FUTURE OF WORK IN ILLINOIS May 2022



Letter from the Governor

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Executive Summary

The Illinois Future of Work Task Force has spent the last eight months focused on understanding opportunities and challenges to work emerging from the future of technology, innovation, and demographic change. This group of leaders from diverse backgrounds has gathered in the spirit of seeking collective economic prosperity for Illinoisans that extends beyond the partisan divide. Our vision is that cooperation sparks a better, stronger, and brighter future workforce for Illinois workers and businesses alike. Our hope is that following our example, legislators, stakeholders, business owners, communities, and workers will use this report and the recommendations found within it to work towards Illinois' shared prosperity and success.

This report sets forth a vision for how the state can broaden equitable access to quality jobs, education, and training opportunities to prepare our workforce for the jobs of the future and support businesses in growing quality jobs across the state. The policy recommendations are aimed at reducing gaps in access to quality jobs that exist for many racial and ethnic groups and other vulnerable populations. Many of these gaps existed before the COVID-19 pandemic, and have been exacerbated since then.

Definition of key terms

Future of Work

The Future of Work encompasses ongoing discussions about how changes in the workforce – including but not limited to the increasing role of technology, generational shifts in the population, changing mix of industries, and rise of service sector and care work – will affect the number, types, and quality of jobs and how workers will experience those jobs.

A **Quality Job** provides a family-sustaining wage and benefits package including access to healthcare and the ability for employees to take time off from their jobs when they are sick or need to care for a sick family member without having to risk financial or career stability. A quality job offers safe working conditions for all of its workers and ensures a culture and environment that treats all workers with dignity and respect, including respect for workers' right to form a union without interference, and to organize and bargain collectively for better conditions. Additionally, a quality job provides workers with predictable work schedules, creates opportunities for training and advancement, and gives workers power and voice within their roles and organizations. In this report we use both Hispanic and Latino according to the categories used in the original data sources.

Summary of key findings and trends *Work Challenges*

- Illinois continues to recover from the COVID-19 pandemic but recovery has been uneven. As of April, unemployment is down to 4.8 percent in Illinois, but that number is much higher for Black men and women (13.4 percent and 11.4 percent) than for other groups, illustrating ongoing challenges with equity and job access. New business openings in Illinois continue to increase, with the rate sitting just below its prepandemic baseline.
- 2. Shifts in the Illinois economy away from manufacturing have translated to a loss of middlewage jobs and a polarized labor market. Over 95 percent of Illinois workers live in urban areas, and although there are wide gaps in the unemployment rate across urban and rural counties, all areas of the state have experienced a hollowing out of middlewage jobs.
- 3. Projections indicate growth in lower-wage and higher-wage jobs, further polarizing the labor market. The loss of middle-wage jobs is expected to continue over the next ten years. This highlights the need for policy innovation and business practices to improve the quality of low-wage jobs and create stronger on-ramps to high-wage jobs.
- 4. Illinois also continues to see gaps in postsecondary access and completion for Black, Latinx, low-income, and rural students. Bachelor's degree attainment serves as a launch pad to higher-wage jobs, but equity gaps and the costs of accessing four-year colleges have grown prohibitive.
- 5. Unionization continues to decline, and nontraditional and gig work continues to increase. Nearly 14 percent of the Illinois workforce were part of a union, a number that has continued to decline. Although gig work is difficult to define and track, national estimates are that 16 percent of the workforce participates in some form of temporary work.

Work Opportunities

 Illinois will experience a large number of new jobs in healthcare, education, and hospitality in the coming decade. An aging population translates into a growing need to attract healthcare practitioners of all levels from certified nursing assistants through midlevel positions, to healthcare professionals. Leisure, hospitality, and other professional and business service sectors are slated for growth as well. Illinois has the opportunity to ensure that job growth in these sectors and others provides living wages, adequate benefits, and worker protections.

- 2. Illinois has the opportunity to be a national leader in aligning business and worker needs through defining and enhancing job quality. The report focuses its recommendations on how to enhance quality jobs, defined as those that produce familysustaining wages and benefits, safe and affirming working conditions, opportunities for training and advancement, and greater power and voice. A focus on job quality aligns with business needs by improving worker engagement, retention, and ultimately profits.
- 3. Illinois should remove barriers to quality jobs for the most vulnerable populations of workers. Illinois must work to ensure access to quality jobs for all workers, regardless of immigration status, history of incarceration, disability, gender, and sexual identity.
- 4. Policy innovation must advance in concert with technological innovation. Just as policy intervention during the COVID-19 pandemic prevented thousands from falling into poverty while lifting others out of it, tax incentives, regulations, and labor standards enforcement all have a role to play in ensuring that workers, especially essential workers or those who must be in-person, receive the respect and working conditions they deserve.
- 5. Illinois' commitment to clean energy and equity creates a need to train workers to fill these jobs. This is an opportunity for the workforce development and business sectors to try new models and practices in order to achieve clear equity goals.

⁶⁶ The central challenge ahead – indeed, the work of the future – is to advance labor market opportunity to meet, complement, and shape technological innovation. This drive will require innovating in our labor market institutions by modernizing the laws, policies, norms, organizations, and enterprises that set the 'rules of the game."

> -David Autor, David A. Mindell, and Elisabeth B. Reynolds

Summary of Task Force Policy Recommendations

Job Quality, Benefits, and Labor Standards

- 1. Adopt a statewide job quality measurement.
- 2. Use a job quality measurement mechanism to award state funding.
- 3. Extend benefits to more people through models that:
 - a. are not tied to any particular job
 - b. support contributions from multiple employers or clients
 - c. cover any worker, including independent contractors and other non-traditional workers.
- 4. Create paid leave benefit programs to improve economic security for workers when they need to care for themselves and their families.
- 6. Encourage employers to expand the scope of benefits to include as much employee support as possible, including defraying costs such as transportation.
- 7. Fund, pilot, and evaluate co-enforcement strategies in sectors with high instances of violations.
- 8. Consider enacting retaliation protections and stronger penalties for misclassifying employees.

The Impact of New Technology and the Future of Tech in Illinois

- All employment-related decisions that are made or assisted by data-driven technologies should be transparent and require explicit consent. Employers should provide notice to workers in a clear and accessible way regarding all data-driven technologies in the workplace.
- 2. Data collection of workers should only be collected when necessary and should be accessible to employees and protected from misuse.
- 3. Workers should be able to collectively bargain employers' use of digital monitoring and surveillance tools, in accordance with existing legal standards.
- 4. Public and private programs that help young people of color access high-skill roles in software engineering and data should receive proper attention and funding, so these programs can provide intergenerational impacts on income and wealth.

Illlinois' Future Jobs

Care Work

- Invest state dollars to match federal investments during the pandemic in both child care and home and community-based services (HCBS) to build the infrastructure, including a robust and well-paid workforce.
- Create a sectoral standards board to review and set fair Medicaid rates that ensure rate increases are coupled with strong pass through provisions for wage increases and ensure training and pipeline programs for care workers.
- 3. Enact state policies to ensure stability of care sector services by requiring providers funded with state dollars to demonstrate a binding agreement that includes an expedient mechanism for resolving labor disputes without service disruption.
- 4. Modernize Illinois' professional licensure system so that neither licensed healthcare professionals from other states nor immigrant and refugee health professionals from other countries face unnecessary barriers and wait times to receive their license.

Clean Energy

- Ensure that the timelines laid out in Illinois' Climate and Equity Jobs Act for the critical workforce programs are achieved and that the necessary funding is appropriated each year.
- Adopt best-value RFPs with a U.S. Employment Plan to procure new state and local electric vehicles (EVs). Bid solicitations should include the U.S. Employment Plan (USEP), a customizable policy tool that builds good jobs and equity into the public purchasing process.
- Adopt centralized, bulk purchasing of EVs. By centralizing the procurements of EVs and creating a program to distribute vehicles to cities and agencies, the state can significantly lower unit price and support equitable deployment of zero emission vehicles in the communities that need them most.
- Ensure an adequate "water workforce" is hired to replace all of Illinois' existing lead service lines and improve drinking water infrastructure in need of replacing.

Manufacturing

- 1. Expose young Illinoisans to manufacturing jobs early and often.
- 2. Use funding incentives to promote advanced

manufacturing training and capital investments, particularly for small and medium-sized manufacturers.

3. Realign Buy Illinois procurement standards with Buy America standards.

Transportation

- 1. Establish a Trucking Innovation and Jobs Council that will unite stakeholders and work to identify and implement policies and programs that improve job quality, safety, and social, economic, and environmental outcomes.
- 2. Establish worker protections that ensure drivers who do work for one company are classified as employees rather than independent contractors.
- 3. Ensure that workforce development funds are serving the purpose of providing drivers with skills to advance their careers.
- 4. Give workers the power to unionize and collectively bargain for benefits and protections.
- 5. Strengthen the incentives application process for EV-related manufacturers seeking public funds to include commitments related to new hiring, wages, benefits, and investment in apprenticeship.
- 6. Fully fund transit systems to ensure they meet the state's workforce needs.
- 7. Include "Access to Jobs" as a measure within the Illinois Department of Transportation's (IDOT) performance-based planning formula used to determine funding for transportation projects.

Agriculture & Jobs

- Invest in training for new technological advancements in agriculture, education, and workforce development pipelines, focusing on equity for small family farms and traditionally excluded workers.
- 2. Invest in programs and organizations providing support services to enable all farms to access new technologies and sustainable practices.
- 3. Identify consolidation and bottlenecks in the food supply chain and advocate with food in production, transporting, and pricing.
- 4. Adopt a bill with provisions to protect farm worker rights and ensure equitable housing and working conditions, granting farm workers overtime pay, a day of rest each week, disability and paid family leave coverage, unemployment benefits, and other labor protections.

Gig, Hourly, and Flexible Employment

- 1. Advocate for further research on gig work by the Bureau of Labor Statistics.
- 2. Collect and analyze data from 1099 workers.
- 3. Collect and analyze data from public benefits programs, including unemployment insurance, to determine the amount of benefits paid by the state based on employee classification.

Small Businesses

- Expand small business access to flexible, low-cost capital, with a focus on women- and minority-owned businesses and rural businesses.
- 2. Support new and existing creative small business accelerators and incubators in BIPOC and rural communities.
- 3. Support self-employed entrepreneurs whose primary business address and primary residences are in areas that have low and moderate incomes (LMI).
- 4. Increase funds and benefits for worker-owned businesses and cooperatives.

Statewide Data Infrastructure

- 1. Fund state agencies to improve their data collection, security, analysis, publication, and create a sense of urgency.
- Invest in data collection specifically on job quality in order to understand whether state funding for workforce development is placing Illinoisans into quality jobs.
- 3. State agencies, in partnership with universities and other research institutions, should produce semiannual reports on future of work outcomes.
- 4. Align data systems to track students from education to college or training to career.
- 5. Proactively reach out to Illinois households that qualify for benefits based on data the government already collects.

Preparing Illinois' Future Workers

- Expand access and funding to K-12, career and technical education (CTE), community college career pathways, and work-based learning to create a pipeline of well-trained workers prepared for the jobs of the future.
- 2. Expand access to postsecondary education through increased MAP funding, enrollment in early college

programs, and free access to CTE programs at community colleges.

- 3. Require and fund post-secondary programs to partner with employers creating quality jobs of the future in high-growth industries.
- 4. Provide flexible state grant funding for wellestablished regional networks to support local workforce strategies and solutions.
- 5. Revise business tax credits to offset a portion of the cost of new training activities that create career advancement opportunities and pathways to financial stability for low-wage workers.
- 6. Improve tax incentives meant to facilitate the creation of new apprenticeship programs, address barriers that prevent businesses from participating, and ensure that businesses are aware of the opportunities.
- 7. Enhance workforce development performance metrics to incentivize placement in quality jobs and in-demand jobs of the future.
- 8. Partner with employers representing growth sectors of the economy and run social media campaigns to expose young people to the jobs of the future.
- 9. Partner with employers and technology training providers to develop more effective tech certification programs that efficiently and effectively move job seekers from training to certification to employment.
- Require that every state investment in job creation

 whether in infrastructure, clean energy, or public health – include skills training and small business development education that is equitable and accessible.
- 11. Invest state dollars in workforce development to address historic opportunity gaps, skill gaps, and systemic barriers to employment faced by women, workers of color, younger workers, and foreign-born workers.
- 12. Establish a state-funded, cross-agency Employment Barrier Support & Job Retention Fund to help job seekers overcome acute barriers to employment and meet their career advancement goals.
- 13. Prioritize the expansion of education and vocational training in the state corrections system or tax breaks for organizations hiring people returning from incarceration.

Outcomes to Track Progress Made

In order to prepare Illinois for the future of work, the Task Force recommends that the state of Illinois track and analyze the following outcomes to better understand progress made and what challenges remain. Outcomes involving job quality will require new data collection, whereas outcomes pertaining to job numbers, worker advancement, and educational attainment will require new analysis and linkage of existing data. State agencies, in partnership with universities and other research institutions, should produce semi-annual reports on these outcomes to ensure the work of this task force continues and remains top of mind.

Future of Work Outcome	Definition	Disaggregation to Identify Equity Gaps	
Percent of Illinoisans Who Have Quality Jobs	Quality Job as defined by family-sustaining wages and benefits, safe and fair environment, opportunities for training and advancement, predictable hours, supportive and inclusive culture, meaningful work, and worker voice	Disaggregate by age, race, gender, regior ability status	
Job Growth/Loss	Number of new jobs in Illinois	Disaggregate by low/med/high wage; by sector/occupation; region, comparisons to other states	
	Number of lost jobs in Illinois	Disaggregate by low/med/high wage; by sector/occupation; region, comparisons to other states	
Worker Advancement	Number of workers moving from low- to higher-wage jobs over time	Disaggregate by age, race, gender, region, ability status, sector/occupation, comparisons to other states	
	Average wage of jobs over time	Disaggregate by age, race, gender, region, ability status, sector/occupation, comparisons to other states	
	Number of workers in unions	Disaggregate by age, race, gender, region, and employment industry	
Educational Attainment	Percent of working-age individuals with postsecondary credentials	Disaggregate by age, race, gender, region, ability status	
	Percent of individuals without college earning higher wages	Disaggregate by age, race, gender, region, ability status, sector/occupation	
	Percent of Illinois secondary and postsecondary students enrolled in career and technical education (CTE), apprenticeship, work-based learning, and other career pathway programs	Disaggregate by district, race, gender, region, ability status, sector/occupation	

The following metrics will be important to monitor, not as an outcome, but as additional context for better understanding the state of work in Illinois and ensuring an equitable future of work. Collecting this data will require additional investment from and coordination with federal agencies.

Metrics to Monitor	Definition	Disaggregation to Identify Equity Gaps	
Non-traditional Employment	Percent of workers with nonstandard employment	Disaggregate by age, race, gender, region, ability status	
	Percent of workers with nonstandard employment who have access to multiple benefits	Disaggregate by age, race, gender, region, ability status	
Labor Enforcement	Number of labor complaints	Disaggregate by type of complaint, sector, region	

IMPACT OF COVID-19 ON WORK

Impact of COVID-19 on Work

Illinois' Future of Work task force is one of the first task forces to convene after the start of the COVID-19 pandemic, providing an opportunity to reflect on how the pandemic has accelerated change, elevated the role of frontline workers, and shifted power dynamics between workers and their employers. As COVID-19 began to spread rapidly across the state and country, Illinoisans saw many aspects of their lives change. In April 2020, the unemployment rate in Illinois hit 16.5 percent.² As the pandemic raged on, millions of Americans struggled to pay for necessities such as food and housing.³ As of April 2022, the workforce has continued to recover and the unemployment rate has drastically decreased, the most recent numbers reported a 4.8 percent unemployment rate in Illinois.² However, the pandemic has left a lasting impact on the economy and the workforce. To date, some 37,000 of the more than one-million Americans who lost their lives to COVID-19 called Illinois home.⁴ Additionally, while the unemployment rate in Illinois as of December 2021 was at 6 percent compared to 4 percent two years prior, Black men and women and Hispanic men experienced higher rates of unemployment of 13, 11, and 7 percent respectively. Finally, businesses began experiencing labor shortages as workers reevaluated their priorities and in many cases sought out new jobs. Worker shortages in lower-wage, lower-guality jobs are likely to continue into the future.

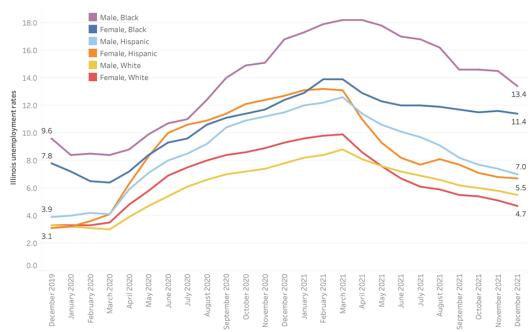


Figure 1: Unemployment Rates by Gender and Race/Ethnicity in Illinois (12-month moving averages): Dec 2019 – Dec 2021

Source: IDES - Illinois Department of Employment Security, U.S. Bureau of Labor Statistics, Current Population Survey

The economy, nationally and locally, was greatly disrupted by the pandemic. Businesses had to find ways to adapt to the new public health procedures, including personal protection protocol, contactless pickup and delivery, staggered staffing, and much more. Unfortunately, many businesses, especially in the retail and food industry, did not survive. In September 2020, Yelp ran a Local Economic Impact Report and found 6,400 businesses closed in Illinois, 3,200 alone in Chicago.⁵ In addition, a JP Morgan & Chase survey found that small businesses in low-income and more racially diverse neighborhoods

were less profitable than their counterparts during the pandemic.⁶ Workers were hit equally hard, with 840,000 layoffs between March and April 2020 and 35 percent of Illinois businesses reporting layoffs during the first half of 2020.^{a,b} However, economic recovery has been positive in the second year of the pandemic, the rate of business openings was up 14 percent from the first year of the pandemic and only down 1 percent from pre-pandemic levels.⁷ The onset of new variants reduced business openings in Chicago, so total economic recovery will continue to be affected as the virus changes.

^a BLS Layoffs and Discharges.

^b BLS Percent of Establishments with Gross Job Losses.

The pandemic also sped up trends that were already in motion. Remote work has gone from being rather uncommon to business as usual, employers have seen the importance of paid leave policies firsthand, and the importance of essential workers and support for ensuring those workers are protected has been further invigorated.

In 2019, fewer than 4 percent of high-paying jobs offered remote work opportunities; that number has increased during the pandemic and 25 percent of high-paying jobs are expected to offer remote work opportunities by the end of 2022.⁸ Between 2019 and 2022 many workers became intimately familiar with remote work and virtual workspaces; however the technology that made this possible had been available before the start of the pandemic. Remote work also changed travel patterns of Illinois households, public transportation was largely empty, and the gas tax revenue was so low that public works projects were paused.

As millions of school-age children stayed home to curb the spread of COVID-19, employers saw firsthand the difficulties faced by workers with caregiver responsibilities. Parents were forced to juggle their work with childcare and educational activities. Without widespread paid leave policies, many workers, especially women, dropped out of the workforce. Though many have since returned, the pandemic laid bare how gender norms create undue burdens for half of the workforce.⁹

The COVID-19 pandemic also brought new workers into the spotlight. Essential workers such as delivery drivers, doctors, grocery store workers, childcare workers, home health care workers, nurses, pharmacists, retail workers, teachers, and truck drivers earned hero status and gratitude from the public. Many of these workers earn lower wages but played a vital role in keeping our society functioning. Essential industries continue to grow and project hundreds of thousands of job openings in the next 10 years.¹⁰ Illinois companies began to experience a labor shortage and responded through increased wages, improved benefits, or better working conditions. One lasting impact of the pandemic has been a recalibration of the relationship between workers and their employers.

As the state's economy continues to recover from the COVID-19 pandemic, the labor market has been very tight, with worker shortages across many industries. It is too soon to know, definitively, if this is a lasting trend. However, there is evidence that the shortage is not due to a "great resignation." Instead, Illinois, like the rest of the country, is in the midst of an employment reshuffling. The labor force participation rate among all ages of workers continues to increase, suggesting that workers are not leaving the workforce altogether, but searching for new opportunities. At the same time, net immigration has decreased over the past several years, likely contributing to the current worker shortage. These trends suggest that job quality will play a central role in attracting workers and resolving worker shortages.

The government's response to the economic stall spurred by the COVID-19 pandemic lifted millions out of poverty, kept millions from falling into poverty, and created the fastest recession recovery on record.¹¹ The Illinois Department of Employment Security ensured millions of recently unemployed Illinoisians could receive benefits within two weeks of the pandemic's start. The expanded child tax credit that recently expired significantly lowered the child poverty rate. Policymakers, business leaders, and the American public have learned that robust relief programs effectively reduce poverty, hardship, and inequality and in turn stimulate the economy. These lessons should inform the role governments can play in ensuring the future of work is equitable and prosperous for all.

66 The future is already here – it's just not very evenly distributed."

-William Gibson, science fiction author

Task Force Guiding Principles

- Seek an equitable economic recovery from the COVID-19 pandemic.
- Employ an equity-focused lens to identify solutions (gender, race, geography, age, ability, etc.).
- Center solutions that address systemic inequality.
- Recommend policies that are data-informed and evidence-based.
- Promote ideas that support and expand a vibrant middle class in Illinois.
- Cultivate collaboration and innovation across the public and private sectors.
- Evaluate impact and adapt strategies as needed.

State of the Illinois Workforce

Workers in Illinois

The Illinois workforce is large and diverse. As of 2019, the state workforce – a group that includes those who are currently formally employed and those who are looking for work – included about 6.5 million people across the state, making up about four percent of the total U.S. workforce.^{12,13} Slightly less than half of workers in the state are women.¹³ One in six workers were born outside the U.S.¹⁴ White workers make up the majority of the Illinois workforce at 78.2 percent, with non-Hispanic white workers make up 13.1 percent, and Asian workers are 6.6 percent of the total workforce.^{13,15, c}

Workers are concentrated in urban areas of the state. As

of 2019, 95.3 percent of currently employed Illinois workers live in urban metro areas. Some 40 percent of workers are located in Cook County alone.^e This concentration of workers in urban areas has intensified in recent years – the number of current employees in urban areas of Illinois increased by 27 percent from 1990 to 2019.^f Illinoisans also increasingly hold postsecondary educational credentials: in 2019, 35.8 percent of residents 25 years and older had a bachelor's degree or higher, up from 21.0 percent in 1990.^{16,17} These changes follow broader national trends in the urbanization and educational attainment of the labor force.^{18, g}

An aging workforce and declining labor force participation both pose challenges to employment growth in Illinois. Nationally, with workers staying employed later in life, more young people choosing to attend school, and the Baby Boom generation aging, the workforce has grown older and, as a result, many workers will soon age out of the workforce.¹⁸ The same goes for Illinois: in 1999, 9.5 percent of the Illinois workforce was between 55 and 64 years old; by 2019, the share was 17.6 percent.^{18,19} As is true at the national level, the labor force participation rate (LFPR) in Illinois has been declining in recent decades.²⁰ As of 2019, the state's LFPR stands at 64.9 percent – down from its peak of 69.5 percent in 2000.^{19, 21} Gaps remain in labor force participation: national data show that men participate in the labor force at a higher rate than women, white men at a higher rate than Black men, and college-educated adults at a higher rate than adults with less education.

