



Women and the future of work in the United States



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Washington Center *for* Equitable Growth

Evidence for a stronger economy

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Foreword

By Anna Wadia and Rachel Korberg

The story of the past several months is a fast-moving tragedy in a long moment of crisis for working people. Since the start of the coronavirus pandemic and resulting recession, 1 in 5 people in the United States have been laid off. They have been scrambling to keep a roof over their heads and food on the table by piecing together support from our fragmented social safety net. For essential workers—such as those working in meat processing, agriculture, and healthcare, who are disproportionately people of color and women—work has become anxiety-producing at best and scary at worst, with thousands falling sick and many dying. And those of us who were able to transition to remote work are struggling to balance the child care, eldercare, and education needs of our families with our job responsibilities.

These recent challenges follow a half-century of rising income and wealth inequality, shrinking worker benefits and social insurance programs, and persistent gender and racial pay and wealth divides. Put simply, the U.S. economy is stacked against working people and families. It is especially stacked against women workers and Black, Latinx, and Native American workers, and it is most stacked against Black women workers.

To address the economic crisis caused by the pandemic, Congress acted quickly by providing a direct assistance payment to most households, expanding Unemployment Insurance benefits, and extending, for the first time, federal paid sick and family leave protections for some (but too few) workers who had never had them before. But these are temporary and limited measures. Some of them directly benefited women workers, but much more is needed to address the long-term gender inequities embedded in our economy.

In our search for solutions, the robust future of work conversation in this report is one critical place to look. The report aims to expand that conversation from one that is so often focused on robots replacing jobs to one that is more about the types of structural changes and innovations we need to create an equitable future for all workers—especially women and people of color. While new technologies hold tremendous promise, the current, highly inequitable social and economic context of their use too often means that they are applied in ways that entrench the status quo of low and unstable pay, shrinking benefits, and lack of worker voice.

These longstanding, structural labor market issues and how they will shape our future were uppermost in our minds when the Ford Foundation sat down in 2018 with the Washington Center for Equitable Growth, the Institute for Women's Policy Research, the National Women's Law Center, and MomsRising to plan a national conversation about women and the future of work. Little did we know that before we issued this report, a pandemic would shine a harsh light on the inequality, lack of worker power, and need for transformative action unpacked in the following pages.

In June 2019, Ford co-hosted a convening with these partners that featured scholars and advocates who had done extensive work on economic and social issues related to gender and worker power. We had a wonderful, productive conversation that helped to lay out the problems, what research was needed, and a path forward. We learned a lot about what we know and, more importantly, what research was needed to understand how the future workplace, with whatever technological developments may come, can be made more equitable and productive for women and for all workers.

This report compiles what we learned at the convening, lays out a research agenda going forward, and also suggests some areas where we already know that policy transformations can improve the conditions under which millions of women work and give workers the power to insist on fairness, safety, and equity in the workplace.

The report connects the problems and opportunities posed by technology to these longstanding workplace issues. It discusses how technological change is likely to affect women and men differently because of occupational segregation. It describes how the gig economy may enhance flexibility for some workers, while leaving many more vulnerable because of low pay and poor benefits. It raises the possibility that technology can help address discrimination by providing pay transparency, as well as concerns that hiring and worker evaluation algorithms could exacerbate gender and racial biases. It speaks to the potential for technology-enhanced lifelong learning. It addresses the ways in which technology can be used by workers to organize unions, and by employers to hinder them.

Finally, many of the report's policy proposals for responding to all these problems relate directly to the issues facing women in the workplace in the wake of the pandemic. Restoring the ability of workers to organize into unions would give workers voice when it comes to safety and other working conditions. Mandating universal paid leave and child care would relieve workers from having to make the horrible choice of either caring for themselves or a loved one or earning a paycheck. Other proposals—among them expanding discrimination protection, combatting sexual harassment, providing for stable schedules, and requiring greater pay transparency—would improve pay and working conditions for the women most deeply affected by the pandemic.

We hope this report will fundamentally shift public understanding of the future of work so that the need for gender equity and the broader issues facing workers in the United States are central to provoking the change that true equality demands. We look forward to continuing to help spark that change.

—**Anna Wadia** and **Rachel Korberg** are program officers in the Ford Foundation's *Future of Work(ers)* program, which focuses on ensuring that all workers, regardless of their status, have equal rights to labor protections, that social protections are guaranteed to all, and that workers shape the policies and economic systems that affect their lives.

Preface

This report was compiled in the latter half of 2019 and the early days of 2020—prior to the onset of the coronavirus pandemic and the recession it caused. The devastating economic pain the recession has already wrought could have been lessened by a stronger public safety net. Instead, the need to modernize and strengthen our automatic stabilizers, as described in the second half of this report, now stands in stark relief. And while the coronavirus pandemic and ensuing recession are affecting nearly everyone, these twin crises are hitting women, and women of color in particular, first and hardest.

Women, especially women of color, were more likely than men to be struggling to make ends meet before the crisis.¹ They are now more likely than men to be facing unemployment.² Women of color are also disproportionately represented in front-line jobs that are newly deemed essential but remain low paid and high risk.³ And, given the structural inequities baked into our economy, women and people of color will likely experience any recovery last and least, unless we dramatically improve our public response.

To date, the federal legislative response has been important but insufficient. So far in 2020, Congress substantially expanded Unemployment Insurance protections, including making a limited form of benefits available to independent contractors and other workers traditionally excluded from Unemployment Insurance, but states have struggled to set them up and process claims in the midst of a massive increase in demand for help.⁴ Congress created new rights to paid sick days and longer-term paid leave for some workers under some circumstances—but gaping exclusions leave millions of workers who most need them without protections.⁵ Congress also boosted federal funding for the child care assistance program, but by only a small fraction of the amount needed to ensure that there will be a functioning child care system in place when the pandemic recedes.⁶ And the list goes on.

In every case, the measures enacted thus far failed to match the magnitude of the crises we face or provide the long-term solutions that will be needed to address the long-term economic damage wrought by the coronavirus recession. The structural reforms identified in the second half of this report remain sorely needed—as the first half of the report attests and as the devastation wrought by the coronavirus recession demonstrates. But there remains an opportunity for transformative policy change that produces an economic recovery that works for all of us—and women and people of color stand to gain the most if we can leverage relief and stimulus policy to advance equity and prepare for the future of work.⁷

—Heather Boushey, Washington Center for Equitable Growth

Heidi Hartmann, The Institute for Women's Policy Research

Fatima Goss Graves, The National Women's Law Center

Kristin Rowe-Finkbeiner, MomsRising



Overview

The U.S. labor market today is characterized by large and growing inequality.⁸ Median wages have stagnated or fallen in many jobs while outsized gains have gone to the wealthiest in the nation.⁹ Wealth and income inequalities are particularly stark for women, especially women of color, the vast majority of whom continue to experience tremendous pay and wealth gaps relative to men.¹⁰ Yet these existing inequalities and power dynamics are typically not considered in public discourse on the future of work. Instead, these discussions tend to be narrowly focused on automation, the transformative potential of artificial intelligence, and other technological innovations.

The extraordinary risk of reinforcing existing economic disparities, including gender and racial inequity, is rarely considered. Nor is the potential for working people and policymakers to harness these new technologies to advance worker power and improve job quality. In June 2019, the Washington Center for Equitable Growth, the Institute for Women's Policy Research, the National Women's Law Center, and MomsRising came together with researchers and advocates at the Ford Foundation for a "Women and the Future of Work" convening to start a new conversation that puts collective agency and gender equity at the heart of the future of work conversation. Participants tackled these key questions:

- What do we know about the potential impact of technology and automation on women's work? What policies are driving its current evolution?
- Where are the gaps in the existing research? What do we need to know to inform policy and ensure that technological change does not entrench the gender disparities and structural barriers of the past?
- How can we bring a gender lens to research and policy development on the future of work and ensure that the experiences of women who face multiple and intersecting forms of discrimination are considered?

To kick off the event, Anna Wadia of the Ford Foundation moderated a plenary session with Heather Boushey of the Washington Center for Equitable Growth, Heidi Hartmann of the Institute for Women's Policy Research, Fatima Goss Graves of the National Women's Law Center, and Kristin Rowe-Finkbeiner of MomsRising.

This conversation highlighted the threats and opportunities that technological change poses for gender equity, noting that without policies designed to ensure technology improves job quality for women and historically vulnerable groups, new technologies may deepen existing gender, racial, and ethnic inequities.¹¹

Yet, the speakers also noted reason for optimism. Social movements, exemplified by the #MeToo movement, signal a growing consensus that a commitment to safety, health, and dignity at work must include an explicit focus on gender equality. To help understand how the structures of the U.S. economy shape the real and potential effects of technological innovation, cutting-edge economics research is helping to illuminate the gendered consequences of income and wealth gaps, as well as the potential for policies to alleviate existing disparities. Similarly, research shows that technological change can be harnessed to create more opportunities for greater gender equity at work. The different groups and individuals gathered at the “Women and the Future of Work” convening show that there is the organized capacity and commitment to turn this potential into a more equitable future.

