supervision of creative professionals, create innovative and useful designs for clients, including logos, branding, marketing materials and apparel. Design Works provides the professional tools, soft skills and technical skills that all designers need and helps young adults break into creative fields by increasing their social capital through industry mentoring and real-world projects that connect them to networks in the business, civic and design communities.

Design Works has two training phases. In the first, the program introduces young adults to basic professional design tools in a six-week period. This phase includes hands-on experience with Adobe Photoshop and Illustrator and DSLR camera operation—as well as help with soft skills such as client interaction, receiving feedback, professional communication and time management. Students come to class for four hours of soft skills and 12 hours of hard skills each week. Phase 1 is open to anyone who can show an example of their creative work, which can be as simple as a sketchbook, music, photography or fashion designs, and who commit to the programming.

Students who are interested and committed to careers in the field go on to Phase 2, an intensive six-month training program that prepares them to compete for entry-level careers in creative fields. During Phase 2, students commit to two hours of soft skills and 16 hours of hard skills per week for six months. To enter this phase of programming, students must complete Phase 1 then, on their own time, complete a project to redesign a local supermarket's logo, which they present to staff and the current Phase 2 cohort. Additionally, they must perfectly complete a precision design task. These unpaid projects demonstrate the young person's commitment to their own personal growth and prepares them for client work.

Building skills is only part of the effort. A major barrier for entry into the creative field is a lack of access to tools, mentoring, support systems and professional networks, as well as young people's lack of understanding about competing in the industry. Access to professional associations are often limited by educational degree, job level and social networks. Design Works seeks to open these networks to creative opportunity youth to build their ability to navigate systems and make vital connections to businesses, networks and professional associations.

To do this, Design Works develops externship opportunities for program graduates as well as tours of local businesses and meetings with professionals and civic leaders. Externships expose young creatives to real-world job experiences with minimal risk to the employer. YEP offers to pay for up to 90 hours of an externship stipend for qualified graduates at a partner business. These opportunities are open to Design Works graduates who complete both Phase 1 and 2 and are a key step to employment. YEP asks these businesses to consider hiring the young adult at the end of their externship, but it is not a requirement and is conditional to each business' needs. Three examples of externships leading to employment are below:

Queork is a cork-based accessories and apparel manufacturer based in New Orleans. Queork's founder and CEO, Amanda Dailey, also allows Design Works externs to use the company's space and equipment on their own time to realize their own fashion and accessory designs. This is the kind of access that is linked to social capital and creates an incentive for young adults, as the equipment available would otherwise be cost-prohibitive. Since launching this partnership in 2016, five young creatives have been hired to work at Queork in manufacturing, which includes designing and sewing goods. According to Dailey, the three Design Works graduates who currently work there now are "the top, most qualified in our facility."

FSC Interactive is a digital marketing and social media management agency whose clients include New Orleans Tourism and Marketing Corp., Sazerac Rye and a host of notable New Orleans brands. The agency worked with Design Works to develop an externship opportunity for three program graduates that exposed them to the dynamic environment of a fast-paced digital firm. At the end of the externship, one graduate was hired as social media coordinator for the company, where she works full time.

Entrescan is a prominent 3D printing firm and one of Design Works' original externship placement partners. With a small staff, they do not have the capacity to host multiple externs throughout the year, but they have committed to one opportunity in each of the last three years. Both 2017 and 2018 externs went on to be hired by Entrescan.

Stipends are critically important at all stages of all YEP Works training programs, and particularly so in Design Works. Most young people could not afford to take the time for this programming without being compensated, and it is a cornerstone of how YEP approaches job training. Stipends begin at $8 per hour at the start of Phase 1 with additional bonuses earned through timeliness and commitment. These are not wages but are educational stipends used to incentivize learning, the development of positive work habits and program completion. Stipends also make it possible for more students to participate in and complete training, as the time intensive nature of the training makes it difficult for students to work full-time, though some students still work part-time to cover living expenses. The stipend continues into externships, where both student and business benefit from this final training phase. Many businesses may not opt to hire a youth outright, but this program gives young people the opportunity to prove themselves in a work environment.

Lessons Learned

YEP's extensive network combined with Design Works' reputation attracts prominent clients from the civic and business community in New Orleans. Working with these clients creates important opportunities for youth enrolled in the program. For example, New Orleans Saints defensive end Cam Jordan commissioned Design Works to create a pair of cleats for a home game. On game day, the Design Works team sat in his suite and were projected on the screen in the dome as he discussed why he chose to support YEP. In another example, New Orleans Mayor Latoya Cantrell hired Design Works to create the logo for her new Office of Youth and Families. Students presented their designs directly to the mayor and received feedback as they created a final version.

These interactions serve a business purpose and open youth up to complex social networks that can support both professional and personal development later in life. Additionally, YEP has begun to integrate concepts of human development and social interaction into the curriculum through adaptation of a biocentric education program developed by Rede Cidadã (Citizen Network), a Brazilian employability-training program. Biocentric education occurs in the introductory week for all youth enrolling in job training. The program includes physical movement, music, meditation reflection and conversation, to bring participants into a place of introspection and exploration, with the intention to change the elements of their lives that they feel need change, and it directly flows into the creative thinking and collaborative work that follows in Design Works.

Design Works facilitates young adults' connections to professional and social environments to help create a feeling of belonging, as well as an understanding of the norms and expectations of the business environment that are difficult to convey in classrooms. The program uses externships, networking opportunities and other events to open doors and to normalize these settings so young people can be comfortable, confident and willing and able to engage professionally.

For example, Design Works' relationship with Blue House, a co-working space and civic studio around the corner from YEP's office, opens doors for young people. Every Design Works class tours the Blue House, meets designers and is introduced to the concept of co-working. Managers share their experiences and resources, host externs and invite apprentices to participate in their Dinner and Design night, where young people work with a professional designer on a low-cost or pro bono, one-night design for local businesses and nonprofits that would not otherwise be able to afford design services.

Success is often dependent on which doors to opportunity are available and open—and Design Works helps to make sure young designers know how to find and walk through those doors. Breaking down barriers to entry for diverse young people in the creative fields is a give and take between preparing young people with the tools to navigate and preparing the professional world to open and give these creative young people a chance. Young designers want to work and are driven to be successful. Through both phases of Design Works, they have been required to prove themselves in professional settings and are ready to take those opportunities to the next level. They bring a strong set of assets to businesses who are willing to give them a chance.

A core principal of Design Works programming is treating students as professionals and giving them real-world job experience, with professional expectations on both work and social fronts. The bottom line is, if it is not real, it is not useful. Finding partners that buy into this mission, and with whom Design Works staff can specify needs and goals in a way that is mutually beneficial to all parties is essential.

At a social media management firm, young people who are plugged into youth culture are valuable and finding a way to include and respect their voices without resorting to tokenism raises the level of the entire team. The authentic partnerships that Design Works has developed with forward thinking businesses increases the social capital of young designers and prepares them as they move from apprentice to professional while also generating new talent with diverse perspectives that benefit the businesses.

HOW DESIGN WORKS OPERATES

Design Works is staffed by a professional full-time lead design mentor; a part-time design mentor, who is a young person that came up through the program; and a manager. The manager handles the business interface and leads recruiting and interviewing of young people. The design mentors teach classes, manage the studio and make sure designs are completed on time and to satisfaction. Collaboratively this team works with the central support staff of YEP Works—including a soft skills instructor, youth services coordinator and employment services coordinator. These support staff are crucial to the success of the program.

YEP Works businesses are supported by a combination of grants, job training funds through the SNAP Employment and Training program of the federal government and earned revenue, which accounts for 20 to 30 percent of costs annually. Design Works' material costs are not high—covering computers, equipment, art supplies and annual software licenses. But staff costs are higher than other businesses because of the technical training necessary and the need to compete with comparable wages in the marketplace. All youth are paid an educational stipend during training that can add up to more than $100 per week.

Design Works charges competitive rates, recognizing that youth's talents are assets not liabilities. In 2018, Design Works had 30 jobs and 43 students in Phase 1 and 21 students in Phase 2.

ABOUT THE AUTHOR

Brice White has been director of YEP Works at Youth Empowerment Project since 2015 and has grown the project to serve approximately 150 youth per year across three businesses. He previously worked at Juvenile Justice Project of Louisiana's Post-Disposition Project to advocate for youth returning home from Louisiana's juvenile prisons. He is a DJ on WWOZ radio as well as record producer and co-founder of New Orleans first community land trust, Jane Place Neighborhood Sustainability Initiative.

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CASE STUDY

Makerspaces and the Future of Work

Will Holman

Baltimore is the poorest city in the richest state in America. It wasn't always this way. In 1950, Baltimore was a manufacturing powerhouse, home to the largest steel mill in the world. Now, a city built for a million is home to only 611,000, with stubbornly high unemployment and an average household income that lags far behind the statewide average.

As with many other Rust Belt cities, Baltimore was hit hard by the shift from a manufacturing to a service economy, brought on by offshoring, automation and the rise of alternative work arrangements. The new local economy relies on so-called "meds and eds," major anchor institutions with large workforces. Unfortunately, this type of service economy exacerbates inequality, with lots of high-paying jobs (professors, doctors) counterbalanced with lots of low-paying jobs (janitors, food-service workers) and very little in the middle. Many of the lower-end jobs are contractual, stripping benefits and job security from those who need it most.

In cities like Baltimore, large-scale manufacturing is not coming back, while automation, offshoring and the use of contingent workers are growing. Public policy options to overcome these systemic problems facing workers are scarce. To defend workers against these coming waves of disruption, we need durable solutions centered around four strategies: democratizing access to industrial tools, skills-based education, entrepreneurship and re-regionalizing portions of our economies.

These strategies are being tested at Open Works, a nonprofit makerspace in central Baltimore that opened in September 2016 and focuses on expanding access to tools, providing skills-based education, promoting entrepreneurship and reinvigorating the city's manufacturing economy. Open Works was developed by a nonprofit development company, the Baltimore Arts Realty Corporation (BARCO), with anchor funding from the Robert W. Deutsch Foundation. The 34,000-square-foot facility contains seven workshops, two classrooms, 115 cubicle-sized workspaces, a computer lab and coffee shop. Open Works operates on a social enterprise model—fees are charged for membership, studio rentals, contract work and classes, while grants cover youth and entrepreneurship programs. BARCO's goal in developing Open Works was to rebuild Baltimore's manufacturing economy from the grassroots up, incubating small businesses, retaining talent from Baltimore's 11 colleges and universities and educating a workforce for the jobs of tomorrow.

Two years in, Open Works has a full-time staff of six and a part-time staff of 28. With just under 300 members, Open Works supports over 50 small businesses and 84 jobs. Reliable wage data for this population is hard to come by, but an analysis of Open Works conducted by the Coppin State University College of Business in 2018 and 2019 estimated the average annual wage of makers operating out of Open Works to be $26,597. While most of this workforce is not full-time, the ability to grow 128 jobs (including employees and contract teachers) in just two years suggests that makerspaces have a serious role to play in countering negative trends in domestic manufacturing employment.

Democratizing Access to Tools

Open Works' facilities include industrial-grade tooling for sewing, electronics, 3D printing, digital media, woodworking, metalworking, laser cutting and a computer lab with CAD and graphic design software. This suite of tools was first developed by Dr. Neal Gershenfeld, director of MIT's Center for Bits and Atoms and co-founder with Sherry Lassiter of the Fab Foundation in 2001.[1] There are now over 500 Fab Labs worldwide, supported by a massive open online course called the Fab Academy that helps individuals go from "zero to maker" in 16 weeks. Access to the means of production is the most fundamental way to re-empower the average worker, and automated tooling helps small maker companies to scale quickly and inexpensively.

Skills-Based Education

Open Works teaches classes in every shop for every age group. Youth programs begin at age eight, teaching hands-on skills like sewing or 3D printing through project-based curriculums. For example, one of the summer camps this year made pajamas—youth learned to operate sewing machines, cut to patterns and size garments for their own bodies. On the adult side, Open Works has trained 1,100 individuals in safety classes and 365 participants in elective classes since it opened. These classes, which average three hours in length, break down complex topics into the smallest discrete units of skill that someone may need to get started on a project. Classes are scheduled around those with day jobs, are not time-consuming and have no entrance requirements and are low-cost—removing the primary barriers to truly democratized education.

Open Works has measured success by two main metrics—a perfect safety record over thousands of hours of shop time and the portfolios of work that young people produce over the course of their programs. Open Works also has several agreements with local school systems to enable young adults to obtain credit. Unfortunately, there is no national credentialing body for this type of education, and it has been a struggle to get Open Works' classes recognized by professional associations, workforce development agencies or universities. Makerspaces offering these micro-units of education don't fit neatly into current job training funding streams like the federal Workforce Innovation and Opportunity Act.

Entrepreneurship

Open Works helps individuals start their own businesses. The Moms as Entrepreneurs Maker's Academy was developed in partnership with Moms as Entrepreneurs and Baltimore Etsy Sellers with support from Etsy and the Kauffman Foundation. Now in its second cohort, it is a 16-week program that helps mothers launch an Etsy-based business. It is free to participants, provides child care during classes and includes three months of membership at Open Works. By the end of 2019, the academy will have helped launch 35 mom-owned businesses. The Teen Entrepreneurship Maker Shop (TEMS) is a 50-hour program for high-schoolers that runs three times per year. Now in its third cohort, TEMS has trained 34 youth in fabrication skills plus business planning, marketing and pitching. The EnterpRISE business competition, now in its second year, offers $18,000 in cash investment and six months of membership to 10 contestants. While not every one of these nascent ventures will succeed, the skills taught in these programs—financial literacy, resilience, business planning—are useful for any job that participants might find in the future.

