



WORKING PARTNERSHIPS

USA



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Understanding the Changing Nature of Work in the Bay Area

DRIVERS OF CHANGE

What national or global shifts over the past 50 years have contributed to structural changes in labor markets and employment?



Demographic shifts



Shifting power from people to firms



Climate change





Structural racism & gender discrimination

TECHNOLOGICAL TOOLS FACILITATE CHANGE

New technologies do not inherently create change, but may be deployed in ways that spur change. Many recent or emerging tech tools are facilitating changes in the nature of work.

WAYS WORK IS CHANGING IN THE BAY AREA

How are these global drivers and technologies manifesting locally in the workforce, labor markets, and employment arrangements that characterize the San Francisco Bay Area?



Automation of tasks



Growth and decline of industries



Changing demands for skills



Economic shifts in response to climate change



Expansion of contingent & nonstandard work arrangements



Introduction of new technologies in the workplace (other than automation)

WAYS BAY AREA ACTORS ARE RESPONDING TO CHANGES

How are the public sector, communities, nonprofits, worker organizations, businesses, industry organizations and funders responding to the changing nature of work?



Worker organizing

Organizing workers to demand better conditions and a say in workplace changes



Workforce development

Investing in worker training, education, access to jobs, and expanding the workforce



Business & economic development

Strengthening industries poised to grow in the new economy



Social protection & assistance

Adapting existing forms and building new models



Alternative economic models

Experimenting with new systems and structures, such as co-ops

HOW CAN WE ASSESS RESPONSES?



Job Quality

Does this response expand the net number of quality jobs available and/or improve the quality of existing jobs?



Equity

Does this response strengthen diversity, equity, and inclusion in employment, particularly across race and gender?



AgencyDoes this response build the ability of workers to shape outcomes related to their future?



Sustainability

Does this response make work more sustainable for the worker, their family, their community, and the environment?

Introduction

New technologies, accelerating climate change, shifting migration patterns, changes in economic and political norms, and a host of other trends are likely to impact—and indeed already are impacting—key features of work and employment, including management relationships, the types of jobs available, compensation patterns, and other issues that shape the day-to-day lives of working people.

This report presents a framework for understanding why and how work is changing in the San Francisco Bay Area. It provides a scan of strategies that Bay Area workers, communities, businesses, educators and elected leaders are deploying to address changes, and offers a suggested rubric for evaluating the potential effects of such strategies.

In the Bay Area and Silicon Valley, a global epicenter of innovation and extraordinary wealth, low-income communities and communities of color struggle with crises in housing and economic stability, and climate change makes itself felt through increasingly destructive wildfires. If Bay Area funders, advocates, policymakers, and worker organizations ever hope to realize quality, empowered jobs for all, we must be able to articulate how work is changing and identify the systemic interventions that will push change to benefit working people.

The framework offered in this report is made up of three parts. First, it presents an analysis of key drivers of change: national and global factors like shifting demographics and increasing corporate influence that are shaping outcomes for work and working people. Importantly, we distinguish that technology in itself is not a driver of change, but a tool that may be used to shape, accelerate or mitigate the impacts of those drivers. Second, the framework draws on a sampling of existing Bay Area projects and initiatives (Appendix A) to present an analysis of how work is changing, and how local stakeholders are responding to the changing nature of work in the Bay Area. The scan can be viewed in its entirety in the appendix. Finally, the framework offers up a series of questions we all can ask to evaluate responses to the changing nature of work and assess the likelihood that they will yield positive impacts in terms of job quality, equity, sustainability, and agency.

This framework is intended as a starting point to spur discussion of the changes underway in the Bay Area, towards the goal of identifying systemic interventions to make quality work more available and accessible to all. It is our hope that this framework can provide an analytical approach to help focus stakeholders on key decision points, critical gaps and high-impact strategies to center workers and communities in shaping agendas and setting policies relating to the future of work.

Drivers of Change

Over the past fifty years, the following national and global shifts have contributed to structural changes in labor markets and employment. While by no means exhaustive, the following factors have driven change in the past decades to give rise to today's conditions and are poised to shape labor market outcomes in decades to come.



Demographic Shifts

The U.S. is becoming increasingly diverse. In 2019, the Brookings Institute reported that the nation's white population is growing at a slower rate, while minority groups—especially Latinx, Asians, and mixed-race people—are younger and experiencing rapid growth. In fact, those three groups account for four-fifths of the nation's overall population growth since 2000. The U.S. is projected to become a nation that is majority people of color in 2043. According to the Economic Policy Institute, people of color will become a majority of the American working class in 2032.

Other demographic shifts related to the aging U.S. population stand to change the types of jobs in demand in coming decades, as well as their quality.

An aging population will generate demand for in-home and nursing facilitybased caregiving, and will also give rise to challenges related to an aging workforce. MIT Economist Paul Osterman posits that by 2040, the U.S. will face a shortage of 355,000 direct care workers and 11 million unpaid family caregivers. According to the Insight Center, the personal care aide is already one of the most common jobs in the San Francisco Metropolitan Area.² As of 2019, the number of personal care aides in the SF metro was second only to the number of software developers, yet the median wage for personal care aides was just \$13.05.3 Across California, over 80% of these jobs are held by women, and predominantly women of color. These jobs, poised to grow, will need intervention to become better quality jobs.

Seniors also make up an increasingly large share of the U.S. workforce. This increase is driven by two factors: not only do seniors comprise a larger share of the overall population, more people are working past age 65 and well into what used to be your retirement years. In the mid-1990s, only 12% of Americans over age 65 were in the active workforce; by 2016 this had grown to 18%,5 and

the Bureau of Labor Statistics projects continued growth through 2024.6 These older workers face challenges related to age discrimination, both interpersonal and structural. Firms may not be equipped with adequate health benefits, sick leave, family leave, and workplace accommodations to meet the needs of older workers.

It's important to note, however, that an increasing share of elderly workers is not the inevitable outcome of an aging population. The attrition of public and private social safety nets contributes to the continued presence in the workplace of elderly individuals who have no choice but to work to make ends meet. Recent years have seen employers shift away from "defined benefit" pension plans, which are primarily employer-funded, towards "defined contribution" pension plans that are employee funded. A 2019 Economic Policy Institute study found that households at the top 10 percent of savings have on average over \$320,000 in retirement accounts, while the median family has just under \$8,000 saved. Today, many private sector workers do not have the choice to save, given the need to cover current living expenses. The fraying of social safety nets combined with the scarcity of jobs that provide a stable, adequate income during prime working years may lead to a higher proportion of seniors being compelled to remain in the workforce, even if their preference would be to retire.



Climate change will impact the labor market and the nature of work in the Bay Area both directly—through the impacts on businesses and workers of rising sea levels, extreme heat events, drought, and wildfire—and indirectly, as the region and the State seek to adapt to the changes and to transition to a clean energy economy.

Specific outcomes are uncertain; they depend on future climate events and climate policy responses. Potential impacts include:

Jobs will be eliminated. Policymakers may heavily regulate or ban industries with high-pollution, energy-intensive production processes. Meanwhile, extreme weather events may cause worker displacement due to the destruction of essential infrastructure and business disruptions that reverberate down the supply chain. In a recent example, Hurricane Sandy displaced 150,000 workers. The Bay Area has already begun to experience worker displacement due to rapidly proliferating wildfires.

Jobs will be created. Investments in climate action and adaptation can lead to job creation in areas like renewable energies, construction of new climate resistant infrastructure, reinforcement of buildings and infrastructure, and relocation of exposed settlements.

Jobs will change. Jobs may shift to reflect more environmentally-friendly practices (e.g., architecture design, industrial processes), or to accommodate emerging occupational health and safety needs, such as working hours shifts for construction workers in a hotter climate.

The labor market in urban areas will see changes due to migration. As climate change makes growing conditions difficult or impossible in some

agricultural areas, as well as rendering low-lying islands and coastal regions uninhabitable, the world is facing increasing waves of migrants displaced by climate change, often exacerbated by political and economic instability. In 2017, approximately 22.5–24 million people worldwide were forcibly displaced due to floods, drought-induced wildfires, and intensified storms. The World Bank predicts that, absent concrete actions to prevent and mitigate climate changes' effects, in Sub-Saharan Africa, South Asia, and Latin America alone, by 2050 143 million people will be displaced from their homes.8 Climate-linked disasters, flooding, famine, and instability will drive migration, likely from the Global South to the North, with profound economic effects.





Structural Racism & Gender **Oppression**

Racism and gender oppression have long been fundamental forces in our economy—from the wealth generated through the labor of enslaved Black people, to the underpaid women and immigrant workers who support a burgeoning service economy and care sector.

Institutional and structural racism and gender bias have been built, manifested and reinforced in a myriad of ways over the history of the United States. While a complete analysis of these drivers is far beyond the scope of this report, below we highlight two examples of how structural racism shapes the status and power of people of color in the labor market, and how, even as historical institutions of oppression like slavery have been overthrown, new policies and systems have been put in place to reinforce the old hierarchies.

Mass incarceration has undermined worker rights along racial lines.

In the three decades from 1970 to 2000, the number of people who were incarcerated in the US grew from 300,000 to 2.5 million. Today, more Black adults are under correctional control in prison, jail, probation or parole than were enslaved in 1850. A criminal record may legalize discrimination in jobs and housing, prevent you from obtaining an occupational license, block educational opportunity, strip the right to vote in some states, and restrict access to food stamps and public benefits. Furthermore, incarcerated people are forced to work under threat of punishment, often in menial roles that pay pennies per hour and contribute little to an inmate's job prospects after release. One striking example is the recent use of prison inmates to fight wildfires in California. These inmates face life-threatening conditions and are paid \$1/ hour—yet many are barred from the firefighting profession after release due to restrictions on individuals with felony convictions.

The rise of mass incarceration targeting Black people and other people of color has shaped the economic fate of millions of people and their families. Mass incarceration draws a dividing line between workers who "deserve" rights and

those who are deemed criminal and excluded. Drawing a racially-coded line between the deserving and undeserving, the creation of the war on drugs, broken windows policing, and the ascendancy of reactionary politics in the last few decades has supported attacks on the social safety net and workers' rights.

Mass deportation has driven the creation of an underclass of exploited workers.

Federal immigration laws in 1986 and 1996, followed by the creation of ICE after 9/11, laid the foundation for enhanced enforcement and the growth of mass deportation. 1996's Illegal Immigration Reform and Immigrant Responsibility Act radically expanded the grounds for deportation and made those changes retroactive, while also closing the door for many immigrants without papers to adjust and legalize their status. As a result, deportations skyrocketed from 70,000 in 1996 to a high of over 432,000 in 2013,9 then began to decline due to lower rates of immigration. In 2019, 267,000 people were forcibly deported, ¹⁰ a rate still nearly four times that of 1996. Racist and xenophobic immigration policy designed to target immigrants from places like Mexico, Central America, and predominantly Muslim countries has helped create classes of hyper-exploited workers and driven others into an underground economy.

With the feminization of the workforce, women face inequality at work and make the call for more family-friendly work environments.