The state is also losing residents: Illinois saw a seventh year of population loss in 2020, with about 80,000 fewer residents than the prior year. Net population loss in Illinois over the previous decade was the second largest in the country. Over that decade, Illinois lost about 2 percent of its population.^{22, 23}

Employment in Illinois

Following national trends, the Illinois economy has shifted away from manufacturing and towards serviceand knowledge-based work, while the loss of mediumwage jobs has left behind a polarized labor market. From 2001 to 2016, the Chicago region and the state both lost about 30 percent of their manufacturing jobs, while service-based jobs in industries like healthcare, finance, and business services expanded.²⁴ This move away from manufacturing towards a service- and knowledge-based economy mirrors broader shifts in the national landscape; many jobs are now requiring greater preparation and higher-level social and analytical skills.^{25, 26} At the same time, as Figure 2 shows, middle-wage jobs in Illinois have declined in recent decades, leaving behind a landscape of low- and high-wage jobs. Nationally, workers have seen uneven wage gains in recent decades. Wage growth was strongest for the highest-wage earners from 2000 to 2019, compared to middle- and low-wage earners.²⁷ Due to the prevalence of occupational segregation in the labor force, the loss of middle-wage jobs is likely to have disproportionately negative effects on Black and Brown workers and female workers.²⁸



^c Note: The ACS and BLS are two different surveys; ACS numbers should not be summed with BLS numbers.

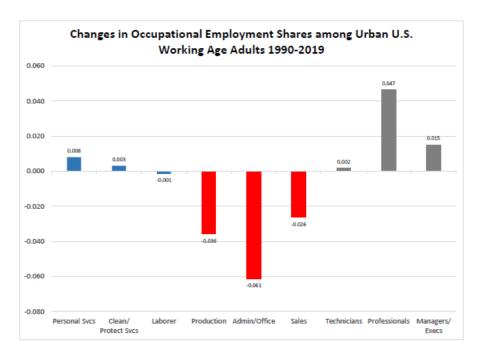
^d Note: Black and Asian workers include Hispanic Black/Black Latino workers and Hispanic Asian/Asian Latino workers.

^e See IEL analysis, Table 6, Table 5.

^f See IEL analysis, Table 6.

⁹ See IEL analysis, Table 2.

Figure 2: Changes in Occupational Employment Shares Among All Illinois Working-Age Adults 1990-2019^h



Unionization is on the decline, while non-traditional work structures like gig work and just-in-time scheduling are on the rise. As of 2019, 13.6 percent of employed workers in Illinois were part of a union, down from 18.3 percent in 2000.²⁹ Workers in Illinois in 2019 were slightly more likely to be unionized than in the U.S. as a whole (10.3 percent), and public sector workers in Illinois were more than five times as likely to be unionized (33.6 percent) as private sector workers (6.2 percent).³⁰

The decline of unions has implications for wages and job quality: unionized workers have a 10 to 20 percent wage boost over non-unionized workers with similar backgrounds, a pattern that has held true since the 1930s.³¹ Evidence suggests that in recent decades, unionization has come to have a positive association with job satisfaction and measures of general worker wellbeing.³² As workers navigate the changed economy, there has been renewed interest in unionizing. Over the first half of the NLRB's 2022 fiscal year, union election petitions increased by 57 percent from 2021, while unfair labor practice reports have increased 14 percent.³³

The rise of non-traditional work structures – gig work, temporary and contract work, and contingent work – has also made unionization more challenging, despite high levels of self-reported interest from gig workers in contract negotiation and workplace benefits.^{34, 35} State-level data on non-traditional work structures are not available as these jobs are not represented in official administrative workforce data. At a national level, according to one estimate, 16 percent of U.S. adults have ever earned money through online gig platforms.³⁶ There are also more Americans engaged in part-time work than in the past, which is often subject to unpredictable "just-in-time scheduling" practices.³⁷ Both of these changes provide flexibility that appeals to many employers and workers, while leaving segments of the workforce without benefits – like health insurance and retirement benefits – that are traditionally associated with full-time work.²⁶

Employment projections indicate a large number of new jobs in healthcare, education, and hospitality in the coming decade. As an older workforce ages into retirement, demand for healthcare and eldercare are projected to increase.³⁸ Ten-year employment sector projections from the Illinois Department of Employment Security (IDES) indicate that from 2018 to 2028, the industries with the largest number of jobs added may be Educational and Health Services (about 32,000 new jobs), Professional and Business Services (22,400), and Leisure and Hospitality (20,900). The industry with the largest drop

^h Figure is constructed using U.S. Census data for 1990, 2000, and 2010, and pooled American Community Survey (ACS) data for years 2014 through 2019, sourced from IPUMS (Ruggles et al. 2018). Sample includes working-age adults ages 16-64 excluding those in the military. Occupational classifications are harmonized across decades using the classifications scheme developed by Dorn (2009). Blue bars represent low-paying jobs, red bars represent medium-paying jobs, and gray bars represent high-paying jobs.

in jobs is projected to be Manufacturing (about 7,700 lost jobs). 10

Employment projections by occupation provide another view of potential areas of job growth and decline. The occupations adding the most jobs may be Healthcare Practitioners (about 23,500 new jobs), Food Preparation and Serving (21,500), and Management (19,400). Although most occupations are projected to add jobs, IDES projects a large drop in Office and Administrative Support (about 57,300 lost jobs) and in Production (13,500).¹⁰

Unemployment in Illinois varies widely by demographic characteristics and geography. Before the pandemic, Illinois had an unemployment rate of 3.9 percent for 2019. Though this was the lowest unemployment on record for the state, it was slightly higher than the U.S. rate of 3.7 percent.²¹ Men (4.0 percent) had a higher unemployment rate than women (3.8 percent). Asian Illinoisans (2.8 percent), white Illinoisans (3.3 percent) and Hispanic Illinoisans (3.6 percent) had unemployment rates below the state average, and Black Illinoisans had a higher unemployment rate (8.7 percent).¹² The lowestunemployment counties pre-pandemic were Brown, Washington, and Monroe, all of which had unemployment rates below 3 percent. The highest-unemployment counties all saw rates above 6 percent: Pulaski, Hardin, and Alexander counties.³⁹ Pandemic disruptions caused unemployment to spike to historically high rates in the spring of 2020; since then, it has largely recovered but remains above pre-pandemic levels.

Largest Nonfarm Employment Supersectors, Illinois, 2019 ³⁰			
Supersector (nonfarm)	Share of jobs	Sectors ⁴⁰	
Trade, Transportation, & Utilities	19.7%	Wholesale Trade; Retail Trade; Transportation and Warehousing; Utilities	
Professional and Business Services	15.4%	Professional, Scientific, and Technical Services; Management of Companies and Enterprises; Administrative and Support and Waste Management and Remediation Services	
Educational and Health Services	15.4%	Educational Services; Healthcare and Social Assistance	
Government	13.5%	Federal Government, State Government, Local Government	
Leisure and Hospitality	10.2%	Arts, Entertainment, and Recreation; Accommodation and Food Services	

Table 1: Illinois Sectors and Occupations at a Glance

Largest Major Occupation Groups, Illinois, 2019 ⁴¹			
Major occupation group	Share of jobs	Example occupations 42	
Office and Administrative Support	13.1%	Material Recording, Scheduling, Dispatching, and Distributing Workers; Secretaries and Administrative Assistants	
Transportation and Material Moving	10.2%	Air Transportation Workers; Motor Vehicle Operators	
Sales and Related	9.3%	Retail Sales Workers; Sales Representatives	
Food Preparation and Serving	8.6%	Cooks and Food Preparation Workers; Food and Beverage Serving Workers	
Management	7.5%	Advertising, Marketing, Promotions, Public Relations, and Sales Managers	

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GOOD JOBS ARE GOOD BUSINESS



Good Jobs Are Good Business

Defining Job Quality

Section 10.b (2) of the Illinois Future of Work Act mandated that the report produced by the Task Force must develop a set of job standards and working conditions that will ensure that future work in Illinois builds a vibrant middle class. Additionally, the law requires the task force to identify policies and programs that can help Illinois recover from the pandemic, reduce systemic inequities, create good-paying jobs, and combat poverty and inequality, all while sparking economic growth and prosperity. The following section introduces a framework that can be adopted and implemented in the state of Illinois to build a thriving middle class and a vibrant business sector that are equipped to take on these challenges.

The current moment calls for a focus on job quality. If the Illinois workforce is to provide a viable pathway to a middle-class life for more Illinoisans and stimulate growth and prosperity in the economy, then all Illinois workers must have access to quality jobs. Despite a demand for labor and rising wages, a large portion of US workers earn low wages and less than half of US workers believe they have good jobs.⁴³ Businesses seek consistent workers, while many workers desire a job that can provide greater financial stability and lead to wealth creation. A statewide initiative on job quality can help ensure both business and labor are able to meet their objectives.

If current trends persist, the next decade will continue to see a polarized labor market and uneven job growth. As shown in Table 2, eight of the 15 job titles projected to experience the most growth by 2030 nationally are low-wage jobs that pay less than \$31,200 annually (the equivalent of \$15/hour). Of the remaining job titles, five are high-wage jobs paying more than \$62,400 annually. **Only two of the 15 largest-growing jobs are middle-wage jobs**.⁴⁵ Research shows that the combination of growth in lowwage jobs and non-standard work arrangements is linked to many social and economic problems, including but not limited to poverty and inequality.⁴⁶ In 2013 state and national governments combined paid out approximately \$153 billion in aid that went to health benefits, food assistance programs, and cash assistance to the families of low-wage workers.⁴⁷ The strain of low-wage jobs is not solely borne by workers and governments. Employers creating low-wage and low-quality jobs often experience negative impacts as well. Lower-quality jobs put strain on employers, often leading to high turnover, increased recruitment costs, reduced productivity and worker performance, and reduced worker engagement. ^{48, 49, 50}

Creating good jobs can start with raising wages but requires also paying attention to objective and subjective facets of employment. Figure 3 demonstrates how fulfilling worker needs and business needs can build on top of one another to create a high-functioning workforce that benefits both employees and employers.

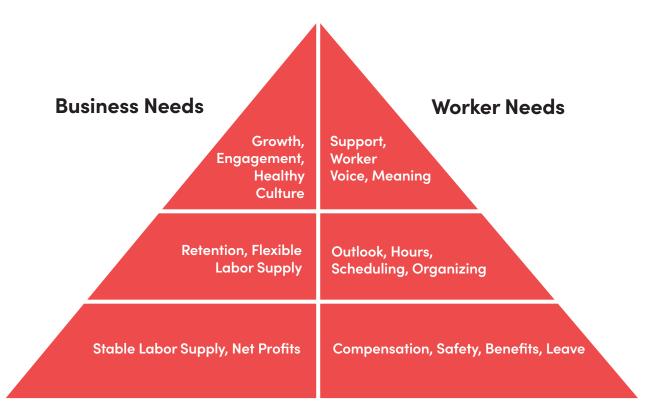
⁶⁶ Offering good jobs lowers costs by reducing employee turnover, operational mistakes, and wasted time. It improves service, which increases sales both in the short term and – through customer loyalty – in the long term. All these improvements can more than make up for the large investments in better wages, benefits, training, and scheduling."

> -Zeynep Ton, MIT Sloan School of Management

Table 2: Top Jobs Projected to Grow Nationally between 2020 and 2030, by Wage ⁴⁵

Top 15 Occupations	Employment Change, 2020-30 (Numbers in Thousands)	Median Annual Wage, 2020
Home health and personal care aides	1,129.9	\$ 27,080
Cooks, restaurant	562.5	\$ 28,800
Fast food and counter workers	517.5	\$ 23,860
Software developers and software quality assurance analysts and testers	409.5	\$ 110,140
Waiters and waitresses	407.6	\$ 23,740
Registered nurses	276.8	\$ 75,330
Laborers and freight, stock, and material movers, hand	255.8	\$ 31,120
General and operations managers	226.3	\$ 103,650
First-line supervisors of food preparation and serving workers	190.8	\$ 34,570
Passenger vehicle drivers (except bus drivers), transit and intercity	180.6	\$ 32,320
Market research analysts and marketing specialists	163.6	\$ 65,810
Bartenders	159.9	\$ 24,960
Security guards	154.2	\$ 31,050
Medical and health services managers	139.6	\$ 104,280
Maids and housekeeping cleaners	127.5	\$ 26,220

Figure 3: Aligning Worker and Business Needs through Job Quality



The Future of Work in Illinois requires leaders across the state to grow not only the number of jobs but also their quality. A statewide definition of job quality facilitates the ability for employers and employees to work in concert to improve job quality and for the government to measure growth over time and design incentives if necessary. The Illinois Future of Work Task Force has defined a Quality Job as a job that provides the following characteristics: a family-sustaining wage and benefits package including access to healthcare and the ability to take time off for personal or family illness without risking financial or career stability. A quality job offers safe working conditions for all of its workers and ensures a culture and environment that treats all workers with dignity and respect, including respect for workers' right to form a union without interference, and to organize and bargain collectively for better conditions. Additionally, a quality job provides workers with predictable work schedules, offers opportunities for training and advancement, and gives workers power and voice within their roles and organizations.

Spotlight: An Employment Quality Index for Illinois (EQ-IL)

Researchers with the Project for Middle Class Renewal (PMCR), in partnership with the Future of Work Task Force, have developed an Employment Quality Index for Illinois. The index is based on a model of seven components of employment quality. These components capture not only pay and benefits, but also workers' perceptions of their job, work environment, and opportunities for advancement. PMCR's index is informed by a parallel national initiative led by the Aspen Institute Economic Opportunities Program and the Families and Workers Fund, which is bringing together leaders from business, policy, labor, and workforce to align on and advance a common job quality definition. EQ-IL defines job quality through the following **components**:

- 1. *Pay:* Hourly wage, tips, commissions, and typical monthly pay; employer withholding of payroll taxes.
- 2. Benefits and paid time off, including earned paid vacation and sick time; paid parental leave; health insurance; pension/retirement contributions; transportation; childcare; tuition reimbursement.
- 3. *Hours and scheduling:* Mismatch between desired and actual work hours (e.g., underemployment); Instability in weekly hours; evening, night, or weekend work; Advance notice and input into work schedule.
- **4.** *Job content:* Autonomy; meaningfulness, usefulness, repetitiveness, engagement; voice, input, representation, due process.

- 5. *Working conditions:* Health and safety; work intensity/fatigue; mistreatment/abuse
- 6. Social equity: Fair treatment; supportive co-workers; accommodations for disability and caregiving responsibilities; worker representation and voice, including respect for workers' right to form a union without interference, and to organize and bargain collectively for better conditions.
- 7. *Training and outlook:* Formal training; promotion opportunities; job security.

Using data from over 3,000 workers across Illinois surveyed in November 2021, PMCR researchers determined which components matter most for workers' self-rated employment quality. The findings illustrate that low-quality working conditions, such as short advance notice and limited access to employer-supported benefits, are more common in lower-paid jobs. There remain wide disparities in access to good-quality jobs and job features, by education level, region, race/ethnicity, age, and gender. This research highlights the importance of conditions of work including but beyond earnings, such as job security, work hours and scheduling, access to employer-sponsored benefits, paid time off, and meaningfulness of work.

PMCR plans to share more complete results from their survey in an upcoming report and interactive website. The website will enable policymakers, practitioners, and members of the public to compare employment quality across different kinds of jobs and groups of workers. This research sheds much-needed light on how employers, industries, investors, and the state of Illinois could better attract, retain, reward, and motivate workers through better-quality employment.

By focusing on job quality, Illinois can build a strong economy and workforce now, which in turn leads to a more efficient and productive workforce in the future. Improving job quality will also lead to sustainability, safeguarding the future workforce from problems and disruptions.⁵¹

Policymakers can improve job quality through a number of strategic initiatives. Contracting decisions can be tied to adherence to job quality and equity standards. Community benefits agreements can benefit developers and workers by making formal or informal agreements to adhere to particular standards. Tax incentives could reward employers proven to be good actors in terms of job quality, incentivizing uptake and defraying any shortterm costs adopters might incur. Community groups can also help improve job quality by acting as an intermediary between workers and employers. Local groups can raise



Job Security and Permanence

- Nearly a **third** (31%) of workers surveyed said that it was very or extremely likely that they would lose their job or be laid off in the next 12 months.
- Among these, nearly 73% also report they are very or extremely likely to leave their job voluntarily, versus only 23% who feel secure.

Accommodations and Supportiveness

 43% of workers with a disability report that it is moderately to extremely difficult to obtain needed accommodations that they need while 55% report mistreatment.

Skills Development and Lifelong Learning

- Workers who receive **formal training**, at least **once a year or more often**, are **more than twice as likely** to report above average than below average employment quality (71% vs. 29%).
- More than three-quarters (77%) of union members report receiving training at least once per year, compared with 52% of non-union workers.



Schedule Predictability

- Erratic schedules and lack of schedule control are related to work-family conflict and interference with childcare arrangements, and they may lead families to rely on a public safety net to make ends meet.
- **47%** of Hispanic and **48%** of Black workers **receive less than a week's notice of their schedule**, at higher rates than white workers (35%).
- About **51%** of part-time workers receive less than a week's notice of their schedules, compared to 37% of full-time and almost **half of parents** versus 36% of those without children who have less than a week's notice of their schedule.



Underemployment

- Underemployment is closely related to subminimum monthly income, which in turn is associated with higher participation in SNAP, lower job satisfaction, lower selfrated overall employment quality, and higher likelihood of quitting one's job.
- **Nearly half** (45%) of part-time workers experiencing extreme underemployment (i.e., desiring an additional 20 hours or more) report being dissatisfied with their job, compared to just **28**% of those who desire the same number of hours per week.

public awareness by identifying employers that are doing well adopting and adhering to good jobs strategies and providing support and retention assistance services to businesses.⁴⁹

Illinois has the opportunity to be a national leader in statewide approaches to define, measure, and improve job quality. The Department of Labor and high-road business champions will soon be implementing similar job quality definitions and strategies in the coming months to ensure that the future of work is full of quality jobs.

Promoting Equitable Access to Good Jobs Means Removing Barriers for Vulnerable Populations

In order to ensure a thriving workforce in Illinois, it is necessary to identify and remove barriers to good jobs for all potentially vulnerable populations. Immigration status, incarceration history, race, gender, sexual identity, age, and housing status are but a few of the aspects that leave workers vulnerable to employment discrimination and exclusion. All policies should serve to promote equity among the most vulnerable populations and geographies that have faced historical inequities in job access. Promoting equity necessitates identifying and responding to the myriad existing barriers that different vulnerable populations face.

For example, formerly incarcerated individuals experience barriers to reentry and employment such as a lack of resources and housing, as well as lack of education and job training. In addition, hundreds of laws in Illinois make employment even more difficult for reentrants who already face transition challenges. Laws that mandate background checks serve as a barrier to employment in quality jobs for people with a criminal record, but also increase the risk of recidivism. Such laws must be eliminated, and new programs created to provide reentrants with education and job training, housing and resources, and navigation support in the transition back into the workforce. Illinois must also enforce policies on topics such as discrimination, workplace safety, wage theft, and other violations that commonly impact vulnerable populations such as undocumented workers.

Improving equity for Illinois' workforce also means increasing access to quality jobs and benefits for all workers, regardless of documentation status, age, gender, and sexual identity. Illinois must encourage employers to close hiring and pay gaps among vulnerable populations and to track progress across all sectors and geographies.

Spotlight: Good Jobs for Good Business at PayPal

PayPal CEO Dan Schulman is a proven leader in using good jobs to create better business. In 2018 PayPal surveyed all of its employees and found that 50-60% were financially struggling.⁵² Schulman set up an emergency fund for employees to apply for and access; however, after realizing that many of the applications for the fund were for everyday expenses, PayPal decided to implement larger-scale solutions. The company covered more healthcare expenses for employees and decreased average healthcare costs by 58%, increased wages by a 7% average, gave PayPal equity to every employee, and instituted financial planning classes. Through these solutions, PayPal employees' net disposable income (NDI) increased from 4 to 6% to 18%. The company is aiming for its employees to have 20% NDI, which is commonly regarded as what workers need to achieve financial stability. Stockholders supported the changes, which signaled the company's commitment to long-term success. The wage and benefit increases led to lower absenteeism and attrition, which cut costs for training and improved customer satisfaction. PayPal employment engagement also increased to the top 1% of engagement among other companies.⁵³ Following the success of PayPal, over 180 CEOs of major companies joined Schulman to urge other companies to shift to stakeholder capitalism, where business invests in all stakeholders, not just stockholders. Schulman continues to advocate for other large companies to implement financial security surveys and look for solutions that center employees' wellness as a way to achieve overall business goals.

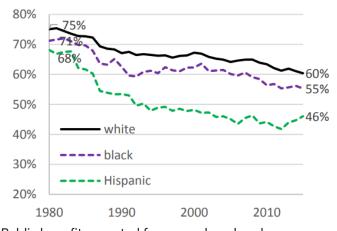
Benefits

An essential component of a good job is workplace benefits, including healthcare, retirement plans, and paid leave, yet millions of Illinoisians do not have access to employer-based benefits. Without the protections which benefits allow, Illinois households cannot reach financial security or build wealth. Workplace benefits are also critical for businesses and staff retention. One metaanalysis synthesized decades of peer-reviewed studies of job characteristics and employer outcomes and reported that **access to workplace benefits decreased employees' intent to leave their company**.⁵⁴

The traditional path for individuals to access benefits is either through employer-funded programs or public benefits funded through government spending. Private employers often provide employees with benefits, including paid leave, childcare assistance, or retirement plans, in order to recruit and retain workers. Employerbased benefits also incorporate public systems, Social Security, Unemployment Insurance, and healthcare, which use risk-sharing pools and government subsidies to reduce individual economic burden. However, with the rise of non-traditional and contingent work arrangements, where employees are hired not directly by companies but through often temporary contracts or subcontractors, more workers find themselves responsible for seeking their own benefits or forgoing them completely.⁵⁵

Higher-wage, full-time employees are much more likely to have benefits than any other classifications of workers. The Bureau of Labor Statistics found that 78 percent of the civilian workforce had access to paid sick leave, but that number reduced to 45 percent for part-time employees. Similarly, 88 percent of full-time employees had access to healthcare benefits whereas only 23 percent of parttime employees had access, and of employees earning in the lowest ten percent of wages 27 percent had access, compared to 95 percent for the highest-earning ten percent of employees.⁵⁷ These gaps in benefits coverage also lead to gaps between racial groups, with one study finding that less than half of Hispanic workers have access to employer-sponsored healthcare benefits (See Figure 4 below).⁵⁸

Just over **One in ten** workers rely on non-traditional arrangements for their primary job, according to a 2017 Bureau of Labor Statistics (BLS) study.⁵⁶ Figure 4: Employer-Provided Health insurance Coverage by Race/Ethnicity, 1980 to 2015



Public benefits, created for unemployed and impoverished households, are increasingly used by employed individuals to meet their financial needs.⁵⁹ Government-supported benefits originated as a minimum safety net and were not designed to support the current reality of a rise in workers without employee benefits.

To create a vibrant state economy, Illinois will need to envision a new integrated benefits system, private and public, to fill the gaps unsupported workers face. The Aspen Institute – a nationally recognized non-profit organization that brings together leaders across industries to solve complex problems – has created the Benefits21 Initiative, recognizing the need to bring public and private leaders together to modernize benefits centered on the financial security needs of households. The vision of this initiative is a future where all workers are equitably and effectively supported by a core set of benefits. The Benefits21 Program defines a 21st-century benefits system as:

- 1. **Inclusive** of all workers, irrespective of their work arrangement and employment status.
- 2. **People-centric**; the voice, life, and experience of workers is critical and central to the design and delivery of benefits.
- 3. **Portable**, providing continued access and funding as workers experience job loss or transition, enter new work arrangements, and piece together different types of work.
- 4. Interoperable, using technology to effectively integrate benefit systems and platforms to ensure seamless access.