Reinvigorating the Baltimore Economy

The fourth strategy reaches outside of Open Works to the city and region at large. In Baltimore, the biggest recent manufacturing resurgence has been in brewing, with over a dozen craft brewers opening in the last 10 years. Other sectors are following suit, including furniture, textiles and food products. Open Works partners with Made in Baltimore, a local certification program, on events and educational programs to help our makers connect with the local market. While the craft manufacturers of today will probably never rival Baltimore's now-gone steel mills in size, they are starting to make a meaningful dent in the city's economy, with single-employer manufacturing companies growing 67 percent in recent years.[2]

Makerspaces like Open Works need recognition and support from policy makers, government agencies and funders to thrive. Makerspaces are expensive to build and operate at scale, and as the failure of TechShop in 2017 shows, it is nearly impossible to self-fund a professionalized space through member fees alone.[3] However, few if any local or state governments are supporting makerspaces with operating funding, despite their contributions to local economies. Traditional workforce development funding streams and approaches are not set up to support the type of training occurring at makerspaces.

Cooperation with universities and school systems has been intermittent, as makerspaces are seen as something for these institutions to capture instead of support through partnership. Open Works has benefited from an anchor three-year funding commitment from the Robert W. Deutsch Foundation and strong partners, but the next two years will test the concept's durability and portability as an urban revitalization strategy.

As the gig economy erodes the workplace as a physical destination, makerspaces connect freelancers with colleagues and collaborators. The member community—resilient, diverse, entrepreneurial, innovative—may prove to be the most useful thing about Open Works in creating a workforce that can thrive in the face of rapid changes to the future of work over the next decade.

GROUNDBIRD GEAR

Marie Sellenrick graduated from Maryland Institute College of Art with a degree in sculpture in 2007. After graduation, she worked as a mold maker at an architectural precast plant and a custom concrete countertop studio before embarking on a hike of the Appalachian Trail in 2011. Frustrated with the off-the-shelf options for a pack for her dog, Cooper, she began tinkering with her own ultra-lightweight designs after completing her trip. After many prototypes, she perfected a system for semi-customizing harness sizes based on a few key measurements of the dog's body. In 2013, she launched Groundbird Gear, marketing to the trail community through Instagram and fulfilling orders from her kitchen table. However, with the birth of her son in 2016, she fell behind on manufacturing, generating a wait list of more than 300. Unable to invest to expand her production capacity, Marie entered EnterpRISE, Open Works' inaugural business competition and placed second, winning $5,000, a six-month membership and six months of free studio space. One year later, Marie has expanded to three studio spaces, hired two part-time sewers and bought her own industrial sewing machine. She digitized all of her paper patterns and now stack-cuts the nylon fabric on a laser cutter, producing parts for dozens of packs in the time it used to take to make just one.

ABOUT THE AUTHOR

Educated as an architect at Virginia Tech and Auburn University's Rural Studio, **Will Holman** is the founding executive director of Open Works, a makerspace in Baltimore City. Previously he worked as an architectural designer, carpenter, artist's assistant, cabinetmaker, furniture designer and educator. He is the author of *Guerilla Furniture Design* and has contributed to Make Magazine, Places Journal, Bmore Art, The Good Woodworker and other publications.

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CASE STUDY

Using Technology to Help Low-Wage Workers Advance in Silicon Valley

Christian Valdez

Along with being a leading hub for high-tech innovation, Silicon Valley is also home to many working-class immigrants who compose a large share of the Silicon Valley service labor force. Nearly all janitors—about 97 percent—are immigrants from Latin America. Their contribution to Silicon Valley's prosperity is often overlooked, yet their work is crucial to the functioning of its highest-earning industries, from high-tech and biotech to aerospace. Despite cleaning some of the wealthiest corporate campuses and universities, janitors in Silicon Valley earn an average of $32,000 a year, which is well below the region's living wage. Many janitors hold additional jobs on top of their full-time positions to keep up with the region's soaring cost of living.

Automated cleaning processes and technological advances are affecting the janitorial industry at increasing rates and are posing challenges to janitors hoping to advance. Mobile and tablet platforms are increasingly used for janitorial work duties. Demand for tech-savvy janitors is high, and those who cannot keep up face a precarious employment outlook. According to janitorial employers, English language proficiency and digital literacy skills continue to be the two most common barriers preventing janitors from advancing to lead or supervisory positions. By leveraging a labor-management approach to develop and deliver workplace English as a Second Language (ESL) instruction and digital literacy skills training, more immigrant janitors could advance in their careers in the janitorial industry or to other pathways within the commercial building industry, such as building engineers, bringing their families into the middle class while also furthering opportunities for community advancement.

Janitors face strenuous work and family schedules and often deal with financial and transportation barriers that prevent them from accessing traditional adult education and community programs. Given the shift nature of janitorial work, in which a large portion of the workforce hold demanding night shifts, offering a curriculum and training model that is flexible and applicable become imperative to circumvent barriers to access. In its approach to address these challenges, Building Skills Partnership (BSP) has been engaging employers in the development of training that meets the labor demand for higher English language skills and digital literacy skills for job readiness and advancement opportunities. Since 2007, BSP has worked to translate employer skill needs into progressive skill development opportunities that blend classroom and online instruction. Beginning with its flagship vocational ESL program, BSP offers in-class training at worksites and mostly on paid work time with the support of its janitorial employer partners and, most notably, their building owner or property management clients. By offering training at the worksite, this approach removes traditional barriers like transportation, lack of time and childcare that often prevent low-wage working adults from accessing training. Over 80 percent of participants advance the equivalent of at least one level in the program's assessment system within the 70-100-hour worksite training program.

To enable workers to adapt to increased use of technology at work, BSP has implemented a variety of complementary strategies to bring digital skills training to busy low-wage workers. BSP offers traditional computer classes at dedicated computer labs in San Jose and Oakland. Courses entail 28 hours of instruction through two-hour classes every Saturday for three months. Class material ranges from how to turn on a computer and operate a mouse to how to use the internet and select a personal computer. Volunteers from the community and high-tech corporations assist as teaching aides to the bilingual instructors.

Through its ADVANCE Vocational ESL and Job Skills Program, BSP transformed its Vocational English curriculum into a blended learning model that incorporates tablets and smartphones as English learning tools in the classroom. Blended learning in the ADVANCE Program combines online digital media instruction with the traditional classroom approach. Workers practice mock-reporting problems at work using email and chat. They also learn how to complete online forms, navigate the internet, bank online and use Google Suite, among other digital tasks. Blended learning gets workers up to speed on existing tech at their workplaces and prepares them to adapt to future innovation. Many training sites are equipped with wi-fi hotspots and tablet training stations to ensure that teachers can carry out digital tasks in the classroom without interruption for charging or connection issues. All of BSP's classes are bilingual and contextualized for janitors' needs and experiences to help workers remain relevant in a tech-dependent world.

Recently, BSP took an innovative step toward improving the accessibility of digital education for janitors. To reach workers who still could not access BSP's traditional in-person model, BSP piloted an industry-specific vocational ESL curriculum delivered exclusively by cell phone, developed in partnership with the California Labor Federation, EdTech Center at World Education, and Outreach and Technical Assistance Network (OTAN). As most low-wage immigrants use cell phones as their primary online device, Cell-Ed's interactive text and audio instruction platform made training and career coaching accessible anytime, anywhere through mobile learning, reducing the final barriers to access. In the first year, 131 workers enrolled in a *BSP on the Go!* course.

Despite the course's successes in increasing access, it also illuminated the challenges of fully technology-based learning. The project required significant in-person staff time for student recruitment, support and progress tracking. As a result, it did not reduce program costs or alleviate staff capacity challenges. BSP on the Go! also had a far lower success rate compared to BSP's in-person programs. Only 10 percent (compared to 80 percent) of students advanced the equivalent of one adult school level. The lower completion rate for this program was due in part to participants having to learn on their own, without the motivational support they would receive from in-person classes.

Through BSP on the Go!, BSP realized that mobile outreach greatly expanded BSP's access to people, even though the full course model was not as successful as hoped for. BSP developed a strategy that does not require participants to use it consistently or use it to reach learning benchmarks to be successful. Recognizing the proven appeal of reaching janitors through mobile communication, BSP developed its own mobile app, My BSP: Connect, Learn, Advance. The app will connect BSP to workers and deliver timely information on classes, programs and resources. It will serve as a springboard for workers to acquire confidence using their mobile phones to interact with BSP and access information. Regular communication, encouragement, reports on progress and reminders are critical for the success and retention of all learners, not just those with distance learning needs. BSP will be evaluating the success of this app in achieving these goals and will continue to make the necessary adjustments to further leverage mobile technology for learner engagement.

BSP's different programmatic approaches have demonstrated that a variety of approaches are necessary to meet the various needs of California's immigrant janitorial workforce. Through its worksite-based training model and tailored curriculum, BSP provides access to effective skills training for workers that are often excluded from traditional workforce development and educational systems. Facing family responsibilities, multiple jobs, financial challenges of the region and the shift nature of their jobs, this janitorial workforce requires a training model that can circumvent those barriers to access while providing applicable skills development training for career mobility. By working jointly with both labor and management, the related goals of workforce development and immigrant integration for low-wage workers can be achieved. Employers see the bottom line: janitors equipped with English and digital literacy skills can offer better customer service to tenants, communicate better with supervisors and managers, easily adapt to new technologies and advance in the industry.

Career Pathway

Night Janitor	Day Porter	Lead	Supervisor
Work night shifts, often in social isolation.	Wage increase up to $3.50 per hour.	Higher wage: $.50–$1.50 per hour. Serve as intermediary between janitorial staff and their formal supervisors and property managers.	
Low language requirement.	Minimum low-intermediate English requirement to be able to provide customer service.	High-intermediate English requirement. Must be able to talk with security and conduct higher-level customer service.	Advanced English requirement.
Minimal digital literacy skills, necessary to communicate with foreperson via phone calls or texting.	Digital literacy requirement: using phone or tablet to communicate and report problems via SMS or email.	Digital Literacy: Email and basic Google documents.	Must be very comfortable with tablets/computers and have "advanced digital literacy skills."

As technology transforms the nature of janitors' jobs, especially in Silicon Valley, leveraging technology for career advancement has played a pivotal role in BSP's approach. Through its worksite model, especially the ADVANCE Program with blended learning curriculum, technology has become an integral component of learning and job-based skills development. Technology has also served as a method of training delivery, leveraging mobile phones to reach those hardest to serve and strengthen the engagement of all participants. As an integrated component of BSP's existing model, mobile tools allow BSP to do what it does best: offer a hard-to-reach population of janitors better job security and career mobility. Advanced digital training in modern internet-based technologies can increase janitors' job security, lead to higher-paying jobs, qualify them to transition from night shifts to day shifts and provide tools for self-advocating and connecting with co-workers. And along with this innovative digital training, janitors still benefit from BSP's signature training programs in soft skills to improve interpersonal communication skills, physical performance and more. Comprehensive training in standard and emerging industry standards is also crucial to janitorial employers' ability to retain employees and build a capable workforce ready for the future of their industry.

OLGA: BUILDING SKILLS AT FACEBOOK AND MOVING AHEAD IN A CAREER

BSP's ADVANCE Vocational ESL and Job Skills Program is offered at worksites across California. Olga B., a janitor at Facebook employed by American Building Maintenance (ABM), graduated from the program and used the opportunity to further her career and improve her life. Originally from Mexico, Olga has been a custodian in Silicon Valley for the past 30 years and is also an active community member, theater actress, musician and songwriter. Emigrating from Tepic, Nayarit, Mexico in 1985, Olga is thankful for the opportunities her three sons have had and proud of their accomplishments in school and college.

Olga participated in an ADVANCE vocational ESL class at her worksite. Two months after graduating, she was promoted from the night shift to a day porter position, earning her a $3.25 an hour wage increase.

"I feel more energized sleeping normal hours; I even eat healthier, and I enjoy being able to practice my English with people at work," she says. Olga's improved English motivated her to take BSP's pre-GED class. After four months in the class, Olga improved her assessment score and transferred to the Adult School to begin taking GED classes. Her goal is to attain her GED and attend college.

"Our hope is that by employees participating in the Building Skills Partnership program, they gain more confidence in communicating in English, in writing and reading and understanding short emails and giving directions, so that with those skills, they can move up the ladder and apply for those foreman or supervisory positions."—Employer partner

ABOUT THE AUTHOR

Christian Valdez the Northern California regional coordinator with the Building Skills Partnership, responsible for operational planning and development strategies in Northern California—working with regional staff, training contractors and various industry and community stakeholders on program development, implementation and evaluation to provide access to training opportunities and further economic advancement for low-wage immigrant service workers in the high tech economy.

Also contributing to this case study: **Grazia Mora**, digital literacy and curriculum coordinator, and **Alissa Klein**, development manager, at the Building Skills Partnership.

CASE STUDY

Changing Tides: The Future of Jobs in Maine's Marine Economy

Hugh Cowperthwaite / Cynthia Murphy

Maine's iconic lobster industry contributes more than $1.5 billion to the state's economy and is the most valuable single species fishery in the country. Yet, in 2017, a harvest shortfall of nearly 20 million pounds was attributed to the declining lobster population, resulting in an 18.6 percent drop in income for Maine fishermen. Water in the Gulf of Maine is warming at an alarming rate, and cold-water species, such as shrimp and lobster, are migrating northwards to Canada. A study by the Gulf of Maine Research Institute forecasts a 62 percent reduction in lobster population by 2050; by 2100, the cod habitat is expected to shrink 90 percent. Due to low population, shrimp fisheries in the state have been closed since 2014; for other species, seasons have been shortened and daily catch limits imposed. These changes imperil the 39,000 jobs in the commercial fishing ecosystem—6 percent of Maine jobs.