Gender norms have long been employed as a justification for undermining job quality and job security, from lower pay for jobs considered "women's work" to gender disparities in pay for the same job. In decades past, the rationalization was that men, not women, were the primary breadwinners, so women did not need to be paid enough to live on. More recently, some businesses have justified precarious employment models using women's societal roles, touting supposed "flexibility" for "busy working moms."

Studies show that even in heterosexual couples where both partners work, women tend to assume the bulk of housekeeping, child care, and elder care responsibilities. Women feeling this pressure have advocated for stronger family-friendly work policies, from paid family leave, to parental leave, to highquality affordable child care. Paid family leave has passed in more progressive states like California and New York, while leading Democratic Party candidates in the 2020 primary tout universal childcare platforms.



Shifting Power from People to Firms

Even while the Bay Area economy is experiencing a sustained boom with one of the fastest rates of job growth in the country, a diminishing portion of Bay Area workers are paid enough to make ends meet. The Bay Area has long been at the tip of the spear for what is now a nationwide phenomenon: even while the economy booms, the majority of working people struggle with rising economic insecurity and declining standards of living. Not only is the rising tide not lifting all boats; many of us are drowning.

It hasn't always been that way. Between 1948 and 1973, economic productivity and workers' pay were tied closely together; when U.S. productivity increased, wages and benefits for non-supervisory workers in the United States grew. In other words, when workers produced more value per hour worked, they usually got to take home some of that added value. But starting in the early 1970s, productivity growth in the United States became decoupled from wage growth, meaning that virtually all of the increased value from production is going to owners, investors, and executives, while workers' pay stagnates. 11

These unbalanced growth patterns are fueling an hourglass economy: growing high-wage jobs at the top, a huge expansion in low-wage jobs at the bottom, but an ever-tighter squeeze in the middle. Workers of color have been disproportionately impacted by the productivity-pay gap, and have felt that gap grow wider recently; for example, since 2015, Black workers experienced the slowest wage growth of any group, and Black college graduates actually saw their wages reduced.12

In the Bay Area, the dominance of the tech industry, which captures an even greater share of growth at the very top, exacerbates this squeeze. Despite leading the nation in per capita economic growth, nearly nine in ten jobs in the South Bay/Peninsula pay lower real wages today than they did 20 years ago. In fact, if labor's share of GDP had been the same in 2016 as in 2001, the average

worker in the region would have received an additional \$8,480 in pay and benefits that year alone.13

The hourglass economy has a disproportionate impact on women, people of color and immigrants, all of whom are much more likely to be in that low-wage segment and much less likely to be hired for a high-wage job. In the Bay Area, Black and Latinx households are two times as likely as white households to live paycheck-to-paycheck,¹⁴ and women in some Bay Area counties are paid 60 to 70 cents for every dollar paid to a man. 15

Economic policies and business practices advanced over the past 40 years have built and shaped the hourglass. Beginning in the early 1980s, policymakers in the Reagan administration, backed by business lobbyists, conservative academics and think tanks, implemented a set of neoliberal economic policies designed to deregulate corporations, weaken labor standards, privatize public services, reduce progressive taxation, and weaken the social safety net. Even policies not obviously related to workers or corporate power have systematically pushed the balance in one direction; for example, the Federal Reserve in recent decades has prioritized keeping inflation low (which is important to the financial sector and to individuals with a large amount of wealth), which it does by keeping unemployment high (thus reducing workers' power to negotiate for higher wages).

These policies represented a break from post-WW2 decades where stronger corporate regulation, robust union membership, and well-enforced worker protections helped to maintain an employer-subsidized system of health care, retirement benefits, and unemployment insurance for many full-time workers—although it's important to remember that racially biased policies and practices excluded many people of color from this period of relative prosperity. For example, federal policymakers excluded predominantly Black and Latino farm and domestic workers from Social Security and labor protections, while legal segregation and redlining excluded African Americans from opportunities for education, home ownership, and many types of quality employment.

Today, declining job quality and shrinking middle-class opportunities are widespread problems affecting nearly every segment of the American workforce, even in high-growth, high-tech economic centers like the Bay Area. The emergence of inequality and instability as a defining feature of the "new economy" is a direct result of policymakers, politicians, and corporate leaders using policy and business decisions to shift power away from workers and towards firms and economic elites. A few ways this has manifested include:

- Systematic attacks on workers' rights and ability to organize. The systematic attacks of right-wing politicians and union-busting legal consultants on worker organizations has created a vast and growing power disparity between workers and firms. At their height, unions represented one-third of workers nationwide and gave workers leverage to negotiate strong employer-provided benefits like health insurance and pensions. Today, only 11.6 percent of U.S. workers have collective bargaining representation. 16 As a result, workers have limited political footing to resist unwelcome changes and negotiate strong livelihoods. In California, although unionization rates have also fallen over time, workers have retained more collective bargaining power; 16.5 percent of workers in California have union representation, and over 100,000 net new workers joined unions in 2019, more than any other state.¹⁷
- **Shifts in corporate governance.** Today, publicly-traded corporations (companies whose shares are traded on stock markets) are driven by shareholder primacy, a system where corporate boards and executives exclusively prioritize the interests of a company's shareholders, without balancing shareholders with other stakeholders such as employees and communities. In order to maximize quarterly shareholder profits, corporations reduce labor costs by slashing benefits, outsourcing work, and spending profits on stock buybacks¹⁸ rather than productive activities. These norms shifted in part when the competitive pressures of corporate deregulation, globalization, and technological change in the 1980s led to a series of hostile takeovers by investors, so-called "vulture capitalists," and rival firms. Even to companies that were not taken over, increasing market concentrations and the threat of hostile takeovers prompted corporate executives to prioritize shareholder returns over all else.19
- Financialization of the United States economy. Financialization refers to the outsized influence of financial sector metrics and incentives, rather than business fundamentals, in driving corporate decisionmaking. For example, investors' criteria and mindsets drive most Silicon Valley tech start-ups to make decisions based on what will please or attract investors, even if those decisions result in a business model that continually loses money.

In another example that resulted in profound implications for communities across the United States, the packaging of home loans into derivatives and more exotic financial instruments created incentives for bankers to push as many loans as possible, often using deceptive or unethical tactics to get more home loans sold; this led to an overheated

housing market and was a primary cause of the 2008 recession and of millions of people losing their homes, wiping out people's savings, and distorting the U.S. economy, housing and labor markets in ways from which we still have not fully recovered.20

Financialization also describes how the financial sector overall has increased both in size and influence over the economy. In 1947, the financial sector made up 7.7% of total U.S. GDP output. By 1987, it had nearly doubled to 14.4%. As of 2018 it has reached 19%.²¹ What this means is that as the financial sector takes up an increasing share of economic production, industries that produce goods and services are left with a smaller piece of the economic pie.

The increasing size and power of the financial sector is due in part to regulatory and tax regimes designed by and for the wealthiest financial institutions. For example, changes in banking laws starting in the late 1970s and accelerating until the mid-2000s favored more power and less oversight for large banks, 22 leading to financial organizations that were deemed "too big to fail." This outsized influence has resulted in the sector's ability to shape macro-level economic outcomes. For example, the recent private equity-enabled bankruptcies of retail firms Payless and Toys R Us—events which devastated tens of thousands workers, many of whom had worked at these companies for decades and who upon dismissal were denied pensions and severance pay. Ultimately, this is made possible by permissive regulatory regimes that enable private equity managers to take over a company and extract huge profits in nonproductive ways (e.g. paying out the company's cash reserves or cutting payroll) while personally or institutionally taking on very little risk.²³ As the New York Times writes, "Financial managers exert greater control over nearly all American companies than they once did." 24

Globalization. Forms of globalization driven by corporate interests resulted in trade regimes that empowered and incentivized corporations to move their blue-collar jobs to countries with weak to non-existent labor standards, devastating U.S. communities that relied heavily on industries such as auto manufacturing.

Technological Tools Facilitate Change

Whether it's a wheel, a plow, gunpowder or microchips, technology is developed by people, and may be used by people in a myriad of ways. A new technology can be deployed in ways that reinforce existing social and economic structures, or in ways that lead to fundamental change in those structures. Although technology often facilitates change, new technological tools can equally be used to resist change and uphold the status quo, such as facial recognition software used to suppress mass protests, AI job applicant screening used to maintain existing hiring biases, or social media algorithms that prevent people from seeing news or opinions that differ from their own.

Today, new technologies are being used in many dimensions of work: how individuals find and connect to job opportunities, how they are hired and fired, the task content of distinct jobs, and the managerial relationship. The impact of a new technology on workers depends on whether workers are able to shape the terms under which it is introduced and used. For example, technology can be used to surveil workers and fire them for minor transgressions, or the same technology could be deployed to enable workers to be safer, more efficient, and more effective at their jobs.

Following are some broad categories of technology that are facilitating workplace and workforce changes today:

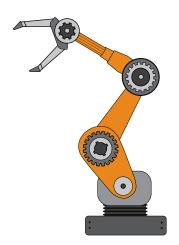
- Robots, automation and artificial intelligence (AI). Some industries, such as manufacturing and shipping, have been deploying robots and automation in the workplace for decades, and may continue to develop and adopt new technologies intended to increase productivity. Other industries are exploring new types of automation like autonomous vehicles, which are poised to enter segments of industry (e.g. long-haul trucking) in disruptive ways. In most cases, specific tasks, not entire jobs, are automated, meaning that rather than robots "taking over" humans' jobs, the introduction of automation may change the skill requirements, quality, or location of those jobs.
- **New products and services.** New technologies can be used to create and develop markets for new products and services, from mobile phones to lab-grown meat. The introduction of new products and services requires new jobs to produce or provide them, and often entire new supply chains. At the same time, new products or services may take market share from existing industries, resulting in those industries laying off workers.

- **Software for hiring & supervising workers.** Al-enabled software is routinely used to screen résumés, and even to conduct video interviews using language and facial recognition. Programs that constantly surveil and monitor worker performance can be used to make decisions about promotions, firing, and management. In the case of app-based drivers, the automatic "deactivations" of workers function effectively as firing by algorithm.
- **Online job markets.** Many employers are incorporating online networks or markets like LinkedIn into their recruitment and hiring procedures, and jobseekers in turn are using those networks to look for work and raise their profile with potential employers. Other online markets like Thumbtack focus on connecting small business owners directly with customers looking to hire them.
- **App-based labor platforms.** App-based labor platforms are used by "gig" companies like Uber, Lyft, and TaskRabbit to hire, set pay, control work hours and conditions, supervise, and/or fire workers, all through a mobile app. In some cases these functions may be performed by a human manager overseeing the app and communicating with the workforce, while in others the managerial functions may be automated or driven by an algorithm.
- Technology used by workers to organize. Workers are finding new ways to connect with each other, both through creative use of existing technology like Facebook or WhatsApp, and by designing their own apps and platforms. Groups like United for Respect and Coworker are pioneering the use of digital tools like social media to shape a new, scalable online-to-offline organizing model.
- **Remote work.** Increasingly flexible arrangements are changing the landscape of work, allowing for workers to take work home and work at odd hours. Whether these are used to make working arrangements more flexible and worker-friendly, or to effectively extend work hours and require employees to be "on-call" at all times, may vary. There may also be income, racial, and gender disparities in which workers have access to choose where and when they work.
- **Datafication.** New technologies enable employers to collect data from workers and consumers which they are able to monetize, raising concerns about privacy and equitable distribution of gains.