“Too often, conversations about the future of work have been led by champions of technology. That technology will have only positive effects is therefore tinged with inevitability. We must unpack these implicit assumptions and ask who will gain from technology, who owns the robots and keeps the profits, and what will human beings do?”—**Heather Boushey, Washington Center for Equitable Growth**

“Technology will change the substance of jobs in the future. But gender-based job segregation means that technological change will affect women and men differently. It’s essential to analyze carefully the positive and negative effects for different groups of workers.”—**Heidi Hartmann, Institute for Women’s Policy Research**

“The workplace is increasingly fissured, with gig workers often replacing traditional employees. Technology has the potential to disrupt or to calcify workplace inequities. Women of color are especially vulnerable to precarious work arrangements, but as such arrangements become more common, this provides an opportunity for increased solidarity among—and better protections for—all contingent workers.”—**Fatima Goss Graves, National Women’s Law Center**

“The future of work will repeat many of the mistakes of the past unless we all demand intentional, conscious change to address structural racial, gender, and other inequalities that have long permeated our workplaces and have held back our businesses and families from more fully thriving. We have a chance to lift families, businesses, and our economy if we build toward a just future of work. Gender, race, and economic justice must be intertwined in these efforts. Technology will be shaped by human hands, our policies can be shaped by our communities, and together we can shape a future of work that works for everyone.”—**Kristin Rowe-Finkbeiner, MomsRising**

Key themes of our report

This report details the conversations, research questions, and policy proposals discussed during the “Women and the Future of Work” convening. The first section reviews the substance of the conversation among leading scholars and policy experts on what research reveals about the intersection between technology, labor, and gender, identifying risks and opportunities for new workplace tools to help achieve greater gender equity. Technology is already changing the way people find employment opportunities, are hired, supervised, trained, and treated at work. Using a gender lens to examine how these changes may affect the future U.S. labor market is essential to build more equitable, safe, and productive workplaces. Here are the five research areas highlighted by thought leaders at the convening.

The impact of automation on women’s jobs and men’s jobs

Because women and men are overrepresented and underrepresented in different types of work, analyses of the impact of automation on employment must consider how gender interacts with the U.S. occupational structure. Employment projections not only show that many women-dominated fields are at particular risk of being replaced by technology in the coming years, but also that automation is especially likely to reduce employment in middle-income and well-paid occupations predominantly held by women. An agenda for women and the future of work must continue to analyze how different groups of workers are going to be affected by automation, as well as examine how automation can improve job quality in the low-wage sectors where women are overrepresented.

Digital platform work

The so-called gig economy is creating new avenues for alternative work arrangements, highlighting how the lack of benefits and labor protections can leave many workers unprotected in the face of health and security concerns, workplace abuses, and economic insecurity. Women, and especially women of color, are often particularly exposed to these risks. Yet digital platform work also can offer workers flexibility, autonomy, and support from organizations that are committed to improving the conditions of platform work. Research on women and the future of work should therefore examine how existing gender and racial inequities interact with alternative work arrangements and access to labor protections.

Innovations in information technology

New tools are changing the way workers are hired, monitored, and evaluated, raising concerns about employers' abilities to breach employees' privacy, make hiring and promotion decisions through algorithms that replicate gender and racial biases, and cut costs via labor-optimizing technology that can diminish job security. If employers incorporate workers' input, however, then these tools could potentially create more fair and safe workplaces by increasing workplace transparency and offering employees new ways to voice their preferences in how and when to work. Future research on information technology and gender should therefore consider how these tools affect the opportunities and experiences of different groups of workers.

Education and lifelong learning

Education and lifelong learning are ongoing parts of adapting to new technological innovations that affect the nature and content of work. Digital delivery of training and education can complement traditional learning methods. Digital literacy in public education and workforce development throughout the career cycle can provide workers with greater opportunity when combined with a broad policy agenda to address underlying structural inequities and power imbalances that are currently dominant forces in outcomes associated with the future of work.

Collective bargaining and worker organizing

Employers' surveillance of workers and the information technologies available to do so more easily and stealthily can entrench power asymmetries between workers and employers, giving businesses new ways to fight workers' attempts to organize and bargain collectively. But technology can also increase labor's power and foster gender equity by creating new opportunities to organize and train for highly demanded jobs. Moreover, technology can lead to more equitable workplaces, higher-quality jobs, and better pay if workers and labor organizations play a role in the design and incorporation of new workplace tools. A research agenda for women and the future of work should include the opportunities for technological innovation to increase workers' power and examine how the priorities of women workers can be advanced, not least by ensuring that the implementation of new technologies are negotiated with workers and that women workers are actively engaged in that negotiation process.

These five topics are not exhaustive, but they represent key themes for future research and demonstrate the need to incorporate a gender lens when analyzing the future of work.

Policies to ensure more equitable workplaces

In the second section of the report, we turn to the convening's discussion of policy solutions as the way forward for women and the future of work. Policies and labor regulations play a central role in shaping the way technology affects workers, highlighting the need to incorporate workers' input into the design and implementation of new workplace tools, expand rights and regulations that protect all workers from abuses facilitated by technology, and use innovation to create opportunities and better economic outcomes for women. Here are several snapshots of our policy proposals and technology-enabled tools to improve outcomes for women and the future of work.

Ensure protections and build power for working people, regardless of their employment status

For decades, rising economic inequality, the decline of unions, and the erosion of worker protections have made paid work increasingly precarious. Women are especially likely to work in occupations that offer low wages, few benefits and protections, and insufficient career-advancement opportunities. Technological change, if unchecked, may further exacerbate such inequities. Given these challenges, policymakers should guarantee the enforcement of labor regulations and ensure all workers are protected by:

- **Expanding employment rights and protections to cover more workers.** Extend labor protections so that independent contractors, small business employees, domestic workers, and others currently not covered by harassment and discrimination laws are protected.
- **Modernizing and expanding access to public benefits.** Diminish barriers to access benefits and increase investment in the scope, technology, and administration of public benefit programs.
- **Fighting worker misclassification.** Closing loopholes in U.S. labor laws by making it harder for employers to misclassify workers as independent contractors.

Labor law and collective bargaining reform

In order to counterbalance the power of employers and harness the potential of new technologies to foster worker power and gender equity, U.S. labor law should be reformed by:

- **Expand union organizing and collective bargaining rights.**
- **Establish** the power to bargain for industrywide standards and regulations around the implementation of new technologies and beyond.
- **Create** work councils.

Combat harmful and discriminatory applications of algorithmic and artificial intelligence technologies

Policymakers should regulate the technologies employers use to hire, monitor, and manage employees, ensuring that algorithms and artificial intelligence alleviate rather than entrench existing gender and racial biases. Similarly, policies should guarantee that new tools designed to optimize productivity and cut labor costs are not putting workers' safety, well-being, and economic security at risk. Areas policy-makers should focus on include:

- **Platform work, digital monitoring, and employment relationships.** Workers should have access to and control over the data they generate at work or through employer-provided apps and programs. Policymakers should also guarantee workers' right to organize since this right provides a powerful avenue for employees to have a say in how monitoring and surveillance technologies are used.
- **Scheduling stability.** As more businesses turn to "just-in-time" scheduling practices, policies need to guarantee workers' right to a fair and stable work schedule. This includes requiring employers to give workers notice of their upcoming workweeks and compensating them if their schedules change.
- **Algorithms and artificial intelligence in hiring practices.** The reinforcement of gender and racial biases through predictive algorithms and artificial intelligence can be reversed if hiring and promotion practices become more transparent and accountability measures are implemented so that employers can be held responsible for discrimination or harm.

Harness potential for technology to enhance women's safety, opportunity, and voice at work

Policies can help shape the way technology affects women's employment opportunities and economic outcomes. To foster more equitable workplaces, policies should:

- **Address workplace harassment.** As a result of the efforts of unions and advocacy groups, cities and states have begun incorporating panic buttons in hotels in order to prevent harassment, highlighting the potential for technology to prevent and reduce harassment. Virtual technology can also help to deliver harassment training to small workplaces.
- **Increase pay transparency.** Despite some policy efforts, the gender wage gap remains a reality of the U.S. labor market. Increasing pay transparency through legislation such as the Paycheck Fairness Act would help achieve greater equity by protecting workers who decide to discuss their pay with their co-workers.
- **Facilitating worker organizing.** Innovative tools are creating new ways for workers to organize and fight for better working conditions.
- **Enhancing skills development and lifelong learning.** Building a workforce development system that works for all women, including those with child care and other caregiving responsibilities, and advancing the acquisition of skills through union partnerships and other means allow women to pursue education and reskilling opportunities.

Caregiving infrastructure reform

Women do a disproportionate share of caregiving labor within families, creating one of the most persistent barriers to gender equality in U.S. labor market. Adoption of universal policies around paid sick days, paid family and medical leave, and high-quality, affordable child care would alleviate these obstacles by enabling people to care for their families while maintaining their jobs, as well as by improving the quality of jobs for paid care providers.

We turn now to the detailed presentation of our findings and our policy recommendations.



Threats and opportunities for greater gender equity in the future of work

Women's jobs, men's jobs, and automation

Despite the focus on new digital technologies, automation, and artificial intelligence in the future of work, little attention has been paid to the interaction between the potential for technological substitution and gender. In their 2019 report “Women, Automation, and the Future of Work,” Ariane Hegewisch, Chandra Childers, and Heidi Hartmann at the Institute for Women’s Policy Research offer one of the first comprehensive examinations of how automation is likely to shape women’s and men’s employment, showing that the economic consequences of technological substitution may be very different for women than for men.¹²

Hegewisch presented the findings at our “Women and the Future of Work” convening by noting that the U.S. occupational structure is segregated along lines of gender, race, and ethnicity. These differences in occupational distribution imply that different demographic groups will be affected differently by technological change, with jobs predominantly done by women facing a greater likelihood of being automated in the coming years. Thus, while women make up 47 percent of the workforce, they represent 58 percent of workers in positions at the highest risk of being displaced by technology.¹³

Hegewisch, Childers, and Hartman’s analysis also shows that many well-paying jobs predominantly held by women are at risk of being automated, particularly in occupations that do not require university-level education. Clerical and secretarial positions—jobs where the majority of workers are women and that have traditionally provided workers a steppingstone into the middle class—are among the most likely to be replaced by technology in the coming years. Some male-dominated jobs are also likely to be lost due to technological change, but those positions are more concentrated in lower-earning occupations such as grounds maintenance.¹⁴

At the same time, other occupations where women are overrepresented have the lowest potential for technological substitution. Women are more likely than men to

work in child care, healthcare, and education—positions that require nonroutine and interpersonal skills that are difficult to automate. But even though these positions are less likely to be displaced by technology, they often lack the pay, benefits, and career-advancement opportunities of the positions most likely to be lost.¹⁵

Jobs held by women of color are particularly exposed to this dual trend—the simultaneous shrinking of middle-skill opportunities and the expansion of low-wage, precarious positions.¹⁶ Latinas, for instance, are both especially likely to work in occupations at a very high risk of automation and to hold jobs in rapidly growing low-wage care occupations such as nursing, psychiatric and home healthcare, domestic work, and child care work.¹⁷ One in three Latinas (32 percent, compared with 29 percent among all women) works in fields with a very high technological potential for automation, and one of these high-risk occupations—secretary and administrative assistants—is also the highest paid among the most common occupations done by Latinas.¹⁸ Like Latinas, African American women are also more likely to work in fast-growing, low-wage jobs in the care sector.