The impact on Maine commercial fishermen has been significant: long unemployment periods due to shorter seasons, increased licensing restrictions, extended days in deeper waters introducing new safety risks and declining income.

Opportunities and Challenges of Aquaculture

Aquaculture, the farming of shellfish, finfish and sea vegetables (as contrasted with harvesting wild fish), experienced 5.8 percent annual growth from 2001 to 2016, the fastest-growing food production sector in the world. Demand for seafood in the U.S. is high and increasing. It is expected that by 2030, 62 percent of food fish will be produced by aquaculture. The emergence of sustainable aquaculture in Maine offers an opportunity for fishermen to diversify to an adjacent sector, boosting their earning potential with a more stable income stream and a safer work environment.

But first, for fishermen to become farmers, they must learn new skills—everything from strategic planning and technical expertise to raising capital and developing marketing plans. As wild fish and lobster stocks continue to decline, the stakes for fishermen to transition to new sources of income are high and the learning curve is steep.

Addressing the Need for Aquaculture Training

In 2012, after studying previous aquaculture training programs in Maine and Norway, Coastal Enterprises, Inc. (CEI) and the Maine Aquaculture Association (MAA) collaborated with experts from the Maine Sea Grant Program (MSG) and the Maine Aquaculture Innovation Center (MAIC) to launch a free program to train commercial fishermen to succeed in aquaculture careers. The partners identified shellfish and sea vegetables as attractive species with low business start-up costs and designed a 12-week program, Aquaculture in Shared Waters.

This program combines classroom training with hands-on workshops and field trips, addressing all aspects of launching and running an aquaculture business, including the mindset shift from wild catch fishing to sea farmer. The program focuses on producing high-demand, native species such as oysters, mussels, scallops and seaweed, that have a proven track record of thriving in a dynamic Maine aquaculture environment.

The program curriculum includes site selection, equipment, husbandry, shellfish and seaweed biology, permitting and regulation, marketing and sales, farm management, biosecurity, business planning and financial management. Aquaculture experts, business professionals, current farmers and guest speakers lead the classes, providing a strong network for the participants to draw from as they launch their new careers. Participants also receive comprehensive course and reference materials, and in 2018, the program introduced an interactive online iBook format using iPads purchased by MAIC.

To provide access to fishermen in locations close to where they live and work along Maine's 3,500 miles of tidal coastline, and to tailor the training for optimal regional species, the course has been offered in six coastal towns over a five-year period. Demand for the course continues to be strong, and the eighth cohort is currently in training.

Starting an aquaculture business takes time to plan and requires a minimum investment of $15,000, which is significant for a commercial fisherman. To date, 130 students have participated in the program, resulting in over 50 new or augmented aquaculture-related businesses. Participant demographics mirror the local commercial fishing population:

- Gender: 98 percent male
- Average age: 49
- Average years commercial fishing: 29.6
- Education: 88 percent are high school graduates

Applicant recruiting has been fine-tuned to target highly likely adopters: multi-species fishermen who want to learn about using aquaculture to diversify. As a result, an increasing percentage of participants have started sea farms: 50 percent of the 2018 cohort started or submitted a leasing application during the course; in 2013, none of the students took that step. Only 21 percent planned to start a business within a year and 57 percent did not expect to try aquaculture at all.

The aquaculture jobs represent improved economic stability:

- More than 70 percent of Maine's aquaculture jobs are full-time, year-round positions eliminating the long unemployment periods faced by today's commercial fishermen.
- 69 percent of Maine aquaculture businesses in 2014 self-reported revenue growth, with 36 percent growing 51 percent or more. Twenty-two percent reported flat revenues and 9 percent reported a decline. Future income potential is strong, with growth in Maine's shellfish aquaculture sector forecasted to be 392 percent from 2015 to 2030.
- Commercial fishing is America's most dangerous occupation in terms of fatalities on the job. A shift to aquaculture reduces risks associated with malfunctioning gear and severe weather.

Learning Lessons and Looking to the Future

The Aquaculture in Shared Waters program is closely aligned with an ongoing University of Maine social science research project studying the attitudes, perceptions and knowledge of fishermen interested in transitioning to aquaculture. Since 2013, the results have been used to shape the curriculum and to help instructors enhance specific sessions.

The primary lessons learned highlight the importance of a practical, hands-on curriculum and support for a successful career transition:

Design a practical curriculum: By incorporating field trips to existing aquaculture farms and adding business-related sessions, participants gain a "day in the life" perspective, which helps them envision a new future. A focus on high-demand, sustainable species with relatively low start-up costs helps students navigate a clear financial path forward. Offering the workshop during the slow winter months in a compressed period appeals to commercial fishermen because it does not affect their current income stream. Also, conducting the training sessions near where the fishermen live and work minimizes transportation challenges and increases the spotlight on local opportunities.

Encourage a successful career transition: Due to the diverse backgrounds of the instructors and the field trips, the participants forge relationships with a community of experts who help enable their success. In addition, networking with fellow fishermen considering a career transition provides a valuable support system. Optional post-training wrap-around services, such as assistance with the permitting process from

MAA and start-up financing from CEI, help students jumpstart their career transitions and position them for success.

Aquaculture in Shared Waters empowers commercial fishermen to explore their interest in aquaculture before launching a business. The multidisciplinary technical training plus hands-on experience mitigates some of the challenges they face when considering a career transition. Working in partnership with organizations with diverse expertise, from financing and business coaching to licensure and aquaculture science, CEI has been able to respond to ongoing challenges to Maine's iconic seafood industry—helping fishermen adapt and become entrepreneurs in the face of climate change and an uncertain economic future.

A STRONG PARTNERSHIP

The partners who collaborate in coordinating and delivering the Aquaculture in Shared Waters program contribute expertise and resources.

A mission-driven investor in Maine since 1977, Coastal Enterprises, Inc. (CEI) offers financing and business advice to help fuel rural prosperity. Fisheries and aquaculture is just one of the economic sectors CEI focuses on to address income disparity. For the Aquaculture in Shared Waters program, CEI provides the technical assistance and coaching to help entrepreneurs and fishermen launch and grow aquaculture businesses. CEI assists students beyond the classroom through financing and free business advice.

The Maine Aquaculture Association (MAA) is the oldest state aquaculture trade association in the country. Founded in 1976 by local oyster growers along the Damariscotta River, MAA now represents all aquaculture in the state, including freshwater and marine farmers and shellfish and finfish farmers. The MAA plays a key role in student recruitment and offers a level of past and present industry perspective throughout the course as students explore their interest in aquaculture.

The Maine Aquaculture Innovation Center was established in 1988 by the Maine Legislature with a mission to assist in developing economically and environmentally sustainable aquaculture opportunities in Maine. MAIC offers a deep level of expertise in shellfish and sea vegetable farming and teaches many of the Shared Waters classes. MAIC promotes research, technology transfer and the commercialization of aquaculture.

Maine Sea Grant has a mission to support the responsible use and conservation of coastal and marine resources in order to create thriving coastal communities and ecosystems. Sea Grant plays an important role with student recruitment offering outreach to both aquaculture and commercial marine fishermen. Sea Grant is well connected with industry experts including the Maine Department of Marine Resources, U.S. Army Corps of Engineers and several private businesses whose principals serve as course instructors for the Shared Waters curriculum. Sea Grant also plays a key role in facilitating field trips enabling students to visit existing farms in Maine.

ABOUT THE AUTHORS

Hugh Cowperthwaite is the Sustainable Fisheries & Aquaculture program director at CEI in Brunswick, Maine. Hugh is a Maine native and has a background in commercial fisheries (lobstering) that began in high school. At CEI Hugh is responsible for coordinating lending, business counseling and technical assistance with commercial fishermen, shellfish growers and waterfront businesses that maintain commercial fishing access.

Cynthia Murphy is senior program director for workforce solutions at CEI in Brunswick, Maine. She grew up in a mill town in Maine at a time when the factories were leaving, stores were closing and, for many, the future of work was uncertain. After a career in the corporate sector, Cynthia returned to Maine and joined CEI to help build an economy that works for everyone. As the leader of CEI's Good Jobs program, Cynthia advises business owners on people strategies that deliver competitive advantage while expanding opportunities for Maine workers.

WORKER AGENCY

Introduction to Worker Agency

There have always been low-wage, contingent jobs in our economy, including farm work, domestic work, and caregiving. Often, those jobs have been held largely by women and people of color. The bifurcation of the labor market, with a growing number of low-wage jobs, plus the growth in contingent (or gig) work means that more workers are in low-wage, contingent jobs.

By the Aspen Institute's estimates, more than a quarter of workers participate in the gig economy in some capacity, about 10% rely on gig work for their primary income, and about 1 percent currently use online platforms regularly to connect with work opportunities.

Traditional ways of organizing and empowering workers are also in decline. As of 2018, 28 states have passed "right to work" legislation that impacts unions' ability to organize. The recent U.S. Supreme Court ruling, Janus v. AFSCME, which barred public sector unions from charging "agency fees" to the public sector employees for whom they negotiate pay and benefits, was another blow.

How do we ensure greater equity in the economy of the future by strengthening worker voice and agency, addressing racial and gender inequities, and making sure workers have basic protections and benefits? The writers in this section have sought to tackle those challenges.

Worker Agency: Creating a Brighter Future of Work

Carmen Rojas

Worker agency—the power of workers to have a voice in the workplace and shape their day-to-day lives—is critical to a stable economy and to a functioning democracy. Stronger worker agency leads to an improved workplace experience and gives workers a better position to negotiate for dignified wages and benefits, safer conditions and more training opportunities—and to shape the political context in which our economic decisions are made.

Unfortunately, many working people today lack both power and voice in the workplace, with disastrous consequences.

A young woman, for example, falls asleep in a convenience store parking lot. She sleeps in this lot a couple of nights a week because she is often scheduled to both open and close at three separate Dunkin' Donuts, and her commute home is long. While asleep, she keeps the car running and a container of gas in the trunk to make sure she doesn't run out. One evening, the container spills open and the gas that was once critical to her livelihood releases fumes that lead to her death.[1]

Or a woman spends hours cleaning the office building of one of the wealthiest companies in the world. To cut costs, the company has outsourced its janitorial services, and her job has shifted from traditional employment to contract work. In the mid-20th century this entry level job might have come with benefits and led to the first step up an opportunity ladder that the U.S. once promised working people. Today, that ladder has disappeared.[2]

Working people in the U.S. are extremely resilient, but many must constantly overcome these kinds of challenges. Discussions about the future of work must consider ways to increase worker agency as a way of ensuring that more workers have a real opportunity to support their families and achieve economic stability.

Working people in the U.S. are more productive than they have ever been[3] yet they are not reaping the benefits. Today, 50 percent of American workers earn $15 or less an hour.[4] Even in the cities and regions that have seen great economic growth over the last 20 years, this means that working people have not seen an increase in real wages since the late 1960s and many are working 60 or more hours a week and/or commuting two to three hours to a low-wage job to make ends meet.[5] Nearly 70 percent of Americans cannot afford to cover an unexpected $1,000 expense.[6] A broken car or sick child can lead many working people into debt and increasingly precarious financial situations. Low-wage workers can work their whole lives without being able to achieve financial stability or build assets.

At the same time, the concentration of wealth and power continues to grow. In 2018, the three richest Americans, all white men, had as much wealth as the bottom 50 percent of the country.[7] These three individuals and many of their peers have benefitted from the intergenerational transfer of wealth and have outsized influence to push for policies and agendas that result in fewer worker protections and practices that create still more uncertainty for the majority of American workers.

FLEXIBILITY VS. UNCERTAINTY

The future of work will be more flexible. Technology companies at the heart of the rising gig economy, for example, tout the benefits of being able to “set your own schedule” or “be your own boss,” making it seem as if workers have ultimate power in the workplace to shape their day-to-day lives. However, the shadow side of flexibility, particularly for low-wage workers, is uncertainty. Uncertainty is a feature of 1099 or gig work as well as a feature of low-wage traditional employment.

The gig economy allows workers to make money during time off from other employment. However, workers have largely failed to gain power or voice to shape their work and pay. Gig economy participants generally lack control over prices, which are set by companies. They are also asked to hold time they may not be paid for, forego benefits and other employment protections, use their own cars and equipment and pay personal insurance premiums and absorb all of the risk of employers, with no prospect of ever being able to reap the rewards.

In traditional low-wage employment, this uncertainty manifests via “just in time” scheduling.[8] This includes everything from “on-call” employment to the more pernicious practice of hiring someone for a part-time position but expecting the worker to be available more hours than agreed to. Income volatility is another manifestation of uncertainty. With hours and paychecks that can swing dramatically from week to week, working people find it difficult to plan, make ends meet or save for their own future.