The trajectory of technological change, and its impact on working people, is shaped by our choices.

Ways Work is Changing in the Bay Area

This section includes a brief overview of six ways in which work is changing in the Bay Area (and beyond), followed by examples of Bay Area initiatives seeking to address that aspect of change or its impacts.



Automation of tasks

In 2013, Oxford researchers Frey and Osborne concluded that 47% of U.S. employment is at risk of automation, a finding that unleashed popular media hysteria about apocalyptic job loss. More recent research, however, suggests that these fears are overblown. The 47% figure reflected the technical capacity to automate work, not the certainty that work will be automated. In reality, whether automated technologies get adopted is subject to a host of political, social, and economic factors. For example, while one might imagine futuristic warehouses with sophisticated machinery assembling packages for home deliveries, thin profit margins in the warehouse industry make large capital investments (i.e., new machinery) risky—especially in an industry so closely tied to e-commerce, where competition is intense and new developments fast-paced.

The impact of automated technologies on jobs is likely to be more nuanced than originally thought. For instance, new technology is more likely to change the structure and task content of jobs rather than to eliminate it entirely. According to a 2017 McKinsey Global Institute Study, 60% of jobs have 30% or more tasks that stand to be automated, suggesting the extent of change possible within individual roles. Among these changes is the possibility that work will be "de-skilled," or simplified to the extent that workers are displaced from their regular roles and perform increasingly menial tasks.

Two studies from the UC Berkeley Labor Center analyzed the possible shifts in long-haul trucking and logistics, industries expected to be highly impacted by automation. Researchers found that automation is likely to diminish job quality more so than the overall quantity of jobs. For instance, without proactive intervention, autonomous trucks could replace stable and middle-wage longdistance trucking jobs with low-wage gig work. Meanwhile, the introduction of new technologies in warehouses have led to an acceleration in pace and

workload, leading to strenuous demands that endanger the occupational safety of workers.

Finally, it's important to note that these changes are not inevitable. Technology is designed and deployed by humans, who have the ability to shape its direction and impacts. The introduction of automated technologies in the workplace can be harnessed to create higher-skilled jobs with training pathways and a real career ladder for workers. Some collective bargaining agreements have included provisions requiring that workers be consulted on the introduction and deployment of new technologies in the workplace.

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING AUTOMATION			
Initiative	Description	Industry or types of workers	Geography
Gov. Newsom's Future of Work Commission	On International Workers' Day 2019, Governor Newsom signed an executive order establishing the Future of Work Commission, with the overarching goal of developing a new social compact for California workers, based on an expansive vision for economic equity that takes work and jobs as the starting point, and assumes that the future of work is not inevitable and will be shaped by our actions.	Focus on occupational sectors most at risk of automation	CA
UC Berkeley-WPUSA Future of Workers project	A research project with strong ties to the labor movement, the UC Berkeley-WPUSA Future of Workers program develops research aimed at shaping a pro-worker policy agenda for the future of work. Currently, the project is focused on developing a series of policy landscape scans on topline future-of-work -related issues, including worker displacement, data and algorithms, and job creation. In addition, the project is commissioning industry studies which provide an in-depth look at industries expected to be hit strongly by automation and other technologies, such as retail, healthcare, and logistics.		CA, national

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING AUTOMATION

Initiative	Description	Industry or types of workers	Geography
UNITE HERE contract with Marriott	As large hotel chains begin to implement automated systems to perform the work traditionally done by low-wage service workers (front desk clerks, bellhops, bartenders, dishwashers, cashiers), Unite Here and related unions representing such workers are beginning to organize around including workers in these new systems of work, rather than render them useless and excluded. The agreed-upon contract that resulted from the 2018 Marriott strike gave workers who lose their jobs to automation first access to job openings at other hotels in the Marriot system. A June 2018 contract reached with MGM & Caesar's Las Vegas included provisions for "workers to be trained to do jobs created or modified by new technology, allowing them to share in the productivity gains. The contracts also provide for the company to try to find jobs for displaced workers. But the union's key achievement was to get 180 days' warning of technological deployments."	Hospitality	Cities nationwide, including San Jose, San Francisco, Boston, Honolulu
Kaiser Permanente Labor-Management Partnership technological transition plan	Kaiser's most recent Coalition National Agreement from 2015 includes provisions related to planning for the "workforce of the future," as driven by technological change. To that end, it created a Regional Workforce Planning and Development Team with the mandate to study "jobs of the future." It also provided additional funding to two Taft-Hartley training trusts to prepare employees for workplace changes. A related union contract between Kaiser and SEIU-UHW outlines specific steps to address job displacement due to mechanization or technological improvement. These protective provisions include: advanced notice, offer of new job and training, and severance pay for long-time employees.	Healthcare	Bay Area, SoCal
AB 1321	A bill that would give the State Lands Commission the power to block automation at ports. The bill arose in part of ILWU dockworkers union's fight against automation at one of the largest terminals in the LA port. Passed out of Assembly and still in consideration in the Senate	Logistics, transportation	CA

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING AUTOMATION

Initiative	Description	Industry or types of workers	Geography
GreenLight.tech	An educational initiative geared at getting young people, high school and college students, informed about job opportunities in the field of autonomous vehicles.	Logistics, transportation	

Recommended reading:

McKinsey Global Institute, *The future of work in America*. July 2019. www. mckinsey.com/mgi

Annette Bernhardt, "Beyond Basic Income: Claiming Our Right to Govern Technology". https://medium.com/@a.d.bernhardt/can-we-imaginegoverning-technology-eb4b58092b81

William M. Rodgers III and Richard Freeman, How Robots Are Beginning to Affect Workers and Their Wages. The Century Foundation, Oct. 17, 2019. https://tcf.org/content/report/robots-beginning-affect-workers-wages/

Steve Viscelli, *Driverless? Autonomous Trucks and the Future of the American Trucker.* Sept. 2018 Working Partnerships USA and UC Berkeley Labor Center. www.driverlessreport.org



Growth & decline of industries

The industry mix in the Bay Area—that is, the relative size of different industries—has changed over time, and may shift in new ways as demographics, economics, policy and business decisions lead some industries to add jobs and others to reduce jobs.

These shifts can have profound impacts on workers and communities. For example, since 1990 the Bay Area has lost over 100,000 manufacturing jobs, while adding hundreds of thousands of jobs in both technology and related fields, and in the service sector.²⁵ This change in the industry mix is a contributing factor to the growing polarization of the regional economy between high-wage and low-wage jobs, leading to the "hollowing out" of the middle class.

Industry shifts also have equity implications. For example, over the past several decades women of color have increased their share of public sector jobs, which tend to be family-supporting positions with career opportunities. If public sector jobs are cut, outsourced, or otherwise become a smaller share of the regional economy, the economic status of many women of color and their families is likely to suffer, especially since women of color are severely underrepresented in other middle-wage or higher-wage occupations.

It is important to remember, however, that wages are not an inherent property of industries; manufacturing jobs in the United States became middle-wage careers through decades of worker organizing coupled with public policy and private business decisions. Similarly, wages in the service sector have been pushed downward through outsourcing and declining worker power, and now to some extent are being pushed up again by local minimum wage laws.

In the future, industries associated with care-giving for the elderly and disabled are expected to increase their share of the industry mix, as demographic change leads to an older population needing more health and personal care services.

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING THE CHANGING INDUSTRY MIX

Initiative	Description	Industry, occupation, or types of workers it addresses	Geography
UFCW Cannabis Division	Cannabis worker organizing, training programs, and health & safety standards. Supporting good employers that provide good jobs through strong licensing rules and smart zoning. Building a robust training program through statecertified apprenticeship programs to develop career pathways for workers in the industry + Worker first rules that protect safety and security of cannabis worker, while ensuring accountability in the sale of a controlled substance.	Cannabis	HQ in Hayward; offices in Eureka, Martinez, Novato, Salinas, San Francisco, San Jose and South San Francisco.
San Francisco Bay Area Biotechnology Center	Hosted at Ohlone College in Fremont, the SF Bay Area Biotechnology Center is part of a broader statewide initiative run by CA Community Colleges Workforce Development Program. Provides handson training and entry-level work readiness for biotech workforce (pharma, diagnostics, biotech, biomedical, and medical devices). With enough training, students can earn an "Employability Milestone" that represents readiness for employability in the biotech industry	Biotechnology	Bay Area
Silicon Valley Competitiveness and Innovation Project	A program designed to "pursue a data-driven public policy agenda aimed at enhancing the region's traditional advantages in tech/innovation & ensure that Silicon Valley residents have access to the job opportunities linked to growth in innovation industries."	Information and communications technology (ICT)	Santa Clara, San Mateo & San Francisco counties
IT Networking / Cybersecurity Apprenticeship	CA community colleges offer a series of 4 sets of course courses intended to get students trained for well-paying, entry-level jobs in IT as well as more specialized areas such as cybersecurity and networking. Overall, this is a field where thousands of entry-level jobs remain unfilled.	Information and communications technology (ICT)	California
Support at Home SF	Support at Home is a SF program won by groups of domestic workers, seniors, and people w/ disabilities to provide financial support to people who need care but make too much to quality for MediCal In-Home Supportive Services (IHSS).	Domestic work; healthcare	San Francisco

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING THE CHANGING INDUSTRY MIX

Initiative	Description	Industry, occupation, or types of workers it addresses	Geography
Center for the Study of Child Care Employment	CSCCE conducts research and policy analysis about the characteristics of those who care for and educate young children and examines policy solutions aimed at improving how our nation prepares, supports, and rewards these early educators.	Child care, education	California
Futuro Health	Kaiser Permanente and Service Employees International Union-United Healthcare Workers West (SEIU-UHW) jointly established Futuro Health as part of a collective bargaining agreement reached in October 2019. Future Health is described as "a new \$130 million nonprofit organization dedicated to growing the largest network of certified health care workers starting in California and scaling throughout the nation." Focused on training, upskilling, and career progressions for the allied health workforce, Futuro Health "aims to graduate 10,000 new licensed, credentialed allied health care workers in California over the next four years."	Allied health	California

Recommended reading:

Caring Across Generations, *Preparing for the Elder Boom: A Framework for State* Solutions. Jan. 2017. https://caringacross.org/wp-content/uploads/2017/01/ FINAL-CAGRe commendations for a Statewide Long-Term Home Care Program. pdf

Linda Burnham and Nik Theodore, Home Economics: the Invisible and Unregulated World of Domestic Work. 2012. National Domestic Workers Alliance, Center for Urban Economic Development, and University of Illinois at Chicago DataCenter. https://www.domesticworkers.org/home-economics-invisibleand-unregulated-world-domestic-work



Changing demands for skills

As both technologies and business models change, many workers today are in the position of needing to continuously learn new skills, yet lack clear pathways to be able to develop those skills while still supporting themselves and their families. It is also challenging for workers, and even for workforce development or education providers, to discern which skills will advance a worker's career, as opposed to becoming obsolete or over-supplied by the time the worker finishes training.