The employment patterns of Latinas and African American women, then, highlight the risk of narrowly focusing on the potential impact of technology on job quantity rather than quality. In many low-wage care jobs, the prospects for employment are very good, but the prospects for working in a good job, with family-sustaining wages and benefits, are poor.

Women's higher levels of educational attainment compared to men and their concentration in higher-paying occupations, such as registered nurses and elementary and middle school teachers, bode well for women overall, even if these occupations tend to be paid less than predominantly male occupations requiring the same level of educational attainment.¹⁹ Overall, workers with university-level education are likely to be less at risk from technological substitution than others.

Asian American women, with the highest average level of educational attainment and the greatest likelihood of working in information technology occupations among the largest racial and ethnic groups, are least likely to work in occupations at high risk of automation. Yet whether the women are Black, Latina, White, or Asian, the top 10 occupations for each group of women include jobs that do not require university-level education and jobs that pay poverty wages. Office and administrative jobs have already begun to decline; such jobs have often provided access to decent earnings without the need for college-level education.²⁰ Providing support to women to access and succeed in education and training will be increasingly important if office and administrative jobs decline further.

Yet technological disruption, with potential job losses and the need to acquire new skills to master new technologies, is likely to be harder for women than men because women typically have both less time and fewer resources than men. Finding the time and financial resources for reskilling is likely to be particularly difficult for the many breadwinner women who have dependent children and are the main or substantial co-earner for their families. Three in four African American women are the sole or co-breadwinners in their families, as are more than 6 in 10 Native American women and a substantial share of Latinas (46 percent), Asian American/Pacific Islander women (33 percent), and White women (38 percent).²¹

Opportunities in automation

Automation, however, also offers opportunities to create more equitable workplaces through the elimination of barriers that have made it harder for women to hold jobs in certain occupations. To be sure, physical barriers are not the main barrier to access. Outright discrimination and hostile work environments, lower access to networks and information, a lack of female role models, and work patterns set as if workers had no family responsibilities are arguably playing a greater role in keeping women's numbers low in physically strenuous, male-dominated occupations, argued Hegewisch at the convening. That said, in construction work, for example, new automated tools to install drywall, lay brick, set tiles, or frame roofs may reduce the physical strength required to perform these jobs.²²

Similarly, advances in truck designs and loading capabilities can make it easier and safer for women to work as long-haul drivers.²³ So-called no-touch freight technology enables tractor trailers to be loaded using forklifts or other heavy equipment, which requires less physical exertion and reduces the risk of driver injury.²⁴

Questions for future research

As the discussion at the convening revealed, further research is needed to identify the ways in which technology can impact the number and quality of jobs available to workers, which groups will be most affected by automation, and what policies are needed to harness innovation to improve job quality in those occupations most likely to experience growth. A research agenda for women and automation should address the following questions:

- How are women-dominated occupations changing in the coming years and decades? What are the factors accelerating or moderating change?

- How will older women, women of color, and women who are part of other historically marginalized groups be affected by automation? How do these experiences differ by geography?
- Which sectors or types of companies are most likely to present risks or opportunities most present?
- Given the potential of automation, what are the new opportunities for developing high-quality, well-paying employment? What are high-road examples of implementing change?
- What are the short- and long-term implications for women and their families, and for gender (in)equality?

Digital platform work

Conversations about the impact of technology on workers and workplaces in the United States often focus on the so-called gig economy. This broadly includes all nonstandard work arrangements, including independent contractors who are exempt from minimum wage laws, maximum hours, occupational safety and health protections, anti-discrimination laws and regulations, and myriad other U.S. labor market protections applicable to traditional employees. Still, the public perception is largely focused on digital platform work, which includes any kind of nonstandard employment in which work is mediated through a digital platform-based intermediary and pay is based on task-driven output.

Even though the vast majority of workers—including women—continue to work full time, year round in traditional employment relationships,²⁵ the advent of digital platform work such as jobs available through Uber Technologies Inc., TaskRabbit, and Care.com, Inc. illustrates of the ways in which technological and other changes are increasing avenues for nonstandard work arrangements, including part time, temporary, and self-employment.

Digital platform work largely mirrors current patterns of gender-based occupational segregation. One case in point: Even though women are more than twice as likely to work as Uber drivers than as traditional taxi drivers (27 percent vs. 12 percent), men continue to make up the vast majority of Uber drivers—73 percent.²⁶ Meanwhile, women are much more likely than men to obtain domestic and care work through platforms such as Handy Technologies Inc., TaskRabbit, and Care.com.²⁷

Like in standard employment arrangements, work traditionally done by women and found through digital platforms tends to offer less flexibility and lower job quality than work found in male-dominated occupations. For instance, an Uber driver may lose income if he or she has to stop driving on short notice, but a care worker who must cancel a scheduled appointment often both forfeits earnings and is charged a cancellation or no-show fee by the platform.²⁸ Clearly, platform work is no panacea for gendered occupational segregation and gendered labor market polarization.

As Hegewisch, Childers, and Hartmann discuss in their report, the flexibility of digital platform work provides both threats and opportunities for job quality. First and foremost, using a digital platform requires internet access and specific skills, including online self-branding and marketing.²⁹ Yet many traditional care and domestic-work jobs are disproportionately filled by women who are older, have limited English language proficiency, and lack extensive formal education, including digital literacy.³⁰

Digital platforms also can exacerbate risks concerning workers' safety. As Alexandra Mateescu from Data & Society described at the "Women and the Future of Work" convening, cleaners and caregivers have long been vulnerable to harassment or abuse in the households where they work. Digital platforms often increase these vulnerabilities since workers receive little or no detail in advance about jobs and clients, making it harder to evaluate potential risks. The women working in these jobs, often women of color and immigrant women, may be subject to clients' racist and misogynistic attitudes.

Moreover, because these firms rely heavily on client ratings to evaluate worker performance, workers may feel obligated to submit to insistent clients in order to safeguard their good ratings—even when doing so threatens their own safety or health.³¹ Thus, the proliferation of digital work platforms can intensify existing power differentials between relatively well-off and demanding clients and comparatively low-income workers, especially women workers and, even more so, women of color.

Opportunities in digital platform work

Digital platforms, however, can also offer workers opportunities for autonomy. The desire for flexible scheduling and workplace autonomy is one of the primary reasons why workers engage in digital platform work.³² Even though this desire for flexibility is often the result of workers seeking and needing additional income or because they are trying to navigate the mismatch between care hours and work hours—with 56 percent of women and 51 percent of men reporting that their gig jobs are a secondary source of income in a 2019 survey³³—digital platform work

can allow drivers, domestic workers, and others to have some ability to choose the days and hours when they labor.

Digital platforms also can facilitate work arrangements that benefit workers and those who hire them. PHI, a national not-for-profit organization whose mission is “to promote quality direct care jobs as the foundation for quality care,”³⁴ offers a comprehensive list of caregiver registries that serve both workers and those needing care. As PHI’s Robert Espinoza explained at our 2019 convening, the goal of these registries is to help consumers identify nearby caregivers with the requisite skills, experience, and availability, while simultaneously helping workers find clients and create sustainable work schedules.³⁵

Linking the registries with PHI’s comprehensive training, education, policy, and advocacy resources is another avenue to advance the organization’s mission and redound to the benefit of caregivers and clients alike. PHI, jointly with organizations such as 1199SEIU Education Fund, are increasingly using digital technologies to facilitate access to training and upskilling for their members.³⁶

In another example, the not-for-profit National Domestic Workers Alliance, or NDWA, administers Alia, a web-based, client-funded benefits program for house cleaners.³⁷ If both client and cleaner wish to participate, then the client makes a monthly contribution to the cleaner’s online account. The cleaner then decides for what purpose and in what amount to draw on her account to buy a VISA gift card through the Alia website. The program is entirely voluntary and has no administrative fees; all client contributions are allocated in their entirety to the cleaner’s account.

At our 2019 convening, NDWA gig economy organizer Tina Pham also described the organization’s Good Work Code, which encourages employers to commit to provide safe, stable, good-paying jobs in order to attract and retain well-qualified and dedicated workers.³⁸ The Good Work Code underlays NDWA’s partnership with Care.com, which launched a Fair Care Pledge that committed signatory families to pay domestic workers a living wage, set clearly defined work expectations, and provide paid medical and sick leave. As of 2018, more than 250,000 employers of domestic workers had signed the pledge.³⁹ NDWA also works with the travel rental digital platform Airbnb, Inc. on its Living Wage Pledge, which asks hosts to agree to pay cleaners a living wage.

Questions for future research

As digital platform work will continue to shape jobs in the future of work, research will need to examine how digital platform work interacts with longstanding gender

inequities in the U.S. labor market, identifying risks and opportunities for women workers. Questions for future research include:

- How much will digital platform work grow, and in what sectors will it dominate employment relationships?
- In what ways does work done through online platforms exacerbate, mirror, or alleviate gender and racial inequities?
- How can policies protect workers who face misconduct or harassment at work?