At the same time, social safety nets intended to protect workers are fraying amid critiques from some policymakers, academics and corporate leaders about the role of government and the effectiveness of social programs. These range from arguments that taxes are inherently bad to a narrative that anything that government does is doomed to fail. In the day-to-day lives of working people this has meant rolling back worker protections, a lack of meaningful action to establish a livable wage and hollowing out government programs that once afforded American workers the benefits to live secure and dignified lives.[9]

THE FUTURE OF WORK VS. THE FUTURE OF WORKERS

A valid critique of the current conversation about the future of work is that the protagonists—working people themselves—are absent. While it's important to consider the role of government, the impact of the robot revolution, the role of artificial intelligence in displacing workers and the mix of skills that will be required in the future workplace, we have not done enough to center the future of work around *worker*s and how to increase their power and agency. As one important critique highlights:

> We argue that it is not the Future of Work that must concern us at this crucial moment, but rather it is the future of workers—whose future is inextricably linked to our ability to promote and preserve equality and democracy—that must be our most urgent concern. Unless we center our thinking around the intertwined and interdependent fates of working people, and their struggles for economic, racial, and gender justice, we cannot plan for a humane and sustainable future.[10]

Fortunately, worker organizations are leading some of the most innovative efforts to increase worker agency. A few examples are featured in the case studies that follow.

The Worker-driven Social Responsibility Network reimagines accountability and transparency in supply chains while actively situating the rights of working people in a human rights framework. This means that factory workers in Bangladesh and agriculture workers in Florida have the agency to inform those that consume their goods how to improve working conditions.

Carina Care connects the infrastructure of the traditional labor movement with a technology platform to demonstrate how these tools can be used to meet the needs of consumers without asking workers to shoulder an increased burden.

NDWA Labs is leading experiments to build solutions to failures in our current safety net by developing prototypes of new benefits for workers who have been left behind.

And Silicon Valley Rising is weaving a tapestry of unions, faith-based organizations, community leaders and policy makers to create a new set of rules and incentives for the tech industry.

The work highlighted in this chapter is contesting for a different future of work where workers have a voice in the workplace, where working people are able to support themselves and their families, and where a more robust set of standards are being set to ensure that dignity and work are inextricably bound together.

ABOUT THE AUTHOR

Carmen Rojas is the founder and CEO of The Workers Lab. For more than 20 years, she has worked with foundations, financial institutions and nonprofits to improve the lives of working people and their families across the United States. She holds a Ph.D. in city and regional planning from the University of California, Berkeley.

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CASE STUDY

Silicon Valley Rising: Organizing to Build an Inclusive Tech Economy

Maria Noel Fernandez

As a subcontracted shuttle bus driver for tech giants like Apple and eBay, Tracy used to work a 16-hour day driving tech employees from their homes in San Francisco to their Silicon Valley workplaces and back again. Many of Tracy's fellow drivers face a super-commute of over 100 miles from places like Stockton, in California's Central Valley, before they begin their driving shifts, because their wages do not enable them to live in the Bay Area. Because most tech companies do not give subcontracted workers access to campus amenities like cafeterias and lounges, drivers often rest in their cars between shifts, waiting six (unpaid) hours before the first trip back to San Francisco. Others sleep in their cars during the work week rather than endure the daily commutes.

Tracy's story offers a window into the challenges facing many low-wage working people in today's tech economy. For the past 20 years, Silicon Valley has seen the strongest economic growth in the nation. Yet for nine in 10 workers, real wages today are lower than in the mid-1990s.[1] And with the tech boom driving living costs sky-high, one in three families aren't paid enough to afford essentials.[2]

So why is Silicon Valley home to some of the wealthiest companies in the world while working families live in garages and the back of cars? Tech industry leaders have adopted business models that concentrate wealth, giving outsized rewards to a few while increasing financial insecurity for the vast majority of working people.

One of the clearest examples of these models is the use of subcontracting to cut labor costs and limit their liability. While tech corporations offer high salaries and perks like free massages to top engineers, they contract out support jobs to third-party firms that compete by paying low wages.

This has created a system of occupational segregation. African American and Latino people make up 26 percent of the region's total workforce but hold only 10 percent of white-collar tech jobs. Meanwhile, they compose 58 percent of tech's subcontracted service workforce, but on average are paid just one-sixth as much as the white-collar employees.[3] These food service workers, janitors, shuttle bus drivers and security officers are tech's invisible workforce, keeping the industry running smoothly but locked out of its prosperity.

Adding to these challenges is an epic housing crisis fueled by tech's expansion that has made Silicon Valley unaffordable for the vast majority of middle- and low-wage working families.

A New Horizon for the Silicon Valley Labor Movement

In response to grueling working conditions and the glaring mismatch between stagnant wages and soaring costs of living, Tracy and his fellow drivers began organizing to join the Teamsters' union in 2014. To show solidarity for their campaign, local labor and community groups rallied in support of drivers at Facebook's iconic headquarters in Menlo Park. Using media outreach to educate policymakers and the public about the drivers' struggle, the coalition brought significant public attention to the campaign. After months of organizing, and with new eyes on their cause, drivers won their campaign to join the Teamsters and have since negotiated better wages, sick days, vacation time and health care.

Tracy has since become a staff member of the Teamsters, where he continues to organize drivers of commercial shuttle bus companies to win improved wages and workplace conditions. Many drivers organized by the Teamsters still commute long distances from places like the Central Valley and struggle to afford the skyrocketing cost of living in the greater Bay Area. But their union contracts have raised standards significantly across the industry, with drivers with the Teamsters starting with a base rate of $27.56 per hour and winning health care coverage and other benefits that are critical for their families.

The drivers' successful organizing campaign at Facebook demonstrated the power of a collective approach to the struggles facing working families in the tech economy. It was one of many subcontracted worker organizing campaigns gaining momentum across the industry, bolstered by a growing regional movement to raise the minimum wage that included a groundbreaking 20 percent minimum wage hike in the city of San Jose.

Inspired by these wins, 14 community, faith and labor organizations came together in 2015 to launch a bold new campaign. By working in coalition, these groups had already proven it was possible to tip the scale in favor of previously invisible workers within tech and to demand better conditions for subcontracted workers.

The founding members of Silicon Valley Rising (SVR) united around a simple yet radical premise: if Silicon Valley is truly to be a center of innovation, it must create a model of shared prosperity—one that brings more people into the middle class and supports all those producing tech's value to share in the rewards.

Convened by Working Partnerships USA and the South Bay Labor Council, SVR founders included Latinos United for a New America, Affordable Housing Network, Asian Americans for Community Involvement, Communication Workers of America, Interfaith Council on Economics and Justice, NAACP San Jose Chapter, Our Lady of Guadalupe Church, Unite HERE Local 19, International Brotherhood of Teamsters, SEIU-USWW, SEIU 521 and Rainbow PUSH Coalition. SVR members committed to:

- **Build the power of working people** by mobilizing to support subcontracted service workers as they organize to win better conditions and a collective voice on the job.
- **Shift the narrative around tech** by conducting strategic research to illuminate the tech industry's impact on inequality and its responsibility to be part of the solution.
- **Raise standards across the region** by driving policy campaigns that lift wages, protect working people and renters and create affordable housing.

Results: 5,500 Workers and Counting

As of early 2019, SVR had supported over 5,500 subcontracted cafeteria workers, security officers, janitors and drivers to organize for better jobs and a voice at work.

SVR has also driven major public policy campaigns, including:

- The nation's first coordinated regional minimum wage hike to $15 per hour in eight cities, ensuring a much-needed raise for 219,000 people—from restaurant servers to retail clerks and home health aides.
- San Jose's Opportunity to Work initiative, which provides 64,000 people work in part-time jobs with a pathway to the additional hours they need to make ends meet.
- Creating the new Office of Labor Standards Enforcement at Santa Clara County, which will partner with local cities and community organizations to empower workers to fight wage theft and sexual abuse.

Strategies for Success

So how did a grassroots community-labor coalition achieve the above in the face of tech's largest and wealthiest corporations in just four years?

1. **Building tech worker leadership and solidarity.** SVR built a broad tech worker movement that united service workers from different unions, tech campuses and service sectors, while building relationships of solidarity across economic class and employment category through shared leadership development as part of an organizing committee. This approach served to undo the isolation created by the fissured economy. SVR also partnered with new organizations comprised of higher-paid tech employees—like the Tech Workers Coalition—to apply internal pressure on executives to take the high road.

2. **Uniting around the housing crisis and advancing a broad workers' rights agenda.** SVR was catalyzed

by the interconnected jobs and housing crises, recognizing that higher wages increase housing stability, and tenant protections and affordable housing help people stay in the communities where they work. SVR organized working-class communities of color both in the workplace and at City Hall, where the coalition has won protections against unjust evictions and landlord retaliation against immigrants. By mobilizing in support of labor, housing and immigrant rights, SVR has strengthened its collective power to win a broad progressive agenda, while building lasting relationships among coalition partners and honoring people's whole identities.

3. **Expanding the tools and reach of the labor movement.** The power differential between tech corporations and subcontracted service workers is too great for a single union or even the labor movement to tackle on its own. Working together, the coalition expanded support for individual worker campaigns and built a movement in support of the Valley's working families, inside and outside of unions. Each SVR member also brought unique capacities that enabled the coalition to organize a broad set of affected communities while amplifying and building support for the coalition's demands. One of SVR's strengths has been using research and policy analysis to identify viable alternatives to tech's corporate practices. Policies like the Opportunity to Work ordinance have raised standards for workers across the region while giving working people more leverage to improve conditions at individual workplaces.

Organizing for the Future

After four years of building the movement for an inclusive tech economy through SVR, it is clear that the inequality that characterizes Silicon Valley is not inevitable. There is nothing fundamental to the technologies being developed in Silicon Valley that devalues work. Rather, industry leaders and elected officials have chosen to promote winner-take-all markets, windfall profits and business models like subcontracting. Thus, leaders can make different choices—choices to look out for the wellbeing of all the people who work for them and ensure that new technology benefits our communities.

The core challenges facing us today are not new, but rather extensions of the decades-long attack on the power and agency of working people. As policymakers and advocates look to address the challenges of the new economy, we must draw from the wisdom of movements that have long been organizing in the face of corporate power. Because regardless of where we find work—on the street corner, on an app, on shop floors—the power to stand together and negotiate collectively over one's economic conditions will be critical to shaping an equitable future of work in which all communities can thrive.

INTEL CAFETERIA WORKERS IGNITE A MOVEMENT TO PROTECT SUBCONTRACTED WORKERS

In the heart of Silicon Valley, Elena* worked in the cafeteria of Intel's corporate headquarters for more than 15 years. Despite her loyalty, her pay stayed low, forcing her and her three children to move out to California's Central Valley. But this left her commuting four hours per day and hardly seeing her kids.

After years of organizing, Elena and her coworkers formed a union for better wages and working conditions. They were thrilled when they won their first contract with Unite HERE Local 19. But then, just days before Thanksgiving in 2014, Elena and her fellow cafeteria workers were fired. Intel had made a sudden decision to change food service contractors, affecting Elena and other employees of the previous contractor. As subcontracted workers for one of tech's corporate giants, Elena and her coworkers had few protections to lean on. Through subcontracting, Intel was able to escape the responsibilities it would normally have towards its workers in the event of a mass layoff.

The news of Intel cafeteria workers' sudden layoff galvanized the newly formed Silicon Valley Rising coalition to take action. Together, partners launched a large-scale organizing campaign in solidarity with the fired Intel workers, amplifying their stories and demanding they be rehired. Through a series of marches, protests and direct actions in early 2015, the coalition brought community, immigrant and faith leaders to stand with the fired Intel workers and their union. The coalition drove a steady stream of communications and news coverage in outlets like the Wall Street Journal, raising the pressure on Intel to act responsibly.

The results of this campaign were twofold: Elena and many of her coworkers won their jobs back with the new contractor along with a new union contract, including a 20 percent pay increase.

In addition, the Intel organizing effort laid the groundwork for a years-long public policy campaign that resulted in passage of a Worker Retention Ordinance in Intel's hometown of Santa Clara. Combining research, media outreach and several direct actions at City Hall, the coalition built steady support to win passage of the policy in 2018. The policy limits large employers from arbitrarily changing from a union to non-union contractor, while safeguarding working people from mass layoffs during contractor transitions.

**Name changed to protect privacy.*

ABOUT THE AUTHOR

Maria Noel Fernandez is the deputy executive director of Working Partnerships USA, where she leads the Silicon Valley Rising campaign and oversees the organization's organizing, communications and operations departments, building coalitions and community power to win a just economy through groundbreaking change for working families. Maria Noel has over a decade of experience leading collaborative community campaigns to improve wages and workplace protections, defend the rights of immigrants, workers and seniors, and ensure robust public services for San Jose's working-class communities of color.

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CASE STUDY

Carina Care: Using Technology to Empower Home Health Care Aides

Rebecca von Loewenfeldt / Abby Solomon

Home care aide is one of the nation's fastest growing and most-needed occupations. However, the direct care industry currently sees an annual turnover rate between 45 percent and 65 percent and is struggling to recruit new aides.[1] In the state of Washington, the Department of Social and Health Services (DSHS) administers a program to ensure that Medicaid-eligible seniors and people with disabilities can receive care in their homes. DSHS assesses each client's needs and then assigns an allotment of care hours, and clients hire the aide of their choice to work those hours. Aides perform daily household tasks, provide personal care and assist with medication compliance. The support of an aide can limit hospital use and prevent a move to a nursing home.

The escalating demand for aides, combined with recruitment and turnover patterns, presented a major challenge to DSHS. DSHS projects a need for more than 76,000 aides by the year 2030, up from the 45,000 working in 2019.[2] While wages and benefits are traditional drivers of turnover, that was not the sole issue for aides in Washington State. Aides in Washington start at $15 an hour, benefits include retirement contributions and health insurance is available for aides who work 80 hours a month. A key concern cited by aides was the inability to work full-time and become eligible for benefits, as most clients could not provide full-time hours.[3] Half of aides who worked 100 hours or less were looking for more hours.[4] In addition, home care aides can immediately lose their hours when a client is hospitalized or passes away.