The state's Unified Workforce Development Plan sets the goal of "produc[ing] a million 'middle-skill' industry-valued and recognized postsecondary credentials between 2017 and 2027."26 Both in the Bay Area and at the state level, public policies and programs for workforce development attempt to use labor market information to predict what skills will be valued and in demand—a difficult calculus to make for an entire regional or state economy. Several emerging initiatives, such as the High Road Training Partnerships (HRTP) initiative, use a sectoral approach, bringing together business, worker organizations, training and education providers, CBOs and other key partners in one specific industry to try to develop a unified strategy for developing career pathways that will support the growth of that industry. This may involve (for example) crafting ways to improve retention of existing skilled workers; creating career pathways whereby incumbent workers in the industry can upgrade their skills and move to higher-paid positions; or developing pipelines to attract and train new workers to the industry.

Structural racism, gender discrimination, and related policies and practices have built barriers that have walled out many immigrants and people of color from the resources needed to achieve basic skills such as math and English literacy that provide the foundation upon which to build higher education and technical skills. For example, harsh disciplinary policies that focus on

suspension or expulsion from school disproportionately impact African-American and Latino students, who are then less likely to complete a high school diploma. In another manifestation, immigrant women whose husbands arrive in the United States on certain work visas may not be legally allowed to work, depriving them of the opportunity to develop formal on-the-job experience needed for career advancement and keeping them economically dependent on a male breadwinner.

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING CHANGING DEMANDS FOR SKILLS			
Initiative	Description	Industry, occupation, or types of workers it addresses	Geography
AMT Workforce Program	A workforce development program put on by Evergreen Valley College & NextFlex aiming to address Silicon Valley's workforce shortage by providing people with the skills & background necessary to find employment in the tech sector. Specifically, this program focuses on teaching students an "advanced manufacturing" skillset.	Manufacturing	San Jose
Design It-Build It-Ship It (DBS)	"DBS aims to build a stronger and more responsive training system that will aid students and unemployed adults to train for jobs that regional employers find difficult to fill. When these systems successfully align, students and incumbent workers can earn credentials that allow them to enter the workforce in one of the three priority sectors that are drivers of the East Bay economy: Advanced Manufacturing, Biosciences and Transportation & Logistics."	Manufacturing, biotechnology, transportation, logistics	East Bay
TechSF Training and apprenticeship program	TechSF is an initiative run by the SF Office of Economic and Workforce Development that provides individuals access to free tech skills trainings—e.g. coding, video production, IT certifications. This is facilitated by connecting them to nonprofits like SamaSchool, UpwardlyGlobal, and the Bay Area Video Coalition.	Information and communications technology (ICT)	San Francisco

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING CHANGING DEMANDS FOR SKILLS

Initiative	Description	Industry, occupation, or types of workers it addresses	Geography
Area Health Education Centers (AHECs)	The California Statewide AHEC Program aims to improve the supply and distribution of health care professionals through community/ academic educational partnerships. Local and regional AHECs are led by healthcare employers (generally community health clinics) in each local area. The San Francisco AHEC hosts a Community HealthCorps program that exposes potential health professionals to community health in underserved areas. A majority of the members go on to be trained as health professionals. The South Bay AHEC provides community-based clinical experience and professional education; teaches residents to conduct health education in community organizations; and provides health careers pipeline opportunities for K-16 students.	Healthcare	Contra Costa, San Francisco, South Bay
Bay Area Council's Workforce of the Future Committee	The Workforce of the Future Committee seeks to address employers' skill needs through two programs. Occupational Councils convene industry executives to diagnose skills gaps in their industry talent pipelines. The Inclusive Economy program advocates for policy-makers and program directors to focus their workforce development efforts on those skills.	multiple	Bay Area
Climb Hire	Funded by \$2 million from donors, including Google.org, Schmidt Futures, and the Schusterman Family Foundation, Climb Hire offers working adults ages 24–33 from underrepresented backgrounds 200 hours of training in Salesforce administration as well as soft skills, then assists with job placement in roles such as Junior Salesforce Administrators, Business Analysts, and Project Coordinators. Once they land a job, participants must pay back a total of \$7,200 to the program in monthly installments. Climb Hire also plans to charge employers a finders' fee.	Information and communications technology (ICT)	Bay Area

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING CHANGING DEMANDS FOR SKILLS

Initiative	Description	Industry, occupation, or types of workers it addresses	Geography
Skills for CA	Skills for CA is a statewide coalition of organizations advancing workforce development policies focused on skills training. Its activities include: 1) Strengthening and amplifying a unified voice towards state policy impacts; 2) Sharing workforce development innovations across the network; and 3) Developing resources to inform state policy. It is a partnership between California EDGE Coalition and National Skills Coalition.	multiple	CA

Recommended reading:

"Providing Opportunity for California's Low-Wage Workers," California EDGE Coalition, Jul 25, 2018. https://caedge.org/workforce-brief-providingopportunity-for-californias-low-wage-workers/

Jaime S. Fall & Alison Ascher Webber, "Foundational Digital Skills: An Equity Imperative," The Aspen Institute (blog), January 7, 2020. https://www. aspeninstitute.org/blog-posts/foundational-digital-skills-an-equity-imperative/



Economic shifts in response to climate change

From wildfires that destroyed homes in the North Bay, to the smoke that choked the lungs of urban residents for days, to record-breaking 100+ degree heat waves, the effects of climate change are here and significantly impacting life in the Bay Area. Sea level rise and recurring drought threaten our future. These impacts drain already stretched public resources and demand more capacity from emergency responders, firefighters, healthcare workers, and public sector workers generally (many of whom recently discovered that they are designated in their contracts as emergency responders).

When global climate chaos meets our local crisis of wealth and racial disparity, the impacts are devastating. Long legacies of environmental racism show that the effects of climate change will not impact everyone equally: without community intervention and empowerment, poor and low-wage workers, people of color and other marginalized communities will bear the brunt of the impacts and receive few of the benefits of mitigation programs. When schools close from severe smoke pollution, low income workers are most impacted by the lack of affordable childcare. In wildfire recovery, low income workers are most impacted by soaring rents from housing shortages and most likely to work unsafe, low-wage recovery jobs, while undocumented workers are unable to access federal disaster support funding. State retirement funds such as CalPERS and CalSTRS are only starting to grapple with the impact of risky fossil fuel-based investments on the future of pensions and the ability of aging workers to support themselves.

As California and local municipalities pursue policies and practices to reduce greenhouse gas emissions, the impacts will vary across Bay Area cities: for example, the impact of phasing out fossil fuel production and use will have much more disruptive impacts on the workers at refineries in Richmond (and adjacent jobs, such as transportation) than in other areas where power plants and refineries no longer exist. Comprehensive and thoughtful just transition plans will be required to ensure that workers in sunset industries are adequately compensated and retrained.

By contrast, in urban areas such as San Francisco, climate change policies targeting some of the largest sources of greenhouse gas emissions—buildings and transportation—are significant opportunities for job growth. As buildings shift from natural gas to electricity (and residential and utility scale renewable industries expand), although some sectors will likely lose jobs (such as plumbers and pipefitters), electricians and those who manufacture renewable energy equipment will gain significant work. Public transportation will also have to be expanded significantly to meet climate goals.

These shifts will require significantly expanded (re)training programs—that community colleges could be ideally suited to house—and provide jobs and economic development opportunities for low-income communities and communities of color. Ensuring that green jobs are also good, union jobs (which is not inevitable) will be critical to the prospect of uniting climate, environmental and economic justice in a meaningful way.

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING CLIMATE TRANSITION			
Initiative	Description	Industry, occupation, or types of workers it addresses	Geography
Alliance for a Just Recovery	Formed after the wildfires of 2017, AJR is a coalition supporting low-income workers, calling for policies ensuring a just recovery and economic and racial justice, such as labor standards for the rebuild, rent control, living wages and environmental policies. (5% of housing stock was destroyed and rents surged by 30% in wake of the fires)	Construction	North Bay

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING CLIMATE TRANSITION

Initiative	Description	Industry, occupation, or types of workers it addresses	Geography
Diablo Canyon Nuclear Power Plant Decommissioning (Just Transition)	IBEW Local 1245, representing the Diablo Canyon workers, worked with PG&E, environmentalists, and local communities to negotiate a deal for the nuclear plant's scheduled 2025 shutdown — including taking care of the 500 high-skill, highwage employees at the plant. The agreement keeps the plant operational until the end of its license with the Nuclear Regulatory Commission, through 2025, and gives a 25 percent retention bonus for workers to remain at the plant through its closure (=\$350million?). To compensate for the loss in the region's tax base, the agreement provides \$85 million for local government.	Utilities	San Luis Obispo
AB639: Task Force on Addressing Workforce Impacts of Transitioning Seaports to a Lower Carbon Economy	CA State bill introduced by Assemblymember Cervantes, would create a task force within CalEPA to analyze the workforce impacts of transitioning seaports to lower carbon economy and require CARB to include a plan for workforce impacts in its regular 5-year scoping plans	Logistics	CA; Port of Oakland
California Advanced Lighting Controls Training Program (CALCTP)	CALCTP is a statewide initiative aimed at increasing the use of lighting controls in commercial buildings and industrial facilities through education. CALCTP is composed of two training programs: (1) an installation program and (2) an acceptance test technician program (Title 24 requirement).	Construction Utilities	CA
	CALCTP provides training and certification to electricians, contractors, acceptance test technicians, building operators and managers. The program is increasing the use of energy-saving lighting controls in commercial buildings and ensuring they are properly installed and commissioned for maximum effectiveness.		

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING CLIMATE TRANSITION

Initiative	Description	Industry, occupation, or types of workers it addresses	Geography
San Francisco Green New Deal	Community and labor coalition formed to push for the framework of a SF Green New Deal and policy solutions to reach SF's climate goals from a worker justice and racial equity perspective with workers and community members of our organizations engaged in participatory planning. This potentially includes efforts around energy and power, jobs, transportation justice, food justice and public financing.	Utilities Transportation Construction Public sector	San Francisco
Rising Sun Center for Opportunity	Opportunity Build / Green Energy Training Services (GETS) provides job training, case management, and job placement services to low-income adults experiencing barriers to employment. GETS offers two training modules: Core, which is a certified Apprenticeship Readiness Program for individuals who want to enter the union building trades, and Solar, for those seeking to enter the solar industry. Climate Careers / California Youth Energy Services (CYES) trains and employs local young adults to provide free energy efficiency and water conservation services to residents of their communities.	Construction Utilities	Oakland East Bay Stockton

Recommended reading:

Climate Justice Alliance Just Transition Principles. https://climatejusticealliance. org/wp-content/uploads/2018/06/CJA_JustTransition_Principles_final_hi-rez. pdf

A Roadmap to an Equitable Low-Carbon Future: Four Pillars for a Just Transition. https://dornsife.usc.edu/pere/roadmap-equitable-low-carbon-future/

Advancing Equity in California Climate Policy: A New Social Contract for Low-Carbon Transition. http://laborcenter.berkeley.edu/advancing-equity/



Expansion of contingent & nonstandard work arrangements

For Bay Area workers who struggle to make ends meet, low wages are only part of the problem. Another dimension of economic insecurity is workers' lack of control over their time: work schedules, ability to take time off, how many work hours they get per week, or even how long their work assignment will last.