Innovations in information technology

Over the past five decades, employers in the United States have increasingly adopted workplace practices designed to maximize short-term profitability and increase shareholder value, often by reducing labor costs.⁴⁰ Technological innovation is already changing hiring processes, the way workers do their jobs, and how workers are managed and evaluated—often entrenching existing power asymmetries between employers and workers while exacerbating gender and racial inequities. Yet these technologies may also present opportunities to improve job quality if they are harnessed to foster workplace safety, diminish bias, promote better management practices, and create opportunities for advancement through upskilling and new career paths.

Monitoring and surveillance

Innovations in information technology have created new ways for employers to surveil and manage workers. Employers have long monitored their employees' work, whether to count how many bushels of strawberries a farmworker picks in an hour, reward a salesperson for making a sale, protect against employee theft, or myriad other purposes. Advances in information technology, however, are changing, and potentially intensifying, the nature of workplace monitoring, creating specific challenges for women workers.⁴¹

Employers can turn to wearables, fitness tracking apps, and biometric timekeeping systems to collect workers' physical and health data.⁴² For remote workspaces, supervisors can surveil workers from a distance using tools such as GPS-location tracking, computer-monitoring software, app-based activity trackers, and remote

sensors.⁴³ And monitoring and surveillance technologies can be used as supposedly neutral arbiters of workplace management when they include tools designed to predict employee characteristics, flag behavior patterns, and deter rule-breaking.⁴⁴ Point-of-sale systems, for example, can be used to identify cashiers in retail stores who process higher than average numbers of customer returns. These cashiers may then be labelled high risk and singled out for additional monitoring with no opportunity to challenge the accuracy of the data or contest accusations of misconduct.⁴⁵

These new surveillance tools can entrench power asymmetries between workers and employers.⁴⁶ As Erin Johansson, research director for Jobs with Justice, described at the 2019 convening, surveillance technology is making especially significant changes in warehouse and retail work. Amazon.com Inc., for example, monitors its warehouse workers through a system that can automatically generate warnings or terminations for quality or productivity reasons—without supervisors' involvement.⁴⁷ In one Baltimore-area facility alone, roughly 300 full-time Amazon associates were fired for inefficiency between August 2017 and September 2018.

Surveillance technologies also create threats to workers' privacy. In domestic work, for example, so-called nanny cams can be used to monitor workers without their consent, capturing not only their interactions with children but also sometimes even recording their conversations.⁴⁸ Similarly, employer-provided programs that offer workers subscriptions to wellness apps can allow companies to access their employees' aggregate health data. Because this information can capture data from fertility, pregnancy, and parenting apps, women working in predominantly male organizations may be exposed to employers using that information to make promotion or pay decisions.⁴⁹

Opportunities in monitoring and surveillance

Monitoring tools also offer opportunities, when they are leveraged to improve job quality and working conditions. For hotel housekeepers and domestic employees, who typically work alone and behind closed doors, surveillance technologies might offer some protection against sexual assault and violence at work. The provision of so-called panic buttons to call for help when hotel housekeepers are at risk of assault have been mandated in cities across the country, including Chicago, Miami, Sacramento, California, and Long Beach, California.⁵⁰ (Please also see our discussion on UNITE HERE in Part II).

Algorithms in hiring and workforce management

The use of predictive algorithms during hiring, evaluating, and promotion processes demonstrates one of the unique features of the current digital era of work. Yet at the same time, as discussed at the June 2019 convening, research suggests that they also may replicate explicit bias and implicit biases against workers already vulnerable to workplace discrimination.⁵¹

In one well-publicized case in 2014, Amazon adopted an automated tool that systematically excluded women from the pool of applicants for software engineer jobs. The algorithm's designers programmed it to search for applicants whose resumes resembled those of current, successful employees. Because the existing workforce was overwhelmingly male, applicants who had attended women's colleges or participated in women's athletic or other activities did not match up and were therefore eliminated. As the algorithm "succeeded" in identifying applicants who looked like current workers, its effects intensified, thus compounding the discriminatory effect. Amazon discarded the tool after designers were unable to fix it and ultimately disbanded the design team altogether.⁵²

Similarly, by targeting recruitment ads at groups most likely to click through, so-called sourcing algorithms may reinforce gender and racial stereotypes. A recent study found that Facebook ads for taxi company jobs were shown to an audience that consisted of roughly 75 percent Black people, while jobs as supermarket cashiers went to an audience of 85 percent women.⁵³

Selection tools can use machine learning to predict which applicants are likely to make "successful" employees, using data such as tenure or productivity in previous jobs. But performance assessments are inherently subjective, often incorporating managers' unconscious or intentional prejudices. Absorbing those data into ostensibly objective automated tools does not purge the embedded bias.⁵⁴

Employers also are frequently turning to algorithmic management to increase profits by matching workers' hours as precisely as possible to changes in demand, which means workers often receive very little notice of their weekly work schedules and may have their shifts reduced, cancelled, or added at the last minute.⁵⁵ This "just-in-time" scheduling is particularly common in low-paid jobs in retail, food service, and caregiving—jobs that women are especially likely to hold.⁵⁶

In their analysis of data drawn from a survey of nearly 28,000 hourly service workers identified using Facebook, sociologists Danny Schneider of University of California, Berkeley and Kristin Harknett of University of California, San Francisco report that workers exposed to unpredictable schedules report significant psycho-

logical distress, poor sleep quality, and unhappiness.⁵⁷ The two researchers also find that these workers also struggle to balance work and family obligations and to secure and maintain high-quality, affordable child care.⁵⁸ Given that women remain responsible for a disproportionate share of family caregiving,⁵⁹ schedule instability is likely to have a disproportionate impact on women in general and on women of color in particular.⁶⁰

Opportunities in using algorithms in hiring and workforce management

At the same time, artificial intelligence offers opportunities for lessening bias in the hiring process if workers and advocates are allowed to weigh in on their design and implementation. Increased transparency in algorithms provides opportunities to institute fair practices. The inclusion of more perspectives and appropriate incentives for algorithm developers affords the potential for more fair processes in hiring. Big data also can help design recruitment and selection materials that proactively address bias and better reflect the experiences of those who are underrepresented in well-paid, male-dominated occupations.

Scheduling practices also can be improved through the integration of algorithms centered on fair worker outcomes. For instance, workforce management systems can be programmed to help workers swap shifts, as well as to ensure compliance with new laws designed to promote more stable and predictable work schedules.⁶¹ And such interventions can also benefit employers. The clothing retailer Gap Inc., for example, recently piloted a scheduling program that, among other interventions, gave workers more stable schedules, permitted them to use a Shift Manager app to trade shifts without needing to involve a supervisor, and allowed managers to post available shifts using the app. The returns were strikingly positive—sales grew 7 percent, productivity rose 5 percent, and participating stores' revenues increased by \$2.9 million.⁶²

Questions for future research

As technology creates new forms of worker surveillance and management, as well as new opportunities for using artificial intelligence and big data to reduce underrepresentation, more research is needed on how this technology can be used to foster more equitable workplaces. The convening discussion demonstrated that a research agenda should continue to address the following questions:

- How are different groups of workers affected by the use of surveillance and monitoring technologies?
- How does management technology influence the well-being and productivity of workers?
- What further opportunities do hiring and management algorithms create for increasing job quality, as well as gender and racial diversity?
- How can these algorithms support the evaluation of and compliance with labor protection laws and regulations?

Understanding how this technology is used and how it affects workers is the first step in ensuring that policies can be implemented that adequately protect privacy and balance the scales between workers and their employers.

New and changing technologies, education, and lifelong learning

As work tasks change and the occupational and industrial composition of the U.S. labor market shifts, new skills will be required to meet demands of employers and the economy. Workers with lower levels of education are more likely to be left behind, which is particularly relevant for many women workers, such as Latinas, who are among those with the lowest numbers of college-educated workers. But technological innovation in the provision of education may also provide opportunities for those who have historically faced barriers in accessing the necessary skills for career advancement.

In the coming decades, the need for education, reskilling and upskilling will likely increase significantly. Digital literacy—the ability to work with computers, software, the internet, and digital platforms—is likely to become a prerequisite for almost all positions, and the number of jobs directly involved in producing and implementing digital tools, and more broadly in the so-called STEM fields, or Science, Technology, Engineering, and Math—fields in which women currently are underrepresented—will continue to grow steeply.⁶³ There likely will be a vast shift in the skills required of individuals in the workforce and a growing need for continual skills development and lifelong learning to keep up.

The need for higher levels of education as a precondition for access to good jobs for women much more so than for men is not new. Every new generation of women has had higher levels of educational attainment when they entered the workforce, as well as significant increases during women's working lives as they have returned to college to improve their opportunities.⁶⁴ Yet increasingly, such progress in educational attainment seems to be required just to stand still in terms of labor market advancement. At the 2019 convening, Chandra Childers from the Institute for Women's Policy Research presented her research on the increasing educational attainment by older women, especially Black women and Latinas. Her research shows that between 2000 and 2016, the fraction of older Black women with at least a bachelor's degree increased from 16.8 percent to 24.8 percent. For older Latinas, the corresponding figure went from 10.6 percent to 17.4 percent.