Clients reported concerns about the ease of finding aides who could meet their care needs.[5] DSHS ran a small referral system, but most clients relied on word of mouth or websites like Craigslist to find aides in their area. A key client concern was how to manage in a situation where an aide was not able to work for personal or medical reasons. DSHS needed a strategy to connect aides to more work hours and to provide clients with access to a verified pool of available aides.

Creating Carina

The state of Washington and SEIU 775, the labor representative for home care aides, negotiated the creation of Carina, a digital referral service that connects verified home care aides and clients. DSHS fully funded Carina's Washington State platform through the collective bargaining agreement. Its purpose is to enable users of the DSHS program to more easily connect with aides and to create a path for aides who want to work for multiple clients.

Carina's web-based application and functionality is tailored to the aides and clients it serves. Carina communicates with aides and clients through both DSHS and the union and conducts outreach through e-mail, social media and text messages. Carina uses text integration to alert aides and clients about new users who meet their requirements, and aides can easily update their availability. Carina's search criteria allow clients and aides to search using a wide range of parameters. Carina also provides estimated travel time to a job location by car and bus.

Carina partners with DSHS and SEIU 775 to conduct outreach to clients and aides. Carina relies heavily on text and email in addition to outreach at union meetings, case manager meetings and conferences. Carina's email and text campaigns have a higher than industry average open and click through rates (20.06 percent), with 40 percent of users responding to SMS-based outreach.[6]

The Results

Carina launched regionally in May 2017, and the service went statewide in August 2018. Ten months into the statewide launch, 18 percent of aides and 6 percent of clients were using the service. Since the launch, over 1,500 jobs have been filled using Carina. Each job is 80 hours of work per month on average, allowing many aides to work full time hours in aggregate and achieve enough hours to maintain or become eligible for healthcare benefits. Carina will be analyzing data so that they can target their outreach to geographic areas with significant client demand. Both the union and DSHS are pleased with the initial results and will continue to explore ways Carina can help fill existing care gaps.

Almost half of all users log on at least monthly, and Carina's user base continues to grow. While it is too early to report long-term results, job matches have increased as Carina's features have matured and the word has spread among aides and clients. Once a connection is made through Carina, state case workers authorize the match, and payment for the aide's services can begin. Aides and consumers provide feedback on the service within the application and after usage. Hundreds of positive testimonials have been gathered to date.

Carina's approach to enhance and strengthen its industry rather than to disrupt or upend it sets the service apart from app-based services such as Uber or Task Rabbit. Carina values the expertise of its partners and builds on the systems they have spent decades creating and improving. Carina is held accountable by the elected board of the union and by DSHS to add value to the state's existing long-term care system.

This system-based value imperative differentiates Carina from venture capital-driven platforms that must extract value from individual transactions.

Most marketplace platforms focus on bringing value to the "buyer" with less regard to the needs of the service provider. Providers are often subject to changing conditions (surge pricing, changing terms of service, etc.) without any say or input. Carina gives both sides voice and agency, ensuring that clients not only have access to a skilled and verified workforce but also that aides enter the relationship knowing when, how and what they will be compensated.

Lessons and Observations

Value

In addition to greater stability for aides through access to new clients and hours, value accrues to DSHS and the clients they serve by increasing the stability of the home care program. As the program expands rapidly over the next decade, DSHS needs to be assured that clients in the program will be able to receive the care they need in order to remain safe and healthy at home. Carina is one mechanism DSHS is using to ensure its clients have reliable care. It has the added benefit of also giving aides a path to quality, full time, benefitted employment. This value can be easily replicated in other states with similarly structured programs. The turnover cost of losing one trained home care aide is an estimated $3,000 to $5,000. As more aides find full-time work through Carina and stay in the occupation, the economic impact grows exponentially, more than covering the costs of funding Carina.[7]

Person-Centered Design and Functionality

Carina's potential audience did not have strong technological capacity but did have access to the internet, as evidenced by the 85 percent of home care aides who filed timesheets online.[8] Carina needed to be easy to use and access, and users needed to know where to go for support. Carina was created to be used though any browser and on any digital device. Carina offers a multi-language phone-based help line, and the state's registry coordinators can provide clients with assistance to post jobs.

Data Privacy, Accuracy and Reliability

Carina's success depends on its ability to safeguard users' data. Data-sharing agreements with DSHS allow Carina to verify that potential clients have authorized hours from the state and that aides have met the state's requirements for serving Medicaid clients. This provides assurance to aides that they will be paid for the hours they work.

Partnership

The platform was developed with input from home care aides, clients and their families, state agencies, and advocacy organizations, such as SEIU 775, Disability Rights Washington and the ARC of Washington. These partners introduced Carina to home care aides and Medicaid clients, helping the service quickly build trust with potential users.

Costs

Start-up and operating costs will vary per market and depend on factors such as size and complexity of the potential market, partner resources, number of potential aides and customers, marketing methods, data storage, sophistication of technology and level of customer support. Those costs can be determined in partnership with funders interested in Carina in a particular area or state.

Scalability and Transferability

Carina was incubated through Washington State's SEIU 775 Benefits Group, a family of Taft-Hartley Benefit Funds delivering health, training and retirement benefits for home care aides. The organization was able to limit start-up costs by using agile software development practices that created a pilot product in less than two months. By building iteratively and developing over time, Carina is resource efficient in the deployment of capital. Because of this initial investment, Carina is both scalable for the homecare industry and transferable to any situation where a worker can be connected to a good job. Carina partners with institutions that support good jobs and uses technology to quickly connect workers with those jobs. Carina listens to the needs of labor and employers, surfaces the information in an easy to use format, and helps people move quickly from online to offline interactions. Carina, or similar models, can be successful in any industry that needs to route verified workers to quality jobs. Carina has received additional funding to explore opportunities for expansion and has begun to market both its proprietary digital platform as well as its marketing and outreach methodology to interested partners around the country.

GREATER STABILITY FOR REBECCA

Rebecca Rybacki was struggling to find a steady client. Although she had been caring for several clients, her work became unstable. One client died, another moved into a nursing home, and one moved unexpectedly. Rebecca was left with only six hours of work per week. Rebecca relied on the health benefits she received through her union because Medicare didn't cover the supplies she needed for her own medical care. She got by for a short time, but only because she was able to use the time-off hours she had accrued to meet the health insurance qualifications. She was starting to panic. When she had not had any luck finding a new client, she sought help from the union, and they told her about Carina. Rebecca immediately and easily signed up for Carina on her cell phone and then continued her search on her computer at home. In less than one week she found a job and was placed successfully with a new client. She loved that there was no cost associated with Carina and she now works enough hours to meet her insurance needs.

"I am ecstatic, and I thank god for Carina. On Carina you can be assured that the client has hours through the Independent Provider program. When you register with Carina you give them your state identification number so the client knows you've had a background check and that you are registered with the state, so everyone feels a little bit safer. It's not just like walking up to somebody on the street. I can't say anything more but thank you, Carina."

ABOUT THE AUTHORS

Rebecca von Loewenfeldt, PMP, is the associate director of H-CAP, Inc. H-CAP, Inc. is a national labor/management organization that promotes innovation and quality in healthcare career education.

Abby Solomon, MSW, is the executive director of the SEIU 775 Benefits Group. The Benefits Group is a family of Taft-Hartley Benefit Funds delivering health, training and retirement benefits for home care aides. SEIU 775 Benefits Group's Training Partnership is the nation's largest home care training program and the state's second largest training institution after the University of Washington.

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CASE STUDY

The Original Gig Workers: Securing Benefits for Domestic Workers

Palak Shah

Domestic workers are the original gig workers.

Each morning, as workers leave their homes to go to work, more than two million domestic workers enter those homes to do the work left behind. They are the nannies who comfort our children, the house cleaners who create order in our homes and the caregivers who care for our loved ones. They do the work that makes all other work possible, filling roles that were historically filled by women who have now entered the workforce.

Domestic workers are some of the most vulnerable workers in the U.S. They work behind the closed doors of private residences; any home can be a workplace, and without employer oversight, domestic workers are more vulnerable to harassment and discrimination in the workplace. Their work has long been considered not "real" or professional work. Domestic work was historically performed by women, and some of the first domestic workers in this country were enslaved African American women. This legacy resulted in domestic workers, along with agricultural workers, being excluded from the labor rights and protections afforded to most other workers as part of the New Deal in the 1930s, as a concession to Southern lawmakers. The domestic workforce of today is still mostly women and disproportionately women of color and immigrants; is paid low wages; and rarely receives employment benefits.[1]

Domestic work has long resembled new kinds of gig work today. Most domestic work is part time and episodic, leaving domestic workers to cobble together a living from multiple jobs or gigs. Domestic workers don't have access to many protections and benefits that come with full-time employment, and clients can discontinue services at any time, creating financial vulnerability.

Alia: The First Portable Benefits Platform

In 2015, NDWA Labs, the innovation arm of the National Domestic Workers Alliance, began exploring the use of technology to provide domestic workers with access to benefits. This effort came directly from member feedback that working without benefits created stress related to losing income due to illness or injury.

NDWA created Alia, the first portable benefits platform, to make it easy for clients or employers to contribute to a domestic worker's benefits. Clients make monthly contributions that can be used by domestic workers to access benefits such as paid time off and life, accident, critical illness and disability insurance. NDWA began piloting Alia in 2017 and launched the platform nationwide in December 2018.

The Alia platform allows multiple clients or employers to contribute to a single domestic worker's benefits. Benefits are associated with the domestic worker, making the benefits truly portable. Contributions are pro-rated: clients who receive a weekly house cleaning contribute more than someone whose home is cleaned once a month.

During the pilot phase of Alia, NDWA reached out through domestic worker movement networks to identify 25 house cleaners in NYC to recruit as pilot users and help shape the program. The organization worked closely with these house cleaners and their clients to test the core assumptions about participating in a benefits program for house cleaners and identify the right value proposition. This phase was critical in making some design decisions for Alia. For example, Alia went into the pilot assuming access to insurance benefits would be the strongest value proposition to house cleaners. It wasn't. By far, paid time off received the strongest response and was the benefit most accessed.

Access to benefits is not a new issue. As the number of independent workers has increased,[2] the portion of the workforce without access to the social safety net has also risen. As benefits solutions have been created to meet this need, however, they have typically been designed for high-wage earners with a small number of clients. This approach fits with the standard operating procedure of the tech sector, where solutions are initially designed for the most common case. Only later are more difficult cases addressed.

By contrast, Alia was designed to meet the needs of workers who are the most difficult to provide benefits to: house cleaners. Most house cleaners have multiple clients or employers, earn low wages and provide different amounts of service to each client. Often, house cleaners don't see their clients at all, instead accessing the home when the client is not there.

By starting with the needs of house cleaners in designing Alia, NDWA has created a solution that can work for all independent workers, whether high- or low-wage, with many or few clients, and recurring or infrequent repeat service.

Using Technology to Promote Equity

Technology has been used to increase efficiency and convenience. But it also has great potential to promote equity. Organizing domestic workers was long considered an impossible undertaking.

The workforce is completely disaggregated, there is no central list of domestic employers or workers and this workforce typically operates on a one-to-one employer-to-employee ratio. However, aggregation is exactly where technology creates a real impact at a low cost, creating opportunities that didn't previously exist.

Alia uses technology to make it easy for clients to set up recurring contributions proportionate to the amount of service they receive. Contributions for a single worker are then pooled together so that contributions from their clients can be used toward the benefits of their choice. And workers do not have to manage the collection of contributions. Alia manages the administrative burden of aggregating contributions, which can be as powerful a barrier to accessing benefits as the financial barrier.

Benefits have typically been attached to an employer as it created an easy way to decrease the cost of sales, resulting in larger employers having access to better benefits for workers. But, as independent work increases in popularity, and technology is being used for cheap aggregation, this model is becoming irrelevant for more and more workers. We expect technology to be able to provide us with a ridesharing service or to deliver our groceries. Technology should also be used to aggregate a disaggregated workforce and provide it with the same benefits other workers receive, solving for equity as well as efficiency.

Shifting Power Toward Workers

Social innovation without addressing power does not create real change. Power is at the heart of every social issue: someone has more, someone has less. We can apply our best design minds and employ the most powerful technology, but if we are not addressing the source and flow of power, our solutions will only create a ripple against a deep and often unseen current.

In marketing Alia, acknowledging power has been key to identifying the most successful user paths. Alia has the unique challenge of requiring conversion of two customers for each "sale"; both a client and a cleaner need to sign up for Alia for benefits to be accessed. While the most obvious conversion entry point is through cleaners, who are the beneficiaries of Alia Benefits, the most successful entry point has been through clients. When NDWA markets Alia to clients, who then introduce the idea of Alia to cleaners, it is more successful than marketing Alia to cleaners, who then need to introduce the idea to their clients.

By understanding the power dynamics in the relationship between a cleaner and her client, we can design a conversion path that navigates existing power dynamics while empowering domestic workers to shift the power in their relationships. Current strategies lean heavily on marketing Alia to clients, to avoid requiring cleaners to introduce Alia to their clients. But the goal is that as cleaners become more empowered, it will be easier for them to introduce Alia to their clients. Two of Alia's early cleaner customers have reported that they will replace clients if Alia benefits are not included as part of their compensation. They are early proof that social innovation that understands power will shift power.