Over the past several decades, business models in the United States have significantly shifted away from long-term, stable employment towards an increased share of what's called "contingent work": temporary, part-time, contract employees, outsourcing, or gig work.

A national study of workers aged 26 to 32 found that extreme and unpredictable fluctuations in work schedules are widespread. Four out of ten workers did not know their schedule more than a week in advance. The timing of their shifts fluctuated from week-to-week and the number of hours they receive (along with their paychecks) rose and fell unexpectedly. Workers who are Latinx, Black, female, or parents of young children were the most likely to be in a job with unpredictable scheduling.27

Furthermore, the on-demand employment model now prevalent in app-based platform work companies (like Uber, Lyft, Doordash and others) is that of a labor broker which recruits, screens, trains and dispatches workers on a per-task or just-in-time basis, with zero workplace or schedule stability and often with net pay less than the legal minimum wage. Many of these on-demand companies have classified their workers as independent contractors, meaning they lack even the most basic workplace rights and are legally forbidden to organize.

These changes shift economic risk away from employers onto individual families and households, who are ill-equipped to assess the risk accurately in advance or deal with the downsides when they occur. Constantly changing work schedules make it extremely difficult for workers and families to predict household income week-to-week, hold a second job to pay the bills, provide stable care for their children, or pursue further education. Unwanted drops in hours and volatile changes in work month-to-month or week-to-week can also impact eligibility for social service programs like child care and food subsidies. This problem is exacerbated by the subcontracted economy, where workers often lose their jobs when contracts change hands, even though the jobs remain the same.

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING CONTINGENT & NONSTANDARD WORK ARRANGEMENTS

Initiative	Description	Industry, occupation, or types of workers it addresses	Geography
AB5: Worker status	"AB5 expands a groundbreaking California Supreme Court decision last year known as Dynamex. The ruling and the bill instruct businesses to use the so-called 'ABC test' to figure out whether a worker is an employee."	Ride-hailing drivers, delivery drivers, and other misclassified employees	CA
San Francisco Formula Retail Employee Rights Ordinances	"The Formula Retail Employee Rights Ordinances (FRERO) regulate hours, retention, and scheduling, and treatment of parttime employees at some Formula Retail Establishments. The laws apply to Formula Retail Establishments with at least 40 stores worldwide and 20 or more employees in San Francisco, as well as their janitorial and security contractors.	Retail (large chains)	San Francisco
San Jose Opportunity to Work Ordinance	This ordinance requires employers to offer additional hours to existing, qualified part-time employees before hiring more employees, including subcontractors or temporary staffing services. The ordinance applies to hourly employees at businesses with 36 or more employees worldwide.	All hourly workers	San Jose

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING CONTINGENT & NONSTANDARD WORK ARRANGEMENTS

Initiative	Description	Industry, occupation, or types of workers it addresses	Geography
Emeryville Fair Workweek Ordinance	Requires employers to provide employees with an estimate of average weekly work hours prior to start of employment, two weeks' notice of schedules, and compensation when the employer makes changes to the posted schedule, and it allows employees to decline last-minute shift additions. Employers must also offer additional hours to existing employees before hiring new staff. The law guarantees employees 11 hours' rest period between shifts and a protected right to request scheduling accommodations. This ordinance applies to retail firms with 56 or more employees globally and to fast-food firms that employ 56 or more people globally and 20 or more people in Emeryville.	Retail, restaurant (large chains)	Emeryville
Facebook responsible contracting standard	In May 2019, Facebook committed to raise standards globally for vendors providing services to the company, including low-wage service workers as well as content reviewers, both subcontracted and direct hire. It includes a minimum wage boost to \$20/hour (from \$15) in the Bay Area, requirements to provide comprehensive healthcare, family and sick leave, and wellness care for the 30,000 or so content reviewers experiencing trauma and issues related to the experience of reviewing often violent and traumatizing content.	Information and communications technology (ICT), Building services, Food service, Private transportation	Bay Area International
Samaschool	Provides low-income adult populations with a 101-level course on working in the gig economy. Curriculum includes the basics of being a contract worker, how to find a job, customer service, brand development, time management, safety, taxes and other topics.	Gig workers	San Francisco based Bay Area New York

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING CONTINGENT & NONSTANDARD WORK ARRANGEMENTS

Initiative	Description	Industry, occupation, or types of workers it addresses	Geography
Maintenance Cooperation Trust Fund	MCTF is a labor and employer joint project that partners with labor agencies to fight wage theft and other violations in the low wage, heavily subcontracted janitorial industry	Building services	

Recommended reading:

Ratna Sinroja, Sarah Thomason and Ken Jacobs, Misclassification in California: A Snapshot of the Janitorial Services, Construction, and Trucking *Industries.* March 11, 2019. UC Berkeley Labor Center. http://laborcenter. berkeley.edu/misclassification-in-california-a-snapshot-of-the-janitorialservices-construction-and-trucking-industries/

Julia Wolfe, Janelle Jones, and David Cooper, 'Fair workweek' laws help more than 1.8 million workers. July 19, 2018. Economic Policy Institute. https://www.epi.org/publication/fair-workweek-laws-help-more-than-1-8-million-workers/

Chris Benner and Kyle Neering, Silicon Valley Technology Industries -Contract Workforce Assessment. March 2016. UC Santa Cruz Everett Program. http://www.everettprogram.org/main/wp-content/uploads/ Contract-Workforce-Assessment.pdf



Introduction of new technologies in the workplace

(other than automation)

Robots and automation garner much of the media attention on the "future of work." Yet many other types of technologies are changing work and workplace relations, both by creating new products and services and by facilitating reorganization of work or how employers and workers interact.

When technology is applied to create a new product or service and a market is developed for it, it can generate entirely new job categories or industries. Software developer, electronics and semiconductor assembler, movie and TV producer, and cable installer are all examples of occupations that did not exist until the technology that enables them was developed and widely deployed.

Businesses or workers also use technology to change the ways that work and workplaces are organized. Technology can be used to hold virtual meetings, or to allow workers to telecommute rather than be physically present at work. At the same time, the prevalence of smartphones and online connectivity can make it easier to require employees to be constantly working or on-call, even when they are not being paid to be at work.

Predictive scheduling software is used by some companies, especially in the retail and restaurant industries, to enable "just-in-time" scheduling where workers are required to be always available, but never know if or when they are going to be called to work. On the other hand, scheduling software can also be used collaboratively to give workers greater agency over their own scheduling, by inputting and updating their availability and preferred hours and enabling workers to choose to accept or decline available shifts.

Some employers are increasingly using data collection and/or surveillance technology to supervise and control their workforce. Workers for platformbased companies like Uber are often supervised almost entirely by algorithm through the company app, which determines how much work they are given, how much they are paid, and can even fire ("deactivate") a worker, all with no direct human interaction.

Finally, many businesses are increasing the use of technology like tablets and apps as part of their everyday jobs, even in hands-on fields like restaurants or construction. This makes digital literacy increasingly important even for nontech-related fields. It also impacts workers who may not be literate in English; even if they can communicate verbally, navigating software with technical, English-only instructions may be a challenge. And industry-specific innovations like electronic medical records may require incumbent workers to gain new skills or adapt to a different process as part of their existing job.

Artificial Intelligence (AI) is also playing an increasing role in whether you get hired in the first place—or whether you can even see the job posting. Al and algorithms often determine to whom a job posting is advertised on career sites or social media. Resumes are often screened using keywords or more sophisticated AI which determines whether or not a human will ever see the application, which in turn has spawned an industry of resume advisors trying to help applicants outwit the algorithms, and even classes on how to "beat" AI video interviews in which facial recognition software assesses applicants' emotions.

However, these systems often use algorithms and heuristics built up primarily by examining past hiring decisions, which introduces inherent bias into the systems. Amazon reportedly gave up on a multi-year project to build an AI recruiting tool after it persistently discriminated against women by downgrading candidates with markers such as attending a women's college or listing job titles or hobbies associated with women.²⁸ Another company ditched an AI resume screening tool after finding that, based on a statistical analysis, the two primary criteria it had decided indicated the best candidates were whether the candidate had played high school lacrosse, and whether they were named Jared.29

EXAMPLES OF BAY AREA WORKFORCE INITIATIVES ADDRESSING NEW TECHNOLOGY IN THE WORKPLACE

(other than automation)

Initiative	Description	Industry/ies, occupation/s, or types of workers it addresses	Geography
California Consumer Privacy Act	The California Consumer Privacy Act of 2018 gave consumers and workers rights around data privacy. However, a subsequent bill, AB 25, was introduced to exclude workers from these protections. Advocates intervened and added a provisions for AB 25 to sunset after one year, and are planning to introduce a worker data rights bill in 2020.	All	CA
Amazon warehouse worker management	Amazon tracks individual warehouse workers' productivity and an automated system can generate warnings and termination. Workers report an inhuman pace of work and avoiding bathroom breaks. Possibly 10% of its workforce is fired for what Amazon considers productivity reasons alone in a year. Amazon has also patented an ultrasonic bracelet that can monitor worker movements.	Logistics, Retail	International
Turkopticon	Amazon's Mechanical Turk (MTurk) workers can review employers, giving them more agency and transparency. MTurk is a service through which Amazon recruits workers who can be hired to do various types of online "microtasks," typically for pennies per task. As described by Wikipedia, MTurk "uses remote human labor hidden behind a computer interface to help employers perform tasks that are not possible using a true machine."	Multiple	International
WorkIt	WorkIt is an app to help people working in hourly jobs get answers to questions about workplace policies and rights from trusted and trained peer advisors. WorkIt also connects you to coworkers who share your experiences and can provide support and care.	Retail, other industries	National Bay Area pilot
Stride Center	The Stride Center is focused on providing introductory IT training for people who face barriers to employment to help them access careers in the technology economy.	Information and communications technology (ICT)	Oakland East Bay

Recommended reading:

Michelle Miller and Sam Adler-Bell, The Datafication of Employment. The Century Foundation, Dec. 19, 2018. https://tcf.org/content/report/ datafication-employment-surveillance-capitalism-shaping-workersfutures-without-knowledge/

Brigid Schulte, "Why Today's Shopping Sucks: The rise of on-demand scheduling has made the shopping experience—and workers' lives miserable." Washington Monthly, Jan. 2020. https://washingtonmonthly. com/magazine/january-february-march-2020/why-todays-shoppingsucks/

Miranda Bogen, "All the Ways Hiring Algorithms Can Introduce Bias." Harvard Business Review, May 06, 2019. https://hbr.org/2019/05/all-theways-hiring-algorithms-can-introduce-bias

Rebecca Heilweil, "Artificial intelligence will help determine if you get your next job." *Recode*, Dec. 12, 2019. https://www.vox.com/ recode/2019/12/12/20993665/artificial-intelligence-ai-job-screen

Sangmi Cha, "'Smile with your eyes': How to beat South Korea's AI hiring bots and land a job." Reuters, Jan. 12, 2020. https://www.reuters.com/ article/us-southkorea-artificial-intelligence-jo/smile-with-your-eyes-howto-beat-south-koreas-ai-hiring-bots-and-land-a-job-idUSKBN1ZC022

How Stakeholders Are Responding to Changes

This section includes a brief overview of five approaches stakeholders are applying to respond to changes in work, followed by examples of Bay Area initiatives using that approach.