Using the tenets of inclusivity, person-centricity, portability, and interoperability, Illinois policymakers can begin the process of creating a more universal benefits system to benefit workers and businesses of the future.

As business leaders and policymakers work to create and improve benefit systems, involving workers in the process 24 | Future of Work in Illinois from the offset will help focus efforts on improving access to and usage of the most critical benefits for workers to improve their financial security outcomes. A model of universal benefits, where all workers are eligible regardless of employee classification, may not be economically or politically feasible. Instead, Illinois should prioritize integrating historically excluded workers, part-time, temporary, or gig workers into existing and new benefits frameworks. While devising new solutions, policymakers should ensure that employees already covered by workplace benefits are not at risk to lose them, through employer misclassification or other mechanisms. As there are many types of benefits that could be available for workers (healthcare, retirement, paid leave, childcare assistance, training opportunities, transportation subsidies, etc.), stakeholders are encouraged to allow workers to set the agenda for what benefits to include.

With the changing labor market, more employees are in non-traditional and contingent roles. Attaching benefits to the worker, as opposed to the job, provides employees more stable and accessible benefit options. One example of a portable benefits program is Alia, created by the National Domestic Workers Alliance. The online platform gives domestic workers, who often have multiple jobs and clients, access to benefits including paid time off and insurance. Workers select the benefit options themselves, while clients contribute to the employee benefits based on work frequency.⁶⁰ Alia is only one example of how a portable benefits system could expand access to workplace benefits for excluded workers.

Spotlight: Illinois Secure Choice

The Illinois Secure Choice program provides a roadmap for a person-centric benefits model.⁶¹The program was created to expand retirement plans for Illinois workers by establishing a state retirement plan for businesses without their own. The program registers small and medium-sized employers and automatically enrolls their employees in a state IRA retirement plan. Employees choose the percentage of their paycheck to contribute to the IRA, or they opt-out of the program. The account stays with the employee, so if they change jobs, they still have access to all of the funds they previously deposited. Secure Choice takes the cost and time burdens of providing retirement plans from employers and transfers them to the state, while also allowing employers with their own plans to continue. Employers are only responsible for enrolling their employees and reporting deductions from the paycheck. This new program promotes inclusion for workers previously excluded from retirement saving plans and portability as the benefit remains with workers instead of being tied to the job. As of 2020, Illinois had registered 6,000 employers and almost 80,000 employees had funded accounts. The fund assets grew exponentially,

in the 4th quarter of 2020 almost reaching \$50 million.⁶²

Spotlight: IL Commission on Poverty Elimination and Economic Security Strategic Plan

The Intergenerational Poverty Act of 2020 created the Commission on Poverty Elimination and Economic Security and required a strategic plan to reduce deep poverty in the state by 50 percent by 2026. This plan, published in May 2022, lays out several strategies related to public assistance benefits that are relevant to the future of work in Illinois:

- Create an open door to benefits enrollment.
- Increase access, uptake, and value of public benefits.
- Utilize direct cash assistance to provide a stable platform for lifting families out of poverty.

The Commission urges state agencies to coordinate so that individuals assessed for one agency's program can also enroll in benefits administered by other agencies. The Commission also calls for the exploration of automatic filing options so that receiving benefits is not dependent on the savvy and persistence of individual households. Lastly, the Commission recognizes that the current array of public benefits is insufficient in lifting everyone who experiences deep poverty across the state. Thus, it calls for state and local governments to utilize direct cash assistance programs to meet the needs of those experiencing poverty and those disqualified from existing benefits because of their immigration status or incarceration history. The Commission recognizes that cash assistance is also a tool for promoting work, as many people have significant health, transportation, childcare, or legal barriers that limit their employment prospects.

Labor Standards

Labor standards exist to protect the rights of employees and define employers' responsibilities and obligations. Labor standards are ultimately good for businesses, as labor policies that improve job quality have been shown to increase job tenure and reduce the cost of employee turnover by improving the wellbeing of workers.⁶³ Illinois laws seek to create work environments that provide applicants and employees with equal access to employment and fair treatment in the workplace. Illinois has a strong history of worker protections and strong labor unions. Since establishing the nation's first eight-hour workday for child workers, Illinois has remained a strong labor state that has led in safeguarding workers' financial stability through raising the minimum wage, improving protections for workers by increasing penalties for discrimination, and facilitating economic mobility by not disclosing salary and benefit history. ^{64, 65, 66}

The COVID-19 pandemic reinforced the need for health and safety measures, the availability of paid leave in order to care for self and family, and the importance of fair compensation for work and exposure to risk. The pandemic also revealed the need for state and local labor enforcement to refocus and repurpose their staff and daily functions. Two commonly accepted ways to strengthen the impact of existing labor standards are a **strategic enforcement model** and a **co-enforcement model**. Strategic enforcement relies on the following principles:⁶⁷

- Be proactive. Rather than waiting for workers to complain about violations of workplace rights they may not even know exist, agencies should proactively target industries with high rates of violations, seeking to broadly change conduct in a lasting manner.
- Use data and collaborate. Adopting a proactive approach requires both reliance on data to identify industries most at risk of violations, as well as close collaboration with unions, community organizations, and worker organizations to learn about violations and reach workers.
- Focus resources. Enforcement should expend limited resources on industries with high rates of violations; resource limitations also require triage of incoming complaints.
- Use multiple tools. Enforcement can utilize a range of tools, including publicity, in order to drive deterrence.⁶⁸
- Be flexible. Strategic enforcement is not static or rigid but rather iterative, nimble, and dynamic, and responsive to new developments.

A complementary approach is the co-enforcement model, where community organizations, unions, or worker centers, along with law-abiding firms, work together with government inspectors to identify unethical and illegal practices.⁶⁹ Worker organizations often have "on the floor" knowledge of business practices and trust with community members to encourage and prepare them to file workplace complaints.¹ Unsurprisingly, compliance with labor laws is correlated with the likelihood of being caught and the severity of the penalty.⁷⁰ New laws that facilitate enforcement combined with new methods of enforcement will help workers assert their rights without fear. The goal of labor enforcement agencies is to bring employers into compliance and keep workers, especially the most vulnerable, safe and satisfied in their workplaces. Addressing the violation of workers' rights is vital to creating a future where workers feel valued and where businesses experience the benefits associated with more satisfied employees.

Strategic enforcement of labor standards helps position Illinois for the work of the future by providing the right incentives to employers to comply with all applicable laws and provide quality jobs for all employees. Inadequate enforcement provides incentives to firms to avoid complying with labor laws, which rewards lowroad firms and puts law-abiding firms at a competitive disadvantage.

Spotlight: California Strategic Enforcement Partnership

The California Strategic Enforcement Partnership was formed in 2016 by the California Labor Commissioner's Office to strengthen anti-wage theft enforcement efforts in California and establish a culture of complying with labor laws via partnership with worker organizations. The Partnership's goals include collecting unpaid wages, developing industry-specific enforcement strategies, supporting law-abiding employers through effective enforcement, and increasing worker engagement in advocating for better working conditions. The Partnership focuses on six industries: agriculture, carwash, construction, janitorial, residential home care, and food service.

The Partnership's work occurs in three main areas: industry strategy teams, annual convenings, and worker exchanges and training. The industry strategy teams meet regularly with the Labor Commissioner's Office and worker organizations to better understand industry structure and dynamics, share information concerning wage theft in their industries, and discuss concerns and complaints from workers. Annual convenings are held among investigators, auditors, attorneys, staff, the National Employment Law Project and 14 worker organization cohorts for panels, workshops, training, and industry-based break-out sessions. The worker cohort exchanges and trainings are facilitated by the National Employment Law Project, where groups exchange best practices, share strategies and cross-train on labor law enforcement tools.⁷¹ A Berkeley Law Review article found that California's co-enforcement strategies improved short-term compliance and enforcement, increased commitment of enforcement officers, and produced modest revenue increases.⁷²

Policy Recommendations Job Quality

- 1. Adopt a statewide job quality measurement.
- 2. Use a job quality measurement mechanism to award state funding.

Benefits

- 1. Extend benefits to more people through models that:
 - a. are not tied to any particular job
 - b. support contributions from multiple employers or clients
 - c. cover any worker, including independent contractors and other non-traditional workers.
- 2. Create paid leave benefit programs to improve economic security for workers when they need to care for themselves and their families.
 - a. These programs should also stay with workers so earned benefits can be taken from one employer to the next without a lapse in coverage and allow contributions across multiple income sources.
 - b. They should include independent contractors either through opt-in options or requiring businesses that rely heavily on the contractors to enroll their workers and contribute to their paid leave.
- 3. Encourage employers to expand the scope of benefits to include as much employee support as possible, including defraying costs such as transportation.

ⁱ This model involves the following principles: Look for the unique assets of each role. The partnership works best when worker organizations and government each recognize the unique role each party plays and recognize ways to enhance each other's efforts instead of duplicating them.

[•] Share information frequently. State inspectors need information about violators and their practices, while worker organizations need updates on specific cases to maintain trust and credibility with their clients.

[•] Build trust and strong relationships. Explicitly discussing differences of power between parties and constraints that exist within each party goes a long way towards creating the conditions for mutuality.

[•] Political support is necessary. Worker organizations require dedicated funding to educate community members and source complaints, and inspectors need support from senior leaders to take on a different mix of cases than were typical previously.

Labor Standards

- 1. Fund, pilot, and evaluate co-enforcement strategies in sectors with high instances of violations.
 - a. Actively pursue randomized audits, unannounced workplace visits, and other investigative tools so that enforcement does not rely exclusively on a complaint-driven process.
 - b. Partner with workers' centers to conduct coenforcement of employment laws and policies.
 - c. Use technology to reach workers in new ways.
 - d. Invest in rich data collection and analysis in order to identify sectors with high instances of violations.
- 2. Consider enacting retaliation protections and stronger penalties for misclassifying employees.

The Impact of New Technology

New technologies and innovation continue to advance and shape the future of work. In particular, advancements in automation technologies and artificial intelligence (AI) are impacting the nature of work and the workplace itself. As machines carry out more tasks done by humans, complement the work that humans do, and even perform some tasks that surpass what humans can do, there will continue to be drastic shifts in wages and occupational trends.

The Polarizing Impacts of Technology on Labor Markets

Arguably the most profound concern around innovation is its impact on current and future labor markets. At the most simplistic level, this sentiment is captured by the fear of robots displacing human workers. Indeed, over the last four decades, technology has played a role in the phenomenon where increases in national productivity have not led to increased incomes for all workers. The rise of computers and automated tasks has decreased demand for middle-skilled workers who perform "routine, codifiable tasks" such as information-gathering, calculating, and organizational tasks.1 The rise of technology, however, does not threaten all groups at the same rate. A 2019 Brookings Institute study found that 47 percent of jobs worked by Hispanic or Latino workers were vulnerable to automation, followed by those of American Indian workers at 45 percent, and those of Black workers at 44 percent. In contrast, jobs held by white workers had a 40 percent automation potential.73

Changing the Conditions to Ensure Broad Benefits to Technology

Technology by itself does not explain the growth in income inequality over the last 40 years. The MIT Task Force on the Future of Work points to international trade policy and institutional changes as additional factors. The inclusion of China in the World Trade Organization led to the loss of at least a million US manufacturing jobs. Additionally, the decrease in the share of unionized workers, the declining value of the federal minimum wage, and the failure to update labor and social protections to contract, temporary, and gig workers have all facilitated the concentration of incomes among higher-educated and higher-skilled workers.

New technologies are emerging in these conditions. Without effort, innovation will continue to increase income equality, weaken worker voice, and widen racial disparities.¹ Fortunately, research shows that **the gradual nature of technological adoption provides an opportunity to change the conditions so that innovation can benefit a broader population**.

An important factor influencing technology's impact is how it frees workers from performing routine tasks, allowing them to focus on more complex and nonroutine tasks. This often leads to improved service and productivity. Effective companies plan for this transition thoughtfully by standardizing routine tasks and investing in training so workers can handle more specialized tasks. This highlights the importance of strong management practices in ensuring that new technologies benefit more than those at the top.

Ultimately, **technology creates the most jobs when it generates new business and industries instead of automating workers' tasks.** The MIT Task Force uses e-commerce, as an automation of retail shopping, as an illustrative example. E-commerce has significantly impacted warehousing, transportation, and logistics, including the doubling of warehouse jobs over the last 20 years, many in rural areas. However, as robotics and automation advance in the future, demand is likely to occur for software developers and technicians, and lowerwage workers such as last-mile drivers and warehouse pickers will need labor protections to avoid exploitation.

Technology is already impacting the everyday lives of Illinoisans, but more-intentional preparation is necessary to ensure that its benefits reach all workers and not just those who are already highly educated and well compensated. ⁶⁶ Just as policies shape trade and labor institutions, they also shape technology. They shape the rate and manner in which firms develop and adopt technologies, as do organizational cultures, economic incentives, and management practices."

> -David Autor, David A. Mindell, and Elisabeth B. Reynolds

Protecting Workers in a Data-Driven Future

The increasing adoption of AI and algorithm-based technologies in the workplace has also raised significant equity issues, particularly in the areas of hiring and worker assessment. While seen as a way to improve and streamline the hiring process in order to more efficiently hire quality candidates, the rise of algorithmic hiring has instead reproduced, or even exacerbated, racial, gender, and other disparities.⁷⁴ Upturn, a D.C.-based non-profit which promotes equity use in technology use and governance, recently conducted a study on hiring practices used by 15 large companies, such as Walmart, Amazon, Walgreens, etc. In the study, the Upturn researchers found that the widespread use of predictive hiring tools such as pre-employment skills and knowledge tests, personality tests, and irrelevant screening questions often discriminate against young people, people of color, and people with disabilities.75

In addition to opaque and discriminatory hiring practices, there has also been an increasing use of algorithms to monitor or surveil workers. **New technologies enable companies to monitor worker behavior across workplaces**, including productivity in warehouses, retail stores, and customer service centers. In fact, a recent study found that retail and manufacturing companies increasingly use surveillance technology to monitor employees' daily tasks.⁷⁶ And while surveillance technologies are used to gather data to support the promotion of employees, they are also prone to misuses, such as supporting retaliation against employees, especially those who are trying – or who are likely – to organize a union.⁷⁶

The reality is much of AI and algorithm-based technologies are still troubled by human biases. As the California Future of Work Task Force describes, AI has to be "trained" with existing data and judgments made by human workers, who are also needed to label, tag, and organize data.⁷⁷ Ultimately, as more of these technologies are adopted in the workplace, the state of Illinois must also proactively push new policies to ensure transparency and protection for all Illinoisans.

The Future of Tech in Illinois

While the advent of new technologies poses significant, undetermined impacts on the labor market, it also presents a critical opportunity to leverage our assets and talent to create meaningful economic opportunities for residents. While tech hubs are synonymous with vast disparities in their resulting wealth and employment, this is not an inevitable byproduct. Public, private, and non-profit institutions all play a critical role in ensuring equitable benefits from technology and innovation. As technological advancements continue to impact the demand for and supply of labor, the state of Illinois must ensure workers are empowered with the skills to remain competitive in the labor market, and that those displaced are retrained and matched to growing occupations.

The state of Illinois continues its ascent towards achieving Tier-1 tech hub status. Illinois had the fourth largest increase in the number of employer job postings for tech openings in 2021, and only three states added more tech jobs than Illinois over the past decade.⁷⁸ Overall, total tech employment stood at 318,600 – the seventh largest in the country. This growth is driven by a robust talent pipeline stemming from universities across the state. The Illinois Science & Technology Coalition determined Illinois universities produce the third largest amount of computer science degrees and sixth largest of data science-related degrees.⁷⁹ Funding for Illinois' innovation economy continues to chart new highs as well, although growth trends remain mixed. Illinois ranked ninth nationally for business research and development (R&D) activity, with \$14.1 billion invested statewide in 2019. University R&D funding saw a record high in 2020 at \$2.7 billion, while the state underperformed in attaining federal funds for R&D, ranking 31st nationally.⁸⁰ On the private side, Chicago saw record venture capital (VC) funding in 2020, with \$7 billion across 374 deals, over double the funding of 2020.81

While the tech economy continues to grow, the creation of wealth and opportunity across the ecosystem has not been equitable. Recent analysis from P33 shows that **only 15 percent of tech degrees went to Black and Latino students statewide in 2020.**⁸² Movement towards a more genderinclusive talent pipeline saw progress in 2020, with women comprising 40 percent of entry-level tech hires, compared to 30 percent of the tech workforce being women. In Chicago's venture capital ecosystem, inclusion remains modest but has seen significant growth. Hispanic or Latino professionals comprise only 4 percent of the region's VC professionals, but this figure saw 80 percent year-overyear growth from 2020, with Hispanic women and Latina employment tripling.⁸³ Additionally, the number of Black professionals grew 12 percent to comprise 6 percent of the ecosystem, while Asian professionals saw 10 percent year-over-year growth to 10 percent of the ecosystem. Ultimately, these numbers present a significant opportunity for the state of Illinois. Tech jobs are some of the highestpaying jobs available to Illinois workers; as such, they have potential to be a powerful tool for wealth building and, ultimately, closing the state's racial wealth gap.

Spotlight: Rebuild Illinois

The bipartisan Rebuild Illinois capital plan will invest \$44.8 billion over six years to create good jobs and develop critical infrastructure across the state.⁸⁴ Alongside \$18 billion from the Infrastructure Investment and Jobs Act, Rebuild Illinois will strengthen the transportation, education, recreation, and utility infrastructure that positions Illinois to lead the innovation economy.⁸⁴ Specific funding in Rebuild Illinois to spur digital growth includes Connect Illinois and the Illinois Innovation Network (IIN). Connect Illinois is a \$420 million program to expand access to high-speed broadband internet. The investment aims to connect all Illinois households, businesses, and community organizations to basic internet services by 2024 and high-speed broadband by 2028.85 The IIN establishes five hubs at public universities across the state, which will collaborate with public, private, and non-profit partners to drive innovation, research, and inclusive economic growth statewide.⁸⁶ One IIN hub will be Discovery Partners Institute (DPI), which will span 500,000 square feet of innovation space and annually train and upskill 10,000 workers and generate \$200 million in R&D investment.⁸⁷ DPI will focus on developing underrepresented talent across the state's core economic sectors, creating and filling 50,000 jobs alongside \$19 billion in economic impact over its first decade of operation.88

Spotlight: Google Career Certificates Provide Accessible On-Ramps to In-Demand Fields

The Google Career Certificates were developed by Google employees to support skilling in high-demand fields like data analytics and project management, and are available in English and with Spanish language support. Google Career Certificates are free for all community colleges and career and technical education (CTE) high schools to include in their curriculum, and are being implemented across all seven of the City Colleges of Chicago and Southeastern Illinois College. Additionally, the program includes an employer consortium of over 150 companies that consider certificate graduates for jobs, including Google and other Illinois-based companies such as Accelerated Digital Media, Accenture, Crate & Barrel, and Cloudasta.

There are 70,000 graduates in the U.S., with 75% reporting a positive career impact within six months of completion and 55% identifying as Asian, Black, or Latino. Oscar Cano Rojas is one of thousands of Illinois residents who used a Google Career Certificate to transition to a new career path in IT Support after getting laid off when the pandemic hit.

"The Google IT Certification has opened many doors such as landing my first IT tech support job. After being a professional chef for over 10 years [I've learned that] it's never too late to change your career path and do something you love. My customer service skills and training with the Google IT Support certification has prepared me well to be successful."

Policy Recommendation

- All employment-related decisions that are made or assisted by data-driven technologies should be transparent and require explicit consent. Employers should provide notice to workers in a clear and accessible way regarding all data-driven technologies in the workplace.
- 2. Data collection of workers should only be collected when necessary and should be accessible to employees and protected from misuse.
- 3. Workers should be able to collectively bargain employers' use of digital monitoring and surveillance tools, in accordance with existing legal standards.
- 4. Public and private programs that help young people of color access high-skill roles in software engineering and data should receive proper attention and funding, so these programs can provide intergenerational impacts on income and wealth.

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ILLINOIS' FUTURE JOBS

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Illinois' Future Jobs

Illinois' future jobs are diverse, with growth expected across many sectors over the next decades. The purpose of this report is not simply to highlight the highest future growth sectors, but to provide guidance and examples of how the state can improve job quality and economic security for all workers across all sectors, throughout the entire state. To that end, this section focuses on a select subgroup of industries where new policies focusing on improved job quality and equitable access for all populations will be especially impactful. These selected sectors represent the diverse growth industries that are critical for the economic security of different populations and geographies across the diverse state of Illinois. Policy recommendations in each of these areas are intended to provide frameworks for improved job quality – and useful guidance for all sectors – which will lead to a stronger and more equitable economy and workforce in Illinois.

Care Economy

Care work is one of the state's fastest-growing sectors, and roles in the care economy are disproportionately filled by women of color. These vital workers allow the rest of the workforce to get to work each day. Care workers compose a large slice of the Illinois workforce: the state employs 168,000 childcare workers, 102,810 home health and personal care aides, and 503 other personal care workers.⁸⁹ Care workers are disproportionately female: women make up 89% of the national home healthcare workforce and 94 percent of the childcare workforce. They are also disproportionately women of color: 55 percent of the home healthcare workforce are women of color, and 41 percent of the childcare workforce, compared to 18 percent of the overall workforce.⁹⁰

The COVID-19 pandemic has highlighted the importance of care workers. Many workers, especially women, were forced to leave the workforce to take care of children, and care workers became a lifeline for older adults whose families were not permitted to visit their facilities. Home health aides, childcare workers, and other direct care employees provide essential support to young children, older adults, and people with disabilities across the state. Research shows that adequate access to affordable, quality care stabilizes and strengthens the broader workforce – whether preschool, home, and communitybased care to assist the older adults and people with disabilities with daily tasks, or paid leave for employees to care for their own family members.^{91, 92}

Care work will only grow more important to the state's economy. Baby Boomers are aging into retirement, and advances in medicine and assistive technology allow more people to live longer. From 2012 to 2050, the population

aged 65 and older is projected to more than double, driving up demand for quality long-term care.93 Care work cannot be outsourced or automated, and care employment is expected to arow significantly, with home health aides projected to be the largest occupation in the economy by 2029.94 Over the next six years, Illinois is projected to add 216,700 jobs in direct care industries, making it one of the fastest-growing fields, growing at a rate of 12 percent.⁹⁵ Healthcare Practitioners and Technical Occupations are projected to be the largest-growing sector in Illinois, adding an estimated 23,466 jobs by 2028.¹⁰ Registered nurse positions alone are expected to grow by 12.6 percent.¹⁰ The growth is an opportunity for policymakers and employers to rise to the challenge of an increasing need for care while ensuring that the valuable work of providing care is recognized with improvements in job quality.