But the cost of postsecondary education is significant, particularly for Black women. Nearly 1 in 4 (24.2 percent) Black women owe \$26,500 in student loan debt, compared to just 16 percent of White women and 9.4 percent of Latinas. While the higher educational attainment offers these women access to higher-skilled and better-compensated jobs, the greater opportunity comes at a substantial cost.⁶⁵

Online training offers a set of options for workplace technology learning. The state of Washington contracted with LinkedIn Learning.com (part of LinkedIn Corp.) to offer state employees more than 8,000 courses at minimal cost. The classes run the gamut, from 3D+Animation to Mobile apps to Video editing, among myriad others. They are available 24/7 and are targeted to a variety of learning levels and types. The online learning platform allows managers to target instruction to their employees and gives individual workers the ability to access courses that meet their interests and needs.⁶⁶ Joint employer/union training funds in Washington state and New York are being deployed to increase the use of digital tools to complement training programs for home healthcare workers.⁶⁷

Collective bargaining, discussed in detail in the next section of this report, also can lead to agreements that can explicitly address retraining workers to use new technologies. Some contracts specify precisely which computer systems will require workers to be trained and provide detailed guidance on the timing and content of training programs. In other instances, unions have obtained wide-ranging retraining provisions applicable to multiple employers and government entities.⁶⁸ The AFL-CIO Commission on the Future of Work and Unions includes a recommendation to establish best practices for training to adjust to changing work tasks and job displacement for union members and beyond for the broader workforce.⁶⁹

There are many other potential opportunities for better training and education fostered by technology. The International Association of Machinists, for example, has

a bargaining framework where it uses negotiations with management to gain information on whether the employer has plans to incorporate new technology. If that is the case, the union bargains to retrain workers at risk of replacement so they can continue an upward trajectory in the company rather than lose their employment.⁷⁰

Questions for future research

These few examples demonstrate that more research is needed to understand if online training, among other potential prospects, is able to reach some of those U.S. workers who are alienated from formal education. Those future research questions include:

- To what degree is Kindergarten through 12th grade education making digital literacy a foundational skill? Are the approaches being used scalable and effective in giving future workers the skills they'll need?
- Which models of training and upskilling best fit best with women's greater care responsibilities?
- What are the variety of methods possible for training workers who will be needed in the future of work? What additional insights can we glean about which programs map onto better opportunities for workers in the digital age in order to guide future policy recommendations?
- What can be learned from publicly funded sabbaticals and other approaches to lifelong learning supported in other high-income countries?

New and changing technologies, collective bargaining, and worker organizing

An underlying theme of the 2019 convening was acknowledging the ways in which the skills training and educational advancements described above will only be accompanied by better wages and improved outcomes for workers if they are also accompanied by increasing worker bargaining power so that workers can share in the economic value that they create. Yet union density has been declining since its peak in the 1950s, down from 33.4 percent in 1956 to 10.3 percent in 2019.⁷¹ This decline has been fostered by statutory limitations on union organizing, decreased enforcement of U.S. labor laws that protect organizing, and increased hostility toward the labor movement.

Additionally, technology is exacerbating economic trends that pose new difficulties for organized labor. Advances in information and monitoring technology have been a driving factor behind the fissuring of workplaces, a process by which employers outsource certain tasks and parts of their business previously done by core employees.⁷² This trend has not only reduced the quality of many jobs, allowing employers to maintain control over workers while not providing benefits, but limited workers' ability to join and form a union.⁷³

Opportunities in new and changing technologies for collective bargaining and worker organizing

Technology also can help workers organize and bargain collectively. Unions are increasingly recognized as an important voice in the equitable integration of technology in workplaces.⁷⁴ In particular, unions can play a crucial role in training women workers in highly demanded jobs. As the AFL-CIO's Chris Neff explained at our 2019 "Women and the Future of Work" convening, attracting and retaining women in construction is the mission of the Trades Women Build Nations Conference, an annual event sponsored by North America's Building Trades Unions. Roughly 2,700 building trades women attended the ninth annual conference in 2019 and participated in workshops aimed at motivating apprentices, improving workplace safety, and tackling harassment, as well as developing leaders and influencing public policy.⁷⁵


Collective bargaining over the deployment and use of technology, as described above, demonstrates the crucial role of unions in ensuring that the changing nature of work includes workers' voices and can serve as a check on employers so that increased productivity is accompanied by higher wages. Emblematic of this approach is the 2018 collective bargaining agreement between the Culinary Workers Local 226, affiliated with UNITE HERE and Las Vegas hotels and casinos, which averted a threatened strike by 50,000 workers at Las Vegas hotels and casinos. The contract addressed a variety of issues implicated by new technologies, which will be discussed at greater length in the next section of this report that presents actionable policy ideas to ensure women more equitably gain from the technologies that will shape the future of work in the United States.

As UNITE HERE's Lead Customer Organizer Rachel Melendes described at our "Women and the Future of Work" convening, one of the agreement's key provisions required the hotels and casinos to agree to pay workers during training on how to use new technologies before their introduction, as described above in the section on training and education.

Questions for future research

Many of the opportunities provided by technological advancement in organizing are in early stages. We still need to understand how new technologies can be leveraged to achieve the greatest success for workers. The questions in need of future research are:

- What training and supports do workers, particularly women workers, need to effectively negotiate over the introduction of new technologies?
- How can digital tools be best leveraged to help workers with lower levels of educational attainment and/or English language proficiency attain digital literacy and accredited skills?
- Do women and men have different priorities during technology bargaining? If so, what are these, and how do bargaining outcomes differ when negotiating teams include women?



The way forward for women and the future of work

The research discussed at the 2019 “Women and the Future of Work” convening offers important insight into the effects of new digital and automation technologies and artificial intelligence on the future of work for women. And further research—in particular, assessments of consequences for different groups of women—will shed additional light on these complicated issues. But there is plenty of evidence now available to consider an array of policy actions to improve gender equality in the U.S. workforce today and in the future.

The research discussion from our 2019 convening stresses the need for a gender lens when analyzing and preparing for the future of work. The occupations in which women predominantly work tend to be at a higher potential risk of automation than those in which men mainly work. And women are more likely to be responsible for unpaid family care work and thus will be particularly affected by demographic change and societal aging. The preceding pages of this report also include examples of how racial and ethnic disparities intersect with gender, which can make it particularly difficult for people who are part of several groups that have historically been marginalized to share in the gains of innovation and economic growth.

How technological change will shape and influence the future of work—by exacerbating inequalities or providing greater opportunities for all—will be shaped by policies that should, in turn, be informed by research and the lived experiences of workers on the front lines of technological upheaval. What, then, are the policies needed to ensure that technological change improves job quality and economic outcomes for women?

All too often, policymaking has reflected and entrenched racial and gender inequality. In the 20th century, policymakers overwhelmingly based workplace regulation on highly gendered and racialized notions of work and family, which led, for example, to the exclusion of domestic and agricultural workers from protections in the National Labor Relations Act of 1935.⁷⁶ As policymakers make choices about how to regulate the development and implementation of technology, they must listen to and be led by those who use and work with such tools, including those who have long been systematically barred from the protection of U.S. laws.

Policymakers must recognize, too, that while automation and technological change are often identified as the gravest threat to workers, decisionmaking and corporate choices are the central drivers in the future of work. Thus, strategies to increase women's power at work—policies and mechanisms that counteract the trends of shifting risk from employer to the most vulnerable workers—are a critical part of the solution.

That is why our “Women and the Future of Work” convening included a discussion of critical policy solutions to ensure an equitable and secure future of work for women. While a comprehensive policy agenda was beyond the scope of the 2019 convening and this report, broad agreement exists among the advocates, scholars, workers, and organizers represented at our convening about current trends and likely challenges ahead. This evidence-based understanding of the situation today and into the future for women, particularly women of color, in the U.S. workforce calls for a suite of policies to:

- Strengthen U.S. labor and employment laws to eliminate historic exclusions, expand protections, and build power for working people—regardless of whether they labor as gig workers, independent contractors, or traditional employees
- Regulate the technological tools and systems that employers use to recruit and hire their workforces and manage their performances on the job
- Advance technology's potential to improve gender equity at work, including new tools that improve workplace safety, giving women a role in designing and implementing hiring algorithms, and achieving schedule stability through systems that truly incorporate workers' voices and preferences

This section of the report covers each of these pieces discussed at the convening in turn to illustrate that when policymakers understand and advance policies to address the inequities that have held women back in the workplace, they can build a better future of work for all of us. While our policy prescriptions are by no means exhaustive, they are a crucial starting point for policymakers today and for looking ahead to future policymaking.

Policies to ensure protections and build power for working people, regardless of employment status

Even though public discussions about the future of work tend to focus on digital platform work, broader economic and political trends have made jobs increasing-

ly precarious for millions of workers, not only those engaged in the so-called gig economy. Corporations have accelerated efforts to structure workplaces in ways that bypass labor protections and diminish workers' bargaining power, including through the use of contracting and domestic outsourcing to lower labor costs through the downward cost pressures of a fissured workplace, temporary employment, and part-time work.⁷⁷

For too many people—whether they hold nonstandard work arrangements or maintain their employee status—this fissuring of the workplace has produced jobs with inadequate pay, minimal benefits, few advancement opportunities, and little security. Without policy interventions, companies will likely continue to exploit technological change to leverage current inequalities in the law to their own advantage or to altogether sidestep their legal responsibilities to those who work for them.

Women are already more likely than men to hold low-paying jobs that have few or no benefits and unstable, inadequate hours that produce unstable and inadequate income—even in traditional employment settings.⁷⁸ These challenges have long been features of low-paying work traditionally done by women, but technological change could make precarious work even more common by reducing the number of secure middle-wage jobs, increasing employers' power through new surveillance tools, and creating more avenues for nonstandard work arrangements. Job instability and a lack of power at work also render women particularly vulnerable to discrimination and sexual harassment.

Against this backdrop, it is imperative for policymakers to address the underlying power imbalance in our workplaces in ways that go beyond the role of technology, including:

- Combating misclassification of workers by employers
- Ensuring workplace protections and benefits apply regardless of employment status
- Shoring up public supports, including Unemployment Insurance and portable benefits, so people can access benefits regardless of employment status
- Strengthening and improving U.S. labor laws to increase workers' ability to organize

Let's now consider each of these policy principles.