Worker

Worker organizing takes many forms, from informal conversations to structured organizations, and from legally-enforceable contracts to spontaneous concerted action. Collective bargaining through a labor union is (in most cases) the only way that workers can collectively exert their voices to obtain legally binding commitments, and historically has been the most effective means for workers in the United States to exercise agency.

However, formal collective bargaining has often been restricted to wages, benefits, discipline, and grievances. Workers have recently begun to seek ways to exercise voice and agency over issues related to the changing nature of work, both within union contracts and through new or alternative forms of organizing.

In the past year, the #MeToo and #TimesUp movements have brought renewed attention to pervasive issues of workplace sexual harassment, which disproportionately affects women, LGBTQ, and non-binary workers. Organizing efforts both inside and outside of the workplace have spurred progress on empowering workers threatened by sexual harassment. For example, hotel workers organizing with union UNITE HERE have won contracts to provide a "panic button" for hotel housekeepers if they are threatened while alone; janitors with SEIU-USWW have won anti-harassment training requirements; and a new California state law prohibits "forced arbitration" clauses, which have been used to silence victims of harassment on the job.

EXAMPLES OF BAY AREA INITIATIVES FOCUSED ON WORKER ORGANIZING

Initiative	Description	Industry/ies, occupation/s, or types of workers it addresses	Geography
University of California workers: AFSCME 3299 Insourcing initiative	A major component of AFSCME 3299's focus has been pushing for parity and insourcing. Over the years, 3299 has successfully fought to insource various contracted workers, including parking lot attendants, janitors who worked for IMPEC, etc. These contracted workers faced great disparity, making \$10 less an hour, and lacking healthcare, vacation and other benefits afforded to UC workers. Outsourcing also feeds racial & gender disparities.	Public sector	CA
California Domestic Workers Coalition	A statewide movement for the rights and dignity of immigrant women workers; building through legislative advocacy, grassroots organizing, and leadership development. A recent victory was winning state funding for a rights education and enforcement program, in June 2019.	Domestic work	CA
Gig Workers Rising	Gig Workers Rising is a campaign that partners with app-based workers to inform them and support them in their demands that include a living wage, transparency, benefits, and a voice at work	Ride-hailing drivers, delivery drivers, other gig workers	Based in Bay Area; national
Silicon Valley Rising	The tech industry relies on an army of subcontracted janitors, cafeteria workers, security officers, bus drivers, and other service workers. These workers, who are mostly Black and Latino, work on the same campuses as direct tech employees, but on average are paid just one-sixth as much.	Building services; Foodservice; Private transportation; Information & communications technology (ICT)	Santa Clara & San Mateo Counties
	Through community organizing, public pressure, and worker organizing, Silicon Valley Rising is calling on tech companies to raise wages and ensure these workers have a voice on the job.		

Tech Workers Coalition
(TWC)

A coalition of workers in and around the tech industry, plus labor organizers, community organizers, and friends.

Guided by a vision for an inclusive & equitable tech industry, TWC organizes to build worker power through rank & file self-organization and education.

TWC is a membership-based, democraticallystructured, all-volunteer, and worker-led organization.

Information & communications technology (ICT)

Bay Area

AB 51 (Gonzalez): Ban on forced arbitration

California's AB 51, a bill introduced by Assemblymember Lorena Gonzalez, prohibits employers from forcing employees to sign a mandatory arbitration agreement as a condition of employment. Mandatory arbitration agreements often prevent workers who are victims of sexual harassment, wage theft, or other serious workplace violations from taking their claims to court. AB 51 was signed into law in October 2019 to take effect Jan. 1, 2020. However, the U.S. Chamber of Commerce has sued to overturn AB 51, and on Dec. 31, 2019 a federal judge issued a temporary restraining order preventing the law from taking effect until the initial motion is heard.

A similar federal law, the FAIR Act, passed the House of Representatives in fall 2019, but is unlikely to move in the Senate.

New hires in all industries

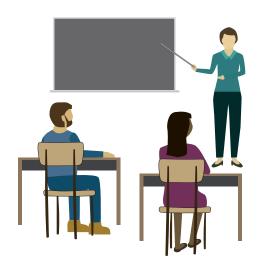
CA

Recommended reading:

The Clean Slate Agenda. Harvard Law School's Labor and Worklife Program. Jan. 2020. https://www.cleanslateworkerpower.org/clean-slate-agenda

Sarita Gupta, Stephen Lerner, Joseph A. Mccartin, "It's Not the Future of Work, It's the Future of Workers That's In Doubt." The American Prospect, Aug. 31, 2018. http://prospect.org/article/its-not-future-work-its-future-workers-doubt

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Workforce development

The field of workforce development includes adult basic education, shortand long-term skills training, support with job search and career navigation, "labor market intermediaries" that work to match businesses with jobseekers, wraparound services like transportation, childcare, work clothing and other necessities, and a host of other approaches to employment and career advancement.

California has several extensive workforce development systems: the California community colleges, California adult schools, local Workforce Development Boards, and Registered Apprenticeships. Each of these systems works to address both the changing demands of employers, and the needs of California's diverse populations of adult learners, jobseekers, and workers seeking career advancement.

- **Adult schools** are the workhorses of the adult basic skills system. They comprise the majority of agencies offering adult basic education, literacy, introductory ESL, and GED preparation classes, typically at low or no cost.
- **Community colleges** are the region's primary providers of vocational and postsecondary education for certificate, 2-year degree, or transfer to a 4-year college.
- Workforce Development Boards are the major providers of employment and career development services for the Bay Area's unemployed and underemployed workers.
- **Registered Apprenticeships** are structured, earn-while-you-learn postsecondary programs that combine full-time, paid on-thejob training with related supplemental classroom instruction. All

California Registered Apprenticeships are overseen by the Division of Apprenticeship Standards, which approves their standards, curriculum, and skills progression. There are currently approximately 94,000 Registered Apprentices in California; 30 the majority are enrolled in Joint Apprenticeships run by a partnership between a union and an employer or employer group, while a smaller number are enrolled in Unilateral Apprenticeships run by employers only.

- In addition to the statewide systems, there are hundreds (if not thousands) of workforce development programs run by nonprofits and community-based organizations (CBOs), as well as many run by forprofit companies.
- Finally, **businesses** play an important role in offering training and development to their incumbent workers in order to "grow their own" talent and provide pathways for existing employees to advance within the company.

All these systems and providers are interconnected, although alignment of the various systems poses challenges.

An even greater challenge is that of predicting what types of training, development, or support will lead to improved employment outcomes. The workforce development field has experienced numerous instances of training for the wrong skill set or for jobs that change or disappear by the time the new training program is established. Another common problem is over-training, wherein a labor market demand is identified, but then dozens of training providers all create programs to meet the same demand, resulting in many more trained workers than job openings. The changing nature of work may exacerbate these challenges.

There are hundreds of workforce development programs in the Bay Area. The list below focuses on a few examples of initiatives that impact the entire region by serving a coordinating or convening role, rather than on individual programs.

EXAMPLES OF BAY AREA INITIATIVES FOCUSED ON WORKFORCE DEVELOPMENT AND TRAINING

Initiative	Description	Industry/ies, occupation/s, or types of workers it addresses	Geography
Strong Workforce Initiative	"The purpose of the Strong Workforce program [a project of California Community Colleges] is to improve the availability and quality of [Career Technical Education] programs leading to certificates, degrees, and credentials. Strong Workforce requires neighboring community colleges to form a regional consortium. Each consortium must collaborate with various regional stakeholders, including local workforce development boards, industry leaders, and local education agencies, to develop a four-year plan for how they will address regional workforce needs." (CA Legislative Analyst's Office)	Multiple	CA
Adult Education consortia	In 2013, California's AB 86 launched a movement towards regional coordination and alignment to break down silos between the various systems and providers serving adult learners. In regions throughout the state, community colleges, adult schools, workforce board, CBOs and other partners came together to form Regional Consortia to plan and work collaboratively, expand and improve adult education and build "no wrong door" systems and pathways for adult learners. In the Bay Area, each local sub-region has formed an Adult Education Consortium and a coordinated plan. A list of all consortia is available at https://caladulted.org/ConsortiumDirectory .	Multiple	Specific sub-regions throughout CA
"Future of the Workforce Development Ecosystem" project for SF OEWD	A research project envisioning a framework for the workforce development system of the future, in San Francisco.	Multiple	San Francisco

EXAMPLES OF BAY AREA INITIATIVES FOCUSED ON WORKFORCE DEVELOPMENT AND TRAINING

Initiative	Description	Industry/ies, occupation/s, or types of workers it addresses	Geography
Cannabis Equity Program, San Jose	In March 2019, San Jose City Council voted to create a Cannabis Equity Program. Per the Mercury News, "Under the new program, the city could help low-income residents and people of color who might have marijuana convictions with everything from licenses and job training to technical assistance. To participate, an applicant must come from a low-income family, and either have lived or attended public school in a low-income neighborhood of San Jose, have been arrested or convicted of a cannabis-related crime, or have a parent, guardian, child or sibling convicted of such a crime."	Cannabis	San Jose
Bay Area Regional Career Education Marketing & Branding	A program "dedicated to increasing the visibility of the vast array of Bay Area career education programs & elevating the image of career education among prospective students." Aims to achieve this goal through providing marketing and advertising services to career education programs throughout the region.	Manufacturing, biotech, utilities construction, healthcare, ICT, retail, hospitality, logistics.	Bay Area
Healthcare Academy SF	The Healthcare Academy, led by the San Francisco Office of Economic & Workforce Development, vets and provides oversight of workforce training programs related to the healthcare sector. It coordinates between employers and training providers. Workers are trained for roles such as certified nursing assistants, home health aides, medical administrative assistants, medical unit coordinators, patient access representatives, and medical assistants.	Healthcare	San Francisco

Recommended reading:

"Securing a strong economic future for all Californians: A state workforce development policy agenda," Nov. 2018, National Skills Coalition. https://www. nationalskillscoalition.org/resources/publications/file/Securing-a-strongeconomic-future-for-all-Californians.pdf

"Making the Right Investments: Ensuring Workforce Development Programs Work for All Californians", Feb. 2019. California Immigrant Policy Center. https:// caimmigrant.org//wp-content/uploads/2019/03/WorkforceDevelopment-FINAL2.pdf

Fay Hanleybrown, Lakshmi Iyer, Josh Kirschenbaum, Sandra Medrano, and Aaron Mihaly, "Advancing Frontline Employees of Color: Innovating for Competitive Advantage in America's Frontline Workforce," FSG and PolicyLink. https://www.fsg.org/publications/advancing-frontline-employees-color



Business & economic development

Business and economic development includes place-based initiatives focused on growing or sustaining a specific industry sector, as well as initiatives focused on helping individual business owners or prospective entrepreneurs to start or grow small businesses.