The care economy is not meeting the needs of Illinois families – and for those who can access care, the costs can be prohibitive. Childcare is essential to most families' economic well-being: in Illinois, seven out of ten young children live in households where all available parents are in the workforce.⁹⁶ Before the pandemic, more than half of Illinois families lived in a childcare desert, meaning there were more than three times as many children as licensed childcare slots. Profit margins in the childcare industry are extremely thin - typically less than one percent among day care operators – driving up costs for families.⁹⁷ Illinois families spent on average about one-third of their income on childcare before the pandemic.⁹⁸ According to one estimate, a family in Cook County composed of one adult and two children ages two and three would incur more than \$29,000 per year in pre-subsidy childcare expenses.⁹⁹ Research shows that these high childcare costs can push parents out of the workforce - particularly women, who continue to disproportionately take on the majority of both paid and unpaid caretaking responsibilities.^{100, 101}

The childcare sector is not the only piece of the care economy that is not meeting Illinoisans' needs. Many older adults and people with disabilities are consumers of long-term services and supports (LTSS), including a variety of personal and medical care services. Over half of all seniors are expected to need this type of care, and these services tend to be expensive – nursing home care costs about \$8,000 per month, and home and communitybased services cost about \$4,300 per month.^{102, 103} Although Medicaid can cover these costs for people who meet income and asset limits, Medicare does not cover any form of long-term care outside of a 90-day rehabilitative stay.¹⁰⁴ Even for those who qualify for Medicaid, there is no guarantee of services; Illinois currently has a waiting list or PUNS list that sits at 14,285 as of February 2022.¹⁰⁵ Private insurance is available but often unaffordable; only about

312,000 people out of roughly two million Illinoisans over 65 had private coverage in 2018.^{106, 107, 108} These coverage gaps leave many aging Illinoisans and residents with disabilities vulnerable to care costs that threaten their families' financial security.

Workers in the care economy often contend with low wages, minimal labor protections, and high turnover. While the average worker in the U.S. earns \$27 per hour, home healthcare workers are paid an average of \$13.81 per hour, and childcare workers make \$13.51 per hour, both about half the national average.⁹⁰ Nationally, one in seven childcare workers lives below the poverty line.⁹⁴ One survey found that the majority of home care workers work less than full time, though 81 percent said they "sometimes" or "always" want to work more hours. Onethird of surveyed home care workers worked a second job, and more than half were seeking another job, consistent with high rates of turnover in the industry.¹⁰⁹ afforded to many other workers. About half of all U.S. workers have employer-sponsored health insurance, compared to only one-fourth of home healthcare workers and one-fifth of childcare workers.¹⁰⁹ One large contributing factor is employer misclassification of care workers as independent contractors when they should be classified as traditional employees.⁹⁰ Employees in the care economy also often have relatively low rates of union representation. While nearly half of elementary and middle school teachers are members of a union, only 10 percent of early childcare center-based teaching staff are union members.¹¹⁰ Because care workers are disproportionately women of color, low wages and lack of benefits in the care sector contribute to inequity in the labor market, widening gaps in income and financial security by gender and race.

Jobs in the care economy also often lack benefits

Spotlight: Care Work From Home Care Worker Adarra Benjamin's Experience

Adarra Benjamin is a 28-year-old home care worker from the South Side of Chicago and an SEIU Healthcare Illinois member. She has been providing home care services for ten years and first started in the industry because her great-grandmother needed care. Benjamin put off her plans for college to ensure her great-grandmother could continue living at home with dignity and independence.

"I never planned to be a home care worker, but once I saw the impact it had on my great-grandmother's life, I wanted to help more seniors and people with disabilities experience that too. It's about having some comfort in your own space and having the ability to make your own decisions. Home care provides that and so much more.

"Home care work is extremely important, but our pay and benefits do not reflect that. It's difficult to remain in this industry with what caregivers are paid, coupled with few if any benefits and little to no training. Unless action is taken, we will never be able to meet the needs of our nation's seniors, and worker shortages will continue.

"Thankfully I have a union, and through our union we have made great strides in improving our jobs, from winning raises, health insurance benefits, and paid training programs. But every home care worker deserves to be respected, protected, and earn a wage we can survive on."



Spotlight: Childcare and Early Education Are Foundational to a Strong Local Economy

I am a relatively new Chamber Executive, starting with the Ottawa Area Chamber

in late January of 2020. As I met members, I heard from many businesspeople that childcare was an issue. A recent report found that of nine census tracts in the Ottawa area, seven were classified as "childcare deserts," greatly lacking capacity to meet area needs. In the western reaches of our community, there were 40 children for every licensed childcare slot available.

Then came COVID. Essential workers had to report, but childcare was almost entirely reliant on family or friends. When facilities reopened, spaces were limited, costs increased due to COVID protocols, and businesses saw the effects. Our workforce saw a large drop in 20- to 40-yearold women participating.

In 2021 we had 300 job openings at two job fairs in a town of 18,000. Talking to job seekers, healthy work conditions and childcare were top concerns. Attendees liked some manufacturing and distribution jobs but no second- or third-shift childcare exists in Ottawa. If you don't have family help, you can't work better-paying shift work jobs. This limits some families' ability to improve their financial situation.

The focus and interaction with childcare also opened our eyes to issues with early childhood education. Step one might be to have safe affordable childcare for the working parents, but just as important was the teaching and interaction of teachers with the children. We are already seeing issues with students coming back from a year of remote learning. Some families worked together; others skipped all video check-ins and did no homework. This new crisis pointed our chamber to consider how we support the workforce of tomorrow. We turned to ReadyNation, a bipartisan organization working with thousands of businesses to promote public policy investments in early childcare, for assistance, and they helped us create a plan. We need incentives for quality childcare, qualified teachers, and greater awareness of this issue.

A bipartisan, statewide commission has spent a year studying ways of improving Illinois' funding and governance of early childhood programs. Members of the ReadyNation network of business leaders, such as me, believe policymakers should take its recommendations very seriously.

Jeff Hettrick – Executive Director, Ottawa Area Chamber of Commerce

Policy Recommendations

- Invest state dollars to match federal investments during the pandemic in both child care and home and community-based services to build the infrastructure, including a robust and well-paid workforce.
 - G. Funding to eliminate the waiting list, and create enough direct care jobs to support people in their homes and communities.
 - b. Funding to raise wages of direct care workers and childcare workers to above the minimum wage, to recognize the skilled and important work that this workforce does.
- 2. Create a sectoral standards board to review and set fair Medicaid rates that ensure rate increases are coupled with strong pass through provisions for wage increases and ensure training and pipeline programs for care workers. The board would also:
 - a. Assure that to meet the growing need there are training opportunities, career ladders, and creation of pipeline programs for childcare and direct care jobs.
 - b. Assure that workers are eligible for paid leave and other benefits to care for their own families.
- 3. Enact state policies to ensure stability of care sector services by requiring providers funded with state dollars to demonstrate a binding agreement that includes an expedient mechanism for resolving labor disputes without service disruption.
- 4. Modernize Illinois' professional licensure system so that neither licensed healthcare professionals from other states nor immigrant and refugee health professionals from other countries face unnecessary barriers and wait times to receive their license.

Clean Energy

Before COVID-19, the energy sector had one of the fastest-growing job markets with an annual national growth rate of 3 percent from 2015-2019.¹¹¹ Clean energy jobs in Illinois grew 5.8 percent between 2018 and 2020.¹¹² Job growth is especially strong in electric vehicles, battery storage, hybrid vehicles, and wind generation. **Most clean energy jobs in Illinois are middle-skill positions,** which require additional education and training beyond high school and are not new positions but existing jobs with new clean energy components.¹¹³ Despite an industry trend of workers gaining necessary skills through on-the-job training, numerous employers in Illinois have reported difficulty hiring due to skills gaps. The 2020 U.S. Energy and

Employment Report lists the top three hiring challenges as:

- 1. lack of experience, training, and technical skills among workers
- 2. a small applicant pool
- 3. insufficient technical skills.

Climate and Equitable Jobs Act

Illinois' Climate Equity and Jobs Act (CEJA) is a comprehensive climate and energy bill, touching every aspect of the clean energy economy from generation to transmission and workforce development to building codes. It was signed into law in September 2021 after four years of work by the Illinois Clean Jobs Coalition, trade union representatives, a variety of energy industry players, legislators, and Governor JB Pritzker's office. CEJA includes over \$80 million invested annually in workforce and contractor equity programs through 2045.

CEJA's Equity Provisions – Workforce Development

CEJA's workforce development provisions are intended to "ensure Illinois residents from communities disproportionately impacted by climate change, communities facing coal plant or coal mine closures, and economically disadvantaged communities and individuals experiencing barriers to employment have access to State programs and good jobs and career opportunities in growing sectors of the State economy."¹¹⁴ To do this, the bill aims to ensure that trainees are recruited from communities where jobs are needed most, are provided with the resources they need to succeed in a new career, and are hired into jobs as soon as they graduate. The bill's programs are intended to work together as an ecosystem of resources, and program provisions include numerous requirements for coordination and crossreferrals between programs. In addition to the programs described below, there are additional CEIA programs, not discussed in this report, that are targeted at communities that have hosted fossil fuel generation plants or mines that have closed or will close. Residents of those communities and workers leaving the fossil fuel industries will be encouraged to take advantage of these programs. CEIA's primary workforce and contractor development programs are as follows:

- Clean Jobs Workforce Network Program DCEO in partnership with community-based organizations will develop and administer programs in 13 specified communities across the state that provide workforce training and connections to a career in clean energy.
- Illinois Climate Works Pre-apprenticeship Program

- DCEO in partnership with organized labor and underserved communities will "create a qualified, diverse pipeline of workers who are prepared for careers in the construction and building trades and clean energy opportunities therein."¹¹⁵ Candidates will be connected to and prepared to successfully complete an apprenticeship program.

- Returning Residents Training Program DCEO, in coordination with the Illinois Department of Corrections, will create a program to make clean energy job training available to people who are about to be released from incarceration. The program must connect graduates with potential employers, lead to industry-recognized credentials for trainees, and provide job and financial coaching to support employment longevity.
- Contractor Incubator DCEO will also create a Clean Energy Contractor Incubator program to support small clean energy businesses and nonprofits such as small and start-up energy efficiency contractors and solar installers. The goal is to help small businesses grow to where they can sustainably participate in energy efficiency and solar contractor pools, support their owners, and take on more employees.
- Contractor Accelerator In addition to the Contractor Incubator, DCEO will create the Clean Energy Primes Contractor Accelerator program to help more established contractors grow from being regular, but smaller, participants in the solar and energy efficiency market to leading those projects. The goal is to help businesses grow from subcontractor to prime contractor, allowing them to build wealth and organizational capacity as they do so.

All CEJA programs are supported by Energy Transition Navigators and the Energy Transition Barrier Reduction Program services. These programs provide the needed outreach and training support (books, coaching, transportation assistance, work attire, tools, etc.) that are needed to ensure underserved workers have access to the jobs and projects that until now have been difficult to access.

By putting equity at its center, CEJA will help Illinois build a diverse clean energy workforce; build wealth, capacity and employment opportunities in diverse businesses; improve community input into clean energy policies; and ensure that the benefits of energy efficiency and clean energy programs reach environmental justice communities and communities that have experienced historic disinvestment. The clean energy industries in Illinois are poised to grow fast because of CEJA's climate provisions. With its performance metrics and rigorous reporting requirements in place, CEJA will hold program administrators and industry leaders accountable and allow policymakers to quickly learn from the bill's results. The Climate and Equitable Jobs Act is the most equitable climate bill ever passed in the United States, and stakeholders cannot wait to see its impacts on underserved communities.

Spotlight: Water Infrastructure Workforce

The U.S. Environmental Protection Agency estimates that Illinois needs to invest \$27.4 billion in the coming decades to ensure clean drinking water and resilient, sustainable stormwater and sewer systems.^j Spending on water infrastructure is a strong investment in jobs.^k A 2017 Value of Water paper estimates that 6.1 direct jobs and 9.4 indirect jobs are created for every million dollars spent in water infrastructure.¹¹⁹ This means Illinois could see 424,700 total jobs created over the next 20 years.

While these numbers are impressive, there are two key opportunities that need to be seized to ensure the health of our water workforce. **The first is the need to grow the water workforce to meet growing demand**. Nationally, a combination of turnover and "future growth in the water sector is projected to lead to about 220,000 occupational openings – on average each year."¹²⁰

Second, there is a need to ensure racial and gender equity in the water workforce. Nationally, people of color are underrepresented in the water infrastructure workforce, especially in the sector's higher-paying jobs such as executives, construction managers, and civil engineers.¹²⁰ Women make up less than 15 percent of the sector nationally and less than 2 percent of construction and heavy equipment operator jobs within the sector, which tend to have higher wages than the office jobs in which women constitute more than 85 percent of the workforce. Deliberate and targeted outreach will be needed to ensure people of color and women have equitable access to all jobs and pay scales in the water sector.

The racial equity imperative is intensified by the reality that, while people of color are nationally underrepresented in the highest-paying sectors of the water workforce, they are overrepresented in communities suffering from crumbling or outdated infractructure For instance, lead service lines are aistributed across the state, but they disproportionately affect Illinois' people of color.¹ Illinois' Black and Latinx residents are twice as likely as white Illinoisans to live in a community that contains lead service lines.¹²² In 2021, Illinois adopted a law requiring the replacement of all lead service lines throughout the state. This will be a decadeslong project that will likely cost over \$5 billion.

The state will receive billions of dollars in federal drinking water and wastewater infrastructure funding as a result of the 2021 Bipartisan Infrastructure Law. Leaders must ensure there is a thriving workforce equipped to repair, maintain, and upgrade that infrastructure. Building a racially and gender diverse workforce is a key step in that process.

Policy recommendations

- 1. Ensure that the timelines laid out in CEJA for the critical workforce programs are achieved and that the necessary funding is appropriated each year.
 - a. Ensure that the direct financial and educational investments in minority-owned businesses laid out in CEJA are robustly implemented, funded, and evaluated, so that minority-owned businesses can benefit from the transition to renewable energy.
 - b. Ensure the workforce equity-related reporting and accountability provisions of CEJA are robustly implemented and enforced.
 - c. Ensure the state agencies that are implementing CEJA actively engage with community partners and stakeholders to ensure the intent of the legislation is being realized in a way that meets the needs of environmental justice communities.
- Adopt best-value RFPs with a U.S. Employment Plan (USEP) to procure new state and local electric vehicles. Bid solicitations should include USEP, a customizable policy tool that builds good jobs and equity into the public purchasing process.
- 3. Adopt centralized, bulk purchasing of electric vehicles. By centralizing the procurements of EVs and creating a program to distribute vehicles to cities and agencies, the state can significantly lower unit price and support equitable deployment of zero-emission vehicles in the communities that need them most.
- 4. Ensure an adequate and diverse "water workforce" is trained and hired to replace all of Illinois' existing lead service lines and improve drinking water infrastructure in need of replacing.

Manufacturing

Innovation is the practice of developing and introducing new practices, products, and processes that result in

^j \$27.4 billion is likely an underestimate: some increasingly urgent needs and realities will likely push this number higher. For instance, the U.S. Environmental Protection Agency's estimate only partially accounted for the cost of remediating notable drinking water contaminants like lead and PFAs. ¹¹⁶

 $^{^{\}rm k}$ For example, see $^{\rm 117}$ and $^{\rm 118}$

Racially inequitable provision of infrastructure is likewise demonstrated in flooding disparity. See ¹²¹

efficiency improvements. Automation, known as advanced manufacturing technologies within the manufacturing industry, is a prime example of innovation. The innovative nature of advanced manufacturing technologies has current and future implications for the industrial industry in Illinois. Understanding the forces that drive manufacturers to adopt more advanced technologies will have a substantial impact on the Illinois manufacturing industry's ability to compete on the regional, national, and international stage. Manufacturers in Illinois account for 12 percent of the total output in the state, employing 10 percent of the nonfarm workforce. The total output from manufacturing was \$107 billion in 2019 with an average annual compensation of \$90,500.¹²³ The potential to revolutionize current manufacturer best practices for operational and business standards creates vast opportunities for reimagining the future of manufacturing employment, productivity, and quality.

US manufacturing has seen deep declines since its all-time peak in 1979 of 22 percent of total nonfarm employment; by June 2019 that share had fallen to 9 percent.¹²⁴ This decline coincided with job growth in service-providing industries.¹²⁵ Despite large declines in employment, the manufacturing industry has experienced large increases in total output, indicating the impact of innovative processes and technologies that have allowed for increased output. In fact, manufacturing leads the nation's innovative activity: while it makes up only around 11 percent of GDP, 90 percent of all of the nation's patents relate to manufacturing. In Illinois the link between manufacturing and innovation is even more pronounced. Nationally 68 percent of all private R&D spending comes from manufacturing firms; in Illinois this number rises to 87 percent.126

Incorporating technology in the manufacturing process can produce a positive output on production, but upskilling workers is an essential part of adding technology and reaping the benefits. According to the 2021 Deloitte's Global Resilience Study, 57 percent of manufacturing respondents used advanced technology to redesign job tasks.¹²⁷ The inclusion of advanced technology in manufacturing will impact the role of the machinist, team assembler, and the industrial engineer some of the most highly skilled positions in manufacturing. Employees in these roles will need to understand robotics and possess data analysis skills, advanced computer skills, and other skills that cannot be replaced by automation. Soft skills such as team management, decision-making, and flexibility are also important to the manufacturing process. The incorporation of automation will come with the demand for workers who understand technology and possess strong soft skills.

Spotlight: Survey of Illinois Manufacturers Reveals Variance in Adoption of Advanced Manufacturing Technologies

A 2021 survey of small to midsize manufacturers in Illinois found that technology adoption in manufacturing was dependent on business size, resource limitations, costs, and production process.¹²⁷ Half of manufacturers cited high financial investment and insufficient talent within organizations as the top two barriers to adopting advanced manufacturing technology. For companies to be successful, they will need support for financial investments in adopting advanced technology and training workers. The report concludes with the following policy opportunities to better support firms in adopting advanced manufacturing technologies.

- Improving, encouraging and providing technical assistance for manufacturers to invest in advanced manufacturing technologies.
- Using policies, such as tax incentives, grants, loans, and vouchers to support investments in training and equipment can help manufacturers as they integrate advanced manufacturing technologies into their operations.
- Building the pipeline of skilled workers requires developing educational and training programs that enable workers to gain skills needed for jobs utilizing advanced manufacturing technologies.
- Supporting innovation in research and development, particularly for small and medium-sized manufacturers is essential for helping such manufacturers improve their operational and business performance.
- Helping and crafting programs that help manufacturers manage the uncertainty and risk of making the necessary investments in productivity-enhancing technologies and processes will be important to the long-term competitiveness of manufacturers.

Policy recommendations

- 1. Expose young Illinoisans to manufacturing jobs early and often.
- 2. Use funding incentives to promote advanced manufacturing training and capital investments particularly for small and medium-sized manufacturers.
- 3. Realign Buy Illinois procurement standards with Buy America standards.

Transportation

Nearly 600,000 Illinoisans are employed in direct transportation or material moving occupations.¹²⁸ The state of Illinois along with the entire nation relies on these workers to function. Recent supply chain problems have made this only more obvious as the country reels from the effects of the COVID-19 pandemic, international tariffs, trade regulations, and increased consumer demand. Without these workers, 925 million tons of freight worth an estimated \$1.3 trillion would not find its way into the Greater Chicagoland area alone.¹²⁹ These numbers don't include the millions of tons of freight worth trillions of additional dollars that residents across the entire state of Illinois depend on. The COVID-19 pandemic illuminated the key role truck drivers, last-mile delivery drivers, and warehouse employees play in ensuring that goods from surgical masks to microchips make it to the doors of Illinois residents and companies.

Deregulation of the trucking industry changed trucking from a steady well-paying job to unpredictable and unsustainable work. Regulation and unionization played a role in the emergence of trucking as an industry that provided family-sustaining wages and appropriate levels of services to communities regardless of size. After the Carter Administration deregulated trucking in 1980, the industry experienced rapid growth and competition among carriers increased, but truck drivers' wages steadily declined, working conditions became worse, and unions and workers lost power in the industry.¹³⁰

Today companies tend to employ the cheapest possible labor model, which puts inexperienced drivers on the road in the least desirable positions and misclassifies them as contractors rather than employees. The truckers that communities rely on frequently spend weeks on the road, with much of this time being spent on unpaid activities such as loading and unloading. The industry has an abnormally high turnover rate, and companies are engaging in a battle to the bottom, providing less and less suitable working conditions knowing that drivers have no power to demand more.¹³¹

While many in the industry claim to have a shortage of drivers, licensing records show more than enough licensed drivers exist to fill open jobs.¹³² Currently states and localities spend millions of federal dollars to train truck drivers; consequently, many people have earned CDL licenses but very few actually stay in the trucking industry.¹³² Utilizing regulation as a tool to improve the quality of these jobs will not just improve the quality of these jobs for the workers, it will lower prices for consumers, increase efficiency and likely profits for companies, and free up state and federal training funds to be allocated to other industries.

The future of the trucking industry will be determined by the policies lawmakers, business owners, and worker advocates make today.¹³³ The recent development in capabilities of autonomous vehicles and other developments in automation and technology have already changed the way Americans drive. Recent years have

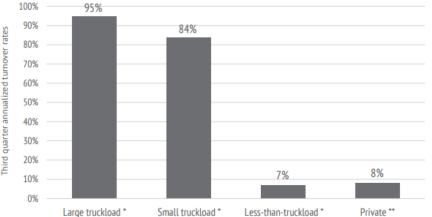


Figure 5: Annual Driver Turnover in Different Industry Segments

Annual driver turnover in different industry segments

* Source: American Trucking Associations. December 7th, 2017. "Large Truckload Driver Turnover Rate Rose in Third Quarter." Arlington, VA: American Trucking Associations.

** Private Fleet Turnover rate is for the year 2014. Source: Costello, Bob. 2014. ATA Compensation Survey 2014. Arlington, VA: American Trucking Associations.

seen more cars on the road with autonomous capabilities such as adaptive cruise control and automatic parallel parking systems, and companies like Uber and Waymo already have a small number of autonomous vehicles in operation at pilot locations. Industry experts predict that self-driving trucks will be able to operate on highways without any need for a human driver, and when this happens roughly 294,000 non-specialized long-distance drivers will lose their jobs.¹³³ Simultaneously, the rapid growth of e-commerce and lower freight costs (resulting from cheaper driverless long-distance transport) is likely to create new jobs; however, these jobs will likely have low pay and poor working conditions, resulting in a further degradation of job quality in the trucking industry.¹³³ Now is the time to identify policies and practices to build the transportation industry Illinois needs.

Industry experts advocate for a three-pillar approach to shaping the future of the trucking industry.¹³³

- An industry-wide standard should be adopted to accomplish the goals of developing good career pathways and job training programs and establishing safety-net programs to support workers transitioning into and out of the industry.
- 2. Establish a strong set of labor standards and worker protections that address the issues of independent contractor misclassification and wage theft, and improving working conditions.
- 3. Promote innovation with the ability to improve social, economic, and environmental outcomes.

The share of electric vehicles (EV) will continue to expand, creating opportunities for quality jobs in EV manufacturing and servicing. Estimates project the global share of EVs to be over 10 percent by the mid-2020s and more than 50 percent by 2040.¹³⁴ Just as government incentives have helped drive consumer purchases of electric vehicles, incentives for manufacturers of EV parts and infrastructure can encourage the creation of new, quality jobs. An updated incentives program for EV manufacturers that ties incentives to equity, wage, training, and hiring goals can ensure that new, quality jobs that pay living wages are created.

Transportation access will continue to be an important aspect of growing quality jobs in Illinois. To ensure workers have access to jobs, transportation should be seen as an integral part of employer location decisions. Locating in places accessible via transit should be a priority. Employers who locate far from transit and where there are no transportation options other than driving may find that they have difficulty attracting and retaining employees. For example, more than one-quarter of households in Chicago do not have a vehicle, and in the greater Chicago region, 13 percent of households do not have a vehicle. Therefore, economic development professionals should work with potential employers to ensure they are considering employee transportation access from the start. If the main consideration is how inexpensive a location is to the employer, the transportation burdens for workers can be high and unsustainable.