The Potential for Scale

Alia's launch has generated wide interest. The connection between this solution for domestic workers and its relevance to the online gig economy has not been missed, and a number of tech platforms have contacted Alia to explore partnerships. Government agencies have discussed the potential of Alia as a platform for all independent workers regardless of work sector. Even freelancers who employ cleaners have asked if they can use Alia themselves.

Legislation that requires employers to provide benefits for workers is an additional path to ensure all workers have access to the benefits they need. Legislative change can reset workplace norms and has the power to change the culture from one where domestic work is devalued to one where domestic workers are recognized as a critical part of our economy. When domestic workers receive that recognition, it creates a path for the sector to grow to meet our society's increasing need for domestic work.

As Alia grows, and domestic workers are aggregated online, the opportunity for building collective power becomes apparent. By joining Alia, domestic workers gain access not only to benefits, but also a social movement with community, support and education. Produced and owned by the domestic worker movement, Alia offers workers benefits as well as evidence that we can create solutions that generate a real impact, igniting the imagination of the workforce as to what else we can build together.

Technology has changed the way we find and manage our work, but we need to make sure that it is making work better. Shifting inequities that have existed offline to online platforms is not innovation. Disruption for the sake of profit is not progress. We need to build a future of work that is better for everyone, no matter how much you work, how you find your work or what kind of work you do, and Alia is one step in that direction.

SECURING NEW BENEFITS FOR OLIVIA

Olivia Mejia has been cleaning homes in the New York area for more than 10 years, and her work supports her three school-age children. She typically cleans for 15 to 20 clients each month. In her decade of cleaning she has not received benefits before Alia; if she was unable to work due to illness or family obligations, she either rescheduled the job or lost wages.

Today, Olivia has access to paid time off, life insurance and accident insurance through Alia. She has 17 clients contributing towards her benefits, most of whom she never sees as she has a key to their home and cleans when the house is empty. Recently she took paid leave for the first time to attend a parent-teacher meeting at her son's school and accompany him on a field trip. "It was a beautiful feeling," Olivia said. "If I don't work, I don't have money in my pocket, so to know that I could join in this and not lose the income was a great feeling."

Olivia now informs her clients that she needs benefits as part of her compensation and will prioritize clients that contribute through Alia. "I think it's discriminatory that they put aside domestic workers as if what we're doing is not important and it doesn't merit any kind of benefits," she says. "Alia brings us benefits that we as domestic workers otherwise do not have."

ABOUT THE AUTHOR

Palak Shah is a social entrepreneur, a leader in the social movement for workers' rights in the new economy and a speaker and thought leader on the future of work. She serves as social innovations director of the National Domestic Workers Alliance (NDWA), leading NDWA's national strategy on raising market norms and standards, building scalable and sustainable business ventures, and partnering with the private sector. Palak is also the founding director of NDWA Labs, the innovation arm of NDWA, which experiments with how technology can improve job access and job quality for domestic workers.

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CASE STUDY

The Future of Human Rights Protection in Corporate Supply Chains

Sean Sellers

In a world of increasingly globalized markets, many of the goods and services we rely on every day come to us through supply chains. Retailers and brands rely on a vast network of suppliers and other sub-contracted intermediaries to extract, grow, process, manufacture, distribute or otherwise ensure the provision of goods and services. The rise of mega-buyers over the last several decades has consolidated power at the top of these supply chains while also driving their rapid expansion.

This trend holds true across industries, from fast food to fashion. The supply chains of multinational corporations have captured 80 percent of world trade and 60 percent of global production.[1] The International Labor Organization estimates that the number of jobs in global supply chains in 40 countries increased from 295 million in 1995 to 450 million in 2013, now totaling more than one-fifth of the global workforce.[2] The multinational corporations atop these supply chains directly employ just 6 percent of these workers.[3] In the case of agriculture, for example, supply chain workers include the laborers who plant, harvest and pack produce that is eventually sold to consumers in the aisles of chain grocery stores.

Governance Gaps

Low-wage workers at the base of supply chains—subject to downward pressure on pay and working conditions as companies seek to control costs and maximize productivity—can be isolated, vulnerable, exploited and abused.[4] Governments, which should be responsible for protecting the rights of workers, often lack the resources or political will to do so. State-based enforcement agencies and policy frameworks consistently fail to protect workers from dangerous conditions and sometimes severe abuses, including forced labor and rape, because those suffering the abuse are often hidden and powerless. Where collective bargaining rights exist and are enforced, unions can provide workplace protections. But, even when those rights exist in the law, they are ignored in practice for millions of workers, while millions more are excluded from the legal right to form a union altogether, as is the case for farmworkers in the United States under the National Labor Relations Act of 1935.

Corporations also bear responsibility for ensuring that human rights are respected in their suppliers' operations, but they tend to treat the discovery of abuses in their supply chains as public relations crises to be managed rather than human rights violations to be remedied. Seeking to protect their brands from reputational harm, corporations embrace strategies that profess adherence to fundamental human rights standards but establish no effective mechanisms for enforcing those standards. This approach, known broadly as corporate social responsibility (CSR), is characterized by voluntary commitments, broad standards that often merely mirror local law, limited monitoring tools and practices and the absence of mechanisms for enforcement of the standards that do exist.[5]

Multi-stakeholder initiatives (MSIs) have sought to address the shortcomings in the traditional CSR model by bringing nongovernmental organizations and other institutions into standard-setting and monitoring roles. While they have been successful in setting higher standards and shifting expectations, MSIs have struggled to secure the commitment necessary for effective monitoring and enforcement. In the U.S., the two farms implicated in a forced labor operation in Florida were certified "socially accountable" by an industry-controlled MSI.[6] CSR and MSIs have failed to address the ongoing human rights crisis in supply chains in large part because they do not put workers at the center of developing and enforcing solutions to the problem. This fundamental design flaw is evident at all levels of these schemes—in their structure, governance, operation and allocation of resources—and makes the failure of these systems inevitable.

A Path Forward

In recent years, this bleak portrait has begun to change. Both in the U.S. and abroad, workers and their organizations have forged effective solutions that ensure the real, verifiable protection of human rights in supply chains. This new paradigm is known as worker-driven social responsibility (WSR). The concepts and analysis informing the WSR model arose from parallel efforts in agricultural and manufacturing supply chains, and this highly flexible model has been tested in some of the most stubbornly exploitative labor environments in the world. In these contexts, WSR has proven its ability to eliminate long-standing abuses and change workers' lives for the better. Consequently, interest in the model is growing beyond these initial sectors.

Fair Food Program

In 2011, after a decade of campaigning in partnership with a national network of student, faith, labor and community allies, the Coalition of Immokalee Workers (CIW), a worker-based human rights organization, launched the Fair Food Program (FFP) across the $650 million Florida tomato industry. The grassroots effort to achieve the FFP was significant and hard fought. This included concerted efforts by students to force their colleges and universities to cut contracts with fast-food companies that refused to join the Fair Food Program, as well as faith-based shareholder efforts to force accountability through more traditional measures. The leadership of workers from Immokalee was front and center in these efforts, and the CIW also gained recognition for its vibrant, joyous and sometimes protracted marches as focal points of campaign action.

Once launched, the FFP was the first comprehensive, fully functional model of the new WSR paradigm. In the case of the FFP, the CIW's 14 Fair Food Agreements leverage brands' wealth and purchasing power to ensure workers' fundamental human rights in the workplace. The CIW designed the FFP to include redundant mechanisms, including worker-to-worker education, a 24-hour complaint investigation and resolution process and in-depth field and farm office audits, to ensure that workers not only participate in the monitoring process but in fact drive and inform enforcement of the FFP's standards.

The FFP emerged from the CIW's successful Campaign for Fair Food. Because farmworkers are excluded from protections under the National Labor Relations Act, the CIW had no access to the traditional collective bargaining process and was obliged during its first decade of existence to pursue a voice on the job through community-wide strikes and other labor actions. By 2000, the CIW had shifted its focus from directly confronting local growers through traditional labor mobilizing tactics to instead holding fast-food brands accountable for conditions in their supply chains. In 2005, the CIW won its first Fair Food Agreement following a four-year boycott of Taco Bell, establishing several fundamental precedents for the emerging paradigm, including:

- A binding legal agreement between workers at the bottom of a global supply chain and a retail brand at the top, conditioning the brand's purchases from the workers' employers on human rights compliance in the workplace, even when those rights are not guaranteed by existing law;
- The first-ever ongoing payment from a food industry leader to its suppliers dedicated to addressing workers' sub-standard wages; and
- 100 percent transparency for tomato purchases in Florida, allowing workers to monitor conditions on participating growers' farms and communicate with the buyer when sanctions are required.

CIW has since expanded these principles, including a worker-drafted Code of Conduct, into 13 Fair Food Agreements with corporate buyers.

Today, the FFP applies to three crops in seven U.S. states—including 90 percent of Florida tomato production—and is in the process of further expansion. The FFP has resulted in unprecedented changes on participating farms, including the elimination and prevention of forced labor, sexual assault and violence against workers.[7] Less extreme abuses such as wage theft and health and safety violations have become the rare exception rather than the rule, and when they do occur, workers have access to a protected complaint investigation and resolution program that is fair, expeditious and effective. To date, over 2,500 worker complaints have been filed under the FFP, and most have been resolved within days and often with systemic reforms that benefit workers beyond the individual who brought forward the complaint.

This degree of participation is a remarkable achievement given the culture of impunity and retaliation that long reigned in the fields and which still haunts many low-wage industries. The complaint investigation and resolution process has allowed workers to identify bad actors and bad practices and fix them, backed by the purchasing powers of the signatory buyers, gradually but inexorably reshaping the industry from the ground up. Health and safety committees provide another structured channel for worker voice on FFP farms. The FFP is jointly administered and monitored by the CIW and an independent third-party monitor created specifically for that purpose, the Fair Food Standards Council. In addition to staffing the 24-hour FFP complaint line, the FFSC conducts in-depth field and office audits, interviewing thousands of workers and all levels of management, to verify compliance with the Code.

Conclusion

Drawing on the success of the FFP and other efforts, the Worker-driven Social Responsibility Network was founded in 2015. The objective of the network is to build understanding of the model among a wide range of actors, to provide support and coordination for worker-led efforts to replicate the model and to create a paradigm shift within the field to establish the model as the baseline for workers' rights programs within global supply chains. Over the past three years, the network has carefully cultivated collaborative practice and strategic alignment among its members, often against a backdrop of complex political terrain and varied experiences in the U.S. and global arenas. Additionally, the network has provided extensive on-the-ground technical support for the WSR adaptation effort now taking root in the Vermont dairy industry.

Drawing from the FFP as a blueprint, the Milk with Dignity Program is being led by Network member Migrant Justice and secured an early victory by signing a binding agreement with Ben & Jerry's to improve labor conditions in its dairy supply chain. This adaptation effort provided several years of careful planning, from the gathering of worker input and drafting of workplace standards to the brand engagement (including a public pressure campaign) to the creation, staffing and training of a new monitoring organization, the Milk with Dignity Standards Council. Today, the Milk with Dignity program is operational on more than 50 New England dairy farms, where it is steadily improving previously stagnant conditions for workers.

Another important early milestone for the WSR Network has been the publication of a statement of principles regarding effective programs to protect the rights of workers in global supply chains based on agreements between global corporations and worker organizations. These principles, in abbreviated form, set forth that:

- Labor rights initiatives must be worker-driven;
- Obligations for global corporations must be binding and enforceable;
- Buyers must afford suppliers the financial incentive and capacity to comply;
- Consequences for non-compliant suppliers must be mandatory;
- Gains for workers must be measurable and timely; and
- Verification of workplace compliance must be rigorous and independent.[8]

These principles distill decades of hard-won knowledge from uniquely successful efforts to improve lives of workers at the base of supply chains. Their salience is ensured in a future where supply chains undoubtedly remain a major component of the work landscape.

ACKNOWLEDGMENTS

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ABOUT THE AUTHOR

Sean Sellers is the director of strategic partnerships at the Worker-driven Social Responsibility Network.

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POLICY

Introduction to State and Local Policies

The changing economy poses significant challenges. Workers displaced by technology or trade may have a hard time finding their footing in the new economy. Low-income workers are experiencing greater instability. Many have fewer protections and benefits than in the past.

Traditional models of organizing and delivering workforce services, training and worker benefits no longer work as well. State and local governments have a critical role to play in designing and redesigning workforce systems that are able to respond to disruptive technologies, changing employer practices, and a changing economic context, particularly growing income inequality.

Regions that choose to be proactive and innovative in their approaches will be best positioned to effect positive changes and address challenges. They may also serve as learning labs for other localities, states and perhaps even the federal government.

How can state and local policy better protect workers, address income inequality and provide new opportunities for workers displaced by economic shifts? This section features writers who are working on these challenges.

The Future of Work: State and Local Policies

Rebecca Smith

Business in America, especially big business, is thriving. Over the last decade and a half, corporate profits have soared, outgrowing employee compensation for the longest period since World War II.[1] But while the U.S. economy is doing well for some, its rules, operations and rewards benefit the few at the expense of the many, shift even more wealth to those already enjoying enormous affluence and concentrate power even more deeply among the powerful. They enshrine a small number of winners at the expense of a large and growing number of individuals, groups and communities. Meanwhile, historic and persistent racial oppression and discrimination against some and the corresponding privilege it confers on others creates and perpetuates perverse bias and unfair advantage across society and exacerbate a yawning racial wealth gap.[2] The as yet unknown effects of automation and technology and a looming climate crisis add to uncertainty about the future of work.