These initiatives may intersect with the changing nature of work in several ways. They may seek to attract, grow, or retain businesses in sectors that are expected to grow due to large-scale economic shifts, or to support local businesses to take advantage of new technologies or economic trends.

Further, as employers shift economic risk onto their workers, rendering formal employment becomes less secure, workers may seek to supplement income from employment by becoming entrepreneurs, either full-time or part-time. Immigrants who do not have legal status as employees may also turn to entrepreneurship, as may caregivers (typically low-income women) who need to earn money while remaining home to care for children or other family. However, entrepreneurship itself carries a high degree of risk and barriers to access. Initiatives to support entrepreneurs and small business owners attempt to provide resources and advice to help them succeed.

EXAMPLES OF BAY AREA INITIATIVES FOCUSED ON BUSINESS AND ECONOMIC DEVELOPMENT

Initiative	Description	Industry/ies, occupation/s, or types of workers it addresses	Geography
East Bay Transportation & Logistics Partnership	An organization that convenes transportation and logistics companies in the East Bay to set priorities related to maintaining competitiveness and growth amidst a changing technological and industrial landscape.	Logistics	East Bay
	EBTIP is also a venue for these companies to work with public sector actors to translate their priorities into policy.		
Center for Applied Competitive Technologies - Bay Area	The Centers for Applied Competitive Technologies (CACT) is an advanced manufacturing initiative out of the California Community College Chancellor's Office. The CACT helps California manufacturers compete successfully in changing markets and the global economy. Through technology education, manufacturing training and services that contribute to continuous workforce development, the CACT provides expertise in technology deployment and business development. Services include onsite training, low-or-no cost technical assistance and educational workshops, as well as information on how to qualify for state funds to assist with retraining employees and upgrading equipment.	Manufacturing	Bay Area
Infusing Entrepreneurship in Makerspaces	A collaborative regional initiative by the Bay Area Community College Consortium which aims to develop curriculum for makerspaces at community colleges. The program creates business development learning opportunities that involve using makerspaces to practice product development and prototyping.	Manufacturing	Marin County Bay Area

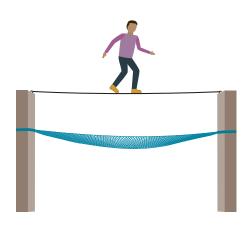
EXAMPLES OF BAY AREA INITIATIVES FOCUSED ON BUSINESS AND ECONOMIC DEVELOPMENT

Initiative	Description	Industry/ies, occupation/s, or types of workers it addresses	Geography
The Hood Incubator	"Supports Black & Brown communities to grow in the legal cannabis industry. Funded by The Workers Lab, THI has three core areas of work—community organizing, policy advocacy, and economic development – to create 'a healthy and sustainable ecosystem of industry access, resources, and support that benefits, rather than harms, Black and Brown communities."	Cannabis	Oakland
XR Marin	A regional training center run by the Marin County Office of Education, geared at introducing students and professionals to virtual reality/augmented reality ("XR") and its applications in different industries. Offers classes and workshops, such as classes for youth & adults interested in careers involving XR, workshops for entrepreneurs on how to create an XR company, and workshops for professionals in industries like real estate to learn how to use XR in their business.	Information and communications technology (ICT), other industries	Marin County
SFMade	Provides business development support for manufacturers to start and grow in San Francisco, and promotes "buy local" initiatives to support San Francisco-made consumer products like food, apparel, bath and body, pet supplies and others.	Manufacturing (primarily non- durable)	San Francisco
NextFlex	NextFlex is a consortium of companies, academic institutions, non-profits and state, local and federal governments focused on expanding manufacturing of Flexible Hybrid Electronics (FHE). It was formed in 2015 through a cooperative agreement between the US Department of Defense (DoD) and FlexTech Alliance.	Electronics manufacturing	San Jose - based National scope

Recommended reading:

Futures Final Report: Resilient And Equitable Strategies For The Bay Area's Future. January 2020. Metropolitan Transportation Commission and Association of Bay Area Governments. https://mtc.ca.gov/sites/default/files/Horz_Futures_ Report.web_.pdf

Comprehensive Economic Development Strategy for the San Francisco Bay Area. 2018 Metropolitan Transportation Commission and Association of Bay Area Governments. https://abag.ca.gov/our-work/land-use/economic-developmentdistrict



Social protection & assistance

Social protection and assistance refers to programs that provide economic supports outside of the workplace. Some focus on supports to enable people to work or to advance in their careers, such as subsidized childcare. Others attempt to compensate for low-paying jobs by providing income supports to make up the difference between earnings from work and a family-supporting income. (Many social protection programs also focus on people outside of the workforce, such as children; however, since this project is focused on the changing nature of work, those types of programs are not included here.)

Several aspects of the changing nature of work, such as the increase in shortterm, contingent, and nonstandard work arrangements, have led to the erosion of benefits typically attached to employment, such as health insurance and retirement plans. To compensate for these shifts, communities have developed programs intended to provide benefits that are not tied to a single employer. In certain heavily unionized industries, such as construction and film/television, multi-employer plans (often called Taft-Hartley plans) have long provided a means for workers to carry their health and retirement benefits from one employer to the next; an estimated 15 million people in the United States are participants in or beneficiaries of multi-employer pension plans, and an estimated 10.5 million people are in multi-employer health plans. 31 However, most workers do not have access to these types of plans, so the State and local communities are experimenting with alternative models.

Finally, the concept of "basic income" or "universal basic income," in which every person would receive a monthly payment in perpetuity, is being explored through a number of different approaches. Some proponents approach UBI as an alternative to an economy that provides family-supporting employment, arguing that with a UBI, work would become a matter of choice, rather than survival. However, most basic income proposals would provide relatively small payments, enough to make a significant difference at the margins, but not to fully replace income from work.

Another perspective on basic income is to view it not as a substitute for work, but as a support for low-wage workers to help make ends meet. However, this raises concerns as to whether basic income, if enacted, would be used as political justification to eliminate current income supports like SNAP (food stamps), TANF/CalWORKS (cash aid), or even housing assistance or the child tax credit, all of which are proven strategies for reducing child and family poverty. Yet another lens on basic income is that of racial justice, viewing basic income as a means to provide reparations for slavery and/or similar forms of oppression that impact affected communities' present-day wealth and income.

EXAMPLES OF BAY AREA INITIATIVES FOCUSED ON SOCIAL PROTECTION AND ASSISTANCE			
Initiative	Description	Industry/ies, occupation/s, or types of workers it addresses	Geography
CalSavers (formerly Secure Choice)	A portable benefits scheme for retirement plans—serves employees at companies without a retirement plan. The program facilitates employee contributes to IRAs. Eventually, employers without a retirement plan offering will be either obligated to participate in CalSavers (taking on administrative costs) or provide a private retirement plan. The IRA will have oversight from a public board of directors.	Multiple	CA
San Francisco's Health Care Security Ordinance/SF City Option	The HCSO "Mandates that all businesses with at least 20 employees offer health insurance to employees working at least 8 hours per week or contribute to City Option, a multi-employer city contribution pool for city-sponsored health care programs. Although not required, employers can choose to contribute to City Option for independent contractors. The ordinance as part of a targeted health care system is a model for how city or state governments can create portable benefits for part-time or temporary workers" (from ABAG May 2019 Future of Jobs report)	Multiple	San Francisco
The Workers Fund at SFO	The Fund would provide 40,000 non-city workers at the airport access to a cash benefit to manage financial emergencies.	Transportation; Hospitality	San Francisco
SEED - Stockton Economic Empowerment Demonstration	Provides 100 randomly selected residents with \$500/month for 18 months, in neighborhoods where median income is \$46K or less.	n/a	Stockton

EXAMPLES OF BAY AREA INITIATIVES FOCUSED ON SOCIAL PROTECTION AND ASSISTANCE

Initiative	Description	Industry/ies, occupation/s, or types of workers it addresses	Geography
Alia	Alia, created by NDWA, is an online platform to help house cleaners get benefits. Clients (people who pay someone to clean their home) make contributions to an Alia account. Cleaners use the contributions from all of their clients to purchase benefits including PTO, disability insurance, accident insurance, life insurance.	Domestic workers	United States
Stanford Basic Income Lab	"Provides an academic home for the research and the study of the development and impact of UBI Convenes scholars, policymakers, business leaders, think tanks, nonprofits, and foundations around the politics and economics of UBI Informs policymakers and practitioners about latest best practices."	n/a	Based on Peninsula / National scope
YC Research Oakland UBI Pilot	YC Research, the nonprofit arm of Y-Combinator startup accelerator, had plans to run a UBI experiment in Oakland but ultimately decided to run only a very small pilot in Oakland (~10 individuals).	n/a	Oakland

Recommended reading:

Benjamin W. Veghte, Alexandra L. Bradley, Marc Cohen, and Heidi Hartmann, eds. Designing Universal Family Care: State-Based Social Insurance Programs for Early Child Care and Education, Paid Family and Medical Leave, and Long-Term Services and Supports (Washington, DC: National Academy of Social Insurance, 2019). https://universalfamilycare. org/downloadreport/

Christa Cassidy, Rachel Heydemann, Anne Price, Nathaniel Unah and William Darity Jr., "Baby Bonds: A Universal Path to Ensure the Next Generation Has the Capital to Thrive, Dec. 2019. Samuel Dubois Cook Center on Social Equity at Duke University and the Insight Center for Community Economic Development. https://insightcced.org/wp-content/ uploads/2020/01/ICCED-Duke BabyBonds Jan2020-Linked.pdf



Alternative economic models

"Alternative economic models" encompasses a set of initiatives that aim to build, from the ground-up, deeply values-driven economic institutions, from stores and small businesses to community-based clean energy infrastructure.

At their core, these enterprises seek to meet community needs in ways that do not extract from or exploit workers, the environment, or communities as a whole. Instead, enterprises attempt to meet social and environmental goals alongside business ones.

These initiatives are part of a bigger movement nationally (and even internationally)—sometimes called the "New Economy" or the "solidarity economy." They are experiments with new organizations for economic activity, with an emphasis on creating enterprises that are democratically governed.