To retain a high-quality workforce, employers also should consider what employee transportation supports they can offer, which may include transit subsidies, private shuttles to connect to transit stations, or coordination on carpooling among employees. For warehousing jobs that may be in low-density locations outside the traditional transit service area, employers may consider offering demand response shuttle buses or subsidizing custom transit routes aligned with shifts. Making sure people have stable transportation to work so they are retained for the long term can cost employers less than shorter cycles of hiring and training workers.

Maintaining strong public transportation systems is also essential as the state continues to emerge from the COVID-19 pandemic. As was highlighted during the pandemic, many "essential" jobs require people to commute to work daily, and many workers in low- to moderate-wage jobs rely on transit for job access, including those working in some of Illinois' largest employment sectors such as hospitality, healthcare, and transportation, distribution, and logistics (TDL). For many, the journey to work includes segments of walking or biking, especially given the challenge of transit services not always matching with evening and nighttime work shifts. Illinois communities need to continue to improve safe biking and walking routes to employment centers – including retail, hospitality, manufacturing, or TDL – so that workers can safely get to their jobs using affordable and healthy transportation, often in combination with transit. Transit systems need full, robust funding throughout the state, and state funding for new transportation projects must build equitable access into its funding criteria.

Policy Recommendations

- Establish a Trucking Innovation and Jobs Council that will unite stakeholders and work to identify and implement policies and programs that improve job quality, safety, and social, economic and environmental outcomes.
- 2. Establish worker protections that ensure drivers who do work for one company are classified as employees rather than independent contractors.
- 3. Ensure that workforce development funds are serving the purpose of providing drivers with skills to advance their careers.
- 4. Give workers the power to unionize and collectively bargain for benefits and protections.
- Strengthen incentives application process for EVrelated manufacturers seeking public funds to include commitments related to new hiring, wages, benefits, and investment in apprenticeship.
- 6. Fully fund transit systems to ensure they meet the state's workforce needs.
- 7. Include "Access to Jobs" as a measure within IDOT's performance-based planning formula used to determine funding for transportation projects.

Agriculture

The agricultural industry is an essential component of the Illinois economy. According to the United States Department of Agriculture National Agricultural Statistics Service (USDA-NASS), as of April 2019, Illinois had 72,000 farms, covering 27 million acres or 75 percent of the total land in the state. Illinois is the leading producer of soybeans, corn, and swine. The industry generated \$19 billion annually through agricultural outputs and billions more through adjacent industry products such as farming equipment and manufacturing supplies. Illinois is also the first in the nation for processed food sales, bringing in \$180 billion annually.¹³⁵

The past ten years have brought considerable change to

the agricultural industry. While small families still make up the largest share of farmers, a USDA report chronicled the consolidation of farming land and production to large-scale and non-family farms.¹³⁶ The concentration of production has spurred conversations around the food and supply chain systems in Illinois and nationally. With fewer farms producing more of the food supply, emergencies such as climate change disasters or global pandemics have a higher chance of creating supply chain bottlenecks and national shortages. The supply chain is important to President Biden's Administration and as federal investments move down the pipeline to Illinois, stakeholders will need to emphasize the importance of robust and stable food and supply chain systems.¹³⁷ Along with infrastructure for moving products, support for small farms and small food processing plants may provide a more direct source of food for local communities.

Rapid technological advancement has changed the very nature of farming. Precision farming, a leading technique, uses computers to analyze data such as soil or crop samples to compute the number of pesticides and fertilizers to use for the planting, and AI provides farmers with better information on where and what to plant for land optimization. Drone farming, crop monitoring, and livestock monitoring allow farmers to manage their products virtually, while autonomous farm equipment, including robotic weeders, uses GPS data to locate and identify weeds. The new technology led to a reduction in the need for herbicides and pesticides. New technology available to agricultural leaders has many opportunities to improve production and increase sustainable practices. However, the technology is not implemented equally. Small to medium-sized family farms often do not have the capital or infrastructure to implement the state-of-the-art technology.¹³⁸ Stakeholders should look for solutions that increase the access and uptake of new technologies for all farmers, regardless of size.

With the changes in concentration and technology in farming, small family farms and farmworkers face greater economic risk. Small family farmers have increasingly relied on off-farm income. In 2019 the USDA reported that 96 percent of farmers made off-farm money and 82 percent of total household income was from off-farm sources.¹³⁹ In 2020, the biggest income loss for family farms was from a household member being laid off or furloughed during the pandemic.¹³⁶

For employees who do not own the farm, financial security is even more tenuous. Automation of work on farms has increased the polarization of workers between highwage and low-wage positions, reducing high-quality, middle-class jobs. As of 2020, farm managers earned a median salary of \$68,090, whereas farmworkers earned a median salary of \$28,900.^{140,141} The polarization is more troubling given that the low-wage positions were meant to be transitory for young workers, but they have become long-term employment sources for many households. The USDA found that H-2A visa holders, workers who are permitted to immigrate to the United States for temporary work, rose 266.5 percent from from 2015 to 2020 in Illinois. These farmworkers are an essential component of the Illinois economy and food system but, due to little oversight, are easily exploited in wages and labor conditions.¹⁴² As the nature of agricultural work changes, Illinois labor laws and enforcement have not kept pace with changing labor patterns, which not only harms unprotected farmworkers, but also drives down wages for all workers. The future of Illinois' food production and processing will require an investment in essential farmworkers that keep the state food system running.

The risk for farmworkers extends beyond production into food processing as well. Employees in food processing are more likely to be people of color, non-citizens, and below the 200 percent federal poverty level, meaning employees face a higher risk of financial precarity.¹⁴³ The pandemic highlighted the working conditions of food processing jobs as supply chains tightened from large-scale outbreaks across plants nationwide.¹⁴⁴ The future of agricultural work is currently on a path for high job polarization, and a loss of middle-class jobs, but an investment in job quality could create new avenues for economic prosperity in the workforce.

Policy Recommendations

- Invest in training for new technological advancements in agriculture, education, and workforce development pipelines, focusing on equity for small family farms and traditionally excluded workers.
 - a. Investments in agricultural education and training should begin during primary education with an emphasis on schools historically lacking programming.
- 2. Invest in programs and organizations providing support services to enable all farms to access new technologies and sustainable practices.
- Identify consolidation and bottlenecks in the food supply chain and advocate with food in production, transporting, and pricing.
- 4. Adopt a bill with provisions to protect farm worker rights and ensure equitable housing and working conditions, granting farm workers overtime pay, a day of rest each week, disability and paid family leave coverage, unemployment benefits, and other labor protections.

Gig, Hourly, and Flexible Employment

An increasing number of Americans are now working in non-traditional work arrangements, often as independent contractors. While these non-traditional work arrangements are not new, online platforms have made it increasingly easier for contractors and customers to do business with each other. These platforms – led by companies like Uber, Lyft, and other app-based service delivery platforms – have facilitated the growth in a sector of the workforce referred to as the "gig economy."¹⁴⁵ The rise of on-demand or gig work has been described by former labor secretary Robert Reich as "the biggest change in the American workforce in over a century."¹⁴⁶

The acceleration of gig jobs, and contract work in general, is part of what labor experts David Weil and Tanya Goldman refer to as the "fissuring" of the workplace. Essentially, companies first began outsourcing activities that were not central to the company's "core competency" - such as payroll, accounting, and facilities maintenance - and later contracted out more central functions.¹⁴⁷ The result has been a growing contract-based workforce, with app-based jobs representing only a small fraction of this group (0.5 percent, according to a 2015 estimate).¹⁴⁸ While there is limited demographic information available on these workers, surveys can provide general trends: Pew finds that app-based workers are disproportionately likely to be Hispanic or Black, and NPR finds that contract workers skew young and male.^{149, 150}

The Challenges in Defining and Counting Gig Workers

There is no official definition of the gig economy and the non-traditional workforce, which makes the size and scope of the gig workforce difficult to measure. For instance, some count the total number of workers who participate in any form of non-standard work. Some only count those who rely on this work for their primary earnings. Others count only particular types of arrangements, like online platform work or subcontracted arrangements. Estimates vary significantly among each of these measures.¹⁵¹ Moreover, gig work is often not captured fully by the Bureau of Labor Statistics. This means that policymakers must often rely on less-standardized survey data to understand the scope of the gig economy and of companies' use of contract work. One recent survey from Pew, for example, estimates that 16 percent of U.S. adults have ever earned money through online gig platforms.³⁶ Higher estimates – between 25 and 35 percent – are seen across several surveys measuring the share of workers in non-traditional or independent contract arrangements.152, 153, 154

A similar data-availability issue limits the extent to which researchers can quantify the growth of this workforce and predict future trends. One survey logs an increase in the share of workers in alternative work arrangements from 11 percent in 2005 to 16 percent in 2015.¹⁴⁸ Tax records also show an increase in self-employment in recent decades – but research suggests a portion of this growth may be attributable to tax rules that incentivize certain ways of reporting income.¹⁵⁵ Meanwhile, data from the Current Population Survey show no conclusive increase in the likelihood of self-employment.¹⁵⁶ The range of estimates on these changes emphasizes the need for additional data and standardization of data practice when it comes to contract-based and gig-based work.¹⁵⁷ However, despite the mixed evidence, most agree that the gig economy and contract workforce will grow in the coming years.¹⁵⁸ Surveys have found that the pandemic facilitated a sharp increase in consumer demand for app-based services and accompanying gig employment.159

Benefits of Working in the Gig Economy

There is surmounting evidence that the traditional nineto-five employee-employer relationship will continue to decline, and for much of the workforce, **the gig economy offers the flexibility that would allow workers to balance work with family, care, or other goals.** For instance, many prefer the flexibility of not being tied to a particular employer: independent contractors, for example, often report enjoying their autonomy and flexibility, and most say they would prefer to stay independent contractors.¹⁶⁰ The flexible hours of the gig economy may be especially valuable for those juggling work while managing family responsibilities or pursuing an educational credential.

Furthermore, the gig economy offers generally few barriers to worker entry, which particularly benefit workers who may otherwise struggle to enter the labor market, including immigrants and formerly incarcerated populations.¹⁶¹ This was apparent during the COVID-19 pandemic as unemployment rates skyrocketed. A study by MIT Sloan School of Management found that the gig economy had actually served as a safety net for the unemployed. The study found that laid-off employees who had access to Uber were less likely to apply for unemployment insurance benefits, rely less on household debt, and experience fewer delinquencies.¹⁶²

Downsides of Working in the Gig Economy

On the other hand, just as serving as a safety net is one of the biggest attractions of the gig economy, its biggest challenge is that it doesn't have a safety net. Indeed, the gig economy lacks many of the protections and benefits granted to full-time employees.¹⁶³ Federal law obligates companies to offer their employees certain protections and benefits that are not offered to independent contractors – including minimum wage, overtime pay, protection from discrimination, unpaid family and medical leave, health insurance for larger employers, eligibility for unemployment and Social Security, workers' compensation, and collective bargaining rights.^{164, 165} For example, because workplace civil rights laws do not apply to contract workers, they cannot file a gender discrimination or sexual harassment lawsuit.¹⁶⁶ In the survey of Los Angeles ridesharing drivers, gig workers expressed a desire for more benefits: 94 percent said they would like "employee-type benefits, such as paid time off, workers' compensation, and health and unemployment insurance."³⁵

Gig and contract workers are also at risk of facing limited career pathways and, in some cases, financial hardship. Gig and contract work can leave many workers with lessthan-clear pathways for advancement. Weil and Goldman note that one result of the "fissured workplace" is that the "chances of 'working up from the mailroom' evaporate."¹⁴⁷ According to the NPR survey, contract workers are less likely to report that they "receive at least some training to advance in their career" (66 percent) than all workers (73 percent).¹⁶⁵

Furthermore, income from gig work can be variable and unpredictable. An NPR poll of contract workers found that contract workers were more likely to have income that changes seasonally, or from month to month (49 percent), than all workers (34 percent).¹⁶⁷ Only 51 percent of contract workers reported that their income mostly stays the same month to month.¹⁶⁵ Gig work has been shown to be helpful to laid-off workers by offsetting income losses, reducing reliance on unemployment insurance and debt, and smoothing consumption shocks.^{168, 169, 170} Additional research and data collection in the field is necessary to accurately understand the impacts of gig work on household income and reliance on public benefits.

Making the Gig Economy Work for All Illinoisans

The gig economy is a wide spectrum that encompasses very different experiences for workers themselves. Just as there are freelancers being paid at a rate of \$30 per hour, there are temporary workers and gig workers earning far less. As more Illinoisans continue to desire more flexibility and freedom in the workplace, the gig economy will continue to have important impacts on the labor market. Ultimately, making these alternative jobs more meaningful and rewarding – both in compensation and career development – is the key to building a robust Illinois workforce.

Spotlight: Reliable Schedules Can Improve Business

Rigorous evidence indicates that it is possible to improve work schedules without undermining the viability of Illinois businesses. A randomized experiment at the U.S. retailer Gap, Inc. finds that improving work schedule stability and predictability for hourly sales associates increased labor productivity by increasing sales and decreasing the use of labor.¹⁷¹ Stores used an app to facilitate shift changes in real time, and managers posted new shifts according to demand.

A randomized experiment of Gap stores in San Francisco and Chicago found that improving schedule stability and predictability increased sales by 3.3%, store productivity by 5.1%, and reduced labor hours by 1.8%.¹⁷¹

Similarly, recent research in the field of business operations reveals that too much labor flexibility undermines business goals.¹⁷² Improving scheduling practices for Illinois' workers can yield positive benefits for Illinois' businesses.

Spotlight: New Work Hour Standards for Illinois Workers

Work schedules are central to job quality. Common employer practices such as posting work schedules with short notice, making changes to the posted schedule, and maintaining a large pool of part-time staff render work hours unpredictable, unstable, and often scarce. These practices jeopardize workers' ability to provide caregiving, attend school, or hold a needed second job. Moreover, unstable, unpredictable, and inadequate hours translate into financial insecurity for workers and families.

Unpredictable and unstable work hours are pervasive in a wide range of industries, not only in retail and food service but also in warehousing, construction, healthcare, and building services. Although widespread, problematic scheduling practices are not equally distributed. The most disadvantaged workers experience volatile, unpredictable, and scarce hours. A larger proportion of Black than white workers work highly fluctuating hours at the behest of their employer.

And a larger proportion of low-paid than higher-paid workers and Black than white workers experience multiple problematic scheduling practices, including the "triple whammy" of work hour volatility, short advance notice, plus lack of schedule control.

Public policy can shift the incentives on the frontlines of firms to address problematic scheduling practices.¹⁷³ The major legislation governing work hours in the U.S. is the Fair Labor Standards Act of 1938. The nature of jobs and the composition of households has changed greatly since its passage. Across the nation, municipalities are at the vanguard of enacting new protections for workers in our changing economy. Since 2014, six municipalities (San Francisco; Seattle; New York City; Emeryville, CA; Philadelphia; and Chicago) and one state (Oregon) have passed comprehensive scheduling laws, and additional cities and states have legislative initiatives underway, even amid the pandemic. The new regulations are intended to establish universal standards for scheduling hourly employees, particularly in industries where problematic scheduling practices are rampant.¹⁷⁴ The laws in all cities cover jobs in retail and food service. Chicago's Fair Workweek Ordinance is the most comprehensive, covering not only low-paid jobs in retail and food service, but also hospitality, custodial and building services, healthcare, warehousing, and manufacturing.^m

Mounting evidence indicates that fair workweek laws are effective. To date, state-of-the-art studies conducted in Seattle and Emeryville, California suggest these laws are making a difference in the lives of workers in retail and food service. By comparing survey responses of retail and food service employees working in the same firms but in municipalities with and without scheduling legislation, Kristen Harknett, Daniel Schneider, and Veronica Irwin (2021) find that Seattle's Secure Scheduling Ordinance increased schedule predictability, which in turn improved workers' subjective well-being, sleep quality, and selfreported financial security.¹⁷⁵

The new work hour standards defined in fair workweek laws balance the needs of employers for labor flexibility with need of workers for more predictable hours and earnings. Note that the laws do not render work schedules rigid for either employees or employers. The laws provide employees with explicit protections for swapping shifts with coworkers and requesting changes to their schedule. Employers can still make changes to employees' work schedules even after the schedule has been posted; they just have to pay a premium for doing so – commonly one extra hour of pay. Much like an overtime premium compensates workers when they work beyond what is viewed as a conventional workweek, a predictability premium compensates workers for being flexible for their employer.

Policy Recommendations

- 1. Advocate for further research on gig work by the Bureau of Labor Statistics.
- 2. Collect and analyze data from 1099 workers.
- 3. Collect and analyze data from public benefits programs, including unemployment insurance, to determine the amount of benefits paid by the state based on employee classification.



Small Businesses

Small businesses are critical for a robust, inclusive recovery in Illinois. In 2021, the U.S. Small Business Administration identified 1.2 million small businesses in Illinois, representing 99.6 percent of total businesses.¹⁷⁶ These firms provide a significant foundation for employment and wealth generation. Across Illinois, small businesses employ over 2.5 million, roughly 44.8 percent of the employed population statewide. Further, 44.6 percent of small businesses in the state are owned by women and 20.2 percent are owned by people of color.

While the economy has significantly recovered since the onset of COVID-19, the results have been uneven. As of January 2022, statewide small business revenue remains 4.9 percent below pre-COVID levels and an estimated 10.4 percent fewer small businesses are open.¹⁷⁷ The economic shifts have also impacted marginalized populations more acutely. The Small Business Administration (SBA) estimates that the number of small business owners declined 22 percent between February and April 2020.¹⁷⁸ However, Black business owners saw a 41 percent decline, followed by Latinx businesses at 32 percent, Asian businesses at 26 percent, and white businesses at 17 percent.

The resilience of Black and Brown small businesses

^m In addition to jobs in retail, food service, and hospitality, the Chicago Fair Workweek Ordinance covers janitorial, maintenance, and security services, healthcare, manufacturing, warehouse services, and nonprofit organizations. Jobs must pay less than \$26 per hour or \$50,000 a year. The Chicago ordinance went into effect July 1, 2020. Evaluations are currently underway to estimate the effects on workers and implementation by frontline managers.



has been shaped by longstanding issues in accessing capital. Limited financial flexibility stems in part from barriers to additional capital, with fewer than one in four Black-owned businesses experiencing a recent borrowing relationship with a bank. The inequities continue across all stages of accessing capital, with 39.7 percent of Black businesses reporting being discouraged from seeking financing, three times the level of whiteowned firms. Following application, 38 and 33 percent of Black and Latinx applicants, respectively, were denied financing, compared to a 20 percent denial rate for white businesses.¹⁷⁹ For Black and Brown businesses who were approved for capital, it was more often through highcost, low-transparency products, including merchant cash advances, factoring, and online lending than white peers.179

Business capacity institutions like incubators and accelerators can support entrepreneurs in long-term planning and capital access, but their geographic distribution is inequitable. Research from the Initiative for a Competitive Inner City (ICIC) found the majority of incubation programs were not oriented towards uplifting marginalized populations, with 9 percent explicitly focusing on Hispanic and Latinx entrepreneurs, 9 percent for women entrepreneurs, and 8 percent for Black entrepreneurs.¹⁸⁰

Illinois has supported small businesses before and through the pandemic, by capping predatory lending, distributing targeted grants exceeding \$540 million, and providing tax relief for over 300,000 small businesses. This has allowed entrepreneurs to remain resilient in the face of COVID-19. In 2021, Illinois was the top state in the Midwest for startup business creation, and second among the 20 largest states.¹⁸¹ The total number of business start-ups created in 2021 was over 198,000, exceeding pre-pandemic levels by 69 percent. While these successes are significant, underlying inequities in the business ecosystem prevent the continued growth of small business. Illinois must move to reduce barriers to fully unleash the potential of our entrepreneurs.

Additionally, the state of Illinois must continue to pursue more pathways for workers to maintain control of their businesses. In recent years, Illinois has made significant strides in reducing the legal barriers that hindered the state's worker cooperative movement. In 2019, the Illinois Limited Worker Cooperative Association Act was passed into law, making Illinois the 14th state in the country to recognize worker cooperatives as legitimate business entities.¹⁸² Worker-owned cooperatives and businesses have been picking up momentum in recent years, and most of this growth has been start-ups launched by women and people of color.¹⁸³ Ultimately, this alternative business model serves as a powerful tool for generating income and building wealth among underrepresented entrepreneurs and workers. The state of Illinois must build on this recent progress by continuing to direct more resources to the growth and development of workerowned businesses and cooperatives in the forthcoming years.

Policy Recommendations

- Expand small business access to flexible, low-cost capital for small businesses, with a focus on womenand minority-owned businesses and rural businesses.
- 2. Support new and existing creative small business accelerators and incubators in BIPOC and rural communities.
- 3. Support self-employed entrepreneurs whose primary business address and primary residences are in areas that have low and moderate incomes (LMI).
- 4. Increase funds and benefits for worker-owned businesses and cooperatives.

The Small Business Administration (SBA) estimates that the number of small business owners declined **22 percent** between February and April 2020. ¹⁷⁸



STATEWIDE DATA INFRASTRUCTURE

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Statewide Data Infrastructure

The state of Illinois collects an enormous amount of data through Illinoisans' participation in programs administered by various state agencies. Though efforts to clean, standardize, and link these data exist and are building momentum, policymakers are unable to answer important questions such as the percentage of high school graduates who earn a living wage by age 25. Simple solutions such as requiring businesses to submit employees' dates of birth would significantly facilitate the linking of education and employment records to produce information central to preparing Illinois for the future of work.

Stronger linkages and collaboration between state agencies are also necessary for the most vulnerable Illinoisans to receive the support for which they are eligible. Just as automation and AI can "disrupt" traditional businesses and services, Illinois' data infrastructure could be leveraged to ensure everyone participating in one agency's program is automatically evaluated for eligibility for other programs even if they are run by separate agencies. Furthermore, enrollment in an income-based program could trigger automatic and prefilled tax forms so that everyone eligible for the state's Earned Income Credit receives it.

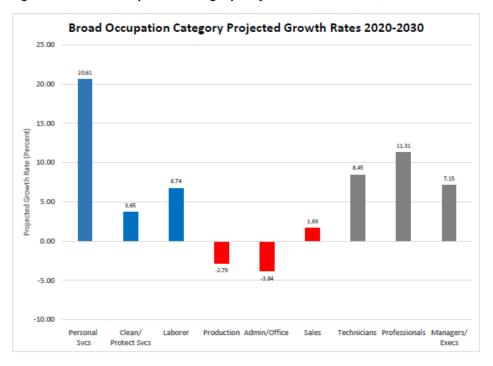
Tracking progress made by the state towards the Future of Work will also require new data collection, particularly from employers. Should Illinois take on the serious challenge of improving job quality, contracting with businesses or offering tax incentives will require new data collection related to the many aspects of job quality. Additional data collection or coordination with the IRS may also be necessary to understand the extent and impact of gig work on Illinoisans. The ability to collect this data will rely on decision makers and leaders across the state taking purposeful steps to build a stronger and more uniform data infrastructure that fosters collaboration between stakeholders.

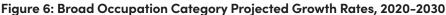
Policy Recommendations

- 1. Fund state agencies to improve their data collection, security, analysis, and publication, and create a sense of urgency.
- 2. Invest in data collection specifically on job quality in order to understand whether state funding for workforce development is placing Illinoisans into quality jobs.
- 3. State agencies, in partnership with universities and other research institutions, should produce semi-annual reports on future of work outcomes.
- 4. Align data systems to track students from education to college or training to career.
 - a. Collect date of birth on wage records.
- 5. Proactively identify Illinois households that qualify for benefits based on data the government already collects.