Fighting misclassification

Because independent contractors are exempted from the worker protection and labor standards and laws that accompany formal employee status, misclassifying employees as contractors leaves workers unfairly vulnerable to economic insecurity, workplace abuses, and physical harm. Companies that use contractors' services benefit by paying far less in taxes and are subject to many fewer regulatory requirements. Thus, industries have long had an enormous financial incentive to classify workers as contractors rather than traditional employees, but in the world of platform-enabled work, companies have engaged in all-out battles to keep people working on their platforms as contractors. These campaigns have intensified in the face of attacks on this model in courts, as well as in federal and state legislatures.

For instance, platform companies including Handy Technologies Inc., Uber, Lyft Inc., GrubHub Inc., Postmates Inc., Thumbtack Inc., YourMechanic, and TaskRabbit have helped draft broad state carve-out bills that would classify platform workers as independent contractors. As of August 2019, seven states had enacted carve-out bills—Arizona, Florida, Indiana, Iowa, Kentucky, Tennessee, and Utah—while legislation was pending in at least two additional states, West Virginia and Missouri. Texas adopted an administrative carve-out for platform workers in the spring of 2019.⁷⁹

Workers and their allies are fighting back. As of May 2020, carve-out bills have stalled or been defeated in Alabama, California, Colorado, and Georgia.⁸⁰ And policymakers can act to affirmatively make it harder to misclassify workers—including those working for platform-based companies—as they recently did in California. In September 2019, the state's governor, Gavin Newsom, signed into law AB 5, which codified a California Supreme Court test that would make it harder for platform workers to be classified as independent contractors.⁸¹ Specifically, AB 5 adopts the ABC test, under which businesses that seek to treat workers as independent contractors must show that the workers are:

- Free from control and direction by the hiring company
- Perform work outside the usual course of business of the hiring entity
- Are independently established in that trade, occupation, or business

This test and other pending proposals, such as Washington state's Universal Workers' Protection Act, ensure that people who are not, in fact, running their own businesses are not carved out of the employee rights and benefits they need and deserve.⁸² At the federal level, the Protecting the Right to Organize, or PRO, Act, would incorporate the ABC test into federal labor law, limiting employers' ability to misclassify workers as independent contractors.

Expanding employment rights and protections to cover more workers

Employment protections that traditionally apply solely to direct employees can also be expanded to cover more nonstandard work arrangements, such as independent contractors and employees of subcontractors in the workplace. Title VII of the Civil Rights Act of 1964, for example, outlaws employment discrimination on the basis of race, national origin, religion, or sex. But this landmark legislation applies only to private companies with 15 or more employees—and only to employees of those companies.⁸³

Excluding small businesses leaves some 19 million workers without federal protections against harassment and discrimination, including many women employed in private homes as house cleaners, nannies, and other domestic workers. Many of them are often particularly vulnerable to harassment and discrimination because they perform their work alone and behind closed doors.⁸⁴ Also left out are independent contractors—or those misclassified as independent contractors—including many women obtaining work via digital platforms.⁸⁵

Many of these loopholes would be closed by the Bringing an End to Harassment by Enhancing Accountability and Rejecting Discrimination in the Workplace, or the BE HEARD in the Workplace, Act, which was introduced in Congress in April 2019.⁸⁶ This groundbreaking, comprehensive bill amends Title VII of the Civil Rights Act to cover smaller workplaces and nonstandard workers such as independent contractors, volunteers, interns, fellows, and trainees. The proposed law extends to those nonstandard workers the Supreme Court's landmark June 2020 decision that Title VII bars discrimination on the basis of sexual orientation or gender identity.⁸⁷ The bill also clarifies the definition of unlawful harassment, and prohibits nondisclosure agreements that prevent workers from revealing harassment or discrimination.⁸⁸ States are already expanding these protections. Since 2018, Vermont, Maryland, Delaware, and New York have enacted legislation that expands the number of workers covered by anti-harassment laws.⁸⁹

Then, there's the federal Domestic Workers' Bill of Rights Act.⁹⁰ Proposed by Rep. Pramila Jayapal (D-WA) and Sen. Kamala Harris (D-CA), it also expands Title VII. This bill would ensure that domestic workers—some of whom remain excluded from basic labor rights and protections—receive overtime pay, paid sick days, and are covered by harassment and discrimination laws. The bill would also help protect domestic workers against unfair scheduling practices and privacy violations from employers, regulating the use of monitoring technology.⁹¹

Modernizing and expanding access to public benefits

For millions of working people across the country, the fissuring of the workplace and other factors described in the previous sections of this report have made work more precarious, regardless of where we are in the economic cycle. Economic crises exacerbate these inequalities, as workers who are most disadvantaged prior to a downturn face the most severe consequences. At the same time, policymakers have failed to update programs to reflect how people live and work today. And for decades, states have disinvested from basic infrastructure and technology to administer public benefit programs, and federal and state lawmakers have established red tape and barriers to accessing help such as work reporting requirements and drug testing.

The result is a set of public benefits and countercyclical macroeconomic policy tools such as Unemployment Insurance that are perennially underperforming in sustaining labor force attachment, helping workers retrain, and mitigating hardship. These challenges are problematic for all workers—whether the U.S. economy is expanding or contracting—but in many ways, they are disproportionately harmful to women, workers of color, and the families they support.

Policymakers can act to ensure that all of us—including independent contractors, gig workers, and employees of companies large and small—can access benefits when we need them, including healthcare, paid family and medical leave, Unemployment Insurance, or other supports, especially in a recession.

The Unemployment Insurance system is a critical example of needed policy interventions during economic downturns. For families where an individual experiences a job loss through no fault of their own, Unemployment Insurance is the single greatest buffer against income loss.⁹² But there are deep cracks in the unemployment benefits infrastructure. Since the end of the Great Recession of 2007–2009, many states have decreased Unemployment Insurance payouts through important reductions in weeks of available benefits, cuts to wage-replacement rates, stricter eligibility requirements, and new disqualifications, instead of increasing the revenue from employer and employee taxes to replenish their trust funds.⁹³

To change that trajectory, state and federal policymakers should shore up the Unemployment Insurance system and ensure that protections apply to independent contractors, gig workers, and part-time workers. Basic reforms are needed to strengthen the solvency of state trust funds that underpin the state's contribution to Unemployment Insurance, improve benefit adequacy, and bolster the federal Extended Benefits program, which increases the duration of unemployment benefits when a state is experiencing high unemployment. Policymakers should also

make sure that re-employment tools and trainings are accessible for all types of workers—including independent contractors and those in temporary, part-time, or seasonal work arrangements—and adopt innovative improvements that can particularly benefit women.⁹⁴ Specifically, state and federal policymakers could:

- Extend eligibility for Unemployment Insurance to part-time workers, who are disproportionately women
- Expand definitions of “good cause” reasons for leaving work to include personal or family reasons, unreasonable scheduling practices, caregiving responsibilities, or unsafe working conditions
- Create a jobseeker’s allowance for workers who are ineligible for Unemployment Insurance even after these reforms are made, including returning caregivers, new entrants such as students, and workers with more limited work history, which would combine a short-term weekly allowance with job search and re-employment services⁹⁵

Other public programs, too, play a critical role in helping families meet basic needs and become all the more important during economic downturns, including Medicaid, the Children’s Health Insurance Program, Supplemental Nutrition Assistance Program benefits, subsidized housing, cash assistance from the Temporary Assistance for Needy Families program, and the Earned Income Tax Credit and Child Tax Credit.

Expanded child care assistance, in particular, is both a key support for working families and a largely untapped countercyclical tool. A boost to the Child Care and Development Block Grant—a federal and state program that helps low-income parents pay for child care—during a recession would enable workers to afford child care as they retrain, pursue additional educational opportunities, or look for work, ensuring stability for children even as their family’s financial footing is disrupted by parental unemployment. Doing so would also prevent job loss for childcare workers and free up some income for parents to spend in the economy to spur demand.⁹⁶

Whether the economy is contracting or expanding, ensuring that everyone has access to the healthcare, paid leave, and other benefits they need—even when such benefits are not made accessible by an employer—can improve economic security for families and help them weather changes in the U.S. labor market. At the federal level, the health insurance marketplaces established by the Affordable Care Act are an example of an existing portable benefit structure that should be strengthened, not undermined, to support an equitable future of work. And for the majority of working people who lack paid family or medical leave—which is especially true for self-employed workers, part-time workers, gig workers, and others with precarious

employment⁹⁷—the federal FAMILY Act would provide up to 12 weeks of paid leave for anyone who needs time to welcome a new child or care for themselves or a loved one facing a serious illness.⁹⁸

The FAMILY Act mirrors the key tenets of the paid leave programs adopted in eight states and the Washington, D.C. to date.⁹⁹ And states are continuing to be laboratories for innovative policies, including ways to make benefits portable for platform and other nonstandard workers. The Washington state legislature, for example, is currently considering a bill to require intermediaries such as temp agencies and digital platforms to contribute to a benefit fund administered by a not-for-profit organization.¹⁰⁰ Workers would accrue benefits for every hour worked, regardless of the number of clients for whom the services were provided. Covered benefits could include health insurance, paid time off, and retirement benefits.

Shoring up and expanding access to the social safety net makes changes in the U.S. labor market more manageable. This is particularly important for women who are both workers and—usually unpaid—caregivers bearing a disproportionate burden for caring for others at the same time as they work to earn income. A stronger floor provided by a robust social safety net also improves the bargaining power of workers, whose fallback position is better when their economic security is more assured.