The rules have allowed businesses to adopt strategies that limit workers' freedom on the job. Anti-union consultancies are used by three-quarters of business to defeat workers' organizing campaigns. Non-compete agreements constrain 30 million U.S. workers from changing jobs.[3] Forced arbitration agreements keep 60 million to 65 million private sector workers—more than half of the private sector workforce—from pursuing claims of mistreatment in court or acting collectively in any forum to vindicate their rights.[4]

At the same time, wages for most workers are stagnant. At the federal level and in 21 states, the minimum wage stands at its 2009 level of $7.25, with a shameful $2.13 minimum wage for tipped workers.[5] Less than 7 percent of U.S. workers receive overtime pay when they work more than 40 hours a week, compared to 60 percent in 1975.[6]

While the Fight for $15 has raised wages for millions of workers, a higher minimum wage doesn't address stagnating wages across the entire bottom half of the income spectrum and doesn't address the full range of workplace conditions, including training, a voice on the job and basic social insurance benefits. Unlike most of the world, workers in the United States have no federal entitlement to paid sick days or paid family leave. Retirement security is an issue for all workers, but households of color are far less likely to have adequate retirement savings than white households.

Workers cannot rely on the federal administration or Congress to address inequality, lack of voice and ongoing structural racism. The early years of the Trump Administration instead saw rollbacks or delays in many of the modest advances made in the Obama Administration, including overtime, health and safety standards, labor standards enforcement, standards governing conflicts of interest by financial advisors and disclosures of anti-union consultants.

Nor can workers expect help from the Supreme Court, whose rulings in the *Janus* and *Epic Systems* cases threaten both to starve unions and cut off workers' access to the courts.[7]

The good news is that with inaction and backsliding at the federal level, states, cities and organizing groups are taking action: raising standards, restoring accountability, building new forms of worker organizing and harnessing technology to serve people rather than investors and CEOs.

Using a range of strategies, they are striving to build a future of work with meaningful and dignified jobs available to all, free from structural bias, a future where workers can provide meaningful input into practices and policies that affect their lives and livelihoods. Many of the innovative strategies outlined here are moving us towards that future.

RAISING STANDARDS

Minimum wage. When fast food workers first walked off the job in New York City in 2012, launching the Fight for $15, they unexpectedly ignited a movement. Since then, 22 million workers have won raises totaling $68 billion, as 24 states and 20 cities have raised their minimum wages, many to levels of $12 to $15 per hour.[8] In 2018, Arkansas and Missouri voters overwhelmingly approved initiatives raising their states' minimum wages. In 2019, Illinois, Maryland, New Jersey and Connecticut joined the growing list of states that have approved a $15 minimum wage.

These successes have led to some major companies, including Amazon, Target, Costco Wholesale and Home Depot, extending the $15 minimum wage to all their workers, but these victories are just a first step towards reversing extreme income and wealth inequality in the United States.[9]

Sector-based approaches. Innovative sector-based proposals are creating new ways to raise standards and build workers' organizations. These campaigns are taking place in sectors dominated by women, people of color, and immigrant workers, historically either formally excluded from basic labor standards or subjected to poor-quality jobs.

One aspect of inequality is that companies often outsource core activities to third party contractors—including logistics firms, temporary and staffing agencies, or other "labor only" contractors. The practice allows companies to disavow any responsibility towards workers, leaving workers without any employment rights or wondering who's the boss.[10] Therefore, a number of campaigns have worked to eliminate or blur the distinction between rights of "employees" and those of "independent contractors," to ensure businesses have no incentive to evade their responsibilities to workers.

STATE AND LOCAL GOVERNMENTS ACT TO PROTECT WORKERS

Long-term Care. In its 2019 legislative session, the state of Washington created a trust fund for services and supports related to long-term care, funded by a paycheck deduction. This is the first publicly funded long-term care program outside of Medicaid and Medicare and a program that will potentially serve as a model for other states. Washingtonians could be eligible for up to $100 a day in services for 365 days, for a lifetime benefit of $36,500.

Child Care. In Alameda County, Calif., a 2018 campaign proposed to create an expanded subsidized childcare program for lower-income and middle-class families. It combined opening affordable childcare to more of the working class with upgrading subsidized childcare jobs significantly, financed by a half-cent sales tax increase. It fell just short of the required two-thirds vote threshold, but nevertheless creates a model for further action.

Domestic Workers Bills of Rights. The Seattle City Council approved a domestic worker bill of rights and the creation of a wage and standards commission that includes representation by domestic workers themselves on an equal footing with business. The law applies whether or not workers are designated as employees.

Transportation Network Company Laws. In Portland, Ore., the City Council passed a resolution to give both Uber and Lyft drivers and impacted communities a voice in how transportation network companies (TNCs) are regulated. The

New York City Council passed a series of measures that create a wage floor for TNC drivers, a "pause" on the addition of new vehicles and rules that level the playing field for taxi and TNC drivers alike.[11]

Fighting Sexual Violence on the Job. California responded to pervasive sexual assault of janitors in 2016 with the Property Services Worker Protection Act, which helps protect janitors by mandating sexual harassment and assault prevention training and registration of property services contractors. Similarly, cities including Chicago, Seattle, Oakland, and Long Beach, Calif., have enacted measures requiring that hotel room cleaners be provided panic buttons when they enter rooms alone and establishing workload standards for room cleaners.

Temp and Staffing Agency Worker Protection Laws. African American and Latinx workers are overrepresented in the temp and staffing industry, where employment is at an all-time high, and workers are paid 41 percent less on average than directly hired workers, usually with no benefits.[12] In recent years, work in the temp and staffing sector has shifted from largely clerical to much more dangerous production and transportation occupations.[13] In 2017, Illinois adopted model temporary agency worker protection legislation. The law ensures that temp and staffing agencies report demographic information about the workers they hire; never charge workers for background checks, drug tests and credit checks; notify temp workers about the types of equipment, protective clothing and training needed to perform the job; provide transportation back from a job site if transportation was provided to the job site; and place their temporary workers into permanent positions when they become open.

USE OF PUBLIC FUNDS FOR PUBLIC GOOD

States and cities are shaping their economic futures by acting to expand quality job opportunities to people and communities that have traditionally been left out.

Fair Pay and Safe Workplaces for Public Contractors. States can and should require companies seeking state contracts to disclose all recent federal, state, and local employment violations before receiving state money. While no state has enacted a comprehensive law, North Carolina has adopted a $15 per hour minimum wage for public contracts.[14] In addition, inclusive procurement and contracting involve a suite of policies to ensure that minority- and women-owned businesses have a fair shot at public contracts.[15]

Promoting Targeted Hiring of Workers from High Unemployment Communities. Many cities are successfully using "targeted hiring" and "first source" programs to ensure that public projects expand access to jobs for workers from communities with high unemployment rates.[16] Given the disproportionately higher rates of unemployment in African American communities that have been shut off from economic opportunity for decades, these targeted hiring programs are an important step toward greater employment equity.

Fair Chance Hiring. States are taking action to promote fair hiring for the one-in-three adults in the U.S. who have an arrest or conviction record.[17] Thirty-three states, including Georgia, Kentucky, Louisiana, North Carolina, Tennessee, and Virginia, have adopted "ban the box" policies to open up job opportunities in state and local government, with

11 states extending fair chance hiring to the private sector.[18] A dozen additional states have taken steps to remove barriers created by unfair occupational licensing laws.[19]

Fair Workweek Laws. Five cities and one state (San Francisco, San Jose and Emeryville, Calif.; Seattle; New York City; and Oregon) have responded to businesses' increased use of "just in time" scheduling. These locales have passed comprehensive fair workweek laws, which provide workers with greater stability, predictability and flexibility in their work schedules.[20] Some measures also require employers to give part-time staff opportunities to increase their hours before adding new staff.

Harnessing Technology. Technology has facilitated the breaking up of what once were full-time jobs into short-term, part-time, poorly paid, be-your-own boss "gigs." It has enabled employers to impose just-in-time scheduling that gives workers little advance notice of their shifts. It has been used to surveil workers throughout the workday and to outsource management to algorithms and unmonitored consumer-sourced performance review systems. Workers' demands are kept in check by threats of automation, though there is little evidence that suggests that automation is permanently increasing unemployment.

While new technology has been introduced into workplaces in unilateral moves, workers are starting to undertake campaigns to address some of its most pernicious effects.

Workers' Voice in Development of New Technology. While workers have largely not been invited to the table when technology that affects them is being discussed, workers could shape automation in several ways, and some such efforts are emerging. California has committed to an ongoing process of developing federally required Electronic Visit Verification for Medicaid-funded personal care services, through a collaborative process that respects the privacy and dignity of providers and recipients of care, is minimally burdensome and includes training of all recipients and providers.[21] And the Teamsters' tentative deal with UPS calls for advance warning to the union of technological deployments and for the creation of a committee with union and company representatives that would negotiate over the effects of the technological changes.[22]

CONCLUSION

States and cities have long been the laboratories for development and testing of new labor standards. After the 2018 election, more states and cities are likely to address issues of job quality, especially as these relate to new structures of work, new technologies and new approaches to reversing inequality. Gov. Jay Inslee of Washington has outlawed forced arbitration in state contracts and, along with Pennsylvania Gov. Tom Wolf, is acting to strengthen workers' overtime pay guarantees. [23]

Many of the gains made at the local level are still threatened by the strategy of state government "preempting" local standards. In recent years, big corporations and their lobbyists have stepped in when cities and counties have tried to address workers' needs for a higher minimum wage, paid sick days and other progressive change. These preemption efforts disproportionately impact efforts by communities of color to improve local economic conditions and address specific localized concerns.[24] At least one governor, Jared Polis of Colorado, pledged to end preemption after the 2018 election.

Deeper change still needs to happen on a national level: changes to national tax policy, antitrust enforcement, creating a strong national system of social insurance and health care, reforming the National Labor Relations Act and creating a just transition in response to climate change. The case studies in this section tell the stories of efforts in three regions that have implemented local campaigns and policy changes to address challenges facing workers in today's economy and that of the future.

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CASE STUDY

Missouri's Fight for 15: A Long-Term Campaign to Secure Dignity for Workers

Richard von Glahn / Caitlyn Adams

Missouri's unemployment rate has been below the national average since 2011, but wages in the fastest-growing employment sectors in the state, such as healthcare, accommodation, food services and retail, remained well below the self-sufficiency standard as of 2018.[1] Full-time, minimum wage work equated to just over $16,000 per year. As a result, 793,000 Missourians, nearly 13.5 percent of the state, lived below the federal poverty level as of 2017.[2] Women make up the bulk of the workforce in these industries and earned a median wage of just $21,088 in Missouri in 2016. Missouri is not facing an employment challenge; the challenge is ensuring that jobs being created pay a family-supporting wage.

Contributing to this problem is that many of the jobs in the food service industry are taking advantage of outdated labor laws that allow them to avoid unionization efforts. By using joint employer designations and franchising, corporations such McDonald's can create national brands and profits, while avoiding traditional employer responsibilities including collective bargaining.[3] With an increasing percentage of the U.S. economy being organized in corporate structures that could can unionization, the labor movement has continued to shrink and lose the leverage it once used to set not just wages for their members, but for the entire economy.

The Fight for 15 steps up to meet this challenge by organizing workers, regardless of whether they can achieve immediate union recognition. The Fight for 15 does not just challenge individual corporate behavior but an entire economy that is leaving millions of workers behind. While unionization has always been a demand of the Fight for 15, it has not been the sole focus of the worker's efforts, allowing the campaign to deliver short term victories for workers while maintaining momentum for long term systemic change to our nation's labor laws.

St. Louis was the third city in the nation to host strikes of low-wage workers in the fall of 2013, and the actions galvanized public support for the rights of low-wage workers across the city. In response to the calls and actions of low-wage workers in St. Louis, local politicians called for legislation to meet workers' demands. In the spring of 2015, St. Louis Mayor Francis Slay announced his support for legislation to gradually raise the minimum wage in the city to $15 an hour. St. Louis was one of the first cities in the Midwest to act, and one of the first in a state with a legislature that was hostile to the idea.

The opening hearing featured workers who led the Fight for 15 as well as community allies. The workers effectively framed the debate as a question of dignity.

> *"I believe all work has dignity. Anyone who is willing to work hard at their job should make enough money to take care of themselves without having to rely on government assistance or food pantries. I love both my jobs, but I don't love the stress of worrying if my paycheck will be enough to cover my bills*."—Candice Young, a leader in the minimum wage campaign who worked in two low-wage jobs.

Hundreds of low-wage workers testified, canvassed and phone-banked their local elected officials to raise the wage. Despite an aggressive campaign of scare tactics from the National and Missouri Restaurant Associations, including threats of job losses and automation due to higher wages, low-wage workers in St. Louis notched a major victory in August 2015 as Mayor Slay signed legislation creating a St. Louis minimum wage ordinance, the first of its kind in Missouri. But the victory would not last.

Business groups immediately sued to block the increase and implementation was delayed as a result of the legal proceedings. With a delay secured through court action, industry associations turned to their allies in the state legislature to nullify the increase. Preemption of local legislative and regulatory authority had become a national movement backed by various industry groups seeking to use state legislative powers to limit actions taken by progressive municipalities.