Preparing Illinois' Future Workers

BLS projections indicate that in Illinois the number of middle-wage jobs will continue to decline over the next ten years. Low-wage jobs are expected to see higher rates of growth than those of high-wage jobs, while middle-wage jobs will experience decline. This phenomenon further demonstrates the need for Illinois' education and workforce development system to make sure students and workers are exposed to, prepared for, and placed in quality jobs that will produce a vibrant economy for decades to come.





An effective workforce development system begins interacting with future workers when they are still students. Children in Illinois today will make up the workforce of tomorrow, and providing early exposure and opportunities for work-based learning is necessary to set them up for success in the future. In addition to job-specific training, durable skills that 21st-century jobs demand include problem-solving, information synthesis, communication, teamwork, and creativity.¹⁸⁴

Educational institutions, business leaders, and workforce development professionals must work together to prepare future workers for success in the workforce. Career and technical education (CTE) programs present an opportunity for the workforce development system to allocate funding to non-college postsecondary career paths, and they give educators and employers an opportunity to interact with learners in the same space.

The state of Illinois already has CTE programs at select public schools across the state and dedicates more than \$34 million annually to getting CTE programs in secondary schools.¹⁸⁵ Students and teachers who have had the opportunity to participate in these programs are quick to identify their value.

K-12 CTE programs are of critical importance in preparing Illinois' future workforce, and reducing worker shortages in growing industries. Unfortunately, not all Illinois students participate in CTE at rates proportionate to their population share. Table 3 below shows that white students constitute 58 percent of high school CTE concentrators (those who earn at least two or three credits in a single CTE program area) even though they make up slightly less than half of all Illinois high schoolers. Students of all other racial and ethnic backgrounds are underrepresented among CTE concentrators.

Spotlight: CTE graduate on the value of CTE

Syed Wahhab is an automotive technology major at Southern Illinois University (SIU) in Carbondale, IL. Syed was always interested in learning how things worked, often taking his bicycle or computer apart to put it back together again. Syed has had his sights set on the auto tech program since he was a student at Hoffman Estates High School. After graduation Syed attended Harper College for 2 years to complete general education courses and save money to pay for the program at SIU.

"CTE has been a major part of my life, even when I wasn't aware that it was", Syed says in regard to the automotive classes he took during high school. He credits those courses for preparing him for the SIU program. In high school "I was exposed to exactly what I wanted to pursue as a career down the road. CTE programs should be explained to parents and students! My plan for the future is to go into the education side of the automotive industry." Syed now aspires to teach high school automotive classes and credits CTE for setting him up for career success.

Table 3: CTE Concentrators and All IllinoisStudent Population Comparison185

Subgroups	State of Illinois - Secondary Students	CTE Concentrators
Total Enrollment	611,732	22,713
White	49.3%	58%
Black	16.2%	13.3%
Hispanic	25.8%	21.6%

Asian	5.1%	4.2%
American Indian	0.3%	0.2%
Pacific Islander	0.1%	0.08%
Two or more races	3.3%	2.3%

The availability and breadth of CTE programs vary across the state of Illinois, resulting in uneven access to high-quality programs in rural areas and lower-income urban areas of color. The racial disparities in access to CTE programs contribute to disparities in exposure to in-demand occupations, CTE certification, and likely future employment in related fields. Any new CTE program placements, teacher recruitment, and employer partnerships should work to address these inequities in access. Further, although the Illinois State Board of Education has guidance in place for school districts to address equitable access to programs according to local needs, entirely different funding models are needed in order to adequately fund districts to address disparities. Other states have explored funding models that go beyond a reliance on federal funds, which, alone, do not provide robust enough funding to cover the cost of providing high-quality CTE programs across all state districts. The state of Illinois should identify ways to bolster funding beyond current levels of federal state funding.

Two-year colleges also have a central role to play in preparing Illinois' future workers. Illinois has 48 community colleges spread across the state which offer a wealth of valuable CTE programs with the goal of producing graduates ready to meet the demands of the current and future workforce. Some examples include:

• Heartland Community College in Normal, Illinois which offers training and certificate programs in agriculture, food, and natural resources, finance and business, health sciences and technology, IT, manufacturing, and many other industries in addition to dozens of A.A. and A.S. degree programs.

- Lake Land College in Mattoon, Illinois, which has a commercial Truck Driver program and a manufacturing skills lab, as well as adult education courses, an EMS training program, and a variety of two-year degree programs.
- Shawnee Community College in Ullin, Illinois, which offers a practical and associate degree nursing program, one-year programs in which students can earn a certificate in agriculture, automotive maintenance, cosmetology, or welding, and dozens of courses that take less than one year to complete and provide industry-specific certificates.

Spotlight: From Cannabis to Healthcare, City Colleges of Chicago Prepares Students for Their Futures

City Colleges of Chicago, Illinois' largest community college system, works closely with Chicago's public K-12 system, to remove barriers to access and implement comprehensive student supports; these among other strategic efforts have played a vital role in creating a more effective school to work pipeline. Preparing City Colleges students, three-quarters of whom identify as Black or Latinx, for in-demand careers is a key priority for Illinois to be competitive now and in the future.

City Colleges of Chicago has many programs and practices aimed at building career pathways to highdemand fields:

- The Chicago Roadmap program strives to prepare students for college and careers via partnership with Chicago Public Schools.
- Centers of Excellence prepare students to meet workforce demand in areas of rapid growth by simplifying the employer engagement process.
- City Colleges offers career bridges through its free adult education programs, in which students build indemand career skills while also learning basic literacy skills, partnering with community, workforce, and industry partners across the city.
- Apprenticeship opportunities are available to students through partnerships with Chicago-area employers offering work-based learning opportunities in fields aligned with their career interest.

City Colleges strive to provide access & support to Chicagoans looking for opportunities to gain professional skills and advance their careers. **Fresh Start** offers a way back into college for students who had been locked out due to prior debt. Generous **Workforce Equity Initiative** grants developed by the Illinois Black Caucus have allowed several City Colleges to offer free, short-term programs in high-demand fields such as cannabis operations and healthcare. Students receive financial support for tuition and other expenses such as childcare and transportation. **Weekend Warriors**, also supported by the Workforce Equity Initiative grant, is a partnership between non-profit Inner-City Muslim Action Network (IMAN), and Daley College and offers a welding certificate program with a 90 percent completion rate. All instruction is given on weekends to students from neighborhoods at risk for violence, and IMAN provides a community of support for the students.

While all seven City Colleges offer a comprehensive community college curriculum, each college also has a special focus on a high-demand industry area.

Employer Partnership with People's Gas prepares veterans for high-demand work in the utility sector

The Utility Workers Military Assistance Program (UMAP) at Kennedy-King College's Dawson Technical Institute connects veterans with high-demand careers in the utility sector. UWUA's Local 18007, the UWUA Power for America Trust, and People's Gas partnered to create the program at Dawson Tech. Through UMAP, students take general education and core courses for six months in order to learn how to safely construct and operate natural gas distribution systems. Upon completion, students receive a certificate, 52 credits towards their associate degree, and an offer for a full-time technical position at People's Gas. 700 veterans have completed the program since launch.

The polarization of the labor market is likely to make bachelor degree attainment even more of a requirement for higher-wage occupations. Although a college degree does not guarantee an individual's capacity to perform the abstract, non-routine tasks that higher-wage work demands, employers often use a degree as a proxy for worker quality. That makes equitable access to college necessary to expand access to higher-wage work.

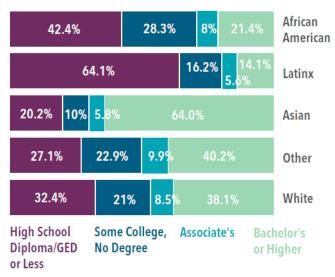
Educational equity and economic growth are inseparable."

-Illinois Board of Higher Education (IBHE) 2021 Strategic Plan Illinois' existing efforts towards closing equity gaps in postsecondary access and completion and making college more affordable all align with better preparing Illinoisans for the future of work. The Illinois Board of Higher Education (IBHE) released a strategic plan in 2021 that clearly calls for increased investment in higher education in order to provide more financial aid and better support Black, Latinx, low-income, or rural students in accessing and completing college. In addition, existing efforts such as the Illinois Success Network (formerly known as the 60 by 25 Network) support K-12 districts, community colleges, and universities to inspire and learn from one another as they work towards the goal of having 60 percent of Illinoisans having earned a college degree by 2025.

In 2019, 43 percent of Illinoisans had a postsecondary degree or credential. However, as Figure 7 shows, disaggregation by race and ethnicity reveals a wide range in postsecondary attainment, from almost 70 percent of Asian Illinoisans to almost 30 percent of Black Illinoisans and 20 percent of Latinx Illinoisans. The many initiatives underway, from recruiting and fairly compensating early childhood educators to eliminating microaggressions on college campuses, all contribute to ensuring that any Illinois student, young or old, will have the opportunity and support necessary to engage in training, skill development, and job placement.

Figure 7: Educational Attainment in Illinois (Age 25+) by Race/Ethnicity¹⁸⁶

EDUCATIONAL ATTAINMENT IN ILLINOIS (AGE 25+) BY RACE/ETHNICITY



In parallel and sometimes overlapping with the P-20 education system is the workforce development system. An effective system should provide clear pathways to retraining and be funded at a level that allows for barrier-reducing supportive service funds. The current system, created in a time when workers often stayed with the same company for most of their careers, provides no clear pathway to retraining workers who find that the skills they developed early in their careers and during their education are insufficient.¹⁸⁴ For workers who do manage to begin training programs, the supports that the programs provide are often not enough to carry participants through to program completion. The amount of supportive service funding available to participants in most workforce training programs cannot address the barriers that decades of disinvestment in the social safety net have established. Front-line program staff report that participants they serve lack childcare, stable housing, mental health care, and access to technology (among other vital resources), making it difficult to successfully complete training programs.¹⁸⁷

Researchers and industry experts report that the changing nature of work is placing increased risk on certain workers. Recent decades have seen growth in non-traditional work arrangements.¹⁸⁸ These arrangements leave a larger share of workers responsible for predicting changes in job qualifications, self-funding their training, and protecting against the risk of lost work hours due to health or family issues.₁₈₄ A 2015 report done by Georgetown University's Center on Education and the Workforce found that America spends \$1.1 trillion annually on postsecondary education and training but only \$65 billion was spent on certifications, apprenticeships, federal job training, or other workforce training, with a much larger share being spent on workers with bachelor's degrees or higher.¹⁸⁹ There is a steadily increasing gap between the earnings of college educated and non-college-educated workers.¹⁹⁰ The negative effects of these trends fall disproportionately on people of color, people with disabilities, new immigrants, rural residents, and individuals with disabilities or of low socio-economic status. Workforce development systems serve as an essential tool to increase access to educational and economic opportunities for workers from communities that have experienced historic disinvestment.

Workers are not alone in their struggles to meet the demands of a 21st-century workforce. Employers are also experiencing struggles that they did not have to contend with in the past. A survey found that 52 percent of small business owners reported having a difficult time finding qualified employees in the first quarter of 2022.¹⁹¹

Workforce development policies and programs must serve the current workforce, especially those who are presently unable to participate in the workforce. There are current workforce models that have proven their ability to engage workers in the workforce, but adjustments to service models and additional investments must be made if these programs are going to effectively serve those who need them most.

Vocational and technical certifications have been shown to be fast, cost-effective methods to help workers gain skills that can launch them back into the workforce. Foundational workforce programs, such as the Workforce Innovation and Opportunities Act (WIOA), provide subsidies for job seekers to earn these certifications.

- Unfortunately, these programs rarely provide adequate **barrier-reducing supportive services** to those with the most need. Training is only one expense of acquiring these high-demand skills. Without pay, it is difficult for individuals already in financially precarious situations to afford for basic expenses for the length of a training program. As a result, workers often leave for low-wage jobs with little potential for advancement before completion or never begin at all.
- Additionally these programs often judge success based on participants simply becoming employed, and fail to prioritize outcomes such as gaining employment in the industry in which they ensure that participants accept quality jobs. This can penalize service providers who take more time to find participants good jobs and provides incentives for bad actors (low-quality employers and lackluster service providers) to invest in just placement rather than reconnecting the worker to the workforce in a lasting and meaningful way.
- Lastly, when analyzing enrollments and outcomes from these programs, women and people of color tend to end up in certification programs that result in employment in jobs on the lower end of the payscale.

Sectoral employment and training programs tend to generate significant increases in worker earnings, immediately after program completion and research shows that these earnings gains are sustained in the years preceding participation in the program. These programs offer some of the largest benefits of any employment program offered in current workforce development systems. These earnings gains can be attributed to increased wages, and individuals completing these programs are more likely to end up in quality jobs than those who participate in certificate programs. Sectoral employment programs that produce the best results include a combination of technical skills training in targeted high-wage sectors and lead to an industry-recognized credential. These programs screen applicants prior to enrollment to assess basic skills and motivation and provide training on non-technical skills, connections to employers, and barrier-reducing levels of wraparound supportive services.



Spotlight: Per Scholas Graduate Achieves Greater Agency in Her Life

Veronica Vergara enrolled in the IT and User Support Cohort program through Per Scholas in March 2021 and received her CompTIA A+ Certification in May 2021. She previously traveled two hours each day to manage an independent pharmacy in central Illinois. After giving birth to a daughter with medical issues, Vergara stayed home for two years to take care of her. Vergara's husband is also in the IT field, and she wanted the option to work remotely. She learned about Per Scholas through social media and was accepted two weeks after applying. Through the program she learned technical skills including knowledge of operating systems, servers, networking, and a broad knowledge of IT. She was exposed to new concepts within IT and given the tools to go further in a variety of IT areas. In addition to technical skills, Per Scholas provided her with professional development skills such as résumé building, job placement, networking with field experts, and mock interviews with recruiters. The benefits of the program extended beyond graduation; Vergara has access to continuing education. Presently, she is enrolled in the IT Google Project Management Course, which Per Scholas is paying for. Currently, she works as a software engineer associate apprentice at Accenture. The program allowed her to secure a remote position and cut down on transit time, which is time she can now spend with her family.

Research shows that apprenticeship programs are an effective way to train workers for good jobs and to ease the burden of recruiting and maintaining skilled workers on business.₁₉₂ An apprenticeship program in its simplest form is paid on-the-job training paired with classroom instruction as a means to prepare workers for careers in the skilled trades. The term apprenticeship has become commonly used by industries, companies, and workforce development systems. Officially, the Department of Labor defines an apprenticeship as a training program that includes: (1) employer involvement; (2) structured on-the-job training; (3) related instruction; (4) rewards for skill gains; and (5) industry credentials. Any program meeting these criteria is eligible to become a Registered Apprenticeship Program with the U.S. Department of Labor (DOL). However, a program that does not meet these requirements can still call itself an apprenticeship program, even though the program does not meet the criteria to be registered with the DOL.¹⁹³

Policy Recommendations

- Expand access and funding to K-12, CTE, community college career pathways, and work-based learning to create a pipeline of well-trained workers prepared for the jobs of the future.
 - a. Incentivize collaborations between K-12 school systems and area community colleges by supporting initiatives like the Chicago Roadmap.
 - b. Provide funding for targeted student supports, including technology devices and connectivity, financial counseling, and wellness centers, for students seeking to advance their education.
 - c. Ensure equitable access to CTE programs regardless of demographic factors including but not limited to race, income status, and region.
- 2. Expand access to postsecondary education through increased MAP funding, enrollment in early college programs, and free access to CTE programs at community colleges.
 - a. Create a MAP-like grant program specifically for short-term programs in high-demand occupations, similar to City Colleges' Future Ready initiative, ensuring these programs are easy to access, especially for adults and those returning to college after years away.
 - b. Aggressively market short-term programs in highdemand occupations and ensure these programs are easy to access, especially for those returning to college after years away.
- 3. Require and fund post-secondary programs to partner

with employers creating quality jobs of the future in high-growth industries.

- Provide flexible state grant funding for well-established regional networks to support local workforce strategies and solutions.
- 5. Revise business tax credits to offset a portion of the cost of new training activities that create career advancement opportunities and pathways to financial stability for low-wage workers.
- 6. Improve tax incentives meant to facilitate the creation of new apprenticeship programs, address barriers that prevent businesses from participating, and ensure that businesses are aware of the opportunities.
 - a. Collect data on apprenticeship application processes to examine whether those most in need of access to middle-wage jobs are able to take advantage of these programs.
- 7. Enhance workforce development performance metrics to incentivize placement in quality jobs and in-demand jobs of the future.
- 8. Partner with employers representing growth sectors of the economy and run social media campaigns to expose young people to the jobs of the future.
- 9. Partner with employers and technology training providers to develop more effective tech certification programs that efficiently and effectively move job seekers from training to certification to employment.
- 10. Require that every state investment in job creation - whether in infrastructure, clean energy, or public health - include workforce, employment rights and skills training, and small business development that is equitable and accessible.
- 11. Invest state dollars in workforce development to address historic opportunity gaps, skill gaps, and systemic barriers to employment faced by women, workers of color, younger workers, and foreign-born workers.
- 12. Establish a state-funded, cross-agency Employment Barrier Support & Job Retention Fund to help job seekers overcome acute barriers to employment and meet their career advancement goals.
- 13. Prioritize the expansion of education and vocational training in the state corrections system or tax breaks for organizations hiring people returning from incarceration.

CONCLUSION

Conclusion

The Illinois Future of Work Task Force first convened amidst the state and nation's reckoning with the COVID-19 pandemic. Businesses and workers faced extraordinary change through a rearrangement of working conditions and disrupted economy. The task force faced a broad challenge in recommending solutions. This report represents a culmination of the work and collaboration of task force members, stakeholders, industry experts, and academic partners. Over the last eight months task force members have gathered monthly to discuss the strengths, weaknesses, opportunities, and threats to work and workers in Illinois. This group has focused its attention and efforts on promoting ideas that support the growth of a vibrant middle class in the state of Illinois, through collaboration and innovation across public and private sectors. The task force emphasized employing an equityfocused lens as it identified solutions.

Throughout all of the task force meetings, job quality remained a central theme. The hollowing out of middlewage jobs has limited workers from finding financially secure, safe, and supportive employment. The Future of Work Task Force recommends the state commit to measuring and improving job quality using a variety of metrics, including tangible workplace benefits and conditions as well as intangible aspects such as worker voice and engagement. The solutions recommended by this report will require flexibility, vision, and collaboration from all stakeholders.

Illinois is a large and diverse state made up of workers who support local and global industry and commerce. This report is just the first step in ensuring that Illinoisans can best prepare for upcoming technological and demographic changes. Next steps should include enhanced data collection on and monitoring of future of work and job quality metrics and evaluation of scalable benefit programs that are available to any worker and innovative labor enforcement strategies. With dedication to the guiding principles and policy recommendations laid out in this report, decision makers can continue building a thriving workforce, a robust middle class, and an equitable future for all.

Appendix



Other State Initiatives that Impact the Future of Work in Illinois

Name	Focus	Deliverables/Products
Illinois Workforce Innovation Board (IWIB) Equity Task Force	 PRIORITY AREAS -Create shared definitions for a set of key terms. -Establish equity goals for the system. -Examine programs, policies, and practices to infuse issues of equity and inclusion as authorized by law. (Policy Workgroup) -Assess and recommend education and workforce tools that can track program access and outcomes and disaggregate data to reveal disparities in policies and program delivery. (Data Workgroup) -Make recommendations regarding inclusive and diverse approaches to organizational capacity, including professional development to ensure use of an equity lens in serving diverse 	Final report to the IWIB with recommendations including equity goals for the system as well as policy, program, and data recommendations. Due June 2022.
Governor's Commission on Workforce Equity & Access	populations. (Program Workgroup) The Illinois Equity & Access Workforce Commission ("Commission") shall create a vision for an equitable, accessible, and effective future state workforce system grounded in an understanding of user and stakeholder experience, including how racial, social, and geographic inequities inform experience and outcomes across Illinois' federally and state-funded workforce programs.	 Report including: 1. key design enhancements/improvements to the state workforce system, 2. the streamlining of state agencies, and 3. the governance structure and state leadership needed for execution (could include legislative asks)
Illinois Commission on Poverty Elimination and Economic Security	"The Illinois Commission on Poverty Elimination and Economic Security's (CPEES) purpose is to improve policy makers' understanding of the root causes of poverty and economic insecurity in Illinois, support efforts to ensure residents have equal opportunity to achieve economic security, and ultimately reduce and eliminate poverty in Illinois by making policy and other recommendations to the legislative, executive, and judicial branches of the state."	Strategic plan to reduce deep poverty in the state by 50 percent by 2026, due May 2022
Illinois Commission on Equitable Early Childhood Education and Care Funding	The Illinois Commission on Equitable Early Childhood Education and Care Funding has released the Ready Illinois report offering recommendations on critical funding, allocation, and governance structures needed for a fully funded, unified system across the state.	
The Illinois Interagency Task Force on Homelessness	It's goal is to "develop a state plan to address homelessness and unnecessary institutionalization with the goals of achieving functional zero homelessness, improving health and human services outcomes for people experiencing homelessness, and strengthening the safety nets that contribute to housing stability."	May 2022
Governor's Five Year Economic Plan	An Illinois economy that creates jobs and expands prosperity to communities across the state is a central part of Governor JB Pritzker's agenda. Under Governor Pritzker's administration, the Illinois Department of Commerce and Economic Opportunity's mission is to support and maintain a strong economic environment for those we serve - taxpayers, employers, workers, and communities - by actively recruiting and growing businesses, maintaining a 21st-century workforce, enhancing innovation, and bringing jobs and investment to underserved communities throughout Illinois.	Strategic Plan released October 2019