Labor law and collective bargaining reforms

In order to better regulate and counterbalance the power of companies using new technologies in the workforce, we need robust reforms to U.S. labor law to help ensure that working people are able to stem growing income inequality and reverse the continued decline in worker power. Workforce protections and strong unions benefit all workers, but evidence demonstrates that balancing bargaining power between workers and employers is of particular benefit to workers who have been historically disadvantaged, including women and people of color.¹⁰¹

Federal labor law is overwhelmingly a creature of the early to mid-20th century. In the Wagner Act of 1935, Congress declared that the national interest would be promoted by “encouraging the practice and procedure of collective bargaining and ... protecting the exercise by workers of full freedom of association, self-organization, and designation of representatives of their own choosing.”¹⁰² But racist and sexist laws left out industries such as agriculture and domestic work whose workforces were, and are, predominantly made up of women and people of color. Subsequent Congresses—as well as court decisions—revised and, in many instances, weakened the ability of unions to enact the promise of the Wagner Act.¹⁰³

Policymakers can take steps to reverse these trends and begin to reimagine labor law for the 21st century to ensure that all working people have power on the job—both by bolstering traditional unions and by advancing new models for worker organizing and collective bargaining. Several states and municipalities have resurrected or created wage boards to establish statutory minimum wages or better working conditions across sectors by expanding how we think about bargaining and which actors get to be at the table. In 2015, for example, New York Gov. Andrew Cuomo (D) directed the state labor commissioner to convene a wage board to recommend an increase to the minimum wage for fast food workers. The board—including representatives for the public, business, and labor—held a series of public hearings and recommended a schedule for increasing the minimum wage in the industry from \$8.75 to \$15 over several years, which the state labor commissioner implemented.¹⁰⁴

Similarly, in Seattle, the Domestic Worker Bill of Rights adopted in 2018 established a structure that grants domestic workers—largely women who traditionally have been excluded from labor protections—the power to bargain for industrywide standards and regulations on issues such as sick leave and health benefits, rather than negotiating employer by employer.¹⁰⁵

What's more, Washington state is currently considering a bill that is primarily designed to establish portable benefit structures but also establishes wage boards to set minimum wage rates and other labor standards for nonstandard workers in certain industries. Through expanding the ability of unions to organize nonstandard workers, the proposed law adopts an innovative mechanism to permit collective bargaining in industries where digital platforms feature prominently, including caregiving and domestic services or other services performed in and about the home, passenger transport, product movement, sales, and certificated professional services.¹⁰⁶

U.S. labor law reform also is long overdue. In the comprehensive new Clean Slate project, led by Sharon Block, the executive director of Harvard Law School's Labor and Worklife Program who participated in our 2019 convening, scholars, advocates, union members and leaders, and activists have taken a hard look at existing labor laws and determined where and how to structure reforms.¹⁰⁷ The project released its recommendations in early 2020. They include proposals to expand unions' ability to organize members and represent workers, which would expand on the progress already made in ensuring the future of work is equitable for all workers.¹⁰⁸ The policy recommendations are explicitly designed to ensure that people who disproportionately have been excluded from the benefits and protections of our labor laws—including women and people of color—are brought within it. The recommendations include major changes, among them:

- The inclusion of domestic, agricultural, and incarcerated workers, and independent contractors in U.S. labor law
- The creation of many new avenues for power sharing, such as:
 - Works councils
 - Nonexclusive collective bargaining
 - Sectoral bargaining
 - Workers representation on corporate boards
 - Just cause protection from retaliation, meaning an end to at-will employment

Some, though not all, of these suggested changes are contained in existing legislation, such as the Protecting the Right to Organize, or PRO, Act, which passed the House of Representatives in February 2020 but has yet to be taken up in the Senate.¹⁰⁹

Policies to combat harmful and discriminatory applications of algorithmic and artificial intelligence technologies

The reforms described above are necessary to build worker power and ensure basic economic security today and in the future. But policymaking also can play a role in specifically addressing the evolving role of algorithms and artificial intelligence in the workplace. Policymakers can and should regulate, for example, the technologies and systems that employers use to recruit and hire their workforces and manage their performance on the job to ensure that algorithms and AI technologies are being used to root out bias in our workplaces rather than entrenching the systemic discrimination of the past.

Specifically, policymakers should focus on areas that include:

- Digital platform work, monitoring, and employment relationships
- Schedule stability

■ Hiring practices

The following are some suggested reforms in each of these categories.

Platform work, digital monitoring, and employment relationships

Integrating digital work platforms and other new technologies into the workplace may not change the nature of work itself, but doing so can provide new pathways to replicate old patterns that disempower workers. To prevent these outcomes, corporate policy, public policy, and worker organizing can shift how algorithmic and artificial intelligence technologies are used to ensure that they protect and benefit workers.

An increasingly common topic for collective bargaining is the plethora of new workforce management technologies, including monitoring and surveillance tools. The National Labor Relations Act of 1935 protects employees from surveillance and monitoring for the explicit purpose of preventing unionization, but unions are also recognizing the importance of giving workers power against these invasive management tactics throughout the production process. The Communications Workers of America, for example, are increasingly insisting on the right to know management's procedures for monitoring workers' calls and GPS data. And the NBA players' union recently negotiated contract language protecting the union's right to obtain expert validity and privacy assessments before management could require players to wear fitness trackers.¹¹⁰

The imposition of technology also mobilized teachers. In 2018, state government officials in West Virginia proposed asking teachers to download a mobile fitness app and use a fitness tracker to monitor their steps, heart rate, and other indicators. Teacher opposition to this proposal led to a 9-day strike.¹¹¹ Ultimately, the state backed down and withdrew the plan. But the strike helped ignite a nationwide Red4Ed movement,¹¹² which involved walkouts over teacher pay and education funding in Kentucky, Oklahoma, Arizona, Washington state, Los Angeles, Denver, and Oakland, California, among others.¹¹³

Another proposal would increase workers' control over their own data. A December 2018 report by Sam Adler-Bell and Michelle Miller titled "The Datafication of Employment" lays bare the ways in which companies use data mining to surveil employees and profit off of employee data.¹¹⁴ They recommend groundbreaking new ideas, including that workers should own the data they produce, have the right to know what data are being collected, should be able to take those data with them from job to job, and share in the profits generated from their data.

Schedule stability

As discussed in the research section, service-sector employers are increasingly turning to technology-enabled tools to set work schedules, often creating havoc and instability in workers' lives. In response, the state of Oregon and localities such as Seattle, San Francisco, New York City, Philadelphia, and Chicago have adopted ordinances regulating employer scheduling practices in the industries in which abuses are most prevalent.¹¹⁵ The rules generally require employers to give workers notice—typically 14 days—of their upcoming schedules and compensate them for changes made after the schedule is posted.¹¹⁶

Most local ordinances also restrict employers' ability to deny pay and benefits to their workforce by minimizing weekly hours, through access-to-hours provisions that require covered employers to offer newly available hours to existing staff before making new hires.¹¹⁷ The federal Schedules That Work Act, reintroduced in Congress in October 2019, would take a similar approach to regulating work schedules at the national level.¹¹⁸ And the Part-Time Workers' Bill of Rights introduced in February 2020 includes an access-to-hours provision.¹¹⁹ Employers can use the same workforce management technology that has enabled just-in-time scheduling to instead ensure compliance with laws that curb abusive practices, promote workers' input into their schedules, and promote access to adequate hours.

A United Food and Commercial Workers' contract with the department store company Macy's Inc. provides an example of how collective bargaining can also lead to comprehensive worker protections regarding the use of scheduling software.¹²⁰ The contract guarantees workers the right to choose when they will take their days off up to 6 months in advance, have a say over the time when they start to work, and have control over their schedule during the holiday season. These provisions can make a big difference for many workers, particularly for those who must coordinate their work schedules with a second job or child care responsibilities.¹²¹

These collective bargaining and legislative efforts provide important protections for women and men in the service sector. Extending these protections to workers in other industries, states, and localities would offer substantial benefits to millions more.

Algorithms and artificial intelligence in hiring practices

As discussed in Part I above, new technologies can reinforce biases. Algorithms can help identify qualified applicants but may also facilitate gendered, racial, and other forms of discrimination. Policymakers must work to ensure these tools do not further embed institutionalized racism and misogyny into the future of work.

Federal law prohibits intentional employment discrimination on the basis of sex, race, national origin, or religion. Hiring practices that have a disparate impact on people of a particular sex, race, or religion are also unlawful.¹²² Employers are thus obligated to ensure that their hiring algorithms do not result in discrimination. But enforcing these provisions in the context of automated tools is challenging. How can a worker prove discrimination when she never saw the job ad in the first place?

Sustained attention from regulators and policymakers will be necessary to reveal, reform, and redress the effects of algorithmic discrimination—and prevent future abuses. And this attention is growing. In 2016, for example, the federal Equal Employment Opportunity Commission convened a public meeting on the uses of algorithms in hiring and the implications of big data for equal employment opportunity more broadly.¹²³ In July 2019, the EEOC issued a number of cause findings in which the federal agency determined that employers had violated federal anti-discrimination laws by excluding women and/or older people from their job advertisements on Facebook. The U.S. Department of Justice and U.S. Department of Housing and Urban Development have taken similar positions.¹²⁴ In a 2019 settlement of a number of related complaints, Facebook agreed to automated and human review processes to screen for discrimination, a requirement that advertisers certify compliance with anti-discrimination laws, and ongoing monitoring by plaintiffs and counsel over a 3-year period to ensure compliance.¹²⁵

In Congress, the House Committee on Education and Labor recently held a series of subcommittee hearings on the future of work, including one titled “Protecting Workers’ Rights in the Digital Age,” which focused on policy proposals to address algorithmic bias and digital discrimination.¹²⁶ Witnesses at this hearing included Jenny Yang, a senior fellow with the Urban Institute and former EEOC chair who joined our 2019 convening. She recommends a Workers’ Bill of Rights for Algorithmic Decisions to identify and prevent discrimination,¹²⁷ with four key components to empower working people to learn of and correct erroneous or discriminatory decisions:

- 1. Notice and consent.** Workers should have the right to know when and how an algorithmic system is used to make employment decisions, and employers should obtain written consent.
- 2. Right to an explanation.** To address concerns about fairness and accuracy, employers should explain the rationale for a decision in terms that a reasonable worker could understand.
- 3. Process for redress.** Workers should have the right to view the data collected to make decisions on them and have an opportunity to dispute erroneous conclusions and ensure the accuracy of the data collected.