A NATIONAL EFFORT TO PREEMPT PROGRESSIVE LOCAL ACTION

After historic Republican gains in state legislatures and governors' offices during the 2010 and 2012 election cycles, progressives increasingly turned to local municipalities to enact economic justice policy reforms. In response to these municipal campaigns, conservative, corporate-backed groups such as ALEC deployed the concept of preemption to retain control at the state government level, where they held wide power.

States with conservative legislatures and progressive cities, such as Missouri, Alabama, Minnesota, Texas, Arizona and Florida, quickly became battlegrounds over the concept of local control and state preemption. States began to pass laws banning local ordinances of a host of issues.

While 10 states had previously banned local minimum wage increases, 26 do now, an increase of 16 states in just eight years. Similarly, preemption of paid sick leave requirements has become widespread. Prior to 2011, only Georgia preempted the policy; today, 22 states do.

After workers scored a unanimous victory at the state Supreme Court,[4] state legislators took quick action to cut the increase before it would go into effect. Workers again mobilized to save their increase, and some legislators launched a filibuster to stop the nullification vote. The final hours of the 2017 legislative session were dedicated to the fight to save the raise these workers had won. Despite this effort, legislation to roll back the wage increase passed. Nearly 18 months after the city had passed the minimum wage increase, workers saw it reflected in their checks in May of 2017. But by August of 2017, the state legislation went into effect, and the raise they had fought so hard for was wiped out.

Knowing that their victory was going to be short-lived did not demoralize the workers. Instead, workers spent the summer of 2017 organizing over 200 St. Louis businesses to pledge to honor the wage increase[56], even if state legislation gave them the authority to roll it back. With local businesses standing by their side, advocates also used the rollback of the St. Louis ordinance to launch Raise Up Missouri, a statewide campaign to raise wages across Missouri. On the day the state legislation to roll back the St. Louis minimum wage went into effect, Raise Up Missouri was launched at a local brewery, with workers and their allies renewing their calls to raise the wage[7].

Throughout the rest of 2017 and into 2018, workers and their allies gathered over 200,000 signatures all across Missouri to put Proposition B on the November 2018 ballot. Proposition B proposed a gradual increase of more than 50 percent in the state minimum wage. Voters from across Missouri approved the measure with over 62 percent of the vote. Proposition B won a majority in 31 out of 34 state Senate districts and 145 out of 163 state House districts, including 19 that simultaneously elected a Republican. Six years after low-wage workers first went on strike in Missouri, workers saw the first of five increases in their January 2019 paychecks.

> *"When Proposition B passed with 62 percent of the vote, I was thrilled. And when the paychecks of my friends and co-workers rose on January 1, I knew we had boosted the economy and supported thousands of families across this state."*[8]—Sherry Golden, a home care worker who collected signatures and campaigned for the minimum wage proposal.

Estimates are that by the time Proposition B is fully phased in on January 1, 2023, it will directly impact one in five Missourians, and indirectly impact one in three. What began as a small group of low-wage workers demanding better treatment at work, culminated in a profound shift in the future of low-wage work for hundreds of thousands of workers. Proposition B is estimated to generate $1 billion of economic activity in just five years by putting more money in workers pockets.

As the economy continues to further bifurcate into high- and low-wage work, state and local policymakers will increasingly need to address job quality and whether full-time work should result in family-sustaining wages regardless of the job. Wage inequality is at an all-time high in the U.S., and that will not be effectively confronted by organizing 50 workers at a time. The Fight for 15 raises the question about whether or not FDR's words spoken nearly a century ago still ring true: "No business which depends on existence on paying less than living wages to its workers has any right to continue in this country...by living wages I mean more than bare subsistence level, I mean the wages of a decent living."

The policy success of campaigns like the Fight for 15, which has secured an estimated $68 billion for over 22 million workers in just five years,[9] suggest that Americans still agree with the premise that honest work should lead to honest pay. Campaigns that engage and empower workers to tell their stories and advocate for fair and family-sustaining wages are critical to building support, changing the narrative and strengthening policy to ensure that large swaths of our workforce are not left behind in the future of work.

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Richard von Glahn serves as the policy director for Missouri Jobs with Justice, a coalition of labor, community faith and student groups that fight for worker's rights and economic justice. Prior to joining the staff of Jobs with Justice, Richard served as the organizing director for CWA Local 6355, a statewide public employee union.

Caitlyn Adams serves as the executive director for Missouri Jobs with Justice. Prior to Jobs with Justice, Caitlyn worked on political candidate campaigns but was frustrated at the voter industrial complex and felt more compelled to be a part of a community driven agenda and be directly in solidarity with workers organizing on the ground.

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CASE STUDY

Passing and Implementing Secure Scheduling in Seattle

Daniel Schneider / Kristen Harknett

In the present and future service economy, when and how much we work is just as important as our wages and benefits. Across the economy, but especially in the large and growing retail and food service sectors, employees no longer work 9 to 5 or even a regularly scheduled eight-hour night or evening shift. Instead, work schedules appear increasingly unstable, with shifts that vary week-to-week and day-to-day, often with little notice and little employee input.[1] Such unstable and unpredictable work schedules both increase work-life conflict and household financial insecurity, with resulting negative effects on workers' health and wellbeing.[2]

In 2017, Seattle enacted an ordinance designed to offer more stable and predictable work schedules. To assess baseline scheduling conditions before new scheduling rules took effect, The Shift Project (which we co-direct) collected survey data from more than 700 retail and food service workers in Seattle in the spring of 2017. As shown in the accompanying figure, last-minute scheduling was common, with 48 percent of workers reporting receiving fewer than 14 days' notice of their work schedule. Assigned work schedules also involved a great deal of instability, with a sizeable share of workers experiencing on-call work, shift cancellations and other types of last-minute schedule changes. One-third of respondents indicated they worked back-to-back closing then opening shifts. Eighty-one percent of workers reported having limited or no input into their schedules, and 75 percent reported wanting more stable and predictable work schedules.[3]

Under Seattle's Secure Scheduling Ordinance, these types of schedule instability are regulated.[4] As one of the earliest adopters of scheduling legislation, Seattle can provide lessons for other localities considering a similar path, both in terms of how the legislation was passed and what has been learned from the process of implementation and enforcement.

A Campaign for Secure Scheduling

Declaring, "I'm a second generation Starbucks worker and I want a Fair Workweek," Darrion Sjoquist, a Starbucks barista and activist, served public notice in 2015 that a coalition of retail workers, unions, advocacy groups and elected officials would pursue legislation in Seattle to regulate work scheduling in the service sector.[5] His call to action was followed in early 2016 by a concerted multi-pronged campaign for legislation in Seattle. The campaign was led by Working Washington, a statewide advocacy group founded in 2011 with a mission of improving working conditions, and supported by a coalition of labor groups including UFCW Local 21, SEIU Local 775 and the King County Labor Council.[6] The campaign made a public case for scheduling reform in Seattle, using the media, social media, marches, data releases and satirical protest.[7] By mid-2016, calls for scheduling legislation had gained momentum, with then-Mayor Ed Murray and City Councilmembers Lorena González and Lisa Herbold collaborating to advance legislation.[8]

Through the spring and summer, this campaign for secure scheduling also met with resistance as business groups and company executives spoke out against the proposed legislation and released competing reports, framing the legislation as imposing onerous regulations on private business to solve a problem that didn't really exist.[9] After a series of public meetings and committee hearings, where business groups highlighted the potential costs and burdens of implementing these changes while workers spoke about the financial and human toll of the current scheduling policies, legislation was ultimately introduced in August 2016.

The Secure Scheduling Ordinance

Seattle's Secure Scheduling Ordinance drew on key provisions of its legislative predecessor, San Francisco's Formula Retail Employee Rights Ordinance of 2015. As in San Francisco, the Seattle ordinance requires employers to provide at least 14 days' advance notice of work schedules or provide workers "premium pay." It also requires premium pay when shifts are cancelled, added or changed after they are posted. An "access to hours" provision stipulates that current part-time workers be offered additional hours before new part-time workers are hired. Extending the provisions of the San Francisco law, Seattle included a "right to rest" provision that entitles workers to extra compensation when they work consecutive closing and opening shifts with less than 10 hours in between. The legislation also requires that employers provide good faith estimates of the number of work hours for the coming year and gives employees the right to work-schedule accommodations for a major life event or health reason. Workers employed at retail, food service or casual dining establishments with at least 500 workers worldwide are covered by the Seattle ordinance.[10]

Following committee hearings, the law was passed by a unanimous vote of the City Council in September 2016 and signed into law the following week by Mayor Murray.[11]

Implementing the Law

Following passage of the law, a rule-making process began in which the detailed provisions of the law were refined. This process was led by Seattle's Office of Labor Standards (OLS), which convened nine meetings of stakeholder businesses, worker advocates and others in the spring of 2017.[12] These meetings provided a venue to work out important details of the law. For instance, through this process, the rules established a 15-minute grace period before premium pay would be triggered. The law did not require premium pay if the offer to extend a work shift was presented to workers via mass communication, and the rule-making process defined mass communication. More broadly, the rule-making process provided a venue for dialogue between regulators, business and worker groups and the chance for OLS to carefully think through specific situations that might arise in the workplace. OLS issued final rules in April 2017.[13] Both worker advocates and business groups maintained their engagement through this extended process.

The Secure Scheduling Ordinance was just the second such law passed in the nation. The law was innovative and regulated a complicated area of employment relations, which also meant that most constituencies were unfamiliar with its mandates and protections. OLS undertook a large-scale public education campaign targeted to both employers and covered workers—holding 40 in-person or webinar training sessions for employers and 220 community partner trainings, responding to 560 employer inquiries and providing template forms for employers and posters in 17 languages to inform workers of their rights.[14] The need for this campaign was plain. In survey data collected prior to the implementation of the law, just 39 percent of covered English-speaking workers and 29 percent of covered workers with limited English had heard about the law. Through in-depth interviews with front-line managers, researchers Susan Lambert and Anna Haley found that 30 of 52 managers they interviewed were unaware of the ordinance a short time before it was to take effect.[15]

Seattle is one of the few large cities in the U.S. to have a dedicated labor enforcement office. This capacity is crucial to effectively enforcing the mandates of the law. Following a "soft launch" from July to December 2017, OLS initiated 24 investigations by December of 2018, examining allegations of insufficient advance notice and a failure to provide access to hours. By the end of 2018, OLS had resolved seven of these cases, assessing $111,863 in payments for 550 affected workers, with several other investigations pending, and several more on a waitlist.[16] At the same time, OLS was tasked with enforcing and educating the community on several other major labor laws—

including paid sick leave, minimum wage and others. While the city of Seattle has significant capacity for labor law enforcement through its 23-person OLS staff, including 10 staff persons dedicated to investigations, enforcing this wide range of labor laws continues to be a big lift.[17]

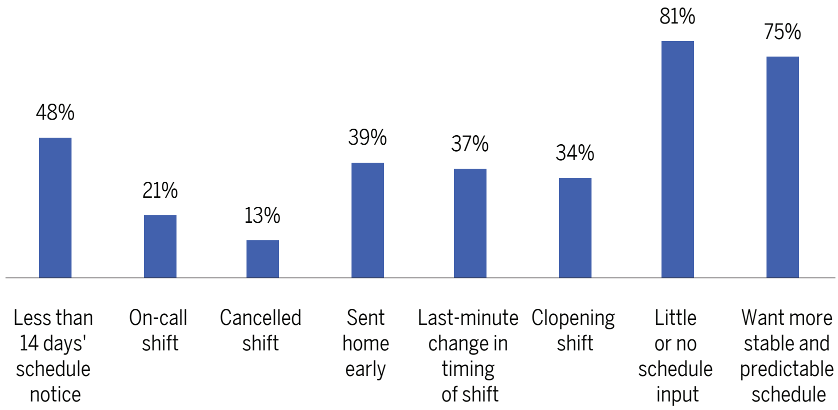
What's Next?

Seattle is now undertaking an evaluation study, which includes follow-up survey data from workers and interviews with frontline managers. This will be the first-in-the-nation evaluation of a secure scheduling law and should provide valuable data on implementation and impact. A key evaluation question is whether Seattle workers now receive more advance notice, fewer schedule changes and more compensation when schedules do change. The evaluation will also explore whether the ordinance has had unintended consequences or costs to workers, such as reduced work hours. Future evaluations might also explore whether the ordinance has had longer-term impacts such as improvements in worker financial security, health and wellbeing.

There is a growing awareness of the prevalence and challenges of unstable and unpredictable work schedules in cities and states across the country. Workers with unstable and unpredictable schedules experience greater stress, income instability and difficulty managing caregiving responsibilities, while local economies may experience constrained spending due to unpredictable incomes.[18] A local ordinance may be one way to create more stability and financial health for families and communities.

As other localities consider similar laws to regulate these scheduling practices, some key insights emerge from the Seattle experience. First, a coalition of workers, advocates and engaged policymakers is crucial to passage. Second, the need for detailed regulations must be balanced against the challenges created by complex legislation and rules. Third, bringing together a broad coalition of stakeholders including workers and employers is key to effective education and implementation. Finally, the role of a sufficiently staffed and funded regulatory authority is crucial to ensure public and business awareness and compliance. These outreach and public education efforts are aided by strong community partnerships, which can provide credible messengers that help in reaching diverse populations of workers. Passing the law is only one step on the road to more stable and predictable schedules for retail workers. Rule-making, education and enforcement are key.

Figure 1. **Schedule conditions for Seattle retail and food service workers in Spring 2017, before Secure Scheduling Ordinance took effect**



Source: Authors' calculations from the Baseline Seattle Secure Scheduling Ordinance survey.

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