Bibliography

- 1. Autor, D. H., Mindell, D. A., Reynolds, E. B., & Solow, R. M. (2021). *The work of the future: Building better jobs in an age of Intelligent Machines*. The MIT Press. https://workofthefuture.mit.edu/research-post/the-work-of-the-future-building-better-jobs-in-an-age-of-intelligent-machines/
- 2. U.S. Bureau of Labor Statistics. (2022, April 20). *Illinois Economy at a Glance*. [Data set] U.S. Department of Labor. <u>https://www.bls.gov/eag/eag.il.htm</u>
- 3. United States Census Bureau, 2021. Multidimensional Hardship in the U.S. during the COVID-19 Pandemic (No. 2021-16). https://www.census.gov/content/dam/Census/library/working-papers/2021/demo/sehsd-wp2021-16.pdf
- 4. Centers for Disease Control and Prevention. COVID Data Tracker. Atlanta, GA: US Department of Health and Human Services, CDC; 2022, April 25. https://covid.cdc.gov/covid-data-tracker
- 5. Bialik, C. and Gole, D.(2020, September). *Yelp: Local Economic Impact Report*. Yelp Economic Average. <u>https://www.yelpeconomicaverage.com/business-closures-update-sep-2020.html</u>
- Kim, B., Mac, C., & Wheat, C. (2021). Small business finances in Illinois during the COVID-19 pandemic. JPMorgan Chase and Co. https://www.jpmorganchase.com/institute/research/small-business/small-business-finances-in-illinois-during-the-covid-19pandemic.
- 7. Yelp Economic Average. (2022). Two years into the pandemic, Yelp data reveals impact on local economies. Yelp Economic Average. https://www.yelpeconomicaverage.com/covid-19-second-anniversary.html.
- Robinson, P. (2022, February 1). Remote Work Is Here To Stay And Will Increase Into 2023, Experts Say. Forbes. Retrieved March 9, 2022, from https://www.forbes.com/sites/bryanrobinson/2022/02/01/remote-work-is-here-to-stay-and-will-increase-into-2023-experts-say/?sh=5cb755b620a6.
- 9. Fry, R. (2022, January 14). Some gender disparities widened in the U.S. workforce during the pandemic. Pew Research Center. https://www.pewresearch.org/fact-tank/2022/01/14/some-gender-disparities-widened-in-the-u-s-workforce-during-thepandemic/
- 10. Illinois Department of Employment Security. (n.d.). *Employment projections* [Data set]. Illinois Department of Employment Security. https://ides.illinois.gov/resources/labor-market-information/employment-projections.html
- 11. Center on Budget and Policy Priorities. (2022). *Robust COVID relief achieved historic gains against poverty and hardship, bolstered economy.* Center on Budget and Policy Priorities. https://www.cbpp.org/research/poverty-and-inequality/robust-covid-relief-achieved-historic-gains-against-poverty-and
- 12. U.S. Bureau of Labor Statistics. (n.d.). Employment status of the civilian noninstitutional population by sex, race, Hispanic or Latino ethnicity, marital status, and detailed age, 2019 annual averages. [Data set]. U.S. Bureau of Labor Statistics. https://www.bls.gov/lau/table14full19.pdf
- 13. U.S. Bureau of Labor Statistics. (n.d.). *Employment status of the civilian noninstitutional population by sex, age, and race*. [Data set]. U.S. Bureau of Labor Statistics. https://www.bls.gov/cps/aa2019/cpsaat05.pdf
- 14. American Immigration Council. (2020, August 6). *Immigrants in Illinois*. American Immigration Council. https://www.americanimmigrationcouncil.org/research/immigrants-in-illinois
- 15. United States Census Bureau. (2019). *Employment status* [Dataset]. United States Census Bureau. https://data.census.gov/cedsci/table?q=Illinois%20labor%20force&t=Race%20and%20Ethnicity&g=0100000US&y=2019&tid=ACSST5Y2019.S2301
- 16. United States Census Bureau. (n.d.) *Illinois* [Data set]. United States Census Bureau. https://data.census.gov/cedsci/ profile?g=0400000US17
- 17. United States Census Bureau. (2015). A Half-Century Of Learning: Historical Census Statistics On Educational Attainment in the United States, 1940 to 2000: Tables [Data set]. United States Census Bureau. https://www.census.gov/data/tables/time-series/ demo/educational-attainment/educational-attainment-1940-2000.html
- U.S. Bureau of Labor Statistics. (2021, September 1). A Labor Day Look at How American Workers Have Changed over 40 Years. *Commissioner's Corner*. https://blogs.bls.gov/blog/2021/09/01/a-labor-day-look-at-how-american-workers-have-changed-over-40-years/
- 19. United States Bureau of Labor Statistics. (n.d.). *Employment status of the civilian noninstitutional population by sex, age, race, and Hispanic origin, 1999 annual averages.* United States Bureau of Labor Statistics. https://www.bls.gov/lau/table12full99.pdf

- 20. Howard, D. (2021, June 21). *Aging boomers solve a labor market puzzle*. census.gov. U.S. Census Bureau.https://www.census.gov/ library/stories/2021/06/why-did-labor-force-participation-rate-decline-when-economy-was-good.html
- 21. Illinois Department of Employment Security. (2022). *Illinois labor force estimates*. [Data set]. Illinois Department of Employment Security. <u>https://ides.illinois.gov/content/dam/soi/en/web/ides/labor_market_information/local_area_</u>unemploymentstatisticslaus/ILlaus-annavg.xls
- 22. Chicago Metropolitan Agency for Planning. (2021, January 21). *Illinois sees second-largest population loss of U.S. states CMAP*. Chicago Metropolitan Agency for Planning. https://www.cmap.illinois.gov/updates/all/-/asset_publisher/UIMfSLnFfMB6/ content/population-loss-2020-census
- 23. Vasilogambros, M. (2019, June 19). Why Is Illinois Hemorrhaging Residents? The Pew Charitable Trusts. <u>https://www.pewtrusts.org/</u>en/research-and-analysis/blogs/stateline/2019/06/19/why-is-illinois-hemorrhaging-residents.
- 24. Chicago Metropolitan Agency for Planning. (2017, February 3). *Manufacturing employment trends in Illinois' metropolitan and nonmetropolitan areas CMAP*. Chicago Metropolitan Agency for Planning.https://www.cmap.illinois.gov/updates/all/-/asset_publisher/UIMfSLnFfMB6/content/id/616685
- 25. Pew Research Center. (2016, October 6). "The State of American Jobs: How the shifting economic landscape is reshaping work and society and affecting the way people think about the skills and training they need to get ahead." Pew Research Center.<u>https://</u> www.pewresearch.org/social-trends/wp-content/uploads/sites/3/2016/10/ST_2016.10.06_Future-of-Work_FINAL4-1.pdf
- 26. Karoly, L. A., & Kumar, K. B. (2016, August 23). Evolving 21st–Century Workplace and the American Workforce: Trends and Policy Responses. The Rand Corporation. https://www.rand.org/blog/2016/08/evolving-21st-century-workplace-and-the-american-workforce.html
- 27. Gould, E. (2020, February 20). State of Working America wages 2019: A story of slow, uneven, and unequal wage growth over the last 40 years. Economic Policy Institute. https://www.epi.org/publication/swa-wages-2019/
- Bahn, K., & Sanchez Cumming, C. (2020, July 1). Four graphs on U.S. occupational segregation by race, ethnicity, and gender. Washington Center for Equitable Growth. https://equitablegrowth.org/four-graphs-on-u-s-occupational-segregation-by-raceethnicity-and-gender/
- 29. U.S. Bureau of Labor Statistics. (2015, September 16). Data Retrieval: Labor Force Statistics. U.S. Bureau of Labor Statistics. https:// www.bls.gov/webapps/legacy/cpslutab5.htm
- 30. Flatt, C., & Reinhold, R. (2020). *Women and Minorities in the Illinois Labor Force*. Illinois Department of Employment Security. https://ides.illinois.gov/content/dam/soi/en/web/ides/ides_forms_and_publications/women-and-minorities-2020.pdf
- Valenti, D. (2018, June 21). Princeton economists find that unions had historical role in helping address income inequality. Princeton University. https://www.princeton.edu/news/2018/06/21/princeton-economists-find-unions-had-historical-role-helping-addressincome
- 32. Blanchflower, D., & Bryson, A. (2020). *Now unions increase job satisfaction and well-being* (NBER Working Paper No. 27720). National Bureau of Economic Research. https://www.nber.org/papers/w27720
- 33. National Labor Relations Board. (2022, April 6). Union Election Petitions Increase 57% In First Half of Fiscal Year 2022. National Labor Relations Board. https://www.nlrb.gov/news-outreach/news-story/union-election-petitions-increase-57-in-first-half-of-fiscal-year-2022#:~:text=Union%20Election%20Petitions%20Increase%2057%25%20In%20First%20Half%20of%20Fiscal%20Year%20 2022,-Office%200f%20Public&text=During%20the%20first%20six%20months,the%20first%20half%20of%20FY2021
- 34. Noguchi, Y. (2018, March 26). Unequal rights: Contract workers have few workplace protections. *NPR*.https://www.npr. org/2018/03/26/593102978/unequal-rights-contract-workers-have-few-workplace-protections
- 35. Waheed, S., Herrera, L., Luz Gonzalez-Vasquez, A., Shadduck-Hernández, J., Koonse, T., & Leynov, D. (2018). More Than a Gig: A Survey of Ride-hailing Drivers in Los Angeles. UCLA Institute for Research on Labor and Employment. https://www.labor.ucla.edu/ wp-content/uploads/2018/06/Final-Report.-UCLA-More-than-a-Gig.pdf
- 36. Anderson, M., McClain, C., Faverio, M., & Gelles-Watnick, R. (2021, December 8). *The state of gig work in 2021*. pewresearch.org. https://www.pewresearch.org/internet/2021/12/08/the-state-of-gig-work-in-2021/
- 37. Scheiber, N. (2022, February 1). Despite labor shortages, workers see few gains in economic security. *The New York Times*. https://www.nytimes.com/2022/02/01/business/economy/part-time-work.html
- 38. Fry, R. (2020, November 9). The pace of Boomer retirements has accelerated in the past year. Pew Research Center. https://www.pewresearch.org/fact-tank/2020/11/09/the-pace-of-boomer-retirements-has-accelerated-in-the-past-year/

- 39. Illinois Department of Employment Security. (n.d.). *Local area unemployment statistics* [Data set].Illinois Department of Employment Security. <u>https://ides.illinois.gov/content/dam/soi/en/web/ides/labor_market_information/local_area_unemploymentstatisticslaus/county-aa.xls</u>
- 40. U.S. Bureau of Labor Statistics. (n.d.). *Industries by supersector and NAICS Code* [Data set]. U.S. Bureau of Labor Statistics. <u>https://www.bls.gov/iag/tgs/iag_index_naics.htm</u>
- 41. U.S. Bureau of Labor Statistics. (2019). May 2019 state occupational employment and wage estimates Illinois [Data set]. U.S. Bureau of Labor Statistics. https://www.bls.gov/oes/2019/may/oes_il.htm
- 42. U.S. Bureau of Labor Statistics. (n.d.). Occupational employment and wage statistics [Data set]. U.S. Bureau of Labor Statistics. https://www.bls.gov/oes/current/oes_stru.htm#23-0000
- Rothwell, J., & Crabtree, S. (2019). Not just a job: New evidence on the quality of work in the United States. Gallup. https://www. luminafoundation.org/wp-content/uploads/2019/11/not-just-a-job-new-evidence-on-the-quality-of-work-in-the-united-states. pdf
- 44. Ton, Z. (2020, May 22). *Rebuilding the economy around good jobs*. Harvard Business Review. https://hbr.org/2020/05/rebuilding-the-economy-around-good-jobs
- 45. U.S. Bureau of Labor Statistics. (n.d.). Occupations with the most job growth [Data set]. U.S. Bureau of Labor Statistics. https://www. bls.gov/emp/tables/occupations-most-job-growth.htm
- 46. Howell, D. R., & Kalleberg, A. L. (2019). Declining job quality in the United States: Explanations and evidence. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, *5*(4). https://doi.org/10.7758/rsf.2019.5.4.01
- 47. Burtless, G. (2015, July 14). Does the government subsidize low-wage employers? The Brookings Institution. https://www.brookings. edu/opinions/does-the-government-subsidize-low-wage-employers/
- 48. Organisation for Economic Co-operation and Development. (2016). *How good is your job? Measuring and assessing job quality*. Organisation for Economic Co-operation and Development. Retrieved from https://www.oecd.org/employment/labour-stats/Job-quality-OECD.pdf.
- 49. Conway, M., LaPrad, J., Cage, A., & Miller, S. (2021). *To Build Back Better, Job Quality Is the Key.* The Aspen Institute. https://www.aspeninstitute.org/wp-content/uploads/2021/03/To-Build-Back-Better-Job-Quality-Is-the-Key.pdf
- 50. Scott, M. M., & Katz, B. (2021). What's important in a job? An analysis of what matters and for whom. The Urban Institute. https:// www.urban.org/sites/default/files/publication/103582/whats-important-in-a-job_1.pdf.
- 51. Marcil, S. (2022, February 8). *How to build a sustainable workforce and improve job satisfaction*. World Economic Forum.https:// www.weforum.org/agenda/2022/02/how-to-build-sustainable-workforce-improve-job-satisfaction/
- 52. Balogh, S. (2021, October 4). PayPal workers were struggling to make ends meet; CEO Dan Schulman vowed to change that. Society for Human Resource Management. https://www.shrm.org/executive/resources/articles/pages/paypal-ceo-helpsworkers-with-finances.aspx
- 53. To do Illinois Future of Work Task Force. (2022, February 25) Cisco Webex Recorded Meeting
- 54. https://illinois.webex.com/webappng/sites/illinois/recording/65d9bde9787a103abcb7a21ad3121d26/playback
- 55. Frank-Miller, E. G., & Fox-Dichter, S. R. (2022). *What business results are possible when you redesign jobs?* Social Policy Institute at Washington University in St. Louis. https://nationalfund.org/wp-content/uploads/2022/01/Job-Quality-Outcome-Maps_Complete.pdf
- Reder, L., Steward, S., & Foster, N. (2019). Designing portable benefits a resource guide for policymakers. The Aspen Institute. https://www.aspeninstitute.org/wp-content/uploads/2019/06/Designing-Portable-Benefits_June-2019_Aspen-Institute-Futureof-Work-Initiative.pdf
- 57. U.S. Bureau of Labor Statistics. (2018, June 7). Contingent and alternative employment arrangements news release. U.S. Bureau of Labor Statistics. https://www.bls.gov/news.release/conemp.htm
- 58. U.S. Bureau of Labor Statistics. (2021, September 23). *Medical care benefits: Access, participation, and take-up rates* [Data set]. U.S. Bureau of Labor Statistics. <u>https://www.bls.gov/news.release/ebs2.t02.htm</u>
- 59. Kristal, T., Cohen, Y., & Navot, E. (2018). Benefit inequality among American workers by gender, race, and ethnicity, 1982-2015. Sociological Science, 5, 461–488. https://doi.org/10.15195/v5.a20

- U.S. Government Accountability Office. (2020, October 19). Federal social safety net programs: Millions of full-time workers rely on federal health care and food assistance programs. U.S. Government Accountability Office. https://www.gao.gov/products/gao-21-45
- 61. NDWA Labs. (n.d.). Benefits for house cleaners. NDWA Labs. https://www.ndwalabs.org/alia-benefits
- 62. Illinois Secure Choice. (n.d.). A new choice for retirement savings. Illinois Secure Choice. https://www.ilsecurechoice.com/
- 63. Illinois Treasurer's Office. (n.d.). 2020 Annual report. Illinois Treasurer's Office.https://www.ilga.gov/reports/ ReportsSubmitted/2460RSGAEmail4366RSGAAttachFinal_2020%20Secure%20Choice%20Annual%20Report%20DIGITAL.pdf
- 64. Bahn, K., & Sanchez Cumming, C. (2020). Improving U.S. labor standards and the quality of jobs to reduce the costs of employee turnover to U.S. companies. Washington Center for Equitable Growth. https://equitablegrowth.org/wp-content/uploads/2020/12/122120-turnover-costs-ib.pdf
- 65. Public Act 102-0562, SB2486 (2022)
- 66. https://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=102-0562
- 67. Public Act 102-0419, HB1838 (2022)
- 68. https://www.ilga.gov/legislation/publicacts/102/PDF/102-0419.pdf
- 69. Public Act 101-0177, HB0834 (2019)
- 70. https://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=101-0177
- 71. Gerstein, T., & Flanagan, J. (2020, April 28). State and local labor standards enforcement during COVID-19: Protecting workers' health and economic security during a pandemic. Economic Policy Institute. https://www.epi.org/publication/state-and-local-labor-standards-enforcement-during-covid-19/
- 72. Johnson, M. S. (2020). "Regulation by Shaming: Deterrence Effects of Publicizing Violations of Workplace Safety and Health Laws." American Economic Review, 110 (6): 1866-1904. DOI: 10.1257/aer.20180501
- 73. Fine, J. (2018) "New Approaches to Enforcing Labor Standards: How Co-enforcement Partnerships between Government and Civil Society Are Showing the Way Forward,". University of Chicago Legal Forum: Vol. 2017, Article 7. <u>https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1594&context=uclf</u>
- 74. Gerstein, T. (2021, February 24). The Oregon just enforcement act could meaningfully improve employer compliance with workplace laws. Economic Policy Institute. https://www.epi.org/publication/the-oregon-just-enforcement-act-could-meaningfully-improve-employer-compliance-with-workplace-laws/
- 75. National Employment Law Project. (2018). California strategic enforcement partnership. National Employment Law Project. https://s27147.pcdn.co/wp-content/uploads/CA-Enforcement-Document-Letter-11-27-18-1.pdf.
- Patel, S. N., & Fisk, C. L. (2018). California Co-Enforcement Initiatives that Facilitate Worker Organizing. Harvard Law and Policy Review, 1–21.
- 77. Muro, M., Maxim, R., & Whiton, J. (2019, January 24). Automation and artificial intelligence: How machines are affecting people and places. The Brookings Institution. https://www.brookings.edu/research/automation-and-artificial-intelligence-how-machines-affect-people-and-places/
- 78. Raghavan, M., & Barocas, S. (2019, December 6). *Challenges for mitigating bias in algorithmic hiring*. The Brookings Institution. https://www.brookings.edu/research/challenges-for-mitigating-bias-in-algorithmic-hiring/
- 79. Reike, A., Janardan, U., Hsu, M., & Duarte, N. (2021, July 6). *Essential Work Analyzing the Hiring Technologies of Large Hourly Employers*. Upturn.https://www.upturn.org/work/essential-work/
- 80. Bernhardt, A., Kresge, L., & Suleiman, R. (2021). Data and algorithms at work: The case for worker technology rights. UC Berkeley Labor Center. https://laborcenter.berkeley.edu/data-algorithms-at-work/
- 81. Institute for the Future. (2021). *Future of work in California: A new social impact for work and workers*. Institute for the Future. https://www.labor.ca.gov/wp-content/uploads/sites/338/2021/02/ca-future-of-work-report.pdf
- 82. The Computing Technology Industry Association. (2022). *State of the tech workforce*. The Computing Technology Industry Association. https://www.cyberstates.org/pdf/CompTIA_Cyberstates_2022.pdf.

- 83. Illinois Science and Technology Coalition. (2020). 2020 STEM talent index. Illinois Science and Technology Coalition. https://www. istcoalition.org/wp-content/uploads/Talent_Index_20_FINAL_12.11.pdf.
- 84. Illinois Science and Technology Coalition. (2022). *Illinois' capacity for innovation & economic growth*. Illinois Science and Technology Coalition. https://www.istcoalition.org/wp-content/uploads/ISTC-IL-Innovation-Index-RD-2022.pdf.
- 85. Davis, K. (2022, January 14). Startup funding soars to \$7 billion in 2021. Crain's Chicago Business. https://www.chicagobusiness. com/technology/startup-funding-chicago-soars-7-billion-2021
- 86. Davis, K. (2021, December 1). Chicago tech's diversity problem starts in college. *Crain's Chicago Business*.https://www. chicagobusiness.com/technology/chicago-techs-diversity-problem-starts-illinois-colleges
- 87. Chicago:Blend. (2022, January 19). More women, people of color working in Chicago VC, Chicago: blend survey shows. Chicago:Blend. https://www.chicagoblend.org/news-insights/2021-vc-diversity-data-released
- 88. Illinois Department of Transportation. (n.d.). *Rebuild Illinois capital plan*. Illinois Department of Transportation. https://idot.illinois.gov/transportation-system/rebuild-illinois.html
- 89. Illinois Department of Commerce and Economic Opportunity. (n.d.). *Broadband expansion*. Illinois Department of Commerce and Economic Opportunity. https://www2.illinois.gov/dceo/ConnectIllinois/Pages/default.aspx
- 90. Illinois Innovation Network. (n.d.). About the Illinois Innovation Network. Illinois Innovation Network.https://iin.uillinois.edu/about_us
- 91. 78 Chicago. (2021). DPI comes to the 78. 78 Chicago. https://www.78chicago.com/explore/discovery-partners-institute
- 92. State of Illinois. (2020, February 12). Gov. Pritzker Highlights Vision for Innovation and Economic Development with \$500 Million Commitment to IIN and DPI. State of Illinois. https://www.illinois.gov/news/press-release.21147.html.
- 93. U.S. Bureau of Labor Statistics. (n.d.). Occupational employment and wages, May 2021 [Data set]. U.S. Bureau of Labor Statistics. https://www.bls.gov/oes/current/oes311120.htm
- Banerjee, A., Gould, E., & Sawo, M. (2021, November 18). Setting higher wages for child care and home health care workers is long overdue. Economic Policy Institute. https://www.epi.org/publication/higher-wages-for-child-care-and-home-health-careworkers/
- 95. U.S. Department of Labor. (2015). *The cost of doing nothing*. U.S. Department of Labor. https://www.dol.gov/sites/dolgov/files/ OASP/Cost-of-Doing-Nothing.pdf.
- Houser, L., & Vartanian, T. P. (2012). Pay Matters: The positive economic impacts of paid family leave for families, businesses and the public. Center for Women and Work. http://go.nationalpartnership.org/site/DocServer/Pay_ Matters_Positive_Economic_Impacts_of_Paid_Family_L.pdf;jsessionid=00000000.app20115a?docID=9681&NONCE_ TOKEN=8BC6ED7BD2C8CDACA923FC74F8245711.
- 97. Reaves, E. L., & Musumeci, M. B. (2015). *Medicaid and long-term services and supports: A primer.* Kaiser Family Foundation. https://www.kff.org/medicaid/report/medicaid-and-long-term-services-and-supports-a-primer/.
- 98. Foster, N., & Newman, A. (2021). A historic moment for the care economy. The Aspen Institute. https://www.aspeninstitute.org/blog-posts/historic-moment-for-care-economy/.
- 99. PHI. (n.d.). Workforce data center [Data set]. PHI. <u>https://www.phinational.org/policy-research/workforce-data-center/#states=17</u> &var=Employment+Projections
- Buchanan, K., Noble, S., & Bishop, S. (2022). Early care & education: A business imperative. Council for a Strong America. https:// www.strongnation.org/articles/1868-early-care-education-a-business-imperative.
- 101. Grunewald, R., & Davies, P. (2011, July 1). *Hardly child's play*. Federal Reserve Bank of Minneapolis. https://www.minneapolisfed. org/article/2011/hardly-childs-play.
- 102. Sabol, T., Virágh, T., Healy, O., & Nerella, A. (2021, September 1). Child care in the time of COVID: How Illinois resourced programs to support (re)opening. Institute for Policy Research Rapid Research Report. https://www.ipr.northwestern.edu/documents/reports/ ipr-rapid-research-report-child-care-in-covid-sept-1-2021.pdf.
- 103. Blackwood, J., Ilin, E., & Schexnider, M. (n.d.). Exploring benefits cliffs in Illinois: CCAP as a case study. University of Chicago Inclusive Economy Lab. https://urbanlabs.uchicago.edu/attachments/14265904df0a33358c29a1c99642f480015e8548/ store/6dbbcf726529cc71b3e8ff72cb9c75a30cd0913444f0f9635f9894fa8c13/IEL_AFRB_Cliffs+Report+_vFinal_wAuthors.pdf.