4. Accountability. Record retention, audit capability, and other transparency measures should be required to ensure that employers and vendors are both responsible and accountable for algorithmic systems and discriminatory harm—and to ensure that regulators have the tools to uncover discrimination in an algorithm, without placing the full burden on individuals to know when they have been discriminated against.

As Yang concluded in her testimony, “The policy choices that we make now will play a dramatic role in how these technologies are deployed. By modernizing our laws to create greater incentives to explain systems and prevent discrimination, we have the potential to promote the development of hiring tools that isolate and dismantle systemic barriers to equal opportunity concealed in many of our current hiring and evaluation systems.”¹²⁸

Policies to harness potential for technology to enhance women’s safety, opportunity, and voice at work

Just as technology can be exploited by employers to discriminate, it can be harnessed by employers to improve equity in hiring and workforce-management practices—and used by working people to enhance their own knowledge, skills, and power in the workplace. And just as policymakers, unions, and worker organizations have a role in combating the abuse of technology, they also have a role in helping to advance its potential to improve women’s lives and opportunities at work by:

- Addressing harassment
- Increasing pay transparency
- Improving worker safety
- Enhancing skills development
- Facilitating worker organizing

Below, we look at policy solutions and worker-driven strategies that can advance each of these goals.

Addressing harassment

New technologies can be used by workers to protect against harassment and report it when it does occur. In the hospitality industry, hotel employees are vulnerable to sexual harassment and assault when isolated with customers who may be in occupied rooms. UNITE HERE has estimated that more than half of all housekeepers have experienced harassment in the course of their work.¹²⁹

Due to advocacy by hotel workers' unions, cities and states have begun to require hotels to offer panic buttons to workers so they can alert management of any perceived hazardous conditions. The cities of Chicago, Seattle, Sacramento, California, and Long Beach, California are among those that have led the way in requiring hotels provide panic buttons to their cleaning staff. In 2019, New Jersey became the first state to require large hotels to provide panic buttons to protect workers from these risks.¹³⁰ Similar provisions may also be included in collective bargaining agreements for unionized hotel staff, as they have been in New York City since 2013.

Increasing pay transparency

Though the Equal Pay Act has been law for more than 50 years, the gender wage gap remains a stubborn disparity in labor market outcomes across the U.S. economy.¹³¹ While a wide range of factors contribute to this gap, employer policies that bar workers from learning about or discussing pay information are significant. A worker can't challenge the higher salary paid to a male colleague if she doesn't know about it. By demanding secrecy, employers deprive workers of their power to act collectively on their own behalf—the foundational right protected by the National Labor Relations Act since 1935.¹³² In contrast, increasing transparency results in better, more equitable pay practices, may enhance worker collaboration, and can improve productivity.¹³³

The proposed Paycheck Fairness Act,¹³⁴ initially introduced in 1997 and reintroduced subsequently, including in 2019, is designed to strengthen the Equal Pay Act in a range of ways that can help women achieve greater pay equity, including barring retaliation against workers for discussing pay among themselves and requiring employers to report wage data to the Equal Employment Opportunity Commission by gender, race, and ethnicity.¹³⁵ Technology can potentially enhance these pay transparency measures, both by helping workers access and share information and by helping employers collect the data they need to monitor their pay practices, correct any unwarranted differentials, and take steps to prevent any recurrences.

The Paycheck Fairness Act is not yet law nationwide. But to date, 18 states and the Washington, D.C. have adopted protections for workers' rights to discuss pay with

their co-workers.¹³⁶ The National Labor Relations Act also protects workers' communication over workplace issues including pay.

Enhancing skills development

Technological change is likely to accelerate the need for education and re- and up-skilling, and technologies may provide new ways for workers to access workforce development and training. Some re- and up-skilling can be provided by employers, within the context of existing employment relationships. The collective agreements developed by UNITE HERE provide a pathway both for ensuring that technology is implemented in consultation with workers and for ensuring that workers are provided with the time and resources to learn the new skills that will allow them to succeed.

Joint union employer education funds in the state of Washington and in New York state are using digital technology on smart phones to deliver basic skills development to domestic care workers and home health aides.¹³⁷ Online and remote learning have the potential to ease time constraints for women with care responsibilities, although they are not substitutes for child care and other supports.

Guidance on what type of skills development to seek and from what type of institution is likely to become even more important than it is currently and with it, the increased oversight and regulation of private for-profit providers. Single mothers are particularly likely to use private for-profit training providers and have particularly low completion rates at such providers, leaving them with debt but without credentials.¹³⁸

Facilitating worker organizing

The discussion above reviews a host of policy responses to the effects of technology on the future of work. But it is workers themselves who have the most at stake in these debates. By coming together, workers can leverage their combined power to effect positive change. New technologies are already catalyzing and facilitating the joint efforts of workers, particularly women and people of color, to assert their rights at work. The AFL-CIO Commission on the Future of Work and Unions establishes guiding principles and best practices for including workers' voices in the future of work.¹³⁹ And labor unions are using innovative collective bargaining strategies to help ensure that technology enhances equity for workers of all genders, races, and ethnicities. These developments offer exciting prospects for improving job quality and economic outcomes for women.

As mentioned above, the imposition of technology is already mobilizing workers. But technology can also be a tool for organizing, and workers are turning to social media to share information and advance their collective interests. Baristas working for Starbucks Corp. used Reddit to vent concerns about new scheduling software that some were required to download to their personal cell phones.¹⁴⁰ Uber and Lyft drivers created a Facebook group, National Uber Lyft Drivers United, to advocate for AB 5, the California bill designed to ensure that drivers are treated as employees rather than independent contractors.¹⁴¹ And in 2011, employees at Walmart Corp. began organizing OUR Walmart (now known as United for Respect) via a Facebook group with some 100,000 members. A mobile app called WorkIt allows retail workers to ask questions about their rights and receive answers shaped by artificial intelligence.¹⁴² This, in turn, is promoting organizing efforts.¹⁴³ Workers and unions in other industries are adapting WorkIt for use in their own organizing campaigns.¹⁴⁴

Another innovative organizing tool helps workers organize to make workplace demands through online petitions. Coworker.org, a nonprofit organization co-founded by Michelle Miller, an attendee at our convening, and Jess Kutch, provides an online platform that facilitates connections between workers and outreach to workers, consumers, and community supporters about worker demands. Signatories can opt in to receiving additional information about petition campaigns, which can help mobilize attendance at protests and other activities. To date, successful petition drives have led to Starbucks reprogramming its scheduling software to eliminate so-called clopening shifts, to Uber adding a tipping feature to its app, and to the outdoor sports retailer Recreational Equipment Inc. increasing wages and posting schedules further in advance, among many others.¹⁴⁵

Thus, just as technology is changing work, workers are adapting tech tools to ensure that they participate in shaping those changes.

Caregiving infrastructure reforms

The disproportionate share of caregiving responsibilities within families that women bear remains one of the most persistent barriers to women's full access to opportunities in the U.S. labor market.¹⁴⁶ At the same time, women also take on the vast majority of paid care work as child care providers, home care workers, and more—jobs that are critically important for our economy and society and unlikely to be automated, yet remain underpaid and undervalued.¹⁴⁷

Policy reforms that recognize the value of both paid and unpaid care work—by enabling people to care for their families while maintaining their jobs, and by improving the quality of jobs for paid care providers—are thus essential to secure an

equitable future of work for women, no matter how the technological landscape unfolds. Universal paid family and medical leave (as proposed in the FAMILY Act) and paid sick and safe days (as proposed in the Healthy Families Act) are key components of a robust care infrastructure.

Similarly, the Child Care for Working Families Act would both make high-quality child care and pre-Kindergarten education more accessible and affordable for families and improve pay and job quality for the child care workforce.¹⁴⁸ And the Domestic Workers Bill of Rights Act would ensure that women providing care in private homes have access to the pay, benefits, and protections that they have been denied for generations.¹⁴⁹

While none of these bills is yet law, they all help chart a course toward greater gender equity in the future of work.

Conclusion

This report examines an array of issues about women, technology, and the future of work, offering evidence for policymakers to understand why women should be a focus in discussions of the future of work and pointing to new areas needing research. The report then considers a variety of policies and organizing efforts designed to improve U.S. labor market outcomes for women in the future of work. Whether and to what degree these policies will succeed will require careful and sustained attention from researchers, policymakers, advocates, and workers.

Many complicated and sometimes-conflicting factors are affecting the future of work for women. The magnitude and pace of change are not certain—nor are the long-term implications of the coronavirus pandemic and the recession it sparked. What is clear is the necessity of putting women at the center of conversations on the future of work. Researchers must assess the impact of technology by incorporating a gender lens in their analyses. Those data must then inform how policy is developed. Policy changes have the potential either to entrench and intensify institutionalized discrimination or to reduce such structural inequities. Public and workplace policies that enhance job quality and economic well-being for women with the support of technology are possible, but only if women exercise their ability to shape the conversations and effect real change.

About the author

Susan Green has more than three decades of experience as a law and policy advocate in the public and private sectors. Currently, she teaches constitutional law and other courses at American University and the University of Maryland. She began her career litigating cases on behalf of employees, labor unions, and employee benefit plans in federal and state courts across the country, then spent 3 years serving as chief labor counsel to the late Sen. Edward M. Kennedy (D-MA), followed by several high-ranking political appointments in the U.S. Department of Labor and 6 years as deputy general counsel at the U.S. Congress Office of Compliance. Green received her B.A. degree from Harvard College in 1980 and graduated from Yale Law School in 1985.

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