Many of these initiatives operate under a sociopolitical lens that centers immigrants, women, and people of color. Entrepreneurship is an especially important avenue for the subset of immigrants who are undocumented or have visas that limit employment. Insofar as these individuals are involved, they benefit. However, these initiatives are still limited in scale.

EXAMPLES OF BAY AREA INITIATIVES FOCUSED ON ALTERNATIVE ECONOMIC MODELS

Initiative	Description	Industry/ies, occupation/s, or types of workers it addresses	Geography
Project Equity	Project Equity raises awareness about employee ownership as an exit strategy for business owners, and as a way to increase n important approach for increasing employee engagement and wellbeing. It provides hands-on consulting and support to companies that want to transition to employee ownership, as well as to the new employee-owners to ensure that they, and their businesses, thrive after the transition. In the Bay Area, there are about 63,000 businesses owned by Baby Boomers, with over 600,000 employees. As owners approach retirement, As these business owners approach retirement, instead of shutting down their business, Project Equity seeks to provide them with a pathway to transition it to employee ownership. It provides consulting to companies that want to transition to employee ownership, as well as support to the new employee-owners. Through their advocacy and partnership with Berkeley's Office of Economic and Workforce Development, the city of Berkeley created a pilot program to support worker cooperative development.	Small family- owned businesses	Bay Area
People Power Solar Cooperative	Cooperatively-owned solar project. Small investments from community members to install a residential solar project who then get paid dividends from sale of energy generated.	Construction, clean energy	Oakland
Driver's Seat Cooperative	Driver's Seat Cooperative helps rideshare drivers own and use their data to maximize their income. Data collected by drivers using the Driver's Seat app can be valuable to local governments for transportation planning. Profits from the data return to drivers as dividends and drivers also share in the governance of the cooperative.	Cooperative enterprises	Bay Area
Arizmendi Association of Cooperatives	Arizemndi develops businesses that are cooperatively owned and democratically run by their workers. Currently the Arizmendi Association includes six cooperative bakeries, a landscape design/build cooperative, a construction cooperative and a development and support collective.	Restaurant, construction	Oakland Bay Area

EXAMPLES OF BAY AREA INITIATIVES FOCUSED ON ALTERNATIVE ECONOMIC MODELS

Initiative	Description	Industry/ies, occupation/s, or types of workers it addresses	Geography
B Local Bay Area	B corporations are legally required to consider the impact of their decisions on their workers, customers, suppliers, community, and the environment. B Local Bay Area is a voluntary collaborative that facilitates networking and coordination among area B Corps.	Wide range of industries, from financial and legal services to consumer goods	Bay Area
Social Entrepreneurs for Economic Development (SEED)	The proposed Social Entrepreneurs for Economic Development (SEED) Initiative, introduced in Jan. 2020 as part of Gov. Newsom's proposed California state budget, would invest \$10 million in microgrants and entrepreneurial training for people with limited English proficiency and people who are undocumented, or have TPS or DACA status. If it is approved in the state budget process, SEED would be run through partnerships between the California Workforce Development Board, the UCLA Labor Center, and community-based organizations.	Immigrants	CA

Recommended reading:

"What is the New Economy?" https://neweconomy.net/about/what-is-the-neweconomy

"Solidarity Economy: Building an Economy for People & Planet" https:// thenextsystem.org/learn/stories/solidarity-economy-building-economypeople-planet

Sophie Quinton, "Seeking a More Worker-Friendly Economy, Some States Push Employee Ownership", Feb. 3, 2020. Pew Stateline. https://www.pewtrusts.org/ en/research-and-analysis/blogs/stateline/2020/02/03/seeking-a-more-workerfriendly-economy-some-states-push-employee-ownership

How Can We **Assess Responses?**

Worker organizations, public agencies, policymakers, workforce development entities, philanthropists, and employers are responding in different ways to the changing nature of work. To evaluate those responses, our quiding question is: how can we positively impact workers' lives and their futures?

Sarita Gupta, former Executive Director of Jobs with Justice, puts it succinctly when she says what's at stake is not the future of work but the future of workers.³³ To navigate towards this future, we offer four quideposts to assessing our initiatives that respond to the changing nature of work: quality, equity, sustainability, and agency.

Job Quality

Does this response expand quality jobs, whether creating new quality jobs or improving the quality of existing jobs?

While the future of work conversation often focuses on potential job losses and sometimes gains, what's missing is the changes in the quality of the jobs, not just the number. A case in point is Working Partnerships and UC Berkeley's report on the Future of Warehouse Work which finds technological change won't replace warehouse workers in the next decade, but worsen the quality of their jobs, especially for frontline workers, two-thirds of whom are workers of color.32

Job quality is a key issue when considering the expansion in care work driven by demographic shifts. Organizing and policy interventions are critical to creating a future of quality jobs with living wages, benefits and dignity, rather than increased poverty for workers who are largely women and immigrants. Expanding quality jobs in the care sector also necessitates systems change to confront structural inequities, valuing work that has been degraded and excluded from labor protections because it was work historically performed by Black women and now also by immigrant women.

Job quality not only measures wages and benefits but considerations such as fair and predictable work schedules instead of schedules that wreak havoc on workers and their families' lives, fluctuating week-to-week with little advance notice or requiring them to be on call. Fair work week laws that were passed by worker advocates in San Francisco, San Jose, and Emeryville were groundbreaking improvements in job quality. The deployment of new scheduling technologies, while often to the detriment of workers, could also be used to improve workers' lives; technological change can be positive, if workers, employers and the government make it so.

Equity and Justice

Does this response strengthen diversity, equity, and inclusion in employment, particularly across race and gender?

Quality, sustainability, equity, and justice are interdependent. For example, for transgender people of color, who face discrimination and one of the highest unemployment rates, racial and gender equity is necessary to benefit from quality and sustainable jobs.

Potential economic opportunities, such as the creation of new jobs in the transition into renewable energy, need to be examined to ensure equitable and just outcomes, such as benefiting communities who have suffered from environmental harm from fossil fuels, or ensuring access to jobs for people of color, gender-oppressed people and those historically marginalized from good jobs.

New technology does not necessarily create a future that is new and unencumbered by the past. The rise of algorithmic management, while touted for its possibilities for reducing bias, often re-encodes racial and gender inequity. Like Amazon's AI recruiting tool that penalized job applicants whose resumes included women's colleges or experiences described as "women's," like "women's chess team," because it was based on data that reflected male dominance in tech jobs, these predictive algorithms are based on historical data—data that reflects a history of racial and gender discrimination, and can lead to decisions which perpetuate that history.

Our responses to the changing nature of work must actively and explicitly challenge inequity in order not to repeat it. And by placing equity at the center of our strategies, we can proactively shape the changing nature of work to seize and create new opportunities, such as new industries, jobs and skills, so that work changes in ways which better the lives of people of color, immigrants, women, transgender and gender-nonconforming people.

Sustainability

Does this response make work more sustainable for the worker, their family, their community, and the environment?

The principle of "sustainability" involves looking beyond the present moment to ask: what are the long-term impacts of this activity? What resources is it using, and are those resources renewable? Does it sustain life for future generations?

While sustainability commonly addresses environmental impact, we consider sustainability in a broader context. For instance, will working families be able to sustain themselves to feed, house, and educate their children? Will communities be able to sustain their cultural and social institutions? Will we build a renewable energy economy led by workers, that is sustainable for both the planet and people? And as we strive to develop approaches to combat climate change, do those approaches function in a way that is sustainable for both people and the planet? Impacts on workers, communities and the environment are not separate, but interrelated parts of our ecosystem. Workers not only benefit from jobs, but clean air and water and ultimately a planet that supports life. As a commentator noted in the debate within organized labor on whether to support constructing the Dakota Access Pipeline, there are no jobs on a dead planet.

On the other hand, while developing clean and renewable energy is necessary for our future, it's also necessary to ensure the resulting jobs are high quality, accessible and provide equitable benefits. Utility scale renewable projects with union labor and apprenticeship programs stand out from many other solar projects that may be sustainable from a climate but perhaps not an economic viewpoint. The challenge ahead is creating a just transition for workers previously in fossil fuel industries that not only retrains them for new jobs, but secures quality jobs that are comparable to the typically high union standards in those industries.

Sustainability in the workplace can also go beyond living wage jobs. For instance, one of the three key strategies of ReWork the Bay includes initiatives around affordable supports such as childcare, transportation, housing and paid family leave for workers and people trying to obtain work. Such supports sustain workers and generate returns to society.

Counter to the primacy of returns to shareholders or the short-term thinking characteristic of financialization (a driver of the changing nature of work), sustainability values benefits that are widely felt, long term and can be sustained for generations to come.

Agency

Does this response build the ability of workers to shape outcomes related to their future?

Technological change or climate change are often seen as inevitable. Instead of seeing the future of work as a phenomenon that ordains and determines workers' lives, we need to ask how workers can be empowered to shape their own futures. What would the future look like if workers were empowered to shape a future they would want to be in? What is more important: profit or people?

One step towards this future is the recent union contract negotiated by hotel workers organized with UNITE HERE and their employer, Marriott hotels. New technologies and deployment of technologies in the hotel industry have the potential to eliminate certain jobs or job tasks, such as checking in hotel guests. Through their collective bargaining agreement, workers and their employer will decide together how that may unfold. Marriott agreed to give 165 days early warning of new technology or automation, and during this period, will negotiate with workers over how technology is implemented. While coping with the impact of economic dislocation often falls to the responsibility of the individual worker or the government, under this agreement Marriott shares responsibility, guaranteeing that any worker it displaces for technological change will have access to retraining to work with the technology or to new positions available at any Marriott hotel in the area.

The conversation around the future of work is an opportunity, not only to understand how work is changing and what are the drivers of change, but for workers to engage in the conversation, to project themselves and their needs into that future, to hold a conversation about the *potential* of work, for workers.

The potential of work lies ahead in improving job quality, sustainability, and equity. And in order to fully realize those potentials, workers also need the power to do so. This future belongs to workers—workers not as subjects, but as agents of change who can actively shape a future for all.

ENDNOTES

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- 2 Insight Center for Community Economic Development. "Re-Imagining a Bay Area Workforce System Grounded in Racial and Gender Equity." 2019.
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- 4 Insight Center for Community Economic Development. "Re-Imagining a Bay Area Workforce System Grounded in Racial and Gender Equity." 2019.
- 5 https://www.census.gov/library/stories/2018/04/aging-workforce.html
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- 11 Economic Policy Institute, "The Productivity-Pay Gap." July 2019. https://www.epi.org/ productivity-pay-gap/
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ReWork the Bay brings together leaders in economic justice, education and training, business, and philanthropy to take bold, urgent action to create a prosperous Bay Area for all, especially working people.

WORKING PARTNERSHIPS

USA

Working Partnerships USA is a community organization bringing together the power of grassroots organizing and public policy innovation to drive the movement for a just economy.



Jobs with Justice San Francisco is a longterm, strategic alliance of labor, community, faith-based, and student organizations working together to build a strong, progressive movement for economic and social justice locally and nationally.