- 104. Morrissey, T. W. (2016, March 23). Child care and parent Labor Force Participation: A review of the research literature. *Review of Economics of the Household*, *15*(1), 1–24. https://doi.org/10.1007/s11150-016-9331-3
- 105. U.S. Department of Labor. (2021, August 11). An economist's view on the care economy. U.S. Department of Labor Blog. https://blog. dol.gov/2021/08/11/an-economists-view-on-the-care-economy.
- 106. Favreault, M., & Dey, J. (2015, June 30). Long-term services and supports for older Americans: Risks and financing research brief. U.S. Department of Health and Human Services. https://aspe.hhs.gov/reports/long-term-services-supports-older-americansrisks-financing-research-brief-0.
- 107. COSSITT-GLESNER, I. (2021, March 1). Finding long-term solutions for long-term care, 28(9). National Conference of State Legislatures. https://www.ncsl.org/research/health/finding-long-term-solutions-for-long-term-care.aspx
- 108. Cohen, M. A., & Butler, S. M. (2021, August 9). The middle ground for fixing long-term care costs: The wish act: Health Affairs Forefront. Health Affairs. https://www.healthaffairs.org/do/10.1377/forefront.20210729.585743/full/
- 109. Illinois Department of Human Services. Overall PUNS snapshot [Data set]. Illinois Department of Human Services. <u>https://www.dhs.state.il.us/page.aspx?item=141313</u>
- 110. U.S. Department of the Treasury. (n.d.). Front page. U.S. Department of the Treasury. https://home.treasury.gov/
- 111. American Association for Long-Term Care Insurance. (n.d). Long-Term Care Insurance Facts Data Statistics 2020 Reports. American Association for Long-Term Care Insurance. <u>https://www.aaltci.org/long-term-care-insurance/learning-center/</u> <u>ltcfacts-2020.php#2020total</u>
- 112. United States Census Bureau. (n.d.) *QuickFacts Illinois* [Data set]. United States Census Bureau. <u>https://www.census.gov/</u> <u>quickfacts/IL</u>
- 113. Christman, A., & Connolly, C. (2017, September 22). Surveying the home care workforce. National Employment Law Project. https://www.nelp.org/publication/surveying-the-home-care-workforce/
- 114. Center for the Study of Child Care Employment, National Institute for Early Education Research, and Bellwether Education Partners. (2020). 2020 Report 50-state early educator policy and practice research. Early Educator Investment Collaborative. https://earlyedcollaborative.org/assets/2020/12/EEIC_Report_50StateEarlyEducatorPolicy_2020.pdf.
- 115. U.S. Department of Energy. (2021, July 19). *DOE finds strong opportunity for job growth in energy sector post-pandemic*. U.S. Department of Energy. https://www.energy.gov/articles/doe-finds-strong-opportunity-job-growth-energy-sector-post-pandemic
- 116. National Resources Defense Council. (2021). *Clean electricity opportunities for Build Back Better: Illinois*. National Resources Defense Council. https://www.nrdc.org/sites/default/files/clean-electricity-bbb-il-fs.pdf.
- 117. Castaldi, M., Morrison, A., & Moses, M. (2021). *Building pathways to clean energy jobs in Illinois*. Chicago Jobs Council. https://cjc. net/wp-content/uploads/2021/03/Building-Pathways-to-Clean-Energy-Jobs-in-Illinois-March-2021.pdf.
- 118. CEJA (Climate and Equity Jobs Act). Pub. Act. 102–0662. (signed into law September 15, 2021). https://www.ilga.gov/legislation/ publicacts/fulltext.asp?Name=102-0662&GA=102
- 119. CEJA (Climate and Equity Jobs Act). Pub. Act. 102-0662. (signed into law September 15, 2021). https://www.ilga.gov/legislation/ publicacts/fulltext.asp?Name=102-0662&GA=102
- U.S. Environmental Protection Agency. (2018). Drinking water infrastructure needs survey and assessment. U.S. Environmental Protection Agency. https://www.epa.gov/sites/default/files/2018-10/documents/corrected_sixth_drinking_water_infrastructure_ needs_survey_and_assessment.pdf.
- Manzo IV, F., & Bruno, R. (2016). A flowing economy: How clean water infrastructure investments support good jobs in Chicago and in Illinois. Illinois Economy Policy Institute. https://illinoisepi.org/site/wp-content/themes/hollow/docs/energy-environment/ILEPI-PMCR-Research-Report-A-Flowing-Economy-FINAL.pdf.
- 122. (2021). Getting the lead out: Employment & economic impacts from replacing America's lead pipes. E2. https://e2.org/wp-content/ uploads/2021/07/E2-UA-Economic-Impacts-from-Replacing-Americas-Lead-Service-Lines_August-2021.pdf.
- 123. Value of Water Campaign. (2017). The economic benefits of investing in water infrastructure. Value of Water Campaign. http:// thevalueofwater.org/sites/default/files/Economic%20Impact%20of%20Investing%20in%20Water%20Infrastructure_VOW_FINAL_ pages.pdf.
- 124. Kane, J., & Tomer, A. (2018). *Renewing the water workforce: improving water infrastructure and creating a pipeline to opportunity*. The Brookings Institution. https://www.brookings.edu/wp-content/uploads/2018/06/Brookings-Metro-Renewing-the-Water-Workforce-June-2018.pdf#page=25.

- 125. Center for Neighborhood Technology. (2019). *Flooding in Chicago: An unequal burden*. Center for Neighborhood Technology. https://cnt.org/sites/default/files/pdf/FloodEquity2019.pdf
- 126. Williams, J., & Jagadeesh, T. (2020, November 10). *Data Points: The environmental injustice of lead lines in Illinois*. Metropolitan Planning. https://www.metroplanning.org/news/9960/Data-Points-the-environmental-injustice-of-lead-lines-in-Illinois
- 127. U.S. Bureau of Labor Statistics. (n.d.). Databases, Tables & Calculators by Subject [Data set]. U.S. Bureau of Labor Statistics. https://data.bls.gov/timeseries/SMS170000300000001?amp%253bdata_tool=XGtable&output_view=data&include_graphs=true
- 128. Harris, K. (2020, November 20). Forty years of falling manufacturing employment, 9(16). U.S. Bureau of Labor Statistics. <u>https://www.bls.gov/opub/btn/volume-9/forty-years-of-falling-manufacturing-employment.htm</u>
- 129. National Association of Manufacturers. (n.d.). 2021 Illinois manufacturing facts. National Association of Manufacturers. https://www.nam.org/state-manufacturing-data/2021-illinois-manufacturing-facts/
- Bolter, K., Martens, N., & Voytek, K. (2021). How Illinois manufacturers are adopting advanced technologies: An insight report on automation, workforce, and productivity. W.E. Upjohn Institute for Employment Research. https://research.upjohn.org/cgi/ viewcontent.cgi?article=1273&context=reports.
- 131. U.S. Bureau of Labor Statistics. (2021, September 8). *Employment projections-2020–2030*.U.S. Bureau of Labor Statistics. <u>https://www.bls.gov/news.release/pdf/ecopro.pdf</u>
- 132. U.S. Bureau of Labor Statistics. (n.d.). Occupational Employment and Wage Statistics [Data set]. U.S. Bureau of Labor Statistics. https://data.bls.gov/oes/#/occInd/One%20occupation%20for%20multiple%20industries
- 133. Chicago Metropolitan Agency for Planning. (n.d.). Overview of freight flows into and out of the Chicago region. Chicago Metropolitan Agency for Planning.https://www.cmap.illinois.gov/updates/all/-/asset_publisher/UIMfSLnFfMB6/content/ overview-of-freight-flows-into-and-out-of-the-chicago-region#:~:text=Over%20925%20million%20tons%20of,176%2C000%20 jobs%20in%20northeastern%20lllinois
- 134. Viscelli, S. (2020). Will robotic trucks be "sweatshops on wheels"? *Issues in Science and Technology, 36*(1). https://issues.org/roboticautonomous-trucking-policy-sweatshops-viscelli/.
- 135. Semuels, A. (2021, November 12). The truck driver shortage doesn't exist. Saying there is one makes conditions worse for drivers. *Time*. https://time.com/6116853/truck-driver-shortage-supply-chain/.
- 136. Viscelli ABS Proof
- 137. Viscelli, S. (2018). (rep.). Driverless? Autonomous trucks and the future of the American trucker. UC Berkeley Center for Labor Research and Education and Working Partnerships USA. http://www.driverlessreport.org/.
- 138. BloombergNEF. (n.d.). Electric vehicle outlook 2021. BloombergNEF. https://about.bnef.com/electric-vehicle-outlook/
- 139. Illinois Department of Agriculture. (n.d.). *Facts about Illinois agriculture*. Illinois Department of Agriculture. https://www2.illinois. gov/sites/agr/About/Pages/Facts-About-Illinois-Agriculture.aspx#:~:text=Illinois%20is%20a%20leading%20producer,%2C%20 poultry%2C%20fruits%20and%20vegetables
- 140. Whitt, C., Todd, J. E., & Keller, A. (2021). America's diverse family farms. U.S. Department of Agriculture Economic Research Service. https://www.ers.usda.gov/webdocs/publications/102808/eib-231.pdf?v=9945.5.
- 141. The White House. (2022, February 24). The Biden-Harris plan to revitalize American manufacturing and secure critical supply chains in 2022. *Whitehouse.gov*. https://www.whitehouse.gov/briefing-room/statements-releases/2022/02/24/the-biden-harris-plan-to-revitalize-american-manufacturing-and-secure-critical-supply-chains-in-2022/.
- 142. Goedde, L., Katz, J., Ménard, A., & Revellat, J. (2020, October 9). *Agriculture's connected future: How technology can yield new growth*. McKinsey & Company. https://www.mckinsey.com/industries/agriculture/our-insights/agricultures-connected-future-how-technology-can-yield-new-growth
- 143. Giri, A. K., Subedi, D., Todd, J. E., Litkowski, C., & Whitt, C. (2021, September 7). Off-farm income a major component of total income for most farm households in 2019. U.S. Department of Agriculture Economic Research Service. https://www.ers.usda. gov/amber-waves/2021/september/off-farm-income-a-major-component-of-total-income-for-most-farm-households-in-2019/#:~:text=ln%202019%2C%2096%20percent%20of,farm%20income%20than%20larger%20farms
- 144. U.S. Bureau of Labor Statistics. (2022, April 18). *Farmers, ranchers, and other agricultural managers : Occupational Outlook Handbook*. U.S. Bureau of Labor Statistics. https://www.bls.gov/ooh/management/farmers-ranchers-and-other-agricultural-managers.htm#tab-1

- 145. U.S. Bureau of Labor Statistics. (2022, April 18). Agricultural workers : Occupational outlook handbook. U.S. Bureau of Labor Statistics. https://www.bls.gov/ooh/farming-fishing-and-forestry/agricultural-workers.htm
- 146. Perez Pintado, A. (2021, September 13). As labor pool shrinks, Illinois farmers turn to foreign workers. The Counter. https:// thecounter.org/as-labor-pool-shrinks-illinois-farmers-turn-to-foreign-workers-h-2a-usda/#:~:text=In%202020%2C%20there%20 were%206%2C260,decrease%20compared%20to%20April%202020
- 147. Artiga, S., & Rae, M. (2020). The COVID-19 outbreak and food production workers: Who is at risk? Kaiser Family Foundation. https:// www.kff.org/coronavirus-covid-19/issue-brief/the-covid-19-outbreak-and-food-production-workers-who-is-at-risk/.
- 148. Taylor, C. A., Boulos, C., & Almond, D. (2020). Livestock plants and covid-19 transmission. *Proceedings of the National Academy of Sciences*, *117*(50), 31706–31715. https://doi.org/10.1073/pnas.2010115117
- 149. Jenkins, M. E., Isom, B., & Koopman, C. (2021). *Tech-enabled gig jobs: Policy solutions for the future of work*. The Center for Growth and Opportunity at Utah State University. https://www.thecgo.org/research/tech-enabled-gig-jobs-policy-solutions-for-the-future-of-work/#the-birth-of-the-gig-economy.
- 150. Aeppel, T. (n.d.). How the on-demand/gig economy is redefining work. MIT Initiative on the Digital Economy.https://ide.mit.edu/ wp-content/uploads/2016/06/IDE-Research-Brief-v06.pdf.
- 151. Weil, D., & Goldman, T. (n.d.). Labor Standards, the Fissured Workplace, and the On-Demand Economy. *Perspectives on Work*. https://www.fissuredworkplace.net/assets/Weil_Goldman.pdf.
- 152. Katz, L. F., & Krueger, A. B. (2016). The rise and nature of alternative work arrangements in the United States, 1995–2015 (NBER Working Paper No. 22667). National Bureau of Economic Research. https://www.nber.org/system/files/working_papers/w22667/ w22667.pdf.
- Gelles-Watnick, R., & Anderson, M. (2021, December 15). Racial and ethnic differences stand out in the U.S. gig workforce. Pew Research Center. https://www.pewresearch.org/fact-tank/2021/12/15/racial-and-ethnic-differences-stand-out-in-the-u-s-gigworkforce/
- 154. Berliner, U. (2018, January 23). *The mystery of contract work: Why so many guys?* NPR. https://www.npr. org/2018/01/23/579690595/the-mystery-of-contract-work-why-so-many-guys
- 155. Gig Economy Data Hub. (n.d.). *How many gig workers are there?* GigEconomyData.org. https://www.gigeconomydata.org/basics/ how-many-gig-workers-are-there
- 156. Gig Economy Data Hub. (n.d.). The state of independence in America. GigEconomyData.org. https://www.gigeconomydata.org/ research/data-sources/state-independence-america
- 157. Gig Economy Data Hub. (n.d.). Freelancing in America. GigEconomyData.org. https://www.gigeconomydata.org/research/datasources/freelancing-america
- 158. Gig Economy Data Hub. (n.d.). Independent work: Choice, necessity, and the gig economy. GigEconomyData.org. https://www.gigeconomydata.org/research/data-sources/independent-work-choice-necessity-and-gig-economy
- 159. Garin, A., Jackson, E., & Koustas, D. (2021). New work or changes in reporting? A framework for measuring self-employment trends in administrative data. Internal Revenue Service. https://www.irs.gov/pub/irs-soi/22rpnewworkchangesinreporting.pdf.
- 160. Abraham, K. G., Haltiwanger, J. C., Hou, C., Sandusky, K., & Spletzer, J. R. (2021, July 28). Reconciling survey and administrative measures of self-employment. *Journal of Labor Economics*, 39(4), 825–860. https://doi.org/10.1086/712187
- 161. Escobari, M., & Fernandez, S. (2018, July 19). *Measuring American gig workers is difficult, but essential*. The Brookings Institution. https://www.brookings.edu/blog/up-front/2018/07/19/measuring-american-gig-workers-is-difficult-but-essential/
- 162. Lavietes, M., & McCoy, M. (2020, October 19). Waiting for work: Pandemic leaves U.S. gig workers clamoring for jobs. *Reuters*. https://www.reuters.com/article/us-biggerpicture-health-coronavirus-gigw-idUSKBN2741DM.
- 163. Straight, B. (2021, February 5). Covid didn't kill gig economy, the pandemic accelerated it. *Modern Shippers*. https://www. freightwaves.com/news/covid-didnt-kill-gig-economy-the-pandemic-accelerated-it.
- 164. Lou, C., & Peters, H. E. (2018, August 23). New data shed light on why some workers prefer non-traditional employment. Urban Institute. https://www.urban.org/urban-wire/new-data-shed-light-why-some-workers-prefer-non-traditional-employment
- 165. Dokko, J., Mumford, M., & Whitmore Schanzenbach , D. (2015). *Workers and the online gig economy*. The Hamilton Project. https://www.hamiltonproject.org/assets/files/workers_and_the_online_gig_economy.pdf.

- 166. Walsh, D. (2020, September 29). *How the gig economy can reduce unemployment and debt*. MIT Sloan School of Management. https://mitsloan.mit.edu/ideas-made-to-matter/how-gig-economy-can-reduce-unemployment-and-debt
- 167. Noguchi, Y. (2018, January 22). Freelanced: The rise of the contract workforce. *NPR*. https://www.npr.org/2018/01/22/578825135/ rise-of-the-contract-workers-work-is-different-now.
- 168. Harris, S. D. (2018). Workers, protections, and benefits in the U.S. gig economy. *Global Law Review*. https://papers.ssrn.com/sol3/ papers.cfm?abstract_id=3198170.
- 169. Noguchi, Y. (2018, January 23). Will work for no benefits: The challenges of being in the new contract workforce. *NPR*. https://www.npr.org/2018/01/23/579720874/will-work-for-no-benefits-the-challenges-of-being-in-the-new-contract-workforce.
- 170. Noguchi, Y. (2018, March 26). Unequal rights: Contract workers have few workplace protections. *NPR*. https://www.npr. org/2018/03/26/593102978/unequal-rights-contract-workers-have-few-workplace-protections.
- 171. Zarroli, J. (2018, January 24). For one family, contract work means 'feast or famine' as income varies. *NPR*. Retrieved from https:// www.npr.org/2018/01/24/580007213/for-one-family-contract-work-means-feast-or-famine-as-income-varies.
- 172. https://drive.google.com/file/d/1q1P11aR8oGDy4znTO2GZiNAL-efn33fK/view
- 173. Fos, V., Hamdi, N., Kalda, A., & Nickerson, J. (2019). Gig-labor: Trading safety nets for steering wheels. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3414041
- 174. Koustas, D. K. (2018, October 31). Consumption insurance and multiple jobs: Evidence from rideshare drivers. Dmitri Koustas. http:// dmitrikoustas.com/DKoustas-RideSmoothing-WP.pdf.
- 175. Kesavan, S., Lambert, S.J., Williams, J.C., and Pendem, P.K. (2022). Doing Well by Doing Good: Improving Retail Store Performance with Responsible Scheduling Practices at the Gap, Inc.. *Management Science*. <u>https://doi.org/10.1287/mnsc.2021.4291</u>
- 176. Kesavan, S., Staats, B.R., and Gilland, W. (2014). Volume Flexibility in Services: The Costs and Benefits of Flexible Labor Resources. Management Science, 60, no.: 1884-1906.
- 177. Lambert, S. J. (2020, February 18). Fair work schedules for the U.S. economy and society: What's reasonable, feasible, and effective. Washington Center for Equitable Growth. <u>https://equitablegrowth.org/fair-work-schedules-for-the-u-s-economy-and-society-whats-reasonable-feasible-and-effective/</u>
- 178. Lambert, S.J. & Haley, A. (2021). Implementing work scheduling regulation: Compliance and enforcement challenges at the local level. *Industrial and Labor Relations Review*, 75(5): 1231–1257.
- 179. Harknett, K. Schneider, D., and Irwin, V. (2021). Improving health and economic security by reducing work schedule uncertainty. *Proceedings of the National Institutes of Sciences*, Vol 118(42): <u>https://doi.org/10.1073/pnas.2107828118</u>
- U.S. Small Business Administration Office of Advocacy. (2021). 2021 Small Business Profile [Data set]. U.S. Small Business Administration Office of Advocacy. <u>https://cdn.advocacy.sba.gov/wp-content/uploads/2021/08/30141858/Small-Business-Economic-Profile-IL.pdf</u>
- Opportunity Insights. (n.d.) Recession has ended for high-wage workers, job losses persist for low-wage workers [Data set].
 Opportunity Insights. <u>https://tracktherecovery.org/</u>
- 182. Kramer Mills, C., & Battisto, J. (2020). Double jeopardy: COVID-19's concentrated health and wealth effects in Black communities. Federal Reserve Bank of New York. https://www.newyorkfed.org/medialibrary/media/smallbusiness/DoubleJeopardy_ COVID19andBlackOwnedBusinesses.
- 183. de Zeeuw, M. (2019). *Small business credit survey*. Federal Reserve Bank of Atlanta . https://www.fedsmallbusiness.org/ medialibrary/fedsmallbusiness/files/2019/20191211-ced-minority-owned-firms-report.pdf.
- 184. Initiative for a Competitive Inner City. (n.d.). Creating inclusive high-tech incubators and accelerators: Strategies to increase participation rates of women and minority entrepreneurs. JPMorgan Chase & Co.https://icic.org/wp-content/uploads/2016/05/ ICIC_JPMC_Incubators_post.pdf.
- 185. Illinois Department of Commerce and Economic Opportunity . (2022, February 4). Illinois emerges as regional and national Leader in startup creation in 2021. *Illinois.gov*. https://www2.illinois.gov/dceo/Media/PressReleases/Pages/PR20220204. aspx#:~:text=ln%202021%2C%20198%2C827%20business%20startups,was%20first%20reported%20in%202004.
- 186. Kahn, K. (2019, September 12). *Illinois 14th state to legally recognize worker cooperatives*. Fifty by Fifty. https://www.fiftybyfifty. org/2019/09/illinois-14th-state-to-legally-recognize-worker-cooperatives/

- 187. Vollmer NPR, D. (2019, March 14). Illinois Proposal Aims To Empower Worker Co-Ops. *NPR*. Retrieved May 9, 2022, from https://www.nprillinois.org/statehouse/2019-03-14/illinois-proposal-aims-to-empower-worker-co-ops.
- 188. Zaber, M. A., Karoly, L. A., & Whipkey, K. (2019). *Reimagining the workforce development and employment system for the 21st century and beyond*. The Rand Corporation. https://www.rand.org/pubs/research_reports/RR2768.html.
- 189. Ayala, C. I. (2020). 2019 Illinois career and technical education report. Illinois State Board of Education. https://www.ilga.gov/ reports/ReportsSubmitted/758RSGAEmail1616RSGAAttachCareer%20and%20Technical%20Education%20Report%202019%20Final. pdf.
- 190. Illinois Board of Higher Education. (2021). A thriving Illinois: Higher education paths to equity, sustainability, and growth. Illinois Board of Higher Education. https://ibhestrategicplan.ibhe.org/pdf/A_Thriving_Illinois_06-15-21.pdf.
- Hartvigsen, N., Castaldi, M., Birkhan-Rommelfanger, R., & Morrison, A. (2021). Supportive services: Lessons learned from the field. Chicago Jobs Council. https://cjc.net/wp-content/uploads/2021/09/Supportive-Services-Summary-Report-Sept-2021-FINAL.pdf.
- 192. Katz, L. F., & Krueger, A. B. (2019). Understanding trends in alternative work arrangements in the United States (NBER Working Paper No.25425). National Bureau of Economic Research. Retrieved from https://www.nber.org/papers/w25425.
- 193. Carnevale, A. P., Strohl, J., & Gulish, A. (2015). College Is just the beginning: Employers' role in the \$1.1 trillion postsecondary education and training system. Georgetown University McCourt School of Public Policy. https://1gyhoq479ufd3yna29x7ubjnwpengine.netdna-ssl.com/wp-content/uploads/2015/02/Trillion-Dollar-Training-System-.pdf.
- 194. Perez-Johnson, I., & Holzer, H. (2021). The importance of workforce development for a future-ready, resilient, and equitable American economy. American Institute for Research. https://www.air.org/sites/default/files/WDEMP-Importance-of-Workforce-Development-Brief-April-2021.pdf.
- 195. Thomas, I. (2022, March 4). Big February job growth for economy, but on Main Street it's still a struggle to find workers. CNBC. https://www.cnbc.com/2022/03/04/even-with-job-gains-small-businesses-are-struggling-to-hire-workers. html#:~:text=Fifty%2Dtwo%20percent%20of%20all,from%2050%25%20in%20Q4%202021.
- 196. Autor, D., Li, A., & Notowidigdo, M. (2019). *Preparing for the work of the future*. Abdul Latif Jameel Poverty Action Lab. https://www. povertyactionlab.org/sites/default/files/documents/work-of-the-future-literature-review-4.2.19.pdf.
- 197. Apprenticeship Illinois. (n.d.). *Discover more about apprenticeship*. Apprenticeship Illinois. https://www.illinoisworknet.com/ ApprenticeshipIL/Pages/default.aspx
- 198. Illinois State Board of Education. (2018). Career Pathways Dictionary. Illinois State Board of Education. <u>https://www.isbe.net/</u> Documents/IL-Career-Pathways-Dictionary.PDF
- 199. U.S. Department of Labor. (n.d.). Apprenticeship. U.S Department of Labor. https://www.dol.gov/general/topic/training/ apprenticeship

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